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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 Data unknown, not to be published or not meaningful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

Despite worsening pandemic situation, economic activity unlikely to experience notable setback in Q4 2020

Real gross domestic product (GDP) is likely to have roughly stagnated in the final quarter of last year. The higher infection rates and considerable tightening of measures introduced again in stages to contain the pandemic put a brake on the German economy's catch-up momentum. Nevertheless, the greater restrictions are unlikely to have led to a major setback. This is because some sectors of the economy not directly affected by the measures continued to recover. Industry is particularly noteworthy in this context. According to figures available up to November, output rose sharply here on the back of a dynamic pick-up in demand. Construction also recorded a steep rise, however. In addition, retail sales grew considerably up to November. This counterbalanced the losses likely to have been incurred as a result of the mandatory closing of bricks-and-mortar retail stores in mid-December. According to the ifo business climate index, corporate sentiment brightened in December despite the increasing headwinds whipped up by the pandemic.[1] Service providers (excluding trade) even reported an improved assessment of the situation overall, although operations in particularly contact-intensive sectors such as the hotel and restaurant sector were still severely restricted. These encouraging signals regarding the resilience of the German economy suggest that the restrictions extended and tightened even further at the beginning of the new year may well not prove to be too much of a setback for the economic recovery. Positive impetus is also being provided by an improvement in prospects for foreign business, in part due to the trade agreement reached between the EU and the United Kingdom. If, however, the infection rates do not diminish significantly and the current restrictions on economic activity persist for a longer period or continue to be tightened even further, the economy might still be faced with a distinct setback.

Preliminary results show GDP dropped by 5% in 2020

The pandemic also left a deep mark on German economic output in 2020 as a whole. According to preliminary calculations by the Federal Statistical Office, real GDP fell by 5.0% (calendar-adjusted: 5.3%) on the year. The decline almost reached the magnitude of that recorded in 2009, when economic output fell by 5.7% in the wake of the global financial and economic crisis. Unlike then, owing to the pandemic a particularly strong decline in activity was seen in contact-intensive services, such as the hotel and restaurant sector or some parts of bricks-and-mortar trade. Industry likewise took a major hit, however. Only a few areas, such as construction or online trading, were able to increase their value added. The expenditure side of GDP shows a similar pattern. In contrast to 2009, private consumption also underwent a massive decline, alongside exports and investment in machinery and equipment. Only construction investment and government consumption experienced growth in this crisis year dominated by the pandemic.

Industry

Further marked rise in industrial output in November

Industrial output continued to rise markedly in November 2020, increasing by a seasonally adjusted 1¼% on the month. On an average of November and October, it overshot the average of the third quarter by 5¾%. Output in the automotive sector posted particularly sharp growth.[2] The production of capital goods was

1 The impact of the intensified measures from mid-December onwards is probably only reflected here to a small extent as, according to the ifo Institute, most of the responses to the survey had already been submitted beforehand.
2 According to data provided by the Association of the Automotive Industry (VDA), the number of passenger cars produced declined significantly in December in seasonally adjusted terms, but was still markedly above the average level of the third quarter.

Economic conditions in Germany*

Seasonally adjusted

Period	Orders received (volume); 2015 = 100			
	Industry			
	Total	of which: Domestic	of which: Foreign	Main construction
2020 Q1	97.8	92.7	101.7	125.5
Q2	75.9	80.1	72.8	117.2
Q3	98.6	93.0	102.9	120.8
Sep.	100.9	95.3	105.1	125.3
Oct.	104.2	98.3	108.6	125.4
Nov.	106.6	99.9	111.7	…

Period	Output; 2015 = 100			
	Industry			
	Total	of which: Intermediate goods	of which: Capital goods	Construction
2020 Q1	97.5	101.0	93.4	118.5
Q2	79.2	84.5	70.5	114.7
Q3	90.9	93.2	85.9	112.5
Sep.	92.3	95.3	86.7	114.8
Oct.	95.6	99.1	91.5	116.7
Nov.	96.7	101.5	92.7	118.3

Period	Foreign trade; € billion			Memo item:
	Exports	Imports	Balance	Current account balance in € billion
2020 Q1	322.87	270.39	52.48	62.75
Q2	252.50	228.09	24.41	37.50
Q3	304.30	254.03	50.27	64.04
Sep.	103.93	86.33	17.60	20.85
Oct.	104.88	86.66	18.22	22.46
Nov.	107.16	90.76	16.40	19.91

Period	Labour market			
	Employment	Vacancies[1]	Unemployment	Unemployment rate
	Number in thousands			%
2020 Q2	44,659	592	2,818	6.2
Q3	44,580	566	2,905	6.3
Q4	…	596	2,814	6.1
Oct.	44,605	588	2,853	6.2
Nov.	44,602	598	2,813	6.1
Dec.	…	603	2,776	6.1

Period	Prices; 2015 = 100			
	Import prices	Producer prices of industrial products	Construction prices[2]	Harmonised consumer prices
2020 Q2	95.5	103.0	118.3	106.2
Q3	96.8	103.3	115.7	105.5
Q4	…	…	116.0	105.4
Oct.	97.3	103.8	.	105.4
Nov.	97.7	104.1	.	105.4
Dec.	…	…	.	e 105.5

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

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up substantially overall (+7¼%) and intermediate goods saw a rise of a similarly high level. By contrast, the output of consumer goods declined (-1¼%). Despite edging up further, industrial output was still almost 3% lower in November than the pre-crisis level of the final quarter of 2019. Producers of capital goods showed the largest shortfall, but consumer goods production was also still significantly lower. By contrast, the production of intermediate goods exceeded pre-crisis levels.

Industrial orders strong

Industrial orders continued their steep upward movement in November 2020, rising by 2¼% on October in seasonally adjusted terms. On an average of November and October, the inflow of orders was up by as much as 7% on the average of the third quarter. Demand for German industrial products now thus clearly exceeded the pre-crisis level of the final quarter of 2019. Orders for intermediate goods rose especially sharply compared with the third quarter (+9¾%), but orders for capital goods were also substantially higher (+6%), with significantly more demand for computer, electronic and optical products, in particular. Orders received by the automotive sector were dampened in November but remained above the pre-crisis level. There was a relatively small increase in demand for consumer goods (+1¾%). In a regional breakdown, incoming orders from Germany and abroad grew at similar rates. The inflow of orders from non-euro area countries was particularly high but demand from the euro area also rose steeply.

Industrial turnover, exports of goods and imports of goods up further

Nominal industrial turnover increased markedly in November 2020, like industrial output, rising by 1¼% on the month. Taking November and October together, it was 5% higher than the third-quarter level. In line with developments in industrial output, substantial growth in capital goods and intermediate goods was recorded. By contrast, sales of consumer goods were slightly lower. Broken down by region, there was a somewhat stronger rise in export sales than sales to domestic customers compared with the third quarter. This was due to high

sales growth outside the euro area. Nominal exports of goods were also substantially higher in seasonally adjusted terms, with a month-on-month rise of 2¼% in November. On an average of November and October, they were up on the third quarter by as much as 4½%. Nominal imports of goods grew more strongly than exports in November, rising by 4¾% on the month. Taking November and October together, in a comparison with the third quarter, growth was only slightly higher than that seen for exports, however. Nominal imports were down on pre-crisis levels by a slightly smaller degree than exports (-1½% and -4%) towards the end of the period under review. In real terms, imports in November were even back to significantly exceeding their pre-crisis level. Unlike in the nominal calculation, the sharp decline in energy prices compared with the pre-crisis period did not have a dampening effect.

Construction

Construction output expanded in November

According to the information available to date, the construction sector has remained largely unaffected by the second wave of the coronavirus pandemic and the measures taken to contain it. Construction output even posted a distinct month-on-month increase in seasonally adjusted terms (+1¼%) in November. On an average of November and October, it was up substantially on the third quarter (+4½%). Output in the main construction sector rose more moderately than in the finishing trades, where the data are prone to revision. The latter had still seen a distinct decline in the third quarter. The order situation in the main construction sector is likewise still favourable, with new orders in October up sharply on the quarter (+3¾%). The reach of the order books, as measured by the ifo Institute, remained at a high level in December. According to the ifo Institute, equipment utilisation continued to rise at the end of the year and the assessment of the business situation improved.

Labour market

Short-time work fell up until October, but is likely to have risen again slightly at year-end

The labour market remained remarkably stable despite the renewed tightening of measures to combat the pandemic. There were more registrations for short-time work in November and December, with 1.3 million employees subject to social security contributions affected when taking the two months together. However, this corresponds to only a fraction of the notifications filed last spring. The current notifications are mainly limited to the hotel and restaurant area and parts of the retail sector affected by enforced closures. According to provisional figures provided by the Federal Employment Agency, which currently extend to October, the number of workers actually in short-time work schemes has fallen to 2.0 million. This number is likely to have risen only slightly in the last two months of 2020. As a rule, not all employees registered for short-time work are actually transferred to short-time working arrangements at a later date. Furthermore, short-time work was probably scaled back further in other sectors of the economy.

Unemployment down throughout reporting period

Registered unemployment declined distinctly in December, as it had done in the two preceding months. The official unemployment figure was 37,000 lower than in the previous month after seasonal adjustment and the unemployment rate remained unchanged at 6.1% due to rounding. This implies a continuation of the positive trend despite the partial lockdown from the beginning of November. The further tightening of contact restrictions from mid-December onwards is not yet reflected here, however, as the cut-off date for the December data had already passed. Up until this point, as was the case in October and November, unemployment had declined, especially in the category of SGB III job seekers (those receiving unemployment benefits under the statutory unemployment insurance scheme), which is more conditioned by economic activity than unemployment under category SGB II, where persons receive basic social benefits.

Employment broadly stable

Although employment stabilised quickly following the decline in the second quarter, the recovery thereafter can be regarded as extremely small following a downward revision of the data by the Federal Statistical Office. Total employment no longer showed any improvement at all in November. According to initial estimates by the Federal Statistical Office for 2020 as a whole, this is likely to be no different in December. Nevertheless, the number of employees continued to rise slightly, while self-employment declined significantly in line with the trend that has been evident for some time now. The leading employment indicators were mixed recently, reflecting the current high level of uncertainty. While the Ifo employment barometer fell clearly, the labour market barometer of the Institute for Employment Research (IAB) showed a slight improvement. The number of vacancies also continued to increase. At the current juncture, employment is not expected to decline considerably despite the stricter lockdown.

Prices

Crude oil prices continue to rise

The past few weeks have seen an acceleration in the upward movement for crude oil prices, which had begun in November. This was mainly due to positive news on vaccination research and the OPEC+ decision for an only gradual expansion of production volumes in 2021. Up to the start of January, prices had risen by 25% compared with November, which is almost one-fifth below the level of a year ago. As this report went to press, the price of a barrel of Brent crude oil stood at US$56. Crude oil futures were trading at considerable discounts. The discount on crude oil futures was US$1 for deliveries six months ahead and US$2½ for deliveries 12 months ahead.

Import and producer prices higher

Import prices rose markedly in November overall, mainly as a result of the steep hike in energy prices. By contrast, other imported goods cost scarcely more than in the previous month. Domestic industrial sales prices were also up markedly. The rise in energy prices was much the same as that for other goods. As in the previous month, prices at the import level were just under 4% down on the year and domestic industrial sales prices were 0.5% lower.

Consumer prices higher too

On the basis of preliminary data, consumer prices rose slightly in December for the first time since the spring in seasonally adjusted terms. This was mainly due to distinctly higher energy prices. Services also became slightly more expensive. By contrast, food was cheaper than in the previous month. Prices for industrial goods excluding energy likewise declined as a result of high discounts on clothing. The price collection was unaffected by the mandatory closures of further businesses and services from mid-December to contain the spread of the virus, as it was largely complete when this entered into force. The Harmonised Index of Consumer Prices (HICP) was still down by 0.7% on the year.[3] Excluding energy and food, it is likely to have remained 0.1% below the previous year's level. If clothing and travel are also excluded, the rate rose slightly to +0.4%.

Inflation fell significantly on an average of 2020 due to one-off effects

Averaged across 2020, headline inflation is likely to have declined from +1.4% to +0.4% owing to the collapse in crude oil prices and the temporary reduction in VAT rates.[4] Excluding energy and food, the corresponding rate was probably +0.7%, after likewise standing at +1.4% in 2019. Inflation is likely to be clearly positive again in January 2021. From the beginning of the year, CO_2 emission permits are being allocated for the consumption of refined petroleum products and gas. In addition, VAT rates have been raised again. However, there is uncertainty as to whether the impact of changed tax rates can be fully reflected in the price statistics given the ongoing closure of businesses.

3 For the national consumer price index (CPI), the rate was -0.3%, likewise unchanged from November.
4 For more information on passing on changes in VAT rates to consumers, see Deutsche Bundesbank (2020a).

Public finances

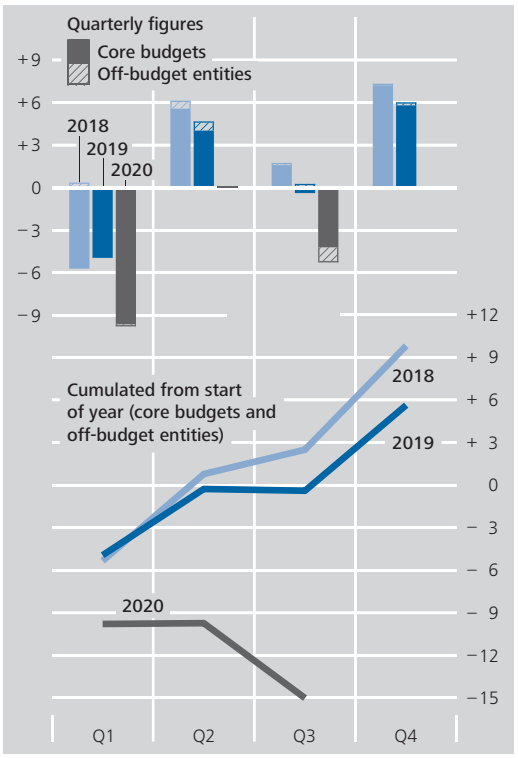
Local government finances

Considerable deficit in 2020 Q3: revenue down …

Local government budgets (core budgets and off-budget entities) ended the third quarter of 2020 with a deficit of just under €5½ billion. In the same quarter of the previous year, they had registered only a small deficit. Revenue declined by 2½% (-€2 billion), chiefly owing to tax revenue (-9%, or €2½ billion). Here, revenue from shares in income tax fell somewhat more sharply than net receipts from local business tax. Although receipts from fees fell distinctly by 7½%, the decline was half of that seen in the second quarter of 2020 when more local amenities had been closed. Transfers from state governments rose significantly by 4½%, although large-scale general purpose grants had already been brought forward to the previous quarter in North Rhine-Westphalia. The increase might be due to the passing on of central government funds intended to ease the pandemic-related burdens of local public transport enterprises. Central government had transferred €2½ billion to state governments for this purpose.

Local government fiscal balance

€ billion



Source: Federal Statistical Office.
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… and expenditure up significantly

Expenditure rose significantly overall by 5% (+€3½ billion). At 3½%, growth in the large expenditure item personnel costs distinctly outpaced the 1% increase in remuneration for salaried employees. Spending on social benefits also rose by 3½%. Accommodation costs for those receiving unemployment benefit II went up only slightly more strongly, although the eligibility criteria had been eased. Other operating expenditure declined moderately, with restrictions on local amenities likely to have played a role here. By contrast, grants to non-government entities, probably also including local public transport enterprises, recorded large growth (+9%, or €½ billion). Despite the coronavirus crisis, fixed asset formation continued to expand strongly (+13%, or €1 billion), with sharper growth originating from purchases of land and equipment than from construction investment. Developments in the off-budget entities in North Rhine-Westphalia had a noticeable impact here.

Deficit very large in first three quarters, but considerable relief provided by central government and state governments in final quarter

In the first three quarters of 2020 combined, local government budgets recorded a very large deficit of €15 billion. Their budgets had practically been balanced in the same period a year earlier. In the final quarter of 2020, central government and state governments paid a one-off sum of €11 billion to compensate local governments for shortfalls in local business tax arising from the coronavirus pandemic. The amount was based on the expected shortfalls compared with the tax estimate in autumn 2019. Moreover, in the fourth quarter, central government assumed an additional quarter of the accommodation costs for recipients of unemployment benefit II with retroactive effect from the start of 2020 (permanent annual relief of approximately €3½ billion). Together with these payments, the local government budget deficit stemming from the first three quarters

of 2020 could have been largely offset in the final quarter.

Central government and state governments shielded local governments from costs related to the coronavirus in 2020, but burdens will persist

Overall, central government and state governments largely shielded local governments from the burdens caused by the coronavirus crisis in 2020. This year, the effects of the crisis will probably continue to put strain on regular local government receipts. In the absence of special adjustments, state government transfers from the municipal revenue-sharing scheme, for instance, would be much smaller than anticipated before the crisis. Moreover, the tax estimate for 2021, too, indicated large revenue shortfalls for local governments as a result of the crisis. However, central government does not plan to provide further compensation for local government tax shortfalls, and there is limited scope for budget adjustments at the local level. As a result, state governments – in line with their fundamental responsibility – will be required to step in. The crisis is making it clear that local government finances are in need of reform. Substantial adjustments appear advisable in order to ensure stable and crisis-proof financing.[5]

Limited rise in local government debt – and partially in cash advances

Over the course of the third quarter of 2020, local government debt rose by €1½ billion to reach €139 billion (including liabilities to the public sector). This indicates that most of the quarterly deficit was covered using reserves. Credit market debt rose by €1 billion to just under €98 billion. The volume of cash advances increased by just over €½ billion. It thus grew to over €38½ billion, after having declined for several years until the end of 2019. North Rhine-Westphalia and Lower Saxony made particular contributions to this rise. By contrast, cash advances were repaid in the majority of the non-city states in the quarter under review. On balance, local governments in Bavaria, in particular, largely paid back the cash advances taken up in the second quarter of 2020.

Securities markets

Bond market

High net issuance in the German bond market in November 2020

In November 2020, issuance in the German bond market stood at €120.0 billion in gross terms (previous month: €128.8 billion). After deducting redemptions, which were significantly lower than in the previous month, and taking account of changes in issuers' holdings of their own debt securities, the outstanding volume of domestic bonds grew by €26.6 billion. By contrast, the outstanding amount of foreign debt securities in Germany decreased by €5.2 billion. The funds raised from sales of domestic and foreign debt securities in the German market therefore amounted to €21.3 billion.

Rise in public sector capital market debt

The public sector issued bonds totalling €27.1 billion net in the reporting month. Ultimately, this was chiefly attributable to central government (€20.3 billion). Above all, it issued five-year Federal notes (Bobls: €15.6 billion) as well as two-year Federal Treasury notes (Schätze: €4.5 billion) and ten-year Federal bonds (Bunds: €3.4 billion). By contrast, central government redeemed Treasury discount paper (Bubills) in net terms (€3.6 billion). State and local government issued bonds worth €6.7 billion net.

Weak net issuance by enterprises

German enterprises increased their capital market debt by €0.5 billion net in the reporting month. Insurance companies were the chief issuers of bonds, on balance, but other financial intermediaries were also active in the market. The majority of the bonds issued had maturities of more than one year. By contrast, non-financial corporations redeemed their own bonds.

Fall in credit institutions' capital market debt

The outstanding volume of debt securities issued by domestic credit institutions fell by €1.0 billion in November, following a decline of €16.3 billion in the preceding month. On bal-

5 For more details, see Deutsche Bundesbank (2020b).

ance, primarily debt securities issued by specialised credit institutions (€1.3 billion) and mortgage Pfandbriefe (€1.2 billion) were redeemed. This contrasted with net issuance of other bank debt securities that can be structured flexibly worth €2.4 billion.

Purchase of debt securities

Among the various investor groups, the Bundesbank was the main buyer in November on balance, acquiring debt securities in the net amount of €27.7 billion – for the most part under the Eurosystem's asset purchase programmes. Domestic credit institutions and domestic non-banks increased their holdings of bonds by €1.5 billion and €1.1 billion, respectively. While banks primarily purchased foreign securities, non-banks' focus was on domestic securities. Foreign investors disposed of German debt securities totalling €8.9 billion net.

Equity market

Net issuance in the German equity market

In the reporting month, domestic enterprises placed €0.2 billion worth of new shares in the German equity market (October: €1.1 billion). The outstanding volume of foreign shares in the German market rose by €9.6 billion over the same period. Domestic non-banks and domestic credit institutions were, on balance, the main purchasers of equities (€8.1 billion and €1.9 billion, respectively), while foreign investors marginally reduced their equity exposure in Germany (€0.2 billion).

Mutual funds

German mutual funds record moderate inflows

In November, domestic mutual funds sold shares totalling €7.5 billion net in the market (previous month: €11.7 billion). In net terms, fresh funds were injected in almost equal measure into retail funds and specialised funds reserved for institutional investors (€3.8 billion and €3.7 billion, respectively). Among the various asset classes, mixed securities-based funds (€4.1 billion) and equity funds (€4.0 billion) attracted the most inflows. By contrast, bond funds redeemed their own shares to the tune of €2.0 billion net. Foreign mutual funds placed shares worth €7.6 billion in the German market in the reporting month. On balance, domestic non-banks were virtually the sole purchasers, adding a net €14.4 billion worth of mutual fund shares to their portfolios. Foreign investors acquired German mutual fund shares for €0.9 billion net, while domestic credit institutions sold shares for €0.1 billion net.

Sales and purchases of debt securities

€ billion

Item	2019 Nov.	2020 Oct.	2020 Nov.
Sales			
Domestic debt securities[1]	38.4	– 17.9	26.6
of which:			
Bank debt securities	13.5	– 16.3	– 1.0
Public debt securities	18.4	– 3.7	27.0
Foreign debt securities[2]	7.0	18.5	– 5.2
Purchases			
Residents	28.9	48.5	30.3
Credit institutions[3]	5.6	9.3	1.5
Deutsche Bundesbank	7.5	24.6	27.7
Other sectors[4]	15.8	14.6	1.1
of which:			
Domestic debt securities	13.0	4.6	8.3
Non-residents[2]	16.4	– 47.9	– 8.9
Total sales/purchases	45.3	0.6	21.3

1 Net sales at market values adjusted for changes in issuers' holdings of their own debt securities. **2** Transaction values. **3** Book values, statistically adjusted. **4** Residual.

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Balance of payments

Decrease in current account surplus

Germany's current account recorded a surplus of €21.3 billion in November 2020, down €1.6 billion from the previous month's level. This was primarily attributable to a decrease in the goods account surplus. The surplus in invisible current transactions, which comprise services as well as primary and secondary income, expanded slightly.

Major items of the balance of payments

€ billion

Item	2019 Nov.	2020 Oct.	2020 Nov.p
I. Current account	+ 23.5	+ 22.9	+ 21.3
1. Goods	+ 17.9	+ 20.3	+ 18.5
Receipts	110.6	110.2	110.6
Expenditure	92.7	89.9	92.1
Memo item:			
Foreign trade[1]	+ 18.5	+ 19.4	+ 17.2
Exports	113.2	112.1	111.7
Imports	94.7	92.7	94.6
2. Services	+ 0.5	– 0.4	+ 1.9
Receipts	25.6	22.9	22.2
Expenditure	25.1	23.3	20.3
3. Primary income	+ 8.7	+ 7.2	+ 8.2
Receipts	18.1	16.1	16.0
Expenditure	9.4	8.9	7.7
4. Secondary income	– 3.6	– 4.3	– 7.5
II. Capital account	– 0.5	– 1.3	– 0.9
III. Financial account (increase: +)	+ 34.8	+ 29.2	+ 15.9
1. Direct investment	+ 5.2	+ 5.3	+ 5.8
Domestic investment abroad	+ 14.1	+ 13.1	+ 35.7
Foreign investment in the reporting country	+ 8.9	+ 7.8	+ 29.9
2. Portfolio investment	+ 0.9	+ 75.2	+ 19.5
Domestic investment in foreign securities	+ 17.2	+ 26.5	+ 11.1
Shares[2]	+ 4.1	+ 4.2	+ 8.7
Investment fund shares[3]	+ 6.1	+ 3.7	+ 7.6
Short-term debt securities[4]	– 0.1	+ 3.3	– 1.8
Long-term debt securities[5]	+ 7.1	+ 15.2	– 3.4
Foreign investment in domestic securities	+ 16.3	– 48.7	– 8.4
Shares[2]	– 0.2	– 0.5	– 0.3
Investment fund shares	+ 0.1	– 0.4	+ 0.9
Short-term debt securities[4]	+ 9.6	– 11.6	– 6.5
Long-term debt securities[5]	+ 6.9	– 36.3	– 2.5
3. Financial derivatives[6]	+ 1.5	+ 0.8	+ 9.0
4. Other investment[7]	+ 27.6	– 52.3	– 18.5
Monetary financial institutions[8]	– 19.0	– 11.0	– 18.0
of which: Short-term	– 9.8	– 10.5	– 7.8
Enterprises and households[9]	+ 5.3	– 3.6	– 7.4
General government	+ 2.9	+ 2.2	– 3.3
Bundesbank	+ 38.4	– 39.8	+ 10.1
5. Reserve assets	– 0.4	+ 0.1	+ 0.1
IV. Errors and omissions[10]	+ 11.8	+ 7.6	– 4.5

1 Special trade according to the official foreign trade statistics (source: Federal Statistical Office). **2** Including participation certificates. **3** Including reinvestment of earnings. **4** Short-term: original maturity of up to one year. **5** Long-term: original maturity of more than one year or unlimited. **6** Balance of transactions arising from options and financial futures contracts as well as employee stock options. **7** Includes, in particular, loans and trade credits as well as currency and deposits. **8** Excluding the 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. **10** 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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Narrower surplus in goods account

In November, the surplus in the goods account fell by €1.8 billion on the month to €18.5 billion, with imports of goods recording a sharper increase than exports.

Increases in services and primary income balances somewhat more pronounced than decline in secondary income balance

The surplus on invisible current transactions went up slightly by €0.2 billion in November to €2.7 billion, as the increasing balances of the services account and in primary income more than offset the larger deficit in the secondary income account. In the services account, the deficit of €0.4 billion recorded in October turned into a surplus of €1.9 billion, chiefly owing to the reduction in expenditure linked to pandemic-related lower travel spending by residents. Receipts also declined overall, albeit less sharply, with lower receipts from financial services and travel having a dampening effect in particular. Net receipts on primary income went up by €1.0 billion to €8.2 billion, with a decline in dividend payments to non-residents on portfolio investment playing a major role. The deficit in the secondary income account widened by €3.2 billion to stand at €7.5 billion. This was mainly the result of higher general government payments to the EU budget in connection with financing related to gross national income.

Portfolio investment sees outflows

In November 2020, there was growing confidence in the international capital markets that the approval of the first vaccines against SARS-CoV-2 would allow the economy to normalise in 2021. In addition, the ultimately clear outcome of the US presidential election reduced political uncertainty. It was against this backdrop that Germany's cross-border portfolio investment recorded net capital exports of €19.5 billion (after €75.2 billion in October). Domestic investors purchased foreign securities worth €11.1 billion. They purchased shares (€8.7 billion) and mutual fund shares (€7.6 billion), while offloading bonds (€3.4 billion) and money market paper (€1.8 billion). Foreign investors divested themselves of German securities once more, albeit to a lesser extent (€8.4 billion, after €48.7 billion in October). They mainly sold money market paper (€6.5 billion), but also disposed of bonds (€2.5 billion), which

affected long-term debt securities issued by the government and commercial banks. Non-residents also sold small amounts of German shares (€0.3 billion), but acquired mutual fund shares (€0.9 billion) on balance.

Financial derivatives

Financial derivatives recorded net capital exports of €9.0 billion in November (October: €0.8 billion).

Direct investment posts net capital exports

Direct investment generated net capital exports of €5.8 billion in November, following €5.3 billion in October. Domestic enterprises increased their foreign direct investment by €35.7 billion. These investors boosted their equity capital in non-resident affiliates by €12.8 billion, with reinvested earnings also playing a role here. In addition, they granted, on balance, €22.9 billion in loans to affiliated enterprises abroad. Foreign direct investment stocks in Germany rose by €29.9 billion as a result of transactions. Foreign enterprises supplied their affiliates in Germany with €9.0 billion of equity capital and provided €20.9 billion on balance via intra-group lending.

Other investment registers inflows

Other statistically recorded investment, which comprises loans and trade credits (where these do not constitute direct investment), bank deposits and other investment, registered net inflows amounting to €18.5 billion in November (following €52.3 billion in October). Monetary financial institutions (excluding the Bundesbank) recorded net capital imports of €18.0 billion, while the Bundesbank recorded net capital exports (€10.1 billion). This was chiefly attributable to the €12.9 billion increase in the TARGET2 balance. On balance, further funds flowed to enterprises and households (€7.4 billion) and the government (€3.3 billion).

Reserve assets

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

List of references

Deutsche Bundesbank (2020a), Impact of the temporary reduction in VAT on consumer prices, November 2020, pp. 56-58.

Deutsche Bundesbank (2020b), Reform of local government finances: making financing crisis-proof and stable, Monthly Report, July 2020, pp. 10-11.

The slowdown in euro area productivity growth

Economic growth and prosperity are largely determined by developments in labour productivity. It is therefore unsurprising that the long-observed slackening of productivity gains in many advanced economies has come to the fore of the economic policy debate. In the euro area, too, productivity growth has slowed markedly over the past 20 years, albeit with some pronounced differences between Member States.

On the one hand, the steep economic losses induced by the global financial and economic crisis and the subsequent sovereign debt crisis likely affected productivity growth not only in the short term. Beyond this, however, there are also clear signs of structural influences. Growth in total factor productivity – a key driver of labour productivity – had already declined in large swathes of the euro area prior to the onset of the global financial crisis. This can be attributed, amongst other things, to a decline in entrepreneurial innovation and adoption activities in some sectors of the economy and decreasing allocative efficiency. Continued demographic change is likely to have contributed to this. Other possible explanatory factors include the institutional and regulatory frameworks in place. The relative loss of importance of the industrial sector, which was accompanied by a shift in labour input to economic sectors with comparatively low productivity growth, also slowed overall output growth. Increased productivity gains in some service sectors were unable to offset this.

The ageing of the population and reduced labour force growth could continue to dampen labour productivity growth in the future. At present, it is difficult to assess what impact the coronavirus pandemic will have on productivity developments. The macroeconomic turmoil triggered by the pandemic is likely to weigh on future labour productivity growth. The extent to which the exceptional challenges presented by the current crisis will lead to a wave of innovation that counteracts such burdens remains to be seen.

Labour productivity developments in the euro area and the Member States

Productivity as a key economic metric

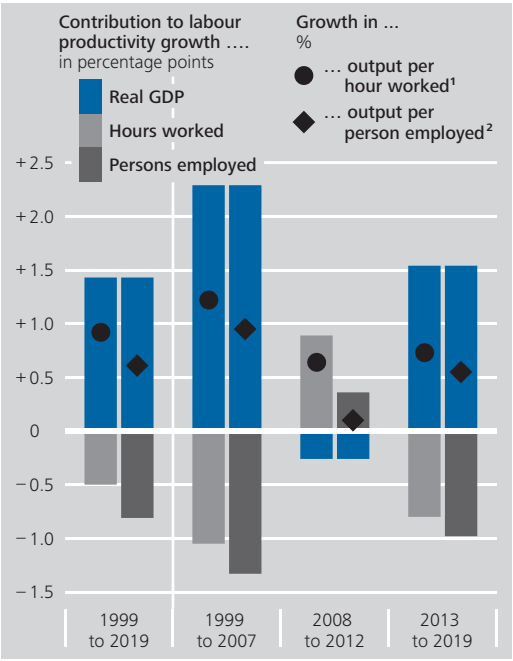
Recently, the focus has mainly been on current economic developments on account of the coronavirus pandemic. However, the long-observed trend of slowing labour productivity growth in a great number of advanced economies remains a core economic policy issue. Labour productivity, defined as the ratio of output to labour input, is a key measure of economic efficiency.[1] Trend developments in labour productivity are an indicator of economies' growth potential. Owing to its close link to per capita income, labour productivity is often also interpreted as a measure of prosperity.

Measuring labour productivity using different labour input metrics

The output measure typically used for the calculation of labour productivity is the price-adjusted gross domestic product (GDP) or real value added, while labour input is determined based on the number of hours worked or the number of persons employed. The number of hours worked is considered to be the more precise measure of labour input, as both trend changes in average hours worked as well as temporary reductions in hours worked or absences are taken into account.

Labour productivity growth in the euro area

Average annual change



Sources: Eurostat and Bundesbank calculations. **1** Labour productivity measured as the ratio of real GDP to the number of hours worked. **2** Labour productivity measured as the ratio of real GDP to the number of persons employed.

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Slowdown in euro area productivity growth

For the euro area as a whole, a marked slowdown in productivity growth can be observed between 1999 and 2019, irrespective of the labour input measure used. Greater differences between the two metrics become apparent during the global financial and economic crisis as well as the subsequent sovereign debt crisis. Between 2008 and 2012, the number of hours worked fell more sharply than the number of persons employed.[2] Growth of output per hour during this period was accordingly markedly higher than that of output per person employed.

Heterogeneous labour productivity developments in the euro area countries

A look at the euro area as a whole conceals what are, in some instances, considerable variations between the Member States. For instance, labour productivity in Estonia, Ireland, Latvia, Lithuania, Slovakia and Slovenia increased significantly more strongly on average between 1999 and 2019 than the euro area average. While the above-average rise in labour productivity in central and eastern European Member States is to be viewed against the backdrop of the ongoing convergence process, the statistical data on labour productivity in Ireland over the past few years have been strongly influenced by the recording of multinational enterprises' business activities.[3] By contrast, labour productivity in the five largest euro area countries increased much more moderately. While labour productivity growth in Germany, France and the Netherlands rose on average by about 1% per year, the development of prod-

1 It follows from the definition above that labour productivity growth can be approximated by the difference between the rates of growth of output and labour input.
2 This was due, amongst other things, to the hoarding of labour, which was exacerbated by short-time work schemes. See also Deutsche Bundesbank (2015).
3 See also Deutsche Bundesbank (2018, 2019b).

Average annual labour productivity growth

Average annual percentage change

Country	Real GDP per person employed				Real GDP per hour worked			
	Total period 1999 to 2019	1999 to 2007	2008 to 2012	2013 to 2019	Total period 1999 to 2019	1999 to 2007	2008 to 2012	2013 to 2019
Euro area[1]	0.6	0.9	0.1	0.6	0.9	1.2	0.6	0.7
Austria	0.7	1.5	– 0.3	0.3	1.2	2.0	0.6	0.6
Belgium	0.8	1.4	– 0.1	0.5	0.8	1.3	0.0	0.6
Cyprus	0.8	1.7	– 0.1	0.3	1.1	2.0	0.1	0.6
Estonia[2]	3.3	6.3	0.0	1.9	3.5	6.1	1.2	2.6
Finland	0.8	2.1	– 1.0	0.5	1.2	2.5	– 0.5	0.8
France	0.8	1.1	0.2	0.6	1.0	1.5	0.2	0.9
Germany	0.6	1.1	– 0.1	0.5	1.0	1.4	0.5	0.7
Greece	0.1	2.7	– 3.6	– 0.5	0.3	2.7	– 3.4	0.0
Ireland	3.1	2.4	1.7	5.1	3.6	2.9	3.1	4.8
Italy	– 0.2	0.1	– 1.0	0.0	0.2	0.4	0.0	0.2
Latvia	4.0	6.8	1.5	2.2	4.3	7.5	0.9	2.8
Lithuania	4.2	6.9	2.0	2.3	4.0	6.1	2.5	2.3
Luxembourg	0.1	1.2	– 2.3	0.5	0.4	1.4	– 1.6	0.5
Malta[3]	1.0	1.3	0.5	1.0	1.7	1.8	1.8	1.4
Netherlands	0.7	1.3	– 0.1	0.6	0.9	1.7	0.2	0.3
Portugal	0.9	1.3	0.6	0.6	1.0	1.4	1.1	0.3
Slovakia	2.9	4.7	1.8	1.3	3.2	4.9	1.8	2.1
Slovenia	1.7	3.3	– 0.2	1.2	2.1	3.8	– 0.1	1.6
Spain	0.6	0.0	1.7	0.5	0.7	0.3	1.7	0.6
Other advanced economies								
Canada	0.8	1.1	0.4	0.6	1.1	1.5	0.6	0.9
Japan[4]	0.7	1.4	0.2	0.2	0.7	1.1	0.2	0.5
United Kingdom	0.9	1.8	– 0.2	0.5	1.0	2.1	0.0	0.4
United States[5]	1.4	1.8	1.2	0.9	1.6	2.3	1.4	0.7

Sources: Eurostat and Bundesbank calculations. **1** 19 countries as of 2015. **2** Data for productivity based on the number of hours worked in Estonia available from 2001. **3** Data for labour productivity in Malta available from 2001. **4** Data for labour productivity in Japan available up to 2018. **5** Data for labour productivity in the United States available up to 2018.

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uctivity was considerably lower in Spain. In Italy, labour productivity growth virtually stagnated.

Moderate productivity growth prior to the global financial and economic crisis …

Looking at individual sub-periods, productivity growth before the global financial and economic crisis was larger in most euro area countries than in later years. In the pre-crisis period, labour productivity expanded particularly strongly in the Baltic States. Productivity gains in Italy and Spain, by contrast, were strikingly small.

… was followed a broad-based slump

In the wake of both the global financial and economic crisis and the subsequent sovereign debt crisis, productivity growth in most euro area countries collapsed. In several euro area countries, labour productivity even declined. Spain represents an exception in this respect. As a result of the disproportionately large reduction in labour input, hourly labour productivity growth there increased more than fivefold during the crisis period.[4]

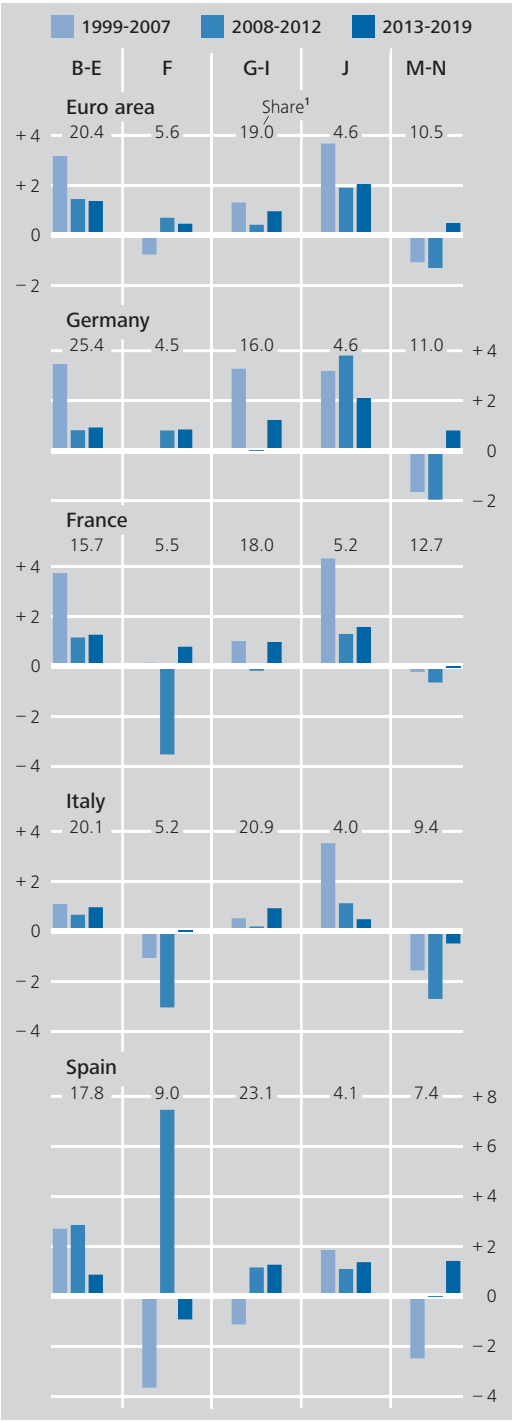
Economic recovery amid subdued productivity growth

Productivity growth picked up again in subsequent years, but in most euro area countries it fell short of its pre-crisis rates. Spain was again

4 See also Deutsche Bundesbank (2016). A similar phenomenon can be seen in Ireland, where average labour productivity growth also increased during the crisis years.

Labour productivity growth in selected economic sectors and sector groups*

Average annual percentage change



Sources: Eurostat and Bundesbank calculations. * Sector classification according to NACE. **B-E:** mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; and water supply; sewerage, waste management and remediation activities; **F:** construction; **G-I:** wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage and accommodation and food service activities; **J:** information and communication; **M-N:** professional, scientific and technical activities and administrative and support service activities. **1** Sector or sector group's average percentage share in aggregate nominal gross value added over the observation period 1999 to 2019.

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a notable exception, with GDP rising at an above-average rate during the recovery period, whilst employment growth remained subdued. In the other countries hit hard by the crisis, however, productivity gains remained clearly below the euro area average. Labour productivity increased only marginally in Italy and continued to decline in Greece despite a certain degree of economic recovery.

Difficult to gauge impact of the coronavirus pandemic on productivity growth

At present, it is difficult to assess how the current coronavirus pandemic will affect trend labour productivity growth. At the current end of the data, the reduction of labour input during the crisis, coupled with simultaneous efforts to maintain employment, result in significant differences between the development of the growth rates of output per hour and output per person employed. Alongside these short-term effects, however, longer-term impacts are to be expected (for more on this, see the box on pp. 36 f.).

Slowdown in productivity growth in manufacturing

The flattening of productivity growth between 1999 and 2019 was observed in several economic sectors.[5] It was particularly pronounced in manufacturing, especially in Germany and France. The manufacturing sector had previously been characterised by above-average productivity gains, which also had a marked impact on average productivity growth owing to the importance of this sector. A similarly strong slowdown was observed in the communication and information sectors. However, productivity growth here, as in manufacturing, was still above average over the period under review.

Marked regional differences in services sector and construction industry, in some cases

In other services sectors, by contrast, productivity growth was rather subdued over the whole observation period. This was particularly true for the provision of professional, scientific, technical, administration and support service

5 The sectoral analysis is based on the Statistical classification of economic activities in the European Community (Nomenclature générale des activités économiques dans les Communautés européennes (NACE)), Rev. 2.

activities.[6] Productivity growth in this area accelerated only recently, particularly in Germany and Spain. In wholesale and retail trade, transportation and storage, and accommodation and food service activities, too, euro area labour productivity increased only slowly for the most part following the introduction of the single currency. In the construction sector, productivity was subject to what were, in some cases, considerable fluctuations. In Italy and France, it outright collapsed between 2008 and 2012. Between 2013 and 2019, output in the affected countries recovered perceptibly, but productivity growth remained subdued. In Spain, by contrast, the sharp contraction in construction output during the crisis was accompanied by an even greater reduction in the use of mostly low-productivity workers, resulting in a significant increase in average labour productivity growth. Productivity has since fallen once again somewhat.[7]

Weakened productivity momentum outside the euro area, too

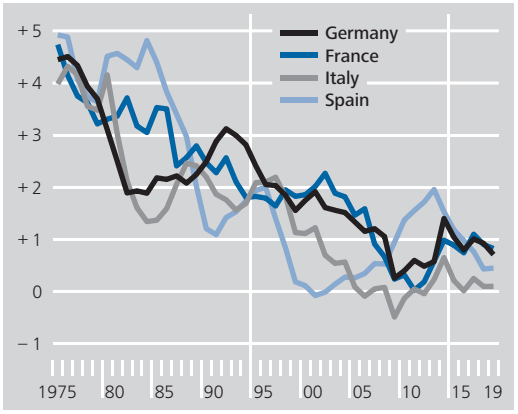
A comparison with other advanced economies shows that subdued productivity developments since 2013 are not a specific feature of the euro area. In the United States, average growth of output per hour was only around one-third of its pre-crisis average; in the United Kingdom, it stood at only one-fifth. Productivity growth also decelerated markedly in Canada and Japan. Meanwhile, the decline in the euro area was comparatively moderate; hourly productivity growth here between 2013 and 2019 did not differ markedly from that in other advanced economies. By contrast, hourly productivity growth in the euro area had been below average before the onset of the financial crisis.

Diminished productivity growth in the four large euro area countries even prior to the financial crisis

Both cyclical and structural factors may provide possible explanations for the subdued productivity dynamics. It is conceivable that severe recessions, as seen during the global financial and economic crisis and the subsequent sovereign debt crisis, could affect productivity gains in the longer term by weakening the development and adoption of innovations, or disrupt the allocation of production factors (see also the box on pp. 28 f.).[8] However, data for the past four decades show that the slowdown in productivity growth started prior to the global financial and economic crisis, at least in the four largest euro area countries. This finding contradicts a purely cyclical explanation of declining productivity growth and also points to structural causes.

Labour productivity growth in selected euro area countries since 1975

%, five-year moving average of annual growth rates



Sources: OECD and Bundesbank calculations.
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Explanatory approaches to the slowdown in labour productivity growth

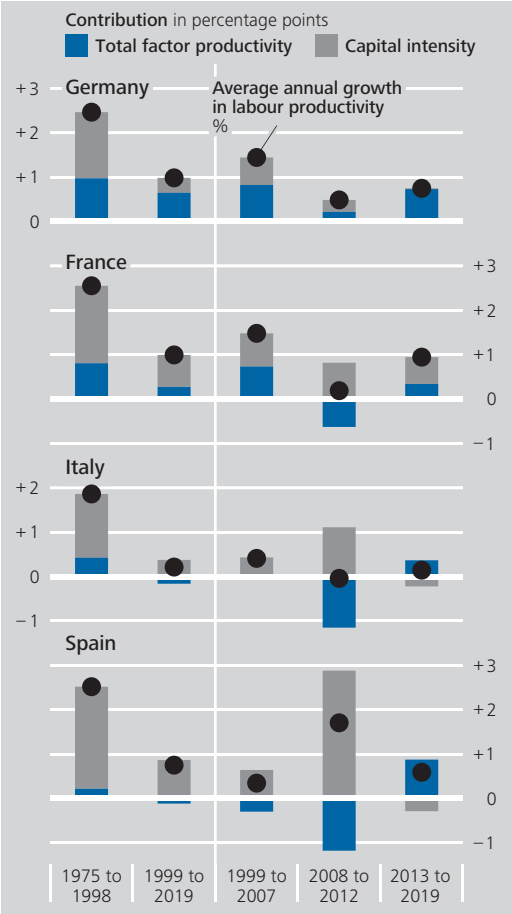
Key drivers of labour productivity

Productivity slowdown, according to growth decomposition …

Growth accounting is one way to study labour productivity developments in greater detail. Most commonly, the change in labour productivity is decomposed into the contributions of

6 It should, however, be borne in mind that measuring labour productivity in the services sector sometimes presents a challenge, for instance, when taking into account quality improvements.
7 A clear shift away from building construction, which has declined particularly sharply, towards civil engineering, where per capita value added is just over 40% higher, also contributed to the considerable increase in labour productivity seen in the Spanish construction sector since 2008. See Deutsche Bundesbank (2014).
8 See, inter alia, Comin and Gertler (2006), Liu and Wang (2014), and Anzoategui et al. (2019).

Contributions of capital intensity and total factor productivity to labour productivity growth*



Sources: European Commission (AMECO database) and Bundesbank calculations. * Capital intensity defined as the ratio of the capital stock to the number of hours worked. Labour productivity measured as the ratio of real GDP to the total number of hours worked.

