



Monthly Report September 2019

Vol. 71
No 9

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ISSN 0418-8292 (print edition)
ISSN 1862-1325 (online edition)

The German original of this Monthly Report went to press at 11 a.m. on 20 September 2019.

Publishing schedules for selected statistics can be downloaded from our website. The statistical data are also published on the website.

The Monthly Report is published by the Deutsche Bundesbank, Frankfurt am Main, by virtue of Section 18 of the Bundesbank Act. It is available to interested parties free of charge.

This is a translation of the original German language version, which is the sole authoritative text.



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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 Data unknown, not to be published or not meaningful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 probably sluggish in Q3, too ...

The German economy got the third quarter off to a sluggish start, too. This was due primarily to export-oriented industry, where the downturn continued. The more domestically oriented areas are still on an upward path, however. The situation on the labour market has remained good, even though employment growth in the past few months was significantly lower than last year. In conjunction with the optimistic outlook for consumers' income, this fuelled private consumption. Construction activity has continued to flourish as well. The economic dichotomy thus appears to have continued for the time being. However, it is uncertain whether these cyclical upward forces have been strong enough to form an adequate counterweight to the slumping industrial sector. Therefore, German GDP could once again have contracted slightly in the third quarter.

... but not in recession

As things currently stand, when viewed in isolation a contraction in GDP in two consecutive quarters does not represent cause for concern just yet. Such a situation does not necessarily mean the end of a period of economic expansion, either, as in this case the contraction in economic activity has been confined largely to manufacturing. From today's vantage point, only a slight decline in GDP is to be expected overall, even including the second quarter. Such a decline should currently be seen as part of a cyclical return to normality as the German economy emerges from a period of high capacity utilisation. In any case, aggregate capacity utilisation is currently still likely to be slightly above average and could reach normal levels towards the end of the year. However, there are still considerable downside risks, in particular in the international environment, and it remains unclear whether industrial activity will

recover before the downturn spills over to more domestically oriented economic sectors.

Industry

Industrial production continued its slump in July 2019, falling significantly on the month in seasonally adjusted terms (-3¼%). A substantial decline (-1¼%) was also recorded in comparison with the average of the second quarter. Though the timing of the summer holidays played a certain role in this respect, it was not the main factor behind the continued slackening in production. Producers of intermediate goods decreased their production particularly strongly (-2¼%). The production of capital goods was also cut back considerably (-1%), though this decline was spread broadly across the different economic sectors. For example, a perceptible decline from the second quarter was recorded in machinery and equipment, in the manufacture of computer, electronic and optical products and in other transport equipment. The manufacture of cars and car parts fell particularly sharply. However, according to information provided by the German Association of the Automotive Industry (VDA), the number of cars manufactured rebounded strongly in August; their average for the July and August period remained around the level of the second quarter. This suggests that the dampening holiday effects were particularly pronounced in motor vehicle production. Production of consumer goods in July was virtually unchanged compared with the second quarter.

Slump in industrial sector continued in July

Industrial orders fell sharply in July 2019. After seasonal adjustment, they were down considerably on the month (-2¾%) and also fell significantly (-1¾%) compared with the average of the second quarter. However, when making a comparison with orders received in the second quarter, it should be noted that these were characterised by numerous large orders,

Sharp fall in industrial orders

Economic conditions in Germany*

Seasonally adjusted

Period	Orders received (volume); 2015 = 100			
	Industry			Main construction
	Total	of which:		
	Domestic	Foreign		
2018 Q4	107.4	103.3	110.5	131.7
2019 Q1	102.9	100.5	104.7	129.1
Q2	102.0	96.4	106.2	121.9
May	100.4	97.0	103.0	119.0
June	103.1	96.2	108.4	122.6
July	100.3	95.7	103.8	...
Period	Output; 2015 = 100			
	Industry			Construction
	Total	of which:		
	Intermediate goods	Capital goods		
2018 Q4	104.4	104.4	105.0	110.3
2019 Q1	103.6	104.4	103.2	112.1
Q2	102.0	102.0	101.8	111.3
May	102.7	102.5	102.7	109.7
June	101.4	100.3	101.9	111.1
July	100.6	99.6	100.7	111.3
Period	Foreign trade; € billion			Memo item: Current account balance in € billion
	Exports	Imports	Balance	
2018 Q4	333.62	277.55	56.07	62.85
2019 Q1	336.06	279.32	56.74	66.80
Q2	329.84	276.33	53.51	64.20
May	110.46	91.78	18.68	21.95
June	110.36	92.44	17.92	21.28
July	111.18	91.01	20.17	24.21
Period	Labour market			
	Employment	Vacancies ¹	Unemployment	Unemployment rate %
	Number in thousands			
2018 Q4	45,041	804	2,274	5.0
2019 Q1	45,177	805	2,243	5.0
Q2	45,227	794	2,263	5.0
June	45,237	789	2,284	5.0
July	45,251	779	2,285	5.0
Aug.	...	772	2,289	5.0
Period	Prices; 2015 = 100			
	Import prices	Producer prices of industrial products	Construction prices ²	Harmonised consumer prices
2018 Q4	103.8	105.0	112.0	104.8
2019 Q1	102.3	105.1	114.0	104.6
Q2	102.1	105.1	115.0	105.6
June	101.3	104.8	.	105.7
July	101.1	104.9	.	105.8
Aug.	...	104.5	.	105.7

* 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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particularly in June. Excluding the volatile large orders, orders received, in fact, contracted only slightly (-1/2%) in the reporting month. Industrial orders excluding large orders have thus been moving sideways since May, albeit at a weak level. From a regional perspective, demand for industrial goods in July was down from the previous quarter across the board. Orders from non-euro area countries fell particularly sharply (-3%). Domestic orders and orders from the euro area declined much less strongly (-3/4% in both cases), each being lifted by other transport equipment, which was influenced by large orders. With regard to the main groupings, manufacturers of consumer goods suffered the sharpest decline (-3%), while the producers of intermediate and capital goods had to cope with a smaller, but nonetheless substantial cut in orders (-2% and -1 1/4% respectively).

Industrial sales slid downward in July, at virtually the same pace as industrial production. Nominal sales declined steeply in seasonally adjusted terms, both compared with the previous month (-1%) and with the average of the second quarter (-1 1/2%). Sales of both intermediate and capital goods were down considerably. In the case of the latter, this was primarily attributable to the automotive sector, which saw a very steep fall in sales, particularly in Germany and the rest of the euro area. By contrast, sales figures for the mechanical engineering sector were slightly higher than in the second quarter. Manufacturers of consumer goods only had to cope with a marginal fall in sales. With regard to the regional sales markets, the decline was primarily attributable to the euro area. While sales in Germany dropped perceptibly, they were up in non-euro area countries. In July 2019, nominal goods exports rose distinctly on the month (+3/4%). An increase was also recorded in both nominal and real terms (1% in each case) compared with the average of the admittedly very weak second quarter. In line with industrial sales, growth in exports to non-euro area countries contrasted with a significant decline in exports to the euro area in terms of value. After seasonal adjust-

Industrial sales down, exports of goods higher

ment, nominal imports of goods were down perceptibly in July 2019, however, both on the month (-1½%) and compared with the average of the second quarter (-1¼%). Sliding import prices, caused by lower energy prices, played an important role here, which meant the decline was much weaker in price-adjusted terms (-¼%).

Construction industry

Slight rise in construction output

After seasonal adjustment, construction output was slightly higher (+¼%) in July 2019 than the previous month, which had undergone a small upward revision, and thus reached the average level of the second quarter. This was due to a marginal rise recorded by the main construction industry, supported by higher output in building construction. By contrast, the slight reduction in activity in finishing trades had a slight dampening effect (-¼%). Orders received in the main construction sector in the second quarter (up to which data are available) declined steeply from the previous quarter (-5½%), but this development is also to be seen as more of a return to normal following the sudden spike in new orders due to major contracts at the beginning of 2019. The persistently high equipment utilisation and the reach of orders in the main construction industry, as expressed in surveys conducted by the Ifo Institute, also suggest that construction activity will continue to flourish for the time being.

Labour market

Only small rise in employment growth

In July 2019, employment continued its moderate upward movement of the past few months, with the number of employed persons up by 14,000 on the month after seasonal adjustment. Employment increased on the year by 374,000 persons, or 0.8%. This was mainly thanks to strong growth in jobs subject to social security contributions, which has eased considerably of late, however. The largest increase was recorded in health and social work

activities and in business-related services (excluding temporary agency employment). By contrast, the number of filled jobs subject to social security contributions in manufacturing was down slightly, and there was a steep decrease in the temporary employment sector. The leading indicators for labour market demand continued to lose ground and are now only slightly expansionary. The number of job vacancies is still very high, however.

The seasonally adjusted number of persons registered as unemployed went up slightly in August 2019. The Federal Employment Agency recorded 2,29 million unemployed persons, 4,000 more than in July. The unemployment rate remained unchanged at 5.0%. 31,000 fewer persons were registered as unemployed than in August last year. Due to the economic slowdown, the month-on-month increase was related to the number of job seekers receiving unemployment benefits under the statutory insurance scheme. Unemployment amongst job seekers receiving the basic welfare allowance was unchanged. The scope of labour market policy measures is unlikely to have influenced the development; the increase in overall underemployment was similar to that in unemployment. The unemployment barometer of the Institute for Employment Research (IAB) declined again, suggesting a further rise in unemployment in the next three months.

Unemployment somewhat higher

Prices

Given the prospects of subdued demand, crude oil prices fell markedly in August 2019 and were down by 7½% on the month. This was a considerable drop of just under one-fifth on the year. In mid-September, prices spiked following the production losses in Saudi Arabia and, as this report went to press, the price of a barrel of Brent crude oil had gone up to US\$65. Crude oil futures were still trading at discounts, however. The discount on crude oil futures was US\$3½ for deliveries six months ahead and US\$5½ for deliveries 12 months ahead.

Crude oil prices up distinctly of late

Barely any change in import and producer prices excluding energy

After seasonal adjustment, prices were down slightly overall at the import level in July. This was mainly attributable to energy, where prices continued to decline. By contrast, prices for the imports of other goods were unchanged. Import prices were down considerably on the year due to cheaper energy products (-2.1%). Domestic producer prices, for which data for August are already available, fell slightly in July and August due to energy. There was no change in prices of other goods, and the year-on-year figure for manufactured articles was still in positive territory (+0.3%).

Consumer prices down slightly

Consumer prices as measured by the Harmonised Index of Consumer Prices (HICP) were down slightly in August after seasonal adjustment. One reason for this was energy prices, which continued to fall on the back of lower crude oil prices. Furthermore, non-energy industrial goods were cheaper. By contrast, food prices surged considerably once again and prices for services picked up slightly. Annual HICP inflation fell slightly to 1.0% (excluding energy and food, to 0.8%). As in July, a key factor in the low year-on-year rates was an arithmetic one-off effect caused by methodological changes to the package holidays sub-index at the beginning of the year in conjunction with the construction of the HICP as a chain-linked index with weightings that are updated annually.¹ By contrast, the year-on-year rate of CPI, which is not subject to this effect, was significantly higher at 1.4% (compared with 1.7% in the previous month). The one-off effect affecting package holidays will also dampen headline and core HICP inflation this month and next.

■ Public finances

Statutory health insurance scheme

Slightly higher deficit in Q2

In the second quarter of 2019, the statutory health insurance (SHI) scheme as a whole (comprising the health insurance institutions and the

health fund) posted a deficit of just over €½ billion, putting it €½ billion higher on the year. Although the health fund halved its deficit to just short of €½ billion, the health insurance institutions ran a deficit of €½ billion. One year previously, they had recorded a surplus of €½ billion. Approximately one-third of the deterioration in the result posted by the health insurance institutions was due to somewhat lower supplementary contribution rates. According to data from the Federal Ministry of Health, the average supplementary contribution rate charged by the health insurance institutions was 0.99% around the middle of the year. It was thus down by just under 0.1 percentage point on the year.

The health insurance institutions' revenue, which mainly consists of transfers from the health fund, grew by 3½%. Lower supplementary contribution rates dampened the increase in contribution receipts by ½ percentage point. Expenditure growth, at 5%, accelerated further, despite being curbed by ½ percentage point by one-off effects from the previous year. Although growth in spending on hospital treatment, a large expenditure item, was again distinctly lower at 3% and only slightly exceeded the adjustment to services charges, the increase in outlays on pharmaceuticals accelerated significantly to +5½%. The rise in expenditure on remedies and therapeutic appliances, sickness benefits and travelling expenses was far above average. Other expenditure on benefits experienced a large increase, as it has done since the beginning of the year, as a result of payments under the Care Staff Strengthening Act (*Pflegepersonal-Stärkungsgesetz*).

Health insurance institutions post slight deficit in face of somewhat lower supplementary contribution rates

The health fund's revenue grew by 4% on the year. In comparison with the start of the year, growth accelerated particularly owing to materially higher revenue from contributions on pensions. These reflected the impact of "mothers' pensions", which had been extended at the start of the year, including retro-

Slight improvement in health fund due to higher "mothers' pensions"

¹ See Deutsche Bundesbank (2019).

spective payments for the entire first quarter. Reduced supplementary contribution rates and lower minimum contributions for self-employed persons had a dampening effect. The fund's expenditure, which largely comprises payments to the health insurance institutions, saw a somewhat weaker rise than revenue.

Another surplus for health fund possible for year as a whole

In autumn 2018, the group of SHI estimators had forecast a moderate deficit in the health fund for 2019 as a whole. Transfers are again being made from reserves to the innovation and structural funds. To date, the economic downturn has not had a perceptible impact on the development of employee compensation and pensions. In the first half of the year, the result was also somewhat more favourable than it had been a year earlier, given reduced transfers to both funds. However, additional expenditure could arise in the second half of the year. All in all, the health fund could, as before, post a moderate surplus for the year as a whole.

Further surplus for health insurance institutions uncertain

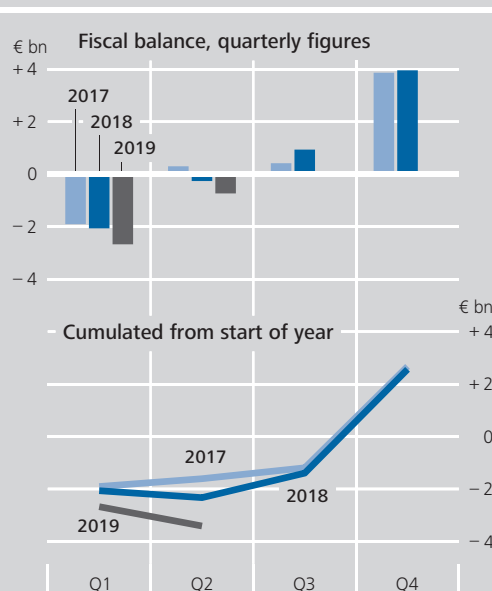
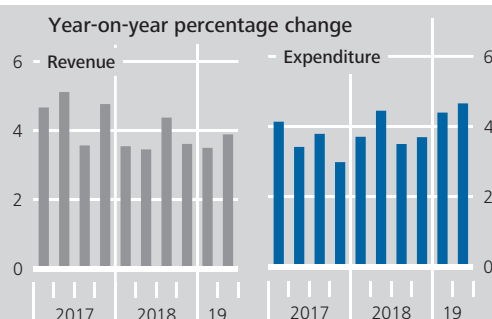
Last autumn, the group of estimators had predicted a rise of 4½% in spending by health insurance institutions for the year as a whole. In the preceding years, increases had regularly been overestimated. If the recent development continues, these estimates might now even turn out to be somewhat too low. Although the average supplementary contribution rate remains above the cost-covering level of 0.9% projected last autumn, it is uncertain whether the health insurance institutions will post another surplus.

Public long-term care insurance scheme

Significant surplus in Q2 due to higher contribution rate

The core area² of the public long-term care insurance scheme recorded a surplus of €1 billion in the second quarter of 2019. One year earlier, it had posted a deficit of just under €1 billion. This considerable improvement is due to the sharp increase in the contribution rate. Since the beginning of the year, the rate has stood at

Finances of the statutory health insurance scheme*

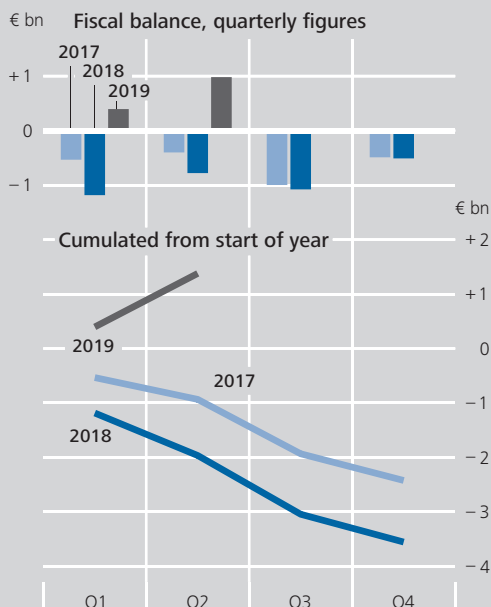
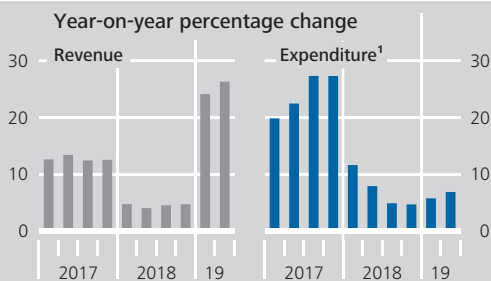


Source: Federal Ministry of Health. * Health fund and health insurance institutions (consolidated). Preliminary quarterly figures. The final annual figures differ from the total of the reported preliminary quarterly figures as the latter are not revised subsequently.
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3.05% (plus an extra 0.25 percentage point for childless persons) and is, therefore, ½ percentage point higher than before. This spurred revenue growth of 26½%. Since the beginning of the year, revenue has also included payments made by the health insurance institutions to the long-term care insurance scheme under the Care Staff Strengthening Act.

² The developments outlined here and below exclude the provident fund. This fund uses grants financed by contributions from the core area to accumulate assets. These assets are to be depleted again in the 2030s to dampen the expected contribution rate rise.

Finances of the public long-term care insurance scheme*



Source: Federal Ministry of Health. * Preliminary quarterly figures. The final annual figures differ from the total of the reported preliminary quarterly figures as the latter are not revised subsequently. ¹ Including the transfers to the long-term care provident fund.
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Major expenditure growth

At 7%, expenditure rose sharply on the year. Higher care allowance payments and pension contributions for those providing care for a relative caused an even stronger expansion in cash benefits of 9% overall. Growth in benefits in kind accelerated to 5½% on the year. However, outlays on fully inpatient care, a major expenditure item, again remained virtually unchanged.

Despite considerable surplus this year, further rises in contribution rates likely in the years ahead

Expenditure growth appears unlikely to decelerate over the remainder of the year. It could even accelerate on account of continued efforts to improve the care situation. This notwithstanding, a significant surplus is also likely

for the year as a whole, after a deficit of €3½ billion in 2018. This is primarily attributable to the sharp rise in contribution rates, resulting in additional revenue of €7½ billion. In future, however, demographic change will place a considerable strain on the finances of the long-term care insurance scheme. It is vital that this fact is given due consideration in the debate on further benefit expansions. Overall, it is likely that, looking ahead, the contribution rate of the long-term care insurance scheme will continue to rise significantly, even without such discretionary increases in expenditure.

Securities markets

Bond market

Gross sales on the German bond market in July 2019, at €122.7 billion, were higher than in June (€95.1 billion). However, after taking account of redemptions, which also increased, and changes in issuers' holdings of their own debt securities, the outstanding volume of domestic bonds contracted by a net €7.9 billion after having already decreased by €2.3 billion in June. Foreign debt securities worth €5.3 billion were placed in the German market, which meant that the outstanding volume of domestic and foreign debt instruments in Germany receded by €2.6 billion on balance.

Net redemptions on the German bond market

The public sector redeemed its own bonds in the amount of €7.6 billion net in the reporting month. It was primarily central government that reduced its capital market debt on balance (€12.6 billion). The redemptions were focused on ten-year Federal bonds (Bunds) (€21.6 billion). This contrasted with net issuance of five-year Federal notes (Bobl)s worth €4.6 billion and Treasury discount paper (Bubills) at €3.7 billion. The Federal states and local governments issued bonds to the tune of €5.1 billion on balance.

Lower public sector capital market borrowing

Domestic enterprises redeemed debt securities worth €1.1 billion net in July. This was due

Net redemptions in the corporate sector

solely to non-financial corporations on balance, while other financial institutions issued bonds on a small scale.

Slight rise in credit institutions' capital market debt

Domestic credit institutions increased their capital market borrowing by €0.7 billion net in the reporting month. This principally involved debt securities issued by specialised credit institutions (€1.6 billion), among which are public promotional banks, for example. There was also an increase of €1.0 billion in the outstanding volume of other bank debt securities that can be structured flexibly. This contrasted with mortgage Pfandbriefe, which were redeemed for €1.8 billion net.

Purchases of debt securities

Domestic credit institutions emerged as sole buyers in July, acquiring debt securities for €4.5 billion net. For the most part, it was foreign paper that was bought. The Bundesbank's bond portfolio declined by €2.6 billion for operational reasons. Foreign investors and domestic non-banks also reduced their bond investment by €2.3 billion and €2.2 billion net, respectively.

Equity market

Hardly any net issuance on the German equity market

The reporting month saw hardly any new shares being issued by domestic firms on the German equity market (€0.1 billion). Sales of foreign shares in Germany rose by €2.6 billion in the same period, however. Domestic non-banks were dominant on the buyers' side of the market, adding shares worth €2.7 billion net to their portfolios. Foreign investors bought equities for €1.6 billion net, while domestic credit institutions sold shares for €1.6 billion on balance.

Investment funds

German investment funds record moderate inflows

Domestic investment funds registered a moderate inflow of funds amounting to €5.9 billion in July, the vast majority of which went into specialised funds which are reserved for institu-

Sales and purchases of debt securities

€ billion

Item	2018	2019	
	July	June	July
Sales			
Domestic debt securities ¹	- 9.9	- 2.3	- 7.9
of which:			
Bank debt securities	- 7.1	- 0.9	0.7
Public debt securities	- 6.4	- 9.8	- 7.6
Foreign debt securities ²	6.1	10.3	5.3
Purchases			
Residents	12.0	11.8	- 0.3
Credit institutions ³	- 3.1	9.7	4.5
Deutsche Bundesbank	5.8	- 1.7	- 2.6
Other sectors ⁴	9.3	3.7	- 2.2
of which:			
Domestic debt securities	2.8	- 0.4	- 4.7
Non-residents ²	- 15.8	- 3.8	- 2.3
Total sales/purchases	- 3.8	8.0	- 2.6

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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tional investors (€5.2 billion). Among the asset classes, the chief beneficiaries of the new funds were mixed securities funds and open-end real estate funds (€3.8 billion and €2.1 billion, respectively). By contrast, bond funds recorded outflows amounting to €1.8 billion. Foreign mutual funds sold share certificates on the German market for €3.6 billion in net terms. It was almost exclusively domestic non-banks that emerged as purchasers of investment fund shares in the reporting month (€8.5 billion). Domestic credit institutions acquired units for €1.4 billion on balance, while foreign investors reduced their fund portfolio in Germany by €0.4 billion.

Balance of payments

Germany's current account recorded a surplus of €22.1 billion in July 2019. The result was €1.2 billion up on the level of the previous month. This was attributable to an increase in

Rise in current account surplus

Major items of the balance of payments

€ billion

Item	2018		2019	
	July	June	July ^P	
I. Current account	+ 13.9	+ 20.9	+ 22.1	
1. Goods ¹	+ 15.3	+ 17.7	+ 23.4	
Exports (f.o.b.)	107.8	105.6	115.3	
Imports (f.o.b.)	92.5	87.9	91.9	
Memo item:				
Foreign trade ²	+ 16.4	+ 16.6	+ 21.4	
Exports (f.o.b.)	111.0	106.1	115.2	
Imports (c.i.f.)	94.6	89.4	93.7	
2. Services ³	- 4.9	- 2.4	- 5.4	
Receipts	24.2	24.5	25.4	
Expenditure	29.1	26.9	30.8	
3. Primary income	+ 8.1	+ 8.9	+ 8.7	
Receipts	17.6	19.3	18.4	
Expenditure	9.5	10.4	9.8	
4. Secondary income	- 4.6	- 3.3	- 4.6	
II. Capital account	- 0.2	- 0.2	+ 0.3	
III. Financial account (increase: +)	+ 6.5	+ 17.9	- 0.6	
1. Direct investment	+ 5.4	+ 2.1	- 3.9	
Domestic investment abroad	+ 10.4	+ 2.8	+ 4.2	
Foreign investment in the reporting country	+ 5.0	+ 0.6	+ 8.1	
2. Portfolio investment	+ 26.4	+ 19.8	+ 10.8	
Domestic investment in foreign securities	+ 10.8	+ 17.5	+ 9.7	
Shares ⁴	+ 2.6	+ 0.5	+ 0.9	
Investment fund shares ⁵	+ 2.1	+ 6.7	+ 3.6	
Long-term debt securities ⁶	+ 4.2	+ 7.8	+ 6.5	
Short-term debt securities ⁷	+ 1.9	+ 2.5	- 1.3	
Foreign investment in domestic securities	- 15.5	- 2.3	- 1.0	
Shares ⁴	- 0.1	+ 0.8	+ 1.6	
Investment fund shares	+ 0.3	+ 0.7	- 0.4	
Long-term debt securities ⁶	- 19.7	+ 2.1	- 4.9	
Short-term debt securities ⁷	+ 3.9	- 5.9	+ 2.6	
3. Financial derivatives ⁸	+ 1.4	+ 4.8	+ 3.0	
4. Other investment ⁹	- 26.9	- 8.5	- 10.8	
Monetary financial institutions ¹⁰	- 1.5	+ 4.4	+ 33.5	
of which:				
Short-term	- 5.6	+ 1.6	+ 34.0	
Enterprises and households ¹¹	+ 4.0	+ 4.9	+ 1.3	
General government	- 2.6	+ 0.0	+ 0.3	
Bundesbank	- 26.9	- 17.8	- 45.9	
5. Reserve assets	+ 0.3	- 0.3	+ 0.3	
IV. Errors and omissions¹²	- 7.2	- 2.8	- 23.0	

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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the goods account surplus, which outweighed the reduction in the invisible current transactions balance comprising services as well as primary and secondary income.

In the reporting month, the surplus in the goods account increased by €5.7 billion on the month to €23.4 billion. In this context, exports of goods expanded more sharply than imports.

Goods account surplus widened

Germany recorded a deficit of €1.3 billion in invisible current transactions in July, compared with a surplus of €3.2 billion one month earlier.

Decline in invisible current transactions balance

The turnaround was largely attributable to greater deficits in the services and secondary income accounts. In the services account, the deficit widened by €3.0 billion to €5.4 billion. Receipts grew, with higher receipts, above all, in charges for the use of intellectual property, in travel and in transport outweighing the decline in IT services, in particular. However, expenditure rose at an even stronger pace than receipts, chiefly owing to the usual seasonal expansion in travel expenditure. The deficit in the secondary income account widened by €1.3 billion to stand at €4.6 billion, with receipts decreasing, notably on account of lower general government revenue from current taxes on income and wealth. In addition, expenditure went up slightly, given the increased payments by general government and non-government sectors to non-residents. Net receipts in primary income fell marginally by €0.2 billion to €8.7 billion. Receipts contracted, particularly on account of lower dividend income from portfolio investments. The decline in expenditure was somewhat weaker, which was also largely attributable to lower dividend payments.

Against the backdrop of market expectations of further interest rate reductions, cross-border portfolio investment saw funds in the amount of €10.8 billion net flow out of Germany in July 2019, compared with €19.8 billion in June 2019. This resulted mainly from the fact that domestic investors acquired foreign securities to the tune of €9.7 billion. They acquired bonds

Portfolio investment sees outflow of funds

(€6.5 billion), mutual fund shares (€3.6 billion) and shares (€0.9 billion), while disposing of money market paper (€1.3 billion). Foreign investors reduced their holdings of German securities on balance, by €1.0 billion. They disposed of bonds (€4.9 billion) and mutual fund shares (€0.4 billion), but acquired money market paper (€2.6 billion) and shares (€1.6 billion).

*Capital imports
both in direct
investment ...*

Direct investment generated net capital imports of €3.9 billion in July (June: net capital exports of €2.1 billion). This was chiefly on account of foreign enterprises stepping up their direct investment in Germany (€8.1 billion). This was achieved mainly through intra-group loans (€6.5 billion). On top of this, they boosted their equity capital in Germany (€1.7 billion). German companies invested a net €4.2 billion abroad. They did so by increasing their equity capital (€2.2 billion) and granting intra-group loans (€2.0 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 inflows from abroad of €10.8 billion in July (June: €8.5 billion). This was primarily attributable to large inflows of funds to the Bundesbank in the amount of €45.9 billion. In this context, Germany's TARGET2 balance receded by €71.4 billion; by contrast, declining deposits made by foreign counterparties at the Bundesbank led to capital outflows (€25.7 billion). Monetary financial institutions (excluding the Bundesbank) recorded capital exports of €33.5 billion. In addition, non-banks saw outflows of funds (€1.6 billion), mainly through transactions by enterprises and households with non-residents (€1.3 billion).

*... and in other
investment*

The Bundesbank's reserve assets grew slightly – at transaction values – by €0.3 billion in July.

Reserve assets

■ List of references

Deutsche Bundesbank (2019), Dampening special effect in the HICP in July 2019, Monthly Report, August 2019, pp. 57-59.

The impact of wages on prices in Germany: evidence from selected empirical analyses

The impact of wages on prices has recently attracted a great deal of attention, both within academic circles and in the monetary policy debate. Despite the recent acceleration of wage growth, underlying inflation has risen only sluggishly, in Germany as well as in the euro area. This observation calls for a more precise analysis of the impact of wages on prices. In particular, the present investigation focuses not only on the scale of the impact, but also whether it might have diminished over time.

This article presents the results of selected empirical analyses examining the impact of wages on prices – a phenomenon known as pass-through – in Germany. On the basis of German firms' cost structure data for 2016, the percentage share of labour costs in the sales of goods and services that are contained in the Harmonised Index of Consumer Prices (HICP) is calculated. A comparable analysis is performed using input-output tables. Moreover, the impact of wages on prices is assessed based on a simulation using the Bundesbank's macroeconomic model. Lastly, a structural time series model is employed to address the question of how the relationship has evolved over the period since 1970. Overall, the analyses indicate that the elasticity of consumer prices to a change in wages is currently around one-third. This means that a 1% increase in labour costs would ultimately push consumer prices up by around 0.3%. The econometric studies additionally show that the pass-through of wage changes to consumer prices takes place gradually over several years.

Although the extent of the pass-through to consumer prices has diminished since the 1970s, there has been little change since the financial crisis of 2007-08 and, more recently, it has remained roughly stable. It must be taken into account, though, that such econometric studies of the pass-through typically focus on the cyclical component of inflation, i.e. deviations of the observed variables from their long-term trends.

The analyses indicate overall that the cyclical impact of wages on prices is still intact. Accordingly, the acceleration of wage growth in Germany over the past few years should, ceteris paribus, be reflected in a gradual rise in inflation.

The multidimensionality of the impact of wages on prices

Overview of impact of wages on prices

Wage dynamics are a central element in analysing and forecasting price developments. The macroeconomic elasticity of price changes to changes in wages, however, is affected by a large number of factors and also depends on which wage and price variables are being examined.

Relationship between unit labour costs and goods prices: mark-ups as buffers given imperfect competition

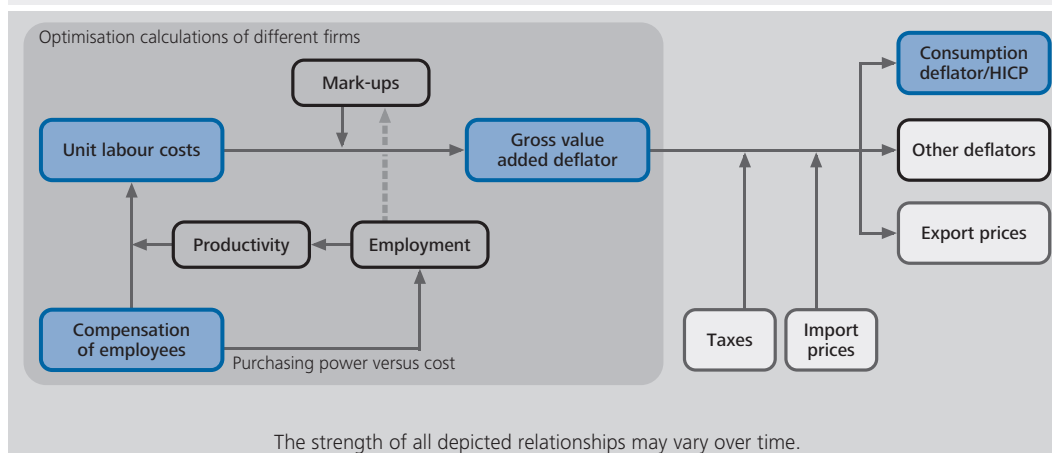
In the theoretical model of a closed economy with perfect competition, where goods prices are set in line with marginal costs, goods prices rise or fall at the same rate as unit labour costs.¹ However, in the real world, changes in unit labour costs are not necessarily passed through completely to price changes. This is because firms usually have a certain price-setting power and can set their prices somewhat higher than their costs. They therefore generally have the option of cushioning changes in unit labour costs by adjusting their mark-ups.² This is especially the case where changes in prices are costly for firms because, for instance, the adjustments themselves involve additional costs or they have reason to fear a decrease in their market share.

It should also be noted that the impact of unit labour costs on prices is not identical to the impact of other wage variables, such as compensation per employee or collectively agreed wages, as unit labour costs already reflect the results of endogenous adjustment processes. If, for instance, compensation per employee increases, reducing mark-ups is not the only way for firms to cushion this rise in labour costs. Another option is to reduce labour demand, either by cutting the average number of working hours or by laying off employees. This would increase measured labour productivity, with unit labour costs either rising less strongly or even remaining unchanged.³ At the same time, lower labour demand could lead to a contraction in aggregate demand, which puts downward pressure on mark-ups and prices (purchasing power character versus cost character of wages).⁴ The impact of wages and unit labour costs on prices can thus be different.⁵

Wages versus unit labour costs and demand character of wages

¹ For more, see the Annex on pp. 32 ff.
² This holds, for instance, under monopolistic competition.
³ This holds wherever factors of production can be substituted, i.e. where labour input can be offset by higher capital input. Substitutability also depends on the scope of employment protection legislation.
⁴ In such a situation, mark-ups would behave pro-cyclically.
⁵ Gumiel and Hahn (2018) show, for instance, that wages and unit labour costs can respond differently to supply and demand shocks. For instance, following a demand shock, by the time the rise in unit labour costs peaks, growth in consumption per employee has already begun to contract.

The multidimensionality of the impact of wages on prices



Sectoral differences as a function of individual labour cost shares

In general, the more labour-intensive production is, the greater the impact of wages on prices.⁶ Since labour intensity of production can vary across sectors, the impact of wage changes on prices should vary by sector. Both the gross value added (GVA) deflator, which is often used in empirical studies to approximate the price of domestic production, and unit labour costs are therefore aggregates of industrial and services sectors with different wage structures and price-setting strategies.

HICP versus GVA deflator: import and export prices and sectoral differences

The macroeconomic GVA deflator, however, is not the target variable of monetary policy. In the euro area, the target variable is the HICP, which can be approximated relatively closely by the consumption deflator. Unlike the GVA deflator, this deflator also contains prices of imported consumer goods and inputs. These prices, however, are likely to be set largely independently of domestic labour costs, apart from those associated with domestic trading activities.⁷ The impact of domestic wages on consumer prices is accordingly likely to be smaller than that on the GVA deflator. In addition, part of the goods produced domestically are not sold domestically but exported. As a result, associated (labour) cost changes might not necessarily be passed through to consumer prices.⁸ As a result, depending on the size of the variation of sectoral wage and price movements, the pass-through of wages to the GVA deflator and to the HICP is likely to be different. The same conclusion holds for the pass-through to sub-components of the HICP.

Possible time variation of pass-through

Lastly, the impact of wages on prices and thus all the relationships described above are likely to be time varying, since the structure of the economy being studied is constantly changing.⁹ Examples of changing trends include (national and international) competitive pressure, the global commodity price cycle and technology transfer, labour force mobility, unions' bargaining power and firms' ability to offshore, the monetary policy strategy and thus possibly inflation expectations, as well as the fiscal policy framework. These factors are likely

to impact both on the pass-through of wages to prices and on their trend pattern.¹⁰

Against this backdrop, the present article examines the impact of wages on prices in Germany using a variety of wage and price variables as well as several different analytical approaches. Pass-through is in principle defined here as elasticity, i.e. the ratio of a percentage change in prices to a percentage change in wages. It is also important to distinguish between a static and a dynamic relationship between wages and prices. In the static context, price elasticity can be determined using statistical methods. By contrast, in a dynamic context, pass-through has to be estimated econometrically. This estimation can account for macroeconomic feedback effects. Such feedback effects are taken into account, for instance, in the Bundesbank's macroeconomic model, which is used for

Static versus dynamic relationship and interaction between wages and prices

⁶ If perfect competition is assumed, it can theoretically be shown that the pass-through of wages to prices corresponds to the labour cost share (see the Annex on pp. 32 ff.).

⁷ By the same token, the cost situation of foreign firms and their price-setting strategies can be expected to play a stronger role.

⁸ The same holds for the prices of goods produced domestically, which are classified as investment or government consumption. Although these are contained in the GVA deflator, they only feed into the consumption deflator via inputs, if at all.

⁹ For the United States, Peneva and Rudd (2017) find a decrease in the impact of wages on prices, whereas for the euro area (including Germany), Bobeica et al. (2019) generally find an unchangingly strong pass-through, which, however, is likely to be somewhat more moderate owing to the existing low inflation environment. Possible changes in the relationship between wages and prices are also very relevant to the monetary policy debate. To substantiate this point, at their press conference in March 2019 Draghi and de Guindos (2019a), for instance, pointed out that "we've got to be patient in terms of pass-through [from wages to prices] (...) because the mechanism whereby increasing the cost, wages and also other parts of the cost components are transferred into prices, has changed structurally in the last few years. You've seen this in the United States and you're seeing this in Europe now". They were referring there to the following statement in Yellen (2015): "movements in labor costs no longer appear to be an especially good guide to future price movements" and: "the wage-price spiral no longer seems to provide a useful description of the U.S. inflation process". At the same time, at their press conference in July 2019 Draghi and de Guindos (2019b) emphasised that "over the medium term underlying inflation is expected to increase, supported by (...) stronger wage growth".

¹⁰ In other words, the relationships could also depend on the position of the business cycle and on the type of shock driving the wage change.

Various analytical approaches using different price and wage variables

preparing the macroeconomic forecasts for Germany that feed into the Eurosystem's projections (see also the box on pp. 19 ff.).

In the first analysis, the share of labour costs in goods and services contained in the HICP is determined for 2016 based on various firms' cost structure data. This is used to derive conclusions on the pass-through of wage changes to changes in consumer prices. The second analysis presents the results of econometric analyses for the period since 1970. It addresses not only the pass-through of hourly wages to the consumption deflator but also the effects on the GVA deflator. In addition, to facilitate comparison with various academic studies, the pass-through of unit labour costs to these two price variables is examined. This article also investigates whether the estimated pass-through has diminished over time.

Firms' labour cost shares as a proxy for the impact of wages on prices

Labour cost share as a proxy for pass-through

A comparison of a firm's labour costs with total sales provides an initial proxy for the pass-through of wages to prices. It is, in fact, possible to demonstrate theoretically that, under certain conditions, labour cost shares correspond to the pass-through of wages to prices (for more, see the exposition in the Annex on pp. 32 ff.). At the macroeconomic level, it must be noted here that – as mentioned in the preceding section – not all goods and services produced domestically are intended for private consumption. This means that, to start with, labour cost shares are calculated for individual firm and services sectors whose products are contained in the HICP.¹¹ These shares are then weighted in accordance with the HICP basket of goods in order to ultimately determine the labour cost share of headline HICP. This share can then be understood as an indicator of pass-through of wages to consumer prices.¹²

Data on the cost structure of firms in Germany are published annually by Germany's Federal Statistical Office for some 70 sectors of the economy. The reporting entities range from those which manufacture prepared meals and dishes via furniture manufacturers to catering services providers. They mostly provide, on an annual basis, data about their expenditure on individual production components, such as purchased goods, raw materials used or wages.¹³ This wage expenditure and all other expenditure can be expressed as a percentage of total sales in that respective economic sector in order to determine labour cost shares and shares of other expenditure at a disaggregated level. At the same time, the difference between sales and the sum of all expenditure provides an approximation of the mark-ups tacked on to costs in the respective business sectors.¹⁴

Data on firms' cost structure for around 70 economic sectors

The sectors of the economy for which cost data are available, however, are subject to a different statistical classification than goods and services, which are contained in the HICP basket of goods.¹⁵ In order to calculate the labour cost share of the HICP, economic sectors have to be assigned to HICP components at the

Assigning business sectors to HICP components: two-thirds of HICP covered

¹¹ In an ideal scenario, firm-level microdata would be used here; however, such data are not available.

¹² Since the data are not available for all sectors and labour cost shares in inputs and the share of imported goods can only be estimated, the result should be understood as a proxy.

¹³ See Federal Statistical Office (2019a) to (2019c). Wage expenditure includes remuneration and social security contributions along with, where available, data on temporary work and wage labour.

¹⁴ The impact of foreign trade is largely excluded in this study. One factor omitted here is that part of the goods contained in the HICP is imported. With regard to these goods, which, directly and indirectly, account for around one-fifth of consumer spending, domestically paid wages are likely to matter only for trade. Another factor omitted here is that certain goods produced domestically are primarily destined for export. The proxy for the pass-through of wages to prices was thus calculated under the assumption that the labour cost share of the goods in a sector destined for sale domestically corresponds to the labour cost share of the goods of the same sector destined for a foreign market.

¹⁵ Whereas firms and service providers are classified according to the Nomenclature statistique des activités économiques dans la Communauté européenne (Statistical classification of economic activities in the European Community (NACE)), HICP components fall under the classification of individual consumption by purpose (COICOP).

Transmission of wage changes to prices in the Bundesbank's macroeconomic model

A wage shock not only has a direct impact on goods prices through the changed cost situation resulting from the shock, it also has indirect effects. These include, in particular, the impact of higher wages on the labour market and the real economy. Amongst other things, these are relevant for the development of productivity and are therefore significant with regard to the adjustment process of prices to a new wage level.

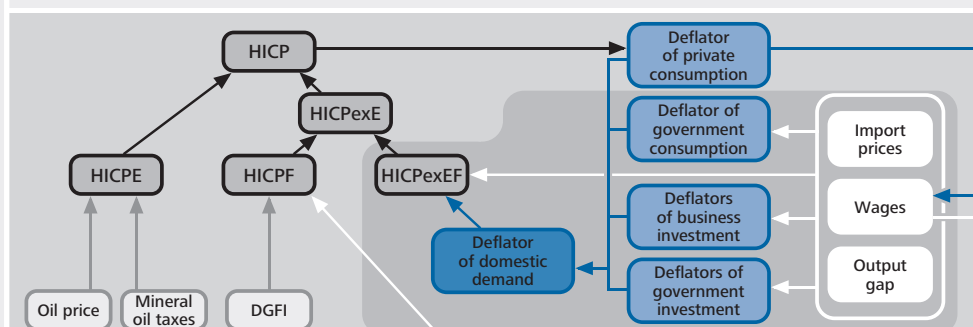
Structural models, such as the structural vector autoregressive model (SVAR) in the main text, or semi-structural macroeconomic models, such as the Bundesbank's macroeconomic model, are suitable analytical instruments for taking account of these repercussions. For the long term, the central behavioural equations in this model are derived from neoclassical theory. In the short term, prices do not fully adjust, and the model behaviour is determined to a greater extent by the demand for goods. This model serves not only as a core instrument for producing macroeconomic projec-

tions for Germany – which feed into the semi-annual euro area forecasts by Eurosystem experts that are published by the ECB in June and December¹ – but it is also regularly used for scenario analyses and policy simulations. This allows, for example, the effects of an assumedly exogenous rise in wages on consumer prices to be estimated. Here, in addition to the direct effects that are evident from the price variable behavioural equations, the impact of wages on the labour market and components of aggregate demand – which in turn have repercussions on price development – can also be taken into account in the context of the full model.

In the price block of the econometric model, both the deflators of the expenditure components as well as various components of the Harmonised Index of Consumer Prices (HICP) are explained. Here,

¹ In this context, the model is chiefly responsible for merging the projections for the sub-aspects of the German economy into a coherent overall macroeconomic picture.

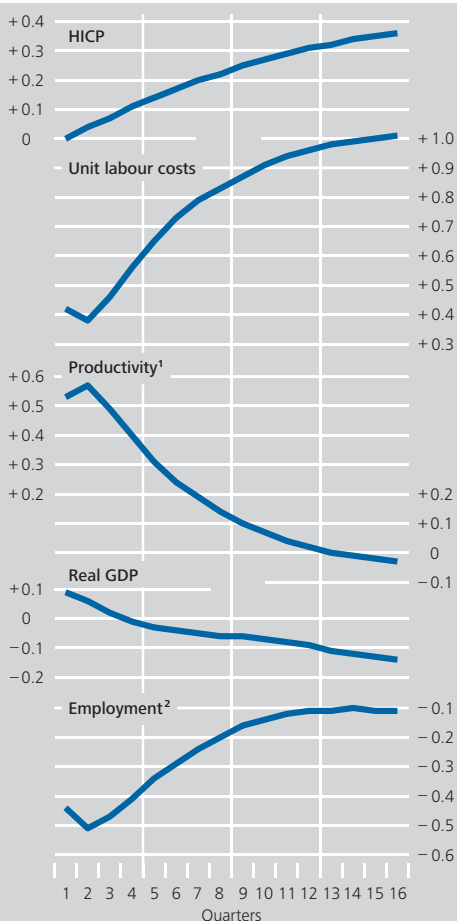
Schematic illustration of the price block in the Bundesbank's macroeconomic model*



* In the model, the role of value added tax is also factored in to the modelling of individual price variables. HICP = Harmonised Index of Consumer Prices. HICPE = HICP energy. HICPF = HICP food. HICPexE = HICP excluding energy. HICPexEF = HICP excluding energy and food. DGFI = agricultural producer prices in the EU.

Response of selected model variables to a wage shock*

Percentage deviation from the baseline



* Exogenous and persistent rise in gross hourly wages of 1%.
 1 On an hourly basis. 2 Total number of hours worked.
 Deutsche Bundesbank

wage variables feed in as determinants to varying degrees in each case. With regard to HICP, the more volatile components of energy and food as well as the HICP core components of services and industrial goods excluding energy are considered separately.² Crude oil prices and agricultural producer prices in the EU are the respective key influencing factors for the energy and food components of HICP. To explain the HICP core components and the deflators for investment and government consumption, Phillips curve equations³ expanded with estimated long-term relationships are used. In this long-term relationship, the impact of

key cost components on prices is captured through import prices (P_t^m) as well as unit labour costs (ULC_t):

$$\ln(P_t) = \alpha_1 + \alpha_2 \ln(ULC_t) + \alpha_3 \ln(P_t^m) + \varepsilon_t.$$

In this modelling framework, it is therefore assumed that wage inflation will not have an effect on prices over the long term provided that productivity rises to the same extent, so that the wage costs per unit produced remain unchanged.

Over the short to medium term, alongside the changes in import prices and unit labour costs, the level of aggregate capacity utilisation (X_t) also affects price development. If required, additional explanatory variables (Z_t), such as the interest rates on commercial or residential mortgages as a measure of user cost of capital, are included:⁴

$$\Delta \ln(P_t) = \beta_1 \varepsilon_{t-1} + \beta_2 \Delta \ln(ULC_t) + \beta_3 \Delta \ln(P_t^m) + \beta_4 X_t + \beta_5 Z_t + u_t.$$

Within the price block, a link between consumer price movements according to HICP and the general domestic price trend is achieved first by including the deflator of aggregate domestic demand as a determinant of the HICP core component. Second, in the behavioural equation for the deflator

² When modelling the individual price variables, an adequate degree of homogeneity is desired on the one hand so that the price variables move largely in parallel in simulations over the long term. On the other hand, individual influencing factors should also be given sufficient consideration.

³ A detailed description of the Phillips curve approach and its application within the price projection can be found in Deutsche Bundesbank (2016).

⁴ The specification presented here is purely for illustrative purposes. Any delays or modifications to the different variables are not shown. In order to factor in any dependencies between the equations in the price system consisting of the deflators of investment, the HICP core components and the deflator of government consumption, the short-term relationships are estimated using a system approach.

of private consumption expenditure, it is ensured that, in simulations, it develops broadly in line with aggregate HICP, comprising food, energy and the core component.⁵

In order to investigate the degree of transmission of wage changes to prices within the context of the model, a permanent exogenous rise in effective gross hourly wages paid⁶ of 1% over their baseline level was simulated.⁷ Here, no consideration is taken of the extent to which this wage inflation is reflected in negotiated wage rates and what proportion, if any, is attributable to wage drift, or of the causes of the rise in wages.⁸ Instead, the analysis focuses on the macroeconomic impact of an increase in wages paid by employers and on the transmission channels that are relevant to price development.⁹

If the price block of the model is viewed in isolation, the higher gross hourly earnings lead to a rise in prices, which, according to the estimation of the behavioural equations, is subdued at first but gradually intensifies over a number of years. At the same time, however, the simulations of the overall model account for employers responding to the higher wage costs by adjusting their demand for labour.¹⁰ The results show an immediate decline in total number of hours worked compared with the baseline level without the wage shock. However, as this response to higher wage costs itself lags behind the growth in hourly earnings, households' disposable income initially rises. For a time, households use the additional purchasing power to increase their consumption expenditure, with a portion going into savings. With the transmission of the wage shock to prices progressing in the second and third years of the simulation period, however, rising consumer price inflation has a dampening effect on real earn-

ings. The domestic price level, which increases as a result of the wage shock, reduces price and cost competitiveness, causing exports to increasingly fall below their baseline level. In principle, the increased wage costs also constitute an incentive for enterprises to substitute labour with capital. Overall, however, this is outweighed by the impact of macroeconomic activity on investment, so the reaction is muted. Imports become more price competitive compared with domestic production on the one hand,

⁵ It is also taken into account that fluctuations in energy prices are generally reflected to a lesser degree in the consumption deflator than in HICP.

⁶ There is no noteworthy effect on the outcome of the simulation if a rise in hourly employee wages that also include employer social contributions is implemented instead.

⁷ Here, it is assumed that wages rise due to an exogenous shock. Accordingly, possible causes for the increase in wages are not taken into account, and potential repercussions on wages resulting from the responses of other macroeconomic variables following the wage shock are not factored in to the analysis. The role of different structural shocks in the transmission of wage changes to prices in the euro area was, for instance, analysed on the basis of simulations using the ECB's New Area-Wide Model (see European Central Bank (2018)).

⁸ In principle, it would be possible to use the central wage equation in the macroeconomic model to trace the root causes of a rise in wages negotiated by the bargaining parties. The specification used to model negotiated wages largely corresponds to the one presented in Deutsche Bundesbank (2018). In the model, it is assumed that effective gross wages and salaries paid move in line with negotiated wages over the long term, but deviations above the estimated behavioural equation are possible over the short to medium term. If effective wages experience stronger growth than negotiated wages – referred to as positive wage drift – this can, within the context of the model, be attributable to the labour supply being more heavily utilised compared to the long-term observed average.

⁹ Furthermore, this analysis assumes that the macroeconomic effects of higher wages in Germany in the observation period do not cause any response in European monetary policy and that there is no reaction in bilateral exchange rates vis-à-vis the euro. This is in line with the analytical framework that is generally used for projections, in which interest rate and exchange rate movements are predetermined in the technical projection assumptions.

¹⁰ The higher potential earnings also incentivise households to expand their labour supply. This would have implications for labour force participation, the unemployment rate and thus feedback loops to wages, too. However, these do not feed into this assessment, as the higher wage level is assumed as given.

yet, on the other hand, are dampened by declining aggregate demand. As a whole, the simulation outcomes obtained using the macroeconomic model initially show an increase in gross domestic output as an immediate reaction to the wage shock. However, this drops below its baseline level as early as the second year.¹¹ Since the decline in the total number of hours worked is greater, productivity per hour rises at first.¹² This limits the impact of higher gross wages on unit labour costs and thereby on prices. This effect expires over the medium term, however, and unit labour costs exceed their benchmark to a similar degree as effective hourly earnings. In accordance with the elasticities in the behavioural equations for the individual price variables estimated for the macroeconomic model, the consumer price level is, after four years, only around 0.3% higher than its baseline level without the wage growth. Consequently,

price elasticity in relation to a wage shock would be only around 30%. In the event of a 1% wage shock, the annual rate of inflation would thus be around 0.1 percentage point higher than in the baseline scenario in each year of the four years.

11 A monetary policy response to the higher inflation rate would amplify the decline in gross domestic product compared to the baseline scenario. See Deutsche Bundesbank (2013).

12 The extent to which the reduced total number of hours worked would be accompanied by employment losses is dependent on whether and how the average number of hours worked per employee responds to the altered circumstances. If it falls as a result of lower demand, the response in the number of employees would be less pronounced than that accounted for in the total number of hours worked. The possibility of compensating by adjusting working hours is more likely in cases of temporary shocks and/or good cyclical positions, for example.

deepest possible level of disaggregation. It should be noted that, for goods in the HICP (food and non-energy industrial goods), the cost structure in both the production sector and in retail trade is relevant since this index reflects final consumer prices in retail trade.¹⁶ Information on the labour cost share is available, on the whole, for more than half of the HICP basket of goods. Therefore, the coverage of goods, at four-fifths, is considerably greater than that of services, at one-third.¹⁷ If it is assumed, moreover, that the wage expenses are likely to be relatively low¹⁸ with regard to rents and energy, which together account for around one-fifth of the HICP, and these components are factored into the analysis, HICP coverage of data on the cost structure rises to around two-thirds.

Thanks to the above classification of the labour cost shares of individual economic sectors, in keeping with the Federal Statistical Office's cost structure survey, to the components of the

HICP basket of goods, direct labour cost shares of the HICP and the HICP special aggregates¹⁹ can be identified; however, these do not contain the wage expenses resulting from inter-

16 To this extent, the labour cost share in the various sub-sectors of retail trade is relevant. In addition, production sector goods, which likewise contain labour cost shares that can be derived from the production sector's cost structure, also feed into retail trade's "services purchased".

17 On the whole, suitable economic sectors can be found for more than 80% of the food products contained in the HICP and for even as much as around 90% of the non-energy industrial goods contained in the HICP. In retail trade, which is downstream from production, a suitable classification can be found for a large share of industrial goods; however, the aggregate "retail sales of food products" must be used for all food products. In the case of services, the fact that data on "other services" are collected only every four years reduces the quantity of useful data. Assuming no distinct change in cost structures in two years, data for 2014 are used in this analysis for some services subsectors (laundry and dry-cleaning, hairdressing salons and funeral parlours) in order to achieve a greater degree of coverage.

18 Data on wage expenditure in these areas are patchy and indicate very small values, such as, for instance, 4% in the manufacture of refined petroleum products or electric power generation.

19 These encompass energy, unprocessed and processed food, non-energy industrial goods and services.

Cost structure data of selected firms and service providers in 2016

€ million

Economic sector ¹	Expenditure					
	Use of or spending on merchandise or materials	Spending on raw materials, consumables and supplies, energy consumption	Wages ²	Social security contributions	Rental and leasing activities, operating leasing	Other costs ³
Manufacture of furniture WZ08-3100	9,099	232	4,918	755	387	2,923
Retail sale of household furniture WZ08-47591	15,804	399	3,474	727	1,614	4,581
Food and beverage service activities WZ08-56	643	18,034	14,729	3,409	5,355	7,592

Sources: Federal Statistical Office (2019) and Bundesbank calculations. Structural data of firms in the manufacturing sector, in the wholesale and retail trade and in the services sector. **1** Economic sectors (WZ) based on the Statistical classification of economic activities in the European Community (NACE Rev. 2). **2** Sum of gross wages and salaries as well as temporary employment and wage labour or other industrial/craft trade services (where data on the latter are available). **3** Including operating taxes and levies as well as purchased merchandise and services.

Deutsche Bundesbank

Share of labour costs in sales of selected firms and service providers in 2016

%

Economic sector ¹	Share of expenditure in sales			
	Wages ²	Other expenditure	Total	Mark-up ³
Manufacture of furniture WZ08-3100	29	67	96	4
Retail sale of household furniture WZ08-47591	15	80	95	5
Food and beverage service activities WZ08-56	31	54	85	15

1 Economic sectors (WZ) based on the Statistical classification of economic activities in the European Community (NACE Rev. 2). **2** Wages and social security contributions (see the uppermost table). **3** Derived from sales minus expenditure.

Deutsche Bundesbank

Direct labour cost share around one-fifth for goods, one-quarter for services

mediate products (see the chart on p. 24). In 2016, these direct labour cost shares for both groups of goods (non-energy industrial goods and food) accounted collectively for around one-fifth²⁰ and were slightly higher in the production sector than in retail trade.²¹ The labour cost share of sales is somewhat greater for services, at one-quarter.²²

Labour cost shares of HICP components vary between 5% and 50%

The distribution of wage expenditure by HICP special aggregates ranges from 5% to over 30% for food and from just over 10% to just under 50% for non-energy industrial goods²³ (see the chart on p. 25). The range of wage expenditure between the individual HICP com-

ponents, especially for non-energy industrial goods, is relatively small. Only the production

²⁰ For Australia, D'Arcy et al. (2012) find a labour cost share of one-fifth only for trade.

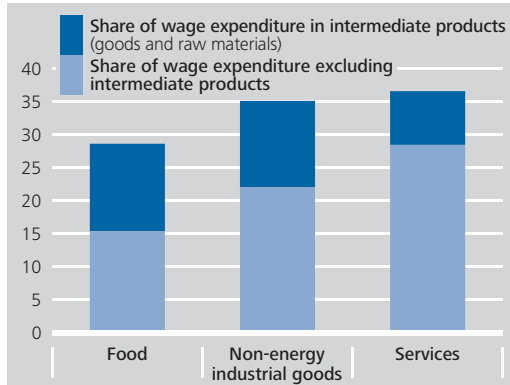
²¹ In the case of food and non-energy industrial goods, the production and retail trade sectors are aggregated by using the cost share for goods in retail trade as a weight of the production sector.

²² For services, where available, cost structure data for large firms (total sales of €250,000 and up) are used since, in this case, small firms can affect the overall data. Small firms are often run by the proprietors themselves or family members, who are not being paid for their work and whose "wages" therefore do not show up as part of wage expenses.

²³ For goods, only the matches at the industrial producer level are taken into account, as fewer matches can be created at the retail trade level. For instance, for the HICP food sub-index there is only one single match at retail trade level.

Wage expenditure by selected HICP special aggregates in 2016

As a percentage of sales



Source: Bundesbank calculations based on data from the Federal Statistical Office.
 Deutsche Bundesbank

of goods such as boats shows a significantly higher labour cost share; the importance of this product for private consumption, however, is marginal. For services, the labour cost shares in the individual HICP areas are vastly more different, ranging from 10% to over 50%. This reflects the highly diversified nature of the components for services covered in the HICP. High labour cost shares are to be seen particularly in labour-intensive services such as hairdressing or dry-cleaning, yet these only make up a small portion of the basket of goods. By contrast, the labour cost share for services with a distinct weight in the HICP, such as telecommunications, amounts only to a little more than 10%.

However, the wage expenses directly contained in the HICP that have been calculated in the analysis thus far using cost structure data are likely to understate the actual figure. This is because firms purchase commodities and other resources in order to produce the final goods or services offered to the consumer. These intermediate inputs also entail wage expenses, which must be added to those already calculated. According to cost structure data, the labour cost shares of intermediate goods producers usually account for around one-quarter of sales. Significantly lower or higher values are rare. This labour cost share can be weighted by the expenditure on goods and raw materials

Wage expenses including intermediate products at roughly 40%, ...

obtained from the cost structure data. As the intermediate inputs themselves contain both direct and indirect labour cost shares, they are incorporated into the calculation at all stages of the production of final goods, ultimately yielding wage expenses of around 40%.²⁴ However, taking into account that calculations made using input-output tables reveal that around one-fifth of goods and raw materials are imported (for more information, see the box on pp. 26 ff.) and are thus largely independent of the domestic wage setting, total wage expenses are likely to amount to closer to one-third.²⁵

If the wage expenditure included in the HICP components of rents and energy, which is likely to be very low – accounting for roughly one-fifth of HICP – is also taken into consideration, then labour costs probably make up just under 30% of headline HICP. The overall difference between goods and services is not very large, partly because many services that are relevant in the HICP are not traditional craft trade service activities.²⁶ Assuming that higher wages are fully passed through to prices, at least in the long term, price elasticity for wages can be expected to amount to around one-third, according to the cost structure analysis.

... but pass-through of wages to headline HICP just under 30% when rental and energy costs considered

SVAR analysis of the impact of wages on prices since 1970

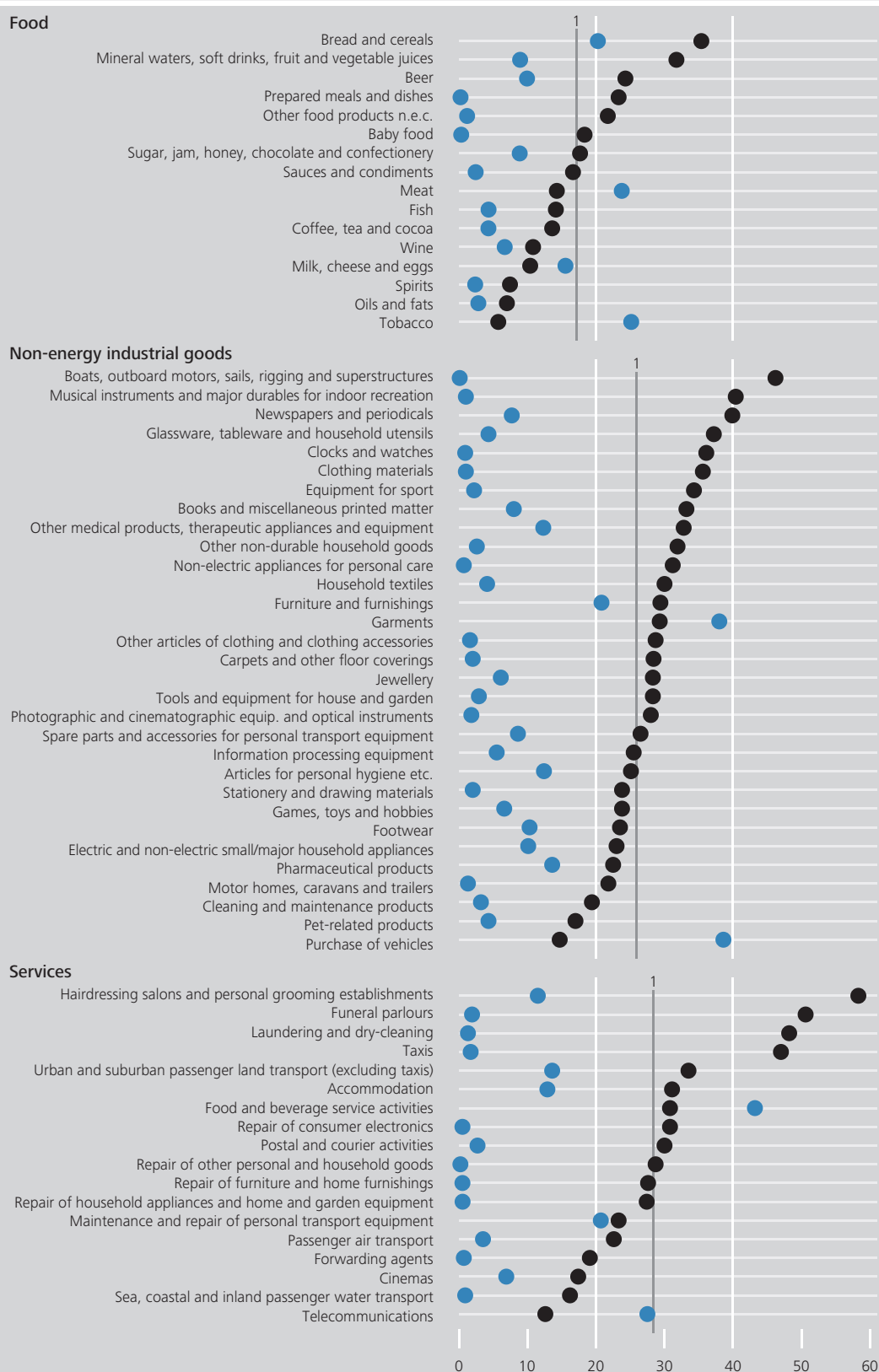
Analysing the share of HICP made up by labour costs provides a first approximation of the pass-through. Furthermore, the impact of wages on prices can be estimated using econometric methods, which use data collected over a

SVAR model with time-varying parameters estimated for 1970 onwards

²⁴ If the inputs are repeatedly replaced with the cost structure of the producing firm, an infinite geometric series is created. If wages and intermediate production account for shares of 0.25 and 0.4 respectively, this generates total wage expenses of: $\frac{0.25}{1-0.4} \approx 0.42$
²⁵ Overall wage expenses are then determined as follows: $\frac{0.25}{1-(0.4-0.08)} \approx 0.37$
²⁶ Alternatively, the small difference may derive from the fact that the wholesale and retail trade services generate high labour cost shares for goods (see the box on pp. 26 ff.).

Distribution of wage expenditure* and share in HICP in 2016

● Wage expenditure as a percentage of sales ● Share in HICP as a %



Sources: Federal Statistical Office and Bundesbank calculations. * The wage expenses contained in the intermediate products are not taken into account in the breakdown of wage expenditure above. 1 Weighted average of wage expenditure using HICP shares from 2016.

The labour cost share of consumption: an analysis with input-output tables

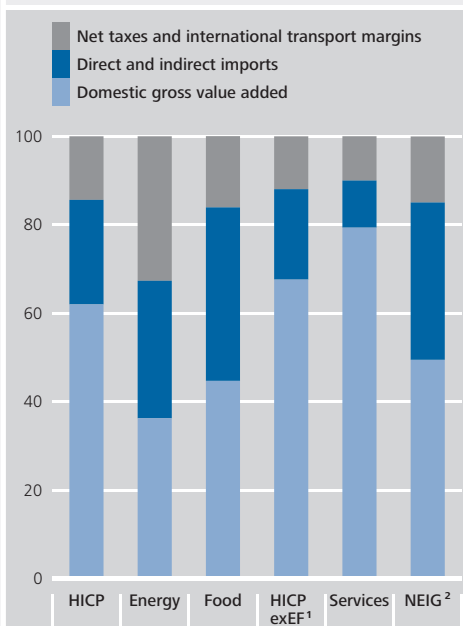
Input-output tables¹ provide comprehensive information on the interconnectedness of a country's economy both nationally and internationally. This information may be used, amongst other things, to break down the value of household consumption expenditure for the goods and services of each industrial sector into the components of net taxes, transport costs, and the nominal contribution of production factors. This latter component comprises imported intermediate goods, gross value added, taxes less subsidies, and international transport margins incurred during the production process. In this context, gross value added covers compensation of employees, mixed income, and capital income. The nominal shares of the labour and capital production factors in overall consumption expenditure may be interpreted, under certain condi-

tions, as elasticity in consumer prices with regard to the individual factors.²

In a further step, information on the composition of the Harmonised Index of Consumer Prices (HICP) and its sub-components can be derived from the composition of consumption according to the revenue account.³ Similar to the allocation of cost structure data in the main text, however, this requires the industrial sectors, according to which consumption in the input-output tables is structured, first to be aligned with the composition of the HICP consumer basket by category of goods.⁴

Breakdown of the HICP consumer basket in Germany by input factors in 2014

As a percentage of household consumption expenditures



Sources: World Input-Output Database, Eurostat and Bundesbank calculations. ¹ HICPexEF = HICP excluding energy and food. ² NEIG = non-energy industrial goods.
 Deutsche Bundesbank

¹ The "World Input-Output Table" compiled by the World Input-Output Database (WIOD) is used here. For further information, see Timmer et al. (2015) and the website www.wiod.org

² Under the assumptions presented in the Annex (see p. 32 ff.), wages in relation to turnover correspond to the elasticity of inflation with regard to wage growth. Given certain assumptions, the same relationship can be established for all other production factors.

³ With regard to the production-related linkages of individual categories of goods described in what are known as Leontief inverses, household consumption expenditure for a certain category of goods can be broken down entirely into the components of domestic gross value added, direct and indirect imports, taxes less subsidies, and international transport margins. Contributions to the HICP special aggregates, for instance, may be determined depending on how the categories of goods are aggregated.

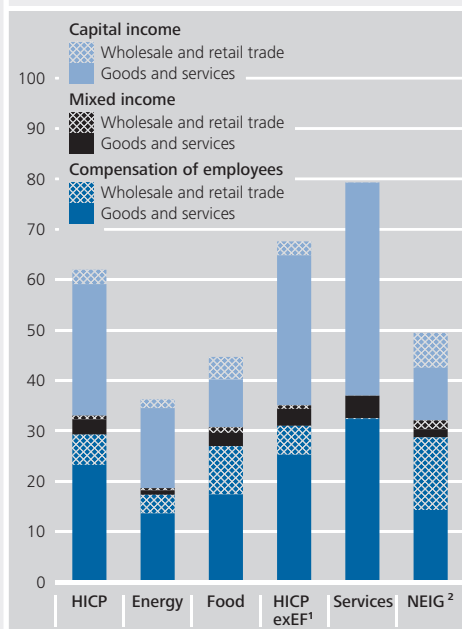
⁴ The idea of breaking down household final consumption expenditure into input factors is not new. Eurostat (2008), for example, points to the possibility of creating input-output tables for final consumption. However, there is no single approach to implementing this for the countries of the euro area. Nevertheless, in order to harness the information in the input-output tables for the analysis of price dynamics in Germany, the following methodology was applied: the linkages between the data on household final consumption expenditure in the WIOD according to the classification of products by activity (CPA) and the classification of individual consumption by purpose (COICOP) were established based on the COICOP 1999 and CPA 2008 correspondence tables lists in Eurostat's Reference And Management Of Nomenclatures (RAMON). The weights in the final consumption input-output tables were approximated using four-digit COICOP weights as well as other publicly available data. For Germany, the Federal Statistical Office published final consumption input-output tables up to 2004.

On balance, 62% of the input factors introduced for the production of household consumer goods in 2014 can be traced back to gross value added within the German economy. Taxes less subsidies and international transport margins make up 14%. Just under a quarter were caused by direct and indirect imports, the proceeds of which thus benefiting non-residents. Services had the largest share of gross value added, food products the largest share of imports, and energy the largest proportion of net taxes and transport margins.

As described in the introduction, individual input factors can be further differentiated using the information contained in the input-output tables. Within domestic gross value added, it is possible, for instance, to differentiate between employee compensation and mixed income on the one hand and capital income on the other. Retail and wholesale trade can also be differentiated. Looking at HICP services, for example, which have the highest share of gross value added among the HICP special aggregates, it can be seen that not even half of this gross value added is attributable to labour income. Consequently, the labour share in HICP services is only slightly higher than for food or non-energy industrial goods. This is because both of these special aggregates require an especially large amount of retail and wholesale trade, which is very labour-intensive. Only the labour cost share for the production of energy goods decreases significantly, at 18%.

Breakdown of domestic gross value added by income type in 2014

As a percentage of household consumption expenditures



Sources: World Input-Output Database, Eurostat and Bundesbank calculations. ¹ HICPexEF = HICP excluding energy and food. ² NEIG = non-energy industrial goods.
 Deutsche Bundesbank

longer period of time.²⁷ In such a context, it is possible to estimate not only the level of pass-through, but also whether this relationship has changed over time. To this end, various structural vector autoregressive models (SVARs) with time-varying parameters, which take the interdependencies of wages and prices into account, are estimated for Germany from 1970 onwards.²⁸ Both the deflator of private consumption expenditure, which exhibits very similar time series characteristics to the HICP (the actual monetary policy target variable), and the GVA deflator, as the indicator of domestic price developments, are selected as price values. Both the impact of hourly wages and that of unit labour costs are examined.²⁹ It should be borne in mind that the analysis addresses the interaction between the cyclical components of the variables under consideration; changes in longer-term relationships are not assessed.³⁰

Marked but declining pass-through of unit labour costs to GVA deflator; ...

Beginning with an examination of the unit labour costs and the GVA deflator (see the chart on p. 29), a fairly close correlation can be identified between their rates of change up to the mid-1990s. After this point, the correlation weakens, since the behaviour of profit mark-ups has changed over time. The SVAR estimates confirm this visual impression.³¹ It appears that the pass-through of unit labour costs to the GVA deflator in the 1970s amounted to just over one-third after one year, increasing to a little over one-half after four years. Since the mid-1990s, however, the pass-through has declined markedly. It currently accounts for less than one-third after one year, and after four years, it amounts to only two-fifths. Overall, the values of the empirically estimated pass-through are significantly lower than neoclassical production theory would suggest. This is most likely due to the fact that, in this theory, profit mark-ups are not determined endogenously.

... by contrast, pass-through of changes to hourly wages stable

However, a different picture emerges for the pass-through of hourly wages to the GVA deflator.³² Having remained relatively stable since the 1970s, it most recently amounted to around

two-fifths after one year and roughly three-fifths after four years. The various degrees of pass-through of unit labour costs and hourly wages to the GVA deflator can be explained by breaking down the growth rate of the GVA deflator into hourly wages, hourly productivity and profit mark-ups. In principle, it may be assumed that wage increases are reflected in higher prices, lower profit mark-ups or increased productivity. Increases in productivity themselves result either in lower prices or higher wages, or are reflected in higher profit mark-ups. Against this backdrop, the SVAR analysis indicates that the cyclical relationship between the GVA deflator and unit labour costs in Germany has become somewhat looser over the past few decades. However, this is not primarily driven by wages, but rather by productivity. Overall, the estimated pass-through of hourly wages is – in contrast to the implications

²⁷ Seasonally adjusted quarterly national accounts data for the period from the first quarter of 1970 to the first quarter of 2019 (data vintage: May 2019) are used for the analysis. Up to and including 1991, the data relate to western Germany; from 1991 onwards, they relate to Germany as a whole. They were chain-linked and scaled in such a way that the annual average of the data for western Germany in 1991 corresponds with the annual average of the data for Germany as a whole.

²⁸ The SVAR estimates with time-varying parameters are made with the help of the Bayesian Estimation, Analysis and Regression (BEAR) toolbox (see Dieppe et al. (2018)). All specifications take into account four lagged values of the endogenous variables.

²⁹ Here, hourly wages are defined as the compensation received by employees per hour worked, and unit labour costs are defined as hourly wages relative to the real GVA per hour worked.

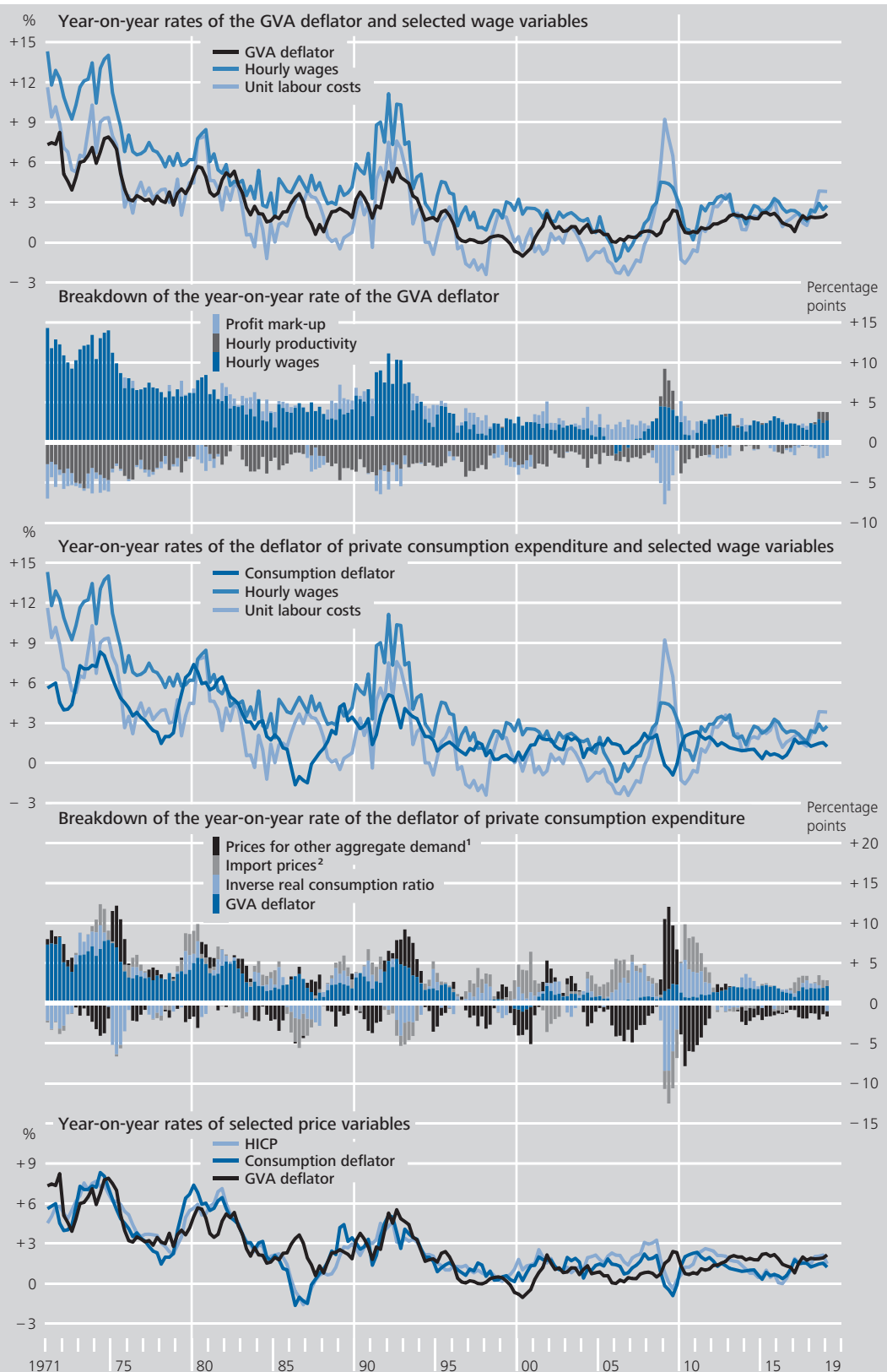
³⁰ This means that the model-implied relationship between wage and price fluctuations from their respective stochastic trends is being examined. See also the box on p. 31.

³¹ The VAR model includes the annualised quarterly rates of change of unit labour costs and of the GVA deflator. The pass-through of unit labour costs to the GVA deflator is defined as a cumulated impulse-response function of the rate of change of the GVA deflator relative to that of unit labour costs following an identified shock to the latter.

³² The VAR model includes the annualised quarterly rates of change of hourly productivity, unit labour costs and the GVA deflator. The pass-through of hourly wages to the GVA deflator is defined as a cumulated impulse-response function of the rate of change of the GVA deflator relative to that of unit labour costs following an identified shock to hourly wages. A Cholesky decomposition of unit labour costs is used to determine the shock to hourly wages and describes a change in unit labour costs that cannot contemporaneously be attributed to a change in hourly productivity.

Selected wage and price variables

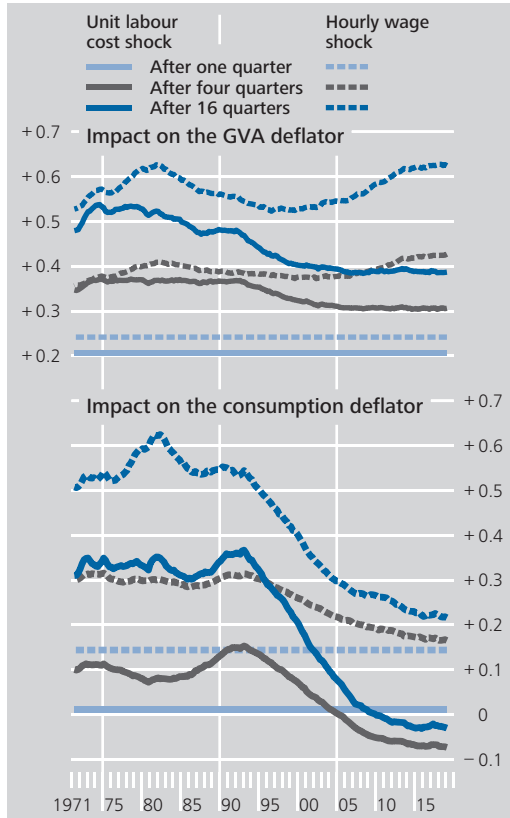
Quarterly data, seasonally adjusted



Source: Bundesbank calculations based on data from the Federal Statistical Office. **1** Impact of the deflators of other aggregate expenditure components on the difference between the consumption deflator and the GVA deflator. **2** Impact of the import deflator on the difference between the consumption deflator and the GVA deflator.

Model calculation of the impact of unit labour costs on the gross value added (GVA) deflator and the deflator of private consumption expenditure*

Quarterly data



* Cumulated impulse-response function of the rate of change of the respective deflator relative to that of the unit labour costs following a unit labour cost shock or an hourly wage shock. Estimation results of an SVAR model with time-varying parameters for one, four and 16 quarters. The impact of unit labour costs on the deflators after four and 16 quarters changes over time. The impact after one quarter is time-invariant due to the model design.

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of neoclassical production theory – greater than that of unit labour costs. This is presumably due to the fact that the estimation approach based on hourly wages is less restricted in econometric terms than the unit labour costs-based approach, and therefore captures the changed behaviour of profit mark-ups more flexibly. This means that the pass-through can be quantified more reliably.

In the case of the consumption deflator, the pass-through of unit labour costs has declined even more strongly than for the GVA deflator.³³ Since the 1970s, it has decreased from 10% to around zero after one year, and from 35% to

Pass-through of hourly wages to consumption deflator also intact, ...

approximately zero after four years. The pass-through of hourly wages to the consumption deflator has also declined. In recent years, however, it has been considerably greater than zero, and currently amounts to 10% after one year and 22% after four years.

Generally speaking, it appears that the pass-through to the consumption deflator is significantly lower than the pass-through to the GVA deflator. There are three reasons for this: first, private consumption expenditure includes a significant proportion of imported goods, the prices of which are likely to be largely independent of domestic wage developments. Second, estimates show that the pass-through of wages to the other deflators is higher than to the consumption deflator. Finally, it is the gross value added excluding taxes on goods which is being examined, whilst indirect taxes account for a substantial share of consumer prices.

... but generally lower than for GVA deflator

The pass-through of wages to prices changes very little if the estimations also use the unemployment rate as a proxy for aggregate capacity utilisation.³⁴ In the context of the SVAR estimation, this merely affects the established stochastic trend of inflation (see the box on p. 31).

Taking capacity utilisation variables into account barely alters pass-through results

Conclusion and outlook

Overall, the results of the various analyses indicate that the pass-through of wages to consumer prices amounts to approximately one-third. A 1% change in wages thus results in a change of consumer prices by around 0.3%.

³³ The VAR model takes into account the annualised quarterly rates of change of the import deflator, the hourly productivity rate, unit labour costs, the consumption deflator and the deflator of other aggregate demand. The pass-through of unit labour costs and of hourly wages to the consumption deflator is defined in the same way as the pass-through to the GVA deflator.

³⁴ Aggregate capacity utilisation, which is usually approximated by the output gap, the unemployment gap or the unemployment rate, is used as a further determinant of inflation, particularly in Phillips curve estimates.

The stochastic trend of inflation

The main text's analysis using the structural vector autoregression (SVAR) model is based on data from 1970 through to the current year. Over this long period of almost 50 years, it is likely that changes to the underlying structural conditions will have been extremely significant as to how inflation has developed in Germany. These include, for instance, the reunification of Germany, the increasing global ties of the German economy, the rising competitive pressure due to globalisation, and the different monetary policy environment following the launch of the single monetary policy for the euro area. On top of this, there was the "Great Moderation", a prolonged period starting in the mid-1980s during which inflation rates fell significantly around the world.¹

These kinds of changes in the underlying economic conditions are typically reflected in changing trends in macroeconomic variables, such as the inflation rate. The SVAR approach used in the main text depicts such influences as changes in the stochastic trends of the analysed variables produced by the estimated model. By contrast, the pass-through from wages to prices in this model refers solely to the interaction between the cyclical components of wages and prices.²

The model shows that the stochastic trend of inflation in Germany – as measured by both the gross value added deflator and the private consumption deflator – saw a distinct decline in the period from 1970 to 1999. Since then, both stochastic trends have been relatively stable.

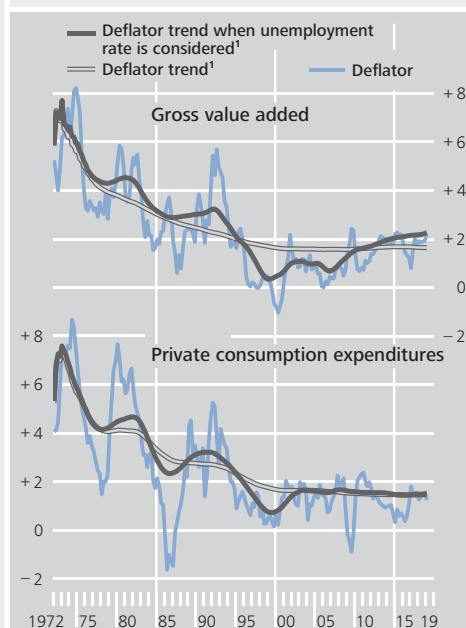
If the unemployment rate is included in the SVAR estimation as an approximation value

for aggregate capacity utilisation, there is markedly higher variation in the stochastic trend of inflation over the medium term. This could mean that capacity utilisation had a major impact on the stochastic trend of inflation. Conversely, the model could, at least in some cases, incorrectly attribute the strong cyclical fluctuations in the registered unemployment rate to the trend.

The stochastic trend of the private consumption deflator in both variants has remained relatively stable since 2002, with a growth rate of around 1½%. The trend of the gross value added deflator has stood slightly above this level in recent years. This likely reflects structural differences between the individual components of gross value added that are associated with different sectoral price trends.

Stochastic trends in the annual rate of change of selected deflators

Quarterly, seasonally adjusted



Sources: Federal Statistical Office and Bundesbank calculations.
 1 Estimated using an SVAR model with time-varying parameters.
 Deutsche Bundesbank

¹ See Bernanke (2004).

² Peneva et al. (2017) likewise estimate a stochastic trend in their analysis of the wage-price pass-through, but do not elaborate on it further. Bobeica et al. (2019) correct the wage and price variables ahead of their econometric analysis of how they trend by adjusting both the wage and the price variables for inflation expectations.

Pass-through of wages to prices in Germany, according to different models

Method	Price variable	Pass-through	
		Level	Time variation
Cost structure ¹	HICP	0.3	Not analysed
SVAR ²	Consumption deflator	0.2	Slight downward trend
	Memo item: GVA deflator	0.6	No time variation
Macro model ³	HICP	0.3	Not analysed

¹ Pass-through derived from sectoral labour cost shares. ² Permanent hourly wage shock, pass-through scaled to the reaction of unit labour costs. ³ Permanent shock to compensation per employee. Pass-through in SVAR and macro models cumulated over four years.

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However, it takes considerably longer than one year for the cyclical adjustment of prices to a

wage shock to be largely complete. Examining the consumption deflator since 1970, there is some evidence to support the argument that the pass-through of wage shocks to prices has weakened in Germany. In any case, the decline has been only slight since the financial crisis of 2007-08, and has come to a halt in recent times. In this context, it is also important to note that, since the start of the 2000s, the stochastic trend of the inflation rate in Germany, which was determined using the SVAR model, has no longer been declining; rather, it has been trending sideways. The cyclical impact of wages on prices should therefore not be greatly affected by the estimated trend seen in recent times. With this in mind, there is much to suggest that the above-average wage growth experienced in Germany over the past few years will result in a gradual rise in inflation.

Annex

The wage-price relationship in economic theory

In the long-term neoclassical equilibrium, unit labour costs as measured by domestically produced goods and the prices of domestically produced goods rise at the same rate

The starting point for these considerations on the long-term wage-price relationship period is neoclassical production theory.³⁵ Assume that, in a model of an open economy, the aggregate of goods produced domestically by a representative firm Y_t may be characterised by a Cobb-Douglas production function with constant returns to scale:³⁶

$$Y_t = A_t N_t^{\alpha_1} K_t^{\alpha_2} M_t^{1-\alpha_1-\alpha_2},$$

$$\alpha_1, 1 - \alpha_1 - \alpha_2 \in (0, 1)$$

where N_t denotes labour input, K_t capital input, M_t imported intermediate goods, and A_t total factor productivity.³⁷ The nominal costs per unit of labour amount to W_t , the nominal costs per unit of capital R_t and the nominal costs per unit of imported intermediate goods P_t^m . It is additionally assumed that the representative firm behaves rationally, that all goods and factor markets are characterised by perfect competition and that there are no price rigidities.

According to the first-order conditions for optimal labour input, nominal costs per unit of labour corres-

pond in the long-term growth equilibrium to the marginal revenue product of labour.

$$\alpha_1 \frac{P_t Y_t}{N_t} = W_t \Leftrightarrow \alpha_1 = \frac{W_t N_t}{P_t Y_t} \quad (1)$$

where P_t describes the deflator of domestically produced goods. Alternatively, the ratio of the aggregate nominal wage bill to sales of the goods produced domestically corresponds to the output elasticity of labour.³⁸

After solving expression (1) for the deflator P_t , taking the logarithm and forming first differences, the inflation rate of domestically produced goods π_t is ob-

³⁵ See, for example, Mas-Colell et al. (1995).

³⁶ In-house analyses show that, in the short to medium term, a CES specification with a substitution elasticity that may diverge from 1 matches the aggregate production function of the German economy more closely than the Cobb-Douglas specification used here, which assumes a substitution elasticity of 1.

³⁷ In this form of presentation, domestically produced intermediate goods are already reduced to the three basic input factors: labour, capital and imported intermediate goods.

³⁸ This relationship serves as a justification for the calculations based on enterprises' cost structure. In the analysis, the pass-through is defined as the wages to sales ratio.

tained as a function of the growth rates of wages per unit of labour less labour productivity. Put differently, in a growth equilibrium, inflation corresponds to the growth rate of unit labour costs measured by the goods produced domestically.³⁹

$$\pi_t = \underbrace{\frac{\Delta \ln W_t - (\Delta \ln Y_t - \Delta \ln N_t)}{\Delta \ln ULC_t}}_{\Delta \ln ULC_t} \quad (2)$$

Pass-through of wages to prices possibly less than 1, however

Consequently, in the long-term neoclassical equilibrium, unit labour costs and prices grow at the same rate. With regard to the impact of wages per unit of labour on prices, it should be noted, however, that labour productivity is likewise a function of factor prices that can be determined using conditional factor demand. Expressed in growth rates, this is written as

$$\begin{aligned} \Delta \ln Y_t - \Delta \ln N_t = & \Delta \ln A_t + (1 - \alpha_1) \Delta \ln W_t \\ & - \alpha_2 \Delta \ln R_t \\ & - (1 - \alpha_1 - \alpha_2) \Delta \ln P_t^m. \end{aligned} \quad (3)$$

Under perfect competition on the factor markets, the representative firm responds to a change in wages by substituting labour with capital or imports until labour productivity has returned to the higher wage level. This effect counteracts wage pressure on prices, which means that the elasticity or pass-through between labour costs and prices, as shown in Equation (4), merely corresponds to $\alpha_1 < 1$.

$$\begin{aligned} \pi_t = & - \Delta \ln A_t + \alpha_1 \Delta \ln W_t \\ & + \alpha_2 \Delta \ln R_t \\ & + (1 - \alpha_1 - \alpha_2) \Delta \ln P_t^m. \end{aligned} \quad (4)$$

In summary, it may be noted that neoclassical production theory, under the assumption of perfect competition on the factor markets and the goods market, suggests that the pass-through between wages and prices should be determined in the long term by the ratio of the nominal wage bill to the value of the domestic supply of goods. The impact of changes in unit labour costs measured by domestically produced goods on prices should, moreover, be greater than is the case for changes in wages.

Other influences on the pass-through given imperfect markets

This outcome does not change even if the assumption of perfect condition is discarded and monopolistic competition with constant or exogenously variable mark-ups is assumed. It is conceivable, however, that – especially over the short and medium term – the identified relationships change if the mark-up in the model is endogenously determined

in a time-varying manner.⁴⁰ The pass-through can also change as a result of imperfections on the factor markets.⁴¹ In this respect, search and matching frictions capture a large number of market imperfections in the labour market, such as heterogeneities, information deficits or indivisibilities.⁴² In particular, it is assumed that labour input is not infinitely divisible, as employees and employers first have to find each other in a time-consuming and resource-intensive manner.⁴³ Although the model-based pass-through of costs per labour unit W_t to prices still corresponds to the above-described constant α_1 , the costs per labour unit W_t are composed of the wage per employee ω_t , plus the expected search costs of hiring one employee $\kappa q(\theta_t)$, less expected savings from not having to hire another employee in the next model period:⁴⁴

$$W_t = \omega_t + \frac{\kappa}{q(\theta_t)} - (1 - \sigma)\beta \frac{\kappa}{q(\theta_{t+1})}. \quad (5)$$

The function $q(\theta_t)$ here represents the aggregate ratio of advertised vacancies V_t to newly filled positions M_t while κ describes the costs of advertising a vacant position for one model period. Under the assumption of a Cobb-Douglas matching function, the rate q is a function of labour market tightness θ_t , defined as the aggregate ratio of advertised vacancies to the number of unemployed persons U_t . The expected savings on search costs – the last term in the above equation – additionally depends on the exogenous job separation rate σ as well as the time preference rate β .

³⁹ Abstracting from imports in the model, Y_t reflects real gross value added and P_t reflects the gross value added (GVA) deflator.

⁴⁰ For instance, modelling consumption patterns at the level of individual product varieties (deep habits) leads in equilibrium to countercyclical movements in firms' mark-ups; see Ravn et al. (2006).

⁴¹ For the sake of simplicity, solely the impact of imperfections in the labour market is discussed below. For the impact of imperfections in the financial markets, see, for example, Brzoza-Brzezina et al. (2013).

⁴² See Pissarides (2000).

⁴³ The following theoretical considerations are based on the model assumption that the representative production firm acquires labour input N_t on a frictionless market from a temporary employment agency at a price of W_t per unit. Following successful recruitment, the temporary employment agencies compensate the formerly unemployed workers with the wage ω_t . See Christoffel and Kuester (2008).

⁴⁴ See Krause et al. (2008).

$$\Delta \ln W_t = \frac{\bar{\omega}}{\bar{W}} \Delta \ln \omega_t - \frac{\kappa}{\bar{W} q(\theta)} (\Delta \ln q(\theta_t) - (1 - \sigma) \beta \Delta \ln q(\theta_{t+1})). \quad (6)$$

According to Equation (6), the trend-adjusted, log-linearised and then differenced version of Equation (5), search costs may lead to the cost per unit of labour not rising at the same rate as an increase in wages per employee.⁴⁵ The pass-through of employees' wages to prices is therefore reduced by the fact that, because of the search costs, wages per labour unit represent only a part of total labour costs.

In summary, it may therefore be stated that the model-based pass-through between wages per employee and the deflator of domestically produced goods depends on labour market search costs,⁴⁶ the production elasticity of labour input, and, possibly, variations in the mark-ups.⁴⁷ Furthermore, search and matching theory makes it clear that – especially over the short to medium term – it is important to include labour market tightness in the empirical estimations in order to control for the resulting variation in labour costs and to obtain an unbiased estimator of the wage-price pass-through.

New Keynesian Phillips curve: consideration of aggregate utilisation

Neoclassical production theory as well as search and matching theory explain the relationship between wages and prices solely in terms of the cost side. In this vein, there is no variable that explicitly represents fluctuations in aggregate capacity utilisation or aggregate demand, which – especially over the short to medium term – have empirical relevance. If it is instead assumed in a New Keynesian modelling approach that rational firms are unable to adjust their prices frictionlessly and that the aggregate price level can therefore adjust only gradually, firms take into account not only current marginal costs but also future marginal costs in their price setting.⁴⁸ The optimal price P_t^* is given by the weighted sum of future expected marginal costs λ_t :⁴⁹

$$\hat{p}_t^* = E_t \left[\sum_{\tau=0}^{\infty} (\beta\theta)^\tau \hat{\lambda}_{t+\tau} \right], \quad (7)$$

where E_t denotes the expectation operator. If this relationship is rewritten and a price index is formed from the percentage $(1 - \theta)$ of enterprises that can adjust their prices in each period and the percentage θ of enterprises that are unable to adjust their prices,⁵⁰ a simple New Keynesian Phillips curve is obtained:

$$\pi_t = \kappa(\hat{\lambda}_t - \hat{p}_t) + \beta E_t[\pi_{t+1}] \quad (8)$$

κ is what is known as the “slack” parameter. This indicates how strongly inflation – conditional on inflation expectations – responds to aggregate capacity utilisation, which is usually measured as real marginal costs, the output gap, the unemployment gap or the unemployment rate. New-Keynesian theory thus attributes the direct transmission channel between aggregate capacity utilisation and prices to price rigidities. A direct relationship between nominal wages and the inflation rate does not exist in the simple New Keynesian model, however.⁵¹

The wage-price relationship in the national accounts

A relationship between wage or labour compensation and prices may likewise be derived from the national accounts. The starting point for this is gross value added (GVA), which is, by definition, the sum of compensation of employees and gross operating surplus, with the latter variable being composed of

Relationship between wages and GVA deflator

⁴⁵ The equation is derived on the assumption that the variables follow a deterministic growth path. See King and Rebelo (1999).

⁴⁶ According to a study based on US data, the average costs of the job application process per newly hired employee amount to roughly 19% of an average employee's wage per month. This does not yet take account of any training costs that are incurred at the beginning of the employment relationship; see Silva and Toledo (2009). As the German labour market is more highly regulated, the cost per newly hired employee is likely to be higher in Germany. As a consequence of the more regulated labour market, however, the average length of time an employee in Germany stays in a single job is longer than it is in the United States (see Hertweck und Sigrist (2015)). For this reason, such costs tend not to be paid as frequently in Germany as in the United States.

⁴⁷ These factors also apply to gross value added, but not to the aggregate demand deflator. In this case, the pass-through is also reduced by the share of imports. This also applies to its individual components, such as the consumption deflator.

⁴⁸ See Calvo (1983) or Rotemberg (1982) for an alternative modelling of price rigidities.

⁴⁹ For any given variable x_t , its percentage deviation from the long-term stationary equilibrium is defined as $\hat{x}_t = \ln x_t - \ln \bar{x}$. This assumes that \bar{x} is stationary either inherently or in efficiency units.

⁵⁰ The price index is formed as follows:
 $P_t = [(1 - \theta)(P_t^*)^{1-\varepsilon} + \theta(P_{t-1})^{1-\varepsilon}]^{\frac{1}{1-\varepsilon}}$,
 where $-\varepsilon$ describes the price elasticity of demand.

⁵¹ In an extended New Keynesian model with unemployment and wage indexation, it is possible to show that the wage growth rate depends directly on the inflation rate as well as the unemployment rate and, therefore, a direct relationship between wages and prices does exist; see Galí (2011).

operating surplus/mixed income, net taxes on production, and depreciation less net taxes on goods and services:

$$GVA = W + \underbrace{S + NPA - TXS + \delta}_{\text{gross operating surplus (GOS)}} .$$

If the ratio of gross operating surplus (*GOS*) and employee compensation (*W*) is denoted by μ , there results for the GVA deflator (GVA^d), i.e. the ratio of nominal and price-adjusted value added:

$$GVA^d = \frac{GVA^n}{GVA^r} = \frac{W}{GVA^r} (1 + \mu).$$

inflation measured in terms of the GVA deflator inflation thus corresponds to the sum of the growth rates of unit labour costs (*ULC*) and the mark-up:

$$\pi_t^{GVA} = \frac{\Delta \ln W_t - \Delta \ln Y_t + \Delta \ln \mu_t}{\Delta \ln ULC_t}$$

Relationship between wages and consumption deflator

In the hypothetical case of constant mark-ups, the growth rate of the GVA deflator – just like the rate of price increase of the supply of goods in neoclassical production theory – corresponds to the growth rate of the associated unit labour costs. In order to create a relationship between employee compensation and the private consumption deflator, the expenditure identity of GDP (*GDP*) is used. Following this, GDP corresponds to the sum of private final consumption expenditure (*C*), general government spending (*G*), investment (*I*), and the external balance (*X-IMP*). Furthermore, in line with the income account, GDP is produced by gross value added plus net taxes on goods (*TXS*):

$$\begin{aligned} GDP - TXS &= C + I + G + X - IMP - TXS \\ &= GVA. \end{aligned}$$

Dividing the equation by real gross value added, the GVA deflator is found as the weighted sum of

the deflators of the individual expenditure components:

$$\begin{aligned} GVA^d &= \frac{C^r}{GVA^r} C^d \\ &+ \frac{(G + I + X - TXS)^r}{GVA^r} \times \\ &(G + I + X - TXS)^d - \frac{IMP^r}{GVA^r} IMP^d. \end{aligned}$$

Transposing the equation after the consumption deflator (C^d) and substituting the GVA deflator gives

$$\begin{aligned} \frac{C^r}{GVA^r} C^d &= ULC(1 + \mu) + \frac{IMP^r}{GVA^r} IMP^d \\ &- \frac{(G + I + X - TXS)^r}{GVA^r} \\ &\times (G + I + X - TXS)^d. \end{aligned} \quad (9)$$

It should be noted that this relationship is true in terms of the level and not in logarithms. Following a number of transformations, this results in

$$\begin{aligned} \ln C^d &= \ln ULC + \ln(1 + \mu) - \ln \frac{C^r}{GVA^r} \\ &+ \ln \left(\frac{GVA + IMP}{GVA} \right) \\ &- \ln \left(\frac{GVA + IMP}{GVA + IMP - XCIMP} \right), \end{aligned} \quad (10)$$

where $XCIMP = G + I + X - TXS$ denotes all other aggregate demand. The sum of the first two terms on the right-hand side of this equation corresponds to the GVA deflator. The other three summands reflect the difference between the deflator of private consumption expenditure and the GVA deflator. The first of these summands is the inverse real consumption ratio. The second summand contains the impact of import prices. The last term reflects the fact that the prices of other expenditure components may differ from those of consumer goods and it also captures the impact of taxes on goods and services on the deflators of the expenditure components.

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State government budgets: analysis of detailed results for 2018

State government finances have been in good shape in recent years. Last year saw their core budgets close with a surplus of €13½ billion. In structural terms (that is, particularly after adjusting the outturns for financial transactions and cyclical effects) and adding off-budget entities and local government, the surplus came to as much as €33½ billion, which is €9½ billion higher than the 2017 outturn. Every federal state showed a structural surplus.

That said, major differences still persist among the federal states. Low interest rates are easing the added strains imposed by above-average debt. Even so, widely differing interest expenditure is still clearly a major factor. Only some of Germany's state governments are spending less on other fiscal items or generating higher revenue in order to fully offset their heavier interest burden. Tax revenue levels remain within a relatively narrow range among the non-city states, as they do for the city states, thanks to the large-scale redistribution of revenue under the state government revenue-sharing scheme. This scheme makes allowance for the city states having additional needs. Against this background, they have far higher levels of revenue and expenditure relative to the size of their populations.

The available financial statistics data have been specifically prepared to better detect how each state government's revenue, expenditure and fiscal balances evolved last year. The data used should nevertheless be interpreted with caution. For example, financial transactions (such as acquisitions of equity) are defined too broadly in some instances, producing structural outturns which sometimes overstate the economic reality. This matters, not least because of the debt brake, which is generally based on these structural indicators. All in all, a great deal still needs to be done to improve the underlying statistical data, such that the results they deliver are more informative and more readily comparable across federal states. The onus here is particularly on the Stability Council, which plays a crucial role in fiscal surveillance in Germany.

State government fiscal data and their comparability

Quarterly reports available quickly, but lack some data inputs

The Bundesbank's Monthly Report comments every three months (in February, May, August and November) on how state government budgets as a whole are performing. This is based on the monthly cash figures for the core budgets. Equivalent data on off-budget government entities and local government are not available until a later date.

Annual reports based on better statistical data because they ...

An article in the October 2018¹ edition of the Bank's Monthly Report gave a more detailed account of fiscal developments in the individual federal states, with the data used there having been prepared specifically for this purpose. The Bank now intends to make summaries of the previous year's budget outturns and a commentary on selected aspects a regular feature in its Monthly Report – starting with the present article on developments in 2018. The aim here is to present the outturns in a more informative and harmonised manner, such that the data better reveal how fiscal results have evolved over time and across state governments. These regular articles will include off-budget entities, reclassify some expenditure and revenue items and adjust the fiscal data to take account of special factors with a particular focus on "adjusted structural outturns", which are calculated as follows:²

... include off-budget entities and local government, ...

– Entities which are not included in the core budget but form part of the government sector (off-budget entities) and local government are assigned to the respective state government to take account of the fact that federal states transfer tasks to these entities to a varying extent. Off-budget entities include reserves for infrastructure development and civil servant pensions, higher education institutions and construction units, but not market-oriented enterprises under state ownership. Furthermore, including local government makes the non-city states more readily comparable with the city states,

which always include this level of government in their calculations.

- Financial transactions reported in the financial statistics are excluded from the outturns. Fundamentally, financial transactions merely reallocate financial assets, which means that they are, in effect, budget-neutral. For example, cash expenditure in the form of a loan (= increase in receivables) or cash revenue from the sale of shares in an undertaking (= reduction in equity holdings) is disregarded, so it leaves the balance unchanged. Many debt brakes (including that of central government) adjust for financial transactions in much the same way. The national accounts, which form the basis for calculating the Maastricht deficit, likewise exclude financial transactions from the fiscal balance. However, unlike the financial statistics, the national accounts do not closely follow the classification in the budget, but instead reflect the economic nature of the transactions. For example, if a federal state offsets repeated losses at an entity, the national accounts would post a deficit-increasing transfer, even if the budget reports this as an acquisition of equity (financial transaction) (see also p. 41 and pp. 44 f.). Appropriate and desirable as such adjustments may be, they need to be examined more thoroughly on a case-by-case basis, which would go beyond the scope of this article.
- Financial statistics data include the state government revenue-sharing scheme with all the cash flows during the reporting year. In this article, the data are adjusted for the lagged settlement of payments under the scheme. These settlement payments are posted to corresponding reporting years on an accruals basis so as to eliminate distortions in cross-state comparisons and over time.

... exclude financial transactions, ...

... account for settlement payments in the revenue-sharing scheme on an accruals basis, ...

¹ See Deutsche Bundesbank (2018a), pp. 13-47.

² For details, see Deutsche Bundesbank (2018a), pp. 19-22.

... eliminate cyclical effects, and ...

– Data are adjusted for cyclical effects, rendering them more comparable over time. This is done using the Bundesbank’s cyclical adjustment procedure, which is currently based on the spring 2019 macroeconomic forecast. As a result of this, the state government outturns are also comparable with each other, which is not the case with the debt brake surveillance work of the Stability Council.³

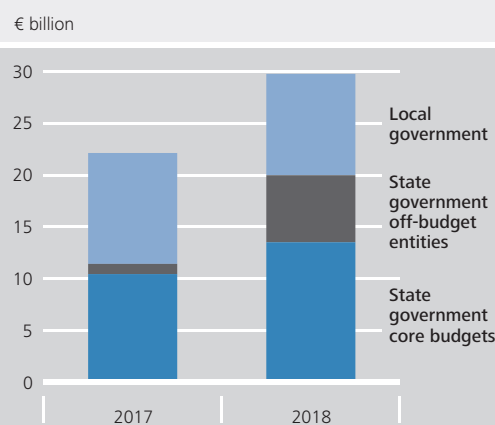
... adjust for one-off effects

– Data should ideally also be adjusted for any sizeable one-off effects (relative to the budget volume of the federal state in question). Otherwise, they will overshadow underlying developments. Suitable data are available only for the core state government budgets in 2018 (monthly cash statistics of the Federal Ministry of Finance). However, adjusting the data for these payments will probably eliminate the most substantial one-off effects.

Statistical data need to be improved

Yet for all such adjustments, the underlying data still have some shortcomings, and these also make it more difficult to compare the calculated fiscal balances. One common shortcoming is the absence of key information, which prevents the data from reflecting economic substance as rigorously as the national accounts figures (which are not available at a federal state level). More needs to be done on this front, then, to boost the informative value of the data. The onus here is particularly on the Stability Council, given its role in monitoring compliance with the national debt brakes and the EU fiscal regime in Germany. This function ought to make the Council especially keen to have a comprehensive and comparable set of underlying data, since they are, after all, used for the reports on the budgetary situation and the fiscal forecasts on which the Council’s decisions are based. The independent advisory board of the Stability Council, whose members include an expert from the Bundesbank, has repeatedly called for improvements to the data quality.⁴

Breakdown of the state and local government surplus*



Sources: Federal Statistical Office and Bundesbank calculations.
 * Financial statistics data.
 Deutsche Bundesbank

Budget outturn of federal states as a whole

Core state government budgets posted a surplus of €15½ billion in the monthly statistics at year-end 2018. Later closing entries reduced this figure to €13½ billion. Many federal states topped up their reserves with the closing entries, which in turn boosted the surpluses of off-budget entities. The latter closed the year on aggregate with a surplus of €6½ billion. Local government likewise recorded a high cash surplus of €9½ billion. Altogether, the surplus for state and local government came in total to €29½ billion (see the table on pp. 42 f., number 1⁵). This was €7½ billion up on the figure for 2017 (see the table on pp. 48 f., number 1).

Overall surplus of state and local governments very high and up further

The picture presented by the structural outturn – that is, after adjustment for financial transactions, and cyclical and one-off effects – is more favourable still.

Structural outturn better still: ...

³ See Deutsche Bundesbank (2019), p. 96.

⁴ Most recently in Independent advisory board to the Stability Council (2019), pp. 19-21.

⁵ The data in the tables are reported on a per inhabitant basis.

Budgetary figures for the federal states (including local government) in 2018*

Item	BW	BY	BB	HE	MV	NI	NW	RP
Fiscal balance in € million	4,404	6,558	989	1,620	809	3,725	5,109	1,453
Population in millions (at mid-2018)	11.1	13.0	2.5	6.3	1.6	8.0	17.9	4.1
Derivation of adjusted structural balances	€ per inhabitant							
Fiscal balance (1)	399	503	394	259	503	467	285	356
Financial transactions (net) (2)	- 33	- 73	- 15	- 98	- 129	- 72	- 57	5
Settlement of payments under the state government revenue-sharing scheme (3)	21	- 10	- 54	30	23	6	- 15	114
Adjusted balance (4) = (1) - (2) + (3)	453	566	355	388	655	545	328	465
Cyclical component (5) ¹	52	52	48	54	48	49	52	50
One-off effects (6)		61				125		
Adjusted structural balance (7) = (4) - (5) - (6)	400	452	307	333	607	371	276	415
Memo item: After deduction of consolidation assistance	.	.	.	.	.	.	.	.
Net interest burden ² (8)	140	- 7	117	205	113	137	175	213
Adjusted structural primary balance (9) = (7) + (8)	541	445	424	539	720	508	450	628
Expenditure, revenue and debt	€ per inhabitant							
Total expenditure (10)	6,495	6,955	6,529	7,296	6,149	5,982	6,809	5,873
of which:								
Personnel expenditure (11)	2,732	2,605	2,652	2,814	2,531	2,618	2,651	2,630
of which: Expenditure on current staff (11a)	2,013	1,928	2,249	2,135	2,093	1,954	1,948	1,963
of which: Pension benefits ³ (11b)	719	677	404	679	438	664	704	666
Other operating expenditure (12)	1,058	1,159	1,230	1,410	1,250	1,063	1,480	1,238
Interest expenditure (13)	162	70	134	232	160	186	231	239
Transfers to households (14)	650	743	804	990	879	960	1,041	807
Fixed asset formation (15)	658	817	426	470	607	386	360	385
Adjusted total expenditure ⁴ (16)	6,126	6,313	6,401	6,776	5,632	5,870	6,669	5,823
Less interest expenditure (16a)	5,964	6,243	6,267	6,544	5,472	5,685	6,439	5,584
Less interest expenditure and fees (16b)	5,510	5,780	5,635	5,783	4,985	5,258	5,490	5,030
Total revenue (17)	6,891	7,458	6,922	7,557	6,652	6,451	7,094	6,230
of which:								
Tax revenue ⁵ (18)	5,011	5,060	4,555	5,145	4,577	4,701	4,905	4,716
Fees (19)	454	462	632	761	486	426	948	553
Transfers from central government ⁶ (20)	383	375	894	528	940	435	476	424
Adjusted total revenue ⁴ (21)	6,576	6,879	6,756	7,166	6,287	6,417	6,997	6,288
Less fees (21a)	6,122	6,416	6,124	6,405	5,801	5,991	6,049	5,735
Debt (22)	5,190	2,210	7,529	9,356	7,248	9,571	12,705	12,581
Calculated average rate of interest (%) ⁷ (23)	3.01	2.88	1.72	2.33	2.22	1.95	1.75	1.87
Tax rates and multipliers	%							
Real estate acquisition tax (24)	5.0	3.5	6.5	6.0	5.0	5.0	6.5	5.0
Real estate tax B ⁸ (25)	397	394	408	473	427	431	570	402
Local business tax ⁸ (26)	367	375	319	413	380	407	451	378
Other data								
Personnel (full-time equivalents per 1,000 inhabitants) ⁹ (27)	33.8	30.7	35.1	34.0	31.0	32.3	32.3	33.1
Recipients of pension benefits (per 1,000 inhabitants) ¹⁰ (28)	13.4	12.7	4.4	14.0	4.2	13.9	13.7	13.5
A 13 annual gross civil servant pay (in €1,000) ¹¹ (29)	62.5	65.5	61.5	60.8	62.1	62.0	60.7	60.5

Sources: Federal Statistical Office, quarterly cash statistics (including post-bookings); Bundesbank calculations. * Core budgets and off-budget entities. Abbreviations: BW – Baden-Württemberg, BY – Bavaria, BB – Brandenburg, HE – Hesse, MV – Mecklenburg-West Pomerania, NI – Lower Saxony, NW – North Rhine-Westphalia, RP – Rhineland-Palatinate, SL – Saarland, SN – Saxony, ST – Saxony-Anhalt, SH – Schleswig-Holstein, TH – Thuringia, BE – Berlin, HB – Bremen, HH – Hamburg. **1** Data pursuant to the Bundesbank's cyclical adjustment procedure based on figures from the spring 2019 macroeconomic forecast. **2** Interest expenditure less interest income. **3** Including healthcare subsidies and refunds to central government for legacy claims for pension benefits in eastern Germany. **4** Excluding financial transactions and payments under the state government revenue-sharing scheme made by states providing contributions. Payments under the state government revenue-sharing scheme are settled on the income side. **5** Taxes and compensation for motor vehicle tax; state government revenue-

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SL	SN	ST	SH	TH	BE	HB	HH	Total	Item
374	2,751	775	- 1,696	1,125	2,100	172	- 550	29,719	Fiscal balance in € million
1.0	4.1	2.2	2.9	2.1	3.6	0.7	1.8	82.9	Population in millions (at mid-2018)
								€ per inhabitant	Derivation of adjusted structural balances
377	675	350	- 586	524	579	252	- 300	359	Fiscal balance (1)
8	225	- 55	- 1,102	2	- 76	- 119	- 1,793	- 118	Financial transactions (net) (2)
- 16	6	8	30	- 2	- 125	- 4	- 40	0	Settlement of payments under the state government revenue-sharing scheme (3)
353	456	413	546	520	530	367	1,453	477	Adjusted balance (4) = (1) - (2) + (3)
49	48	47	50	48	66	68	72	52	Cyclical component (5) ¹
								22	One-off effects (6)
304	408	367	496	472	464	299	1,381	403	Adjusted structural balance (7) = (4) - (5) - (6)
41	.	330	468	.	442	- 142	.	.	Memo item: After deduction of consolidation assistance
426	13	133	160	163	330	861	280	147	Net interest burden ² (8)
730	421	499	656	635	794	1,160	1,661	550	Adjusted structural primary balance (9) = (7) + (8)
								€ per inhabitant	Expenditure, revenue and debt
5,938	6,043	6,730	7,318	5,916	8,109	9,341	11,617	6,656	Total expenditure (10)
									of which:
2,832	2,620	2,615	2,478	2,518	3,051	3,252	3,511	2,692	Personnel expenditure (11)
2,047	2,247	2,189	1,828	2,123	2,322	2,364	2,520	2,036	of which: Expenditure on current staff (11a)
785	373	425	650	394	729	888	991	656	of which: Pension benefits ³ (11b)
1,261	1,134	1,600	1,036	952	2,482	2,190	3,245	1,347	Other operating expenditure (12)
439	54	184	213	189	340	1,037	448	195	Interest expenditure (13)
627	733	611	912	725	828	1,053	841	850	Transfers to households (14)
285	630	475	526	514	345	331	735	523	Fixed asset formation (15)
5,832	5,864	6,644	6,177	5,876	7,953	9,086	9,698	6,447	Adjusted total expenditure ⁴ (16)
5,393	5,810	6,461	5,964	5,687	7,613	8,049	9,250	6,252	Less interest expenditure (16a)
4,960	5,326	5,941	5,478	5,350	6,913	7,273	7,068	5,605	Less interest expenditure and fees (16b)
6,314	6,712	7,082	6,731	6,440	8,687	9,594	11,317	7,014	Total revenue (17)
									of which:
4,744	4,530	4,532	4,719	4,579	6,275	6,420	6,903	4,987	Tax revenue ⁵ (18)
433	485	520	487	337	700	777	2,181	646	Fees (19)
721	743	1,168	591	803	906	1,118	644	542	Transfers from central government ⁶ (20)
6,184	6,314	7,059	6,723	6,396	8,482	9,454	11,151	6,923	Adjusted total revenue ⁴ (21)
5,751	5,830	6,539	6,236	6,058	7,782	8,678	8,970	6,277	Less fees (21a)
17,903	2,574	10,428	13,173	8,524	16,468	35,024	21,181	9,176	Debt (22)
2.41	1.90	1.70	1.74	2.10	2.05	3.05	2.27	2.08	Calculated average rate of interest (%) ⁷ (23)
								%	Tax rates and multipliers
6.5	3.5	5.0	6.5	6.5	6.0	5.0	4.5	5.4	Real estate acquisition tax (24)
439	498	419	393	435	810	687	540	472	Real estate tax B ⁸ (25)
445	422	363	380	408	410	469	470	402	Local business tax ⁸ (26)
									Other data
32.0	34.5	35.1	30.2	34.7	40.4	41.2	37.0	33.2	Personnel (full-time equivalents per 1,000 inhabitants) ⁹ (27)
16.9	2.9	5.0	13.3	4.8	17.0	22.3	19.7	12.4	Recipients of pension benefits (per 1,000 inhabitants) ¹⁰ (28)
60.7	64.1	62.5	59.8	62.4	60.6	61.2	61.7	61.8	A 13 annual gross civil servant pay (in €1,000) ¹¹ (29)

sharing scheme and general supplementary central government grants according to provisional settlement figures. **6** Excluding general supplementary central government grants and compensation for motor vehicle tax. **7** Interest expenditure as a percentage of debt at the end of the previous year. **8** Revenue-weighted average local government multipliers for 2018. **9** Public sector personnel working for state and local government on 30 June 2017. Not including areas in which non-public sector enterprises normally operate (such as university and other hospitals,

nutrition, utilities, transport, finance). **10** Recipients of pension benefits at state and local government level on 1 January 2018. **11** Total of annual basic salary at the final level of the pay grade, general job-based allowance or structural allowance, special payment(s), assuming a 40-hour week. Total column shows the unweighted mean here. The A 13 pay grade applies in particular to many school teachers. Source: DGB Besoldungsreport, March 2018.

... eliminating significant burden of financial transactions ...

Financial transactions weighed heavily on the outturn. The standard budget categories under the financial statistics framework showed a net burden to the tune of almost €10 billion (see the table on pp. 42 f., number 2). Eliminating such transactions leaves a reported surplus of €39½ billion, i.e. €11½ billion more than in the previous year. This is a case in point with regard to shortcomings in the underlying statistical data. From an economic vantage point, part of the adjustment item does not represent a shift within financial assets, which means that it should not be considered as a financial transaction. Half of the reported net burden from financial transactions was due to guarantees in respect of HSH Nordbank, for example. But this ultimately constitutes an absorption of loss. Probably, other losses recorded by unprofitable entities have been absorbed and posted in the financial statistics as an acquisition of assets, too. At all events, the recognition of the guarantees in the financial statistics will be improved as from the 2019 reporting year. From now on – as in the national accounts – they will no longer be posted as financial transactions.

... outweighs relief from cyclical factors ...

The cyclical component provided continuing tailwinds for state government finances in 2018, coming in at €4½ billion (see the table on pp. 42 f., number 5), which was only slightly up on the previous year's figure.⁶ The balance adjusted for the cyclical component declined accordingly.

The cyclical component identified here differs significantly, in some cases, from the figures calculated by numerous federal states using their own cyclical adjustment procedures. In particular, the tax-smoothing procedures are less suited to eliminating cyclical effects and thus bringing structural growth trends to light. Added to this is the fact that differences in the specific methods employed by the individual federal states make it all but impossible to compare the results properly.⁷

In 2018, two car makers were ordered to pay fines totalling €2 billion into the state government budgets of Lower Saxony and Bavaria. The Federal Ministry of Finance reports these amounts as significant one-off effects (see the table on pp. 42 f., number 6).⁸ Similar one-off effects were not listed for earlier years, nor are any such effects immediately apparent, which is why no further adjustments were made to the outturn for 2017.

Overall, then, the budgetary situation in the federal states (and their local governments) was exceptionally good last year. Adjusted for the aforementioned factors, the structural surplus (see the tables on pp. 42 f., number 7 and pp. 48 f., number 7) rose significantly, climbing from €24 billion in 2017 to €33½ billion in 2018 (1.0% of GDP). The €1½ billion decline in the interest burden played no more than a minor part in this improvement. The adjusted structural primary surplus (that is, the structural fiscal balance adjusted for the net interest burden; see the table on pp. 48 f., number 9) increased by €8 billion.

... and one-off revenue from fines

Overall structural surplus high and showing strong growth

2018 outturns in individual federal states

Given this exceptionally favourable overall outturn, all the federal states registered an adjusted structural surplus for the first time (see the table on pp. 42 f., number 7; to improve comparability across federal states, the variables in question are shown on a per inhabitant basis).⁹ Every state government posted a strong adjusted structural surplus, with Hamburg

Clear structural surplus in all federal states

⁶ Compared with the data reported in the October 2018 edition of the Monthly Report, the cyclical component in 2017 is €3 billion higher due to revisions.

⁷ Federal states' cyclical adjustment procedures are discussed in Deutsche Bundesbank (2017), p. 38 and p. 41.

⁸ The aforementioned guarantee charges for HSH Nordbank are also shown there, but they have already been eliminated due to their classification as financial transactions.

⁹ A population-weighted federal state average is used for the national reference figure. This means that high-population federal states have a greater weight.

achieving by far the strongest result, which was three times the German average, while North Rhine-Westphalia was at the other end of the table, at roughly two-thirds of the national reference figure. Results were somewhat better in Bremen, Saarland and Brandenburg.

Comparability restricted by statistical difficulties

The statistical difficulties discussed above are also an issue when it comes to comparing data across federal states. For instance, some outturns are overstated in cases where financial transactions that were eliminated on the expenditure side were not used to acquire assets of value. Also, a lack of data means that it is not possible to adjust for any one-off effects at the local government level or in off-budget entities.

Examples of overstated acquisitions of equity ...

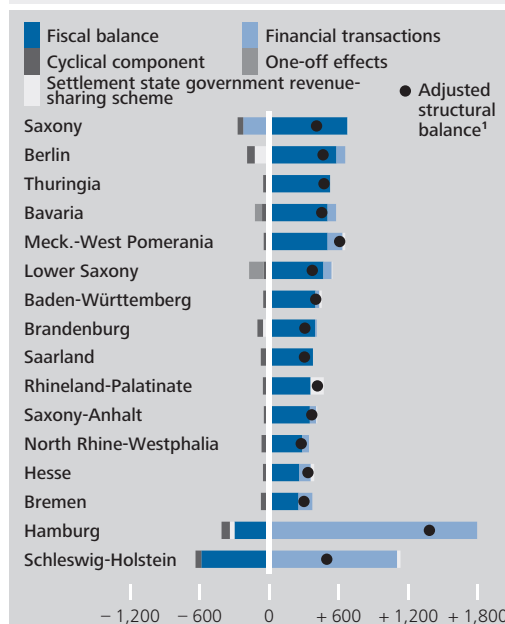
For an illustration of these problems, one need only look at Bremen and Saarland, two federal states which receive consolidation assistance on condition that they limit their structural deficit. Bremen, for example, made a large capital injection into a hospital enterprise in 2018. This transaction is recognised in the city state's budget – and in the financial statistics based on those data – as an acquisition of equity. However, that equity is not expected to generate an adequate return in the form of profit distributions or capital appreciation. This is why this transaction does not represent an acquisition of financial assets under the rules for Germany's national accounts but, instead, constitutes a capital transfer that affects the fiscal balance. In Saarland, meanwhile, the state theatre (Theater Saarbrücken) has been receiving capital injections for many years to offset its losses. Apparently, these capital injections are nonetheless being posted as acquisitions of equity in the reported state government core budget figures.¹⁰ In principle, capital transfers used to absorb losses should already be recorded as such in the financial statistics.

... and loans

Another example may be found in North Rhine-Westphalia, where major guarantee calls by the former WestLB were apparently routinely posted as financial transactions (loans) on a

Derivation of the adjusted structural balance of state and local government in 2018*

€ per inhabitant



Sources: Federal Statistical Office and Bundesbank calculations.
 * Financial statistics data. ¹ Fiscal balance adjusted for financial transactions, settlement of payments under the state government revenue-sharing scheme, cyclical and one-off effects.
 Deutsche Bundesbank

number of occasions in the past, even though no financial assets of value were acquired as a result. The same goes for the aforementioned guarantee call in connection with HSH Nordbank in Hamburg and Schleswig-Holstein. Starting this year, however, guarantee calls will be recognised in the financial statistics in the same way as they are shown in the national accounts, i.e. as capital transfers. This means they will affect the structural outturn.

The Stability Council monitors what progress the federal states in receipt of consolidation assistance are making in consolidating their budgets.¹¹ It does so adopting an approach

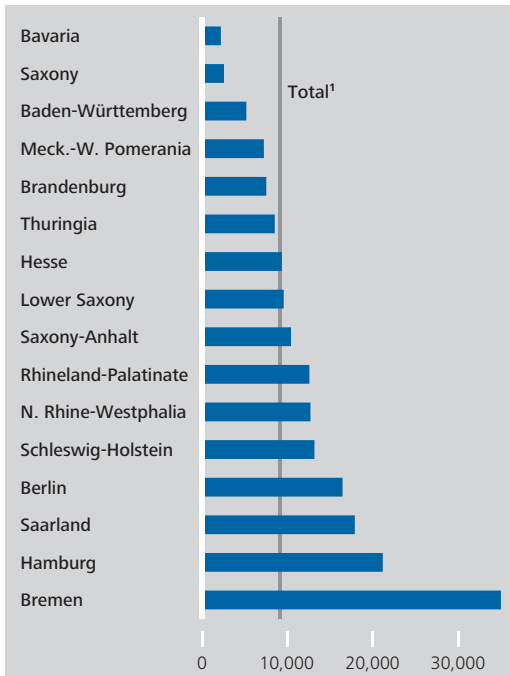
Without consolidation assistance, a structural deficit in Bremen

¹⁰ The capital injections even increase the reported acquisitions of equity in Saarland's consolidated state outturn (including the theatre as an off-budget entity). This topic is discussed at greater length in the box on pp. 51f.

¹¹ The federal states of Berlin, Bremen, Saarland, Saxony-Anhalt and Schleswig-Holstein are recipients of consolidation assistance for the fiscal years of 2011 to 2019 on condition that they continue the agreed reduction paths for their structural budget deficits.

State and local government debt in 2018*

€ per inhabitant



Sources: Federal Statistical Office and Bundesbank calculations.
 * Financial statistics data. Debt in the non-public and public sectors (non-consolidated). **1** All state and local governments.
 Deutsche Bundesbank

that adjusts the structural outturns for any consolidation assistance (granted only on a temporary basis). Applying the same approach to Saarland would shrink that federal state's adjusted structural surplus to a smaller residual, while Bremen would post a distinct deficit.

Debt levels and interest burdens vastly different

Expenditure on interest varies a great deal from one federal state to another (see the table on pp. 42 f., number 13, and the chart on p. 46), mainly because they each have different levels of debt (see the table on pp. 42 f., number 22). At the end of 2018, for instance, per capita debt was almost four times the national average in Bremen, but less than one-third of the national reference figure in Bavaria and Saxony.

Most federal states paid down a notable volume of debt in 2018 (see the table on pp. 48 f.,

number 22). Bremen, by contrast, saw a further marked increase in its level of debt, even though it had no fiscal deficit to cover. Bremen did, however, assume the debt of one institution of higher education, a transaction which is recognised as a capital transfer in the national accounts but not recorded at all on the expenditure side of the financial statistics. But this fact alone fails by some margin to explain the growth in Bremen's stock of debt. Indeed, it would appear that Bremen, facing an impending need for temporary funding, took out additional (mostly non-interest-bearing) cash advances. Debt levels rose somewhat more quickly still in Hamburg, chiefly because the guarantees issued in respect of HSH Nordbank were credit-financed. At the same time, it would appear that funds were set aside. With the exception of Hesse and North Rhine-Westphalia, the fiscal balance (see the table on p. 42 f., number 1) will have overstated the evolution of debt levels. Hesse saw its debt decline largely owing to the debt relief that was provided by the state-owned WIBank for cash advances taken out by local government. In effect, responsibility for this debt has been transferred to a newly established off-budget entity (the "Hessenkasse"). However, owing to the structure chosen, the underlying debt statistics used here (Federal Statistical Office, Fachserie 14, Reihe 5) no longer include this debt, though they do draw attention to this fact.¹²

Significant discrepancies in some cases between budget outturn and change in debt level

Local governments in other federal states are still highly indebted with cash advances in some cases. The federal states of Saarland, Rhineland-Palatinate and North Rhine-Westphalia, for instance, have outstanding local government cash advances of well above €1,000 per capita on average. In July, as a conclusion from the work of the Commission on Equivalent Living Conditions, the commission members from the Federal Government floated the general prospect of granting central government assistance, albeit conditional on a

Local government legacy debt from cash advances a major challenge for federal states in question

Different debt levels, so wide divergence in interest expenditure

¹² This debt is added for the purpose of calculating the Maastricht debt level.

cross-state consensus being reached, which appears unlikely at present. Ultimately, the onus of responsibility for local government finances is not on central government, but on the individual federal states. The latter oversee local government budgets and run the local government revenue-sharing scheme. The positive fiscal situation in the federal states should make it easier for them to quickly roll out programmes like the one in Hesse.

Risk premiums not responsible for differences in average interest rates

Like debt levels, there are also variations in the calculated average rates of interest (see the table on pp. 42 f., number 23) paid by the state governments, although such differences are of less significance. It would seem that such average interest rates are not founded on risk premiums charged for exceptionally high levels of debt – rather, the key factors are differences in interest rate fixation periods, in the percentage of loans taken out during years when rates were low, and in hedging operations.

Earnings from interest income need to be offset

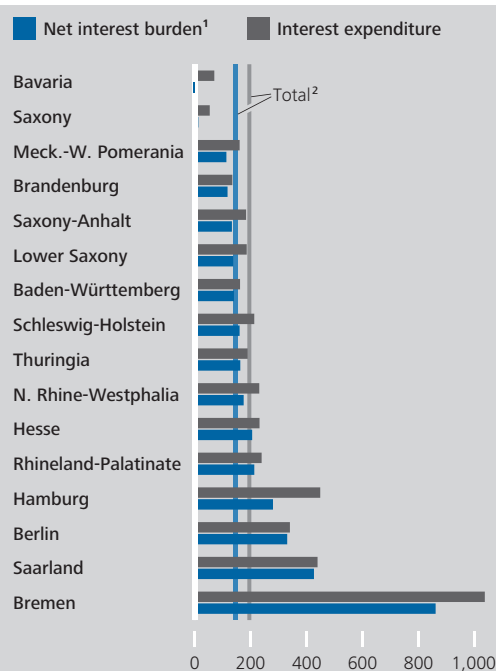
High debt servicing costs can look somewhat less substantial when they are offset by returns on assets. The resulting net interest burden shows interest expenditure less interest income (there is no adjustment for other returns on assets, such as dividends, because they are not reported consistently as a separate item in the financial statistics). As shown in the table on pp. 42 f., number 8, the net interest burden was in fact slightly negative in Bavaria and only slightly positive in Saxony, while at the other end of the scale, Bremen was quite some way behind Saarland, despite its high interest income. The figure for Berlin is also well above the average. By contrast, Hamburg's sizeable interest income offset some of the city state's high interest expenditure.

The bigger the interest burden, the higher the structural primary surpluses tend to be

Federal states faced with higher interest burdens turned out to be more frugal elsewhere in their budgets last year. This explains why the adjusted structural primary balances (i.e. the structural balance excluding the net interest burden, see the table on pp. 42 f., number 9) were mostly better for those federal states with

State and local government interest burden in 2018*

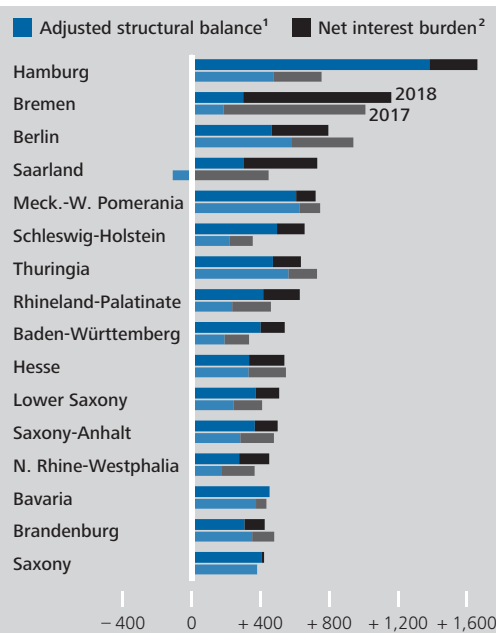
€ per inhabitant



Sources: Federal Statistical Office and Bundesbank calculations. * Financial statistics data. ¹ Interest expenditure less interest income. ² All state and local governments. Deutsche Bundesbank

Adjusted structural primary balance of state and local government*

€ per inhabitant



Sources: Federal Statistical Office and Bundesbank calculations. * Financial statistics data. ¹ Fiscal balance adjusted for financial transactions, settlement of payments under the state government revenue-sharing scheme, cyclical and one-off effects. ² Interest expenditure less interest income. Deutsche Bundesbank

Budgetary figures for the federal states (including local government) in 2018 compared with the previous year*

Item	BW	BY	BB	HE	MV	NI	NW	RP
Fiscal balance in € million	3,027	987	81	36	- 253	1,874	2,427	- 73
Derivation of adjusted structural balances	€ per inhabitant							
Fiscal balance (1)	273	74	31	5	- 157	234	135	- 19
Financial transactions (net) (2)	69	- 103	29	3	- 113	- 22	14	1
Settlement of payments under the state government revenue-sharing scheme (3)	6	- 37	- 45	1	27	- 5	- 21	201
Adjusted balance (4) = (1) - (2) + (3)	210	140	- 43	2	- 17	251	101	182
Cyclical component (5) ¹	1	0	2	0	2	0	1	2
One-off effects (6)		61				125		
Adjusted structural balance (7) = (4) - (5) - (6)	209	79	- 44	3	- 19	127	100	180
Net interest burden ² (8)	- 2	- 67	- 11	- 12	- 7	- 27	- 15	- 12
Adjusted structural primary balance (9) = (7) + (8)	207	11	- 55	- 9	- 26	99	85	168
Expenditure, revenue and debt	€ per inhabitant							
Total expenditure (10)	95	468	218	213	277	262	118	35
of which:								
Personnel expenditure (11)	104	95	115	134	77	99	116	85
of which: Expenditure on current staff (11a)	63	61	92	100	52	71	78	61
of which: Pension benefits ³ (11b)	41	34	23	34	25	27	38	24
Other operating expenditure (12)	17	124	22	62	26	85	- 9	13
Interest expenditure (13)	- 6	- 13	- 10	- 10	- 7	- 14	- 19	- 45
Transfers to households (14)	3	33	14	- 6	- 9	20	- 3	11
Fixed asset formation (15)	- 35	83	31	63	73	15	44	14
Adjusted total expenditure ⁴ (16)	130	408	267	308	169	230	152	78
Less interest expenditure (16a)	136	421	277	318	176	244	171	123
Less interest expenditure and fees (16b)	114	406	258	274	179	196	116	114
Total revenue (17)	369	541	249	221	121	498	254	17
of which:								
Tax revenue ⁵ (18)	269	312	192	229	249	278	205	270
Fees (19)	22	14	19	44	- 3	47	55	9
Transfers from central government ⁶ (20)	4	- 21	- 54	19	- 68	- 8	7	- 9
Adjusted total revenue ⁴ (21)	341	548	224	313	152	484	253	260
Less fees (21a)	319	534	205	269	155	436	198	250
Debt (22)	- 210	- 232	- 290	- 632	38	3	- 503	- 244
Calculated average rate of interest (%) ⁷ (23)	0.25	- 0.21	- 0.08	- 0.02	- 0.16	- 0.17	- 0.09	- 0.15
Tax rates and multipliers	%							
Real estate acquisition tax (24)	-	-	-	-	-	-	-	-
Real estate tax B ⁸ (25)	1.8	1.8	2.2	3.1	2.5	3.9	3.5	1.7
Local business tax ⁸ (26)	- 1.3	1.5	- 1.2	2.9	3.6	3.6	- 0.9	- 4.5

Sources: Federal Statistical Office, quarterly cash statistics (including post-bookings); Bundesbank calculations. * Core budgets and off-budget entities. Abbreviations: BW – Baden-Württemberg, BY – Bavaria, BB – Brandenburg, HE – Hesse, MV – Mecklenburg-West Pomerania, NI – Lower Saxony, NW – North Rhine-Westphalia, RP – Rhineland-Palatinate, SL – Saarland, SN – Saxony, ST – Saxony-

Anhalt, SH – Schleswig-Holstein, TH – Thuringia, BE – Berlin, HB – Bremen, HH – Hamburg. **1** Data pursuant to the Bundesbank's cyclical adjustment procedure based on figures from the spring 2019 macroeconomic forecast. **2** Interest expenditure less interest income. **3** Including healthcare subsidies and refunds to central government for legacy claims for pension benefits in eastern Germany.

SL	SN	ST	SH	TH	BE	HB	HH	Total	Item
463	1,615	95	- 1,589	- 199	- 338	88	- 624	7,618	Fiscal balance in € million
									€ per inhabitant
467	396	45	- 549	- 91	- 99	129	- 341	91	Derivation of adjusted structural balances Fiscal balance (1)
30	391	- 17	- 757	- 5	- 68	- 76	- 1,266	- 46	Financial transactions (net) (2)
- 21	24	21	70	- 4	- 87	- 91	- 17	- 2	Settlement of payments under the state government revenue-sharing scheme (3)
415	29	83	278	- 90	- 118	114	909	136	Adjusted balance (4) = (1) - (2) + (3)
1	1	- 1	1	1	1	- 1	2	1	Cyclical component (5) ¹
								22	One-off effects (6)
414	28	84	277	- 91	- 119	115	907	113	Adjusted structural balance (7) = (4) - (5) - (6)
- 21	13	- 62	24	- 3	- 26	36	- 1	- 20	Net interest burden ² (8)
393	41	22	301	- 94	- 145	150	906	93	Adjusted structural primary balance (9) = (7) + (8)
									€ per inhabitant
- 195	- 79	255	836	245	488	236	1,053	252	Expenditure, revenue and debt Total expenditure (10)
									of which:
104	142	97	116	78	178	110	97	111	Personnel expenditure (11)
78	119	72	79	51	116	89	68	76	of which: Expenditure on current staff (11a)
25	23	25	37	28	62	21	28	35	of which: Pension benefits ³ (11b)
- 98	37	108	23	- 30	93	43	149	46	Other operating expenditure (12)
- 22	- 8	- 42	- 14	- 22	- 24	38	- 42	- 16	Interest expenditure (13)
- 45	4	10	- 8	13	14	39	53	9	Transfers to households (14)
- 22	56	78	54	66	140	- 68	- 328	34	Fixed asset formation (15)
- 167	- 3	243	80	258	449	130	- 197	208	Adjusted total expenditure ⁴ (16)
- 146	5	285	95	279	473	93	- 156	224	Less interest expenditure (16a)
- 164	- 26	199	89	320	429	17	- 287	190	Less interest expenditure and fees (16b)
271	317	302	287	154	388	367	713	344	Total revenue (17)
									of which:
284	207	307	252	260	331	344	474	264	Tax revenue ⁵ (18)
18	31	86	6	- 41	44	75	131	35	Fees (19)
- 49	- 51	- 89	- 15	- 57	- 41	- 37	- 27	- 15	Transfers from central government ⁶ (20)
248	26	328	359	168	330	245	712	345	Adjusted total revenue ⁴ (21)
230	- 5	242	353	208	286	170	581	310	Less fees (21a)
- 262	- 248	- 313	943	- 465	- 263	981	1,287	- 220	Debt (22)
- 0.09	- 0.09	- 0.43	0.14	- 0.33	- 0.11	0.18	- 0.40	- 0.11	Calculated average rate of interest (%) ⁷ (23)
									%
									Tax rates and multipliers
-	-	-	-	-	-	-	-	-	Real estate acquisition tax (24)
20.3	2.5	4.7	3.0	- 0.4	-	1.0	-	2.8	Real estate tax B ⁸ (25)
4.0	- 0.6	2.4	2.2	1.6	-	9.0	-	0.2	Local business tax ⁸ (26)

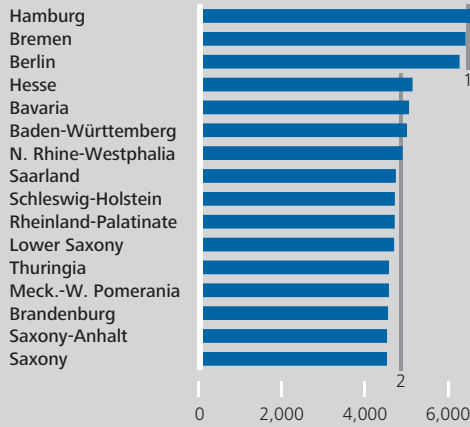
4 Excluding financial transactions and payments under the state government revenue-sharing scheme made by states providing contributions. Payments under the state government revenue-sharing scheme are settled on the income side. 5 Taxes and compensation for motor vehicle tax; state government revenue-sharing scheme and general supplementary central government grants as settled at mid-

2019. 6 Excluding general supplementary central government grants and compensation for motor vehicle tax. 7 Interest expenditure as a percentage of debt at the end of the previous year. 8 Revenue-weighted average local government multipliers for 2018.

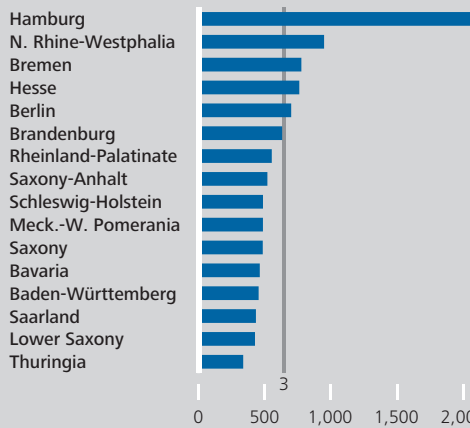
State and local government tax and fee revenue in 2018*

€ per inhabitant

Tax revenue



Fee revenue



Sources: Federal Statistical Office, Federal Ministry of Finance and Bundesbank calculations. * Financial statistics data. **1** City states in total. **2** Non-city states in total. **3** All state and local governments.

Deutsche Bundesbank

higher interest burdens. This primary surplus was highest in the city states, with Hamburg ranking first. Of the non-city states, Saarland posted the best figure.¹³ On the other hand, there are the federal states with small interest burdens. In this category, Saxony recorded the smallest adjusted structural primary surplus, closely followed by Brandenburg and Bavaria.

Changes compared with 2017

The adjusted structural balance for Germany's federal states as a whole improved by just over €110 per capita compared with 2017 (see the

table on pp. 48 f., number 7).¹⁴ There was a very broad spectrum of outturns across the federal states, however, with Hamburg's strongly improved balance proving to be a particularly striking feature and with Berlin suffering the strongest deterioration. On balance, the outturn in those federal states with below-average figures for 2017 showed a somewhat stronger improvement.

There are a variety of reasons why some federal states fared better than others. Berlin, for instance, saw what was by far the strongest growth in personnel expenditure (see the table on pp. 48 f., number 11), with a move that brought, in particular, Berlin salary levels closer to the national average. Second, Berlin's fixed asset formation also increased exceptionally strongly (see the table on pp. 48 f., number 15) after many years of low spending in this area. And, third, like in the new federal states, there were lower central government grants for infrastructure reconstruction in eastern Germany, which left the outturns worse off than in the previous year.

Hamburg, by contrast, benefited from considerably higher revenue, with tax revenue (adjusted for payments under the state government revenue-sharing scheme and for later settlements, see the table on pp. 48 f., number 18) playing the biggest part in this. Adjustments to multipliers for real estate tax and trade tax or a higher real estate acquisition tax were immaterial in this regard (see the table on pp. 48 f., numbers 24 to 26). Another source of relief for Hamburg was the decline in adjusted primary expenditure (see the table on pp. 48 f., number 16a), which was mainly due to decreasing fixed asset formation.

Structural balances improve nationwide compared to the previous year, but differences are marked

Variety of reasons for differences: additional spending in Berlin, but lower central government grants, ...

... key factors in Hamburg: strong upturn in tax revenue and spending cuts

¹³ If consolidation assistance is excluded, the figure would have been only slightly higher than that of North Rhine-Westphalia.

¹⁴ The revision of the cyclical component mentioned in footnote 6 has led to a reduction in the adjusted structural balance for 2017 compared with the figure published in the October 2018 edition of the Monthly Report.

Difficulties in analysing consolidated data

In its 2006 “Berlin judgement”, the Federal Constitutional Court (*Bundesverfassungsgericht, BVerfG*) was critical of the official financial statistics.¹ Partly in response to this, the Federal Statistical Office has re-included government entities hived off from the core budgets (off-budget entities).² Data on expenditure and revenues as required by law are collected from these entities for the financial statistics, but other accounting systems, such as commercial double-entry bookkeeping, are often used. The available information must then be re-classified to fit into the required financial statistics categories, and in some cases simplifying assumptions need to be made. Moreover, the classification systems used for the core budgets do not draw a clear distinction between payments to off-budget entities and those to market-oriented public companies (and return flows from such entities). This creates a state of affairs in which payment flows between the entities of a federal state might not be correctly consolidated in all cases, meaning that figures are then overstated.

Financial statistics reclassify payments in some areas in order to avoid errors. For example, transfers to off-budget entities for pension provision, which are booked as personnel expenditure in the budgets, are adjusted accordingly.

There is no direct consolidation of transfers, however. This means transfers reported in the core budgets and off-budget entities are likewise aggregated if they are intra-entity transfers. In this respect, the consolidated result for the transfers is overstated. Only the overarching budget category (i.e. current or capital revenue and expenditure) is consolidated. The outturn of this over-

arching category is thus less than the sum of the subcategories.

In principle, the above-mentioned consolidation of the overarching categories is based on information taken from the revenue side.³ This can lead to additional problems. If, for instance, a local government records revenues from one of its one-off entities, this amount is deducted from the revenue of the core budget and an equal amount subtracted from the corresponding expenditure group of the off-budget entity. The consolidation therefore does not change the local government’s total balance. It is, however, conceivable that the corresponding expenditure in the off-budget entity was recorded in a different manner or at a different time. In this case, the consolidated superordinated group for expenditure would be understated. The total expenditure is reduced even though no expenditure to be consolidated was recorded. If, however, revenues from other government entities are not recognised as such, the consolidated expenditure and revenue groups are overstated. This is to be expected for fee revenues from other government entities. For the majority of recipients, no distinction is made as to whether such fees originate from an intra-government payment or from third parties.

¹ See BVerfG, 2 BvF3/03, paras 204 and 58.

² However, the reporting population is subject to repeated change caused by spin-offs, mergers, liquidation of off-budget entities and sectoral reassignments. In this respect, it is not always easy for accounting departments to recognise whether or not a transaction partner is allocated to the government sector. Ultimately, it would appear to make sense for the accounting system to assign the units automatically using a public register.

³ See Rückner (2011), p. 1109.

In principle, fiscal balance errors can also arise from payment flows within a state. For example, sometimes apparently no expenditure was recorded in the financial statistics if an off-budget entity transferred a profit to the core budget, provided this transaction was not recorded in the income statement. This meant that a revenue was recorded in the core budget but that the off-budget entity did not book any expenditure and thus the (consolidated) balance appeared too favourable. On the other hand, compensation payments from the core budget to off-budget entities were also apparently not always recognised as income in the latter, which resulted in the consolidated result being understated. Such sources of error appear to have been effectively rectified in the meantime.

The bottom line is that, in spite of progress in some areas, the adjustment of state out-

turns for payments between government entities is still unsatisfactory. In order to improve the quality of data, efforts could be made towards achieving a harmonised accounting system for all entities that belong to the general government sector. There should at least be a clear differentiation between the payment flows to other parts of the respective state and others. In addition, a further subdivision of payments to other levels of government and a clear classification of payments to non-government entities would make sense. Under section 49a of the Budget Principles Act (*Haushaltsgrundsatzgesetz*), it is the task of central and state government to take account of statistical requirements in government accounting.⁴

⁴ See Deutsche Bundesbank (2018b), p. 67.

Decline in spending in Saarland overstated by the statistics, but with no bottom line impact

Detailed data on payments between state entities are vital for preventing errors in the consolidated view of individual budget categories. Saarland's capital spending is a case in point. Due to shortcomings in the data, the financial statistics reported a negative aggregate figure for the (consolidated) federal state level. This means that expenditure developments during the reporting year were understated accordingly. This did not distort the fiscal balance, however (see the box on pp. 51 and 52).¹⁵

■ Selected aspects

State government revenue-sharing scheme largely levelling out tax revenue

The state government revenue-sharing scheme and supplementary general central government transfers are intended to minimise differences in per capita financial capacity between the federal states. Local government tax revenue is included up to 64% (with adjustments being made for the use of differing multipliers). Furthermore, the population of city states is given

a 35% higher weighting. If the accruals-based tax revenue (see the table on pp. 42 f., number 18 and the chart on p. 50) is considered only for the non-city states, the differences remaining under the revenue-sharing scheme are, in fact, moderate.¹⁶ Thus, Hesse¹⁷, which yields a particularly high revenue, was 5½% higher than the figure for the non-city states, and Saxony and Saxony-Anhalt were 7% below

¹⁵ It appears that Saarland experienced some inconsistencies concerning payments in connection with redemptions of long-term securities. One off-budget special fund holding debt instruments issued by Saarland posted repayment return flows from the core budget as revenue affecting the fiscal balance. In the core budget, the redemption of long-term securities financed by other entities was not taken to the fiscal balance. Against this background, it would appear that the capital expenditure has been understated.

¹⁶ Unlike in the government financial statistics, the revenue of the states providing contributions is reduced by the payments under the state government revenue-sharing scheme.

¹⁷ Bavaria achieves a higher financial capacity in the state government revenue-sharing scheme, since this involves adjustment for its considerably lower real estate acquisition tax and its significantly lower multipliers for business tax and property tax.

it. If the special-purpose grants for reconstruction in eastern Germany are added to this, their shortfall is reduced further to below 4%. However, before the ex ante redistribution of turnover tax receipts as the first stage of the government revenue-sharing scheme, the range (relative only to the federal state level) among the non-city states was still between 46% below the average in Saxony-Anhalt to 32% above it in Bavaria.¹⁸ The burden from the equalisation stages totalled €700 per capita of the population in Bavaria, while the inflows in Saxony-Anhalt (including the “special assistance”) were as much as almost twice as high.

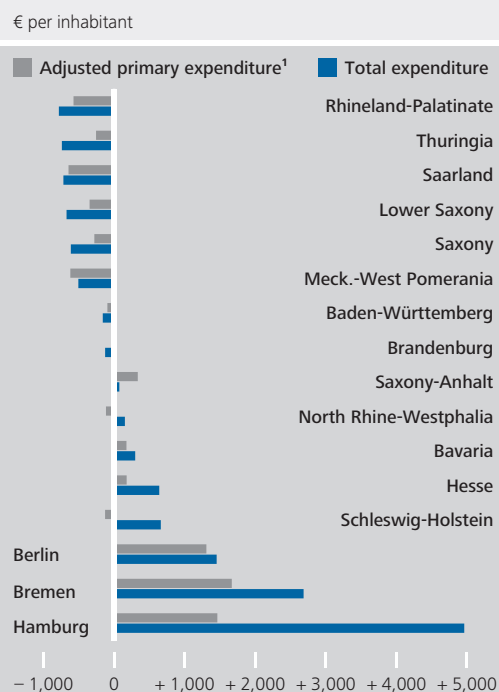
Strong dispersion of receipts from fees – also due to spin-offs ...

The per capita receipts from fees varied much more strongly (see the table on pp. 42 f., number 19 and the chart on p. 50). They were at by far their highest in Hamburg, while, in Thuringia, they amounted to no more than just over half of the national figure. One reason for these differences is the varying degree to which tasks that lie within the responsibility of each of the federal states are outsourced to enterprises outside the government sector. This means that the relevant receipts from fees and staff costs, operating expenditure and investments are no longer recorded in the government financial statistics presented here. Matters of superregional importance in individual federal states also sometimes play a role, such as the port in Hamburg. Thus, a higher recorded level of receipts from fees does not necessarily go hand in hand with a greater burden on the general public of a federal state. Moreover, this indicates additional budgetary leeway only if they increase the cost coverage rate (i.e. if the expenditure is not correspondingly higher either).

... and apparently consolidation problems

Furthermore, in connection with fees, there are apparent problems in consolidating transactions between government entities in individual federal states. For instance, in some federal states, such as in North Rhine-Westphalia, there are off-budget entities that manage and rent out administrative property. In this case, rent payments from the core budget are paid

Difference in state and local government spending from national figure in 2018*



Sources: Federal Statistical Office and Bundesbank calculations.
 * Financial statistics data. ¹ Total expenditure less payments into the state government revenue-sharing scheme, purchases of financial assets, fee revenue and interest expenditure.
 Deutsche Bundesbank

to this off-budget entity. These amounts are evidently not consolidated, but instead recorded as expenditure of the core budget and revenue of the special fund (in this instance as sales which are classified as fees). In effect, this results in double-counting under property costs, since the rents and the operating expenses and financing costs covered by them are added together.

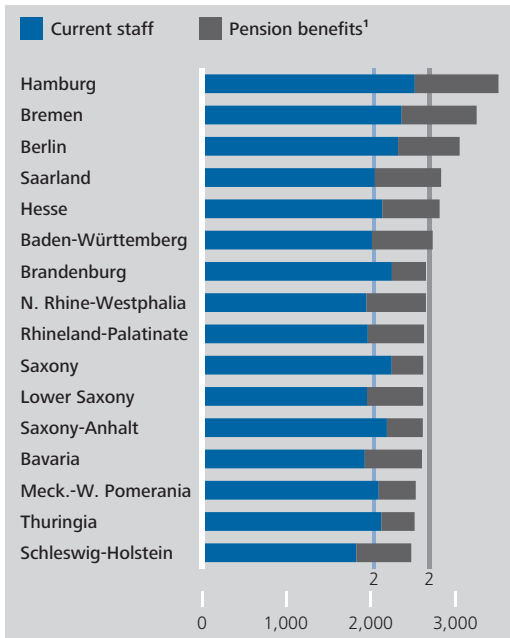
Thus, the adjusted total receipts and expenditure (see the table on pp. 42 f., numbers 21 and 16) are easier to compare between federal states if the fees are deducted on the expenditure and the revenue side. In addition, interest rates are then also deducted on the expenditure side. The range is then significantly narrower (see table on pp. 42 f., numbers 21a and 16b).

Budgetary scope easier to compare by adjustment of fees

¹⁸ See Federal Ministry of Finance (2019).

State and local government expenditure on personnel in 2018*

€ per inhabitant



Sources: Federal Statistical Office and Bundesbank calculations.
 * Financial statistics data. ¹ Including refunds under the legislation incorporating legacy claims and entitlements to pension benefits in eastern Germany into the west German pension scheme. ² All state and local governments in total.
 Deutsche Bundesbank

Highest adjusted primary expenditure in Bremen; lowest in Saarland

Among the non-city states, adjusted per capita primary expenditure was highest in Saxony-Anhalt. However, this was accompanied by a very high level of central government transfers on the revenue side (see the table on pp. 42 f., number 20). Saxony-Anhalt was closely followed by Hesse and Bavaria, which had the highest levels of tax revenue. Saarland was at the other end of the spectrum: low primary expenditure was offset by above-average interest expenditure and below-average revenue.¹⁹ The correspondingly adjusted primary expenditure of the city states was far higher than the figures for the non-city states. Despite a significantly lower level of tax revenue and a very high interest burden, Bremen reported markedly higher primary expenditure than Hamburg.

Outsourced tasks can distort comparison

Caution is advisable when comparing individual revenue and expenditure categories across federal states – as addressed on pp. 52 f. For example, the extent to which core areas, such as

schools and childcare, are outsourced to non-government enterprises can vary greatly across federal states. In some cases, these enterprises are still receiving central government transfers, whereas primarily higher personnel costs and other operating expenditure would be recorded if there were no outsourcing. Transactions between government entities are also not always consolidated in a satisfactory manner in the government financial statistics. Thus, the comparisons for individual expenditure categories allow no more than tentative conclusions to be drawn about how economically a federal state uses funds or to what extent it performs services. Nonetheless, a number of differences appear noteworthy.

With regard to personnel expenditure, new federal states have considerably lower pension obligations owing to a below-average number of recipients of civil servant pensions (see the table on pp. 42 f., number 28). The same also applies if payments for special pension provisions and supplementary pension schemes for government employees before 1990 are included (see the table on pp. 42 f., number 11b). By contrast, new federal states have higher expenditure for current employees (see the table on pp. 42 f., number 11a) due, not least in many cases, to sizeable staffing levels in relation to the number of inhabitants (see the table on pp. 42 f., number 27). In addition, having a larger percentage of employees who are not civil servants, which eases the burden stemming from pension payments, leads to additional expenditure on social security contributions. However, the expenditure of the city states on current employees was still considerably higher than that of the new federal states. This is particularly true of Hamburg, which collected high fees at the same time. Expenditure was especially low in Schleswig-Holstein. In addition to relatively low staff numbers, this was also due to a below-average level of remuneration. Pay levels varying more greatly than

New federal states have low pension obligations but high staff numbers

¹⁹ The statistical problems explained in footnote 15 only play a limited role here.

before along with the diverging costs of living within Germany can make staff recruitment easier in urban areas. At the same time, the burden on financially weak federal states would tend to be eased with regard to staffing costs. Pay levels in the public sector would then also be more likely to reflect local differences in private sector pay.²⁰

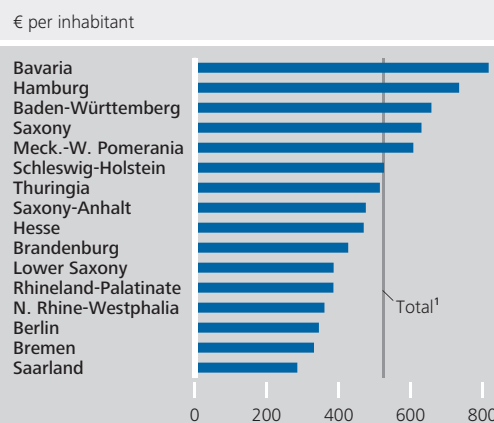
Marked differences in transfers to households, but partly offset by central government

Bremen reported the highest figure for transfers to households (see the table on pp. 42 f., number 14), closely followed by North Rhine-Westphalia. Saxony-Anhalt and Saarland were at the other end of the table. However, in Saxony-Anhalt, at least, this is likely to be due to a different classification. Here, some social benefits, otherwise provided by local government, are provided at state government level and are not recorded as transfers there, but rather as other operating expenditure. This expenditure was also particularly high in this instance (see the table on pp. 42 f., number 12). The extent to which this plays a role in Saarland cannot easily be derived from the data at present.²¹ In order to assess the burdens in individual federal states from transfer expenditure (social benefits), it should be noted that these are partly offset by central government. For instance, central government completely reimburses the costs of the basic allowance for the elderly and for persons with reduced earning capacity and almost half of the accommodation costs of those receiving unemployment benefit II. Thus, net expenditure in these areas, which is ultimately relevant to the regional cost burden, was not only much lower, there was also considerably less disparity between federal states. Central government implicitly absorbs differences in the cost burden in this respect. An even somewhat greater shift to central government might be worth considering.²²

Fixed asset formation: significant dispersion between federal states, ...

Expenditure on fixed asset formation is a focal point when considering infrastructure development. Expenditure varied substantially, with spin-offs and geographical features specific to certain federal states also likely to have played a part in this. Bavaria posted the highest per

Fixed asset formation by state and local government in 2018*



Sources: Federal Statistical Office and Bundesbank calculations.
 * Financial statistics data. ¹ All state and local governments.
 Deutsche Bundesbank

capita figure (see the table on pp. 42 f., number 15), noticeably ahead of Hamburg. Among the new federal states, whose funds for reconstruction in eastern Germany are now running out, Saxony and Mecklenburg-West Pomerania were clearly in the lead. Berlin, Bremen and, above all, Saarland remained considerably below the national average.

Ultimately, however, it is not the comparison of the expenditure level that is decisive. Far more important is the extent to which public infrastructure can be deemed to meet the individual needs of each federal state. Meaningful data on this are not available.

... but key data on infrastructural needs are lacking

Room for improvement in analysis of state government finances

All in all, it is difficult to make cross-state comparisons of individual revenue and expenditure items. The picture is distorted, not least, by differences concerning the transfer of tasks to

²⁰ See Deutsche Bundesbank (2015), pp. 35-36.
²¹ In Saarland, benefits are granted by a regional authority that is not captured in the core budget. How these benefits are recorded is not immediately apparent from the regional authority's business plan, which is attached as an annex to the state budget.
²² See also Deutsche Bundesbank (2016), p. 19.

Transferring tasks to non-government entities makes comparisons more complicated

Desirable: data for each federal state broken down by government function and nationally coordinated accounting systems

More precise demarcation of financial transactions in financial statistics and budget plans

non-government entities that do not belong to the government sector. Current comprehensive data, broken down by government function, which include the grants to such entities, exist at present only in the national accounts for general government.

It would be desirable to have near-time access to financial statistical data for each federal state with a breakdown by government function. Furthermore, additional data would be important for consolidating transactions between government entities for individual categories of households, too. Double counting and other biases can scarcely be avoided without a system that is closely coordinated between state governments, local governments and off-budget entities.

Starting this year, guarantee calls will no longer be shown as financial transactions in the government financial statistics (in line with the national accounts). As a result, they will then essentially have a detrimental effect on the reported adjusted structural balance. Expenditure on equity purchase will continue to be recognised as a financial transaction. However, if sufficient yields are not expected from this, it would be an economic imperative to record such expenditure as transfers in the financial statistics, like in the national accounts. This

would also create greater pressure to ensure the proper classification of items when drawing up the budget. The effectiveness of the debt brake could be better safeguarded in this way.

Clear and unbiased data are important for assessing the finances of the individual federal states. The situation and structure of the consolidated state and local government budgets reflect political decisions regarding how a state performs its tasks and what spending this involves. In addition to meaningful budgetary data, it would be beneficial for federal states to agree on result indicators for major functions and to publish the figures. Examples of this are performance indicators of educational outcomes or the quality and availability of child-care or transport infrastructure. Federal states possess a relatively broad range of legislative and organisational powers. The current positive budgetary situation should make it easier for the states to use these powers to provide services that are in line with needs. Meaningful performance indicators would also make it easier to assess the various specific strategies adopted by the individual federal states. One advantage of federalism is being able to learn from such specific state-level approaches and make better use of future opportunities in this way.

Meaningful indicators for fulfilling tasks are also important for strengthening competition

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Longer-term changes in the unsecured interbank money market

The turnover in the unsecured interbank money market has been dropping since the financial crisis, but in particular since 2015. Important factors driving this development are changes in the use of monetary policy instruments and innovations in banking regulation. In terms of monetary policy, the high levels of excess liquidity as a result of asset purchases for monetary policy purposes, in particular, are currently a key factor. Another relevant issue is that the spread between the Eurosystem's main refinancing rate and the deposit facility rate is significantly reduced compared to the first ten years of the monetary union.

The decrease in turnover in the overnight money market is particularly striking. At last count, EONIA panel banks granted other institutions just roughly one-twentieth of the average lending volume of 2008. This segment of the interbank money market is therefore virtually inexistent. As more banks hold excess central bank reserves than before, fewer banks seek liquidity on interbank money markets, causing a direct drop in turnover.

Lower turnover and a decrease in the spread versus key interest rates reduce the interest income that can be achieved per lending relationship. This leads to a reduction of the supply on the interbank money market. In many cases, lower interest income no longer covers the fixed counterparty-specific (monitoring) costs. Consequently, only few institutions are able to lend profitably in the interbank money market, and not all those seeking to obtain central bank reserves on the market will be able to fund themselves at terms commensurate with their respective counterparty risk. In the absence of intermediation through money markets, institutions' marginal liquidity and refinancing costs will be determined by the key interest rates set by the Eurosystem, which are independent of counterparty risk. At times, these rates can therefore be more favourable than market conditions. Banking sector risks are therefore no longer fully reflected in refinancing costs, which may impair the efficiency of the allocation of financial and ultimately also of real resources.

In the interests of an efficient allocation of resources in the euro area, the objective must therefore be to strive for a more rather than less market-based management of banks' liquidity. Going forward, if the Eurosystem reduces excess liquidity in the long term, possibly combined with a re-enlargement of the interest rate spread between the main refinancing rate and the deposit facility rate, banks would have greater incentives to trade liquidity in the market again.

At the same time, it must be taken into account that various changes in the regulatory treatment of money market transactions between banks have created conditions which could make it more difficult to revitalise the interbank money market. However, the positive turnover developments during various periods with declining levels of excess liquidity since 2009 suggest that the possibility of a revival of interbank money markets and a simultaneous reduction of the intermediation role of the Eurosystem should not be ruled out in the long term.

■ Introduction

Banks' liquidity management: balancing liquidity fluctuations via the interbank money market

Banks trade central bank reserves in the interbank money market. Commercial banks' conduct of business, for instance processing payments, causes constant fluctuations in the balances of their accounts with the central bank. The interbank money market allows banks to balance these short-term liquidity fluctuations by trading with one another. If an individual bank temporarily has a shortage of central bank reserves, it can borrow central bank reserves from other banks in order to meet minimum reserve requirements and make payments on behalf of customers. If the redistribution of liquidity among banks is readily possible via money markets, banks need not maintain any systematic liquidity buffers in the form of central bank reserves over and above their reserve requirements.

Use of monetary policy instruments has significant influence on liquidity management

Central banks exert a significant influence on banks' liquidity management through their use of monetary policy instruments: for instance, central banks may, on demand, provide their monetary policy counterparties with any additional liquidity they require individually by means of standing facilities or through regular credit operations.¹ In addition, central banks can provide the banking system with excess liquidity in the form of central bank reserves through asset purchases, even in the absence of individual or aggregate demand from banks for additional central bank liquidity.

Changes in the environment for the euro area interbank money market

The Eurosystem has taken both paths, in particular with the full allotment in monetary policy refinancing operations that was introduced at the end of 2008 and has been extended repeatedly and with the creation of very large volumes of excess liquidity² as a result of the expanded asset purchase programme (APP). With these and additional measures, the Eurosystem has fundamentally changed the basic conditions for banks' liquidity management within the euro area. On top of that, there have also been changes to the regulatory environ-

ment, especially in terms of capital requirements and liquidity regulations.

The present article will outline the resulting longer-lasting changes in the unsecured interbank money market based on various publicly available indicators. These include interest rates and/or interest rate spreads as well as market turnover and relevant stock variables, in particular banks' liquidity position vis-à-vis the Eurosystem.

■ Unsecured interbank money market: changes in liquidity and interest rate conditions

Basics

Through their short-term liquidity management, banks traditionally ensure their capacity to pay by borrowing the required funds in the interbank money market. Banks' capacity to pay is key not just for the institutions themselves but also from their clients' point of view. Bank clients trust that they can access their due account balances at all times and can carry out payments. Ultimately, banks that conduct maturity transformation can only meet this crucial interest of their clients permanently if they themselves are able to procure the central bank reserves required for deposit withdrawals in the interbank money market in due time. Market access of this nature requires a minimum degree of confidence on the part of an institution's potential creditors in the interbank money market.³

Banks that engage in maturity transformation require effective market access in order to maintain capacity to pay

¹ From commercial banks' perspective, the interest rate differential between the central bank's credit and deposit rates is an important factor in determining the attractiveness of central bank credit operations compared to loans in the interbank money market.

² Excess liquidity generally means banks' aggregate reserve balances with the central bank in excess of the institutions' potential aggregate reserve requirements. For the Eurosystem, it makes sense to define excess liquidity as, for instance, "current accounts (including minimum reserve balances) plus deposit facility minus reserve requirement (as an average for the respective maintenance period)".

³ See, for example, Choudry (2003), p. 533.

Unsecured interbank money market – definition and institutional aspects

In unsecured transactions in the interbank money market, the bank granting credit does not take in any collateral to cover itself against the eventuality of the recipient bank being unable to fully repay the loan. Transactions in the unsecured interbank money market are often conducted via telephone in the form of bilateral over-the-counter (OTC) credit agreements and are based on ongoing business relations between institutions.¹ In practice, one of the key prerequisites for a credit transaction to be concluded between banks is probably for the credit-granting institution's risk management unit to determine the set of potential counterparties in addition to setting limits for each institution deemed to be creditworthy. The main parameters underlying individual transactions in the unsecured interbank money market are loan amount, maturity and interest rate.² Transactions of this kind are often carried out as overnight transactions, which means that the credit amount becomes due on the very next business day.

Prominent measures of interest rate conditions in the unsecured interbank money market are the transaction-based EONIA for overnight lending and the EURIBORs for lending in various maturities; both are published by the European Money Markets Institute (EMMI).³ These measures are important sources of summary information for Eurosystem monetary policy makers in their assessment of the effectiveness and efficiency of the direct monetary transmission mechanism in the interest rate channel, i.e. regarding the transmission of policy rates to banks' marginal liquidity and funding costs. However, they also serve as reference rates for derivative instruments, which financial market players use to manage interest rate risk, amongst other things. In financial mar-

kets, the prices of such derivative instruments – e.g. interest rate swaps – often serve as the basis for the valuation of capital market instruments and may also be used to gauge policy rate expectations.⁴

1 If banks purchase unsecured bank bonds with a short (residual) maturity, this may also be interpreted as an unsecured interbank money market transaction. That segment of the market is, however, disregarded for the purposes of this article.

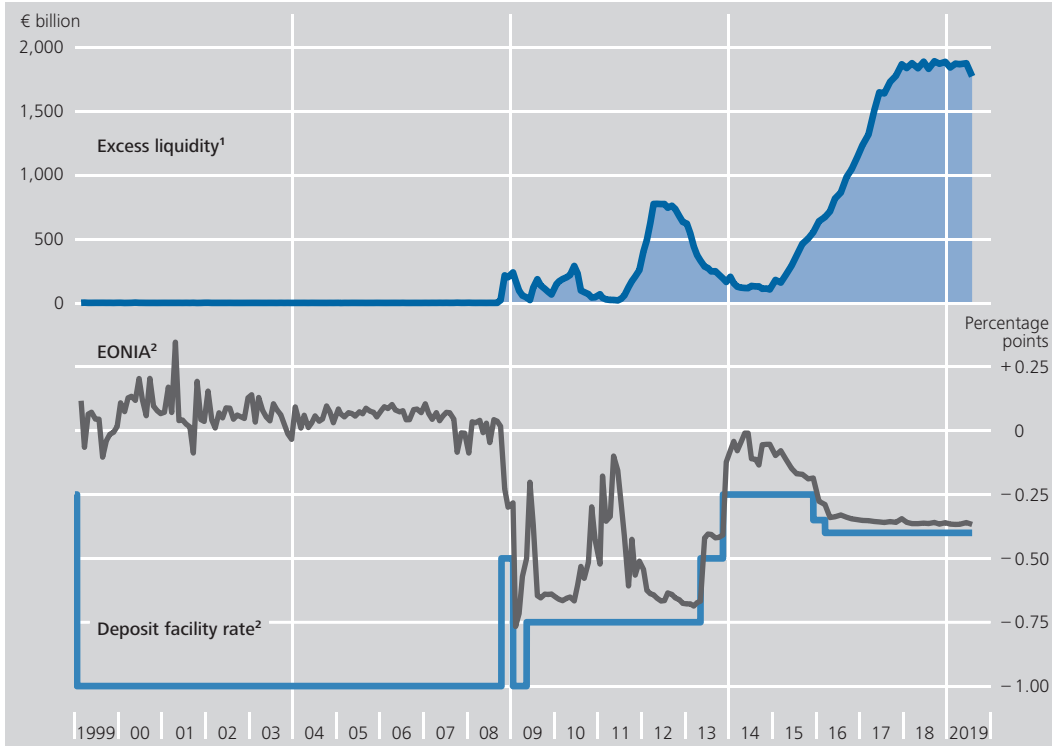
2 In principle, further parameters, e.g. the payment systems used for settlement, may be determined on an individual basis.

3 Please note the ongoing reform initiatives, for instance, the potential replacement of the EONIA with the ECB's euro short-term rate (€STR) or the transition to a hybrid methodology for the EURIBORs. See also European Central Bank (2018).

4 See also Deutsche Bundesbank (2017a).

Interest rate spreads and excess liquidity

As an average for each maintenance period



1 Current accounts minus minimum reserve requirement plus deposit facility. 2 Interest rate spread versus main refinancing rate.
 Deutsche Bundesbank

Liquidity management: maintaining capacity to pay, avoiding excessive central bank reserves

However, under normal circumstances, it is not profitable for banks to hold excess central bank reserves. Banks therefore regularly seek to hold their assets⁴ not as central bank reserves but in the form of more lucrative investments. Traditionally, both aspects together – maintaining a bank’s capacity to pay while at the same time avoiding unnecessary, unprofitable buffers in the form of central bank reserves – have constituted a main objective of banks’ liquidity management.

Profitability of interbank money trading depends on environment

Banks can also play an active role in the interbank money market by accepting other banks’ deposits in addition to the activities resulting from business with non-banks and by issuing money market loans to other institutions. Whether such transactions are profitable from banks’ perspective and are therefore conducted in meaningful degree depends, crucially, on various underlying conditions, in particular the design of monetary policy instruments and on banking regulation.

Balanced liquidity conditions before the financial crisis

Since the introduction of the euro in 1999, there was, for a long time, virtually no change to the basic conditions in the euro area interbank money market that were determined by monetary policy (see the chart above). The banking system had to participate in the Eurosystem’s weekly refinancing operations in order to be able to fulfil aggregate reserve requirements.⁵ The Eurosystem maintained balanced liquidity conditions via limited allotments in refinancing operations: the banking system’s aggregate liquidity position vis-à-vis the Eurosystem, on average during the maintenance period, amounted to little more than the re-

Balanced liquidity conditions: interbank loans and main refinancing operations approximate substitutes

⁴ Beyond potential minimum reserve requirements.

⁵ The banking system was operating under what is known as a “structural liquidity deficit” vis-à-vis the Eurosystem.

serve requirement.⁶ Institutions balanced any remaining volatility in their central bank balances as a result of their business operations by participating in the interbank money market.⁷ Banks' marginal willingness to pay for an interbank loan was broadly equivalent to the interest rate of the Eurosystem's main refinancing operations.⁸

Incentives for lending in the interbank money market determined by interest rate spread between the main refinancing rate and the deposit facility rate

Banks needed an economic incentive to lend out central bank reserves in excess of their minimum reserve requirements in money market transactions with other banks. The Eurosystem created this incentive by maintaining a constant 100 bps spread between the minimum bid rate for the main refinancing operations and the interest rate on the deposit facility (deposit facility rate). Compared to the marginal willingness to pay of banks with remaining liquidity needs, banks would have foregone a considerable amount of interest by using the deposit facility as opposed to lending in the interbank market.⁹ It was therefore a straightforward decision to offer any central bank reserves not needed to meet reserve requirements to other institutions with liquidity needs via the interbank money market rather than making use of the Eurosystem's deposit facility. Given the aggregate shortage of central bank reserves, the equilibrium of short-term interbank money market rates was slightly above the minimum bid rate in the Eurosystem's main refinancing operations.¹⁰

Measures to stabilise the short-term interest rates from 2007 onwards

From the summer of 2007 onwards, interbank markets around the world experienced tensions. A loss of confidence in one another increased banks' sensitivity to potential counterparty risks. This was also evident in rising interest rates (and/or increasing risk premia¹¹) in the interbank money market. From the perspective of an individual bank providing liquidity, higher interest rates seemed justified: first, a broad loss of confidence had the potential to make it more expensive for the individual bank to obtain liquidity for itself. Second, interest rates on interbank money market loans had to reflect the changes in the assessment of counterparty-

specific credit risks. During this period, the Eurosystem initially deployed various discretionary measures to stabilise interest rate conditions in the interbank money market in the euro area without, however, altering the monetary policy framework for the interbank money market as a whole.¹² This changed when the initial liquidity crisis evolved into a full-blown financial crisis in the autumn of 2008, resulting in ever greater turmoil also in the euro area. In October 2008, the Eurosystem decided that refinancing operations would be carried out through a fixed-rate tender procedure with full allotment at the interest rate on the main refinancing operations.¹³ At the same time, the interest rate corridor created by the Eurosystem's key interest rates was narrowed. In particular, the Governing Council of the ECB reduced the differential between the main refinancing rate and the deposit facility rate to 50 bps for a limited period until January 2009.

⁶ In other words, excess liquidity was negligibly small. From 1999 until June 2007, it averaged less than €1.1 billion.

⁷ Against sufficient collateral, the Eurosystem provides banks with additional liquidity at all times through the marginal lending facility. However, it charges a significantly higher interest rate than the main refinancing rate, meaning that the Eurosystem's monetary policy counterparties do not make systematic use of this instrument.

⁸ It should be noted that banks do not have to maintain the central bank balances necessary to fulfil the Eurosystem's minimum reserve requirements on a daily basis, but only averaged across a maintenance period of several weeks.

⁹ Given balanced liquidity conditions, the gross interest rate loss, in other words before risk costs, would have been slightly above 100 bps. In actual fact, the Eurosystem's counterparties made no systematic use of the deposit facility until the liquidity and later the financial crisis, with the exception of a transitional phase following the introduction of the euro. Average stocks in the deposit facility were less than €0.3 billion between 2000 and 2006.

¹⁰ Other major central banks achieved similar results in managing short-term interest rates in the interbank money market through an overall comparable use of instruments. See also Bindseil (2014), p. 138 f.

¹¹ For an introduction to money market risk premia, see Deutsche Bundesbank (2014a).

¹² See also European Central Bank (2008).

¹³ Known as full allotment at a fixed interest rate.

Full allotment policy and narrower interest rate corridor: demand-driven excess liquidity

Full allotment policy and narrower interest rate corridor reduce incentives for short-term liquidity transfers in the money market

From this point onwards, fixed-rate full allotment provided a cap for banks' funding costs¹⁴ – and therefore effectively limited the willingness to pay for short-term loans in the interbank money market of institutions with a demand for liquidity. At the same time, the increase in the deposit facility rate relative to the main refinancing rate reduced the interest foregone by banks with excess reserves who made use of the deposit facility rather than offering surplus liquidity to other banks.¹⁵ Against the backdrop of a higher perception of risk, lending in the interbank money market had become less attractive given a narrower corridor width, while holding excess liquidity in the deposit facility had become more attractive than before. Both measures therefore resulted in the Eurosystem partially replacing the trading of surplus liquidity that had previously taken place on the interbank money market. The extent of the intermediation via the Eurosystem's balance sheet was evident in the temporary surge in excess liquidity from close to zero to an average of more than €200 billion in the fourth quarter of 2008. However, this demand-driven increase in excess liquidity soon proved to be largely reversible when the corridor width was widened again in the first half of 2009, essentially shortly after the financial crisis reached its peak.

Excess liquidity: money market rates fall below the main refinancing rate

Institutions enjoying a high level of confidence in the markets continued to use money market transactions for their liquidity management during this period, which meant that there was a certain remaining turnover in the interbank money market. During this phase, short-term interbank money market rates fell below the interest rate on main refinancing operations in some instances.¹⁶ For institutions with excess central bank reserves it was still profitable to pass on their excess liquidity to banks with high creditworthiness. The aggregate excess supply of central bank reserves meant that, at times, interest rates for money market transactions

moved towards the deposit facility rate. When excess liquidity fell in conjunction with the widening of the corridor at the beginning of 2009, money market rates temporarily returned towards the interest rate on the main refinancing operations.

From May 2009 onwards, the Eurosystem reduced the interest rate differential between the main refinancing operations and the deposit facility, until it remained at just 25 bps from November 2013 for roughly two years. This reduced width of the effective interest rate corridor resulted primarily from the Governing Council lowering the main refinancing rate in order to alter the monetary policy stance without at the same time reducing the deposit facility rate. As key interest rates increasingly approached the zero lower bound, the Eurosystem was initially reluctant to lower the deposit facility rate to zero and then into negative territory.¹⁷ For banks, the foregone interest as a result of holding excess central bank reserves (as compared to the main refinancing rate or the representative interbank money market rate) consequently fell sharply. All other things being equal, this further reduced the incentives for horizontal adjustment in the distribution of liquidity¹⁸ among euro area banks.

Narrowing of interest rate corridor: sustained reduction in interest foregone by holding excess reserves

¹⁴ Where an institution was eligible as a monetary policy counterparty for monetary policy credit operations and had sufficient (unencumbered) collateral.

¹⁵ Whereas holding excess liquidity in the deposit facility would, up until then, have involved foregone interest of roughly 100 bps before the cost of risks, the interest rate gap between the EONIA and the Eurosystem's deposit facility averaged roughly 27 bps in the period from 8 October 2008 to 20 January 2009 against a backdrop of significantly positive aggregate excess liquidity.

¹⁶ For more on the behaviour of short-term money market rates and the impact of longer-term Eurosystem credit operations, see also Abbassi, Fecht and Tischer (2017).

¹⁷ It was not until the deposit facility rate was lowered into negative territory at -10 bps and subsequently further reduced up until 2016 that the interest rate differential between the main refinancing rate and the deposit facility rate widened to 40 bps (as of March 2016).

¹⁸ Although demand-driven excess liquidity can generally be considered a suitable indicator for tensions in the interbank money market when only short-term Eurosystem credit operations are utilised, the increasing compression of the maximum possible interest margins in the interbank money market in itself already considerably limited the usefulness of this interpretation of excess liquidity as a crisis indicator.

Favourable long-term refinancing operations and asset purchases: structural excess liquidity

Favourable refinancing operations with long maturities: excess liquidity with structural character

Moreover, the monetary policy framework for the interbank money market changed starting in the summer of 2009 because the Eurosystem repeatedly offered refinancing operations with very long maturities¹⁹ and at very favourable interest rates as compared to market conditions. Overall, the Eurosystem's counterparties reduced their recourse to regular refinancing operations with shorter maturities following the allotment of the long-term tenders. Nevertheless, the large-scale use of long-term credit operations created additional excess liquidity on a large, and in some ways unprecedented scale. The high levels of excess liquidity were no longer predominantly a symptom of tensions in interbank money markets, but were, first and foremost, a consequence of the very favourable conditions of the long-term refinancing operations offered by the Eurosystem. Although the level of excess liquidity was determined by the individual demand of banks, the long maturities of refinancing operations and, at times, the lack of early repayment options meant that it was, for a sustained period, structural in nature.

Further increase in structural excess liquidity through Eurosystem asset purchases

Excess liquidity with a structural character may also be produced by central bank asset purchases. Of the Eurosystem's monetary policy asset purchase programmes, this is particularly true of the APP which the Governing Council of the ECB adopted in early 2015. Asset purchases under this programme led to a strong increase in the central bank reserve balances of euro area banks on a scale far exceeding that of previous increases in excess liquidity as a result of the long-term refinancing operations.

Relationship between excess liquidity and interest rates in the unsecured interbank money market

If central banks use their liquidity operations to produce balanced liquidity conditions, their objective is generally to anchor short-term interest rates roughly at the level of the key interest rate.²⁰ Under the orderly market conditions prevailing before the financial crisis, the Eurosystem and many other central banks were pretty successful: short-term unsecured interbank money market rates were fairly stable and, on average, did not deviate much from the level of key interest rates.²¹ Central banks being able to successfully steer short-term interest rates in the interbank money market is an important prerequisite to ensuring that changes in key interest rates effectively influence the interest rate conditions banks offer their retail clients.²² These conditions are, in turn, relevant factors for developments in the real economy and price dynamics.

Once excess liquidity increases from balanced liquidity conditions, average short-term interest rates on the interbank money market will drop towards the interest rate of the deposit facility

Central bank steers short-term interest rates through liquidity conditions

19 To date, the Eurosystem has conducted four series of such refinancing operations with very long maturities of one year or more: 1. In 2009, a total of around €614 billion was provided in three longer-term refinancing operations using a full allotment procedure, each running for around 12 months. 2. At the end of 2011/beginning of 2012, a total of more than €1 trillion was drawn by credit institutions in two longer-term refinancing operations with a maturity of three years. 3. From the summer of 2014 onwards, a first series of a total of eight targeted longer-term refinancing operations (TLTRO) with maturities of up to four years were offered, which was used by Eurosystem counterparties to the tune of €432 billion in total. 4. From the spring of 2016 onwards, four further targeted longer-term refinancing operations (TLTRO II) with maturities of four years each were carried out (roughly €740 billion).

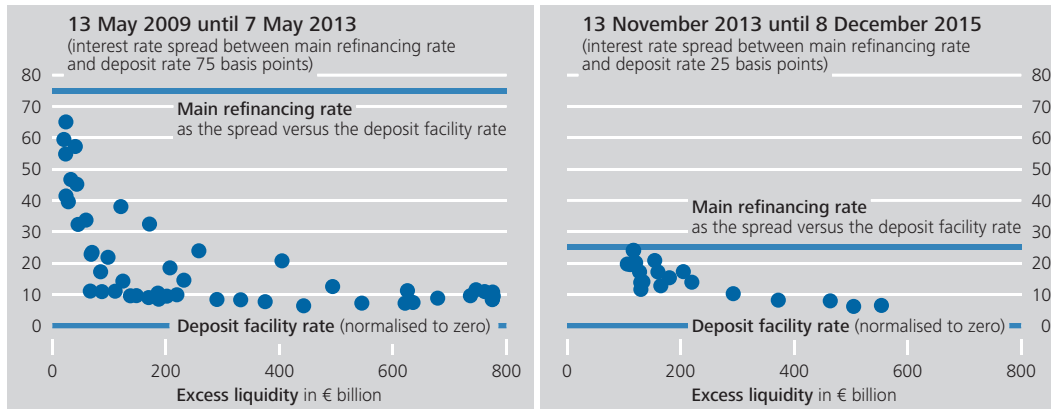
20 The key interest rate is usually also the interest rate which is (at least approximately) used for those liquidity operations with which the central bank manages the banking system's liquidity position. For the Eurosystem, this key interest rate is the interest rate on the main refinancing operations or, where the variable rate tender procedure is applied, the minimum bid rate in the main refinancing operations.

21 See, for example, Nautz and Scheithauer (2011).

22 See Deutsche Bundesbank (2019).

Relationship between EONIA and excess liquidity*: interest rate spread between EONIA and deposit facility rate

Basis points, average for each maintenance period



* Current accounts minus minimum requirement plus deposit facility.
 Deutsche Bundesbank

Increasing excess liquidity: decline in money market rates towards the deposit facility rate

as a result of the excess supply of central bank reserves.²³ The degree to which money market rates converge towards the deposit facility rate at very high levels of excess liquidity likely depends on various different factors.

Lower bound for differential between the unsecured overnight rate and the deposit facility rate as a result of risk premia and regulation

From the perspective of the banks providing loans in the interbank money market, these factors could include the risk premium they demand vis-à-vis a risk-free investment with the Eurosystem. Both for institutions that lend and for those that borrow, regulatory factors might also play a role. Creditors could demand compensation for the capital charges that they must provide for unsecured loans. In turn, debtors that are restricted by the leverage ratio might expect a compensation, in the form of an interest rate deduction, for the extension of their balance sheet. When credit risk premia and a potential surcharge for the regulatory cost of an interbank loan (see the box on p. 67 f.) exceed the opportunity costs equal to the interest rate differential between the interest rate that can be achieved in the interbank money market and the Eurosystem's deposit facility rate, money dealing is no longer profitable for the institution providing liquidity.²⁴

The relationship between the banking system's aggregate liquidity position and interbank money market rates can be illustrated graphic-

ally. As credit risk premia and potential regulatory costs do not vary with the width of the interest rate corridor, it would make sense to examine, in particular, time periods with a constant spread between the main refinancing rate and the deposit facility rate.²⁵ Moreover, the time periods should be characterised by a transition from roughly balanced liquidity conditions to phases of increased excess liquidity. Based on these criteria, the two periods 13 May 2009 to 7 May 2013 (with a policy rate spread of 75 bps) and 13 November 2013 to 8 December 2015 (with a policy rate spread of 25 bps) are especially suitable for graphical analyses (see the chart above).

When liquidity conditions are close to balanced, interbank money market rates converge towards the main refinancing rate and can also

Periods with constant key interest rate differentials a relevant basis for analysis

²³ Or, more generally: towards the interest rate at which excess central bank balances are remunerated.

²⁴ With increasing levels of excess liquidity, by contrast, the absolute interest rate differential between the main refinancing rate and the deposit facility rate is likely to play a comparatively ever decreasing role in determining the remaining gap between measured interbank money market rates and the Eurosystem's deposit facility rate. See also Deutsche Bundesbank (2014b).

²⁵ A comprehensive graphical analysis of the long-term relationship between interest rates and liquidity across periods with varying corridor widths, e.g. by normalising the interest rate spread with the corridor width would, at best, be of limited informative value.

Money markets and financial regulation

Besides monetary policy, changes in the regulatory framework are another key reason why the conditions for banks' liquidity management have changed. In order to meet new liquidity requirements, banks must hold a certain percentage of assets – which depends on the expected inflows and outflows in various types of financing – that can be relatively easily converted into central bank reserves. Likewise, there are, in some instances, tighter risk management and precautionary requirements for banks, especially regarding capital. Many of these rules were introduced or revised since 2008 in response to the financial crisis.

A bank granting an unsecured interbank loan exchanges safe central bank liquidity on the assets side for a claim vis-à-vis another bank. The lending bank must therefore hold additional capital for the event of a potential default of this credit claim. Consequently, the interest rate also has to reflect the opportunity costs of the capital required as backing. While borrowing funds in the interbank money market as a precaution increases the stock of risk-free central bank reserves and allows additional payments to be settled, it also involves a balance sheet extension, which is likewise associated with regulatory costs. A balance sheet extension also affects what is known as the leverage ratio; if binding, this makes intermediation between banks – usually associated only with low margins – significantly less attractive.

The aftermath of the financial crisis also saw comprehensive new liquidity rules being adopted for banks, including the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR). The NSFR aims to ensure that institutions have a sustain-

able funding structure and to limit overreliance on short-term wholesale funding.¹ Short-term financing instruments make banks particularly vulnerable as creditors can withdraw their funds at short notice, if necessary. The LCR requires banks to hold a buffer in the form of high quality liquid assets (HQLA) to cover the net cash outflows over the next 30 days. Ideally, such assets may be sold or exchanged for central bank reserves within a short period of time and without a markdown. Hoerova et al. (2018) show that banks with a lower liquidity position relied more heavily on central bank credit during the two crisis periods 2008-09 and 2011-12.² Had European banks complied with these ratios, they would, in principle, have been more resilient to outflows of liquidity and the need for additional liquidity provided by the central bank would have been at least partially reduced.

The impact of liquidity rules on the interbank money market can be attributed both to payments made in relation to the transactions that fall within the LCR's 30-day horizon and to the classification of central bank reserves as HQLA. The introduction of new regulatory standards thus affects how attractive the provision of and recourse to interbank credit is.³ Interbank loans with a

¹ See also Basel Committee on Banking Supervision (2014).

² The Hoerova et al. (2018) study shows that the use of central bank refinancing during the two crisis periods 2008-09 and 2011-12 was negatively correlated with the LCR and NSFR proxies generated from balance sheet variables.

³ The same applies to the attractiveness of participating in liquidity-providing central bank operations. Using a theoretical model, Bech and Keister (2017) show that liquidity regulation can – depending on the design of the central bank's collateral framework – also have an effect on the transmission of central bank liquidity operations to money market rates.

residual maturity of less than 30 days do not usually affect LCR compliance significantly.⁴ Money market transactions with a maturity of more than 30 days initially improve borrowers' LCR as their stock of HQLA rises, yet they are not required (until 30 days before the loan matures) to record LCR-relevant outflows of central bank liquidity. By contrast, lenders' LCR deteriorates as the inflow of HQLA at maturity will not occur within the next 30 days and can, therefore, not initially be included.⁵

In addition to regulatory costs stemming from liquidity and capital requirements (including the leverage ratio), there may be potential costs for assessing counterparty credit risk (monitoring costs) and possible extra costs related to the establishment of new customer relationships (e.g. checking the identity of new customers or what are referred to as know-your-customer rules). The additional costs incurred by both the lender and the borrower must be compensated by a corresponding interest rate deduction or premium.

In some cases, interactions with the central bank benefit from preferential regulatory treatment. For instance, in terms of liquidity requirements, transactions with the central bank are subject to a roll-over assumption.⁶ In other words, regulators do not assume an outflow of the central bank reserves that an institution has obtained by participating in a monetary policy refinancing operation. Furthermore, in terms of capital requirements, central bank deposits are treated preferentially, with a risk weight of 0%, as compared to a potentially risky provision of central bank liquidity to other commercial banks. Differences in regulatory costs may, therefore, render interbank money market transactions less attractive compared with transactions with the central bank.

⁴ Providing central bank liquidity to other banks for a period of less than 30 days reduces HQLA in the form of central bank reserves. However, unless stipulated otherwise in Article 33 of Commission Delegated Regulation (EU) 2015/61, this is approximately offset by an expected inflow of liquidity within the LCR horizon. Similarly, borrowing central bank liquidity in the interbank money market for a period of less than 30 days does not lead to a substantial change in the LCR given that the borrowed central bank funds (HQLA) will flow back out upon maturity.

⁵ According to the estimates of Bonner and Eijffinger (2013), it was observed that banks close to the regulatory minimum requirement raised more funds and provided less liquidity for more than 30 days following the introduction of a similar liquidity rule in the Netherlands.

⁶ The roll-over assumption presumes that – at the sole initiative of an institution – central bank credit may be extended beyond the initial maturity.

Changing relationship between money market rates and excess liquidity

exceed it.²⁶ By contrast, when there is a marked increase in excess liquidity, money market rates move towards the deposit facility rate. For the periods with a constant key interest rate spread that we consider in our analysis, we find that for levels of excess liquidity of about €50 billion to €200 billion (as much as €400 billion in exceptional cases), forecasts of the average money market rates solely on the basis of the banking system's average liquidity position are, at best, inaccurate.²⁷ This suggests that the relationship between excess liquidity and short-term money market rates varies over time and is influenced by additional factors.

Decline in interest rates dependent on segmentation, corridor width and concentration of excess liquidity

The decline in the money market rates can be slower in segmented markets because it is possible that only part of the excess liquidity is offered on the market. In non-segmented markets, on the other hand, money market interest rates may converge towards the deposit facility rate when excess liquidity is at a relatively low level. Besides any segmentation of the money market, the spread (stipulated by monetary policymakers) between the main refinancing rate and the deposit facility rate also plays an important role. All else being equal, a larger spread between these policy rates would amplify the initial absolute decrease in interest rates due to the creation of excess liquidity. The distribution of excess reserves in the banking system is important as well.²⁸ The higher the concentration of excess liquidity, the more banks are reliant on money market transactions to meet the bank-specific reserve requirements if they do not want to make use of central bank credit operations.²⁹ Thus, because of the greater market power of the few banks holding excess liquidity, the fall of the interest rates towards the deposit facility rate would be slower. Finally, bank-specific risk premia of transactions that were actually carried out and were captured in the Euro OverNight Index Average (EONIA) may also be reflected in the weighted average interest rates and lead to upward pressures at given levels of excess liquidity.

Developments in interbank money market activity based on aggregated indicators

Changing liquidity and interest rate conditions have a major effect on the incentives to lend on the interbank money market and are reflected in money market turnover. Only a limited number of aggregated indicators are available for the development of turnover in the unsecured interbank money market. There is a long time series of daily turnover data available for the transaction-weighted EONIA index, which measures the average interest rates of unsecured interbank loans that mature the next business day (i.e. normally "overnight").³⁰ Apart from short and medium-term fluctuations, the pronounced downward trend in turnover over the last decade is particularly striking (see the chart on p. 72). This decline in turnover was interspersed with temporary recoveries, but remains ongoing. At present, turnover is increasingly approaching zero.

Unsecured overnight turnover on the interbank money market falls to near zero

²⁶ In the period 1999 to 2007, money market rates when liquidity conditions were balanced were, on average, mostly above the minimum bid rate of the main refinancing operations.

²⁷ Thus, excess liquidity totalling around €170 billion may go hand in hand with money market rates of around 9 bps above the deposit facility rate (1st reserve maintenance period 2010) as well as of more than 32 bps above the deposit facility rate (9th reserve maintenance period 2011). When excess liquidity totalled just above €400 billion, there were interest rate spreads of around 6 bps (2nd reserve maintenance period 2013) as well as of 20 bps (12th reserve maintenance period 2011).

²⁸ See Afonso, Armenter and Lester (2018).

²⁹ This may be illustrated by means of the following hypothesis. If the banking system's excess liquidity were held in its entirety at only one institution, the willingness of all the other banks to pay for central bank liquidity would depend on the main refinancing rate. Conversely, if the excess liquidity were distributed evenly across the banking system so that all banks already held excess liquidity, they would hardly be prepared to pay more than the deposit facility rate for it.

³⁰ According to the EONIA Benchmark Determination Methodology of the European Money Market Institute (EMMI), all unsecured interbank money market loans that are granted by EONIA panel banks from one TARGET business day to the following TARGET business day (overnight transactions) are captured. At the end of August 2018, the panel comprised 28 banks domiciled in the EU. Daily turnover from 1999 is available, for example, in the ECB's Statistical Data Warehouse (see the chart on p. 72).

Payments data analysis confirms sharp drop in interbank overnight money market turnover

Evidence of a drop in turnover in the interbank overnight money market can also be obtained from payments data. Central banks are able to determine money market activity by using suitable algorithms.³¹ Depending on market conditions, analyses of this kind are subject to a high level of uncertainty and can only identify money market transactions that are settled using a gross settlement transfer system such as TARGET2. However, secured and unsecured transactions can only be distinguished to a limited extent, if at all. According to recently published evidence, the volume of overnight loans granted on the interbank money market fell from around €80 billion in the years 2009 to 2010 to around €6 billion in September 2017, after daily turnover of well over €100 billion was recorded for mid-2008.³² This is a decline comparable to that of EONIA turnover.

Shift of unsecured transactions to the secured segment?

A variety of reasons may have caused this prolonged downward trend that we observe. One view is that, as awareness of default risk in the banking sector grew in the wake of the financial crisis, transactions that had been conducted in unsecured markets shifted to secured market segments.³³ As an example, secured overnight trading on platforms such as Eurex GC Pooling gained in importance relative to unsecured EONIA turnover. Overall, however, GC Pooling turnover shows a momentum similar to that of EONIA turnover.

Switch to longer maturities?

Moreover, the downward trend in EONIA turnover could be partially attributed to a switch of transactions to longer maturities. The ECB Money Market Survey that was conducted during the period 2003 to 2015 permits inferences with regard to longer-term trends in turnover in the interbank money market in various maturity segments. However, the survey results show that not only overnight transactions but also – and to a particular extent – transactions with longer maturities decreased. From 2015 onwards, the gradual introduction of the liquidity coverage ratio (LCR) as part of the implementation of Basel III probably tended to increase incentives to conclude longer-term

transactions (see the box on p. 67 f.). Aggregate results from the German institutions subject to the Eurosystem's money market statistical reporting (MMSR) indicate that the share of longer-term borrowing in the unsecured interbank money market has increased slightly since 2017. At the same time, this finding is not attributable to an absolute increase in longer-term transactions but to a decrease in shorter-term transactions.

During the early years of the monetary union, from 1999 to 2005, the institutions participating in the EONIA panel provided other banks with overnight transactions of, on average, €39 billion. In the years that followed, the EONIA turnover measured proved to be relatively robust despite the liquidity crisis that was building up in 2007 and, later, the financial crisis, and actually even rose temporarily. This finding, which at first glance does not square with the, at that time, frequently used image of a market that was "freezing" or "drying up" can be explained by the temporary switch from longer-term to shorter-term transactions amid stressed market conditions. However, the decline in turnover which began in 2009 and has followed a steady downward trend since 2015 was accompanied by a marked decrease in indicators of tensions in money markets.³⁴ This could suggest that the long-term decrease in turnover is not primarily a reflection of tensions in the money markets.³⁵

Market tensions?

³¹ Algorithms which allow money market transactions to be identified from payments data are documented, for example, in Furfine (1999), Arciero et al. (2016), and Frutos de Andres et al. (2016).

³² See European Central Bank (2017), p. 9. Use is made here of the Frutos et al. (2016) implementation.

³³ See Wuermeling (2017).

³⁴ Such indicators are based, for instance, on the interest rate spread between secured and unsecured money market rates; see Deutsche Bundesbank (2014a).

³⁵ Based on the Bundesbank's credit register for loans of one million euro or more, Bednarek, Dinger and von Westernhagen (2016) come to the conclusion that there is no evidence to support the assertion that the interbank money market in Germany "either collapsed or succumbed to paralysis". The study documents that outstanding interbank liabilities in the period 2003 to 2012 fluctuated surprisingly little. This is largely consistent with the comparatively stable trend in EONIA turnover during this period.

Inverse relationship between excess liquidity and turnover in the interbank money market

Over the long term, the development of average EONIA turnover has run counter to excess liquidity levels since 2008. This has become particularly apparent since the beginning of 2015. A roughly tenfold increase in excess liquidity, from less than €200 billion to almost €2 trillion as a result of the asset purchases for monetary policy purposes, was accompanied by a decrease in average EONIA turnover from more than €25 billion to about one-tenth of this amount (going to press, the average for 2019 stood at below €2.5 billion).³⁶ The inverse long-term relationship between excess liquidity and money market turnover is not a mere coincidence. On days when refinancing volumes rise sharply, turnover in the unsecured interbank overnight money market falls considerably. Over extended periods, there is a statistically significant link between an increase in the volume of monetary policy refinancing or excess liquidity and a decrease in money market turnover.³⁷ The literature also contains references to these links. Heijmans et al. (2016) show on the basis of turnover figures derived from payments data that total overnight turnover in the euro area interbank money market decreased from around €90 billion to around €75 billion as a result of the two three-year tenders allotted by the Eurosystem at the end of 2011 and the beginning of 2012, which led to a massive rise in excess liquidity. According to Garcia-de-Andoain et al. (2016), the Eurosystem's refinancing operations during the crisis years 2008 to 2011 crowded out demand in the interbank money market. They point out that only during the sovereign debt crisis in the period 2011 to 2013 is it possible that the liquidity provided by the Eurosystem may have supported the provision of interbank loans to banks domiciled in Italy, Greece and Spain.

Evidence from the Eurosystem's money market statistical reporting

A systematic collection of high-frequency (turnover) data of the unsecured interbank money

market transactions has been available since 2016 by means of the Eurosystem's MMSR.³⁸ The MMSR dataset contains transactions of more than 100 banks domiciled in Germany. Money market transactions with other banks have to be reported, as well as transactions with other financial institutions, public institutions and large non-financial corporations.³⁹ The types of transactions include, amongst others, all interbank loans in the form of (overnight) deposits and call accounts. Selected aggregates of these statistics, including in particular unsecured interbank transactions, are regularly published by the Bundesbank.

The decline in unsecured overnight lending by German institutions subject to the MMSR reporting requirement to other banks is particularly striking.⁴⁰ These transactions have slumped by around 66% since mid-2017. Whereas daily turnover initially totalled around €12 billion, unsecured overnight lending at present shows a volume of only around €4 billion (see the chart on p. 73). These transactions are economically comparable to the transactions underlying the EONIA index; however, the reporting population in terms of the reporting institutions is different.⁴¹

During the same period, the volume of overnight borrowing by the German banks subject to the MMSR from other banks was almost

Money market statistical reporting improves coverage of money market transactions

Unsecured overnight lending decreased by around two-thirds

³⁶ To some extent, the decline in EONIA turnover is also likely attributable to a drop in the number of participants on the EONIA panel.

³⁷ This is borne out by a regression of the daily changes in EONIA turnover to the first four lags of the daily changes in refinancing volume or excess liquidity, the EURIBOR-OIS spread, and three lags of the daily changes in EONIA turnover in the period January 2006 to January 2019.

³⁸ See Deutsche Bundesbank (2017b). Aggregated MMSR time series are made available through the Bundesbank's time series database.

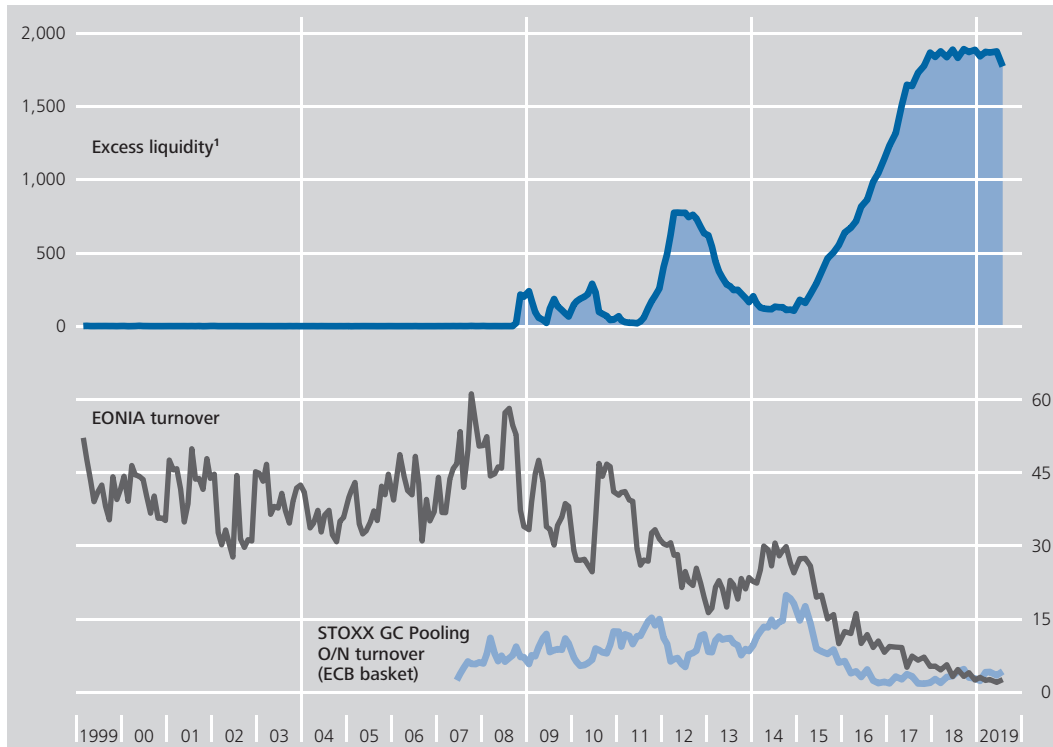
³⁹ Transactions that are classified as "wholesale" pursuant to the Basel III framework are reported. A large share of short-term interbank transactions can be allocated to banks' daily liquidity management. In isolated cases, transactions relating, for instance, to clearing accounts for certain financial transactions etc. are reported.

⁴⁰ These may be banks domiciled within or outside the euro area.

⁴¹ The German MMSR sample comprises banks domiciled in Germany, whereas the EONIA sample comprises a selection of large European banks.

Money market turnover and excess liquidity

€ billion, average for each maintenance period



Sources: ECB, Bloomberg and Bundesbank calculations. 1 Current accounts minus minimum requirement plus deposit facility.
 Deutsche Bundesbank

Banks domiciled outside the euro area earn interest rates below the deposit facility rate for interbank deposits

halved, falling from just under €5 billion to around €2.5 billion.⁴² On average, around 42% of this turnover is accounted for by creditor institutions domiciled in non-euro area countries, with a volume-weighted average interest rate of just under -0.48%.⁴³ The average rate for corresponding transactions with German banks was around -0.38%, which was slightly above the deposit facility rate in that period. The interest rate spread is due to the fact that banks domiciled in the euro area are generally able to hold their euro liquidity directly with the central bank. For this reason, they are usually only prepared to provide other banks with central bank liquidity at rates above the deposit facility rate. For institutions domiciled outside the euro area, this possibility is not given as a matter of principle, which is why they are willing to place euro liquidity with other banks at lower interest rates. Accepting liquidity at interest rates below the deposit facility rate and passing it on is thus a remaining incentive to trade for German banks.⁴⁴

Discussion, conclusion and outlook

The Eurosystem's monetary policy since the financial crisis, but also changes in banking regulation, have significantly altered the environment for the unsecured interbank money market. In particular, the Eurosystem's large-scale asset purchases for monetary policy purposes, which have raised the level of excess liquidity approximately tenfold since the begin-

Tenfold increase in excess liquidity since 2015: interbank market for unsecured overnight money now barely existent

⁴² The collection of deposits from non-banks by institutions subject to reporting under the MMSR increased by around €5 billion over the same period. As opposed to transactions between banks and non-banks, the interbank money market is characterised, amongst other things, by the fact that lenders and borrowers have, in principle, access to central bank accounts under identical terms. By contrast, the prices for transactions between banks and non-banks are influenced by a large number of additional factors. An asymmetry as regards central bank access usually leads to differences in the pricing of interbank transactions compared to transactions with non-banks.

⁴³ Transactions with reference date 1 July 2017 to 31 August 2019.

⁴⁴ See Abbassi, Bräuning and Schulze (2017).

ning of 2015, as well as the narrowing of the interest rate differential between the main refinancing rate and the deposit facility rate have had a profound impact on turnover in the unsecured overnight segment – to the extent that this part of the interbank money market has basically ceased to exist.

Refinancing costs equalised to a large extent

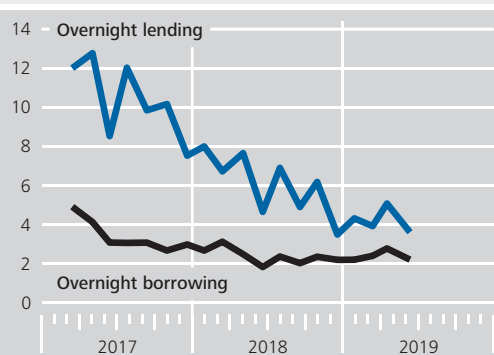
Since a considerable part of the banking system holds surplus central bank reserves, there are fewer banks seeking liquidity in the short-term interbank money market. Therefore, institutions can only invest surplus reserves in the interbank money market on particular occasions and at rates slightly above the deposit facility rate. As a result, interest income from sporadic transactions has decreased to the extent that it often does not suffice to cover the costs of monitoring potential borrowers. The mismatch between counterparty-specific monitoring costs and the interest income that is achievable at low money market turnovers can lead to institutions participating in Eurosystem monetary policy operations at a fixed, uniform interest rate, even when overall excess liquidity is high yet unevenly distributed. As a result, banks' marginal liquidity and refinancing costs are currently harmonised by the Eurosystem, such that a bank's marginal refinancing costs do not always reflect its counterparty risk.