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capital intensity, which is defined as the ratio of the capital stock to labour input, and total factor productivity (TFP).[9] The TFP contribution is measured as a residual. It captures the part of productivity growth that cannot be attributed to changes in the factor inputs, serving as a yardstick for the increased efficiency of production processes.[10] The long-term development of TFP is sometimes also seen as an indicator of disembodied technological progress. In the short term, though, it is difficult to make such an interpretation. Even in the case of severe economic downturns, decreases in technological progress can, if at all, only be regarded to a very limited extent as a plausible explanation for calculated TFP declines. Furthermore, due to its residual character, the contribution of TFP can also pick up other influences on labour productivity. Against this background, there is good reason to interpret TFP more broadly and to view it as a metric of production efficiency.[11]

… due to declining TFP growth …

According to the growth accounting exercise, TFP growth in the four largest euro area economies has lost significant momentum over the past 45 years. An examination of individual subperiods shows that the average TFP development between 1999 and 2019 was considerably burdened by the crisis years between 2008 and 2012. In Germany and France, however, the TFP growth rate also remained under its average of the pre-crisis period in the subsequent recovery phase. In Italy, TFP growth provided no stimulus even prior to the outbreak of the global financial crisis, whilst in Spain, TFP even decelerated. Recently, however, TFP has risen in Spain in particular. Nevertheless, according to the calculations, production efficiency overall has also been lower in Italy and Spain in the past 20 years than before the turn of the millennium. Although the declining TFP growth rates in the four largest euro area countries heavily influence the development of the euro area as a whole simply by virtue of their aggregate economic output, a similar pattern can also be identified in a host of other euro area economies.[12]

… and reduced capital intensity contributions

The contributions of capital intensity to labour productivity growth in the four largest euro area countries were far lower in the period following the establishment of the monetary union than they had been in the preceding 25

9 The growth accounting approach is based on several assumptions. For instance, it is typically assumed that the relationship between output and the effective factor input can be depicted using a Cobb Douglas production function with constant returns to scale. Furthermore, it is assumed for the sake of simplicity that perfect competition exists in the goods and factor markets. See also Solow (1957).
10 See also Comin (2008).
11 See Hulten (2001).
12 A fall in TFP growth was also apparent in this period in Austria, the Netherlands and Belgium. Together with the four largest euro area countries, these countries account for approximately 90% of economic output in the euro area.

years. Subdued investment and increased labour input were key factors in this development.[13] Between 2013 and 2019, the growth contributions of capital intensity contracted once more.

TFP measurement influenced by factors such as quality of work, capacity utilisation …

Standard growth accounting provides initial information about the main driving forces behind the slowdown in productivity growth. However, the results cannot be interpreted without acknowledging certain caveats. This applies in particular to the TFP contributions. Due to their residual character, they can be biased if the actual factor inputs are not accurately measured. Thus far, for example, neither changes in the quality of the factor labour or fluctuations in the degree of utilisation of labour and capital have been taken into account.[14] However, further analyses that control for these important factors confirm the finding of decreasing TFP growth, at least for the period since the establishment of monetary union (see also the box on pp. 22 ff.).[15]

… and embodied technology

Moreover, traditional growth accounting typically does not take into account the fact that technological progress can be embodied and, for example, only be released through investment in new equipment. This applies to a large extent to information and communication technologies.[16] The contribution of capital-embodied technological progress to labour productivity growth can be determined with a model-based analysis. Here, too, the larger euro area economies display declining growth rates. This supports the hypothesis of a structurally driven slowdown in productivity growth (see also the box on pp. 25 ff.).

Determinants of total factor productivity at the corporate level

With regard to the importance of total factor productivity for labour productivity, the question arises as to the underlying explanatory factors for the slowdown in TFP growth in large parts of the euro area. A key determinant of the overall TFP path is the development of TFP at the enterprise level,[17] which is a function of enterprises' power to innovate and adopt new technologies. The former measures an enterprise's ability to develop new products and processes, while the latter assesses how well enterprises are able to integrate new technology into their production processes. Enterprises' innovation and adoption abilities have recently become a focal point.[18]

Macroeconomic productivity development shaped by enterprises' ability to innovate and adopt

No evidence of a general decline in innovative power but rather of a shift toward services

Own analyses of corporate data selected from a group of euro area countries[19] suggest that the previously above-average TFP growth of highly productive enterprises in the manufacturing sector slowed significantly (for more details, see the box on pp. 28 f.). By contrast, the innovative power of service providers with the highest TFP level even seems to have increased over time, in spite of burdens resulting from the global financial crisis and the subsequent sovereign debt crisis. Thus, although there is no evidence of a general lack of innovation at the enterprise level, there are indications of a shift in innovation toward services.

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13 See also Deutsche Bundesbank (2016). The temporary increase in the contribution of capital intensity to hourly labour productivity growth in Italy and Spain during the global financial and economic crisis and the subsequent sovereign debt crisis was the arithmetical effect of the considerable decline in labour input during this period.

14 For example, actual labour input may differ between employed persons working the same number of hours on account of their training, professional experience and other individual characteristics. For more information on quality adjustments to the factor labour and the difficulties entailed, see, inter alia: OECD (2001).

15 Further measurement problems arise in the price adjustment of inputs and outputs as well as the recording of capital input, particularly in the case of intangible goods (see OECD (2001) and Deutsche Bundesbank (2002)). The assumptions of constant returns to scale and perfect competition are also gross simplifications (see Hulten (2001, 2010)).

16 See, inter alia, Solow (1960), Greenwood et al. (1997), Sakellaris and Wilson (2004) and Hulten (2010).

17 See also Syverson (2011).

18 See, inter alia, Andrews et al. (2015, 2019) and OECD (2015).

19 The analysis is based on data for Germany, Spain, France, Italy, Belgium and Portugal for the period 2004-2017.

Measuring total factor productivity in the euro area

Total factor productivity (TFP) captures the fraction of output that cannot be explained by the amount of production factors. It is thus a key indicator for the efficiency of production processes.[1] However, TFP is not directly observable and, therefore, has to be estimated. A common approach is to capture TFP developments by decomposing output growth into the contributions of the primary production factors, i.e. labour and capital, as well as a residual component.[2] The latter, also known as the Solow residual, is interpreted as a measure of TFP growth.

One key challenge for the determination of TFP developments lies in precise measurement of the used production factors.[3] For example, idle assets or not fully utilised employees can cause an overestimation of factor inputs and thereby an underestimation of TFP growth. As the rate of capacity utilisation is typically procyclical, this might particularly bias the measurement of TFP in boom and bust phases.

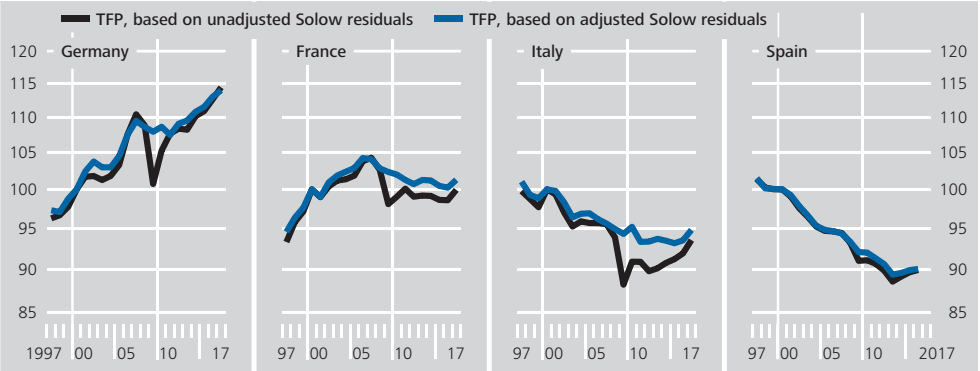
By incorporating an indicator for the degree of capacity utilisation, it is possible to better account for the actual use of production factors and, as a result, to measure TFP growth more accurately.[4] One such indicator can be found in the European Commission's business and consumer surveys.[5]

Not least in order to make full use of the available information, the growth decompositions are conducted at the sectoral level.[6] The Solow residual in each economic sector is calculated as the difference between the growth rate of price-adjusted gross value added and the growth rates of capital and (quality-adjusted) labour input weighted by the respective production elasticities.[7] The Solow residuals are then regressed in a panel on the percentage change in the economic sectors' average rates of capacity utilisation and sector-specific indicator variables.[8] Utilisation-adjusted TFP growth of an economic sector

1 See Comin (2008).
2 See Solow (1957). The decomposition is based on a Cobb-Douglas production function with constant returns to scale, which characterises output as a function of the capital and labour inputs (weighted by the production elasticities) as well as TFP. Assuming perfect competition on the factor and product markets, cost minimisation by firms implies that the production factors are remunerated according to their marginal products. The production elasticity of labour can therefore be determined by the ratio of the wage bill to gross value added, while the elasticity of capital is equal to one minus the elasticity of labour. See Deutsche Bundesbank (2012) and Hulten (2010).
3 This is only one possible bias. Distortions in the measurement of TFP can also result, inter alia, from disregarding factor-embodied technological progress or imperfect competition. See Hulten (2001, 2010) and Baqaee and Farhi (2020).
4 See Comin et al. (2020).
5 For the big euro area countries, quarterly data on the degree of capacity utilisation are available from the first quarter of 1985 onwards for the manufacturing sector and from the third quarter of 2011 onwards for the services sectors (Italy from the third quarter of 2010 onwards). See European Commission (2020).
6 The data were taken from the EU KLEMS database (https://euklems.eu/).
7 In the EU KLEMS data, labour input is weighted, inter alia, by the average educational attainment and age of the persons employed in the respective economic sector in order to incorporate the characteristics of the production factor. Capital services are based on the capital stock weighted by the user cost of capital. See EU KLEMS (2019). In order to account for the dynamics of the production elasticities, these are calculated as the average of the current and previous year.
8 The methodology follows the approach outlined by Basu et al. (2006) for the United States. Comin et al. (2020) use a similar approach to determine TFP measures for selected euro area countries. For the years prior to 2011 (for Italy prior to 2010), the capacity measures for the services sectors are extended backwards by using the growth rate of average capacity utilisation in the manufacturing sector (see Comin et al. (2020)). Due to a lack of data availability, the average capacity utilisation for the manufacturing sector is also used for the construction, trade as well as energy and water supply sectors. Survey data from the ifo Institute and the National Institute of Statistics and Economic Studies *(Institut national de la statistique et des études économiques)* are used for the German and French construction sectors, respectively.

Total factor productivity* in selected euro area countries between 1997 and 2017

2000 = 100, log scale



Sources: EU KLEMS, European Commission and Bundesbank calculations. * Unadjusted total factor productivity (TFP) was calculated using a prototypical Solow decomposition. Survey data on capacity utilisation were used in an econometric model to adjust TFP for changes in the rate of capacity utilisation.

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is then computed as the difference between the Solow residual and the estimated impact of changes in capacity utilisation.[9]

Since changes in capacity utilisation can, in turn, be triggered by exogenous changes in TFP, an instrumental variables approach is used for the estimation. The approach requires variables that are correlated with capacity utilisation, but not with TFP growth. The following structural shock series that were obtained in separate analyses prove suitable: an international oil price shock, an international financial market shock and macroeconomic uncertainty shocks.[10] Finally, aggregate TFP growth is derived by aggregating the adjusted TFP growth rates of the various economic sectors, weighted by gross value added shares.[11]

The calculations were performed for each of the four major Member States using data for 19 economic sectors.[12] To account for differences in the effect of capacity utilisation across different areas of the economy, the economic sectors were divided into three groups (durable manufacturing, non-durable manufacturing, and other economic sectors, in particular services). The panel estimations were conducted separately for each group.

While the time series of the unadjusted and adjusted TFP measures show similar trends, they can differ significantly in the short term. This is especially true for the years during the global financial and economic crisis. Whilst, according to the standard Solow decomposition, TFP contracts sharply in most countries during this period, the adjusted measure shows no or only a comparatively moderate decline.[13] Temporary

9 Capacity utilisation is only taken into account if the estimated coefficient is significant at the 90% level.
10 The oil price shock is calculated on the basis of movements in the Brent oil price (see Basu et al. (2006)). The uncertainty shocks stem from structural macroeconomic models (see Jurado et al. (2015) and Meinen and Röhe (2017)). The financial market shock is based on the indicator introduced by Gilchrist and Zakrajšek (2012) for the non-predictable component of risk premia on US corporate bonds. Statistical tests certify that the instruments are sufficiently correlated with the capacity utilisation of the sectors provided in the surveys.
11 See Hulten (1978).
12 The estimation period spans from 1997 to 2017 (Spain: 1997 to 2016). The models comprise sections D-E, F, G, H, I, J, K, M-N, R-S of the Statistical classification of economic activities in the European Community (NACE) as well as NACE divisions C10-C12, C13-C15, C16-C18, C20-C21, C22-C23, C24-C25, C26-C27, C28, C29-C30 and C31-C33 of the manufacturing sector.
13 This can also be observed, inter alia, in Austria, the Netherlands and Belgium.

reductions in typical, unadjusted TFP indicators can therefore often be explained by changes in capacity utilisation and, consequently, do not represent efficiency declines.

Over the longer term, the estimations confirm the findings from macroeconomic growth decompositions which are based on aggregate data (see also the remarks on pp. 19 ff.). In Germany, a slowdown in TFP growth is apparent following the global financial and economic crisis, whilst in France, TFP even stagnated. The picture is somewhat different for Italy and Spain. Following a continuous decline over most of the observation period, TFP improved for the first time in these countries before the onset of the current economic downturn.

Signs of enterprises' waning ability to adopt new technologies also apparent

With regard to enterprises' ability to adopt new technologies, there have been indications of a growing discrepancy between the TFP growth of highly productive enterprises and that of other enterprises since the global financial and economic crisis. The manufacturing sector is showing a similar development, although the differences between the groups of enterprises are noticeably smaller than those seen for services. Overall, the empirical analysis thus provides a differentiated picture of the reasons behind a flattening-out of TFP growth.

Reduced capacity to innovate and adopt new technologies may have both cyclical and structural causes

A decline in an enterprise's capacity for innovation and technology adoption can have a variety of causes. In addition to cyclical influences – in the form of severe recessions, for example – these include structural impediments such as a lack of quality in the institutional environment,[20] rigidities in the labour and product markets,[21] an increasing market concentration[22] or a lack of availability of (specific) human capital.[23] Thus, the considerable economic turmoil in the wake of the global financial and economic crisis and the subsequent sovereign debt crisis are just one possible cause of the slowdown in innovation capabilities and diffusion in the euro area countries. For example, there are also indications in the euro area of a clear need for reform in the institutional and regulatory frameworks, in some cases.[24] Added to this is the skills mismatch observed in the euro area labour market,[25] which is likely to become increasingly important in view of the ongoing demographic change (see also the remarks on pp. 33 ff.).

20 See, inter alia, Parente and Prescott (2000), Manca (2010) and Mokyr (2018).
21 See, inter alia, Andrews et al. (2019).
22 See, inter alia, Autor et al. (2020).
23 See, inter alia, Bartel and Lichtenberg (1987), Abowd et al. (2005) and Berlingieri et al. (2020).
24 See, inter alia, Deutsche Bundesbank (2019a).
25 See European Centre for the Development of Vocational Training (2015, 2019).

Capital-embodied technological progress and its importance for labour productivity: a DSGE analysis

Not least in view of the role played by information and communication technology (ICT), a range of studies has emphasised the importance of capital-embodied technological progress for the economy as a whole.[1] This specific form of technological change requires capital investment to become effective, and it impacts labour productivity, inter alia, by improving the quality of the capital stock.[2] Investment by firms in new, more powerful computer equipment is commonly cited as an example of capital-embodied technological progress enhancing productivity. Standard growth accounting approaches, which are based solely on disembodied technological progress, ignore these relationships.[3]

Dynamic stochastic general equilibrium (DSGE) models[4] are one way to grasp the macroeconomic role of capital-embodied technological progress.[5] This framework can also be used to estimate its contribution to trend labour productivity growth.[6]

To illustrate the approach, this box analyses labour productivity growth in the three largest euro area countries and the United States based on a DSGE model with different types of capital. In order to evaluate the extent to which capital-embodied technological progress specifically in the field of ICT contributes to labour productivity growth, we divide the capital stock (excluding structures) into two types of capital: ICT capital, which comprises information and communication technology plus software and databases, and other assets (non-ICT capital).[7]

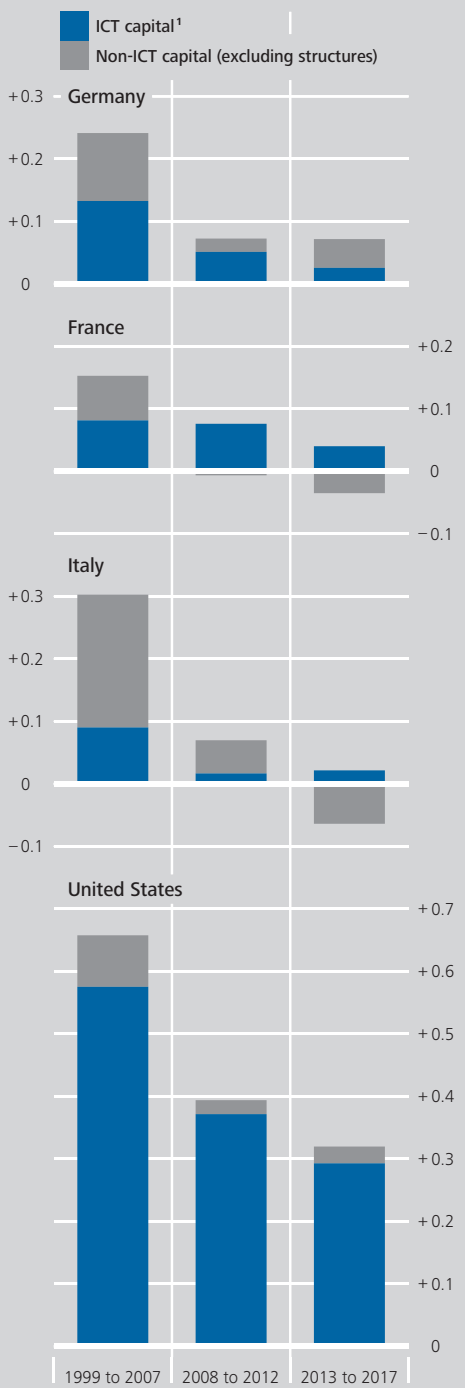
In the model, the total contribution of capital-embodied technological change is equal to the weighted sum of the technological progress associated with each of these types of capital.[8] Capital-specific technological progress can be measured by the development of the ratio of consumption goods prices to investment goods prices.[9] The idea here is that investment-specific innovations will lower the price of investment goods relative to that of consumption goods.[10] The resulting increase in demand for investment goods is ultimately what enables technological progress to have its productivity-enhancing effect. However, the importance of capital-embodied technological progress of a specific capital type for labour productivity growth is also determined by its relative weight in the production process. Assuming a Cobb-Douglas production function with constant returns

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1 See, inter alia, Solow (1960), Greenwood et al. (1997), Hercowitz (1998), Cooper et al. (1999) and Greenwood and Jovanovic (2001).
2 The terms "capital-embodied technological progress" and "investment-specific technological progress" are therefore often used interchangeably in the literature.
3 See Solow (1957).
4 A typical feature of this model class is the way it seeks to explain macroeconomic relationships and developments based on the individual optimal decisions of rational economic agents. More specifically, it assumes that economic agents do not make any systematic errors when forming their expectations and that they make optimum use of all the information available to them. In this sense, they behave "rationally". This model framework is presented in detail, inter alia, in Christiano et al. (2018).
5 See, inter alia, Justiniano et al. (2011), Schmitt-Grohé and Uribe (2012) and Díaz and Franjo (2016).
6 See, inter alia, Greenwood et al. (1997), Bakhshi and Larsen (2005) and Rodríguez-López and Torres (2012).
7 The analysis for the three euro area countries is based on data from the EU KLEMS database on the capital stock, depreciation rates, the labour income share and labour productivity. These data are available over the period 1999 to 2017. For the United States, meanwhile, the relevant data are sourced from the US Bureau of Economic Analysis (national income and product accounts and fixed assets accounts) and the US Bureau of Labor Statistics.
8 The assumption here is that exogenous capital-embodied technological progress can be described by a stochastic trend. See also Schmitt-Grohé and Uribe (2011).
9 The model assumes that there is a linear relationship between the relative price and capital-embodied technological progress. Empirical evidence suggesting that such a relationship exists can be found, inter alia, in Schmitt-Grohé and Uribe (2011).
10 See Greenwood et al. (1997), Fisher (1999) and Pakko (2002).

Contributions of capital-embodied technological progress to average annual labour productivity growth in selected countries*

Percentage points



Sources: EU KLEMS, Haver Analytics and Bundesbank calculations. * Contributions of capital-embodied technological progress, broken down by type of capital, to the average annual (aggregate) growth rate of labour productivity (real GDP per hour worked). Computed from a dynamic stochastic general equilibrium model. 1 Investment capital in the areas information and communication technology, software and databases.

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to scale, the weight is given by the ratio of the respective capital income to total labour income.[11,12] This allows both technological progress and its relative importance for aggregate productivity to be derived in a model-consistent manner from macroeconomic data. In traditional growth accounting approaches, by contrast, the contribution of (disembodied) technological progress to labour productivity growth is typically measured as a residual. This might lead to considerable mismeasurement of technological progress (see also the box on pp. 22 ff.).[13]

However, the approach outlined above relies on a number of simplifying assumptions. These include, in addition to the basic principles of the standard neoclassical model, the assumption of a closed economy and of labour being a homogenous production factor.[14,15] The model furthermore presumes that there is a direct inverse relationship between capital-embodied technological progress and the respective relative price of ICT and non-ICT investment goods. This requires that the prices of investment goods are accurately captured in the official statistics.[16]

11 One particular feature of the model specification chosen here is the assumption of time-varying production elasticities. Therefore, unlike in the prototypical approach, there is no need to confine the analysis to an assessment of long-term equilibria (where it is standard practice to assume constant parameters as production elasticities that are calibrated to average values). Instead, changes in capital and labour income shares can be taken into account. In the above DSGE approach, exogenous stochastic shocks are assumed to capture the time-varying production elasticities. See Young (2004), Ríos-Rull and Santaeulàlia-Llopis (2010) and Lansing (2015).
12 See Eden and Gaggl (2018).
13 See also Greenwood and Krusell (2007).
14 For a critical discussion of these assumptions, see, inter alia, Chen and Wemy (2015).
15 The impact of capital goods imports on investment-specific technological progress is discussed, inter alia, in Cavallo and Landry (2010).
16 In this regard, the literature notes that in the field of ICT especially, insufficient attention has been given to adjustments for changes in quality, which can lead to a mismeasurement of technological progress. See, inter alia, Byrne et al. (2017).

Model-based growth accounting shows that the contributions of capital-embodied progress in ICT to aggregate labour productivity growth turned out to be smaller in all countries under observation during the post-crisis period compared to the time before the global financial and economic crisis. In this context, it is noteworthy that ICT-specific technological progress had a comparatively low relative weight for labour productivity over the entire observation period.[17] This suggests that the at times fairly large ICT-specific growth contributions to labour productivity, particularly in the 1999-2007 sub-period, can be attributed to exceptionally strong growth rates of capital-embodied technological progress. This is particularly the case for the United States.[18]

Non-ICT-specific technological progress evolved in a similar way over time, its contribution to labour productivity growth likewise decreasing markedly and even changing signs in part in recent years.

Taken as a whole, all countries considered saw the growth contributions of capital-embodied technological progress decline in the post-crisis period relative to the preceding era. This outcome is consistent with the finding that TFP dynamics have been receding, as outlined by traditional growth accounting exercises (see the remarks on this topic on pp. 19 ff.).[19]

17 Average ICT capital income shares range between 2% (Italy) and 5% (United States) over the total observation period. By contrast, capital income shares for non-ICT assets vary from 10% in the United States to 19% in France.
18 The United States records significantly higher contributions of ICT-specific technological progress to labour productivity growth than the three euro area countries over all periods under observation. This finding is consistent with the results of other empirical studies. See, inter alia, van Ark et al. (2003) and Cette et al. (2015).
19 See Cette et al. (2016).

The role of factor allocation and business dynamism in the development of total factor productivity

TFP growth also influenced by factor allocation between enterprises

In addition to within-firm dynamics, the distribution of production factors, such as labour and capital, across enterprises plays an important role in aggregate productivity growth. The reallocation of production factors from relatively low-productivity enterprises to high-productivity enterprises is a key driver of aggregate TFP growth.[26] By contrast, systematic misallocations reduce aggregate production efficiency.

Increasing dispersion of marginal revenue products within economic sectors …

A comparison of the marginal revenue products of capital and labour across enterprises within an industry provides an important indication of whether production factors have been misallocated. The marginal revenue product shows how revenue would change if an enterprise raised its factor input marginally. Diverging marginal revenue products within an industry suggest that value added can be pushed up by decreasing (increasing) the input of production factors in enterprises with a relatively low (high) marginal revenue product. In case of an efficient allocation, the marginal revenue products of enterprises in an industry should be similar to each other.[27]

… points to increasing misallocation in the euro area

Corporate data provide an opportunity to examine the development of marginal revenue products. For the euro area, however, limited data availability across countries and sectors

26 See, inter alia, Foster et al. (2001, 2006), Bartelsman et al. (2013) and Restuccia and Rogerson (2017).
27 In macroeconomic models, the marginal revenue products of enterprises in an industry are, under certain assumptions, identical in a first-best scenario. These models assume, in particular, identical production functions of the Cobb-Douglas type as well as perfect price adjustments to changes in demand. See Hsieh and Klenow (2009) and Restuccia and Rogerson (2017).

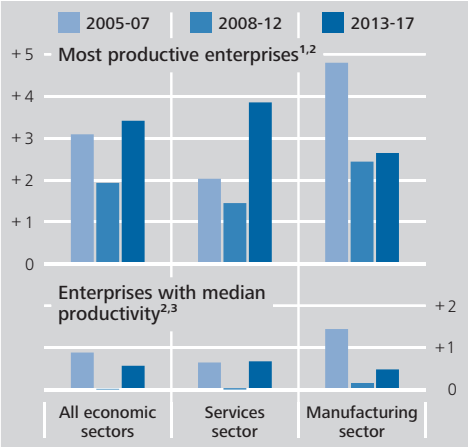
Developments in innovation activity and productivity growth in Europe

In recent years, the advanced economies have seen a marked decline in productivity growth. "Techno-pessimists" attribute this to a slowdown in technological progress, i.e. a general low level of innovation.[1] From the point of view of "techno-optimists", however, technological progress is generally still intact. In their opinion, weak productivity growth is more a result of mismeasurement, allocation inefficiencies, and a reduced diffusion of innovation.[2]

The question of the extent to which weak productivity growth in Europe stems more from a low level of innovation or more from reduced diffusion can be investigated using a dataset covering enterprises from six euro area countries (Belgium, France, Germany, Italy, Portugal and Spain); this data can be used to calculate growth rates in total factor productivity (TFP) for each enterprise and each year.[3] The findings are inconsistent: while TFP growth among highly productive enterprises[4] – interpreted here as a measure of innovative power – actually appears to have increased recently in the services sector, it declined in the manufacturing sector. According to the calculations, productivity growth among the leading enterprises in the high-technology segments of the manufacturing sector in particular – such as pharmaceuticals, mechanical engineering and IT hardware – has fallen distinctly over time.[5] One reason for this may have been waning business dynamics (as measured by rates of market entry and exit). At the very least, this is suggested by the relatively high and sharply increasing average age of the leading enterprises in

Average annual TFP growth rates for enterprises at and behind the technology frontier

%



Sources: iBACH (micro Bank for the Accounts of Companies Harmonized), ECCBSO (European Committee of Central Balance-Sheet Data Offices), Orbis (Bureau van Dijk), and ECB and Bundesbank calculations. **1** Weighted sum of the average annual growth rates in total factor productivity (TFP) of the most productive 5% of enterprises in each industry (NACE level 4). **2** The weighted aggregate across industries is calculated using the average number of employees in each industry during the period from 2005 to 2017. **3** Weighted sum of the TFP growth rates of those enterprises with the median TFP level in each industry (NACE level 4).

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1 See Gordon (2016) and Bloom et al. (2020a).
2 See Brynjolfsson and McAfee (2014), van Ark (2016) and OECD (2015).
3 The analysis is based on the iBACH database (micro Bank for the Accounts of Companies Harmonized) processed by the ECB and expanded to include data from the Orbis database (Bureau van Dijk). This database contains annual balance sheet data from a multitude of non-financial enterprises from the six aforementioned countries. The database provides information on a considerable portion of the relevant enterprises in France, Italy, Portugal, Spain and, to a limited extent, in Belgium. Germany is represented only by a comparatively small number of large enterprises, which are included in the Orbis database. Annual and enterprise-specific TFP levels and growth rates were calculated using an estimated production function. The dataset covers the period from 2005 to 2017 as well as the following NACE sections: C (excluding C12 and C19), F, G, H (excluding H51), I, J, L, M (excluding M75) and N (excluding N78 and N82).
4 For each year, the most productive enterprises are defined as the 5% of enterprises with the highest TFP level in a given industry (NACE level 4) in that year.
5 The segments of the manufacturing sector are divided into those with relatively intensive usage of high technology and those with comparatively limited usage of high technology on the basis of the corresponding Eurostat classification. The group of high-technology industries includes NACE divisions C20, C21, C26, and C27 to C30.

this subgroup.[6] On the whole, however, the enterprise data provide no indication of a general low level of innovation.[7]

With regard to TFP growth among less productive enterprises,[8] which comprise the majority of enterprises in every sector, the findings are similarly complex. In this case, too, the TFP growth of enterprises in the manufacturing sector appears to have declined noticeably. By contrast, TFP growth in the services sector stagnated despite heightened innovation activity among the leading enterprises. As a result, the gap in productivity between highly productive and less productive service providers widened considerably, which may be interpreted as a sign of a reduced diffusion of technology.[9]

There are a number of possible explanations for the decline in technology diffusion observed in some sectors. For instance, the nature of technological progress over recent years, often characterised by the use of digital technologies and intangible capital, may have made it more difficult to close productivity gaps.[10] In addition, a general rise in market power – not necessarily induced by technology – may have reduced incentives to adapt technologies or innovate.[11] In Europe, however, there is very little evidence to suggest a broadly based increase in market concentration and market power.[12] Ultimately, even if there are incentives to adapt innovations, it is likely that, in many cases, enterprises simply lack the corresponding complementary resources required to do so (such as well-trained and skilled workers or a specific infrastructure).[13]

In summary, the results of the enterprise data analysis suggest that there are multifaceted reasons for weak macroeconomic productivity. They do not provide any indication of a general low level of innovation. The findings suggest that the leading, highly productive enterprises should be given sufficient scope to develop their growth potential, at least to the extent that this does not excessively subdue their incentives to innovate or third parties' incentives to imitate. Less successful competitors should not be prevented from exiting the market and the subsequent reallocation of resources should not be obstructed. Such an approach would most likely boost macroeconomic productivity growth.

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6 In the subgroup of industries that utilise high technology less intensively, the average age of enterprises at the technology frontier (known as "frontier firms") rose by just over 1 year from 14 years (in the period from 2006 to 2007) to around 15¼ years (in the period from 2013 to 2017). For industries characterised by greater usage of high technology, this figure rose by around 5½ years to just under 19 years during the same period.

7 Here, it also cannot be ruled out that, especially during phases of cyclical upturn and downturn, TFP growth is captured only imprecisely (for more information, see the box entitled "Measuring total factor productivity in the euro area").

8 In this context, the productivity growth of this group is approximated based on the TFP growth of the enterprise with the median TFP level in each year and each industry (NACE level 4).

9 A number of studies have reached similar overall conclusions for the services sector in particular. See Andrews et al. (2015, 2019), Lotti and Sette (2019), Cette et al. (2018) and Decker et al. (2016).

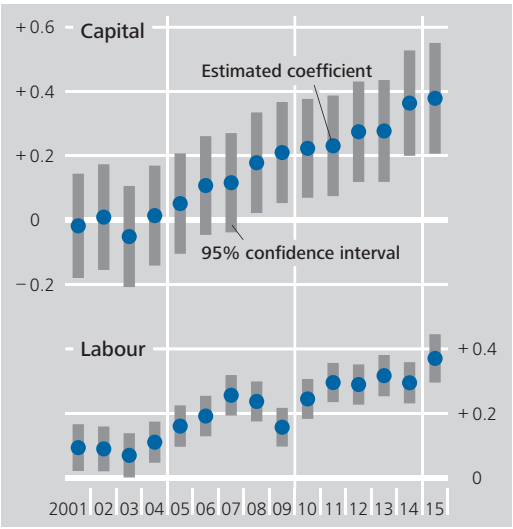
10 In this vein, it is argued that the rising use of digital technologies and intangible capital, which is often associated with high fixed costs and network effects, also leads to increasing economies of scale. See Haskel and Westlake (2018), Aghion et al. (2020) and De Ridder (2020). Such economies of scale cannot be replicated at will. Increasing economies of scale could also result in "superstar effects" (see Autor et al. (2020)): especially in less mature sectors, market leaders may use economies of scale to capture large market shares within very short periods of time, thus leading to rising market concentration and market power. This may reduce the incentives to invest in innovation and adapting technologies, which would ultimately have a dampening effect on productivity growth. See Aghion et al. (2020), De Ridder (2020) and Le Mouel and Schiersch (2020).

11 For example, multiple studies suggest a broadly based increase in market power for the United States in particular over the past few years. See De Loecker et al. (2020).

12 See Deutsche Bundesbank (2017), OECD (2018) and Gutierrez and Philippon (2020).

13 In particular, there may be a lack of sufficient human capital (see Berlingieri et al. (2020)). This applies especially with regard to digital technologies that require employees with relevant IT skills in order to be utilised successfully. See Autor et al. (2003) and OECD (2016).

Estimated changes in the dispersion of marginal revenue products of capital and labour in the euro area*



Sources: CompNet and Bundesbank calculations. * Changes in the average dispersion of (standardised) marginal revenue products within selected economic sectors compared with the base year 2000, derived from a panel model with indicator variables for countries, sectors and years. The estimations include data from 11 euro area countries (Belgium, Finland, France, Germany, Italy, Lithuania, the Netherlands, Portugal, Slovakia, Slovenia and Spain) and 57 NACE divisions from sections C, F, G, H, I, J, L, M and N.
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complicates this analysis.[28] Nonetheless, by using a panel model with indicator variables for industries, countries and years, it is possible to estimate how the dispersion of marginal revenue products has changed on average across economic industries.[29] The estimated coefficients of the annual indicators reflect how the dispersion has changed on average across all industries and countries over time. They show that the dispersion of marginal revenue products has increased since the mid-2000s, and that this rise accelerated again slightly at the end of the estimation horizon.[30] Moreover, this fairly continuous development suggests that these are not purely cyclical phenomena. Rather, allocation efficiency within euro area industries appears to have deteriorated structurally, which is likely to have contributed to the slowdown in euro area productivity growth.[31]

Role of business dynamism in productivity growth

Changes in business dynamism are one possible explanation for the declining allocation efficiency between enterprises. For instance, a number of studies stress the importance of enterprise births and deaths for reallocation processes and productivity growth.[32] Schumpeterian growth models, in which the entry of young innovative firms into the market increases the degree of competition and the pressure for competitors to innovate, thus leading to the exit of less profitable producers ("creative destruction"), also indicate a link between business dynamism and productivity growth.[33]

Data on enterprise births and deaths in the euro area …

Owing in particular to the limited availability of data, a panel model is estimated to answer the question of how business dynamism has developed in the euro area.[34] Country-specific sectoral market entry and exit rates are regressed on a constant and indicator variables

28 Data on marginal revenue products are taken from the CompNet database (www.comp-net.org). An enterprise's marginal revenue product is calculated as a product of the production elasticity of labour or capital and the ratio of revenue to labour or capital input, assuming a Cobb-Douglas production function and perfect competition. The dispersion is calculated as the standard deviation of the marginal revenue products across enterprises within an industry, with these being normalised at the industry level (see Kehrig (2011)).
29 The estimates include data from eleven euro area countries and 57 industries for the years 2000 to 2015. The latter belong to the following NACE sections: "manufacturing" (C), "construction" (F), "wholesale and retail trade; repair of motor vehicles and motorcycles" (G), "accommodation and food service activities" (I), "information and communication" (J), "transportation and storage" (H), "real estate activities" (L), "professional, scientific and technical activities" and "administrative and support service activities" (M-N). The data situation varies considerably across countries. For example, only data for NACE section C are available for Germany. See CompNet (2020).
30 It should be noted that estimation uncertainty is higher due to a smaller number of observations for the dispersion of the marginal revenue product of capital.
31 The finding is consistent with indications that misallocations have increased in southern European countries (Gopinath et al. (2017)) and selected OECD countries (Corrado et al. (2019)). When interpreting the results, it should be borne in mind that an aggregate analysis may mask potential differences between countries.
32 See, inter alia, Foster et al. (2001, 2006, 2008), Lentz and Mortensen (2008) and Decker et al. (2017).
33 See, inter alia, Schumpeter (1934), Nelson (1981), Aghion and Howitt (1992), Caballero and Hammour (1996) and Aghion et al. (2014).
34 The inclusion of cross-sectional information in the form of sectoral data on enterprise births and deaths provides an opportunity to shed light on the development of business dynamism in the euro area, despite a limited time series dimension and existing data gaps.

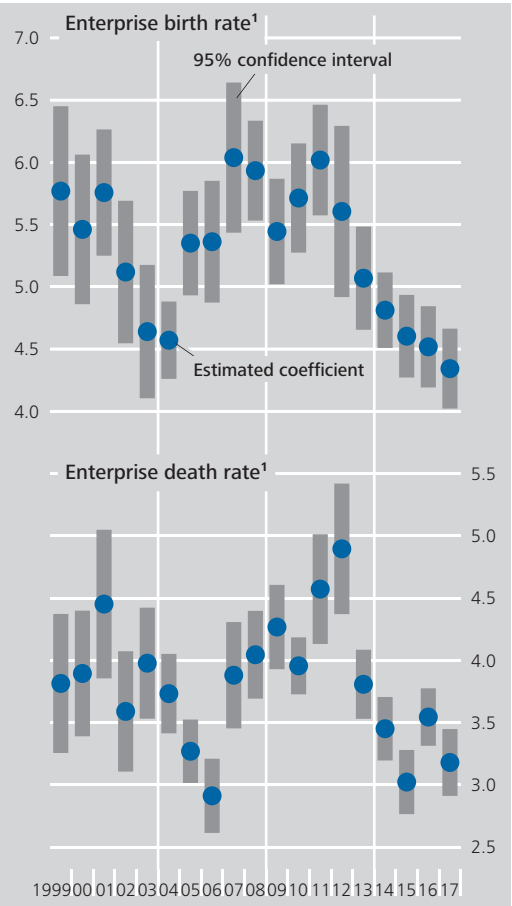
for countries, years and sectors.[35,36] The changes in the annual enterprise birth and death rates in the euro area are then derived from the estimated coefficients of the time indicators.[37] The data cover 19 euro area countries, each with nine economic sectors,[38] for the years 1999 to 2017.

… tend to show slowing business dynamism

There are signs that business dynamism in the euro area has undergone a slowing trend. However, developments have not been steady and the estimates are subject to considerable uncertainty. The development between 2013 and 2017 is particularly striking. Despite the broad-based economic upturn over this period, the rates of enterprise births and deaths declined markedly. As the economic situation was favourable overall, one would normally have expected a rise in enterprise births.[39] A possible explanation for this development is the similarly unusual marked decline in the market exit rate. If fewer firms exit the market, this can impede the entry of potential candidates, as competition for sales markets and scarce production factors is then greater.[40] The question therefore arises as to whether the extended policy measures implemented during this period were beneficial to established enterprises in particular and could have thus dampened business dynamism.

Estimated enterprise birth and death rates in the euro area*

%



Sources: Eurostat and Bundesbank calculations. * Estimated birth and death rates for enterprises with at least one employee. The underlying panel estimations include data for all 19 euro area countries and the following nine economic sectors or sector groups according to NACE Rev. 2: B, C, D-E, F, G, I, J and H, K and L-N. **1** Number of enterprise births or deaths relative to the total number of active enterprises in the respective year.
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Structural change as a possible cause of flattening productivity growth

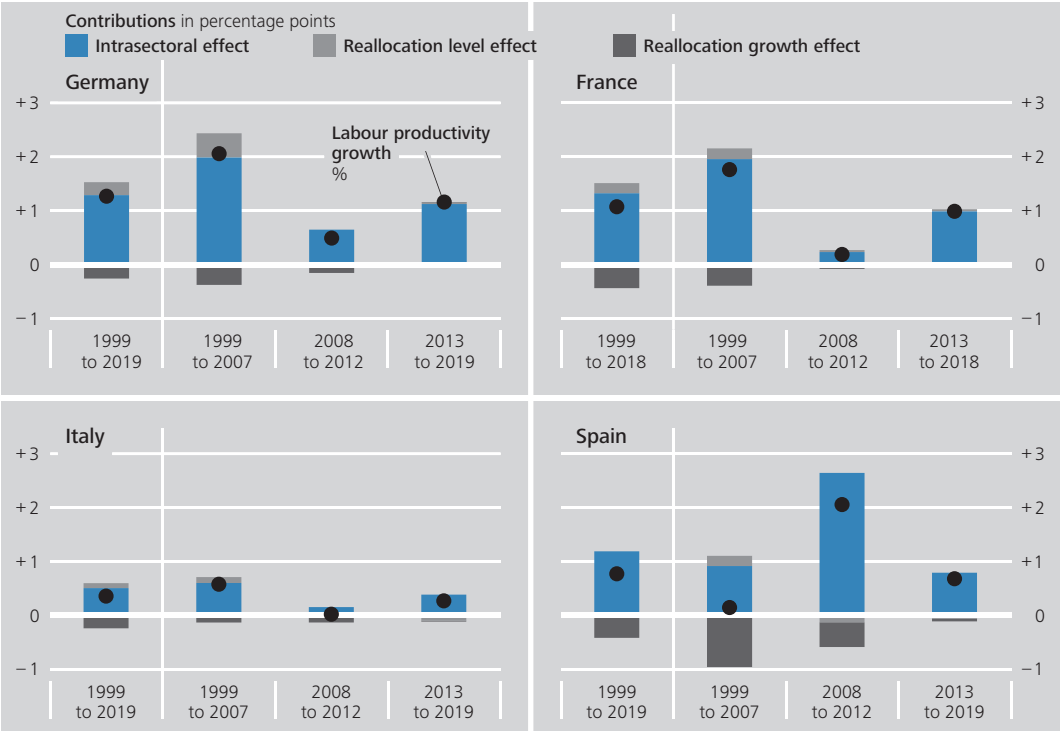
Impact of reallocation of labour input between economic sectors on aggregate productivity growth

Productivity-dampening effects can also emerge from the changing economic structure and the associated intersectoral shifts in production factors. One prominent hypothesis in this context is that the share of employees in

35 The birth rate (death rate) is defined as the ratio of the number of enterprise births (enterprise deaths) to the total number of active enterprises in the respective year. The analysis only considers enterprises with at least one employee in order to ensure better comparability across countries. See Eurostat (2007).
36 The country data on enterprise demographics reported by Eurostat only go back to 1997, with data availability varying across member countries. In addition to fundamental differences regarding when data were first recorded, the country data are incomplete in some cases. Furthermore, a conceptual revision of the statistical classification of economic activities in the European Community (NACE) makes it more difficult to examine business dynamism over time. The updated version of statistics relating to economic activities (NACE Rev. 2) has been applicable since 1 January 2008. See Eurostat (2008).
37 Average enterprise birth and death rates over time are calculated from the estimated coefficients of the country and sector indicators.
38 The economic activities covered include NACE sections C, F, G, I, J and H, and L to N, as well as the sections "mining and quarrying" (B), "electricity, gas, steam and air conditioning supply" and "water supply; sewerage, waste management and remediation activities" (D-E) and "financial and insurance services" excluding holding companies (K, excluding NACE group 642).
39 See also Koellinger and Thurik (2012), Lee and Mukoyama (2015) and Tian (2018).
40 See also Caballero et al. (2008) and Acharya et al. (2019).

Contributions to labour productivity growth in selected euro area countries*

Average annual change



Sources: Eurostat and Bundesbank calculations. * Contributions to growth in labour productivity (real gross value added per hour worked) in the market sector, which comprises NACE sections A, B-E, F, G-I, J, K, M-N and R-S.

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the workforce working in economic sectors with comparatively low productivity growth increases on account of consumer preferences.[41] This curbs overall productivity growth even without changes in productivity or its growth rate in individual enterprises or sectors.[42] The significance of this reallocation effect can be illustrated by breaking down productivity growth into three sub-components. A "reallocation level effect" captures the contribution to aggregate productivity growth that results from a shift in labour input between sectors with different productivity levels. A "reallocation growth effect" measures the impact of a shift in working hours between sectors with different productivity growth rates. In addition, there is an "intrasectoral effect", which is calculated as the weighted sum of productivity growth in the economic sectors under consideration and which reflects, amongst other things, sector-specific TFP growth.[43] When viewed in isolation, the reallocation growth effect causes aggregate hourly productivity to rise when labour input increases (decreases) in areas with positive (negative) productivity growth. The reallocation level effect makes a positive contribution to labour productivity growth if hours worked are increased (reduced) in sectors with a comparatively high (low) hourly productivity relative to aggregate labour productivity.[44] Consequently, factor reallocation across economic activities can help to increase aggregate labour

41 For example, consumers do not want to give up services provided by sectors with low productivity growth, and even increase their demand for such services.
42 See Baumol (1967) and Baumol et al. (1985).
43 The literature contains various methods of decomposing labour productivity growth in this manner. In order to avoid distortions that may arise when adding chained volume data, the "generalised exactly additive decomposition" (GEAD) method was used to break down hourly productivity. A detailed description of the method can be found in Tang and Wang (2004) and Dumagan (2013).
44 In the context of this kind of labour productivity decomposition, some simplifying assumptions are typically made, including the fact that no differences in the quality of the labour input are taken into account.

productivity even if sectoral productivity growth is stagnant.[45]

Decomposition of aggregate productivity growth shows industry's relative loss of importance

A corresponding decomposition for the four largest euro area economies shows that, on average, productivity growth over the years 1999 to 2019 was driven mainly by the intrasectoral effect.[46] Nevertheless, reallocation effects in countries where the intrasectoral effect is relatively small can have a noticeable impact on aggregate productivity growth. However, it can be seen that the direction of impact of the two reallocation effects is often divergent. For instance, the reallocation level effect was mostly positive on average across all of the sectors under consideration (labour input shifted on average to sectors with above-average productivity), while the reallocation growth effect was negative (labour input shifted on average to sectors with below-average productivity growth).[47] The latter was mainly driven by the relative loss of importance of the industrial sector. The negative impact of the reallocation growth effect was particularly strong in the pre-crisis period from 1999 to 2007. Nevertheless, in France, Italy and Spain a productivity-dampening effect – albeit only marginal at times – caused by shifts in the number of hours worked to economic sectors with comparatively weak productivity growth can also be seen in the economic recovery period from 2013 to 2019.