Redistribution of liquidity via the interbank money markets superfluous?

An active money market may involve peer monitoring and can have a disciplining effect on market participants if the counterparty risk is reflected in risk premia.⁴⁵ In recent years, however, the benefits of an active interbank overnight money market have been called into question, especially in the United States.⁴⁶ It is true, the argument goes, that the interbank money market can be efficient in allocating central bank liquidity and, to a certain extent, discipline banks. However, activity in the interbank money market would be a waste of resources if, on the other hand, the central bank were able to supply additional central bank reserves to an unlimited extent and at negligible marginal costs.⁴⁷

Daily transaction volume* of German credit institutions in the unsecured interbank money market

€ billion, averaged across the maintenance period



* Daily transactions according to money market statistics (MMSR).

Deutsche Bundesbank

With regard to the United States with its strong capital market tradition in comparison to continental Europe, this argument seems worthy of discussion. There, the success or failure of financial institutions is also determined by capital markets, as a loss of confidence can make it more expensive for institutions to obtain financing on a lasting basis. What is more, there is no comparable tradition of borrowing from the central bank, neither in short nor in long maturities. If US banks were forced to borrow central bank funds, they would remain stigmatised and would have to expect the markets to lose confidence in them. Under those circumstances, it is conceivable that institutions are already sufficiently disciplined by the capital markets. A largely efficient allocation of financial and real resources could potentially be achieved by an adequate reflection of the risks

Disciplining of banks through the capital markets sufficient?

⁴⁵ See Blasques, Bräuning and van Lelyveld (2018).

⁴⁶ These ideas originated, amongst others, with Martin and McAndrews (2008) and have recently been revisited in speeches by Dudley (2017) and Bostic (2019).

⁴⁷ The starting point in the euro area at that time already differed considerably from that in the United States. As the Eurosystem has always paid interest on banks' minimum reserve holdings at the main refinancing rate, they do not constitute a cost factor from the banks' viewpoint. Thus, the Eurosystem had always taken into account to a limited extent the thoughts emanating from the United States. In addition, the Eurosystem always made the deposit facility available to banks, which meant that although holding excess liquidity entailed interest foregone for banks in the euro area, the loss was less than for banks in the United States.

on banks' balance sheets in their longer-term financing costs.

Objective of efficient allocation of resources would encourage reduced intermediation by the Eurosystem

However, such conditions do not apply in the euro area. The Eurosystem purchases and holds a sizable stock of covered bank bonds under the APP.⁴⁸ Moreover, for quite some time now, the Eurosystem has replaced a significant fraction of the longer-term financing needs of institutions that they would otherwise cover, at least in part, in capital markets with various series of long-term refinancing operations. And finally, full allotment in the Eurosystem's refinancing operations, recourse to which is not stigmatised in an equivalent manner, is available to a broad range of counterparties in the banking sector at comparatively favourable interest rates. This is why the exercise of market discipline is less pronounced in the euro area compared to the United States. In the interest of an efficient allocation of resources, it seems advisable for the euro area to reduce Eurosystem intermediation and return to a more market-based refinancing of banks, including through the interbank money market.

Future recovery of the interbank money market should not be ruled out

The positive developments in turnover in various intermittent periods with declining levels of excess liquidity since 2009 suggest that the possibility of reviving the interbank money market and simultaneously reducing the Eurosystem's role as an intermediary should not be

ruled out in the long term. Even after 2009 there were episodes in which the interbank money market was hardly impaired by monetary policy conditions. For example, in the period between end-2010 and mid-2011 a significant differential between the main refinancing rate and the deposit facility rate meant that it was unprofitable for the majority of banks that were able to obtain short-term liquidity via the markets to obtain short-term central bank refinancing.

The systematic reduction of excess liquidity, possibly in conjunction with a widening of the differential between the main refinancing rate and the deposit facility rate, could boost incentives for liquidity adjustment between banks in the market. That said, it must be conceded that various adjustments in the regulatory treatment of interbank money market transactions have created conditions that could impede a revival of the interbank money market. However, it would be desirable in the medium term to strengthen market mechanisms in the refinancing of banks and to contain the role of monetary policy operations in the compliance by banks with regulatory standards.

Incentives for the redistribution of liquidity adjustment via the market once excess liquidity declines

⁴⁸ In addition, the Eurosystem also purchases unsecured debt of certain public credit institutions under the public sector purchase programme (PSPP).

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The performance of German credit institutions in 2018

German credit institutions' profitability deteriorated in 2018. Profit for the financial year before tax fell from €27.5 billion in 2017 to €18.9 billion in 2018. Thus, at 0.23% of total assets, the return on assets dipped to a level which, in recent times, was only lower during the financial crisis. However, the last few years have been characterised by a period of above-average growth in profitability. An analysis over a longer period reveals that the return on assets corresponds to the average for the past 20 years.

The year-on-year decrease in profit for the financial year was primarily driven by a fall in three components: the trading result (-€2.1 billion), the result from the valuation of assets (-€3.1 billion) and the extraordinary result (-€3.5 billion). In the second half of 2018, a challenging market environment brought about by downward trends in the financial markets caused income from securities and financial investment business to suffer. According to information in credit institutions' annual reports, this prompted them to step up risk provisioning for securities in the liquidity reserve. However, thanks to the continued favourable situation in the domestic economy, they set aside only minimal risk provisions for lending.

At €87.2 billion, net interest income remained below its long-term average. In directly interest-related business, German banks still managed to improve their result by €0.7 billion to €71.8 billion. The net interest income of credit institutions with interest-driven business models, such as savings banks and credit cooperatives, however, stagnated despite dynamic credit growth. In comparison with the previous year, administrative spending remained roughly constant at €88.1 billion.

This year, credit institutions have to overcome a number of hurdles: large and globally operating companies have issued profit warnings, while trade disputes are set to mount and, potentially, escalate. Yet the greatest challenge on the horizon is adjusting to a longer-term low interest rate environment.

Banks' business environment and structural data

Waning economic momentum, mounting risks

The economy was markedly weaker in 2018, not only in Germany and in the euro area, but throughout the world. In addition, trade disputes and heightened political tensions inflated risks to the economic outlook. However, the economic slowdown was confined to those economic areas associated with exports; the domestic economy remained in good shape.

Continued credit growth

This also explains how it was possible to continue recording robust credit growth despite the weak economy. Loan growth was particularly steep, especially for longer-term loans.¹ The expansion of loans to non-financial corporations and to households for house purchase was more dynamic than in 2017; however, the annual growth rate for consumer loans remained unchanged.² This was bolstered not just by the low interest rate environment, but also by rising incomes, job security and soaring real estate prices.

Financial market environment challenging

Despite a very accommodative monetary policy stance around the world, the market environment was particularly challenging, especially in the second half of 2018. During the reporting year, the S&P500 fell by just over 6%, with the CDAX even declining by more than 20%. This was the biggest drop within one year for both indices since the 2008 financial crisis. The downward trend in stock markets, which could be seen in more haircuts on securities than in the previous year, also took its toll on the performance of German banks.

Structural change in the form of mergers ...

The following analysis of credit institutions' profit and loss accounts covers a total of 1,484 institutions (previous year: 1,538 banks) with total assets of €8,062 billion derived from individual accounts³ prepared in accordance with the German Commercial Code (*Handelsgesetzbuch*).⁴ Total assets fell by 2.3% on the previous year (€8,251 billion). The financial market environment remained challenging, forcing the German banking sector to undergo a number of changes in 2018, too. With the prevailing

low interest rates continuing and competitive pressure intensifying, also due to new competitors from the fintech sector entering the market, the need to cut costs and the trend towards mergers did not let up. Changes in the banking sector during the reporting year were also reflected in statistical reclassifications, which often complicate year-on-year comparisons. As in previous years, the most mergers were reported by savings banks and credit cooperatives. At the end of 2018, there were four fewer institutions in the savings bank sector and 40 fewer in the credit cooperative sector than at the beginning of the year. However, the total assets and share of the savings bank sector in the German banking market rose to €1,268 billion (previous year: €1,180 billion), or 15.7% (previous year: 14.3%), in part due to Landesbank Berlin AG being assigned to this category of banks for the first time. Credit cooperatives increased their total assets by €43.1 billion to €911 billion and thus represented 11.3% of the aggregate total assets across all categories of banks (previous year: 10.5%).

Two institutions that previously belonged to the category of Landesbanken have since been assigned to different categories of banks following a realignment of their business model.⁵

... and realigning business models

¹ Among non-financial corporations, medium and long-term loans rose by €39 billion on balance in 2018, and short-term loans by €7 billion. Loans to households for house purchase rose by €54 billion on balance in the same period, and other loans by €9 billion. See Deutsche Bundesbank (2019a).

² In December 2018, the annual growth rate of loans was 5.3% for loans to domestic non-financial corporations, 4.6% for loans to households for house purchase and 5.1% for consumer credit. See Deutsche Bundesbank (2019a).

³ Some, but not all, credit institutions also apply International Financial Reporting Standards (IFRS) in addition to the provisions from the Commercial Code at the individual or group level for the group accounts. This can lead to different results due to a number of conceptual differences.

⁴ See the box on p. 79.

⁵ Following the sale of the former Landesbank HSH Nordbank to financial investors Cerberus and JC Flowers, it is now assigned to the category of regional banks. The institution has been operating under the name "Hamburg Commercial Bank" since February 2019. In addition, Landesbank Berlin AG, which has sold those lines of business that are typical for Landesbanken and now operates under the name "Berliner Sparkasse", was assigned to the category of savings banks for the first time in the reporting year.

Methodological notes

Data based on individual accounts prepared in accordance with the German Commercial Code and on monthly balance sheet statistics

The results from the profit and loss accounts are based on the published annual reports of the individual institutions in accordance with the provisions set forth in the German Commercial Code (*Handelsgesetzbuch*) and the Regulation on the Accounting of Credit Institutions (*Verordnung über die Rechnungslegung der Kreditinstitute*). They differ in terms of their conception, structure and definitions from the International Financial Reporting Standards (IFRS)¹ for publicly traded banking groups. This means that – from a methodological viewpoint – business performance and certain balance sheet or individual profit and loss items are not comparable across the national and international accounting frameworks. For reasons of comparability within Germany, it is advisable to consider the individual accounts when analysing financial performance. The figures for balance sheet capital (total equity), total assets and other stock variables are not obtained from the annual reports but are taken as annual average values on the basis of the monthly balance sheet statistics reported for the institution as a whole.

Reporting group

The reporting group for statistics on banks' profit and loss accounts (profit and loss statistics) includes all banks that are both monetary financial institutions (MFIs) and conform to the definition of a CRR credit institution as defined in Article 4(1) number 1 of Regulation (EU) No 575/2013 and are domiciled in Germany. Branches of foreign banks that are exempted from the provisions of Section 53 of the German Banking Act (*Kreditwesengesetz*), banks in liquidation and banks with a financial year of less than 12 months (truncated financial year) are not included in this performance analysis.

Reclassifications

As in the monthly balance sheet statistics, a series of reclassifications in the banking categories included in the banking statistics were also carried out in the profit and loss statistics in the 2018 reporting year. This means there is some-

times limited comparability with the prior-year figures for the affected banking groups. "DB Privat- und Firmenkundenbank AG" was created through the merger between "Deutsche Bank Privat- und Geschäftskunden Aktiengesellschaft", which had up to now been assigned to the "regional banks and other commercial banks" category, and "Postbank AG", which had up to now been classified as a "big bank". "DB Privat- und Firmenkundenbank AG" has been assigned to the category of "big banks" as of this reporting year. "DSK Hyp AG" (formerly "SEB AG") is no longer assigned to the "regional banks and other commercial banks" category, and has instead been assigned to the "mortgage banks" category. Two banks have been re-assigned from the "Landesbanken" category: "HSH Nordbank" now belongs to the "regional banks and other commercial banks" category and "Landesbank Berlin AG" has been assigned to the "savings banks" category. "Wüstenrot Bank Aktiengesellschaft Pfandbriefbank" no longer belongs to the "mortgage banks" category, and has instead been assigned to the "regional banks and other commercial banks" category.

Calculation of the long-term average

At the launch of monetary union in 1999, the reporting group relevant for calculating the money supply and for monetary analysis was uniformly defined by the ECB area as a whole and designated as the monetary financial institutions (MFI) sector. Unlike the population of banks used for the Bundesbank analysis up to that point, building and loan associations are also included. Except where another time period is explicitly mentioned, the calculations with regard to the longer-term average will, in future, cover the years since the launch of monetary union, i.e. from 1999 to 2018.

¹ IFRS-based financial statements are of relevance, for instance, to matters of macroprudential analysis and oversight, concentrating on systemically important banks and their international business activities (including their foreign subsidiaries). For details, see Deutsche Bundesbank (2013).

Structural data on German credit institutions

End of year

Category of banks	Number of institutions ¹			Number of branches ¹			Number of employees ²		
	2016	2017	2018P	2016	2017	2018P	2016	2017	2018P
All categories of banks	1,724	1,653	1,603	31,974	30,072	27,834	608,399	585,892	571,084
Commercial banks	280	283	281	9,406	9,004	7,732	3 166,050	3 158,100	3 156,200
Big banks	4	4	4	7,005	6,820	6,298	.	.	.
Regional banks and other commercial banks	166	164	158	2,245	2,024	1,274	.	.	.
Branches of foreign banks	110	115	119	156	160	160	.	.	.
Landesbanken	9	8	6	384	356	240	31,800	31,100	28,800
Savings banks	403	390	386	10,555	9,818	9,492	224,700	216,100	209,600
Credit cooperatives	975	918	878	10,156	9,442	8,942	4 151,050	4 146,400	4 142,850
Mortgage banks	15	13	11	36	38	44	.	.	.
Building and loan associations	20	20	20	1,400	1,385	1,357	5 13,550	5 13,250	5 13,000
Banks with special, development and other central support tasks	22	21	21	37	29	27	6 21,249	6 20,942	6 20,634

1 Source: Bank office statistics, in Deutsche Bundesbank, Banking statistics, Statistical Supplement 1 to the Monthly Report, p. 104 (German edition). The term "credit institution" is used as in the Banking Act, resulting in divergences from data in "Balance sheet statistics" and "Statistics on the profit and loss account". 2 Number of full-time and part-time employees excluding the Bundesbank. Sources: data provided by associations and Bundesbank calculations. 3 Employees in private banking, including mortgage banks established under private law. 4 Only employees whose primary occupation is in banking. 5 Only office-based employees. 6 Employees at public mortgage banks (mortgage banks established under public law), banks with special tasks established under public law and at DZ BANK AG.

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The aggregate total assets of the Landesbank sector decreased from €940 billion to €804 billion. Altogether in 2018, the Landesbanken made up 10.0% of total assets across the entire reporting population, compared with 11.4% in the year before. The category of mortgage banks also changed following reclassifications⁶ and changes to business policy as a result of legacy loans.⁷ Despite losing two institutions, the mortgage bank category continued, when measured in terms of total assets, to make up 2.9% of all institutions, as in the previous year. Structural changes in the banking sector may also lead to shifts in the importance of lines of business and sources of income for the categories of banks. Following the merger of Deutsche Postbank AG with Deutsche Bank Privat- und Geschäftskunden AG,⁸ interest-driven business increased for the category of big banks. However, the total assets of this category of banks fell from €2,400 billion to €2,293 billion, in particular due to declining derivatives positions. Nevertheless, at 28.4% (pre-

vious year: 29.1%), big banks still account for the largest share of the German banking sector in terms of total assets.

Profit for the financial year and profitability

In 2018, German credit institutions reported profit for the financial year before tax of €18.9 billion. Tax of around €6.8 billion was due, leaving profit for the financial year after tax of €12.2 billion. Thus, profit for the 2018 financial year decreased significantly in comparison with the previous year by 31.2% (before tax) and 39.2% (after tax). None of the categories of banks were able to match their profit for the 2017 financial year before tax. Big banks, in

Significantly lower profit for the financial year

⁶ See the box on p. 79.

⁷ See the box on p. 79.

⁸ Deutsche Bank Privat- und Geschäftskunden AG was previously assigned to the regional and other commercial banks category.

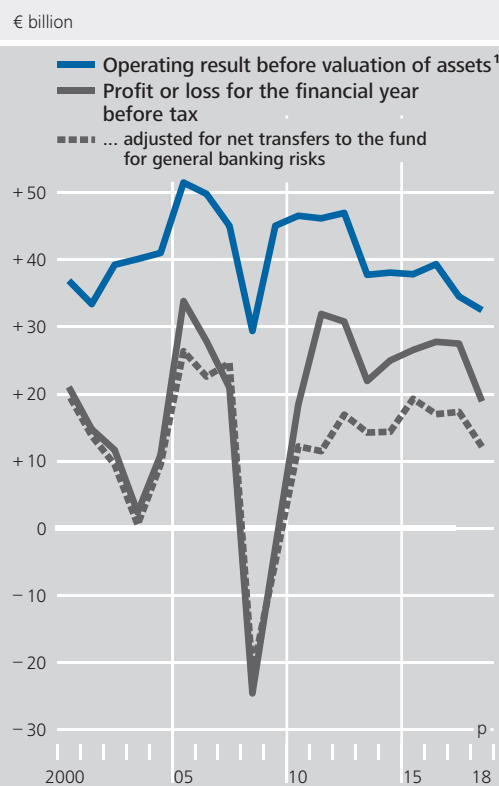
particular, reported a considerable drop in profit for the financial year before tax in the reporting year: down by €1.7 billion to €1.1 billion. The regional and other commercial banks' profit for the financial year contracted by €1.5 billion to €2.2 billion. Before tax, the Landesbanken even reported a loss for the financial year of €1.0 billion. Savings banks and credit cooperatives performed best in the reporting year; their profit for the financial year before tax amounted to €8.3 billion and €6.3 billion, respectively. This means that the figures for primary institutions⁹ were down on the year, too (by €1.6 billion and €0.9 billion, respectively).

Strengthening the equity base

Credit institutions topped up their reserves from profit for the financial year by a total of €8.4 billion (previous year: €12.7 billion). These allocations to the reserves contained net transfers to the fund for general banking risks pursuant to Section 340g of the Commercial Code¹⁰ amounting to €6.8 billion, which are recognised as Common Equity Tier 1 (CET1) capital under prudential regulations. In this profit and loss analysis, these allocations are interpreted as profit distribution.¹¹ The business results thus meant a further strengthening of the regulatory equity base in 2018 as well. Taking into account the net losses brought forward of €4.7 billion, the German banking sector shouldered a balance sheet loss of €1.0 billion in the reporting year. Credit institutions' equity ratio¹² rose from 5.93% in the previous year to

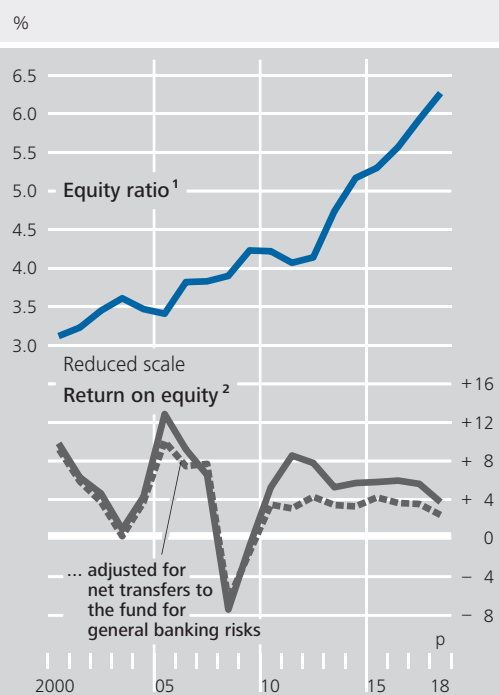
⁹ Primary institutions comprise savings banks and credit cooperatives.
¹⁰ In accounting terms this special item is considered when determining profit and is recognised as income.
¹¹ As an alternative, credit institutions can form undisclosed reserves pursuant to Section 340f of the Commercial Code to hedge against general banking risks. However, due to the cross-offsetting option permissible under the Commercial Code, the annual accounts do not show the extent to which undisclosed reserves have been formed or released. Undisclosed reserves are thus taken into account in the result from the valuation of assets.
¹² Calculated as equity (including the fund for general banking risks, but excluding participation rights capital) as a percentage of total assets as an annual average.

The performance of credit institutions



¹ Operating income less general administrative spending. Deutsche Bundesbank

Equity ratio and return on equity of credit institutions



¹ Equity (including the fund for general banking risks, but excluding participation rights capital) as a percentage of total assets as an annual average. ² Profit or loss for the financial year before tax as a percentage of average equity. Deutsche Bundesbank

Return on equity of individual categories of banks*

%

Category of banks	2014		2015		2016		2017		2018 ^P	
All categories of banks	5.72	(3.98)	5.82	(3.97)	5.97	(4.27)	5.63	(4.08)	3.74	(2.40)
Commercial banks	4.80	(3.51)	3.54	(2.18)	4.51	(3.20)	3.95	(2.79)	2.07	(1.54)
of which:										
Big banks	4.33	(3.16)	3.01	(1.81)	3.45	(2.50)	2.88	(2.30)	1.14	(1.24)
Regional banks and other commercial banks	5.22	(3.89)	4.22	(2.71)	6.30	(4.45)	5.31	(3.33)	3.30	(1.90)
Landesbanken	-0.63	(-1.50)	3.27	(1.89)	-1.01	(-1.95)	1.85	(0.98)	-2.45	(-3.89)
Savings banks	9.94	(6.72)	9.68	(6.54)	10.42	(7.42)	9.44	(6.72)	7.25	(4.82)
Credit cooperatives	12.22	(8.59)	10.74	(7.36)	11.54	(8.39)	10.11	(7.05)	8.20	(5.51)
Mortgage banks	-1.03	(-1.67)	4.94	(4.29)	5.54	(4.20)	5.49	(3.56)	2.09	(0.88)
Building and loan associations	8.43	(5.61)	4.49	(3.66)	8.87	(7.28)	9.18	(7.74)	2.21	(1.02)

* Profit or loss for the financial year before tax (in brackets: after tax) as a percentage of equity as shown in the balance sheet (including the fund for general banking risks, but excluding participation rights capital).

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6.27%.¹³ German credit institutions thus raised their average equity ratio – also in light of tighter regulatory requirements set by Basel III¹⁴ – for the seventh consecutive year.

5.49%), to 1.14% for big banks (2.88%) and, above all, to -2.45% for Landesbanken (1.85%) on the back of the loss they generated for the financial year.

Return on equity decreased significantly

The return on equity before tax, calculated as the ratio of profit for the financial year before tax to balance sheet equity, provides information on the rate of return on the equity employed. As profit for the 2018 financial year fell far short of the amount recorded in the previous year and, at the same time, credit institutions' equity was much stronger than in the previous period, the return on equity before tax was also lower, slipping 1.89 percentage points to 3.74% (after tax: 2.40%). At 7.25% (previous year: 9.44%) and 8.20% (10.11%) before tax, the savings banks and credit cooperatives bore the best returns on equity, even if these were also lower than in the previous year. The return on equity declined considerably for the other categories of banks. For instance, it was down to 2.09% for mortgage banks (previous year:

As cited above, one reason that returns on equity were lower was because credit institutions had strengthened their equity base in previous years. Having a good equity base enables institutions to make the most of profitable investment opportunities that arise at short notice and could have a positive impact on their future earnings potential. It also usually im-

Importance of equity base for profitability

¹³ When interpreting the data on the equity base, which are calculated as annual average values, it should be borne in mind that the amounts transferred from the profit for the respective financial year do not increase the balance sheet equity until the year after the annual accounts are adopted, while withdrawals from equity items are to be deducted when the annual accounts are prepared at the latest.

¹⁴ The capital conservation buffer to be maintained was increased from 1.25% in 2017 to 1.875% in 2018. The phase-out of capital positions which are no longer eligible under the Basel III regulations and the phase-in of capital deductions also continued in 2018.

Components of the return on assets for individual categories of banks in 2018^o

As a percentage of total assets^o

Item	All categories of banks	Big banks	Regional banks and other commercial banks	Landesbanken	Savings banks	Credit cooperatives	Mortgage banks	Building and loan associations	Banks with special, development and other central support tasks
Net interest income	1.08	0.86	1.47	0.66	1.73	1.80	0.74	1.13	0.40
Net commission income	0.37	0.46	0.40	0.13	0.63	0.57	-0.03	-0.21	0.11
Gross earnings	1.45	1.32	1.87	0.79	2.36	2.37	0.71	0.92	0.51
Administrative spending	-1.09	-1.17	-1.32	-0.68	-1.65	-1.59	-0.42	-0.82	-0.35
Partial operating result	0.36	0.15	0.55	0.11	0.71	0.78	0.29	0.10	0.16
Trading result	0.04	0.10	0.03	0.08	0.00	0.00	0.00	0.00	0.03
Other operating result	0.01	-0.08	0.10	0.02	0.06	0.04	-0.01	0.01	-0.01
Operating result before valuation of assets	0.40	0.16	0.68	0.21	0.77	0.81	0.28	0.11	0.18
Net valuation result	-0.08	-0.02	-0.16	-0.33	-0.05	-0.10	-0.15	0.01	-0.02
Operating result after valuation of assets	0.32	0.15	0.51	-0.12	0.71	0.71	0.14	0.11	0.17
Extraordinary result	-0.09	-0.10	-0.28	-0.01	-0.06	-0.02	-0.04	-0.01	-0.06
Profit or loss for the financial year before tax	0.23	0.05	0.23	-0.13	0.65	0.70	0.09	0.11	0.11

^o Excluding total assets of foreign branches of savings banks and mortgage banks. Rounding differences are possible.

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proves financing conditions. Furthermore, with a sound equity base, German credit institutions can hedge the financial risk of unexpected losses. Given the challenging profitability situation, this is essential, particularly in case the economy takes a turn for the worse.

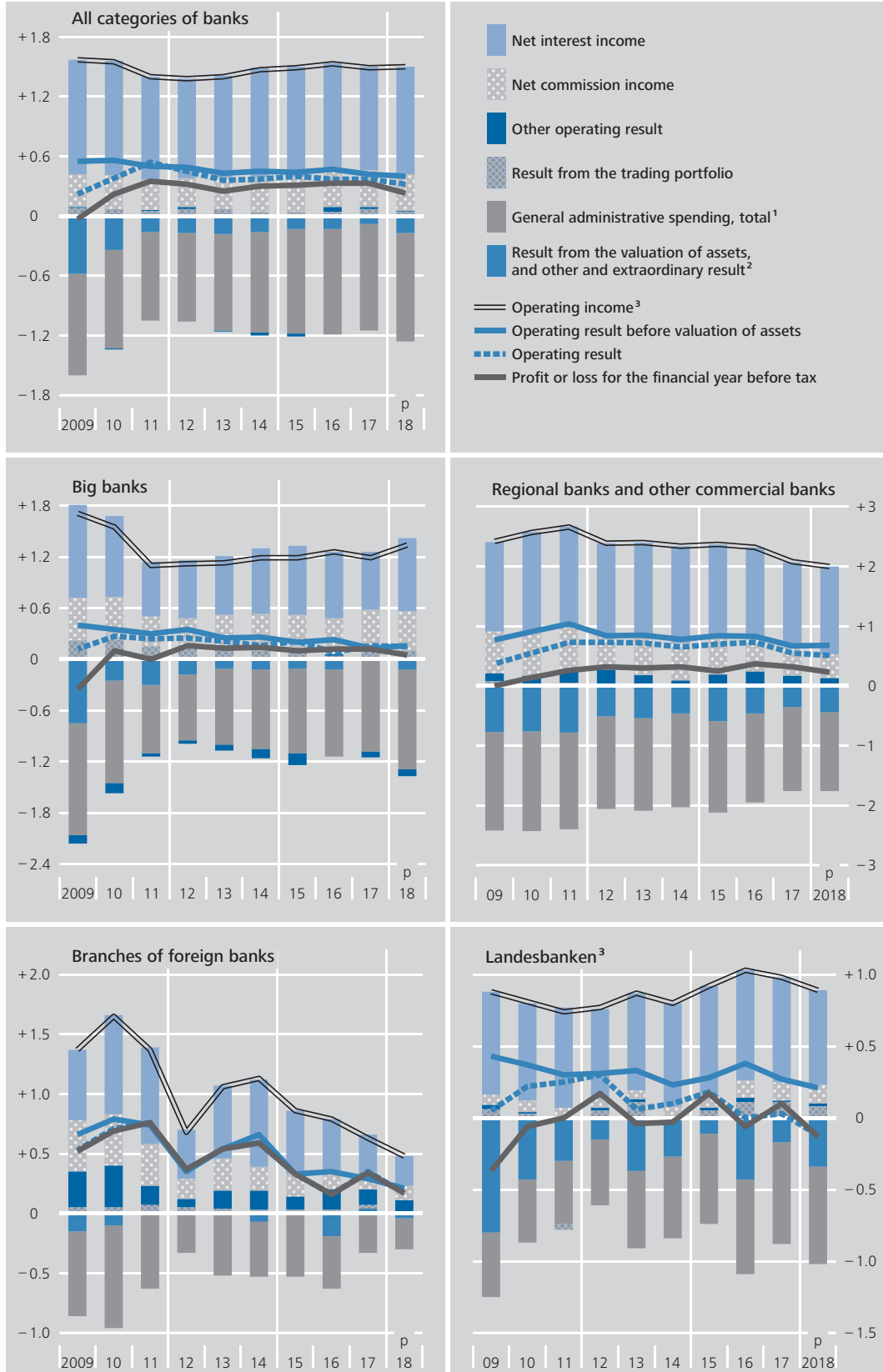
ated the highest return on assets, although it clearly fell for both savings banks (from 0.84% to 0.65%) and credit cooperatives (from 0.84% to 0.70%). Although these figures are much worse than in the previous year, the primary institutions were still more profitable than on average since 1999. Mortgage banks (0.09%) are among the categories of banks with lower earnings; however, in a long-term comparison, their return on assets in 2018 was above average. In comparison, other categories of banks performed rather poorly in the reporting year. The return on assets of regional and other commercial banks (0.23%), building and loan associations (0.11%), and banks with special,

Return on assets decreased significantly

German credit institutions reported a return on assets (ratio of profit for the financial year before tax to total assets) of 0.23% in 2018. Thus both the return on equity and the return on assets were at their lowest level since 2010. The Landesbanken and big banks generated the lowest return on assets (-0.13% and 0.05%, respectively). The primary institutions gener-

Return on assets and its components by category of banks*

As a percentage of total assets, the charts below use different scales



* Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. **1** Including depreciation of and value adjustments to tangible and intangible assets. **2** Other than tangible or financial fixed assets.
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As a percentage of total assets, the charts below use different scales



³ Gross earnings plus result from the trading portfolio (up to 2009, from financial operations) and other operating result.

Cost/income ratios, by category of banks

%

Category of banks	General administrative spending in relation to ...		
	2016	2017	2018P
... gross earnings ¹			
All categories of banks	73.3	76.2	75.5
Commercial banks	79.9	86.1	82.0
Big banks	85.2	95.3	88.9
Regional banks and other commercial banks	71.6	74.2	70.7
Branches of foreign banks	74.9	71.9	70.5
Landesbanken	73.1	83.0	86.2
Savings banks	67.8	67.5	69.9
Credit cooperatives	68.2	67.1	67.4
Mortgage banks	61.6	68.4	59.0
Building and loan associations	89.9	87.8	89.2
Banks with special, development and other central support tasks	62.3	63.0	68.2
... operating income ²			
All categories of banks	69.3	71.9	73.1
Commercial banks	74.3	79.4	79.3
Big banks	81.4	88.7	87.9
Regional banks and other commercial banks	64.2	67.8	66.1
Branches of foreign banks	56.0	53.3	54.9
Landesbanken	63.6	72.5	76.5
Savings banks	67.8	67.1	68.2
Credit cooperatives	66.6	65.7	66.2
Mortgage banks	61.0	70.2	59.8
Building and loan associations	66.2	66.3	88.6
Banks with special, development and other central support tasks	56.6	59.2	65.4

1 Sum of net interest income and net commission income.
 2 Gross earnings plus result from the trading portfolio and other operating result.
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development and other central support tasks (0.11%) failed to match either the prior-year figure or the long-term average for their category, as did the big banks and Landesbanken.

Lower cost efficiency

Efficiency under broad definition worse overall, ...

The cost/income ratio provides an indication of institutions' cost efficiency. It is the ratio of administrative spending to gross earnings¹⁵ (narrow definition) or to operating income¹⁶ (broad definition). The lower this ratio, the more income is left over after deducting administrative spending and the more cost-efficiently the en-

terprise has been operating. The efficiency of the German banking sector under the narrow definition improved from 76.2% to 75.5% on the back of an increase in gross earnings and a nominal decrease in administrative spending. Under the broad definition, it deteriorated from 71.9% to 73.1%, as trading results and other operating results were down on the previous year.

When interpreting the cost/income ratio, it should be borne in mind that its magnitude is influenced by the typical business and cost structure of a given category of banks. Although big banks should benefit from economies of scale, they have been among the banks with the worst cost/income ratio for years. However, during the year under review, they were able to slightly improve their cost/income ratio under the broad definition from 88.7% to 87.9%. Regional banks and other commercial banks also improved from 67.8% to 66.1%. However, significant changes in cost efficiency in comparison with the previous year can usually be attributed to changes in the reporting sample and special effects. The cost/income ratio of mortgage banks improved strikingly from 70.2% to 59.8% due to the improved net interest income of one institution. By contrast, the cost efficiency of the Landesbanken deteriorated markedly from 72.5% to 76.5%, as the composition of this category of banks changed significantly. For building and loan associations, the cost/income ratio under the broad definition deteriorated sharply in comparison to 2016 and 2017 (from 66.2% and 66.3%, respectively, to 88.6%), as elevated withdrawals in those years from the fund required by the building and loan association rules were booked as income.

... but development varies depending on category of banks

While profit and loss statistics do not allow for a European comparison of cost efficiency, there

¹⁵ Sum of net interest income and net commission income.

¹⁶ Sum of net interest income, net commission income, the result from the trading portfolio and the other operating result.

Cost efficiency of German banks in a European comparison

is much to suggest that cost efficiency among German institutions continues to be weak. In a European comparison of 190 large institutions carried out by the European Banking Authority (EBA),¹⁷ the group of 20 German institutions included in the sample had the worst cost/income ratio. At over 80%,¹⁸ it was well above the average of 64.6% for the European sample as a whole.

Breakdown of profit for the financial year

Net interest income lower than average

Interest income in narrower sense

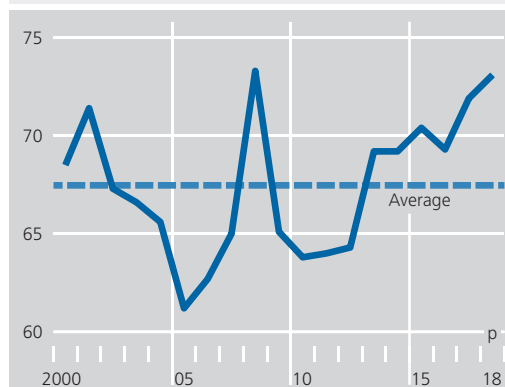
Interest income in the narrower sense is generated by directly interest-related business, i.e. by lending and money market transactions and by fixed-income securities and debt register claims. During the year under review, the deposit facility remained at -0.40% and institutions continued to receive negative interest income on a portion of their invested funds, particularly deposits held at the central bank.¹⁹

Interest income in narrower sense higher

German institutions' interest income from directly interest-related business increased on the previous year by €1.3 billion to €152.2 billion. It thus went up for the first time since 2011, but this was solely attributable to developments in the big banks category. Their interest income in the narrower sense rose by €5.9 billion to a total of €29.4 billion. First of all, the significance of directly interest-related business for big banks increased due to the change in the composition of this category of banks. Furthermore, big banks disclosed in their annual reports that they generated higher interest income in their business with banks in the United States. Other categories of banks were unable to boost their income in directly interest-related business, despite higher lending growth. For example, this income fell from €25.6 billion to €25.0 billion (2.18% of total assets to 1.97%) for savings banks, from €18.6 billion to €18.0 billion (2.14% to 1.96%) for credit coopera-

Ratio of administrative spending to operating income

As a percentage of operating income¹



¹ Sum of net interest income, net commission income, result from the trading portfolio and other operating income.

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tives, and even more significantly from €7.9 billion to €7.0 billion (3.34% to 2.99%) for mortgage banks. The low interest rates continued to lead to lower interest income, as institutions became increasingly unable to benefit from loans that were issued when interest rates were higher. Furthermore, maturing proprietary investments such as securities and promissory notes had to be replaced by lower-yielding investments.

Lending growth was dynamic in the year under review, and the demand for savings and loan contracts also increased. The targeted savings amounts under these contracts could therefore

Targeted savings amounts under savings and loan contracts higher

¹⁷ The sample is reviewed annually, includes only large institutions, and is therefore not representative of the entire German banking market or the entire European banking market. See European Banking Authority (2018). The average cost/income ratio for German banks according to the profit and loss statistics is 75.5% under the narrow definition and 73.1% under the broad definition, which is better than the level determined by the EBA for 20 large German financial institutions.

¹⁸ In its analysis, the EBA calculates the cost/income ratio as administrative and depreciation expenses in relation to total net operating income.

¹⁹ The treatment of negative interest in the profit and loss account under the Regulation on the Accounting of Credit Institutions (*Verordnung über die Rechnungslegung der Kreditinstitute und Finanzdienstleistungsinstitute*) has yet to be decided. Offsetting expenses against income and assets against liabilities is prohibited by Section 246(2) sentence 1 of the Commercial Code. If interest income is reported in net terms (i.e. offset by negative interest amounts), the negative interest amounts must additionally be reported as a separate item.

Major income and cost items for individual categories of banks in 2018^P

As a percentage of operating income

Item	All categories of banks	Big banks	Regional banks and other commercial banks	Landesbanken	Savings banks	Credit co-operatives	Mortgage banks	Building and loan associations	Banks with special, development and other central support tasks
Net interest income	72.3	64.4	73.6	73.7	71.6	74.6	106.2	122.4	75.0
Net commission income	24.5	34.5	20.0	15.0	26.0	23.5	- 4.9	- 23.1	20.9
Result from the trading portfolio	2.9	7.2	1.4	8.8	0.0	0.0	0.4	0.0	5.5
Other operating result	0.4	- 6.1	5.1	2.4	2.4	1.9	- 1.7	0.6	- 1.3
Operating income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
General administrative spending	- 73.1	- 87.9	- 66.1	- 76.5	- 68.2	- 66.2	- 59.8	- 88.6	- 65.4
of which:									
Staff costs	- 36.7	- 34.8	- 30.1	- 38.5	- 42.4	- 39.0	- 27.5	- 32.1	- 33.3
Other administrative spending	- 36.3	- 53.1	- 36.0	- 37.9	- 25.8	- 27.1	- 32.3	- 56.5	- 32.1
Result from the valuation of assets	- 5.6	- 1.2	- 8.2	- 36.5	- 2.2	- 4.2	- 20.9	1.0	- 3.0
Other and extraordinary result	- 5.7	- 7.1	- 14.2	- 1.3	- 2.6	- 0.8	- 5.8	- 0.6	- 11.6
Memo item:									
Profit or loss (-) for the financial year before tax	15.7	3.7	11.5	- 14.2	27.0	28.9	13.5	11.7	20.0
Taxes on income and earnings	- 5.6	0.3	- 4.9	- 8.4	- 9.0	- 9.5	- 7.8	- 6.3	- 2.2
Profit or loss (-) for the financial year after tax	10.1	4.1	6.6	- 22.6	17.9	19.4	5.6	5.4	17.8

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be stepped up further in the year under review (+1.5%, after +0.9% in 2017 and +0.7% in 2016). This development reflected not only higher real estate prices but also the increasing use of savings and loan contracts by consumers to secure the current low lending rates for future loans. At the same time, owing to the negative interest rate environment and the zero lower bound for deposits, the interest paid on deposits in new savings and loan contracts in the year under review were similar to the deposit rates for alternative forms of deposit.

Lending business makes a positive contribution to net interest income, as lending rates contain

a mark-up on the yields obtainable from a comparable alternative investment in the money market or financial market (assets-side margin contribution).²⁰ Owing, in particular, to the competitive pressure in the banking market, margins on new loans narrowed further in 2018, irrespective of debtors' creditworthiness.²¹ According to institutions, however, margins on riskier loans eased to a lesser extent.

Margins in lending business squeezed further

²⁰ See Deutsche Bundesbank (2018).

²¹ See also Deutsche Bundesbank (2018/2019) and <https://www.bundesbank.de/en/tasks/monetary-policy/economic-analyses/-/bank-lending-survey-for-germany-618070>

Current income and income from profit transfers

In addition to income from directly interest-related business, interest income also includes current income²² and income from profit transfers.²³ This item also includes distributed income from group companies or subsidiaries.²⁴ In the year under review, current income fell by €1.0 billion to €10.0 billion, while profit transfers climbed by €2.0 billion overall to €5.4 billion. This increase was driven by a one-off effect among big banks resulting from a transfer of reserves pursuant to Section 340g of the Commercial Code from one big bank to another. The bulk of this transferred profit therefore did not result from operational business and so cannot be interpreted as having enhanced profitability during the year under review.

-0.03% for new overnight deposits from non-financial corporations, compared to -0.02% in January of the same year. Nevertheless, the volume of overnight deposits increased from €430 billion to €446 billion. For retail deposits, however, negative interest rates were still the exception. In December 2018, institutions offered an interest rate of 0.02% on average for new overnight deposits from retail customers. In January of the same year, it was 0.03%. The deposit interest rate for the majority of retail deposits in 2018 thus often exceeded the (negative) market rate. Deposits in the reporting year therefore still constituted an attractive form of investment from the perspective of retail customers, with the volume increasing from €1,319 billion to €1,433 billion.

Slight rise in interest income

Overall, German institutions' interest income in the year under review rose by €2.2 billion to €167.6 billion (2.08% of total assets, compared with 2.00% in the previous year). Big banks increased their interest income significantly from 1.26% of total assets (€30.2 billion) to 1.65% (€37.9 billion), and regional and other commercial banks raised theirs from 2.25% (€25.6 billion) to 2.45% (€25.6 billion). Compared to the previous year, Landesbanken also boosted their interest income relative to total assets (from 2.74% in 2017 to 3.08%). By contrast, interest income fell for savings banks (from 2.42% to 2.17%, or from €28.6 billion to €27.5 billion), for credit cooperatives (from 2.33% to 2.13%, or from €20.3 billion to €19.4 billion) and for mortgage banks (from 3.35% to 2.99%, or from €7.9 billion to €7.0 billion).

Much like the handling of negative interest income, positive and negative interest expenditure is netted out in the figures reported by institutions. In spite of the negative amounts factored into the net figure, interest expenditure in 2018, at €80.5 billion, was up 0.7% compared to the previous year, in particular due to an increase in interest expenditure at big banks.²⁷ Yields on bank bonds increased marginally by 18 basis points, while yields on mortgage Pfandbriefe rose by 13 basis points.²⁸

Interest expenditure up

Interest expenditure was higher than in the previous year for big banks (from 0.66% of total assets to 0.83%, or from €13.8 billion to €18.1 billion), regional and other commercial banks (from 0.89% to 0.98%, or from €9.3 billion to €9.4 billion), and Landesbanken (from

Interest expenditure, by category of banks

Negative interest rates increasingly applied to deposits

Due to the exceptional interest rate environment, some institutions increasingly charged negative interest on large corporate deposits and, in some cases, on large deposits made by wealthy retail customers as well in the year under review.²⁵ Almost a third of less significant institutions stated that they had, on average, already charged negative interest on overnight deposits as at the end of 2018.²⁶ According to the MFI interest rate statistics, institutions in December 2018 charged an interest rate of

²² Income from shares and other variable-yield securities, from participating interests, and from shares in affiliated enterprises.

²³ Profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement.

²⁴ If the profit-transferring enterprises are also included in the reporting sample of this analysis, the expenses related to the profit transfer will be reflected in the extraordinary result.

²⁵ See also Deutsche Bundesbank (2019b).

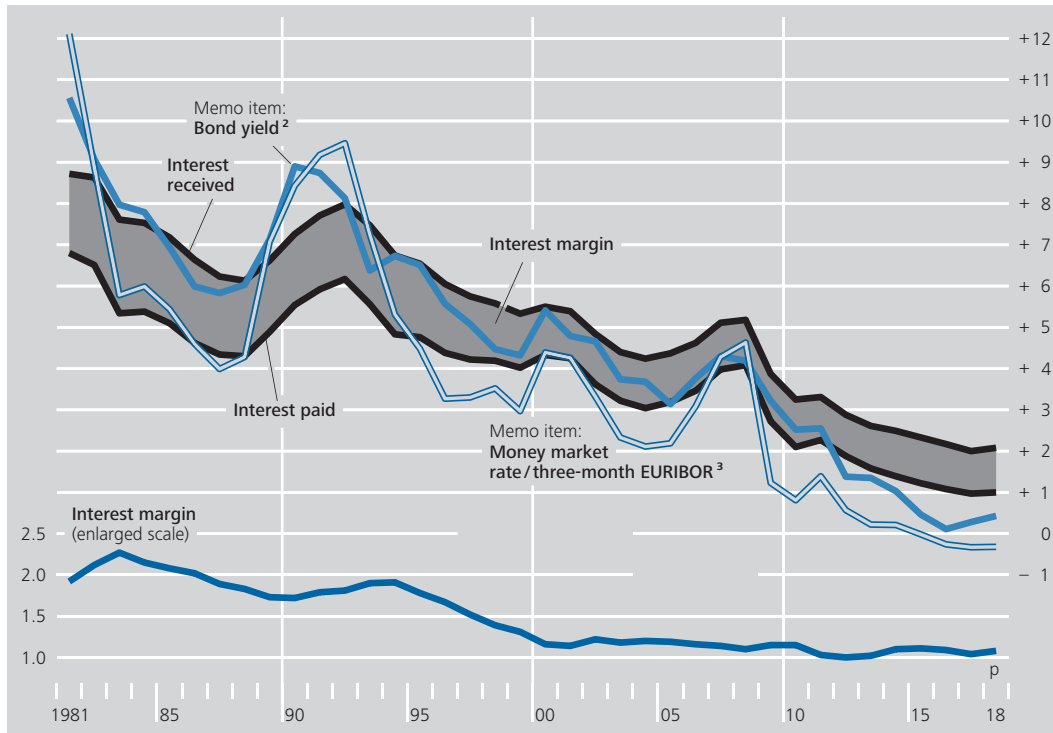
²⁶ See Deutsche Bundesbank (2019c).

²⁷ Alongside changes in the reporting sample, exchange rate effects are likely to have played a role in the increase in interest expenditure at big banks.

²⁸ See Deutsche Bundesbank (2019d).

Interest received and interest paid by credit institutions in the interest cycle

As a percentage of average total assets¹



¹ Up to end-1998, as a percentage of the average volume of business. ² Average yield on domestic bearer debt securities. ³ Up to end-1998, money market rate for three-month funds in Frankfurt am Main.
 Deutsche Bundesbank

2.02% to 2.42%, or from €19.0 billion to €19.4 billion). Interest expenditure was lower for savings banks (from 0.56% to 0.44%, or from €6.6 billion to €5.6 billion) and credit cooperatives (from 0.43% to 0.33%, or from €3.8 billion to €3.0 billion), but it fell to a lesser extent than interest income.

High degree of maturity transformation

The institutions engaged in a high degree of maturity transformation in the year under review. In the prevailing low interest rate environment, customers preferred to invest their money in sight deposits they can access at short notice, as this allows them to flexibly move their funds when interest rates rise. At the end of 2018, the sight deposits of German non-banks exceeded their time deposits by 70%, whereas the ratio at the end of 2010 was still balanced.²⁹ This contrasts with the increased demand for loans with a long interest rate fixation period³⁰ to lock in the low interest rate level. At the end of 2018, 81.6% of loans issued by German institutions to domestic cus-

tomers were loans of a long-term nature, whereas this figure was just 75.7% at the end of 2010.

However, the interest rate environment, particularly the flat yield curve and the zero lower bound for retail deposits, hampered the generation of income from maturity transformation. The already rather flat yield curve flattened further during the reporting year. The yield on bearer debt securities outstanding with a residual maturity of more than one year and up to two years increased between December 2017 and December 2018 from -0.6% to -0.4%; at the same time, the yield on bearer debt securities outstanding with a residual maturity of more than nine years and up to ten years fell from 0.5% to 0.4%. The interest rate differential therefore narrowed to 0.8 percent-

Earnings potential from maturity transformation

²⁹ See Deutsche Bundesbank (2019e).

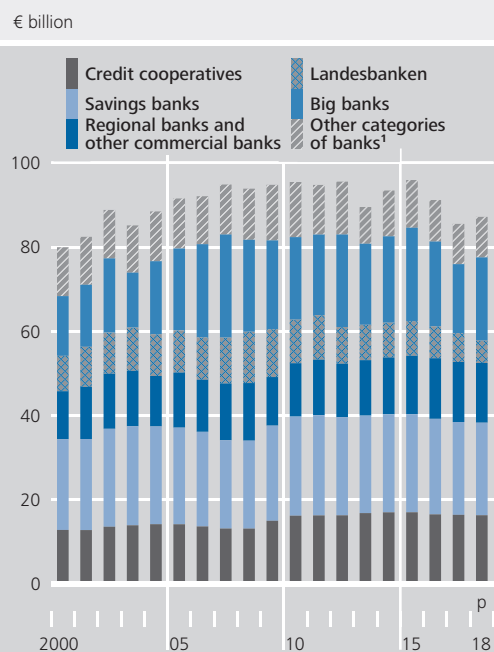
³⁰ Long-term loans have an agreed maturity or notice period of more than five years.

age point. For institutions that did not pass on negative interest rates at the short end to their depositors, the earnings potential offered by maturity transformation was even more limited.

Net interest income lower than average

Net interest income, which is still the most important income component for German banks, is calculated by netting out interest income and interest expenditure. It amounted to €87.2 billion in the year under review, representing an interest margin (net interest income in relation to total assets) of 1.08%. On account of their interest-based business model, primary institutions contributed a substantial proportion of this amount: €38.3 billion in total, compared to €38.5 billion in the previous year. However, savings banks and credit cooperatives were less profitable in the field of interest business than in the previous year and compared to their long-term average, with their interest margins falling to 1.73% and 1.80%, respectively, from 1.87% and 1.90% in the previous year. By contrast, big banks increased their contribution to the aggregate net interest income of the German banking sector due to the increased significance of interest business as a result of mergers. Overall, the net interest income of big banks increased by €3.4 billion to €19.8 billion, i.e. from 0.68% of total assets in the previous year to 0.86%. However, more than half of the difference to the previous year is explained by the aforementioned one-off effect. Without this one-off effect, the interest rate margin of this category of banks would only have risen to 0.77%. In addition, regional and other commercial banks made a significant contribution to the net interest income of the German banking sector with €14.2 billion, which corresponds to an interest margin of 1.47% (previous year: 1.36%). Mortgage banks' interest-related business was also more profitable than in the previous year. Their net interest income increased from €1.4 billion, or 0.58% of total assets, in the previous year to €1.7 billion, or 0.74% of total assets. In this context, factors such as the progressive scaling-back of one institution that has not taken on any new business in several years had a positive impact. Ac-

Net interest income generated by credit institutions*



* Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. 1 Branches of foreign banks, regional institutions of credit cooperatives, mortgage banks, banks with special, development and other central bank support tasks, and building and loan associations.
 Deutsche Bundesbank

ording to information provided in their annual reports, mortgage banks also benefited from good financing opportunities in the bond market and the Pfandbrief market. Overall, however, the net interest income of the German banking sector in the year under review remained lower than its long-term average, despite higher volumes in traditional lending business for some categories of banks and the still favourable financing conditions for institutions financed by the capital markets. Income was adversely affected, amongst other things, by the fact that institutions passed on negative interest rates to depositors to only a minor extent and that strong competition limited earnings potential in lending business.

Net commission income stable

Net commission income is the second most important income component for German institutions. It includes income generated by the pro-

Net commission income slightly lower

Overview of the results of the 2019 LSI stress test

Since 2013, the Bundesbank and the Federal Financial Supervisory Authority have been surveying the German credit institutions under their direct supervision every two years on the impact of the low interest rate environment. This year, around 1,400 small and medium-sized credit institutions (less significant institutions, or LSIs) took part in the supervisory LSI stress test as well as the associated survey on the profit outlook and resilience.

The aim of the survey was to gain a comprehensive insight into the individual profit expectations of participating credit institutions and to identify at an early stage potential risks that might arise, above all, in a setting of persistently low interest rates. The results will be taken into account in future supervisory activities.

As part of the survey, credit institutions' planning and forecast data as well as earnings simulations were obtained for five interest rate scenarios defined by supervisors (constant interest rate level, positive interest rate shock of +200 basis points, negative interest rate shock of -100 basis points and inverse turn in the yield curve, each as at 1 January 2019, as well as a gradual interest rate rise of 40 basis points annually); static balance sheet structures were assumed over a period from 2019 to 2023.

The evaluations of the planning and forecast data show that the low interest rate environment continues to put German credit institutions under considerable strain, particularly those with business models that are predominantly reliant on interest income. At the starting point of the survey, the return on total assets (ratio of pre-tax profit for the financial year to total assets) was already at a historic low of 0.42%. Over the five-year planning horizon, the in-

stitutions still expect the return on total assets to climb slightly to 0.46%, despite planned balance sheet growth of around 12%. However, roughly half of the institutions anticipate that the interest rate level will rise, considerably in some cases, compared with the survey cut-off date. This was a reflection of the market expectations prevailing when the survey was conducted in the second quarter of 2019; however, given the prospective interest rate developments since then, the planning forecasts of these institutions are likely, in hindsight, to have been too optimistic. On the other hand, institutions that were not expecting an interest rate reversal in the survey period therefore also projected a significantly more conservative development in net interest income. These institutions would only manage to stabilise the return on total assets at roughly the current level by scaling back the build-up of contingency reserves.

Compared with the previous survey, many more institutions now also plan to pass on negative interest rates on deposits. While only about one in four institutions were considering this in 2017, more than 40% of institutions now state that they have already priced negative interest rates on deposits into their planning forecasts. This proportion even increases to around two-thirds should the interest rate level continue to fall.

Overall, the tendency seen in previous years towards increased risk-taking is continuing. For around one-third of the institutions participating in the survey, the individual plans envisage a decrease in the (sometimes comfortably met) common equity tier 1 capital ratios up until 2023, particularly due to the planned increase in the ratio of risk-weighted assets to total assets.

At present, banks are still earning adequate margins on housing loans, especially from higher-interest existing business. In terms of collateralisation, there is evidence of a moderate rise in loan-to-value ratios for new business over the past three years.

Institutions also plan to increase net fee and commission income to stabilise their earnings. At the same time, administrative expenses are expected to be only marginally higher in comparison to growth in total assets.

A comparison of the supervisory interest rate scenarios shows that all scenarios entailing rising interest rates have a positive impact on the return on total assets in the medium to long term. In the short term, however, interest rate rises have a negative impact due to valuation effects on securities caused by discounting and may also potentially lead to additional credit losses, especially for institutions that take more risk. In addition, interest rate rises reduce net interest income in the short run as a result of maturity transformation. Even if interest rates were to rise gradually, net interest income would only start to recover in the medium to long term. This is due mainly to the combination of long interest rate fixation periods on the assets side and short interest rate fixation periods for customer deposits. As a result of this, the interest rate on shorter-term liabilities adjusts to the new interest rate level more rapidly than the interest rate on longer-term assets.

Furthermore, the simulations show that a drop – significant in some cases – in profitability would be likely in the medium to long term given a persistent or intensifying low interest rate environment and in the event of an inverse turn in the yield curve. The longer the low interest rate setting lasts, the more persistent the repercussions for profitability and hence also for capital accumulation. At present, this is still being counteracted by good capitalisation and

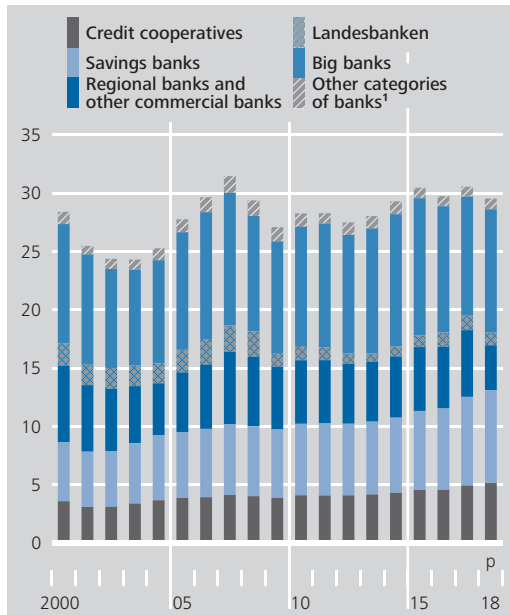
sufficient risk provisioning at the majority of institutions.

In addition to the survey, simulations on material risk categories and drivers of income were collected in the core part of the LSI stress test (particularly net interest income and net fee and commission income as well as credit and market risk), in each case applying a macroeconomic baseline and stress scenario defined by supervisors for a three-year time horizon. The German LSI stress test (with its two supervisory scenarios) thus complies with the harmonisation of supervisory LSI stress tests that is being pursued in the SSM. The aim is to test the credit institutions' resilience, taking into account adverse stress factors such as an increase in defaults in the credit portfolio as well as a sudden rise in credit spreads or falling asset prices. Thus, over a three-year stress horizon, the aggregate common equity tier 1 capital ratio would fall from 16.5% in 2018 to 13.0% in 2021. The main driver of this decrease is the assumed increase in write-downs in the credit portfolio. The LSI stress test results are subject to an extensive supervisory quality assurance process and are used as part of the Supervisory Review and Evaluation Process (SREP) to determine the Pillar 2 guidance, amongst other things. Institutions with especially noteworthy results are subjected to intensified supervision.

As in 2017, data on other side effects of the low interest rate environment were collected this year. The focus was on lending for residential and commercial real estate as well as developments in lending standards in corporate lending business. Further information on the results of the LSI stress test and the surveys on real estate and lending standards is available on the Bundesbank's website at <https://www.bundesbank.de/en/tasks/banking-supervision/individual-aspects/expert-panels/expert-panel-on-lsi-stress-tests-622808>.

Net commission income generated by credit institutions*

€ billion



* Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. ¹ Branches of foreign banks, regional institutions of credit cooperatives, mortgage banks, banks with special, development and other central bank support tasks, and building and loan associations.

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vision of services to customers. Account management fees are an example of this. Institutions generated further commission income from the brokerage of real estate, savings and loan contracts and insurance. Furthermore, net commission income is boosted when customers conduct securities or custody transactions. Commission expenses arise when the bank itself makes use of services, for example for sales and brokerage. The net commission income generated by German institutions in 2018 fell by €1.0 billion on the previous year to €29.5 billion, but in relation to total assets just managed to stay on a par with the previous year's level at 0.37%. Net commission income therefore made up only one quarter of operating income, as in the previous year. In non-interest business, too, competition is likely to have increased and led to falling commission margins, particularly for payment transactions and standardised products that customers require little advice for.

The gradual introduction of account management fees continued to be a key factor contributing to primary institutions' commissions business. For savings banks, the changed reporting sample also had a substantial impact. The net commission income of savings banks and credit cooperatives increased from €7.6 billion and €5.0 billion to €8.8 billion and €5.2 billion, respectively. Their commission margins (net commission income in relation to total assets) are the highest of all the various categories of banks at 0.63% and 0.57%, respectively, and remained virtually unchanged on the previous year.³¹ Due to changes in the reporting sample, the net commission income of big banks increased by €0.4 billion to a total of €10.6 billion, or 0.46% of total assets. As in previous years, big banks were the category of banks generating the largest share of operating income from commissions business, at 34.5%. By contrast, the net commission income of regional banks and other commercial banks fell by €1.9 billion to €3.8 billion. In addition to changes in the reporting sample, the outsourcing of consultancy and sales services by individual regional and other commercial banks was a significant factor here. The commission margin of this category of banks fell from 0.54% to 0.40%, well below the long-term average. For building and loan associations and mortgage banks, commissions paid in the year under review once again exceeded commissions received. Net commission income for these institutions was once again negative, standing at -0.21% and -0.03% of total assets, respectively, as these institutions made a greater number of commission payments for the brokerage of real estate financing.

Net commission income, by category of banks

³¹ The commission margin, however, needs to be interpreted with caution, as the stock of banking assets, i.e. total assets, is practically unaffected by commissions business. However, as the commission margin and changes in it also depend on total assets, using the commission margin to draw conclusions about the significance and development of non-interest business is only possible to a limited extent. A more meaningful assessment is possible through an additional comparison of net commission income and net interest income or of net commission income's share of operating income.

Administrative spending remains high

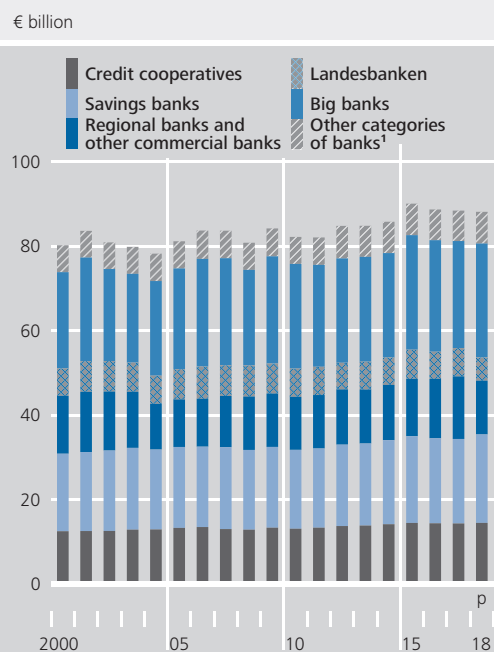
Slight decline in staff costs

Administrative spending encompasses staff costs and other administrative spending, including depreciation of and value adjustments to tangible and intangible assets, but excluding depreciation of and value adjustments to assets leased. At 50.2%, staff costs accounted for just over half of German institutions' administrative spending. Alongside the rise in negotiated wages and salaries, higher social security costs and spending on pensions³² also limited the scope for reducing staff costs. In addition, demand for highly qualified staff increased owing to digitalisation campaigns and the need to implement supervisory requirements.³³ Socially responsible staff cutbacks, through phased retirement contracts, for instance, and smaller bonus payments nonetheless also resulted in total staff costs declining slightly by €0.3 billion to €44.3 billion in 2018.

Other administrative spending practically unchanged

On aggregate, other administrative spending remained unchanged at €43.8 billion.³⁴ However, at big banks, it increased significantly on the year from €14.8 billion to €16.3 billion, but dropped from €8.3 billion to €6.9 billion for regional and other commercial banks. The differences stemmed mainly from merger-based changes to reporting groups³⁵ among these categories of banks. In much the same way as for the primary institutions, the retail-oriented business model of the institution classified as a big bank for the first time in 2018 causes higher administrative expenses. Other administrative spending includes, for example, investment in product development, information technology, and digitalisation. This expenditure is used to maintain long-term competitiveness and boost future cost efficiency or market power in the hope that these factors will have a positive impact on profitability in the years to come. This item also covers the costs arising from reorganisation and restructuring measures, such as consultancy fees and severance payments. Other expenses stemmed from the need to adapt to new regulatory requirements. Clos-

Credit institutions' administrative spending*



* Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. 1 Branches of foreign banks, regional institutions of credit cooperatives, mortgage banks, banks with special, development and other central bank support tasks, and building and loan associations.
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ures of branches and offices reduced other administrative spending in 2018, resulting in lower costs for maintaining premises.

General administrative spending decreased from €88.4 billion in 2017 to €88.1 billion. In relation to total assets, it reached 1.09% – its highest level since 2003 (previous year: 1.07%). During the reporting year, it remained highest at the primary institutions, although, in a long-term comparison, lower administrative spending was reported by both savings banks (from

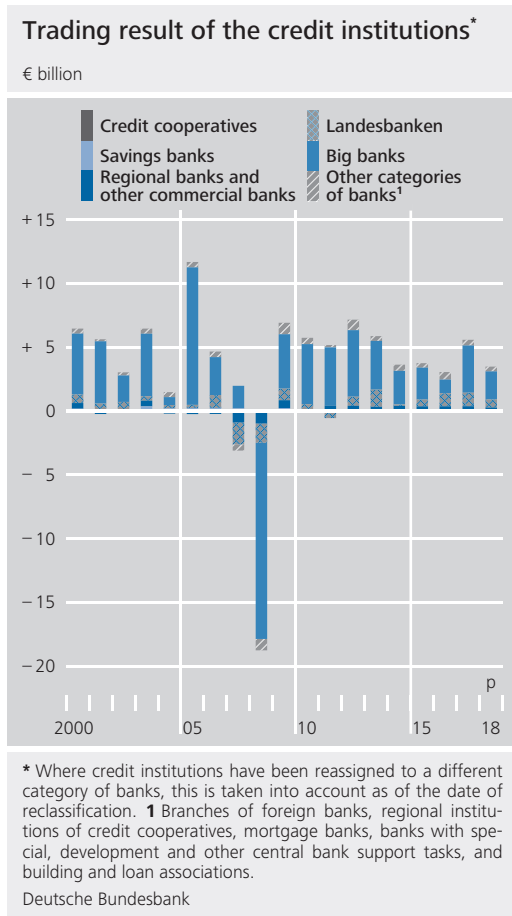
Administrative spending relative to total assets at highest level since 2003

³² Pension liabilities in the reporting year were discounted on the basis of the 2018G mortality tables, which replaced the 2005G mortality tables previously in use.

³³ In addition to MiFID II, which was introduced on 3 January 2018, these include Basel III, which the Basel Committee agreed upon at the end of 2017.

³⁴ Other administrative spending also includes the bank levy which, in the 2018 contribution year, amounted to a total of €1.99 billion (€1.71 billion in 2017). For more information, see: https://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Meldung/2018/meldung_180612_bankenabgabe.html

³⁵ See the structural data of the German banking sector and the box on p. 79.



Deterioration in the net result from the trading portfolio

At €3.5 billion, or 2.9% of operating income, the net result from the trading portfolio made only a very small contribution to operating income in 2018. Compared to the previous year, the trading result was €2.1 billion lower; in relation to total assets, it fell from 0.07% to 0.04%. The institutions' trading result was hampered, in particular, by losses from securities transactions that could not be offset by interest-related and foreign exchange business. The trading result represented a major component of income for big banks (at €2.2 billion, or 7.2% of operating income) and Landesbanken (at €0.6 billion, or 8.8% of operating income) only. Although, together, both categories of banks continued to generate the lion's share (81.6%) of the overall trading result, the trading result in relation to total assets nonetheless sank from 0.15% to 0.10% for big banks and from 0.11% to 0.08% for the Landesbanken.

Reduced trading result

1.69% to 1.65%) and credit cooperatives (from 1.66% to 1.59%), as in the previous years. These institutions have a very dense network of branches and appear to have made significant savings by thinning them down over the last few years. The number of branches fell from a total of 20,711 at the end of 2016 to 18,434 at the end of 2018. The group of Landesbanken affected by structural changes likewise reduced administrative spending to 0.68% of total assets. However, from a long-term perspective, the expenditure of the Landesbanken remained above average. The group of mortgage banks affected by reorganisation and restructuring measures saw administrative costs rise to 0.42% of total assets (previous year: 0.38%). For big banks, at 1.17% of total assets, administrative costs not only exceeded the previous year's figure (1.06%), but also the long-term average.

During the reporting year, the institutions again mainly carried out own-account trading in financial instruments on behalf of clients. Some institutions scaled back or abandoned proprietary trading altogether.³⁶ The latter was partly due to balance sheet reduction requirements imposed by the European Commission in the context of EU state aid procedures. In addition, changes to business policy are likely to have had a dampening effect on proprietary trading during the reporting year, owing to stricter regulatory requirements, amongst other factors. The trading result has become less volatile over the last few years, but has continued to experience fluctuations. While the institutions achieved a profit of €11.4 billion in 2005 but recorded a loss of €18.7 billion in 2008, the trading result has fluctuated during the past

Reduction in proprietary trading

³⁶ Proprietary trading covers all transactions in financial instruments carried out by the credit institution in its own name and on its own behalf. It is not performed on behalf of clients; instead, its purpose is to generate short-term profits. However, it also involves the risk of losses.

ten years within a bandwidth of €3.0 billion in 2016 and €7.1 billion in 2012.

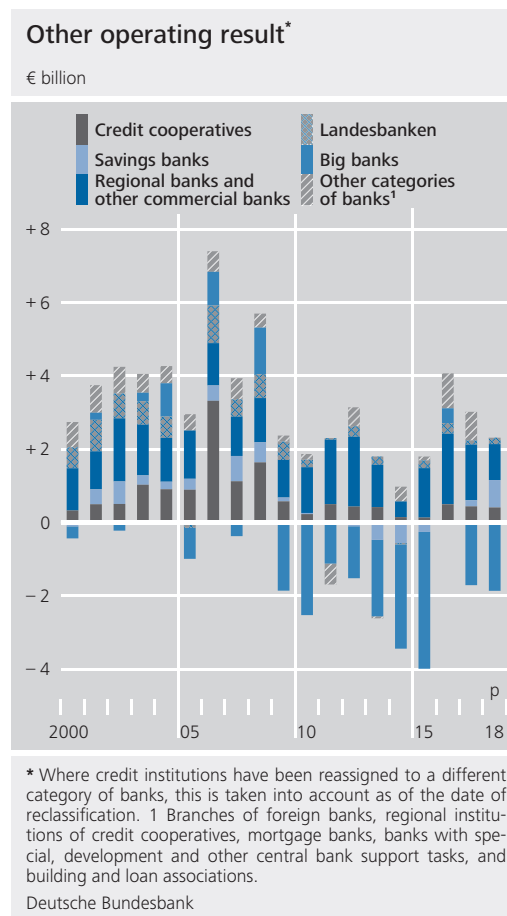
Other operating income low

Other operating income low

The other operating result is a summary item used to record income and charges from operating business that have no connection to net interest income, net commission income or the trading result.³⁷ Aggregated across all banks, it fell from €1.3 billion to just €0.4 billion (0.3% of operating income). It was therefore also substantially lower than its long-term average of €2.1 billion and boosted the profitability of German institutions only slightly during the reporting year (0.01% in relation to total assets after 0.02% the year before). Leasing transactions made a significant contribution, particularly at car financing institutions (just under €0.2 billion). Commodities transactions by credit cooperatives generated just under €0.2 billion. Other business lines, including real estate business, generated €0.3 billion. Other taxes reduced the balance by €0.2 billion.

Other operating result, by category of banks

In the reporting year, the other operating result contributed significantly to the result from ongoing business operations at regional and other banks only; however, amounting to €0.98 billion, or 5.1% of operating income, it was therefore also lower than in the previous year for this category of banks. Positive other operating results were also reported by savings banks (€0.7 billion, or 0.06% of total assets), credit cooperatives (€0.4 billion, or 0.04%) and Landesbanken (€0.2 billion, or 0.02%). The big banks, by contrast, reported a negative balance of -€1.9 billion; this was equivalent to -6.1% of operating income, or -0.08% of total assets. In their annual reports, they attributed this to expenses from the marking-up of provisions, transfers to provisions for litigation and recourse risks, and changes in value arising from non-trading derivatives. For building and loan associations, this item contracted significantly to €14 million in comparison to the two preceding years, in which it had amounted to



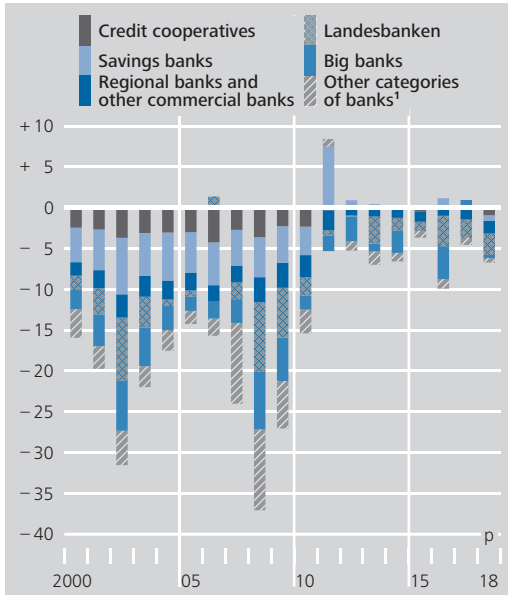
€707 million and €717 million, respectively. In both 2016 and 2017, building and loan associations had made considerable withdrawals from the fund required by the building and loan association rules;³⁸ the other operating result reported by the building and loan associations in these preceding years was higher by this amount.

³⁷ It includes, inter alia, the gross result for transactions in goods and subsidiary business and income from depreciation of and value adjustments to assets leased. This item also contains withdrawals from and transfers to the fund required by the building and loan association rules.

³⁸ The funds were used to safeguard the collective interest margin and the increase in lending outside the scope of building and loan association business. In 2018, only 8% of all loans granted by building and loan associations were loans under savings and loan contracts. Other building loans accounted for 17.4%, with the remainder attributable to interim and bridging loans. By way of comparison, the share of loans under savings and loan contracts was 10.5% in 2016 and 43% in 2000.

Risk provisioning of credit institutions (net valuation result)*

€ billion



* Excluding investment in tangible and financial fixed assets. Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. ¹ Branches of foreign banks, regional institutions of credit cooperatives, mortgage banks, banks with special, development and other central bank support tasks, and building and loan associations.

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Deterioration in the net valuation result

Deterioration in net valuation result

At -€6.7 billion, or -0.08% of total assets, the net valuation result³⁹ in 2018 was favourable in a long-term comparison, reflecting the fact that, although the economy was slower, it remained robust. However, the burden was €3.1 billion higher than the year before.

Need to recognise loss allowances for shipping loan portfolio ...

In particular, the profitability of individual institutions⁴⁰ with legacy shipping loans was considerably curtailed by the need for provisioning. It was necessary to recognise loss allowances as part of the restructuring of non-performing loans, but also owing to higher economic risks, including those stemming from escalating trade disputes. During the reporting year, in order to improve portfolio quality, the institutions followed up on or made the decision to sell parts of their non-performing shipping loans to investors or special purpose entities.

Overall, however, the institutions only made minimal additional risk provisions in lending business. According to sectoral data, the fact that the domestic economy remained in good shape and business and consumer insolvency figures were in decline,⁴¹ leading to positive credit risk developments, meant that write-ups were even permitted in some cases owing to the need to reverse individual and general provisions for lending business. Generally speaking, the level of credit risk provisioning was thus very low in 2018.

... in the context of overall low risk provisioning for lending business

In their annual reports, a large number of German institutions reported higher write-downs⁴² and value adjustments for securities in the liquidity reserve which, owing to yield increases and the general downward trend in the capital markets, were particularly necessary in the second half of 2018. According to the annual reports, some institutions compensated for the large haircuts on these securities partly by reversing undisclosed reserves pursuant to Section 340f of the Commercial Code. Nonetheless, overall, these reserves were stocked up during the year.

Unexpectedly large haircuts on securities in liquidity reserve

The largest contributions to the negative net valuation result of the German banking sector were made by the Landesbanken, at -€2.6 billion, or -0.33% of total assets, and by regional and other commercial banks, at -€1.6 billion, or -0.16% of total assets. Alongside the decline in stock prices at the end of the reporting year, this was mainly due to the materialisation of

Net valuation result, by category of banks

³⁹ The net valuation result comprises the effects of value adjustments, write-ups and write-downs on accounts receivable and securities in the liquidity reserve. In addition, income and charges in connection with transfers from and to loan-loss provisions are taken into account, as are transfers and releases relating to undisclosed reserves pursuant to Section 340f of the Commercial Code. In this context, the net valuation result makes use of the cross-offsetting option permissible under the Commercial Code.

⁴⁰ The institutions concerned belonged to Landesbanken and regional and other commercial banks categories.

⁴¹ See Federal Statistical Office (2019); and press release No 091 of 13 March 2019, https://www.destatis.de/EN/Press/2019/03/PE19_091_52411.html

⁴² Compared to the previous year, the institutions also generated much less income from reversals of write-downs in respect of securities held in the liquidity reserve.

The impact of fintech innovations on profitability in the banking sector

In recent years, fintech innovations have taken on an increasingly important role in banking business. Fintech innovations are technology-driven innovations in banking products, applications and processes, which even go as far as financial agents adopting previously unknown business models.¹

Fintech innovations often initially result in higher costs due to the necessary investment in IT restructuring operations. In the medium term, however, they lead to cost savings, e.g. by increasing the automation of business processes, enhancing the quality of individual processes and exploiting specialisation effects – by stepping up cooperation with other service providers, for instance. New sources of revenue are also conceivable, e.g. through new or improved products, new business areas and access to supraregional markets via online services.

However, fintech innovations can also have a negative impact on banks' profitability. Greater competition posed by online services and new market players, for example, increases pressure on margins and drives up competition for specialised IT staff, in particular. The technology-driven business environment also makes it possible to run business models which focus on marketing financial services via large platforms, meaning that a small number of providers can provide services to as many customers as they want, even across national borders, and thus ramp up competitive pressure even further.

In the German banking sector, it would appear based on various indicators that fintech innovations are paving the way for major changes in the banking sector. For example, investment in IT infrastructure has risen significantly in recent years. Similarly, numerous collaborations between banks

and other service providers have been observed.²

But it is not yet possible to make any robust, general statement about the current impact of fintech innovations on profitability in the banking sector, as the scale of the actual phenomenon is difficult to gauge due to a lack of appropriate definitions. Moreover, the implications for profitability are highly complex and thus difficult to account for in statistical terms. For example, the extent to which the impact of increased IT and cyber risks on banks' profitability can be attributed to fintech innovations requires some clarification.

There are additional obstacles to assessing how things will develop in future. Statistical observations in a dynamic market environment serve merely as snapshots and leave only very limited scope to draw conclusions on the evolution of business models and the competitive landscape. There is also uncertainty regarding the impact of external factors such as future changes in technologies,³ customer behaviour and societal aspects.⁴ Unpredictable patterns of response by the banking sector to external developments also render it difficult to make medium-term forecasts.

¹ The Financial Stability Board (FSB) defines the term "fintech" as "technologically enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services" (source: FSB Monitoring of FinTech, available online at <https://www.fsb.org/work-of-the-fsb/policy-development/additional-policy-areas/monitoring-of-fintech/>).

² According to PwC's fintech cooperation radar, there were 197 new collaborations between banks and fintech firms in 2018 (projected value) compared with 162 in 2017 and 22 in 2014, for example.

³ This includes, for example, the development of blockchain or AI algorithms.

⁴ Such as regulatory changes.

legacy risks from shipping loans. The Landesbanken were the only category of banks whose net valuation result relative to total assets was worse in the reporting year than the long-term average, as in the preceding two years. Credit cooperatives (-€0.9 billion) and savings banks (-€0.7 billion), in particular, posted a distinctly more negative net valuation result in 2018 than in 2017. The net valuation result for mortgage banks also decreased significantly from €32 million in the previous year to -€341 million in the reporting year (or from 0.01% of total assets the year before to -0.15%). In their annual reports, the mortgage banks put the deterioration of their net valuation result down to the formation of specific provisions for legacy loans and provisions to better mitigate interest rate risk. In addition, the group of reporting institutions within the category of banks changed in comparison to the previous year. Building and loan associations, meanwhile, were able to improve their net valuation result, making a positive contribution of +€22 million to the profit for the financial year before tax of this category of banks. According to the information in the annual reports, besides the low need for provisioning for building loans, the planned liquidation of financial and capital investments had a positive impact on the result, since the market values of the fixed-rate securities sold generally exceeded their nominal prices.

Deterioration in extraordinary result

Extraordinary result clearly negative

Standing at -€6.9 billion, the balance in the extraordinary account⁴³ markedly reduced banks' net income. Big banks and regional and other commercial banks accounted for the bulk of this figure, at -€2.2 billion and -€2.7 billion, respectively. The result from financial investment business was negative at -€0.9 billion. This was €2.5 billion down on the previous year, reflecting the challenging financial market environment. In particular, value adjustments in respect of participating interests and securities

treated as fixed assets were €2.2 billion lower and write-downs on such assets were €0.3 billion higher than in 2017. Charges arising from profit transfers were the main component of extraordinary profit and loss; they climbed by €1.4 billion to a total of €5.7 billion during the reporting year, clearly exceeding the previous year's figure. The main influencing factor here was the expenditure entry for profit transfers at one big bank, which constituted the offsetting counterpart to an income entry for profit transfers under net interest income at another big bank.⁴⁴ Extraordinary profit or loss in the narrower sense (-€0.5 billion)⁴⁵ and the result from loss absorption (€0.2 billion) made a smaller contribution to the negative balance in the extraordinary account than in the previous year.

■ Outlook

Since the end of 2018, the economic outlook for Germany has become bleaker again. Ongoing international trade disputes, which are curbing economic activity, as well as the uncertainties associated with the United Kingdom's planned withdrawal from the European Union are playing a part in this.

Economic downturn ahead

⁴³ Income and charges stemming from extraordinary events which interrupt the normal financial year are recorded in this item. These include merger gains and losses, reorganisation gains and losses, debt forgiveness in restructuring operations as well as charges for redundancy programmes. The item also includes the result from financial investment business, i.e. the balance of income from value adjustments in respect of participating interests, shares in affiliated enterprises and securities treated as fixed assets as well as write-downs and write-offs in respect of these items. Finally, charges from profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement are also recorded under this item. By contrast, income from profit transfers is reported under net interest income; the assumption is that they are part of the business strategy and hence of operating business.

⁴⁴ Charges arising from profit transfers cannot be assigned to actual operating business. By contrast, income from profit transfers is reported under net interest income; the assumption is that they are part of the business strategy and hence of operating business.

⁴⁵ Only extraordinary events which interrupt the normal financial year are recorded in this item. These include merger gains and losses, reorganisation gains and losses, debt forgiveness in restructuring operations as well as charges for redundancy programmes and restructuring.

Breakdown of extraordinary profit and loss

€ million

Item	2016	2017	2018P
Other and extraordinary result	- 2,812	- 3,398	- 6,858
Income (total)	8,347	5,318	2,894
Value adjustments in respect of participating interests, shares in affiliated enterprises, and securities treated as fixed assets	3,446	3,100	872
from loss transfers	39	610	730
Extraordinary income	4,862	1,608	1,292
Charges (total)	- 11,159	- 8,716	- 9,752
Write-offs and write-downs in respect of participating interests, shares in affiliated enterprises, and securities treated as fixed assets	- 3,720	- 1,466	- 1,725
from loss transfers	- 914	- 636	- 497
Extraordinary charges	- 1,800	- 2,317	- 1,838
Profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement	- 4,725	- 4,297	- 5,692

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Growing risks in lending business

In light of the ongoing slowdown in the industrial sector, a greater need for value adjustments and write-downs in lending business and in banks' securities trading is probably to be expected this year. To prepare for a potentially prolonged economic downturn, institutions need to price their loans in a risk-appropriate manner.

Outlook for monetary policy

At its meeting in September 2019, the ECB Governing Council decided to lower the deposit facility rate by 10 basis points to -0.5%. It expects the key ECB interest rates to remain at their present or lower levels until it has seen the inflation outlook robustly converge to a level sufficiently close to, but below, 2% within its projection horizon, and such convergence has been reflected in underlying inflation dynamics. In addition, it announced that net purchases under the asset purchase programme

would resume at a monthly pace of €20 billion from 1 November. Banks will therefore have to operate in an environment of persistently low interest rates, which is likely to include negative rates on deposits held at the central bank. Even the introduction of a two-tier system for reserve remuneration, which exempts part of credit institutions' excess liquidity holdings from the negative deposit facility rate, will not fundamentally alter this key challenge.

Brexit will see banking activities relocated from the United Kingdom to the rest of the EU, which may change the competitive situation and market dynamics. Through further consolidation, institutions can optimise processes and improve their competitiveness in the long term. They also need to cultivate or create a customer focus by pressing ahead with digitalisation campaigns.

Need to increase competitiveness

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Major components of credit institutions' profit and loss accounts, by category of banks*

As a percentage of total assets^o

Financial year	All categories of banks	Commercial banks			Landesbanken ¹	Savings banks ¹	Credit cooperatives	Mortgage banks ¹	Building and loan associations	Banks with special, development and other central support tasks
		Total	of which:							
			Big banks ¹	Regional banks and other commercial banks ¹						
Interest received²										
2012	2.88	1.77	1.37	3.35	4.87	3.72	3.68	4.25	3.83	2.45
2013	2.61	1.70	1.29	3.09	3.49	3.40	3.40	3.91	3.61	2.58
2014	2.49	1.74	1.38	2.91	3.20	3.15	3.15	3.86	3.39	2.38
2015	2.33	1.66	1.33	2.71	3.04	2.90	2.84	4.07	3.18	2.21
2016	2.17	1.58	1.30	2.37	2.81	2.64	2.55	4.01	2.89	2.15
2017	2.00	1.54	1.26	2.25	2.74	2.42	2.33	3.35	2.63	1.78
2018	2.08	1.85	1.65	2.45	3.08	2.17	2.13	2.99	2.42	1.68
Interest paid										
2012	1.88	0.92	0.69	1.84	4.24	1.59	1.47	3.83	2.21	1.99
2013	1.58	0.80	0.61	1.50	2.81	1.29	1.15	3.53	2.07	2.32
2014	1.39	0.77	0.60	1.30	2.47	1.06	0.94	3.38	1.95	1.95
2015	1.22	0.67	0.52	1.14	2.29	0.84	0.71	3.47	1.85	1.76
2016	1.08	0.61	0.52	0.85	2.04	0.68	0.55	3.47	1.73	1.73
2017	0.97	0.66	0.58	0.89	2.02	0.56	0.43	2.78	1.47	1.36
2018	1.00	0.83	0.79	0.98	2.42	0.44	0.33	2.25	1.29	1.28
Excess of interest received over interest paid = net interest income (interest margin)										
2012	1.00	0.85	0.68	1.51	0.63	2.12	2.21	0.43	1.62	0.46
2013	1.02	0.89	0.69	1.60	0.68	2.10	2.25	0.38	1.54	0.26
2014	1.10	0.97	0.77	1.62	0.72	2.09	2.21	0.48	1.45	0.43
2015	1.11	0.99	0.81	1.56	0.76	2.06	2.14	0.60	1.32	0.45
2016	1.09	0.97	0.78	1.52	0.77	1.96	1.99	0.54	1.16	0.42
2017	1.04	0.87	0.68	1.36	0.73	1.87	1.90	0.58	1.16	0.42
2018	1.08	1.02	0.86	1.47	0.66	1.73	1.80	0.74	1.13	0.40
Excess of commissions received over commissions paid = net commission income (commission margin)										
2012	0.29	0.37	0.32	0.61	0.06	0.56	0.56	0.02	-0.26	0.10
2013	0.32	0.43	0.38	0.62	0.06	0.57	0.56	0.01	-0.31	0.11
2014	0.35	0.47	0.43	0.63	0.07	0.58	0.56	0.00	-0.26	0.12
2015	0.35	0.47	0.43	0.62	0.09	0.60	0.57	0.00	-0.27	0.11
2016	0.36	0.45	0.42	0.56	0.12	0.60	0.55	-0.01	-0.23	0.10
2017	0.37	0.45	0.43	0.54	0.13	0.64	0.57	-0.02	-0.21	0.10
2018	0.37	0.43	0.46	0.40	0.13	0.63	0.57	-0.03	-0.21	0.11

* The figures for the most recent date should be regarded as provisional in all cases. ^o Excluding the total assets of the foreign branches of savings banks, excluding the total assets of the foreign branches of regional institutions of credit cooperatives until 2015 and, from 2016, excluding the total assets of the foreign branches of mortgage banks. For footnotes 1 and 2, see p. 104.

Major components of credit institutions' profit and loss accounts, by category of banks* (cont'd)

As a percentage of total assets^o

Financial year	All categories of banks	Commercial banks			Landesbanken ¹	Savings banks ¹	Credit cooperatives	Mortgage banks ¹	Building and loan associations	Banks with special, development and other central support tasks
		Total	of which:							
			Big banks ¹	Regional banks and other commercial banks ¹						
General administrative spending										
2012	0.89	0.92	0.77	1.55	0.46	1.76	1.86	0.24	0.97	0.29
2013	0.97	1.03	0.89	1.55	0.54	1.77	1.85	0.27	0.91	0.30
2014	1.01	1.08	0.93	1.57	0.57	1.79	1.84	0.29	0.90	0.32
2015	1.05	1.11	0.99	1.53	0.63	1.81	1.82	0.30	0.81	0.32
2016	1.06	1.14	1.02	1.49	0.66	1.74	1.73	0.32	0.83	0.33
2017	1.07	1.14	1.06	1.41	0.71	1.69	1.66	0.38	0.83	0.33
2018	1.09	1.19	1.17	1.32	0.68	1.65	1.59	0.42	0.82	0.35
Result from the trading portfolio										
2012	0.07	0.14	0.16	0.04	0.05	0.00	0.00	0.00	0.00	0.06
2013	0.07	0.11	0.14	0.04	0.11	0.00	0.00	0.00	0.00	0.03
2014	0.04	0.09	0.10	0.04	0.01	0.00	0.00	0.00	0.00	0.04
2015	0.04	0.08	0.09	0.04	0.05	0.00	0.00	0.00	0.00	0.03
2016	0.04	0.04	0.04	0.04	0.11	0.00	0.00	0.00	0.00	0.04
2017	0.07	0.12	0.15	0.03	0.11	0.00	0.00	0.00	0.00	0.03
2018	0.04	0.07	0.10	0.03	0.08	0.00	0.00	0.00	0.00	0.03
Operating result before the valuation of assets										
2012	0.49	0.45	0.35	0.84	0.31	0.92	0.97	0.23	0.41	0.34
2013	0.43	0.38	0.25	0.85	0.33	0.86	1.01	0.09	0.33	0.10
2014	0.45	0.39	0.26	0.78	0.23	0.83	0.95	0.21	0.26	0.29
2015	0.44	0.36	0.20	0.84	0.28	0.82	0.91	0.29	0.23	0.26
2016	0.47	0.39	0.23	0.83	0.38	0.83	0.87	0.21	0.43	0.25
2017	0.42	0.30	0.13	0.67	0.27	0.83	0.86	0.16	0.42	0.23
2018	0.40	0.31	0.16	0.68	0.21	0.77	0.81	0.28	0.11	0.18
Result from the valuation of assets										
2012	-0.05	-0.10	-0.09	-0.11	-0.01	0.06	0.04	-0.11	0.01	-0.04
2013	-0.07	-0.06	-0.03	-0.13	-0.27	0.01	0.04	-0.08	-0.04	-0.09
2014	-0.08	-0.11	-0.10	-0.12	-0.14	0.00	-0.03	-0.07	0.14	-0.08
2015	-0.04	-0.03	0.00	-0.14	-0.10	0.01	-0.06	-0.09	-0.03	-0.03
2016	-0.10	-0.14	-0.16	-0.10	-0.38	0.09	0.01	-0.04	0.01	-0.07
2017	-0.04	-0.02	0.03	-0.12	-0.24	0.02	-0.02	0.01	-0.03	-0.07
2018	-0.08	-0.06	-0.02	-0.16	-0.33	-0.05	-0.10	-0.15	0.01	-0.02

For footnotes *, °, see p. 103. ¹ From 2018, DB Privat- und Firmenkundenbank AG (merger between Deutsche Postbank AG, belonging to the category "Big banks", with Deutsche Bank Privat- und Geschäftskunden AG, belonging to the category "Regional banks and other commercial banks") allocated to the category "Big banks". HSH Nordbank allocated to the category "Regional banks and other commercial banks" and Landesbank Berlin allocated to the category "Savings banks". DSK Hyp AG (formerly SEB AG) allocated to the category "Mortgage banks". Wüstenrot Bank Aktiengesellschaft Pfandbriefbank allocated to the category "Regional banks and other commercial banks". ² Interest received plus current income and profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement.

Major components of credit institutions' profit and loss accounts, by category of banks* (cont'd)

As a percentage of total assets^o

Financial year	All categories of banks	Commercial banks			Landesbanken ¹	Savings banks ¹	Credit cooperatives	Mortgage banks ¹	Building and loan associations	Banks with special, development and other central support tasks
		Total	of which:							
			Big banks ¹	Regional banks and other commercial banks ¹						
Operating result										
2012	0.45	0.35	0.25	0.73	0.30	0.98	1.00	0.11	0.41	0.30
2013	0.36	0.33	0.21	0.72	0.06	0.88	1.06	0.01	0.29	0.02
2014	0.37	0.28	0.16	0.65	0.10	0.83	0.93	0.14	0.39	0.21
2015	0.40	0.33	0.21	0.70	0.18	0.83	0.85	0.20	0.20	0.23
2016	0.37	0.25	0.08	0.73	0.00	0.92	0.88	0.17	0.44	0.18
2017	0.37	0.28	0.16	0.55	0.03	0.85	0.84	0.17	0.40	0.15
2018	0.32	0.25	0.15	0.51	-0.12	0.71	0.71	0.14	0.11	0.17
Other and extraordinary result										
2012	-0.12	-0.16	-0.09	-0.40	-0.14	-0.12	0.00	-0.10	-0.09	-0.11
2013	-0.11	-0.16	-0.08	-0.41	-0.10	-0.09	-0.04	0.02	-0.07	-0.07
2014	-0.08	-0.10	-0.02	-0.34	-0.13	-0.05	-0.02	-0.18	-0.03	-0.01
2015	-0.09	-0.19	-0.11	-0.45	-0.01	-0.03	-0.02	-0.01	0.00	-0.01
2016	-0.03	-0.06	0.04	-0.36	-0.05	-0.03	0.04	0.01	-0.02	0.00
2017	-0.04	-0.10	-0.05	-0.23	0.07	-0.01	0.00	0.03	0.04	-0.04
2018	-0.09	-0.15	-0.10	-0.28	-0.01	-0.06	-0.02	-0.04	-0.01	-0.06
Profit or loss (-) for the financial year before tax										
2012	0.32	0.20	0.16	0.32	0.17	0.86	1.00	0.02	0.32	0.19
2013	0.25	0.17	0.13	0.30	-0.04	0.78	1.02	0.02	0.22	-0.05
2014	0.30	0.19	0.14	0.32	-0.03	0.78	0.91	-0.04	0.36	0.20
2015	0.31	0.14	0.10	0.25	0.17	0.79	0.84	0.20	0.20	0.21
2016	0.33	0.19	0.12	0.37	-0.06	0.89	0.93	0.18	0.41	0.17
2017	0.33	0.18	0.12	0.32	0.10	0.84	0.84	0.21	0.43	0.12
2018	0.23	0.11	0.05	0.23	-0.13	0.65	0.70	0.09	0.11	0.11
Profit or loss (-) for the financial year after tax										
2012	0.23	0.11	0.07	0.25	0.12	0.62	0.73	0.01	0.23	0.21
2013	0.17	0.12	0.09	0.22	-0.08	0.54	0.76	0.01	0.12	-0.07
2014	0.21	0.14	0.10	0.23	-0.08	0.53	0.64	-0.06	0.24	0.19
2015	0.21	0.09	0.06	0.16	0.10	0.54	0.57	0.17	0.16	0.17
2016	0.24	0.13	0.09	0.26	-0.11	0.63	0.67	0.14	0.34	0.17
2017	0.24	0.13	0.09	0.20	0.05	0.60	0.58	0.13	0.37	0.13
2018	0.15	0.08	0.05	0.13	-0.20	0.43	0.47	0.04	0.05	0.09

For footnotes *, °, see p. 103. For footnote 1, see p. 104.

Credit institutions' profit and loss accounts*

Financial year	Number of reporting institutions	Total assets ¹	Interest business			Commissions business			Result from the trading portfolio	Other operating result	Operating income ³ (col. 3 plus col. 6 plus col. 9 plus col. 10)
			Net interest income (col. 4 less col. 5)	Interest received ²	Interest paid	Net commission income (col. 7 less col. 8)	Commissions received	Commissions paid			
	1	2	3	4	5	6	7	8	9	10	11
		€ billion									
2011	1,801	9,167.9	94.7	303.0	208.3	28.3	41.1	12.8	4.6	0.6	128.2
2012	1,776	9,542.7	95.5	274.7	179.2	27.5	40.0	12.5	7.1	1.6	131.8
2013	1,748	8,755.4	89.5	228.2	138.7	28.0	40.6	12.6	5.9	– 0.8	122.6
2014	1,715	8,452.6	93.4	210.8	117.4	29.3	42.6	13.3	3.6	– 2.5	123.8
2015	1,679	8,605.6	95.9	200.9	105.0	30.5	44.5	14.1	3.7	– 2.2	127.9
2016	1,611	8,355.0	91.1	181.5	90.4	29.7	43.2	13.5	3.0	4.1	128.0
2017	1,538	8,251.2	85.5	165.4	79.9	30.6	44.2	13.6	5.6	1.3	122.9
2018	1,484	8,061.5	87.2	167.6	80.5	29.5	43.1	13.6	3.5	0.4	120.6
		Year-on-year percentage change									
2012	– 1.4	4.1	0.8	– 9.4	– 14.0	– 2.8	– 2.7	– 2.4	55.3	166.7	2.8
2013	– 1.6	– 8.2	– 6.3	– 16.9	– 22.6	2.0	1.7	1.0	– 18.0	.	– 7.0
2014	– 1.9	– 3.5	4.4	– 7.6	– 15.3	4.5	5.0	6.1	– 38.2	– 201.2	1.0
2015	– 2.1	1.8	2.7	– 4.7	– 10.6	4.0	4.5	5.5	3.0	11.1	3.3
2016	– 4.1	– 2.9	– 4.9	– 9.6	– 13.9	– 2.3	– 3.0	– 4.4	– 18.4	.	0.1
2017	– 4.5	– 1.2	– 6.2	– 8.9	– 11.6	2.7	2.3	1.3	82.9	– 67.9	– 4.0
2018	– 3.5	– 2.3	1.9	1.4	0.7	– 3.3	– 2.5	– 0.6	– 37.7	– 66.2	– 1.9
		As a percentage of total assets									
2011	.	.	1.03	3.31	2.27	0.31	0.45	0.14	0.05	0.01	1.40
2012	.	.	1.00	2.88	1.88	0.29	0.42	0.13	0.07	0.02	1.38
2013	.	.	1.02	2.61	1.58	0.32	0.46	0.14	0.07	– 0.01	1.40
2014	.	.	1.10	2.49	1.39	0.35	0.50	0.16	0.04	– 0.03	1.47
2015	.	.	1.11	2.33	1.22	0.35	0.52	0.16	0.04	– 0.03	1.49
2016	.	.	1.09	2.17	1.08	0.36	0.52	0.16	0.04	0.05	1.53
2017	.	.	1.04	2.00	0.97	0.37	0.54	0.17	0.07	0.02	1.49
2018	.	.	1.08	2.08	1.00	0.37	0.53	0.17	0.04	0.01	1.50

* The figures for the most recent date should be regarded as provisional in all cases. **1** Excluding the total assets of the foreign branches of savings banks and of the foreign branches of regional institutions of credit cooperatives until 2015 and, Deutsche Bundesbank

from 2016, excluding the total assets of the foreign branches of mortgage banks. **2** Interest received plus current income and profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement. **3** Net inter-

General administrative spending			Operating result before the valuation of assets (col. 11 less col. 12)	Result from the valuation of assets (other than tangible or financial fixed assets)	Operating result (col. 15 plus col. 16)	Other and extraordinary result	Profit or loss (–) for the financial year before tax (col. 17 plus col. 18)	Taxes on income and earnings ⁵	Profit or loss (–) for the financial year after tax (col. 19 less col. 20)	Financial year
Total (col. 13 plus col. 14)	Staff costs	Total other administrative spending ⁴								
12	13	14	15	16	17	18	19	20	21	
€ billion										
82.0	42.5	39.6	46.2	3.1	49.3	– 17.4	31.9	7.0	24.9	2011
84.8	44.6	40.2	47.0	– 4.3	42.7	– 11.9	30.8	8.8	22.0	2012
84.8	43.8	41.0	37.8	– 6.5	31.2	– 9.3	22.0	7.4	14.6	2013
85.8	44.0	41.8	38.1	– 6.6	31.5	– 6.5	25.0	7.6	17.4	2014
90.0	46.0	44.0	37.9	– 3.5	34.4	– 7.8	26.6	8.4	18.1	2015
88.7	44.6	44.0	39.4	– 8.8	30.6	– 2.8	27.8	7.9	19.9	2016
88.4	44.6	43.8	34.5	– 3.6	30.9	– 3.4	27.5	7.5	20.0	2017
88.1	44.3	43.8	32.5	– 6.7	25.8	– 6.9	18.9	6.8	12.2	2018
Year-on-year percentage change										
3.3	5.0	1.5	1.8	.	– 13.4	31.7	– 3.5	24.6	– 11.5	2012
0.0	– 1.9	2.2	– 19.6	– 50.9	– 26.8	21.8	– 28.7	– 15.8	– 33.9	2013
1.1	0.5	1.8	0.9	– 0.6	0.9	29.8	13.9	3.0	19.4	2014
5.0	4.7	5.3	– 0.6	46.9	9.0	– 19.7	6.3	11.2	4.1	2015
– 1.5	– 3.1	0.1	4.0	– 150.3	– 10.9	63.9	4.6	– 6.7	9.9	2016
– 0.3	– 0.1	– 0.5	– 12.2	58.7	1.0	– 20.8	– 1.0	– 4.3	0.4	2017
– 0.3	– 0.7	0.0	– 5.9	– 85.8	– 16.6	– 101.8	– 31.2	– 10.2	– 39.2	2018
As a percentage of total assets										
0.89	0.46	0.43	0.50	0.03	0.54	– 0.19	0.35	0.08	0.27	2011
0.89	0.47	0.42	0.49	– 0.05	0.45	– 0.12	0.32	0.09	0.23	2012
0.97	0.50	0.47	0.43	– 0.07	0.36	– 0.11	0.25	0.08	0.17	2013
1.01	0.52	0.49	0.45	– 0.08	0.37	– 0.08	0.30	0.09	0.21	2014
1.05	0.53	0.51	0.44	– 0.04	0.40	– 0.09	0.31	0.10	0.21	2015
1.06	0.53	0.53	0.47	– 0.10	0.37	– 0.03	0.33	0.09	0.24	2016
1.07	0.54	0.53	0.42	– 0.04	0.37	– 0.04	0.33	0.09	0.24	2017
1.09	0.55	0.54	0.40	– 0.08	0.32	– 0.09	0.23	0.08	0.15	2018

est and commission income plus result from the trading portfolio and other operating result. **4** Including depreciation of and value adjustments to tangible and intangible assets, but excluding depreciation of and value adjustments to assets

leased ("broad" definition). **5** In part, including taxes paid by legally dependent building and loan associations affiliated to Landesbanken.

Profit and loss accounts, by category of banks*

Financial year	Number of reporting institutions	€ million									
		Total assets ¹	Interest business			Commissions business			Result from the trading portfolio	Other operating result	Operating income ³ (col. 3 plus col. 6 plus col. 9 plus col. 10)
			Net interest income (col. 4 less col. 5)	Interest received ²	Interest paid	Net commission income (col. 7 less col. 8)	Commissions received	Commissions paid			
1	2	3	4	5	6	7	8	9	10	11	
All categories of banks											
2013	1,748	8,755,419	89,485	228,193	138,708	28,039	40,618	12,579	5,861	– 820	122,565
2014	1,715	8,452,585	93,398	210,822	117,424	29,297	42,639	13,342	3,624	– 2,470	123,849
2015	1,679	8,605,560	95,887	200,861	104,974	30,461	44,542	14,081	3,734	– 2,196	127,886
2016	1,611	8,355,020	91,146	181,543	90,397	29,746	43,201	13,455	3,046	4,065	128,003
2017	1,538	8,251,175	85,486	165,387	79,901	30,559	44,190	13,631	5,572	1,304	122,921
2018	1,484	8,061,520	87,152	167,631	80,479	29,540	43,095	13,555	3,470	441	120,603
Commercial banks											
2013	183	3,669,592	32,689	62,225	29,536	15,946	22,387	6,441	4,136	– 861	51,910
2014	183	3,532,938	34,370	61,502	27,132	16,686	24,065	7,379	3,026	– 2,335	51,747
2015	177	3,678,042	36,282	60,993	24,711	17,337	25,183	7,846	2,867	– 2,320	54,166
2016	171	3,580,912	34,768	56,451	21,683	16,204	23,873	7,669	1,429	2,427	54,828
2017	172	3,532,639	30,887	54,373	23,486	16,027	23,832	7,805	4,074	– 83	50,905
2018	167	3,351,857	34,151	62,132	27,981	14,525	22,145	7,620	2,462	– 790	50,348
Big banks ⁷											
2013	4	2,798,461	19,235	36,200	16,965	10,698	13,043	2,345	3,821	– 2,086	31,668
2014	4	2,647,559	20,491	36,414	15,923	11,336	14,269	2,933	2,635	– 2,844	31,618
2015	4	2,736,876	22,151	36,394	14,243	11,762	14,569	2,807	2,496	– 3,732	32,677
2016	4	2,575,072	20,126	33,572	13,446	10,817	13,510	2,693	1,069	405	32,417
2017	4	2,400,315	16,369	30,216	13,847	10,205	12,929	2,724	3,701	– 1,712	28,563
2018	4	2,293,271	19,751	37,924	18,173	10,573	13,478	2,905	2,196	– 1,866	30,654
Regional banks and other commercial banks ⁷											
2013	160	822,706	13,161	25,462	12,301	5,119	9,200	4,081	295	1,153	19,728
2014	160	833,806	13,500	24,305	10,805	5,245	9,674	4,429	375	428	19,548
2015	154	884,457	13,832	23,939	10,107	5,469	10,492	5,023	353	1,348	21,002
2016	148	942,665	14,369	22,343	7,974	5,286	10,245	4,959	340	1,916	21,911
2017	149	1,048,189	14,237	23,545	9,308	5,712	10,779	5,067	350	1,516	21,815
2018	145	962,520	14,158	23,561	9,403	3,838	8,543	4,705	261	980	19,237
Branches of foreign banks											
2013	19	48,425	293	563	270	129	144	15	20	72	514
2014	19	51,573	379	783	404	105	122	17	16	81	581
2015	19	56,709	299	660	361	106	122	16	18	64	487
2016	19	63,175	273	536	263	101	118	17	20	106	500
2017	19	84,135	281	612	331	110	124	14	23	113	527
2018	18	96,066	242	647	405	114	124	10	5	96	457
Landesbanken ⁷											
2013	9	1,229,051	8,383	42,870	34,487	732	2,582	1,850	1,340	227	10,682
2014	9	1,139,438	8,243	36,437	28,194	847	2,632	1,785	112	– 37	9,165
2015	9	1,087,623	8,230	33,092	24,862	995	2,816	1,821	535	210	9,970
2016	9	975,957	7,558	27,464	19,906	1,216	2,810	1,594	1,026	289	10,089
2017	8	940,293	6,833	25,797	18,964	1,238	2,867	1,629	1,059	114	9,244
2018	6	803,978	5,300	24,749	19,449	1,081	2,380	1,299	634	175	7,190

For footnotes *, 1-7, see pp. 110 f.

												Financial year
General administrative spending			Operating result before the valuation of assets (col. 11 less col. 12)	Result from the valuation of assets (other than tangible or financial fixed assets)	Operating result (col. 15 plus col. 16)	Other and extraordinary result	Profit or loss (–) for the financial year before tax (col. 17 plus col. 18)	Taxes on income and earnings ⁵	Profit or loss (–) for the financial year after tax (col. 19 less col. 20)	Withdrawals from or transfers to (–) reserves and participation rights capital ⁶	Balance sheet profit or loss (–) (col. 21 plus col. 22)	
Total (col. 13 plus col. 14)	Staff costs	Total other administrative spending ⁴										
12	13	14	15	16	17	18	19	20	21	22	23	
All categories of banks												
84,798	43,756	41,042	37,767	– 6,542	31,225	– 9,271	21,954	7,376	14,578	– 16,232	– 1,654	2013
85,756	43,979	41,777	38,093	– 6,583	31,510	– 6,510	25,000	7,596	17,404	– 15,454	1,950	2014
90,033	46,039	43,994	37,853	– 3,497	34,356	– 7,791	26,565	8,445	18,120	– 15,436	2,684	2015
88,653	44,615	44,038	39,350	– 8,754	30,596	– 2,812	27,784	7,875	19,909	– 15,395	4,514	2016
88,389	44,563	43,826	34,532	– 3,619	30,913	– 3,398	27,515	7,536	19,979	– 16,777	3,202	2017
88,102	44,267	43,835	32,501	– 6,723	25,778	– 6,858	18,920	6,765	12,155	– 13,124	– 969	2018
Commercial banks												
37,800	16,903	20,897	14,110	– 2,036	12,074	– 5,769	6,305	1,812	4,493	– 2,794	1,699	2013
37,990	16,216	21,774	13,757	– 3,797	9,960	– 3,367	6,593	1,776	4,817	– 2,812	2,005	2014
40,961	17,530	23,431	13,205	– 1,183	12,022	– 6,890	5,132	1,969	3,163	– 1,870	1,293	2015
40,723	17,379	23,344	14,105	– 5,130	8,975	– 2,248	6,727	1,954	4,773	148	4,921	2016
40,400	17,160	23,240	10,505	– 540	9,965	– 3,536	6,429	1,885	4,544	– 4,064	480	2017
39,912	16,563	23,349	10,436	– 1,991	8,445	– 4,919	3,526	897	2,629	– 4,292	– 1,663	2018
Big banks ⁷												
24,792	11,174	13,618	6,876	– 958	5,918	– 2,367	3,551	1,036	2,515	– 756	1,759	2013
24,683	10,450	14,233	6,935	– 2,717	4,218	– 559	3,659	993	2,666	– 729	1,937	2014
27,101	11,422	15,679	5,576	85	5,661	– 2,953	2,708	1,082	1,626	– 216	1,410	2015
26,378	11,134	15,244	6,039	– 4,021	2,018	1,127	3,145	864	2,281	1,918	4,199	2016
25,324	10,489	14,835	3,239	666	3,905	– 1,126	2,779	559	2,220	– 433	1,787	2017
26,944	10,660	16,284	3,710	– 382	3,328	– 2,179	1,149	– 97	1,246	22	1,268	2018
Regional banks and other commercial banks ⁷												
12,757	5,617	7,140	6,971	– 1,076	5,895	– 3,402	2,493	690	1,803	– 2,017	– 214	2013
13,068	5,655	7,413	6,480	– 1,042	5,438	– 2,808	2,630	672	1,958	– 2,066	– 108	2014
13,562	5,987	7,575	7,440	– 1,267	6,173	– 3,937	2,236	802	1,434	– 1,633	– 199	2015
14,065	6,121	7,944	7,846	– 988	6,858	– 3,375	3,483	1,022	2,461	– 1,750	711	2016
14,795	6,538	8,257	7,020	– 1,252	5,768	– 2,405	3,363	1,257	2,106	– 3,612	– 1,506	2017
12,717	5,786	6,931	6,520	– 1,571	4,949	– 2,740	2,209	935	1,274	– 4,286	– 3,012	2018
Branches of foreign banks												
251	112	139	263	– 2	261	0	261	86	175	– 21	154	2013
239	111	128	342	– 38	304	0	304	111	193	– 17	176	2014
298	121	177	189	– 1	188	0	188	85	103	– 21	82	2015
280	124	156	220	– 121	99	0	99	68	31	– 20	11	2016
281	133	148	246	46	292	– 5	287	69	218	– 19	199	2017
251	117	134	206	– 38	168	0	168	59	109	– 28	81	2018
Landesbanken ⁷												
6,605	3,200	3,405	4,077	– 3,321	756	– 1,235	– 479	469	– 948	973	25	2013
6,498	3,261	3,237	2,667	– 1,580	1,087	– 1,455	– 368	511	– 879	1,406	527	2014
6,893	3,488	3,405	3,077	– 1,114	1,963	– 158	1,805	764	1,041	– 580	461	2015
6,412	2,889	3,523	3,677	– 3,725	– 48	– 499	– 547	505	– 1,052	182	– 870	2016
6,699	3,083	3,616	2,545	– 2,257	288	656	944	443	501	– 741	– 240	2017
5,498	2,770	2,728	1,692	– 2,623	– 931	– 91	– 1,022	603	– 1,625	– 128	– 1,753	2018

Profit and loss accounts, by category of banks* (cont'd)

Financial year	Number of reporting institutions	€ million									
		Total assets ¹	Interest business			Commissions business			Result from the trading portfolio	Other operating result	Operating income ³ (col. 3 plus col. 6 plus col. 9 plus col. 10)
			Net interest income (col. 4 less col. 5)	Interest received ²	Interest paid	Net commission income (col. 7 less col. 8)	Commissions received	Commissions paid			
1	2	3	4	5	6	7	8	9	10	11	
Savings banks⁷											
2013	417	1,098,581	23,117	37,298	14,181	6,241	6,633	392	19	-476	28,901
2014	416	1,110,362	23,237	35,028	11,791	6,441	6,854	413	8	-563	29,123
2015	413	1,130,688	23,285	32,807	9,522	6,776	7,211	435	-7	-260	29,794
2016	403	1,154,475	22,667	30,520	7,853	6,975	7,423	448	10	7	29,659
2017	390	1,179,915	22,018	28,577	6,559	7,590	8,069	479	6	169	29,783
2018	386	1,267,726	21,952	27,543	5,591	7,965	8,777	812	1	748	30,666
Credit cooperatives											
2013	1,078	750,899	16,881	25,539	8,658	4,182	5,083	901	10	417	21,490
2014	1,047	771,932	17,063	24,305	7,242	4,324	5,266	942	10	143	21,540
2015	1,021	798,178	17,077	22,705	5,628	4,564	5,570	1,006	5	132	21,778
2016	972	832,181	16,578	21,180	4,602	4,577	5,601	1,024	10	495	21,660
2017	915	868,255	16,475	20,250	3,775	4,957	6,071	1,114	10	437	21,879
2018	875	911,384	16,374	19,424	3,050	5,160	6,318	1,158	4	407	21,945
Mortgage banks⁷											
2013	17	482,524	1,828	18,864	17,036	58	267	209	2	-134	1,754
2014	17	421,014	2,007	16,232	14,225	14	225	211	-4	108	2,125
2015	16	376,908	2,245	15,323	13,078	-11	212	223	-2	9	2,241
2016	15	289,800	1,565	11,623	10,058	-43	176	219	0	14	1,536
2017	13	236,414	1,360	7,921	6,561	-48	158	206	0	-35	1,277
2018	11	233,165	1,732	6,975	5,243	-80	97	177	6	-27	1,631
Building and loan associations											
2013	22	204,540	3,144	7,381	4,237	-629	1,381	2,010	0	26	2,541
2014	21	210,066	3,037	7,126	4,089	-547	1,339	1,886	0	-53	2,437
2015	21	214,613	2,841	6,818	3,977	-590	1,375	1,965	0	-2	2,249
2016	20	215,668	2,503	6,233	3,730	-503	1,260	1,763	0	717	2,717
2017	20	227,924	2,634	5,995	3,361	-481	1,226	1,707	0	701	2,854
2018	20	233,865	2,653	5,661	3,008	-500	1,295	1,795	0	14	2,167
Banks with special, development and other central support tasks											
2013	22	1,320,232	3,443	34,016	30,573	1,509	2,285	776	354	-19	5,287
2014	22	1,266,835	5,441	30,192	24,751	1,532	2,258	726	472	267	7,712
2015	22	1,319,508	5,927	29,123	23,196	1,390	2,175	785	336	35	7,688
2016	21	1,306,027	5,507	28,072	22,565	1,320	2,058	738	571	116	7,514
2017	20	1,265,735	5,279	22,474	17,195	1,276	1,967	691	423	1	6,979
2018	19	1,259,545	4,990	21,147	16,157	1,389	2,083	694	363	-86	6,656
Memo item: Banks majority-owned by foreign banks⁸											
2013	37	692,773	8,266	15,323	7,057	2,633	4,282	1,649	1,106	301	12,306
2014	35	680,177	8,347	14,546	6,199	3,025	4,966	1,941	343	-45	11,670
2015	33	735,491	8,383	13,502	5,119	2,919	4,834	1,915	435	456	12,193
2016	34	762,620	8,950	13,098	4,148	3,157	5,057	1,900	718	402	13,227
2017	34	765,500	8,801	12,037	3,236	3,589	5,218	1,629	812	891	14,093
2018	33	763,177	9,262	12,327	3,065	3,053	4,711	1,658	436	-347	12,404

* The figures for the most recent date should be regarded as provisional in all cases. **1** Excluding the total assets of the foreign branches of savings banks and of the foreign branches of regional institutions of credit cooperatives until 2015 and, from 2016, excluding the total assets of the foreign branches of mortgage banks. **2** Interest received plus current income and profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement. **3** Net inter-Deutsche Bundesbank

est and commission income plus result from the trading portfolio and other operating result. **4** Including depreciation of and value adjustments to tangible and intangible assets, but excluding depreciation of and value adjustments to assets leased ("broad" definition). **5** In part, including taxes paid by legally dependent building and loan associations affiliated to Landesbanken. **6** Including profit or loss brought forward and withdrawals from or transfers to the fund for general

												Financial year
General administrative spending			Operating result before the valuation of assets (col. 11 less col. 12)	Result from the valuation of assets (other than tangible or financial fixed assets)	Operating result (col. 15 plus col. 16)	Other and extraordinary result	Profit or loss (–) for the financial year before tax (col. 17 plus col. 18)	Taxes on income and earnings ⁵	Profit or loss (–) for the financial year after tax (col. 19 less col. 20)	Withdrawals from or transfers to (–) reserves and participation rights capital ⁶	Balance sheet profit or loss (–) (col. 21 plus col. 22)	
Total (col. 13 plus col. 14)	Staff costs	Total other administrative spending ⁴										
12	13	14	15	16	17	18	19	20	21	22	23	
Savings banks ⁷												
19,410	12,085	7,325	9,491	130	9,621	– 1,020	8,601	2,664	5,937	– 4,401	1,536	2013
19,891	12,606	7,285	9,232	1	9,233	– 593	8,640	2,794	5,846	– 4,288	1,558	2014
20,517	12,946	7,571	9,277	92	9,369	– 392	8,977	2,913	6,064	– 4,491	1,573	2015
20,110	12,587	7,523	9,549	1,062	10,611	– 386	10,225	2,939	7,286	– 5,728	1,558	2016
19,991	12,646	7,345	9,792	283	10,075	– 153	9,922	2,861	7,061	– 5,517	1,544	2017
20,926	13,012	7,914	9,740	– 676	9,064	– 790	8,274	2,775	5,499	– 4,045	1,454	2018
Credit cooperatives												
13,886	8,303	5,583	7,604	322	7,926	– 276	7,650	1,956	5,694	– 4,285	1,409	2013
14,201	8,538	5,663	7,339	– 198	7,141	– 153	6,988	2,077	4,911	– 3,480	1,431	2014
14,509	8,754	5,755	7,269	– 453	6,816	– 134	6,682	2,103	4,579	– 3,226	1,353	2015
14,423	8,649	5,774	7,237	103	7,340	– 361	7,701	2,104	5,597	– 4,246	1,351	2016
14,382	8,583	5,799	7,497	– 186	7,311	– 33	7,278	2,199	5,079	– 3,774	1,305	2017
14,518	8,563	5,955	7,427	– 917	6,510	– 174	6,336	2,079	4,257	– 2,983	1,274	2018
Mortgage banks ⁷												
1,322	525	797	432	– 405	27	90	117	88	29	– 4,775	– 4,746	2013
1,241	529	712	884	– 278	606	– 772	– 166	103	– 269	– 1,714	– 1,983	2014
1,147	492	655	1,094	– 327	767	– 20	747	98	649	– 1,385	– 736	2015
937	410	527	599	– 113	486	39	525	127	398	– 1,138	– 740	2016
897	411	486	380	32	412	75	487	171	316	– 722	– 406	2017
975	449	526	656	– 341	315	– 95	220	128	92	– 795	– 703	2018
Building and loan associations												
1,867	701	1,166	674	– 88	586	– 145	441	194	247	– 104	143	2013
1,893	752	1,141	544	284	828	– 65	763	255	508	– 389	119	2014
1,749	721	1,028	500	– 72	428	– 2	426	78	348	– 4	344	2015
1,798	692	1,106	919	22	941	– 51	890	160	730	– 548	182	2016
1,891	719	1,172	963	– 61	902	89	991	155	836	– 622	214	2017
1,921	696	1,225	246	22	268	– 14	254	137	117	13	130	2018
Banks with special, development and other central support tasks												
3,908	2,039	1,869	1,379	– 1,144	235	– 916	– 681	193	– 874	– 846	– 1,720	2013
4,042	2,077	1,965	3,670	– 1,015	2,655	– 105	2,550	80	2,470	– 4,177	– 1,707	2014
4,257	2,108	2,149	3,431	– 440	2,991	– 195	2,796	520	2,276	– 3,880	– 1,604	2015
4,250	2,009	2,241	3,264	– 973	2,291	– 28	2,263	86	2,177	– 4,065	– 1,888	2016
4,129	1,961	2,168	2,850	– 890	1,960	– 496	1,464	– 178	1,642	– 1,337	305	2017
4,352	2,214	2,138	2,304	– 197	2,107	– 775	1,332	146	1,186	– 894	292	2018
Memo item: Banks majority-owned by foreign banks ⁸												
8,230	3,773	4,457	4,076	– 474	3,602	– 1,481	2,121	513	1,608	– 558	1,050	2013
7,920	3,516	4,404	3,750	– 439	3,311	– 1,308	2,003	320	1,683	– 725	958	2014
8,503	3,992	4,511	3,690	– 479	3,211	– 1,723	1,488	430	1,058	– 396	662	2015
9,072	4,329	4,743	4,155	– 1,012	3,143	– 1,604	1,539	636	903	2,646	3,549	2016
8,817	4,070	4,747	5,276	– 590	4,686	– 1,819	2,867	808	2,059	– 565	1,494	2017
8,731	4,065	4,666	3,673	– 992	2,681	– 992	1,689	575	1,114	– 518	596	2018

banking risks. ⁷ From 2018, DB Privat- und Firmenkundenbank AG (merger between Deutsche Postbank AG, belonging to the category "Big banks", with Deutsche Bank Privat- und Geschäftskunden AG, belonging to the category "Regional banks and other commercial banks") allocated to the category "Big banks". HSH Nordbank allocated to the category "Regional banks and other commercial banks" and Landesbank Berlin allocated to the category "Savings banks". DSK

Hyp AG (formerly SEB AG) allocated to the category "Mortgage banks". Wüstenrot Bank Aktiengesellschaft Pfandbriefbank allocated to the category "Regional banks and other commercial banks". ⁸ Separate presentation of the (legally independent) banks majority-owned by foreign banks and included in other categories of banks.

Credit institutions' charge and income items*

Financial year	Number of reporting institutions	Charges, € billion											
		Total	Interest paid	Commissions paid	Net loss from the trading portfolio ¹	Gross loss on transactions in goods and subsidiary transactions	General administrative spending						
							Total	Staff costs			Social security costs and costs relating to pensions and other benefits	Other administrative spending ¹	
								Total	Wages and salaries	of which: Pensions			
2010	1,821	329.1	174.7	13.7	0.7	0.0	78.7	43.1	35.2	7.9	2.3	35.6	
2011	1,801	367.1	208.3	12.8	1.2	0.0	78.6	42.5	34.7	7.8	2.4	36.1	
2012	1,776	329.0	179.2	12.5	0.2	0.0	80.9	44.6	35.5	9.1	3.4	36.3	
2013	1,748	285.8	138.7	12.6	0.3	0.0	81.1	43.8	35.2	8.6	2.9	37.4	
2014	1,715	262.8	117.4	13.3	0.4	0.0	82.0	44.0	35.3	8.7	3.2	38.0	
2015	1,679	256.6	105.0	14.1	0.5	0.0	86.0	46.0	36.4	9.6	3.7	39.9	
2016	1,611	240.9	90.4	13.5	0.2	0.0	84.4	44.6	36.1	8.6	2.7	39.8	
2017	1,538	224.1	79.9	13.6	0.0	0.0	84.0	44.6	35.6	8.9	2.9	39.4	
2018	1,484	226.8	80.5	13.6	0.0	0.0	83.6	44.3	34.6	9.7	3.9	39.3	

Financial year	Income, € billion									
	Total	Interest received			Current income				Profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement	Commissions received
		Total	from lending and money market transactions	from debt securities and Debt Register claims	Total	from shares and other variable yield securities	from participating interests ³	from shares in affiliated enterprises		
2010	342.0	255.5	212.0	43.5	12.4	7.2	1.0	4.3	2.1	42.0
2011	392.0	288.8	246.1	42.7	11.2	6.7	1.2	3.3	3.0	41.1
2012	351.0	256.3	220.3	36.0	12.2	7.5	1.0	3.8	6.2	40.0
2013	300.4	213.6	184.9	28.7	10.0	6.0	1.0	3.0	4.6	40.6
2014	280.2	196.4	170.2	26.1	11.3	6.3	1.1	4.0	3.1	42.6
2015	274.7	183.1	160.1	22.9	15.0	6.7	1.8	6.5	2.8	44.5
2016	260.8	166.8	147.1	19.7	10.0	5.8	1.3	2.9	4.7	43.2
2017	244.1	151.0	134.4	16.5	11.0	6.9	1.1	3.0	3.4	44.2
2018	238.9	152.2	136.7	15.5	10.0	5.3	1.1	3.5	5.4	43.1

* The figures for the most recent date should be regarded as provisional in all cases. ¹ Spending item does not include depreciation of and value adjustments to tangible and intangible assets, shown net of depreciation of assets leased ("narrow" definition). All other tables are based on a broad definition of "other administrative" items.

Total	of which: Assets leased	Other operating charges	Depreci- ation of and value adjust- ments to loans and advances, and provi- sions for contingent liabilities and for commit- ments	Depreci- ation of and value adjust- ments to participat- ing inter- ests, shares in affiliated enterprises and securities treated as fixed assets	Charges incurred from loss transfers	Transfers to special reserves	Extra- ordinary charges	Taxes on income and earnings ²	Other taxes	Profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement	Financial year
3.9	0.5	11.5	18.4	4.0	3.9	0.0	10.4	5.5	0.3	3.2	2010
5.4	2.0	17.2	11.9	11.2	6.6	0.0	2.7	7.0	0.6	3.6	2011
5.8	2.0	15.3	11.7	7.1	0.6	0.0	2.4	8.8	0.2	4.3	2012
5.5	1.9	16.8	10.6	3.6	0.7	0.0	3.4	7.4	0.2	4.9	2013
5.5	1.8	16.4	10.5	3.5	0.6	0.0	1.5	7.6	0.2	3.9	2014
5.9	1.8	17.9	7.2	3.6	1.2	0.0	2.5	8.4	0.3	4.1	2015
6.6	2.3	13.8	12.7	3.7	0.9	0.0	1.8	7.9	0.3	4.7	2016
7.0	2.6	14.8	8.3	1.5	0.6	0.0	2.3	7.5	0.3	4.3	2017
7.4	2.9	15.0	10.0	1.7	0.5	0.0	1.8	6.8	0.2	5.7	2018

Net profit from the trading portfolio	Gross profit on trans- actions in goods and subsidiary transactions	Value readjust- ments in respect of loans and advances, and provisions for contingent liabilities and for commit- ments	Value re- adjustments in respect of participating interests, shares in affiliated enterprises and securities treated as fixed assets	Other operating income		Income from the release of special reserves	Extraordinary income	Income from loss transfers	Financial year
				Total	of which: from leasing business				
6.4	0.2	3.0	1.6	11.5	0.9	0.0	6.1	1.2	2010
5.8	0.2	15.0	0.7	20.2	6.3	0.0	0.8	5.2	2011
7.4	0.2	7.4	1.4	18.9	5.1	0.0	0.7	0.5	2012
6.2	0.2	4.0	1.5	17.9	4.7	0.0	0.9	0.9	2013
4.0	0.2	4.0	1.7	15.7	4.5	0.0	0.8	0.4	2014
4.2	0.2	3.8	1.9	17.6	4.7	0.0	0.5	1.1	2015
3.3	0.2	4.0	3.4	20.3	5.5	0.0	4.9	0.0	2016
5.6	0.2	4.7	3.1	18.8	6.0	0.0	1.6	0.6	2017
3.5	0.2	3.3	0.9	18.4	6.3	0.0	1.3	0.7	2018

istrative spending". ² In part, including taxes paid by legally dependent building and loan associations affiliated to Landesbanken. ³ Including amounts paid up on cooperative society shares.

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	M3 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							% p.a. as a monthly average			
2017 Nov.	9.1	5.2	4.9	4.9	3.9	2.9	- 1.3	- 0.35	- 0.33	0.9	
Dec.	8.8	5.2	4.7	4.7	3.6	2.6	- 1.1	- 0.34	- 0.33	0.9	
2018 Jan.	8.8	5.2	4.6	4.5	3.5	2.9	- 0.6	- 0.36	- 0.33	1.1	
Feb.	8.4	4.8	4.3	4.2	3.3	2.6	- 1.0	- 0.36	- 0.33	1.2	
Mar.	7.5	4.3	3.6	3.9	2.8	2.4	- 0.6	- 0.36	- 0.33	1.1	
Apr.	7.1	4.2	3.8	3.8	2.8	2.7	- 0.5	- 0.37	- 0.33	1.0	
May	7.5	4.6	4.0	4.0	3.3	3.2	- 0.8	- 0.36	- 0.33	1.1	
June	7.4	4.7	4.3	4.1	3.1	2.8	- 0.9	- 0.36	- 0.32	1.1	
July	7.0	4.4	4.0	3.9	3.4	3.3	- 0.6	- 0.36	- 0.32	1.0	
Aug.	6.5	4.0	3.5	3.7	3.3	3.4	- 0.7	- 0.36	- 0.32	1.1	
Sep.	6.9	4.3	3.6	3.6	3.2	3.2	0.0	- 0.36	- 0.32	1.2	
Oct.	6.8	4.4	3.8	3.7	2.9	2.9	0.6	- 0.37	- 0.32	1.3	
Nov.	6.7	4.3	3.7	3.9	2.6	2.8	0.6	- 0.36	- 0.32	1.2	
Dec.	6.6	4.3	4.1	3.9	2.8	3.0	0.7	- 0.36	- 0.31	1.1	
2019 Jan.	6.2	4.0	3.7	4.0	2.7	2.9	0.8	- 0.37	- 0.31	1.0	
Feb.	6.6	4.5	4.1	4.1	3.0	3.2	1.4	- 0.37	- 0.31	0.9	
Mar.	7.5	5.2	4.5	4.5	2.7	3.0	1.3	- 0.37	- 0.31	0.8	
Apr.	7.4	5.3	4.7	4.7	2.7	3.2	1.1	- 0.37	- 0.31	0.8	
May	7.2	5.2	4.8	4.7	2.2	2.8	1.3	- 0.37	- 0.31	0.7	
June	7.2	5.0	4.5	4.8	2.3	3.1	2.1	- 0.36	- 0.33	0.4	
July	7.8	5.5	5.2	...	2.2	3.0	1.9	- 0.37	- 0.36	0.2	
Aug.	...	...	...	...	...	...	...	- 0.36	- 0.41	- 0.1

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 4
	€ million								EUR 1 = USD ... Q1 1999 = 100		
2017 Nov.	+ 39,121	+ 33,281	- 5,116	- 58,948	+ 24,346	+ 1,610	+ 21,712	+ 6,164	1.1738	98.5	93.1
Dec.	+ 46,006	+ 29,489	+ 104,577	+ 51,429	- 8,935	+ 2,518	+ 61,170	- 1,604	1.1836	98.8	93.3
2018 Jan.	+ 8,881	+ 10,354	+ 4,616	+ 41,911	+ 2,085	- 4,354	- 37,226	+ 2,201	1.2200	99.4	93.9
Feb.	+ 18,586	+ 22,067	+ 28,042	+ 3,299	+ 63,969	- 492	- 38,686	- 49	1.2348	99.6	93.9
Mar.	+ 44,364	+ 34,091	+ 51,820	+ 79,303	- 60,033	- 597	+ 23,987	+ 9,160	1.2336	99.7	94.2
Apr.	+ 31,891	+ 23,177	+ 6,912	+ 30,997	+ 22,556	+ 13,894	- 56,884	- 3,651	1.2276	99.5	94.0
May	+ 9,347	+ 22,618	+ 20,946	- 3,194	+ 51,932	+ 15,231	- 45,382	+ 2,358	1.1812	98.1	92.7
June	+ 30,678	+ 27,654	+ 13,927	- 12,103	- 20,925	+ 8,508	+ 30,586	+ 7,861	1.1678	97.9	92.6
July	+ 30,160	+ 24,756	- 7,221	- 4,292	+ 1,306	+ 13,966	- 13,914	- 4,287	1.1686	99.2	93.8
Aug.	+ 28,158	+ 17,979	+ 40,493	- 11,823	+ 76,859	+ 14,225	- 41,988	+ 3,220	1.1549	99.0	93.4
Sep.	+ 27,028	+ 18,879	+ 51,985	- 911	- 29,694	+ 6,687	+ 73,571	+ 2,331	1.1659	99.5	93.9
Oct.	+ 33,991	+ 24,183	- 26,513	+ 4,595	- 7,187	+ 11,698	- 34,869	- 750	1.1484	98.9	93.4
Nov.	+ 30,445	+ 27,825	+ 37,568	- 47,528	+ 13,476	+ 16,128	+ 52,036	+ 3,456	1.1367	98.3	92.9
Dec.	+ 42,186	+ 25,726	+ 56,782	- 44,432	+ 101,998	+ 2,045	- 5,951	+ 3,122	1.1384	98.4	92.7
2019 Jan.	+ 11,379	+ 9,694	+ 2,614	+ 14,789	- 21,599	- 972	+ 11,164	- 2,711	1.1416	97.8	92.2
Feb.	+ 18,884	+ 26,262	+ 2,792	+ 12,871	- 23,727	- 1,108	+ 14,536	+ 220	1.1351	97.4	91.7
Mar.	+ 33,326	+ 31,759	+ 52,137	+ 24,314	- 44,128	+ 6,764	+ 59,970	+ 5,218	1.1302	96.9	91.1
Apr.	+ 21,423	+ 24,414	- 23,300	- 44,782	+ 18,051	+ 3,102	- 2,837	+ 3,164	1.1238	96.7	91.0
May	+ 13,494	+ 29,085	+ 40,864	+ 17,067	- 58,496	+ 2,163	+ 78,331	+ 1,799	1.1185	97.4	91.4
June	+ 23,092	+ 27,640	+ 51,344	+ 9,875	- 11,153	+ 7,807	+ 47,017	- 2,202	1.1293	97.9	91.9
July	...	...	...	...	...	...	...	...	1.1218	97.5	p 91.4
Aug.	...	...	...	...	...	...	...	...	1.1126	98.1	p 91.9

* Source: ECB, according to the international standards of the International Monetary Fund's Balance of Payments Manual (sixth edition). 1 Monthly averages, see also

Tables XII.10 and 12, pp. 82-83*. 2 Including employee stock options. 3 Against the currencies of the EER-19 group. 4 Based on consumer price indices.

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										
Annual percentage change										
2016	1.9	1.5	2.2	3.5	2.8	1.1	- 0.2	3.7	1.1	2.1
2017	2.5	1.7	2.5	4.9	3.0	2.3	1.5	8.1	1.7	4.6
2018	1.9	1.4	1.5	3.9	1.7	1.7	1.9	8.2	0.9	4.8
2018 Q1	2.6	1.5	1.6	4.7	2.1	2.2	2.3	12.1	1.2	4.0
Q2	2.3	1.5	2.5	4.5	2.1	1.8	1.4	10.4	1.2	5.3
Q3	1.7	1.6	1.1	4.7	1.8	1.7	2.4	7.4	0.5	4.5
Q4	1.2	1.2	0.9	5.1	0.7	1.3	1.6	3.6	0.5	5.2
2019 Q1	1.3	1.3	0.8	5.0	0.9	1.0	0.5	7.4	- 0.2	3.0
Q2	1.2	1.2	0.0	3.6	1.2	1.4	1.9	5.8	- 0.1	2.0
Industrial production ²										
Annual percentage change										
2016	1.6	4.5	1.2	3.0	4.1	0.6	2.6	1.8	1.9	4.7
2017	2.9	2.9	3.4	4.3	3.4	2.4	4.1	- 2.2	3.6	8.7
2018	0.9	1.2	1.0	4.1	3.5	0.3	1.8	- 0.1	0.6	2.0
2018 Q1	3.0	2.7	3.8	4.6	6.2	2.3	0.1	- 2.3	3.4	4.4
Q2	2.2	1.3	2.8	3.1	2.6	0.4	2.0	4.1	1.7	0.2
Q3	0.5	- 0.5	- 0.1	3.7	3.4	0.1	2.5	5.9	- 0.3	2.9
Q4	- 1.9	1.1	- 2.3	5.1	2.2	- 1.8	2.6	- 6.4	- 2.4	0.8
2019 Q1	- 0.5	3.1	- 2.7	3.4	0.5	0.5	1.7	2.6	- 0.6	- 0.8
Q2	- 1.3	6.4	P - 5.1	- 0.6	3.2	1.3	1.0	4.0	- 1.1	1.3
Capacity utilisation in industry ³										
As a percentage of full capacity										
2016	81.6	80.0	84.6	73.6	78.0	83.2	67.6	78.3	76.3	72.6
2017	83.0	81.8	86.6	74.9	82.3	84.7	70.0	79.5	76.8	74.5
2018	83.9	81.0	87.7	74.4	84.1	85.9	70.8	76.2	78.1	76.4
2018 Q2	84.0	81.2	87.8	73.9	84.3	85.9	71.2	76.1	78.1	76.3
Q3	83.8	79.9	87.8	75.2	84.7	85.9	70.7	74.6	77.9	77.4
Q4	83.6	80.8	87.1	73.0	84.1	85.7	70.9	77.0	77.9	75.9
2019 Q1	83.6	81.5	86.3	75.2	83.2	85.2	70.2	80.3	78.4	77.0
Q2	82.8	81.3	85.3	73.5	80.8	85.1	71.7	76.9	77.5	76.9
Q3	81.9	81.2	83.9	72.5	81.6	84.0	71.8	74.1	77.0	75.9
Standardised unemployment rate ⁴										
As a percentage of civilian labour force										
2016	10.0	7.8	4.1	6.8	8.8	10.1	23.6	8.4	11.7	9.7
2017	9.1	7.1	3.8	5.8	8.6	9.4	21.5	6.8	11.2	8.7
2018	8.2	6.0	3.4	5.4	7.4	9.1	19.3	5.8	10.6	7.5
2019 Mar.	7.7	5.5	3.4	4.1	6.7	8.6	18.1	5.0	10.1	6.5
Apr.	7.6	5.5	3.1	5.0	6.7	8.5	17.4	5.2	10.1	6.4
May	7.6	5.5	3.1	5.0	6.7	8.5	17.1	5.2	9.9	6.4
June	7.5	5.6	3.1	4.6	6.6	8.5	17.0	5.3	9.8	6.5
July	7.5	5.7	3.1	...	6.7	8.5	...	5.3	9.9	6.5
Aug.	...	...	...	...	...	...	...	5.2	...	...
Harmonised Index of Consumer Prices										
Annual percentage change										
2016	0.2	1.8	0.4	0.8	0.4	0.3	0.0	- 0.2	- 0.1	0.1
2017	1.5	2.2	1.7	3.7	0.8	1.2	1.1	0.3	1.3	2.9
2018	1.8	2.3	1.9	3.4	1.2	2.1	0.8	0.7	1.2	2.6
2019 Mar.	1.4	2.2	1.4	2.2	1.1	1.3	1.0	1.1	1.1	2.7
Apr.	1.7	2.0	2.1	3.2	1.5	1.5	1.1	1.7	1.1	3.3
May	1.2	1.7	1.3	3.1	1.3	1.1	0.6	1.0	0.9	3.5
June	1.3	1.3	1.5	2.6	1.1	1.4	0.2	1.1	0.8	3.1
July	1.0	1.2	1.1	2.0	1.0	1.3	0.4	0.5	0.3	3.0
Aug.	1.0	0.9	1.0	2.1	1.2	1.3	e 0.1	0.6	0.5	3.1
General government financial balance ⁵										
As a percentage of GDP										
2016	- 1.6	- 2.4	1.2	- 0.3	- 1.7	- 3.5	0.5	- 0.7	- 2.5	0.1
2017	- 1.0	- 0.8	1.2	- 0.4	- 0.8	- 2.8	0.7	- 0.3	- 2.4	- 0.6
2018	- 0.5	- 0.7	1.9	- 0.6	- 0.7	- 2.5	1.1	0.0	- 2.1	- 1.0
General government debt ⁵										
As a percentage of GDP										
2016	89.2	106.1	69.1	9.2	63.0	98.0	178.5	73.5	131.4	40.3
2017	87.1	103.4	65.2	9.2	61.3	98.4	176.2	68.5	131.4	40.0
2018	85.1	102.0	61.7	8.4	58.9	98.4	181.1	64.8	132.2	35.9

Sources: Eurostat, European Commission, European Central Bank, Federal Statistical Office, Bundesbank calculations. Latest data are partly based on press reports and

are provisional. **1** Euro area: quarterly data seasonally adjusted. **2** Manufacturing, mining and energy: adjusted for working-day variations. **3** Manufacturing: quarterly

I. Key economic data for the euro area

Lithuania	Luxembourg	Malta	Netherlands	Austria	Portugal	Slovakia	Slovenia	Spain	Cyprus	Period
Real gross domestic product ¹										
Annual percentage change										
2.4	2.4	5.7	2.2	2.0	1.9	3.1	3.1	3.0	4.8	2016
4.1	1.5	6.7	2.9	2.6	2.8	3.2	4.8	2.9	4.5	2017
3.5	2.6	6.8	2.6	2.7	2.1	4.1	4.1	2.4	3.9	2018
3.7	3.1	5.0	2.8	3.7	2.1	3.7	4.3	2.6	4.0	2018 Q1
3.8	3.1	7.1	3.0	2.7	2.6	4.5	3.7	2.4	4.0	Q2
2.6	2.6	7.7	2.5	2.2	2.1	4.6	4.6	2.0	3.8	Q3
3.8	1.7	7.1	2.2	2.4	1.7	3.6	3.8	2.4	3.8	Q4
4.2	1.6	5.4	1.7	1.5	1.9	3.7	3.3	2.1	3.2	2019 Q1
3.9	...	4.0	2.0	1.7	1.5	2.0	2.5	1.9	3.0	Q2
Industrial production ²										
Annual percentage change										
2.7	0.2	- 7.3	1.3	2.8	2.4	4.6	7.8	1.7	9.1	2016
6.8	3.7	8.8	1.3	5.5	3.5	3.3	8.4	3.3	7.5	2017
5.2	- 1.3	1.3	0.6	3.7	0.1	4.4	5.0	0.4	7.1	2018
7.1	1.8	2.0	2.4	5.0	2.2	1.3	8.9	2.9	5.2	2018 Q1
5.2	- 2.3	0.8	1.5	5.1	0.9	5.8	6.9	1.3	10.5	Q2
2.9	- 2.6	- 1.9	0.1	2.4	- 1.3	6.0	3.6	0.4	6.1	Q3
5.7	- 2.1	4.5	- 1.6	2.3	- 1.4	4.6	0.8	- 2.9	6.3	Q4
4.8	- 1.5	- 2.1	- 1.2	5.5	- 4.1	6.7	4.4	- 0.2	5.7	2019 Q1
5.4	- 1.3	0.4	- 1.7	p - 0.8	- 2.5	3.0	3.1	1.3	1.6	Q2
Capacity utilisation in industry ³										
As a percentage of full capacity										
75.9	76.9	79.1	81.7	84.3	80.2	84.5	83.5	78.6	59.8	2016
77.2	81.5	80.3	82.5	86.7	80.4	85.3	85.1	78.7	59.1	2017
77.5	81.2	80.3	84.0	88.7	81.6	85.4	85.3	79.5	61.4	2018
77.5	82.0	77.6	83.6	88.7	81.4	86.3	86.0	80.3	60.9	2018 Q2
77.2	80.8	83.2	84.4	88.7	82.0	84.0	84.6	79.3	61.8	Q3
77.4	79.0	79.1	84.0	88.5	81.2	87.6	85.6	78.6	62.5	Q4
77.5	80.1	77.1	84.4	87.0	77.8	88.2	85.2	80.8	61.5	2019 Q1
76.9	79.7	78.2	84.3	87.2	79.4	89.1	84.8	80.4	66.0	Q2
77.5	80.3	75.9	84.1	86.7	80.1	89.4	83.6	80.8	64.2	Q3
Standardised unemployment rate ⁴										
As a percentage of civilian labour force										
7.9	6.3	4.7	6.0	6.0	11.2	9.7	8.1	19.6	13.0	2016
7.1	5.6	4.0	4.9	5.6	9.0	8.1	6.6	17.3	11.1	2017
6.2	5.5	3.7	3.9	4.9	7.1	6.6	5.1	15.3	8.4	2018
6.0	5.6	3.4	3.3	4.8	6.5	5.6	4.5	14.2	7.5	2019 Mar.
6.1	5.7	3.5	3.3	4.7	6.6	5.5	4.5	14.2	7.5	Apr.
6.1	5.7	3.5	3.3	4.6	6.6	5.4	4.5	14.1	7.3	May
6.2	5.7	3.4	3.4	4.5	6.6	5.4	4.5	14.0	7.2	June
6.4	5.7	3.4	3.4	4.4	6.5	5.3	4.5	13.9	7.0	July
...	...	...	...	...	...	...	...	...	...	Aug.
Harmonised Index of Consumer Prices										
Annual percentage change										
0.7	0.0	0.9	0.1	1.0	0.6	- 0.5	- 0.2	- 0.3	- 1.2	2016
3.7	2.1	1.3	1.3	2.2	1.6	1.4	1.6	2.0	0.7	2017
2.5	2.0	1.7	1.6	2.1	1.2	2.5	1.9	1.7	0.8	2018
2.6	2.4	1.3	2.9	1.7	0.8	2.7	1.6	1.3	1.1	2019 Mar.
2.7	2.2	1.7	3.0	1.7	0.9	2.4	1.8	1.6	1.2	Apr.
2.5	2.2	1.7	2.3	1.7	0.3	2.7	1.6	0.9	0.2	May
2.4	1.5	1.8	2.7	1.6	0.7	2.7	1.9	0.6	0.3	June
2.5	1.6	1.8	2.6	1.4	- 0.7	3.0	2.0	0.6	0.1	July
2.5	e 1.4	1.9	3.1	1.4	- 0.1	3.0	e 2.4	0.4	0.6	Aug.
General government financial balance ⁵										
As a percentage of GDP										
0.2	1.9	0.9	0.0	- 1.6	- 2.0	- 2.2	- 1.9	- 4.5	0.3	2016
0.5	1.4	3.4	1.2	- 0.8	- 3.0	- 0.8	0.0	- 3.1	1.8	2017
0.7	2.4	2.0	1.5	0.1	- 0.5	- 0.7	0.7	- 2.5	- 4.8	2018
General government debt ⁵										
As a percentage of GDP										
40.0	20.7	55.5	61.9	83.0	129.2	51.8	78.7	99.0	105.5	2016
39.4	23.0	50.2	57.0	78.2	124.8	50.9	74.1	98.1	95.8	2017
34.2	21.4	46.0	52.4	73.8	121.5	48.9	70.1	97.1	102.5	2018

data seasonally adjusted. Data collection at the beginning of the quarter. **4** Monthly data seasonally adjusted. Germany: Bundesbank calculation based on unadjusted

data from the Federal Statistical Office. **5** According to Maastricht Treaty definition.

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								
2017 Dec.	- 107.5	- 89.3	- 8.8	- 18.2	- 8.6	16.9	- 151.8	- 168.7	- 2.0	11.4	- 0.6	- 7.9	- 4.9
2018 Jan.	124.7	83.9	26.4	40.8	27.6	- 43.9	152.4	196.3	11.6	- 8.5	- 0.1	22.0	- 1.8
Feb.	7.6	3.4	- 0.3	4.2	20.8	- 11.5	46.9	58.3	- 16.3	- 0.8	- 0.5	- 13.3	- 1.8
Mar.	65.9	61.0	1.5	4.9	6.9	81.6	- 65.9	- 147.5	13.3	- 6.0	- 0.4	1.9	17.7
Apr.	66.2	65.1	52.5	1.1	- 0.7	- 75.3	41.9	117.2	- 5.6	- 1.1	- 0.5	- 2.5	- 1.5
May	122.3	88.1	11.0	34.2	39.9	- 35.5	120.6	156.1	- 4.5	- 7.4	- 0.4	1.2	2.1
June	- 5.6	- 23.0	- 22.3	17.3	20.5	77.3	- 67.6	- 144.9	- 8.4	- 4.8	- 0.4	- 7.7	4.6
July	67.7	66.9	19.9	0.8	3.4	- 25.3	41.6	66.9	10.4	6.1	- 0.6	- 8.3	13.1
Aug.	- 2.2	- 13.6	- 4.8	11.4	22.7	- 27.3	- 1.3	26.0	4.1	- 8.3	- 0.4	1.4	11.4
Sep.	25.3	22.4	- 11.2	2.9	7.1	65.6	- 26.5	- 92.1	23.9	- 12.5	- 0.5	22.3	14.6
Oct.	11.8	17.5	3.1	- 5.7	- 7.5	- 13.2	72.4	85.6	8.0	- 6.5	- 0.2	3.8	10.9
Nov.	92.0	91.5	12.1	0.5	2.0	72.9	35.0	- 37.9	3.7	- 4.2	- 1.0	4.0	4.9
Dec.	- 89.0	- 69.5	- 21.2	- 19.5	- 21.4	- 0.4	- 162.8	- 162.4	4.7	16.4	0.1	- 7.9	- 4.0
2019 Jan.	126.1	70.3	15.1	55.8	44.3	- 1.8	196.3	198.1	21.5	- 8.7	0.1	25.4	4.8
Feb.	52.8	42.4	17.3	10.4	24.1	20.7	- 32.6	- 53.3	20.8	0.6	- 0.1	26.0	- 5.7
Mar.	15.4	41.5	2.1	- 26.1	- 26.2	63.9	- 0.4	- 64.3	7.5	- 1.8	0.0	- 5.7	15.0
Apr.	68.8	89.8	26.7	- 21.0	- 20.6	- 6.4	114.3	120.7	- 16.9	- 5.2	0.2	- 10.5	- 1.4
May	39.1	36.7	12.7	2.4	3.3	61.2	67.6	6.3	10.0	- 2.9	0.6	6.6	5.7
June	1.5	22.7	- 13.8	- 21.1	- 20.3	80.6	- 12.1	- 92.7	45.7	20.0	1.1	8.6	16.0
July	48.6	58.5	- 4.5	- 9.9	- 12.6	37.1	162.9	125.8	- 1.5	- 23.9	0.4	4.4	17.7

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								
2017 Dec.	- 5.4	- 3.5	4.3	- 1.8	1.0	- 48.9	- 8.1	40.8	2.6	- 0.3	- 0.6	- 1.9	5.3
2018 Jan.	19.1	21.3	2.0	- 2.2	- 1.3	10.1	28.1	18.0	4.9	- 3.0	- 0.7	14.2	- 5.6
Feb.	5.1	10.7	- 1.7	- 5.6	- 0.2	- 20.7	11.6	32.4	- 5.3	- 0.9	- 0.6	- 1.0	- 2.9
Mar.	7.2	9.7	- 2.2	- 2.5	- 0.6	7.9	- 5.2	- 13.1	3.1	- 2.6	- 0.4	4.0	2.2
Apr.	7.3	7.2	0.9	0.1	- 0.7	- 5.0	- 13.9	- 8.9	- 2.3	- 0.6	- 0.5	- 3.1	1.9
May	19.2	21.2	5.0	- 2.1	2.4	- 10.7	29.8	40.6	- 0.1	0.6	- 0.2	4.1	- 4.6
June	16.7	17.9	2.1	- 1.1	1.3	- 18.2	- 20.4	- 2.1	2.3	- 2.2	- 0.5	- 3.1	8.1
July	12.7	9.7	0.0	2.9	0.9	26.0	- 0.3	- 26.3	2.4	- 0.4	- 0.5	- 2.7	5.9
Aug.	4.1	5.7	- 8.7	- 1.6	2.8	- 8.5	- 11.6	- 3.1	- 3.5	- 3.2	- 0.4	- 1.7	1.8
Sep.	19.3	18.3	1.8	1.0	4.1	- 4.1	7.9	12.0	12.0	- 3.1	- 0.3	7.6	7.8
Oct.	7.0	8.7	1.4	- 1.7	- 5.0	34.2	2.8	- 31.4	1.6	0.1	- 0.5	4.1	- 2.0
Nov.	20.0	18.5	0.9	1.5	2.5	15.1	- 3.7	- 18.8	0.8	- 0.2	- 0.6	3.0	- 1.4
Dec.	- 5.6	- 1.5	- 0.4	- 4.0	- 0.7	- 33.5	3.6	37.1	- 1.1	0.7	- 0.3	- 9.1	7.5
2019 Jan.	16.3	15.0	0.3	1.3	- 1.3	67.9	21.1	- 46.8	2.1	- 5.7	- 0.5	14.0	- 5.7
Feb.	12.5	16.4	- 0.3	- 3.9	- 1.4	24.3	- 15.4	- 39.6	6.6	- 0.8	0.1	12.6	- 5.2
Mar.	9.7	17.2	0.1	- 7.5	- 4.8	- 32.1	13.9	46.1	- 4.0	- 3.2	0.2	- 4.4	3.4
Apr.	7.6	12.7	- 0.5	- 5.1	- 6.1	19.2	14.8	- 4.5	- 6.6	- 2.7	0.2	- 4.0	0.0
May	19.3	19.8	0.5	- 0.5	1.4	11.8	2.4	- 9.3	9.1	- 1.7	0.6	7.5	2.6
June	25.7	26.4	4.3	- 0.7	1.2	- 8.0	10.3	18.3	11.5	1.5	0.6	2.4	7.1
July	9.3	7.5	- 0.3	1.8	- 0.7	42.6	6.3	- 36.4	- 0.2	- 3.0	- 0.3	- 1.3	4.4

* 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 1 to the Monthly Report, 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. Deposits of central governments	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 transactions	Money market fund shares (net) 2,7,8	Debt securities 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 circulation	Overnight deposits 5							
- 21.5	- 89.6	-	22.5	63.8	66.3	16.1	50.2	- 6.6	4.1	- 31.8	- 26.5	-	7.1	2017 Dec.
40.9	20.0	-	8.3	- 2.4	- 19.6	- 15.2	- 4.5	5.6	11.7	- 7.8	20.1	-	12.7	2018 Jan.
13.8	10.7	-	12.0	- 9.0	5.7	0.3	5.4	- 17.4	2.7	- 4.8	- 11.3	-	4.9	Feb.
13.9	49.4	-	70.8	67.4	64.6	8.7	55.9	- 3.5	6.4	8.2	- 1.4	-	8.3	Mar.
- 19.9	- 32.6	-	49.0	30.0	48.7	4.2	44.5	- 20.7	2.0	- 3.8	11.3	-	0.9	Apr.
7.1	15.5	-	68.7	93.1	95.8	4.9	90.9	- 10.0	7.2	24.9	- 12.3	-	6.7	May
21.4	- 43.5	-	102.2	108.7	91.1	11.4	79.6	14.2	3.4	- 5.6	- 8.9	-	4.8	June
7.6	34.1	-	9.7	- 9.5	- 6.0	6.7	- 12.8	- 8.1	4.6	6.7	10.3	-	7.1	July
2.9	- 41.1	-	4.6	- 1.5	- 0.0	2.9	- 3.0	- 6.7	5.2	3.8	- 1.6	-	1.2	Aug.
40.6	6.0	-	20.5	45.4	69.3	2.1	67.2	- 20.8	- 3.2	- 10.7	- 19.5	-	1.0	Sep.
- 38.8	- 5.4	-	34.8	13.3	8.0	1.8	6.3	8.3	- 3.0	- 10.2	23.8	-	2.4	Oct.
7.3	64.7	-	89.3	88.2	97.7	5.3	92.4	- 11.6	2.2	31.5	0.3	-	1.8	Nov.
- 59.9	- 86.9	-	52.7	50.3	49.3	18.0	31.3	- 4.4	5.4	- 14.2	0.6	-	7.1	Dec.
66.2	66.6	-	30.0	- 21.6	- 39.0	- 13.1	- 25.9	3.2	14.2	15.6	- 3.9	-	8.3	2019 Jan.
18.6	- 3.7	-	37.9	45.6	39.4	3.2	36.2	- 0.4	6.6	0.2	- 8.4	-	0.4	Feb.
- 21.2	- 28.0	-	121.0	139.5	133.0	6.2	126.8	- 6.2	12.7	- 7.2	- 0.5	-	19.3	Mar.
- 33.5	36.6	-	76.2	56.0	46.8	7.4	39.4	2.4	6.8	22.2	15.5	0.4	0.4	Apr.
17.8	- 8.4	-	80.9	88.3	87.3	5.1	82.2	- 12.4	13.4	- 7.7	- 9.7	-	5.9	May
33.6	- 71.1	-	73.9	87.9	98.9	8.1	90.8	- 14.4	3.4	- 20.7	- 11.5	-	2.5	June
- 13.0	47.6	-	52.6	31.5	26.2	9.0	17.2	1.4	4.0	18.0	24.4	-	6.4	July

b) German contribution

IV. Deposits of central governments	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 circulation	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 transactions						
									Total	Overnight deposits			Deposits with an agreed maturity of up to 2 years		Deposits at agreed notice of up to 3 months 6	Repo transactions
10.0	- 58.0	3.8	2.0	- 8.8	- 10.1	0.4	2.4	0.7	- 0.3	-	1.8	2017 Dec.		
- 24.3	35.5	- 0.0	- 2.8	13.1	11.5	2.4	0.2	1.0	- 0.0	-	2.0	2018 Jan.		
9.2	- 21.2	2.0	- 0.3	1.7	5.2	- 4.4	0.3	- 0.5	0.3	-	0.7	Feb.		
8.3	0.6	6.9	- 1.5	3.1	- 0.5	6.0	- 0.5	- 0.9	0.2	-	1.1	Mar.		
- 15.2	14.5	1.3	1.9	5.3	14.7	- 8.6	- 0.3	- 0.5	- 0.0	-	0.0	Apr.		
11.7	- 42.5	5.4	- 0.1	39.3	38.8	- 0.5	- 0.1	- 0.8	- 0.2	-	2.1	May		
17.7	- 26.3	3.6	2.5	4.8	- 6.4	14.6	- 0.5	- 0.3	0.1	-	2.6	June		
- 21.0	57.8	3.1	2.2	- 0.5	6.6	- 6.1	- 0.6	0.6	- 0.1	-	0.9	July		
13.7	- 14.2	5.3	0.5	- 0.4	2.4	- 3.5	- 0.2	- 0.6	- 0.0	-	1.7	Aug.		
12.2	- 32.9	3.9	- 0.3	23.8	27.3	- 2.1	0.0	0.1	- 0.1	-	1.5	Sep.		
- 17.8	43.5	3.8	0.1	13.8	11.1	- 0.8	0.2	1.0	0.0	-	2.3	Oct.		
9.7	- 8.2	2.5	1.0	32.8	38.6	- 4.1	0.5	- 1.0	0.4	-	1.5	Nov.		
- 5.4	- 27.6	4.0	2.8	- 5.0	- 1.3	- 3.3	2.0	- 0.6	- 0.0	-	1.8	Dec.		
- 18.5	103.9	- 9.6	7.5	- 3.4	- 14.3	9.6	0.3	0.9	0.0	-	0.0	2019 Jan.		
- 2.7	20.3	2.9	0.4	12.5	8.3	3.6	1.0	0.3	- 0.0	-	0.7	Feb.		
17.7	- 58.0	2.5	1.2	21.8	20.9	- 1.5	2.2	0.0	- 0.2	-	0.3	Mar.		
- 15.2	33.9	3.9	2.1	14.7	17.9	- 3.7	0.0	1.1	- 0.1	-	0.6	Apr.		
19.0	- 20.1	4.0	0.8	23.0	23.8	0.4	- 0.3	- 1.3	0.1	-	0.4	May		
3.7	- 7.7	3.0	2.1	10.3	10.3	- 1.4	- 0.4	- 1.7	- 0.0	-	0.2	June		
- 27.1	73.2	3.6	3.2	6.0	8.7	- 3.3	- 0.6	1.0	0.1	-	0.1	July		

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											
2017 June	26,689.9	17,610.8	13,132.6	10,895.2	1,441.2	796.1	4,478.3	1,063.1	3,415.2	5,192.9	3,886.2
July	26,650.3	17,603.7	13,118.4	10,866.0	1,460.0	792.4	4,485.3	1,060.3	3,425.0	5,229.5	3,817.2
Aug.	26,683.9	17,609.7	13,086.6	10,852.9	1,444.0	789.6	4,523.2	1,054.6	3,468.6	5,199.9	3,874.3
Sep.	26,562.4	17,656.1	13,131.0	10,905.8	1,434.3	790.9	4,525.1	1,046.0	3,479.1	5,171.5	3,734.8
Oct.	26,760.5	17,733.1	13,189.5	10,968.3	1,423.0	798.2	4,543.6	1,046.2	3,497.4	5,292.7	3,734.6
Nov.	26,790.2	17,846.3	13,272.1	11,037.5	1,430.9	803.7	4,574.2	1,038.3	3,535.9	5,247.3	3,696.6
Dec.	26,320.8	17,707.9	13,166.9	10,942.4	1,425.5	798.9	4,541.0	1,028.7	3,512.3	5,065.9	3,547.0
2018 Jan.	26,335.6	17,818.8	13,240.9	10,990.5	1,448.8	801.7	4,577.8	1,041.6	3,536.2	5,253.9	3,262.9
Feb.	26,299.5	17,821.0	13,239.7	10,993.3	1,456.5	790.0	4,581.2	1,025.2	3,556.0	5,342.9	3,135.6
Mar.	26,291.9	17,880.2	13,279.0	11,032.1	1,466.5	780.4	4,601.1	1,023.3	3,577.8	5,257.8	3,154.0
Apr.	26,515.2	18,032.6	13,432.7	11,127.7	1,490.0	814.9	4,599.9	1,025.1	3,574.8	5,334.9	3,147.6
May	26,916.0	18,104.0	13,514.0	11,201.8	1,504.5	807.7	4,590.1	1,019.9	3,570.2	5,543.5	3,268.5
June	26,771.9	18,098.7	13,482.1	11,193.5	1,501.6	786.9	4,616.7	1,016.8	3,599.9	5,455.8	3,217.3
July	26,782.0	18,156.2	13,547.0	11,235.8	1,523.9	787.2	4,609.3	1,012.7	3,596.5	5,466.1	3,159.6
Aug.	26,815.7	18,127.4	13,530.6	11,227.3	1,523.9	779.3	4,596.8	1,001.7	3,595.1	5,485.0	3,203.4
Sep.	26,769.6	18,147.6	13,539.4	11,248.0	1,509.2	782.1	4,608.3	1,000.7	3,607.5	5,462.0	3,159.9
Oct.	27,088.7	18,151.6	13,555.2	11,266.4	1,510.8	778.0	4,596.4	1,002.6	3,593.9	5,679.3	3,257.9
Nov.	27,225.8	18,243.2	13,637.8	11,338.0	1,515.9	783.9	4,605.5	1,001.0	3,604.5	5,704.0	3,278.5
Dec.	26,994.7	18,172.5	13,567.9	11,295.9	1,501.8	770.3	4,604.6	1,002.8	3,601.8	5,563.4	3,258.8
2019 Jan.	27,404.5	18,309.9	13,637.6	11,345.5	1,517.5	774.7	4,672.3	1,015.9	3,656.4	5,783.6	3,311.0
Feb.	27,442.0	18,354.5	13,683.8	11,368.6	1,528.5	786.7	4,670.8	1,001.2	3,669.6	5,771.3	3,316.2
Mar.	27,740.7	18,397.1	13,735.6	11,413.7	1,526.3	795.6	4,661.5	1,001.3	3,660.2	5,848.8	3,494.8
Apr.	27,899.9	18,467.9	13,828.4	11,472.9	1,529.9	825.6	4,639.5	1,001.1	3,638.4	5,956.0	3,476.0
May	28,196.3	18,496.5	13,853.5	11,494.6	1,549.2	809.7	4,643.0	1,000.3	3,642.6	6,039.1	3,660.7
June	28,320.4	18,523.2	13,873.8	11,521.0	1,552.3	800.5	4,649.4	1,000.0	3,649.4	6,005.2	3,792.0
July	28,792.7	18,600.0	13,935.1	11,583.8	1,547.2	804.0	4,665.0	1,002.8	3,662.1	6,219.8	3,972.8
German contribution (€ billion)											
2017 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
Nov.	6,088.7	4,211.0	3,227.4	2,777.0	178.7	271.6	983.6	321.5	662.1	1,177.2	700.5
Dec.	6,051.1	4,202.2	3,222.8	2,768.6	180.4	273.8	979.4	318.5	660.9	1,163.4	685.4
2018 Jan.	6,074.8	4,214.9	3,242.3	2,786.5	181.6	274.2	972.5	317.0	655.6	1,176.4	683.5
Feb.	6,051.9	4,220.1	3,253.3	2,799.4	183.1	270.8	966.8	311.4	655.4	1,195.1	636.8
Mar.	6,053.7	4,228.1	3,260.9	2,809.5	183.0	268.4	967.2	309.7	657.5	1,184.4	641.2
Apr.	6,046.4	4,233.3	3,267.7	2,816.0	184.4	267.4	965.6	310.5	655.0	1,178.5	634.6
May	6,148.1	4,248.4	3,280.8	2,824.1	186.8	269.8	967.6	306.5	661.1	1,226.7	673.0
June	6,120.9	4,264.2	3,297.3	2,838.8	187.5	271.0	966.9	304.3	662.7	1,201.8	654.9
July	6,089.3	4,274.2	3,307.9	2,849.4	187.0	271.5	966.3	304.9	661.4	1,194.2	620.9
Aug.	6,121.9	4,279.7	3,313.6	2,863.9	183.8	265.9	966.0	300.5	665.5	1,189.8	652.4
Sep.	6,119.7	4,295.4	3,331.0	2,880.3	184.8	265.9	964.4	297.5	666.9	1,194.5	629.8
Oct.	6,154.2	4,303.6	3,339.1	2,888.2	185.3	265.6	964.5	300.8	663.7	1,208.1	642.4
Nov.	6,177.4	4,323.4	3,356.8	2,905.6	188.1	263.0	966.9	299.8	666.9	1,202.7	651.3
Dec.	6,194.1	4,317.4	3,353.6	2,903.7	187.8	262.2	963.7	296.4	667.3	1,208.5	668.2
2019 Jan.	6,252.9	4,333.5	3,366.6	2,917.4	188.8	260.4	966.9	299.2	667.7	1,232.6	686.9
Feb.	6,243.9	4,343.3	3,382.0	2,932.6	189.2	260.2	961.3	296.6	664.7	1,221.0	679.6
Mar.	6,392.0	4,373.9	3,414.7	2,963.7	189.7	261.3	959.2	293.9	665.3	1,265.4	752.8
Apr.	6,408.7	4,379.3	3,427.3	2,976.4	189.1	261.9	951.9	294.8	657.1	1,278.2	751.2
May	6,524.8	4,402.6	3,446.8	2,995.6	190.0	261.1	955.8	293.1	662.8	1,284.5	837.7
June	6,619.8	4,431.8	3,473.1	3,017.0	194.4	261.7	958.6	291.2	667.5	1,294.2	893.7
July	6,699.5	4,445.1	3,480.8	3,024.8	193.7	262.3	964.4	293.7	670.7	1,312.3	942.1

* 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

II. Overall monetary survey in the euro area

Liabilities											End of year/month
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			
			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											
1,099.7	12,214.1	11,384.0	11,483.6	6,113.3	854.2	265.6	1,986.7	2,201.9	61.9	2017 June	
1,105.6	12,209.8	11,392.9	11,476.5	6,123.4	848.8	262.8	1,976.5	2,206.6	58.4	July	
1,103.3	12,226.5	11,422.5	11,504.8	6,146.4	857.8	260.6	1,969.4	2,213.0	57.7	Aug.	
1,104.2	12,271.6	11,432.3	11,519.7	6,196.5	843.3	256.2	1,956.5	2,210.4	56.8	Sep.	
1,106.2	12,217.1	11,420.3	11,507.4	6,216.9	846.4	250.5	1,929.6	2,207.7	56.2	Oct.	
1,107.1	12,249.2	11,471.4	11,544.6	6,291.1	832.2	245.9	1,912.7	2,207.2	55.5	Nov.	
1,123.2	12,285.7	11,542.3	11,615.7	6,348.4	834.7	242.2	1,925.2	2,210.3	54.9	Dec.	
1,108.0	12,318.0	11,527.5	11,608.3	6,347.5	840.6	236.7	1,915.0	2,212.7	55.8	2018 Jan.	
1,108.3	12,329.7	11,524.1	11,601.3	6,351.7	831.3	232.1	1,915.9	2,215.2	55.1	Feb.	
1,117.0	12,393.6	11,579.9	11,659.1	6,416.1	831.5	226.4	1,908.9	2,221.4	54.8	Mar.	
1,121.2	12,401.4	11,610.6	11,679.1	6,454.1	817.7	222.3	1,907.2	2,223.4	54.4	Apr.	
1,126.1	12,502.5	11,690.4	11,761.7	6,547.6	810.6	217.7	1,900.9	2,230.9	54.0	May	
1,137.6	12,613.6	11,776.7	11,843.6	6,623.3	821.4	214.9	1,895.2	2,235.1	53.7	June	
1,145.3	12,606.0	11,760.4	11,825.6	6,603.5	817.3	212.1	1,899.9	2,239.8	53.1	July	
1,148.3	12,595.4	11,753.0	11,802.8	6,593.6	812.2	208.9	1,890.4	2,244.9	52.7	Aug.	
1,150.4	12,662.1	11,779.9	11,831.4	6,656.8	796.4	205.9	1,877.8	2,242.2	52.3	Sep.	
1,152.2	12,639.6	11,788.4	11,848.4	6,668.9	812.9	203.6	1,872.0	2,239.0	52.1	Oct.	
1,157.5	12,719.4	11,861.9	11,912.4	6,750.7	801.7	200.7	1,866.8	2,241.3	51.3	Nov.	
1,175.4	12,713.4	11,926.4	11,989.5	6,799.2	800.9	200.7	1,888.5	2,248.7	51.5	Dec.	
1,162.4	12,765.3	11,909.0	11,974.7	6,778.5	798.3	199.4	1,885.1	2,262.1	51.3	2019 Jan.	
1,165.6	12,830.6	11,958.0	12,003.9	6,807.0	795.6	196.8	1,885.4	2,268.0	51.2	Feb.	
1,171.7	12,947.7	12,078.6	12,135.4	6,931.8	786.3	199.6	1,885.8	2,280.4	51.3	Mar.	
1,179.1	12,958.0	12,121.3	12,181.2	6,971.4	788.7	201.9	1,880.0	2,287.7	51.5	Apr.	
1,184.2	13,059.0	12,198.7	12,257.4	7,050.3	775.9	201.5	1,876.2	2,301.4	52.1	May	
1,191.7	13,181.4	12,288.4	12,336.0	7,123.4	762.4	198.4	1,893.9	2,304.6	53.2	June	
1,200.7	13,175.4	12,297.1	12,348.5	7,148.4	767.2	199.2	1,871.1	2,308.9	53.7	July	
German contribution (€ billion)											
249.5	3,590.5	3,482.0	3,339.9	1,928.7	165.5	40.3	621.4	535.7	48.3	2017 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	619.0	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	3,606.4	3,490.8	3,352.9	1,958.5	158.8	38.6	616.2	538.0	42.7	Oct.	
250.9	3,646.8	3,521.5	3,383.7	1,990.6	157.1	37.4	618.2	538.3	42.1	Nov.	
252.9	3,647.9	3,515.8	3,378.5	1,976.2	162.0	37.7	620.4	540.7	41.5	Dec.	
250.1	3,632.5	3,522.3	3,390.7	1,994.6	161.5	36.4	616.5	539.5	42.2	2018 Jan.	
249.8	3,642.4	3,523.0	3,388.4	1,995.9	160.2	35.3	615.5	540.0	41.5	Feb.	
248.3	3,652.2	3,524.1	3,389.6	1,998.1	164.6	34.2	612.1	539.4	41.0	Mar.	
250.3	3,641.8	3,529.8	3,395.0	2,013.5	157.6	33.6	610.6	539.1	40.6	Apr.	
250.2	3,693.8	3,568.4	3,425.0	2,048.0	154.6	33.0	610.2	539.0	40.3	May	
252.7	3,716.5	3,574.0	3,423.0	2,039.4	165.5	32.6	607.2	538.5	39.8	June	
256.0	3,694.1	3,571.0	3,429.7	2,053.1	161.2	32.2	605.8	538.0	39.4	July	
256.4	3,703.1	3,568.1	3,417.3	2,051.8	153.7	34.0	601.1	537.7	38.9	Aug.	
256.1	3,737.2	3,588.3	3,437.1	2,076.9	153.2	33.2	597.4	537.8	38.6	Sep.	
256.3	3,730.6	3,595.8	3,453.9	2,092.2	155.1	33.6	596.9	538.0	38.1	Oct.	
257.2	3,774.2	3,632.0	3,482.3	2,127.4	149.8	33.2	595.9	538.5	37.4	Nov.	
260.0	3,766.4	3,629.3	3,481.1	2,120.4	152.5	33.7	596.7	540.6	37.2	Dec.	
267.6	3,737.2	3,622.2	3,471.2	2,113.7	154.3	33.5	592.1	540.9	36.7	2019 Jan.	
268.0	3,747.2	3,634.2	3,474.2	2,117.5	153.9	33.2	591.0	541.8	36.7	Feb.	
269.1	3,785.8	3,652.3	3,490.2	2,136.2	152.2	33.0	587.7	544.0	37.1	Mar.	
271.3	3,782.3	3,667.4	3,506.4	2,156.4	151.2	32.8	584.8	544.1	37.2	Apr.	
272.1	3,824.2	3,689.1	3,523.2	2,176.6	149.4	32.7	582.9	543.7	37.9	May	
274.2	3,837.7	3,697.8	3,528.6	2,183.2	147.8	32.3	583.5	543.3	38.4	June	
277.3	3,813.0	3,702.0	3,533.2	2,193.3	147.0	31.6	580.4	542.7	38.1	July	

volume 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.

II. Overall monetary survey in the euro area

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

Liabilities (cont'd)													
Deposits of non-banks (non-MFIs) in the euro area (cont'd)													
General government													
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													
2017 June	352.5	378.0	181.2	95.7	26.6	45.8	24.0	4.7	221.7	221.0	504.1	2,147.8	1,477.6
July	345.0	388.3	191.0	95.2	26.7	46.2	24.4	4.8	197.4	196.8	517.0	2,127.0	1,469.9
Aug.	326.7	395.0	197.1	94.8	27.8	46.2	24.4	4.7	199.6	198.9	526.4	2,112.1	1,462.7
Sep.	362.5	389.5	193.2	91.9	28.1	47.5	24.1	4.7	206.6	205.9	522.1	2,092.5	1,446.5
Oct.	318.9	390.9	197.9	87.6	28.3	48.3	24.1	4.7	226.5	225.8	531.3	2,083.4	1,429.2
Nov.	310.2	394.4	197.6	89.5	29.8	49.0	23.8	4.6	243.4	242.8	527.6	2,096.7	1,444.2
Dec.	289.4	380.5	191.5	81.5	31.5	46.8	24.6	4.6	211.2	210.7	501.2	2,076.2	1,433.0
2018 Jan.	330.3	379.3	186.4	84.3	31.1	47.5	25.1	5.0	203.0	202.5	521.3	2,070.6	1,439.3
Feb.	344.1	384.3	192.0	83.4	30.4	47.8	25.8	4.8	198.5	198.0	510.0	2,072.8	1,430.6
Mar.	358.1	376.4	181.7	85.8	29.5	48.6	25.9	4.8	206.7	206.1	508.5	2,077.7	1,435.4
Apr.	338.2	384.1	190.5	84.7	28.4	49.7	26.0	4.7	227.6	227.1	519.7	2,085.5	1,436.6
May	345.3	395.4	196.6	87.2	29.8	51.0	26.1	4.7	253.0	252.5	507.4	2,097.7	1,439.2
June	366.7	403.3	199.6	91.7	29.9	51.9	25.7	4.7	247.4	246.8	498.2	2,095.1	1,439.0
July	374.6	405.8	203.3	88.4	30.9	52.8	25.7	4.7	254.0	253.5	508.7	2,075.6	1,432.2
Aug.	377.4	415.2	208.7	90.6	31.0	54.4	25.9	4.6	257.8	257.3	507.1	2,081.7	1,438.6
Sep.	414.4	416.3	211.2	87.8	32.4	54.8	25.5	4.6	247.2	246.7	487.6	2,109.0	1,457.1
Oct.	375.6	415.5	213.2	84.0	32.3	55.7	25.8	4.5	237.4	236.9	511.4	2,163.6	1,474.0
Nov.	383.0	423.9	218.9	85.1	33.6	56.3	25.7	4.3	268.8	268.4	511.7	2,162.4	1,469.4
Dec.	322.4	401.4	203.7	78.6	34.2	56.9	23.8	4.3	254.5	254.2	512.5	2,153.7	1,466.4
2019 Jan.	388.6	402.0	196.7	85.8	34.9	55.8	24.2	4.5	270.1	269.6	513.3	2,170.0	1,478.3
Feb.	407.3	419.4	207.3	92.1	34.2	56.3	25.1	4.5	270.5	269.7	505.0	2,198.6	1,500.2
Mar.	385.8	426.5	212.0	92.5	35.4	56.7	25.5	4.4	272.8	272.4	506.5	2,177.4	1,483.1
Apr.	352.4	424.4	212.1	91.2	34.5	56.9	25.3	4.4	295.0	294.6	521.8	2,166.6	1,480.3
May	370.2	431.3	216.8	94.7	33.4	57.0	25.1	4.3	287.4	287.0	512.0	2,181.9	1,489.2
June	403.7	441.8	224.3	94.6	35.1	58.1	25.2	4.4	266.0	265.7	500.4	2,174.9	1,486.7
July	390.7	436.2	220.7	93.8	34.1	58.1	25.1	4.4	284.2	283.9	524.8	2,180.3	1,482.9
German contribution (€ billion)													
2017 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	521.8	252.3
Nov.	51.7	211.4	65.5	73.0	26.2	43.1	2.9	0.7	2.6	2.6	2.0	518.3	251.1
Dec.	61.7	207.7	69.3	66.3	27.8	40.6	2.9	0.7	3.3	3.3	1.7	512.7	256.4
2018 Jan.	37.4	204.4	61.6	70.3	27.5	41.4	2.8	0.8	4.3	4.3	1.7	518.8	262.8
Feb.	46.7	207.4	66.3	69.2	26.8	41.5	3.0	0.6	3.8	3.8	2.0	522.7	263.8
Mar.	55.0	207.6	63.2	72.7	25.8	42.3	3.0	0.6	2.9	2.9	2.2	523.5	265.6
Apr.	39.7	207.0	63.1	72.5	24.4	43.3	3.0	0.6	2.4	2.4	2.1	524.1	270.0
May	51.4	217.4	68.6	74.9	25.7	44.5	3.1	0.6	1.6	1.6	1.9	536.8	274.3
June	69.1	224.5	70.7	79.2	25.6	45.3	3.1	0.6	1.3	1.3	2.0	531.3	274.8
July	48.1	216.4	63.4	76.6	26.5	46.2	3.1	0.6	1.8	1.8	1.9	526.6	277.0
Aug.	61.7	224.1	67.3	78.9	26.4	47.7	3.1	0.6	1.2	1.2	1.9	527.7	282.0
Sep.	73.9	226.2	69.6	76.9	27.8	48.3	3.1	0.6	1.3	1.3	1.9	536.3	287.6
Oct.	56.1	220.6	66.1	73.9	28.0	48.9	3.1	0.6	2.4	2.4	1.9	544.5	286.9
Nov.	65.7	226.3	69.4	74.8	28.7	49.7	3.1	0.7	1.3	1.3	2.2	544.9	290.3
Dec.	60.3	225.0	74.6	67.5	29.3	49.9	3.0	0.6	0.8	0.8	2.2	532.5	283.4
2019 Jan.	41.8	224.2	67.1	74.8	30.0	48.7	3.0	0.6	1.7	1.7	2.2	546.6	294.1
Feb.	38.8	234.3	71.8	80.3	29.3	49.1	3.1	0.6	2.0	2.0	2.2	560.4	302.9
Mar.	56.4	239.2	75.9	80.0	30.3	49.4	3.1	0.6	11.4	11.4	2.0	557.3	298.2
Apr.	41.2	234.7	73.6	78.4	29.4	49.6	3.1	0.6	12.5	12.5	1.9	552.8	293.5
May	60.3	240.7	77.4	81.7	28.3	49.6	3.2	0.5	11.2	11.2	2.0	560.1	300.1
June	64.0	245.1	80.4	81.5	29.0	50.6	3.1	0.5	12.9	12.9	2.0	558.0	301.8
July	36.9	242.9	79.6	80.7	28.2	50.7	3.1	0.5	13.9	13.9	2.0	559.3	296.7

* 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 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 DEM 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														
37.6	39.8	2,070.4	4,139.0	2,631.0	6.5	3,726.0	–	7,515.8	11,007.6	11,656.5	6,800.5	145.5	2017 June	
35.1	38.7	2,053.2	4,184.5	2,615.9	9.4	3,683.8	–	7,544.1	11,032.5	11,692.4	6,755.1	148.0	July	
30.6	38.7	2,042.7	4,181.0	2,647.7	– 0.9	3,688.2	–	7,571.6	11,073.6	11,744.4	6,768.5	148.5	Aug.	
39.4	38.3	2,014.8	4,159.3	2,650.8	17.0	3,538.2	–	7,620.4	11,098.3	11,764.0	6,731.1	150.4	Sep.	
33.6	36.4	2,013.4	4,340.8	2,666.0	13.3	3,575.8	–	7,646.1	11,114.4	11,783.8	6,718.2	148.7	Oct.	
37.4	36.7	2,022.6	4,290.9	2,657.3	45.9	3,572.1	–	7,724.0	11,175.5	11,852.9	6,701.7	151.3	Nov.	
32.5	34.8	2,008.9	4,099.4	2,730.9	26.5	3,266.5	–	7,786.3	11,233.9	11,869.9	6,771.4	146.0	Dec.	
24.9	28.7	2,017.1	4,416.9	2,714.8	– 43.9	3,026.7	–	7,767.2	11,220.5	11,865.8	6,755.2	148.1	2018 Jan.	
32.0	27.2	2,013.6	4,507.8	2,708.1	– 28.7	2,892.9	–	7,777.1	11,217.7	11,861.0	6,745.3	147.5	Feb.	
39.8	27.1	2,010.8	4,350.2	2,719.6	– 8.1	2,926.9	–	7,840.1	11,282.8	11,928.6	6,747.5	147.5	Mar.	
41.3	26.9	2,017.3	4,495.8	2,720.5	10.0	2,933.4	–	7,892.1	11,316.8	11,985.0	6,753.8	148.4	Apr.	
35.6	26.7	2,035.3	4,710.5	2,699.6	13.6	3,005.6	–	7,994.8	11,419.6	12,064.8	6,745.5	147.0	May	
41.4	26.0	2,027.7	4,564.3	2,670.0	31.6	2,914.0	–	8,086.7	11,529.2	12,167.8	6,703.1	150.2	June	
33.0	27.1	2,015.5	4,614.5	2,665.2	18.6	2,894.1	–	8,080.7	11,518.8	12,157.1	6,691.2	152.4	July	
34.4	27.1	2,020.2	4,651.8	2,661.0	25.8	2,887.0	–	8,082.1	11,519.5	12,164.2	6,683.3	155.5	Aug.	
37.0	25.1	2,046.9	4,574.1	2,660.3	27.3	2,851.7	–	8,152.5	11,566.6	12,186.0	6,696.6	157.9	Sep.	
35.1	26.5	2,102.0	4,706.5	2,705.9	– 2.6	2,974.8	–	8,164.0	11,585.4	12,228.6	6,792.2	153.6	Oct.	
37.9	21.9	2,102.6	4,660.5	2,708.5	15.7	3,021.3	–	8,260.7	11,672.4	12,316.6	6,789.8	157.4	Nov.	
47.9	20.4	2,085.4	4,503.4	2,725.2	14.8	2,941.7	–	8,307.2	11,719.3	12,367.5	6,811.8	154.1	Dec.	
35.5	23.7	2,110.8	4,707.8	2,752.8	24.0	3,039.0	–	8,264.8	11,694.0	12,337.6	6,860.3	151.7	2019 Jan.	
32.1	25.8	2,140.7	4,672.5	2,740.4	22.8	3,036.0	–	8,305.8	11,742.0	12,377.2	6,878.5	150.4	Feb.	
14.4	22.5	2,140.5	4,669.9	2,766.3	22.0	3,206.4	–	8,443.1	11,887.3	12,504.5	6,905.1	151.9	Mar.	
16.2	21.4	2,129.0	4,787.8	2,760.6	20.4	3,210.7	–	8,489.7	11,943.3	12,580.8	6,882.4	151.5	Apr.	
22.7	22.2	2,137.0	4,794.1	2,774.3	30.5	3,373.0	–	8,576.8	12,032.9	12,664.4	6,901.1	149.7	May	
19.9	20.5	2,134.5	4,659.0	2,830.0	40.4	3,476.4	–	8,670.8	12,115.1	12,730.4	6,974.1	155.2	June	
15.0	20.1	2,145.1	4,810.9	2,879.3	37.4	3,699.7	–	8,700.2	12,151.3	12,789.0	7,011.7	153.2	July	
German contribution (€ billion)														
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	–	2017 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.	
18.6	15.7	487.5	913.6	596.3	– 946.7	1,386.3	354.2	2,023.0	2,859.6	2,898.2	1,785.4	–	Oct.	
18.5	15.8	484.0	883.4	593.7	– 940.3	1,382.0	355.5	2,056.1	2,890.9	2,929.9	1,781.9	–	Nov.	
17.7	14.8	480.2	921.3	668.6	– 999.6	1,295.2	359.3	2,045.5	2,882.9	2,920.4	1,852.1	–	Dec.	
16.0	14.2	488.5	931.6	656.8	– 974.7	1,303.7	359.3	2,056.2	2,894.2	2,930.5	1,846.2	–	2018 Jan.	
16.7	14.3	491.6	968.4	653.3	– 1,003.8	1,263.2	361.3	2,062.1	2,896.6	2,933.5	1,844.1	–	Feb.	
16.0	13.9	493.6	953.5	657.7	– 1,016.5	1,278.1	368.2	2,061.3	2,901.1	2,936.2	1,847.4	–	Mar.	
17.5	12.3	494.3	949.7	658.7	– 1,002.9	1,270.5	369.5	2,076.6	2,907.0	2,941.3	1,848.1	–	Apr.	
19.0	13.1	504.7	997.9	662.3	– 1,044.2	1,297.9	374.9	2,116.6	2,946.8	2,982.4	1,862.6	–	May	
17.0	12.5	501.8	996.0	666.2	– 1,070.1	1,277.7	378.5	2,110.1	2,954.5	2,987.3	1,860.9	–	June	
16.7	11.9	498.0	967.9	665.4	– 1,019.3	1,250.8	381.6	2,116.5	2,954.1	2,986.4	1,855.4	–	July	
18.3	12.0	497.4	966.5	672.6	– 1,024.8	1,273.6	386.9	2,119.1	2,953.0	2,986.4	1,858.4	–	Aug.	
17.8	11.0	507.4	979.8	670.9	– 1,059.4	1,251.7	390.8	2,146.5	2,978.4	3,010.4	1,863.3	–	Sep.	
20.2	11.0	513.2	952.8	676.1	– 1,031.2	1,277.1	394.6	2,158.3	2,990.0	3,025.5	1,873.8	–	Oct.	
19.4	10.3	515.2	932.7	675.8	– 1,041.8	1,288.0	397.1	2,196.8	3,024.9	3,058.2	1,874.7	–	Nov.	
17.7	10.1	504.6	967.9	689.9	– 1,063.4	1,297.9	401.1	2,195.0	3,021.7	3,052.5	1,879.0	–	Dec.	
18.2	9.6	518.7	920.7	690.0	– 971.6	1,326.1	391.5	2,180.7	3,017.3	3,049.1	1,886.9	–	2019 Jan.	
19.1	8.2	533.2	882.8	684.4	– 966.0	1,330.9	394.4	2,189.4	3,030.9	3,062.3	1,895.1	–	Feb.	
19.2	8.3	529.8	958.7	695.9	– 1,031.3	1,412.2	396.9	2,212.1	3,054.7	3,095.5	1,900.4	–	Mar.	
18.6	8.2	525.9	953.9	692.7	– 985.8	1,398.5	400.8	2,230.0	3,069.0	3,110.2	1,890.7	–	Apr.	
18.9	8.4	532.9	944.9	702.5	– 1,016.3	1,496.1	404.8	2,254.0	3,093.0	3,133.5	1,906.3	–	May	
19.7	7.6	530.7	957.2	722.3	– 1,013.1	1,542.9	407.8	2,263.6	3,100.7	3,142.8	1,926.0	–	June	
19.7	7.9	531.7	925.0	735.5	– 950.6	1,601.5	411.4	2,272.8	3,106.3	3,149.7	1,937.0	–	July	

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 two

years and at agreed notice of up to three 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 two years. **13** Deposits with agreed maturities of over two years and at agreed notice of over three months, debt securities with maturities of over two years, capital and reserves. **14** Non-existent in Germany.

II. Overall monetary survey in the euro area

3. Banking system's liquidity position * Stocks

€ billion; period averages of daily positions

Reserve maintenance period ending in 1	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current account balances (including minimum reserves) 7	Base money 8
	Net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations 4	Banknotes in circulation 5	Central government deposits	Other factors (net) 6		
		Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations 3							
Eurosystem 2												
2017 Apr.	.	.	.	.	.	.	.	.	.	.	.	.
May	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
June	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
July	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
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	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
Oct.	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
Nov.	.	.	.	.	.	.	.	.	.	.	.	.
Dec.	634.5	3.0	763.7	0.2	2,333.5	682.5	0.0	1,146.6	188.5	407.6	1,309.7	3,138.8
2018 Jan.	635.7	2.9	760.6	0.2	2,398.2	689.2	0.0	1,158.2	188.1	487.0	1,275.2	3,122.5
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	630.9	1.5	760.5	0.0	2,435.5	686.3	0.0	1,148.2	203.6	474.9	1,315.6	3,150.1
Apr.	.	.	.	.	.	.	.	.	.	.	.	.
May	627.1	1.9	759.5	0.1	2,476.8	668.0	0.0	1,159.0	247.5	495.6	1,295.3	3,122.3
June	625.2	1.8	757.3	0.1	2,519.9	659.5	0.0	1,170.4	218.0	502.5	1,353.9	3,183.8
July	635.1	2.1	744.2	0.1	2,558.4	652.2	0.0	1,183.6	263.4	533.8	1,306.9	3,142.6
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	637.5	3.0	739.9	0.1	2,589.7	671.2	0.0	1,192.2	239.1	519.1	1,348.7	3,212.0
Oct.	625.2	6.9	727.8	0.1	2,622.8	631.8	0.0	1,194.3	283.1	504.4	1,369.0	3,195.1
Nov.	.	.	.	.	.	.	.	.	.	.	.	.
Dec.	625.1	6.8	726.4	0.1	2,642.3	635.9	0.0	1,202.4	240.2	542.9	1,379.4	3,217.7
2019 Jan.	655.8	7.9	723.8	0.1	2,652.8	640.0	0.0	1,218.8	231.3	618.2	1,332.1	3,190.9
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	665.5	6.0	723.1	0.1	2,645.8	637.6	0.0	1,209.2	257.3	571.4	1,364.8	3,211.7
Apr.	678.6	5.7	720.3	0.1	2,635.9	619.6	0.0	1,215.8	270.5	555.6	1,379.0	3,214.4
May	.	.	.	.	.	.	.	.	.	.	.	.
June	689.7	5.5	718.6	0.4	2,630.6	601.9	0.0	1,228.2	248.2	561.9	1,404.6	3,234.7
July	710.3	4.6	700.1	0.0	2,620.4	570.8	0.0	1,240.8	295.9	592.2	1,335.7	3,147.4
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Deutsche Bundesbank												
2017 Apr.	.	.	.	.	.	.	.	.	.	.	.	.
May	164.4	1.0	86.0	0.1	412.4	181.4	0.0	264.1	29.7	- 185.3	374.0	819.5
June	165.8	0.3	95.0	0.0	431.8	181.2	0.0	266.2	32.4	- 204.9	418.0	865.4
July	159.6	0.5	95.0	0.0	447.9	170.1	0.0	269.0	52.7	- 201.6	412.7	851.9
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	155.2	0.3	94.9	0.0	463.2	165.5	0.0	269.9	52.4	- 192.6	418.5	853.9
Oct.	154.8	0.3	94.9	0.0	481.5	171.0	0.0	269.4	65.9	- 197.6	422.7	863.2
Nov.	.	.	.	.	.	.	.	.	.	.	.	.
Dec.	154.2	0.5	94.8	0.0	501.4	187.5	0.0	270.3	56.0	- 218.6	455.8	913.6
2018 Jan.	155.5	0.9	93.3	0.0	514.7	204.4	0.0	272.8	54.9	- 192.2	424.5	901.7
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	151.5	0.6	93.4	0.0	522.9	207.9	0.0	271.0	56.8	- 221.3	453.9	932.8
Apr.	.	.	.	.	.	.	.	.	.	.	.	.
May	150.7	1.1	93.3	0.0	530.6	190.8	0.0	273.8	61.1	- 191.3	440.9	905.5
June	150.1	1.1	93.1	0.0	540.6	200.3	0.0	277.4	59.2	- 217.9	466.0	943.6
July	151.9	0.4	91.8	0.0	547.6	196.8	0.0	280.0	69.4	- 194.1	439.6	916.4
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	152.1	0.4	91.5	0.0	556.2	192.9	0.0	282.0	65.2	- 178.9	439.0	913.9
Oct.	148.1	0.5	88.5	0.0	563.5	160.0	0.0	282.6	81.3	- 183.4	460.0	902.6
Nov.	.	.	.	.	.	.	.	.	.	.	.	.
Dec.	146.9	0.6	88.1	0.0	570.0	148.0	0.0	283.6	69.6	- 185.2	489.5	921.2
2019 Jan.	155.8	1.7	87.6	0.1	570.4	153.1	0.0	293.4	60.5	- 144.9	453.7	900.1
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	158.3	0.6	87.6	0.0	569.5	163.3	0.0	294.3	49.3	- 157.0	466.0	923.7
Apr.	160.8	0.6	86.7	0.0	563.7	172.5	0.0	296.1	61.2	- 199.4	481.6	950.1
May	.	.	.	.	.	.	.	.	.	.	.	.
June	163.6	0.6	86.1	0.0	565.2	166.3	0.0	299.6	58.0	- 213.6	505.3	971.1
July	169.4	0.7	85.3	0.0	563.1	150.1	0.0	303.0	65.7	- 175.0	474.5	927.7
Aug.	.	.	.	.	.	.	.	.	.	.	.	.

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 asset purchase programmes. 4 From August 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, a share of 8% of the total value of the euro banknotes in circulation is

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												
+ 16.2	- 10.5	+ 153.1	± 0.0	+ 117.8	+ 70.8	± 0.0	+ 7.6	+ 21.7	+ 56.6	+ 120.2	+ 198.5	2017 Apr.
+ 4.5	- 4.8	+ 60.0	- 0.1	+ 89.7	+ 43.7	± 0.0	+ 7.6	- 18.4	+ 18.6	+ 97.6	+ 149.1	May
- 26.2	- 4.3	± 0.0	± 0.0	+ 81.1	+ 1.6	± 0.0	+ 10.3	+ 66.2	- 18.0	- 9.5	+ 2.3	June
- 17.9	- 3.9	+ 1.2	+ 0.1	+ 74.1	+ 16.1	± 0.0	+ 6.2	- 48.0	+ 5.7	+ 73.5	+ 95.9	July
- 4.0	+ 1.2	- 3.3	- 0.1	+ 89.0	+ 36.7	± 0.0	+ 0.3	+ 36.5	- 1.2	+ 10.6	+ 47.5	Aug.
- 0.5	- 3.7	- 1.6	± 0.0	+ 94.3	+ 34.4	± 0.0	+ 3.8	- 29.8	+ 23.7	+ 56.4	+ 94.6	Sep.
+ 1.2	- 0.1	- 3.1	± 0.0	+ 64.7	+ 6.7	± 0.0	+ 11.6	- 0.4	+ 79.4	- 34.5	- 16.3	Oct.
- 4.8	- 1.4	- 0.1	- 0.2	+ 37.3	- 2.9	± 0.0	- 10.0	+ 15.5	- 12.1	+ 40.4	+ 27.6	Nov.
- 3.8	+ 0.4	- 1.0	+ 0.1	+ 41.3	- 18.3	± 0.0	+ 10.8	+ 43.9	+ 20.7	- 20.3	- 27.8	Dec.
- 1.9	- 0.1	- 2.2	± 0.0	+ 43.1	- 8.5	± 0.0	+ 11.4	- 29.5	+ 6.9	+ 58.6	+ 61.5	2018 Jan.
+ 9.9	+ 0.3	- 13.1	± 0.0	+ 38.5	- 7.3	± 0.0	+ 13.2	+ 45.4	+ 31.3	- 47.0	- 41.2	Feb.
+ 2.4	+ 0.9	- 4.3	± 0.0	+ 31.3	+ 19.0	± 0.0	+ 8.6	- 24.3	- 14.7	+ 41.8	+ 69.4	Mar.
- 12.3	+ 3.9	- 12.1	± 0.0	+ 33.1	- 39.4	± 0.0	+ 2.1	+ 44.0	- 14.7	+ 20.3	- 16.9	Apr.
- 0.1	- 0.1	- 1.4	± 0.0	+ 19.5	+ 4.1	± 0.0	+ 8.1	- 42.9	+ 38.5	+ 10.4	+ 22.6	May
+ 30.7	+ 1.1	- 2.6	± 0.0	+ 10.5	+ 4.1	± 0.0	+ 16.4	- 8.9	+ 75.3	- 47.3	- 26.8	June
+ 9.7	- 1.9	- 0.7	± 0.0	- 7.0	- 2.4	± 0.0	- 9.6	+ 26.0	- 46.8	+ 32.7	+ 20.8	July
+ 13.1	- 0.3	- 2.8	± 0.0	- 9.9	- 18.0	± 0.0	+ 6.6	+ 13.2	- 15.8	+ 14.2	+ 2.7	Aug.
+ 11.1	- 0.2	- 1.7	+ 0.3	- 5.3	- 17.7	± 0.0	+ 12.4	- 22.3	+ 6.3	+ 25.6	+ 20.3	2019 Jan.
+ 20.6	- 0.9	- 18.5	- 0.4	- 10.2	- 31.1	± 0.0	+ 12.6	+ 47.7	+ 30.3	- 68.9	- 87.3	Feb.
Deutsche Bundesbank												
+ 4.9	+ 0.1	+ 22.6	+ 0.0	+ 25.9	+ 27.7	± 0.0	+ 1.8	+ 6.6	- 15.6	+ 33.0	+ 62.5	2017 Apr.
+ 1.5	- 0.7	+ 9.0	- 0.1	+ 19.4	- 0.2	± 0.0	+ 2.1	+ 2.6	- 19.6	+ 44.0	+ 45.9	May
- 6.2	+ 0.2	+ 0.0	+ 0.0	+ 16.1	- 11.1	± 0.0	+ 2.8	+ 20.3	+ 3.3	- 5.3	- 13.6	June
- 4.4	- 0.2	- 0.1	+ 0.0	+ 15.4	- 4.6	± 0.0	+ 0.9	- 0.2	+ 9.0	+ 5.8	+ 2.1	July
- 0.4	- 0.1	- 0.1	- 0.0	+ 18.3	+ 5.5	± 0.0	- 0.5	+ 13.5	- 5.0	+ 4.2	+ 9.2	Aug.
- 0.6	+ 0.2	- 0.0	- 0.0	+ 19.9	+ 16.5	± 0.0	+ 0.9	- 9.9	- 21.0	+ 33.1	+ 50.4	Sep.
+ 1.3	+ 0.4	- 1.6	- 0.0	+ 13.3	+ 16.9	± 0.0	+ 2.5	- 1.1	+ 26.4	- 31.3	- 11.9	Oct.
- 4.0	- 0.3	+ 0.1	+ 0.0	+ 8.2	+ 3.5	± 0.0	- 1.7	+ 1.9	- 29.1	+ 29.4	+ 31.1	Nov.
- 0.8	+ 0.5	- 0.0	+ 0.0	+ 7.7	- 17.0	± 0.0	+ 2.8	+ 4.2	+ 30.0	- 13.0	- 27.3	Dec.
- 0.6	+ 0.0	- 0.2	- 0.0	+ 10.0	+ 9.5	± 0.0	+ 3.6	- 1.8	- 26.6	+ 25.1	+ 38.1	2018 Jan.
+ 1.8	- 0.6	- 1.3	+ 0.0	+ 7.0	- 3.5	± 0.0	+ 2.6	+ 10.2	+ 23.9	- 26.4	- 27.2	Feb.
+ 0.2	+ 0.0	- 0.3	- 0.0	+ 8.6	- 3.9	± 0.0	+ 2.0	- 4.2	+ 15.2	- 0.6	- 2.5	Mar.
- 4.0	+ 0.0	- 3.0	+ 0.0	+ 7.3	- 32.9	± 0.0	+ 0.6	+ 16.1	- 4.5	+ 21.1	- 11.2	Apr.
- 1.1	+ 0.1	- 0.5	+ 0.0	+ 6.6	- 12.0	± 0.0	+ 1.1	- 11.7	- 1.8	+ 29.5	+ 18.5	May
+ 8.8	+ 1.2	- 0.4	+ 0.0	+ 0.4	+ 5.0	± 0.0	+ 9.7	- 9.2	+ 40.2	- 35.9	- 21.1	June
+ 2.5	- 1.1	- 0.1	- 0.1	- 0.9	+ 10.3	± 0.0	+ 1.0	- 11.2	- 12.0	+ 12.3	+ 23.6	July
+ 2.6	- 0.0	- 0.9	+ 0.0	- 5.8	+ 9.1	± 0.0	+ 1.8	+ 12.0	- 42.5	+ 15.6	+ 26.5	Aug.
+ 2.8	+ 0.0	- 0.6	- 0.0	+ 1.4	- 6.2	± 0.0	+ 3.5	- 3.2	- 14.2	+ 23.7	+ 21.0	2019 Jan.
+ 5.7	+ 0.0	- 0.9	+ 0.0	- 2.1	- 16.2	± 0.0	+ 3.5	+ 7.6	+ 38.6	- 30.7	- 43.5	Feb.

allocated to the ECB on a monthly basis. 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 share of the euro banknotes issued corresponding 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 balances".

III. Consolidated financial statement of the Eurosystem

1. Assets *

€ billion

As at reporting date	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 ¹									
2019 Feb. 22	4,692.1	389.8	328.8	76.9	251.9	20.4	19.1	19.1	–
Mar. 1	4,686.3	389.8	327.7	76.9	250.8	20.9	21.8	21.8	–
8	4,691.3	389.8	328.5	76.9	251.6	21.0	23.6	23.6	–
15	4,680.6	389.8	329.3	76.9	252.4	19.5	19.7	19.7	–
22	4,677.0	389.8	331.2	76.8	254.4	19.0	18.6	18.6	–
29	4,695.8	402.3	340.2	78.1	262.1	20.2	19.0	19.0	–
Apr. 5	4,699.6	402.2	338.7	78.0	260.7	19.6	18.2	18.2	–
12	4,701.8	402.2	342.2	80.5	261.7	19.4	16.5	16.5	–
19	4,707.9	402.1	343.5	80.5	263.0	19.3	19.6	19.6	–
26	4,697.6	402.1	344.6	80.5	264.1	18.5	18.1	18.1	–
May 3	4,683.9	402.1	344.1	80.5	263.7	19.0	19.3	19.3	–
10	4,685.4	402.1	344.1	80.6	263.6	19.3	18.4	18.4	–
17	4,684.9	402.1	344.5	80.6	263.9	18.6	16.6	16.6	–
24	4,692.6	402.1	345.6	80.6	265.0	20.1	19.4	19.4	–
31	4,686.0	402.1	344.8	80.6	264.2	19.2	18.3	18.3	–
2019 June 7	4,690.4	402.1	344.8	80.6	264.2	20.1	23.7	23.7	–
14	4,681.4	402.1	345.9	80.6	265.3	20.4	20.8	20.8	–
21	4,682.7	402.1	344.4	80.5	263.9	20.4	20.8	20.8	–
28	4,692.6	431.8	340.4	79.6	260.8	20.4	21.0	21.0	–
July 5	4,677.5	431.8	339.0	79.6	259.5	21.0	20.6	20.6	–
12	4,684.4	431.9	341.1	79.6	261.6	20.3	20.9	20.9	–
19	4,688.2	431.9	345.2	80.5	264.7	20.2	21.6	21.6	–
26	4,685.7	431.9	347.0	80.6	266.4	20.5	19.7	19.7	–
Aug. 2	4,679.2	431.9	347.7	80.6	267.1	18.8	20.0	20.0	–
9	4,677.8	431.9	347.3	80.6	266.8	19.3	19.0	19.0	–
16	4,676.1	431.9	347.1	80.6	266.5	18.5	21.6	21.6	–
23	4,681.0	431.9	347.6	80.6	267.0	18.6	21.7	21.7	–
30	4,683.7	431.9	347.9	80.6	267.3	19.5	22.5	22.5	–
Sep. 6	4,681.6	431.9	346.5	80.6	265.9	19.0	25.3	25.3	–
Deutsche Bundesbank									
2019 Feb. 22	1,745.1	121.4	51.6	19.9	31.8	0.0	2.7	2.7	–
Mar. 1	1,741.6	121.4	52.0	19.9	32.1	0.0	4.7	4.7	–
8	1,742.8	121.4	52.3	19.9	32.4	0.0	6.9	6.9	–
15	1,745.6	121.4	52.0	19.9	32.2	0.0	3.2	3.2	–
22	1,751.0	121.4	51.7	19.9	31.8	0.0	2.0	2.0	–
29	1,812.7	125.3	52.8	20.2	32.6	0.0	2.9	2.9	–
Apr. 5	1,774.3	125.3	52.9	20.2	32.7	0.0	2.2	2.2	–
12	1,760.4	125.3	53.6	20.9	32.7	0.0	0.9	0.9	–
19	1,773.9	125.3	53.3	20.9	32.4	0.0	4.1	4.1	–
26	1,787.4	125.3	53.6	20.9	32.7	0.0	1.8	1.8	–
May 3	1,786.4	125.2	53.5	20.9	32.7	0.0	3.2	3.2	–
10	1,772.4	125.2	53.6	20.8	32.8	0.0	1.7	1.7	–
17	1,785.1	125.2	53.2	20.8	32.5	0.0	0.4	0.4	–
24	1,788.8	125.2	53.4	20.8	32.6	0.0	3.5	3.5	–
31	1,813.2	125.2	53.5	20.8	32.7	0.0	3.1	3.1	–
2019 June 7	1,805.8	125.2	53.4	20.8	32.6	0.0	6.8	6.8	–
14	1,778.2	125.2	53.9	20.8	33.1	0.0	3.0	3.0	–
21	1,764.8	125.2	53.3	20.8	32.5	0.0	2.8	2.8	–
28	1,818.3	125.2	53.2	20.8	32.4	0.0	2.8	2.8	–
July 5	1,751.7	134.5	52.9	20.6	32.3	0.0	2.3	2.3	–
12	1,754.5	134.5	53.1	20.6	32.5	0.0	2.5	2.5	–
19	1,765.7	134.5	54.1	20.8	33.3	0.0	3.8	3.8	–
26	1,736.3	134.5	54.4	20.8	33.6	0.0	1.7	1.7	–
Aug. 2	1,756.5	134.5	53.6	20.8	32.8	0.0	2.9	2.9	–
9	1,756.1	134.5	53.3	20.7	32.5	0.0	1.2	1.2	–
16	1,768.1	134.5	53.3	20.7	32.6	0.0	3.4	3.4	–
23	1,764.5	134.5	53.6	20.8	32.8	0.0	2.8	2.8	–
30	1,779.5	134.5	54.0	20.8	33.3	0.0	3.1	3.1	–
Sep. 6	1,761.8	134.5	53.4	20.7	32.7	0.0	6.1	6.1	–

* 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 end of the quarter. ¹ Source: ECB.