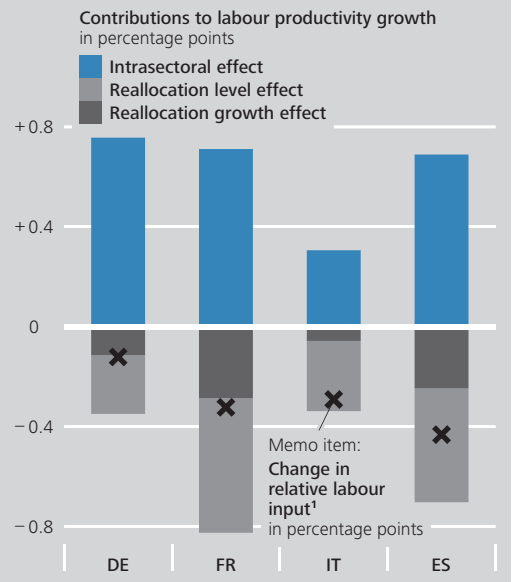
The impact of demographic change

Ageing population has direct impact on productivity

Demographic change is another structural factor with a potential impact on labour productivity. The progressive ageing of the population can dampen productivity growth in a number of ways. First, there are indications that individual productivity varies across age groups and tends to decline at an older age.[48] There is also growing evidence that societal ageing reduces innovation and technology adoption.[49]

Contributions of the industrial sectors to aggregate labour productivity growth between 1999 and 2019*

Average annual change



Sources: Eurostat and Bundesbank calculations. * Contributions of the industrial sectors (NACE sections B-E) to average growth in labour productivity (real gross value added per hour worked) in the market sector (NACE sections A, B-E, F, G-I, J, K, M-N and R-S). Data for France up to 2018. **1** Relative labour input reflects the share of hours worked in the industrial sectors.

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45 Alongside changes in labour input, sectoral relative price changes can also influence the contributions of reallocation effects in the GEAD decomposition. Although these price effects can be isolated by modifying the GEAD method, this comes at the cost of giving up an isolated assessment of the two reallocation effects; see Diewert (2015). It is evident, however, that the price effects have a negligible impact on the results of the analysis carried out here.

46 Only the following NACE sections are considered here: A (agriculture, forestry and fishing), B-E, F, G-I, J, K, M-N and R-S (arts, entertainment and recreation and other service activities). The reasons for this selection include the partial absence of market prices in public services data and, with regard to the aim of measuring efficiency, a distorting effect in the case of real estate activities. In the case of the latter, total rents from real estate including the use of owner-occupied dwellings are recorded. See also Institute for the World Economy (2017).

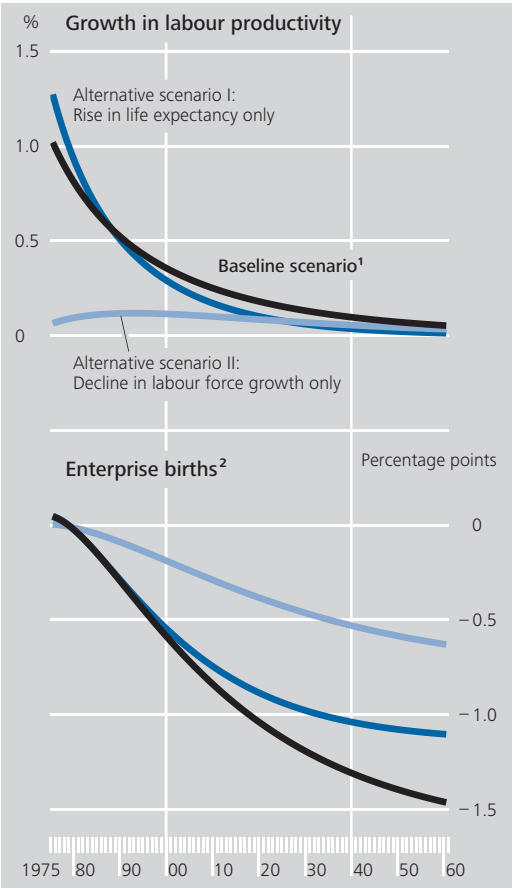
47 In the four euro area countries considered in the analysis, the positive reallocation level effect between 1999 and 2019 is due, in particular, to a relative increase in labour input in "professional, scientific and technical activities" and "administrative and support service activities" (NACE sections M and N). Although these areas showed below-average productivity growth over the period under review, their level of productivity was above average.

48 See Feyrer (2007), Jones (2010), Aiyar et al. (2016) and Maestas et al. (2016).

49 Empirical studies suggest that an ageing population negatively affects the number of patent applications (Aksoy et al. (2019)), enterprise births (Ouimet and Zarutskie (2014)) and the ability to adopt new technologies (Weinberg (2004) and Skirbekk (2004)).

competitive disadvantage for potential market entry candidates, which is reflected in a decline in the birth rate of enterprises in the long term. Business dynamism, however, is an important driver of TFP growth. The model framework also illustrates that societal ageing can dampen labour productivity growth over time, even without having a direct impact on TFP.[53]

Effects of demographic change on labour productivity and enterprise births



Sources: Bundesbank calculations based on Röhe and Stähler (2020). **1** The baseline scenario shows the combined effect of rising life expectancy and a decline in the growth rate of the labour force on labour productivity growth and the entry rate of enterprises in an OLG-DSGE model. The simulation period spans from 1970 to 2060. The model is calibrated for the United States. **2** Deviation from the state with constant population growth and unchanged life expectancy.
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Other possible transmission channels of demographic change

Furthermore, it is conceivable that societal ageing, as a result of declining growth of the labour force and rising life expectancy, may also influence TFP growth through its impact on market dynamics. A dynamic general equilibrium model with overlapping generations as well as endogenous market entry and exit of enterprises demonstrates this.[50] In this model, ageing reduces fluctuations in the number of enterprises.[51] This is due, in particular, to the savings decisions prompted by higher life expectancy, which depress the real interest rate.[52] As a result, incumbent enterprises find it easier to refinance their fixed assets, with the result that fewer enterprises close. This creates a

Empirical analyses of euro area based on a vector autoregressive model …

In order to empirically examine the impact of demographic change on productivity growth in the euro area, a vector autoregressive model with a panel structure is estimated. In this model, important macroeconomic variables for a number of Member States are regressed on their own lagged values and exogenous variables. The dependent variables comprise year-on-year labour productivity growth, the saving and investment ratio, the short-term real interest rate and the inflation rate. The exogenous variables are demographic indicators: the shares of the population that are categorised as young (below 20), middle aged (aged 20 to 64) and elderly (aged 65 and above).[54] Because of the data's cross-sectional dimension, the model can also take advantage of variations in the ageing process across Member States to identify the effect of demographic changes on endogenous variables. The panel model com-

50 A detailed description of the model, calibrated for the United States, can be found in Röhe and Stähler (2020).
51 This finding is consistent with studies that see ageing as a key factor in the decline in business dynamism in the United States. See Pugsley and Sahin (2019), Hopenhayn et al. (2018) and Karahan et al. (2019).
52 See also Carvalho et al. (2016) as well as Kara and von Thadden (2016).
53 For example, although a higher life expectancy leads to a clear rise in capital intensity – assuming a prototypical production function – its growth rate declines steadily over time, which is reflected in a slowdown in labour productivity growth.
54 See Aksoy et al. (2019). The estimating equation $Y_{it} = a_i + AY_{it-1} + DW_{it} + \varepsilon_{it}$, where Y_{it} encompasses the dependent variables and W_{it} the age structure of country i in year t (a_i and ε_{it} are a country-specific constant and a residual). To avoid exact linear dependencies, the differences between the share of the population classed as young and middle aged to the share of the population classed as elderly are entered as exogenous variables. The influences of the individual age groups can then be derived from the estimated coefficients. Vector W_{it} also includes lagged values of an international oil price.

Projected change in population shares and labour productivity growth

%

	Euro area		Germany		France		Italy		Spain	
Population share	2017	Δ 2030[1]	2017	Δ 2030[1]	2017	Δ 2030[1]	2017	Δ 2030[1]	2017	Δ 2030[1]
Below 20	20.3	– 1.4	18.5	0.4	24.0	– 1.9	18.2	– 2.4	19.4	– 2.4
Aged 20 to 64	59.3	– 3.7	60.1	– 5.2	56.3	– 2.6	59.3	– 3.0	61.4	– 3.5
Aged 65 and above	20.4	5.1	21.4	4.8	19.7	4.5	22.5	5.4	19.1	5.9
Δ LP growth[2]	– 1.4		– 1.2		– 1.3		– 1.6		– 1.8	
90% confidence bands	(– 2.2; – 0.7)		(– 2.0; – 0.4)		(– 2.0; – 0.7)		(– 2.4; – 0.9)		(– 2.6; – 1.0)	

Source: UN World Population Prospects and Bundesbank calculations. **1** Projected change in the respective population share between 2017 and 2030 (in percentage points). **2** Estimated change in growth rate of labour productivity (real GDP per hour worked) caused by the projected change in the age structure between 2017 and 2030 (in percentage points).

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prises 17 euro area Member States and is estimated over the period from 1971 to 2017.[55]

… suggest a distinct negative impact of ageing on labour productivity growth …

As demographic variables typically only change slowly over time, the analysis focuses on long-term relationships, which can be derived from the estimated coefficients of the panel model.[56] This analysis suggests that an increase in the share of the elderly population – with a concurrent fall in the young and middle-aged population shares – is likely to have dampened labour productivity growth in the euro area countries. Between 2007 and 2017, for example, the share of the population aged over 65 in the euro area increased by around 2.5 percentage points. According to the estimation, overall productivity growth in the euro area would have been around 0.8 percentage point higher during this period if the age structure had remained unchanged.

… and also indicate that productivity growth will be dampened going forward

United Nations projections suggest that the percentage of the euro area population aged over 65 years will rise even more sharply in the future. Between 2017 and 2030, their share is expected to increase from around 20% to more than 25%. According to the estimates, this would depress euro area productivity growth by a total of 1.4 percentage points over this period. On average, this corresponds to a decline of just over 0.1 percentage point per year. The picture is similar for the euro area's four major economies. However, productivity growth in Italy and Spain would, in fact, decline somewhat more sharply, as the ageing process is forecasted to be more rapid there. When interpreting the projections, it should, however, be noted, that the estimation results (as well as the population forecasts) are subject to uncertainty. Moreover, no account is taken of potential factors that could counteract the adverse effects of ageing. And finally, the calculations are based on the simplifying assumption that changes in the age structure have the same impact on productivity trends in all the countries included in the analysis.

Conclusion and outlook

Slowdown in productivity growth in the euro area attributable to cyclical as well as structural factors

Growth in labour productivity in the euro area has slowed significantly over the past 20 years. This slowdown was broad based across the Member States and was evident in numerous sectors of the economy. It can be attributed, amongst other things, to a reduction in the

55 The estimate covers all Member States except Luxembourg and Malta. Due to data availability, the length of the time series used varies across countries.

56 The long-term impact of the demographic variables is derived from the long-term equilibrium of the model. This results from a combination of the coefficient matrices: $(I-A)^{-1}D$. See Aksoy et al. (2019).

Possible impact of the coronavirus pandemic on productivity growth in the euro area

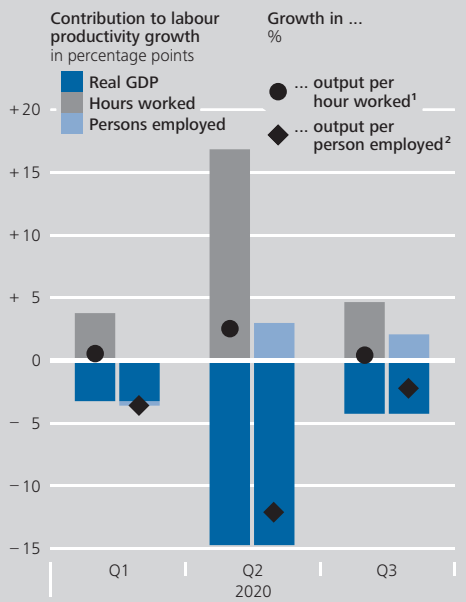
In the light of the current severe economic crisis and its specific nature, the question arises as to the implications for euro area productivity growth. In the short term, both the pandemic-induced constraints on production and also its recovery are having a direct impact on labour productivity. In this context, it is of significance that governments' efforts are currently aimed at safeguarding as many jobs as possible. One instrument in this respect is government-assisted short-time work. As a consequence, output per person employed in the euro area initially fell significantly before recovering again.

The development of output per hour worked was more remarkable. It rose sharply at times, as it already had done in some countries during the global financial and economic crisis. Compositional effects are likely to have played a role in this, as the containment measures mainly affected sectors with below-average labour productivity. This probably obscured possible productivity-reducing effects caused by abrupt, pandemic-related changes in working methods, such as the switch to teleworking.[1] The temporary closure of child daycare facilities and schools presumably has also affected not only labour supply but also labour productivity.[2]

Beyond these short-term impacts, longer-term effects need to be taken into account. For example, despite the massive economic and monetary policy interventions, investment activity suffered significantly, also owing to the temporarily steep rise in uncertainty.[3] If the decline in investment is not compensated for sufficiently fast, it is likely to weigh on enterprises' innovation performance and technology adoption, and therefore hamper productivity growth. Beyond this, reduced investment activity impedes labour productivity via its negative impact on capital intensity. These factors may possibly be countered by productivity increases induced by the pandemic. The crisis forced enterprises and employees to try new ways of working. Some of the lessons learned could also be useful in the future.[4] Examples include more flexible working models and virtual conference formats. In general, there are signs of a boost to digitalisation.

Labour productivity growth in the euro area in 2020

Year-on-year percentage change



Sources: Eurostat and Bundesbank calculations. **1** Labour productivity measured as the ratio of real GDP to the number of hours worked. **2** Labour productivity measured as the ratio of real GDP to the number of persons employed.

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1 See Bloom et al. (2015) and Bloom (2020).
2 In addition, there may possibly be longer-term implications for productivity as a result of a deterioration in the quality of school education. See also Fuchs-Schündeln et al. (2020).
3 See Baker et al. (2020).
4 See also European Central Bank (2020).

Without extensive government assistance, many enterprises would probably have had to exit from the market owing to the massive slump in some sectors. Even the assistance measures will probably not be able to entirely prevent this in the longer term. This, too, may influence productivity growth. If mainly low-productivity enterprises or economic sectors are affected by closures, this may have a positive impact on average productivity.[5] However, if the freed-up production factors are not, or only insufficiently, absorbed, this will weigh on macroeconomic developments. Moreover, market concentration may increase, with potentially adverse effects on competition and productivity gains.

To sum up, the pandemic may influence future productivity growth via multiple channels. Although the severe macroeconomic disruptions are likely to weigh on productivity growth, the overall effect is difficult to gauge. Specifically, it remains to be seen to what extent a crisis-induced boost to innovation – in the form of increased digitalisation, for example – will impact on future productivity growth.

5 See Bloom et al. (2020b).

growth rates of total factor productivity. Analyses of the underlying driving forces point to cyclical influences as well as, in particular, structural factors. For some sectors of the economy, there are indications to suggest that enterprises' ability to innovate and adopt may have diminished. Moreover, inefficiencies in the allocation of production factors appear increasingly to have contributed to the slowdown in productivity growth. Alongside the institutional and regulatory framework, demographic change is another possible structural factor. As a society ages, enterprises' ability to innovate and adopt may be impaired. The decline in labour force growth and the increase in life expectancy can also affect business dynamics and, via this channel, also impede aggregate TFP growth. An empirical analysis for the euro area suggests that demographic change has indeed dampened productivity growth.

Outlook

The continued ageing of the euro area's population could continue to dampen productivity growth in the future. Moreover, the observed slowdown in the pace of reforms in the euro area suggests that economic policy will not provide any decisive stimulus for productivity growth. At present, it is difficult to assess what impact the coronavirus pandemic will have on developments in productivity. The macroeconomic turmoil triggered by the pandemic is likely to weigh on future labour productivity growth. The extent to which this can be counteracted by a wave of innovation in response to the exceptional challenges presented by the crisis remains to be seen.

List of references

Abowd, J. M., J. Haltiwanger, R. Jarmin, J. Lane, P. Lengermann, K. McCue, K. McKinney and K. Sandusky, The Relation among Human Capital, Productivity, and Market Value: Building Up from Micro Evidence, in Corrado, C., J. Haltiwanger and D. Sichel (eds., 2005), Measuring Capital in the New Economy, University of Chicago Press, pp. 153-204.

Acharya, V. V., T. Eisert, C. Eufinger and C. Hirsch (2019), Whatever it Takes: The Real Effects of Unconventional Monetary Policy, Review of Financial Studies, Vol. 32 (9), pp. 3366-3411.

Aghion, P., A. Bergeaud, T. Boppart, P. J. Klenow and H. Li (2020), A Theory of Falling Growth and Rising Rents, Federal Reserve Bank of San Francisco Working Paper, No 2019-11.

Aghion, P., U. Akcigit and P. Howitt, What Do We Learn From Schumpeterian Growth Theory?, in Aghion, P. and S. N. Durlauf (eds., 2014), Handbook of Economic Growth, Vol. 2, pp. 515-563.

Aghion, P. and P. Howitt (1992), A Model of Growth Through Creative Destruction, Econometrica, Vol. 60 (2), pp. 323-351.

Aiyar, S., C. Ebeke and X. Shao (2016), The Impact of Workforce Aging on European Productivity, IMF Working Paper, No 16/238.

Aksoy, Y., H. S. Basso, R. P. Smith and T. Grasl (2019), Demographic Structure and Macroeconomic Trends, American Economic Journal: Macroeconomics, Vol. 11 (1), pp. 193-222.

Andrews, D., C. Criscuolo and P. Gal (2019), The Best Versus the Rest: Divergence Across Firms During the Global Productivity Slowdown, CEP Discussion Paper, No 1645.

Andrews, D., C. Criscuolo and P. Gal (2015), Frontier Firms, Technology Diffusion and Public Policy: Micro Evidence from OECD Countries, OECD Productivity Working Papers, No 2.

Anzoategui, D., D. A. Comin, M. Gertler and J. Martinez (2019), Endogenous Technology Adoption and R&D as Sources of Business Cycle Persistence, American Economic Journal: Macroeconomics, Vol. 11 (3), pp. 67-110.

Autor, D. H., D. Dorn, L. F. Katz, C. Patterson and J. Van Reenen (2020), The Fall of the Labor Share and the Rise of Superstar Firms, Quarterly Journal of Economics, Vol. 135 (2), pp. 645-709.

Autor, D. H., F. Levy and R. J. Murnane (2003), The Skill Content of Recent Technological Change – An Empirical Exploration, Quarterly Journal of Economics, Vol. 118 (4), pp. 1279-1333.

Baker, S. R., N. Bloom, S. J. Davis and S. J. Terry (2020), COVID-Induced Economic Uncertainty, NBER Working Paper, No 26983.

Bakhshi, O. H. and J. Larsen (2005), ICT-Specific Technological Progress in the United Kingdom, Journal of Macroeconomics, Vol. 27 (4), pp. 648-669.

Baqaee, D. R. and E. Farhi (2020), Productivity and Misallocation in General Equilibrium, Quarterly Journal of Economics, Vol. 135 (1), pp. 105-163.

Bartel, A. P. and F. R. Lichtenberg (1987), The Comparative Advantage of Educated Workers in Implementing New Technology, Review of Economics and Statistics, Vol. 69 (1), pp. 1-11.

Bartelsman, E., J. Haltiwanger and S. Scarpetta (2013), Cross-Country Differences in Productivity: The Role of Allocation and Selection, American Economic Review, Vol. 103 (1), pp. 305-334.

Basu, S., J. G. Fernald and M. S. Kimball (2006), Are Technology Improvements Contractionary?, American Economic Review, Vol. 96 (5), pp. 1418-1448.

Baumol, W. J. (1967), Macroeconomics of Unbalanced Growth: The Anatomy of Urban Crisis, American Economic Review, Vol. 57 (3), pp. 415-426.

Baumol, W. J., S. A. B. Blackman and E. N. Wolff (1985), Unbalanced Growth Revisited: Asymptotic Stagnancy and New Evidence, American Economic Review, Vol. 75 (4), pp. 806-817.

Berlingieri, G., S. Calligaris, C. Criscuolo and R. Verlhac (2020), Laggard Firms, Technology Diffusion and its Structural and Policy Determinants, OECD Science, Technology and Industry Policy Papers, No 86.

Bloom, N. (2020), How Working from Home Works out, Stanford Institute for Economic Policy Research, Policy Brief, June 2020, https://siepr.stanford.edu/sites/default/files/publications/PolicyBrief-June2020.pdf, accessed on 17 November 2020.

Bloom, N., C. I. Jones, J. Van Reenen and M. Webb (2020a), Are Ideas Getting Harder to Find?, American Economic Review, Vol. 110 (4), pp. 1104-1144.

Bloom, N., P. Bunn, P. Mizen, P. Smietanka and G. Thwaites (2020b), The Impact of Covid-19 on Productivity, NBER Working Paper, No 28233.

Bloom, N., J. Liang, J. Roberts and J. Z. Ying (2015), Does Working from Home Work? Evidence from a Chinese Experiment, Quarterly Journal of Economics, Vol. 130 (1), pp. 165-218.

Brynjolfsson, E. and A. McAfee (2014), The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies, WW Norton & Company.

Byrne, D. M., J. G. Fernald and M. B. Reinsdorf (2017), Does Growing Mismeasurement Explain Disappointing Growth?, Federal Reserve Bank of San Francisco, Economic Letter, No 2017-4.

Caballero, R. J., T. Hoshi and A. K. Kashyap (2008), Zombie Lending and Depressed Restructuring in Japan, American Economic Review, Vol. 98 (5), pp. 1943-1977.

Caballero, R. J. and M. L. Hammour (1996), On the Timing and Efficiency of Creative Destruction, Quarterly Journal of Economics, Vol. 111 (3), pp. 805-852.

Carvalho, C., A. Ferrero and F. Nechio (2016), Demographics and Real Interest Rates: Inspecting the Mechanism, European Economic Review, Vol. 88, pp. 208-226.

Cavallo, M. and A. Landry (2010), The Quantitative Role of Capital Goods Imports in US Growth, American Economic Review: Papers & Proceedings, Vol. 100 (2), pp. 78-82.

Cette, G., S. Corde and R. Lecat (2018), Firm-Level Productivity Dispersion and Convergence, Economic Letters, Vol. 166, pp. 76-78.

Cette, G., J. Fernald and B. Mojon (2016), The Pre-Great Recession Slowdown in Productivity, European Economic Review, Vol. 88, pp. 3-20.

Cette, G., C. Clerc and L. Bresson (2015), Contribution of ICT Diffusion to Labour Productivity Growth: The United States, Canada, the Eurozone, and the United Kingdom, 1970 – 2013, International Productivity Monitor, No 28, pp. 81-88.

Chen, K. and E. Wemy (2015), Investment-Specific Technological Changes: The Source of Long-Run TFP Fluctuations, European Economic Review, Vol. 80, pp. 230-252.

Christiano, L. J., M. S. Eichenbaum and M. Trabandt (2018), On DSGE Models, Journal of Economic Perspectives, Vol. 32 (3), pp. 113-140.

Comin, D. A., J. Q. Gonzalez, T. G. Schmitz and A. Trigari (2020), Measuring TFP: The Role of Profits, Adjustment Costs, and Capacity Utilization, NBER Working Paper, No 28008.

Comin, D. A., Total Factor Productivity, in Durlauf, S. N. and L. E. Blume (eds., 2008), The New Palgrave Dictionary of Economics, 2nd edition, pp. 260-263.

Comin, D. A. and M. Gertler (2006), Medium-Term Business Cycles, American Economic Review, Vol. 96 (3), pp. 523-551.

CompNet (2020), User Guide for the 7th Vintage of the CompNet Dataset, https://www.comp-net.org/fileadmin/_compnet/user_upload/Documents/7th_Vintage/7th_Vintage_User_Guide.pdf, accessed on 17 November 2020.

Cooper, R., J. Haltiwanger and L. Power (1999), Machine Replacement and the Business Cycle: Lumps and Bumps, American Economic Review, Vol. 89 (4), pp. 921-946.

Corrado, C., J. Haskel and C. Jona-Lasinio (2019), Productivity Growth, Capital Reallocation and the Financial Crisis: Evidence from Europe and the US, Journal of Macroeconomics, Vol. 61, pp. 1-22.

Decker, R. A., J. Haltiwanger, R. S. Jarmin and J. Miranda (2017), Declining Dynamism, Allocative Efficiency, and the Productivity Slowdown, American Economic Review: Papers & Proceedings, Vol. 107 (5), pp. 322-326.

Decker, R. A., J. Haltiwanger, R. S. Jarmin and J. Miranda (2016), Declining Business Dynamism: Implications for Productivity?, Brookings Institution, Hutchins Center Working Paper, No 23.

De Loecker, J., J. Eeckhout and G. Unger (2020), The Rise of Market Power and the Macroeconomic Implications, Quarterly Journal of Economics, Vol. 135 (2), pp. 561-644.

De Ridder, M. (2020), Market Power and Innovation in the Intangible Economy, mimeo.

Deutsche Bundesbank (2019a), Structural reforms in the euro area, Monthly Report, October 2019, pp. 83-105.

Deutsche Bundesbank (2019b), Progress in the convergence process of the central and eastern European EU Member States, Monthly Report, August 2019, pp. 16-18.

Deutsche Bundesbank (2018), Activities of multinational enterprise groups and national economic statistics, Monthly Report, October 2018, pp. 65-78.

Deutsche Bundesbank (2017), Mark-ups of firms in selected European countries, Monthly Report, December 2017, pp. 53-67.

Deutsche Bundesbank (2016), Investment in the euro area, Monthly Report, January 2016, pp. 31-49.

Deutsche Bundesbank (2015), Adjustment patterns of enterprises in the German labour market during the Great Recession – selected results of a special survey, Monthly Report, July 2015, pp. 33-39.

Deutsche Bundesbank (2014), Distinctive features of unit labour cost developments in Spain, Monthly Report, February 2014, pp. 21-25.

Deutsche Bundesbank (2012), On the technical relationship between the trend rate of hourly productivity, the trend growth of total factor productivity and capital deepening, Monthly Report, April 2012, pp. 24-25.

Deutsche Bundesbank (2002), Productivity developments in Germany, Monthly Report, September 2002, pp. 47-61.

Díaz, A. and L. Franjo (2016), Capital Goods, Measured TFP and Growth: The Case of Spain, European Economic Review, Vol. 83, pp. 19-39.

Diewert, W.E. (2015), Decompositions of Productivity Growth into Sectoral Effects, Journal of Productivity Analysis, Vol. 43, pp. 367-387.

Dumagan, J. C. (2013), A Generalized Exactly Additive Decomposition of Aggregate Labor Productivity Growth, Review of Income and Wealth, Vol. 59 (1), pp. 157-168.

Eden, M. and P. Gaggl (2018), On the Welfare Implications of Automation, Review of Economic Dynamics, Vol. 29, pp. 15-43.

EU KLEMS (2019), Industry Level Growth and Productivity Data with Special Focus on Intangible Assets, Report on methodologies and data construction for the EU KLEMS Release 2019, https://euklems.eu/wp-content/uploads/2019/10/Methodology.pdf

European Central Bank (2020), The long-term effects of the pandemic: insights from a survey of leading companies, Economic Bulletin Issue 8, 2020.

European Centre for the Development of Vocational Training (2019), 2018 European Skills Index, Cedefop reference series, No 111.

European Centre for the Development of Vocational Training (2015), Skills, Qualifications and Jobs in the EU: The Making of a Perfect Match? Evidence from Cedefop's European Skills and Jobs Survey, Cedefop reference series, No 103.

European Commission (2020), The Joint Harmonised EU Programme of Business and Consumer Surveys – User Guide.

Eurostat (2008), NACE Rev. 2 – Statistical classification of economic activities in the European Community, Methodologies and Working Papers.

Eurostat (2007), Eurostat – OECD Manual on Business Demography Statistics, Methodologies and Working Papers.

Feyrer, J. (2007), Demographics and Productivity, Review of Economics and Statistics, Vol. 89 (1), pp. 100-109.

Fisher, J. D. M. (1999), The New View of Growth and Business Cycles, Federal Reserve Bank of Chicago, Economic Perspectives, Vol. 23 (1), pp. 35-56.

Foster, L., J. Haltiwanger and C. Syverson (2008), Reallocation, Firm Turnover, and Efficiency: Selection on Productivity or Profitability?, American Economic Review, Vol. 98 (1), pp. 394-425.

Foster, L., J. Haltiwanger and C. J. Krizan (2006), Market Selection, Reallocation, and Restructuring in the U.S. Retail Trade Sector in the 1990s, Review of Economics and Statistics, Vol. 88 (4), pp. 748-758.

Foster, L., J. Haltiwanger and C. J. Krizan, Aggregate Productivity Growth: Lessons from Microeconomic Evidence, in Hulten, C. R., E. R. Dean and M. J. Harper (eds., 2001), New Developments in Productivity Analysis, pp. 303-372.

Fuchs-Schündeln, N., D. Krueger, A. Ludwig and I. Popova (2020), The Long-Term Distributional and Welfare Effects of Covid-19 School Closures, NBER Working Paper, No 27773.

Gilchrist, S. and E. Zakrajšek (2012), Credit Spreads and Business Cycle Fluctuations, American Economic Review, Vol. 102 (4), pp. 1692-1720.

Gopinath, G., S. Kalemli-Özcan, L. Karabarbounis and C. Villegas-Sanchez (2017), Capital Allocation and Productivity in South Europe, Quarterly Journal of Economics, Vol. 132 (4), pp. 1915-1967.

Gordon, R. J. (2016), The Rise and Fall of American Growth: The US Standard of Living since the Civil War, Princeton University Press.

Greenwood, J. and P. Krusell (2007), Growth Accounting With Investment-Specific Technological Progress: A Discussion of Two Approaches, Journal of Monetary Economics, Vol. 54 (4), pp. 1300-1310.

Greenwood, J. and B. Jovanovic, Accounting For Growth, in Hulten, C. R, E. R. Dean and M. J. Harper (eds., 2001), New Developments in Productivity Analysis, University of Chicago Press, pp. 179-224.

Greenwood, J., Z. Hercowitz and P. Krusell (1997), Long-Run Implications of Investment-Specific Technological Change, American Economic Review, Vol. 87 (3), pp. 342-362.

Gutierrez, G. and T. Philippon (2020), How European Markets Became Free: A Study of Institutional Drift, NBER Working Paper, No 24700.

Haskel, J. and S. Westlake (2018), Capitalism without Capital: The Rise of the Intangible Economy, Princeton University Press.

Hercowitz, Z. (1998), The 'Embodiment' Controversy: A Review Essay, Journal of Monetary Economics, Vol. 41 (1), pp. 217-224.

Hopenhayn, H., J. Neira and R. Singhania (2018), From Population Growth to Firm Demographics: Implications for Concentration, Entrepreneurship and the Labor Share, NBER Working Paper, No 25382.

Hsieh, C.-T. and P. J. Klenow (2009), Misallocation and Manufacturing TFP in China and India, Quarterly Journal of Economics, Vol. 124 (4), pp. 1403-1448.

Hulten, C. R., Growth Accounting, in Hall, B. H. and N. Rosenberg (eds., 2010), Handbook of the Economics of Innovation, Ed. 1, Vol. 2, pp. 987-1031.

Hulten, C. R., Total Factor Productivity: A Short Biography, in Hulten, C. R., E. R. Dean and M. J. Michael (eds., 2001), New Developments in Productivity Analysis, University of Chicago Press, pp. 1-54.

Hulten, C. R. (1978), Growth Accounting with Intermediate Inputs, Review of Economic Studies, Vol. 45 (3), pp. 511-518.

Institute for the World Economy (2017), Productivity in Germany – Measurability and Development (in German), Kieler Beiträge zur Wirtschaftspolitik, No 12.

Jones, B. F. (2010), Age and Great Invention, Review of Economics and Statistics, Vol. 92 (1), pp. 1-14.

Jurado, K., S. C. Ludvigson and S. Ng (2015), Measuring Uncertainty, American Economic Review, Vol. 105 (3), pp. 1177-1216.

Justiniano, A., G. E. Primiceri and A. Tambalotti (2011), Investment Shocks and the Relative Price of Investment, Review of Economic Dynamics, Vol. 14 (1), pp. 102-121.

Kara, E. and L. von Thadden (2016), Interest Rate Effects of Demographic Changes in a New Keynesian Life-Cycle Framework, Macroeconomic Dynamics, Vol. 20 (1), pp. 120-164.

Karahan, F., B. Pugsley and A. Sahin (2019), Demographic Origins of the Startup Deficit, NBER Working Paper, No 25874.

Kehrig, M. (2011), The Cyclicality of Productivity Dispersion, CES Working Papers, No 11-15.

Koellinger, P. D. and A. R. Thurik (2012), Entrepreneurship and the Business Cycle, Review of Economics and Statistics, Vol. 94 (4), pp. 1143-1156.

Lansing, K. J. (2015), Asset Pricing with Concentrated Ownership of Capital and Distribution Shocks, American Economic Journal: Macroeconomics, Vol. 7 (4), pp. 67-103.

Lee, Y. and T. Mukoyama (2015), Entry and Exit of Manufacturing Plants Over the Business Cycle, European Economic Review, Vol. 77, pp. 20-27.

Le Mouel, M. and A. Schiersch (2020), Knowledge-Based Capital and Productivity Divergence, DIW Discussion Paper, No 1868.

Lentz, R. and D. T. Mortensen (2008), An Empirical Model of Growth through Product Innovation, Econometrica, Vol. 76 (6), pp. 1317-1373.

Liu, Z. and P. Wang (2014), Credit Constraints and Self-Fulfilling Business Cycles, American Economic Journal: Macroeconomics, Vol. 6 (1), pp. 32-69.

Lotti, F. and E. Sette (2019), Frontier and Superstar Firms in Italy, Banca d'Italia, Occasional Papers, No 537.

Maestas, N., K. J. Mullen and D. Powell (2016), The Effect of Population Aging on Economic Growth, the Labor Force and Productivity, NBER Working Paper, No 22452.

Manca, F. (2010), Technology Catch-Up and the Role of Institutions, Journal of Macroeconomics, Vol. 32 (4), pp. 1041-1053.

Meinen, P. and O. Röhe (2017), On Measuring Uncertainty and its Impact on Investment: Cross-country Evidence from the Euro Area, European Economic Review, Vol. 92, pp. 161-179.

Mokyr, J. (2018), Bottom-Up or Top-Down? The Origins of the Industrial Revolution, Journal of Institutional Economics, Vol. 14 (6), pp. 1003-1024.

Nelson, R. R. (1981), Research on Productivity Growth and Productivity Differences: Dead Ends and New Departures, Journal of Economic Literature, Vol. 19 (3), pp. 1029-1064.

OECD (2018), Market Concentration, OECD Issues Paper by the Secretariat, No 46.

OECD (2016), New Skills for the Digital Economy – Measuring the Demand and Supply of ICT Skills at Work, OECD Digital Economy Papers, No 258.

OECD (2015), The Future of Productivity, OECD Publishing, Paris.

OECD (2001), Measuring Productivity – OECD Manual: Measurement of Aggregate and Industry-level Productivity Growth, OECD Publishing, Paris.

Ouimet, P. and R. Zarutskie (2014), Who Works for Startups? The Relation Between Firm Age, Employee Age, and Growth, Journal of Financial Economics, Vol. 112 (3), pp. 386-407.

Pakko, M. R. (2002), Investment-Specific Technology Growth: Concepts and Recent Estimates, Federal Reserve Bank of St. Louis Review, Vol. 84, pp. 37-48.

Parente, S. L. and E. C. Prescott (2000), Barriers to Riches, MIT Press.

Pugsley, B. W. and A. Sahin (2019), Grown-up Business Cycles, Review of Financial Studies, Vol. 32 (3), pp. 1102-1147.

Restuccia, D. and R. Rogerson (2017), The Causes and Costs of Misallocation, Journal of Economic Perspectives, Vol. 31 (3), pp. 151-174.

Ríos-Rull, J.-V. and R. Santaeulàlia-Llopis (2010), Redistributive Shocks and Productivity Shocks, Journal of Monetary Economics, Vol. 57 (8), pp. 931-948.

Rodríguez-López, J. and J. Torres (2012), Technological Sources of Productivity Growth in Germany, Japan, and the United States, Macroeconomic Dynamics, Vol. 16 (1), pp. 133-150.

Röhe, O. and N. Stähler (2020), Demographics and the Decline in Firm Entry: Lessons from a Life-Cycle Model, Deutsche Bundesbank Discussion Paper No 15/2020.

Sakellaris, P. and D. J. Wilson (2004), Quantifying Embodied Technological Change, Review of Economic Dynamics, Vol. 7 (1), pp. 1-26.

Schmitt-Grohé, S. and M. Uribe (2012), What's News in Business Cycles, Econometrica, Vol. 80 (6), pp. 2733-2764.

Schmitt-Grohé, S. and M. Uribe (2011), Business Cycles With a Common Trend in Neutral and Investment-Specific Productivity, Review of Economic Dynamics, Vol. 14 (1), pp. 122-135.

Schumpeter, J. A. (1934), The Theory of Economic Development, Cambridge, Massachusetts: Harvard University Press.

Skirbekk, V. (2004), Age and Individual Productivity: A Literature Survey, Vienna Yearbook of Population Research, Vol. 2 (1), pp. 133-153.

Solow, R. M., Investment and Technical Progress, in Arrow, K. J., S. Karlin and P. Suppes (eds., 1960), Mathematical Methods in the Social Sciences, Stanford University Press, pp. 89-104.

Solow, R. M. (1957), Technical Change and the Aggregate Production Function, Review of Economics and Statistics, Vol. 39 (3), pp. 312-320.

Syverson, C. (2011), What Determines Productivity?, Journal of Economic Literature, Vol. 49 (2), pp. 326-365.

Tang, J. and W. Wang (2004), Sources of Aggregate Labour Productivity Growth in Canada and the United States, Canadian Journal of Economics, Vol. 37 (2), pp. 421-444.

Tian, C. (2018), Firm-Level Entry and Exit Dynamics Over the Business Cycles, European Economic Review, Vol. 102, pp. 298-326.

van Ark, B. (2016), The Productivity Paradox of the New Digital Economy, International Productivity Monitor, Vol. 31, pp. 3-18.

van Ark, B., R. Inklaar and R.H. McGuckin (2003), The Contribution of ICT-Producing and ICT-Using Industries to Productivity Growth: A Comparison of Canada, Europe and the United States, International Productivity Monitor, Vol. 6, pp. 56-63.

Weinberg, B. A. (2004), Experience and Technology Adoption, IZA Discussion Paper, No 1051.

Young, A. T. (2004), Labor's Share Fluctuations, Biased Technical Change, and the Business Cycle, Review of Economic Dynamics, Vol. 7 (4), pp. 916-931.

Methodology and analytical options for the expanded statistics on banking groups' securities holdings

The statistics on holdings of securities by reporting banking groups were expanded in 2018. For the first time, they provide a granular insight into the risk structure of the securities held by significant banking groups in their own portfolios. Thus, risk concentrations can be identified at an early stage. All 113 significant banking groups in the euro area directly supervised by the European Central Bank (ECB) – 21 of which are domiciled in Germany – report their own holdings of securities held domestically and abroad as well as additional risk-related attributes.

Together, the 21 significant German banking groups hold securities (debt securities, equities, investment fund shares) with a market value of €610 billion in their own portfolios (as at September 2020). The majority of these are long-term debt securities (85%). A large portion of the total portfolio of securities (74%) is held by group entities domiciled in Germany.

The regional breakdown shows that the country risk of the securities held by significant German banking groups is broadly diversified across the issuers' countries of domicile. Those issuers are roughly split into thirds between Germany (36%), other European Union (EU) countries (37%) and countries outside the EU (27%).

The 21 significant German banking groups predominantly hold unencumbered securities, which are securities that can be sold or used for other purposes, such as central bank refinancing, at any time without restrictions. The quality of the own holdings of securities, measured by the probability of default of the issuer, is largely equivalent to investment grade.

During the COVID-19 pandemic, the share of short-term debt securities and securities with a lower risk weight held by significant German banking groups has increased perceptibly.

Introduction

Risk-related information for each security is available in the expanded group statistics

The expanded statistics on holdings of securities by reporting banking groups (referred to as "banking group statistics" in the remainder of this article) for the first time capture the global own holdings of securities of significant banking groups as well as additional information on risk-related attributes of those holdings. This article begins by outlining the statistical methodology for collecting the data. The results are then presented in three sections: an analysis of the global own holdings of securities of significant German banking groups,[1] an evaluation of the risk exposure of these holdings, and a description of how both aspects evolved as the COVID-19 pandemic began.

Data collected and purpose of the expanded banking group statistics

Banking group statistics focus on banking groups and their global own holdings of securities

The banking group statistics capture the global own holdings of securities of significant banking groups on a security-by-security basis. To this end, the respective head of the group reports information on the securities held by group entities in their own portfolios (debt securities, equities and investment fund shares).[2] Thus, the focus is on the banking group as a single unit comprising the head of the group as well as all of its domestic and foreign subsidiaries and branches. The Bundesbank collects information from all significant banking groups domiciled in Germany on a monthly basis. These data constitute Germany's contribution to the ESCB's Securities Holdings Statistics Database (SHSDB) for the euro area.

All 113 significant euro area banking groups report data

The banking group statistics, introduced in December 2013, were expanded in September 2018 in terms of both the number of reporting agents and the information to be reported.[3] Since September 2018, all banking groups directly supervised by the ECB – currently 113 in the euro area (of which 21 are domiciled in Germany) – have been subject to reporting requirements for the banking group statistics. The actual reporting population is reviewed annually by the Governing Council of the ECB and adjusted if necessary.[4] The relevant criteria for being assigned "significant" status include size, economic importance, level of cross-border activities, and whether direct financial support has been provided by the European Stability Mechanism (ESM) or the European Financial Stability Facility (EFSF).[5]

Data collection includes risk-related information on securities – for an array of uses

In addition, the statistics now also collect risk-related attributes so as to better capture the importance of banking groups and their stability for the financial sector and the real economy. Another reason behind this is that the areas of financial stability, monetary policy, risk

1 In this article, the term "significant German banking groups" corresponds to the banking groups domiciled in Germany which have been classified as significant by the ECB and are therefore subject to its direct supervision.
2 A banking group within the meaning of these statistics comprises the head of the group, i.e. a credit institution or a financial holding company, as well as all associated financial subsidiaries and branches which do not constitute insurance corporations. The basis of consolidation was determined in line with prudential supervisory regulations (see Directive 2006/48/EC). The reported data are broken down by the individual group members, with each legally independent financial subsidiary presented individually with its country of domicile, and with legally dependent branches grouped by country of domicile.
3 The legal basis for the collection of banking group statistics is Regulation (EU) 2016/1384 of the European Central Bank of 2 August 2016 amending Regulation (EU) No 1011/2012 (ECB/2012/24) concerning statistics on holdings of securities (ECB/2016/22), published in the Official Journal of the European Union (OJ, L 222, p. 85) on 17 August 2016.
4 The ECB provides the current list of significant euro area banking groups on its website: https://www.bankingsupervision.europa.eu/banking/list/who/html/index.en.html
5 To qualify as significant, banks must fulfil at least one of these criteria:
- the total value of its assets exceeds €30 billion;
- economic importance for the specific country or the EU economy as a whole;
- the total value of its assets exceeds €5 billion and the ratio of its cross-border assets/liabilities in more than one other participating Member State to its total assets/liabilities is above 20%;
- it has requested or received funding from the European Stability Mechanism or the European Financial Stability Facility.

A supervised bank can also be considered significant if it is one of the three most significant banks established in a particular country.

management and banking supervision needed more information for the following tasks:

- expansion/enhancement of the pool of data for stress tests;
- early warning indicators;
- study of the transmission mechanism of monetary policy;
- portfolio analysis of securities holdings;
- identification of risks in the financial system and of significant cross-border risk concentrations;
- business model analysis.

The original attributes of securities holdings

These issues could not be fully covered by the attributes collected in the original banking group statistics, as only holding amounts were collected prior to the expansion.

Using the international securities identification number (ISIN), reference data on the individual securities are added from the Centralised Securities Database (CSDB)[6] and do not have to be reported by the reporting agent.[7]

The additional risk-related attributes

In line with the new user requirements, the attributes shown in the adjacent overview, which focus on assessing the risk of the issuer or the security, were introduced as of September 2018.[8]

Overview of attributes in the statistics on banking groups

Original attributes prior to September 2018

Attributes per security:

- International Securities Identification Number (ISIN)
- Reporting basis
- Issuer is part of reporting group
- Name of group entity
- Country of domicile of group entity
- Holdings per group entity
- Further reference data for securities without an ISIN

Additional attributes since September 2018[1]

Accounting standard applied by group and each entity

Attributes per security at group level:

- Issuer is part of reporting group (since 2018, split between prudential and accounting scope of consolidation)
- Status of forbearance and renegotiation (+ date)
- Performing status of the instrument (+ date)
- Default status of the issuer (+ date)
- Default status of the instrument (+ date)
- Probability of default of the issuer
- Loss given default in downturns
- Loss given default in normal economic times
- Risk weight

Attributes per security at entity level:

- Carrying amount
- Type of impairment
- Impairment assessment method
- Accumulated impairment amount
- Source of encumbrance
- Accounting classification of instruments
- Prudential portfolio
- Accumulated changes in fair value due to credit risk
- Cumulative recoveries since default
- Exposure value (also referred to as exposure at default)
- Capital calculation approach for prudential purposes
- Exposure class

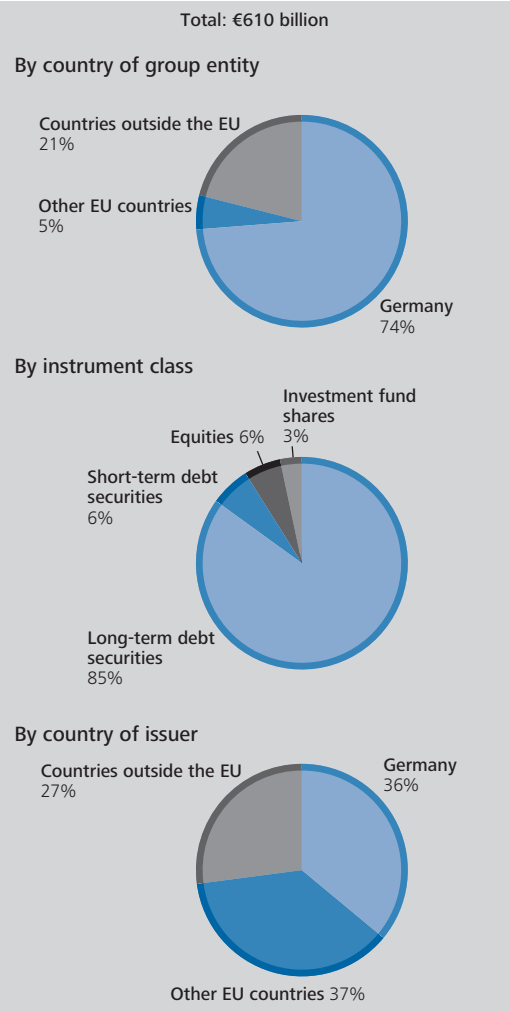
1 Listed here are attributes for securities with an official ISIN. Additional attributes are collected for securities with an internal securities identification number.

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6 The CSDB is a standardised master and reference database based on individual ISINs. It contains security-by-security information on the security itself, the issuer and the price. For more information, see European Central Bank (2010).
7 For securities with no ISIN, the reporting agent must provide reference data (e.g. information on the security type, price, interest rate and issuer) for each security.
8 For a comprehensive description of all attributes in the banking group statistics, see Deutsche Bundesbank (2020b).

Own holdings of securities of significant German banking groups

As a percentage of the total volume (market value); holdings in September 2020



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roughly 34% of the own holdings of securities of all financial institutions domiciled in Germany.[11]

Securities worth €160 billion held in group entities outside Germany

Data from the banking group statistics can be used to analyse the own holdings of securities of significant German banking groups at a more granular level and to divide them into different categories. With the methodology used to collect data for the banking group statistics, it is possible to determine the countries in which significant banking groups hold individual securities. In total, the significant German banking groups hold securities worth €160 billion (26% of the total volume) in their group entities domiciled outside Germany. The largest shares are held in the United Kingdom, the United States, Luxembourg, Poland and Singapore. The remaining own holdings of securities are spread across 31 other countries. By capturing securities held abroad, the banking group statistics thus provide a global picture of the groups' own holdings of securities.

Significant German banking groups mainly hold long-term debt securities

The securities held in the group-wide own portfolio can also be broken down by instrument class using the CSDB. Measured in terms of the total volume, significant German banking groups predominantly hold long-term debt securities (85%). By contrast, short-term debt securities (6%), equities (6%) and investment fund shares (3%) make up a comparatively small share.

Own holdings of securities of significant German banking groups in the banking group statistics

Significant German banking groups hold €610 billion worth of securities – 74% of which in Germany

The 21 significant banking groups domiciled in Germany which are required to report to the banking group statistics hold securities with a combined total market value[9] of €610 billion in their global own portfolios.[10] Of this amount, €450 billion (74% of the total volume) is held by group entities domiciled in Germany. This means that the share of securities held by significant banking groups in Germany equates to

9 The market value is generally used for comparisons, as this allows for a more up-to-date evaluation. The banking group statistics also provide information on the carrying amount and nominal value. Portfolios can be broken down into banking book and trading book holdings.
10 At the time this report went to press, quality-assured data from September 2020 were available, so this is chosen as the reference period below.
11 The volume of securities held in Germany in the own portfolios of all financial institutions domiciled in Germany comes to a market value of around €1,321 billion. This information can be obtained from the sectoral statistics of the Securities Holdings Statistics, for which all banks domiciled in Germany report their own holdings of securities held in Germany to the Bundesbank. For an overview of the sectoral statistics of the Securities Holdings Statistics, see Deutsche Bundesbank (2015).

Own holdings of securities mainly issued by enterprises

A breakdown of the own holdings of securities by issuer sector shows that 38% of the volume of securities held were issued by general government.[12] The remaining 62% are spread across deposit-taking corporations (36%), financial corporations[13] (excluding deposit-taking corporations) (20%), and non-financial corporations (5%).

36% of the own holdings of securities were from issuers domiciled in Germany

When analysing the country risk of the own holdings of securities, one relevant factor is the regional distribution of the issuers' countries of domicile. The group-wide own holdings of securities were split roughly into thirds between issuers domiciled in Germany (36%), in other EU countries[14] (37%) and in countries outside the EU (27%) – see the chart on p. 50. Besides Germany itself, the issuers' countries of domicile accounting for the largest shares are the United States (10%), France (6%), Luxembourg (6%) and the United Kingdom (5%).

Group entities inside and outside Germany hold own portfolios of securities with different country risk

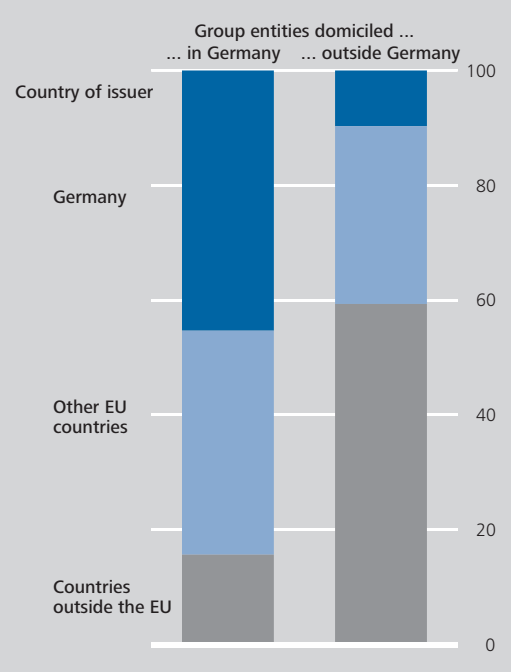
Microprudential and macroprudential risk analysis raises the question of whether significant German banking groups hold different securities portfolios in Germany and in their group entities domiciled outside Germany. It is evident that there are, in particular, differences in the regional distribution of issuers of the securities held. For instance, significant German banking groups predominantly hold securities from issuers domiciled in Germany (45%) or in the other EU countries (39%) in group entities domiciled in Germany. By contrast, group entities domiciled outside Germany mainly hold securities from issuers located in countries outside the EU (59%).

In each case, long-term debt securities make up the lion's share of the securities held in the group entities domiciled both inside and outside Germany.

The significant banking groups domiciled in Germany predominantly hold long-term debt securities in their own portfolios and largely hold these securities in Germany. Using SHSDB data on all significant banking groups in the euro area (113 banking groups), it is possible to determine the volumes of German banking groups in proportion to significant banking groups in the rest of the euro area. Overall, all significant banking groups in the euro area have own holdings of securities with a total market value of €4,533 billion.[15] The significant French banking groups account for the largest share, at 29%. The significant banking groups domiciled in Germany have the fourth largest

Own holdings of securities of significant German banking groups in Germany and abroad by country of issuer

As a percentage of the total volume (market value); holdings in September 2020



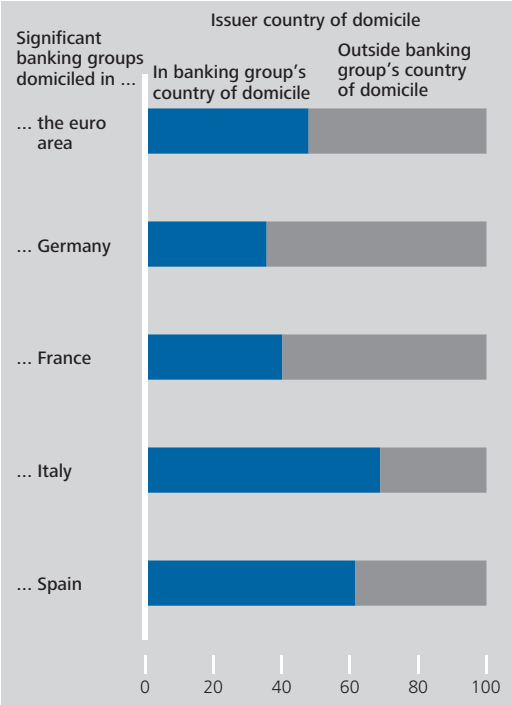
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Significant German banking groups hold 13% of the total volume of securities held by all significant banking groups in the euro area

12 The 38% government share is divided into central government (25%), state government (11%), local government (1%) and social security funds (less than 1%). This subdivision corresponds to the general government sector (S.13) of ESA 2010.
13 The financial corporations sector (S.12) comprises corporations and quasi-corporations principally engaged in financial intermediation and/or auxiliary financial activities.
14 This includes securities issued by EU Member States and enterprises based in the respective EU countries, as well as issuance by European institutions (e.g. the European Investment Bank and the European Commission).
15 At the time this report went to press, quality-assured data for the euro area from September 2020 were available, so this is chosen as the reference period here, too.

Own holdings of securities of significant euro area banking groups

As a percentage of the total volume in each case (market value); holdings in September 2020



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share, at around 13%, after Spain (17%) and Italy (17%).

Different proportions of own holdings of securities issued in the home country

A comparison between significant German banking groups and all significant banking groups in the euro area reveals that, at 36%, German banking groups hold fewer securities from issuers located in their home country than the euro area average of all banking groups (48%). There is a clear difference between the four countries with the largest own holdings of securities (France, Italy, Spain and Germany) when it comes to whether there is a preference for securities issued in their home country. Significant German banks hold a comparatively large share of securities not issued in their home country (64%). By contrast, in the case of significant banking groups in Spain and Italy, the share of own holdings of home-issued securities is higher – at 62% and 69% respectively – than the euro area average of 48%. Furthermore, as a proportion of their total own holdings, significant Italian banking groups hold a smaller share of securities from issuers outside their home country than the euro area overall, at 31% compared with 52%.

Selected risk attributes covered by the banking group statistics

Additional attributes provide new possibilities for analysis

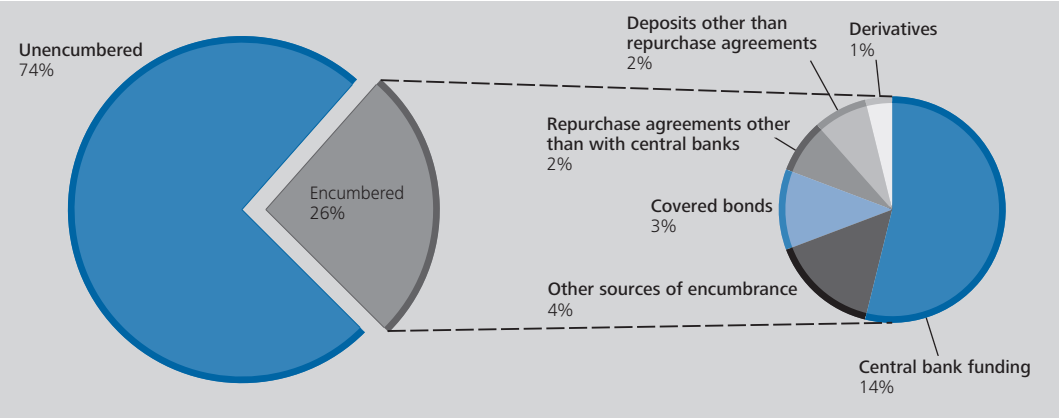
As well as allowing for analysis of global own holdings, the expanded banking group statistics – augmented to incorporate risk-related attributes in 2018 – permit an evaluation of the risk embedded in banking groups' own portfolios. This broad range of risk-related information is reported monthly by the banking groups in addition to the holding amounts and is of relevance for microprudential and macroprudential issues. First, enhanced data on the issuer and instrument provide information about economic loss events (e.g. an instrument or issuer default). The same is true of the performing status of the instrument, which is used to identify distressed assets. Second, the new attributes take into account hypothetical developments in the economic setting (e.g. the loss given default in normal economic times or in the event of a crisis), which can be used to conduct risk analyses. The risks emanating from the issuer of the securities play a crucial role here. Taken together, this allows for a comprehensive picture of the risk to the banking group stemming from its own holdings of securities. Wherever possible, the newly added attributes closely interlink the reporting requirements with the legal bases for banking supervision. A selection of the additional attributes are presented below by way of example.

The source of encumbrance[16] indicates whether an asset is regarded as encumbered or tied up,

16 For the purposes of the group statistics, the source of encumbrance is defined in line with Annexes XVI and XVII to Regulation (EU) No 680/2014 (Commission Implementing Regulation (EU) No 680/2014 of 16 April 2014 laying down implementing technical standards with regard to supervisory reporting of institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council).

Own holdings of securities of significant German banking groups and their sources of encumbrance

As a percentage of total volume (market value); holdings in September 2020



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Source of encumbrance is a feature for assessing risk

preventing it from being freely available at any time to the banking group. This is always the case if the asset (in the context of the banking group statistics, the security) is pledged or lent, or is being used to collateralise potential obligations arising from derivatives transactions or for the purposes of credit enhancement in balance sheet or off-balance-sheet transactions. If the enterprise runs into crisis, constraints apply to the sale of any encumbered securities. By looking at the degree to which assets are encumbered, it is possible to derive an assessment of the bank's solvency in the event of asset default.

Significant German banking groups hold predominantly unencumbered own holdings of securities

Looking at all own holdings of securities for which the source of encumbrance attribute was reported by the significant German banking groups, the majority of these holdings are unencumbered (74%).[17] The encumbered portion of securities is mainly utilised for central bank funding (14%), issuance of covered bonds (3%) or for repurchase transactions (2%).

Risk weight as a core element of the risk position

Another important risk-related attribute in the banking group statistics is the risk weight.[18] The size of the risk weight is based on the provisions contained in the Capital Requirements Regulation (CRR).[19] The risk weight plays a role in determining the applicable regulatory capital requirements under the CRR, that is to say the amount of own funds that banking groups must hold in reserve to back banking business subject to credit risk in the banking book. For example, in the case of debt securities, issuer insolvency gives rise to credit risk. There may be a relationship between the risk weight and the rating assigned to the issuer by rating agencies. There are two different approaches that may be applied to calculate the capital required to cover credit risk, namely the credit risk standardised approach (CRSA) and the internal ratings-based (IRB) approach.

The banking group statistics can be used to analyse the distribution of the risk weights

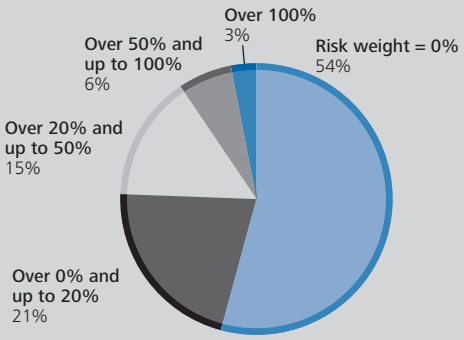
17 The source of encumbrance attribute does not need to be reported when the issuer is part of the same reporting group as the holder (prudential consolidation group) or for "pure" short positions (i.e. items for which no positive amount is held and recorded on the assets side of the balance sheet). This means that no source of encumbrance was reported for €37 billion worth of securities (6% of the total volume). The percentages cited are based only on those securities for which a source of encumbrance has been reported.

18 Risk weight does not need to be reported when the issuer is part of the same reporting group as the holder, nor is it required in the case of off-balance-sheet holdings, items deducted from capital and "pure" short positions (i.e. items for which no positive amount is held and recorded on the assets side of the balance sheet).

19 Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 646/2012. For the rules relating to risk weights see Part Three, Title II, Chapter 2, Section 2.

Risk weights of own holdings of securities of significant German banking groups

As a percentage of the total volume in the banking book (market value); holdings in September 2020



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Significant German banking groups' own holdings of securities mostly have a low risk weight

attached to the own holdings of securities in the banking book of significant German banking groups.[20] More than half of the total volume of securities held in the banking book (54%; €245 billion) have a risk weight of 0%. A further 21% have a risk weight of between 0% and 20%.

The volume-weighted average of the risk weight across all significant banking groups is 25%. However, it differs widely from group to group. Accordingly, there is also variation between the banking groups in terms of the average regulatory capital required under the CRR for the securities portion of their assets. In summary, it can be said that, overall, significant banking groups domiciled in Germany mostly have own holdings of securities with a risk weight towards the lower end of the scale.

Probability of default of issuer a further risk indicator

An additional indicator that may be used to analyse risk is the probability of default of the issuer.[21] This refers to the risk of the issuer proving unable to meet a claim. In the case of securities, default risk stems most notably from an issuer's inability to service its bonds, for example as a result of liquidity difficulties or bankruptcy.[22] Here, the reported probability of default means the forecast probability that the issuer of the security will default within a one-year horizon. Where the CRSA is used, the probability of default is calculated using external ratings; under the IRB approach, the probability of default is estimated by the banks themselves.

Vast majority of own holdings of securities have a reported probability of default of under 0.4%

For 88% of the own holdings of securities for which a probability of default has been reported, the probability of default of the issuer is 0.4% or less (see the chart on p. 55). In credit assessment terms, this corresponds to an external rating of at least BBB-, hence qualifying as investment grade.[23] 76% of the holdings for which a default probability has been reported have a probability of default of the issuer no higher than 0.1% (meaning that they have a rating of at least A- in credit assessment terms).

Default status of the issuer and of the instrument

The default status of the issuer and of the instrument[24] provide information on securities and issuers that are assessed negatively when

20 The significant German banking groups have €453 billion in own holdings of securities in their banking book and €104 billion in their trading book. For a volume of €53 billion, no information on the prudential portfolio is available as this attribute does not need to be reported for all securities.
21 The probability of default is estimated according to the procedures laid down in the CRR.
22 It is only mandatory to report the probability of default attribute if this is required in accordance with the capital calculation approach for prudential purposes. In addition, the attribute need not be reported when the issuer is part of the same reporting group as the holder or for off-balance-sheet holdings, items deducted from capital and "pure" short positions. Overall, no probability of default has been reported for holdings with a market value totalling €143 billion (23% of the total volume of own holdings of securities). The percentages cited are based only on those securities for which a probability of default has been reported.
23 When performing credit assessments, the Bundesbank identifies two credit quality bands on the basis of the Eurosystem credit assessment framework. The first covers anything up to a forecast probability of default of 0.1%. The second band is for forecast probabilities of default between 0.1% and 0.4%. The first credit quality band encompasses credit quality steps 1 and 2 and is equivalent to a rating of at least "A-" from Fitch or Standard and Poor's (S&P) or "A3" from Moody's. The second band comprises credit quality step 3 and is equivalent to a rating of "BBB+ to BBB-" from Fitch or S&P or "Baa1 to Baa3" from Moody's. See Deutsche Bundesbank (2019) and European Central Bank (2015).
24 The reporting of these attributes follows the same criteria as the prudential reporting in accordance with Regulation (EU) No 575/2013.

examining a banking group's risk exposure.[25] The own holdings of securities held by the significant banking groups domiciled in Germany were issued almost entirely by issuers who have not defaulted. The volume of securities reported as being distressed stands at just €909 million (0.1% of the total market value).

13% of the holdings are securities with an issuer belonging to the same reporting group

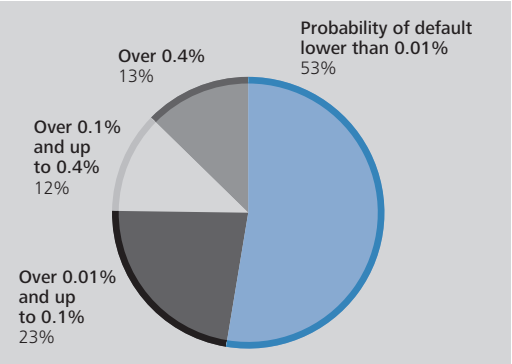
Information on intra-group issuance, where the issuer is part of the same reporting banking group as the holder, can be used to examine the financial links within the respective banking group. Around €80 billion worth (13%) of all own holdings of securities held by significant banking groups domiciled in Germany were issued by entities in the same group as the holder (prudential scope). The majority were long-term debt securities (€57 billion) and equities (€22 billion). This equates to 11% and 64%, respectively, of the total volume of securities held in that instrument class. As a result, if securities issued intra-group are excluded when looking at the instrument classes held by the significant German banking groups, the proportion of the total portfolio accounted for by equities shrinks from 6% to 2%, while the percentage accounted for by other instrument classes sees a slight increase.

Conclusion

The banking group statistics underwent significant expansion in 2018. All 113 significant banking groups in the euro area directly supervised by the ECB – 21 of which are domiciled in Germany – report their own holdings of securities held domestically and abroad as well as additional risk-related attributes. This makes it possible to break down securities positions in a variety of ways – by instrument class, the issuers' countries of domicile, the group entity holding the position and a range of risk attributes, for instance. The statistics thus open up a broad array of new possibilities for granular analysis, for example with regard to the risk structure of the securities portfolios of significant banking groups and the changes that they undergo (for example in response to the COVID-19 pandemic).

Own holdings of securities of significant German banking groups and probabilities of issuer default

As a percentage of total volume (market value); holdings in September 2020



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25 Since reporting of these attributes is not mandatory for all securities, no default status of the issuer and of the instrument has been reported for just under 17% of the total volume in market value terms (€103 billion). This exemption from reporting applies where the issuer is part of the same reporting group as the holder as well as to off-balance-sheet items, "pure" short positions, financial assets held for trading, and equities and investment fund shares.

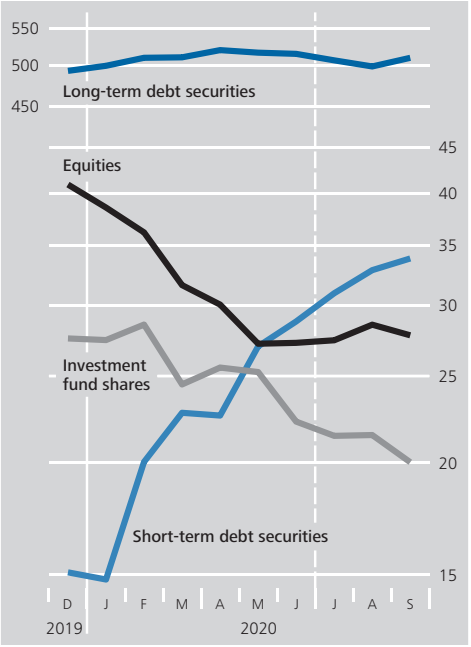
Trends in group data in recent times of crisis

The COVID-19 pandemic has been dominating social life and real economic activity across the globe since the beginning of 2020. The dynamic evolution of the pandemic has led to high volatility in the financial markets. For instance, up until March 2020 the DAX stock price index, which comprises Germany's 30 largest public limited enterprises, temporarily lost as much as 35% of its value compared to year-end 2019. However, it subsequently rallied quickly to recoup large portions of its losses, which meant that, by the end of the second quarter, it had returned to around 90% of its 2019 year-end mark.

The statistics on banking groups can be used to take a detailed look at Germany's significant banking groups.[1] Upon the outbreak of the pandemic in early 2020, the market value of the total volume of own holdings of debt securities rose. The volume of short-term debt securities, in particular, more than doubled by July 2020 and even continued its rise thereafter. This also reflects German banks facing an elevated need for liquidity upon the onset of the COVID-19 pandemic.[2] On the whole, up until September 2020 own holdings of short-term debt securities had increased by 124%. The volume of long-term debt securities, on the other hand, went back down after April 2020.[3]

Own holdings of securities of significant German banking groups by instrument class

€ billion, total volume (market value), log scale



Deutsche Bundesbank

A countermovement of own holdings of equities and investment fund shares can be observed at the beginning of the pandemic. From end-2019 until June 2020, they fell by 33% and 19%, respectively, even though the DAX had recouped large portions of its losses in June 2020. In the third quarter of 2020, too, the volume of equities remained at the lower level and, for investment fund shares, fell even further.

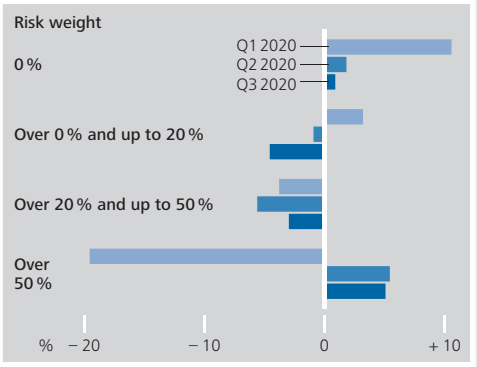
In respect of the quality, measured in terms of risk weights, of own holdings of securities, a strong increase in the volume of securities with a 0% risk weight can be detected between end-2019 and end-March 2020. By contrast, the volume of securities with a high risk weight fell over the same period.

1 In order to avoid changing the set of underlying data, the evaluations in this chapter refer to those 17 significant German banking groups which were continuously subject to reporting requirements between December 2019 and September 2020.
2 See Deutsche Bundesbank (2020a).
3 Changes in the volume of securities can be caused by changes in holdings or prices. The developments cited here show the overall effect. Since the banking group statistics contain holdings based on individual securities, changes in holdings and prices can also be identified separately for each individual security.

A detailed look at the banking group statistics shows that, in March 2020, roughly two-thirds of the decline in the volume of own holdings of securities with a risk weight greater than 50% was caused by a fall in the volume of equities and investment fund shares of this risk weight category. The overall result was that the average risk weight across the entire own holdings of securities of significant German banking groups dropped from a one-time figure of 31% to 25% in March 2020 and also remained at that new level until September 2020.[4]

Change in own holdings of securities of significant German banking groups by risk weight category

Quarterly percentage change in total volume (market value)



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In summary, the composition of the own holdings of securities of the significant German banking groups has changed since the outbreak of the COVID-19 pandemic. In autumn 2020, the significant German banking groups had, in particular, more short-term debt securities in their own holdings and a portfolio with an, on average, lower risk weight than as recently as the end of 2019.

4 The risk weight assessments in this section refer to all holdings in the banking group statistics (i.e. to non-trading book and trading book holdings) for which a risk weight has been reported.

List of references

Deutsche Bundesbank (2020a), Financial Stability Review, pp. 26 f.

Deutsche Bundesbank (2020b), Statistik der Banken und sonstigen Finanzinstitute – Richtlinien, Statistische Sonderveröffentlichung 1, Statistik über Wertpapierinvestments, July 2020, pp. 551-590.

Deutsche Bundesbank (2019), Besondere Bedingungen für die Bonitätsbeurteilung von Sicherheiten, die nicht von der EZB im Sicherheitenverzeichnis veröffentlicht sind: Bonitätsbedingungen, August 2019 version.

Deutsche Bundesbank (2015), Securities holdings statistics for analysing holdings of securities in Germany and Europe: methodology and results, Monthly Report, March 2015, pp. 95 ff.

European Central Bank (2015), Guideline (EU) 2015/510 of the European Central Bank of 19 December 2014 on the implementation of the Eurosystem monetary policy framework (ECB/2014/60), Official Journal of the European Union, L 91, pp. 3-135, April 2015.

European Central Bank (2010), The "Centralised Securities Database" in brief, February 2010.

The two-tier system for reserve remuneration and its impact on banks and financial markets

When operating in a negative interest rate environment, central banks have introduced tiering systems for the remuneration of excess liquidity holdings as a monetary policy measure. These tiering systems enable central banks to exempt a certain part of commercial banks' excess liquidity holdings from negative remuneration or to set a slightly more attractive rate of interest on this part. By contrast, the non-exempt tier of excess liquidity holdings continues to be remunerated at the regular, negative rate. This cuts banks' interest expenditure on excess liquidity held when the tiering system is introduced. In September 2019, the Governing Council of the European Central Bank (ECB Governing Council) decided that the euro area, too, should have a tiering system and introduced a two-tier system for excess reserve remuneration on 30 October 2019.

The aim of this measure was to support the bank-based transmission of monetary policy. At the same time, the ECB Governing Council sought to preserve the positive contribution of negative interest rates to the accommodative stance of monetary policy and thus to the continued sustained convergence of inflation to the ECB's aim. The two-tier system is designed in such a way that euro short-term money market rates are not unduly influenced.

The system prompted some banks to increase their central bank balances in order to take full advantage of their own exemption allowances. The resulting redistribution of liquidity between banks began as soon as the two-tier system was introduced and, to start with, this largely took place via the money market. Redistribution could be observed both domestically and within banking groups as well as across national borders, and it enabled almost all euro area banks to make full use of their allowances. Despite significant liquidity redistribution, short-term money market rates rose only temporarily and to a very small extent, which was also due to a large volume of excess liquidity holdings, which continued to expand over time, still being subject to negative remuneration.

In December 2020, euro area excess liquidity holdings stood at €3,352 billion. Between the introduction of the two-tier system in October 2019 and December 2020, euro area banks' interest expenditure on excess liquidity holdings amounted to €8.9 billion, and was thus €4.7 billion lower than would have been the case without a tiering system but under otherwise identical conditions. At the same time, the lion's share of excess liquidity holdings (€2,498 billion at last report) continued to be subject to negative remuneration.

Introduction

Two-tier system part of large package of measures aimed at …

At its monetary policy meeting on 12 September 2019, the ECB Governing Council decided, in addition to other monetary policy measures, to introduce the two-tier system for reserve remuneration (hereinafter referred to as the "two-tier system"). Since 30 October 2019, banks have no longer been required to pay the Eurosystem negative interest on part of their excess reserve holdings.[1] Thus, for the first time, the Eurosystem has set two different interest rates for holding excess reserves.

… supporting bank-based transmission of monetary policy …

The two-tier system reduces a portion of commercial banks' interest expenditure on holding excess reserves, which had risen as a result of the interest rate on the deposit facility being lowered by 10 basis points on 18 September 2019. By introducing the two-tier system, the ECB Governing Council sought to support the bank-based transmission of monetary policy. Literature on this topic suggests that an exceedingly long-lasting environment of low interest rates could, under certain conditions, hurt lending by banks,[2] meaning that they would no longer adequately fulfil their role in monetary policy transmission. This would impede the ECB Governing Council's intended objective of monetary policy easing.

… without undue influence on money market rates

The ECB Governing Council took care to design the two-tier system in such a way that euro short-term money market rates are not unduly influenced. Tiering systems provide incentives for the redistribution of liquidity between banks: institutions that do not make full use of their exemption allowances under a tiering system can generate additional interest income by borrowing funds at negative interest rates and depositing them in their central bank account at the zero interest rate. Thus, in principle, the additional demand for liquidity from some banks that is triggered by a tiering system could raise short-term money market rates, which may run counter to the central bank's intended monetary policy stance.

Review of first year of two-tier system

Around one year after the launch of the two-tier system, this article examines whether and how this measure has achieved the effect intended by the ECB Governing Council without producing undesirable side effects in the money market. To this end, the article begins by discussing the background and motivation behind introducing the two-tier system, before examining the impact that the two-tier system has on interest expenditure on excess liquidity holdings[3] in the banking sector. It concludes with an analysis of the resulting redistribution of central bank liquidity via money and other financial markets.

The two-tier system in a monetary policy context

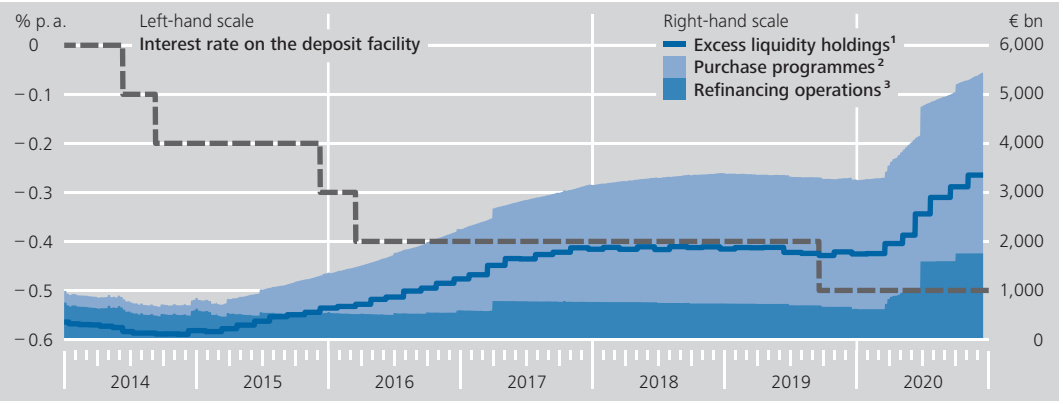
Interest expenditure arising from negative interest rate on deposit facility and excess liquidity holdings

Since the global financial and the European debt crises, the Eurosystem has been providing banks with significantly more central bank liquidity through non-standard monetary policy measures than they need overall.[4] This excess liquidity is held on banks' accounts with the Eurosystem. In June 2014, the ECB Governing Council lowered the interest rate on the deposit facility from 0.0% to -0.1%. Thus, for the first time, the Eurosystem charged banks a negative rate of interest on excess liquidity holdings. Since then, the ECB Governing Council has adopted additional non-standard liquidity-providing monetary policy measures. These non-standard measures have gradually raised excess liquidity holdings even more (see the chart on p. 61). Together with further interest rate cuts, this has led to an increase in

1 Excess reserves are the amount a bank holds on current accounts with the central bank which exceeds its minimum reserve requirements on average over a reserve maintenance period. Excess reserves do not include the deposit facility.
2 See Brunnermeier and Koby (2018).
3 Excess liquidity is the sum of deposits in the deposit facility and excess reserves.
4 Banks need central bank liquidity in the form of reserve holdings with the central bank in order to meet their minimum reserve requirements. Banks' reserve holdings are subject to fluctuations because current payments and the issuance and acceptance of cash by the central bank are ultimately also settled using central bank liquidity.

Excess liquidity holdings and interest rate on the deposit facility

Daily values



Source: Eurosystem. **1** Reserve maintenance period averages. **2** Asset purchase programme (APP), pandemic emergency purchase programme (PEPP), and remaining holdings from the covered bond purchase programmes (CBPP and CBPP1) and the securities markets programme (SMP). **3** Main refinancing operations and longer-term refinancing operations.

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banks' interest expenditure on excess liquidity holdings. The banking system as a whole is scarcely able to lower excess liquidity and therefore cannot reduce interest expenditure stemming from negative remuneration on its excess liquidity holdings in central bank accounts. Transactions between banks only result in excess liquidity being redistributed within the banking system.[5]

Two-tier system in connection with other monetary policy measures

In pursuit of its price stability objective, the ECB Governing Council decided in September 2019 to adopt an additional, comprehensive package of measures, lowering the interest rate on the deposit facility by 10 basis points to -0.5% and also making the interest rate on targeted longer-term refinancing operations (TLTRO-III) more attractive.[6] In addition, the ECB Governing Council resumed net purchases under the asset purchase programme (APP) at a monthly pace of €20 billion starting in November 2019. The interest rate cut and the further rise in excess liquidity resulting from this package of measures pushed up banks' interest expenditure even further. To address this, the ECB Governing Council also introduced its two-tier system for excess reserve remuneration as a new item in its monetary policy toolkit. In an environment of expanding excess liquidity, the two-tier system exempts part of credit institutions' excess liquidity holdings from negative remuneration at the rate applicable on the deposit facility, thereby reducing their interest expenditure. Prior to this, other central banks had already made similar arrangements for the remuneration of banks' excess central bank balances in connection with negative policy rates (see the box on pp. 64 ff.).

Design of the two-tier system

Two-tier system exempts part of excess reserve holdings from negative remuneration

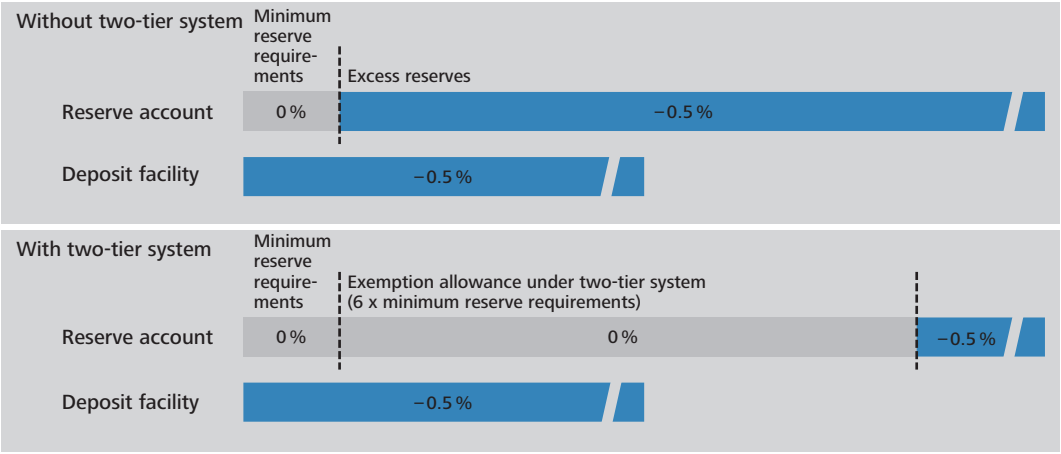
The tiering system established in the euro area on 30 October 2019 introduced two tiers for the remuneration of excess reserve holdings. A certain amount of excess reserve holdings is exempt from remuneration at the applicable deposit rate, i.e. it is remunerated at 0% instead. This exemption allowance is calculated as a multiple of an individual bank's minimum

5 The banking system as a whole can only lower central bank liquidity and thus excess liquidity independently by exchanging liquidity holdings for banknotes or reducing refinancing operations.

6 For more information, see https://www.ecb.europa.eu/mopo/implement/omo/tltro/html/index.en.html.

Remuneration of central bank liquidity holdings with and without the two-tier system

As at January 2021



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reserve requirements.[7] The multiplier is the same for all institutions. The ECB Governing Council stated that it would set the multiplier at a level which ensures that euro short-term money market rates are not unduly influenced. The Eurosystem determines the remuneration rate on and the size of the exempt tier on average over a reserve maintenance period.[8] The ECB Governing Council set the multiplier at six.

Expectations, impact and role in monetary policy

Two-tier system aimed at supporting monetary policy transmission

In the euro area, banks play a key role in transmitting monetary policy impulses. They pass on changes in the policy rates to the real economy by adjusting lending conditions. As a rule, policy rate cuts should encourage banks to ease lending conditions for their customers. In turn, this should raise the demand for and granting of credit, thereby increasing investment, private consumption and, ultimately, the price level. With its two-tier system, the ECB Governing Council aims to support the bank-based transmission of its monetary policy. In particular, it is designed to prevent the costs of borrowing for new loans from rising. In a prolonged period of low or negative interest rates, non-standard monetary policy measures, which generate these high levels of excess liquidity, can have such undesirable side effects.

Persistently negative interest rates could have undesirable side effects; …

So far, banks have largely refrained from passing on negative interest rates to their depositors – households' deposits, in particular, are still largely unaffected.[9] As low interest rates are becoming increasingly entrenched, banks that rely heavily on deposits as a source of funding are seeing their interest margins shrink. While the average lending rate continues to fall, banks are reluctant to lower their interest rate on deposits below zero. Interest income from lending therefore reacts more elastically to changes in interest rates than interest ex-

7 Minimum reserves are compulsory deposits that commercial banks are required to hold with their respective euro area central bank and are calculated using the reserve base. The reserve base comprises deposits from non-banks or banks that are not subject to minimum reserve requirements as well as debt securities that have an agreed maturity or notice period of no more than two years. The Eurosystem applies a positive minimum reserve ratio of 1% at present to the components included in the reserve base. Minimum reserves are remunerated at the weighted average marginal allotment rate on main refinancing operations in the corresponding reserve maintenance period.
8 A reserve maintenance period lasts six or seven weeks, each starting shortly after the monetary policy meetings of the ECB Governing Council. For more information and the indicative calendar for reserve maintenance periods, see https://www.bundesbank.de/en/tasks/monetary-policy/minimum-reserves.
9 For more information, see the euro area monetary financial institution (MFI) interest rate statistics, Heider et al. (2019) and Eisenschmidt and Smets (2019).

penditure on households' deposits.[10] Viewed in isolation, this could worsen banks' profitability. If this decreased profitability has an impact on banks' capital, they could reduce their credit supply or charge higher lending rates.[11]

The exemption allowance is calculated as a multiple of the relevant institution's minimum reserve requirements. Minimum reserves currently comprise 1% of enterprises' and households' deposits subject to reserve requirements. They are largely determined by the amount of deposits held by households, which is roughly three times the amount of deposits held by enterprises. It is precisely those banks with predominantly deposit-based funding that are the main lenders to enterprises and households in the euro area. This is why banks that are involved in lending to enterprises and households tend to be the main beneficiaries of the two-tier system. If the two-tier system helps banks to uphold their credit supply even in the low interest rate environment, it fulfils the ECB Governing Council's objective of supporting the bank-based transmission of monetary policy.

… no negative effects seen so far

So far, there have been no signs either in the euro area or Germany of banks restricting their credit supply because of the negative remuneration on their excess liquidity holdings. Expansionary monetary policy is supporting economic activity and is aimed at meeting the price stability objective in the medium term. The favourable economic situation prior to the coronavirus crisis enabled European banks to compensate for narrower interest margins in the low interest rate environment, allowed them to reduce their loan loss provisions and ensured robust credit demand. Consequently, banks were able to keep their profitability largely stable. Until the onset of the coronavirus crisis, there were no signs of banks being less willing to lend.[12] Bundesbank and ECB analyses confirm that monetary policy continued to have a stimulating effect in this environment.[13]

Two-tier system is intended to reduce likelihood of adverse impact from negative interest rates …

The interest expenditure that banks have to pay for excess liquidity holdings is relatively low compared with their other interest-dependent business. From the beginning of the negative interest rate policy period to the end of 2019, declining interest margins cost banks in Germany around four times as much as interest expenditure on excess liquidity holdings.[14] This interest expenditure is a side effect of the negative interest rate policy in combination with high levels of excess liquidity holdings resulting from other monetary policy measures. Taken in isolation, it is a profit-reducing factor that is affected directly by monetary policy. To avoid monetary policy potentially having unwanted side effects in this area, the two-tier system therefore exempts part of banks' excess liquidity holdings from negative remuneration.

… whilst avoiding undue influence on money market rates

In setting the multiplier, the ECB Governing Council calculated the exemption allowances such that the short-term money market rates would not be unduly influenced.[15] The two-tier system encouraged banks to make use of their allowances and thus the more favourable level of remuneration. In this way, the Eurosystem set interest rate incentives for bank transactions that result in a more even distribution of excess liquidity in the system. Money markets had a key role to play, as this is where banks typically trade liquidity. Given that levels of negatively remunerated excess liquidity holdings remained high, there was indeed no sustained rise in the relevant benchmark interest rates for the money market.[16]

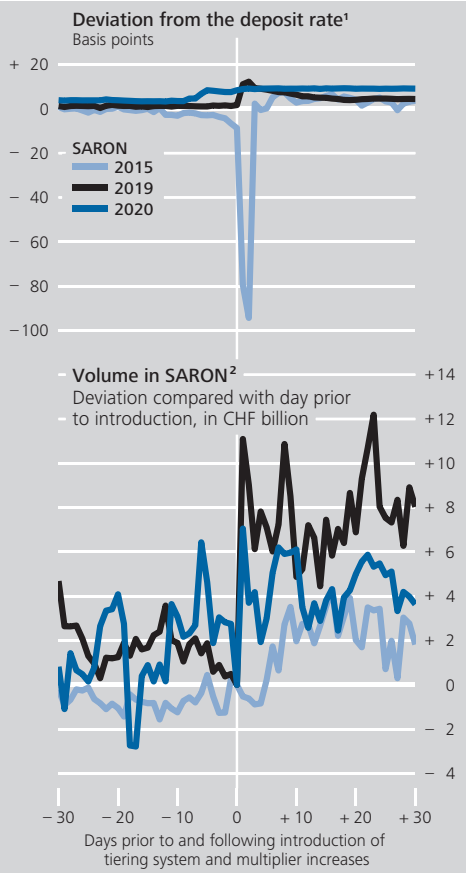
10 See Deutsche Bundesbank (2020).
11 See Brunnermeier and Koby (2018).
12 See European Central Bank (2020).
13 See Deutsche Bundesbank (2020) and Schnabel (2020).
14 See Deutsche Bundesbank (2020).
15 See also European Central Bank (2019).
16 In November 2019, when the two-tier system was introduced, the outstanding volume of negatively remunerated excess liquidity held with the Eurosystem stood at around €1,000 billion, and it has risen since then.

Tiering systems in other currency areas

Other central banks besides the Eurosystem have also cut policy rates, pushing their deposit rates into negative territory: these are the Bank of Japan (BoJ), Danmarks Nationalbank, Sveriges Riksbank and the Swiss National Bank (SNB). Each of these central banks has introduced a tiering system in one form or another. The ways in which these tiering systems differ go beyond remuneration and the size and calculation of exemption allowances. For example, Sveriges Riksbank absorbs a certain amount of excess liquidity, which is otherwise negatively remunerated, by issuing deposit certificates on a weekly basis. This arrangement is therefore not a tiering system in the narrower sense, but it is similar in its effect. The systems adopted by the SNB and the BoJ, which are outlined below, illustrate how differently tiering systems in the narrower sense, too, can be structured and calibrated.

The SNB's tiering system is similar in design to that of the Eurosystem. In January 2015, the SNB had lowered the interest rate on banks' sight deposits held with the SNB from 0% to -0.75% in order to ensure that the appreciation of the Swiss franc following the discontinuation of the minimum EUR/CHF exchange rate did not lead to an inappropriate tightening of monetary conditions.[1] When it introduced its negative deposit rate, it exempted around two-thirds of domestic banks' deposits from this negative interest. The aim of this was to limit the negative interest rate burden on banks to the minimum deemed necessary by the SNB for the implementation of monetary policy while still keeping secured short-term money market rates close to the policy rate.[2] The exemption allowance for domestic banks subject to minimum reserve requirements was initially equal to 20 times their minimum reserve requirements ("multiplier"). The SNB deducted the cash holdings reported in the last reserve maintenance

Short-term money market rates and volumes in Switzerland



Sources: SIX Swiss Exchange and Bundesbank calculations. **1** Difference between the Swiss Average Rate Overnight (SARON) and the SNB's interest rate on sight deposits. SARON is a reference interest rate for the Swiss franc. **2** The volume referred to here is the volume used to calculate SARON.
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1 See Swiss National Bank (2015).
2 See Swiss National Bank (2019) and Maechler and Moser (2020).

Comparison with tiering systems in other currency areas

Currency area	Start of negative interest rate policy	Start of tiering system	Deposit rates	Average remuneration rate[1]	Exempt tier[1]	Calculation of exemption allowance
Denmark[2]	July 2012	–	0% (facility) or – 0.6% (certificates)	– 0.48%	18%	1.55% to 3% of current account deposits[3]
Euro area	June 2014	Oct. 2019	0% or – 0.5%	– 0.37%	25%	6 x minimum reserve requirements
Switzerland	Jan. 2015	Jan. 2015	0% or – 0.75%	[4] – 0.15%	[4] 80%	30 x minimum reserve requirements[5]
Sweden[6]	Feb. 2015	–	0% (certificates) or – 0.1% (facility)	– 0.06%	44%	Set each week based on liquidity surplus
Japan	Jan. 2016	Jan. 2016	0.1%; 0% or – 0.1%[7]	[8] 0.04%	[8] 93%	Range of factors

Sources: Bank of Japan, Danmarks Nationalbank, Eurosystem, Sveriges Riksbank, Swiss National Bank and Bundesbank calculations. **1** Applies to banks' excess liquidity and actual use of exemption allowances. Estimate based on data made available to the public by the respective central banks and may deviate from actual values due to reasons such as the lack of bank-level data. As at (end of reserve maintenance period in) December 2020 (Denmark, euro area, Sweden) or November 2020 (Switzerland, Japan). **2** Negative interest rate policy was suspended for a time. Dual interest rates on the deposit facility and certificates were the norm even prior to the start of the negative interest rate policy period. **3** Depending on the size of current account deposits. **4** Estimate applies exclusively to domestic banks subject to minimum reserve requirements. Full use of exemption allowances is assumed. **5** Less the amount of cash held in the last reserve maintenance period. The exemption allowance is at least CHF 10 million per sight deposit account holder. **6** Sveriges Riksbank had already brought in negative interest rates temporarily back in 2009. The Riksbank absorbs a certain amount of excess liquidity by issuing certificates on a weekly basis. This arrangement is therefore not a tiering system in the narrower sense. **7** For individual regional banks, less 10 basis points in the special deposit facility. **8** The additional interest on deposits held in the special deposit facility for regional banks is not factored into this estimate.

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period from this.[3] In response to the significant increase in total sight deposits, in November 2019 the SNB raised its exemption allowance to 25 times banks' minimum reserve requirements, before raising it further to 30 times the requirements in April 2020 in response to the coronavirus crisis.[4] In terms of volume, the exemption allowances granted to domestic banks subject to minimum reserve requirements comprised around four-fifths of these banks' sight deposits in November 2020, making the average interest rate on the banks' sight deposits held with the SNB likely to have been just under -0.2% per annum.

Trading in the Swiss franc money market increased significantly following the introduction of the tiering system and the subsequent increases in the multiplier. The secured short-term money market rate (Swiss Average Rate Overnight – SARON) rose and temporarily drifted away from the SNB's deposit rate. This was not desirable from a monetary policy perspective. Since November 2019, the SNB has conducted a number of liquidity-providing operations, bringing SARON back into line with the SNB policy rate.[5]

3 Since November 2019, there have been two methods for calculating the exemption allowance, also referred to as the exemption threshold: (i) For domestic banks subject to minimum reserve requirements, the moving average of their minimum reserve requirements over the preceding three years is multiplied by the threshold factor and updated on a monthly basis. Previously, the calculation of individual banks' minimum reserve requirements was static. The cash holdings reported in the last reserve maintenance period are deducted from this. (ii) The SNB sets a fixed threshold for all other sight deposit account holders. The exemption allowance amounts to at least CHF 10 million for all sight deposit account holders. See also Swiss National Bank (2019).