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	As at reporting date
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 ¹													
729.3	5.9	723.2	–	–	0.1	–	35.4	2,891.7	2,646.3	245.4	23.9	253.6	2019 Feb. 22
729.1	6.5	722.6	–	–	–	–	32.6	2,879.3	2,639.7	239.6	23.9	261.3	Mar. 1
728.5	5.8	722.6	–	–	0.1	–	37.7	2,883.1	2,643.2	240.0	23.9	255.3	8
728.7	6.1	722.6	–	–	0.0	–	36.1	2,878.1	2,639.1	239.0	23.9	255.4	15
728.2	5.6	722.6	–	–	–	–	38.2	2,877.0	2,637.1	239.9	23.9	251.1	22
725.3	6.1	718.7	–	–	0.5	–	39.1	2,868.5	2,629.7	238.8	23.9	257.2	29
724.1	5.4	718.7	–	–	–	–	40.8	2,873.5	2,634.9	238.6	23.9	258.7	Apr. 5
724.1	5.3	718.7	–	–	0.1	–	39.9	2,873.0	2,634.9	238.1	23.9	260.7	12
727.8	5.4	718.7	–	–	3.7	–	39.0	2,873.6	2,635.8	237.8	23.9	259.1	19
724.7	6.0	718.6	–	–	0.1	–	39.2	2,869.4	2,633.7	235.7	23.9	257.1	26
724.3	5.7	718.6	–	–	–	–	38.2	2,857.9	2,624.8	233.1	23.9	255.0	May 3
724.0	5.4	718.6	–	–	–	–	39.5	2,859.5	2,628.1	231.5	23.9	254.5	10
724.0	5.4	718.6	–	–	–	–	36.7	2,862.1	2,631.2	230.8	23.9	256.5	17
723.5	4.9	718.6	–	–	0.0	–	39.2	2,864.0	2,634.3	229.7	23.9	254.7	24
724.9	6.1	718.7	–	–	0.1	–	37.6	2,858.5	2,628.9	229.7	23.9	256.6	31
724.0	5.3	718.7	–	–	–	–	36.0	2,859.5	2,630.0	229.6	23.9	256.4	2019 June 7
724.7	6.0	718.7	–	–	–	–	31.3	2,854.2	2,624.9	229.2	23.9	258.2	14
724.9	6.2	718.7	–	–	0.0	–	42.3	2,852.8	2,625.0	227.9	23.9	251.1	21
699.1	6.4	692.6	–	–	0.0	–	47.6	2,849.1	2,620.3	228.8	23.4	259.9	28
697.7	5.1	692.6	–	–	–	–	42.0	2,843.6	2,615.6	228.0	23.4	258.3	July 5
695.6	2.9	692.6	–	–	–	–	40.4	2,846.8	2,619.9	226.9	23.4	264.1	12
695.5	2.9	692.6	–	–	–	–	39.7	2,841.9	2,616.1	225.8	23.4	268.9	19
695.6	2.9	692.6	–	–	0.0	–	38.7	2,843.4	2,617.9	225.5	23.4	265.6	26
696.2	3.6	692.6	–	–	0.0	–	42.3	2,832.5	2,610.5	221.9	23.4	266.5	Aug. 2
696.0	3.4	692.6	–	–	–	–	41.5	2,833.2	2,612.2	221.0	23.4	266.2	9
695.6	3.0	692.6	–	–	0.0	–	39.6	2,834.1	2,613.0	221.2	23.4	264.3	16
695.6	3.0	692.6	–	–	0.0	–	36.0	2,835.5	2,613.7	221.7	23.4	270.8	23
695.7	3.3	692.3	–	–	–	–	35.1	2,835.5	2,614.2	221.3	23.4	272.3	30
694.7	2.3	692.3	–	–	0.0	–	35.7	2,833.0	2,612.6	220.3	23.4	272.2	Sep. 6
Deutsche Bundesbank													
88.2	0.7	87.6	–	–	0.0	–	6.3	567.8	567.8	–	4.4	902.6	2019 Feb. 22
88.3	0.7	87.6	–	–	–	–	7.3	567.4	567.4	–	4.4	896.0	Mar. 1
88.1	0.5	87.6	–	–	–	–	7.6	568.6	568.6	–	4.4	893.4	8
88.2	0.6	87.6	–	–	0.0	–	7.0	565.2	565.2	–	4.4	904.1	15
88.2	0.6	87.6	–	–	–	–	5.9	563.5	563.5	–	4.4	913.7	22
87.3	0.7	86.2	–	–	0.5	–	5.5	562.2	562.2	–	4.4	972.3	29
86.8	0.6	86.2	–	–	–	–	6.6	564.0	564.0	–	4.4	932.1	Apr. 5
86.7	0.5	86.2	–	–	0.1	–	6.9	560.7	560.7	–	4.4	922.0	12
86.8	0.7	86.2	–	–	0.0	–	7.6	562.1	562.1	–	4.4	930.2	19
86.9	0.6	86.1	–	–	0.1	–	7.5	563.1	563.1	–	4.4	944.7	26
86.7	0.5	86.1	–	–	–	–	7.4	563.8	563.8	–	4.4	942.2	May 3
86.7	0.5	86.1	–	–	–	–	6.8	564.8	564.8	–	4.4	929.1	10
86.8	0.6	86.1	–	–	–	–	6.8	565.5	565.5	–	4.4	942.8	17
86.7	0.5	86.1	–	–	0.0	–	7.1	566.6	566.6	–	4.4	941.7	24
87.2	1.0	86.1	–	–	0.1	–	6.7	567.5	567.5	–	4.4	965.5	31
86.6	0.5	86.1	–	–	–	–	8.8	568.0	568.0	–	4.4	952.5	2019 June 7
86.6	0.5	86.1	–	–	–	–	7.3	564.4	564.4	–	4.4	933.3	14
86.7	0.6	86.1	–	–	0.0	–	7.7	565.3	565.3	–	4.4	919.4	21
85.6	0.7	84.9	–	–	0.0	–	7.8	565.7	565.7	–	4.4	973.5	28
85.5	0.6	84.9	–	–	–	–	6.8	559.5	559.5	–	4.4	905.7	July 5
85.6	0.7	84.9	–	–	–	–	8.4	561.1	561.1	–	4.4	904.9	12
85.6	0.6	84.9	–	–	0.0	–	9.4	561.7	561.7	–	4.4	912.3	19
85.8	0.8	84.9	–	–	0.0	–	4.9	562.4	562.4	–	4.4	888.3	26
85.5	0.6	84.9	–	–	0.0	–	6.7	562.2	562.2	–	4.4	906.7	Aug. 2
85.6	0.7	84.9	–	–	–	–	5.3	562.8	562.8	–	4.4	909.2	9
85.4	0.5	84.9	–	–	0.0	–	7.4	562.6	562.6	–	4.4	917.1	16
85.4	0.5	84.9	–	–	0.0	–	7.5	563.1	563.1	–	4.4	913.2	23
85.2	0.4	84.8	–	–	–	–	6.7	563.4	563.4	–	4.4	928.2	30
85.1	0.2	84.8	–	–	0.0	–	7.2	563.7	563.7	–	4.4	907.2	Sep. 6

III. Consolidated financial statement of the Eurosystem

2. Liabilities *

€ billion

As at reporting date	Total liabilities	Banknotes in circulation ¹	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 ³													
2019 Feb. 22	4,692.1	1,207.2	1,971.1	1,337.0	634.1	–	–	0.0	7.9	–	414.3	289.1	125.2
Mar. 1	4,686.3	1,212.2	2,021.2	1,380.2	641.0	–	–	0.0	7.6	–	361.6	234.2	127.4
8	4,691.3	1,213.6	2,044.6	1,412.8	631.8	–	–	0.0	9.6	–	349.1	219.4	129.7
15	4,680.6	1,213.3	1,995.0	1,403.5	591.5	–	–	0.0	6.7	–	398.7	272.3	126.4
22	4,677.0	1,212.4	1,971.7	1,351.4	620.2	–	–	0.0	7.0	–	429.9	302.3	127.6
29	4,695.8	1,216.1	1,948.2	1,348.9	599.2	–	–	0.1	5.3	–	389.9	263.7	126.2
Apr. 5	4,699.6	1,218.3	2,036.0	1,401.7	634.2	–	–	0.0	5.4	–	370.4	244.6	125.8
12	4,701.8	1,221.2	2,028.3	1,396.8	631.5	–	–	0.0	6.6	–	382.4	253.9	128.5
19	4,707.9	1,229.4	1,980.3	1,393.9	586.4	–	–	0.0	6.5	–	416.5	285.8	130.7
26	4,697.6	1,228.5	1,989.6	1,378.8	610.6	–	–	0.1	5.4	–	401.5	271.4	130.1
May 3	4,683.9	1,229.0	2,037.6	1,403.9	633.7	–	–	0.1	5.1	–	325.4	203.1	122.2
10	4,685.4	1,226.6	2,041.2	1,435.9	605.3	–	–	–	5.2	–	328.4	206.8	121.6
17	4,684.9	1,225.4	1,986.7	1,393.7	593.1	–	–	–	4.9	–	389.4	264.0	125.3
24	4,692.6	1,224.9	1,967.3	1,396.0	571.3	–	–	0.0	6.2	–	428.1	301.8	126.4
31	4,686.0	1,231.2	2,014.5	1,388.5	626.0	–	–	–	6.1	–	364.7	239.7	125.0
2019 June 7	4,690.4	1,234.1	2,043.5	1,441.1	602.4	–	–	0.0	8.4	–	337.1	210.4	126.7
14	4,681.4	1,234.4	2,003.1	1,419.2	583.8	–	–	0.0	5.8	–	372.6	241.5	131.1
21	4,682.7	1,234.9	1,911.4	1,341.7	569.7	–	–	0.0	5.4	–	457.1	325.1	132.0
28	4,692.6	1,239.3	1,891.4	1,312.0	579.4	–	–	0.0	6.0	–	410.2	278.0	132.2
July 5	4,677.5	1,243.1	1,935.4	1,350.4	585.0	–	–	0.0	4.5	–	388.1	257.3	130.8
12	4,684.4	1,245.1	1,909.2	1,327.2	582.0	–	–	0.0	5.9	–	413.6	283.7	129.9
19	4,688.2	1,245.2	1,845.2	1,293.5	551.7	–	–	0.0	6.9	–	469.1	333.4	135.7
26	4,685.7	1,247.1	1,848.7	1,307.3	541.3	–	–	0.0	3.8	–	463.7	329.6	134.0
Aug. 2	4,679.2	1,252.4	1,916.3	1,349.5	566.8	–	–	0.0	4.5	–	380.2	245.4	134.8
9	4,677.8	1,252.6	1,907.1	1,350.0	557.1	–	–	0.0	4.0	–	382.2	251.6	130.6
16	4,676.1	1,253.9	1,865.8	1,323.6	542.2	–	–	0.0	5.6	–	413.1	279.6	133.5
23	4,681.0	1,249.2	1,836.9	1,299.2	537.7	–	–	0.0	5.6	–	450.9	316.0	134.9
30	4,683.7	1,250.8	1,873.2	1,318.4	554.7	–	–	0.0	5.9	–	415.3	278.1	137.2
Sep. 6	4,681.6	1,251.6	1,916.9	1,335.6	581.2	–	–	0.0	6.0	–	376.1	238.3	137.8
Deutsche Bundesbank													
2019 Feb. 22	1,745.1	294.9	619.5	463.2	156.2	–	–	0.0	4.5	–	104.3	57.4	47.0
Mar. 1	1,741.6	294.5	639.9	470.4	169.4	–	–	0.0	4.4	–	88.7	41.3	47.4
8	1,742.8	295.0	646.1	477.5	168.6	–	–	0.0	5.7	–	89.4	41.4	48.0
15	1,745.6	295.4	628.3	470.9	157.3	–	–	0.0	3.8	–	120.3	72.5	47.8
22	1,751.0	295.7	641.5	475.2	166.3	–	–	0.0	4.2	–	119.4	71.2	48.2
29	1,812.7	295.2	663.4	481.2	182.2	–	–	0.0	2.1	–	109.0	61.8	47.3
Apr. 5	1,774.3	296.5	679.7	492.9	186.8	–	–	0.0	2.3	–	98.8	50.2	48.6
12	1,760.4	298.1	675.4	496.0	179.3	–	–	0.0	3.5	–	92.7	44.6	48.1
19	1,773.9	301.4	654.9	487.2	167.7	–	–	0.0	3.3	–	112.1	62.9	49.2
26	1,787.4	301.1	657.4	482.5	174.9	–	–	0.0	2.9	–	121.5	72.2	49.3
May 3	1,786.4	298.4	687.5	504.6	182.8	–	–	–	2.5	–	82.5	38.7	43.8
10	1,772.4	298.5	665.4	499.5	165.9	–	–	–	2.4	–	90.7	47.4	43.3
17	1,785.1	299.0	654.3	498.6	155.7	–	–	–	2.3	–	116.4	70.8	45.5
24	1,788.8	299.8	670.9	520.9	150.0	–	–	–	3.8	–	112.2	68.7	43.4
31	1,813.2	298.8	694.7	518.8	175.9	–	–	–	3.5	–	102.4	59.8	42.6
2019 June 7	1,805.8	300.7	691.1	523.6	167.5	–	–	–	5.2	–	94.7	53.1	41.6
14	1,778.2	301.1	641.0	490.8	150.2	–	–	–	3.7	–	118.8	76.1	42.7
21	1,764.8	301.9	610.9	472.2	138.6	–	–	0.0	3.1	–	130.5	88.7	41.8
28	1,818.3	300.8	659.5	485.2	174.3	–	–	0.0	3.6	–	109.3	65.2	44.1
July 5	1,751.7	302.6	638.4	475.1	163.4	–	–	0.0	2.2	–	79.5	38.2	41.3
12	1,754.5	304.3	621.5	469.4	152.1	–	–	0.0	3.4	–	94.7	52.4	42.3
19	1,765.7	305.2	613.2	467.5	145.7	–	–	0.0	4.3	–	108.8	67.8	41.0
26	1,736.3	306.0	594.1	462.6	131.5	–	–	0.0	0.9	–	103.8	62.9	40.9
Aug. 2	1,756.5	304.8	631.0	474.2	156.8	–	–	0.0	1.9	–	85.3	42.7	42.7
9	1,756.1	306.1	625.1	476.0	149.1	–	–	0.0	1.1	–	86.9	46.8	40.1
16	1,768.1	307.1	606.9	463.4	143.4	–	–	0.0	2.2	–	103.0	63.4	39.6
23	1,764.5	307.3	598.5	456.0	142.5	–	–	0.0	2.7	–	109.9	67.7	42.2
30	1,779.5	303.6	627.8	462.3	165.4	–	–	0.0	2.9	–	95.5	52.0	43.5
Sep. 6	1,761.8	304.6	618.7	457.4	161.3	–	–	0.0	2.4	–	92.1	51.3	40.8

* 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 In accordance with the accounting

procedure chosen by the Eurosystem for 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 remaining 92% of the value of the euro banknotes in circulation is allocated, likewise on a monthly

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 ²	Intra-Eurosystem liability related to euro banknote issue ¹	Revaluation accounts	Capital and reserves	As at reporting date
		Total	Deposits, balances and other liabilities	Liabilities arising from the credit facility under ERM II						
Eurosystem ³										
279.2	7.6	9.3	9.3	–	56.5	258.1	–	376.1	104.8	2019 Feb. 22
270.9	6.6	9.5	9.5	–	56.5	259.1	–	376.1	104.9	Mar. 1
262.2	6.9	9.8	9.8	–	56.5	258.0	–	376.1	104.9	8
255.5	5.6	10.1	10.1	–	56.5	256.9	–	376.1	106.2	15
245.3	6.3	9.6	9.6	–	56.5	256.0	–	376.1	106.2	22
302.5	5.6	9.8	9.8	–	57.5	256.6	–	397.5	106.8	29
239.3	6.2	10.4	10.4	–	57.5	251.7	–	397.3	107.2	Apr. 5
230.5	5.9	11.7	11.7	–	57.5	253.3	–	397.3	107.2	12
239.6	7.1	10.9	10.9	–	57.5	255.6	–	397.3	107.2	19
236.9	6.7	11.5	11.5	–	57.5	255.5	–	397.3	107.2	26
248.5	5.9	12.2	12.2	–	57.5	258.3	–	397.3	107.2	May 3
242.7	6.7	12.6	12.6	–	57.5	259.9	–	397.3	107.2	10
240.5	6.8	11.4	11.4	–	57.5	257.8	–	397.3	107.2	17
225.9	8.2	11.9	11.9	–	57.5	258.0	–	397.3	107.2	24
234.8	6.5	11.7	11.7	–	57.5	254.4	–	397.3	107.2	31
235.1	7.2	11.8	11.8	–	57.5	251.3	–	397.3	107.2	2019 June 7
232.3	7.8	12.4	12.4	–	57.5	251.0	–	397.3	107.2	14
237.3	7.5	11.3	11.3	–	57.5	255.7	–	397.3	107.2	21
277.4	5.4	10.4	10.4	–	56.8	262.8	–	425.7	107.2	28
241.3	5.8	10.2	10.2	–	56.8	259.4	–	425.7	107.2	July 5
242.8	6.7	10.7	10.7	–	56.8	260.7	–	425.7	107.2	12
248.3	8.1	11.7	11.7	–	56.8	264.0	–	425.7	107.2	19
245.8	10.3	11.4	11.4	–	56.8	265.3	–	425.7	107.2	26
247.0	10.4	10.5	10.5	–	56.8	268.1	–	425.7	107.2	Aug. 2
254.0	10.8	10.5	10.5	–	56.8	266.8	–	425.7	107.2	9
263.1	10.2	10.3	10.3	–	56.8	264.4	–	425.7	107.2	16
261.6	9.7	11.6	11.6	–	56.8	265.9	–	425.7	107.2	23
260.9	10.2	11.4	11.4	–	56.8	266.4	–	425.7	107.2	30
250.5	10.2	10.9	10.9	–	56.8	269.7	–	425.7	107.2	Sep. 6
Deutsche Bundesbank										
159.1	0.0	0.2	0.2	–	14.7	32.3	391.5	118.5	5.7	2019 Feb. 22
150.6	0.0	0.4	0.4	–	14.7	29.8	394.4	118.5	5.7	Mar. 1
142.8	0.0	0.7	0.7	–	14.7	29.8	394.4	118.5	5.7	8
134.0	0.0	0.4	0.4	–	14.7	30.1	394.4	118.5	5.7	15
126.7	0.0	0.1	0.1	–	14.7	30.2	394.4	118.5	5.7	22
172.9	0.0	0.1	0.1	–	14.9	29.4	396.9	123.1	5.7	29
126.7	0.0	0.3	0.3	–	14.9	29.5	396.9	123.1	5.7	Apr. 5
120.2	0.0	0.3	0.3	–	14.9	29.7	396.9	123.1	5.7	12
131.6	0.0	0.0	0.0	–	14.9	29.9	396.9	123.1	5.7	19
133.6	0.0	0.3	0.3	–	14.9	30.0	396.9	123.1	5.7	26
140.7	0.0	0.2	0.2	–	14.9	30.1	400.8	123.1	5.7	May 3
140.3	0.0	0.3	0.3	–	14.9	30.2	400.8	123.1	5.7	10
138.4	0.0	0.0	0.0	–	14.9	30.3	400.8	123.1	5.7	17
127.1	0.0	0.2	0.2	–	14.9	30.4	400.8	123.1	5.7	24
134.6	0.0	0.3	0.3	–	14.9	30.5	404.8	123.1	5.7	31
134.7	0.0	0.2	0.2	–	14.9	30.7	404.8	123.1	5.7	2019 June 7
133.5	0.0	0.7	0.7	–	14.9	31.0	404.8	123.1	5.7	14
138.6	0.0	0.1	0.1	–	14.9	31.1	404.8	123.1	5.7	21
162.3	0.0	0.0	0.0	–	14.9	31.3	407.8	123.1	5.7	28
136.6	0.0	–	–	–	14.7	32.1	407.8	132.0	5.7	July 5
137.9	0.0	0.2	0.2	–	14.7	32.1	407.8	132.0	5.7	12
140.9	0.0	1.0	1.0	–	14.7	32.1	407.8	132.0	5.7	19
137.7	0.0	1.4	1.4	–	14.7	32.2	407.8	132.0	5.7	26
136.6	0.0	0.5	0.5	–	14.7	32.5	411.4	132.0	5.7	Aug. 2
140.2	0.0	0.4	0.4	–	14.7	32.5	411.4	132.0	5.7	9
151.8	0.0	0.6	0.6	–	14.7	32.6	411.4	132.0	5.7	16
148.6	0.0	0.9	0.9	–	14.7	32.7	411.4	132.0	5.7	23
145.9	0.0	1.4	1.4	–	14.7	32.7	417.2	132.0	5.7	30
140.8	0.0	0.8	0.8	–	14.7	32.7	417.2	132.0	5.7	Sep. 6

basis, to the NCBs, with each NCB showing in its balance sheet the share of the euro banknotes issued corresponding 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 procedure and the value of euro banknotes put

into circulation is also disclosed as an "Intra-Eurosystem claim/liability related to banknote issue". ² For the Deutsche Bundesbank: including DEM banknotes still in circulation. ³ 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	Total	Enterprises and house-holds	
													Total	Loans
End of year or month														
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	
2017	7,710.8	32.1	2,216.3	1,821.1	1,556.3	264.8	395.2	270.1	125.2	3,801.7	3,400.7	2,918.8	2,610.1	
2018	7,776.0	40.6	2,188.0	1,768.3	1,500.7	267.5	419.7	284.8	134.9	3,864.0	3,458.2	3,024.3	2,727.0	
2017 Oct.	7,825.7	28.4	2,285.3	1,873.3	1,604.0	269.2	412.1	285.1	127.0	3,804.7	3,393.5	2,899.1	2,598.2	
Nov.	7,849.9	28.0	2,312.8	1,901.5	1,633.0	268.5	411.3	285.5	125.8	3,818.1	3,411.2	2,919.0	2,612.6	
Dec.	7,710.8	32.1	2,216.3	1,821.1	1,556.3	264.8	395.2	270.1	125.2	3,801.7	3,400.7	2,918.8	2,610.1	
2018 Jan.	7,817.2	29.2	2,296.1	1,891.0	1,624.5	266.5	405.1	280.3	124.9	3,813.9	3,407.5	2,930.5	2,622.5	
Feb.	7,790.8	29.6	2,298.1	1,892.3	1,627.0	265.2	405.9	280.6	125.2	3,814.1	3,406.5	2,938.1	2,633.4	
Mar.	7,746.6	35.1	2,254.6	1,852.5	1,585.3	267.1	402.1	274.9	127.2	3,814.9	3,410.8	2,946.8	2,644.4	
Apr.	7,781.1	33.8	2,300.8	1,892.1	1,625.1	267.0	408.7	280.6	128.0	3,818.5	3,417.4	2,956.1	2,650.7	
May	7,882.8	35.0	2,314.0	1,900.7	1,630.1	270.6	413.3	284.6	128.6	3,823.8	3,418.9	2,963.0	2,656.6	
June	7,804.7	35.0	2,266.6	1,853.0	1,584.7	268.2	413.6	285.5	128.1	3,832.7	3,430.8	2,979.9	2,672.2	
July	7,784.2	34.7	2,276.2	1,852.8	1,585.7	267.1	423.4	295.9	127.5	3,840.0	3,437.3	2,987.0	2,679.3	
Aug.	7,828.0	35.1	2,294.8	1,865.2	1,597.6	267.6	429.6	301.1	128.5	3,840.6	3,431.8	2,987.4	2,690.7	
Sep.	7,799.9	35.8	2,267.8	1,846.4	1,577.7	268.7	421.4	291.0	130.4	3,854.6	3,447.2	3,006.3	2,708.5	
Oct.	7,845.2	36.9	2,286.9	1,855.6	1,588.6	267.0	431.4	298.1	133.2	3,858.3	3,447.8	3,009.7	2,711.9	
Nov.	7,881.2	36.8	2,303.5	1,872.8	1,605.2	267.6	430.8	295.9	134.8	3,874.4	3,460.7	3,023.7	2,727.7	
Dec.	7,776.0	40.6	2,188.0	1,768.3	1,500.7	267.5	419.7	284.8	134.9	3,864.0	3,458.2	3,024.3	2,727.0	
2019 Jan.	7,902.3	36.7	2,267.3	1,827.4	1,559.5	267.8	439.9	304.8	135.1	3,878.8	3,468.7	3,032.2	2,737.6	
Feb.	7,935.7	36.9	2,304.8	1,865.2	1,591.5	271.1	442.3	304.8	137.5	3,893.1	3,477.0	3,044.8	2,751.0	
Mar.	8,121.3	37.0	2,343.5	1,885.9	1,614.7	271.2	457.6	319.3	138.4	3,921.0	3,488.4	3,059.8	2,765.7	
Apr.	8,154.6	38.2	2,354.4	1,893.6	1,625.2	268.5	460.8	321.6	139.1	3,928.3	3,492.4	3,068.0	2,774.1	
May	8,280.9	37.9	2,376.8	1,919.0	1,648.5	270.5	457.8	317.9	139.9	3,944.5	3,509.1	3,085.5	2,790.5	
June	8,321.9	37.9	2,332.5	1,869.9	1,600.4	269.6	462.6	321.6	141.0	3,972.1	3,530.5	3,108.0	2,809.6	
July	8,373.5	37.4	2,311.6	1,845.2	1,575.0	270.2	466.4	324.2	142.2	3,984.7	3,539.6	3,114.6	2,815.1	
Changes ³														
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	
2017	8.0	6.1	135.9	165.0	182.6	- 17.6	- 29.1	- 19.6	- 9.5	51.3	63.5	114.8	101.1	
2018	101.8	8.5	- 29.2	- 49.7	- 53.4	3.7	20.6	13.0	7.6	78.7	71.9	118.1	127.8	
2017 Nov.	33.4	- 0.4	28.9	28.8	29.4	- 0.6	0.0	1.2	- 1.1	14.8	18.7	19.0	13.5	
Dec.	- 126.4	4.1	- 90.1	- 74.7	- 72.0	- 2.7	- 15.4	- 15.0	- 0.4	- 15.2	- 10.0	0.1	- 2.4	
2018 Jan.	124.2	- 2.9	82.2	70.9	68.7	2.2	11.3	11.5	- 0.2	14.7	8.2	12.4	13.0	
Feb.	6.3	0.3	0.5	0.6	2.0	- 1.4	- 0.1	- 0.4	0.3	0.2	- 0.7	7.7	10.7	
Mar.	- 37.4	5.5	- 42.9	- 39.5	- 41.4	1.9	- 3.4	- 5.3	2.0	2.7	5.6	10.1	12.3	
Apr.	28.9	- 1.3	45.6	39.7	39.9	- 0.2	5.9	5.1	0.9	4.0	7.1	9.8	6.3	
May	85.0	1.3	12.4	9.1	5.7	3.4	3.4	2.8	0.5	12.9	9.4	15.3	14.3	
June	- 77.2	- 0.1	- 47.4	- 47.7	- 45.4	- 2.3	0.3	0.9	- 0.5	9.9	12.8	17.9	16.4	
July	- 14.4	- 0.3	10.5	0.3	1.3	- 1.0	10.1	10.7	- 0.6	7.8	6.8	5.9	6.1	
Aug.	41.9	0.4	19.8	13.8	13.0	0.8	5.9	4.9	1.0	0.6	- 5.6	0.4	11.3	
Sep.	- 30.4	0.8	- 27.3	- 18.9	- 19.9	1.0	- 8.4	- 10.4	1.9	14.2	15.9	19.2	18.2	
Oct.	36.4	1.1	15.0	8.5	10.3	- 1.8	6.5	6.1	0.4	3.8	0.5	3.4	3.2	
Nov.	38.5	- 0.1	17.2	17.6	16.7	1.0	- 0.5	- 2.0	1.6	16.7	13.4	14.4	16.1	
Dec.	- 100.0	3.8	- 114.6	- 104.0	- 104.3	0.2	- 10.6	- 10.9	0.3	- 8.8	- 1.5	1.6	- 0.1	
2019 Jan.	128.9	- 3.9	79.5	59.2	58.8	0.5	20.3	20.0	0.3	17.0	12.6	10.0	11.4	
Feb.	31.1	0.1	36.8	34.8	31.7	3.0	2.1	- 0.4	2.5	15.5	9.5	13.7	14.5	
Mar.	124.6	0.2	32.4	25.5	26.3	- 0.8	6.9	6.5	0.4	12.4	10.7	14.4	14.6	
Apr.	33.9	1.2	10.8	7.7	10.5	- 2.8	3.1	2.4	0.7	7.6	4.4	8.4	8.9	
May	124.6	- 0.3	22.1	25.4	23.2	2.1	- 3.2	- 3.9	0.7	16.3	16.3	17.4	16.2	
June	50.5	0.0	- 42.3	- 48.3	- 47.7	- 0.6	6.0	4.8	1.2	27.8	21.7	22.9	19.4	
July	59.7	- 0.5	- 21.2	- 24.9	- 25.5	0.6	3.7	2.6	1.1	12.5	9.5	7.2	6.0	

* 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				to non-banks in other Member States						Total	of which: Loans		
Secur-ities	Total	Loans	Secur-ities ²	Total	Enterprises and households		General government						
					Total	of which: Loans	Total	Loans	Secur-ities				
End of year or month													
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
308.7	481.9	284.3	197.6	401.0	271.8	158.3	129.1	29.8	99.3	991.9	745.3	668.9	2017
297.2	433.9	263.4	170.5	405.8	286.7	176.5	119.2	28.6	90.6	1,033.2	778.5	650.2	2018
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	2017 Oct.
306.4	492.2	287.3	205.0	406.8	276.8	164.2	130.0	29.8	100.2	1,005.3	759.4	685.6	Nov.
308.7	481.9	284.3	197.6	401.0	271.8	158.3	129.1	29.8	99.3	991.9	745.3	668.9	Dec.
308.0	477.0	282.8	194.2	406.4	278.6	163.9	127.8	29.7	98.0	1,009.1	758.2	668.9	2018 Jan.
304.7	468.4	277.4	191.0	407.6	280.5	165.9	127.1	29.6	97.5	1,026.5	775.9	622.5	Feb.
302.4	463.9	275.5	188.4	404.1	278.3	164.9	125.9	29.8	96.1	1,016.8	763.8	625.3	Mar.
305.4	461.2	276.2	185.0	401.2	275.1	165.1	126.0	29.9	96.2	1,009.2	757.3	618.9	Apr.
306.4	455.9	272.3	183.6	404.9	280.2	167.4	124.8	29.8	95.0	1,052.9	799.1	657.1	May
307.7	450.8	270.0	180.8	402.0	278.4	166.4	123.6	29.9	93.7	1,032.5	777.4	637.9	June
307.7	450.3	270.8	179.5	402.7	281.2	169.9	121.5	29.7	91.8	1,028.8	770.8	604.5	July
296.8	444.3	266.4	178.0	408.9	286.1	173.1	122.8	29.7	93.1	1,021.0	762.2	636.6	Aug.
297.8	440.9	263.4	177.5	407.4	283.7	171.7	123.6	29.6	94.0	1,028.7	770.3	613.1	Sep.
297.8	438.1	265.4	172.7	410.5	287.6	176.1	122.9	31.0	91.9	1,037.4	780.7	625.6	Oct.
296.0	437.0	264.5	172.5	413.7	290.8	177.8	122.9	30.9	92.1	1,032.1	777.3	634.5	Nov.
297.2	433.9	263.4	170.5	405.8	286.7	176.5	119.2	28.6	90.6	1,033.2	778.5	650.2	Dec.
294.6	436.5	265.9	170.6	410.1	291.8	179.6	118.3	28.9	89.5	1,049.5	794.1	670.0	2019 Jan.
293.8	432.2	263.3	168.9	416.1	294.1	181.5	122.0	28.8	93.1	1,037.8	781.6	663.2	Feb.
294.1	428.5	260.6	168.0	432.6	311.4	197.8	121.2	28.9	92.4	1,084.1	826.7	735.7	Mar.
293.8	424.5	260.8	163.7	435.9	315.7	202.0	120.2	29.6	90.5	1,099.5	840.3	734.2	Apr.
295.0	423.6	259.2	164.4	435.5	317.7	205.0	117.8	29.4	88.4	1,101.0	839.1	820.6	May
298.5	422.5	257.7	164.7	441.6	320.9	207.2	120.7	29.0	91.7	1,103.8	841.8	875.6	June
299.5	425.0	260.2	164.8	445.1	321.8	209.5	123.2	29.0	94.2	1,114.5	851.7	925.2	July
Changes ³													
- 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
13.7	- 51.3	- 22.8	- 28.5	- 12.2	- 3.4	4.0	- 8.7	0.1	- 8.9	- 12.3	- 6.7	- 173.1	2017
- 9.8	- 46.2	- 19.1	- 27.0	6.8	18.2	18.6	- 11.4	- 1.5	- 9.9	29.0	18.9	14.8	2018
5.6	- 0.4	- 0.1	- 0.3	- 3.9	- 4.3	- 3.1	0.4	- 0.6	1.0	- 2.5	- 3.6	- 7.3	2017 Nov.
2.5	- 10.1	- 2.8	- 7.2	- 5.2	- 4.3	- 5.4	- 0.8	0.0	- 0.9	- 8.3	- 9.5	- 16.9	Dec.
- 0.6	- 4.1	- 0.8	- 3.3	6.5	7.7	6.3	- 1.2	- 0.1	- 1.2	29.4	24.6	0.7	2018 Jan.
- 3.0	- 8.4	- 5.2	- 3.3	1.0	1.7	1.7	- 0.7	- 0.2	- 0.5	10.6	11.1	- 5.4	Feb.
- 2.2	- 4.5	- 1.9	- 2.6	- 2.9	- 1.6	- 0.4	- 1.3	0.1	- 1.4	- 5.5	- 8.2	2.8	Mar.
3.5	- 2.6	0.7	- 3.3	- 3.1	- 3.3	0.0	0.1	0.1	0.0	- 13.2	- 11.9	- 6.2	Apr.
0.9	- 5.8	- 4.3	- 1.5	3.5	4.6	1.8	- 1.2	- 0.1	- 1.1	30.9	29.9	27.5	May
1.5	- 5.0	- 2.3	- 2.8	- 2.9	- 1.4	- 0.6	- 1.5	- 0.1	- 1.4	- 20.4	- 21.8	- 19.2	June
- 0.2	0.9	2.2	- 1.3	0.9	3.1	3.7	- 2.2	- 0.2	- 2.0	- 0.7	- 3.8	- 31.6	July
- 10.9	- 6.0	- 4.5	- 1.5	6.2	4.9	3.1	1.3	0.0	1.2	- 11.0	- 11.5	32.1	Aug.
1.1	- 3.4	- 2.9	- 0.4	- 1.6	- 1.9	- 1.6	0.3	- 0.1	0.5	5.4	5.9	- 23.5	Sep.
0.2	- 2.9	1.9	- 4.8	3.3	4.5	4.1	- 1.2	1.4	- 2.6	- 4.0	- 3.5	12.6	Oct.
- 1.7	- 1.1	- 0.8	- 0.2	3.3	3.3	1.5	0.0	- 0.1	0.2	- 4.0	- 2.2	8.8	Nov.
1.7	- 3.1	- 1.1	- 2.0	- 7.3	- 3.5	- 1.1	- 3.8	- 2.3	- 1.5	3.5	3.5	16.1	Dec.
- 1.4	- 2.6	2.4	0.2	4.4	5.1	3.2	- 0.8	0.3	- 1.0	- 16.5	- 15.8	19.8	2019 Jan.
- 0.8	- 4.2	- 2.6	- 1.7	6.0	2.4	2.2	3.7	- 0.0	3.7	- 14.5	- 15.1	- 6.9	Feb.
- 0.2	- 3.7	- 2.8	- 1.0	1.7	3.0	2.5	- 1.2	0.0	- 1.2	16.1	17.2	63.6	Mar.
- 0.4	- 4.0	0.2	- 4.2	3.1	4.2	4.3	- 1.1	0.7	- 1.8	15.8	14.1	- 1.5	Apr.
1.2	- 1.0	- 1.7	0.7	- 0.1	2.3	3.1	- 2.4	- 0.2	- 2.2	0.0	- 2.8	86.5	May
3.5	- 1.2	- 1.5	0.3	6.1	3.4	2.7	2.6	- 0.4	3.1	10.5	9.9	54.5	June
1.2	2.3	2.5	- 0.2	3.0	1.1	2.3	1.9	- 0.0	1.9	10.6	9.9	58.2	July

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	Deposits of banks (MFIs) in the euro area				Deposits of non-banks (non-MFIs) in the euro area									
	Balance sheet total ¹	of banks			Total	Deposits of non-banks in the home country						Deposits of non-banks		
		Total	in the home country	in other Member States		Total	Total	Over-night	With agreed maturities		At agreed notice		Total	Over-night
									Total	of which: up to 2 years	Total	of which: up to 3 months		
End of year or month														
2010	8,304.8	1,495.8	1,240.1	255.7	2,925.8	2,817.6	1,089.1	1,110.3	304.6	618.2	512.5	68.4	19.3	
2011	8,393.3	1,444.8	1,210.3	234.5	3,033.4	2,915.1	1,143.3	1,155.8	362.6	616.1	515.3	78.8	25.9	
2012	8,226.6	1,371.0	1,135.9	235.1	3,091.4	2,985.2	1,294.9	1,072.8	320.0	617.6	528.4	77.3	31.2	
2013	7,528.9	1,345.4	1,140.3	205.1	3,130.5	3,031.5	1,405.3	1,016.2	293.7	610.1	532.4	81.3	33.8	
2014	7,802.3	1,324.0	1,112.3	211.7	3,197.7	3,107.4	1,514.3	985.4	298.1	607.7	531.3	79.7	34.4	
2015	7,665.2	1,267.8	1,065.9	201.9	3,307.1	3,215.1	1,670.2	948.4	291.5	596.4	534.5	80.8	35.3	
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	
2017	7,710.8	1,233.6	1,048.6	184.9	3,529.1	3,411.1	1,936.6	891.7	274.2	582.8	541.0	108.6	42.5	
2018	7,776.0	1,213.8	1,021.8	192.0	3,642.8	3,527.0	2,075.5	872.9	267.2	578.6	541.1	104.5	45.0	
2017 Oct.	7,825.7	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	
Nov.	7,849.9	1,275.5	1,081.0	194.5	3,542.9	3,417.4	1,939.9	896.5	276.9	581.0	538.6	113.6	52.1	
Dec.	7,710.8	1,233.6	1,048.6	184.9	3,529.1	3,411.1	1,936.6	891.7	274.2	582.8	541.0	108.6	42.5	
2018 Jan.	7,817.2	1,249.4	1,060.8	188.6	3,539.8	3,419.1	1,944.5	892.2	276.8	582.4	539.7	110.6	46.4	
Feb.	7,790.8	1,246.9	1,058.2	188.8	3,536.8	3,416.5	1,945.4	888.9	273.3	582.1	540.4	109.7	47.1	
Mar.	7,746.6	1,238.1	1,057.5	180.6	3,537.7	3,413.3	1,944.1	888.1	274.7	581.2	539.9	115.3	48.7	
Apr.	7,781.1	1,233.9	1,053.5	180.4	3,551.3	3,430.7	1,967.4	882.9	270.2	580.4	539.6	108.8	46.7	
May	7,882.8	1,232.4	1,037.1	195.3	3,582.2	3,462.4	1,998.3	884.0	271.4	580.1	539.5	109.4	47.7	
June	7,804.7	1,224.7	1,035.7	189.0	3,582.9	3,463.7	1,991.4	893.1	281.1	579.2	539.1	109.0	44.0	
July	7,784.2	1,228.5	1,042.2	186.3	3,584.2	3,462.9	1,997.6	887.1	277.5	578.2	538.6	108.8	44.5	
Aug.	7,828.0	1,229.6	1,043.7	185.9	3,595.2	3,474.5	2,014.0	882.9	276.6	577.6	538.3	106.9	45.1	
Sep.	7,799.9	1,220.4	1,034.2	186.2	3,594.0	3,473.8	2,017.5	879.0	273.7	577.3	538.4	108.8	48.2	
Oct.	7,845.2	1,227.0	1,034.3	192.7	3,614.3	3,494.1	2,039.3	877.8	273.4	577.0	538.6	108.8	47.3	
Nov.	7,881.2	1,244.5	1,046.8	197.7	3,646.1	3,527.4	2,074.8	875.8	271.5	576.8	539.1	106.2	47.1	
Dec.	7,776.0	1,213.8	1,021.8	192.0	3,642.8	3,527.0	2,075.5	872.9	267.2	578.6	541.1	104.5	45.0	
2019 Jan.	7,902.3	1,238.4	1,040.5	197.9	3,646.4	3,530.1	2,074.3	877.3	277.3	578.4	541.4	104.9	45.9	
Feb.	7,935.7	1,258.4	1,046.6	211.8	3,658.9	3,544.0	2,083.6	880.9	281.8	579.5	542.4	103.3	44.6	
Mar.	8,121.3	1,281.9	1,050.1	231.8	3,676.8	3,554.7	2,095.7	877.1	280.6	582.0	544.7	109.9	51.7	
Apr.	8,154.6	1,298.3	1,061.2	237.0	3,689.3	3,569.8	2,117.1	870.5	276.7	582.2	544.7	105.8	47.5	
May	8,280.9	1,291.2	1,057.1	234.1	3,721.9	3,599.3	2,147.3	869.5	277.3	582.5	544.4	108.1	50.1	
June	8,321.9	1,292.1	1,048.3	243.8	3,728.4	3,595.5	2,144.7	868.1	274.5	582.6	544.0	116.0	56.6	
July	8,373.5	1,291.7	1,054.8	236.8	3,729.3	3,606.3	2,162.2	862.3	272.0	581.8	543.4	110.3	51.1	
Changes ⁴														
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	- 62.1	- 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	- 31.6	- 2.2	- 29.4	105.7	105.2	124.3	- 11.1	1.4	- 8.0	2.4	2.7	1.9	
2017	8.0	30.6	14.8	15.8	124.2	107.7	145.8	- 32.5	- 15.3	- 5.6	1.5	16.4	5.8	
2018	101.8	- 20.1	- 25.7	5.6	112.4	114.7	137.7	- 18.8	- 6.5	- 4.3	1.2	- 4.3	2.3	
2017 Nov.	33.4	4.6	- 0.3	4.9	37.9	30.2	27.9	- 2.8	- 0.2	- 0.5	0.2	4.6	5.9	
Dec.	- 126.4	- 36.9	- 27.7	- 9.2	- 13.1	- 5.7	- 3.0	- 4.6	- 2.6	1.9	2.4	- 4.9	- 9.6	
2018 Jan.	124.2	- 17.6	- 13.1	- 4.5	12.2	9.1	8.7	- 0.9	3.2	- 0.5	0.2	2.4	4.0	
Feb.	6.3	- 3.6	- 3.2	- 0.4	- 4.0	- 3.5	0.2	- 3.5	- 3.7	- 0.2	0.4	- 1.1	0.7	
Mar.	- 37.4	- 8.3	- 0.5	- 7.9	1.3	- 2.8	- 1.1	- 0.8	1.5	- 0.9	- 0.5	5.7	1.6	
Apr.	28.9	- 4.5	- 3.8	- 0.6	13.5	17.5	22.8	- 4.6	- 4.0	- 0.8	- 0.3	- 6.6	- 2.0	
May	85.0	- 3.5	- 17.3	13.9	29.2	30.2	29.9	0.7	0.8	- 0.3	- 0.1	0.4	0.9	
June	- 77.2	- 7.8	- 1.5	- 6.3	0.7	1.2	- 6.9	9.0	9.7	- 0.9	- 0.4	- 0.4	- 3.8	
July	- 14.4	4.7	7.2	- 2.5	1.8	- 0.4	6.5	- 5.9	- 3.5	- 1.0	- 0.5	- 0.1	0.5	
Aug.	41.9	2.0	2.6	- 0.6	10.7	11.3	16.1	- 4.2	- 0.9	- 0.6	- 0.2	- 2.0	0.6	
Sep.	- 30.4	- 9.6	- 9.7	0.1	- 1.2	- 0.7	3.6	- 4.0	- 3.1	- 0.3	0.0	1.9	3.1	
Oct.	36.4	5.4	- 0.4	5.9	19.1	19.3	21.1	- 1.5	- 0.5	- 0.3	0.2	- 0.2	- 1.0	
Nov.	38.5	17.7	12.6	5.1	32.1	33.5	35.5	- 1.9	- 1.9	- 0.1	0.5	- 2.5	- 0.2	
Dec.	- 100.0	- 30.3	- 24.8	- 5.5	- 2.9	- 0.1	1.3	- 3.1	- 4.2	1.7	2.0	- 1.7	- 2.1	
2019 Jan.	128.9	24.8	18.9	6.0	3.6	3.0	- 1.2	4.4	10.1	- 0.2	0.3	0.4	1.0	
Feb.	31.1	19.6	5.6	13.9	12.0	13.3	9.0	3.2	4.1	1.1	1.0	- 1.7	- 1.4	
Mar.	124.6	19.3	2.7	16.6	15.7	9.5	11.1	- 4.1	- 1.4	2.5	2.2	5.7	6.3	
Apr.	33.9	16.4	11.2	5.2	12.6	15.1	21.4	- 6.6	- 3.9	0.2	0.1	- 4.1	- 4.3	
May	124.6	- 7.3	- 4.2	- 3.1	32.4	29.5	30.1	- 0.9	0.6	0.3	- 0.3	2.3	2.7	
June	50.5	2.1	- 8.2	10.3	7.3	- 3.2	- 2.0	- 1.3	- 2.8	0.2	- 0.4	7.9	6.6	
July	59.7	- 0.4	6.5	- 6.9	0.9	10.7	17.4	- 5.8	- 2.6	- 0.9	- 0.6	- 5.7	- 5.5	

* 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										
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
63.2	19.7	2.9	2.6	9.4	8.7	3.3	2.1	994.5	37.8	603.4	686.0	658.8	2017
56.7	15.8	2.8	2.5	11.3	10.5	0.8	2.4	1,034.0	31.9	575.9	695.6	610.7	2018
59.9	18.3	2.9	2.6	8.6	7.9	2.3	2.2	1,008.9	40.7	667.9	612.7	753.9	2017 Oct.
58.6	16.7	2.9	2.6	11.8	8.3	2.6	2.2	1,004.7	40.1	664.4	609.8	747.9	Nov.
63.2	19.7	2.9	2.6	9.4	8.7	3.3	2.1	994.5	37.8	603.4	686.0	658.8	Dec.
61.3	18.9	2.9	2.6	10.0	8.9	4.3	2.1	1,002.6	35.4	682.4	666.5	670.0	2018 Jan.
59.7	18.2	2.9	2.6	10.7	8.8	3.8	2.1	1,006.3	36.0	690.3	678.6	625.9	Feb.
63.8	22.6	2.9	2.6	9.1	8.3	2.9	2.3	1,014.0	35.2	641.0	675.0	635.6	Mar.
59.2	18.0	2.9	2.5	11.7	8.4	2.4	2.2	1,016.6	34.7	672.9	677.3	624.6	Apr.
58.8	16.8	2.9	2.5	10.4	8.8	1.6	2.0	1,031.1	36.4	707.2	679.7	646.6	May
62.2	21.7	2.9	2.5	10.2	9.3	1.3	2.1	1,022.2	33.7	670.8	680.2	620.5	June
61.5	19.0	2.9	2.5	12.4	10.0	1.8	2.0	1,016.9	33.1	681.9	682.2	586.7	July
58.9	16.4	2.8	2.5	13.9	10.6	1.2	2.0	1,021.2	35.0	690.5	684.5	603.8	Aug.
57.8	17.4	2.8	2.5	11.5	9.2	1.3	2.0	1,034.7	33.9	681.7	687.2	578.7	Sep.
58.6	17.2	2.8	2.5	11.4	9.7	2.4	2.0	1,044.7	36.2	666.9	687.8	600.0	Oct.
56.3	15.0	2.8	2.5	12.5	10.0	1.3	2.4	1,048.3	34.6	643.3	688.1	607.3	Nov.
56.7	15.8	2.8	2.5	11.3	10.5	0.8	2.4	1,034.0	31.9	575.9	695.6	610.7	Dec.
56.2	15.3	2.8	2.5	11.5	10.1	1.7	2.4	1,048.1	32.1	636.9	688.3	640.1	2019 Jan.
55.9	14.9	2.8	2.5	11.7	10.0	2.0	2.3	1,067.9	32.2	621.9	684.9	639.5	Feb.
55.4	14.9	2.8	2.5	12.1	10.5	11.4	2.1	1,065.3	32.7	666.8	699.3	717.8	Mar.
55.5	15.0	2.8	2.5	13.7	11.2	12.5	2.0	1,060.0	32.1	698.4	696.3	697.8	Apr.
55.2	14.8	2.8	2.5	14.4	12.0	11.2	2.0	1,071.8	32.4	688.6	703.5	790.6	May
56.6	16.1	2.8	2.5	17.0	14.0	12.9	2.0	1,071.1	33.1	676.3	706.6	832.5	June
56.4	15.6	2.8	2.5	12.8	11.2	13.9	2.1	1,075.3	33.4	667.9	709.8	883.6	July
Changes ⁴													
- 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
10.8	4.2	- 0.1	- 0.0	- 0.0	- 0.0	1.1	- 0.3	- 3.3	- 8.5	- 16.1	34.1	- 162.3	2017
- 6.4	- 4.1	- 0.1	- 0.1	2.1	2.1	- 2.6	0.3	30.0	- 5.9	- 36.0	7.4	10.3	2018
- 1.3	- 1.5	- 0.0	- 0.0	3.0	0.3	0.3	0.0	- 0.2	- 0.5	- 0.6	- 1.5	- 7.1	2017 Nov.
4.7	3.0	0.0	0.0	- 2.4	0.3	0.7	- 0.0	- 7.3	- 2.3	- 59.2	5.6	- 16.1	Dec.
- 1.5	- 0.8	- 0.0	- 0.0	0.6	0.2	- 1.0	- 0.0	15.8	- 2.2	84.0	- 17.5	11.0	2018 Jan.
- 1.7	- 0.8	- 0.0	- 0.0	0.6	- 0.1	- 0.5	- 0.0	- 0.5	0.6	5.0	10.8	- 1.0	Feb.
4.1	4.4	- 0.0	- 0.0	- 1.6	- 0.4	- 0.9	0.2	9.4	- 0.8	- 48.1	- 3.0	12.1	Mar.
- 4.6	- 4.6	- 0.0	- 0.0	2.7	0.1	- 0.5	- 0.1	- 0.9	- 0.3	28.0	1.7	- 8.4	Apr.
- 0.5	- 1.4	- 0.0	- 0.0	- 1.4	0.3	- 0.8	- 0.2	7.3	1.4	29.3	0.1	23.6	May
3.3	4.9	- 0.0	- 0.0	- 0.1	0.5	- 0.4	0.1	- 9.2	- 2.7	- 36.6	0.4	- 24.3	June
- 0.6	- 2.7	- 0.0	- 0.0	2.2	0.7	- 0.6	- 0.1	- 3.6	- 0.6	12.3	2.6	- 32.6	July
- 2.6	- 2.6	- 0.0	- 0.0	1.4	0.6	- 0.6	- 0.0	2.8	1.9	7.5	2.3	17.3	Aug.
- 1.2	0.9	- 0.0	- 0.0	- 2.4	- 1.3	0.1	- 0.0	11.8	- 1.1	- 10.0	2.2	- 23.7	Sep.
- 0.8	- 0.3	- 0.0	- 0.0	- 0.0	0.5	- 1.0	0.1	5.5	- 2.2	- 18.1	- 0.7	24.1	Oct.
- 2.3	- 2.2	- 0.0	- 0.0	1.2	0.5	- 1.0	0.3	4.4	- 1.6	- 23.1	0.5	7.6	Nov.
0.5	0.9	- 0.0	- 0.0	- 1.2	0.5	- 0.6	0.0	- 12.7	- 2.6	- 66.2	8.0	4.7	Dec.
- 0.6	- 0.5	- 0.0	- 0.0	0.2	- 0.4	0.9	0.0	13.9	- 0.2	61.2	- 7.3	31.7	2019 Jan.
- 0.3	- 0.4	- 0.0	- 0.0	0.5	0.2	0.3	- 0.1	17.8	- 0.0	- 16.4	- 4.0	1.9	Feb.
- 0.5	- 0.1	- 0.0	- 0.0	0.5	0.6	0.0	- 0.3	- 6.0	0.4	15.8	11.6	68.4	Mar.
0.1	0.1	- 0.0	- 0.0	1.7	0.8	- 1.1	- 0.0	- 5.3	- 0.5	31.6	- 3.0	- 19.4	Apr.
- 0.4	- 0.2	- 0.0	- 0.0	0.6	0.6	- 1.3	0.0	11.8	0.2	- 10.4	7.2	92.3	May
1.4	1.3	- 0.0	- 0.0	2.5	2.0	1.7	0.0	3.4	0.9	- 8.2	4.8	39.5	June
- 0.2	- 0.5	- 0.0	0.0	- 4.2	- 2.8	1.0	0.1	5.2	1.3	- 8.4	2.2	59.1	July

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

published together with money market fund shares. 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:			Securities issued by non-banks		
					Balances and loans	Securities issued by banks		Loans		Bills			
							for up to and including 1 year	for more than 1 year					
All categories of banks													
2019 Feb.	1,579	7,984.1	516.1	2,393.6	1,904.1	487.0	4,195.5	367.4	3,150.9	0.5	670.6	112.8	766.2
Mar.	1,579	8,171.5	521.8	2,473.2	1,982.4	487.8	4,224.1	382.8	3,162.7	0.6	669.3	112.6	839.7
Apr.	1,578	8,205.5	546.2	2,470.0	1,981.4	485.0	4,236.8	385.1	3,178.3	0.5	665.2	113.2	839.3
May	1,576	8,331.8	564.0	2,462.3	1,970.6	488.1	4,265.7	395.5	3,196.6	0.4	665.2	113.7	926.0
June	1,572	8,371.8	523.0	2,471.9	1,978.5	489.2	4,283.3	405.3	3,197.4	0.5	672.2	113.5	980.1
July	1,567	8,421.6	520.0	2,454.7	1,958.2	492.2	4,305.2	411.5	3,211.6	0.4	670.9	113.2	1,028.5
Commercial banks ⁶													
2019 June	263	3,503.7	312.8	1,032.8	945.4	86.8	1,378.2	245.5	921.1	0.4	208.1	51.9	727.9
July	262	3,520.3	298.2	1,019.7	929.3	89.6	1,386.8	249.6	924.5	0.4	206.5	51.5	764.0
Big banks ⁷													
2019 June	4	2,032.6	97.5	595.9	561.8	34.1	638.6	126.2	402.6	0.1	107.7	45.4	655.2
July	4	2,084.0	100.4	593.6	557.2	36.4	645.5	131.0	403.1	0.1	106.7	45.4	699.2
Regional banks and other commercial banks													
2019 June	151	1,040.7	99.9	239.9	189.1	50.7	631.1	84.7	452.5	0.2	92.9	5.8	64.0
July	150	1,031.1	98.9	238.0	186.5	51.3	632.0	84.4	454.3	0.2	92.3	5.5	56.7
Branches of foreign banks													
2019 June	108	430.4	115.4	197.1	194.5	2.0	108.6	34.6	66.0	0.1	7.5	0.7	8.7
July	108	405.1	99.0	188.1	185.6	1.9	109.3	34.3	67.1	0.1	7.5	0.7	8.1
Landesbanken													
2019 June	6	813.6	48.6	262.9	200.9	60.9	394.5	48.0	296.5	0.0	47.5	9.3	98.3
July	6	831.3	56.0	262.7	199.9	61.7	398.5	51.4	297.5	0.0	46.7	9.4	104.6
Savings banks													
2019 June	385	1,309.2	53.6	189.4	70.0	119.1	1,032.0	52.6	816.3	0.0	162.9	14.2	20.0
July	385	1,315.1	56.2	189.4	70.4	118.7	1,035.6	52.3	819.5	0.0	163.4	14.2	19.7
Credit cooperatives													
2019 June	871	952.2	21.3	173.9	65.9	107.7	719.4	35.7	570.0	0.0	113.5	17.4	20.2
July	867	958.7	20.9	177.1	69.5	107.3	723.5	34.7	574.8	0.0	113.8	17.4	19.9
Mortgage banks													
2019 June	10	233.5	4.2	27.6	18.3	9.3	193.4	2.7	170.7	-	20.0	0.2	8.1
July	10	233.1	4.1	27.3	17.9	9.4	193.3	2.5	170.9	-	19.9	0.2	8.1
Building and loan associations													
2019 June	19	236.9	1.0	53.9	37.6	16.3	177.1	1.1	150.3	.	25.6	0.3	4.6
July	19	237.2	0.8	53.9	37.5	16.4	178.0	1.2	151.0	.	25.8	0.3	4.3
Banks with special, development and other central support tasks													
2019 June	18	1,322.8	81.5	731.3	640.4	89.2	388.7	19.7	272.5	-	94.6	20.2	101.0
July	18	1,325.9	83.7	724.7	633.6	89.3	389.5	19.8	273.4	-	94.7	20.2	107.9
Memo item: Foreign banks ⁸													
2019 June	143	1,246.7	173.8	401.1	363.4	37.1	543.7	104.4	349.4	0.3	88.7	3.5	124.6
July	143	1,225.6	159.7	389.1	349.6	38.7	548.3	104.0	352.7	0.3	90.2	3.4	125.3
of which: Banks majority-owned by foreign banks ⁹													
2019 June	35	816.3	58.5	204.1	168.9	35.1	435.1	69.7	283.3	0.2	81.2	2.8	115.9
July	35	820.5	60.7	201.0	164.0	36.8	439.0	69.7	285.6	0.2	82.7	2.7	117.1

* Assets and liabilities of monetary financial institutions (MFIs) in Germany. The assets and liabilities of foreign branches, of money market funds (which are also classified as MFIs) and of the Bundesbank are not included. For the definitions of the respective items, see the footnotes to Table IV.3. 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 (*Handels-*

gesetzbuch) read in conjunction with Section 35(1) number 1a of the Credit Institution Accounting Regulation (*Verordnung über die Rechnungslegung der Kredit-institute*) are classified under "Other assets and liabilities" as of the December 2010 reporting date. Trading portfolio derivatives are listed separately in Statistical Supplement 1 to the Monthly Report – Banking statistics, in Tables I.1 to I.3. ² For building and loan associations: including deposits under savings and loan contracts (see Table IV.12). ³ Included in time deposits. ⁴ Excluding deposits under savings 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 3 months' notice	Bank savings bonds				
All categories of banks														
1,744.9	549.0	1,195.8	3,796.2	2,199.0	285.3	685.5	49.5	586.5	548.7	40.0	1,159.7	533.6	749.8	2019 Feb.
1,812.3	586.4	1,225.8	3,824.4	2,215.0	297.4	683.5	53.4	588.9	550.9	39.7	1,169.0	536.1	829.6	Mar.
1,847.9	573.2	1,274.6	3,850.4	2,246.9	295.4	679.6	60.5	589.1	550.9	39.4	1,161.2	536.0	810.0	Apr.
1,840.1	603.9	1,236.2	3,872.7	2,273.4	293.8	677.1	58.1	589.4	550.5	39.1	1,178.2	539.6	901.3	May
1,834.3	593.8	1,240.4	3,875.2	2,277.6	290.2	679.1	52.4	589.5	550.1	38.8	1,174.8	544.3	943.3	June
1,822.2	584.0	1,238.2	3,878.8	2,292.6	284.2	674.7	59.8	588.6	549.5	38.7	1,179.0	545.3	996.4	July
Commercial banks 6														
928.1	434.7	493.4	1,566.5	996.8	172.7	277.3	48.5	104.0	94.9	15.7	174.2	197.3	637.6	2019 June
897.4	415.1	482.3	1,573.3	1,006.1	173.2	274.3	57.3	103.8	94.7	16.0	171.6	197.2	680.7	July
Big banks 7														
460.1	200.7	259.3	769.2	465.1	101.3	111.6	37.5	87.7	79.6	3.5	122.3	110.1	571.0	2019 June
455.1	191.3	263.8	777.6	475.2	101.2	110.1	44.9	87.5	79.4	3.6	120.7	110.1	620.5	July
Regional banks and other commercial banks														
208.9	77.7	131.2	646.0	425.8	48.9	143.1	11.0	16.1	15.1	12.1	51.0	78.1	56.7	2019 June
209.3	80.0	129.3	643.7	424.1	49.7	141.6	12.5	16.1	15.1	12.3	49.9	77.9	50.3	July
Branches of foreign banks														
259.1	156.3	102.8	151.3	105.9	22.5	22.6	–	0.2	0.2	0.1	0.9	9.1	10.0	2019 June
233.0	143.8	89.2	151.9	106.8	22.3	22.6	–	0.2	0.2	0.1	1.0	9.2	10.0	July
Landesbanken														
242.8	59.1	183.7	238.6	112.0	41.5	77.6	1.6	7.2	7.0	0.3	192.2	40.0	100.0	2019 June
256.7	71.4	185.4	234.5	109.3	40.6	77.2	2.2	7.1	7.0	0.3	192.7	39.9	107.4	July
Savings banks														
134.1	5.0	129.1	991.5	650.8	18.0	15.4	–	291.0	268.9	16.3	18.6	121.4	43.6	2019 June
134.5	3.8	130.7	996.7	656.5	18.5	15.2	–	290.4	268.5	16.0	18.4	122.3	43.2	July
Credit cooperatives														
118.4	1.5	116.9	711.6	472.0	33.8	14.1	–	186.9	178.9	4.8	10.0	83.2	29.0	2019 June
119.1	1.4	117.6	716.9	477.7	33.7	13.9	–	186.8	178.8	4.8	10.1	83.3	29.3	July
Mortgage banks														
50.5	5.7	44.8	72.5	2.3	3.7	66.5	–	–	–	–	93.7	10.2	6.6	2019 June
50.2	6.0	44.2	71.9	2.1	3.5	66.2	–	–	–	–	94.3	10.2	6.6	July
Building and loan associations														
23.2	3.0	20.2	186.4	3.2	2.1	180.5	–	0.5	0.5	0.1	3.1	12.0	12.2	2019 June
23.8	2.3	21.5	186.4	3.2	2.1	180.6	–	0.5	0.5	0.1	3.1	12.0	11.9	July
Banks with special, development and other central support tasks														
337.3	84.8	252.4	108.1	40.4	18.5	47.7	2.3	–	–	–	682.9	80.3	114.3	2019 June
340.6	84.0	256.5	99.1	37.8	12.5	47.3	0.3	–	–	–	688.7	80.3	117.3	July
Memo item: Foreign banks 8														
468.8	242.3	226.5	568.9	409.0	54.6	80.0	13.4	19.7	19.3	5.5	30.8	58.8	119.5	2019 June
443.5	231.6	211.9	570.3	411.4	54.5	79.4	14.3	19.6	19.2	5.4	31.2	58.9	121.7	July
of which: Banks majority-owned by foreign banks 9														
209.7	86.0	123.7	417.5	303.2	32.0	57.4	13.4	19.5	19.1	5.4	29.8	49.7	109.5	2019 June
210.5	87.8	122.7	418.4	304.6	32.2	56.9	14.3	19.4	19.0	5.4	30.2	49.7	111.7	July

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), Deutsche Postbank AG (from December 2004 up to April 2018) and DB Privat- und Firmenkundenbank AG (from May 2018) (see the explanatory notes in the Statistical Supplement to the Monthly Report 1, Banking statistics, Table I.3, banking group "Big banks"). 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 *													
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
2017	31.9	392.5	1,407.5	1,163.4	0.0	0.7	243.4	1.9	3,332.6	2,894.0	0.4	0.7	437.5
2018	40.4	416.1	1,323.5	1,083.8	0.0	0.8	239.0	5.9	3,394.5	2,990.2	0.2	0.2	403.9
2018 Feb.	29.3	460.7	1,409.5	1,165.3	0.0	0.8	243.3	2.9	3,338.3	2,910.6	0.2	1.2	426.4
Mar.	34.8	440.7	1,389.5	1,143.5	0.0	0.9	245.2	3.2	3,342.5	2,919.6	0.3	1.0	421.7
Apr.	33.5	464.4	1,405.8	1,159.9	0.0	0.8	245.1	3.6	3,348.5	2,926.7	0.2	1.6	420.0
May	34.8	475.7	1,398.4	1,153.4	0.0	1.0	244.1	4.1	3,350.0	2,928.6	0.2	2.3	418.8
June	34.7	437.6	1,388.9	1,146.3	0.0	1.0	241.6	4.5	3,361.8	2,941.9	0.2	1.8	417.7
July	34.4	456.8	1,369.6	1,128.2	0.0	1.1	240.3	4.8	3,368.0	2,949.9	0.2	2.2	415.6
Aug.	34.8	455.2	1,383.7	1,141.5	0.0	1.2	241.0	5.3	3,368.5	2,956.8	0.2	1.6	409.9
Sep.	35.6	471.0	1,349.1	1,105.9	0.0	1.3	241.9	5.9	3,384.0	2,971.7	0.2	1.8	410.2
Oct.	36.6	505.8	1,323.8	1,082.0	0.0	1.4	240.3	6.1	3,384.4	2,977.1	0.2	0.6	406.6
Nov.	36.5	496.8	1,350.3	1,107.7	0.0	1.3	241.3	6.0	3,397.3	2,992.0	0.2	0.8	404.3
Dec.	40.4	416.1	1,323.5	1,083.8	0.0	0.8	239.0	5.9	3,394.5	2,990.2	0.2	0.2	403.9
2019 Jan.	36.5	451.8	1,346.4	1,106.7	0.0	0.8	238.9	6.1	3,405.3	3,003.3	0.2	1.0	400.8
Feb.	36.6	471.9	1,361.8	1,118.8	0.0	0.8	242.1	6.1	3,413.6	3,014.0	0.2	0.3	399.0
Mar.	36.8	476.4	1,380.3	1,137.3	0.0	1.0	242.0	6.0	3,425.0	3,026.0	0.3	1.0	397.7
Apr.	38.0	501.2	1,363.8	1,123.2	0.0	0.8	239.8	6.0	3,428.9	3,034.7	0.2	1.1	393.0
May	37.7	517.6	1,371.8	1,129.7	0.0	0.8	241.3	5.5	3,445.6	3,049.5	0.2	1.5	394.4
June	37.7	477.9	1,362.5	1,121.2	0.0	1.0	240.3	5.2	3,467.1	3,067.0	0.2	1.3	398.5
July	37.2	460.1	1,355.5	1,113.6	0.0	0.9	241.0	5.1	3,476.1	3,075.1	0.2	2.3	398.6
Changes *													
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
2017	+ 6.1	+108.4	+ 50.3	+ 70.4	– 0.0	+ 0.0	– 20.1	– 0.1	+ 57.0	+ 70.2	+ 0.0	+ 0.4	– 13.6
2018	+ 8.5	+ 24.0	– 81.0	– 76.6	+ 0.0	+ 0.1	– 4.4	+ 3.8	+ 71.5	+ 105.4	– 0.1	– 0.5	– 33.2
2018 Feb.	+ 0.3	+ 12.7	– 12.3	– 10.7	+ 0.0	+ 0.1	– 1.7	+ 0.4	– 1.0	+ 5.6	– 0.1	+ 0.2	– 6.7
Mar.	+ 5.5	– 20.0	– 19.9	– 21.9	–	+ 0.1	+ 1.9	+ 0.3	+ 4.2	+ 9.1	+ 0.1	– 0.2	– 4.7
Apr.	– 1.3	+ 23.6	+ 16.8	+ 16.9	+ 0.0	– 0.0	– 0.0	+ 0.4	+ 6.4	+ 7.1	– 0.0	+ 0.7	– 1.3
May	+ 1.3	+ 11.4	– 5.8	– 4.9	–	+ 0.1	– 1.1	+ 0.5	+ 10.4	+ 10.8	– 0.0	+ 0.7	– 1.2
June	– 0.1	– 38.1	– 9.5	– 7.1	–	+ 0.0	– 2.4	+ 0.4	+ 11.8	+ 13.3	+ 0.0	– 0.5	– 1.0
July	– 0.3	+ 19.3	– 19.3	– 18.1	–	+ 0.1	– 1.3	+ 0.3	+ 6.2	+ 8.0	– 0.0	+ 0.4	– 2.1
Aug.	+ 0.4	– 1.6	+ 15.6	+ 14.8	–	+ 0.1	+ 0.7	+ 0.5	+ 0.7	+ 7.1	– 0.0	– 0.6	– 5.8
Sep.	+ 0.8	+ 16.0	– 34.6	– 35.7	–	+ 0.1	+ 0.9	+ 0.4	+ 15.5	+ 14.9	+ 0.0	+ 0.2	+ 0.4
Oct.	+ 1.1	+ 34.7	– 25.4	– 23.8	+ 0.0	+ 0.1	– 1.7	+ 0.1	+ 0.5	+ 5.4	– 0.0	– 1.2	– 3.6
Nov.	– 0.1	– 9.0	+ 26.6	+ 25.7	–	– 0.1	+ 1.0	– 0.1	+ 12.9	+ 14.9	+ 0.0	+ 0.2	– 2.2
Dec.	+ 3.9	– 80.6	– 26.9	– 24.0	–	– 0.6	– 2.3	– 0.1	– 2.9	– 1.8	+ 0.0	– 0.6	– 0.5
2019 Jan.	– 3.9	+ 35.6	+ 23.0	+ 23.0	– 0.0	+ 0.0	+ 0.1	+ 0.2	+ 10.8	+ 13.1	– 0.0	+ 0.8	– 3.1
Feb.	+ 0.1	+ 20.1	+ 15.3	+ 12.1	+ 0.0	+ 0.0	+ 3.2	+ 0.0	+ 8.3	+ 10.7	+ 0.0	– 0.7	– 1.7
Mar.	+ 0.2	+ 3.8	+ 22.0	+ 22.7	–	+ 0.1	– 0.8	– 0.0	+ 10.9	+ 12.0	+ 0.1	+ 0.7	– 1.8
Apr.	+ 1.2	+ 24.8	– 16.6	– 14.1	+ 0.0	– 0.2	– 2.2	+ 0.0	+ 3.8	+ 8.5	– 0.0	+ 0.1	– 4.7
May	– 0.3	+ 16.4	+ 8.0	+ 6.5	–	– 0.0	+ 1.5	– 0.5	+ 16.7	+ 14.8	– 0.0	+ 0.4	+ 1.5
June	– 0.0	– 39.7	– 9.2	– 8.4	–	+ 0.2	– 0.9	– 0.3	+ 21.5	+ 17.5	+ 0.1	– 0.1	+ 4.1
July	– 0.5	– 17.7	– 7.2	– 7.8	+ 0.0	– 0.1	+ 0.7	– 0.1	+ 9.1	+ 8.3	– 0.1	+ 0.9	+ 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 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

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)					Memo item: Fiduciary loans	Period
			Total	Sight deposits 4	Time deposits 4	Redis-counted bills 5	Memo item: Fiduciary loans	Total	Sight deposits 6	Time deposits 6	Savings deposits 7	Bank savings bonds 8		
End of year or month *														
-	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
-	19.1	88.1	1,048.2	110.7	937.4	0.0	5.1	3,420.9	1,941.0	853.2	582.9	43.7	30.0	2017
-	18.0	90.9	1,020.9	105.5	915.4	0.0	4.7	3,537.6	2,080.1	841.5	578.6	37.3	33.9	2018
-	19.0	88.5	1,056.6	110.3	946.4	0.0	5.0	3,425.8	1,949.6	851.6	582.2	42.3	30.9	2018 Feb.
-	18.9	88.5	1,056.3	118.6	937.7	0.0	5.0	3,421.8	1,948.0	850.7	581.3	41.8	31.5	Mar.
-	18.8	89.2	1,052.8	118.2	934.6	0.0	5.0	3,439.5	1,971.4	846.3	580.5	41.3	31.9	Apr.
-	18.8	93.8	1,035.9	107.1	928.9	0.0	5.0	3,471.4	2,002.6	847.7	580.2	40.9	32.4	May
-	18.7	94.0	1,034.3	122.0	912.2	0.0	4.9	3,473.1	1,996.6	856.7	579.3	40.6	32.6	June
-	18.5	94.4	1,041.4	118.8	922.6	0.0	4.9	3,473.2	2,002.6	852.3	578.2	40.0	32.8	July
-	18.4	88.0	1,042.8	117.3	925.5	0.0	4.8	3,485.0	2,020.0	847.9	577.6	39.5	33.1	Aug.
-	18.3	87.9	1,033.4	117.1	916.2	0.0	4.8	3,482.9	2,022.5	844.0	577.3	39.1	33.9	Sep.
-	17.9	87.9	1,032.9	111.3	921.6	0.0	4.8	3,504.0	2,044.7	843.7	577.0	38.6	33.7	Oct.
-	17.9	87.7	1,045.8	115.5	930.3	0.0	4.7	3,537.4	2,079.6	843.0	576.9	37.9	33.7	Nov.
-	18.0	90.9	1,020.9	105.5	915.4	0.0	4.7	3,537.6	2,080.1	841.5	578.6	37.3	33.9	Dec.
-	17.8	90.8	1,039.4	114.9	924.6	0.0	4.7	3,540.8	2,079.4	846.3	578.5	36.7	33.8	2019 Jan.
-	17.8	90.8	1,045.6	118.2	927.4	0.0	4.7	3,554.5	2,088.8	850.1	579.5	36.1	34.0	Feb.
-	17.6	90.9	1,049.4	122.3	927.1	0.0	4.7	3,565.3	2,101.1	846.4	582.0	35.8	33.9	Mar.
-	17.5	90.7	1,060.8	131.5	929.3	0.0	4.6	3,582.0	2,122.7	841.6	582.3	35.4	33.9	Apr.
-	17.5	91.2	1,056.4	121.5	934.9	0.0	4.6	3,611.4	2,152.7	841.0	582.5	35.2	33.7	May
-	17.5	90.9	1,047.1	122.5	924.6	0.0	4.6	3,609.5	2,150.7	841.2	582.7	34.9	33.4	June
-	17.1	91.0	1,053.6	123.2	930.4	0.0	4.5	3,615.9	2,166.4	832.9	581.8	34.8	32.9	July
Changes *														
-	- 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
-	- 0.0	- 1.6	+ 11.0	- 18.4	+ 29.4	- 0.0	- 0.5	+ 103.1	+ 142.8	- 27.5	- 5.6	- 6.7	+ 0.4	2017
-	- 1.0	+ 3.1	- 25.0	- 3.1	- 21.9	+ 0.0	- 0.4	+ 117.7	+ 139.3	- 10.8	- 4.3	- 6.5	+ 3.9	2018
-	- 0.0	+ 0.4	- 3.5	- 5.8	+ 2.3	-	+ 0.0	- 3.1	+ 0.3	- 2.5	- 0.3	- 0.6	+ 0.5	2018 Feb.
-	- 0.1	+ 0.0	- 0.3	+ 8.3	- 8.7	+ 0.0	- 0.0	- 4.0	- 1.7	- 0.9	- 0.9	- 0.5	+ 0.5	Mar.
-	- 0.1	+ 0.7	- 3.0	+ 0.3	- 3.2	- 0.0	- 0.0	+ 18.6	+ 23.4	- 3.5	- 0.8	- 0.5	+ 0.4	Apr.
-	+ 0.0	+ 4.6	- 16.9	- 11.2	- 5.7	+ 0.0	- 0.0	+ 31.9	+ 31.3	+ 1.4	- 0.3	- 0.5	+ 0.5	May
-	- 0.1	+ 0.2	- 1.6	+ 15.0	- 16.6	-	- 0.1	+ 1.8	- 6.0	+ 9.1	- 0.9	- 0.4	+ 0.3	June
-	- 0.2	+ 0.4	+ 7.7	- 2.7	+ 10.4	+ 0.0	- 0.1	+ 0.1	+ 6.1	- 4.4	- 1.0	- 0.6	+ 0.2	July
-	+ 0.0	- 6.0	+ 2.8	- 1.5	+ 4.2	- 0.0	- 0.0	+ 11.9	+ 17.3	- 4.3	- 0.6	- 0.5	+ 0.5	Aug.
-	- 0.1	- 0.0	- 9.5	- 0.2	- 9.3	-	- 0.0	- 1.9	+ 2.7	- 3.9	- 0.3	- 0.4	+ 0.6	Sep.
-	- 0.4	- 0.1	- 0.5	- 5.8	+ 5.3	+ 0.0	- 0.0	+ 21.2	+ 22.2	- 0.2	- 0.3	- 0.5	- 0.2	Oct.
-	- 0.0	- 0.2	+ 13.0	+ 4.2	+ 8.8	+ 0.0	- 0.0	+ 33.4	+ 34.8	- 0.5	- 0.1	- 0.7	- 0.0	Nov.
-	+ 0.1	+ 3.2	- 24.9	- 8.9	- 16.1	- 0.0	- 0.0	+ 0.2	+ 0.8	- 1.8	+ 1.7	- 0.6	+ 0.2	Dec.
-	- 0.2	- 0.0	+ 18.6	+ 9.4	+ 9.2	- 0.0	- 0.0	+ 3.2	- 0.7	+ 4.7	- 0.2	- 0.6	- 0.0	2019 Jan.
-	-	- 0.0	+ 5.9	+ 3.3	+ 2.6	+ 0.0	+ 0.0	+ 13.6	+ 9.3	+ 3.9	+ 1.1	- 0.6	+ 0.1	Feb.
-	- 0.2	+ 0.1	+ 3.5	+ 3.8	- 0.3	- 0.0	- 0.1	+ 10.4	+ 12.0	- 3.8	+ 2.5	- 0.3	- 0.0	Mar.
-	- 0.1	- 0.2	+ 11.3	+ 9.2	+ 2.2	+ 0.0	- 0.0	+ 16.7	+ 21.6	- 4.7	+ 0.2	- 0.3	+ 0.0	Apr.
-	+ 0.0	+ 0.5	- 4.3	- 10.0	+ 5.7	-	+ 0.0	+ 29.4	+ 30.0	- 0.6	+ 0.3	- 0.3	- 0.2	May
-	- 0.1	- 0.1	- 9.2	+ 1.2	- 10.4	- 0.0	- 0.1	- 2.0	- 1.9	+ 0.1	+ 0.2	- 0.3	- 0.3	June
-	- 0.4	+ 0.0	+ 6.5	+ 0.7	+ 5.8	+ 0.0	- 0.0	+ 6.2	+ 15.7	- 8.5	- 0.9	- 0.1	- 0.5	July

operations 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 *														
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
2017	0.3	963.8	738.2	441.0	297.2	0.7	225.0	2.3	723.9	442.2	93.3	348.9	4.2	277.5
2018	0.2	1,014.1	771.9	503.8	268.1	1.0	241.3	3.0	762.0	489.6	99.9	389.7	4.3	268.1
2018 Feb.	0.3	999.3	770.8	477.7	293.1	2.1	226.3	2.3	742.5	459.1	111.5	347.7	6.2	277.2
Mar.	0.3	993.3	759.8	469.7	290.0	2.2	231.3	2.4	736.2	456.1	108.7	347.4	6.5	273.6
Apr.	0.3	1,003.7	769.6	478.3	291.3	2.3	231.8	2.4	730.1	453.9	105.2	348.7	6.8	269.4
May	0.3	1,030.6	796.6	501.0	295.6	2.3	231.7	2.5	749.9	470.2	112.9	357.2	5.3	274.4
June	0.3	1,027.1	792.4	501.1	291.2	2.3	232.4	2.5	732.4	454.6	97.7	356.9	5.9	271.8
July	0.2	1,031.9	795.4	502.7	292.7	2.3	234.2	2.6	740.4	464.1	103.9	360.2	6.1	270.2
Aug.	0.2	1,027.9	789.8	496.9	292.9	2.3	235.8	2.6	748.7	469.5	107.6	362.0	6.5	272.7
Sep.	0.3	1,028.7	787.7	496.7	291.1	2.3	238.6	2.7	742.5	464.0	102.4	361.6	5.3	273.2
Oct.	0.3	1,013.0	772.7	492.7	280.0	2.1	238.1	2.8	772.5	495.4	115.8	379.6	6.0	271.1
Nov.	0.3	1,007.9	765.4	491.4	274.0	1.5	241.0	2.9	776.4	500.3	117.6	382.7	5.9	270.2
Dec.	0.2	1,014.1	771.9	503.8	268.1	1.0	241.3	3.0	762.0	489.6	99.9	389.7	4.3	268.1
2019 Jan.	0.2	1,031.6	787.8	518.2	269.6	1.3	242.5	3.1	784.3	511.1	119.4	391.8	6.0	267.2
Feb.	0.2	1,031.8	785.3	511.5	273.7	1.7	244.8	3.2	782.0	504.5	110.6	393.9	5.9	271.5
Mar.	0.2	1,092.9	845.1	565.9	279.2	2.0	245.8	3.2	799.2	519.8	122.8	397.0	7.8	271.6
Apr.	0.2	1,106.2	858.3	579.0	279.3	2.8	245.2	3.3	807.9	529.0	130.3	398.7	6.6	272.2
May	0.2	1,090.6	840.9	564.1	276.8	2.8	246.8	3.6	820.1	542.9	140.2	402.7	6.4	270.8
June	0.2	1,109.3	857.3	578.3	279.0	3.1	248.9	3.8	816.2	535.9	135.8	400.1	6.6	273.6
July	0.2	1,099.2	844.6	563.6	281.0	3.3	251.2	3.8	829.1	548.2	143.9	404.3	8.6	272.3
Changes *														
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
2017	+ 0.0	- 57.2	- 48.7	- 61.5	+ 12.8	+ 0.0	- 8.5	+ 0.6	- 4.7	+ 13.0	+ 8.6	+ 4.4	+ 0.7	- 18.4
2018	+ 0.0	+ 49.6	+ 34.0	+ 57.7	- 23.7	+ 0.2	+ 15.3	+ 0.7	+ 18.3	+ 28.3	+ 3.2	+ 25.2	- 0.4	- 9.7
2018 Feb.	- 0.0	+ 8.4	+ 7.4	+ 8.2	- 0.8	+ 0.3	+ 0.7	+ 0.1	+ 4.9	+ 6.5	+ 5.4	+ 1.1	+ 0.7	- 2.3
Mar.	- 0.0	- 3.1	- 8.3	- 6.3	- 2.0	+ 0.0	+ 5.1	+ 0.1	- 5.1	- 2.1	- 2.6	+ 0.5	+ 0.4	- 3.4
Apr.	+ 0.0	+ 6.0	+ 5.4	+ 6.6	- 1.2	+ 0.2	+ 0.5	+ 0.0	- 8.2	- 4.1	- 3.9	- 0.3	+ 0.2	- 4.3
May	- 0.0	+ 16.9	+ 17.3	+ 17.3	- 0.0	- 0.0	- 0.4	+ 0.0	+ 14.7	+ 12.1	+ 7.0	+ 5.1	- 1.5	+ 4.2
June	+ 0.0	- 4.0	- 4.7	- 0.0	- 4.7	- 0.0	+ 0.8	+ 0.1	- 17.4	- 15.4	- 15.2	- 0.3	+ 0.6	- 2.6
July	- 0.0	+ 7.0	+ 5.1	+ 2.7	+ 2.4	+ 0.0	+ 1.8	+ 0.1	+ 9.2	+ 10.4	+ 6.4	+ 4.0	+ 0.1	- 1.4
Aug.	- 0.0	- 6.4	- 7.9	- 7.2	- 0.8	+ 0.0	+ 1.6	+ 0.1	+ 7.3	+ 4.7	+ 3.5	+ 1.1	+ 0.4	+ 2.3
Sep.	+ 0.0	- 1.2	- 3.9	- 1.2	- 2.8	- 0.0	+ 2.8	+ 0.1	- 7.6	- 6.8	- 5.5	- 1.3	- 1.1	+ 0.3
Oct.	- 0.0	- 7.7	- 6.9	- 4.5	- 2.4	- 0.2	- 0.6	+ 0.0	+ 12.8	+ 14.8	+ 10.5	+ 4.3	+ 0.6	- 2.6
Nov.	+ 0.0	- 4.9	- 6.5	- 0.9	- 5.6	- 0.6	+ 2.1	+ 0.1	+ 5.3	+ 5.4	+ 2.0	+ 3.5	- 0.1	- 0.0
Dec.	- 0.0	+ 8.0	+ 8.2	+ 13.2	- 4.9	- 0.6	+ 0.3	+ 0.1	- 13.4	- 9.5	- 17.4	+ 7.9	- 2.0	- 2.0
2019 Jan.	- 0.0	+ 17.6	+ 16.1	+ 14.5	+ 1.6	+ 0.3	+ 1.2	+ 0.1	+ 22.2	+ 21.4	+ 19.4	+ 2.0	+ 1.7	- 0.9
Feb.	+ 0.0	- 1.8	- 4.4	- 7.7	+ 3.3	+ 0.4	+ 2.2	+ 0.1	- 4.3	- 8.3	- 9.2	+ 0.9	- 0.1	+ 4.2
Mar.	+ 0.0	+ 28.2	+ 27.8	+ 24.7	+ 3.1	+ 0.3	+ 0.2	+ 0.0	- 3.0	- 2.5	- 3.4	+ 0.8	+ 1.5	- 2.0
Apr.	+ 0.0	+ 13.7	+ 13.5	+ 13.5	- 0.0	+ 0.8	- 0.5	+ 0.1	+ 9.1	+ 9.6	+ 7.7	+ 1.9	- 1.1	+ 0.7
May	- 0.0	- 17.6	- 19.4	- 16.4	- 3.0	+ 0.0	+ 1.7	+ 0.3	+ 12.1	+ 13.9	+ 10.0	+ 3.9	- 0.2	- 1.6
June	+ 0.0	+ 23.8	+ 21.3	+ 15.8	+ 5.5	+ 0.3	+ 2.2	+ 0.2	- 0.1	- 3.7	- 3.2	- 0.5	+ 0.2	+ 3.4
July	- 0.0	- 14.9	- 17.4	- 17.3	- 0.1	+ 0.2	+ 2.3	+ 0.0	+ 10.0	+ 9.9	+ 7.7	+ 2.2	+ 2.0	- 1.8

* 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 enterprises	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)			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 *															
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	
12.1	24.3	659.0	389.6	269.4	182.4	87.0	0.0	241.2	109.4	131.8	68.1	63.8	0.3	2017	
11.8	22.1	643.1	370.6	272.5	185.6	86.8	0.0	231.5	110.2	121.3	63.7	57.6	0.1	2018	
12.1	23.7	715.7	441.2	274.5	185.5	89.0	0.0	279.6	134.8	144.8	85.5	59.3	0.3	2018 Feb.	
12.2	24.0	668.6	385.6	283.0	196.4	86.5	0.0	272.9	126.3	146.6	87.8	58.8	0.3	Mar.	
12.3	23.6	685.3	410.6	274.7	188.3	86.4	0.0	282.6	138.4	144.2	85.2	59.0	0.3	Apr.	
12.2	23.7	730.1	452.6	277.4	188.0	89.4	0.0	285.8	140.5	145.4	86.9	58.5	0.3	May	
12.1	23.7	713.1	432.8	280.3	187.1	93.1	0.0	259.1	123.3	135.8	78.9	56.9	0.3	June	
11.9	23.0	708.4	420.2	288.2	197.2	91.0	0.0	273.1	129.4	143.7	84.1	59.6	0.3	July	
11.9	23.1	709.8	404.3	305.5	217.7	87.8	0.0	278.8	129.5	149.2	90.1	59.1	0.3	Aug.	
11.8	22.4	711.7	426.7	285.0	197.3	87.7	0.0	269.3	133.2	136.1	79.2	56.9	0.1	Sep.	
11.8	22.5	702.4	413.6	288.9	200.1	88.8	0.0	271.0	129.8	141.2	82.8	58.4	0.1	Oct.	
11.8	22.3	693.6	410.5	283.1	194.4	88.7	0.0	258.1	132.6	125.5	67.7	57.8	0.2	Nov.	
11.8	22.1	643.1	370.6	272.5	185.6	86.8	0.0	231.5	110.2	121.3	63.7	57.6	0.1	Dec.	
11.7	21.5	674.5	405.5	269.1	182.9	86.1	0.0	268.4	132.7	135.8	77.9	57.9	0.1	2019 Jan.	
11.8	21.7	699.2	430.9	268.3	181.1	87.3	0.0	241.7	110.2	131.5	73.6	57.8	0.1	Feb.	
13.0	21.5	762.8	464.1	298.7	209.1	89.6	1.3	259.1	113.8	145.3	87.7	57.6	0.1	Mar.	
13.0	22.3	787.1	441.7	345.4	255.0	90.4	1.3	268.4	124.2	144.2	86.9	57.3	0.1	Apr.	
13.0	22.3	783.6	482.4	301.2	210.0	91.2	1.3	261.3	120.7	140.6	83.6	57.0	0.1	May	
12.8	22.3	787.2	471.3	315.9	225.1	90.7	1.3	265.6	126.9	138.8	81.8	56.9	0.1	June	
12.8	22.0	768.5	460.7	307.8	214.3	93.5	1.3	262.9	126.2	136.7	79.5	57.2	0.1	July	
Changes *															
+ 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	
- 1.0	- 4.1	- 15.5	+ 25.3	- 40.8	- 43.2	+ 2.4	± 0.0	+ 31.8	+ 11.0	+ 20.8	+ 15.6	+ 5.2	- 0.4	2017	
- 0.2	- 2.2	- 23.9	- 23.4	- 0.4	+ 2.1	- 2.6	- 0.0	- 11.9	- 0.2	- 11.8	- 5.7	- 6.0	- 0.2	2018	
+ 0.1	- 0.5	+ 1.1	- 10.9	+ 12.0	+ 11.7	+ 0.3	- 0.0	+ 3.9	+ 4.0	- 0.2	+ 3.0	- 3.2	+ 0.0	2018 Feb.	
+ 0.1	+ 0.3	- 45.8	- 55.0	+ 9.1	+ 11.5	- 2.3	-	- 6.4	- 8.3	+ 1.9	+ 2.3	- 0.4	- 0.0	Mar.	
+ 0.1	- 0.5	+ 13.1	+ 22.9	- 9.8	- 9.3	- 0.5	+ 0.0	+ 9.1	+ 11.9	- 2.8	- 2.9	+ 0.0	+ 0.0	Apr.	
- 0.0	+ 0.1	+ 39.7	+ 40.1	- 0.4	- 2.7	+ 2.3	-	+ 1.9	+ 1.4	+ 0.5	+ 1.2	- 0.7	+ 0.0	May	
- 0.2	-	- 17.3	- 19.9	+ 2.7	- 1.0	+ 3.7	-	- 26.8	- 17.2	- 9.6	- 8.0	- 1.6	-	June	
- 0.1	- 0.6	- 3.0	- 12.2	+ 9.2	+ 9.1	+ 0.1	-	+ 13.9	+ 6.3	+ 7.6	+ 5.4	+ 2.2	-	July	
- 0.1	+ 0.1	- 0.1	- 16.4	+ 16.3	+ 20.0	- 3.7	-	+ 5.7	- 0.1	+ 5.8	+ 5.8	- 0.1	- 0.0	Aug.	
- 0.0	- 0.7	+ 0.9	+ 22.1	- 21.2	- 20.9	- 0.3	-	- 9.8	+ 3.6	- 13.3	- 11.2	- 2.2	- 0.2	Sep.	
+ 0.0	+ 0.0	- 12.5	- 14.5	+ 2.0	+ 1.4	+ 0.6	-	+ 0.7	- 3.8	+ 4.5	+ 3.1	+ 1.4	+ 0.0	Oct.	
- 0.0	- 0.2	- 8.2	- 2.8	- 5.4	- 5.4	- 0.0	-	- 12.7	+ 2.9	- 15.6	- 15.0	- 0.6	+ 0.0	Nov.	
+ 0.0	- 0.1	- 49.1	- 40.2	- 8.9	- 7.2	- 1.7	- 0.0	- 26.5	- 22.3	- 4.1	- 4.0	- 0.1	- 0.0	Dec.	
- 0.1	- 0.6	+ 31.6	+ 34.9	- 3.3	- 2.6	- 0.7	-	+ 36.9	+ 22.5	+ 14.5	+ 14.2	+ 0.2	+ 0.0	2019 Jan.	
+ 0.0	+ 0.1	+ 23.6	+ 24.8	- 1.2	- 2.2	+ 1.0	-	- 27.2	- 22.6	- 4.6	- 4.6	- 0.1	+ 0.0	Feb.	
+ 1.3	- 0.2	+ 32.9	+ 22.7	+ 10.2	+ 9.0	+ 1.3	+ 1.3	+ 5.1	+ 1.6	+ 3.5	+ 4.0	- 0.5	- 0.0	Mar.	
- 0.0	+ 0.8	+ 24.4	- 22.2	+ 46.6	+ 45.9	+ 0.7	- 0.0	+ 9.3	+ 10.4	- 1.1	- 0.8	- 0.3	-	Apr.	
- 0.0	- 0.0	- 4.2	+ 40.4	- 44.6	- 45.3	+ 0.8	+ 0.0	- 7.2	- 7.9	+ 0.6	+ 1.0	- 0.3	+ 0.0	May	
- 0.2	+ 0.0	+ 7.2	- 9.6	+ 16.8	+ 14.6	+ 2.2	-	+ 5.4	+ 6.6	- 1.2	- 1.2	- 0.0	- 0.0	June	
- 0.0	- 0.4	- 22.0	- 12.0	- 10.0	- 12.4	+ 2.4	+ 0.0	- 3.6	- 1.2	- 2.4	- 2.5	+ 0.1	+ 0.0	July	

IV. Banks

lending													Period
prises and households					to general government								
Loans			Securities	Memo item: Fiduciary loans	Total	Loans			Securities 1	Equalisation claims 2	Memo item: Fiduciary loans		
Total	Medium-term	Long-term				Total	Medium-term	Long-term					
End of year or month *													
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	
2,399.5	273.5	2,125.9	240.6	17.4	450.9	254.0	22.5	231.5	196.9	–	1.7	2017	
2,499.4	282.6	2,216.8	233.4	16.5	412.1	241.7	19.7	222.0	170.4	–	1.4	2018	
2,414.1	275.1	2,139.0	236.3	17.5	440.3	250.3	21.9	228.4	190.1	–	1.5	2018 Feb.	
2,419.5	275.2	2,144.2	233.8	17.4	435.8	247.9	22.1	225.8	187.9	–	1.6	Mar.	
2,428.6	277.1	2,151.5	236.0	17.3	430.0	245.9	21.9	224.1	184.0	–	1.5	Apr.	
2,431.2	270.8	2,160.4	236.6	17.3	427.7	245.5	21.9	223.6	182.2	–	1.5	May	
2,443.3	275.3	2,168.0	238.1	17.2	423.4	243.7	21.0	222.7	179.7	–	1.5	June	
2,454.6	277.7	2,176.9	237.9	17.0	418.7	241.0	20.3	220.8	177.7	–	1.5	July	
2,467.5	279.3	2,188.2	233.1	17.0	417.4	240.6	21.1	219.5	176.8	–	1.3	Aug.	
2,476.9	280.1	2,196.8	234.1	16.9	417.1	241.0	20.5	220.5	176.1	–	1.3	Sep.	
2,484.5	279.7	2,204.9	234.1	16.6	413.1	240.7	20.2	220.5	172.5	–	1.3	Oct.	
2,500.3	284.2	2,216.1	232.4	16.6	412.9	240.9	20.0	220.9	171.9	–	1.3	Nov.	
2,499.4	282.6	2,216.8	233.4	16.5	412.1	241.7	19.7	222.0	170.4	–	1.4	Dec.	
2,507.3	283.1	2,224.2	231.1	16.5	411.1	241.4	19.3	222.0	169.7	–	1.3	2019 Jan.	
2,516.1	284.2	2,231.9	230.3	16.5	409.6	240.8	18.9	221.9	168.7	–	1.3	Feb.	
2,525.3	286.6	2,238.7	230.5	16.3	407.6	240.4	18.7	221.7	167.2	–	1.3	Mar.	
2,539.8	291.3	2,248.5	230.0	16.2	402.7	239.8	18.4	221.4	162.9	–	1.3	Apr.	
2,554.8	293.7	2,261.1	231.0	16.3	402.5	239.1	18.2	220.9	163.4	–	1.3	May	
2,560.3	294.3	2,266.1	234.9	16.2	400.6	237.0	17.9	219.0	163.7	–	1.3	June	
2,571.9	295.2	2,276.8	235.8	15.8	398.2	235.4	17.4	218.0	162.8	–	1.2	July	
Changes *													
+ 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	
+ 87.6	+ 9.4	+ 78.2	+ 15.8	+ 0.1	– 39.9	– 10.6	– 1.3	– 9.3	– 29.4	–	– 0.1	2017	
+ 108.7	+ 19.3	+ 89.4	– 6.7	– 0.9	– 37.1	– 10.5	– 2.7	– 7.8	– 26.6	–	– 0.0	2018	
+ 8.2	+ 0.3	+ 8.0	– 3.2	– 0.0	– 3.9	– 0.4	– 0.1	– 0.3	– 3.5	–	– 0.0	2018 Feb.	
+ 5.4	+ 0.2	+ 5.2	– 2.5	– 0.1	– 4.6	– 2.4	+ 0.1	– 2.5	– 2.2	–	+ 0.0	Mar.	
+ 9.1	+ 1.8	+ 7.3	+ 2.5	– 0.1	– 5.8	– 1.9	– 0.2	– 1.8	– 3.9	–	– 0.0	Apr.	
+ 11.8	+ 2.6	+ 9.3	+ 0.6	– 0.0	– 2.6	– 0.8	+ 0.1	– 0.8	– 1.8	–	+ 0.0	May	
+ 12.1	+ 4.5	+ 7.6	+ 1.5	– 0.1	– 4.3	– 1.8	– 0.9	– 0.8	– 2.6	–	– 0.1	June	
+ 10.1	+ 2.5	+ 7.6	– 0.2	– 0.2	– 3.4	– 1.4	– 0.7	– 0.7	– 1.9	–	– 0.0	July	
+ 13.1	+ 1.6	+ 11.5	– 4.9	– 0.0	– 1.3	– 0.4	+ 0.8	– 1.2	– 0.9	–	+ 0.0	Aug.	
+ 9.2	+ 0.5	+ 8.7	+ 1.1	– 0.1	– 0.4	+ 0.3	– 0.6	+ 0.9	– 0.7	–	– 0.0	Sep.	
+ 9.2	+ 1.0	+ 8.2	– 0.0	– 0.3	– 3.9	– 0.3	– 0.3	+ 0.0	– 3.6	–	– 0.0	Oct.	
+ 15.8	+ 4.6	+ 11.2	– 1.7	– 0.0	– 0.3	+ 0.3	– 0.1	+ 0.4	– 0.5	–	– 0.0	Nov.	
– 0.9	– 1.6	+ 0.7	+ 1.0	– 0.1	– 0.7	+ 0.8	– 0.3	+ 1.1	– 1.5	–	+ 0.2	Dec.	
+ 8.0	+ 0.5	+ 7.5	– 2.4	– 0.0	– 1.1	– 0.4	– 0.4	– 0.0	– 0.7	–	– 0.2	2019 Jan.	
+ 8.7	+ 1.1	+ 7.6	– 0.7	–	– 1.5	– 0.5	– 0.4	– 0.1	– 1.0	–	–	Feb.	
+ 9.1	+ 2.1	+ 6.9	– 0.3	– 0.2	– 1.9	– 0.4	– 0.3	– 0.2	– 1.5	–	+ 0.0	Mar.	
+ 13.9	+ 4.5	+ 9.4	– 0.5	– 0.1	– 4.8	– 0.6	– 0.2	– 0.3	– 4.3	–	– 0.0	Apr.	
+ 15.0	+ 2.4	+ 12.7	+ 0.9	+ 0.0	– 0.3	– 0.8	– 0.2	– 0.6	+ 0.5	–	– 0.0	May	
+ 5.6	+ 0.6	+ 5.0	+ 3.9	– 0.0	– 1.9	– 2.2	– 0.3	– 1.9	+ 0.2	–	– 0.0	June	
+ 11.7	+ 1.0	+ 10.7	+ 1.1	– 0.4	– 2.7	– 1.6	– 0.5	– 1.0	– 1.1	–	– 0.0	July	

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	Mortgage loans, total	Housing loans			Lending to enterprises and self-employed persons								
			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 motor-cycles	Agriculture, forestry, fishing and aquaculture	Transportation and storage; post and telecommunications	Financial intermediation (excluding MFIs) and insurance companies
Lending, total														
End of year or quarter *														
2017	2,610.1	1,304.3	1,326.6	1,053.0	273.6	1,403.1	368.5	131.3	112.6	67.3	133.3	50.2	51.5	147.9
2018 June	2,672.2	1,333.8	1,357.5	1,074.2	283.3	1,445.5	380.1	139.2	114.2	71.9	136.5	50.5	51.0	152.8
Sep.	2,708.5	1,349.5	1,377.7	1,086.8	290.9	1,476.9	389.6	140.5	115.9	73.0	138.8	53.5	50.8	157.0
Dec.	2,727.0	1,382.2	1,391.2	1,116.4	274.8	1,483.6	392.7	139.3	116.5	71.9	138.7	53.2	50.6	157.3
2019 Mar.	2,765.7	1,437.3	1,404.9	1,152.3	252.6	1,513.5	398.4	144.4	117.8	74.0	141.0	53.6	50.1	160.5
June	2,809.5	1,469.6	1,427.8	1,182.8	244.9	1,539.7	405.2	150.3	120.5	76.2	140.5	54.4	50.5	161.5
Short-term lending														
2017	210.6	–	6.5	–	6.5	180.8	3.6	32.3	4.0	13.6	45.2	3.4	4.0	27.4
2018 June	228.9	–	7.1	–	7.1	199.2	4.0	36.7	4.8	16.6	47.3	3.9	4.2	28.5
Sep.	231.6	–	7.4	–	7.4	201.9	4.3	37.3	4.2	16.6	48.7	4.2	4.0	29.4
Dec.	227.6	–	7.2	–	7.2	195.9	4.1	35.5	4.9	14.7	48.3	3.7	4.9	28.0
2019 Mar.	240.4	–	7.7	–	7.7	210.1	4.5	39.5	6.2	15.8	49.6	4.0	5.0	29.7
June	249.2	–	8.0	–	8.0	217.3	4.6	42.9	7.2	16.5	48.6	4.7	5.2	29.3
Medium-term lending														
2017	273.5	–	34.0	–	34.0	193.1	14.0	23.6	5.1	11.3	18.2	4.3	10.3	46.7
2018 June	275.3	–	34.7	–	34.7	195.1	15.0	25.5	4.4	11.8	18.2	4.2	10.4	47.5
Sep.	280.1	–	35.6	–	35.6	199.4	15.6	24.9	4.4	12.2	18.3	4.4	11.1	48.0
Dec.	282.6	–	35.4	–	35.4	202.5	15.4	24.9	4.5	12.5	19.0	4.5	10.6	49.0
2019 Mar.	286.6	–	35.1	–	35.1	206.0	15.4	25.4	4.5	12.9	19.3	4.5	10.4	49.1
June	294.3	–	36.0	–	36.0	212.6	16.1	26.1	5.2	13.5	19.5	4.5	10.4	49.0
Long-term lending														
2017	2,125.9	1,304.3	1,286.1	1,053.0	233.1	1,029.2	351.0	75.4	103.5	42.4	70.0	42.4	37.2	73.8
2018 June	2,168.0	1,333.8	1,315.7	1,074.2	241.5	1,051.1	361.1	77.0	105.0	43.5	71.0	42.4	36.4	76.8
Sep.	2,196.9	1,349.5	1,334.6	1,086.8	247.8	1,075.6	369.7	78.4	107.4	44.2	71.8	44.9	35.7	79.6
Dec.	2,216.8	1,382.2	1,348.6	1,116.4	232.2	1,085.2	373.2	78.9	107.2	44.7	71.4	45.0	35.1	80.3
2019 Mar.	2,238.7	1,437.3	1,362.1	1,152.3	209.8	1,097.4	378.5	79.5	107.2	45.3	72.1	45.0	34.6	81.7
June	2,266.1	1,469.6	1,383.8	1,182.8	200.9	1,109.8	384.5	81.3	108.1	46.2	72.4	45.3	34.9	83.2
Lending, total														
Change during quarter *														
2018 Q2	+ 37.0	+ 15.4	+ 17.8	+ 11.8	+ 6.0	+ 23.1	+ 6.6	+ 4.1	– 0.6	+ 2.9	– 0.6	+ 1.1	+ 0.1	+ 1.6
Q3	+ 35.2	+ 12.9	+ 19.4	+ 11.1	+ 8.3	+ 19.3	+ 6.0	+ 1.3	+ 0.3	+ 1.0	+ 2.3	+ 0.9	– 0.3	+ 4.0
Q4	+ 18.5	+ 10.8	+ 15.2	+ 8.9	+ 6.2	+ 6.8	+ 4.8	– 1.1	+ 0.7	– 1.0	+ 0.1	– 0.3	– 0.2	+ 0.1
2019 Q1	+ 38.7	+ 15.1	+ 13.5	+ 11.4	+ 2.1	+ 29.8	+ 5.5	+ 5.1	+ 1.4	+ 2.1	+ 2.3	+ 0.4	– 0.5	+ 4.9
Q2	+ 43.8	+ 16.3	+ 20.1	+ 13.5	+ 6.7	+ 26.8	+ 6.9	+ 5.8	+ 1.7	+ 2.2	– 0.7	+ 0.9	+ 0.4	+ 1.0
Short-term lending														
2018 Q2	+ 4.0	–	+ 0.3	–	+ 0.3	+ 4.0	+ 0.1	+ 0.3	– 0.2	+ 1.7	– 1.3	+ 0.4	+ 0.1	– 0.6
Q3	+ 2.8	–	+ 0.3	–	+ 0.3	+ 2.3	+ 0.2	+ 0.5	– 0.7	+ 0.0	+ 1.7	+ 0.1	– 0.2	+ 0.9
Q4	– 5.5	–	– 0.1	–	– 0.1	– 6.2	– 0.1	– 1.7	+ 0.6	– 2.0	– 0.4	– 0.5	+ 0.9	– 1.4
2019 Q1	+ 12.9	–	+ 0.5	–	+ 0.5	+ 14.3	+ 0.4	+ 4.0	+ 1.4	+ 1.1	+ 1.3	+ 0.4	+ 0.1	+ 3.5
Q2	+ 9.3	–	+ 0.3	–	+ 0.3	+ 7.7	+ 0.2	+ 3.3	+ 1.0	+ 0.8	– 1.2	+ 0.6	+ 0.1	– 0.4
Medium-term lending														
2018 Q2	+ 8.9	–	+ 0.6	–	+ 0.6	+ 7.3	+ 0.6	+ 3.0	– 0.4	+ 0.4	+ 0.2	+ 0.1	+ 0.3	+ 0.6
Q3	+ 4.6	–	+ 0.9	–	+ 0.9	+ 3.6	+ 0.5	– 0.6	– 0.1	+ 0.3	– 0.2	+ 0.1	+ 0.6	+ 0.5
Q4	+ 3.9	–	+ 0.6	–	+ 0.6	+ 3.4	+ 0.6	+ 0.1	+ 0.2	+ 0.4	+ 0.9	+ 0.1	– 0.5	+ 0.9
2019 Q1	+ 3.7	–	– 0.3	–	– 0.3	+ 3.2	+ 0.0	+ 0.4	– 0.0	+ 0.4	+ 0.3	+ 0.0	– 0.1	– 0.1
Q2	+ 7.4	–	+ 0.9	–	+ 0.9	+ 6.4	+ 0.6	+ 0.8	+ 0.7	+ 0.5	+ 0.2	+ 0.0	– 0.0	– 0.0
Long-term lending														
2018 Q2	+ 24.1	+ 15.4	+ 16.9	+ 11.8	+ 5.1	+ 11.7	+ 5.8	+ 0.8	+ 0.1	+ 0.7	+ 0.6	+ 0.6	– 0.3	+ 1.6
Q3	+ 27.8	+ 12.9	+ 18.2	+ 11.1	+ 7.1	+ 13.5	+ 5.3	+ 1.4	+ 1.1	+ 0.6	+ 0.8	+ 0.6	– 0.7	+ 2.7
Q4	+ 20.1	+ 10.8	+ 14.7	+ 8.9	+ 5.8	+ 9.6	+ 4.3	+ 0.6	– 0.1	+ 0.6	– 0.4	+ 0.2	– 0.6	+ 0.5
2019 Q1	+ 22.0	+ 15.1	+ 13.3	+ 11.4	+ 1.9	+ 12.3	+ 5.1	+ 0.7	+ 0.0	+ 0.6	+ 0.7	+ 0.0	– 0.5	+ 1.5
Q2	+ 27.0	+ 16.3	+ 18.9	+ 13.5	+ 5.5	+ 12.7	+ 6.1	+ 1.8	– 0.0	+ 0.9	+ 0.4	+ 0.2	+ 0.4	+ 1.5