4 The SNB took this action to help banks play their key role in economic developments. See Swiss National Bank (2020).

5 From November 2019 to July 2020 via fine-tuning operations in the overnight segment of the repo market, and since July 2020 by auctioning one-month funds on the repo platform. See Maechler and Moser (2020).

In January 2016, the BoJ introduced a tiering system at the same time as it implemented a negative interest rate policy. The BoJ's intention was to prevent an excessive decrease in Japanese banks' earnings stemming from the implementation of negative interest rates that could weaken their function as financial intermediaries.[6] The Japanese tiering system has three tiers. In the first component of the tiering system, the basic balance, a portion of the deposits held by banks in BoJ accounts is still remunerated at a positive rate of 0.1% per annum. The amount of this positive interest-bearing component for each financial institution corresponds to that institution's average outstanding current account balance at the BoJ in 2015. The minimum reserve requirement is deducted from this. The first component is therefore fixed and amounted to just under half of total deposits in November 2020. In the second component of the tiering system, the macro add-on balance,[7] a zero interest rate is applied to other deposits (also slightly less than half of total deposits in November 2020). The third component, the policy-rate balance, only comes into play if a financial institution's outstanding balance is in excess of the first two tiers: these excess reserves are subject to negative remuneration at -0.1% per annum. The BoJ adjusts the level of the macro add-on balance each month in both directions to ensure that this negative interest-bearing policy-rate balance accounts for a very low share of total deposits: in November 2020, it only comprised around 7% of deposits. At the end of the period under review, the combination of the three tiering system components produced slightly positive average remuneration overall for deposits held with the BoJ. In Japan, too, the tiering system has led to liquidity being redistributed via the money market.

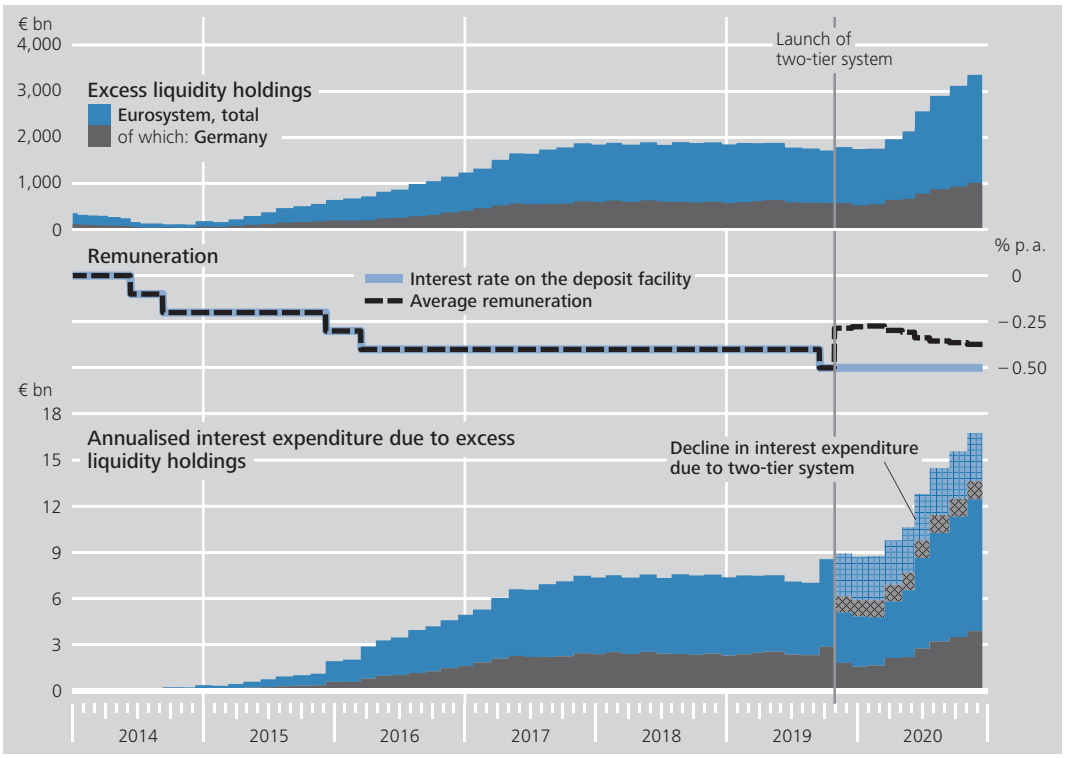
In November 2020, the BoJ added a further component to its tiering system. As a three-year measure, it set up a special deposit facility with interest rates specifically for regional banks that meet certain requirements, namely an additional 0.1 percentage point on each of the three tiering system components. The BoJ hopes that this will strengthen regional economies and ensure financial system stability.[8] For example, the specific eligibility conditions for the more attractive rate of remuneration promote consolidation in the regional banking sector.

The tiering systems of other central banks show how they can differ in terms of structure and specific objectives. All central banks that have introduced negative policy rates in recent years have also adopted a tiering system in one form or another to reduce the potential side effects of the negative interest rate environment. The Japanese tiering system is much more complex and appears, more recently, to have been supporting structural policy in addition to providing interest rate relief. The SNB's experience confirms that a large exempt tier of excess liquidity holdings and significantly negative interest rates can temporarily raise money market rates.

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6 See Bank of Japan (2016).
7 The macro add-on balance comprises minimum reserve holdings plus the basic balance multiplied by a benchmark ratio (expressed as a percentage). It also contains other components, such as the amount outstanding of the BoJ's provision of credit through the loan support programme and its funds-supplying operation to support financial institutions in disaster areas. In the past, the macro add-on balance used to be adjusted quarterly, but since May 2020 it has been adjusted on a monthly basis via the benchmark ratio. The macro add-on balance has risen almost continuously since its introduction in 2016.
8 See Bank of Japan (2020).

Excess liquidity holdings and interest expenditure



Sources: Eurosystem and Bundesbank calculations.
Deutsche Bundesbank

Impact on interest expenditure in the banking system

Rising interest expenditure as a result of negative deposit facility rate and high levels of excess liquidity holdings

When the interest rate on the deposit facility was first lowered into negative territory in 2014, banks in the euro area had to pay just under €0.2 billion per year in interest for holding excess liquidity. In the years that followed, rising excess liquidity holdings led to a continuous increase in the interest paid by banks to the Eurosystem. In September 2019, their annualised interest expenditure on excess liquidity holdings came to €6.8 billion.[17] When the ECB Governing Council lowered the interest rate on the deposit facility by 10 basis points to -0.5% in the same month, this expenditure rose to an annualised figure of €8.6 billion (see the chart above).

Introduction of the two-tier system

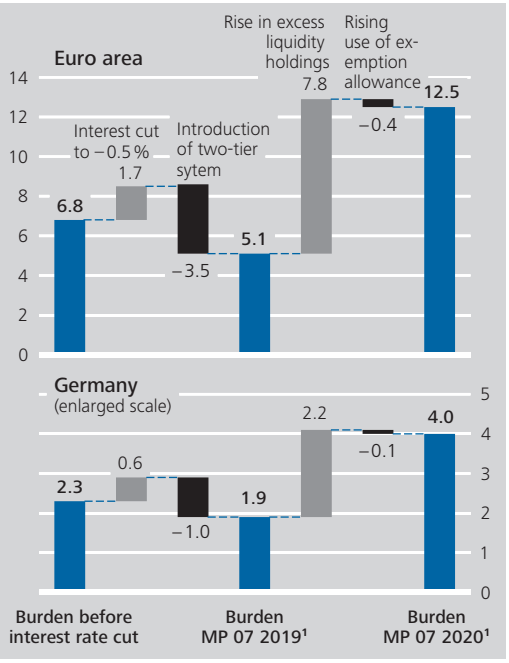
Two-tier system has cut euro area banks' costs by €4.7 billion so far

The introduction of the two-tier system at the end of October 2019 reduced the absolute annualised interest expenditure on excess liquidity holdings of euro area banks to €5.1 billion.[18] This means that the two-tier system reduced banks' annualised interest expenditure by just under €3.5 billion and thus lowered their total annual burden by €1.7 billion net after adjustment for the interest rate cut implemented around the same time. Initially, it thus more than offset the impact of the last cut to the deposit facility rate (see the chart on p. 68). Adding together the savings across all reserve maintenance periods from the introduction of the two-

17 The period referred to here and below is the sixth reserve maintenance period of 2019, from 18 September to 29 October 2019.
18 The period referred to here is the seventh reserve maintenance period of 2019, from 30 October to 17 December 2019.

Development of interest expenditure on excess liquidity holdings*

€ billion



Sources: Eurosystem and Bundesbank calculations. * Interest expenditure on excess liquidity holdings averaged across one reserve maintenance period, annualised. **1** Seventh reserve maintenance period in 2019 and 2020, respectively.

Deutsche Bundesbank

tier system to December 2020, the interest banks paid on their excess liquidity holdings in this period was, in fact, €4.7 billion lower in total than it would have been without the two-tier system. Around one-quarter of this reduction was accounted for by banks in Germany.

The most recent figures show an increase in the annualised interest expenditure on excess liquidity holdings to around €12.5 billion, which is due to the significant rise in excess liquidity holdings.

Use of the exemption allowances

The liquidity redistribution required for full use of exemption allowances …

The impact of the two-tier system is maximised when all banks make full use of their individual exemption allowances. If the distribution of excess liquidity holdings had been the same as it was before the two-tier system was introduced, banks would have been able to use only 72% of the available allowances. Excess liquidity holdings are distributed heterogeneously both across euro area countries and among banks in individual countries.[19] For example, before the introduction of the two-tier system, the German banking system was holding €571 billion in excess liquidity (around 33% of total excess liquidity holdings in the euro area). However, given the set multiplier of six, only 69% of the €221 billion in available allowances would have been used in the reserve maintenance period before the two-tier system was launched.

… began when two-tier system was introduced

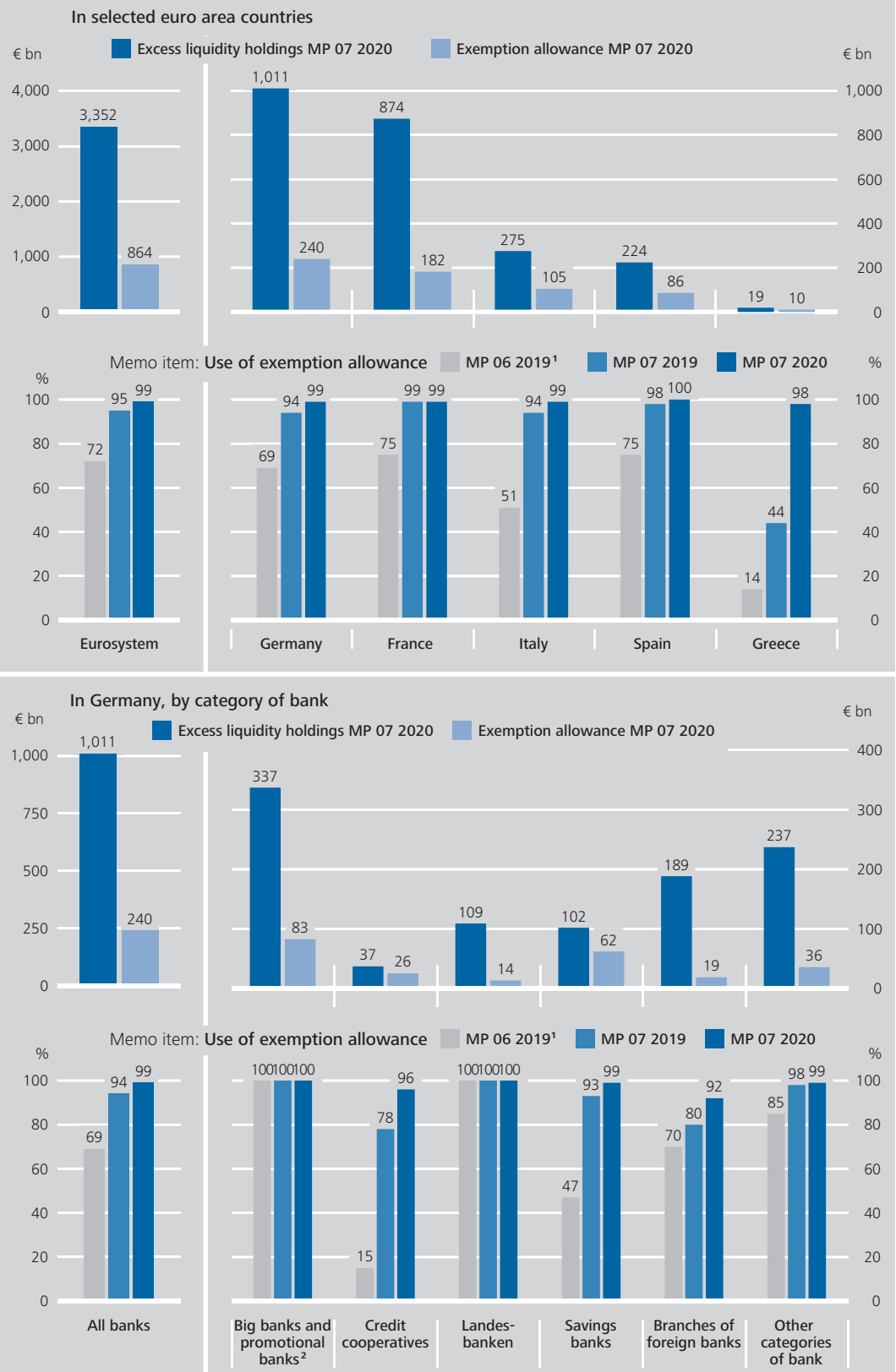
Banks were already using the bulk of their allowances during the introductory phase of the two-tier system in the seventh reserve maintenance period of 2019, both in the euro area as a whole and in Germany. The banking sectors of some euro area countries recorded net inflows of liquidity in connection with allowances being used up. On aggregate, the excess liquidity held by the banking sectors in Italy, Greece, Portugal and Slovakia was initially lower than the allowances granted. In the first reserve maintenance period after the two-tier system was introduced (from 30 October 2019 to 17 December 2019), banks in the euro area were able to use 95% of their allowances as a result of liquidity redistribution. One year later, in December 2020, this figure had risen to 99% (see the chart on p. 69).

In Germany, allowances left partly unused by savings banks, credit cooperatives and branches of foreign banks

Before the introduction of the two-tier system, the volume of excess liquidity held in the German banking system, particularly by some savings banks, credit cooperatives and branches of foreign banks, was in some cases significantly smaller than the allowances granted by the ECB Governing Council. These institutions often hold liquidity indirectly via their central and parent institutions. In the first reserve maintenance period after the two-tier system was launched, some savings banks immediately received inflows of liquidity, above all from Landesbanken, enabling them to use 93% of their exemption

19 See also Baldo et al. (2017).

Excess liquidity holdings and two-tier system exemption allowance



Sources: Eurosystem and Bundesbank calculations. **1** The use of the two-tier system in the reserve maintenance period 06 2019 is a hypothetical value, as the two-tier system was introduced with effect from the reserve maintenance period 07 2019. **2** Big banks and banks with special, development and other central support tasks.

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The two-tier system and liquidity holding in finance associations

German finance associations in the cooperative and savings bank sectors are characterised by special liquidity management and therefore also by special liquidity movements in the two-tier system. In particular, central institutions often assume a liquidity distribution function within the financial group and offer central services, such as indirect holding of minimum reserves. Exemptions specific to finance associations in the supervisory capital and liquidity requirements may apply to these arrangements. In this context, the introduction of the two-tier system triggered special liquidity movements.

Liquidity pooling in accounts with the central bank

Prior to the introduction of the two-tier system, some cooperatives and savings banks did not have large enough balances on their accounts with the Bundesbank for them to make full use of their exemption allowances. By contrast, their central institutions did hold sufficient excess liquidity on their Bundesbank accounts. As an alternative to their accounts with the Bundesbank, savings banks and cooperative banks also hold liquid funds in the form of deposits with the central institution of their association as part of their intra-group liquidity management – e.g. for settling payments. They can transfer balances between these accounts in order to make best use of their allowances in the two-tier system. However, they may also generate additional deposits from other sources (e.g. borrowing on the money market or liquidating securities).

The central institutions themselves are not necessarily dependent on their affiliated institutions' deposits to be able to make use of exemption allowances. They have sufficient liquidity from other sources. Nevertheless, it is in their interest for their affiliated institutions to hold liquidity with them on their current accounts, as intra-group deposits with the central institution are given preferential treatment in the liquidity coverage ratio (LCR) and can therefore improve this ratio.[1]

In some cases, central institutions improved the conditions for their affiliated institutions in order to retain these deposits after the introduction of the two-tier system. This affected both the conditions for deposits held with the central institutions and the interest rates for interbank lending.

Under the two-tier system, affiliated institutions have shifted deposits from their central institution accounts to the Bundesbank and have also procured additional liquidity to make use of their exemption allowances. Around three-quarters of the increase in central bank balances observed in the first reserve maintenance period following the introduction of the two-tier system (30 October 2019 to 17 December 2019) came from shifts and around one-quarter from additional borrowing. This additional liquidity is

1 The LCR defines the minimum stock of high-quality liquid assets credit institutions must hold as liquidity reserves in order to cover their net cash outflows under a severe 30-day stress scenario. Affiliated institutions' deposits are particularly attractive for the central institutions of finance associations with regard to the LCR if these deposits are treated as operational deposits pursuant to Article 27(1) of Commission Delegated Regulation (EU) 2015/61 of 10 October 2014 and are given a reduced outflow factor of 25% (compared with a 100% outflow rate for non-operative interbank deposits). However, this is accompanied by an equally reduced inflow rate (25% instead of 100%) for the association member which provides the deposit.

also largely provided by central institutions as the affiliated institutions are not usually active in the money market themselves.

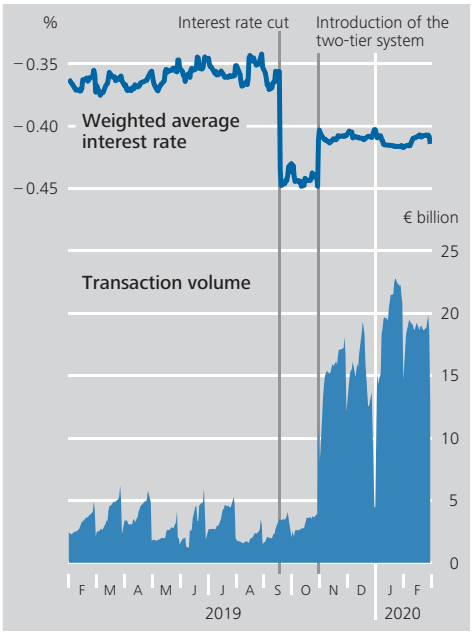
Indirect holding of reserves

Exemption allowances in the two-tier system can also be used more efficiently within finance associations when the affiliated institutions use indirect holding of minimum reserves[2] to pool their allowances at the central institution. With indirect holding of reserves, the affiliated institution transfers the responsibility for fulfilling the minimum reserve requirement to the central institution and thus also its exemption allowance. By combining the management of minimum reserves in this way, the association is able to use its aggregate exemption allowances without having to shift any liquidity. The central institution can pass on the resulting interest rate advantage to the affiliated institutions.

The advantages of this procedure for member institutions with indirect reserve holdings are that they do not necessarily need to have a Bundesbank account, their minimum reserve requirements are met by the central institution and, in some cases, their deposits with the central institution are remunerated more attractively. The disadvantage is that the institutions may only be able to count excess reserves on their current accounts with the central institution as a 25% weighted inflow in their LCR.[3] By contrast, their balances with the Bundesbank in excess of the minimum reserve requirement could always be included at a rate of 100% as high-quality liquid assets in the LCR.

Following the introduction of the two-tier system, more individual institutions switched from holding minimum reserves directly to indirectly than vice versa. It appears that the benefits of indirect holding of minimum reserves outweighed the disadvantages it poses for fulfilling regulatory ratios.

Unsecured lending by central institutions to savings banks and credit cooperatives*

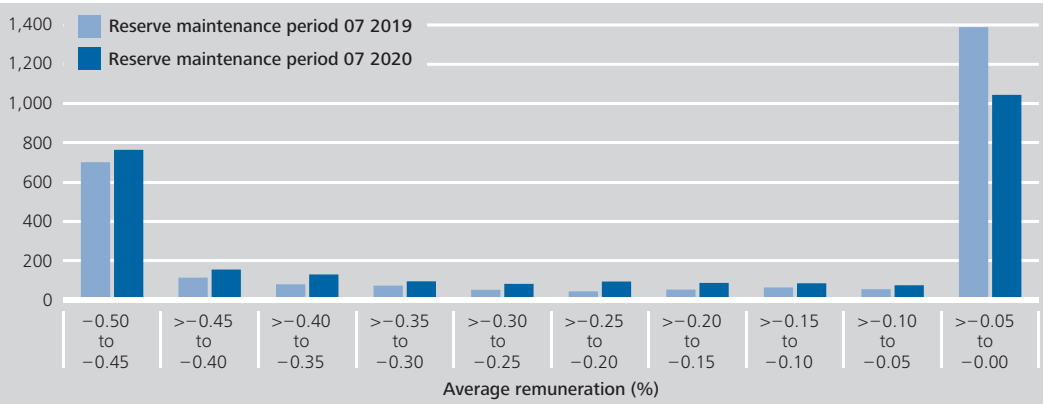


Sources: Money market statistical reporting and Bundesbank calculations. * Volume and interest rate refer to overnight transactions.
Deutsche Bundesbank

2 However, indirect holding of minimum reserves is only possible in the cooperative sector. Landesbanken do not perform this intermediary function for savings banks.
3 Article 27 of Commission Delegated Regulation (EU) 2015/61, in particular Article 27(1) (b) in relation to deposits within a group.

Distribution of the average remuneration on excess liquidity holdings with the Eurosystem

Number of banks



Sources: Eurosystem and Bundesbank calculations.
Deutsche Bundesbank

allowances on average. Credit cooperatives and branches of foreign banks tended to be slower to increase their liquidity and initially used only 78% and 80% of their allowances, respectively. In the months that followed, the institutions in both of these categories used an ever greater proportion of their allowances, with utilisation of these allowances reaching over 90% one year after the launch of the two-tier system (see the chart above). Redistribution in the savings bank and credit cooperative sectors was strongly influenced by liquidity management features specific to these sectors, and by regulatory requirements (see the box on pp. 70 f.). Both factors prevented some of these institutions from using up their allowances more quickly.

On the whole, big banks, promotional banks and Landesbanken did not need any additional liquidity inflows. When the two-tier system was introduced, they already had sufficient excess liquidity holdings to use more than 99% of their allowances.

Aggregated across all institutions domiciled in Germany, the unused allowances in the first reserve maintenance period after the two-tier system was introduced came to €14.3 billion, which corresponds to 94% utilisation. One year later, the respective figures were €2.9 billion and 99%.

Average remuneration on excess liquidity holdings

Two-tier system increased average remuneration on excess liquidity holdings …

By changing the level of remuneration on excess liquidity holdings, the ECB Governing Council is able to directly influence the interest expenditure – and thus also the interest margin – of banks in the euro area. Until the two-tier system was introduced, the rate of remuneration on excess liquidity holdings was the same as the Eurosystem's interest rate on the deposit facility. Prior to the launch of the two-tier system, average remuneration stood at -0.5% beginning in September 2019, whereas once the two-tier system was introduced on 30 October 2019, average remuneration rose from -0.5% to -0.29%. The average interest rate was thus higher than before the interest rate cut in September 2019, when it stood at -0.4% per year. Although the average remuneration on excess liquidity holdings had fallen back to -0.37% per year by December 2020 due to non-standard monetary policy measures increasing excess liquidity holdings to over €3 trillion,[20] it remained higher than before the interest rate cut.

20 Averaged across the sixth reserve maintenance period of 2020.

… with variation across individual banks

In the two-tier system, the average remuneration on the excess liquidity holdings of individual banks varies considerably. For most institutions, average remuneration is either 0% or -0.5% (see the chart on p. 72). This is because smaller institutions, in particular, remain within the scope of their exemption allowance and thus do not hold any excess liquidity subject to negative remuneration. Other institutions do not have an allowance because, for example, they do not hold any liabilities subject to minimum reserve requirements and therefore do not have a minimum reserve requirement from which the allowance would be calculated. These institutions have to pay negative interest from the very first euro of excess liquidity they hold.

Cut-off interest rate on excess liquidity holdings usually the same as deposit facility rate

After most banks had made full use of their allowances, in December 2020 the cut-off interest rate, i.e. the opportunity cost of holding an additional euro of excess liquidity, stood at -0.5% for just under 70% of banks in the euro area.[21] In view of this cut-off interest rate, undue influence on money market rates is unlikely. Consequently, the ECB Governing Council's interest rate policy is likely to continue to deliver an expansionary stimulus.

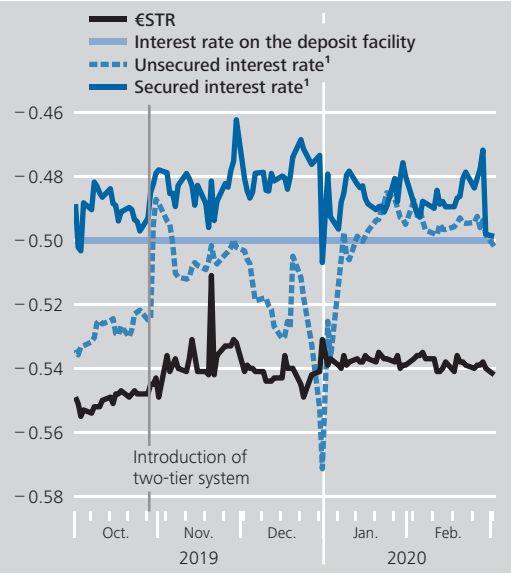
Money market rates and liquidity channels

Negatively remunerated excess liquidity holdings significantly exceeded unused allowances

It was intended that the introduction of the two-tier system and the liquidity redistribution it triggered should not unduly influence short-term money market rates, which would therefore remain close to the interest rate on the deposit facility. For this purpose, it was envisaged that a sufficiently large volume of excess liquidity would continue to be remunerated at the negative interest rate on the deposit facility. The liquidity supply of those banks that made full use of their exemption allowances would thus sufficiently exceed the liquidity demand of banks with unused allowances.

Response of money market rates to the introduction of the two-tier system*

%



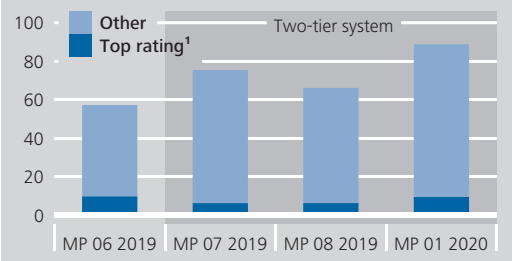
Sources: Eurosystem, MMSR and Bundesbank calculations. * Based on one-day transactions in the money market statistical reporting (MMSR) dataset. In the daily MMSR statistics, the reporting agents report all of their transactions in the secured and unsecured money market segments, amongst others. See Deutsche Bundesbank (2017) for more information. **1** Only banks with hypothetically unused exemption allowances in the reserve maintenance period 06 2019.
Deutsche Bundesbank

When the two-tier system was introduced, banks which would already have been able to make full use of their allowances at that point in time held an additional €1,140 billion in excess liquidity on top of these allowances. By contrast, the hypothetical liquidity demand of banks with unused allowances came to €227 billion in total.[22] Consequently, aggregate potential liquidity demand met with such a large liquidity supply that, given functioning markets, money market rates could be expected to respond only weakly, if at all.

21 This share rises to over 90% when banks are weighted by the size of their minimum reserves as a possible approximation of their economic relevance.
22 These figures are based on the sixth reserve maintenance period of 2019, which ran from 18 September to 29 October 2019 and thus pre-dates the two-tier system. They are therefore theoretical, based on the assumption that the two-tier system had already been adopted at that point in time.

Collateral provided for overnight borrowing by banks with unused exemption allowances, broken down by country rating*

€ billion, weekly average of reserve maintenance periods



Sources: MMSR and Bundesbank calculations. * Bilateral operations only. Only banks with hypothetically unused exemption allowances in the 06 2019 reserve maintenance period. **1** Collateral from countries that have a minimum country rating of Aa/AA+ from Moody's/S&P/Fitch.

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Development of short-term money market rates

Short-term money market rates rose only temporarily

In practice, the two-tier system did indeed have barely any impact on money market rates, just as the ECB Governing Council had intended. This was reflected by the euro short-term rate (€STR),[23] which rose only slightly – by around 1 basis point – up to the end of 2019. Secured interest rates such as the STOXX GC Pooling Indices and the RepoFunds Rates[24] likewise saw only minor increases.

Distinguishing between banks with and without unused exemption allowances results in slightly higher interest rates on the borrowing of banks with unused allowances than on the borrowing of banks that would have already made full use of their allowances before the two-tier system was introduced. Banks with unused allowances had a greater interest in obtaining liquidity. The higher interest rates incurred by these banks in the unsecured money market had almost completely receded again within a few days.

They remained elevated for somewhat longer in the secured money market. This is explained by the fact that banks with unused allowances made increasing use of securities, which – all other business conditions being equal – lead to somewhat higher interest rates than, say, German Federal bonds (Bunds) (see the adjacent chart). The slightly higher interest rates in the secured money market are likely to also be due to growth in bilateral transactions.[25]

Increase in secured money market rates owing to modified collateral structure

Channels of liquidity movements

Such a rapid liquidity redistribution of around €200 billion, triggered by an adjustment in the monetary policy framework, is unusual. Investigating it can provide information as to the state of the banking system and the financial markets in the euro area. In this context, the observed shift in liquidity is mainly of interest in terms of its market channels, magnitude, speed and geographical focus. This analysis is principally confined to the fourth quarter of 2019. During this period, liquidity shifts due to the two-tier system had largely been concluded and the financial markets were not yet experiencing the impact of the coronavirus pandemic.

Essentially three channels open for liquidity increase

In the two-tier system, banks with unused exemption allowances were interested in obtaining liquidity as long as the rate of interest on this was lower than the remuneration rate on the allowance. Banks holding excess liquidity subject to negative remuneration were expected to lend some of it, provided that the remuneration was higher than the rate of interest

23 The unsecured transaction-based overnight rate, which is published by the ECB on a daily basis.

24 The STOXX GC Pooling Indices and the RepoFunds Rates are based on secured money market transactions executed via the electronic trading platforms Eurex Repo GmbH (for the former) and BrokerTec and MTS (for the latter).

25 Unlike transactions with a central counterparty (CCP), secured bilateral transactions are not settled centrally. This means that the contracting parties are unable to benefit from the advantages of a CCP (e.g. offsetting various positions, easier provision of collateral) and therefore charge somewhat higher interest rates in some cases. Between the introduction of the two-tier system and the end of 2019, the percentage of bilateral transactions had increased from around 22% to more than 34% for banks with unused allowances.

on the deposit facility. These conditions essentially produce three channels for the redistribution: the money market, the capital market (especially through the sale of highly liquid assets[26]) and participation in the targeted longer-term refinancing operations of the Eurosystem.[27]

Role of the money market

Liquidity initially redistributed within banking groups

In order to offset liquidity differences among themselves, banks can first shift funds within banking groups and close alliances – such as the German associations. In this way, banks were already able to fill more than one-quarter of their unused exemption allowances as soon as the two-tier system came into operation. In Germany, banks filled roughly one-third of their unused allowances through intra-group shifts and shifts within associations (see the adjacent chart).[28]

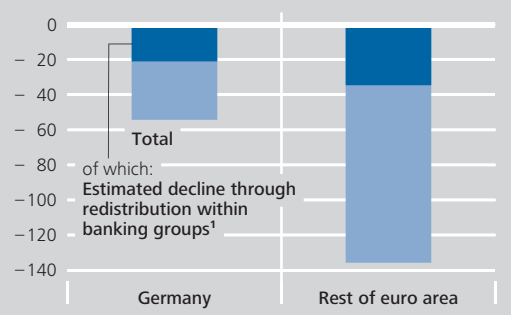
Banks can borrow not only within their group and association but also in the money market.[29] On the first day of the two-tier system, outstanding net borrowing[30] by banks with unused allowances rose significantly. Large institutions were thus able to reduce their unused allowances by roughly one-third.[31] They borrowed around 90% of the additional liquidity in the secured money market. By contrast, banks that made full use of their allowances expanded their lending, thus reducing their net borrowing (see the upper chart on p. 76).[32] Non-banks, too, participated in this redistribution, principally through secured transactions.

Majority of liquidity distributed through money market

When the two-tier system was introduced, the short-term money market was an obvious opportunity for banks to rapidly increase their liquidity holdings. For one thing, the money market rates were (and are) well below 0%, i.e. the rate of remuneration on the exemption allowance. For another, the short-term liquidity coverage of unused allowances introduces flexibility because it can be scaled back again at any time.

Decline in unused exemption allowances

€ billion, change from the sixth to the seventh reserve maintenance period of 2019

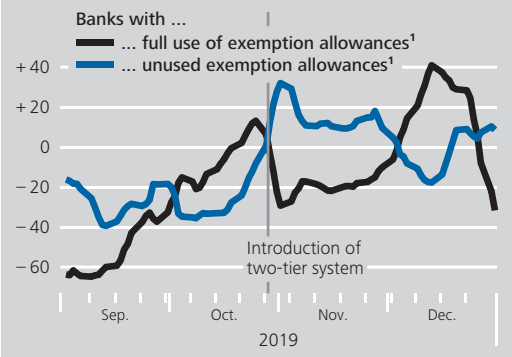


Sources: Eurosystem and Bundesbank calculations. **1** The estimate uses the change in the aggregate unused exemption allowances of a banking group adjusted for the increase in its holdings of excess liquidity. In the case of Germany, both savings banks and cooperative banks are considered as a banking group, respectively.
Deutsche Bundesbank

26 Another possibility would be the sale of other assets such as corporate bonds or shares. Here, however, it is assumed that banks chiefly scale back assets that have particularly low returns. Reducing euro government bonds, in particular, would therefore seem purposeful.
27 Above and beyond that, there are yet further channels for obtaining liquidity, such as accepting customer deposits.
28 An analysis of TARGET2 data confirms this development and shows heightened transactions by banks with unused allowances at the time the two-tier system started, especially within banking groups. Money market transactions in TARGET2 can be identified by an algorithm, described in Arciero et al. (2016) and elsewhere.
29 The money market is that part of the financial market in which short-term liquidity (maturity of up to one year) is traded.
30 The outstanding net volume of borrowed funds is the difference between the outstanding volume of borrowing and the outstanding volume of lending.
31 Estimate for MMSR reporting agents taking into account individual banks' unused allowances from the sixth reserve maintenance period of 2019 and the change in net borrowing in the money market between the sixth and seventh reserve maintenance periods of 2019. If net borrowing rises above the theoretically unused allowance for an individual bank, it is no longer taken into account. The aggregate also takes into account any decrease in net borrowing. The 48 banks for which MMSR data are available represent approximately €63 billion of €227 billion in theoretically unused allowances.
32 The MMSR statistics reflect a large part of the money market operations of the reporting banks and thus also the borrowing of counterparties outside the banking sector. For this reason, even some institutions with clear excess liquidity holdings report net borrowing.

Change in money market net borrowing*

€ billion

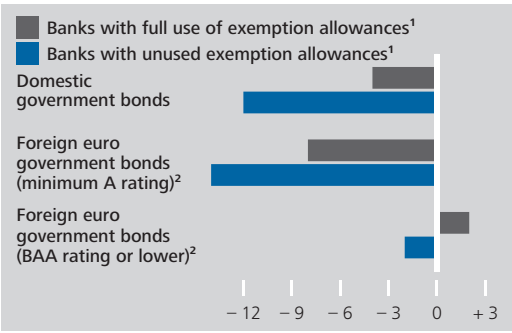


Sources: Eurosystem, MMSR and Bundesbank calculations. * Absolute change in outstanding net borrowing, normalised as at 29 October 2019. Centred moving five-day average. All maturities. **1** Hypothetical in the reserve maintenance period prior to the introduction of the two-tier system.

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Change in bond holdings from banks' perspective in the final quarter of 2019*

%

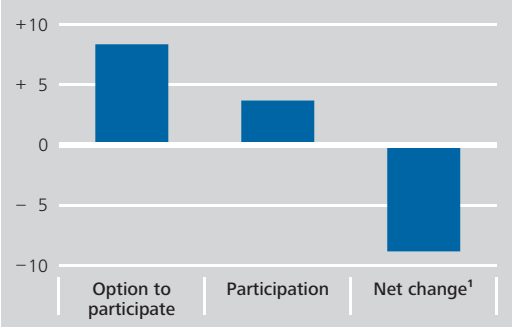


Sources: Eurosystem, securities holding statistics and Bundesbank calculations. * Relative change in own holdings at nominal values compared with previous quarter. **1** Hypothetical in the reserve maintenance period prior to the introduction of the two-tier system. **2** Moody's rating.

Deutsche Bundesbank

Use of second TLTRO-III to reduce unused exemption allowances*

€ billion



Sources: Eurosystem and Bundesbank calculations. * Amounts are shown only if banks were able to use them to fill their unused exemption allowances for the seventh reserve maintenance period of 2019. **1** After deduction of repayments of TLTRO-II operations.

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Additional channels for liquidity inflows

Additional liquidity obtained through reduction of securities holdings

Liquidity can also be generated in the capital market, for instance by banks actively selling securities or not reinvesting principal payments. Banks with unused exemption allowances, in particular, have reduced their government bond holdings. This was generally remunerative in the case of securities with a return below 0%. In the fourth quarter of 2019, these securities included the government bonds of several euro area countries. Furthermore, the Eurosystem's resumption of net purchases under its asset purchase programmes boosted market demand. There are indications that banks covered roughly one-quarter of their unused allowances by reducing their own holdings of government bonds.[33] It was mainly domestic government bonds that were sold. There are no signs of banks reducing foreign government bonds with somewhat lower ratings to a greater extent (see the adjacent middle chart). In the aggregate, there is no evidence of any obvious sales of other securities, such as corporate bonds or shares, or of a disproportionate increase in bond issuance, for banks with unused allowances. [34]

Obtaining liquidity through additional Eurosystem refinancing operations insignificant

Another way of obtaining liquidity at a negative interest rate was provided by participation in the Eurosystem's monetary policy refinancing operations. There are no apparent indications, however, of banks with unused allow-

33 Estimate taking account of individual banks' unused allowances in the sixth reserve maintenance period of 2019 and the changes in holdings of euro government bonds between the third and fourth quarters of 2019. Reductions beyond the theoretically unused allowance are not taken into account. Any increase in holdings by individual banks reduces the aggregate estimated value. The estimate is calculated using the market and nominal values from the securities holdings statistics. The 249 banks for which data are available from these statistics account for roughly €93 billion of €227 billion in theoretically unused allowances.

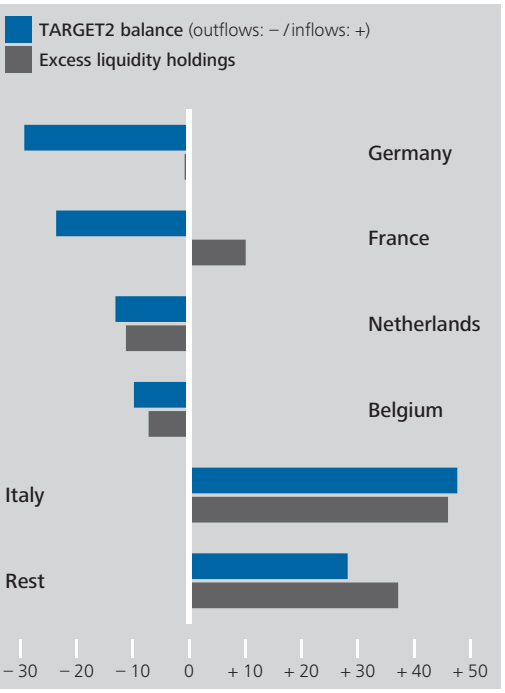
34 Higher net issuance by banks with unused allowances was not observable in the individual balance sheet items (IBSI) dataset. Banks could also have obtained liquidity in the capital market through bond issuance. However, owing to the fact that funds are tied up in bonds for a relatively long period of time compared with other alternatives (in contrast to short-term central bank liquidity), issuing bonds is initially not as attractive for this purpose.

ances participating in greater numbers in the second TLTRO-III operation in December 2019. To fully utilise their allowances, they could have borrowed €8 billion in this operation, but they used only €4 billion of this amount. Taking account of the repayments of the outstanding second series of targeted longer-term refinancing operations (TLTRO-II), the liquidity effect for these banks is in fact negative (see the lower chart on p. 76). Even so, banks with unused allowances made somewhat greater use of their bidding opportunities overall than those that had already made full use of their allowances.

The allotments of the later TLTRO-III operations, which are now also remunerated more attractively, as well as the additional asset purchases by the Eurosystem meanwhile caused excess liquidity to increase further from mid-March 2020. As a result, banks probably do not have to obtain as much additional liquidity to make full use of their still unused allowances.

Change in TARGET2 balances and excess liquidity holdings from MP 06 to MP 07 2019

€ billion



Sources: Eurosystem and Bundesbank calculations.
Deutsche Bundesbank

Cross-border liquidity flows

Cross-border liquidity flows …

As already highlighted, for some countries liquidity had to flow in from outside so that the banks in those countries could utilise their exemption allowances in full.[35] In the first few days following the start of the two-tier system, banks with unused allowances additionally borrowed roughly €16 billion via the money markets in other euro area countries. Cross-border money market transactions within Europe as a percentage of the total volume thus increased by just under 2 percentage points to 20%.

… lead to somewhat more homogenous liquidity distribution and temporarily reduce TARGET2 balances

These cross-border liquidity shifts were reflected not only in an altered distribution of excess liquidity but also in temporarily lower TARGET2 balances.[36] On 30 October 2019, total TARGET2 claims and liabilities fell by €32 billion. During the first few weeks of the two-tier system, there was a reduction especially in the TARGET2 claims of Germany, France, the Netherlands and Belgium and a correlated decline in these countries' relative share of excess liquidity holdings. By contrast, liquidity flowed into the Italian banking system, evidenced in particular by a €48 billion decline in Italian TARGET2 liabilities[37] and a considerable rise in excess liquidity held in the Italian banking system of €46 billion to €115 billion (see the chart above). Following the initial effects of the two-tier system, developments in TARGET2 balances were rapidly again dominated by other cross-

35 As far as liquidity is not created locally, for example through Eurosystem refinancing operations.
36 Countries with TARGET2 claims often correspond to banking systems that hold a relatively large amount of excess liquidity. In line with this, a redistribution from countries with high excess liquidity to countries with relatively low excess liquidity is also accompanied by a decline in the respective TARGET2 claims and/or liabilities. This, in turn, leads to a decline in total TARGET2 claims and/or liabilities.
37 Here and below: on an average of the sixth to the seventh reserve maintenance period of 2019. Liquidity did not necessarily flow directly between the countries mentioned above.

border transactions.[38] The distribution of excess liquidity in the euro area remains exceedingly heterogeneous, too.

Conclusion

With two-tier system, ECB Governing Council has achieved its aims

The data and facts analysed here suggest, as an interim conclusion, that the ECB Governing Council has achieved its intended aims with the introduction of the two-tier system. The two-tier system is likely to have assisted bank-based transmission, for example, through having reduced interest expenditure on holding excess liquidity by €4.7 billion up to December 2020. As was intended, short-term money market rates have not been unduly influenced. They are, in fact, somewhat lower at present than when the two-tier system was introduced. With regard to money market rates, there is therefore no need to charge a negative rate of interest on all excess liquidity holdings. At €2,498 billion at last report, the vast majority of excess liquidity in the euro area is, at present, still subject to the negative interest rate on the deposit facility.

The incentives of the two-tier system led to a redistribution of liquidity in the banking system, resulting in exemption allowances being very largely used up. The banks essentially achieved this directly after the introduction of the two-tier system via the money market, which proved to be stable. Banks carried out a large part of the redistribution within their banking groups and associations. Liquidity shifts also took place internationally. Some banks boosted the amount of liquidity they held by reducing their government bond holdings. Most banks managed to use up their allowances completely without recourse to additional Eurosystem refinancing.

38 Net asset purchases by the Eurosystem, in particular, lead to rising TARGET2 balances. See also Deutsche Bundesbank (2016), Eisenschmidt et al. (2017) and Avdjiev et al. (2019).

List of references

Arciero, L., R. Heijmans, R. Heuver, M. Massarenti, C. Picillo and F. Vacirca (2016), How to Measure the Unsecured Money Market: The Eurosystem's Implementation and Validation Using TARGET2 Data, International Journal of Central Banking, Volume 12, March 2016.

Avdjiev, S., M. Everett and H. S. Shin (2019), Following the imprint of the ECB's asset purchase programme on global bond and deposit flows, BIS Quarterly Review, March 2019.

Baldo, L., B. Hallinger, C. Helmus, N. Herrala, D. Martins, F. Mohing, F. Petroulakis, M. Resinek, O. Vergote, B. Usciati and Y. Wang (2017), The distribution of excess liquidity in the euro area, ECB Occasional Paper Series No 200, November 2017.

Bank of Japan (2020), Introduction of "Special Deposit Facility to Enhance the Resilience of the Regional Financial System", press release of 10 November 2020.

Bank of Japan (2016), Introduction of "Quantitative and Qualitative Monetary Easing with a Negative Interest Rate", press release of 29 January 2016.

Brunnermeier, M. and Y. Koby (2018), The Reversal Interest Rate, NBER Working Paper No 25406.

Deutsche Bundesbank (2020), Developments in the German banking system during the negative interest rate policy period, Monthly Report, October 2020, pp. 15 ff.

Deutsche Bundesbank (2017), The Eurosystem's new money market statistical reporting – initial results for Germany, Monthly Report, October 2017, pp. 57 ff.

Deutsche Bundesbank (2016), The impact of Eurosystem securities purchases on the TARGET2 balances, Monthly Report, March 2016, pp. 53 ff.

Eisenschmidt, J., D. Kedan, M. Schmitz, R. Adalid and P. Papsdorf (2017), The Eurosystem's asset purchase programme and TARGET balances, ECB Occasional Paper Series No 196, September 2017.

Eisenschmidt, J. and F. Smets (2019), Negative interest rates: Lessons from the euro area, Series on Central Banking Analysis and Economic Policies No 26.

European Central Bank (2020), Results of the Bank Lending Survey, January 2020, https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/ecb.blssurvey2019q4~34a62b4261.en.html

European Central Bank (2019), ECB introduces two-tier system for remunerating excess liquidity holdings, press release of 12 September 2019, https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.pr190912_2~a0b47cd62a.en.html

Heider, F., F. Saidi and G. Schepens (2019), Life below Zero: Bank Lending under Negative Policy Rates, The Review of Financial Studies, 32(10), pp. 3728-3761.

Maechler, M. and T. Moser (2020), Monetary policy implementation: How to steer interest rates in negative territory, Swiss National Bank, speech on 5 November 2020.

Schnabel, I. (2020), Going negative: the ECB's experience, 35th Annual Congress of the European Economic Association, August 2020.

Swiss National Bank (2020), Monetary policy assessment of 19 March 2020, press release.

Swiss National Bank (2019), Monetary policy assessment of 19 September 2019, press release.

Swiss National Bank (2015), SNB discontinues minimum exchange rate and lowers interest rate to -0.75%, press release of 15 January 2015.

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I. Key economic data for the euro area

1. Monetary developments and interest rates

	Money stock in various definitions [1,2]				Determinants of the money stock [1]			Interest rates		
			M3 [3]							
Period	M1	M2		3-month moving average (centred)	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]
	Annual percentage change							% p.a. as a monthly average		
2019 Apr.	7.4	5.4	4.8	4.8	2.7	3.2	1.2	– 0.37	– 0.31	0.7
May	7.2	5.2	4.9	4.8	2.2	2.8	1.4	– 0.37	– 0.31	0.7
June	7.3	5.0	4.6	4.9	2.2	3.1	2.2	– 0.36	– 0.33	0.4
July	7.7	5.5	5.2	5.2	2.1	3.0	2.0	– 0.37	– 0.36	0.2
Aug.	8.4	6.1	5.8	5.5	2.3	3.3	1.7	– 0.36	– 0.41	– 0.1
Sep.	8.0	5.9	5.7	5.7	2.2	3.3	1.8	– 0.40	– 0.42	– 0.1
Oct.	8.3	6.0	5.7	5.6	2.4	3.7	1.5	– 0.46	– 0.41	– 0.0
Nov.	8.3	5.9	5.6	5.4	2.1	3.4	1.8	– 0.45	– 0.40	0.1
Dec.	8.0	5.7	4.9	5.2	2.0	3.3	1.5	– 0.46	– 0.40	0.2
2020 Jan.	8.0	5.6	5.2	5.2	1.9	3.2	1.2	– 0.45	– 0.39	0.2
Feb.	8.1	5.6	5.5	6.1	1.9	3.2	0.8	– 0.45	– 0.41	– 0.0
Mar.	10.4	7.4	7.5	7.1	3.6	4.2	0.2	– 0.45	– 0.42	0.2
Apr.	11.8	8.3	8.2	8.2	4.8	4.3	– 0.0	– 0.45	– 0.25	0.3
May	12.5	9.1	9.0	8.8	6.1	4.9	0.1	– 0.46	– 0.27	0.2
June	12.7	9.3	9.3	9.4	6.9	4.6	– 0.5	– 0.46	– 0.38	0.2
July	13.5	10.0	10.1	9.6	7.4	4.7	– 0.6	– 0.46	– 0.44	0.0
Aug.	13.3	9.6	9.5	10.0	7.7	4.7	– 0.2	– 0.47	– 0.48	– 0.0
Sep.	13.8	10.3	10.4	10.1	8.1	4.5	– 0.5	– 0.47	– 0.49	– 0.1
Oct.	13.8	10.3	10.5	10.6	8.3	4.2	– 0.6	– 0.47	– 0.51	– 0.2
Nov.	14.5	10.8	11.0	...	8.5	4.2	– 1.2	– 0.47	– 0.52	– 0.2
Dec.	...	...	...	...	...	...	...	– 0.47	– 0.54	– 0.2

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 included: DE, FR, NL, BE, AT, FI, IE, PT, ES, IT, GR, SK, CY, SI.

2. External transactions and positions *

	Selected items of the euro area balance of payments [r]								Euro exchange rates [1]		
	Current account		Financial account							Effective exchange rate [3]	
Period	Balance	of which: Goods	Balance	Direct investment	Portfolio investment	Financial derivatives [2]	Other investment	Reserve assets	Dollar rate	Nominal	Real [4]
	€ million								EUR 1 = USD ...	Q1 1999 = 100	
2019 Apr.	+ 10,425	+ 24,208	– 19,485	+ 6,784	– 44,907	+ 8,035	+ 7,365	+ 3,237	1.1238	97.7	93.0
May	– 1,806	+ 27,139	– 1,154	– 27,382	– 48,846	+ 3,715	+ 69,514	+ 1,845	1.1185	98.2	93.4
June	+ 11,164	+ 26,624	+ 8,676	– 67,830	+ 26,867	+ 4,975	+ 46,933	– 2,269	1.1293	98.8	93.9
July	+ 32,210	+ 34,396	+ 28,999	– 16,204	– 23,706	+ 8,832	+ 54,628	+ 5,449	1.1218	98.4	93.4
Aug.	+ 32,290	+ 22,786	+ 24,907	+ 38,111	– 5,898	– 5,344	– 2,591	+ 629	1.1126	98.9	93.9
Sep.	+ 38,352	+ 28,258	+ 39,786	+ 9,321	– 13,235	– 5,561	+ 55,201	– 5,939	1.1004	98.2	93.1
Oct.	+ 28,919	+ 36,559	+ 38,980	+ 20,355	+ 35,243	+ 6,382	– 23,895	+ 894	1.1053	98.1	92.9
Nov.	+ 23,454	+ 29,955	+ 22,053	– 54,009	+ 42,274	+ 346	+ 37,313	– 3,870	1.1051	97.5	92.2
Dec.	+ 33,443	+ 31,059	+ 1,997	– 66,001	+ 66,535	– 11,982	+ 12,987	+ 458	1.1113	97.4	92.1
2020 Jan.	– 8,191	+ 9,346	– 9,299	+ 8,076	– 44,974	+ 7,304	+ 19,312	+ 983	1.1100	97.0	91.4
Feb.	+ 15,155	+ 29,044	+ 18,700	+ 26,238	– 27,181	+ 6,827	+ 13,925	– 1,108	1.0905	96.3	90.7
Mar.	+ 25,083	+ 38,239	+ 4,707	– 7,526	– 116,404	– 1,848	+ 126,935	+ 3,550	1.1063	99.0	93.1
Apr.	+ 11,273	+ 11,210	– 30,556	– 34,009	+ 158,892	+ 10,904	– 168,045	+ 1,702	1.0862	98.2	92.6
May	– 591	+ 16,592	+ 14,661	– 34,804	+ 42,674	+ 8,709	– 3,592	+ 1,673	1.0902	98.4	92.8
June	+ 19,104	+ 27,879	+ 57,279	– 23,135	– 19,501	+ 18,405	+ 81,673	– 163	1.1255	99.8	94.0
July	+ 25,023	+ 35,876	– 735	+ 24,210	– 49,449	+ 5,069	+ 19,992	– 558	1.1463	100.5	94.6
Aug.	+ 22,573	+ 24,536	+ 51,426	+ 23,887	+ 24,321	– 14,419	+ 16,332	+ 1,304	1.1828	101.6	95.1
Sep.	+ 35,285	+ 35,487	+ 43,811	+ 7,007	– 1,792	– 21,604	+ 57,564	+ 2,637	1.1792	101.6	95.0
Oct.	+ 34,071	+ 39,005	+ 34,639	+ 19,002	+ 85,942	– 985	– 72,230	+ 2,911	1.1775	101.4 p	94.9
Nov.	...	...	...	...	...	...	...	...	1.1838	100.7 p	94.4
Dec.	...	...	...	...	...	...	...	...	1.2170	101.9 p	95.5

***** 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										
2018	1.9	1.8	1.3	4.4	1.3	1.8	1.6	8.5	1.0	4.0
2019	1.3	1.7	0.6	5.0	1.1	1.5	1.9	5.6	0.3	2.1
2020	...	...	– 5.0	...	...	...	...	...	...	...
2019 Q2	1.3	1.7	– 0.3	3.3	1.3	1.9	3.0	5.6	0.2	1.7
Q3	1.4	1.8	1.2	6.3	2.0	1.9	3.0	6.3	0.8	2.6
Q4	1.0	1.6	0.2	5.3	0.7	0.8	0.6	5.9	0.1	0.8
2020 Q1	– 3.2	– 2.0	– 1.7	– 0.7	– 0.7	– 5.3	– 1.0	6.0	– 5.6	– 1.0
Q2	– 14.7	– 13.9	– 11.3	– 6.9	– 6.3	– 18.9	– 15.3	– 3.2	– 18.4	– 8.9
Q3	– 4.3	– 4.5	– 3.9	– 1.9	– 3.0	– 4.5	...	8.1	– 5.2	– 2.6
Industrial production [2]										
Annual percentage change										
2017	3.0	2.9	3.4	4.3	3.4	2.4	4.1	– 2.2	3.6	8.6
2018	0.7	1.2	1.0	4.8	3.4	0.4	1.8	– 5.0	0.7	2.0
2019	– 1.3	4.8	– 4.3	0.1	1.9	0.5	– 0.7	2.8	– 1.1	0.8
2019 Q2	– 1.3	5.9	– 5.0	2.0	2.8	1.6	0.6	0.4	– 0.8	1.4
Q3	– 1.6	4.3	– 4.9	– 1.5	3.3	– 0.2	– 0.2	4.7	– 1.3	2.5
Q4	– 2.1	5.9	– 5.1	– 5.1	1.2	– 0.7	– 5.0	4.7	– 2.1	0.0
2020 Q1	– 6.0	– 0.3	– 6.7	– 4.7	– 0.2	– 7.6	– 1.3	6.8	– 11.4	– 2.3
Q2	– 20.1	– 11.7	– 21.7	– 13.3	– 5.0	– 23.5	– 8.1	– 1.6	– 25.4	– 5.1
Q3	– 6.6	– 3.5	p – 9.8	– 2.9	– 5.0	– 7.1	– 2.1	– 2.2	– 5.1	– 1.9
Capacity utilisation in industry [3]										
As a percentage of full capacity										
2018	83.8	81.0	87.7	74.4	84.1	85.9	70.8	76.2	78.1	76.4
2019	82.3	81.2	84.5	72.8	81.1	84.5	71.5	77.3	77.4	76.3
2020	74.4	75.5	77.0	67.4	76.8	73.5	70.8	68.5	53.1	71.8
2019 Q3	81.8	81.2	83.9	72.5	81.6	84.3	71.8	74.1	77.0	75.9
Q4	81.0	80.7	82.6	69.9	78.6	83.4	72.1	78.0	76.8	75.5
2020 Q1	80.8	79.7	82.9	70.7	78.4	82.6	72.3	75.5	76.5	74.7
Q2	68.3	72.8	71.4	63.3	77.2	62.4	67.3	56.7	–	69.1
Q3	72.1	73.4	74.4	66.0	76.0	72.9	70.3	69.6	64.5	70.8
Q4	76.3	75.9	79.1	69.6	75.4	76.0	73.2	72.0	71.4	72.7
Standardised unemployment rate [4]										
As a percentage of civilian labour force										
2017	9.0	7.1	3.8	5.8	8.6	9.1	21.5	6.8	11.3	8.7
2018	8.2	6.0	3.4	5.4	7.4	8.7	19.3	5.8	10.6	7.5
2019	7.5	5.4	3.2	4.5	6.7	8.2	17.3	5.0	10.0	6.3
2020 June	7.9	5.3	e 4.5	8.0	7.8	6.9	18.0	5.3	9.3	8.8
July	8.7	5.9	e 4.5	7.8	8.6	9.4	16.6	6.2	9.8	8.8
Aug.	8.6	6.5	e 4.5	8.0	8.5	9.0	16.5	6.7	9.7	8.6
Sep.	8.5	6.6	e 4.5	8.1	8.4	8.8	16.1	7.2	9.5	8.3
Oct.	8.4	6.3	e 4.5	8.1	8.1	8.6	...	7.2	9.5	8.1
Nov.	8.3	6.1	e 4.5	...	7.8	8.8	...	7.5	8.9	8.1
Harmonised Index of Consumer Prices										
Annual percentage change										
2018	1.8	2.3	1.9	3.4	1.2	2.1	0.8	0.7	1.2	2.6
2019	1.2	1.2	1.4	2.3	1.1	1.3	0.5	0.9	0.6	2.7
2020	e 0.3	e 0.4	5,e 0.4	e – 0.6	e 0.4	e 0.5	e – 1.2	e – 0.5	e – 0.1	0.1
2020 July	0.4	1.7	5 0.0	– 1.3	0.7	0.9	– 1.9	– 0.6	0.8	0.1
Aug.	– 0.2	– 0.9	5 – 0.1	– 1.3	0.3	0.2	– 2.3	– 1.1	– 0.5	– 0.5
Sep.	– 0.3	0.5	5 – 0.4	– 1.3	0.3	0.0	– 2.3	– 1.2	– 1.0	– 0.4
Oct.	– 0.3	0.4	5 – 0.5	– 1.7	0.2	0.1	– 2.0	– 1.5	– 0.6	– 0.7
Nov.	– 0.3	0.2	5 – 0.7	– 1.2	0.2	0.2	– 2.1	– 1.0	– 0.3	– 0.7
Dec.	e – 0.3	e 0.4	5,e – 0.7	e – 0.9	e 0.2	e 0.0	e – 2.4	e – 1.0	e – 0.3	– 0.5
General government financial balance [6]										
As a percentage of GDP										
2017	– 0.9	– 0.7	1.4	– 0.7	– 0.7	– 3.0	0.7	– 0.3	– 2.4	– 0.8
2018	– 0.5	– 0.8	1.8	– 0.5	– 0.9	– 2.3	1.0	0.1	– 2.2	– 0.8
2019	– 0.6	– 1.9	1.5	0.1	– 1.0	– 3.0	1.5	0.5	– 1.6	– 0.6
General government debt [6]										
As a percentage of GDP										
2017	87.7	102.0	65.1	9.1	61.3	98.3	179.2	67.0	134.1	39.0
2018	85.8	99.8	61.8	8.2	59.6	98.1	186.2	63.0	134.4	37.1
2019	84.0	98.1	59.6	8.4	59.3	98.1	180.5	57.4	134.7	36.9

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:

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										
3.9	3.1	4.8	2.4	2.6	2.9	3.8	4.4	2.4	5.2	2018
4.3	2.3	5.3	1.7	1.4	2.2	2.3	3.2	2.0	3.1	2019
...	...	...	...	...	...	...	...	...	...	2020
4.2	3.1	5.5	1.7	1.4	1.9	2.4	3.3	1.9	2.8	2019 Q2
4.4	3.1	3.7	1.8	1.7	2.2	1.4	3.1	1.8	2.8	Q3
4.2	2.8	5.5	1.6	0.4	2.4	2.0	2.0	1.6	3.6	Q4
2.4	1.5	0.8	– 0.2	– 3.4	– 2.3	– 3.6	– 2.4	– 3.8	1.1	2020 Q1
– 4.6	– 7.6	– 16.1	– 9.4	– 14.1	– 16.2	– 12.1	– 13.0	– 21.6	– 12.2	Q2
0.1	0.4	– 9.9	– 2.5	– 4.0	– 5.7	– 2.4	– 2.6	– 9.1	– 4.1	Q3
Industrial production [2]										
Annual percentage change										
6.8	3.7	8.8	1.3	5.9	3.5	3.3	8.1	3.3	8.0	2017
5.2	– 1.1	1.3	0.6	4.9	0.1	4.3	5.3	0.4	6.9	2018
3.5	– 3.1	1.1	– 0.9	0.0	– 2.2	0.5	2.8	0.5	4.0	2019
5.5	– 0.7	0.5	– 1.4	0.1	– 1.7	3.0	3.2	1.4	2.4	2019 Q2
4.1	– 1.8	3.7	0.1	– 0.4	– 3.5	– 2.8	2.6	0.7	4.6	Q3
– 0.1	– 8.7	2.1	– 0.9	– 4.5	0.5	– 4.7	1.7	0.3	2.9	Q4
– 2.2	– 10.1	10.6	– 1.2	– 5.8	– 1.3	– 7.3	– 2.7	– 6.6	– 1.3	2020 Q1
– 7.0	– 22.4	– 7.2	– 8.6	– 16.8	– 23.8	– 28.2	– 17.3	– 24.6	– 19.7	Q2
– 0.1	– 8.2	– 1.9	– 5.1	– 3.2	– 1.6	– 1.5	– 3.6	– 5.2	– 5.2	Q3
Capacity utilisation in industry [3]										
As a percentage of full capacity										
77.5	81.2	80.3	84.0	88.7	81.6	85.4	85.3	79.5	61.4	2018
77.3	79.8	77.3	84.2	86.6	78.7	87.7	84.4	80.3	63.8	2019
72.9	72.2	70.4	78.2	79.2	75.5	79.3	78.2	74.3	51.7	2020
77.5	80.3	75.9	84.1	86.7	80.1	89.4	83.6	80.8	64.2	2019 Q3
77.2	79.0	78.0	84.0	85.3	77.4	84.1	83.8	79.3	63.6	Q4
76.4	83.4	78.8	83.2	84.8	80.6	82.2	83.0	80.0	63.3	2020 Q1
70.0	53.8	61.1	75.2	73.9	71.7	77.1	71.9	70.9	47.4	Q2
71.9	76.3	68.0	76.3	77.2	71.9	78.3	76.1	71.5	49.2	Q3
73.4	75.3	73.5	78.0	80.8	77.8	79.7	81.6	74.8	46.7	Q4
Standardised unemployment rate [4]										
As a percentage of civilian labour force										
7.1	5.5	4.0	4.9	5.6	9.0	8.1	6.6	17.3	11.1	2017
6.2	5.6	3.7	3.9	4.9	7.1	6.6	5.1	15.3	8.4	2018
6.3	5.6	3.6	3.4	4.5	6.5	5.8	4.5	14.1	7.1	2019
8.8	7.6	4.4	4.3	5.5	7.3	6.8	5.4	15.9	7.7	2020 June
9.6	7.2	4.5	4.5	5.3	7.9	7.1	5.2	16.9	7.6	July
10.2	6.8	4.5	4.6	5.2	8.1	7.2	5.2	16.6	8.5	Aug.
10.5	6.7	4.6	4.4	5.1	7.9	7.0	5.0	16.3	9.3	Sep.
10.4	6.5	4.7	4.3	5.1	7.5	7.1	4.9	16.2	10.5	Oct.
10.4	6.5	4.8	4.0	5.2	7.2	7.1	4.9	16.4	7.8	Nov.
Harmonised Index of Consumer Prices										
Annual percentage change										
2.5	2.0	1.7	1.6	2.1	1.2	2.5	1.9	1.7	0.8	2018
2.2	1.6	1.5	2.7	1.5	0.3	2.8	1.7	0.8	0.5	2019
1.1	e 0.0	e 0.8	1.1	e 1.4	– 0.1	e 2.0	e – 0.3	e – 0.3	e – 1.1	2020
0.9	0.1	0.7	1.6	1.8	– 0.1	1.8	– 0.3	– 0.7	– 2.0	2020 July
1.2	– 0.2	0.7	0.3	1.4	– 0.2	1.4	– 0.7	– 0.6	– 2.9	Aug.
0.6	– 0.3	0.5	1.0	1.2	– 0.8	1.4	– 0.7	– 0.6	– 1.9	Sep.
0.5	– 0.4	0.6	1.2	1.1	– 0.6	1.6	– 0.5	– 0.9	– 1.4	Oct.
0.4	– 0.7	0.2	0.7	1.1	– 0.4	1.6	– 1.1	– 0.8	– 1.1	Nov.
– 0.1	e – 0.3	e 0.2	0.9	e 1.0	– 0.3	e 1.6	e – 1.2	e – 0.6	e – 0.8	Dec.
General government financial balance [6]										
As a percentage of GDP										
0.5	1.3	3.2	1.3	– 0.8	– 3.0	– 0.9	– 0.1	– 3.0	1.9	2017
0.6	3.1	2.0	1.4	0.2	– 0.3	– 1.0	0.7	– 2.5	– 3.5	2018
0.3	2.4	0.5	1.7	0.7	0.1	– 1.4	0.5	– 2.9	1.5	2019
General government debt [6]										
As a percentage of GDP										
39.1	22.3	48.8	56.9	78.5	126.1	51.7	74.1	98.6	93.5	2017
33.7	21.0	45.2	52.4	74.0	121.5	49.9	70.3	97.4	99.2	2018
35.9	22.0	42.6	48.7	70.5	117.2	48.5	65.6	95.5	94.0	2019

quarterly 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** Influenced by a temporary reduction of value added tax. **6** According to Maastricht Treaty definition.

II. Overall monetary survey in the euro area

1. The money stock and its counterparts *

a) Euro area [1]

€ 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				
		Enterprises and households		General government									
	Total	Total	of which: Securities	Total	of which: Securities	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]
2019 Apr.	69.1	90.1	27.1	– 21.0	– 20.5	– 15.7	107.8	123.5	– 16.1	– 5.0	0.2	– 10.2	– 1.2
May	39.0	36.7	12.7	2.4	3.2	63.5	69.9	6.3	11.0	– 2.9	0.6	7.6	5.7
June	– 0.4	23.0	– 13.5	– 23.4	– 22.6	78.1	– 15.3	– 93.4	41.8	19.9	1.1	6.2	14.7
July	49.7	61.3	– 1.4	– 11.6	– 14.3	35.0	165.1	130.1	0.7	– 21.9	0.4	5.0	17.1
Aug.	25.2	19.2	– 7.9	5.9	5.7	– 3.9	26.6	30.5	– 16.2	– 15.5	– 0.4	– 7.3	7.0
Sep.	6.6	26.5	25.9	– 19.9	– 13.7	41.8	– 45.7	– 87.5	36.1	25.1	– 1.1	– 1.4	13.5
Oct.	43.7	63.3	– 9.2	– 19.6	– 25.7	17.3	16.2	– 1.1	– 11.5	– 1.9	– 1.8	– 19.8	12.1
Nov.	54.4	54.9	30.9	– 0.5	3.3	10.4	– 21.5	– 31.9	19.0	0.8	– 0.8	4.7	14.3
Dec.	– 118.6	– 79.8	– 25.2	– 38.8	– 20.6	– 21.8	– 299.1	– 277.3	– 7.9	7.1	– 1.4	– 6.1	– 7.6
2020 Jan.	101.8	51.7	1.7	50.2	28.0	24.6	295.6	271.0	– 5.4	– 6.2	– 1.0	13.1	– 11.2
Feb.	60.7	50.1	20.1	10.7	22.1	41.5	92.7	51.2	– 2.6	– 3.0	– 0.7	– 3.3	4.4
Mar.	322.7	180.6	– 21.1	142.1	127.8	– 5.8	101.6	107.4	– 32.8	1.2	– 1.0	– 42.9	9.9
Apr.	293.0	101.1	54.4	191.9	180.9	– 99.0	14.7	113.7	– 34.2	– 9.4	– 1.1	– 4.1	– 19.7
May	291.9	119.9	30.6	172.1	176.8	8.8	– 42.4	– 51.2	19.7	3.9	– 0.8	– 0.7	17.4
June	136.5	– 15.8	16.3	152.3	160.5	68.7	– 146.0	– 214.7	– 0.6	– 6.2	– 1.1	– 8.8	15.6
July	155.3	75.9	28.9	79.5	78.9	– 48.1	77.8	125.9	– 5.4	1.5	– 0.1	– 12.6	5.8
Aug.	84.6	25.9	17.3	58.7	66.7	17.3	– 2.7	– 20.1	13.5	9.6	– 0.4	– 11.5	15.8
Sep.	83.2	– 3.6	– 3.2	86.9	86.1	46.2	– 26.1	– 72.2	10.4	– 11.0	– 0.2	19.4	2.3
Oct.	71.0	31.4	– 5.4	39.6	33.6	– 21.5	91.5	112.9	– 16.8	– 4.2	– 0.4	– 29.5	17.3
Nov.	97.0	44.1	1.5	52.9	53.7	– 39.1	86.4	125.5	– 26.0	0.6	– 0.5	– 16.4	– 9.8

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				
		Enterprises and households		General government									
	Total	Total	of which: Securities	Total	of which: Securities	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]
2019 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	9.5	7.8	0.0	1.6	– 0.8	42.6	6.3	– 36.4	0.8	– 2.2	– 0.3	– 1.1	4.4
Aug.	25.2	19.9	1.0	5.2	5.5	– 13.6	2.4	16.0	– 6.2	– 4.4	– 0.3	– 3.7	2.3
Sep.	5.7	11.8	– 0.8	– 6.1	– 1.3	– 2.8	– 24.3	– 21.5	4.3	– 0.7	– 0.6	0.0	5.6
Oct.	10.2	11.0	1.2	– 0.8	– 4.2	56.3	2.4	– 53.9	– 2.6	– 0.7	– 0.8	– 3.6	2.5
Nov.	25.3	20.4	5.2	4.9	3.9	– 23.5	– 17.6	5.9	3.0	– 1.9	– 0.9	1.6	4.2
Dec.	– 4.4	1.5	0.8	– 5.9	– 1.1	– 38.9	– 47.5	– 8.6	– 4.4	– 0.3	– 1.1	– 5.8	2.7
2020 Jan.	16.3	9.5	1.9	6.8	2.6	74.7	37.7	– 37.0	– 9.0	– 2.6	– 1.5	3.8	– 8.6
Feb.	24.5	25.4	4.3	– 0.9	1.2	– 4.3	14.1	18.4	– 4.6	– 1.2	– 0.6	4.8	– 7.6
Mar.	47.3	31.4	– 6.1	15.9	14.3	– 34.3	18.5	52.8	– 8.3	– 3.7	– 0.7	– 8.2	4.3
Apr.	33.0	16.0	1.3	16.9	14.8	– 28.8	8.9	37.6	– 23.8	– 5.1	– 0.8	– 2.1	– 15.8
May	58.3	27.1	10.0	31.2	32.7	11.7	– 22.1	– 33.8	2.3	– 1.5	– 0.4	– 1.2	5.4
June	26.4	2.6	3.5	23.7	25.9	– 45.6	– 20.9	24.7	– 7.9	– 7.1	– 1.0	– 7.9	8.1
July	25.9	13.8	0.3	12.2	10.3	9.4	– 9.7	– 19.1	– 3.0	– 6.9	– 0.6	1.2	3.3
Aug.	9.3	7.5	1.9	1.8	7.9	5.6	– 8.1	– 13.7	– 5.2	– 2.2	– 0.4	– 4.4	1.8
Sep.	22.6	4.6	1.3	18.1	15.8	– 34.8	22.9	57.8	10.4	– 3.4	– 0.4	5.1	9.1
Oct.	48.7	22.1	6.6	26.7	23.9	30.1	– 16.6	– 46.8	– 2.0	– 0.5	– 0.4	– 4.5	3.4
Nov.	43.9	19.5	4.5	24.3	26.0	– 15.6	7.0	22.6	0.6	– 1.6	– 0.4	0.3	2.3

***** 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" of the Statistical Series Banking Statistics). **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. **8** Less German MFIs' holdings

II. Overall monetary survey in the euro area

a) Euro area [1]

IV. Deposits of central governments	V. Other factors		VI. Money stock M3 (balance I plus II less III less IV less V)										
	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]	Period
				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]						
– 33.1	28.9	0.0	73.8	55.4	46.2	7.4	38.9	2.5	6.7	22.3	14.3	– 0.4	2019 Apr.
17.8	– 7.4	0.0	81.1	88.6	87.6	5.1	82.5	– 12.4	13.4	– 7.7	– 9.7	5.8	May
33.6	– 71.2	0.0	73.5	87.2	98.4	7.5	90.8	– 14.5	3.4	– 20.7	– 11.9	– 2.0	June
– 13.0	47.0	0.0	50.0	31.1	25.7	9.0	16.7	1.4	4.0	17.9	21.1	– 5.2	July
6.3	– 81.9	0.0	113.1	110.1	86.1	1.3	84.7	19.1	4.9	4.7	18.0	– 13.5	Aug.
5.8	42.9	0.0	– 36.5	– 18.4	– 1.0	3.3	– 4.3	– 15.6	– 1.8	– 17.9	– 13.9	– 0.4	Sep.
– 37.7	51.8	0.0	58.3	45.6	60.1	2.8	57.3	– 10.1	– 4.5	42.1	1.4	6.5	Oct.
– 1.1	– 53.7	0.0	100.6	103.3	122.4	6.9	115.5	– 17.6	– 1.5	– 14.7	3.1	– 0.7	Nov.
– 66.5	– 25.9	0.0	– 40.2	1.5	8.3	16.3	– 8.1	– 9.7	2.9	– 33.6	– 22.6	– 18.3	Dec.
84.6	42.0	0.0	5.2	– 44.3	– 52.0	– 7.3	– 44.7	0.2	7.6	– 7.1	34.8	14.0	2020 Jan.
43.7	– 34.7	0.0	95.9	82.7	84.1	5.2	79.0	– 1.2	– 0.3	19.7	– 4.7	4.9	Feb.
4.7	– 3.9	0.0	348.8	321.2	300.5	23.8	276.8	16.2	4.5	30.0	– 19.3	22.8	Mar.
72.1	– 17.3	0.0	173.4	174.9	175.2	20.4	154.8	– 15.0	14.7	– 4.6	24.0	– 16.9	Apr.
100.9	– 38.0	0.0	218.0	226.3	189.5	20.1	169.5	16.8	19.9	9.6	0.1	– 9.1	May
123.4	– 0.1	0.0	82.5	78.9	88.5	13.1	75.4	– 20.5	10.9	– 42.7	14.4	– 5.5	June
– 4.6	– 65.9	0.0	183.1	149.3	123.4	14.3	109.1	20.1	5.8	18.1	29.9	– 11.0	July
40.5	29.5	0.0	18.5	35.5	45.0	5.9	39.1	– 18.6	9.1	– 4.8	– 0.1	– 4.1	Aug.
20.2	10.7	0.0	88.1	82.3	63.6	3.5	60.1	16.7	1.9	– 29.5	8.2	– 3.3	Sep.
– 17.2	– 29.2	0.0	112.7	85.8	101.2	7.8	93.4	– 17.8	2.4	5.3	14.0	16.4	Oct.
– 98.5	59.4	0.0	123.0	120.4	146.0	11.8	134.2	– 33.6	8.1	3.7	– 0.7	– 1.0	Nov.

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]								
	Total	of which:		Total	Components of the money stock							
		Intra-Eurosystem liability/claim related to banknote issue [9,11]	Currency in circulation		Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits at agreed notice of up to 3 months [6]	Repo transactions	Money market fund shares (net) [7,8]	maturities with maturities of up to 2 years (incl. money market paper)(net) [7]	Period
– 15.2	33.9	3.9	2.1	14.7	17.9	– 3.7	0.0	1.1	– 0.1	– 0.6	2019 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	74.0	3.6	3.2	4.4	7.2	– 3.3	– 0.6	1.0	0.1	0.1	July
10.7	– 26.8	5.8	– 0.7	33.9	26.1	5.7	– 1.2	3.1	0.0	0.3	Aug.
9.9	– 6.6	4.9	0.8	– 4.7	0.1	– 4.8	– 0.7	– 1.1	0.1	1.7	Sep.
– 19.8	74.2	4.3	0.2	14.7	18.7	– 0.4	– 1.0	– 0.3	– 0.1	– 2.3	Oct.
8.2	– 29.5	4.5	0.7	20.0	24.1	– 3.4	– 0.7	0.4	– 0.2	– 0.2	Nov.
– 2.0	– 32.4	4.9	3.4	– 4.5	– 0.4	– 6.6	0.6	1.8	– 0.1	0.0	Dec.
– 5.6	108.0	2.1	– 0.6	– 2.5	– 7.8	5.9	– 3.0	– 1.0	– 0.1	3.4	2020 Jan.
24.4	– 14.0	4.9	0.1	14.5	17.7	1.2	– 1.7	– 0.6	0.1	– 2.2	Feb.
7.5	– 71.9	12.2	0.9	85.7	93.3	– 0.4	– 3.4	– 0.3	0.4	– 3.8	Mar.
17.9	8.6	3.2	4.3	1.5	9.9	– 8.1	0.1	1.7	– 0.1	– 1.9	Apr.
28.6	– 9.3	0.3	5.3	48.4	43.4	6.2	0.3	– 1.0	– 0.1	– 0.4	May
57.8	– 69.3	– 0.4	4.7	0.1	9.9	– 7.7	– 0.1	– 1.6	– 0.2	– 0.3	June
14.2	– 11.1	2.4	3.9	35.2	27.4	8.6	– 1.1	1.3	– 0.2	– 0.8	July
21.0	– 14.2	3.8	0.9	13.3	18.6	– 4.9	0.2	– 0.4	0.3	– 0.3	Aug.
15.3	– 58.3	2.7	0.6	20.4	26.2	– 5.2	– 0.1	– 0.4	0.2	– 0.2	Sep.
– 20.0	70.5	2.4	1.7	30.3	30.6	– 0.1	– 0.0	0.2	0.6	– 1.0	Oct.
– 12.7	3.5	1.3	3.0	36.9	44.8	– 14.3	0.2	7.6	– 0.3	– 1.1	Nov.

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 month	Total assets or liabilities	Assets										
		Lending to non-banks (non-MFIs) in the euro area									Claims on non-euro area residents	Other assets
		Total	Enterprises and households				General government					
			Total	Loans	Debt securities 2	Shares and other equities	Total	Loans	Debt securities 3			
	Euro area (€ billion) 1											
2018 Oct.	27,077.1	18,151.7	13,555.3	11,266.2	1,510.9	778.1	4,596.4	1,002.6	3,593.8	5,667.4	3,258.0
Nov.	27,216.6	18,243.5	13,638.0	11,337.8	1,516.2	784.1	4,605.5	1,001.0	3,604.5	5,694.7	3,278.5
Dec.	26,990.0	18,173.2	13,568.7	11,295.5	1,502.0	771.2	4,604.5	1,002.8	3,601.8	5,557.1	3,259.8
2019 Jan.	27,392.5	18,309.1	13,637.4	11,345.0	1,517.2	775.3	4,671.7	1,015.9	3,655.8	5,770.3	3,313.0
Feb.	27,436.4	18,354.8	13,683.9	11,368.3	1,528.3	787.3	4,670.9	1,001.2	3,669.7	5,763.8	3,317.9
Mar.	27,733.7	18,397.2	13,735.5	11,413.7	1,526.2	795.7	4,661.7	1,001.4	3,660.3	5,841.6	3,494.9
Apr.	27,886.9	18,468.4	13,828.8	11,472.8	1,529.8	826.1	4,639.6	1,001.1	3,638.6	5,942.4	3,476.2
May	28,185.6	18,497.0	13,854.0	11,494.6	1,549.1	810.4	4,643.0	1,000.3	3,642.7	6,027.7	3,660.8
June	28,305.8	18,522.0	13,874.9	11,521.2	1,552.5	801.2	4,647.1	1,000.0	3,647.1	5,991.6	3,792.1
July	28,772.3	18,601.9	13,939.3	11,583.7	1,550.8	804.7	4,662.6	1,002.8	3,659.8	6,208.8	3,961.7
Aug.	29,374.0	18,658.9	13,961.4	11,612.7	1,549.4	799.3	4,697.5	1,003.1	3,694.4	6,311.5	4,403.7
Sep.	29,193.7	18,651.6	13,971.2	11,595.9	1,566.6	808.7	4,680.4	996.7	3,683.7	6,300.2	4,241.9
Oct.	28,966.1	18,689.3	14,042.6	11,660.4	1,550.6	831.5	4,646.8	1,002.5	3,644.3	6,259.5	4,017.3
Nov.	29,017.9	18,729.5	14,099.4	11,684.4	1,569.3	845.7	4,630.0	998.6	3,631.4	6,270.8	4,017.6
Dec.	28,327.9	18,591.5	14,008.6	11,617.0	1,543.9	847.7	4,582.9	981.0	3,601.9	5,930.8	3,805.6
2020 Jan.	29,020.9	18,722.5	14,062.6	11,668.8	1,542.9	850.9	4,659.8	1,003.4	3,656.5	6,302.2	3,996.2
Feb.	29,486.5	18,767.4	14,101.9	11,697.4	1,563.2	841.3	4,665.5	992.2	3,673.3	6,414.4	4,304.6
Mar.	30,019.3	19,013.6	14,239.5	11,885.0	1,557.4	797.2	4,774.1	1,006.7	3,767.4	6,486.4	4,519.3
Apr.	30,447.4	19,307.7	14,348.3	11,933.3	1,612.6	802.5	4,959.4	1,018.0	3,941.4	6,585.2	4,554.5
May	30,496.9	19,607.9	14,466.6	12,020.5	1,643.3	802.8	5,141.3	1,013.7	4,127.6	6,465.6	4,423.4
June	30,405.0	19,758.4	14,448.4	11,981.0	1,651.3	816.1	5,309.9	1,005.3	4,304.7	6,298.1	4,348.6
July	30,603.8	19,909.3	14,331.3	12,012.5	1,504.3	814.5	5,578.0	1,006.0	4,572.1	6,276.3	4,418.2
Aug.	30,431.8	19,982.4	14,352.5	12,018.1	1,523.4	811.0	5,629.9	997.8	4,632.1	6,242.3	4,207.1
Sep.	30,521.5	20,081.3	14,346.2	12,017.8	1,518.5	809.9	5,735.1	998.6	4,736.5	6,239.4	4,200.8
Oct.	30,689.4	20,159.4	14,373.2	12,054.0	1,517.9	801.3	5,786.2	1,004.3	4,781.9	6,342.7	4,187.2
Nov.	30,727.0	20,261.2	14,417.9	12,088.6	1,488.6	840.6	5,843.3	1,003.4	4,839.9	6,331.4	4,134.4
	German contribution (€ billion)											
2018 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	966.7	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	6,698.2	4,445.3	3,481.1	3,024.8	194.0	262.3	964.2	293.7	670.5	1,312.3	940.7
Aug.	6,973.5	4,478.6	3,501.8	3,044.3	196.5	261.0	976.8	293.5	683.3	1,330.9	1,163.9
Sep.	6,872.6	4,462.9	3,497.0	3,040.4	196.0	260.5	965.9	288.3	677.6	1,311.9	1,097.8
Oct.	6,769.9	4,466.0	3,506.4	3,049.0	195.9	261.4	959.5	291.6	667.9	1,303.7	1,000.3
Nov.	6,785.4	4,490.1	3,527.4	3,064.8	199.7	262.9	962.6	292.6	670.0	1,289.6	1,005.8
Dec.	6,716.1	4,480.4	3,527.3	3,064.0	197.9	265.4	953.1	288.5	664.6	1,236.4	999.3
2020 Jan.	6,847.7	4,503.3	3,537.5	3,071.5	198.2	267.8	965.8	292.8	673.0	1,290.1	1,054.4
Feb.	7,028.5	4,531.0	3,562.2	3,092.6	203.2	266.4	968.8	290.8	678.0	1,306.1	1,191.4
Mar.	7,148.1	4,567.1	3,589.0	3,128.9	202.1	258.0	978.1	292.4	685.7	1,321.3	1,259.6
Apr.	7,258.0	4,605.2	3,606.5	3,143.8	206.5	256.1	998.7	294.8	703.9	1,346.6	1,306.2
May	7,230.4	4,666.4	3,640.1	3,167.2	215.9	257.1	1,026.2	293.8	732.5	1,326.0	1,238.1
June	7,225.3	4,692.6	3,641.6	3,164.7	220.4	256.6	1,051.0	291.5	759.6	1,304.2	1,228.5
July	7,267.6	4,718.8	3,634.9	3,175.5	202.7	256.7	1,083.9	293.4	790.5	1,282.9	1,265.8
Aug.	7,167.3	4,723.0	3,642.2	3,180.7	202.9	258.6	1,080.8	287.4	793.3	1,268.8	1,175.5
Sep.	7,236.4	4,749.2	3,647.1	3,184.0	204.9	258.1	1,102.1	289.7	812.4	1,293.8	1,193.4
Oct.	7,257.1	4,801.4	3,670.3	3,200.4	210.7	259.3	1,131.1	292.0	839.1	1,278.8	1,176.8
Nov.	7,240.5	4,841.7	3,688.6	3,213.7	214.3	260.6	1,153.1	290.2	862.9	1,261.9	1,136.9

***** Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and national central banks (the Eurosystem). **1** Source: ECB. **2** Including money market paper of enterprises. **3** Including Treasury bills and other money market paper issued by general government. **4** Euro currency in circulation (see also footnote 8 on p.12*). Excluding MFIs` cash in hand (in euro). The German contribution includes the volume of

II. Overall monetary survey in the euro area

Liabilities										
	Deposits of non-banks (non-MFIs) in the euro area									
			Enterprises and households							
					With agreed maturities of			At agreed notice of [6]		
Currency in circulation [4]	Total	of which: in euro [5]	Total	Overnight	up to 1 year	over 1 year and up to 2 years	over 2 years	up to 3 months	over 3 months	End of month
										Euro area (€ billion) [1]
1,152.2	12,639.5	11,788.3	11,848.3	6,668.8	812.8	203.6	1,872.0	2,239.0	52.1	2018 Oct.
1,157.5	12,719.4	11,861.8	11,912.4	6,750.6	801.6	200.7	1,866.9	2,241.2	51.3	Nov.
1,175.4	12,713.3	11,926.3	11,989.2	6,797.9	801.0	200.7	1,888.7	2,249.5	51.5	Dec.
1,162.4	12,768.0	11,911.1	11,976.6	6,776.6	798.4	199.4	1,888.0	2,262.9	51.3	2019 Jan.
1,165.6	12,833.0	11,959.7	12,005.4	6,805.1	795.7	196.8	1,887.9	2,268.8	51.2	Feb.
1,171.7	12,947.7	12,078.5	12,135.0	6,930.4	786.3	199.5	1,886.3	2,281.3	51.3	Mar.
1,179.1	12,958.0	12,120.9	12,180.6	6,969.3	788.9	201.8	1,880.4	2,288.5	51.5	Apr.
1,184.2	13,059.3	12,198.6	12,257.0	7,048.4	776.2	201.4	1,876.7	2,302.3	52.1	May
1,191.7	13,181.6	12,288.1	12,335.7	7,121.7	762.8	198.3	1,894.2	2,305.5	53.2	June
1,200.7	13,178.8	12,300.1	12,350.5	7,146.8	767.8	198.9	1,873.6	2,309.7	53.7	July
1,202.0	13,283.3	12,388.8	12,438.4	7,226.5	782.5	201.0	1,860.5	2,314.5	53.4	Aug.
1,205.4	13,298.4	12,383.2	12,446.2	7,221.7	769.3	200.8	1,886.9	2,314.4	53.0	Sep.
1,208.2	13,292.6	12,422.5	12,487.1	7,283.5	758.8	201.3	1,883.1	2,311.1	49.4	Oct.
1,215.1	13,388.9	12,520.7	12,572.4	7,386.6	741.1	200.6	1,885.1	2,310.4	48.6	Nov.
1,231.5	13,311.3	12,508.3	12,583.4	7,391.8	738.5	200.2	1,892.6	2,314.1	46.2	Dec.
1,224.1	13,359.5	12,460.6	12,555.5	7,362.8	734.6	200.1	1,890.9	2,322.3	44.7	2020 Jan.
1,229.3	13,477.0	12,528.4	12,615.5	7,430.6	731.7	198.6	1,888.5	2,322.0	44.1	Feb.
1,253.1	13,775.3	12,782.3	12,903.7	7,698.1	759.6	192.1	1,883.2	2,327.6	43.1	Mar.
1,273.5	13,996.0	12,953.0	13,065.1	7,852.4	762.5	188.2	1,876.5	2,343.4	42.1	Apr.
1,293.5	14,301.2	13,162.3	13,263.2	8,009.7	779.9	188.4	1,880.1	2,363.7	41.4	May
1,306.6	14,476.7	13,207.3	13,309.2	8,066.5	763.7	186.8	1,876.0	2,375.5	40.6	June
1,320.9	14,591.4	13,274.7	13,362.0	8,090.1	783.4	186.3	1,880.7	2,381.1	40.4	July
1,326.8	14,666.7	13,302.7	13,389.6	8,117.1	767.8	184.4	1,890.4	2,390.0	40.0	Aug.
1,330.3	14,757.1	13,359.4	13,466.0	8,175.8	781.0	195.5	1,881.9	2,392.0	39.8	Sep.
1,338.1	14,813.4	13,430.0	13,544.0	8,266.4	782.9	181.8	1,878.9	2,394.6	39.4	Oct.
1,349.9	14,800.1	13,513.8	13,608.4	8,358.3	758.0	179.3	1,871.5	2,402.5	39.0	Nov.
										German contribution (€ billion)
256.3	3,730.6	3,595.8	3,453.9	2,092.2	155.1	33.6	596.9	538.0	38.1	2018 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	3,812.4	3,701.4	3,532.6	2,191.7	147.0	31.6	581.4	542.7	38.1	July
276.6	3,849.7	3,730.3	3,550.9	2,213.2	149.7	31.7	576.9	541.5	37.8	Aug.
277.4	3,853.5	3,722.1	3,546.0	2,213.9	146.4	31.5	576.1	540.8	37.2	Sep.
277.6	3,848.5	3,734.8	3,571.5	2,240.3	148.6	31.2	575.2	539.9	36.4	Oct.
278.4	3,874.7	3,753.7	3,580.0	2,257.7	143.0	30.8	573.7	539.2	35.6	Nov.
281.8	3,863.9	3,744.4	3,574.3	2,250.5	144.8	31.0	573.5	540.0	34.5	Dec.
281.2	3,850.4	3,733.8	3,572.3	2,255.2	145.3	31.0	570.6	537.2	33.0	2020 Jan.
281.3	3,890.4	3,750.4	3,576.3	2,265.3	142.0	31.3	569.8	535.4	32.5	Feb.
282.2	3,982.8	3,830.4	3,655.2	2,346.4	147.3	30.5	567.2	532.0	31.8	Mar.
286.5	3,997.3	3,828.9	3,665.7	2,359.6	149.2	30.0	563.6	532.2	31.1	Apr.
291.8	4,080.7	3,885.8	3,710.9	2,396.9	158.3	29.0	563.6	532.5	30.7	May
296.5	4,132.2	3,873.6	3,711.6	2,408.7	152.1	29.6	559.0	532.6	29.7	June
300.4	4,170.7	3,880.3	3,716.8	2,409.9	163.5	30.0	552.8	531.5	29.2	July
301.3	4,202.4	3,889.9	3,720.2	2,419.2	159.3	30.1	551.3	531.6	28.8	Aug.
301.9	4,235.6	3,905.7	3,745.0	2,445.3	160.3	30.3	549.2	531.5	28.4	Sep.
303.6	4,245.3	3,935.3	3,781.4	2,476.4	165.4	30.5	549.7	531.5	28.0	Oct.
306.6	4,260.1	3,961.7	3,804.3	2,507.8	157.7	30.6	548.9	531.8	27.6	Nov.