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

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

IV. Banks

Services sector (including the professions)						Lending to employees and other individuals						Lending to non-profit institutions		Period
						Memo items:		Other lending		Total	Housing loans	of which:		
Total	of which:		Lending to self-employed persons ²	Lending to craft enterprises	Total	Housing loans	Instalment loans ³	Debit balances on wage, salary and pension accounts	Total			of which: Housing loans		
	Housing enterprises	Holding companies								Other real estate activities				
End of year or quarter *												Lending, total		
709.0	214.9	42.3	186.4	411.2	47.7	1,192.3	954.3	237.9	171.6	8.6	14.8	3.7	2017	
729.3	221.8	47.3	190.7	415.5	48.3	1,211.8	973.7	238.1	173.0	8.4	14.9	3.8	2018 June	
747.4	231.0	48.2	194.9	430.6	48.6	1,216.6	984.4	232.2	172.2	8.4	15.0	3.7	Sep.	
756.0	237.0	47.3	196.9	432.6	48.0	1,228.4	994.8	233.7	172.9	8.3	15.0	3.7	Dec.	
772.0	242.9	48.7	197.6	436.3	48.6	1,237.2	1,002.7	234.4	173.7	8.0	15.1	3.8	2019 Mar.	
785.8	247.4	51.6	199.3	441.1	48.6	1,254.6	1,018.8	235.9	175.6	8.0	15.2	3.8	June	
												Short-term lending		
50.9	10.1	6.8	10.3	23.3	5.0	29.3	2.9	26.4	1.6	8.6	0.5	0.0	2017	
57.2	10.7	10.2	10.6	23.5	5.7	29.2	3.1	26.1	1.5	8.4	0.5	–	2018 June	
57.4	11.6	10.3	10.2	24.0	5.7	29.2	3.2	26.0	1.5	8.4	0.5	0.0	Sep.	
55.9	12.0	8.1	10.4	24.0	5.2	31.2	3.1	28.2	1.5	8.3	0.5	–	Dec.	
60.1	12.1	9.3	10.4	24.4	5.8	29.8	3.2	26.5	1.5	8.0	0.5	0.0	2019 Mar.	
63.0	12.5	10.2	10.6	24.6	5.6	31.3	3.4	28.0	1.9	8.0	0.5	0.0	June	
												Medium-term lending		
73.5	12.1	9.3	18.3	32.7	3.6	79.9	20.0	59.9	55.2	–	0.6	0.0	2017	
73.0	13.0	9.7	19.2	31.0	3.4	79.6	19.7	59.9	55.4	–	0.5	0.0	2018 June	
76.2	14.0	9.8	20.0	31.7	3.5	80.1	20.0	60.2	55.8	–	0.5	0.1	Sep.	
77.5	14.8	9.9	21.3	31.5	3.5	79.6	19.9	59.7	56.4	–	0.5	0.1	Dec.	
80.0	15.4	9.6	21.8	31.7	3.5	80.1	19.6	60.5	57.2	–	0.5	0.0	2019 Mar.	
84.4	16.6	11.0	22.4	32.2	3.6	81.2	19.9	61.4	58.0	–	0.5	0.0	June	
												Long-term lending		
584.6	192.6	26.2	157.8	355.3	39.2	1,083.1	931.4	151.6	114.8	–	13.7	3.7	2017	
599.1	198.1	27.4	160.9	361.1	39.2	1,103.0	950.9	152.1	116.0	–	13.9	3.7	2018 June	
613.8	205.3	28.0	164.7	374.9	39.5	1,107.2	961.2	146.0	114.9	–	14.0	3.7	Sep.	
622.6	210.2	29.2	165.3	377.2	39.3	1,117.6	971.8	145.8	115.0	–	14.0	3.7	Dec.	
631.9	215.4	29.8	165.4	380.3	39.3	1,127.2	979.9	147.4	115.1	–	14.1	3.7	2019 Mar.	
638.5	218.3	30.3	166.3	384.3	39.4	1,142.0	995.5	146.5	115.8	–	14.2	3.8	June	
Change during quarter *												Lending, total		
+ 14.5	+ 4.8	+ 3.2	+ 2.2	+ 3.8	+ 0.1	+ 14.0	+ 11.1	+ 2.8	+ 3.2	– 0.0	– 0.0	+ 0.0	2018 Q2	
+ 9.6	+ 3.9	+ 1.0	+ 2.0	+ 3.7	+ 0.3	+ 15.7	+ 13.4	+ 2.3	+ 2.3	+ 0.1	+ 0.1	– 0.0	Q3	
+ 8.4	+ 6.1	– 1.1	+ 2.3	+ 2.1	– 0.5	+ 11.7	+ 10.3	+ 1.4	+ 1.0	– 0.2	+ 0.1	+ 0.0	Q4	
+ 14.1	+ 4.6	+ 1.4	+ 2.0	+ 3.7	+ 0.6	+ 8.8	+ 8.0	+ 0.8	+ 2.6	– 0.2	+ 0.1	+ 0.0	2019 Q1	
+ 15.5	+ 4.5	+ 2.8	+ 1.7	+ 4.3	– 0.1	+ 16.9	+ 13.2	+ 3.7	+ 2.9	– 0.0	+ 0.1	+ 0.0	Q2	
												Short-term lending		
+ 3.7	+ 0.6	+ 2.3	– 0.2	– 0.2	– 0.1	+ 0.1	+ 0.1	+ 0.0	+ 0.0	– 0.0	– 0.2	–	2018 Q2	
– 0.0	+ 0.6	+ 0.1	– 0.4	+ 0.1	– 0.0	+ 0.5	+ 0.1	+ 0.4	– 0.1	+ 0.1	+ 0.0	+ 0.0	Q3	
– 1.8	+ 0.3	– 2.1	+ 0.2	– 0.1	– 0.4	+ 0.8	– 0.1	+ 0.8	– 0.0	– 0.2	+ 0.0	– 0.0	Q4	
+ 2.4	+ 0.1	+ 1.2	+ 0.1	+ 0.4	+ 0.5	– 1.4	+ 0.2	– 1.5	– 0.0	– 0.2	+ 0.0	+ 0.0	2019 Q1	
+ 3.5	+ 0.5	+ 0.9	+ 0.3	+ 0.2	– 0.2	+ 1.6	+ 0.2	+ 1.4	+ 0.4	– 0.0	+ 0.0	+ 0.0	Q2	
												Medium-term lending		
+ 3.1	+ 0.7	+ 0.4	+ 1.0	+ 0.4	+ 0.0	+ 1.6	+ 0.0	+ 1.5	+ 1.5	–	– 0.0	+ 0.0	2018 Q2	
+ 2.8	+ 0.8	+ 0.2	+ 0.8	+ 0.2	+ 0.0	+ 1.0	+ 0.3	+ 0.7	+ 0.6	–	– 0.0	+ 0.0	Q3	
+ 1.3	+ 0.8	+ 0.1	+ 1.3	– 0.2	+ 0.0	+ 0.5	– 0.0	+ 0.6	+ 0.5	–	+ 0.0	–	Q4	
+ 2.4	+ 0.6	– 0.3	+ 0.5	+ 0.1	+ 0.0	+ 0.5	– 0.3	+ 0.9	+ 0.9	–	– 0.0	– 0.0	2019 Q1	
+ 4.3	+ 1.2	+ 1.4	+ 0.6	+ 0.4	+ 0.1	+ 1.1	+ 0.3	+ 0.8	+ 0.8	–	– 0.0	– 0.0	Q2	
												Long-term lending		
+ 7.7	+ 3.6	+ 0.6	+ 1.4	+ 3.5	+ 0.1	+ 12.3	+ 11.0	+ 1.3	+ 1.6	–	+ 0.1	+ 0.0	2018 Q2	
+ 6.9	+ 2.5	+ 0.7	+ 1.6	+ 3.4	+ 0.3	+ 14.2	+ 13.0	+ 1.2	+ 1.7	–	+ 0.1	– 0.0	Q3	
+ 8.9	+ 5.0	+ 0.9	+ 0.8	+ 2.4	– 0.2	+ 10.4	+ 10.4	+ 0.0	+ 0.4	–	+ 0.1	+ 0.0	Q4	
+ 9.3	+ 3.9	+ 0.5	+ 1.5	+ 3.2	+ 0.0	+ 9.7	+ 8.2	+ 1.5	+ 1.7	–	+ 0.1	+ 0.0	2019 Q1	
+ 7.7	+ 2.9	+ 0.5	+ 0.8	+ 3.7	+ 0.0	+ 14.2	+ 12.8	+ 1.5	+ 1.7	–	+ 0.1	+ 0.0	Q2	

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*	
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		
2017	3,420.9	1,941.0	853.2	207.6	645.6	57.3	588.3	582.9	43.7	30.0	16.3	1.6		
2018	3,537.6	2,080.1	841.5	203.4	638.2	56.8	581.4	578.6	37.3	33.9	14.9	0.5		
2018 Aug.	3,485.0	2,020.0	847.9	215.1	632.8	53.8	579.0	577.6	39.5	33.1	14.9	0.5		
Sep.	3,482.9	2,022.5	844.0	210.9	633.0	54.7	578.3	577.3	39.1	33.9	14.8	0.7		
Oct.	3,504.0	2,044.7	843.7	210.3	633.4	55.1	578.3	577.0	38.6	33.7	14.9	0.7		
Nov.	3,537.4	2,079.6	843.0	208.1	635.0	55.8	579.2	576.9	37.9	33.7	14.9	0.4		
Dec.	3,537.6	2,080.1	841.5	203.4	638.2	56.8	581.4	578.6	37.3	33.9	14.9	0.5		
2019 Jan.	3,540.8	2,079.4	846.3	212.7	633.6	57.1	576.4	578.5	36.7	33.8	14.9	0.8		
Feb.	3,554.5	2,088.8	850.1	217.9	632.2	56.2	576.0	579.5	36.1	34.0	15.1	0.6		
Mar.	3,565.3	2,101.1	846.4	215.8	630.5	57.0	573.5	582.0	35.8	33.9	15.2	0.2		
Apr.	3,582.0	2,122.7	841.6	214.7	626.9	56.0	570.9	582.3	35.4	33.9	15.2	2.6		
May	3,611.4	2,152.7	841.0	216.3	624.7	54.9	569.8	582.5	35.2	33.7	15.2	1.6		
June	3,609.5	2,150.7	841.2	214.5	626.7	55.4	571.4	582.7	34.9	33.4	15.1	2.2		
July	3,615.9	2,166.4	832.9	210.7	622.2	54.0	568.2	581.8	34.8	32.9	13.9	0.2		
Changes*														
2017	+ 103.1	+ 142.8	- 27.5	- 24.7	- 2.8	+ 10.1	- 12.8	- 5.6	- 6.7	+ 0.4	- 2.0	+ 0.8		
2018	+ 117.7	+ 139.3	- 10.8	- 3.5	- 7.3	- 0.1	- 7.2	- 4.3	- 6.5	+ 3.9	- 1.4	- 1.2		
2018 Aug.	+ 11.9	+ 17.3	- 4.3	- 3.2	- 1.1	+ 1.9	- 3.1	- 0.6	- 0.5	+ 0.5	- 0.0	- 1.0		
Sep.	- 1.9	+ 2.7	- 3.9	- 4.1	+ 0.2	+ 0.9	- 0.6	- 0.3	- 0.4	+ 0.6	- 0.1	- 0.1		
Oct.	+ 21.2	+ 22.2	- 0.2	- 0.6	+ 0.4	+ 0.4	- 0.0	- 0.3	- 0.5	- 0.2	+ 0.0	+ 0.4		
Nov.	+ 33.4	+ 34.8	- 0.5	- 2.3	+ 1.7	+ 0.7	+ 1.0	- 0.1	- 0.7	- 0.0	+ 0.0	- 0.3		
Dec.	+ 0.2	+ 0.8	- 1.8	- 4.7	+ 2.9	+ 1.0	+ 1.9	+ 1.7	- 0.6	+ 0.2	- 0.0	+ 0.1		
2019 Jan.	+ 3.2	- 0.7	+ 4.7	+ 9.3	- 4.6	+ 0.3	- 4.9	- 0.2	- 0.6	- 0.0	- 0.0	+ 0.4		
Feb.	+ 13.6	+ 9.3	+ 3.9	+ 5.2	- 1.4	- 0.9	- 0.4	+ 1.1	- 0.6	+ 0.1	+ 0.2	- 0.2		
Mar.	+ 10.4	+ 12.0	- 3.8	- 2.1	- 1.7	+ 0.8	- 2.5	+ 2.5	- 0.3	- 0.0	+ 0.1	- 0.4		
Apr.	+ 16.7	+ 21.6	- 4.7	- 1.1	- 3.6	- 1.1	- 2.6	+ 0.2	- 0.3	+ 0.0	+ 0.0	+ 2.4		
May	+ 29.4	+ 30.0	- 0.6	+ 1.6	- 2.2	- 1.1	- 1.1	+ 0.3	- 0.3	- 0.2	- 0.0	- 1.0		
June	- 2.0	- 1.9	+ 0.1	- 2.0	+ 2.0	+ 0.5	+ 1.5	+ 0.2	- 0.3	- 0.3	- 0.0	+ 0.6		
July	+ 6.2	+ 15.7	- 8.5	- 3.8	- 4.8	- 1.4	- 3.4	- 0.9	- 0.1	- 0.5	- 0.2	- 2.0		
Domestic government													End of year or month*	
2016	199.8	57.9	133.5	79.5	54.0	16.6	37.4	3.9	4.5	27.1	2.5	-		
2017	201.7	58.9	134.7	65.8	69.0	27.4	41.5	3.6	4.4	25.7	2.3	-		
2018	218.9	62.7	148.2	67.9	80.3	28.5	51.8	3.7	4.2	25.3	2.2	-		
2018 Aug.	223.9	62.7	153.2	79.1	74.0	25.7	48.3	3.8	4.3	25.7	2.2	-		
Sep.	221.1	60.4	152.7	76.9	75.9	27.1	48.8	3.8	4.3	25.6	2.2	-		
Oct.	216.5	57.5	151.1	73.8	77.3	27.3	50.0	3.7	4.2	25.3	2.2	-		
Nov.	224.6	62.6	154.0	74.8	79.1	27.9	51.2	3.8	4.2	25.3	2.2	-		
Dec.	218.9	62.7	148.2	67.9	80.3	28.5	51.8	3.7	4.2	25.3	2.2	-		
2019 Jan.	221.7	59.2	154.7	74.8	79.8	29.2	50.6	3.7	4.2	25.2	2.2	-		
Feb.	230.4	63.0	159.5	80.1	79.4	28.4	51.0	3.8	4.1	25.2	2.2	-		
Mar.	232.2	64.0	160.3	79.8	80.5	29.3	51.2	3.8	4.1	25.1	2.2	-		
Apr.	229.6	62.3	159.5	79.7	79.8	28.4	51.4	3.7	4.1	25.0	2.2	1.4		
May	238.8	68.9	162.0	83.0	79.0	27.3	51.7	3.7	4.1	25.0	2.2	1.4		
June	240.8	68.3	164.6	84.1	80.5	28.1	52.4	3.7	4.2	24.8	2.2	2.0		
July	234.6	66.2	160.5	80.7	79.8	27.3	52.6	3.7	4.2	24.7	2.2	-		
Changes*														
2017	- 1.0	+ 1.6	- 2.4	- 14.1	+ 11.7	+ 10.7	+ 0.9	- 0.3	+ 0.1	- 1.1	- 0.3	± 0.0		
2018	+ 16.9	+ 3.6	+ 13.5	+ 2.0	+ 11.5	+ 1.1	+ 10.3	+ 0.1	- 0.2	- 0.2	- 0.1	± 0.0		
2018 Aug.	+ 9.1	+ 5.7	+ 3.3	+ 1.9	+ 1.4	- 0.1	+ 1.5	+ 0.0	- 0.0	+ 0.1	+ 0.0	- 0.7		
Sep.	- 2.9	- 2.5	- 0.4	- 2.3	+ 1.9	+ 1.3	+ 0.5	- 0.0	- 0.0	- 0.0	+ 0.0	-		
Oct.	- 4.7	- 2.9	- 1.7	- 3.0	+ 1.3	+ 0.2	+ 1.1	- 0.0	- 0.0	- 0.3	+ 0.0	-		
Nov.	+ 8.1	+ 5.1	+ 3.0	+ 1.0	+ 2.0	+ 0.7	+ 1.3	+ 0.0	- 0.0	+ 0.0	+ 0.0	-		
Dec.	- 5.7	+ 0.1	- 5.7	- 6.9	+ 1.2	+ 0.6	+ 0.6	- 0.0	- 0.0	+ 0.0	+ 0.0	-		
2019 Jan.	+ 2.7	- 3.5	+ 6.3	+ 6.9	- 0.6	+ 0.6	- 1.2	- 0.1	- 0.0	- 0.1	+ 0.0	-		
Feb.	+ 8.7	+ 3.8	+ 4.9	+ 5.3	- 0.4	- 0.8	+ 0.4	+ 0.1	- 0.1	+ 0.0	+ 0.0	-		
Mar.	+ 1.8	+ 1.1	+ 0.8	- 0.3	+ 1.1	+ 0.9	+ 0.2	- 0.0	- 0.1	- 0.1	- 0.1	-		
Apr.	- 2.6	- 1.7	- 0.8	- 0.2	- 0.6	- 0.9	+ 0.2	- 0.0	- 0.0	- 0.1	+ 0.0	+ 1.4		
May	+ 9.1	+ 6.6	+ 2.5	+ 3.3	- 0.9	- 1.1	+ 0.3	- 0.0	+ 0.1	- 0.0	-	- 0.0		
June	+ 1.6	- 0.8	+ 2.3	+ 1.1	+ 1.3	+ 0.7	+ 0.5	- 0.0	+ 0.0	- 0.2	-	+ 0.6		
July	- 6.2	- 2.1	- 4.0	- 3.4	- 0.7	- 0.8	+ 0.2	- 0.0	+ 0.0	- 0.1	- 0.0	- 2.0		

* 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*	
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		
2017	3,219.2	1,882.1	718.5	141.9	576.6	29.9	546.8	579.3	39.3	4.3	14.0	1.6		
2018	3,318.7	2,017.4	693.3	135.4	557.9	28.3	529.6	574.9	33.1	8.6	12.7	0.5		
2018 Aug.	3,261.1	1,957.3	694.7	135.9	558.8	28.1	530.7	573.8	35.3	7.4	12.7	0.5		
Sep.	3,261.8	1,962.1	691.2	134.1	557.1	27.6	529.5	573.5	34.8	8.2	12.6	0.3		
Oct.	3,287.5	1,987.2	692.6	136.5	556.1	27.8	528.3	573.3	34.4	8.4	12.7	0.7		
Nov.	3,312.8	2,017.0	689.1	133.3	555.8	27.8	528.0	573.1	33.7	8.4	12.7	0.4		
Dec.	3,318.7	2,017.4	693.3	135.4	557.9	28.3	529.6	574.9	33.1	8.6	12.7	0.5		
2019 Jan.	3,319.1	2,020.2	691.6	137.9	553.7	27.9	525.8	574.8	32.5	8.7	12.7	0.8		
Feb.	3,324.1	2,025.8	690.6	137.8	552.8	27.8	525.0	575.8	31.9	8.8	12.9	0.6		
Mar.	3,333.1	2,037.1	686.0	136.0	550.0	27.7	522.3	578.3	31.7	8.8	13.0	0.2		
Apr.	3,352.4	2,060.4	682.1	135.1	547.1	27.5	519.5	578.5	31.3	8.9	13.0	1.1		
May	3,372.6	2,083.8	679.0	133.3	545.7	27.6	518.1	578.8	31.0	8.7	13.0	0.2		
June	3,368.8	2,082.4	676.6	130.4	546.2	27.3	518.9	579.0	30.7	8.6	12.9	0.2		
July	3,381.3	2,100.2	672.4	130.0	542.4	26.7	515.6	578.1	30.6	8.2	11.7	0.2		
													Changes*	
2017	+ 104.1	+ 141.3	- 25.1	- 10.6	- 14.4	- 0.7	- 13.8	- 5.3	- 6.7	+ 1.6	- 1.7	+ 0.8		
2018	+ 100.8	+ 135.7	- 24.3	- 5.5	- 18.8	- 1.3	- 17.5	- 4.3	- 6.3	+ 4.1	- 1.3	- 1.2		
2018 Aug.	+ 2.8	+ 11.6	- 7.7	- 5.1	- 2.6	+ 2.0	- 4.6	- 0.7	- 0.5	+ 0.4	- 0.0	- 0.4		
Sep.	+ 1.0	+ 5.2	- 3.5	- 1.8	- 1.7	- 0.5	- 1.2	- 0.3	- 0.4	+ 0.6	- 0.1	- 0.1		
Oct.	+ 25.8	+ 25.1	+ 1.5	+ 2.4	- 1.0	+ 0.1	- 1.1	- 0.3	- 0.4	+ 0.1	+ 0.0	+ 0.4		
Nov.	+ 25.3	+ 29.8	- 3.6	- 3.3	- 0.3	+ 0.1	- 0.4	- 0.1	- 0.7	- 0.0	+ 0.0	- 0.3		
Dec.	+ 5.9	+ 0.8	+ 3.9	+ 2.2	+ 1.7	+ 0.4	+ 1.3	+ 1.8	- 0.6	+ 0.2	- 0.0	+ 0.1		
2019 Jan.	+ 0.5	+ 2.8	- 1.6	+ 2.4	- 4.0	- 0.3	- 3.7	- 0.1	- 0.6	+ 0.1	- 0.0	+ 0.4		
Feb.	+ 4.9	+ 5.6	- 1.1	- 0.1	- 0.9	- 0.1	- 0.8	+ 1.0	- 0.6	+ 0.1	+ 0.2	- 0.2		
Mar.	+ 8.6	+ 10.9	- 4.5	- 1.7	- 2.8	- 0.1	- 2.7	+ 2.5	- 0.3	+ 0.0	+ 0.1	- 0.4		
Apr.	+ 19.3	+ 23.3	- 3.9	- 0.9	- 3.0	- 0.2	- 2.8	+ 0.3	- 0.3	+ 0.1	+ 0.0	+ 0.9		
May	+ 20.2	+ 23.3	- 3.1	- 1.7	- 1.3	+ 0.1	- 1.4	+ 0.3	- 0.3	- 0.2	- 0.0	- 0.9		
June	- 3.6	- 1.2	- 2.3	- 3.1	+ 0.8	- 0.2	+ 1.0	+ 0.2	- 0.3	- 0.1	- 0.0	+ 0.0		
July	+ 12.3	+ 17.8	- 4.5	- 0.4	- 4.1	- 0.6	- 3.5	- 0.9	- 0.1	- 0.4	- 0.2	- 0.1		
of which: Domestic enterprises													End of year or month*	
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		
2017	1,039.6	558.9	461.0	92.9	368.2	17.2	351.0	6.8	12.8	2.7	11.6	1.6		
2018	1,035.4	584.0	432.9	86.0	346.9	17.2	329.7	7.0	11.4	2.8	10.3	0.5		
2018 Aug.	1,028.5	573.1	436.2	86.3	349.9	16.3	333.6	7.2	12.0	2.5	10.3	0.5		
Sep.	1,021.9	570.3	432.5	84.5	348.0	16.0	332.0	7.2	11.9	2.6	10.3	0.3		
Oct.	1,039.7	586.7	434.0	86.6	347.4	16.4	331.0	7.1	11.8	2.6	10.3	0.7		
Nov.	1,040.8	590.9	431.3	84.2	347.1	16.5	330.6	7.1	11.6	2.6	10.3	0.4		
Dec.	1,035.4	584.0	432.9	86.0	346.9	17.2	329.7	7.0	11.4	2.8	10.3	0.5		
2019 Jan.	1,036.9	587.8	430.7	88.3	342.4	16.9	325.5	7.0	11.4	2.6	10.2	0.8		
Feb.	1,026.7	579.2	429.1	88.2	340.9	16.7	324.2	7.0	11.4	2.7	10.4	0.6		
Mar.	1,028.2	585.5	424.2	86.2	338.0	16.6	321.4	7.1	11.4	2.6	10.5	0.2		
Apr.	1,035.7	596.5	420.7	85.6	335.1	16.5	318.6	7.1	11.4	2.6	10.5	1.1		
May	1,043.1	606.9	417.7	84.7	333.0	16.6	316.4	7.1	11.3	2.6	10.5	0.2		
June	1,029.8	595.8	415.6	81.9	333.7	16.5	317.2	7.1	11.3	2.6	10.4	0.2		
July	1,034.2	604.4	411.5	81.7	329.8	15.9	313.9	7.1	11.2	2.2	9.2	0.2		
													Changes*	
2017	+ 19.5	+ 40.2	- 20.0	- 4.7	- 15.4	- 0.2	- 15.2	- 0.0	- 0.6	+ 0.8	- 1.3	+ 0.8		
2018	- 3.2	+ 25.1	- 27.2	- 5.9	- 21.3	+ 0.3	- 21.7	+ 0.2	- 1.3	+ 0.1	- 1.3	- 1.2		
2018 Aug.	- 4.5	+ 3.4	- 7.8	- 5.2	- 2.6	+ 2.3	- 4.9	+ 0.1	- 0.1	- 0.1	- 0.1	- 0.4		
Sep.	- 6.5	- 2.7	- 3.6	- 1.8	- 1.9	- 0.2	- 1.6	- 0.1	- 0.1	+ 0.1	- 0.1	- 0.1		
Oct.	+ 17.8	+ 16.4	+ 1.5	+ 2.1	- 0.5	+ 0.4	- 0.9	- 0.0	- 0.1	+ 0.0	- 0.0	+ 0.4		
Nov.	+ 1.1	+ 4.1	- 2.8	- 2.4	- 0.4	+ 0.1	- 0.5	- 0.0	- 0.2	- 0.0	+ 0.0	- 0.3		
Dec.	- 5.4	- 6.6	+ 1.3	+ 1.9	- 0.5	+ 0.6	- 1.2	- 0.1	- 0.1	+ 0.2	- 0.0	+ 0.1		
2019 Jan.	+ 1.6	+ 3.9	- 2.2	+ 2.2	- 4.4	- 0.2	- 4.2	- 0.0	- 0.1	- 0.1	- 0.0	+ 0.4		
Feb.	- 10.3	- 8.7	- 1.6	- 0.1	- 1.5	- 0.2	- 1.3	+ 0.0	- 0.0	+ 0.0	+ 0.2	- 0.2		
Mar.	+ 1.1	+ 5.9	- 4.9	- 1.9	- 3.0	- 0.1	- 2.9	+ 0.0	+ 0.1	- 0.0	+ 0.1	- 0.4		
Apr.	+ 7.4	+ 11.0	- 3.5	- 0.6	- 2.9	- 0.1	- 2.7	+ 0.0	- 0.1	+ 0.0	- 0.0	+ 0.9		
May	+ 7.5	+ 10.4	- 2.8	- 0.9	- 1.9	+ 0.2	- 2.1	+ 0.0	- 0.0	+ 0.0	- 0.0	- 0.9		
June	- 13.1	- 10.9	- 2.1	- 3.0	+ 0.9	- 0.1	+ 1.0	- 0.0	- 0.1	- 0.0	- 0.0	+ 0.0		
July	+ 4.3	+ 8.7	- 4.3	- 0.2	- 4.1	- 0.6	- 3.5	- 0.0	- 0.0	- 0.4	- 0.2	- 0.1		

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					
	Total	by creditor group					Total	by creditor group				
		Domestic households						Domestic non-profit institutions				
		Total	Self-employed persons	Employees	Other individuals	Domestic non-profit institutions		Total	Self-employed persons	Employees	Other individuals	
End of year or month*												
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	2,179.7	1,323.1	1,286.6	223.4	907.6	155.7	36.5	257.5	243.5	23.4	182.9	37.1
2018	2,283.4	1,433.5	1,396.1	248.4	991.3	156.4	37.4	260.4	246.7	21.3	188.6	36.7
2019 Feb.	2,297.4	1,446.6	1,408.9	252.6	999.8	156.5	37.7	261.5	247.7	21.5	189.3	36.9
Mar.	2,304.9	1,451.6	1,413.3	247.7	1,008.9	156.8	38.3	261.9	248.2	21.6	189.7	36.9
Apr.	2,316.7	1,463.9	1,425.9	253.6	1,015.6	156.8	37.9	261.4	247.8	21.6	189.5	36.7
May	2,329.6	1,476.9	1,437.9	255.8	1,024.3	157.8	38.9	261.3	247.6	21.5	189.4	36.7
June	2,339.0	1,486.6	1,447.7	252.7	1,036.8	158.2	38.9	261.0	247.5	21.6	189.2	36.7
July	2,347.1	1,495.9	1,457.2	260.2	1,039.3	157.8	38.7	260.8	247.3	21.6	188.9	36.8
Changes*												
2017	+ 84.7	+ 101.1	+ 99.8	+ 17.5	+ 77.8	+ 4.5	+ 1.3	- 5.0	- 5.1	- 1.8	- 2.1	- 1.3
2018	+ 104.0	+ 110.5	+ 109.7	+ 20.3	+ 83.1	+ 6.2	+ 0.9	+ 3.0	+ 3.2	- 2.3	+ 5.8	- 0.3
2019 Feb.	+ 15.2	+ 14.2	+ 13.2	+ 1.4	+ 10.9	+ 0.8	+ 1.1	+ 0.6	+ 0.6	+ 0.1	+ 0.5	- 0.1
Mar.	+ 7.5	+ 5.0	+ 4.4	- 4.4	+ 8.8	+ 0.0	+ 0.6	+ 0.4	+ 0.4	+ 0.1	+ 0.3	+ 0.0
Apr.	+ 11.8	+ 12.3	+ 12.6	+ 5.9	+ 6.6	+ 0.1	- 0.3	- 0.5	- 0.4	- 0.0	- 0.2	- 0.2
May	+ 12.7	+ 13.0	+ 12.0	+ 2.3	+ 8.6	+ 1.1	+ 1.0	- 0.2	- 0.2	- 0.0	- 0.2	- 0.0
June	+ 9.5	+ 9.8	+ 9.8	- 3.2	+ 12.5	+ 0.5	+ 0.0	- 0.2	- 0.1	+ 0.1	- 0.2	+ 0.0
July	+ 8.0	+ 9.1	+ 9.5	+ 7.5	+ 2.5	- 0.4	- 0.4	- 0.2	- 0.2	- 0.0	- 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 Including subordinated liabilities and liabilities arising from

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*													
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	201.7	8.7	4.3	1.5	2.8	0.1	12.9	37.5	11.9	9.9	14.5	1.3	12.7
2018	218.9	10.5	4.7	1.7	4.1	0.1	12.2	39.0	13.4	11.5	13.0	1.2	13.0
2019 Feb.	230.4	10.0	5.0	1.0	4.0	0.1	12.2	49.9	12.7	24.0	12.1	1.2	13.0
Mar.	232.2	10.5	5.6	1.0	3.8	0.1	12.2	55.2	14.0	27.5	12.6	1.1	12.9
Apr.	229.6	11.2	5.0	2.3	3.9	0.1	12.2	54.3	13.0	27.2	12.9	1.1	12.8
May	238.8	12.0	5.5	2.3	4.2	0.1	12.1	54.8	13.6	27.1	13.0	1.1	12.9
June	240.8	14.0	6.1	3.6	4.2	0.1	11.9	57.8	15.1	28.5	13.1	1.1	12.9
July	234.6	11.2	6.0	0.9	4.2	0.0	11.8	58.0	15.8	27.8	13.3	1.1	12.8
Changes*													
2017	- 1.0	- 0.0	+ 0.7	- 1.0	+ 0.2	- 0.0	- 0.6	- 5.1	- 1.4	- 1.4	- 2.5	+ 0.2	- 0.5
2018	+ 16.9	+ 2.1	+ 0.4	+ 0.2	+ 1.4	- 0.0	- 0.7	+ 1.3	+ 1.3	+ 1.5	- 1.3	- 0.1	+ 0.5
2019 Feb.	+ 8.7	+ 0.2	+ 0.2	- 0.0	- 0.0	+ 0.0	- 0.0	+ 6.4	+ 0.7	+ 5.5	+ 0.3	- 0.0	+ 0.0
Mar.	+ 1.8	+ 0.6	+ 0.7	+ 0.0	- 0.1	+ 0.0	- 0.0	+ 5.3	+ 1.2	+ 3.5	+ 0.6	- 0.1	- 0.1
Apr.	- 2.6	+ 0.8	- 0.7	+ 1.4	+ 0.1	- 0.0	- 0.0	- 1.0	- 1.0	- 0.3	+ 0.3	+ 0.0	- 0.0
May	+ 9.1	+ 0.6	+ 0.5	- 0.0	+ 0.2	- 0.0	- 0.0	+ 0.5	+ 0.6	- 0.1	+ 0.1	- 0.0	+ 0.0
June	+ 1.6	+ 2.0	+ 0.7	+ 1.3	-	+ 0.0	- 0.2	+ 3.0	+ 1.5	+ 1.4	+ 0.1	- 0.0	+ 0.0
July	- 6.2	- 2.8	- 0.2	- 2.7	+ 0.1	- 0.0	- 0.1	+ 0.2	+ 0.8	- 0.8	+ 0.2	+ 0.0	- 0.0

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

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

IV. Banks

					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	of which: up to and including 2 years	more than 2 years								
End of year or month*												
13.5	54.5	207.5	13.3	194.3	577.7	569.3	8.4	32.7	0.1	2.9	–	2016
14.0	49.0	208.5	12.7	195.8	572.4	564.6	7.9	26.6	1.7	2.4	–	2017
13.7	49.4	211.0	11.1	199.9	567.9	560.6	7.2	21.7	5.8	2.4	–	2018
13.8	49.6	211.9	11.1	200.8	568.7	561.5	7.3	20.6	6.1	2.4	–	2019 Feb.
13.7	49.8	212.1	11.1	201.0	571.2	563.7	7.5	20.2	6.2	2.5	–	Mar.
13.6	49.4	212.0	11.1	200.9	571.4	563.9	7.5	20.0	6.2	2.5	–	Apr.
13.7	48.6	212.7	11.0	201.7	571.7	564.2	7.5	19.7	6.1	2.5	–	May
13.5	48.5	212.5	10.8	201.7	571.9	564.4	7.5	19.5	6.0	2.5	–	June
13.5	48.3	212.5	10.8	201.7	571.1	563.7	7.4	19.4	6.0	2.5	–	July
Changes*												
+ 0.1	– 5.9	+ 0.9	– 0.5	+ 1.4	– 5.3	– 4.7	– 0.6	– 6.1	+ 0.8	– 0.4	–	2017
– 0.2	+ 0.4	+ 2.6	– 1.6	+ 4.2	– 4.5	– 3.9	– 0.6	– 5.0	+ 4.0	+ 0.0	–	2018
– 0.0	– 0.0	+ 0.6	+ 0.1	+ 0.5	+ 1.0	+ 1.0	– 0.0	– 0.5	+ 0.1	+ 0.0	–	2019 Feb.
– 0.1	+ 0.2	+ 0.2	– 0.0	+ 0.2	+ 2.5	+ 2.3	+ 0.2	– 0.4	+ 0.0	+ 0.0	–	Mar.
– 0.1	– 0.3	– 0.1	– 0.0	– 0.1	+ 0.3	+ 0.2	+ 0.0	– 0.2	+ 0.1	+ 0.0	–	Apr.
– 0.0	– 0.8	+ 0.6	– 0.1	+ 0.7	+ 0.3	+ 0.3	– 0.0	– 0.3	– 0.2	+ 0.0	–	May
– 0.1	– 0.1	– 0.1	– 0.1	– 0.0	+ 0.2	+ 0.2	– 0.0	– 0.2	– 0.1	+ 0.0	–	June
+ 0.0	– 0.2	– 0.0	– 0.0	– 0.0	– 0.8	– 0.7	– 0.1	– 0.1	– 0.0	+ 0.0	–	July

registered debt securities. ² Including deposits under savings and loan contracts (see 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. 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*												
56.0	31.5	8.7	10.1	5.7	0.4	93.6	9.4	57.6	25.1	1.5	–	2016
61.6	33.2	8.8	14.1	5.5	0.0	93.8	9.5	45.6	37.6	1.1	–	2017
65.4	35.1	9.8	14.9	5.7	0.0	103.9	9.5	45.0	48.4	1.0	–	2018
61.6	31.5	9.6	14.9	5.7	0.0	108.8	13.7	45.6	48.5	1.0	–	2019 Feb.
60.3	30.4	9.5	14.8	5.6	0.0	106.2	14.0	41.8	49.2	1.0	–	Mar.
59.1	29.7	9.2	14.6	5.6	0.0	105.0	14.6	40.9	48.5	1.0	–	Apr.
64.1	34.3	9.6	14.6	5.7	0.0	107.9	15.5	44.0	47.3	1.0	–	May
61.7	31.8	9.8	14.5	5.6	0.0	107.3	15.3	42.2	48.7	1.0	–	June
57.4	28.4	9.3	14.1	5.6	0.0	108.0	16.0	42.7	48.2	1.1	–	July
Changes*												
+ 4.5	+ 2.1	+ 0.1	+ 2.3	– 0.0	– 0.0	– 0.3	+ 0.2	– 11.8	+11.6	– 0.4	–	2017
+ 3.6	+ 1.9	+ 1.0	+ 0.6	+ 0.1	+ 0.0	+ 9.9	– 0.0	– 0.8	+10.8	– 0.1	–	2018
+ 3.9	+ 3.5	+ 0.3	+ 0.0	+ 0.0	–	– 1.7	– 0.6	– 0.5	– 0.7	+ 0.0	–	2019 Feb.
– 1.4	– 1.2	– 0.1	– 0.1	– 0.0	–	– 2.7	+ 0.3	– 3.8	+ 0.8	+ 0.0	–	Mar.
– 1.2	– 0.7	– 0.3	– 0.2	– 0.1	–	– 1.1	+ 0.5	– 0.9	– 0.8	+ 0.0	–	Apr.
+ 5.2	+ 4.6	+ 0.4	+ 0.1	+ 0.1	–	+ 2.8	+ 0.9	+ 3.1	– 1.2	– 0.0	–	May
– 2.8	– 2.7	+ 0.1	– 0.3	– 0.0	– 0.0	– 0.7	– 0.3	– 1.8	+ 1.4	+ 0.0	–	June
– 4.3	– 3.4	– 0.5	– 0.3	– 0.1	–	+ 0.7	+ 0.7	+ 0.5	– 0.6	+ 0.1	–	July

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).

IV. Banks

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 3 months' notice		at more than 3 months' notice		Total	of which: At 3 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*													
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	590.3	582.9	541.0	348.3	41.9	30.3	7.4	6.5	2.7	52.0	43.7	31.4	8.2
2018	585.6	578.6	541.1	333.4	37.5	27.2	7.0	6.2	2.3	41.2	37.3	27.9	3.9
2019 Mar.	588.9	582.0	544.7	330.4	37.3	27.3	6.9	6.2	0.1	39.7	35.8	26.7	3.9
Apr.	589.1	582.3	544.8	329.5	37.5	27.5	6.9	6.1	0.1	39.4	35.4	26.6	4.0
May	589.4	582.5	544.4	326.9	38.1	28.1	6.9	6.1	0.1	39.1	35.2	26.4	3.9
June	589.5	582.7	544.0	326.5	38.6	28.6	6.8	6.1	0.1	38.8	34.9	26.2	3.9
July	588.6	581.8	543.4	325.0	38.4	28.4	6.8	6.1	0.1	38.7	34.8	26.2	3.9
Changes*													
2017	- 6.2	- 5.6	+ 1.5	- 13.1	- 7.1	- 7.4	- 0.6	- 0.4	.	- 7.2	- 6.7	- 4.4	- 0.5
2018	- 4.7	- 4.3	+ 1.2	- 15.9	- 5.5	- 3.2	- 0.5	- 0.3	.	- 9.1	- 6.5	- 3.6	- 2.6
2019 Mar.	+ 2.5	+ 2.5	+ 2.2	+ 0.3	+ 0.2	+ 0.3	- 0.0	- 0.0	.	- 0.3	- 0.3	- 0.2	+ 0.0
Apr.	+ 0.2	+ 0.2	+ 0.1	- 0.8	+ 0.2	+ 0.3	- 0.0	- 0.0	.	- 0.3	- 0.3	- 0.1	+ 0.1
May	+ 0.2	+ 0.3	- 0.3	- 2.6	+ 0.6	+ 0.5	- 0.0	- 0.0	.	- 0.2	- 0.3	- 0.2	+ 0.0
June	+ 0.1	+ 0.2	- 0.4	- 0.3	+ 0.6	+ 0.5	- 0.0	- 0.0	.	- 0.3	- 0.3	- 0.2	- 0.0
July	- 0.9	- 0.9	- 0.6	- 1.6	- 0.3	- 0.2	- 0.0	- 0.0	.	- 0.1	- 0.1	- 0.1	+ 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 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 securities	non-negotiable 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*														
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	1,066.5	147.2	26.0	370.4	89.8	107.4	4.1	32.9	6.4	926.2	0.4	0.2	30.5	0.5
2018	1,099.7	139.4	27.5	355.9	88.3	106.2	3.1	22.0	6.1	971.5	0.6	0.1	30.6	0.4
2019 Mar.	1,139.1	139.4	31.9	374.4	92.4	115.6	2.9	20.8	5.4	1,002.7	0.7	0.1	29.9	0.7
Apr.	1,131.3	136.5	30.8	371.9	86.4	108.6	2.9	24.8	5.4	997.9	1.0	0.7	29.9	0.7
May	1,147.8	136.0	31.8	377.6	91.1	113.7	2.9	25.0	5.4	1,009.1	0.9	0.6	30.4	0.4
June	1,144.6	132.9	31.6	370.9	91.2	113.6	2.8	23.1	4.8	1,007.9	1.2	0.7	30.1	0.4
July	1,147.8	130.6	30.0	377.1	92.7	113.6	2.8	23.4	4.8	1,010.7	1.2	0.7	31.2	0.4
Changes*														
2017	- 30.8	- 29.7	- 2.1	- 36.7	- 0.5	- 3.9	- 0.0	- 4.6	+ 0.6	- 22.3	- 0.2	+ 0.0	- 3.2	- 0.0
2018	+ 33.6	- 7.8	+ 1.5	- 14.3	- 1.6	- 1.2	- 1.0	- 10.5	- 0.3	+ 45.3	+ 0.3	- 0.1	- 0.0	+ 0.0
2019 Mar.	+ 10.4	+ 0.3	+ 1.5	+ 14.7	+ 10.6	+ 12.5	- 0.2	- 0.1	- 0.1	- 2.0	- 0.1	+ 0.0	- 1.0	+ 0.1
Apr.	- 7.8	- 2.9	- 1.1	- 2.4	- 6.1	- 7.0	- 0.0	+ 4.0	- 0.0	- 4.8	+ 0.3	+ 0.5	+ 0.0	-
May	+ 16.5	- 0.5	+ 1.0	+ 5.6	+ 4.7	+ 5.1	+ 0.0	+ 0.1	+ 0.0	+ 11.2	- 0.0	- 0.0	+ 0.5	- 0.3
June	- 3.7	- 3.1	- 0.2	- 6.6	+ 0.2	- 0.1	- 0.2	- 1.9	- 0.6	- 1.7	+ 0.2	+ 0.0	- 0.2	-
July	+ 3.2	- 2.4	- 1.7	+ 6.3	+ 1.5	- 0.0	+ 0.0	+ 0.3	+ 0.0	+ 2.8	+ 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 and 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																
2017	20	229.2	41.8	0.0	15.8	12.3	104.4	24.8	25.1	2.6	23.0	168.6	9.5	3.0	11.0	83.6
2018	20	233.4	39.4	0.0	15.7	11.9	110.2	25.7	25.8	2.8	20.4	174.3	10.0	3.3	11.7	86.6
2019 May	19	236.3	38.9	0.0	16.2	11.8	112.5	26.4	25.6	2.9	20.1	176.4	10.0	3.1	11.9	7.9
June	19	236.9	38.5	0.0	16.3	11.7	113.3	26.4	25.6	2.9	20.3	176.6	9.8	3.1	12.0	7.2
July	19	237.2	38.3	0.0	16.4	11.7	113.9	26.6	25.8	2.9	20.9	176.6	9.8	3.1	12.0	7.5
Private building and loan associations																
2019 May	11	163.6	23.1	–	6.7	8.8	87.4	22.4	11.4	1.7	18.3	114.4	9.6	3.1	8.3	4.8
June	11	164.2	22.9	–	6.8	8.8	88.0	22.4	11.5	1.7	18.4	114.5	9.6	3.1	8.3	4.5
July	11	164.4	22.7	–	6.8	8.8	88.5	22.6	11.6	1.7	18.8	114.6	9.6	3.1	8.3	4.7
Public building and loan associations																
2019 May	8	72.6	15.9	0.0	9.5	2.9	25.2	4.0	14.1	1.1	1.9	62.0	0.4	–	3.7	3.1
June	8	72.7	15.7	0.0	9.5	3.0	25.3	4.0	14.2	1.1	1.9	62.0	0.3	–	3.7	2.7
July	8	72.8	15.6	0.0	9.6	2.9	25.5	4.0	14.2	1.2	2.1	62.0	0.3	–	3.7	2.8

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				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							Newly granted interim and bridging loans and other building loans
							Total	of which: Applied to settlement of interim and bridging loans	Total	of which: Applied to settlement of interim and bridging loans						
All building and loan associations																
2017	26.7	2.3	7.6	45.3	26.0	39.6	16.4	4.1	4.5	3.4	18.7	16.4	7.4	7.1	6.2	0.2
2018	27.0	2.1	7.4	45.2	25.1	40.2	15.9	4.3	4.8	3.7	19.5	16.6	6.8	6.6	5.5	0.2
2019 May	2.6	0.0	0.7	4.1	2.0	3.5	1.3	0.3	0.4	0.3	1.8	17.8	7.2	0.6	–	0.0
June	2.2	0.0	0.6	3.9	2.2	3.5	1.4	0.3	0.4	0.3	1.8	17.7	7.2	0.5	1.3	0.0
July	2.2	0.0	0.7	4.3	2.2	3.9	1.4	0.4	0.4	0.3	2.1	17.6	7.1	0.6	–	0.0
Private building and loan associations																
2019 May	1.6	0.0	0.3	3.0	1.3	2.6	0.9	0.2	0.3	0.2	1.5	12.4	3.7	0.5	–	0.0
June	1.4	0.0	0.3	2.8	1.5	2.6	1.0	0.2	0.2	0.2	1.4	12.4	3.7	0.4	1.0	0.0
July	1.4	0.0	0.3	3.3	1.6	3.0	1.0	0.3	0.3	0.3	1.7	12.6	3.8	0.5	–	0.0
Public building and loan associations																
2019 May	1.0	0.0	0.4	1.1	0.7	0.8	0.4	0.1	0.1	0.1	0.4	5.4	3.5	0.1	–	0.0
June	0.8	0.0	0.4	1.0	0.7	0.9	0.4	0.1	0.1	0.1	0.4	5.3	3.5	0.1	0.4	0.0
July	0.8	0.0	0.4	1.0	0.6	1.0	0.4	0.1	0.1	0.1	0.4	5.1	3.3	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 ¹ and/or foreign subsidiaries		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 *															
2016	51	192	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	52	188	1,647.8	493.9	484.1	197.1	287.0	9.8	528.8	443.2	13.1	430.1	85.6	625.1	402.9
2018	49	183	1,401.2	403.8	392.8	192.1	200.7	11.0	516.8	427.7	20.0	407.7	89.1	480.5	309.0
2018 Sep.	48	183	1,494.1	452.1	441.2	185.4	255.8	10.8	541.6	456.5	21.9	434.7	85.1	500.5	318.4
Oct.	49	184	1,487.3	439.9	428.6	205.9	222.7	11.3	535.8	448.0	20.3	427.8	87.8	511.6	336.0
Nov.	49	184	1,456.1	454.1	443.4	206.9	236.5	10.8	519.7	433.1	20.7	412.4	86.6	482.2	313.7
Dec.	49	183	1,401.2	403.8	392.8	192.1	200.7	11.0	516.8	427.7	20.0	407.7	89.1	480.5	309.0
2019 Jan.	50	184	1,451.6	419.4	408.0	190.8	217.2	11.4	541.3	453.3	19.8	433.5	88.0	491.0	309.4
Feb.	50	186	1,457.9	426.1	413.9	203.7	210.2	12.2	562.1	472.2	19.2	453.1	89.9	469.6	290.3
Mar.	53	196	1,498.2	446.3	434.3	214.6	219.7	11.9	572.3	480.1	19.3	460.8	92.1	479.7	305.2
Apr.	53	199	1,517.6	449.4	433.3	212.3	221.1	16.0	565.8	477.7	18.9	458.8	88.1	502.4	313.7
May	52	198	1,573.6	442.1	425.4	213.1	212.3	16.7	575.5	483.3	19.5	463.9	92.1	556.0	383.3
June	53	199	1,556.2	429.4	412.4	216.7	195.7	17.0	576.2	478.8	19.5	459.3	97.4	550.6	378.2
Changes *															
2017	+ 1	- 4	- 216.7	- 52.5	- 49.4	- 7.9	- 41.5	- 3.1	- 10.9	- 10.0	- 1.4	- 8.6	- 0.9	- 74.6	- 60.4
2018	- 3	- 5	- 250.2	- 101.0	- 102.0	- 5.0	- 97.0	+ 1.0	- 24.8	- 27.1	+ 7.0	- 34.1	+ 2.4	- 148.2	- 102.6
2018 Oct.	+ 1	+ 1	- 8.5	- 16.3	- 16.7	+ 20.5	- 37.2	+ 0.4	- 12.1	- 14.1	- 1.6	- 12.5	+ 1.9	+ 9.5	+ 15.0
Nov.	-	-	+ 30.9	+ 14.9	+ 15.4	+ 1.0	+ 14.4	- 0.5	- 14.9	- 13.8	+ 0.5	- 14.3	- 1.1	- 29.1	- 21.8
Dec.	-	- 1	- 54.5	- 49.4	- 49.7	- 14.8	- 34.9	+ 0.3	- 1.2	- 3.9	- 0.7	- 3.3	+ 2.8	- 1.3	- 3.9
2019 Jan.	+ 1	+ 1	+ 50.5	+ 15.5	+ 15.2	- 1.3	+ 16.5	+ 0.3	+ 24.1	+ 25.4	- 0.2	+ 25.6	- 1.3	+ 10.5	+ 0.4
Feb.	-	+ 2	+ 5.8	+ 5.6	+ 4.8	+ 12.8	- 8.0	+ 0.8	+ 18.5	+ 17.0	- 0.7	+ 17.7	+ 1.4	- 21.7	- 20.0
Mar.	+ 3	+ 10	+ 40.4	+ 18.1	+ 18.4	+ 11.0	+ 7.5	- 0.4	+ 5.4	+ 3.7	+ 0.1	+ 3.6	+ 1.6	+ 10.0	+ 13.3
Apr.	-	+ 3	+ 19.3	- 0.8	- 1.0	- 2.3	+ 1.3	+ 0.2	- 2.5	- 2.4	- 0.4	- 2.0	- 0.2	+ 22.7	+ 8.4
May	- 1	- 1	+ 55.6	- 8.0	- 8.7	+ 0.8	- 9.5	+ 0.7	+ 8.9	+ 4.7	+ 0.6	+ 4.2	+ 4.1	+ 53.2	+ 69.2
June	+ 1	+ 1	- 16.0	- 10.1	- 10.5	+ 3.6	- 14.1	+ 0.4	+ 6.7	+ 0.5	+ 0.1	+ 0.4	+ 6.2	- 4.0	- 2.7
Foreign subsidiaries															
End of year or month *															
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	-
2017	20	50	276.6	70.4	63.9	25.0	39.0	6.5	149.5	122.2	22.2	99.9	27.4	56.7	-
2018	17	43	237.2	51.2	45.4	20.1	25.3	5.8	136.4	111.7	13.8	97.8	24.7	49.6	-
2018 Sep.	18	46	244.8	55.2	49.4	19.8	29.6	5.8	138.8	114.5	13.7	100.8	24.4	50.8	-
Oct.	17	45	243.8	52.1	46.2	19.5	26.7	5.9	139.3	114.2	13.5	100.7	25.1	52.4	-
Nov.	17	45	239.8	51.0	45.0	20.4	24.7	6.0	136.8	110.8	13.6	97.2	26.1	52.0	-
Dec.	17	43	237.2	51.2	45.4	20.1	25.3	5.8	136.4	111.7	13.8	97.8	24.7	49.6	-
2019 Jan.	16	42	234.8	49.0	42.8	18.1	24.6	6.2	135.4	109.4	13.9	95.4	26.0	50.5	-
Feb.	16	42	236.0	50.6	44.6	19.0	25.6	5.9	134.3	108.5	13.9	94.6	25.8	51.2	-
Mar.	16	42	246.1	53.9	48.3	19.2	29.1	5.6	141.2	114.2	13.8	100.5	27.0	51.1	-
Apr.	17	43	245.6	53.9	48.5	19.9	28.6	5.4	142.6	116.0	14.0	102.0	26.6	49.1	-
May	17	43	245.4	54.3	48.9	19.1	29.8	5.4	145.4	119.0	14.4	104.7	26.3	45.7	-
June	17	43	249.3	57.4	51.9	19.1	32.7	5.6	146.8	120.5	14.3	106.2	26.3	45.1	-
Changes *															
2017	-	- 3	- 33.3	- 4.9	- 2.4	+ 3.5	- 6.0	- 2.5	- 8.2	- 4.4	- 0.4	- 4.0	- 3.8	- 20.2	-
2018	- 3	- 7	- 42.2	- 20.9	- 19.9	- 4.9	- 15.1	- 1.0	- 14.2	- 11.6	- 8.4	- 3.2	- 2.6	- 7.0	-
2018 Oct.	- 1	- 1	- 2.1	- 3.8	- 3.6	- 0.3	- 3.3	- 0.1	+ 0.0	- 0.7	- 0.2	- 0.6	+ 0.7	+ 1.6	-
Nov.	-	-	- 3.8	- 1.0	- 1.1	+ 0.9	- 2.0	+ 0.1	- 2.4	- 3.4	+ 0.1	- 3.4	+ 1.0	- 0.4	-
Dec.	-	- 2	- 2.2	+ 0.4	+ 0.5	- 0.3	+ 0.8	- 0.1	- 0.3	+ 1.1	+ 0.2	+ 0.8	- 1.3	- 2.4	-
2019 Jan.	- 1	- 1	- 2.2	- 2.1	- 2.5	- 2.0	- 0.5	+ 0.4	- 1.0	- 2.3	+ 0.1	- 2.4	+ 1.3	+ 0.8	-
Feb.	-	-	+ 0.7	+ 1.3	+ 1.7	+ 0.9	+ 0.8	- 0.3	- 1.4	- 1.1	- 0.1	- 1.0	- 0.3	+ 0.7	-
Mar.	-	-	+ 6.0	+ 2.8	+ 3.3	+ 0.2	+ 3.0	- 0.5	+ 6.5	+ 5.3	- 0.1	+ 5.4	+ 1.2	- 3.3	-
Apr.	+ 1	+ 1	- 0.3	+ 0.1	+ 0.3	+ 0.6	- 0.4	- 0.1	+ 1.5	+ 1.9	+ 0.2	+ 1.6	- 0.4	- 2.0	-
May	-	-	+ 0.6	+ 0.2	+ 0.2	- 0.7	+ 1.0	- 0.1	+ 2.6	+ 2.9	+ 0.4	+ 2.5	- 0.3	- 3.4	-
June	-	-	+ 5.0	+ 3.5	+ 3.2	+ 0.0	+ 3.2	+ 0.3	+ 2.0	+ 2.1	- 0.1	+ 2.1	- 0.0	- 0.5	-

* 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	Total			of which: Derivative financial instruments in the trading portfolio			
	Total	German banks	Foreign banks	Total	German non-banks ⁴		Foreign non-banks								
					Total	Short-term	Medium and long-term								
End of year or month *													Foreign branches		
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		
1,000.3	682.5	372.8	309.7	317.8	16.0	14.1	1.9	301.8	97.0	51.9	498.6	399.2	2017		
897.1	607.2	428.8	178.4	290.0	11.4	9.7	1.8	278.5	91.2	54.0	358.9	302.6	2018		
964.0	648.5	417.8	230.7	315.4	10.8	9.3	1.5	304.6	101.5	53.5	375.2	313.0	2018 Sep.		
938.4	608.2	400.9	207.3	330.2	8.8	7.3	1.5	321.4	100.2	53.9	394.7	330.9	Oct.		
931.9	611.9	392.8	219.1	319.9	13.1	11.3	1.8	306.8	101.4	53.8	369.0	307.1	Nov.		
897.1	607.2	428.8	178.4	290.0	11.4	9.7	1.8	278.5	91.2	54.0	358.9	302.6	Dec.		
928.8	622.0	420.2	201.8	306.7	9.5	7.7	1.7	297.3	93.9	54.0	375.0	304.6	2019 Jan.		
952.3	635.2	419.8	215.4	317.1	11.8	9.9	1.8	305.4	97.2	54.2	354.1	287.1	Feb.		
981.9	664.9	448.7	216.2	317.1	11.4	9.7	1.8	305.6	98.2	53.7	364.4	302.3	Mar.		
994.1	675.5	467.6	207.9	318.6	10.8	8.4	2.4	307.9	100.2	54.0	369.3	303.1	Apr.		
989.9	667.6	450.7	216.9	322.2	10.7	8.4	2.2	311.6	103.2	54.3	426.2	380.3	May		
979.6	670.4	468.5	201.8	309.2	12.0	9.4	2.6	297.2	94.4	54.4	427.8	376.0	June		
Changes *															
- 97.3	- 80.7	- 52.1	- 28.6	- 16.7	+ 0.6	+ 2.3	- 1.7	- 17.3	+ 5.2	+ 0.8	- 86.5	- 58.1	2017		
- 113.1	- 84.7	+ 56.0	-140.8	- 28.3	- 4.6	- 4.4	- 0.2	- 23.8	- 9.4	+ 2.0	- 139.7	- 105.7	2018		
- 29.3	- 43.9	- 16.9	- 26.9	+ 14.6	- 2.0	- 2.0	-	+ 16.6	- 2.9	+ 0.4	+ 19.5	+ 15.0	2018 Oct.		
- 5.9	+ 4.3	- 8.0	+ 12.3	- 10.2	+ 4.3	+ 4.0	+ 0.3	- 14.5	+ 1.4	- 0.1	- 25.7	- 23.3	Nov.		
- 33.9	- 4.0	+ 36.0	- 40.0	- 29.9	- 1.7	- 1.6	- 0.1	- 28.2	- 9.8	+ 0.1	- 10.1	- 3.7	Dec.		
+ 31.7	+ 14.9	- 8.6	+ 23.5	+ 16.8	- 2.0	- 1.9	- 0.0	+ 18.7	+ 2.7	- 0.0	+ 16.1	+ 2.0	2019 Jan.		
+ 22.7	+ 12.4	- 0.4	+ 12.8	+ 10.3	+ 2.3	+ 2.2	+ 0.1	+ 8.0	+ 3.0	+ 0.2	- 20.9	- 17.5	Feb.		
+ 27.3	+ 27.4	+ 28.8	- 1.5	- 0.1	- 0.3	- 0.3	- 0.0	+ 0.2	+ 1.0	- 0.5	+ 10.3	+ 15.3	Mar.		
+ 12.2	+ 10.6	+ 18.9	- 8.4	+ 1.6	- 0.7	- 1.3	+ 0.6	+ 2.3	+ 2.0	+ 0.3	+ 4.9	+ 0.8	Apr.		
- 5.1	- 8.6	- 16.9	+ 8.3	+ 3.6	- 0.1	+ 0.1	- 0.1	+ 3.7	+ 2.6	+ 0.3	+ 56.9	+ 77.2	May		
- 7.8	+ 5.1	+ 17.8	- 12.7	- 12.9	+ 1.3	+ 1.0	+ 0.3	- 14.2	- 7.4	+ 0.1	+ 1.6	- 4.3	June		
End of year or month *													Foreign subsidiaries		
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		
207.1	96.3	49.8	46.5	110.8	12.0	6.2	5.8	98.8	13.0	24.2	32.3	-	2017		
171.5	71.6	36.1	35.5	100.0	9.1	6.4	2.7	90.8	14.3	22.4	29.0	-	2018		
178.9	75.0	37.8	37.3	103.9	10.1	6.1	3.9	93.8	13.9	22.8	29.2	-	2018 Sep.		
175.5	73.4	36.5	36.8	102.1	9.6	6.0	3.6	92.6	14.1	22.8	31.3	-	Oct.		
172.2	72.6	35.7	37.0	99.5	9.1	5.5	3.6	90.4	13.7	22.5	31.4	-	Nov.		
171.5	71.6	36.1	35.5	100.0	9.1	6.4	2.7	90.8	14.3	22.4	29.0	-	Dec.		
168.3	70.9	35.5	35.4	97.4	7.0	4.3	2.7	90.4	16.1	21.8	28.7	-	2019 Jan.		
168.3	69.6	35.4	34.2	98.7	7.9	5.2	2.7	90.8	16.1	21.8	29.8	-	Feb.		
174.4	75.1	37.8	37.3	99.3	7.5	4.8	2.7	91.7	16.5	21.8	33.4	-	Mar.		
173.1	75.7	36.4	39.3	97.5	7.6	4.9	2.7	89.9	16.6	22.2	33.6	-	Apr.		
172.7	74.8	36.0	38.8	97.9	7.4	4.6	2.8	90.5	16.5	22.3	33.9	-	May		
177.0	74.7	37.9	36.8	102.4	7.7	4.9	2.8	94.6	16.5	22.4	33.3	-	June		
Changes *															
- 32.8	- 33.7	- 22.0	- 11.8	+ 0.9	- 0.2	- 0.5	+ 0.3	+ 1.1	- 0.6	+ 0.3	- 0.3	-	2017		
- 37.4	- 25.8	- 13.7	- 12.0	- 11.7	- 2.8	+ 0.2	- 3.0	- 8.8	+ 1.3	- 1.8	- 4.3	-	2018		
- 4.3	- 2.1	- 1.2	- 0.9	- 2.1	- 0.5	- 0.2	- 0.3	- 1.6	+ 0.2	+ 0.0	+ 1.9	-	2018 Oct.		
- 3.2	- 0.7	- 0.8	+ 0.2	- 2.5	- 0.4	- 0.4	- 0.0	- 2.1	+ 0.4	- 0.3	+ 0.1	-	Nov.		
- 0.3	- 0.9	+ 0.4	- 1.3	+ 0.6	+ 0.0	+ 0.9	- 0.9	+ 0.6	+ 0.6	- 0.1	- 2.4	-	Dec.		
- 3.2	- 0.6	- 0.6	- 0.0	- 2.5	- 2.1	- 2.1	-	- 0.4	+ 1.8	- 0.6	- 0.3	-	2019 Jan.		
- 0.3	- 1.4	- 0.1	- 1.3	+ 1.1	+ 0.9	+ 0.9	- 0.0	+ 0.2	+ 0.1	- 0.0	+ 1.0	-	Feb.		
+ 5.6	+ 5.3	+ 2.4	+ 2.8	+ 0.3	- 0.4	- 0.3	- 0.0	+ 0.7	+ 0.4	+ 0.0	- 0.0	-	Mar.		
- 1.3	+ 0.5	- 1.5	+ 2.0	- 1.8	+ 0.1	+ 0.1	-	- 1.9	+ 0.1	+ 0.4	+ 0.5	-	Apr.		
- 0.7	- 1.0	- 0.4	- 0.6	+ 0.3	- 0.2	- 0.3	+ 0.1	+ 0.5	- 0.1	+ 0.1	+ 0.0	-	May		
+ 5.2	+ 0.4	+ 1.9	- 1.5	+ 4.8	+ 0.3	+ 0.3	+ 0.0	+ 4.5	+ 0.0	+ 0.1	- 0.3	-	June		

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
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	12,415.8	124.2	123.8	1,275.2	1,151.4	0.0
2018	12,775.2	127.8	127.4	1,332.1	1,204.8	0.0
2019 July ^P	13,243.3	132.4	132.0	...	...	...
Aug.	...	...	...	...	...	...
Sep. ^P	...	...	...	...	...	...

2. Reserve maintenance in Germany

€ million

Maintenance period beginning in ¹	Reserve base ²	German share of euro area reserve base as a percentage	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
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	3,456,192	27.8	34,562	34,404	424,547	390,143	2
2018	3,563,306	27.9	35,633	35,479	453,686	418,206	1
2019 July ^P	3,713,540	28.0	37,135	36,983	...	...	...
Aug.	...	...	...	...	...	...	...
Sep. ^P	3,703,927	...	37,039	36,889	...	...	...

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
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	6,366	5,678	3,110	11,163	6,256	132	1,699
2018	7,384	4,910	3,094	11,715	6,624	95	1,658
2019 July	7,722	5,427	2,955	12,035	6,856	100	1,888
Aug.	7,764	5,405	3,031	11,903	6,859	104	1,932
Sep.	7,674	5,386	2,854	12,068	6,916	101	1,890

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
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	2,338,161	628	415,084	581,416	120,894
2018	2,458,423	1,162	414,463	576,627	112,621
2019 July	2,577,215	1,050	434,473	582,830	117,972
Aug.	2,583,771	1,192	430,423	583,066	116,534
Sep.	2,583,838	1,051	419,906	582,270	116,860

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 has 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			Applicable from	Deposit facility	Main refinancing operations		
		Fixed rate	Minimum bid rate	Marginal lending facility			Fixed rate	Minimum bid rate	Marginal lending facility
2005 Dec. 6	1.25	–	2.25	3.25	2011 Apr. 13	0.50	1.25	–	2.00
					July 13	0.75	1.50	–	2.25
2006 Mar. 8	1.50	–	2.50	3.50	Nov. 9	0.50	1.25	–	2.00
June 15	1.75	–	2.75	3.75	Dec. 14	0.25	1.00	–	1.75
Aug. 9	2.00	–	3.00	4.00					
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					
Oct. 9	3.25	3.75	–	4.25	2015 Dec. 9	–0.30	0.05	–	0.30
Nov. 12	2.75	3.25	–	3.75					
Dec. 10	2.00	2.50	–	3.00	2016 Mar. 16	–0.40	0.00	–	0.25
2009 Jan. 21	1.00	2.00	–	3.00	2019 Aug. 18	–0.50	0.00	–	0.25
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		
July 1	1.13	2013 Jan. 1	–0.13
		July 1	–0.38
2005 Jan. 1	1.21		
July 1	1.17	2014 Jan. 1	–0.63
		July 1	–0.73
2006 Jan. 1	1.37		
July 1	1.95	2015 Jan. 1	–0.83
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	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								
2019 Aug. 14	2,990	2,990	0.00	–	–	–	7	
Aug. 21	2,973	2,973	0.00	–	–	–	7	
Aug. 28	3,348	3,348	0.00	–	–	–	7	
Sep. 4	2,347	2,347	0.00	–	–	–	7	
Sep. 18	2,021	2,021	0.00	–	–	–	7	
Long-term refinancing operations								
2019 May 30	1,399	1,399	2 0.00	–	–	–	91	
June 27	966	966	2 ...	–	–	–	91	
Aug. 1	790	790	2 ...	–	–	–	91	
Aug. 29	1,138	1,138	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	Twelve-month funds
2019 Feb.	–0.37	–0.37	–0.37	–0.31	–0.23	–0.11
Mar.	–0.37	–0.38	–0.37	–0.31	–0.23	–0.11
Apr.	–0.37	–0.38	–0.37	–0.31	–0.23	–0.11
May	–0.37	–0.38	–0.37	–0.31	–0.24	–0.13
June	–0.36	–0.40	–0.38	–0.33	–0.28	–0.19
July	–0.37	–0.40	–0.40	–0.36	–0.35	–0.28
Aug.	–0.36	–0.41	–0.41	–0.41	–0.40	–0.36

* Averages are Bundesbank calculations. Neither the Deutsche Bundesbank nor anyone else can be held liable for any irregularity or inaccuracy of the EONIA or the EURIBOR. 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 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2018 July	0.26	64,623	1.26	215,907	0.03	67,013	0.93	26,859
Aug.	0.25	64,215	1.25	216,126	0.03	67,659	0.92	27,206
Sep.	0.24	63,849	1.25	216,273	0.03	66,871	0.90	27,188
Oct.	0.24	63,652	1.24	215,766	0.04	66,681	0.89	27,535
Nov.	0.24	62,369	1.23	215,502	0.03	68,118	0.88	28,176
Dec.	0.23	63,057	1.23	217,570	0.01	68,323	0.87	28,597
2019 Jan.	0.23	62,837	1.21	217,168	0.01	68,701	0.86	28,839
Feb.	0.23	62,576	1.20	217,250	0.01	69,389	0.85	28,815
Mar.	0.23	62,652	1.20	217,159	0.02	67,395	0.85	29,229
Apr.	0.22	62,253	1.19	216,952	0.02	67,114	0.84	28,899
May	0.21	60,966	1.18	217,558	0.03	66,325	0.83	28,799
June	0.22	60,652	1.17	217,383	0.03	63,711	0.83	28,547
July	0.22	60,382	1.16	217,260	0.03	63,826	0.85	27,957

End of month	Housing loans to households 3						Loans to households for consumption and other purposes 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 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2018 July	2.27	4,217	1.90	25,586	2.54	1,174,210	7.00	48,360	3.75	85,994	3.86	312,593
Aug.	2.28	4,215	1.89	25,643	2.52	1,180,809	7.00	48,053	3.75	86,634	3.85	313,801
Sep.	2.27	4,306	1.89	26,196	2.50	1,186,420	7.00	49,160	3.74	86,205	3.85	313,297
Oct.	2.25	4,311	1.87	26,171	2.48	1,191,048	7.17	50,033	3.54	85,254	3.83	313,604
Nov.	2.25	4,299	1.87	26,265	2.46	1,196,579	7.01	49,658	3.53	85,715	3.83	314,344
Dec.	2.27	4,242	1.86	26,203	2.44	1,199,525	7.10	51,196	3.53	85,387	3.81	312,896
2019 Jan.	2.27	4,379	1.85	25,867	2.42	1,200,982	7.19	49,709	3.52	85,499	3.79	314,143
Feb.	2.28	4,300	1.85	25,861	2.41	1,204,756	7.17	49,608	3.51	85,678	3.78	314,960
Mar.	2.27	4,424	1.85	25,905	2.39	1,210,350	7.16	49,935	3.50	86,453	3.78	314,929
Apr.	2.26	4,418	1.79	25,875	2.37	1,218,785	7.04	50,058	3.49	86,872	3.77	313,007
May	2.26	4,534	1.79	26,212	2.35	1,224,628	7.13	49,275	3.49	87,410	3.76	314,341
June	2.23	4,575	1.78	26,445	2.33	1,230,368	7.11	51,281	3.49	87,504	3.76	314,057
July	2.22	4,643	1.77	26,544	2.31	1,236,461	7.06	50,115	3.47	86,724	3.74	315,493

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 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2018 July	2.20	148,897	1.74	142,697	2.12	684,893
Aug.	2.22	148,026	1.74	144,021	2.11	688,709
Sep.	2.22	150,891	1.74	144,942	2.10	691,969
Oct.	2.21	147,714	1.73	147,743	2.08	696,222
Nov.	2.20	148,399	1.72	151,603	2.07	702,286
Dec.	2.24	146,721	1.72	150,727	2.06	703,722
2019 Jan.	2.22	151,176	1.70	152,824	2.04	707,410
Feb.	2.22	154,912	1.70	154,061	2.03	712,194
Mar.	2.21	159,432	1.69	155,413	2.02	713,389
Apr.	2.20	157,460	1.66	159,372	2.00	716,684
May	2.14	159,767	1.67	162,699	1.99	722,437
June	2.14	167,044	1.66	164,225	1.98	722,521
July	2.13	163,263	1.64	165,839	1.96	724,902

* 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 non-financial corporations domiciled in the euro area. The household sector comprises individuals (including sole proprietors) and non-profit institutions serving households. Non-financial corporations include all enterprises other than insurance corporations, 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 on 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 ⁸ of				
		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 % p.a.	Volume ² € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ² € million	Effective interest rate ¹ % p.a.	Volume ² € million
2018 July	0.02	1,375,299	0.27	5,005	0.40	626	0.63	693	0.16	537,703	0.26	39,331
Aug.	0.01	1,383,683	0.30	5,135	0.43	516	0.67	677	0.15	537,459	0.26	38,903
Sep.	0.01	1,391,356	0.31	4,831	0.40	476	0.64	645	0.15	537,477	0.25	38,579
Oct.	0.01	1,399,998	0.28	4,853	0.38	772	0.70	803	0.15	537,728	0.25	38,051
Nov.	0.02	1,425,632	0.30	4,599	0.39	752	0.65	752	0.15	538,222	0.25	37,420
Dec.	0.02	1,432,861	0.28	5,439	0.26	642	0.65	702	0.14	540,271	0.25	37,155
2019 Jan.	0.02	1,432,335	0.28	6,375	0.44	603	0.69	1,074	0.14	540,608	0.24	36,693
Feb.	0.02	1,446,689	0.29	5,693	0.45	619	0.68	1,032	0.13	541,529	0.24	36,726
Mar.	0.01	1,451,707	0.29	5,595	0.34	837	0.73	978	0.13	543,711	0.25	37,036
Apr.	0.01	1,464,110	0.29	5,357	0.33	485	0.72	868	0.14	543,806	0.25	37,197
May	0.01	1,477,188	0.13	4,250	0.52	665	0.67	737	0.13	543,432	0.26	37,857
June	0.01	1,487,229	0.10	3,429	0.44	330	0.68	713	0.13	543,047	0.27	38,409
July	0.01	1,496,424	0.12	3,834	0.49	378	0.79	965	0.13	542,420	0.27	38,137

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 % p.a.	Volume ² € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million
2018 July	- 0.02	429,934	- 0.13	11,466	0.08	354	0.29	754
Aug.	- 0.02	436,893	- 0.06	10,147	0.07	303	0.46	723
Sep.	- 0.02	433,078	- 0.10	9,835	0.07	347	0.23	375
Oct.	- 0.03	445,427	- 0.07	12,291	0.17	518	0.66	891
Nov.	- 0.03	448,301	- 0.08	12,192	0.13	376	0.78	1,035
Dec.	- 0.03	445,954	- 0.07	15,012	0.14	308	0.55	1,109
2019 Jan.	- 0.03	443,971	0.01	16,527	0.08	549	0.40	545
Feb.	- 0.03	439,934	0.02	15,774	0.11	277	0.31	238
Mar.	- 0.03	443,524	0.01	15,807	0.07	389	0.65	299
Apr.	- 0.03	451,668	0.01	14,136	0.09	374	0.34	278
May	- 0.03	460,120	- 0.03	12,080	0.23	641	0.40	311
June	- 0.03	448,314	- 0.09	10,189	0.19	421	0.25	190
July	- 0.03	462,129	- 0.08	11,503	0.00	86	0.66	442

Loans to households												
Loans for consumption ⁴ with an initial rate fixation of												
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	
		Annual percentage rate of charge ¹⁰ % p.a.	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million
2018 July	6.02	6.00	9,543	7.42	2,140	6.64	312	4.57	3,715	6.93	5,516	
Aug.	6.08	6.02	9,242	7.44	1,938	7.95	395	4.59	3,702	6.91	5,145	
Sep.	5.96	5.91	8,166	7.33	1,629	8.14	372	4.41	3,239	6.79	4,555	
Oct.	6.06	5.99	8,915	7.34	1,797	7.68	421	4.60	3,527	6.83	4,967	
Nov.	5.84	5.83	8,668	7.19	1,694	7.21	489	4.40	3,599	6.80	4,580	
Dec.	5.80	5.81	6,514	7.04	1,133	7.58	518	4.45	2,820	6.72	3,176	
2019 Jan.	5.98	5.98	9,985	7.13	2,196	8.08	544	4.53	3,696	6.72	5,745	
Feb.	5.80	5.83	9,354	6.98	1,934	7.98	486	4.44	3,556	6.55	5,312	
Mar.	5.73	5.72	9,868	6.88	1,765	8.48	528	4.25	3,929	6.52	5,411	
Apr.	5.83	5.76	9,830	6.86	1,767	8.44	504	4.36	3,762	6.47	5,564	
May	5.86	5.80	9,893	6.79	1,839	8.80	428	4.46	3,770	6.45	5,695	
June	6.06	5.98	8,345	7.01	1,554	9.23	425	4.52	3,222	6.68	4,698	
July	6.17	6.11	10,573	7.13	2,175	9.16	496	4.63	3,859	6.79	6,219	

For footnotes * and 1 to 6, see p. 44*. + For 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. For 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 premiums. 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 to households for other purposes ⁵ with an initial rate fixation of										
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 % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million
Loans to households										
2018 July	2.06	6,380	1.88	2,123	1.94	2,532	2.35	910	2.08	2,938
Aug.	2.07	5,365	1.83	1,452	1.99	2,124	2.51	756	2.00	2,485
Sep.	2.08	4,952	1.76	1,425	1.98	2,265	2.51	634	2.05	2,053
Oct.	2.11	5,549	1.84	1,952	2.01	2,413	2.48	810	2.08	2,326
Nov.	1.96	5,394	1.75	1,743	1.76	2,263	2.51	720	1.98	2,411
Dec.	1.89	5,777	1.79	1,716	1.76	2,554	2.42	717	1.87	2,506
2019 Jan.	1.96	5,889	1.84	2,160	1.81	2,541	2.39	860	1.96	2,488
Feb.	1.99	4,707	1.78	1,409	1.82	2,095	2.59	661	1.96	1,951
Mar.	1.90	5,598	1.77	1,515	1.68	2,497	2.51	772	1.92	2,329
Apr.	2.01	5,684	1.88	1,734	2.01	2,214	2.46	815	1.86	2,655
May	1.90	5,259	1.75	1,397	1.79	2,312	2.44	813	1.82	2,134
June	1.80	5,098	1.80	1,128	1.69	2,120	2.32	731	1.73	2,247
July	1.84	5,914	1.78	1,869	1.80	2,428	2.43	876	1.69	2,610
of which: Loans to sole proprietors										
2018 July	2.13	4,266	-	-	2.09	1,755	2.46	647	2.05	1,864
Aug.	2.13	3,553	-	-	2.12	1,431	2.56	563	1.98	1,559
Sep.	2.04	3,403	-	-	1.91	1,586	2.52	491	2.02	1,326
Oct.	2.11	3,858	-	-	2.04	1,691	2.49	597	2.04	1,570
Nov.	1.96	3,869	-	-	1.81	1,526	2.50	561	1.93	1,782
Dec.	1.96	4,139	-	-	1.94	1,777	2.42	546	1.83	1,816
2019 Jan.	2.00	4,236	-	-	1.94	1,774	2.46	640	1.89	1,822
Feb.	2.02	3,331	-	-	1.94	1,502	2.61	504	1.89	1,325
Mar.	1.99	3,895	-	-	1.95	1,539	2.53	580	1.86	1,776
Apr.	2.04	3,962	-	-	2.09	1,654	2.46	619	1.83	1,689
May	1.95	3,864	-	-	1.91	1,705	2.54	593	1.76	1,566
June	1.90	3,540	-	-	1.94	1,397	2.43	515	1.70	1,628
July	1.92	4,264	-	-	1.99	1,719	2.43	676	1.68	1,869

Loans to households (cont'd)													
Housing loans ³ with an initial rate fixation of													
Reporting period	Total (including charges)		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 % p.a.	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million
Total loans													
2018 July	1.94	1.88	22,177	1.94	4,907	2.16	2,675	1.74	1,994	1.73	7,666	1.95	9,842
Aug.	1.93	1.87	20,493	1.96	3,401	2.13	2,337	1.70	1,753	1.71	6,974	1.97	9,429
Sep.	1.92	1.86	17,864	1.96	3,046	2.11	1,973	1.71	1,544	1.69	5,923	1.94	8,424
Oct.	1.91	1.86	21,275	1.94	4,124	2.08	2,443	1.68	1,884	1.71	7,669	1.97	9,279
Nov.	1.94	1.88	20,357	1.94	3,423	2.02	2,313	1.74	1,779	1.72	6,738	1.98	9,527
Dec.	1.90	1.85	17,630	1.89	3,168	2.02	2,113	1.71	1,519	1.70	6,088	1.94	7,910
2019 Jan.	1.92	1.86	20,907	1.93	4,619	2.09	2,475	1.69	1,962	1.70	7,080	1.95	9,390
Feb.	1.84	1.78	19,352	1.84	3,469	2.04	2,163	1.65	1,749	1.63	6,344	1.85	9,095
Mar.	1.80	1.74	21,335	1.83	3,606	2.04	2,413	1.64	1,755	1.59	6,884	1.79	10,283
Apr.	1.72	1.67	23,105	1.76	4,326	2.04	2,570	1.48	2,074	1.53	7,760	1.72	10,701
May	1.68	1.63	22,629	1.74	3,609	2.00	2,560	1.50	2,030	1.46	7,324	1.67	10,715
June	1.63	1.57	20,164	1.65	3,245	1.98	2,280	1.44	1,695	1.41	6,429	1.61	9,760
July	1.54	1.49	25,671	1.64	4,570	1.98	2,742	1.43	2,107	1.34	8,473	1.49	12,348
of which: Collateralised loans ¹¹													
2018 July	-	1.83	9,622	-	-	2.06	914	1.60	960	1.69	3,575	1.94	4,173
Aug.	-	1.82	8,424	-	-	2.02	807	1.54	792	1.65	2,911	1.96	3,914
Sep.	-	1.82	7,495	-	-	2.13	664	1.51	715	1.65	2,604	1.95	3,512
Oct.	-	1.81	9,201	-	-	1.98	880	1.51	846	1.67	3,351	1.96	4,124
Nov.	-	1.83	8,504	-	-	1.95	750	1.53	771	1.67	2,910	1.98	4,073
Dec.	-	1.79	7,242	-	-	2.02	694	1.49	670	1.64	2,592	1.93	3,286
2019 Jan.	-	1.81	9,238	-	-	2.04	922	1.50	948	1.65	3,196	1.96	4,172
Feb.	-	1.72	8,040	-	-	2.07	682	1.45	859	1.56	2,709	1.84	3,790
Mar.	-	1.68	8,615	-	-	2.06	732	1.43	768	1.51	2,924	1.77	4,191
Apr.	-	1.63	9,886	-	-	2.02	933	1.40	986	1.47	3,469	1.71	4,498
May	-	1.56	9,434	-	-	1.90	945	1.30	879	1.39	3,118	1.65	4,492
June	-	1.52	8,277	-	-	1.98	820	1.28	744	1.35	2,732	1.59	3,981
July	-	1.44	10,437	-	-	1.95	943	1.24	936	1.31	3,504	1.48	5,054

For footnotes * and 1 to 6, see p. 44*. For footnotes + and 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 % p.a.	Volume ² € million	Effective interest rate ¹ % p.a.	Volume ² € million	Effective interest rate ¹ % p.a.	Volume ² € million	Effective interest rate ¹ % p.a.	Volume ² € million	Effective interest rate ¹ % p.a.	Volume ² € million	Effective interest rate ¹ % p.a.	Volume ² € million	
2018 July	8.19	39,373	8.29	31,035	14.74	4,430	3.25	73,268	3.26	72,921		
Aug.	8.20	39,040	8.27	30,862	14.73	4,390	3.21	72,775	3.23	72,415		
Sep.	8.18	40,096	8.27	31,781	14.79	4,421	3.18	76,148	3.19	75,723		
Oct.	8.16	39,591	8.24	31,353	14.79	4,366	3.13	74,312	3.15	73,892		
Nov.	7.88	40,395	7.93	31,901	14.77	4,429	3.11	74,306	3.13	73,881		
Dec.	7.86	41,799	7.96	32,782	14.75	4,585	3.14	73,787	3.16	73,380		
2019 Jan.	8.01	40,499	7.96	32,586	14.78	4,389	3.09	76,006	3.10	75,622		
Feb.	7.99	40,394	7.99	32,324	14.76	4,384	3.09	78,104	3.10	77,717		
Mar.	7.98	40,531	7.97	32,533	14.75	4,355	3.06	80,843	3.07	80,447		
Apr.	7.78	40,783	7.93	31,833	14.75	4,416	3.04	78,782	3.06	78,390		
May	7.90	39,977	7.92	31,720	14.76	4,369	2.98	78,903	2.99	78,496		
June	7.86	41,429	7.92	32,848	14.77	4,421	2.92	84,632	2.94	84,230		
July	7.72	40,774	7.81	32,054	14.77	4,372	2.92	80,865	2.94	80,466		

Reporting period	Loans to non-financial corporations (cont'd)															
	Total		of which:				Loans up to €1 million ¹⁵ with an initial rate fixation of				Loans over €1 million ¹⁵ with an initial rate fixation of					
			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 % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	
Total loans																
2018 July	1.19	81,709	1.41	22,096	2.09	10,235	2.41	1,466	1.93	1,578	0.85	55,149	1.53	3,956	1.74	9,325
Aug.	1.18	66,072	1.41	16,124	2.05	9,274	2.44	1,316	1.86	1,311	0.85	44,950	1.73	2,130	1.64	7,091
Sep.	1.26	76,448	1.40	22,010	2.04	9,668	2.49	1,315	1.94	1,180	0.98	53,010	1.78	3,023	1.66	8,252
Oct.	1.28	78,085	1.39	21,850	2.04	10,699	2.50	1,580	1.92	1,403	0.98	52,918	1.64	3,158	1.72	8,327
Nov.	1.27	74,844	1.47	18,178	2.05	9,884	2.46	1,578	1.91	1,400	0.96	50,045	1.80	3,422	1.63	8,515
Dec.	1.29	96,525	1.46	25,307	2.06	10,205	2.40	1,480	1.85	1,434	1.02	62,907	1.72	5,156	1.60	15,343
2019 Jan.	1.24	74,566	1.42	20,900	2.01	10,992	2.43	1,491	1.94	1,376	0.96	50,703	1.46	2,676	1.58	7,328
Feb.	1.25	65,642	1.46	16,418	2.04	9,918	2.51	1,338	1.86	1,136	0.97	43,885	1.37	3,016	1.56	6,349
Mar.	1.29	77,548	1.41	22,154	2.05	11,060	2.56	1,534	1.85	1,391	1.05	52,989	1.49	2,834	1.43	7,740
Apr.	1.21	81,708	1.38	21,675	2.10	10,283	2.46	1,606	1.76	1,464	0.95	55,315	1.26	3,354	1.44	9,686
May	1.19	75,507	1.38	19,256	2.12	9,981	2.52	1,587	1.76	1,374	0.91	51,534	1.45	3,207	1.40	7,824
June	1.18	84,377	1.28	25,393	2.08	10,633	2.51	1,407	1.65	1,312	0.94	58,540	1.21	3,408	1.40	9,077
July	1.18	86,025	1.32	22,605	2.02	11,039	2.52	1,630	1.59	1,640	0.91	56,722	1.69	4,920	1.24	10,074
of which: Collateralised loans ¹¹																
2018 July	1.55	9,982	.	.	1.95	707	2.74	155	1.81	468	1.25	5,263	1.81	1,205	1.85	2,184
Aug.	1.56	7,174	.	.	2.10	507	2.74	151	1.76	302	1.32	4,296	2.50	348	1.68	1,570
Sep.	1.56	10,319	.	.	1.89	576	2.57	124	1.83	309	1.33	6,391	2.52	646	1.79	2,273
Oct.	1.55	9,237	.	.	1.96	640	2.64	138	1.84	376	1.32	5,296	1.77	627	1.80	2,160
Nov.	1.61	9,181	.	.	1.96	528	2.64	140	1.79	379	1.41	5,283	2.15	824	1.72	2,027
Dec.	1.50	16,695	.	.	1.90	607	2.55	122	1.68	411	1.37	8,845	2.04	1,266	1.51	5,444
2019 Jan.	1.42	9,732	.	.	1.83	630	2.46	149	1.84	429	1.20	5,503	1.90	464	1.57	2,557
Feb.	1.42	7,982	.	.	1.90	485	2.59	151	1.70	323	1.23	4,383	1.46	648	1.56	1,992
Mar.	1.49	11,158	.	.	1.87	508	2.65	144	1.78	388	1.40	7,357	1.71	520	1.53	2,241
Apr.	1.39	10,596	.	.	1.81	620	2.43	162	1.60	417	1.25	5,977	1.95	533	1.41	2,887
May	x	x	.	.	1.94	565	x	x	1.58	381	1.50	6,363	2.17	355	1.49	2,156
June	1.47	10,380	.	.	1.80	493	2.86	126	1.55	326	1.41	6,221	1.31	448	1.51	2,766
July	1.34	11,662	.	.	1.80	595	2.81	152	1.46	466	1.22	6,100	1.63	1,548	1.26	2,801

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 (amongst 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 debit balances from this specific billing cycle become due. **15** The amount category refers to the single loan transaction considered as new business. **x** Dominated by the business of one or two banks. Therefore, the value cannot be published because of confidentiality.

VII. Insurance corporations and pension funds

1. Assets *

€ billion

End of year/quarter	Total	Currency and deposits ¹	Debt securities	Loans ²	Shares and other equity	Investment fund shares/units	Financial derivatives	Insurance technical reserves	Non-financial assets	Remaining assets
Insurance corporations										
2016 Q3	2,219.9	378.7	397.3	387.3	280.2	613.9	5.3	46.1	31.4	79.9
Q4	2,189.4	361.5	371.0	374.6	308.6	623.2	3.3	44.1	32.4	70.6
2017 Q1	2,189.7	355.4	377.5	367.7	297.7	635.8	2.8	50.4	32.5	69.7
Q2	2,178.4	344.0	378.9	365.2	302.0	643.8	3.1	49.1	32.6	59.6
Q3	2,188.1	331.2	386.1	371.0	305.6	650.5	3.1	49.5	32.7	58.4
Q4	2,212.2	320.9	387.0	354.3	336.1	671.3	2.9	48.2	34.3	57.3
2018 Q1	2,217.9	344.3	394.6	327.1	343.3	663.1	2.3	50.7	33.9	58.5
Q2	2,226.3	347.5	400.2	320.1	347.1	668.0	2.2	53.6	34.1	53.6
Q3	2,224.8	327.3	401.2	328.7	350.5	675.0	2.0	52.9	35.7	51.6
Q4	2,213.2	318.2	400.4	330.4	349.8	665.7	2.0	55.4	36.8	54.6
2019 Q1	2,343.8	332.2	431.9	329.6	381.6	707.7	2.6	59.5	37.1	61.6
Life insurance										
2016 Q3	1,247.0	242.9	203.0	241.2	47.0	445.8	4.0	10.2	18.7	34.0
Q4	1,197.3	231.3	182.7	223.0	50.7	456.9	2.1	9.6	19.1	21.9
2017 Q1	1,170.5	223.8	185.3	217.2	37.2	462.6	1.8	8.2	19.1	15.3
Q2	1,172.8	215.7	189.5	217.6	38.6	467.1	2.0	8.0	19.1	15.3
Q3	1,177.5	207.6	193.6	220.6	38.4	472.5	1.9	7.9	19.1	16.0
Q4	1,193.2	199.2	192.4	226.1	41.4	487.8	1.8	8.6	20.0	16.0
2018 Q1	1,187.6	213.0	199.0	207.0	43.1	480.9	1.2	8.5	19.4	15.5
Q2	1,195.2	216.2	202.0	201.1	46.3	486.1	1.1	8.8	19.5	14.2
Q3	1,194.1	201.0	202.2	209.8	47.4	491.2	1.0	8.8	19.3	13.4
Q4	1,185.2	194.5	200.1	208.4	50.4	484.6	1.0	11.6	20.3	14.3
2019 Q1	1,237.8	202.8	213.4	205.9	52.7	516.7	1.6	10.4	20.2	14.1
Non-life insurance										
2016 Q3	592.3	123.8	103.2	93.6	50.8	154.4	0.5	28.5	8.6	28.8
Q4	583.5	118.9	98.6	91.8	56.8	152.0	0.5	26.8	9.0	29.0
2017 Q1	606.7	120.3	102.5	92.1	56.9	157.3	0.3	34.1	9.1	34.2
Q2	603.7	116.8	103.9	91.2	58.5	160.4	0.4	33.3	9.1	30.1
Q3	603.1	111.9	106.2	92.9	58.6	162.9	0.4	32.5	9.2	28.4
Q4	606.7	111.6	108.1	82.2	70.8	165.9	0.4	31.4	9.7	26.5
2018 Q1	623.1	120.1	112.5	75.1	72.3	166.9	0.3	34.6	9.8	31.4
Q2	621.6	120.0	115.3	72.9	73.4	167.4	0.3	35.6	9.8	27.0
Q3	618.0	116.2	115.6	72.9	74.4	168.8	0.2	34.9	9.8	25.1
Q4	616.1	113.7	117.4	73.7	73.8	167.4	0.2	33.4	10.8	25.5
2019 Q1	655.5	119.2	128.0	74.2	75.7	177.0	0.3	38.3	11.1	31.6
Reinsurance ³										
2016 Q3	380.7	12.0	91.0	52.5	182.3	13.8	0.8	7.3	4.0	17.0
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	11.4	89.8	58.4	203.6	15.9	0.8	8.1	4.3	20.2
Q2	401.9	11.6	85.5	56.5	204.8	16.3	0.8	7.9	4.4	14.2
Q3	407.5	11.7	86.3	57.5	208.6	15.1	0.9	9.2	4.4	13.9
Q4	412.3	10.2	86.5	45.9	223.9	17.6	0.7	8.2	4.7	14.7
2018 Q1	407.2	11.2	83.1	45.0	227.8	15.3	0.8	7.6	4.8	11.6
Q2	409.5	11.3	82.9	46.1	227.4	14.6	0.8	9.1	4.8	12.4
Q3	412.7	10.0	83.4	46.0	228.7	14.9	0.8	9.3	6.6	13.1
Q4	412.0	10.1	82.9	48.2	225.5	13.7	0.7	10.3	5.7	14.8
2019 Q1	450.5	10.2	90.5	49.5	253.1	14.0	0.7	10.8	5.8	15.9
Pension funds ⁴										
2016 Q3	608.0	107.7	63.5	29.3	19.1	326.2	–	6.3	35.4	20.5
Q4	609.6	106.4	61.1	29.7	19.9	328.1	–	6.7	37.0	20.8
2017 Q1	617.0	103.4	60.3	30.1	20.3	337.7	–	6.7	37.5	20.9
Q2	624.5	102.7	60.6	30.3	20.7	344.3	–	6.8	38.1	21.1
Q3	633.7	100.6	61.7	30.3	21.2	353.1	–	7.0	38.6	21.3
Q4	645.5	96.0	63.5	30.6	21.6	364.5	–	7.1	40.3	21.8
2018 Q1	646.8	94.8	63.1	31.0	22.0	366.1	–	7.2	40.6	21.9
Q2	652.7	95.2	62.8	31.5	22.9	369.9	–	7.3	41.1	22.1
Q3	656.4	92.0	62.6	31.6	23.3	376.3	–	7.3	41.5	21.9
Q4	663.0	91.4	63.4	32.0	23.5	380.3	–	7.4	42.6	22.3
2019 Q1	680.4	89.4	67.6	32.1	24.2	393.2	–	7.5	43.6	22.8

Sources: The calculations for the insurance sectors are based on supervisory data according to Solvency I and II. Pension funds data are compiled using Solvency I supervisory data, supplemented by voluntary reports and own calculations. * Valuation of listed securities at the corresponding consistent price from the ESCB's securities database. ¹ Accounts receivable to monetary financial institutions, including registered bonds, borrowers' note loans and registered Pfandbriefe. ² Including deposits retain-

ed on assumed reinsurance as well as registered bonds, borrowers' note loans and registered Pfandbriefe. ³ Not including the reinsurance business conducted by primary insurers, which is included there. ⁴ 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

End of year/quarter	€ billion									
	Total	Debt securities issued	Loans ¹	Shares and other equity	Insurance technical reserves			Financial derivatives	Remaining liabilities	Net worth ⁵
					Total	Life/ claims on pension fund reserves ²	Non-life			
Insurance corporations										
2016 Q3	2,219.9	30.7	73.7	383.0	1,579.4	1,396.9	182.5	1.5	151.5	–
Q4	2,189.4	30.7	70.3	441.0	1,494.4	1,313.3	181.1	2.3	150.7	–
2017 Q1	2,189.7	30.5	57.2	448.6	1,511.9	1,309.6	202.3	1.8	139.6	–
Q2	2,178.4	28.6	57.0	450.8	1,505.5	1,308.5	197.0	2.1	134.3	–
Q3	2,188.1	28.5	58.4	455.6	1,513.1	1,317.2	195.9	2.3	130.2	–
Q4	2,212.2	28.3	62.6	466.0	1,521.6	1,334.2	187.4	2.2	131.6	–
2018 Q1	2,217.9	28.0	61.9	460.5	1,538.9	1,333.5	205.4	1.5	127.1	–
Q2	2,226.3	27.7	64.0	457.1	1,553.3	1,347.6	205.7	1.9	122.3	–
Q3	2,224.8	27.5	65.1	462.6	1,545.0	1,343.7	201.4	2.0	122.5	–
Q4	2,213.2	29.3	64.6	463.1	1,530.1	1,332.3	197.8	1.6	124.6	–
2019 Q1	2,343.8	31.6	68.3	489.1	1,624.9	1,402.6	222.3	1.5	128.4	–
Life insurance										
2016 Q3	1,247.0	3.8	25.9	96.0	1,066.2	1,066.2	–	0.7	54.4	–
Q4	1,197.3	4.1	25.0	116.3	993.7	993.7	–	1.2	56.9	–
2017 Q1	1,170.5	4.1	12.5	116.3	991.8	991.8	–	0.9	44.8	–
Q2	1,172.8	4.0	12.1	119.8	989.6	989.6	–	1.0	46.2	–
Q3	1,177.5	4.1	12.3	121.5	994.0	994.0	–	1.1	44.5	–
Q4	1,193.2	4.1	12.8	122.2	1,007.1	1,007.1	–	1.1	45.9	–
2018 Q1	1,187.6	4.0	13.3	119.8	1,007.0	1,007.0	–	0.7	42.7	–
Q2	1,195.2	4.1	13.0	119.6	1,017.0	1,017.0	–	0.8	40.8	–
Q3	1,194.1	4.1	12.6	121.2	1,013.3	1,013.3	–	0.9	42.0	–
Q4	1,185.2	4.1	15.2	122.7	1,000.6	1,000.6	–	0.5	42.2	–
2019 Q1	1,237.8	4.1	14.3	120.8	1,057.4	1,057.4	–	0.4	40.8	–
Non-life insurance										
2016 Q3	592.3	0.9	6.6	120.0	407.4	310.1	97.3	0.0	57.3	–
Q4	583.5	1.1	6.3	130.4	390.1	300.5	89.7	0.2	55.4	–
2017 Q1	606.7	1.1	7.3	134.1	409.0	300.8	108.2	0.1	55.1	–
Q2	603.7	1.1	6.8	135.7	406.8	302.5	104.3	0.1	53.1	–
Q3	603.1	1.1	6.9	137.5	406.8	305.8	101.1	0.1	50.7	–
Q4	606.7	1.1	6.7	141.2	405.7	309.7	96.0	0.1	51.9	–
2018 Q1	623.1	1.1	7.7	141.4	422.8	311.1	111.7	0.0	50.0	–
Q2	621.6	1.1	8.1	140.6	424.5	314.3	110.2	0.1	47.2	–
Q3	618.0	1.1	8.0	141.7	420.7	314.0	106.7	0.0	46.4	–
Q4	616.1	1.0	8.3	140.3	416.5	315.5	101.0	0.0	49.9	–
2019 Q1	655.5	1.1	9.3	144.5	449.6	329.5	120.1	0.0	50.9	–
Reinsurance ³										
2016 Q3	380.7	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	–
Q3	407.5	23.3	39.3	196.6	112.3	17.5	94.9	1.1	35.0	–
Q4	412.3	23.1	43.1	202.6	108.8	17.4	91.4	1.0	33.8	–
2018 Q1	407.2	22.9	40.8	199.3	109.0	15.4	93.7	0.8	34.4	–
Q2	409.5	22.5	43.0	196.9	111.7	16.2	95.5	1.1	34.3	–
Q3	412.7	22.4	44.4	199.7	111.0	16.4	94.7	1.1	34.1	–
Q4	412.0	24.1	41.2	200.1	113.0	16.2	96.8	1.1	32.5	–
2019 Q1	450.5	26.5	44.6	223.8	117.9	15.7	102.2	1.1	36.7	–
Pension funds ⁴										
2016 Q3	608.0	–	6.4	6.7	536.0	536.0	–	–	3.3	55.6
Q4	609.6	–	6.8	6.9	546.0	546.0	–	–	2.4	47.5
2017 Q1	617.0	–	6.9	7.0	552.9	552.9	–	–	2.5	47.8
Q2	624.5	–	6.9	7.1	558.7	558.7	–	–	2.5	49.4
Q3	633.7	–	6.9	7.2	565.2	565.2	–	–	2.5	51.9
Q4	645.5	–	7.1	7.4	576.1	576.1	–	–	2.5	52.4
2018 Q1	646.8	–	7.2	7.4	579.5	579.5	–	–	2.6	50.0
Q2	652.7	–	7.3	7.5	585.7	585.7	–	–	2.6	49.6
Q3	656.4	–	7.4	7.7	587.7	587.7	–	–	2.6	51.0
Q4	663.0	–	7.6	7.8	597.2	597.2	–	–	2.6	47.8
2019 Q1	680.4	–	7.7	7.9	606.0	606.0	–	–	2.7	56.0

Sources: The calculations for the insurance sectors are based on supervisory data according to Solvency I and II. Pension funds data are compiled using Solvency I supervisory data, supplemented by voluntary reports and own calculations. ¹ Including deposits retained on ceded business as well as registered bonds, borrowers' note loans and registered Pfandbriefe. ² Insurance technical reserves "life" taking account of transitional measures. Health insurance is also included in the "non-life insurance" sec-

tor. ³ Not including the reinsurance business conducted by primary insurers, which is included there. ⁴ 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. ⁵ 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 pur- chases	Sales						Purchases					
		Domestic debt securities ¹					Foreign debt secur- ities ³	Residents					
		Total	Bank debt securities	Corporate bonds (non-MFIs) ²	Public debt secur- ities	Total ⁴		Credit in- stitutions including building and loan associations ⁵	Deutsche Bundesbank	Other sectors ⁶	Non- residents ⁷		
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	68,536	19,945		
2010	146,620	1,212	7,621	24,044	17,635	147,831	92,682	103,271	22,967	172,986	53,938		
2011	33,649	13,575	46,796	850	59,521	20,075	23,876	94,793	36,805	34,112	57,525		
2012	51,813	21,419	98,820	8,701	86,103	73,231	3,767	42,017	3,573	41,823	55,581		
2013	15,969	101,616	117,187	153	15,415	85,645	16,409	25,778	12,708	54,895	32,379		
2014	64,775	31,962	47,404	1,330	16,776	96,737	50,408	12,124	11,951	74,484	14,366		
2015	33,024	36,010	65,778	26,762	3,006	69,034	116,493	66,330	121,164	61,657	83,471		
2016	69,745	27,429	19,177	18,265	10,012	42,316	164,603	58,012	187,500	35,113	94,856		
2017	53,710	11,563	1,096	7,112	3,356	42,147	141,177	71,454	161,012	51,620	87,470		
2018	56,664	16,630	33,251	12,433	29,055	40,034	102,442	24,417	67,328	59,529	45,778		
2018 Sep.	19,809	11,015	8,990	84	2,109	8,794	19,310	5,189	7,652	6,470	499		
Oct.	2,853	7,812	10,652	4,521	7,361	4,959	1,962	8,161	3,659	2,540	4,815		
Nov.	18,500	13,260	6,849	693	7,104	5,240	11,009	3,159	3,945	3,904	7,492		
Dec.	39,633	31,356	9,339	2,127	19,890	8,277	106	6,873	3,343	3,424	39,527		
2019 Jan.	34,314	20,326	8,377	1,319	10,630	13,988	9,297	1,486	1,700	9,511	25,018		
Feb.	25,646	13,718	16,833	2,035	5,150	11,928	12,638	7,239	1,984	7,383	13,008		
Mar.	17,631	18,264	4,492	2,581	11,191	633	5,323	1,709	4,425	811	22,954		
Apr.	13,949	18,294	8,318	5,092	15,069	4,345	3,081	8,015	1,283	3,651	10,868		
May	44,585	42,665	20,104	1,599	20,962	1,920	16,191	4,099	4,010	8,082	28,395		
June	8,018	2,297	913	8,375	9,757	10,315	11,820	9,743	1,663	3,740	3,801		
July	2,585	7,860	744	1,051	7,553	5,275	309	4,471	2,627	2,153	2,277		

€ million

Period	Shares							
	Sales = total purchases	Sales			Purchases			
		Domestic shares ⁸	Foreign shares ⁹		Residents			Non- residents ¹²
					Total ¹⁰	Credit in- stitutions ⁵	Other sectors ¹¹	
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	32,195	
2009	35,980	23,962	12,018	30,496	8,335	38,831	5,485	
2010	37,767	20,049	17,718	36,406	7,340	29,066	1,360	
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	43,501	18,778	24,723	43,950	17,203	26,747	449	
2015	44,165	7,668	36,497	34,437	5,421	39,858	9,728	
2016	31,881	4,409	27,472	30,525	5,143	35,668	1,356	
2017	50,410	15,570	34,840	48,773	7,031	41,742	1,637	
2018	61,212	16,188	45,024	50,020	11,184	61,204	11,192	
2018 Sep.	484	225	709	2,392	2,837	445	1,908	
Oct.	13,611	1,227	14,838	16,477	1,242	15,235	2,866	
Nov.	3,032	227	3,259	3,854	1,544	2,310	822	
Dec.	11,300	482	10,818	13,017	637	13,654	1,717	
2019 Jan.	4,206	671	3,535	5,804	55	5,859	1,598	
Feb.	634	122	512	1,500	436	1,936	866	
Mar.	1,529	948	2,477	138	867	1,005	1,667	
Apr.	5,466	243	5,223	6,315	360	6,675	849	
May	4,650	1,061	3,589	5,996	1,182	4,814	1,346	
June	989	475	514	181	295	476	808	
July	2,662	68	2,594	1,074	1,609	2,683	1,588	

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 Net purchases or net sales (-) of foreign debt securities by residents; transaction values. ⁴ Domestic and foreign debt securities. ⁵ Book values; statistically adjusted. ⁶ Residual; also including purchases of domestic and foreign securities by domestic mutual funds. Up to end-2008 including Deutsche Bundesbank. ⁷ Net purchases or net sales (-) of domestic debt securities by non-residents; transaction values.