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)

End of month	Liabilities (cont'd)												
	Deposits of non-banks (non-MFIs) in the euro area (cont'd)								Repo transactions with non-banks in the euro area		Money market fund shares (net) [3]	Debt securities	
	General government												
		Other general government											
				With agreed maturities of			At agreed notice of [2]						
	Central government	Total	Overnight	up to 1 year	over 1 year and up to 2 years	over 2 years	up to 3 months	over 3 months	Total	of which: Enterprises and households		Total	of which: Denominated in euro
	Euro area (€ billion) [1]												
2018 Oct.	375.6	415.5	213.2	84.0	32.3	55.7	25.8	4.5	237.4	236.9	511.5	2,165.4	1,474.6
Nov.	383.1	423.9	218.9	85.1	33.6	56.3	25.7	4.3	268.8	268.4	511.8	2,162.9	1,469.0
Dec.	322.5	401.6	203.7	78.7	34.2	56.9	23.8	4.3	254.5	254.2	513.3	2,158.0	1,471.8
2019 Jan.	389.2	402.2	196.8	86.0	34.9	55.8	24.2	4.5	270.1	269.6	524.5	2,176.2	1,484.6
Feb.	407.9	419.6	207.3	92.2	34.2	56.3	25.1	4.5	270.5	269.7	516.3	2,205.0	1,506.2
Mar.	386.0	426.7	212.1	92.6	35.4	56.7	25.5	4.4	272.7	272.3	520.2	2,185.7	1,489.6
Apr.	352.9	424.6	212.2	91.4	34.5	56.9	25.3	4.4	295.0	294.6	532.3	2,174.9	1,488.0
May	370.7	431.6	216.9	94.9	33.4	57.0	25.1	4.3	287.4	287.0	522.6	2,191.0	1,497.2
June	404.2	441.8	224.4	94.6	35.1	58.1	25.2	4.4	266.0	265.7	510.6	2,182.2	1,493.8
July	391.2	437.1	221.5	93.8	34.1	58.2	25.2	4.4	284.1	283.8	533.0	2,189.1	1,492.7
Aug.	397.4	447.4	228.3	97.2	34.1	58.3	25.3	4.3	289.0	288.5	550.9	2,173.6	1,484.1
Sep.	402.9	449.3	231.4	98.0	31.7	58.9	25.0	4.2	257.0	256.5	537.1	2,181.1	1,484.7
Oct.	365.0	440.5	224.5	95.5	32.3	59.1	25.2	3.9	298.8	298.3	538.6	2,174.6	1,488.4
Nov.	363.9	452.6	235.7	95.5	33.8	59.1	24.8	3.8	284.3	283.7	541.6	2,187.8	1,493.0
Dec.	297.5	430.4	224.7	85.9	33.7	59.1	23.6	3.6	250.3	249.8	520.3	2,153.8	1,486.7
2020 Jan.	381.8	422.3	209.6	92.7	33.2	59.5	23.2	4.1	243.4	242.9	555.1	2,187.7	1,500.2
Feb.	425.5	436.0	219.8	96.8	32.8	59.2	23.3	4.0	263.2	262.7	550.5	2,191.4	1,497.8
Mar.	430.2	441.4	232.8	93.3	31.0	58.2	22.3	3.9	293.2	292.6	530.9	2,175.2	1,484.3
Apr.	502.3	428.6	233.9	84.0	29.4	56.4	21.1	3.8	289.0	288.6	554.9	2,159.1	1,472.6
May	603.1	434.8	245.9	81.7	28.4	54.7	20.3	3.8	297.8	297.5	554.9	2,134.2	1,470.8
June	726.5	441.1	259.5	82.4	24.6	51.8	19.3	3.4	254.8	254.6	569.4	2,105.3	1,453.5
July	788.0	441.4	264.1	80.1	23.2	51.0	19.4	3.5	271.8	271.6	599.3	2,054.9	1,434.1
Aug.	828.6	448.5	273.6	79.5	22.1	50.3	19.6	3.5	266.9	266.7	599.9	2,036.4	1,424.9
Sep.	849.0	442.1	274.8	74.4	20.8	49.1	19.5	3.4	237.7	237.5	608.1	2,059.5	1,429.9
Oct.	831.8	437.6	277.4	69.5	20.8	47.0	19.5	3.4	243.1	242.9	622.2	2,047.1	1,418.1
Nov.	733.3	458.4	307.1	64.6	17.8	46.1	19.4	3.3	246.4	246.4	621.5	2,019.3	1,398.2
	German contribution (€ billion)												
2018 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	50.8	3.1	0.5	13.9	13.9	2.0	559.4	296.9
Aug.	47.6	251.2	84.7	83.8	28.1	50.9	3.2	0.5	16.9	16.7	2.0	557.3	295.0
Sep.	57.3	250.3	84.6	85.0	25.8	51.1	3.1	0.5	1.5	1.3	2.2	563.5	297.7
Oct.	37.4	239.6	76.3	82.4	26.1	51.3	3.1	0.5	1.2	1.0	2.1	555.2	299.2
Nov.	45.4	249.3	83.4	83.9	27.4	51.1	3.1	0.5	1.7	1.5	1.9	560.4	302.2
Dec.	43.4	246.2	89.5	75.4	27.0	51.0	2.9	0.4	3.5	3.4	1.8	551.4	301.6
2020 Jan.	37.8	240.2	77.8	81.4	26.6	51.3	2.7	0.4	2.5	2.4	1.8	560.9	306.5
Feb.	62.2	251.9	85.5	86.0	26.3	50.9	2.8	0.4	2.0	1.8	1.8	563.9	310.3
Mar.	69.7	257.9	97.6	82.5	24.7	49.8	2.8	0.4	1.7	1.6	2.2	553.0	310.7
Apr.	87.5	244.0	94.7	74.4	23.7	48.3	2.7	0.4	3.4	3.3	2.1	550.6	306.2
May	116.2	253.6	108.0	72.9	22.9	46.7	2.8	0.3	2.4	2.3	1.9	543.1	305.4
June	174.0	246.5	106.1	74.1	19.5	44.0	2.5	0.3	0.9	0.7	1.8	532.8	297.2
July	208.5	245.3	109.6	71.4	18.3	43.2	2.5	0.3	2.1	2.0	1.6	523.3	293.3
Aug.	229.5	252.8	118.7	71.3	17.4	42.4	2.6	0.3	1.7	1.5	1.9	517.9	291.1
Sep.	244.7	245.8	119.4	66.0	16.5	41.1	2.5	0.3	1.3	1.1	2.0	525.3	296.1
Oct.	224.8	239.1	119.1	61.7	16.6	39.0	2.5	0.3	1.4	1.3	2.7	519.9	296.2
Nov.	212.1	243.7	131.6	57.3	14.0	38.0	2.5	0.2	9.1	9.1	2.4	515.4	296.2

***** Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and national central banks (the Eurosystem). **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 euro banknotes

II. Overall monetary survey in the euro area

issued (net) [3]						Other liability items		Memo item: Monetary aggregates [7] (from 2002 German contribution excludes currency in circulation)					
With maturities of													
up to 1 year [4]	over 1 year and up to 2 years	over 2 years	Liabilities to non-euro area residents [5]	Capital and reserves [6]	Excess of inter-MFI liabilities	Total [8]	of which: Intra-Eurosystem-liability/ claim related to banknote issue [9]	M1 [10]	M2 [11]	M3 [12]	Monetary capital formation [13]	Monetary liabilities of central governments (Post Office, Treasury) [14]	End of month
Euro area (€ billion) [1]													
39.6	23.7	2,102.1	4,704.7	2,709.2	– 14.4	2,971.7	0.0	8,160.1	11,581.4	12,226.4	6,795.6	149.7	2018 Oct.
38.9	21.7	2,102.3	4,659.6	2,711.2	6.6	3,018.8	0.0	8,256.6	11,668.3	12,313.3	6,792.3	153.3	Nov.
47.5	20.7	2,089.8	4,503.3	2,727.3	8.7	2,936.1	0.0	8,301.7	11,714.7	12,363.6	6,818.5	149.8	Dec.
36.3	23.9	2,116.1	4,696.6	2,752.7	10.8	3,031.2	0.0	8,262.9	11,693.2	12,349.0	6,868.4	151.7	2019 Jan.
33.2	26.1	2,145.8	4,661.2	2,740.4	15.1	3,029.3	0.0	8,303.9	11,741.1	12,389.0	6,886.1	150.4	Feb.
16.0	22.5	2,147.2	4,647.4	2,766.7	23.2	3,198.4	0.0	8,441.7	11,886.7	12,519.2	6,912.6	151.9	Mar.
17.0	21.4	2,136.5	4,770.1	2,760.9	14.1	3,202.5	0.0	8,487.7	11,942.4	12,591.3	6,890.6	151.5	Apr.
23.4	22.1	2,145.4	4,776.2	2,774.6	26.3	3,364.1	0.0	8,575.0	12,032.4	12,675.1	6,910.1	149.7	May
20.0	21.6	2,140.6	4,640.6	2,830.3	33.6	3,469.1	0.0	8,669.1	12,114.5	12,741.2	6,980.7	155.2	June
16.1	21.3	2,151.6	4,796.8	2,878.9	25.7	3,685.3	0.0	8,697.8	12,150.2	12,798.2	7,020.3	151.7	July
2.7	20.7	2,150.1	4,854.7	2,940.4	– 2.9	4,083.0	0.0	8,786.7	12,264.2	12,915.0	7,066.9	152.7	Aug.
3.2	19.0	2,158.9	4,803.5	2,942.8	25.4	3,943.1	0.0	8,788.8	12,251.2	12,883.4	7,104.7	153.4	Sep.
7.5	19.8	2,147.2	4,768.1	2,935.0	34.3	3,716.0	0.0	8,846.0	12,293.3	12,936.6	7,077.6	152.9	Oct.
6.8	19.5	2,161.5	4,770.3	2,922.8	31.2	3,675.9	0.0	8,971.7	12,401.5	13,041.9	7,080.9	157.9	Nov.
– 11.3	19.2	2,145.9	4,452.2	2,913.5	25.1	3,469.9	0.0	8,975.4	12,395.9	12,995.5	7,060.8	152.0	Dec.
– 0.4	21.9	2,166.2	4,759.3	2,950.9	24.4	3,716.4	0.0	8,927.4	12,357.6	13,006.6	7,116.2	154.9	2020 Jan.
3.6	23.4	2,164.4	4,817.2	2,967.8	26.5	3,963.5	0.0	9,012.7	12,442.0	13,104.7	7,128.0	156.9	Feb.
29.9	21.7	2,123.7	4,908.2	2,930.7	11.7	4,140.9	0.0	9,312.6	12,762.2	13,454.2	7,042.8	152.5	Mar.
12.8	21.5	2,124.8	5,048.8	2,947.0	– 25.6	4,204.8	0.0	9,490.6	12,941.3	13,631.9	7,050.6	153.0	Apr.
3.8	22.3	2,108.1	4,946.7	2,952.7	– 33.2	4,049.0	0.0	9,682.0	13,166.3	13,848.7	7,040.8	154.7	May
– 0.1	21.1	2,084.4	4,711.9	2,977.9	– 4.4	4,006.7	0.0	9,768.9	13,243.0	13,929.0	7,034.2	158.0	June
– 12.1	20.2	2,046.8	4,734.4	3,017.8	– 53.1	4,066.3	0.0	9,812.9	13,308.0	14,024.9	7,040.3	159.4	July
– 15.4	19.2	2,032.5	4,700.6	3,015.2	– 39.0	3,858.3	0.0	9,856.0	13,340.6	14,040.9	7,031.9	160.0	Aug.
– 14.6	15.8	2,058.3	4,656.8	3,011.7	– 16.5	3,876.9	0.0	9,923.4	13,428.0	14,135.2	7,044.3	163.9	Sep.
– 1.2	18.4	2,029.9	4,778.4	3,038.7	– 48.1	3,856.6	0.0	10,025.7	13,516.3	14,250.1	7,037.3	165.3	Oct.
– 3.7	19.7	2,003.4	4,859.2	2,984.1	– 43.7	3,890.0	0.0	10,166.1	13,629.3	14,365.0	6,947.4	172.4	Nov.
German contribution (€ billion)													
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	0.0	2018 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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	June
19.7	7.9	531.9	925.0	735.6	– 950.3	1,600.3	411.4	2,271.3	3,104.7	3,148.2	1,938.3	0.0	July
20.3	7.6	529.4	944.3	757.0	– 980.7	1,826.9	417.2	2,297.9	3,135.9	3,182.8	1,952.6	0.0	Aug.
22.3	7.4	533.8	927.2	755.6	– 992.1	1,761.2	422.1	2,298.5	3,131.2	3,164.7	1,954.3	0.0	Sep.
20.7	6.7	527.8	867.4	750.0	– 918.5	1,664.0	426.3	2,316.5	3,147.7	3,178.4	1,941.3	0.0	Oct.
21.4	5.8	533.1	877.7	749.1	– 951.9	1,671.9	430.8	2,341.2	3,168.5	3,199.3	1,943.1	0.0	Nov.
21.0	6.1	524.3	863.5	750.1	– 999.8	1,681.4	435.8	2,340.1	3,161.1	3,193.6	1,933.9	0.0	Dec.
23.9	6.7	530.2	831.0	757.2	– 900.5	1,744.6	437.9	2,333.0	3,157.1	3,192.1	1,942.8	0.0	2020 Jan.
21.7	6.8	535.4	850.2	764.8	– 912.0	1,867.4	442.7	2,350.9	3,174.6	3,207.0	1,953.8	0.0	Feb.
18.4	6.3	528.3	901.4	757.6	– 990.7	1,940.1	455.0	2,444.0	3,263.9	3,292.5	1,935.1	0.0	Mar.
15.9	6.9	527.8	942.0	759.1	– 1,003.6	2,007.1	458.2	2,454.3	3,266.4	3,294.7	1,930.3	0.0	Apr.
14.9	7.3	520.8	917.3	756.1	– 1,003.8	1,932.8	458.5	2,505.0	3,323.2	3,349.8	1,918.3	0.0	May
14.8	7.1	510.9	939.7	769.1	– 1,074.1	1,923.1	458.1	2,514.8	3,325.2	3,349.7	1,913.0	0.0	June
12.8	6.7	503.7	907.0	784.6	– 1,089.1	1,967.5	460.5	2,519.5	3,336.8	3,360.1	1,913.6	0.0	July
12.0	7.2	498.7	891.2	778.4	– 1,114.7	1,888.5	464.3	2,537.9	3,350.2	3,372.9	1,899.9	0.0	Aug.
12.4	6.7	506.2	952.4	787.3	– 1,172.8	1,905.3	467.0	2,564.6	3,371.8	3,394.2	1,912.5	0.0	Sep.
11.1	7.0	501.8	906.4	794.7	– 1,107.6	1,894.1	469.4	2,595.4	3,403.6	3,425.7	1,913.5	0.0	Oct.
9.8	7.0	498.5	923.5	780.2	– 1,109.5	1,859.4	470.7	2,639.3	3,433.2	3,461.5	1,893.5	0.0	Nov.

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						
		Monetary policy operations of the Eurosystem										
	Net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations 3	Deposit facility	Other liquidity-absorbing operations 4	Banknotes in circulation 5	Central government deposits	Other factors (net) 6	Credit institutions' current account balances (including minimum reserves) 7	Base money 8
Eurosystem 2												
2019 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.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	720.2	3.0	692.5	0.0	2,612.4	555.7	0.0	1,251.1	268.5	621.2	1,331.5	3,138.3
Oct.	758.5	2.0	668.5	0.0	2,608.7	456.6	0.0	1,252.7	298.6	641.3	1,388.5	3,097.8
Nov.	.	.	.	.	.	.	.	.	.	.	.	.
Dec.	773.3	1.8	663.7	0.0	2,618.8	257.9	0.0	1,262.9	226.6	648.1	1,662.1	3,182.9
2020 Jan.	768.6	2.9	616.1	0.0	2,639.1	254.6	0.0	1,282.2	211.8	654.3	1,623.7	3,160.6
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	767.1	1.4	615.9	0.0	2,666.7	244.6	0.0	1,277.1	268.6	618.4	1,642.3	3,164.1
Apr.	.	.	.	.	.	.	.	.	.	.	.	.
May	926.3	0.6	865.7	0.0	2,784.2	271.8	0.0	1,321.9	374.4	788.6	1,820.2	3,413.8
June	950.4	0.3	984.2	0.0	2,986.9	299.9	0.0	1,347.9	477.1	830.5	1,966.5	3,614.4
July	871.3	0.8	1,401.5	0.0	3,168.2	356.0	0.0	1,365.7	671.2	703.1	2,345.9	4,067.5
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	865.9	1.3	1,593.2	0.0	3,323.6	413.2	0.0	1,381.2	712.9	651.0	2,625.7	4,420.1
Oct.	.	.	.	.	.	.	.	.	.	.	.	.
Nov.	864.4	1.3	1,707.8	0.0	3,475.8	460.7	0.0	1,389.1	749.0	653.5	2,797.0	4,646.8
Dec.	865.1	0.5	1,754.4	0.0	3,614.7	535.4	0.0	1,403.9	647.0	687.7	2,960.7	4,900.0
Deutsche Bundesbank												
2019 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.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	172.5	0.5	84.9	0.0	562.7	150.1	0.0	305.6	57.6	– 157.6	464.9	920.6
Oct.	182.8	0.4	82.8	0.0	560.0	151.5	0.0	306.5	70.8	– 159.4	456.6	914.7
Nov.	.	.	.	.	.	.	.	.	.	.	.	.
Dec.	186.9	0.4	82.4	0.0	566.1	82.2	0.0	307.6	55.9	– 135.3	525.4	915.3
2020 Jan.	186.0	0.9	74.0	0.0	567.9	73.6	0.0	311.7	52.7	– 95.7	486.5	871.8
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	185.0	0.4	74.0	0.0	573.7	65.4	0.0	311.2	64.4	– 125.0	517.1	893.7
Apr.	.	.	.	.	.	.	.	.	.	.	.	.
May	238.0	0.2	106.8	0.0	585.3	76.3	0.0	324.1	102.0	– 174.5	602.8	1,003.2
June	248.7	0.1	122.5	0.0	623.1	85.0	0.0	326.4	137.6	– 172.6	618.1	1,029.5
July	222.1	0.5	235.2	0.0	655.9	108.2	0.0	331.5	205.0	– 238.1	707.1	1,146.8
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	212.1	0.8	284.0	0.0	692.0	136.0	0.0	336.4	239.6	– 298.0	774.8	1,247.3
Oct.	.	.	.	.	.	.	.	.	.	.	.	.
Nov.	212.1	0.7	319.5	0.0	729.0	145.5	0.0	338.1	254.7	– 302.9	826.0	1,309.6
Dec.	213.0	0.3	333.9	0.0	768.7	166.6	0.0	341.2	217.9	– 294.5	884.7	1,392.5

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
	Monetary policy operations of the Eurosystem											
Net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations 3	Deposit facility	Other liquidity-absorbing operations 4	Banknotes in circulation 5	Central government deposits	Other factors (net) 6			
Eurosystem 2												
+ 13.1	– 0.3	– 2.8	± 0.0	– 9.9	– 18.0	± 0.0	+ 6.6	+ 13.2	– 15.8	+ 14.2	+ 2.7	2019 Apr.
.	.	.	.	.	.	.	.	.	.	.	.	May
+ 11.1	– 0.2	– 1.7	+ 0.3	– 5.3	– 17.7	± 0.0	+ 12.4	– 22.3	+ 6.3	+ 25.6	+ 20.3	June
+ 20.6	– 0.9	– 18.5	– 0.4	– 10.2	– 31.1	± 0.0	+ 12.6	+ 47.7	+ 30.3	– 68.9	– 87.3	July
.	.	.	.	.	.	.	.	.	.	.	.	Aug.
+ 9.9	– 1.6	– 7.6	± 0.0	– 8.0	– 15.1	± 0.0	+ 10.3	– 27.4	+ 29.0	– 4.2	– 9.1	Sep.
+ 38.3	– 1.0	– 24.0	± 0.0	– 3.7	– 99.1	± 0.0	+ 1.6	+ 30.1	+ 20.1	+ 57.0	– 40.5	Oct.
.	.	.	.	.	.	.	.	.	.	.	.	Nov.
+ 14.8	– 0.2	– 4.8	± 0.0	+ 10.1	–198.7	± 0.0	+ 10.2	– 72.0	+ 6.8	+ 273.6	+ 85.1	Dec.
– 4.7	+ 1.1	– 47.6	± 0.0	+ 20.3	– 3.3	± 0.0	+ 19.3	– 14.8	+ 6.2	– 38.4	– 22.3	2020 Jan.
.	.	.	.	.	.	.	.	.	.	.	.	Feb.
– 1.5	– 1.5	– 0.2	± 0.0	+ 27.6	– 10.0	± 0.0	– 5.1	+ 56.8	– 35.9	+ 18.6	+ 3.5	Mar.
.	.	.	.	.	.	.	.	.	.	.	.	Apr.
+ 159.2	– 0.8	+ 249.8	± 0.0	+ 117.5	+ 27.2	± 0.0	+ 44.8	+ 105.8	+170.2	+ 177.9	+ 249.7	May
+ 24.1	– 0.3	+ 118.5	± 0.0	+ 202.7	+ 28.1	± 0.0	+ 26.0	+ 102.7	+ 41.9	+ 146.3	+ 200.6	June
– 79.1	+ 0.5	+ 417.3	± 0.0	+ 181.3	+ 56.1	± 0.0	+ 17.8	+ 194.1	–127.4	+ 379.4	+ 453.1	July
.	.	.	.	.	.	.	.	.	.	.	.	Aug.
– 5.4	+ 0.5	+ 191.7	± 0.0	+ 155.4	+ 57.2	± 0.0	+ 15.5	+ 41.7	– 52.1	+ 279.8	+ 352.6	Sep.
.	.	.	.	.	.	.	.	.	.	.	.	Oct.
– 1.5	± 0.0	+ 114.6	± 0.0	+ 152.2	+ 47.5	± 0.0	+ 7.9	+ 36.1	+ 2.5	+ 171.3	+ 226.7	Nov.
+ 0.7	– 0.8	+ 46.6	± 0.0	+ 138.9	+ 74.7	± 0.0	+ 14.8	– 102.0	+ 34.2	+ 163.7	+ 253.2	Dec.
Deutsche Bundesbank												
+ 2.6	– 0.0	– 0.9	+ 0.0	– 5.8	+ 9.1	± 0.0	+ 1.8	+ 12.0	– 42.5	+ 15.6	+ 26.5	2019 Apr.
.	.	.	.	.	.	.	.	.	.	.	.	May
+ 2.8	+ 0.0	– 0.6	– 0.0	+ 1.4	– 6.2	± 0.0	+ 3.5	– 3.2	– 14.2	+ 23.7	+ 21.0	June
+ 5.7	+ 0.0	– 0.9	+ 0.0	– 2.1	– 16.2	± 0.0	+ 3.5	+ 7.6	+ 38.6	– 30.7	– 43.5	July
.	.	.	.	.	.	.	.	.	.	.	.	Aug.
+ 3.2	– 0.2	– 0.4	– 0.0	– 0.4	+ 0.0	± 0.0	+ 2.5	– 8.1	+ 17.4	– 9.6	– 7.1	Sep.
+ 10.3	– 0.1	– 2.1	+ 0.0	– 2.7	+ 1.4	± 0.0	+ 1.0	+ 13.2	– 1.8	– 8.3	– 5.9	Oct.
.	.	.	.	.	.	.	.	.	.	.	.	Nov.
+ 4.1	+ 0.0	– 0.4	+ 0.0	+ 6.1	– 69.3	± 0.0	+ 1.1	– 14.9	+ 24.1	+ 68.8	+ 0.6	Dec.
– 0.9	+ 0.4	– 8.5	+ 0.0	+ 1.8	– 8.6	± 0.0	+ 4.1	– 3.2	+ 39.6	– 38.9	– 43.5	2020 Jan.
.	.	.	.	.	.	.	.	.	.	.	.	Feb.
– 1.0	– 0.5	+ 0.0	– 0.0	+ 5.8	– 8.2	± 0.0	– 0.5	+ 11.7	– 29.3	+ 30.7	+ 21.9	Mar.
.	.	.	.	.	.	.	.	.	.	.	.	Apr.
+ 53.0	– 0.2	+ 32.9	– 0.0	+ 11.6	+ 10.9	± 0.0	+ 12.9	+ 37.6	– 49.6	+ 85.6	+ 109.5	May
+ 10.7	– 0.1	+ 15.7	+ 0.0	+ 37.8	+ 8.7	± 0.0	+ 2.3	+ 35.6	+ 2.0	+ 15.3	+ 26.3	June
– 26.6	+ 0.4	+ 112.6	– 0.0	+ 32.8	+ 23.2	± 0.0	+ 5.1	+ 67.5	– 65.5	+ 89.0	+ 117.3	July
.	.	.	.	.	.	.	.	.	.	.	.	Aug.
– 10.0	+ 0.3	+ 48.9	+ 0.0	+ 36.1	+ 27.9	± 0.0	+ 5.0	+ 34.6	– 59.9	+ 67.6	+ 100.5	Sep.
.	.	.	.	.	.	.	.	.	.	.	.	Oct.
+ 0.0	– 0.1	+ 35.5	– 0.0	+ 37.0	+ 9.5	± 0.0	+ 1.7	+ 15.0	– 5.0	+ 51.2	+ 62.3	Nov.
+ 0.9	– 0.4	+ 14.4	+ 0.0	+ 39.8	+ 21.1	± 0.0	+ 3.1	– 36.8	+ 8.4	+ 58.7	+ 82.9	Dec.

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]									
2020 June 12	5,630.3	509.8	362.2	85.0	277.1	86.1	13.1	13.1	–
19	5,636.4	509.8	361.3	85.1	276.2	63.8	12.6	12.6	–
26	6,236.1	509.8	361.0	85.1	276.0	50.7	13.3	13.3	–
July 3	6,289.0	548.8	358.0	84.3	273.7	37.5	13.3	13.3	–
10	6,309.2	548.8	356.9	84.3	272.6	35.7	13.6	13.6	–
17	6,322.6	548.8	356.3	84.3	272.0	35.4	13.3	13.3	–
24	6,351.4	548.7	357.1	84.3	272.8	32.9	12.9	12.9	–
31	6,360.8	548.7	357.0	85.9	271.1	32.4	13.6	13.6	–
Aug. 7	6,385.3	548.7	357.1	85.8	271.3	29.9	12.7	12.7	–
14	6,404.7	548.7	357.1	85.8	271.3	29.7	12.8	12.8	–
21	6,424.0	548.7	357.9	85.8	272.0	28.5	12.7	12.7	–
28	6,440.2	548.8	358.6	85.8	272.8	27.8	11.5	11.5	–
Sep. 4	6,458.9	548.8	359.5	85.8	273.7	27.5	13.8	13.8	–
11	6,474.6	548.8	359.3	85.8	273.5	25.5	12.0	12.0	–
18	6,502.4	548.8	360.4	85.8	274.6	24.1	11.7	11.7	–
25	6,534.8	548.8	360.5	86.6	273.9	24.6	12.5	12.5	–
Oct. 2	6,705.1	559.3	351.3	84.7	266.6	22.2	12.4	12.4	–
9	6,725.7	559.3	350.8	84.7	266.0	23.0	12.6	12.6	–
16	6,743.5	559.3	351.8	84.7	267.1	21.1	13.0	13.0	–
23	6,781.8	559.3	352.6	84.8	267.8	20.9	12.1	12.1	–
30	6,775.8	559.3	353.4	84.9	268.6	20.2	11.9	11.9	–
Nov. 6	6,796.9	559.3	353.1	84.8	268.2	20.8	12.3	12.3	–
13	6,833.5	559.3	352.7	84.8	267.8	20.4	13.1	13.1	–
20	6,867.8	559.3	352.6	84.8	267.8	20.4	13.1	13.1	–
27	6,883.4	559.3	351.5	84.8	266.7	21.2	13.2	13.2	–
Dec. 4	6,923.1	559.3	353.4	86.2	267.2	22.0	12.8	12.8	–
11	6,949.6	559.3	353.3	86.2	267.1	22.3	12.8	12.8	–
18	7,008.9	559.3	354.7	86.2	268.4	25.2	12.2	12.2	–
25	7,014.7	559.3	356.7	87.1	269.7	24.5	13.0	13.0	–
2021 Jan. 1	6,979.3	536.5	347.2	85.4	261.8	23.4	14.3	14.3	–
Deutsche Bundesbank									
2020 June 12	2,003.6	158.6	56.1	21.7	34.4	32.4	0.9	0.9	–
19	2,047.0	158.6	55.4	21.7	33.7	23.7	0.4	0.4	–
26	2,197.3	158.6	55.3	21.7	33.6	19.1	1.3	1.3	–
July 3	2,215.8	170.7	54.9	21.6	33.3	9.3	1.3	1.3	–
10	2,199.9	170.7	55.1	21.6	33.5	7.8	1.1	1.1	–
17	2,230.8	170.7	54.7	21.6	33.1	6.5	1.3	1.3	–
24	2,217.8	170.7	54.7	21.6	33.2	5.1	1.0	1.0	–
31	2,257.3	170.7	54.8	22.3	32.5	3.8	1.7	1.7	–
Aug. 7	2,271.2	170.7	54.7	22.3	32.4	1.6	1.0	1.0	–
14	2,277.4	170.7	54.3	22.3	32.1	1.2	1.2	1.2	–
21	2,274.8	170.7	54.7	22.3	32.4	1.1	1.3	1.3	–
28	2,293.3	170.7	54.5	22.3	32.3	1.0	0.4	0.4	–
Sep. 4	2,306.2	170.7	54.1	22.3	31.8	0.9	2.5	2.5	–
11	2,299.5	170.7	54.0	22.3	31.7	0.7	0.5	0.5	–
18	2,310.9	170.7	54.0	22.3	31.7	0.5	0.2	0.2	–
25	2,325.1	170.7	54.1	22.4	31.7	0.5	0.5	0.5	–
Oct. 2	2,383.8	174.0	53.2	21.9	31.2	0.1	1.2	1.2	–
9	2,379.0	174.0	53.1	21.9	31.2	0.1	1.4	1.4	–
16	2,382.2	174.0	53.3	21.9	31.4	0.1	1.7	1.7	–
23	2,401.0	174.0	53.4	21.9	31.5	0.1	0.8	0.8	–
30	2,394.5	174.0	53.3	21.9	31.4	0.1	0.8	0.8	–
Nov. 6	2,373.1	174.0	53.3	21.9	31.4	0.1	1.3	1.3	–
13	2,406.2	174.0	53.2	21.9	31.3	0.1	1.9	1.9	–
20	2,409.1	174.0	53.6	21.9	31.7	0.1	1.7	1.7	–
27	2,450.9	174.0	53.4	21.9	31.5	0.1	1.4	1.4	–
Dec. 4	2,465.1	174.0	54.2	22.6	31.6	0.1	1.7	1.7	–
11	2,451.1	174.0	54.0	22.6	31.4	0.2	1.5	1.5	–
18	2,458.9	174.0	53.9	22.6	31.3	0.5	0.8	0.8	–
25	2,485.2	174.0	54.0	22.6	31.4	0.5	0.4	0.4	–
2021 Jan. 1	2,536.2	174.0	54.0	22.6	31.4	0.5	1.5	1.5	–

***** 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 refinancing operations	Longer-term refinancing 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]													
1,026.2	0.4	1,025.8	–	–	0.0	–	30.7	3,297.9	3,094.9	203.0	23.3	280.9	2020 June 12
1,026.3	0.5	1,025.8	–	–	0.0	–	34.9	3,325.9	3,123.2	202.7	23.3	278.6	19
1,590.1	0.7	1,589.4	–	–	0.0	–	39.3	3,365.1	3,162.5	202.7	23.3	283.4	26
1,590.8	1.4	1,589.4	–	–	–	–	37.3	3,391.9	3,188.4	203.5	22.8	288.7	July 3
1,590.5	1.1	1,589.4	–	–	–	–	33.3	3,416.2	3,213.5	202.8	22.8	291.3	10
1,590.5	1.0	1,589.4	–	–	0.0	–	33.1	3,435.2	3,232.5	202.7	22.8	287.3	17
1,590.6	1.1	1,589.4	–	–	0.0	–	37.7	3,462.8	3,259.7	203.2	22.8	285.9	24
1,590.0	1.1	1,588.9	–	–	–	–	34.0	3,477.5	3,274.7	202.8	22.8	284.7	31
1,595.5	1.0	1,594.6	–	–	–	–	34.9	3,499.3	3,296.2	203.2	22.8	284.3	Aug. 7
1,595.6	1.0	1,594.6	–	–	–	–	32.0	3,518.1	3,316.1	202.1	22.8	287.8	14
1,595.9	1.3	1,594.6	–	–	–	–	33.3	3,537.7	3,335.3	202.4	22.8	286.6	21
1,595.9	1.6	1,594.3	–	–	0.0	–	32.0	3,554.3	3,351.2	203.1	22.8	288.5	28
1,596.6	1.6	1,595.0	–	–	0.0	–	35.2	3,567.9	3,366.2	201.8	22.8	286.7	Sep. 4
1,596.7	1.7	1,595.0	–	–	–	–	35.7	3,589.3	3,388.2	201.1	22.8	284.4	11
1,596.7	1.7	1,595.0	–	–	–	–	37.5	3,613.8	3,413.0	200.8	22.8	286.7	18
1,596.9	1.9	1,595.0	–	–	–	–	36.7	3,643.3	3,442.5	200.8	22.8	288.7	25
1,753.3	1.2	1,752.1	–	–	–	–	34.6	3,654.3	3,454.5	199.8	22.7	294.9	Oct. 2
1,754.3	1.2	1,753.1	–	–	–	–	29.2	3,678.4	3,478.6	199.7	22.7	295.6	9
1,754.1	1.0	1,753.1	–	–	–	–	33.2	3,693.6	3,494.9	198.7	22.7	294.7	16
1,754.1	1.0	1,753.1	–	–	0.0	–	35.7	3,717.5	3,519.1	198.3	22.7	306.8	23
1,754.1	1.0	1,753.1	–	–	0.0	–	26.0	3,723.9	3,529.9	194.0	22.7	304.0	30
1,754.7	0.9	1,753.8	–	–	0.0	–	36.6	3,738.7	3,546.2	192.6	22.7	298.7	Nov. 6
1,754.4	0.6	1,753.8	–	–	–	–	40.0	3,769.3	3,576.0	193.2	22.7	301.6	13
1,754.3	0.5	1,753.8	–	–	–	–	42.1	3,801.0	3,607.8	193.2	22.7	302.2	20
1,754.5	0.6	1,753.9	–	–	–	–	41.6	3,816.6	3,622.5	194.1	22.7	303.0	27
1,756.0	0.3	1,755.7	–	–	0.0	–	41.8	3,848.8	3,654.4	194.4	22.7	306.4	Dec. 4
1,756.0	0.2	1,755.7	–	–	–	–	38.4	3,875.5	3,681.1	194.5	22.7	309.3	11
1,792.9	0.3	1,792.6	–	–	0.0	–	36.7	3,895.6	3,700.0	195.6	22.7	309.6	18
1,792.8	0.3	1,792.6	–	–	0.0	–	31.9	3,900.9	3,704.9	196.0	22.7	312.8	25
1,793.2	0.5	1,792.6	–	–	0.2	–	25.3	3,890.9	3,694.6	196.3	22.7	325.7	2021 Jan. 1
Deutsche Bundesbank													
138.3	0.3	138.0	–	–	0.0	–	6.6	641.8	641.8	–	4.4	964.4	2020 June 12
138.2	0.1	138.0	–	–	0.0	–	6.8	647.1	647.1	–	4.4	1,012.4	19
284.0	0.2	283.8	–	–	0.0	–	5.9	655.0	655.0	–	4.4	1,013.7	26
284.8	1.0	283.8	–	–	–	–	7.2	660.6	660.6	–	4.4	1,022.6	July 3
284.6	0.8	283.8	–	–	0.0	–	5.4	662.5	662.5	–	4.4	1,008.5	10
284.5	0.7	283.8	–	–	0.0	–	5.3	669.4	669.4	–	4.4	1,034.0	17
284.7	1.0	283.8	–	–	0.0	–	5.6	676.1	676.1	–	4.4	1,015.4	24
284.7	0.9	283.8	–	–	0.0	–	5.1	682.1	682.1	–	4.4	1,049.9	31
284.7	0.6	284.0	–	–	0.0	–	5.6	685.6	685.6	–	4.4	1,062.9	Aug. 7
284.7	0.6	284.0	–	–	0.0	–	5.7	690.3	690.3	–	4.4	1,064.9	14
284.9	0.8	284.0	–	–	0.0	–	5.2	694.8	694.8	–	4.4	1,057.7	21
285.0	0.9	284.1	–	–	0.0	–	5.2	699.5	699.5	–	4.4	1,072.3	28
285.1	0.8	284.3	–	–	0.0	–	8.1	701.8	701.8	–	4.4	1,078.6	Sep. 4
285.1	0.8	284.3	–	–	0.0	–	4.5	703.4	703.4	–	4.4	1,076.1	11
285.0	0.7	284.3	–	–	0.0	–	5.6	710.4	710.4	–	4.4	1,080.0	18
285.1	0.8	284.3	–	–	–	–	5.9	718.2	718.2	–	4.4	1,085.6	25
333.8	0.7	333.1	–	–	–	–	6.0	723.5	723.5	–	4.4	1,087.5	Oct. 2
334.5	0.8	333.8	–	–	0.0	–	4.8	730.5	730.5	–	4.4	1,076.1	9
334.5	0.7	333.8	–	–	0.0	–	5.8	732.9	732.9	–	4.4	1,075.5	16
334.5	0.7	333.8	–	–	0.0	–	9.1	740.2	740.2	–	4.4	1,084.5	23
334.5	0.7	333.8	–	–	0.0	–	5.0	745.2	745.2	–	4.4	1,077.3	30
334.5	0.7	333.8	–	–	0.0	–	8.1	750.0	750.0	–	4.4	1,047.4	Nov. 6
334.2	0.4	333.8	–	–	0.0	–	9.3	757.7	757.7	–	4.4	1,071.4	13
334.1	0.2	333.8	–	–	0.0	–	11.3	765.4	765.4	–	4.4	1,064.6	20
334.2	0.3	333.8	–	–	0.0	–	10.5	772.2	772.2	–	4.4	1,100.8	27
334.4	0.1	334.2	–	–	0.0	–	10.8	781.2	781.2	–	4.4	1,104.4	Dec. 4
334.3	0.0	334.2	–	–	0.0	–	10.7	785.6	785.6	–	4.4	1,086.6	11
341.2	0.1	341.1	–	–	0.0	–	9.6	790.8	790.8	–	4.4	1,083.7	18
341.2	0.1	341.1	–	–	0.0	–	7.4	791.3	791.3	–	4.4	1,112.1	25
341.4	0.2	341.1	–	–	0.2	–	2.4	791.1	791.1	–	4.4	1,166.9	2021 Jan. 1

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]														
2020 June	12	5,630.3	1,359.2	2,327.1	2,080.5	246.5	–	–	0.0	9.3	–	701.4	569.7	131.7
	19	5,636.4	1,360.7	2,253.3	1,985.7	267.6	–	–	–	7.2	–	799.2	668.9	130.4
	26	6,236.1	1,363.2	2,830.2	2,531.0	299.2	–	–	–	7.9	–	828.3	699.3	128.9
July	3	6,289.0	1,368.2	2,919.4	2,500.4	418.9	–	–	–	9.2	–	764.1	702.8	61.3
	10	6,309.2	1,372.0	2,957.8	2,498.1	459.7	–	–	–	8.2	–	741.9	674.8	67.1
	17	6,322.6	1,372.7	2,916.1	2,463.7	452.4	–	–	–	6.9	–	792.6	724.7	67.9
	24	6,351.4	1,374.6	2,928.6	2,638.8	289.8	–	–	0.0	6.8	–	816.0	750.9	65.1
	31	6,360.8	1,377.8	2,997.8	2,650.4	347.4	–	–	–	6.0	–	760.8	697.7	63.1
Aug.	7	6,385.3	1,381.6	3,051.0	2,674.8	376.2	–	–	–	6.3	–	728.0	665.3	62.7
	14	6,404.7	1,382.9	3,035.7	2,583.9	451.7	–	–	–	5.6	–	772.1	712.6	59.6
	21	6,424.0	1,382.3	3,045.9	2,600.4	445.4	–	–	–	5.9	–	781.9	725.0	57.0
	28	6,440.2	1,383.1	3,025.6	2,549.4	476.2	–	–	–	6.1	–	822.2	763.7	58.5
Sep.	4	6,458.9	1,384.5	3,115.1	2,621.9	493.2	–	–	–	9.6	–	737.8	679.2	58.5
	11	6,474.6	1,385.7	3,123.2	2,623.1	500.1	–	–	–	6.2	–	747.1	690.4	56.7
	18	6,502.4	1,385.7	3,060.9	2,732.1	328.8	–	–	–	7.4	–	836.1	784.4	51.7
	25	6,534.8	1,386.1	3,056.1	2,722.2	333.8	–	–	–	7.4	–	862.4	810.1	52.3
Oct.	2	6,705.1	1,387.9	3,303.1	2,807.7	495.4	–	–	–	7.4	–	787.8	732.8	55.1
	9	6,725.7	1,390.2	3,338.2	2,787.6	550.6	–	–	–	7.1	–	771.4	714.8	56.6
	16	6,743.5	1,390.3	3,322.9	2,788.9	534.0	–	–	–	7.0	–	797.6	737.6	60.0
	23	6,781.8	1,391.6	3,360.6	3,242.3	118.3	–	–	0.0	6.1	–	806.5	747.1	59.4
	30	6,775.8	1,394.0	3,370.2	2,750.0	620.2	–	–	0.0	6.3	–	787.8	721.9	65.9
Nov.	6	6,796.9	1,396.7	3,456.3	3,015.2	441.0	–	–	–	9.2	–	713.9	645.8	68.1
	13	6,833.5	1,397.7	3,470.1	2,999.2	470.9	–	–	–	10.9	–	723.4	654.8	68.6
	20	6,867.8	1,399.7	3,429.7	2,884.4	545.3	–	–	–	12.3	–	788.9	721.1	67.8
	27	6,883.4	1,403.2	3,463.8	2,896.1	567.7	–	–	–	11.5	–	753.3	684.4	68.8
Dec.	4	6,923.1	1,410.9	3,559.1	2,962.3	596.7	–	–	0.2	14.8	–	674.5	601.7	72.8
	11	6,949.6	1,417.2	3,610.4	3,038.5	571.8	–	–	0.1	12.7	–	627.1	557.8	69.3
	18	7,008.9	1,424.7	3,600.6	3,036.8	563.7	–	–	–	15.6	–	643.3	560.5	82.8
	25	7,014.7	1,433.6	3,570.9	2,979.4	591.4	–	–	–	17.8	–	621.3	540.1	81.2
2021 Jan.	1	6,979.3	1,434.5	3,489.2	2,805.3	683.9	–	–	–	23.6	–	611.3	516.2	95.1
Deutsche Bundesbank														
2020 June	12	2,003.6	329.4	708.6	647.6	61.0	–	–	–	3.7	–	190.2	165.0	25.3
	19	2,047.0	329.3	707.6	646.2	61.4	–	–	–	2.1	–	235.9	207.7	28.2
	26	2,197.3	330.2	836.6	761.1	75.5	–	–	–	3.1	–	264.0	236.0	27.9
July	3	2,215.8	332.5	874.1	733.5	140.7	–	–	–	4.2	–	228.7	221.2	7.5
	10	2,199.9	334.0	884.5	734.8	149.8	–	–	–	3.0	–	200.3	192.8	7.5
	17	2,230.8	334.4	879.8	718.7	161.1	–	–	–	2.2	–	231.0	223.5	7.4
	24	2,217.8	334.6	874.0	786.5	87.4	–	–	–	1.8	–	228.1	220.8	7.3
	31	2,257.3	334.2	908.2	812.3	95.9	–	–	–	1.4	–	233.6	226.6	7.0
Aug.	7	2,271.2	336.5	921.4	813.2	108.2	–	–	–	2.0	–	231.0	223.9	7.2
	14	2,277.4	337.3	904.2	749.3	155.0	–	–	–	1.8	–	259.0	252.0	7.1
	21	2,274.8	337.6	903.3	751.9	151.4	–	–	–	1.4	–	258.2	251.1	7.2
	28	2,293.3	339.0	904.0	748.2	155.9	–	–	–	2.3	–	276.9	269.3	7.6
Sep.	4	2,306.2	336.4	947.4	773.9	173.5	–	–	–	5.5	–	238.6	231.4	7.2
	11	2,299.5	337.4	934.1	760.5	173.6	–	–	–	2.3	–	246.8	239.7	7.1
	18	2,310.9	337.8	905.4	810.9	94.6	–	–	–	2.9	–	286.3	279.0	7.3
	25	2,325.1	338.3	908.3	812.5	95.8	–	–	–	2.9	–	286.3	278.9	7.3
Oct.	2	2,383.8	337.0	1,000.3	870.0	130.3	–	–	–	3.0	–	252.3	245.0	7.3
	9	2,379.0	338.2	996.6	812.7	183.9	–	–	–	2.5	–	247.4	240.2	7.2
	16	2,382.2	338.7	975.6	796.8	178.7	–	–	–	2.8	–	264.5	257.4	7.1
	23	2,401.0	339.1	1,016.1	1,010.1	6.1	–	–	–	2.0	–	252.8	245.5	7.3
	30	2,394.5	338.1	1,030.5	812.5	218.0	–	–	–	1.1	–	230.2	223.1	7.1
Nov.	6	2,373.1	339.3	1,027.6	918.1	109.4	–	–	–	3.8	–	213.0	206.0	7.0
	13	2,406.2	339.8	1,039.2	912.8	126.4	–	–	–	5.1	–	231.2	224.1	7.1
	20	2,409.1	340.0	1,031.8	854.6	177.1	–	–	0.0	6.9	–	240.3	233.0	7.3
	27	2,450.9	341.4	1,051.7	866.4	185.2	–	–	–	5.8	–	250.9	243.1	7.8
Dec.	4	2,465.1	343.0	1,080.5	882.3	198.0	–	–	0.2	7.8	–	223.0	215.3	7.7
	11	2,451.1	345.2	1,075.2	883.1	192.0	–	–	0.1	4.9	–	200.4	192.6	7.8
	18	2,458.9	347.4	1,034.5	839.9	194.6	–	–	–	3.2	–	216.1	208.0	8.2
	25	2,485.2	349.9	1,029.4	814.6	214.8	–	–	–	3.2	–	217.5	208.8	8.6
2021 Jan.	1	2,536.2	350.3	1,018.8	793.8	225.0	–	–	–	7.5	–	209.7	196.0	13.7

***** 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 quarrter. **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 monthy basis. The counterpart of this adjustment is disclosed as an "Intra-Eurosystem liability related to