⁸ Excluding shares of public limited investment companies; at issue prices. ⁹ Net purchases or net sales (-) of foreign shares (including direct investment) by residents; transaction values. ¹⁰ Domestic and foreign shares. ¹¹ Residual; also including purchases of domestic and foreign securities by domestic mutual funds. ¹² 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
		Total	Mortgage Pfandbriefe	Public Pfandbriefe					
Gross sales									
2007	1,021,533	743,616	19,211	82,720	195,722	445,963	15,044	262,873	
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	398,421	
2010	1,375,138	757,754	36,226	33,539	363,828	324,160	53,653	563,730	
2011	1,337,772	658,781	31,431	24,295	376,876	226,180	86,614	592,375	
2012	1,340,568	702,781	36,593	11,413	446,153	208,623	63,258	574,530	
2013	1,433,628	908,107	25,775	12,963	692,611	176,758	66,630	458,892	
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	106,675	400,701	
2016 ³	1,206,483	717,002	29,059	7,621	511,222	169,103	73,371	416,108	
2017 ³	1,047,822	619,199	30,339	8,933	438,463	141,466	66,290	362,332	
2018	1,148,091	703,416	38,658	5,673	534,552	124,530	91,179	353,496	
2018 Dec.	54,388	28,723	2,215	151	19,140	7,217	11,345	14,320	
2019 Jan.	127,454	77,489	6,215	3,057	58,545	9,672	5,380	44,585	
Feb.	123,547	81,698	5,742	1,909	57,017	17,030	5,091	36,758	
Mar.	116,190	65,908	1,768	741	50,411	12,988	7,155	43,128	
Apr.	100,795	64,464	2,078	92	53,880	8,414	6,941	29,390	
May	115,749	71,690	7,035	15	53,641	10,998	5,146	38,914	
June	88,671	50,607	1,469	37	38,478	10,623	13,573	24,491	
July	116,547	73,836	3,014	738	58,148	11,936	6,410	36,302	
of which: Debt securities with maturities of more than four years ⁴									
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 ³	375,859	173,900	24,741	5,841	78,859	64,460	47,818	154,144	
2017 ³	357,506	170,357	22,395	6,447	94,852	46,663	44,891	142,257	
2018	375,906	173,995	30,934	4,460	100,539	38,061	69,150	132,760	
2018 Dec.	16,845	5,192	1,542	20	1,905	1,725	8,650	3,003	
2019 Jan.	46,309	24,508	5,786	750	15,779	2,194	4,264	17,538	
Feb.	42,078	23,849	3,661	1,726	13,196	5,266	3,505	14,723	
Mar.	38,161	11,772	1,637	685	4,153	5,296	4,995	21,394	
Apr.	25,789	9,141	1,255	92	4,760	3,035	4,194	12,454	
May	34,546	17,220	3,914	15	8,131	5,160	2,831	14,495	
June	30,682	11,412	1,015	35	7,578	2,784	11,093	8,177	
July	33,810	15,283	2,331	290	8,959	3,704	5,310	13,217	
Net sales ⁵									
2007	86,579	58,168	–	10,896	–	46,629	–	3,683	32,093
2008	119,472	8,517	–	15,052	–	65,773	–	82,653	28,302
2009	76,441	75,554	858	–	80,646	25,579	–	48,508	103,482
2010	21,566	87,646	–	3,754	–	63,368	–	23,748	85,464
2011	22,518	54,582	–	1,657	–	44,290	–	3,189	80,289
2012	–	85,298	–	4,177	–	41,660	–	6,401	21,298
2013	–	140,017	–	17,364	–	37,778	–	1,394	15,479
2014	–	34,020	–	6,313	–	23,856	–	25,869	12,383
2015	–	65,147	–	9,271	–	9,754	–	74,028	25,300
2016 ³	–	21,951	–	2,176	–	12,979	–	18,177	7,020
2017 ³	–	2,669	–	5,954	–	6,389	–	14,525	6,828
2018	–	2,758	–	19,814	–	6,564	–	5,453	9,738
2018 Dec.	–	30,192	–	11,122	–	1,558	–	3,366	593
2019 Jan.	–	10,398	–	8,587	–	4,184	–	3,735	735
Feb.	–	16,523	–	17,671	–	2,937	–	5,702	2,320
Mar.	–	13,397	–	3,874	–	910	–	306	1,676
Apr.	–	14,225	–	6,856	–	987	–	1,319	4,151
May	–	39,075	–	19,156	–	4,826	–	2,052	317
June	–	933	–	116	–	608	–	188	8,975
July	–	6,666	–	1,488	–	1,791	–	1,306	6,847

* For definitions, see the explanatory notes in Statistical Supplement 2 – Capital market statistics on pp. 23 ff. ¹ Excluding registered bank debt securities. ² Including cross-border financing within groups from January 2011. ³ Sectoral reclassification

of debt securities. ⁴ Maximum maturity according to the terms of issue. ⁵ 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		
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 ¹	3,068,111	1,164,965	132,775	62,701	633,578	335,910	275,789	1,627,358
2017 ¹	3,090,708	1,170,920	141,273	58,004	651,211	320,432	302,543	1,617,244
2018	3,091,303	1,194,160	161,088	51,439	670,062	311,572	313,527	1,583,616
2018 Dec.	3,091,303	1,194,160	161,088	51,439	670,062	311,572	313,527	1,583,616
2019 Jan.	3,101,701	1,202,748	165,272	52,757	676,882	307,837	314,262	1,584,691
Feb.	3,118,224	1,220,419	168,209	52,757	685,915	313,538	316,582	1,581,223
Mar.	3,131,621	1,224,293	167,299	52,477	691,284	313,232	318,258	1,589,070
Apr.	3,117,396	1,217,437	168,287	51,300	685,937	311,913	322,409	1,577,550
May	3,154,821	1,236,593	173,113	50,201	699,314	313,965	321,076	1,597,151
June	3,153,887	1,236,477	172,505	49,008	700,811	314,153	330,051	1,587,359
July	3,147,222	1,237,965	170,714	49,054	702,662	315,535	328,744	1,580,512

Breakdown by remaining period to maturity ³

	992,729	455,131	41,269	15,493	292,541	105,828	61,707	475,891
less than 2	992,729	455,131	41,269	15,493	292,541	105,828	61,707	475,891
2 to less than 4	656,423	286,315	46,882	12,807	159,477	67,152	49,983	320,125
4 to less than 6	482,247	213,464	36,866	6,610	120,272	49,714	51,183	217,599
6 to less than 8	289,098	113,282	21,049	7,261	51,098	33,874	25,718	150,099
8 to less than 10	250,298	83,270	16,440	4,712	43,494	18,623	21,088	145,941
10 to less than 15	129,205	34,514	5,606	551	14,798	13,560	27,778	66,913
15 to less than 20	89,868	21,131	1,768	1,373	14,413	3,579	11,090	57,647
20 and more	257,356	30,859	834	248	6,570	23,206	80,199	146,298

Position at end-July 2019

* Including debt securities temporarily held in the issuers' portfolios. ¹ Sectoral reclassification of debt securities. ² Adjustments due to change of domicile of issuers. 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	
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	178,828	2,471	3,894	776	533	0	457	661	1,615	1,933,733
2018	180,187	1,357	3,670	716	82	0	1,055	1,111	946	1,634,155
2018 Dec.	180,187	120	317	22	6	0	13	423	29	1,634,155
2019 Jan.	180,090	97	223	0	0	0	2	8	310	1,726,959
Feb.	180,116	26	116	0	0	0	0	37	52	1,755,552
Mar.	180,706	590	929	179	0	0	486	2	34	1,722,937
Apr.	180,744	38	127	21	19	0	29	9	90	1,833,023
May	180,763	19	46	112	0	0	45	60	34	1,696,088
June	180,375	389	420	84	8	0	22	59	864	1,784,783
July	179,852	523	35	11	3	0	10	6	555	1,769,824

* 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 Herausbergemeinschaft Wertpapier-Mitteilungen and 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				Corporate bonds (non-MFIs)	Debt securities		Shares		
	Total	Listed Federal securities			Total	With a residual maturity of 9 to 10 years ⁴	Total	With a residual maturity of more than 9 years and up to 10 years		German bond index (REX)	iBoxx € Germany price index	CDAX share price index	German share index (DAX)	
		Total	Total	With a residual maturity of 9 to 10 years ⁴										
% per annum											Average daily rate	End-1998 = 100	End-1987 = 100	End-1987 = 1,000
2006	3.8	3.7	3.7	3.8	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	4.4	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	4.7	6.3	121.68	102.06	266.33	4,810.20		
2009	3.2	3.1	3.0	3.2	3.5	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	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	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	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	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	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	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	0.3	1.0	2.1	142.50	112.72	526.55	11,481.06		
2017	0.3	0.2	0.2	0.3	0.4	0.4	0.9	1.7	140.53	109.03	595.45	12,917.64		
2018	0.4	0.3	0.3	0.4	0.6	0.6	1.0	2.5	141.84	109.71	474.85	10,558.96		
2019 Mar.	0.2	0.0	0.0	0.0	0.4	0.6	2.7	143.19	111.35	516.84	11,526.04			
Apr.	0.1	0.0	0.1	0.0	0.3	0.5	2.6	142.69	110.72	552.28	12,344.08			
May	0.1	0.1	0.1	0.1	0.1	0.4	2.6	144.20	112.36	510.79	11,726.84			
June	–	0.1	0.2	0.3	0.3	0.1	2.5	144.73	113.54	535.23	12,398.80			
July	–	0.2	0.3	0.4	0.4	0.2	2.4	145.43	113.94	528.16	12,189.04			
Aug.	–	0.4	0.6	0.7	0.2	0.1	2.2	147.13	116.35	518.10	11,939.28			

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 and similar, 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 out-

standing 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									Purchases					
	Sales = total purchases	Open-end domestic mutual funds ¹ (sales receipts)								Residents					Non-residents ⁵
		Total	Mutual funds open to the general public				Specialised funds	Foreign funds ⁴	Total	Credit institutions including building and loan associations ²		Other sectors ³			
Total			Money market funds	Securities-based funds	Real estate funds	Total				of which: Foreign mutual fund shares	Total	of which: Foreign mutual fund shares			
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	1,290	39,474	– 7,576	– 694	47,050	1,984	7,035	
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	– 3,437	
2013	123,736	91,337	9,184	– 574	5,596	3,376	82,153	32,400	117,028	771	100	116,257	32,300	6,710	
2014	140,233	97,711	3,998	– 473	862	1,000	93,713	42,521	144,075	819	– 1,745	143,256	44,266	– 3,840	
2015	181,889	146,136	30,420	318	22,345	3,636	115,716	35,753	174,018	7,362	494	166,656	35,259	7,871	
2016	157,068	119,369	21,301	– 342	11,131	7,384	98,068	37,698	163,998	2,877	– 3,172	161,121	40,870	– 6,931	
2017	145,017	94,921	29,560	– 235	21,970	4,406	65,361	50,096	147,006	4,938	1,048	142,068	49,048	– 1,991	
2018	122,353	103,694	15,279	377	4,166	6,168	88,415	18,660	128,170	2,979	– 2,306	125,191	20,966	– 5,821	
2019 Jan.	11,660	7,739	1,569	56	43	1,336	6,170	3,921	12,727	– 1,334	423	14,061	3,498	– 1,067	
Feb.	12,476	8,702	1,188	– 107	127	965	7,514	3,774	14,478	692	1,228	13,786	2,546	– 2,002	
Mar.	9,647	6,647	302	– 283	– 29	624	6,345	3,000	10,378	698	595	9,680	2,405	– 732	
Apr.	12,448	9,524	1,305	– 47	437	919	8,219	2,923	12,749	1,090	830	11,659	2,093	– 301	
May	2,417	3,715	1,386	3	449	979	2,329	– 1,298	3,744	– 2,014	– 2,357	5,758	1,059	– 1,327	
June	10,963	4,257	2,040	10	790	1,164	2,218	6,705	10,282	– 150	– 505	10,432	7,210	681	
July	9,470	5,905	681	63	122	549	5,225	3,564	9,828	1,367	– 56	8,461	3,620	– 358	

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	2016	2017	2018	2018					2019
				Q4	Q1	Q2	Q3	Q4	Q1
Acquisition of financial assets									
Currency and deposits	36.84	47.85	28.48	25.57	- 15.60	- 0.16	12.09	32.14	- 15.17
Debt securities	- 3.40	- 5.65	5.10	- 3.01	0.65	0.55	1.46	2.44	0.65
Short-term debt securities	- 0.58	- 2.26	1.00	- 0.34	- 0.12	- 0.02	0.38	0.77	0.41
Long-term debt securities	- 2.81	- 3.39	4.10	- 2.67	0.77	0.57	1.09	1.68	0.25
Memo item:									
Debt securities of domestic sectors	- 2.68	- 2.80	1.45	- 1.15	0.11	0.47	- 0.02	0.89	0.62
Non-financial corporations	0.67	- 0.56	0.51	- 0.14	- 0.01	0.32	- 0.13	0.33	0.74
Financial corporations	- 2.53	- 0.41	1.18	- 0.59	0.19	0.31	0.08	0.61	- 0.10
General government	- 0.82	- 1.82	- 0.25	- 0.43	- 0.07	- 0.15	0.03	- 0.05	- 0.03
Debt securities of the rest of the world	- 0.72	- 2.85	3.66	- 1.86	0.54	0.08	1.48	1.56	0.04
Loans	18.11	52.64	- 23.47	1.67	- 2.46	- 9.92	- 0.59	- 10.51	10.88
Short-term loans	18.80	28.74	4.73	4.31	5.71	- 4.96	- 0.62	4.59	13.72
Long-term loans	- 0.70	23.90	- 28.19	- 2.63	- 8.17	- 4.96	0.03	- 15.09	- 2.85
Memo item:									
Loans to domestic sectors	0.67	21.78	- 3.15	7.47	- 0.75	- 3.75	4.64	- 3.29	- 0.46
Non-financial corporations	- 4.78	15.23	- 9.64	4.18	- 2.41	- 4.52	2.50	- 5.20	- 2.47
Financial corporations	5.25	6.26	6.29	3.22	1.60	0.72	2.10	1.87	2.01
General government	0.20	0.29	0.20	0.07	0.05	0.05	0.05	0.05	0.00
Loans to the rest of the world	17.44	30.86	- 20.32	- 5.80	- 1.71	- 6.17	- 5.23	- 7.22	11.34
Equity and investment fund shares	91.82	58.61	115.70	19.13	29.99	38.16	42.44	5.12	4.60
Equity	85.99	50.05	114.03	9.42	26.47	37.18	42.34	8.04	1.84
Listed shares of domestic sectors	22.91	- 3.82	18.82	0.65	21.74	- 2.70	- 1.34	1.12	1.82
Non-financial corporations	22.59	- 3.76	18.27	0.80	21.64	- 2.90	- 1.38	0.91	1.84
Financial corporations	0.31	- 0.06	0.55	- 0.14	0.10	0.20	0.04	0.21	- 0.02
Listed shares of the rest of the world	10.84	7.16	2.12	0.42	0.80	16.15	- 15.14	0.32	0.29
Other equity ¹	52.25	46.71	93.09	8.35	3.93	23.73	58.82	6.61	- 0.28
Investment fund shares	5.83	8.55	1.67	9.71	3.52	0.98	0.10	- 2.93	2.76
Money market fund shares	0.36	- 0.46	- 0.53	0.89	- 0.63	- 0.03	- 0.14	0.27	- 0.03
Non-MMF investment fund shares	5.47	9.01	2.21	8.83	4.15	1.01	0.24	- 3.19	2.79
Insurance technical reserves	1.15	3.92	4.68	0.51	0.96	1.36	1.33	1.04	0.99
Financial derivatives	22.74	12.68	- 5.09	2.86	2.57	- 2.68	- 4.36	- 0.61	2.50
Other accounts receivable	7.36	163.84	4.85	33.36	33.28	8.93	- 0.86	- 36.49	26.75
Total	174.62	333.88	130.26	80.08	49.38	36.24	51.51	- 6.86	31.19
External financing									
Debt securities	23.71	8.56	7.08	0.55	2.79	2.36	0.90	1.03	5.77
Short-term securities	- 0.15	0.60	4.08	- 1.83	2.54	1.48	0.38	- 0.32	1.23
Long-term securities	23.85	7.95	3.00	2.37	0.24	0.89	0.53	1.35	4.54
Memo item:									
Debt securities of domestic sectors	10.82	7.13	3.80	1.83	2.48	1.65	- 0.94	0.61	3.95
Non-financial corporations	0.67	- 0.56	0.51	- 0.14	- 0.01	0.32	- 0.13	0.33	0.74
Financial corporations	10.06	9.13	3.27	2.39	2.19	1.38	- 0.54	0.24	2.32
General government	0.01	0.01	0.01	0.00	0.01	- 0.01	0.00	0.00	0.69
Households	0.08	- 1.45	0.01	- 0.42	0.29	- 0.05	- 0.27	0.04	0.20
Debt securities of the rest of the world	12.89	1.42	3.28	- 1.28	0.31	0.71	1.84	0.42	1.82
Loans	41.74	97.41	136.17	14.83	40.15	46.92	37.86	11.25	15.18
Short-term loans	14.98	21.51	69.62	- 6.31	26.97	22.86	23.49	- 3.71	13.52
Long-term loans	26.76	75.91	66.56	21.14	13.18	24.06	14.37	14.95	1.66
Memo item:									
Loans from domestic sectors	20.78	55.94	78.80	10.82	27.94	19.87	28.03	2.95	10.76
Non-financial corporations	- 4.78	15.23	- 9.64	4.18	- 2.41	- 4.52	2.50	- 5.20	- 2.47
Financial corporations	22.35	40.62	84.82	4.12	30.50	23.61	24.40	6.31	19.05
General government	3.22	0.09	3.61	2.52	- 0.15	0.78	1.13	1.85	- 5.81
Loans from the rest of the world	20.95	41.47	57.38	4.01	12.21	27.05	9.83	8.29	4.41
Equity	16.09	13.41	14.80	- 2.67	2.40	11.38	- 1.03	2.06	3.76
Listed shares of domestic sectors	27.35	8.53	73.29	5.75	20.00	4.49	5.21	43.60	4.48
Non-financial corporations	22.59	- 3.76	18.27	0.80	21.64	- 2.90	- 1.38	0.91	1.84
Financial corporations	- 2.06	11.14	46.76	4.22	- 5.05	4.52	4.11	43.19	- 0.24
General government	0.07	0.51	0.53	0.15	0.16	0.15	0.09	0.13	- 0.04
Households	6.74	0.65	7.72	0.59	3.26	2.71	2.38	- 0.63	2.92
Listed shares of the rest of the world	- 25.83	- 4.20	- 32.01	- 5.10	8.73	6.18	- 4.82	- 42.09	- 4.24
Other equity ¹	14.57	9.07	- 26.47	- 3.32	- 26.33	0.71	- 1.42	0.56	3.52
Insurance technical reserves	3.60	7.25	7.25	1.81	1.81	1.81	1.81	1.81	1.81
Financial derivatives and employee stock options	- 0.13	3.69	- 4.19	- 2.12	1.50	3.27	- 0.06	- 8.90	4.86
Other accounts payable	37.62	57.05	22.26	15.71	18.30	19.82	5.60	- 21.46	17.90
Total	122.62	187.37	183.37	28.11	66.95	85.55	45.08	- 14.21	49.28

¹ Including unlisted shares.

IX. Financial accounts

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

End of year/quarter; € billion

Item	2016	2017	2018	2018				2019	
				Q4	Q1	Q2	Q3	Q4	Q1
Financial assets									
Currency and deposits	516.9	559.6	575.8	559.6	528.4	540.4	541.9	575.8	541.5
Debt securities	44.8	38.8	43.1	38.8	39.2	39.7	41.0	43.1	44.4
Short-term debt securities	5.5	3.3	4.2	3.3	3.1	3.1	3.5	4.2	4.7
Long-term debt securities	39.3	35.6	38.8	35.6	36.0	36.6	37.5	38.8	39.7
Memo item:									
Debt securities of domestic sectors	20.8	18.2	19.2	18.2	18.2	18.7	18.6	19.2	20.1
Non-financial corporations	4.4	3.9	4.3	3.9	3.8	4.1	4.0	4.3	5.1
Financial corporations	12.0	11.7	12.7	11.7	11.9	12.2	12.3	12.7	12.8
General government	4.4	2.5	2.3	2.5	2.4	2.3	2.3	2.3	2.2
Debt securities of the rest of the world	24.0	20.7	23.8	20.7	21.0	21.1	22.5	23.8	24.2
Loans	546.2	590.7	567.7	590.7	586.9	578.5	577.9	567.7	585.3
Short-term loans	450.7	475.0	480.2	475.0	480.1	476.0	475.5	480.2	500.2
Long-term loans	95.5	115.8	87.4	115.8	106.9	102.5	102.4	87.4	85.1
Memo item:									
Loans to domestic sectors	351.2	373.0	369.9	373.0	372.3	368.5	373.2	369.9	369.4
Non-financial corporations	282.6	297.8	288.2	297.8	295.4	290.9	293.4	288.2	285.7
Financial corporations	62.0	68.2	74.5	68.2	69.8	70.5	72.6	74.5	76.5
General government	6.7	7.0	7.2	7.0	7.1	7.1	7.2	7.2	7.2
Loans to the rest of the world	195.0	217.7	197.8	217.7	214.6	210.0	204.7	197.8	215.9
Equity and investment fund shares	2,029.0	2,175.4	2,140.0	2,175.4	2,172.4	2,219.8	2,252.8	2,140.0	2,228.5
Equity	1,869.1	2,005.3	1,975.7	2,005.3	2,001.5	2,047.0	2,079.0	1,975.7	2,054.2
Listed shares of domestic sectors	292.3	332.2	302.6	332.2	349.4	338.5	338.3	302.6	318.3
Non-financial corporations	286.2	325.3	296.0	325.3	342.2	330.9	330.4	296.0	311.3
Financial corporations	6.1	6.8	6.6	6.8	7.1	7.6	7.9	6.6	7.0
Listed shares of the rest of the world	44.4	48.5	46.3	48.5	49.3	64.8	49.7	46.3	49.9
Other equity ¹	1,532.4	1,624.7	1,626.9	1,624.7	1,602.8	1,643.7	1,690.9	1,626.9	1,686.0
Investment fund shares	159.9	170.1	164.3	170.1	170.9	172.8	173.9	164.3	174.3
Money market fund shares	1.9	1.5	1.0	1.5	0.9	0.9	0.7	1.0	0.9
Non-MMF investment fund shares	158.0	168.6	163.3	168.6	170.0	172.0	173.1	163.3	173.4
Insurance technical reserves	50.2	54.2	59.0	54.2	55.4	56.6	57.8	59.0	60.3
Financial derivatives	60.1	49.3	43.7	49.3	48.7	42.8	41.4	43.7	49.2
Other accounts receivable	969.1	1,081.0	1,111.0	1,081.0	1,137.2	1,146.3	1,145.7	1,111.0	1,156.9
Total	4,216.4	4,549.1	4,540.2	4,549.1	4,568.2	4,624.3	4,658.6	4,540.2	4,666.0
Liabilities									
Debt securities	183.8	210.6	187.8	210.6	185.4	189.0	185.8	187.8	196.4
Short-term securities	2.9	3.4	6.1	3.4	5.9	7.4	6.5	6.1	7.4
Long-term securities	180.9	207.2	181.6	207.2	179.4	181.6	179.2	181.6	189.1
Memo item:									
Debt securities of domestic sectors	72.1	82.8	78.9	82.8	79.6	80.1	78.9	78.9	84.8
Non-financial corporations	4.4	3.9	4.3	3.9	3.8	4.1	4.0	4.3	5.1
Financial corporations	51.9	64.3	60.6	64.3	61.2	61.5	60.6	60.6	64.6
General government	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.8
Households	15.7	14.4	13.9	14.4	14.4	14.3	14.1	13.9	14.3
Debt securities of the rest of the world	111.7	127.8	108.9	127.8	105.8	108.9	106.9	108.9	111.7
Loans	1,514.1	1,610.8	1,736.3	1,610.8	1,648.0	1,693.2	1,725.4	1,736.3	1,758.5
Short-term loans	598.0	624.1	688.9	624.1	650.1	674.1	692.7	688.9	705.7
Long-term loans	916.1	986.8	1,047.3	986.8	997.9	1,019.1	1,032.7	1,047.3	1,052.8
Memo item:									
Loans from domestic sectors	1,160.2	1,211.4	1,282.8	1,211.4	1,237.4	1,253.3	1,280.3	1,282.8	1,288.9
Non-financial corporations	282.6	297.8	288.2	297.8	295.4	290.9	293.4	288.2	285.7
Financial corporations	817.2	854.2	932.6	854.2	883.0	903.0	926.6	932.6	946.9
General government	60.4	59.5	62.0	59.5	59.0	59.5	60.4	62.0	56.4
Loans from the rest of the world	353.9	399.4	453.5	399.4	410.6	439.9	445.1	453.5	469.6
Equity	2,785.3	3,062.0	2,684.8	3,062.0	2,957.4	2,978.5	2,942.3	2,684.8	2,779.6
Listed shares of domestic sectors	654.2	748.2	683.9	748.2	737.4	726.8	733.2	683.9	733.3
Non-financial corporations	286.2	325.3	296.0	325.3	342.2	330.9	330.4	296.0	311.3
Financial corporations	144.8	171.8	180.2	171.8	155.4	156.3	160.2	180.2	193.2
General government	44.4	51.8	48.7	51.8	48.7	49.0	52.1	48.7	54.1
Households	178.7	199.2	159.0	199.2	191.1	190.7	190.5	159.0	174.7
Listed shares of the rest of the world	813.6	933.6	740.2	933.6	889.8	915.2	882.3	740.2	760.2
Other equity ¹	1,317.6	1,380.1	1,260.7	1,380.1	1,330.2	1,336.5	1,326.8	1,260.7	1,286.0
Insurance technical reserves	259.5	266.7	274.0	266.7	268.6	270.4	272.2	274.0	275.8
Financial derivatives and employee stock options	38.2	26.9	23.3	26.9	26.7	28.2	30.1	23.3	29.7
Other accounts payable	1,056.5	1,099.4	1,148.2	1,099.4	1,125.4	1,144.9	1,153.1	1,148.2	1,177.2
Total	5,837.4	6,276.4	6,054.3	6,276.4	6,211.4	6,304.2	6,308.9	6,054.3	6,217.2

¹ Including unlisted shares.

IX. Financial accounts

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

€ billion

Item	2016	2017	2018	2017	2018				2019
				Q4	Q1	Q2	Q3	Q4	Q1
Acquisition of financial assets									
Currency and deposits	114.85	106.17	140.05	41.37	14.00	40.39	27.30	58.36	38.71
Currency	21.18	19.73	32.27	3.81	3.67	7.57	7.05	13.98	17.70
Deposits	93.68	86.45	107.78	37.57	10.33	32.83	20.24	44.38	21.01
Transferable deposits	105.26	99.72	109.62	35.86	12.14	33.90	21.35	42.23	17.20
Time deposits	1.28	- 4.03	6.79	2.34	1.15	1.99	1.43	2.23	1.86
Savings deposits (including savings certificates)	- 12.87	- 9.24	- 8.63	- 0.64	- 2.95	- 3.06	- 2.53	- 0.08	1.95
Debt securities	- 12.80	- 8.14	1.81	- 3.01	- 1.00	0.52	1.71	0.58	0.52
Short-term debt securities	- 0.16	- 0.20	- 0.13	- 0.41	- 0.37	- 0.01	- 0.02	0.26	- 0.22
Long-term debt securities	- 12.63	- 7.93	1.94	- 2.60	- 0.63	0.53	1.72	0.32	0.74
Memo item:									
Debt securities of domestic sectors	- 4.14	- 5.09	2.29	- 2.56	- 0.01	0.16	1.18	0.96	0.71
Non-financial corporations	- 0.01	- 1.43	- 0.09	- 0.40	0.08	- 0.23	- 0.12	0.19	0.22
Financial corporations	- 2.48	- 2.68	2.83	- 1.97	0.07	0.61	1.36	0.79	0.58
General government	- 1.65	- 0.99	- 0.46	- 0.19	- 0.17	- 0.22	- 0.06	- 0.02	- 0.09
Debt securities of the rest of the world	- 8.66	- 3.05	- 0.48	- 0.45	- 0.98	0.36	0.53	- 0.38	- 0.19
Equity and investment fund shares	45.78	55.13	39.42	16.62	17.73	8.06	11.79	1.84	11.41
Equity	21.65	14.69	18.92	3.97	7.35	2.79	7.01	1.76	6.76
Listed shares of domestic sectors	9.37	0.90	9.47	0.04	4.27	2.55	2.63	0.02	4.29
Non-financial corporations	6.09	0.54	6.33	0.47	3.12	1.63	2.27	- 0.69	2.52
Financial corporations	3.28	0.36	3.14	- 0.43	1.15	0.92	0.37	0.70	1.78
Listed shares of the rest of the world	6.93	9.65	4.41	2.77	1.47	- 0.83	2.82	0.95	0.93
Other equity ¹	5.35	4.13	5.04	1.15	1.61	1.07	1.57	0.79	1.54
Investment fund shares	24.13	40.44	20.51	12.65	10.38	5.27	4.77	0.08	4.65
Money market fund shares	- 0.53	- 0.28	- 0.33	0.05	- 0.40	- 0.03	- 0.06	0.16	- 0.12
Non-MMF investment fund shares	24.66	40.72	20.84	12.60	10.79	5.29	4.83	- 0.07	4.77
Non-life insurance technical reserves and provision for calls under standardised guarantees	15.58	20.23	16.93	7.75	4.22	4.24	4.21	4.26	4.37
Life insurance and annuity entitlements	24.79	37.68	32.64	8.20	11.79	8.20	7.46	5.19	9.42
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	32.58	30.84	21.91	3.49	4.30	4.84	4.51	8.26	5.81
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	- 19.49	- 30.79	- 17.39	- 25.36	19.03	- 9.88	- 6.03	- 20.51	16.27
Total	201.31	211.12	235.38	49.06	70.09	56.37	50.94	57.98	86.52
External financing									
Loans	47.46	55.55	68.46	12.45	10.81	20.12	22.48	15.05	15.90
Short-term loans	- 4.31	- 2.19	2.44	- 0.40	- 0.02	0.11	1.83	0.53	0.47
Long-term loans	51.76	57.74	66.02	12.85	10.83	20.01	20.66	14.52	15.43
Memo item:									
Mortgage loans	41.92	47.41	57.47	12.15	9.00	15.79	19.58	13.11	9.10
Consumer loans	9.78	11.25	11.14	2.19	1.78	4.34	2.36	2.67	6.15
Entrepreneurial loans	- 4.24	- 3.11	- 0.14	- 1.89	0.04	- 0.01	0.55	- 0.73	0.65
Memo item:									
Loans from monetary financial institutions	42.87	49.99	61.72	10.42	11.00	17.65	19.41	13.67	12.51
Loans from other financial institutions	4.59	5.57	6.74	2.03	- 0.19	2.47	3.07	1.38	3.39
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	- 0.23	0.53	0.07	0.34	0.22	0.01	- 0.05	- 0.11	0.42
Total	47.23	56.09	68.53	12.79	11.03	20.13	22.43	14.94	16.32

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/quarter; € billion

Item	2016	2017	2018	2018					2019
				Q4	Q1	Q2	Q3	Q4	Q1
Financial assets									
Currency and deposits	2,208.7	2,313.7	2,455.5	2,313.7	2,327.7	2,368.1	2,397.1	2,455.5	2,494.2
Currency	174.4	194.1	226.3	194.1	197.8	205.3	212.3	226.3	244.0
Deposits	2,034.4	2,119.6	2,229.2	2,119.6	2,130.0	2,162.8	2,184.8	2,229.2	2,250.2
Transferable deposits	1,188.0	1,287.7	1,397.1	1,287.7	1,299.8	1,333.7	1,354.9	1,397.1	1,414.3
Time deposits	248.7	245.4	252.4	245.4	246.6	248.6	250.2	252.4	254.3
Savings deposits (including savings certificates)	597.7	586.5	579.7	586.5	583.6	580.5	579.8	579.7	581.6
Debt securities	127.4	120.5	115.7	120.5	117.7	118.1	119.3	115.7	119.4
Short-term debt securities	2.7	2.5	2.1	2.5	2.1	2.0	2.0	2.1	1.9
Long-term debt securities	124.7	118.0	113.6	118.0	115.6	116.0	117.3	113.6	117.5
Memo item:									
Debt securities of domestic sectors	85.6	82.5	79.9	82.5	81.2	81.4	82.5	79.9	83.1
Non-financial corporations	13.9	12.5	12.1	12.5	12.4	12.1	12.1	12.1	12.4
Financial corporations	66.7	66.1	64.4	66.1	65.1	65.7	67.0	64.4	67.3
General government	5.0	3.9	3.4	3.9	3.7	3.5	3.4	3.4	3.4
Debt securities of the rest of the world	41.8	37.9	35.9	37.9	36.4	36.7	36.9	35.9	36.3
Equity and investment fund shares	1,105.7	1,215.8	1,138.9	1,215.8	1,196.1	1,214.9	1,239.8	1,138.9	1,229.3
Equity	587.9	639.7	583.2	639.7	624.0	628.5	644.2	583.2	632.5
Listed shares of domestic sectors	200.8	226.4	183.0	226.4	217.3	214.2	217.2	183.0	202.6
Non-financial corporations	169.8	190.3	151.0	190.3	182.5	180.8	180.8	151.0	166.0
Financial corporations	31.0	36.1	32.0	36.1	34.8	33.4	36.5	32.0	36.6
Listed shares of the rest of the world	86.8	101.0	98.2	101.0	97.7	102.9	111.4	98.2	114.2
Other equity ¹	300.3	312.3	302.0	312.3	309.0	311.5	315.6	302.0	315.7
Investment fund shares	517.8	576.2	555.7	576.2	572.1	586.3	595.7	555.7	596.9
Money market fund shares	2.8	2.7	2.3	2.7	2.3	2.3	2.1	2.3	2.2
Non-MMF investment fund shares	515.0	573.5	553.4	573.5	569.8	584.1	593.5	553.4	594.7
Non-life insurance technical reserves and provision for calls under standardised guarantees	339.9	360.1	377.0	360.1	364.3	368.6	372.8	377.0	381.4
Life insurance and annuity entitlements	947.8	991.4	1,025.6	991.4	1,003.6	1,012.2	1,020.1	1,025.6	1,035.1
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	819.2	849.8	871.7	849.8	854.1	859.0	863.5	871.7	877.6
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	32.6	31.1	31.5	31.1	31.5	31.8	31.8	31.5	32.5
Total	5,581.4	5,882.5	6,016.0	5,882.5	5,895.1	5,972.6	6,044.4	6,016.0	6,169.5
Liabilities									
Loans	1,654.7	1,711.9	1,775.9	1,711.9	1,722.6	1,737.9	1,760.8	1,775.9	1,791.6
Short-term loans	56.6	54.4	58.1	54.4	54.4	54.5	56.3	58.1	58.5
Long-term loans	1,598.1	1,657.5	1,717.7	1,657.5	1,668.2	1,683.4	1,704.5	1,717.7	1,733.1
Memo item:									
Mortgage loans	1,195.8	1,247.4	1,308.1	1,247.4	1,257.4	1,275.0	1,295.0	1,308.1	1,317.1
Consumer loans	201.8	211.8	218.1	211.8	212.8	213.4	215.5	218.1	224.1
Entrepreneurial loans	257.0	252.7	249.7	252.7	252.5	249.5	250.4	249.7	250.4
Memo item:									
Loans from monetary financial institutions	1,558.3	1,610.0	1,667.2	1,610.0	1,620.9	1,633.7	1,653.5	1,667.2	1,679.6
Loans from other financial institutions	96.4	101.9	108.7	101.9	101.8	104.2	107.3	108.7	112.1
Loans from general government and rest of the world	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts payable	15.4	16.3	16.2	16.3	17.6	17.2	17.4	16.2	17.5
Total	1,670.1	1,728.3	1,792.1	1,728.3	1,740.3	1,755.1	1,778.2	1,792.1	1,809.1

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														
2013	+ 1.1	- 1.3	- 0.7	- 2.5	+ 5.7	+ 0.0	- 0.0	- 0.0	- 0.1	+ 0.2	+ 0.2	+ 0.2		
2014	+ 17.0	+ 15.5	+ 2.0	- 3.9	+ 3.4	+ 0.6	+ 0.5	+ 0.1	- 0.1	+ 0.1	+ 0.1	+ 0.1		
2015	+ 28.6	+ 16.6	+ 5.2	+ 3.7	+ 3.0	+ 0.9	+ 0.5	+ 0.2	+ 0.1	+ 0.1	+ 0.1	+ 0.1		
2016 P	+ 37.1	+ 13.6	+ 8.1	+ 6.9	+ 8.6	+ 1.2	+ 0.4	+ 0.3	+ 0.2	+ 0.3	+ 0.3	+ 0.3		
2017 P	+ 40.3	+ 8.1	+ 11.3	+ 9.9	+ 11.0	+ 1.2	+ 0.2	+ 0.3	+ 0.3	+ 0.3	+ 0.3	+ 0.3		
2018 P	+ 62.4	+ 20.1	+ 12.8	+ 13.7	+ 15.9	+ 1.9	+ 0.6	+ 0.4	+ 0.4	+ 0.4	+ 0.4	+ 0.5		
2017 H1 P	+ 23.6	+ 2.8	+ 6.8	+ 6.7	+ 7.3	+ 1.5	+ 0.2	+ 0.4	+ 0.4	+ 0.4	+ 0.4	+ 0.5		
H2 P	+ 16.7	+ 5.3	+ 4.5	+ 3.3	+ 3.6	+ 1.0	+ 0.3	+ 0.3	+ 0.2	+ 0.2	+ 0.2	+ 0.2		
2018 H1 P	+ 51.7	+ 18.7	+ 15.8	+ 8.0	+ 9.2	+ 3.1	+ 1.1	+ 1.0	+ 0.5	+ 0.6	+ 0.6	+ 0.6		
H2 P	+ 10.7	+ 1.4	- 3.0	+ 5.7	+ 6.6	+ 0.6	+ 0.1	- 0.2	+ 0.3	+ 0.4	+ 0.4	+ 0.4		
2019 H1 pe	+ 45.3	+ 17.7	+ 12.7	+ 7.1	+ 7.7	+ 2.7	+ 1.0	+ 0.8	+ 0.4	+ 0.5	+ 0.5	+ 0.5		
Debt level²													End of year or quarter	
2013	2,210.7	1,390.4	663.5	172.9	1.3	78.6	49.5	23.6	6.1	0.0	0.0	0.0		
2014	2,212.3	1,396.5	657.8	174.5	1.4	75.6	47.7	22.5	6.0	0.0	0.0	0.0		
2015	2,182.0	1,372.6	654.5	174.4	1.4	72.0	45.3	21.6	5.8	0.0	0.0	0.0		
2016 P	2,165.9	1,366.8	637.5	175.8	1.1	69.1	43.6	20.3	5.6	0.0	0.0	0.0		
2017 P	2,115.4	1,351.3	610.5	171.7	0.8	65.2	41.6	18.8	5.3	0.0	0.0	0.0		
2018 P	2,063.2	1,323.0	595.5	162.6	0.7	61.7	39.6	17.8	4.9	0.0	0.0	0.0		
2017 Q1 P	2,140.2	1,351.0	628.1	174.7	1.2	67.6	42.7	19.8	5.5	0.0	0.0	0.0		
Q2 P	2,133.9	1,353.6	620.5	174.6	0.9	67.1	42.5	19.5	5.5	0.0	0.0	0.0		
Q3 P	2,127.5	1,353.0	618.5	173.1	0.8	66.2	42.1	19.3	5.4	0.0	0.0	0.0		
Q4 P	2,115.4	1,351.3	610.5	171.7	0.8	65.2	41.6	18.8	5.3	0.0	0.0	0.0		
2018 Q1 P	2,092.5	1,338.6	599.8	171.2	1.0	64.0	40.9	18.3	5.2	0.0	0.0	0.0		
Q2 P	2,076.9	1,329.3	595.9	169.8	0.9	62.9	40.3	18.0	5.1	0.0	0.0	0.0		
Q3 P	2,077.1	1,335.5	594.8	164.5	0.8	62.6	40.2	17.9	5.0	0.0	0.0	0.0		
Q4 P	2,063.2	1,323.0	595.5	162.6	0.7	61.7	39.6	17.8	4.9	0.0	0.0	0.0		
2019 Q1 P	2,077.7	1,325.1	607.7	164.3	0.7	61.7	39.4	18.0	4.9	0.0	0.0	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														
2013	1,264.7	650.9	465.4	148.4	1,263.5	666.6	220.5	141.8	61.0	51.5	122.2	+ 1.1	1,120.6	
2014	1,313.9	673.0	482.3	158.5	1,296.9	691.3	227.5	147.1	60.5	47.1	123.4	+ 17.0	1,160.0	
2015	1,363.1	704.2	501.2	157.7	1,334.5	722.0	233.0	149.7	64.6	42.7	122.5	+ 28.6	1,212.4	
2016 P	1,425.6	738.6	524.3	162.7	1,388.5	754.3	240.7	158.6	68.2	37.8	128.9	+ 37.1	1,269.8	
2017 P	1,481.7	772.7	549.5	159.6	1,441.4	784.8	250.0	162.9	71.9	34.3	137.5	+ 40.3	1,328.9	
2018 P	1,552.9	807.7	572.5	172.7	1,490.5	806.1	259.3	169.4	78.4	31.7	145.7	+ 62.4	1,387.3	
As a percentage of GDP														
2013	45.0	23.2	16.6	5.3	44.9	23.7	7.8	5.0	2.2	1.8	4.3	+ 0.0	39.9	
2014	44.9	23.0	16.5	5.4	44.3	23.6	7.8	5.0	2.1	1.6	4.2	+ 0.6	39.6	
2015	45.0	23.2	16.5	5.2	44.0	23.8	7.7	4.9	2.1	1.4	4.0	+ 0.9	40.0	
2016 P	45.5	23.6	16.7	5.2	44.3	24.1	7.7	5.1	2.2	1.2	4.1	+ 1.2	40.5	
2017 P	45.7	23.8	16.9	4.9	44.4	24.2	7.7	5.0	2.2	1.1	4.2	+ 1.2	41.0	
2018 P	46.4	24.2	17.1	5.2	44.6	24.1	7.8	5.1	2.3	0.9	4.4	+ 1.9	41.5	
Percentage growth rates														
2013	+ 2.5	+ 3.0	+ 2.4	+ 1.1	+ 2.5	+ 3.3	+ 2.7	+ 4.5	+ 1.0	- 18.9	+ 7.9	.	+ 2.7	
2014	+ 3.9	+ 3.4	+ 3.6	+ 6.9	+ 2.6	+ 3.7	+ 3.2	+ 3.7	- 0.8	- 8.4	+ 1.0	.	+ 3.5	
2015	+ 3.7	+ 4.6	+ 3.9	- 0.5	+ 2.9	+ 4.4	+ 2.4	+ 1.8	+ 6.7	- 9.4	- 0.7	.	+ 4.5	
2016 P	+ 4.6	+ 4.9	+ 4.6	+ 3.1	+ 4.0	+ 4.5	+ 3.3	+ 6.0	+ 5.5	- 11.6	+ 5.3	.	+ 4.7	
2017 P	+ 3.9	+ 4.6	+ 4.8	- 1.9	+ 3.8	+ 4.1	+ 3.9	+ 2.7	+ 5.4	- 9.3	+ 6.7	.	+ 4.7	
2018 P	+ 4.8	+ 4.5	+ 4.2	+ 8.2	+ 3.4	+ 2.7	+ 3.7	+ 4.0	+ 9.0	- 7.4	+ 5.9	.	+ 4.4	

Source: Federal Statistical Office. * Figures in accordance with ESA 2010. **1** Taxes and social contributions plus customs duties and bank levies to the Single Resolution Fund.

X. Public finances in Germany

3. General government: budgetary development (as per the government finance statistics)

€ billion

Period	Central, state and local government ¹									Social security funds ²			General government, total			
	Revenue			Expenditure						Deficit/ surplus	Rev- enue ⁶	Expend- iture	Deficit/ surplus	Rev- enue	Expend- iture	Deficit/ surplus
	Total ⁴	of which:		Total ⁴	of which: ³											
		Taxes	Finan- cial transac- tions ⁵		Person- nel expend- iture	Current grants	Interest	Fixed asset forma- tion	Finan- cial transac- tions ⁵							
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	788.9	236.0	295.1	57.1	45.9	17.6	+ 2.9	554.5	551.1	+ 3.5	1,245.2	1,238.8	+ 6.4
2015 P	829.8	673.3	10.4	804.3	244.1	302.7	49.8	46.4	12.5	+ 25.5	575.0	573.1	+ 1.9	1,301.1	1,273.6	+ 27.4
2016 P	862.3	705.8	9.0	844.5	251.3	321.6	43.4	49.0	11.8	+ 17.8	601.8	594.8	+ 7.1	1,355.1	1,330.2	+ 24.9
2017 P	900.3	734.5	7.9	869.4	261.6	327.9	42.0	52.3	13.8	+ 30.8	631.5	622.0	+ 9.5	1,417.5	1,377.2	+ 40.3
2018 P	949.3	776.3	6.2	905.5	272.3	337.8	39.2	55.8	16.0	+ 43.8	656.3	642.2	+ 14.1	1,488.5	1,430.6	+ 57.9
2016 Q1 P	206.1	169.9	1.4	205.5	60.0	81.2	17.7	8.4	2.2	+ 0.6	143.0	146.6	- 3.6	322.2	325.3	- 3.0
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	232.6	189.2	2.1	233.2	68.1	82.6	7.7	17.2	4.8	- 0.6	160.1	152.2	+ 7.8	365.3	358.1	+ 7.2
2017 Q1 P	216.0	180.4	0.9	199.6	62.9	80.3	13.8	10.2	1.9	+ 16.4	150.3	155.1	- 4.8	338.0	326.4	+ 11.6
Q2 P	217.9	177.3	1.2	206.6	63.9	83.6	6.6	8.8	3.6	+ 11.3	156.4	154.3	+ 2.1	346.1	332.7	+ 13.4
Q3 P	219.6	180.4	3.5	215.9	64.4	78.6	14.5	13.4	4.2	+ 3.8	154.8	155.7	- 0.9	346.1	343.2	+ 2.8
Q4 P	243.8	196.3	2.1	244.4	69.8	84.7	6.9	19.2	4.1	- 0.6	168.2	158.0	+ 10.2	383.4	373.8	+ 9.6
2018 Q1 P	225.7	189.1	1.1	210.0	66.0	81.7	14.6	9.1	2.5	+ 15.7	156.1	160.8	- 4.7	352.7	341.7	+ 11.0
Q2 P	239.9	194.7	1.0	206.2	65.9	80.9	5.8	11.4	2.1	+ 33.7	162.4	160.1	+ 2.3	373.3	337.3	+ 36.1
Q3 P	228.8	189.0	1.8	223.6	67.0	84.6	13.4	14.4	1.9	+ 5.2	161.8	161.1	+ 0.7	361.3	355.5	+ 5.9
Q4 P	255.2	203.9	2.2	262.1	73.1	89.7	6.2	20.3	9.6	- 6.9	174.6	163.4	+ 11.2	400.7	396.4	+ 4.3
2019 Q1 P	240.9	192.7	2.5	230.4	71.0	88.5	11.5	10.1	3.3	+ 10.5	163.3	166.4	- 3.1	374.3	366.8	+ 7.5

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 the government finance 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
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	372.4	+ 8.8	248.9	243.1	+ 5.8
2017 P	357.8	352.8	+ 5.0	397.7	385.8	+ 11.8	260.3	249.1	+ 11.2
2018 P	374.4	363.5	+ 10.9	421.2	400.5	+ 20.7	271.8	261.5	+ 10.2
2016 Q1 P	81.1	82.2	- 1.1	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	93.9	- 3.0	104.3	104.4	- 0.0	76.3	68.0	+ 8.3
2017 Q1 P	88.2	82.9	+ 5.3	95.6	90.0	+ 5.6	52.7	57.7	- 4.9
Q2 P	81.5	80.0	+ 1.4	96.3	93.6	+ 2.7	65.0	59.5	+ 5.5
Q3 P	88.6	93.6	- 5.0	98.9	91.4	+ 7.5	63.4	61.5	+ 1.9
Q4 P	99.5	96.2	+ 3.3	104.7	109.2	- 4.5	77.2	69.1	+ 8.2
2018 Q1 P	87.9	83.9	+ 4.0	100.0	92.7	+ 7.3	54.9	60.3	- 5.3
Q2 P	94.5	79.8	+ 14.6	104.3	91.8	+ 12.5	68.5	62.4	+ 6.1
Q3 P	91.7	95.9	- 4.2	100.7	95.4	+ 5.3	66.0	64.3	+ 1.7
Q4 P	100.4	103.9	- 3.5	113.4	118.5	- 5.1	80.4	73.1	+ 7.3
2019 Q1 P	84.7	86.1	- 1.4	105.7	99.4	+ 6.2	58.2	63.2	- 4.9

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.

X. Public finances in Germany

5. Central, state and local government: tax revenue

€ million

Period	Central and state government and European Union							Balance of untransferred tax shares ⁴	Memo item: Amounts deducted in the Federal budget ⁵
	Total	Total	Central government ¹	State government ¹	European Union ²	Local government ³			
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	705,797	606,965	316,854	260,837	29,273	98,648	+	186	27,836
2017	734,540	629,458	336,730	271,046	21,682	105,158	-	76	27,368
2018	776,314	665,005	349,134	287,282	28,589	111,308	+	1	26,775
2017 Q1	181,506	154,154	85,256	66,704	2,194	17,950	+	9,403	6,606
Q2	177,090	149,915	76,391	66,605	6,918	27,631	-	456	6,825
Q3	180,407	155,250	82,576	66,718	5,957	25,517	-	361	7,467
Q4	195,537	170,139	92,507	71,019	6,613	34,060	-	8,662	6,471
2018 Q1	189,457	159,974	83,370	69,413	7,191	19,173	+	10,310	6,398
Q2	194,715	166,191	88,450	71,995	5,745	29,064	-	540	6,592
Q3	189,015	161,683	84,952	69,414	7,317	27,579	-	248	7,579
Q4	203,128	177,157	92,363	76,459	8,335	35,492	-	9,521	6,206
2019 Q1	193,054	162,696	79,669	71,578	11,450	19,816	+	10,541	6,270
Q2	...	172,563	90,883	75,455	6,224	...	...	...	6,179
2018 July	.	51,041	26,535	22,230	2,276	.	.	.	3,060
2019 July	.	50,036	25,537	21,917	2,582	.	.	.	2,984

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** Customs 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											Central government taxes ⁷	State government taxes ⁷	EU customs duties	Memo item: Local government share in joint taxes
	Total ¹	Income taxes ²					Turnover taxes ⁵			Local business tax transfers ⁶					
		Total	Wage tax ³	Assessed income tax	Corporation tax	Investment income tax ⁴	Total	Turnover tax	Turnover tax on imports						
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	
2017	674,598	312,462	195,524	59,428	29,259	28,251	226,355	170,498	55,856	8,580	99,934	22,205	5,063	45,141	
2018	713,576	332,141	208,231	60,415	33,425	30,069	234,800	175,437	59,363	9,078	108,586	23,913	5,057	48,571	
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	
Q4	182,288	82,077	54,707	14,873	6,843	5,654	58,128	43,846	14,282	3,868	31,587	5,384	1,243	12,149	
2018 Q1	172,111	81,713	48,059	17,640	9,418	6,595	59,248	45,272	13,977	291	23,752	5,836	1,271	12,136	
Q2	178,102	86,322	51,395	14,889	9,302	10,736	55,801	41,220	14,581	2,215	26,474	6,170	1,119	11,912	
Q3	173,202	78,105	50,368	12,683	7,192	7,862	59,169	43,951	15,218	2,315	26,424	5,797	1,391	11,519	
Q4	190,161	86,001	58,409	15,204	7,513	4,876	60,581	44,994	15,587	4,257	31,936	6,109	1,276	13,004	
2019 Q1	175,216	82,996	50,923	17,453	9,194	5,426	60,402	46,018	14,384	121	23,968	6,531	1,197	12,519	
Q2	185,333	90,134	54,437	16,069	8,085	11,543	59,101	43,943	15,158	2,113	26,625	6,087	1,273	12,770	
2018 July	54,358	22,042	18,240	- 644	- 506	4,952	19,320	14,304	5,016	2,020	8,634	1,942	401	3,317	
2019 July	53,498	21,403	19,068	- 642	- 39	3,016	19,016	14,422	4,594	1,928	8,672	2,079	400	3,462	

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 2018: 49.6:47.2:3.2. The EU share is deducted from central government's share. **6** Respective percentage share of central and state government for 2018: 22.7:77.3. **7** For the breakdown, see Table X. 7.

X. Public finances in Germany

7. Central, state and local government: individual taxes

€ million

Period	Central government taxes ¹								State government taxes ¹				Local government taxes		
	Energy tax	Solidarity surcharge	Tobacco tax	Insurance tax	Motor vehicle tax	Electricity tax	Alcohol 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
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	65,319	50,103	13,654
2017	41,022	17,953	14,399	13,269	8,948	6,944	2,094	-4,695	13,139	6,114	1,837	1,115	68,522	52,899	13,966
2018	40,882	18,927	14,339	13,779	9,047	6,858	2,133	2,622	14,083	6,813	1,894	1,122	71,817	55,904	14,203
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	16,698	12,443	3,824
Q4	15,622	4,677	4,261	2,070	1,906	1,786	538	727	3,257	1,438	456	233	17,118	13,670	3,082
2018 Q1	4,865	4,587	2,425	6,388	2,602	1,725	591	569	3,576	1,431	479	350	17,638	13,880	3,291
Q2	10,158	5,127	3,485	2,442	2,360	1,805	466	631	3,270	2,166	470	264	18,827	14,548	3,853
Q3	10,423	4,353	3,886	2,752	2,128	1,677	531	674	3,592	1,463	464	278	18,128	13,764	3,919
Q4	15,436	4,860	4,543	2,197	1,956	1,650	545	749	3,645	1,752	481	231	17,224	13,713	3,140
2019 Q1	4,848	4,679	2,495	6,542	2,594	1,646	579	586	3,976	1,705	499	351	...	14,139	3,350
Q2	9,937	5,257	3,588	2,543	2,491	1,659	485	665	3,667	1,660	513	247	...	...	...
2018 July	3,504	1,171	1,558	776	709	532	176	209	1,197	487	169	88	.	.	.
2019 July	3,523	1,235	1,450	718	810	543	181	212	1,276	555	163	85	.	.	.

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 statutory pension insurance scheme: budgetary development and assets*

€ million

Period	Revenue ^{1,2}			Expenditure ^{1,2}				Assets ^{1,4}					Memo item: Administrative assets
	Total	of which:		Total	of which:		Deficit/surplus	Total	Deposits ⁵	Securities	Equity interests, mortgages and other loans ⁶	Real estate	
		Contributions ³	Payments from central government		Pension payments	Pensioners' health insurance							
2012	259,700	181,262	77,193	254,604	216,450	15,283	+ 5,097	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
2017	299,826	211,424	87,502	299,297	255,261	18,028	+ 529	35,366	33,740	1,335	238	53	4,032
2018	312,788	221,572	90,408	308,356	263,338	18,588	+ 4,432	40,345	38,314	1,713	262	56	4,008
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
Q4	79,956	57,910	21,790	75,842	64,694	4,562	+ 4,114	35,362	33,750	1,335	224	53	4,045
2018 Q1	74,368	51,726	22,489	75,482	64,885	4,569	- 1,114	34,219	32,775	1,146	240	58	4,029
Q2	77,824	55,186	22,451	75,747	64,742	4,557	+ 2,077	36,244	34,963	983	241	57	4,033
Q3	76,831	54,085	22,575	78,284	67,017	4,727	- 1,453	35,344	34,104	936	248	57	4,019
Q4	82,953	60,561	22,185	78,432	67,042	4,729	+ 4,521	40,353	38,332	1,713	252	56	4,018
2019 Q1	77,984	54,393	23,426	78,630	67,328	5,087	- 646	39,432	37,637	1,474	263	57	4,001
Q2	81,410	57,837	23,408	80,804	69,011	5,205	+ 605	40,232	38,639	1,272	264	57	3,996

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 generally differ from the total of the reported provisional quarterly figures as the latter are not revised sub-

sequently. ² Including financial compensation payments. Excluding 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.

X. Public finances in Germany

9. Federal Employment Agency: budgetary development*

€ million

Period	Revenue				Expenditure							Deficit/ surplus	Deficit- offsetting grant or loan from central govern- ment
	Total 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		
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	-
2017	37,819	32,501	882	-	31,867	14,055	769	7,043	.	687	6,444	+ 5,952	-
2018	39,335	34,172	622	-	33,107	13,757	761	6,951	.	588	8,129	+ 6,228	-
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	-
Q4	10,446	8,929	241	-	7,789	3,193	55	1,823	.	215	1,717	+ 2,657	-
2018 Q1	9,167	7,926	151	-	9,546	3,826	415	1,742	.	174	2,625	- 379	-
Q2	9,713	8,523	152	-	8,471	3,431	245	1,752	.	161	2,209	+ 1,243	-
Q3	9,515	8,355	152	-	7,288	3,296	50	1,623	.	114	1,514	+ 2,227	-
Q4	10,940	9,367	167	-	7,802	3,204	51	1,834	.	139	1,781	+ 3,138	-
2019 Q1	8,369	7,027	148	-	8,597	3,969	403	1,818	.	179	1,450	- 228	-
Q2	8,685	7,440	156	-	8,136	3,673	204	1,832	.	243	1,475	+ 549	-

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 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	Remedies and therapeutic appliances	Sickness benefits	Adminis- trative expendi- ture ⁵	
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
2017	233,814	216,227	14,500	230,773	72,303	37,389	38,792	14,070	14,776	12,281	10,912	+ 3,041
2018	242,360	224,912	14,500	239,706	74,506	38,327	39,968	14,490	15,965	13,090	11,564	+ 2,654
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
Q4	62,391	57,526	3,625	58,527	17,878	9,627	9,712	3,566	3,792	3,080	3,095	+ 3,865
2018 Q1	57,788	53,670	3,625	59,854	19,028	9,569	10,045	3,656	3,763	3,370	2,614	- 2,067
Q2	59,796	55,571	3,625	60,060	18,677	9,591	10,049	3,639	3,904	3,294	2,821	- 264
Q3	60,138	55,778	3,625	59,204	18,302	9,600	9,862	3,481	4,070	3,155	2,810	+ 934
Q4	64,645	59,893	3,625	60,689	18,537	9,806	10,067	3,677	4,157	3,272	3,236	+ 3,956
2019 Q1	59,809	55,622	3,625	62,485	19,586	9,947	10,386	3,738	4,106	3,649	2,707	- 2,676
Q2	62,121	57,858	3,625	62,858	19,210	10,127	10,421	3,821	4,289	3,535	2,774	- 736

Source: Federal Ministry of Health. ¹ The final annual figures generally differ from the total of the reported provisional quarterly figures as the latter are not revised subsequently. Excluding revenue and expenditure as part of the risk structure compensation scheme. ² Including contributions from subsidised low-paid part-time employ-

ment. ³ Federal grant and liquidity assistance. ⁴ Including dentures. ⁵ Net, i.e. after deducting reimbursements for expenses for levying contributions incurred by other social security funds.

X. Public finances in Germany

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	Inpatient care	Nursing benefit	Contributions to pension insur- ance scheme ³		Administrative expenditure	
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
2017	36,305	36,248	38,862	4,609	13,014	10,010	1,611	1,606	-	2,557
2018 P	37,949	37,886	41,265	4,778	12,951	10,809	2,093	1,586	-	3,315
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
Q4	9,620	9,610	10,110	1,158	3,285	2,731	470	387	-	490
2018 Q1	8,961	8,948	10,146	1,192	3,233	2,603	496	424	-	1,185
Q2	9,338	9,322	10,118	1,160	3,217	2,658	509	389	-	780
Q3	9,349	9,334	10,428	1,202	3,251	2,781	515	397	-	1,079
Q4	10,071	10,050	10,581	1,229	3,251	2,835	561	384	-	510
2019 Q1	11,123	10,938	10,728	1,198	3,232	2,833	547	437	+	396
Q2	11,795	11,620	10,812	1,205	3,237	2,868	588	449	+	983

Source: Federal Ministry of Health. * Including transfers to the long-term care provident fund. ¹ The final annual figures generally differ from the total of the reported provisional quarterly figures as the latter are not revised subsequently. 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		
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
2017	+ 171,906	+ 4,531	+ 11,823	+ 2,897
2018	+ 167,231	- 16,248	- 91	- 1,670
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
Q4	+ 36,878	+ 1,455	+ 4,741	+ 95
2018 Q1	+ 42,934	- 4,946	- 5,138	+ 3,569
Q2	+ 43,602	- 5,954	- 166	- 6,139
Q3	+ 46,500	+ 4,856	+ 1,688	+ 1,871
Q4	+ 34,195	- 10,205	+ 3,525	- 971
2019 Q1	+ 56,654	+ 3,281	- 2,172	- 1,199
Q2	+ 48,545	+ 5,491	- 279	+ 7,227

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 co- rporations pe	Other domestic creditors ¹	
2012	2,225,204	12,126	652,393	199,132	60,157	1,301,397
2013	2,210,739	12,438	660,140	190,555	43,994	1,303,612
2014	2,212,280	12,774	630,752	190,130	44,949	1,333,675
2015	2,181,972	85,952	617,681	186,661	45,028	1,246,650
2016	2,165,891	205,391	594,765	179,755	41,737	1,144,243
2017 P	2,115,397	319,159	547,973	175,617	38,678	1,033,970
2018 P	2,063,172	364,731	493,533	181,077	39,043	984,788
2016 Q1	2,190,308	108,746	632,259	183,160	41,396	1,224,747
Q2	2,193,776	142,139	620,966	181,372	39,602	1,209,696
Q3	2,187,329	172,567	607,540	179,359	38,912	1,188,950
Q4	2,165,891	205,391	594,765	179,755	41,737	1,144,243
2017 Q1 P	2,140,165	239,495	581,651	178,219	39,561	1,101,239
Q2 P	2,133,921	265,130	597,962	176,810	39,008	1,085,011
Q3 P	2,127,477	290,214	555,881	176,646	39,276	1,065,460
Q4 P	2,115,397	319,159	547,973	175,617	38,678	1,033,970
2018 Q1 P	2,092,470	329,387	525,588	176,495	37,574	1,023,426
Q2 P	2,076,933	344,279	509,060	179,856	36,929	1,006,809
Q3 P	2,077,122	356,899	497,343	180,464	37,203	1,005,212
Q4 P	2,063,172	364,731	493,533	181,077	39,043	984,788
2019 Q1 P	2,077,658	359,884	495,439	179,512	37,627	1,005,195

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. Maastricht debt by instrument

€ million

Period (end of year or quarter)	Total	Currency and deposits ¹	Debt securities by original maturity		Loans by original maturity		Memo item: 2	
			Short-term debt securities (up to one year)	Long-term debt securities (more than one year)	Short-term loans (up to one year)	Long-term loans (more than one year)	Debt vis-à-vis other government subsectors	Claims vis-à-vis other government subsectors
General government								
2012	2,225,204	9,742	106,945	1,441,406	124,389	542,722	.	.
2013	2,210,739	10,592	85,836	1,470,698	100,646	542,966	.	.
2014	2,212,280	12,150	72,618	1,501,494	95,945	530,073	.	.
2015	2,181,972	14,303	65,676	1,499,098	85,232	517,662	.	.
2016 Q1	2,190,308	11,976	69,372	1,491,129	104,397	513,434	.	.
Q2	2,193,776	12,181	76,710	1,485,041	111,107	508,737	.	.
Q3	2,187,329	15,370	77,249	1,491,971	98,090	504,648	.	.
Q4	2,165,891	15,845	69,715	1,484,378	91,406	504,547	.	.
2017 Q1 P	2,140,165	12,891	60,798	1,479,234	89,209	498,033	.	.
Q2 P	2,133,921	15,196	54,362	1,486,948	83,649	493,767	.	.
Q3 P	2,127,477	16,161	48,197	1,489,630	82,844	490,645	.	.
Q4 P	2,115,397	14,651	48,789	1,484,691	82,876	484,390	.	.
2018 Q1 P	2,092,470	12,472	48,449	1,479,750	70,445	481,354	.	.
Q2 P	2,076,933	12,636	54,968	1,466,057	66,345	476,927	.	.
Q3 P	2,077,122	15,607	60,407	1,466,370	63,884	471,215	.	.
Q4 P	2,063,172	14,833	52,674	1,456,412	71,008	468,245	.	.
2019 Q1 P	2,077,658	15,635	64,295	1,461,244	68,610	467,874	.	.
Central government								
2012	1,387,857	9,742	88,372	1,088,796	88,311	112,636	1,465	11,354
2013	1,390,440	10,592	78,996	1,113,029	64,970	122,852	2,696	10,303
2014	1,396,496	12,150	64,230	1,141,973	54,388	123,756	1,202	12,833
2015	1,372,604	14,303	49,512	1,139,039	45,256	124,494	2,932	13,577
2016 Q1	1,382,473	11,976	49,030	1,138,051	58,381	125,035	2,853	10,025
Q2	1,391,131	12,181	59,399	1,129,874	65,168	124,508	2,803	11,367
Q3	1,381,054	15,370	61,408	1,134,326	46,832	123,117	2,634	9,042
Q4	1,366,840	15,845	55,208	1,124,445	50,004	121,338	2,238	8,478
2017 Q1 P	1,350,988	12,891	45,510	1,124,430	48,082	120,075	2,465	7,469
Q2 P	1,353,600	15,196	40,225	1,132,686	44,682	120,811	2,547	8,136
Q3 P	1,352,975	16,161	34,216	1,136,873	45,235	120,490	2,674	10,160
Q4 P	1,351,290	14,651	36,297	1,132,542	47,758	120,041	2,935	10,603
2018 Q1 P	1,338,606	12,472	35,921	1,133,358	37,206	119,650	2,953	9,862
Q2 P	1,329,320	12,636	42,883	1,120,469	34,038	119,293	2,662	10,643
Q3 P	1,335,479	15,607	46,608	1,119,011	35,617	118,637	2,492	10,185
Q4 P	1,322,995	14,833	42,237	1,107,646	41,057	117,222	2,468	9,917
2019 Q1 P	1,325,052	15,635	50,024	1,103,040	38,989	117,365	2,460	11,427
State government								
2012	684,123	–	18,802	355,756	12,314	297,252	13,197	2,968
2013	663,514	–	6,847	360,706	11,862	284,099	12,141	2,655
2014	657,812	–	8,391	361,916	19,182	268,323	14,825	2,297
2015	654,484	–	16,169	362,376	18,707	257,232	15,867	4,218
2016 Q1	647,567	–	20,347	355,304	21,563	250,352	12,358	4,230
Q2	644,144	–	17,318	357,069	23,456	246,301	13,860	4,061
Q3	644,655	–	15,848	359,618	26,149	243,040	11,685	3,871
Q4	637,534	–	14,515	361,996	16,116	244,907	11,408	3,376
2017 Q1 P	628,149	–	15,308	356,832	15,938	240,071	10,407	3,527
Q2 P	620,539	–	14,167	356,647	14,792	234,933	11,180	3,578
Q3 P	618,534	–	14,021	355,342	16,358	232,813	13,313	3,581
Q4 P	610,473	–	12,543	354,941	15,154	227,835	14,325	3,609
2018 Q1 P	599,752	–	12,583	349,945	13,307	223,916	13,305	3,740
Q2 P	595,914	–	12,144	349,086	13,648	221,036	14,387	3,754
Q3 P	594,816	–	13,499	350,782	11,107	219,427	13,967	3,666
Q4 P	595,496	–	10,499	352,351	15,127	217,520	14,344	3,272
2019 Q1 P	607,708	–	14,335	362,029	15,809	215,535	15,498	3,679
Local government								
2012	169,839	–	–	423	24,791	144,625	3,124	802
2013	172,858	–	–	646	25,435	146,777	2,523	530
2014	174,527	–	–	1,297	26,121	147,109	1,959	734
2015	174,415	–	–	2,047	26,998	145,370	2,143	463
2016 Q1	176,617	–	–	2,076	26,908	147,633	2,348	476
Q2	176,233	–	–	2,453	26,469	147,312	2,216	503
Q3	177,037	–	–	2,455	26,788	147,794	2,123	527
Q4	175,839	–	–	2,404	26,521	146,914	1,819	566
2017 Q1 P	174,709	–	–	2,645	25,561	146,503	1,959	610
Q2 P	174,565	–	–	2,672	25,370	146,523	1,950	644
Q3 P	173,054	–	–	2,687	24,581	145,786	1,851	664
Q4 P	171,702	–	–	2,947	24,101	144,654	1,600	714
2018 Q1 P	171,159	–	–	2,427	22,887	145,846	1,765	719
Q2 P	169,777	–	–	2,561	22,551	144,665	1,912	724
Q3 P	164,544	–	–	2,703	20,604	141,236	2,049	757
Q4 P	162,623	–	–	2,914	18,823	140,887	1,804	770
2019 Q1 P	164,333	–	–	2,961	19,197	142,175	2,185	785

For footnotes see end of table.

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14. Maastricht debt by instrument (cont'd)

€ million

Period (end of year or quarter)	Currency and deposits ¹	Debt securities by original maturity		Loans by original maturity		Memo item: ²	
		Short-term debt securities (up to one year)	Long-term debt securities (more than one year)	Short-term loans (up to one year)	Long-term loans (more than one year)	Debt vis-à-vis other government subsectors	Claims vis-à-vis other government subsectors
Social security funds							
2012	1,171	–	–	195	976	–	2,661
2013	1,287	–	–	360	927	–	3,872
2014	1,430	–	–	387	1,043	–	2,122
2015	1,411	–	–	446	965	–	2,685
2016 Q1	1,211	–	–	458	753	–	2,828
Q2	1,147	–	–	443	704	–	2,948
Q3	1,025	–	–	334	691	–	3,002
Q4	1,143	–	–	473	670	–	3,044
2017 Q1 P	1,150	–	–	504	646	–	3,226
Q2 P	895	–	–	290	605	–	3,318
Q3 P	750	–	–	184	566	–	3,433
Q4 P	792	–	–	247	545	–	3,934
2018 Q1 P	975	–	–	424	551	–	3,702
Q2 P	883	–	–	383	500	–	3,840
Q3 P	790	–	–	400	390	–	3,900
Q4 P	674	–	–	372	302	–	4,659
2019 Q1 P	707	–	–	437	270	–	4,253

Source: Bundesbank calculations based on data from the Federal Statistical Office and the Federal Republic of Germany – Finance Agency. ¹ Particularly liabilities resulting from coins in circulation. ² Besides direct loan relationships, claims and debt

vis-à-vis other government subsectors also comprise securities holdings purchased on the market. No entry for general government as debt and claims are consolidated between different government subsectors.

15. Maastricht debt of central government by instrument and category

€ million

Period (end of year or quarter)	Currency and deposits ²		Debt securities									Loans ¹
	Total ¹	of which: ³	Total ¹	of which: ³					Federal Treasury notes (Schätze) ⁵	Treasury discount paper (Bubills) ⁶	Federal savings notes	
				Federal day bond	Federal bonds (Bunds)	Federal notes (Boblts)	Inflation-linked Federal bonds (Bunds) ⁴	Inflation-linked Federal notes (Boblts) ⁴					Capital indexation of inflation-linked securities
2007	984,256	6,675	917,584	564,137	173,949	10,019	3,444	506	102,083	37,385	10,287	59,997
2008	1,016,364	12,466	928,754	571,913	164,514	12,017	7,522	1,336	105,684	40,795	9,649	75,144
2009	1,082,644	9,981	1,013,072	577,798	166,471	16,982	7,748	1,369	113,637	104,409	9,471	59,592
2010	1,334,021	10,890	1,084,019	602,624	185,586	25,958	9,948	2,396	126,220	85,867	8,704	239,112
2011	1,344,082	10,429	1,121,331	615,200	199,284	29,313	14,927	3,961	130,648	58,297	8,208	212,322
2012	1,387,857	9,742	1,177,168	631,425	217,586	35,350	16,769	5,374	117,719	56,222	6,818	200,947
2013	1,390,440	10,592	1,192,025	643,200	234,759	41,105	10,613	4,730	110,029	50,004	4,488	187,822
2014	1,396,496	12,150	1,206,203	653,823	244,633	48,692	14,553	5,368	103,445	27,951	2,375	178,144
2015	1,372,604	14,303	1,188,551	663,296	232,387	59,942	14,553	5,607	96,389	18,536	1,305	169,750
2016	1,366,840	15,845	1,179,653	670,245	221,551	51,879	14,585	3,602	95,727	23,609	737	171,342
2017 P	1,351,290	14,651	1,168,840	693,687	203,899	58,365	14,490	4,720	91,013	10,037	289	167,800
2018 P	1,322,995	14,833	1,149,883	710,513	182,847	64,647	–	5,139	86,009	12,949	48	158,279
2016 Q1	1,382,473	11,976	1,187,081	666,565	225,678	61,893	14,603	4,395	98,232	20,526	1,205	183,416
Q2	1,391,131	12,181	1,189,273	675,794	220,840	49,675	14,550	3,099	99,417	28,369	1,108	189,676
Q3	1,381,054	15,370	1,195,734	664,034	231,375	50,869	14,570	3,097	102,053	30,626	922	169,949
Q4	1,366,840	15,845	1,179,653	670,245	221,551	51,879	14,585	3,602	95,727	23,609	737	171,342
2017 Q1 P	1,350,988	12,891	1,169,939	674,049	213,371	53,838	14,535	3,362	95,148	14,910	619	168,158
Q2 P	1,353,600	15,196	1,172,911	687,278	205,203	55,842	14,465	4,507	93,795	14,431	487	165,493
Q3 P	1,352,975	16,161	1,171,089	684,134	215,029	56,905	14,490	4,092	91,893	11,851	398	165,726
Q4 P	1,351,290	14,651	1,168,840	693,687	203,899	58,365	14,490	4,720	91,013	10,037	289	167,800
2018 Q1 P	1,338,606	12,472	1,169,279	699,638	193,811	60,778	14,455	4,421	94,282	9,031	219	156,855
Q2 P	1,329,320	12,636	1,163,353	710,784	185,042	62,863	–	4,276	92,639	15,049	141	153,330
Q3 P	1,335,479	15,607	1,165,619	703,682	194,356	64,304	–	4,548	90,575	17,340	75	154,254
Q4 P	1,322,995	14,833	1,149,883	710,513	182,847	64,647	–	5,139	86,009	12,949	48	158,279
2019 Q1 P	1,325,052	15,635	1,153,064	709,008	178,900	66,531	–	4,191	89,782	18,288	31	156,354

Sources: Federal Republic of Germany – Finance Agency, Federal Statistical Office, and Bundesbank calculations. ¹ Comprises all of central government, i.e. all off-budget entities in addition to the core budget, including the government-owned bad bank FMS Wertmanagement and liabilities attributed to central government from an economic perspective under the European System of Accounts (ESA)

2010. ² Particularly liabilities resulting from coins in circulation. ³ Issuances by the Federal Republic of Germany. Excluding issuers' holdings of own securities but including those held by other government entities. ⁴ Excluding inflation-induced indexation of capital. ⁵ Including medium-term notes issued by the Treuhand agency (expired in 2011). ⁶ Including Federal Treasury financing papers (expired in 2014).

XI. Economic conditions in Germany

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

Item	2016			2017			2018			2019				
	Index 2015 = 100			Annual percentage change			Q4	Q1	Q2	Q3	Q4	Q1	Q2	
	2016	2017	2018	2016	2017	2018	2017	2018	2019	2019	2019	2019	2019	
At constant prices, chained														
I. Origin of domestic product														
Production sector (excluding construction)	104.3	107.6	109.0	4.3	3.2	1.3	4.4	2.2	3.7	0.2	0.8	2.1	4.7	
Construction	102.0	101.4	104.8	2.0	- 0.6	3.4	- 0.4	1.3	3.5	3.3	4.9	6.6	2.8	
Wholesale/retail trade, transport and storage, hotel and restaurant services	101.4	104.4	106.2	1.4	2.9	1.8	2.6	2.2	3.0	0.8	1.2	2.1	1.2	
Information and communication	102.8	106.4	109.7	2.8	3.5	3.1	3.6	2.6	2.9	3.9	2.9	3.2	3.3	
Financial and insurance activities	96.5	100.2	100.1	- 3.6	3.8	- 0.1	3.0	0.5	- 0.0	- 1.0	0.3	1.8	2.6	
Real estate activities	100.0	99.0	100.1	- 0.1	- 1.0	1.1	- 0.5	1.3	1.1	1.0	0.9	0.9	1.5	
Business services ¹	101.9	105.7	108.0	1.9	3.7	2.2	4.3	2.7	3.4	1.8	1.0	1.3	0.5	
Public services, education and health	104.2	107.7	109.0	4.2	3.4	1.2	3.5	1.5	1.2	1.0	1.1	1.2	1.2	
Other services	98.0	98.9	99.0	- 2.0	0.8	0.1	0.8	- 0.4	0.4	- 0.1	0.6	1.2	1.0	
Gross value added	102.2	104.8	106.4	2.2	2.5	1.5	2.9	1.8	2.5	0.9	0.8	0.8	- 0.1	
Gross domestic product ²	102.2	104.8	106.4	2.2	2.5	1.5	2.8	1.6	2.5	1.1	0.9	0.8	0.0	
II. Use of domestic product														
Private consumption ³	102.3	103.6	105.0	2.3	1.3	1.3	1.2	1.8	1.4	0.6	1.3	1.0	1.5	
Government consumption	104.1	106.6	108.1	4.1	2.4	1.4	2.2	1.5	1.9	1.2	1.1	1.9	1.9	
Machinery and equipment	103.0	107.1	111.8	3.0	4.0	4.4	4.7	5.0	5.9	3.4	3.4	2.7	1.5	
Premises	103.8	104.6	107.2	3.8	0.7	2.5	- 0.1	0.6	2.7	2.6	4.0	6.6	2.2	
Other investment ⁴	105.2	109.6	114.3	5.2	4.2	4.3	6.8	3.9	4.6	4.8	3.8	3.0	2.7	
Changes in inventories ^{5,6}	.	.	.	0.1	0.5	0.3	0.3	- 0.2	- 0.1	1.0	0.6	- 0.2	- 0.4	
Domestic demand	103.0	105.5	107.7	3.0	2.4	2.1	2.1	1.7	2.0	2.4	2.4	1.7	1.3	
Net exports ⁶	.	.	.	- 0.6	0.3	- 0.4	0.8	0.1	0.6	- 1.1	- 1.3	- 0.7	- 1.1	
Exports	102.4	107.4	109.7	2.4	4.9	2.1	5.2	3.0	4.4	1.3	- 0.1	2.1	- 0.8	
Imports	104.3	109.8	113.7	4.3	5.2	3.6	4.3	3.4	3.7	4.3	3.1	4.3	1.8	
Gross domestic product ²	102.2	104.8	106.4	2.2	2.5	1.5	2.8	1.6	2.5	1.1	0.9	0.8	0.0	
At current prices (€ billion)														
III. Use of domestic product														
Private consumption ³	1,649.8	1,697.0	1,743.7	3.0	2.9	2.8	2.5	3.1	2.8	2.2	3.0	2.2	3.1	
Government consumption	620.0	644.3	665.6	4.6	3.9	3.3	4.3	3.3	3.7	3.3	3.0	4.0	4.1	
Machinery and equipment	214.1	224.2	235.3	3.5	4.7	4.9	5.9	5.2	6.4	4.1	4.2	3.6	2.5	
Premises	307.9	320.7	344.3	5.7	4.2	7.3	3.9	4.8	7.2	7.8	9.3	12.0	7.1	
Other investment ⁴	114.4	121.0	128.1	6.1	5.8	5.9	8.4	5.5	6.2	6.6	5.5	4.7	4.4	
Changes in inventories ⁵	- 2.9	7.4	21.3	.	.	.	.	.	.	.	.	.	.
Domestic use	2,903.3	3,014.5	3,138.3	3.7	3.8	4.1	3.9	3.4	3.9	4.2	4.8	3.6	3.3	
Net exports	230.8	230.4	206.1	.	.	.	.	.	.	.	.	.	.
Exports	1,442.4	1,538.0	1,585.8	1.6	6.6	3.1	6.3	3.2	4.8	2.9	1.6	3.5	0.1	
Imports	1,211.6	1,307.6	1,379.7	1.8	7.9	5.5	6.0	3.6	4.9	7.6	5.9	5.5	2.6	
Gross domestic product ²	3,134.1	3,245.0	3,344.4	3.4	3.5	3.1	4.2	3.2	4.0	2.3	2.8	2.8	2.1	
IV. Prices (2015 = 100)														
Private consumption	100.7	102.2	103.7	0.7	1.5	1.5	1.2	1.2	1.4	1.5	1.7	1.2	1.6	
Gross domestic product	101.2	102.2	103.8	1.2	1.0	1.5	1.4	1.6	1.4	1.2	1.9	1.9	2.0	
Terms of trade	101.7	100.8	99.9	1.7	- 0.9	- 0.9	- 0.6	- 0.1	- 0.8	- 1.6	- 1.0	0.2	0.2	
V. Distribution of national income														
Compensation of employees	1,625.1	1,694.7	1,771.3	3.9	4.3	4.5	4.3	4.5	4.4	4.9	4.3	4.4	4.5	
Entrepreneurial and property income	721.0	735.8	731.8	3.8	2.1	- 0.5	4.7	0.8	2.8	- 4.8	- 0.5	- 0.3	- 1.9	
National income	2,346.1	2,430.5	2,503.1	3.8	3.6	3.0	4.4	3.3	4.0	1.8	3.0	2.9	2.7	
Memo item: Gross national income	3,211.3	3,328.0	3,437.9	3.6	3.6	3.3	4.3	3.4	4.2	2.6	3.0	2.8	2.3	

Source: Federal Statistical Office; figures computed in August 2019. 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 in-

stitutions 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	
2015 = 100												
% of total ¹	100.00	14.04	6.37	79.59	29.45	36.98	2.27	10.89	10.31	9.95	12.73	14.16
Period												
2015	99.7	99.6	100.0	99.7	99.8	99.7	99.6	99.8	99.8	99.7	99.7	99.6
2016	101.5	105.2	98.5	101.1	100.9	101.3	102.6	101.0	101.6	101.0	99.6	102.1
2017	104.9	108.7	98.9	104.7	104.9	105.0	106.9	103.0	106.2	107.0	104.1	105.2
2018	² 105.8	² 109.0	97.4	105.9	105.5	106.0	106.1	106.9	107.3	108.9	106.5	103.5
2018 Q2	106.7	110.2	91.0	107.4	107.7	107.5	105.4	106.8	109.7	107.2	104.8	110.6
Q3	106.3	116.1	93.3	105.6	106.7	103.1	104.1	111.4	107.9	110.3	105.1	96.5
Q4	107.7	122.1	99.9	105.8	101.8	109.3	106.3	105.0	104.8	110.3	115.7	97.7
2019 Q1	100.9	92.9	102.4	102.2	104.3	100.8	108.4	100.1	106.5	104.4	100.3	98.0
Q2	102.5	112.4	83.6	102.2	103.2	101.8	103.5	100.3	105.5	103.3	102.4	95.3
2018 July ³	107.2	118.4	93.5	106.4	108.5	104.2	98.4	109.9	109.2	108.9	104.7	100.6
Aug. ³	100.4	110.8	94.8	99.0	102.8	93.0	95.0	110.0	102.9	105.5	98.1	80.4
Sep.	111.2	119.0	91.6	111.4	108.8	112.1	118.8	114.3	111.7	116.5	112.6	108.5
Oct.	110.0	120.3	97.5	109.2	109.2	108.5	112.2	110.9	112.2	112.4	108.7	104.3
Nov.	111.3	122.0	99.0	110.5	107.3	113.5	112.0	108.4	112.0	114.7	113.4	107.8
Dec.	101.8	124.0	103.1	97.8	88.9	105.8	94.8	95.6	90.2	103.7	124.9	80.9
2019 Jan.	92.8	75.1	109.5	94.6	100.1	88.6	100.8	98.5	100.7	97.6	88.3	84.9
Feb.	98.3	92.6	96.6	99.4	100.7	99.4	105.3	94.6	103.1	99.7	97.1	99.5
Mar.	111.7	111.0	101.1	112.7	112.2	114.3	119.1	107.1	115.8	115.8	115.4	109.7
Apr. ^x	101.5	111.6	88.1	100.7	103.5	98.8	102.0	99.5	105.8	101.4	99.4	92.6
May ^x	101.3	109.8	84.2	101.2	102.8	100.0	101.6	100.5	104.1	101.8	98.9	96.2
June ^x	104.6	115.8	78.4	104.7	103.4	106.6	106.8	101.0	106.6	106.6	108.9	97.2
July ^{3,x,p}	102.7	120.7	80.4	101.3	102.5	100.1	99.6	102.7	104.1	103.5	101.4	90.9
Annual percentage change												
2015	+ 0.9	- 2.3	+ 5.0	+ 0.4	- 0.1	+ 0.9	+ 2.2	- 0.3	+ 0.1	+ 0.7	- 0.3	- 0.2
2016	+ 1.8	+ 5.6	- 1.5	+ 1.4	+ 1.1	+ 1.6	+ 3.0	+ 1.2	+ 1.8	+ 1.3	- 0.1	+ 2.5
2017	+ 3.3	+ 3.3	+ 0.4	+ 3.6	+ 4.0	+ 3.7	+ 4.2	+ 2.0	+ 4.5	+ 5.9	+ 4.5	+ 3.0
2018	² + 0.9	² + 0.3	- 1.5	+ 1.1	+ 0.6	+ 1.0	- 0.7	+ 3.8	+ 1.0	+ 1.8	+ 2.3	- 1.6
2018 Q2	+ 2.2	- 0.8	- 3.0	+ 3.2	+ 2.1	+ 3.3	- 0.2	+ 6.4	+ 2.5	+ 2.5	+ 2.9	+ 4.4
Q3	- 0.2	- 0.5	+ 0.9	- 0.2	- 0.7	- 1.5	- 2.0	+ 5.9	+ 0.2	+ 0.7	+ 2.0	- 8.3
Q4	- 2.0	- 0.1	- 4.6	- 2.2	- 2.6	- 1.8	- 3.0	- 2.0	- 1.8	- 1.2	- 0.1	- 6.7
2019 Q1	- 1.6	+ 6.2	- 2.9	- 2.6	- 1.4	- 3.2	- 0.3	- 4.1	- 0.3	- 3.4	- 0.2	- 10.2
Q2	- 4.0	+ 2.0	- 8.2	- 4.8	- 4.1	- 5.3	- 1.8	- 6.0	- 3.8	- 3.6	- 2.3	- 13.8
2018 July ³	+ 0.6	- 0.6	+ 2.4	+ 0.7	± 0.0	+ 0.1	- 3.1	+ 5.1	+ 0.6	- 0.3	+ 2.8	- 3.1
Aug. ³	- 0.8	- 1.4	+ 1.9	- 0.9	- 0.7	- 3.5	- 3.3	+ 7.2	+ 0.7	+ 1.2	+ 3.4	- 16.0
Sep.	- 0.3	+ 0.6	- 1.5	- 0.4	- 1.3	- 1.3	- 0.2	+ 5.4	- 0.7	+ 1.3	+ 0.2	- 6.5
Oct.	+ 0.5	- 0.3	- 5.4	+ 1.1	- 0.5	+ 2.1	- 1.5	+ 2.5	+ 0.3	+ 2.6	+ 5.5	- 3.4
Nov.	- 4.1	- 1.1	- 5.1	- 4.4	- 3.9	- 4.9	- 4.8	- 4.2	- 2.6	- 2.3	- 2.2	- 11.9
Dec.	- 2.4	+ 1.1	- 3.5	- 3.1	- 3.8	- 2.2	- 2.4	- 4.2	- 3.2	- 3.9	- 2.9	- 3.3
2019 Jan.	- 2.8	- 0.5	+ 2.8	- 3.7	- 2.1	- 5.3	- 1.2	- 3.8	- 0.4	- 3.9	+ 0.6	- 14.2
Feb.	- 0.4	+ 11.4	- 5.3	- 1.8	- 1.7	- 1.1	- 0.4	- 4.4	- 1.2	- 4.2	+ 0.1	- 5.1
Mar.	- 1.5	+ 6.8	- 6.4	- 2.3	- 0.7	- 3.4	+ 0.4	- 4.0	+ 0.7	- 2.1	- 0.9	- 11.2
Apr. ^x	- 2.8	+ 5.0	- 5.4	- 4.1	- 2.1	- 6.3	- 1.2	- 2.8	- 2.1	- 2.1	- 0.8	- 17.4
May ^x	- 4.4	- 1.0	- 7.2	- 4.9	- 4.7	- 4.4	- 1.1	- 7.7	- 4.5	- 3.5	- 2.7	- 10.9
June ^x	- 4.7	+ 2.0	- 12.1	- 5.5	- 5.6	- 5.2	- 3.1	- 7.3	- 4.7	- 5.2	- 3.2	- 13.1
July ^{3,x,p}	- 4.2	+ 1.9	- 14.0	- 4.8	- 5.5	- 3.9	+ 1.2	- 6.6	- 4.7	- 5.0	- 3.2	- 9.6

Source of the unadjusted figures: Federal Statistical Office. * For explanatory notes, see Statistical Supplement 4 – Seasonally adjusted business statistics, Tables II.10 to II.12. ◦ Using JDemetra+ 2.2.1 (X13). ¹ Share of gross value added at factor cost of the production sector in the base year 2015. ² As of January 2018 weights in structural and civil engineering work corrected by the Federal Statistical

Office. ³ 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:			
	2015 = 100	Annual percentage change	Intermediate goods		Capital goods		2015 = 100	Annual percentage change	Durable goods		Non-durable goods	
			2015 = 100	Annual percentage change	2015 = 100	Annual percentage change			2015 = 100	Annual percentage change	2015 = 100	Annual percentage change
Total												
2014	97.8	+ 2.7	100.6	+ 0.6	96.2	+ 3.9	96.8	+ 4.6	95.8	+ 0.6	97.1	+ 5.9
2015	99.8	+ 2.0	99.8	- 0.8	99.8	+ 3.7	99.8	+ 3.1	99.7	+ 4.1	99.8	+ 2.8
2016	100.7	+ 0.9	98.9	- 0.9	101.8	+ 2.0	100.6	+ 0.8	105.3	+ 5.6	99.1	- 0.7
2017	108.6	+ 7.8	109.4	+ 10.6	108.5	+ 6.6	105.7	+ 5.1	116.5	+ 10.6	102.2	+ 3.1
2018	110.5	+ 1.7	111.5	+ 1.9	109.9	+ 1.3	110.0	+ 4.1	118.9	+ 2.1	107.1	+ 4.8
2018 July	107.9	+ 2.0	113.6	+ 4.4	102.7	- 1.1	120.7	+ 12.1	120.0	+ 10.3	120.9	+ 12.7
Aug.	98.9	- 0.1	103.2	- 1.6	94.7	+ 0.6	109.9	+ 1.9	116.7	+ 1.2	107.6	+ 1.9
Sep.	109.7	- 0.5	109.2	+ 0.3	109.6	- 2.0	113.1	+ 5.7	125.4	- 0.6	109.1	+ 8.3
Oct.	111.6	- 1.1	113.9	+ 0.4	110.7	- 1.9	108.9	- 0.6	127.4	- 0.4	102.8	- 0.8
Nov.	112.4	- 2.1	111.3	- 5.8	114.0	+ 0.8	105.7	- 5.2	121.6	- 6.2	100.4	- 4.7
Dec.	111.6	- 3.1	96.8	- 6.4	122.8	- 1.9	95.8	+ 1.5	109.6	+ 0.9	91.3	+ 1.8
2019 Jan.	108.0	- 2.4	110.0	- 5.0	106.8	- 0.6	108.3	- 3.0	118.6	+ 3.7	104.9	- 5.2
Feb.	102.8	- 7.0	104.5	- 5.0	101.4	- 8.5	106.5	- 4.7	114.9	+ 3.5	103.8	- 7.3
Mar.	115.9	- 4.7	113.9	- 6.0	117.3	- 4.2	115.5	- 0.4	131.2	+ 6.8	110.4	- 2.9
Apr.	104.3	- 4.1	104.9	- 8.5	103.6	- 1.9	105.9	+ 1.0	115.6	+ 1.7	102.8	+ 1.0
May	101.2	- 7.7	102.1	- 9.7	100.3	- 7.0	104.2	- 2.3	113.7	- 6.0	101.0	- 0.9
June	108.9	- 3.0	105.1	- 8.3	111.4	+ 0.9	107.6	- 6.6	120.6	- 1.6	103.3	- 8.4
July P	102.5	- 5.0	101.5	- 10.7	102.1	- 0.6	109.6	- 9.2	120.1	+ 0.1	106.1	- 12.2
From the domestic market												
2014	98.1	+ 1.1	101.7	- 1.1	95.2	+ 3.1	97.1	+ 2.0	100.4	± 0.0	96.0	+ 2.8
2015	99.8	+ 1.7	99.8	- 1.9	99.7	+ 4.7	99.8	+ 2.8	99.7	- 0.7	99.8	+ 4.0
2016	99.8	± 0.0	97.6	- 2.2	101.9	+ 2.2	98.1	- 1.7	103.1	+ 3.4	96.3	- 3.5
2017	107.0	+ 7.2	107.1	+ 9.7	107.8	+ 5.8	101.6	+ 3.6	108.6	+ 5.3	99.3	+ 3.1
2018	107.2	+ 0.2	108.6	+ 1.4	106.6	- 1.1	102.9	+ 1.3	114.7	+ 5.6	98.9	- 0.4
2018 July	109.6	+ 2.2	112.9	+ 4.3	107.2	+ 0.4	106.3	+ 1.4	108.9	+ 6.6	105.4	- 0.3
Aug.	97.6	- 3.6	101.5	- 5.1	93.5	- 2.0	103.1	- 3.0	114.8	+ 3.5	99.2	- 5.3
Sep.	107.8	+ 0.3	107.5	+ 1.5	109.2	- 0.2	100.7	- 3.6	119.1	- 1.6	94.5	- 4.4
Oct.	106.8	- 3.7	110.4	- 1.7	103.7	- 5.8	107.4	- 1.1	120.5	- 6.2	102.9	+ 1.1
Nov.	112.2	- 0.4	111.0	- 2.7	113.8	+ 1.9	108.2	- 3.0	121.3	- 1.5	103.8	- 3.6
Dec.	101.4	+ 0.1	91.6	- 6.9	111.3	+ 4.9	90.9	+ 5.5	99.0	+ 11.2	88.1	+ 3.4
2019 Jan.	107.2	- 0.6	106.3	- 6.2	108.9	+ 4.7	101.1	- 1.2	109.3	+ 1.8	98.3	- 2.3
Feb.	104.3	- 0.6	102.6	- 4.3	105.4	+ 2.1	106.9	+ 3.0	112.6	+ 4.2	105.0	+ 2.5
Mar.	112.3	- 6.2	109.4	- 8.5	115.2	- 5.3	109.7	+ 1.5	134.6	+ 10.9	101.3	- 2.2
Apr.	100.1	- 4.0	100.3	- 7.0	100.3	- 2.1	97.4	+ 0.7	111.9	- 1.2	92.5	+ 1.5
May	99.3	- 6.3	99.6	- 8.6	99.4	- 3.9	96.8	- 8.6	105.9	- 16.8	93.7	- 5.1
June	101.3	- 5.9	99.6	- 10.2	103.3	- 2.4	97.6	- 3.9	104.4	- 9.6	95.3	- 1.7
July P	101.0	- 7.8	100.1	- 11.3	101.3	- 5.5	103.7	- 2.4	112.0	+ 2.8	100.9	- 4.3
From abroad												
2014	97.5	+ 3.8	99.5	+ 2.5	96.7	+ 4.2	96.5	+ 6.6	92.0	+ 1.1	97.9	+ 8.3
2015	99.8	+ 2.4	99.8	+ 0.3	99.8	+ 3.2	99.8	+ 3.4	99.8	+ 8.5	99.8	+ 1.9
2016	101.5	+ 1.7	100.4	+ 0.6	101.9	+ 2.1	102.6	+ 2.8	107.0	+ 7.2	101.1	+ 1.3
2017	109.8	+ 8.2	111.9	+ 11.5	108.9	+ 6.9	108.9	+ 6.1	122.8	+ 14.8	104.4	+ 3.3
2018	113.0	+ 2.9	114.6	+ 2.4	111.9	+ 2.8	115.5	+ 6.1	122.2	- 0.5	113.3	+ 8.5
2018 July	106.6	+ 1.7	114.3	+ 4.4	100.0	- 2.0	131.8	+ 19.9	128.9	+ 12.9	132.8	+ 22.3
Aug.	99.8	+ 2.6	105.1	+ 2.4	95.5	+ 2.4	115.1	+ 5.4	118.3	- 0.4	114.1	+ 7.4
Sep.	111.2	- 1.2	111.0	- 1.0	109.9	- 2.9	122.8	+ 12.7	130.5	+ 0.2	120.3	+ 17.8
Oct.	115.3	+ 1.0	117.6	+ 2.3	114.9	+ 0.4	110.1	- 0.2	133.0	+ 4.4	102.7	- 2.1
Nov.	112.6	- 3.3	111.7	- 9.0	114.1	+ 0.2	103.7	- 6.9	121.9	- 9.8	97.8	- 5.7
Dec.	119.4	- 5.0	102.5	- 5.8	129.8	- 5.0	99.6	- 1.2	118.1	- 5.0	93.7	+ 0.5
2019 Jan.	108.6	- 3.7	113.9	- 3.9	105.5	- 3.6	113.9	- 4.2	126.1	+ 5.0	110.0	- 7.2
Feb.	101.7	- 11.4	106.5	- 5.8	99.0	- 14.1	106.2	- 9.9	116.7	+ 2.9	102.9	- 13.8
Mar.	118.7	- 3.5	118.7	- 3.6	118.5	- 3.7	120.0	- 1.8	128.4	+ 3.5	117.3	- 3.5
Apr.	107.4	- 4.3	109.8	- 10.1	105.6	- 1.9	112.5	+ 1.4	118.6	+ 3.9	110.6	+ 0.5
May	102.7	- 8.6	104.8	- 10.9	100.9	- 8.8	109.9	+ 2.6	120.0	+ 3.5	106.6	+ 2.2
June	114.7	- 0.9	111.1	- 6.3	116.3	+ 2.7	115.3	- 8.3	133.6	+ 4.1	109.5	- 12.4
July P	103.6	- 2.8	103.0	- 9.9	102.6	+ 2.6	114.1	- 13.4	126.7	- 1.7	110.1	- 17.1

Source of the unadjusted figures: Federal Statistical Office. * At current prices; for explanatory notes, see Statistical Supplement 4 – Seasonally adjusted business statistics, Tables II.14 to II.16. ◦ Using JDemetra+ 2.2.1 (X13).

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		Industry		Public sector ²	
	Total		Housing construction		Industrial construction		Public sector construction									
	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	
2015	99.9	+ 4.7	99.9	+ 4.9	99.9	+ 12.9	99.9	- 2.1	99.8	+ 8.7	99.9	+ 4.5	99.9	+ 0.7	99.8	+ 4.9
2016	114.4	+ 14.5	115.0	+ 15.1	116.9	+ 17.0	114.9	+ 15.0	108.8	+ 9.0	113.7	+ 13.8	111.7	+ 11.8	116.0	+ 16.2
2017	122.4	+ 7.0	123.1	+ 7.0	123.0	+ 5.2	123.4	+ 7.4	121.8	+ 11.9	121.6	+ 6.9	119.8	+ 7.3	125.0	+ 7.8
2018	134.7	+ 10.0	131.2	+ 6.6	136.6	+ 11.1	127.9	+ 3.6	125.2	+ 2.8	138.8	+ 14.1	135.7	+ 13.3	132.5	+ 6.0
2018 June	147.1	+ 5.6	141.7	+ 0.7	142.5	- 1.0	136.1	+ 3.0	159.7	- 1.0	153.4	+ 11.3	136.8	+ 7.5	161.6	+ 7.4
July	142.2	+ 7.3	142.1	+ 12.4	142.3	+ 14.9	143.8	+ 11.0	134.9	+ 10.0	142.4	+ 2.0	144.4	+ 13.7	139.7	- 3.0
Aug.	128.7	+ 10.5	119.8	+ 5.5	125.7	+ 13.2	116.5	+ 2.6	112.3	- 8.5	139.0	+ 16.0	127.3	+ 13.0	132.0	+ 6.4
Sep.	139.7	+ 14.2	143.6	+ 16.9	155.9	+ 28.7	130.4	+ 9.0	152.2	+ 8.5	135.3	+ 11.1	134.8	+ 13.9	135.6	+ 6.2
Oct.	132.1	+ 15.8	128.6	+ 11.6	141.3	+ 14.3	122.2	+ 14.8	110.8	- 7.7	136.1	+ 20.5	134.4	+ 24.0	123.8	+ 7.7
Nov.	128.6	+ 13.9	125.6	+ 6.6	139.5	+ 23.0	117.1	- 6.8	111.8	+ 9.2	131.9	+ 23.0	136.7	+ 10.0	112.5	+ 13.2
Dec.	150.5	+ 12.4	145.7	- 2.1	166.6	+ 12.1	135.1	- 14.2	116.5	- 1.1	156.1	+ 34.0	164.1	+ 15.3	125.2	+ 8.5
2019 Jan.	117.3	+ 18.2	120.8	+ 19.8	123.8	+ 21.3	123.7	+ 19.6	99.7	+ 15.0	113.3	+ 16.3	126.5	+ 19.6	102.8	+ 14.3
Feb.	132.9	+ 7.1	129.4	+ 9.7	119.0	+ 5.5	134.4	+ 7.8	145.1	+ 31.7	137.0	+ 4.4	132.4	- 2.9	141.9	+ 21.3
Mar.	171.7	+ 17.9	163.9	+ 16.8	170.3	+ 22.9	158.4	+ 15.6	163.1	+ 3.2	180.9	+ 19.2	166.5	+ 21.1	178.7	+ 12.2
Apr.	153.1	+ 12.7	149.0	+ 14.0	149.8	+ 6.2	151.6	+ 20.5	136.8	+ 19.6	157.9	+ 11.4	145.5	+ 14.6	163.9	+ 14.8
May	147.7	+ 3.4	144.6	+ 5.6	146.8	+ 12.3	148.8	+ 4.1	121.6	- 9.9	151.4	+ 1.2	148.0	+ 3.7	148.0	- 1.5
June	162.2	+ 10.3	161.7	+ 14.1	158.3	+ 11.1	164.1	+ 20.6	164.0	+ 2.7	162.8	+ 6.1	166.2	+ 21.5	159.9	- 1.1

Source of the unadjusted figures: Federal Statistical Office. * At current prices; excluding value added tax; for explanatory notes, see Statistical Supplement – Seasonally

adjusted business statistics, Table II.21. ◦ Using JDemetra+ 2.2.1 (X13). 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													Retail sale via mail order houses or via internet as well as other retail sale ²			
	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								
	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change		
2015	3	100.1	+ 3.7	3	100.1	+ 3.8	100.1	+ 2.9	100.2	+ 0.3	100.2	+ 1.0	100.2	+ 2.7	3	100.0	+ 20.0
2016		102.5	+ 2.4		102.2	+ 2.1	101.7	+ 1.6	101.0	+ 0.8	99.9	- 0.3	101.5	+ 1.3		103.9	+ 9.8
2017		107.6	+ 5.0		105.8	+ 3.5	105.9	+ 4.1	108.2	+ 7.1	106.2	+ 6.3	103.0	+ 1.5		107.7	+ 9.7
2018	4	110.6	+ 2.8		107.4	+ 1.5	109.5	+ 3.4	105.5	- 2.5	107.0	+ 0.8	103.0	± 0.0		112.5	+ 6.1
2018 July		110.6	+ 2.9		108.3	+ 1.8	110.6	+ 2.7	105.3	- 2.1	96.1	- 4.9	102.6	- 1.3		115.8	+ 10.3
Aug.		106.5	+ 3.4		103.8	+ 1.9	107.4	+ 3.4	98.4	- 1.1	97.2	+ 0.1	96.3	- 0.8		110.0	+ 5.7
Sep.		107.8	+ 2.0		103.9	+ 0.3	105.6	+ 2.7	108.6	- 8.4	108.2	+ 5.6	98.8	- 0.4		110.7	+ 7.4
Oct.		114.3	+ 3.6		110.0	+ 2.0	110.7	+ 4.3	116.2	- 2.3	107.8	- 1.3	108.2	- 0.6		115.4	+ 12.5
Nov.		118.8	+ 3.4		114.6	+ 2.0	109.3	+ 0.9	112.2	- 0.2	131.5	+ 6.9	112.0	+ 2.0		118.1	+ 7.7
Dec.		128.7	- 0.5		125.0	- 1.2	126.4	+ 0.6	121.9	- 4.7	157.2	- 2.8	109.6	- 2.2		124.5	- 0.1
2019 Jan.		103.9	+ 3.8		101.4	+ 3.3	102.1	+ 3.0	87.5	- 2.5	112.1	+ 2.0	92.1	+ 2.0		113.7	+ 10.4
Feb.		101.6	+ 5.6		98.6	+ 4.7	101.2	+ 3.1	82.7	+ 5.5	94.2	+ 1.9	94.4	+ 4.8		110.2	+ 11.7
Mar.		115.8	+ 4.5		112.1	+ 4.1	114.0	+ 3.4	104.2	+ 4.1	105.2	+ 1.3	114.9	+ 7.4		117.4	+ 6.3
Apr.		114.9	+ 1.6		110.6	+ 0.8	113.2	+ 0.4	110.0	- 8.0	93.5	+ 2.9	114.8	+ 1.1		116.4	+ 9.2
May		113.3	+ 2.3		108.8	+ 1.5	111.6	- 0.8	103.2	- 5.6	94.2	+ 5.6	110.2	+ 4.1		115.6	+ 6.0
June		114.9	+ 4.7		110.8	+ 4.0	115.5	+ 3.3	116.5	+ 9.3	97.6	- 2.0	106.7	+ 5.0		114.7	+ 13.5
July		114.6	+ 3.6		110.9	+ 2.4	113.6	+ 2.7	105.8	+ 0.5	94.2	- 2.0	108.1	+ 5.4		117.5	+ 9.4

Source of the unadjusted figures: Federal Statistical Office. * Excluding value added tax; for explanatory notes, see Statistical Supplement 4 – 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 2018 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						Short-time workers 3		Unemployment 4		Unemployment rate 4, 5 in %	Vacancies, 4, 6 thousands
	Thousands	Annual percentage change	Total		of which:			Total	of which: Cyclically induced	Total	of which: Assigned to the legal category of the Third Book of the Social Security Code (SGB III)			
			Thousands	Annual percentage change	Production sector	Services excluding temporary employment	Temporary employment					Solely jobs exempt from social contributions 2		
Thousands														
2014	42,721	+ 0.9	30,197	+ 1.6	8,860	20,332	770	5,029	134	49	2,898	933	6.7	490
2015	43,122	+ 0.9	30,823	+ 2.1	8,938	20,840	806	4,856	130	44	2,795	859	6.4	569
2016	43,655	+ 1.2	31,508	+ 2.2	9,028	21,407	834	4,804	128	42	2,691	822	6.1	655
2017	44,248	+ 1.4	32,234	+ 2.3	9,146	21,980	868	4,742	114	24	2,533	785	5.7	731
2018	44,854	+ 1.4	32,964	+ 2.3	9,349	22,532	840	4,671	118	25	2,340	802	5.2	796
2016 Q2	43,568	+ 1.2	31,350	+ 2.2	8,988	21,298	820	4,823	59	47	2,674	782	6.1	653
2016 Q3	43,830	+ 1.2	31,593	+ 2.1	9,056	21,431	858	4,827	46	35	2,651	808	6.0	682
2016 Q4	44,091	+ 1.3	32,014	+ 2.2	9,137	21,770	866	4,781	93	36	2,547	766	5.8	677
2017 Q1	43,720	+ 1.4	31,790	+ 2.3	9,040	21,697	830	4,728	307	41	2,734	787	6.2	671
2017 Q2	44,153	+ 1.3	32,064	+ 2.3	9,110	21,857	852	4,762	36	25	2,513	822	5.6	717
2017 Q3	44,436	+ 1.4	32,324	+ 2.3	9,172	22,011	892	4,766	28	16	2,504	833	5.6	763
2017 Q4	44,684	+ 1.3	32,759	+ 2.3	9,263	22,354	900	4,711	82	15	2,381	780	5.3	771
2018 Q1	44,380	+ 1.5	32,563	+ 2.4	9,214	22,279	843	4,664	325	24	2,525	909	5.7	760
2018 Q2	44,776	+ 1.4	32,802	+ 2.3	9,296	22,414	843	4,701	23	14	2,325	760	5.1	794
2018 Q3	45,016	+ 1.3	33,040	+ 2.2	9,387	22,546	855	4,694	35	27	2,311	784	5.1	828
2018 Q4	45,244	+ 1.3	33,452	+ 2.1	9,498	22,890	819	4,627	88	35	2,200	755	4.9	804
2019 Q1	44,887	+ 1.1	33,214	+ 2.0	9,420	22,803	819	4,581	8	34	2,360	892	5.2	780
2019 Q2	45,211	+ 1.0	33,378	+ 1.8	9,455	22,924	750	4,618	8	45	2,227	778	4.9	795
2016 Apr.	43,411	+ 1.2	31,314	+ 2.2	8,983	21,279	809	4,806	67	55	2,744	817	6.3	640
2016 May	43,591	+ 1.2	31,410	+ 2.3	9,000	21,337	826	4,838	57	45	2,664	774	6.0	655
2016 June	43,703	+ 1.2	31,443	+ 2.2	9,010	21,339	846	4,865	54	42	2,614	754	5.9	665
2016 July	43,697	+ 1.1	31,378	+ 2.1	9,007	21,273	853	4,863	43	31	2,661	805	6.0	674
2016 Aug.	43,768	+ 1.2	31,675	+ 2.2	9,076	21,486	865	4,802	50	38	2,684	830	6.1	685
2016 Sep.	44,024	+ 1.2	32,007	+ 2.2	9,157	21,729	869	4,768	46	35	2,608	787	5.9	687
2016 Oct.	44,102	+ 1.2	32,045	+ 2.2	9,154	21,773	871	4,767	50	39	2,540	756	5.8	691
2016 Nov.	44,154	+ 1.2	32,069	+ 2.2	9,147	21,807	876	4,794	52	40	2,532	756	5.7	681
2016 Dec.	44,016	+ 1.3	31,848	+ 2.2	9,063	21,731	835	4,794	178	30	2,568	785	5.8	658
2017 Jan.	43,640	+ 1.4	31,707	+ 2.3	9,017	21,648	825	4,719	370	43	2,777	1,010	6.3	647
2017 Feb.	43,692	+ 1.4	31,774	+ 2.3	9,032	21,690	828	4,706	335	42	2,762	1,014	6.3	675
2017 Mar.	43,829	+ 1.4	31,930	+ 2.3	9,078	21,777	838	4,722	216	40	2,662	935	6.0	692
2017 Apr.	43,999	+ 1.4	32,013	+ 2.2	9,101	21,831	838	4,748	39	27	2,569	861	5.8	706
2017 May	44,168	+ 1.3	32,131	+ 2.3	9,124	21,900	859	4,775	36	25	2,498	810	5.6	714
2017 June	44,291	+ 1.3	32,165	+ 2.3	9,135	21,902	878	4,802	33	22	2,473	796	5.5	731
2017 July	44,330	+ 1.4	32,128	+ 2.4	9,123	21,869	890	4,803	30	18	2,518	842	5.6	750
2017 Aug.	44,371	+ 1.4	32,396	+ 2.3	9,189	22,060	896	4,739	28	15	2,545	855	5.7	765
2017 Sep.	44,606	+ 1.3	32,732	+ 2.3	9,272	22,304	901	4,711	28	16	2,449	800	5.5	773
2017 Oct.	44,678	+ 1.3	32,778	+ 2.3	9,274	22,355	901	4,696	27	16	2,389	772	5.4	780
2017 Nov.	44,749	+ 1.3	32,830	+ 2.4	9,278	22,395	916	4,720	26	16	2,368	772	5.3	772
2017 Dec.	44,625	+ 1.4	32,609	+ 2.4	9,202	22,319	867	4,722	194	12	2,385	796	5.3	761
2018 Jan.	44,326	+ 1.6	32,504	+ 2.5	9,191	22,249	841	4,660	287	23	2,570	941	5.8	736
2018 Feb.	44,358	+ 1.5	32,551	+ 2.4	9,223	22,262	838	4,642	359	23	2,546	927	5.7	764
2018 Mar.	44,456	+ 1.4	32,660	+ 2.3	9,253	22,334	837	4,656	327	27	2,458	859	5.5	778
2018 Apr.	44,632	+ 1.4	32,782	+ 2.4	9,291	22,404	840	4,686	23	13	2,384	796	5.3	784
2018 May	44,812	+ 1.5	32,857	+ 2.3	9,310	22,450	845	4,718	21	12	2,315	751	5.1	793
2018 June	44,885	+ 1.3	32,870	+ 2.2	9,325	22,439	853	4,742	25	16	2,276	735	5.0	805
2018 July	44,918	+ 1.3	32,844	+ 2.2	9,339	22,396	860	4,736	22	14	2,325	788	5.1	823
2018 Aug.	44,968	+ 1.3	33,131	+ 2.3	9,412	22,609	856	4,664	41	33	2,351	804	5.2	828
2018 Sep.	45,161	+ 1.2	33,422	+ 2.1	9,496	22,827	842	4,619	42	34	2,256	759	5.0	834
2018 Oct.	45,249	+ 1.3	33,488	+ 2.2	9,515	22,895	827	4,616	46	37	2,204	742	4.9	824
2018 Nov.	45,312	+ 1.3	33,513	+ 2.1	9,513	22,934	822	4,638	51	43	2,186	745	4.8	807
2018 Dec.	45,170	+ 1.2	33,286	+ 2.1	9,434	22,854	773	4,637	166	26	2,210	777	4.9	781
2019 Jan.	44,839	+ 1.2	33,156	+ 2.0	9,405	22,762	763	4,574	354	42	2,406	919	5.3	758
2019 Feb.	44,870	+ 1.2	33,199	+ 2.0	9,416	22,794	758	4,576	310	29	2,373	908	5.3	784
2019 Mar.	44,951	+ 1.1	33,289	+ 1.9	9,444	22,856	750	4,564	8	33	2,301	850	5.1	797
2019 Apr.	45,097	+ 1.0	33,374	+ 1.8	9,456	22,918	752	4,611	8	43	2,229	795	4.9	796
2019 May	45,240	+ 1.0	33,422	+ 1.7	9,460	22,961	748	4,632	8	47	2,236	772	4.9	792
2019 June	45,295	+ 0.9	33,385	+ 1.6	9,452	22,932	749	4,649	8	45	2,216	766	4.9	798
2019 July	45,292	+ 0.8	...	...	...	...	...	...	...	...	2,275	825	5.0	799
2019 Aug.	...	...	...	...	...	...	...	...	...	...	2,319	848	5.1	795

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 Number within a given month. 4 Mid-month level. 5 Relative to the total civilian labour force. 6 Excluding government-assisted forms of employment, including jobs located abroad. 7 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). 8 Unadjusted figures estimated by the Federal

Employment Agency. In 2017 and 2018 the estimated values for Germany deviated from the final data by a maximum of 0.2% for employees subject to social contributions, by a maximum of 0.4% for persons solely in jobs exempt from social contributions, and by a maximum of 70.0% for cyclically induced short-time work. 9 Initial preliminary estimate by the Federal Statistical Office. 10 Statistical break due to late recording of unemployed persons in the legal category of the Second Book of the Social Security Code (SGB II). 11 From May 2019 calculated on the basis of new labour force figures.

XI. Economic conditions in Germany

7. Prices

Period	Harmonised Index of Consumer Prices						Memo item: Consumer price index (national concept)	Construction price index	Index of producer prices of industrial products sold on the domestic market 6	Index of producer prices of agricultural products 6	Indices of foreign trade prices		HWWI Index of World Market Prices of Raw Materials 7	
	of which: 1					Actual rents for housing					Exports	Imports	Energy 8	Other raw materials 9
	Total 2	Food 3	Non-energy industrial goods 4	Energy 4, 5	Services 2, 4									
2015 = 100														
Index level														
2015	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2016	100.4	101.3	101.0	94.6	101.1	101.2	100.5	101.9	98.4	98.7	99.0	96.7	83.2	98.4
2017	102.1	104.0	102.2	97.5	102.5	102.9	102.0	105.3	101.1	108.6	100.7	100.1	99.6	107.1
2018	104.0	106.7	103.0	102.3	104.2	104.6	103.8	110.2	103.7	108.8	101.9	102.7	124.6	106.2
2017 Oct.	102.7	104.8	103.1	97.4	103.1	103.3	102.5		101.6	109.6	100.6	99.9	101.6	102.7
Nov.	102.0	104.8	103.1	98.7	101.3	103.5	102.1	106.5	101.7	109.4	100.8	100.6	110.3	103.8
Dec.	102.7	105.5	102.7	98.5	102.8	103.6	102.6		101.9	108.9	100.8	100.8	113.7	103.6
2018 Jan.	101.7	106.2	101.7	98.9	100.8	103.9	102.0		102.4	105.2	101.1	101.4	115.9	105.4
Feb.	102.2	106.2	102.1	98.5	101.9	104.0	102.3	108.3	102.3	104.8	101.0	100.9	108.7	106.0
Mar.	103.0	106.4	103.1	97.9	102.9	104.1	102.9		102.4	105.8	101.1	100.8	109.5	104.9
Apr.	103.2	106.8	103.3	99.5	102.8	104.3	103.1		102.8	105.6	101.3	101.4	116.7	106.1
May	104.3	106.9	103.2	101.9	104.6	104.4	103.9	109.4	103.3	104.4	101.8	102.9	129.9	112.5
June	104.4	106.9	102.8	102.4	104.9	104.5	104.0		103.7	104.6	102.1	103.4	130.5	111.3
July	105.2	106.6	101.7	102.3	107.4	104.7	104.4		103.9	107.1	102.2	103.3	129.9	105.8
Aug.	105.2	106.4	102.3	103.1	107.0	104.8	104.5	111.0	104.2	110.5	102.4	103.3	130.5	105.7
Sep.	105.3	107.1	103.8	105.1	105.6	104.9	104.7		104.7	111.5	102.4	103.7	140.8	102.7
Oct.	105.4	107.1	104.1	106.1	105.5	105.0	104.9		105.0	111.2	102.6	104.7	144.7	105.5
Nov.	104.2	107.0	104.1	108.0	102.4	105.1	104.2	112.0	105.1	111.6	102.5	103.7	123.7	105.2
Dec.	104.4	107.0	103.8	103.5	104.0	105.2	104.2		104.7	111.5	102.1	102.4	111.4	103.2
2019 Jan.	103.4	107.4	102.9	101.5	102.9	105.4	103.4		105.1	111.3	102.2	102.2	112.3	104.4
Feb.	103.9	107.9	103.4	101.7	103.6	105.6	103.8	114.0	105.0	112.0	102.3	102.5	114.3	109.4
Mar.	104.4	107.7	103.9	102.4	104.1	105.7	104.2		104.9	112.9	102.4	102.5	115.2	108.3
Apr.	105.4	107.9	104.6	104.4	105.3	105.8	105.2		105.4	115.4	102.6	102.8	119.2	108.8
May	105.7	108.3	104.6	106.1	105.3	105.9	105.4	115.0	105.3	115.5	102.5	102.7	116.6	106.6
June	106.0	108.4	104.1	104.9	106.6	106.1	105.7		104.9	115.0	102.3	101.3	102.8	108.6
July	106.4	108.7	103.3	104.7	107.9	106.2	106.2		105.0	114.2	102.4	101.1	105.7	113.0
Aug.	106.3	108.8	103.4	103.8	107.8	106.3	106.0	...	...	...	...	...	100.2	106.0
Annual percentage change														
2015	+ 0.7	+ 1.2	+ 0.8	- 7.0	+ 2.5	+ 1.2	+ 0.5	+ 1.4	- 1.9	- 5.3	+ 0.9	- 2.8	- 30.0	- 7.7
2016	+ 0.4	+ 1.3	+ 1.0	- 5.4	+ 1.1	+ 1.2	+ 0.5	+ 1.9	- 1.6	- 1.3	- 1.0	- 3.3	- 16.8	- 1.6
2017	+ 1.7	+ 2.7	+ 1.2	+ 3.1	+ 1.4	+ 1.7	+ 1.5	+ 3.3	+ 2.7	+ 10.0	+ 1.7	+ 3.5	+ 19.7	+ 8.8
2018	+ 1.9	+ 2.6	+ 0.8	+ 4.9	+ 1.6	+ 1.6	+ 1.8	+ 4.7	+ 2.6	10 + 0.2	+ 1.2	+ 2.6	+ 25.1	- 0.8
2017 Oct.	+ 1.5	+ 3.6	+ 1.1	+ 1.2	+ 1.1	+ 1.6	+ 1.3		+ 2.8	+ 8.5	+ 1.3	+ 2.5	+ 5.6	+ 2.9
Nov.	+ 1.7	+ 2.7	+ 1.1	+ 3.7	+ 1.4	+ 1.7	+ 1.6	+ 3.8	+ 2.6	+ 5.8	+ 1.1	+ 2.3	+ 15.6	- 4.3
Dec.	+ 1.5	+ 2.8	+ 1.1	+ 1.2	+ 1.4	+ 1.6	+ 1.4		+ 2.3	+ 3.4	+ 0.5	+ 0.7	+ 6.7	- 9.1
2018 Jan.	+ 1.5	+ 2.9	+ 1.0	+ 0.7	+ 1.3	+ 1.7	+ 1.4		+ 2.1	- 1.0	+ 0.4	+ 0.6	+ 6.4	- 9.1
Feb.	+ 1.2	+ 1.5	+ 1.1	+ 0.1	+ 1.5	+ 1.7	+ 1.1	+ 4.2	+ 1.8	- 2.1	+ 0.1	- 0.5	- 1.4	- 10.8
Mar.	+ 1.7	+ 2.9	+ 0.6	+ 0.4	+ 2.1	+ 1.7	+ 1.5		+ 1.8	- 2.4	+ 0.2	- 0.3	+ 9.8	- 9.9
Apr.	+ 1.3	+ 3.3	+ 0.6	+ 1.2	+ 1.0	+ 1.7	+ 1.3		+ 1.9	- 4.3	+ 0.2	+ 0.4	+ 16.2	- 3.6
May	+ 2.5	+ 3.3	+ 0.5	+ 5.2	+ 2.5	+ 1.6	+ 2.1	+ 4.3	+ 2.5	- 6.5	+ 1.0	+ 2.9	+ 39.5	+ 8.0
June	+ 2.1	+ 3.2	+ 0.8	+ 6.6	+ 1.4	+ 1.6	+ 1.9		+ 2.9	- 6.7	+ 1.5	+ 4.4	+ 52.3	+ 10.9
July	+ 2.2	+ 2.7	+ 0.4	+ 6.7	+ 2.1	+ 1.7	+ 1.9		+ 2.9	- 4.2	+ 1.7	+ 4.8	+ 50.2	+ 2.8
Aug.	+ 2.1	+ 2.5	+ 0.6	+ 7.1	+ 1.7	+ 1.6	+ 1.9	+ 5.0	+ 3.1	- 1.7	+ 2.1	+ 4.8	+ 44.8	+ 2.3
Sep.	+ 2.2	+ 2.9	+ 1.0	+ 7.8	+ 1.5	+ 1.6	+ 1.9		+ 3.2	10 + 1.2	+ 1.9	+ 4.4	+ 46.2	- 0.1
Oct.	+ 2.6	+ 2.2	+ 1.0	+ 8.9	+ 2.3	+ 1.6	+ 2.3		+ 3.3	+ 1.5	+ 2.0	+ 4.8	+ 42.4	+ 2.7
Nov.	+ 2.2	+ 2.1	+ 1.0	+ 9.4	+ 1.1	+ 1.5	+ 2.1	+ 5.2	+ 3.3	+ 2.0	+ 1.7	+ 3.1	+ 12.1	+ 1.3
Dec.	+ 1.7	+ 1.4	+ 1.1	+ 5.1	+ 1.2	+ 1.5	+ 1.6		+ 2.7	+ 2.4	+ 1.3	+ 1.6	- 2.0	- 0.4
2019 Jan.	+ 1.7	+ 1.1	+ 1.2	+ 2.6	+ 2.1	+ 1.4	+ 1.4		+ 2.6	+ 5.8	+ 1.1	+ 0.8	- 3.1	- 0.9
Feb.	+ 1.7	+ 1.6	+ 1.3	+ 3.2	+ 1.7	+ 1.5	+ 1.5	+ 5.3	+ 2.6	+ 6.9	+ 1.3	+ 1.6	+ 5.2	+ 3.2
Mar.	+ 1.4	+ 1.2	+ 0.8	+ 4.6	+ 1.2	+ 1.5	+ 1.3		+ 2.4	+ 6.7	+ 1.3	+ 1.7	+ 5.2	+ 3.2
Apr.	+ 2.1	+ 1.0	+ 1.3	+ 4.9	+ 2.4	+ 1.4	+ 2.0		+ 2.5	+ 9.3	+ 1.3	+ 1.4	+ 2.1	+ 2.5
May	+ 1.3	+ 1.3	+ 1.4	+ 4.1	+ 0.7	+ 1.4	+ 1.4	+ 5.1	+ 1.9	+ 10.6	+ 0.7	- 0.2	- 10.2	- 5.2
June	+ 1.5	+ 1.4	+ 1.3	+ 2.4	+ 1.6	+ 1.5	+ 1.6		+ 1.2	+ 9.9	+ 0.2	- 2.0	- 21.2	- 2.4
July	+ 1.1	+ 2.0	+ 1.6	+ 2.3	+ 0.5	+ 1.4	+ 1.7		+ 1.1	+ 6.6	+ 0.2	- 2.1	- 18.6	+ 6.8
Aug.	+ 1.0	+ 2.3	+ 1.1	+ 0.7	+ 0.7	+ 1.4	+ 1.4	...	...	...	...	...	- 23.2	+ 0.3

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 Deviations from the official figures are due to rounding. 2 With effect from 2015, methodological changes to the collection of data on the prices of package holidays, impacting until the beginning of the series. 3 Including alcoholic beverages and tobacco. 4 Modified procedure as of 2017 due to calculations on the

basis of the five digit structure set out in the European Classification of Individual Consumption according to Purpose (ECOICOP). 5 Electricity, gas and other fuels as well as transport fuels and lubricants, from January 2017 excluding lubricants. 6 Excluding value added tax. 7 For the euro area, in euro. 8 Coal, crude oil (Brent) and natural gas. 9 Food, beverages and tobacco as well as industrial raw materials. 10 From September 2018 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
2011	1,103.5	4.9	746.4	4.0	371.1	- 1.3	1,117.5	2.2	1,628.1	3.3	163.1	0.5	10.0
2012	1,150.0	4.2	776.1	4.0	376.8	1.5	1,152.9	3.2	1,668.4	2.5	161.0	- 1.3	9.7
2013	1,186.3	3.2	799.4	3.0	383.9	1.9	1,183.2	2.6	1,690.8	1.3	157.1	- 2.5	9.3
2014	1,234.2	4.0	830.5	3.9	394.0	2.6	1,224.5	3.5	1,734.5	2.6	170.6	8.6	9.8
2015	1,285.5	4.2	863.3	4.0	410.2	4.1	1,273.5	4.0	1,781.5	2.7	179.2	5.1	10.1
2016	1,337.4	4.0	896.9	3.9	425.6	3.7	1,322.4	3.8	1,836.2	3.1	186.4	4.0	10.2
2017	1,394.0	4.2	932.0	3.9	441.5	3.7	1,373.4	3.9	1,894.4	3.2	197.4	5.9	10.4
2018	1,460.9	4.8	975.5	4.7	451.8	2.3	1,427.3	3.9	1,958.2	3.4	214.5	8.6	11.0
2018 Q1	340.2	4.7	227.6	4.6	113.9	2.1	341.5	3.8	492.5	3.8	70.8	8.1	14.4
Q2	355.8	4.8	232.3	4.6	111.6	2.3	343.9	3.9	482.3	3.4	50.2	9.0	10.4
Q3	361.7	5.1	246.5	5.0	113.6	2.4	360.1	4.2	486.0	2.8	45.1	9.1	9.3
Q4	403.3	4.6	269.0	4.4	112.8	2.5	381.8	3.9	497.5	3.5	48.4	8.7	9.7
2019 Q1	354.7	4.3	238.5	4.8	117.5	3.2	356.0	4.2	503.8	2.3	73.0	3.2	14.5
Q2	371.2	4.3	243.5	4.8	117.1	4.9	360.6	4.9	497.1	3.1	51.8	3.1	10.4

Source: Federal Statistical Office; figures computed in August 2019. * 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					
2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	
2011	90.3	1.7	90.5	1.7	90.4	1.7	90.3	1.7	89.8	3.5
2012	92.7	2.6	92.9	2.6	92.9	2.8	92.8	2.8	92.4	2.9
2013	95.0	2.5	95.1	2.5	95.2	2.5	95.1	2.5	94.4	2.2
2014	97.8	2.9	97.8	2.8	97.8	2.7	97.7	2.7	97.2	3.0
2015	100.0	2.3	100.0	2.2	100.0	2.3	100.0	2.3	100.0	2.9
2016	102.1	2.1	102.1	2.1	102.1	2.1	102.2	2.2	102.5	2.5
2017	104.2	2.1	104.2	2.1	104.3	2.2	104.6	2.3	105.1	2.6
2018	107.2	2.9	107.2	2.9	107.1	2.7	107.4	2.7	108.4	3.1
2018 Q1	99.0	2.3	99.0	2.3	98.9	2.1	106.0	2.2	102.1	2.9
Q2	100.9	3.3	100.9	3.3	100.7	3.0	107.5	3.0	105.9	3.1
Q3	109.6	2.9	109.6	2.9	109.7	2.9	107.9	2.8	107.2	3.6
Q4	119.2	2.9	119.3	2.9	119.2	2.7	108.3	2.8	118.5	3.1
2019 Q1	101.9	2.9	101.9	2.9	101.9	3.0	109.1	3.0	105.0	2.9
Q2	103.0	2.1	103.0	2.1	102.9	2.2	109.8	2.2	109.1	3.1
2019 Jan.	101.7	3.1	101.7	3.1	101.8	3.1	109.0	3.1	.	.
Feb.	102.1	3.4	102.1	3.4	101.9	3.1	109.1	3.1	.	.
Mar.	101.8	2.2	101.8	2.2	101.9	2.8	109.2	2.8	.	.
Apr.	102.9	2.3	102.9	2.3	103.0	2.5	109.8	2.5	.	.
May	103.0	1.3	103.0	1.3	103.1	2.1	109.8	2.0	.	.
June	103.2	2.6	103.2	2.6	102.6	1.9	109.9	2.0	.	.
July	135.8	6.6	135.8	6.6	130.9	2.7	110.3	2.3	.	.

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

and retirement provisions). ³ Source: Federal Statistical Office; figures computed in August 2019.

XI. Economic conditions in Germany

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

Period	End of year/half															
	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)																
2015	2,226.8	1,395.1	470.7	565.7	273.1	831.8	215.5	190.5	136.1	633.5	1,593.4	861.4	466.2	732.0	222.8	180.3
2016	2,367.7	1,478.1	493.4	595.9	288.9	889.6	226.8	218.0	150.5	672.2	1,695.6	889.3	482.6	806.3	249.1	192.8
2017	2,400.8	1,490.0	500.0	602.9	295.9	910.8	230.6	225.7	158.2	758.8	1,642.0	867.3	496.4	774.7	236.4	195.7
2018 p,3	2,595.6	1,539.2	542.4	611.3	290.2	1,056.4	249.5	235.8	175.5	792.4	1,803.2	927.6	560.2	875.6	257.4	205.1
2017 H1	2,385.4	1,471.8	502.9	584.4	288.6	913.5	238.2	220.8	149.9	701.7	1,683.6	888.0	498.3	795.7	246.2	194.9
H2	2,400.8	1,490.0	500.0	602.9	295.9	910.8	230.6	225.7	158.2	758.8	1,642.0	867.3	496.4	774.7	236.4	195.7
2018 H1 3	2,551.8	1,533.0	541.7	602.5	289.8	1,018.8	250.1	236.1	143.3	775.6	1,776.2	909.4	541.0	866.7	254.7	210.2
H2 p	2,595.6	1,539.2	542.4	611.3	290.2	1,056.4	249.5	235.8	175.5	792.4	1,803.2	927.6	560.2	875.6	257.4	205.1
As a percentage of total assets																
2015	100.0	62.7	21.1	25.4	12.3	37.4	9.7	8.6	6.1	28.5	71.6	38.7	20.9	32.9	10.0	8.1
2016	100.0	62.4	20.8	25.2	12.2	37.6	9.6	9.2	6.4	28.4	71.6	37.6	20.4	34.1	10.5	8.1
2017	100.0	62.1	20.8	25.1	12.3	37.9	9.6	9.4	6.6	31.6	68.4	36.1	20.7	32.3	9.9	8.2
2018 p,3	100.0	59.3	20.9	23.6	11.2	40.7	9.6	9.1	6.8	30.5	69.5	35.7	21.6	33.7	9.9	7.9
2017 H1	100.0	61.7	21.1	24.5	12.1	38.3	10.0	9.3	6.3	29.4	70.6	37.2	20.9	33.4	10.3	8.2
H2	100.0	62.1	20.8	25.1	12.3	37.9	9.6	9.4	6.6	31.6	68.4	36.1	20.7	32.3	9.9	8.2
2018 H1 3	100.0	60.1	21.2	23.6	11.4	39.9	9.8	9.3	5.6	30.4	69.6	35.6	21.2	34.0	10.0	8.2
H2 p	100.0	59.3	20.9	23.6	11.2	40.7	9.6	9.1	6.8	30.5	69.5	35.7	21.6	33.7	9.9	7.9
Groups with a focus on the production sector (€ billion) ²																
2015	1,782.4	1,077.8	304.0	447.3	259.0	704.6	198.8	147.1	104.4	485.2	1,297.2	690.4	354.0	606.8	198.4	127.5
2016	1,910.1	1,147.2	322.5	473.9	270.8	762.9	209.7	170.0	115.5	514.5	1,395.7	715.9	370.3	679.8	223.1	140.9
2017	1,936.3	1,150.3	323.1	474.5	281.8	786.0	212.5	175.2	127.0	588.2	1,348.0	698.4	381.6	649.6	215.5	148.4
2018 p,3	2,093.2	1,173.8	359.3	462.9	277.5	919.4	231.4	182.2	136.5	612.2	1,481.0	741.9	428.3	739.1	231.3	150.7
2017 H1	1,923.5	1,138.9	325.9	465.1	273.1	784.6	224.2	171.9	125.4	550.6	1,372.9	709.7	379.4	663.2	224.4	153.2
H2	1,936.3	1,150.3	323.1	474.5	281.8	786.0	212.5	175.2	127.0	588.2	1,348.0	698.4	381.6	649.6	215.5	148.4
2018 H1 3	2,072.0	1,177.0	360.2	460.4	277.5	895.0	232.7	185.6	115.2	604.9	1,467.0	727.9	411.2	739.2	229.5	167.5
H2 p	2,093.2	1,173.8	359.3	462.9	277.5	919.4	231.4	182.2	136.5	612.2	1,481.0	741.9	428.3	739.1	231.3	150.7
As a percentage of total assets																
2015	100.0	60.5	17.1	25.1	14.5	39.5	11.2	8.3	5.9	27.2	72.8	38.7	19.9	34.1	11.1	7.2
2016	100.0	60.1	16.9	24.8	14.2	39.9	11.0	8.9	6.1	26.9	73.1	37.5	19.4	35.6	11.7	7.4
2017	100.0	59.4	16.7	24.5	14.6	40.6	11.0	9.1	6.6	30.4	69.6	36.1	19.7	33.6	11.1	7.7
2018 p,3	100.0	56.1	17.2	22.1	13.3	43.9	11.1	8.7	6.5	29.3	70.8	35.4	20.5	35.3	11.1	7.2
2017 H1	100.0	59.2	16.9	24.2	14.2	40.8	11.7	8.9	6.5	28.6	71.4	36.9	19.7	34.5	11.7	8.0
H2	100.0	59.4	16.7	24.5	14.6	40.6	11.0	9.1	6.6	30.4	69.6	36.1	19.7	33.6	11.1	7.7
2018 H1 3	100.0	56.8	17.4	22.2	13.4	43.2	11.2	9.0	5.6	29.2	70.8	35.1	19.9	35.7	11.1	8.1
H2 p	100.0	56.1	17.2	22.1	13.3	43.9	11.1	8.7	6.5	29.3	70.8	35.4	20.5	35.3	11.1	7.2
Groups with a focus on the services sector (€ billion)																
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	457.6	330.9	170.9	122.0	18.1	126.7	17.1	48.0	34.9	157.7	299.9	173.4	112.3	126.5	25.9	51.9
2017	464.5	339.7	176.9	128.4	14.1	124.8	18.1	50.4	31.3	170.6	293.9	168.9	114.8	125.0	20.9	47.3
2018 p,3	502.4	365.4	183.1	148.4	12.7	137.1	18.2	53.6	38.9	180.2	322.2	185.7	131.9	136.5	26.2	54.4
2017 H1	461.9	332.9	177.0	119.3	15.5	129.0	14.0	48.8	24.5	151.1	310.7	178.3	118.9	132.5	21.8	41.8
H2	464.5	339.7	176.9	128.4	14.1	124.8	18.1	50.4	31.3	170.6	293.9	168.9	114.8	125.0	20.9	47.3
2018 H1 3	479.8	356.0	181.4	142.1	12.3	123.8	17.4	50.5	28.1	170.7	309.2	181.6	129.8	127.6	25.2	42.7
H2 p	502.4	365.4	183.1	148.4	12.7	137.1	18.2	53.6	38.9	180.2	322.2	185.7	131.9	136.5	26.2	54.4
As a percentage of total assets																
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	72.3	37.3	26.7	4.0	27.7	3.7	10.5	7.6	34.5	65.5	37.9	24.5	27.7	5.7	11.3
2017	100.0	73.1	38.1	27.6	3.0	26.9	3.9	10.9	6.7	36.7	63.3	36.4	24.7	26.9	4.5	10.2
2018 p,3	100.0	72.7	36.4	29.5	2.5	27.3	3.6	10.7	7.7	35.9	64.1	37.0	26.3	27.2	5.2	10.8
2017 H1	100.0	72.1	38.3	25.8	3.4	27.9	3.0	10.6	5.3	32.7	67.3	38.6	25.7	28.7	4.7	9.0
H2	100.0	73.1	38.1	27.6	3.0	26.9	3.9	10.9	6.7	36.7	63.3	36.4	24.7	26.9	4.5	10.2
2018 H1 3	100.0	74.2	37.8	29.6	2.6	25.8	3.6	10.5	5.9	35.6	64.4	37.8	27.1	26.6	5.2	8.9
H2 p	100.0	72.7	36.4	29.5	2.5	27.3	3.6	10.7	7.7	35.9	64.1	37.0	26.3	27.2	5.2	10.8

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

Excluding groups engaged in real estate activities. ¹ Including cash equivalents. ² Including groups in agriculture and forestry. ³ From this point onwards: significant changes in IFRS standards, impairing comparability with previous periods.

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 percentage change 4	€ billion 3	Annual percentage change 4	Weighted average	Distribution 2			€ billion 3	Annual percentage change 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																
2011	1,414.3	8.5	175.9	0.5	12.4	- 1.0	5.7	11.1	17.4	93.9	- 4.1	6.6	- 0.9	2.7	6.6	12.0
2012	1,532.9	6.6	188.8	3.2	12.3	- 0.4	5.4	10.2	17.5	95.7	- 7.7	6.2	- 0.9	2.0	6.1	11.0
2013	1,541.1	- 0.6	187.2	- 2.8	12.2	- 0.3	5.2	10.3	18.5	99.5	5.5	6.5	0.4	2.0	5.9	11.1
2014	1,565.7	1.0	198.9	4.9	12.7	0.5	5.9	10.3	17.5	109.4	8.5	7.0	0.5	1.9	6.2	11.2
2015	1,635.4	6.9	196.2	- 1.0	12.0	- 1.0	6.1	10.6	18.1	91.7	- 16.3	5.6	- 1.5	1.7	6.7	11.6
2016	1,626.1	- 0.4	214.9	8.0	13.2	1.0	6.7	11.5	18.1	112.1	9.2	6.9	0.5	2.6	6.7	12.0
2017	1,721.7	5.1	243.9	14.6	14.2	1.2	6.8	11.0	18.0	142.3	33.2	8.3	1.7	2.5	6.9	12.2
2018 p,6	1,709.6	0.7	233.5	- 0.9	13.7	- 0.2	6.3	10.6	17.8	129.8	- 6.1	7.6	- 0.6	2.3	6.5	11.9
2014 H1	757.3	- 0.9	97.3	4.6	12.8	0.7	4.8	9.6	16.2	57.9	9.4	7.6	0.7	1.1	5.3	10.7
H2	808.8	2.9	101.7	5.3	12.6	0.3	5.6	11.0	19.2	51.5	7.6	6.4	0.3	1.8	7.1	12.1
2015 H1	815.3	8.7	102.9	5.7	12.6	- 0.4	5.0	10.2	17.6	59.1	1.3	7.3	- 0.5	1.2	5.9	10.9
H2	831.4	5.1	93.6	- 7.6	11.3	- 1.5	6.3	11.5	18.5	32.7	- 36.6	3.9	- 2.5	2.3	7.2	11.7
2016 H1	782.7	- 1.9	111.8	6.3	14.3	1.1	6.1	10.5	18.0	65.7	2.9	8.4	0.4	1.7	6.4	11.4
H2	843.4	1.1	103.1	9.8	12.2	1.0	6.9	11.9	19.2	46.4	21.0	5.5	0.8	3.0	7.6	12.5
2017 H1	845.0	6.8	125.9	14.5	14.9	1.0	5.8	10.1	17.2	78.6	29.3	9.3	1.6	1.8	5.8	11.7
H2	879.8	3.5	117.7	14.7	13.4	1.3	6.9	12.0	19.4	63.2	38.3	7.2	1.8	3.0	7.5	12.4
2018 H1 6	849.5	- 0.0	120.7	- 2.5	14.2	- 0.4	5.1	10.6	18.2	72.9	- 5.2	8.6	- 0.5	1.7	6.4	12.5
H2 p	870.9	1.4	115.3	0.9	13.2	- 0.1	6.5	11.2	18.3	58.4	- 7.3	6.7	- 0.6	2.2	6.8	12.5
Groups with a focus on the production sector 5																
2011	1,079.0	10.6	130.0	- 1.7	12.1	- 1.5	5.6	11.3	16.4	74.1	- 4.9	6.9	- 1.1	2.4	6.9	11.5
2012	1,173.8	7.7	140.8	5.3	12.0	- 0.3	5.8	10.3	16.1	81.7	2.2	7.0	- 0.4	1.9	6.1	9.8
2013	1,179.0	- 0.8	138.8	- 2.6	11.8	- 0.2	5.1	10.3	15.7	74.5	- 5.8	6.3	- 0.3	1.6	5.8	10.5
2014	1,197.4	1.0	148.1	5.8	12.4	0.6	5.6	10.0	15.5	82.0	9.3	6.9	0.5	1.5	5.9	10.3
2015	1,282.5	7.0	144.0	- 2.7	11.2	- 1.1	6.3	10.5	16.0	65.2	- 20.2	5.1	- 1.8	2.1	6.5	10.3
2016	1,267.1	- 1.0	156.5	6.0	12.4	0.8	6.5	10.6	16.0	80.6	4.3	6.4	0.3	2.8	6.3	10.5
2017	1,362.9	5.5	181.6	16.8	13.3	1.3	6.8	10.9	15.6	108.0	41.0	7.9	2.0	3.2	6.7	10.4
2018 p,6	1,334.9	1.0	169.1	- 1.6	12.7	- 0.3	6.8	10.6	15.6	95.5	- 7.0	7.2	- 0.6	2.7	6.8	10.9
2014 H1	584.4	- 1.1	74.3	3.8	12.7	0.6	4.9	9.7	15.2	46.3	8.9	7.9	0.7	1.6	5.5	9.7
H2	613.1	3.0	73.8	7.8	12.0	0.5	4.4	9.8	16.0	35.8	9.8	5.8	0.4	0.7	6.4	10.8
2015 H1	636.4	8.7	80.1	7.8	12.6	- 0.1	5.4	10.2	15.5	48.8	4.8	7.7	- 0.3	2.1	6.1	10.0
H2	646.7	5.3	63.9	- 13.3	9.9	- 2.1	5.3	11.1	15.6	16.4	- 52.4	2.5	- 3.3	1.8	6.9	10.7
2016 H1	611.3	- 2.6	84.0	1.3	13.7	0.5	6.7	10.6	15.8	50.7	- 6.5	8.3	- 0.3	2.9	6.4	10.0
H2	655.9	0.5	72.6	11.9	11.1	1.1	6.2	11.3	16.4	29.9	34.7	4.6	0.9	2.4	6.3	10.6
2017 H1	678.7	7.2	98.5	18.7	14.5	1.4	6.0	10.1	16.1	64.0	37.5	9.4	2.1	2.3	5.8	10.8
H2	684.9	3.9	83.1	14.7	12.1	1.2	6.9	11.7	16.5	44.0	46.4	6.4	1.9	3.4	7.2	10.8
2018 H1 6	665.8	- 0.1	90.9	- 3.8	13.7	- 0.5	6.5	10.8	16.7	57.1	- 5.8	8.6	- 0.5	2.9	6.6	11.5
H2 p	678.8	2.1	80.6	1.0	11.9	- 0.1	6.2	11.1	15.9	39.8	- 8.5	5.9	- 0.7	1.9	6.4	10.9
Groups with a focus on the services sector																
2011	335.3	1.7	45.9	7.6	13.7	0.8	6.0	10.4	20.7	19.7	- 0.7	5.9	- 0.1	3.2	6.2	13.8
2012	359.1	2.8	48.0	- 3.3	13.4	- 0.8	5.1	10.1	23.0	14.0	- 47.2	3.9	- 3.0	2.1	5.7	14.2
2013	362.0	- 0.1	48.4	- 3.4	13.4	- 0.5	5.2	10.5	21.6	25.0	84.4	6.9	3.0	2.4	5.9	12.5
2014	368.3	1.1	50.8	2.2	13.8	0.1	6.2	12.7	22.6	27.3	5.7	7.4	0.3	2.9	6.5	13.7
2015	352.9	6.4	52.2	4.8	14.8	- 0.2	6.1	11.4	22.1	26.4	- 1.6	7.5	- 0.6	1.4	6.7	14.1
2016	358.9	2.4	58.4	14.6	16.3	1.8	6.9	13.5	25.8	31.6	29.7	8.8	1.5	2.5	8.3	15.5
2017	358.7	3.4	62.3	7.5	17.4	0.7	7.3	11.6	23.0	34.3	9.9	9.6	0.5	2.4	7.5	15.1
2018 p,6	374.7	- 0.6	64.4	1.6	17.2	0.4	5.7	10.5	24.7	34.3	- 3.0	9.2	- 0.2	1.7	5.9	16.6
2014 H1	172.9	- 0.5	23.0	7.7	13.3	1.0	4.8	9.3	20.4	11.6	11.7	6.7	0.7	1.0	5.1	13.5
H2	195.6	2.5	27.8	- 2.2	14.2	- 0.7	6.4	13.5	23.8	15.7	1.5	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	29.7	10.8	16.1	0.9	7.0	12.1	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	187.4	3.6	30.6	4.6	16.3	0.2	7.4	13.7	24.4	16.6	2.7	8.8	- 0.1	4.0	9.0	17.2
2017 H1	166.3	4.8	27.4	- 0.2	16.5	- 0.8	5.3	10.5	21.2	14.6	- 0.8	8.8	- 0.5	1.3	5.8	14.6
H2	195.0	2.0	34.7	14.6	17.8	2.0	6.9	12.5	24.6	19.2	19.9	9.9	1.5	3.0	8.2	17.9
2018 H1 6	183.7	- 0.5	29.8	3.0	16.2	0.4	4.0	9.7	22.9	15.8	- 1.8	8.6	- 0.2	- 0.9	5.1	15.5
H2 p	192.1	1.7	34.7	0.4	18.1	0.4	7.0	13.3	25.7	18.5	- 3.9	9.6	- 0.2	2.7	7.3	18.0

* 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. Excluding groups engaged in real estate activities. 1 Earnings before interest, taxes, depreciation and amortisation. 2 Quartile 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 Statistical Supplement 4 – Seasonally adjusted business statistics. 5 Including groups in agriculture and forestry. 6 From this point onwards: significant changes in IFRS standards, impairing comparability with previous periods.

XII. External sector

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

€ million

Item	2016	2017	2018	2018	2019			Apr.	May	June P
				Q4	Q1	Q2 P				
A. Current account	+ 334,624	+ 362,825	+ 335,715	+ 106,622	+ 63,589	+ 58,009	+ 21,423	+ 13,494	+ 23,092	
1. Goods										
Exports	2,116,412	2,251,144	2,342,609	616,274	594,057	599,526	197,718	207,233	194,575	
Imports	1,769,839	1,933,352	2,063,300	538,540	526,343	518,386	173,304	178,147	166,935	
Balance	+ 346,576	+ 317,788	+ 279,309	+ 77,734	+ 67,715	+ 81,139	+ 24,414	+ 29,085	+ 27,640	
2. Services										
Receipts	818,021	874,456	915,324	239,956	215,733	231,667	73,448	76,944	81,275	
Expenditure	774,459	770,519	805,581	219,296	194,471	212,752	67,832	70,875	74,045	
Balance	+ 43,561	+ 103,936	+ 109,742	+ 20,660	+ 21,263	+ 18,914	+ 5,616	+ 6,069	+ 7,229	
3. Primary income										
Receipts	668,424	694,825	768,040	209,094	178,661	194,669	62,883	66,570	65,216	
Expenditure	585,226	616,494	669,878	157,911	152,097	208,242	60,878	82,179	65,185	
Balance	+ 83,198	+ 78,332	+ 98,163	+ 51,183	+ 26,563	- 13,573	+ 2,005	- 15,609	+ 31	
4. Secondary income										
Receipts	103,416	107,802	115,563	30,613	27,079	29,927	8,553	11,244	10,130	
Expenditure	242,127	245,034	267,062	73,568	79,031	58,400	19,166	17,295	21,939	
Balance	- 138,711	- 137,230	- 151,500	- 42,955	- 51,950	- 28,472	- 10,612	- 6,051	- 11,809	
B. Capital account	+ 1,620	- 21,413	- 33,451	- 42,323	- 4,286	+ 2,822	+ 563	+ 977	+ 1,282	
C. Financial account (increase: +)	+ 336,720	+ 376,168	+ 279,357	+ 67,837	+ 57,543	+ 68,908	- 23,300	+ 40,864	+ 51,344	
1. Direct investment	+ 186,860	+ 78,533	+ 35,822	- 87,365	+ 51,974	- 17,840	- 44,782	+ 17,067	+ 9,875	
By resident units abroad	+ 541,442	+ 435,361	- 260,922	- 269,645	+ 79,690	- 15,768	+ 28,967	+ 12,837	- 57,572	
By non-resident units in the euro area	+ 354,583	+ 356,827	- 296,743	- 182,280	+ 27,718	+ 2,072	+ 73,749	- 4,230	- 67,447	
2. Portfolio investment	+ 460,718	+ 297,042	+ 216,342	+ 108,287	- 89,454	- 51,598	+ 18,051	- 58,496	- 11,153	
By resident units abroad	+ 386,628	+ 653,092	+ 195,807	- 35,409	+ 52,883	+ 1,541	+ 9,446	- 217	- 7,688	
Equity and investment fund shares	+ 19,665	+ 198,545	+ 40,638	- 37,508	- 5,960	- 1,101	+ 20,705	- 21,548	- 258	
Long-term debt securities	+ 358,992	+ 376,615	+ 187,444	+ 1,580	+ 60,296	+ 35,005	+ 10,980	+ 16,616	+ 7,409	
Short-term debt securities	+ 7,971	+ 77,936	- 32,275	+ 518	- 1,453	- 32,364	- 22,239	+ 4,714	- 14,839	
By non-resident units in the euro area	- 74,091	+ 356,050	- 20,534	- 143,696	+ 142,337	+ 53,138	- 8,606	+ 58,279	+ 3,465	
Equity and investment fund shares	+ 112,111	+ 486,296	+ 154,211	+ 36,336	- 11,354	+ 39,784	- 1,237	+ 33,045	+ 7,976	
Long-term debt securities	- 238,070	- 135,984	- 98,240	- 101,653	+ 127,659	+ 54,239	+ 5,206	+ 25,610	+ 23,423	
Short-term debt securities	+ 51,868	+ 5,738	- 76,507	- 78,380	+ 26,032	- 40,884	- 12,574	- 376	- 27,934	
3. Financial derivatives and employee stock options	+ 15,229	+ 23,967	+ 96,939	+ 29,871	+ 6,628	+ 13,072	+ 3,102	+ 2,163	+ 7,807	
4. Other investment	- 341,566	- 21,975	- 94,720	+ 11,216	+ 85,670	+ 122,511	- 2,837	+ 78,331	+ 47,017	
Eurosysteem	- 152,798	- 175,527	- 132,123	- 148,797	+ 141,268	+ 5,740	+ 29,171	+ 20,726	- 44,157	
General government	+ 12,593	+ 21,595	- 3,520	+ 15,745	- 9,404	+ 5,388	- 5,001	+ 2,988	+ 7,401	
MFIs (excluding the Eurosysteem)	- 123,705	+ 144,138	+ 89,661	+ 169,458	- 13,656	+ 118,467	- 47,304	+ 54,876	+ 110,895	
Enterprises and households	- 77,653	- 12,182	- 48,734	- 25,189	- 32,538	- 7,081	+ 20,299	- 258	- 27,122	
5. Reserve assets	+ 15,480	- 1,400	+ 24,972	+ 5,828	+ 2,727	+ 2,761	+ 3,164	+ 1,799	- 2,202	
D. Net errors and omissions	+ 474	+ 34,755	- 22,907	+ 3,539	- 1,758	+ 8,077	- 45,286	+ 26,393	+ 26,970	

* Source: ECB, according to the international standards of the International Monetary Fund's Balance of Payments Manual (sixth edition).

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: -)			Errors and omissions 5
	Total	Goods (f.o.b./f.o.b.) 1		Services 3	Primary income	Secondary income	Balance of capital account 4	Total	of which: Reserve assets	
		Total	of which: Supplementary trade items 2							
2004	+ 102,270	+ 152,851	- 7,174	- 35,201	+ 14,577	- 29,957	- 119	+ 112,867	- 1,470	+ 10,715
2005	+ 106,942	+ 156,563	- 6,515	- 37,580	+ 19,300	- 31,341	- 2,334	+ 96,436	- 2,182	- 8,172
2006	+ 137,674	+ 160,965	- 4,687	- 31,777	+ 40,499	- 32,014	- 1,328	+ 157,142	- 2,934	+ 20,796
2007	+ 171,493	+ 201,728	- 1,183	- 32,465	+ 35,620	- 33,390	- 1,597	+ 183,169	+ 953	+ 13,273
2008	+ 144,954	+ 184,160	- 3,947	- 29,122	+ 24,063	- 34,147	- 893	+ 121,336	+ 2,008	- 22,725
2009	+ 142,744	+ 140,626	- 6,605	- 17,642	+ 54,524	- 34,764	- 1,858	+ 129,693	+ 8,648	- 11,194
2010	+ 147,298	+ 160,829	- 6,209	- 25,255	+ 51,306	- 39,582	+ 1,219	+ 92,757	+ 1,613	- 55,760
2011	+ 167,340	+ 162,970	- 9,357	- 29,930	+ 69,087	- 34,787	+ 419	+ 120,857	+ 2,836	- 46,902
2012	+ 195,712	+ 199,531	- 11,388	- 30,774	+ 65,658	- 38,703	- 413	+ 151,417	+ 1,297	- 43,882
2013	+ 184,274	+ 203,802	- 12,523	- 39,399	+ 63,284	- 43,413	- 563	+ 225,371	+ 838	+ 41,660
2014	+ 210,735	+ 219,629	- 14,296	- 25,873	+ 57,858	- 40,880	+ 2,936	+ 240,117	- 2,564	+ 26,446
2015	+ 259,920	+ 248,394	- 15,405	- 19,242	+ 69,262	- 38,494	- 48	+ 234,404	- 2,213	- 25,467
2016	+ 265,489	+ 252,581	- 19,010	- 21,814	+ 75,590	- 40,868	+ 2,138	+ 259,720	+ 1,686	- 7,908
2017	+ 261,894	+ 253,111	- 14,069	- 21,938	+ 80,276	- 49,554	- 1,947	+ 282,947	+ 1,269	+ 23,000
2018	+ 245,035	+ 221,675	- 24,490	- 20,686	+ 91,666	- 47,619	+ 1,858	+ 228,848	+ 392	- 18,045
2016 Q3	+ 60,302	+ 63,541	- 4,007	- 11,827	+ 20,320	- 11,733	+ 412	+ 60,148	- 261	- 566
Q4	+ 69,437	+ 55,640	- 8,359	- 2,048	+ 28,269	- 12,425	+ 2,844	+ 90,452	- 43	+ 18,171
2017 Q1	+ 69,906	+ 63,678	- 1,365	- 2,653	+ 22,781	- 13,901	+ 562	+ 69,234	- 360	- 1,234
Q2	+ 52,671	+ 64,258	- 3,660	- 5,301	+ 5,673	- 11,959	- 2,624	+ 67,523	+ 385	+ 17,476
Q3	+ 64,060	+ 65,296	- 3,113	- 12,334	+ 21,991	- 10,893	+ 766	+ 62,836	+ 152	- 1,990
Q4	+ 75,257	+ 59,879	- 5,931	- 1,651	+ 29,831	- 12,802	- 652	+ 83,353	- 1,446	+ 8,749
2018 Q1	+ 69,966	+ 61,219	- 3,973	- 2,203	+ 25,279	- 14,329	+ 4,003	+ 67,340	+ 699	- 6,629
Q2	+ 60,605	+ 60,111	- 8,201	- 2,804	+ 8,504	- 5,205	- 2,563	+ 56,803	- 374	- 1,239
Q3	+ 48,036	+ 47,693	- 7,861	- 13,139	+ 25,305	- 11,823	- 1,050	+ 39,839	- 493	- 7,147
Q4	+ 66,429	+ 52,652	- 4,455	- 2,540	+ 32,578	- 16,262	+ 1,467	+ 64,866	+ 560	- 3,030
2019 Q1 r	+ 66,736	+ 59,927	- 1,896	- 2,309	+ 25,733	- 16,615	+ 1,408	+ 35,415	- 63	- 32,730
Q2 r	+ 59,927	+ 58,374	- 2,487	- 3,680	+ 11,389	- 6,156	- 522	+ 49,254	+ 444	- 10,151
2017 Feb.	+ 21,505	+ 21,492	- 336	- 817	+ 5,441	- 4,611	+ 252	+ 12,282	- 216	- 9,475
Mar.	+ 32,687	+ 26,969	- 149	- 1,217	+ 9,421	- 2,487	+ 414	+ 45,745	- 21	+ 12,644
Apr.	+ 15,315	+ 19,080	- 763	- 1,286	+ 5,841	- 8,319	- 384	+ 17,461	- 2	+ 2,529
May	+ 14,767	+ 21,701	- 2,429	- 1,721	+ 4,343	- 869	+ 20	+ 10,532	- 47	+ 4,256
June	+ 22,588	+ 23,477	- 468	- 2,293	+ 4,175	- 2,770	- 2,260	+ 39,530	+ 434	+ 19,202
July	+ 18,800	+ 19,876	- 203	- 4,325	+ 7,632	- 4,383	+ 483	+ 18,879	+ 463	- 404
Aug.	+ 17,949	+ 20,316	- 2,098	- 5,515	+ 6,576	- 3,427	+ 130	+ 9,684	- 912	- 8,395
Sep.	+ 27,311	+ 25,104	- 812	- 2,494	+ 7,783	- 3,082	+ 154	+ 34,273	+ 602	+ 6,808
Oct.	+ 19,647	+ 20,060	- 767	- 4,091	+ 7,853	- 4,175	- 270	+ 16,992	+ 1,176	- 2,385
Nov.	+ 27,382	+ 23,893	- 1,960	- 345	+ 8,266	- 4,432	- 521	+ 30,390	- 270	+ 3,530
Dec.	+ 28,228	+ 15,926	- 3,204	+ 2,785	+ 13,712	- 4,195	+ 139	+ 35,971	- 2,353	+ 7,604
2018 Jan.	+ 21,070	+ 17,587	- 1,544	- 367	+ 8,866	- 5,016	+ 3,772	+ 27,335	- 121	+ 2,492
Feb.	+ 19,495	+ 19,147	- 883	- 772	+ 6,465	- 5,346	+ 324	+ 13,905	+ 583	- 5,913
Mar.	+ 29,401	+ 24,484	- 1,546	- 1,064	+ 9,948	- 3,967	- 92	+ 26,100	+ 236	- 3,208
Apr.	+ 22,756	+ 20,264	- 2,447	+ 89	+ 4,958	- 2,556	+ 301	+ 30,453	- 670	+ 7,396
May	+ 13,047	+ 19,112	- 2,380	- 1,360	+ 4,851	- 146	- 27	+ 20,458	+ 83	+ 7,438
June	+ 24,802	+ 20,734	- 3,373	- 1,533	+ 8,396	- 2,795	- 2,838	+ 5,892	+ 213	- 16,072
July	+ 13,874	+ 15,287	- 1,892	- 4,865	+ 8,090	- 4,638	- 231	+ 6,482	+ 266	- 7,161
Aug.	+ 15,185	+ 15,923	- 2,680	- 5,693	+ 8,565	- 3,610	+ 97	+ 21,233	- 640	+ 5,952
Sep.	+ 18,978	+ 16,483	- 3,289	- 2,581	+ 8,651	- 3,576	- 915	+ 12,124	- 119	- 5,938
Oct.	+ 20,181	+ 19,801	- 512	- 4,338	+ 9,005	- 4,287	- 822	+ 4,021	+ 700	- 15,337
Nov.	+ 23,688	+ 19,517	- 2,015	+ 521	+ 9,185	- 5,534	- 489	+ 26,596	- 124	+ 3,398
Dec.	+ 22,560	+ 13,335	- 1,928	+ 1,277	+ 14,389	- 6,440	+ 2,779	+ 34,248	- 17	+ 8,909
2019 Jan. r	+ 18,777	+ 15,789	- 1,006	- 1,088	+ 9,112	- 5,036	+ 2,133	+ 9,673	+ 158	- 11,237
Feb. r	+ 17,329	+ 18,983	- 546	- 544	+ 6,868	- 7,979	+ 224	+ 15,413	+ 112	- 2,139
Mar. r	+ 30,631	+ 25,154	- 344	- 677	+ 9,754	- 3,600	- 949	+ 10,329	- 333	- 19,353
Apr. r	+ 22,839	+ 19,191	- 972	- 516	+ 7,789	- 3,625	+ 79	+ 25,075	+ 547	+ 2,157
May r	+ 16,153	+ 21,480	- 1,048	- 791	+ 5,274	- 739	- 435	+ 6,257	+ 182	- 9,461
June r	+ 20,935	+ 17,704	- 467	- 2,373	+ 8,875	- 3,271	- 166	+ 17,923	- 285	- 2,847
July p	+ 22,119	+ 23,442	- 542	- 5,404	+ 8,668	- 4,586	+ 332	- 571	+ 348	- 23,022

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		2016	2017	2018	2019					
					Jan./July P	Mar.	Apr.	May	June	July P
All countries ¹	Exports	1,203,833	1,278,958	1,317,556	781,269	118,235	109,983	114,108	106,066	115,175
	Imports	954,917	1,031,013	1,089,832	650,170	95,896	92,154	93,536	89,425	93,726
	Balance	+ 248,916	+ 247,946	+ 227,724	+ 131,099	+ 22,339	+ 17,829	+ 20,571	+ 16,641	+ 21,449
I. European countries	Exports	818,644	872,427	900,177	532,930	81,315	74,740	77,270	73,449	75,402
	Imports	657,753	699,677	745,342	444,712	66,922	62,880	64,313	62,208	62,613
	Balance	+ 160,891	+ 172,749	+ 154,834	+ 88,217	+ 14,392	+ 11,861	+ 12,957	+ 11,241	+ 12,789
1. EU Member States (28)	Exports	705,548	749,850	778,645	459,715	70,633	64,164	66,191	63,476	64,204
	Imports	551,344	586,071	623,037	375,650	56,754	53,346	54,307	53,353	52,845
	Balance	+ 154,204	+ 163,780	+ 155,609	+ 84,065	+ 13,879	+ 10,819	+ 11,884	+ 10,123	+ 11,359
Euro area (19) countries	Exports	441,092	471,213	492,517	293,598	44,547	41,811	42,337	40,617	41,304
	Imports	358,848	378,700	404,663	246,537	37,038	35,024	35,893	35,001	34,853
	Balance	+ 82,244	+ 92,513	+ 87,854	+ 47,062	+ 7,509	+ 6,787	+ 6,444	+ 5,616	+ 6,451
of which: Austria	Exports	59,778	62,656	64,984	39,345	5,959	5,727	5,799	5,356	5,555
	Imports	38,543	40,686	43,134	26,638	3,884	3,873	3,975	3,726	3,907
	Balance	+ 21,235	+ 21,970	+ 21,851	+ 12,707	+ 2,075	+ 1,854	+ 1,824	+ 1,629	+ 1,649
Belgium and Luxembourg	Exports	46,931	50,071	50,399	30,644	4,634	4,422	4,510	4,307	4,203
	Imports	40,960	43,689	49,481	28,393	3,969	3,938	3,920	4,151	3,654
	Balance	+ 5,971	+ 6,381	+ 918	+ 2,251	+ 665	+ 484	+ 591	+ 157	+ 549
France	Exports	101,106	105,687	105,277	64,082	9,643	9,266	9,056	8,777	9,061
	Imports	65,651	64,329	65,172	39,611	6,055	5,602	5,726	5,609	5,664
	Balance	+ 35,454	+ 41,359	+ 40,105	+ 24,470	+ 3,588	+ 3,664	+ 3,329	+ 3,168	+ 3,396
Italy	Exports	61,265	65,422	69,916	41,166	6,320	5,619	5,977	5,807	5,935
	Imports	51,737	55,342	60,329	34,132	5,081	4,794	4,805	5,083	5,109
	Balance	+ 9,528	+ 10,080	+ 9,587	+ 7,035	+ 1,239	+ 825	+ 1,172	+ 724	+ 825
Netherlands	Exports	78,433	84,661	91,147	54,101	8,317	7,718	7,703	7,233	7,615
	Imports	83,142	90,597	98,014	59,023	9,227	8,172	8,560	8,218	8,251
	Balance	- 4,709	- 5,935	- 6,867	- 4,922	- 910	- 454	- 857	- 985	- 636
Spain	Exports	40,497	43,067	44,217	26,938	4,036	3,788	3,860	3,932	3,714
	Imports	27,870	31,396	32,465	20,607	3,096	2,717	3,360	2,973	2,896
	Balance	+ 12,627	+ 11,671	+ 11,752	+ 6,331	+ 939	+ 1,071	+ 500	+ 959	+ 818
Other EU Member States	Exports	264,456	278,638	286,128	166,116	26,085	22,354	23,855	22,859	22,900
	Imports	192,496	207,371	218,374	129,113	19,715	18,321	18,414	18,352	17,991
	Balance	+ 71,960	+ 71,267	+ 67,755	+ 37,004	+ 6,370	+ 4,032	+ 5,440	+ 4,507	+ 4,908
of which: United Kingdom	Exports	85,939	85,440	82,047	47,081	8,119	5,572	6,462	5,999	6,252
	Imports	35,654	36,820	37,102	21,196	3,535	2,763	2,698	2,941	3,085
	Balance	+ 50,285	+ 48,620	+ 44,945	+ 25,885	+ 4,584	+ 2,809	+ 3,764	+ 3,058	+ 3,167
2. Other European countries	Exports	113,096	122,576	121,531	73,215	10,682	10,576	11,079	9,973	11,199
	Imports	106,409	113,607	122,306	69,063	10,169	9,534	10,006	8,855	9,769
	Balance	+ 6,687	+ 8,969	- 774	+ 4,152	+ 513	+ 1,042	+ 1,073	+ 1,118	+ 1,430
of which: Switzerland	Exports	50,161	53,913	54,041	32,796	4,807	4,766	4,902	4,271	4,877
	Imports	43,896	45,689	45,937	27,232	4,007	3,620	4,230	3,673	3,973
	Balance	+ 6,265	+ 8,224	+ 8,104	+ 5,564	+ 799	+ 1,145	+ 672	+ 598	+ 904
II. Non-European countries	Exports	382,486	403,490	413,560	246,255	36,629	34,967	36,507	32,313	39,439
	Imports	297,164	328,606	343,180	204,412	28,848	29,105	29,047	27,043	30,938
	Balance	+ 85,322	+ 74,884	+ 70,380	+ 41,843	+ 7,781	+ 5,861	+ 7,460	+ 5,270	+ 8,502
1. Africa	Exports	24,434	25,431	22,639	14,234	2,144	1,878	2,133	1,920	2,271
	Imports	16,675	20,428	22,527	13,957	1,900	2,154	2,090	1,847	2,320
	Balance	+ 7,759	+ 5,003	+ 111	+ 277	+ 244	- 276	+ 42	+ 73	- 48
2. America	Exports	147,542	154,644	158,946	97,273	14,916	13,648	14,165	12,789	15,756
	Imports	83,499	89,927	92,465	57,769	8,262	8,129	8,500	7,838	8,515
	Balance	+ 64,043	+ 64,717	+ 66,481	+ 39,505	+ 6,654	+ 5,520	+ 5,665	+ 4,951	+ 7,241
of which: United States	Exports	106,822	111,805	113,293	69,567	10,622	9,788	10,130	9,242	11,266
	Imports	57,968	61,902	64,515	41,001	5,953	5,762	6,014	5,399	6,112
	Balance	+ 48,855	+ 49,903	+ 48,778	+ 28,566	+ 4,669	+ 4,027	+ 4,116	+ 3,844	+ 5,154
3. Asia	Exports	200,158	212,070	219,685	127,934	18,664	18,419	19,254	16,728	20,204
	Imports	193,979	214,393	224,550	130,425	18,312	18,525	18,044	17,073	19,722
	Balance	+ 6,179	- 2,323	- 4,865	- 2,491	+ 352	- 106	+ 1,210	- 346	+ 481
of which: Middle East	Exports	36,659	33,104	29,148	15,662	2,214	2,116	2,455	2,340	2,675
	Imports	6,581	6,963	8,145	4,431	614	628	602	668	710
	Balance	+ 30,079	+ 26,141	+ 21,003	+ 11,231	+ 1,600	+ 1,487	+ 1,853	+ 1,672	+ 1,965
Japan	Exports	18,307	19,546	20,441	12,378	1,832	1,644	1,657	1,599	2,042
	Imports	21,922	22,955	23,724	14,144	2,043	2,104	2,108	1,839	2,033
	Balance	- 3,615	- 3,410	- 3,282	- 1,766	- 212	- 460	- 452	- 240	+ 9
People's Republic of China ²	Exports	76,046	86,141	93,037	55,926	8,259	8,295	8,178	7,220	8,736
	Imports	94,172	101,837	106,266	61,473	8,311	8,392	8,486	7,948	9,498
	Balance	- 18,126	- 15,695	- 13,229	- 5,547	- 51	- 96	- 308	- 728	- 763
New industrial countries and emerging markets of Asia ³	Exports	51,921	53,425	54,926	31,713	4,634	4,396	4,842	4,069	4,987
	Imports	42,966	50,873	52,963	30,677	4,437	4,508	4,182	4,084	4,615
	Balance	+ 8,955	+ 2,552	+ 1,963	+ 1,035	+ 197	- 113	+ 660	+ 15	+ 372
4. Oceania and polar regions	Exports	10,352	11,344	12,291	6,813	905	1,021	955	876	1,208
	Imports	3,011	3,857	3,638	2,261	374	298	412	285	381
	Balance	+ 7,341	+ 7,487	+ 8,653	+ 4,553	+ 530	+ 723	+ 543	+ 591	+ 827

* Source: Federal Statistical Office. Exports (f.o.b.) by country of destination, imports (c.i.f.) 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			
2014	- 25,873	- 6,867	- 37,653	+ 6,712	+ 3,549	+ 1,280	+ 555	+ 2,971	+ 1,184	+ 55,783	+ 891
2015	- 19,242	- 5,203	- 36,595	+ 8,621	+ 5,354	+ 2,601	- 1,216	+ 3,161	+ 1,114	+ 68,506	- 358
2016	- 21,814	- 5,978	- 38,247	+ 8,607	+ 6,779	+ 1,536	- 1,716	+ 3,093	+ 441	+ 76,218	- 1,070
2017	- 21,938	- 3,669	- 43,558	+ 10,726	+ 5,930	+ 1,349	+ 39	+ 2,138	- 702	+ 82,270	- 1,292
2018	- 20,686	- 2,500	- 44,543	+ 10,044	+ 7,453	+ 1,597	- 353	+ 3,209	- 1,118	+ 93,548	- 765
2017 Q4	- 1,651	- 1,013	- 9,509	+ 2,970	+ 2,263	+ 1,084	- 72	+ 381	- 150	+ 26,848	+ 3,133
2018 Q1	- 2,203	- 811	- 6,977	+ 2,590	+ 1,077	- 68	+ 43	+ 824	+ 374	+ 25,736	- 831
Q2	- 2,804	- 249	- 9,153	+ 2,093	+ 1,998	+ 804	- 225	+ 906	- 469	+ 11,098	- 2,125
Q3	- 13,139	- 654	- 18,219	+ 1,777	+ 1,604	+ 287	+ 326	+ 822	- 918	+ 27,163	- 939
Q4	- 2,540	- 786	- 10,194	+ 3,585	+ 2,774	+ 574	- 497	+ 656	- 104	+ 29,552	+ 3,130
2019 Q1	- 2,309	- 686	- 6,978	+ 2,272	+ 2,154	- 157	- 454	+ 760	+ 329	+ 26,232	- 828
Q2	- 3,680	+ 329	- 9,899	+ 2,530	+ 1,790	+ 632	- 1,152	+ 817	- 466	+ 13,997	- 2,142
2018 Sep.	- 2,581	- 280	- 5,789	+ 752	+ 446	+ 562	+ 1,040	+ 379	- 281	+ 9,198	- 266
Oct.	- 4,338	- 290	- 6,073	+ 940	+ 637	- 68	- 81	+ 238	- 47	+ 9,589	- 537
Nov.	+ 521	- 164	- 2,309	+ 1,510	+ 1,645	- 496	- 410	+ 162	- 51	+ 9,534	- 298
Dec.	+ 1,277	- 333	- 1,813	+ 1,135	+ 492	+ 1,137	- 6	+ 257	- 6	+ 10,429	+ 3,966
2019 Jan.	- 1,088	- 337	- 1,739	+ 762	+ 218	- 119	- 362	+ 244	+ 119	+ 9,207	- 214
Feb.	- 544	- 368	- 2,106	+ 731	+ 1,078	- 170	- 216	+ 249	+ 125	+ 7,029	- 285
Mar.	- 677	+ 18	- 3,133	+ 779	+ 858	+ 132	+ 124	+ 267	+ 85	+ 9,996	- 328
Apr.	- 516	+ 185	- 1,830	+ 936	+ 512	- 240	- 601	+ 278	- 152	+ 8,365	- 425
May	- 791	+ 89	- 3,401	+ 706	+ 1,080	- 130	- 6	+ 267	- 157	- 3,630	- 1,487
June	- 2,373	+ 55	- 4,668	+ 888	+ 198	+ 1,002	- 545	+ 272	- 157	+ 9,262	- 230
July P	- 5,404	+ 149	- 6,098	+ 845	+ 680	- 896	- 607	+ 253	- 311	+ 9,390	- 411

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)

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

€ million

Period	General government					All sectors excluding general government 2				Total	Non-produced non-financial assets	Capital transfers
	Total	Total	of which:		Total	of which:		Personal transfers between resident and non-resident households 3	of which: Workers' remittances			
			Current international cooperation 1	Current taxes on income, wealth, etc.								
2014	- 40,880	- 28,146	- 6,419	+ 8,105	- 12,734	- 3,477	- 3,451	+ 2,936	+ 2,841	+ 95		
2015	- 38,494	- 24,087	- 6,805	+ 10,455	- 14,406	- 3,540	- 3,523	- 48	+ 1,787	- 1,835		
2016	- 40,868	- 25,232	- 11,516	+ 10,627	- 15,636	- 4,214	- 4,196	+ 2,138	+ 3,208	- 1,070		
2017	- 49,554	- 21,979	- 9,852	+ 10,446	- 27,576	- 4,632	- 4,613	- 1,947	+ 2,502	- 4,449		
2018	- 47,619	- 27,748	- 9,880	+ 10,351	- 19,871	- 5,152	- 5,142	+ 1,858	+ 5,375	- 3,517		
2017 Q4	- 12,802	- 7,191	- 3,800	+ 795	- 5,611	- 1,158	- 1,153	- 652	+ 216	- 868		
2018 Q1	- 14,329	- 9,218	- 2,234	+ 1,698	- 5,111	- 1,291	- 1,286	+ 4,003	+ 3,390	+ 613		
Q2	- 5,205	- 347	- 1,260	+ 6,233	- 4,858	- 1,287	- 1,286	- 2,563	- 48	- 2,515		
Q3	- 11,823	- 7,249	- 1,926	+ 1,225	- 4,574	- 1,287	- 1,286	- 1,050	- 297	- 753		
Q4	- 16,262	- 10,934	- 4,461	+ 1,195	- 5,328	- 1,287	- 1,286	+ 1,467	+ 2,329	- 862		
2019 Q1	- 16,615	- 12,096	- 2,756	+ 2,015	- 4,519	- 1,360	- 1,358	+ 1,408	+ 845	+ 563		
Q2	- 6,156	- 543	- 1,352	+ 6,600	- 5,613	- 1,361	- 1,358	- 522	- 288	- 233		
2018 Sep.	- 3,576	- 2,048	- 540	+ 760	- 1,527	- 429	- 429	- 915	- 626	- 289		
Oct.	- 4,287	- 3,183	- 1,074	+ 172	- 1,104	- 429	- 429	- 822	- 594	- 228		
Nov.	- 5,534	- 3,195	- 999	+ 180	- 2,339	- 429	- 429	- 489	- 313	- 176		
Dec.	- 6,440	- 4,556	- 2,388	+ 843	- 1,885	- 429	- 429	+ 2,779	+ 3,237	- 458		
2019 Jan.	- 5,036	- 3,623	- 1,286	+ 278	- 1,413	- 453	- 453	+ 2,133	+ 1,831	+ 302		
Feb.	- 7,979	- 6,374	- 1,056	+ 927	- 1,605	- 453	- 453	+ 224	- 241	+ 465		
Mar.	- 3,600	- 2,099	- 413	+ 811	- 1,501	- 453	- 453	- 949	- 745	- 203		
Apr.	- 3,625	- 1,072	- 371	+ 1,138	- 2,553	- 454	- 453	+ 79	+ 305	- 226		
May	+ 739	+ 2,424	- 333	+ 4,352	- 1,685	- 453	- 453	- 435	- 554	+ 119		
June	- 3,271	- 1,895	- 648	+ 1,109	- 1,375	- 454	- 453	- 166	- 39	- 127		
July P	- 4,586	- 2,899	- 813	+ 374	- 1,687	- 453	- 453	+ 332	+ 737	- 406		

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.

XII. External sector

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

€ million

Item	2016	2017	2018	2018		2019			
				Q4	Q1	Q2	May	June	July P
I. Net domestic investment abroad (increase: +)	+ 401,354	+ 376,599	+ 352,485	+ 9,965	+ 123,539	+ 100,445	+ 26,114	+ 61,218	+ 53,687
1. Direct investment	+ 99,180	+ 123,084	+ 132,671	+ 2,237	+ 44,205	+ 30,482	+ 12,370	+ 2,774	+ 4,198
Equity of which:	+ 83,199	+ 76,326	+ 140,071	+ 11,697	+ 24,175	+ 29,812	+ 8,527	+ 4,010	+ 2,247
Reinvestment of earnings 1	+ 32,535	+ 24,572	+ 31,689	+ 3,530	+ 12,762	+ 12,576	+ 4,955	+ 3,224	+ 3,247
Debt instruments	+ 15,981	+ 46,758	- 7,400	- 9,459	+ 20,030	+ 670	+ 3,843	- 1,236	+ 1,951
2. Portfolio investment	+ 96,969	+ 106,469	+ 68,098	- 8,940	+ 36,459	+ 27,839	+ 2,541	+ 17,479	+ 9,717
Shares 2	+ 16,954	+ 14,229	+ 9,406	- 504	+ 481	+ 2,928	+ 1,919	+ 458	+ 878
Investment fund shares 3	+ 37,698	+ 50,094	+ 18,658	- 441	+ 10,695	+ 8,330	- 1,298	+ 6,705	+ 3,564
Long-term debt securities 4	+ 48,544	+ 44,184	+ 44,648	- 2,411	+ 17,978	+ 17,011	+ 2,210	+ 7,848	+ 6,549
Short-term debt securities 5	- 6,227	- 2,038	- 4,613	- 5,585	+ 7,304	- 430	- 290	+ 2,468	- 1,274
3. Financial derivatives and employee stock options 6	+ 29,053	+ 11,618	+ 23,253	+ 537	+ 6,184	+ 11,240	+ 1,310	+ 4,810	+ 3,032
4. Other investment 7	+ 174,467	+ 136,697	+ 128,070	+ 15,571	+ 36,754	+ 30,440	+ 9,710	+ 36,440	- 70,983
Monetary financial institutions 8	+ 18,509	- 20,986	+ 49,856	+ 1,493	+ 51,097	+ 34,381	- 3,874	+ 16,642	+ 7,786
Long-term	+ 44,861	+ 19,641	+ 4,456	+ 3,023	+ 12,324	+ 7,842	+ 873	+ 5,049	+ 2,040
Short-term	- 26,353	- 40,627	+ 45,400	- 1,530	+ 38,773	+ 26,540	- 4,747	+ 11,593	+ 5,747
Enterprises and households 9	- 13,510	+ 5,039	+ 30,233	+ 5,877	+ 6,210	- 5,403	- 5,496	+ 11,720	- 6,716
Long-term	- 3,237	- 2,062	+ 10,456	+ 2,393	- 14	+ 2,627	+ 1,059	+ 729	+ 890
Short-term	- 10,273	+ 7,102	+ 19,777	+ 3,484	+ 6,225	- 8,030	- 6,555	+ 10,990	- 7,606
General government	- 1,022	- 3,993	- 8,814	+ 1,020	+ 1,764	- 453	+ 2,605	- 41	- 479
Long-term	- 7,408	- 4,408	- 1,097	- 121	- 358	- 1,514	+ 97	- 1,396	- 245
Short-term	+ 6,386	+ 415	- 7,717	+ 1,141	+ 2,122	+ 1,061	+ 2,508	+ 1,355	- 234
Bundesbank	+ 170,491	+ 156,637	+ 56,795	+ 7,181	- 22,318	+ 1,915	+ 16,476	+ 8,120	- 71,574
5. Reserve assets	+ 1,686	- 1,269	+ 392	+ 560	- 63	+ 444	+ 182	- 285	+ 348
II. Net foreign investment in the reporting country (increase: +)	+ 141,635	+ 93,652	+ 123,637	- 54,901	+ 88,124	+ 51,191	+ 19,857	+ 43,295	- 53,116
1. Direct investment	+ 56,018	+ 74,395	+ 89,151	+ 25,853	+ 8,953	+ 26,472	+ 15,706	+ 639	+ 8,137
Equity of which:	+ 13,883	+ 21,255	+ 13,396	+ 7,680	+ 8,138	+ 2,857	+ 1,907	- 113	+ 1,670
Reinvestment of earnings 1	+ 2,188	+ 8,115	+ 4,531	+ 2,551	+ 4,062	+ 1,216	+ 340	- 188	+ 853
Debt instruments	+ 42,135	+ 53,140	+ 75,755	+ 18,172	+ 815	+ 23,615	+ 13,799	+ 752	+ 6,467
2. Portfolio investment	- 102,008	- 90,176	- 44,980	- 27,860	+ 53,202	+ 11,356	+ 25,721	- 2,328	- 1,046
Shares 2	- 221	- 715	+ 6,618	+ 14	- 3,977	- 1,422	- 1,346	+ 793	+ 1,588
Investment fund shares 3	- 6,932	- 1,991	- 5,821	- 654	- 3,801	- 948	- 1,327	+ 681	- 358
Long-term debt securities 4	- 95,327	- 70,432	- 47,593	- 22,480	+ 38,800	+ 20,460	+ 18,555	+ 2,074	- 4,899
Short-term debt securities 5	+ 471	- 17,039	+ 1,815	- 4,740	+ 22,179	- 6,734	+ 9,840	- 5,876	+ 2,622
3. Other investment 7	+ 187,625	+ 109,433	+ 79,466	- 52,893	+ 25,969	+ 13,362	- 21,570	+ 44,984	- 60,207
Monetary financial institutions 8	+ 86,742	+ 17,476	- 35,965	- 108,955	+ 102,619	+ 34,768	- 11,335	+ 12,233	- 25,737
Long-term	+ 5,774	+ 7,541	- 8,496	- 509	+ 1,223	+ 3,349	+ 706	+ 2,238	+ 2,481
Short-term	+ 80,968	+ 9,935	- 27,469	- 108,446	+ 101,396	+ 31,419	- 12,041	+ 9,995	- 28,218
Enterprises and households 9	- 4,658	+ 23,541	+ 15,750	- 19,053	+ 26,964	+ 831	+ 3,818	+ 6,840	- 7,978
Long-term	+ 78	+ 8,855	+ 8,259	- 1,417	+ 3,091	+ 3,182	- 908	+ 1,156	+ 3,066
Short-term	- 4,736	+ 14,687	+ 7,491	- 17,636	+ 23,873	- 2,351	+ 4,725	+ 5,684	- 11,044
General government	- 5,309	- 8,719	+ 2,890	- 4,205	+ 6,805	- 620	- 204	- 46	- 824
Long-term	- 4,682	- 3,723	+ 660	+ 402	- 1	- 101	- 20	- 25	- 23
Short-term	- 626	- 4,996	+ 2,230	- 4,607	+ 6,807	- 519	- 184	- 21	- 801
Bundesbank	+ 110,849	+ 77,135	+ 96,792	+ 79,319	- 110,419	- 21,617	- 13,849	+ 25,957	- 25,668
III. Net financial account (net lending: +/net borrowing: -)	+ 259,720	+ 282,947	+ 228,848	+ 64,866	+ 35,415	+ 49,254	+ 6,257	+ 17,923	- 571

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				
		Total	Gold and gold receivables	Special drawing rights	Reserve position in the IMF	Currency, deposits and securities	Total	of which: Clearing accounts within the ESCB 1	Portfolio investment 2		
1	2	3	4	5	6	7	8	9	10	11	
1999 Jan. 5	95,316	93,940	29,312	1,598	6,863	56,167	1,376	–	–	9,628	85,688
1999	141,958	93,039	32,287	1,948	6,383	52,420	48,919	26,275	–	7,830	134,128
2000	100,762	93,815	32,676	1,894	5,868	53,377	6,947	– 6,851	–	8,287	92,475
2001	76,147	93,215	35,005	2,032	6,689	49,489	– 17,068	– 30,857	–	10,477	65,670
2002	103,948	85,002	36,208	1,888	6,384	40,522	18,780	4,995	166	66,278	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	481,787	318,921
2016	990,450	175,765	119,253	14,938	6,581	34,993	767,128	754,263	47,557	592,723	397,727
2017	1,142,845	166,842	117,347	13,987	4,294	31,215	923,765	906,941	52,238	668,652	474,193
2018	1,209,982	173,138	121,445	14,378	5,518	31,796	980,560	966,190	56,284	765,813	444,168
2016 Dec.	990,450	175,765	119,253	14,938	6,581	34,993	767,128	754,263	47,557	592,723	397,727
2017 Jan.	1,034,804	177,256	121,656	14,806	6,523	34,270	809,862	795,621	47,687	577,945	456,858
Feb.	1,060,894	184,666	128,507	14,976	6,248	34,935	828,264	814,375	47,964	609,216	451,678
Mar.	1,075,039	181,898	126,158	14,886	6,183	34,671	843,892	829,751	49,249	623,524	451,515
Apr.	1,089,144	180,726	126,011	14,697	6,055	33,963	858,281	843,439	50,137	601,492	487,652
May	1,098,879	175,958	122,486	14,459	5,907	33,107	871,724	857,272	51,197	601,093	497,785
June	1,098,880	171,295	118,235	14,349	5,695	33,016	875,312	860,764	52,273	623,914	474,966
July	1,092,769	169,735	117,330	14,124	5,531	32,750	871,752	856,510	51,282	612,871	479,898
Aug.	1,089,883	171,044	119,770	14,071	5,530	31,673	867,696	852,511	51,143	620,273	469,611
Sep.	1,115,200	169,937	118,208	14,089	5,471	32,169	894,441	878,888	50,821	618,496	496,703
Oct.	1,085,916	172,047	118,569	14,208	5,446	33,824	862,772	848,443	51,097	600,416	485,499
Nov.	1,091,832	169,539	117,208	14,069	5,168	33,094	869,988	855,548	52,305	576,550	515,282
Dec.	1,142,845	166,842	117,347	13,987	4,294	31,215	923,765	906,941	52,238	668,652	474,193
2018 Jan.	1,114,774	164,944	117,008	13,776	4,166	29,994	896,665	882,043	53,165	617,024	497,750
Feb.	1,147,979	166,370	117,138	13,949	4,138	31,146	928,275	913,989	53,333	636,717	511,262
Mar.	1,158,983	165,830	116,630	13,906	4,114	31,181	939,229	923,466	53,924	678,829	480,155
Apr.	1,139,056	166,970	117,867	14,043	4,150	30,910	917,971	902,364	54,115	633,679	505,377
May	1,198,995	171,469	120,871	14,287	4,172	32,139	973,323	956,150	54,203	656,506	542,489
June	1,213,511	167,078	116,291	14,245	4,983	31,559	991,577	976,266	54,857	701,075	512,436
July	1,147,878	163,308	112,693	14,131	4,881	31,603	930,107	913,270	54,463	666,362	481,515
Aug.	1,145,283	162,346	111,986	14,208	4,879	31,273	929,073	912,448	53,864	644,650	500,633
Sep.	1,189,175	161,078	110,755	14,236	4,889	31,199	973,380	956,487	54,717	686,357	502,818
Oct.	1,167,004	168,272	116,314	14,440	5,259	32,258	943,644	927,555	55,089	662,976	504,029
Nov.	1,184,703	168,198	116,409	14,405	5,244	32,140	960,478	941,130	56,026	671,196	513,507
Dec.	1,209,982	173,138	121,445	14,378	5,518	31,796	980,560	966,190	56,284	765,813	444,168
2019 Jan.	1,123,169	176,720	124,811	14,424	5,486	31,999	890,410	868,142	56,039	645,348	477,822
Feb.	1,127,455	178,016	125,793	14,496	5,510	32,217	894,226	872,698	55,214	632,447	495,008
Mar.	1,190,416	178,088	125,302	14,629	5,561	32,596	958,243	941,310	54,086	655,643	534,773
Apr.	1,167,188	177,378	124,046	14,622	6,228	32,482	935,563	919,696	54,247	621,907	545,280
May	1,186,394	180,073	126,092	14,637	6,150	33,193	952,038	934,640	54,283	608,076	578,317
June	1,201,041	187,401	134,470	14,473	6,081	32,377	960,158	942,319	53,482	633,849	567,192
July	1,134,349	193,244	139,163	14,613	6,391	33,077	888,584	870,903	52,521	609,370	524,979
Aug.	1,173,631	205,322	149,696	14,703	6,379	34,543	915,546	897,901	52,763	627,395	546,236

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

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

XII. External sector

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

€ million

End of year or month	Claims on non-residents							Liabilities vis-à-vis non-residents						
	Total	Balances with foreign banks	Claims on foreign non-banks					Total	Loans from foreign banks	Liabilities vis-à-vis foreign non-banks				
			Total	from financial operations	from trade credits					Total	from financial operations	from trade credits		
					Total	Credit terms granted	Advance payments effected					Total	Credit terms used	Advance payments received
All countries														
2015	876,992	264,561	612,431	416,692	195,739	181,240	14,499	1,018,628	152,364	866,264	681,975	184,289	112,668	71,621
2016	877,132	245,991	631,141	420,851	210,290	196,110	14,180	1,051,138	132,151	918,987	722,253	196,734	124,129	72,605
2017	892,379	218,372	674,007	450,147	223,860	210,204	13,657	1,087,106	138,289	948,818	750,318	198,500	128,892	69,607
2018	914,056	233,402	680,654	450,943	229,712	215,637	14,075	1,174,527	138,328	1,036,199	832,342	203,857	133,440	70,417
2019 Feb.	935,021	234,300	700,721	466,686	234,036	219,649	14,387	1,194,265	146,169	1,048,097	849,383	198,713	127,000	71,713
Mar.	959,563	238,446	721,117	478,350	242,767	228,246	14,521	1,221,840	165,016	1,056,824	850,485	206,339	134,484	71,854
Apr.	947,991	226,267	721,725	485,109	236,616	221,914	14,702	1,221,073	155,616	1,065,457	866,481	198,976	126,167	72,809
May	945,779	221,210	724,569	487,822	236,747	222,353	14,394	1,238,781	158,729	1,080,052	881,048	199,005	127,163	71,842
June	953,789	228,595	725,194	488,559	236,636	222,043	14,592	1,245,781	160,979	1,084,802	882,811	201,991	129,420	72,571
July	948,630	222,224	726,406	489,845	236,562	221,906	14,656	1,242,158	152,217	1,089,941	888,131	201,810	128,590	73,220
Industrial countries ¹														
2015	768,263	260,659	507,604	374,690	132,915	119,868	13,047	919,095	147,507	771,588	644,558	127,030	91,119	35,911
2016	760,622	242,112	518,510	378,804	139,705	127,025	12,680	946,894	128,163	818,731	685,120	133,611	96,436	37,174
2017	773,242	214,321	558,921	406,982	151,939	139,749	12,190	982,241	131,450	850,792	711,976	138,816	104,054	34,762
2018	789,499	228,170	561,329	406,279	155,050	142,678	12,372	1,058,150	125,576	932,574	792,349	140,225	105,662	34,563
2019 Feb.	813,733	229,668	584,065	421,232	162,833	150,078	12,755	1,085,646	136,836	948,810	808,802	140,008	104,544	35,464
Mar.	832,431	233,720	598,711	430,270	168,440	155,544	12,896	1,099,773	142,642	957,131	811,167	145,963	110,390	35,573
Apr.	820,716	221,574	599,142	437,295	161,847	148,697	13,150	1,105,485	139,858	965,627	827,612	138,015	102,103	35,912
May	819,654	216,486	603,168	441,245	161,924	149,117	12,806	1,121,023	139,328	981,695	842,151	139,544	104,462	35,082
June	826,620	223,823	602,796	441,001	161,795	148,751	13,044	1,122,439	136,566	985,872	844,066	141,806	105,516	36,290
July	819,106	217,580	601,525	442,194	159,331	146,223	13,108	1,125,009	135,308	989,701	849,689	140,012	104,013	35,998
EU Member States ¹														
2015	631,596	242,588	389,007	294,555	94,452	83,957	10,495	752,188	136,630	615,558	531,136	84,422	58,673	25,749
2016	614,938	224,194	390,744	293,305	97,439	87,421	10,018	770,003	118,015	651,988	563,776	88,212	61,312	26,901
2017	612,266	194,340	417,927	311,482	106,445	96,562	9,882	807,572	115,034	692,538	596,293	96,244	71,297	24,947
2018	629,920	207,625	422,295	314,364	107,932	98,242	9,689	865,713	108,560	757,153	661,338	95,816	71,623	24,192
2019 Feb.	650,225	208,717	441,508	328,407	113,101	103,363	9,738	894,944	121,467	773,477	675,400	98,077	73,042	25,036
Mar.	661,769	211,392	450,377	332,137	118,241	108,492	9,748	904,541	123,318	781,223	679,002	102,220	77,107	25,113
Apr.	654,450	200,962	453,489	341,586	111,902	101,852	10,050	909,613	121,585	788,027	692,216	95,812	70,297	25,515
May	653,493	195,672	457,820	345,009	112,812	103,166	9,645	919,425	120,876	798,549	700,934	97,615	73,058	24,557
June	661,551	203,487	458,064	345,445	112,618	102,746	9,872	922,542	118,963	803,579	704,592	98,987	73,459	25,528
July	650,380	197,353	453,028	343,962	109,066	99,264	9,802	923,976	117,518	806,458	709,433	97,025	71,823	25,202
of which: Euro area ²														
2015	469,103	195,348	273,755	212,286	61,469	54,890	6,579	606,161	94,619	511,542	458,734	52,808	38,164	14,644
2016	450,353	171,625	278,728	214,125	64,603	57,876	6,727	616,804	75,803	541,001	484,967	56,034	41,167	14,867
2017	449,892	150,351	299,541	227,981	71,560	64,102	7,458	642,801	74,554	568,248	503,475	64,773	49,432	15,342
2018	461,247	155,715	305,532	234,656	70,875	63,734	7,141	702,037	67,366	634,671	569,246	65,425	49,682	15,743
2019 Feb.	474,189	157,169	317,021	244,083	72,937	65,794	7,143	722,514	75,863	646,651	580,051	66,600	50,332	16,268
Mar.	483,210	161,906	321,303	245,166	76,138	68,994	7,144	728,003	75,884	652,119	583,445	68,673	52,481	16,192
Apr.	475,064	152,528	322,536	249,339	73,198	65,877	7,321	734,333	75,778	658,555	593,264	65,292	48,849	16,443
May	475,158	151,513	323,645	249,843	73,803	66,678	7,124	742,927	75,513	667,414	602,524	64,890	49,627	15,263
June	480,893	154,754	326,139	252,678	73,461	66,321	7,140	752,044	73,642	678,402	610,770	67,632	51,210	16,421
July	471,613	148,930	322,683	250,896	71,787	64,439	7,348	753,740	73,129	680,611	614,659	65,952	49,671	16,281
Emerging economies and developing countries ³														
2015	107,753	3,094	104,659	42,003	62,656	61,204	1,452	95,363	886	94,477	37,218	57,259	21,549	35,710
2016	115,100	2,632	112,468	42,031	70,437	68,937	1,500	101,101	1,061	100,039	36,933	63,107	27,693	35,414
2017	117,488	2,618	114,871	43,097	71,774	70,307	1,467	98,839	1,101	97,738	38,142	59,596	24,838	34,758
2018	122,483	3,445	119,038	44,535	74,503	72,800	1,703	104,630	1,236	103,394	39,793	63,601	27,778	35,823
2019 Feb.	119,242	2,851	116,391	45,325	71,066	69,434	1,631	100,315	1,304	99,011	40,381	58,630	22,424	36,205
Mar.	125,082	2,943	122,138	47,950	74,188	72,563	1,625	100,531	1,102	99,429	39,118	60,311	24,064	36,247
Apr.	125,298	3,200	122,098	47,477	74,621	73,069	1,552	100,796	1,238	99,559	38,669	60,890	24,030	36,860
May	124,128	3,238	120,890	46,232	74,658	73,070	1,587	99,326	1,242	98,085	38,696	59,388	22,665	36,723
June	125,168	3,285	121,883	47,212	74,672	73,123	1,549	99,891	1,233	98,658	38,545	60,113	23,865	36,248
July	127,555	3,191	124,364	47,304	77,060	75,512	1,548	101,231	1,249	99,981	38,242	61,740	24,540	37,200

* The assets and liabilities vis-à-vis non-residents of banks (MFIs) in Germany are shown in Table 4 of Section IV, "Banks". Statistical increases and decreases have not been eliminated; to this extent, the changes in totals are not comparable with the figures shown in Table XI.7. 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.

figures 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.

XII. External sector

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

EUR 1 = currency units ...

Yearly or monthly average	Australia AUD	Canada CAD	China CNY	Denmark DKK	Japan JPY	Norway NOK	Sweden SEK	Switzerland CHF	United Kingdom GBP	United States USD
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
2017	1.4732	1.4647	7.6290	7.4386	126.71	9.3270	9.6351	1.1117	0.87667	1.1297
2018	1.5797	1.5294	7.8081	7.4532	130.40	9.5975	10.2583	1.1550	0.88471	1.1810
2018 Apr.	1.5972	1.5622	7.7347	7.4479	132.16	9.6202	10.3717	1.1890	0.87212	1.2276
May	1.5695	1.5197	7.5291	7.4482	129.57	9.5642	10.3419	1.1780	0.87726	1.1812
June	1.5579	1.5327	7.5512	7.4493	128.53	9.4746	10.2788	1.1562	0.87886	1.1678
July	1.5792	1.5356	7.8504	7.4523	130.23	9.4975	10.3076	1.1622	0.88726	1.1686
Aug.	1.5762	1.5063	7.9092	7.4558	128.20	9.6161	10.4668	1.1413	0.89687	1.1549
Sep.	1.6189	1.5211	7.9930	7.4583	130.54	9.6205	10.4426	1.1286	0.89281	1.1659
Oct.	1.6158	1.4935	7.9481	7.4597	129.62	9.4793	10.3839	1.1413	0.88272	1.1484
Nov.	1.5681	1.4998	7.8880	7.4611	128.79	9.6272	10.2918	1.1377	0.88118	1.1367
Dec.	1.5849	1.5278	7.8398	7.4653	127.88	9.8055	10.2766	1.1293	0.89774	1.1384
2019 Jan.	1.5975	1.5196	7.7504	7.4657	124.34	9.7631	10.2685	1.1297	0.88603	1.1416
Feb.	1.5895	1.4995	7.6485	7.4627	125.28	9.7444	10.4986	1.1368	0.87264	1.1351
Mar.	1.5959	1.5104	7.5868	7.4625	125.67	9.7181	10.4999	1.1311	0.85822	1.1302
Apr.	1.5802	1.5035	7.5489	7.4650	125.44	9.6233	10.4819	1.1319	0.86179	1.1238
May	1.6116	1.5058	7.6736	7.4675	122.95	9.7794	10.7372	1.1304	0.87176	1.1185
June	1.6264	1.5011	7.7937	7.4669	122.08	9.7465	10.6263	1.1167	0.89107	1.1293
July	1.6061	1.4693	7.7151	7.4656	121.41	9.6587	10.5604	1.1076	0.89942	1.1218
Aug.	1.6431	1.4768	7.8581	7.4602	118.18	9.9742	10.7356	1.0892	0.91554	1.1126

* 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.

11. Euro area countries and irrevocable euro conversion rates in the third stage of 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 *

1999Q1=100

Period	Effective exchange rate of the euro vis-à-vis the currencies of the group						Indicators of the German economy's price competitiveness							
	EER-19 1				EER-38 2		Based on the deflators of total sales 3 vis-à-vis					Based on consumer price indices vis-à-vis		
	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	26 selected industrial countries 4			37 countries 5	26 selected industrial countries 4	37 countries 5	56 countries 6	
							Total	of which:						
							Euro area countries	Non-euro area countries						
1999	96.3	96.1	96.0	96.0	96.5	95.8	97.9	99.5	95.9	97.6	98.3	98.1	97.7	
2000	87.2	86.7	86.0	85.3	88.0	85.8	91.9	97.3	85.3	90.9	93.0	92.1	91.0	
2001	87.8	87.0	86.5	86.0	90.6	86.8	91.8	96.4	86.2	90.2	93.1	91.5	90.9	
2002	90.1	90.0	89.4	89.3	95.2	90.4	92.4	95.5	88.7	90.7	93.6	92.0	91.7	
2003	100.7	101.1	100.3	100.5	107.1	101.2	95.8	94.6	98.0	95.0	97.0	96.6	96.7	
2004	104.6	104.8	103.1	103.8	111.7	104.9	96.1	93.4	100.4	95.3	98.4	98.0	98.3	
2005	102.9	103.3	100.9	101.9	109.6	102.3	94.8	91.9	99.3	92.9	98.4	96.9	96.6	
2006	102.8	103.2	100.1	100.6	109.6	101.5	93.6	90.4	98.7	91.2	98.6	96.5	95.8	
2007	106.1	105.8	101.9	102.8	113.0	103.4	94.5	89.6	102.6	91.5	100.9	97.9	97.1	
2008	109.3	107.9	103.2	106.1	117.1	105.4	94.7	88.3	105.8	90.6	102.2	97.8	97.1	
2009	110.7	108.7	104.1	111.0	120.2	106.4	95.1	89.1	105.3	91.3	101.8	98.0	97.5	
2010	103.6	101.0	95.9	102.9	111.6	97.4	92.5	88.7	98.8	87.4	98.7	93.6	92.0	
2011	103.3	99.9	93.7	101.4	112.3	96.9	92.1	88.5	98.1	86.5	98.2	92.8	91.3	
2012	97.7	94.7	88.3	95.3	107.2	92.1	90.2	88.4	93.0	83.8	95.9	89.8	88.3	
2013	101.0	97.5	91.0	97.8	111.8	94.9	92.5	88.8	98.2	85.7	98.2	91.5	90.2	
2014	101.4	97.1	91.0	98.7	114.1	95.3	93.1	89.7	98.6	86.5	98.3	91.7	90.8	
2015	91.7	87.6	82.9	88.5	105.7	87.0	90.2	90.5	89.7	82.6	94.7	87.0	86.3	
2016	94.4	89.5	85.1	89.3	109.7	88.9	90.9	90.8	91.1	84.0	95.3	88.0	87.5	
2017	96.6	91.4	86.0	89.8	112.0	90.0	91.9	90.7	93.7	84.6	96.6	89.1	88.3	
2018	98.9	93.4	87.5	90.9	117.9	93.8	92.9	90.6	96.5	85.4	98.0	90.3	90.4	
2016 Sep.	95.1	90.2			110.2	89.2				95.6	88.3	87.7		
Oct.	95.1	90.3			110.0	89.0				95.9	88.3	87.6		
Nov.	94.6	89.7	84.8	88.8	109.6	88.6	90.8	90.6	91.0	83.7	95.4	88.1	87.4	
Dec.	93.7	89.0			108.6	87.8				95.3	87.9	87.1		
2017 Jan.	93.9	89.1			109.0	88.0				95.2	87.7	87.0		
Feb.	93.4	88.9	83.5	87.9	108.1	87.4	90.4	90.4	90.3	83.2	95.0	87.6	86.7	
Mar.	94.0	89.2			108.5	87.5				95.3	87.7	86.7		
Apr.	93.7	89.0			108.2	87.2				95.1	87.6	86.5		
May	95.6	90.5	85.0	88.8	110.5	88.8	91.3	90.8	92.1	84.1	96.0	88.6	87.6	
June	96.3	91.1			111.4	89.5				96.4	88.9	88.0		
July	97.6	92.3			113.3	90.9				97.1	89.7	89.0		
Aug.	99.0	93.6	87.8	91.4	115.0	92.3	92.9	90.8	96.0	85.6	97.9	90.4	89.8	
Sep.	99.0	93.6			115.0	92.3				97.9	90.5	89.9		
Oct.	98.6	93.1			114.8	91.9				97.5	89.9	89.4		
Nov.	98.5	93.1	87.6	91.1	115.0	92.0	93.0	90.7	96.6	85.5	97.9	90.2	89.7	
Dec.	98.8	93.3			115.3	92.2				98.1	90.3	89.8		
2018 Jan.	99.4	93.9			116.1	92.8				98.3	90.4	89.9		
Feb.	99.6	93.9	88.1	91.5	117.3	93.6	93.4	90.5	97.9	85.7	98.4	90.4	90.1	
Mar.	99.7	94.2			117.7	94.0				98.5	90.7	90.4		
Apr.	99.5	94.0			117.9	94.0				98.6	90.6	90.5		
May	98.1	92.7	87.1	90.5	116.6	93.1	93.0	90.6	96.7	85.2	98.1	90.1	90.0	
June	97.9	92.6			116.7	93.0				97.8	89.9	90.0		
July	99.2	93.8			118.2	94.2				97.6	90.3	90.4		
Aug.	99.0	93.4	87.7	91.3	119.0	94.6	92.6	90.4	95.9	85.4	97.5	90.2	90.6	
Sep.	99.5	93.9			120.4	95.5				98.0	90.8	91.5		
Oct.	98.9	93.4			119.0	94.4				97.6	90.3	90.7		
Nov.	98.3	92.9	87.1	90.4	117.9	93.5	92.6	90.9	95.4	85.4	97.6	90.3	90.5	
Dec.	98.4	92.7			118.0	93.4				97.4	90.0	90.3		
2019 Jan.	97.8	92.2			117.3	92.7				97.0	89.5	89.7		
Feb.	97.4	91.7	85.9	89.1	116.6	92.0	92.2	90.7	94.5	84.6	96.9	89.3	89.4	
Mar.	96.9	91.1			116.2	91.6				96.5	88.8	88.9		
Apr.	96.7	91.0			116.1	91.4				96.9	89.1	89.2		
May	97.4	91.4	...	...	117.0	91.9	92.1	90.8	94.0	84.5	97.0	89.4	89.6
June	97.9	91.9			117.4	92.2				97.2	89.7	89.8		
July	97.5	91.4			116.5	91.4				97.0	89.4	89.3		
Aug.	98.1	91.9	...	...	117.6	92.1	...	...	...	96.7	89.5	89.6	

* 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 vis-à-vis 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

group EER-19 (see footnote 1) and additionally Algeria, Argentina, Brazil, Chile, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, Philippines, Russian Federation, South Africa, Taiwan, Thailand, Turkey and Venezuela. Due to the redenomination of the Venezuelan bolivar on 20 August 2018, the spot rate from 17 August 2018 is used since then. 3 Annual and quarterly averages. 4 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. 5 Euro area countries (current composition) and countries belonging to the group EER-19. 6 Euro area countries (current composition) and countries belonging to the group EER-38 (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 2018 see the index attached to the January 2019 Monthly Report.

Monthly Report articles

October 2018

- State government finances: comparison of developments, debt brakes and fiscal surveillance
- The macroeconomic impact of uncertainty
- Activities of multinational enterprise groups and national economic statistics
- The growing importance of exchange-traded funds in the financial markets

November 2018

- The current economic situation in Germany

December 2018

- Outlook for the German economy – macroeconomic projections for 2019 and 2020 and an outlook for 2021
- German enterprises' profitability and financing in 2017
- Germany's international investment position: amount, profitability and risks of cross-border assets

January 2019

- The impact of an interest rate normalisation on the private non-financial sector in the euro area from a balance sheet perspective
- Price competitiveness in individual euro area countries: developments, drivers and the influence of labour market reforms
- Financial cycles in the euro area
- IFRS 9 from the perspective of banking supervision

February 2019

- The current economic situation in Germany

March 2019

- German balance of payments in 2018
- Cash demand in the shadow economy

April 2019

- Household wealth and finances in Germany: results of the 2017 survey

- Interest rate pass-through in the low interest rate environment
- European Stability and Growth Pact: individual reform options
- Germany's debt brake: surveillance by the Stability Council

May 2019

- The current economic situation in Germany

June 2019

- Outlook for the German economy – macro-economic projections for 2019 and 2020 and an outlook for 2021
- The European banking package – revised rules in EU banking regulation
- Payment services in transition: instant payments, PSD2 and new competitors
- The costs of payment methods in the retail sector

July 2019

- Parallels in the exchange rate movements of major currencies
- Crypto tokens in payments and securities settlement

August 2019

- The current economic situation in Germany

September 2019

- The impact of wages on prices in Germany: evidence from selected empirical analyses
- State government budgets: analysis of detailed results for 2018
- Longer-term changes in the unsecured inter-bank money market
- The performance of German credit institutions in 2018

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-ökonometrisches 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, January 2019^{2, 4}
- 2 Banking statistics customer classification, January 2019²
- 3 Aufbau der bankstatistischen Tabellen, July 2013^{2, 3}
- 4 Financial accounts for Germany 2013 to 2018, July 2019²
- 5 Extrapolated results from financial statements of German enterprises 1997 to 2017, June 2019²
- 6 Verhältniszahlen aus Jahresabschlüssen deutscher Unternehmen von 2014 bis 2015, May 2018^{2, 3}
- 7 Notes on the coding list for the balance of payments statistics, October 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, June 2019^{1, 2}
- 11 Balance of payments by region, July 2013
- 12 Technologische Dienstleistungen in der Zahlungsbilanz, June 2011³

■ Discussion Papers*

- 24/2019
Capital flows in the euro area and TARGET2 balances
- 25/2019
Macro to the rescue? – An analysis of macro-prudential instruments to regulate housing credit
- 26/2019
The effects of the Eurosystem's APP on euro area bank lending: Letting different data speak
- 27/2019
Do conventional monetary policy instruments matter in unconventional times?
- 28/2019
Forecast uncertainty, disagreement, and the linear pool
- 29/2019
Going the extra mile: Effort by workers and job-seekers
- 30/2019
Risk weighting, private lending and macro-economic dynamics
- 31/2019
A novel housing price misalignment indicator for Germany
- 32/2019
Price trends over the product life cycle and the optimal inflation target
- 33/2019
When old meets young? Germany's population ageing and the current account

^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. 88*.

■ 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.