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]										
270.0	7.7	8.5	8.5	–	57.9	273.2	–	507.1	108.9	2020 June 12
251.0	7.8	8.1	8.1	–	57.9	275.2	–	507.1	108.9	19
238.1	7.4	8.1	8.1	–	57.9	278.9	–	507.1	109.0	26
230.0	6.9	7.4	7.4	–	57.1	274.7	–	542.9	109.0	July 3
228.9	6.1	7.7	7.7	–	57.1	277.5	–	542.9	109.0	10
237.0	6.0	7.5	7.5	–	57.1	274.6	–	542.9	109.0	17
227.2	5.6	7.9	7.9	–	57.1	275.6	–	542.9	109.0	24
224.2	5.7	7.4	7.4	–	57.1	272.1	–	542.9	109.0	31
220.3	5.6	7.5	7.5	–	57.1	275.8	–	542.9	109.0	Aug. 7
210.6	5.9	7.5	7.5	–	57.1	275.3	–	542.9	109.0	14
209.6	5.6	7.7	7.7	–	57.1	276.1	–	542.9	109.0	21
204.2	5.4	7.4	7.4	–	57.1	277.2	–	542.9	109.0	28
209.9	5.7	7.2	7.2	–	57.1	280.2	–	542.9	108.9	Sep. 4
209.4	5.7	7.2	7.2	–	57.1	281.2	–	542.9	108.9	11
206.0	5.8	6.9	6.9	–	57.1	284.6	–	542.9	108.9	18
216.2	5.9	6.9	6.9	–	57.1	284.9	–	542.9	108.9	25
219.0	5.8	6.6	6.6	–	55.9	279.1	–	543.5	108.9	Oct. 2
220.6	5.8	6.4	6.4	–	55.9	277.8	–	543.5	108.9	9
224.4	5.9	6.4	6.4	–	55.9	280.7	–	543.5	108.9	16
212.5	6.1	6.3	6.3	–	55.9	284.0	–	543.5	108.9	23
212.0	6.1	6.3	6.3	–	55.9	284.8	–	543.5	108.9	30
209.7	6.3	6.1	6.1	–	55.9	290.6	–	543.5	108.8	Nov. 6
214.8	6.3	5.9	5.9	–	55.9	296.0	–	543.5	108.8	13
218.3	6.5	6.1	6.1	–	55.9	298.1	–	543.5	108.8	20
231.2	7.0	5.2	5.2	–	55.9	299.9	–	543.5	108.8	27
241.4	7.2	5.0	5.0	–	55.9	301.9	–	543.5	108.8	Dec. 4
260.5	8.0	4.2	4.2	–	55.9	301.5	–	543.5	108.8	11
300.3	8.4	3.8	3.8	–	55.9	304.2	–	543.5	108.8	18
349.2	8.0	4.1	4.1	–	55.9	301.7	–	543.5	108.8	25
431.1	7.8	3.9	3.9	–	54.8	301.4	–	512.9	108.8	2021 Jan. 1
Deutsche Bundesbank										
103.2	0.0	0.9	0.9	–	15.0	30.4	458.5	157.8	5.7	2020 June 12
104.2	0.0	0.7	0.7	–	15.0	30.3	458.5	157.8	5.7	19
96.1	0.0	0.7	0.7	–	15.0	29.7	458.5	157.8	5.7	26
99.1	0.0	0.4	0.4	–	14.8	29.3	458.1	168.8	5.7	July 3
99.7	0.0	0.7	0.7	–	14.8	30.2	458.1	168.8	5.7	10
105.3	0.0	0.4	0.4	–	14.8	30.4	458.1	168.8	5.7	17
100.7	0.0	0.6	0.6	–	14.8	30.6	458.1	168.8	5.7	24
99.3	0.0	0.2	0.2	–	14.8	30.6	460.5	168.8	5.7	31
99.6	0.0	0.2	0.2	–	14.8	30.6	460.5	168.8	5.7	Aug. 7
94.4	0.0	0.2	0.2	–	14.8	30.6	460.5	168.8	5.7	14
93.0	0.0	0.7	0.7	–	14.8	30.7	460.5	168.8	5.7	21
89.9	0.0	0.5	0.5	–	14.8	30.9	460.5	168.8	5.7	28
93.2	0.0	0.1	0.1	–	14.8	31.3	464.3	168.8	5.7	Sep. 4
93.8	0.0	0.1	0.1	–	14.8	31.4	464.3	168.8	5.7	11
93.0	0.0	0.0	0.0	–	14.8	31.8	464.3	168.8	5.7	18
103.8	0.0	0.0	0.0	–	14.8	31.8	464.3	168.8	5.7	25
102.9	0.0	–	–	–	14.5	30.6	467.0	170.4	5.7	Oct. 2
106.0	0.0	–	–	–	14.5	30.8	467.0	170.4	5.7	9
112.1	0.0	0.2	0.2	–	14.5	30.8	467.0	170.4	5.7	16
101.4	0.0	0.2	0.2	–	14.5	31.9	467.0	170.4	5.7	23
103.6	0.0	0.2	0.2	–	14.5	30.9	469.4	170.4	5.7	30
98.0	0.0	0.2	0.2	–	14.5	31.3	469.4	170.4	5.7	Nov. 6
99.6	0.0	0.0	0.0	–	14.5	31.3	469.4	170.4	5.7	13
98.4	0.0	0.4	0.4	–	14.5	31.3	469.4	170.4	5.7	20
109.6	0.0	0.2	0.2	–	14.5	31.3	469.4	170.4	5.7	27
117.9	0.0	0.3	0.3	–	14.5	31.4	470.7	170.4	5.7	Dec. 4
132.6	0.0	0.1	0.1	–	14.5	31.5	470.7	170.4	5.7	11
164.4	0.0	0.0	0.0	–	14.5	31.9	470.7	170.4	5.7	18
192.1	0.0	0.0	0.0	–	14.5	31.9	470.7	170.4	5.7	25
256.8	0.0	0.0	0.0	–	14.5	31.9	470.7	170.4	5.7	2021 Jan. 1

euro banknote issue". The remaining 92% of the value of the euro banknotes in circulation is allocated, likewise on an 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 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 Deutsche 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			
				to banks in the home country			to banks in other Member States				to non-banks in the home country		
												Enterprises and households	
			Total	Total	Loans	Securities issued by banks	Total	Loans	Securities issued by banks	Total	Total	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
2019	8,311.0	43.4	2,230.1	1,759.8	1,493.5	266.3	470.4	327.6	142.8	4,020.1	3,584.9	3,168.7	2,864.9
2019 Feb.	7,935.7	36.9	2,304.8	1,862.5	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	8,372.1	37.4	2,311.4	1,845.2	1,575.0	270.2	466.2	324.2	142.0	3,984.9	3,539.6	3,114.5	2,815.1
Aug.	8,645.5	38.3	2,327.7	1,857.2	1,589.6	267.6	470.5	327.6	142.9	4,009.7	3,554.6	3,127.0	2,827.3
Sep.	8,550.4	38.0	2,323.6	1,835.8	1,569.4	266.4	487.8	344.3	143.5	4,001.0	3,562.6	3,139.5	2,839.7
Oct.	8,445.6	39.3	2,312.0	1,810.4	1,543.9	266.5	501.6	358.5	143.1	4,008.1	3,569.7	3,149.2	2,847.6
Nov.	8,509.2	40.1	2,361.5	1,860.2	1,590.2	270.0	501.3	358.1	143.2	4,027.4	3,586.5	3,166.8	2,863.7
Dec.	8,311.0	43.4	2,230.1	1,759.8	1,493.5	266.3	470.4	327.6	142.8	4,020.1	3,584.9	3,168.7	2,864.9
2020 Jan.	8,482.2	39.4	2,293.1	1,800.7	1,531.5	269.2	492.4	348.1	144.3	4,033.9	3,591.5	3,173.1	2,867.5
Feb.	8,666.7	40.3	2,308.1	1,815.4	1,545.5	269.9	492.7	348.9	143.8	4,055.3	3,606.4	3,190.1	2,885.8
Mar.	8,912.6	48.1	2,421.0	1,920.7	1,651.9	268.8	500.4	357.5	142.8	4,096.9	3,641.9	3,215.5	2,915.9
Apr.	9,014.6	48.6	2,442.9	1,943.2	1,674.0	269.2	499.7	355.0	144.8	4,115.5	3,656.4	3,225.2	2,926.3
May	8,915.3	48.1	2,395.2	1,896.4	1,631.8	264.6	498.8	355.2	143.6	4,149.8	3,682.9	3,247.5	2,946.1
June	9,026.9	46.0	2,542.6	2,056.2	1,788.0	268.2	486.4	343.6	142.8	4,153.0	3,683.1	3,249.8	2,949.1
July	9,069.0	45.5	2,574.4	2,099.6	1,830.7	268.9	474.8	333.3	141.5	4,153.7	3,688.0	3,258.4	2,958.3
Aug.	8,985.5	46.0	2,595.4	2,127.5	1,858.5	269.0	467.9	328.0	139.9	4,148.3	3,691.9	3,266.7	2,966.1
Sep.	9,097.4	46.1	2,657.2	2,196.9	1,926.4	270.6	460.3	320.7	139.5	4,153.9	3,696.5	3,269.8	2,968.7
Oct.	9,124.3	46.3	2,686.7	2,226.8	1,957.0	269.8	459.9	320.9	139.0	4,181.8	3,713.6	3,283.1	2,980.6
Nov.	9,096.0	45.7	2,684.0	2,232.0	1,965.2	266.8	452.0	313.9	138.1	4,198.6	3,723.7	3,293.2	2,991.0
													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
2019	483.4	2.8	20.7	– 3.8	– 2.3	– 1.5	24.5	16.9	7.5	161.8	130.5	148.2	140.9
2019 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	49.8	– 0.5	– 23.0	– 25.4	– 26.0	0.6	2.4	1.5	0.9	12.1	9.1	6.8	5.6
Aug.	265.9	0.8	14.8	11.4	14.2	– 2.8	3.4	2.7	0.7	23.9	14.6	12.3	11.9
Sep.	– 100.4	– 0.3	– 19.8	– 19.0	– 18.0	– 1.0	– 0.7	– 1.3	0.6	7.9	8.2	12.1	12.1
Oct.	– 93.5	1.2	– 9.8	– 24.8	– 25.0	0.2	15.0	15.3	– 0.3	8.8	8.1	10.5	8.8
Nov.	55.4	0.8	48.2	49.3	45.9	3.3	– 1.1	– 1.2	0.1	18.6	16.6	17.3	15.8
Dec.	– 187.4	3.3	– 129.3	– 99.6	– 96.3	– 3.3	– 29.7	– 29.4	– 0.3	– 6.1	– 1.2	2.2	1.6
2020 Jan.	162.1	– 4.0	61.4	40.5	37.7	2.8	21.0	19.6	1.4	13.0	6.8	4.7	3.1
Feb.	193.8	0.8	20.5	18.6	13.8	4.8	1.9	0.5	1.3	21.8	15.0	17.2	18.3
Mar.	251.0	7.9	113.4	105.3	106.1	– 0.9	8.2	8.8	– 0.6	44.3	36.8	26.5	31.0
Apr.	96.1	0.5	20.8	21.8	21.5	0.3	– 1.1	– 3.0	1.9	18.2	14.2	9.8	10.5
May	– 40.6	– 0.6	22.6	22.4	19.3	3.1	0.2	1.3	– 1.1	27.3	24.9	20.5	18.0
June	118.6	– 2.1	149.4	161.5	157.8	3.7	– 12.1	– 11.2	– 0.9	5.0	1.7	3.6	4.3
July	67.5	– 0.5	36.5	45.1	44.3	0.8	– 8.6	– 7.5	– 1.1	3.1	6.6	10.2	10.8
Aug.	– 79.5	0.5	21.7	28.2	28.0	0.1	– 6.4	– 4.9	– 1.5	– 4.9	4.3	8.7	8.1
Sep.	104.9	0.1	60.5	69.0	67.5	1.5	– 8.5	– 8.0	– 0.4	5.2	4.5	3.0	2.6
Oct.	25.2	0.2	29.1	29.7	30.5	– 0.8	– 0.6	0.1	– 0.7	27.6	17.3	12.9	11.3
Nov.	1.5	– 0.7	26.3	34.5	36.0	– 1.5	– 8.2	– 7.4	– 0.8	17.6	10.7	10.7	11.1

***** 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 exchange

IV. Banks

euro area													
				to non-banks in other Member States						Claims on non-euro area residents			
	General government				Enterprises and households		General government						
Securities	Total	Loans	Securities [2]	Total	Total	of which: Loans	Total	Loans	Securities	Total	of which: Loans	Other assets [1]	Period
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
303.8	416.2	254.7	161.6	435.2	312.6	199.0	122.6	29.4	93.2	1,035.8	777.5	981.5	2019
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	2019 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
299.4	425.0	260.2	164.8	445.3	322.2	209.5	123.1	29.0	94.1	1,114.6	851.7	923.8	July
299.7	427.6	260.2	167.4	455.1	330.1	216.8	125.0	28.9	96.1	1,122.3	857.7	1,147.5	Aug.
299.8	423.2	255.1	168.1	438.3	313.4	200.6	124.9	28.8	96.1	1,106.8	841.9	1,081.1	Sep.
301.6	420.5	257.1	163.4	438.4	313.1	201.3	125.3	30.1	95.2	1,102.8	842.5	983.5	Oct.
303.1	419.8	257.7	162.0	440.8	315.2	201.0	125.6	30.5	95.1	1,091.3	828.7	989.0	Nov.
303.8	416.2	254.7	161.6	435.2	312.6	199.0	122.6	29.4	93.2	1,035.8	777.5	981.5	Dec.
305.6	418.3	258.6	159.8	442.4	316.4	203.8	126.0	29.8	96.2	1,078.6	819.6	1,037.1	2020 Jan.
304.3	416.3	256.5	159.8	448.9	322.8	206.6	126.2	29.9	96.3	1,088.6	829.3	1,174.5	Feb.
299.6	426.4	258.5	167.9	455.0	325.2	212.8	129.8	29.5	100.3	1,104.4	838.8	1,242.1	Mar.
298.8	431.2	259.2	172.0	459.1	329.0	217.4	130.2	31.1	99.1	1,119.2	852.3	1,288.4	Apr.
301.4	435.4	258.3	177.1	466.9	334.5	220.6	132.3	31.0	101.3	1,102.1	840.8	1,220.2	May
300.7	433.3	257.8	175.5	469.9	331.1	215.4	138.8	29.2	109.6	1,075.8	816.4	1,209.5	June
300.1	429.6	259.1	170.5	465.7	313.2	217.1	152.5	29.9	122.6	1,047.3	792.5	1,248.1	July
300.7	425.1	253.7	171.4	456.5	311.1	214.5	145.4	29.2	116.1	1,037.6	784.0	1,158.2	Aug.
301.1	426.7	256.0	170.8	457.4	311.0	215.2	146.4	29.3	117.0	1,063.9	808.9	1,176.3	Sep.
302.5	430.5	257.3	173.2	468.2	318.6	219.6	149.5	30.2	119.3	1,049.9	793.4	1,159.6	Oct.
302.2	430.5	256.7	173.8	474.9	325.7	222.5	149.2	29.1	120.1	1,048.0	792.3	1,119.7	Nov.
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
7.3	– 17.7	– 8.6	– 9.1	31.3	29.5	26.9	1.7	0.0	1.7	– 32.1	– 33.3	330.3	2019
– 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	2019 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	2.2	2.5	– 0.2	3.0	1.3	2.1	1.7	– 0.0	1.8	4.4	4.1	56.8	July
0.4	2.3	– 0.2	2.5	9.3	7.5	7.0	1.8	– 0.1	1.9	2.6	1.2	223.7	Aug.
0.0	– 4.0	– 4.7	0.8	– 0.3	– 0.1	0.5	– 0.1	– 0.1	– 0.0	– 21.9	– 21.7	– 66.4	Sep.
1.7	– 2.4	2.1	– 4.6	0.8	0.2	1.0	0.5	1.3	– 0.8	3.9	7.7	– 97.7	Oct.
1.5	– 0.8	0.6	– 1.4	2.1	1.7	– 0.7	0.4	0.4	0.0	– 17.6	– 19.3	5.3	Nov.
0.7	– 3.4	– 3.0	– 0.4	– 4.9	– 1.4	– 0.9	– 3.5	– 1.8	– 1.7	– 47.9	– 44.3	– 7.5	Dec.
1.6	2.1	3.9	– 1.8	6.2	3.2	4.5	3.0	0.4	2.6	36.0	35.9	55.6	2020 Jan.
– 1.1	– 2.2	– 2.1	– 0.1	6.8	6.7	2.8	0.1	0.1	– 0.0	13.5	12.5	137.3	Feb.
– 4.5	10.2	2.0	8.3	7.5	3.3	6.5	4.2	– 0.4	4.6	17.8	11.2	67.6	Mar.
– 0.7	4.5	0.6	3.9	4.0	3.7	4.3	0.3	1.6	– 1.3	10.4	9.3	46.3	Apr.
2.5	4.4	– 0.9	5.3	2.5	0.8	– 1.2	1.6	– 0.6	2.2	– 23.0	– 18.2	– 67.0	May
– 0.7	– 1.9	– 0.3	– 1.6	3.3	– 3.2	– 4.9	6.4	– 1.8	8.2	– 22.9	– 21.2	– 10.8	June
– 0.6	– 3.6	1.3	– 4.9	– 3.5	1.6	2.7	– 5.1	0.6	– 5.7	– 10.3	– 7.1	38.7	July
0.6	– 4.4	– 5.4	0.9	– 9.2	– 2.3	– 2.5	– 6.9	– 0.7	– 6.2	– 7.0	– 6.0	– 89.8	Aug.
0.4	1.5	2.2	– 0.7	0.7	– 0.1	0.7	0.9	0.1	0.7	21.1	20.0	18.0	Sep.
1.6	4.4	2.0	2.5	10.4	7.3	4.2	3.0	0.9	2.1	– 15.3	– 16.7	– 16.4	Oct.
– 0.4	– 0.0	– 0.6	0.6	6.9	7.3	3.3	– 0.3	– 1.1	0.8	– 1.9	– 1.0	– 39.9	Nov.

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 Deutsche Bundesbank) in Germany * Liabilities

€ billion

Period	Balance sheet total [1]	Deposits of banks (MFIs) in the euro area			Deposits of non-banks (non-MFIs) in the euro area								
						Deposits of non-banks in the home country						Deposits of non-banks	
			of banks					With agreed maturities		At agreed notice			
		Total	in the home country	in other Member States	Total	Total	Overnight	Total	of which: up to 2 years	Total	of which: up to 3 months	Total	Overnight
	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
2019	8,311.0	1,242.8	1,010.4	232.4	3,778.1	3,649.8	2,230.9	843.7	261.7	575.1	540.5	116.3	54.6
2019 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	8,372.1	1,291.9	1,055.1	236.8	3,728.8	3,605.7	2,160.6	863.3	271.9	581.8	543.4	110.3	51.1
Aug.	8,645.5	1,306.3	1,062.2	244.1	3,754.1	3,626.8	2,182.9	863.7	276.0	580.2	542.2	114.6	54.3
Sep.	8,550.4	1,299.7	1,038.3	261.4	3,745.4	3,618.0	2,179.8	859.2	273.5	579.0	541.5	115.2	55.7
Oct.	8,445.6	1,313.5	1,050.3	263.2	3,761.4	3,633.5	2,201.7	854.6	270.4	577.2	540.6	114.1	51.4
Nov.	8,509.2	1,326.4	1,057.3	269.1	3,791.3	3,663.8	2,238.9	849.3	266.7	575.6	539.9	115.8	52.6
Dec.	8,311.0	1,242.8	1,010.4	232.4	3,778.1	3,649.8	2,230.9	843.7	261.7	575.1	540.5	116.3	54.6
2020 Jan.	8,482.2	1,293.2	1,033.0	260.2	3,775.6	3,647.0	2,229.5	846.8	267.2	570.7	537.5	116.3	54.3
Feb.	8,666.7	1,313.5	1,047.8	265.7	3,794.5	3,664.6	2,249.1	847.1	270.3	568.4	535.8	117.0	55.2
Mar.	8,912.6	1,418.4	1,135.8	282.6	3,853.2	3,705.0	2,299.1	841.5	268.6	564.4	532.5	135.5	72.3
Apr.	9,014.6	1,426.3	1,156.6	269.6	3,872.7	3,729.4	2,339.0	826.7	259.6	563.8	532.6	130.3	65.2
May	8,915.3	1,386.1	1,112.0	274.0	3,913.5	3,764.4	2,370.9	829.9	266.6	563.6	532.9	136.6	70.6
June	9,026.9	1,503.5	1,230.4	273.1	3,906.1	3,754.5	2,379.1	812.8	256.1	562.5	532.8	139.2	71.1
July	9,069.0	1,488.7	1,209.5	279.2	3,937.1	3,783.3	2,408.1	814.3	263.0	560.9	531.7	132.9	65.5
Aug.	8,985.5	1,489.8	1,213.2	276.6	3,951.0	3,790.7	2,421.8	808.3	258.8	560.6	531.8	129.7	63.6
Sep.	9,097.4	1,523.9	1,252.4	271.5	3,975.9	3,795.1	2,436.7	798.3	251.4	560.1	531.7	140.6	72.8
Oct.	9,124.3	1,536.3	1,264.9	271.4	4,015.2	3,827.0	2,473.1	794.2	249.1	559.7	531.7	140.8	69.6
Nov.	9,096.0	1,515.4	1,245.5	269.9	4,034.8	3,846.1	2,508.7	777.9	235.3	559.5	531.9	140.2	69.0
	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
2019	483.4	12.6	– 10.0	22.6	132.1	120.0	154.1	– 30.6	– 6.6	– 3.4	– 0.6	10.6	8.7
2019 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	49.8	– 1.3	6.3	– 7.6	– 0.7	9.3	15.4	– 5.2	– 2.8	– 0.9	– 0.6	– 5.8	– 5.6
Aug.	265.9	13.7	6.8	6.9	24.7	20.5	21.9	0.2	4.0	– 1.5	– 1.2	4.2	3.1
Sep.	– 100.4	– 19.2	– 21.7	2.5	– 9.5	– 9.5	– 3.5	– 4.7	– 2.7	– 1.2	– 0.7	0.5	1.3
Oct.	– 93.5	15.0	12.5	2.5	17.1	16.2	22.5	– 4.5	– 3.1	– 1.8	– 1.0	– 0.9	– 4.2
Nov.	55.4	11.9	6.6	5.3	29.1	29.5	36.7	– 5.7	– 3.8	– 1.6	– 0.7	1.5	1.1
Dec.	– 187.4	– 82.4	– 46.4	– 36.0	– 12.2	– 13.2	– 7.3	– 5.4	– 4.9	– 0.5	0.6	0.7	2.2
2020 Jan.	162.1	49.3	22.2	27.2	– 3.4	– 3.5	– 2.0	2.9	5.3	– 4.5	– 3.0	– 0.1	– 0.4
Feb.	193.8	20.0	14.6	5.4	18.5	17.3	19.4	0.2	3.0	– 2.2	– 1.7	0.6	0.9
Mar.	251.0	104.6	87.7	16.9	58.9	40.4	50.1	– 5.6	– 1.7	– 4.0	– 3.4	18.5	17.1
Apr.	96.1	7.0	20.3	– 13.3	18.8	24.0	39.6	– 15.0	– 9.2	– 0.7	0.1	– 5.3	– 7.1
May	– 40.6	22.0	16.8	5.2	34.0	33.3	29.9	3.6	7.3	– 0.2	0.3	1.2	0.1
June	118.6	118.2	118.9	– 0.7	– 7.0	– 9.6	8.3	– 16.8	– 10.5	– 1.1	– 0.1	2.6	0.6
July	67.5	– 11.0	– 19.0	8.1	34.1	31.5	31.0	2.1	7.4	– 1.6	– 1.1	– 5.7	– 5.4
Aug.	– 79.5	1.6	4.0	– 2.4	14.4	7.7	13.8	– 5.9	– 4.1	– 0.2	0.2	– 3.2	– 1.9
Sep.	104.9	33.1	38.7	– 5.7	24.1	3.7	14.4	– 10.2	– 7.6	– 0.5	– 0.1	10.7	9.1
Oct.	25.2	12.3	12.4	– 0.1	39.1	32.1	36.4	– 3.9	– 3.3	– 0.4	– 0.0	0.1	– 3.3
Nov.	1.5	6.6	7.6	– 1.0	19.8	19.1	35.5	– 16.3	– 13.8	– 0.2	0.3	– 0.5	– 0.6

***** 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 governments.

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: up to 2 years	Total	of which: up to 3 months	Total	of which: domestic central governments			Total	of which: with maturities of up to 2 years [3]				
End of year or month													
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
59.0	16.5	2.7	2.4	12.0	11.2	1.5	1.9	1,063.2	32.3	559.4	728.6	935.6	2019
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	2019 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	709.9	882.4	July
57.5	17.4	2.8	2.5	12.8	11.2	16.9	2.2	1,072.7	33.9	676.2	713.0	1,103.9	Aug.
56.8	15.2	2.7	2.4	12.2	10.9	1.5	2.3	1,077.8	35.7	671.4	719.2	1,033.2	Sep.
60.1	17.8	2.7	2.4	13.8	10.6	1.2	2.2	1,067.5	33.4	657.4	711.0	931.3	Oct.
60.6	18.3	2.7	2.4	11.7	10.6	1.7	2.0	1,076.7	33.7	653.6	723.6	933.9	Nov.
59.0	16.5	2.7	2.4	12.0	11.2	1.5	1.9	1,063.2	32.3	559.4	728.6	935.6	Dec.
59.4	17.1	2.7	2.4	12.3	10.8	2.5	1.8	1,078.0	36.0	622.5	712.5	996.0	2020 Jan.
59.2	15.3	2.6	2.4	12.9	11.2	2.0	1.9	1,087.4	34.6	638.8	714.0	1,114.6	Feb.
60.6	16.5	2.6	2.4	12.8	11.2	1.7	2.5	1,074.1	30.8	674.1	713.4	1,175.2	Mar.
62.4	17.6	2.6	2.4	13.0	11.1	3.4	2.4	1,078.1	29.6	704.0	693.5	1,234.2	Apr.
63.4	16.4	2.6	2.4	12.5	10.8	2.2	2.2	1,076.9	28.8	693.7	686.4	1,154.4	May
65.4	19.2	2.6	2.4	12.5	11.8	0.9	2.1	1,074.0	28.6	696.8	702.1	1,141.4	June
64.8	20.2	2.6	2.3	20.8	20.1	2.1	1.9	1,067.4	25.9	698.3	694.7	1,178.9	July
63.6	19.3	2.6	2.3	30.6	29.8	1.7	1.9	1,063.9	25.5	682.1	699.9	1,095.2	Aug.
65.2	21.8	2.6	2.3	40.2	39.0	1.2	2.6	1,077.3	25.6	687.1	720.4	1,108.9	Sep.
68.6	25.0	2.6	2.3	47.3	46.6	1.4	2.7	1,075.1	24.6	687.8	712.4	1,093.3	Oct.
68.7	24.3	2.6	2.3	48.5	47.6	9.1	2.5	1,069.8	23.0	696.7	713.3	1,054.3	Nov.
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
2.0	0.6	– 0.1	– 0.1	1.4	1.4	5.6	– 0.5	22.3	0.1	– 47.9	30.0	329.1	2019
– 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	2019 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
– 0.3	– 0.5	– 0.0	0.0	– 4.2	– 2.8	1.0	0.1	1.0	0.2	– 11.7	2.2	59.2	July
1.1	1.7	– 0.0	– 0.0	– 0.0	– 0.0	3.1	0.1	– 5.4	0.4	5.8	2.3	221.7	Aug.
– 0.8	– 2.2	– 0.0	– 0.0	– 0.5	– 0.2	– 1.1	0.1	1.3	1.7	– 8.3	5.3	– 69.0	Sep.
3.4	2.7	– 0.0	– 0.0	1.8	– 0.1	– 0.3	– 0.1	– 6.5	– 2.1	– 9.7	– 6.9	– 102.1	Oct.
0.4	0.4	– 0.0	– 0.0	– 2.0	0.2	0.4	– 0.2	5.6	0.2	– 7.2	11.5	4.2	Nov.
– 1.5	– 1.7	– 0.0	– 0.0	0.3	0.6	– 0.2	– 0.1	– 9.2	– 1.3	– 90.5	6.4	0.7	Dec.
0.3	0.5	– 0.0	– 0.0	0.3	– 0.5	1.1	– 0.1	11.0	3.5	59.9	– 17.2	61.4	2020 Jan.
– 0.3	– 1.8	– 0.0	– 0.0	0.6	0.4	– 0.6	0.1	8.6	– 1.4	15.5	1.3	130.4	Feb.
1.4	1.2	– 0.0	– 0.0	– 0.0	– 0.0	– 0.3	0.6	– 11.9	– 3.8	36.2	– 0.3	63.2	Mar.
1.8	1.1	– 0.0	– 0.0	0.1	– 0.1	1.7	– 0.1	1.6	– 1.3	27.6	– 20.7	60.3	Apr.
1.1	– 1.1	– 0.0	– 0.0	– 0.5	– 0.3	– 1.2	– 0.1	5.1	– 0.6	– 21.9	3.5	– 82.0	May
2.0	2.8	– 0.0	0.0	0.0	1.0	– 1.3	– 0.2	– 1.3	– 0.1	4.6	16.4	– 10.8	June
– 0.3	1.2	– 0.0	– 0.0	8.3	8.3	1.3	– 0.2	3.3	– 1.2	10.9	– 4.3	33.3	July
– 1.3	– 0.8	– 0.0	– 0.0	9.8	9.8	– 0.5	0.0	– 2.2	– 0.4	– 14.9	5.7	– 83.7	Aug.
1.6	2.4	– 0.0	– 0.0	9.6	9.2	– 0.5	0.7	10.5	0.0	2.6	19.6	14.9	Sep.
3.4	3.2	– 0.0	0.0	7.0	7.5	0.3	0.1	– 2.9	– 1.0	– 0.1	– 8.2	– 15.5	Oct.
0.1	– 0.7	– 0.0	– 0.0	1.2	1.0	7.6	– 0.2	– 6.8	– 3.1	8.9	3.6	– 38.0	Nov.

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
					of which:			of which:					
								Loans					
				Total	Balances and loans	Securities issued by banks	Total	for up to and including 1 year	for more than 1 year	Bills	Securities issued by non-banks		
All categories of banks													
2020 June	1,530	9,082.2	819.6	2,384.2	1,880.4	498.9	4,459.5	405.3	3,339.4	0.3	690.7	98.1	1,320.8
July	1,527	9,126.2	859.0	2,353.6	1,853.2	495.7	4,454.7	405.3	3,348.1	0.3	678.0	98.5	1,360.4
Aug.	1,526	9,043.3	810.5	2,414.9	1,917.9	492.4	4,449.5	389.7	3,361.2	0.3	673.5	98.4	1,269.9
Sep.	1,518	9,155.2	933.3	2,378.2	1,882.3	491.2	4,456.2	383.5	3,371.2	0.3	677.6	98.5	1,289.1
Oct.	1,511	9,183.4	859.7	2,462.0	1,968.1	489.5	4,490.9	389.4	3,387.4	0.3	688.4	98.6	1,272.1
Nov.	1,501	9,154.5	910.5	2,409.0	1,918.2	486.5	4,506.7	390.6	3,396.3	0.3	698.2	97.3	1,231.0
Commercial banks 6													
2020 Oct.	260	3,870.9	458.2	993.1	911.8	80.5	1,409.3	240.7	938.1	0.3	213.5	36.8	973.6
Nov.	257	3,845.0	493.3	955.1	874.7	79.7	1,417.4	245.3	937.3	0.2	220.8	35.2	944.0
Big banks 7													
2020 Oct.	3	2,270.1	144.0	532.9	499.6	33.3	670.4	126.6	422.6	0.1	108.7	30.7	892.1
Nov.	3	2,244.8	160.0	521.8	488.6	33.1	673.0	125.4	424.8	0.0	112.3	29.3	860.8
Regional banks and other commercial banks													
2020 Oct.	146	1,164.1	193.3	269.7	223.8	45.6	620.0	74.9	442.9	0.1	98.6	5.4	75.7
Nov.	144	1,155.7	203.1	241.3	196.0	45.1	631.4	84.1	442.0	0.1	102.4	5.3	74.5
Branches of foreign banks													
2020 Oct.	111	436.7	120.9	190.5	188.4	1.5	118.8	39.2	72.6	0.1	6.3	0.7	5.9
Nov.	110	444.6	130.2	192.1	190.1	1.5	113.0	35.8	70.5	0.1	6.0	0.7	8.7
Landesbanken													
2020 Oct.	6	879.8	98.2	246.5	188.8	57.2	404.7	43.5	313.9	0.0	43.9	8.6	121.9
Nov.	6	856.3	96.5	238.8	181.9	56.3	399.8	41.3	311.7	0.0	43.8	8.6	112.6
Savings banks													
2020 Oct.	377	1,446.4	133.7	178.9	60.7	118.0	1,097.0	47.5	878.4	0.0	170.5	14.8	21.9
Nov.	377	1,455.8	137.0	179.4	61.3	117.9	1,102.4	46.9	883.4	0.0	171.5	14.9	22.2
Credit cooperatives													
2020 Oct.	822	1,058.6	47.9	193.4	79.9	113.2	775.7	33.1	624.2	0.0	118.4	18.1	23.5
Nov.	815	1,065.8	48.6	195.5	82.5	112.8	779.9	32.9	628.1	0.0	118.8	18.2	23.6
Mortgage banks													
2020 Oct.	10	241.4	8.6	23.2	13.3	9.8	200.9	3.3	178.4	–	19.1	0.2	8.6
Nov.	10	240.3	8.4	21.7	12.0	9.6	201.5	3.3	179.3	–	18.9	0.2	8.6
Building and loan associations													
2020 Oct.	18	242.4	1.6	45.8	29.8	16.0	190.9	1.0	164.6	.	25.3	0.2	3.9
Nov.	18	243.4	1.8	45.5	29.4	16.0	192.0	1.0	165.5	.	25.5	0.3	3.9
Banks with special, development and other central support tasks													
2020 Oct.	18	1,443.8	111.5	781.2	683.8	94.8	412.5	20.3	289.8	0.0	97.7	20.0	118.6
Nov.	18	1,447.8	124.8	773.1	676.3	94.2	413.7	20.0	290.9	0.0	99.0	20.0	116.2
Memo item: Foreign banks 8													
2020 Oct.	145	1,409.9	236.3	453.3	415.4	37.3	560.9	104.2	355.5	0.2	96.4	3.7	155.7
Nov.	144	1,430.2	263.5	451.8	413.8	37.5	563.9	107.6	353.5	0.2	98.9	3.7	147.3
of which: Banks majority-owned by foreign banks 9													
2020 Oct.	34	973.1	115.4	262.9	227.0	35.7	442.1	65.0	282.9	0.1	90.1	3.0	149.8
Nov.	34	985.6	133.3	259.8	223.6	36.0	450.9	71.8	283.0	0.1	92.9	3.0	138.6

***** Assets and liabilities of monetary financial institutions (MFIs) in Germany. The assets and liabilities of foreign branches, of money market funds (which are also classified as MFIs) and of the Bundesbank are not included. For the definitions of the respective items, see the footnotes to Table IV.3. **1** Owing to the Act Modernising Accounting Law *(Gesetz zur Modernisierung des Bilanzrechts)* of 25 May 2009, derivative financial instruments in the trading portfolio (trading portfolio derivatives) within the meaning of Section 340e(3) sentence 1 of the German Commercial Code *(Handelsgesetzbuch)* read in conjunction with Section 35(1) number 1a of the Credit Institution Accounting Regulation *(Verordnung über die Rechnungslegung der Kreditinstitute)* are classified under "Other assets and liabilities" as of the December 2010 reporting date. Trading portfolio derivatives are listed separately in 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)										
	of which:			of which:									
					Time deposits 2			Savings deposits 4					
Total	Sight deposits	Time deposits	Total	Sight deposits	for up to and including 1 year	for more than 1 year 2	Memo item: Liabilities arising from repos 3	Total	of which: At 3 months' notice	Bank savings bonds	Bearer debt securities out-standing 5	Capital including published reserves, partici-pation rights capital, funds for general banking risks	Other liabi-lities 1	End of month
All categories of banks														
2,065.1	603.9	1,461.1	4,042.0	2,530.5	270.4	640.1	36.8	569.0	538.6	32.1	1,179.5	539.1	1,256.6	2020 June
2,051.8	614.3	1,437.5	4,074.1	2,553.4	282.3	639.4	41.9	567.3	537.5	31.8	1,162.0	540.2	1,298.1	July
2,040.4	601.0	1,439.3	4,084.0	2,562.5	279.1	643.9	40.8	567.0	537.6	31.5	1,162.2	540.0	1,216.6	Aug.
2,084.0	610.3	1,473.7	4,103.9	2,588.3	270.4	647.6	34.1	566.5	537.4	31.1	1,188.5	544.8	1,234.1	Sep.
2,096.9	618.8	1,478.0	4,143.6	2,624.0	270.4	652.5	33.0	566.0	537.4	30.7	1,175.0	546.6	1,221.3	Oct.
2,081.7	625.9	1,455.7	4,174.2	2,669.5	256.8	651.6	40.3	565.8	537.7	30.4	1,169.3	545.9	1,183.4	Nov.
Commercial banks 6														
1,025.9	447.7	578.2	1,630.1	1,115.2	167.8	236.5	30.6	98.1	93.5	12.4	165.9	182.0	867.0	2020 Oct.
1,010.0	452.3	557.7	1,645.1	1,138.5	159.8	236.3	37.8	98.3	93.8	12.3	167.7	181.0	841.2	Nov.
Big banks 7														
471.7	170.7	301.0	793.3	529.4	92.2	87.3	30.4	82.9	79.1	1.5	123.3	80.6	801.2	2020 Oct.
443.3	172.4	270.9	824.7	571.6	83.6	84.9	33.8	83.1	79.4	1.5	125.3	80.5	771.0	Nov.
Regional banks and other commercial banks														
306.1	119.9	186.1	667.8	470.9	43.4	127.9	0.2	14.8	14.0	10.8	42.1	91.5	56.8	2020 Oct.
310.0	119.3	190.7	651.6	451.3	45.5	129.3	4.1	14.8	14.0	10.7	42.0	90.7	61.4	Nov.
Branches of foreign banks														
248.2	157.1	91.1	169.0	115.0	32.3	21.3	–	0.3	0.3	0.1	0.5	10.0	9.1	2020 Oct.
256.7	160.6	96.1	168.8	115.5	30.7	22.2	–	0.4	0.4	0.1	0.4	9.8	8.8	Nov.
Landesbanken														
283.7	61.8	221.9	256.9	137.7	37.0	76.0	2.2	6.2	6.1	0.1	177.5	42.9	118.7	2020 Oct.
279.8	59.3	220.6	252.3	139.6	32.3	74.1	2.3	6.2	6.1	0.0	176.1	42.9	105.1	Nov.
Savings banks														
172.3	5.3	167.0	1,081.9	765.1	12.5	13.8	–	277.9	259.6	12.6	17.1	127.8	47.2	2020 Oct.
171.5	4.4	167.1	1,092.2	776.0	12.5	13.7	–	277.6	259.4	12.4	17.0	127.8	47.3	Nov.
Credit cooperatives														
147.6	1.8	145.8	777.9	548.0	29.7	12.8	–	183.4	177.8	4.0	10.5	88.6	33.9	2020 Oct.
147.9	1.5	146.4	784.5	555.0	29.5	12.6	–	183.3	177.9	4.0	10.5	89.1	33.8	Nov.
Mortgage banks														
59.8	3.1	56.7	65.2	2.0	4.3	58.9	–	–	–	.	98.6	10.7	7.1	2020 Oct.
59.8	3.1	56.7	64.8	2.6	3.9	58.3	–	–	–	.	98.2	10.7	6.8	Nov.
Building and loan associations														
27.6	2.3	25.2	188.3	3.4	1.2	183.2	–	0.4	0.4	0.1	2.8	12.3	11.5	2020 Oct.
28.7	2.7	26.0	188.1	3.3	1.2	183.1	–	0.4	0.4	0.1	2.8	12.3	11.6	Nov.
Banks with special, development and other central support tasks														
379.9	96.7	283.2	143.3	52.5	17.8	71.3	0.1	–	–	.	702.6	82.1	135.9	2020 Oct.
383.9	102.7	281.2	147.1	54.5	17.5	73.6	0.1	–	–	.	697.0	82.2	137.6	Nov.
***Memo item:* Foreign banks 8**														
547.2	295.7	251.4	615.3	453.8	63.9	74.8	1.4	19.0	18.6	3.9	36.2	69.5	141.7	2020 Oct.
556.6	293.5	263.1	629.3	467.2	63.3	76.1	9.8	19.0	18.6	3.8	35.8	69.4	139.0	Nov.
***of which:* Banks majority-owned by foreign banks 9**														
299.0	138.6	160.4	446.3	338.8	31.6	53.5	1.4	18.6	18.3	3.8	35.7	59.5	132.6	2020 Oct.
299.9	133.0	167.0	460.6	351.7	32.7	53.9	9.8	18.6	18.3	3.7	35.4	59.6	130.2	Nov.

loan associations: Including deposits under savings and loan contracts (see Table IV.12). **3** Included in time deposits. **4** Excluding deposits under savings and loan contracts (see also footnote 2). **5** Including subordinated negotiable bearer debt securities; excluding non-negotiable bearer debt securities. **6** Commercial banks comprise the sub-groups "Big banks", "Regional banks and other commercial banks" and "Branches of foreign banks". **7** Deutsche Bank AG, Dresdner Bank AG (up to Nov. 2009), Commerzbank AG, UniCredit Bank AG (formerly Bayerische Hypo- und Vereinsbank AG), 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 *
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
2019	43.2	476.6	1,254.7	1,016.2	0.0	0.7	237.9	4.5	3,521.5	3,119.2	0.3	3.3	398.7
2019 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
Aug.	38.0	462.1	1,365.8	1,126.4	0.0	0.9	238.4	4.8	3,491.7	3,087.2	0.2	2.9	401.4
Sep.	37.8	452.7	1,354.1	1,115.7	0.0	0.8	237.6	4.7	3,499.8	3,094.5	0.2	3.8	401.3
Oct.	39.0	529.1	1,252.1	1,013.6	0.0	0.9	237.6	4.6	3,506.7	3,104.5	0.2	3.4	398.6
Nov.	39.9	529.6	1,301.7	1,059.6	0.0	1.1	241.0	4.6	3,523.5	3,121.1	0.2	3.3	398.9
Dec.	43.2	476.6	1,254.7	1,016.2	0.0	0.7	237.9	4.5	3,521.5	3,119.2	0.3	3.3	398.7
2020 Jan.	39.2	515.2	1,256.9	1,015.4	0.0	0.8	240.7	4.6	3,528.4	3,125.8	0.3	3.3	399.1
Feb.	40.0	509.4	1,280.0	1,035.2	0.0	0.9	243.8	5.0	3,544.7	3,141.9	0.3	4.6	397.8
Mar.	47.9	621.7	1,273.0	1,029.4	0.0	1.0	242.6	5.1	3,580.0	3,174.1	0.2	5.1	400.6
Apr.	48.4	582.3	1,334.6	1,090.6	0.0	1.2	242.8	5.0	3,594.3	3,185.3	0.2	7.2	401.6
May	47.8	586.2	1,291.8	1,044.7	0.0	1.1	246.0	6.0	3,620.9	3,204.2	0.1	10.1	406.4
June	45.7	767.6	1,270.4	1,019.6	0.0	1.1	249.6	6.9	3,621.1	3,206.6	0.2	8.0	406.2
July	45.2	810.5	1,270.5	1,019.2	0.0	1.2	250.0	7.5	3,625.7	3,217.2	0.2	8.0	400.3
Aug.	45.7	760.8	1,348.1	1,096.7	0.0	1.1	250.3	7.8	3,629.7	3,219.6	0.2	9.4	400.5
Sep.	45.8	884.4	1,293.9	1,041.1	0.0	1.0	251.8	8.3	3,634.2	3,224.4	0.2	8.4	401.3
Oct.	46.1	811.0	1,397.3	1,145.2	0.0	0.8	251.2	8.6	3,651.1	3,237.6	0.2	9.0	404.3
Nov.	45.4	862.0	1,353.1	1,102.4	0.0	0.8	249.8	8.6	3,661.1	3,247.4	0.2	7.6	405.8
													Changes *
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
2019	+ 2.8	+ 59.7	– 63.0	– 61.1	– 0.0	– 0.2	– 1.6	– 1.4	+ 126.7	+ 129.1	+ 0.1	+ 3.1	– 5.5
2019 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	+ 9.2	+ 8.3	– 0.1	+ 0.9	+ 0.0
Aug.	+ 0.8	+ 1.9	+ 10.3	+ 12.9	+ 0.0	+ 0.0	– 2.6	– 0.2	+ 15.6	+ 12.1	+ 0.0	+ 0.6	+ 2.8
Sep.	– 0.2	– 9.4	– 9.2	– 8.2	– 0.0	– 0.1	– 0.8	– 0.1	+ 8.1	+ 7.3	– 0.1	+ 0.9	– 0.1
Oct.	+ 1.2	+ 76.4	– 102.1	– 102.2	–	+ 0.1	– 0.0	– 0.1	+ 6.9	+ 10.0	– 0.0	– 0.3	– 2.8
Nov.	+ 0.9	+ 0.4	+ 49.6	+ 46.0	– 0.0	+ 0.1	+ 3.4	+ 0.0	+ 16.8	+ 16.6	+ 0.0	– 0.2	+ 0.3
Dec.	+ 3.3	– 53.0	– 46.9	– 43.5	– 0.0	– 0.4	– 3.1	– 0.1	– 1.9	– 1.9	+ 0.1	+ 0.0	– 0.1
2020 Jan.	– 4.0	+ 38.6	+ 2.3	– 0.7	– 0.0	+ 0.1	+ 2.9	+ 0.1	+ 6.8	+ 6.5	– 0.1	– 0.0	+ 0.4
Feb.	+ 0.8	– 5.9	+ 23.1	+ 19.8	– 0.0	+ 0.1	+ 3.1	+ 0.4	+ 16.3	+ 16.2	+ 0.1	+ 1.4	– 1.3
Mar.	+ 7.8	+112.4	– 7.0	– 5.9	–	+ 0.1	– 1.3	+ 0.0	+ 35.3	+ 32.1	– 0.1	+ 0.4	+ 2.8
Apr.	+ 0.5	– 39.4	+ 61.6	+ 61.2	+ 0.0	+ 0.2	+ 0.2	– 0.0	+ 14.4	+ 11.2	– 0.1	+ 2.2	+ 1.0
May	– 0.6	+ 3.9	+ 16.9	+ 13.7	–	– 0.1	+ 3.2	+ 0.9	+ 24.1	+ 16.4	– 0.0	+ 2.9	+ 4.8
June	– 2.1	+181.4	– 21.4	– 25.0	–	– 0.0	+ 3.6	+ 0.9	+ 0.2	+ 2.4	+ 0.0	– 2.1	– 0.2
July	– 0.5	+ 42.9	+ 0.1	– 0.4	–	+ 0.1	+ 0.4	+ 0.6	+ 4.6	+ 10.5	– 0.0	+ 0.0	– 5.9
Aug.	+ 0.5	– 49.7	+ 77.6	+ 77.5	– 0.0	– 0.2	+ 0.3	+ 0.3	+ 4.0	+ 2.4	+ 0.0	+ 1.4	+ 0.2
Sep.	+ 0.1	+123.6	– 54.2	– 55.6	+ 0.0	– 0.0	+ 1.5	+ 0.5	+ 4.6	+ 4.8	+ 0.0	– 1.0	+ 0.7
Oct.	+ 0.2	– 73.5	+ 103.4	+ 104.2	–	– 0.2	– 0.6	+ 0.3	+ 16.5	+ 12.9	+ 0.0	+ 0.6	+ 3.0
Nov.	– 0.6	+ 51.2	– 15.9	– 14.5	– 0.0	– 0.0	– 1.5	– 0.0	+ 10.6	+ 10.5	– 0.0	– 1.4	+ 1.5

***** 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;

IV. Banks

Equalisation claims [2]	Memo item: Fiduciary loans	Participating interests in domestic banks and enterprises	Deposits of domestic banks (MFIs) [3] Total	Sight deposits [4]	Time deposits [4]	Redis-counted bills [5]	Memo item: Fiduciary loans	Deposits of domestic non-banks (non-MFIs) Total	Sight deposits	Time deposits [6]	Savings deposits [7]	Bank savings bonds [8]	Memo item: Fiduciary loans	Period
End of year or month *														
–	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
–	17.3	90.4	1,010.2	107.2	902.9	0.0	4.4	3,661.0	2,236.3	816.2	575.2	33.2	32.5	2019
–	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	2019 June
–	17.1	91.0	1,053.9	123.2	930.6	0.0	4.5	3,616.9	2,166.5	833.9	581.8	34.8	32.9	July
–	17.1	90.3	1,061.4	127.7	933.7	0.0	4.5	3,638.4	2,189.1	834.4	580.3	34.7	32.7	Aug.
–	17.0	90.0	1,037.5	121.4	916.1	0.0	4.5	3,629.1	2,185.4	830.3	579.0	34.4	32.6	Sep.
–	17.1	90.1	1,049.3	129.3	920.0	0.0	4.5	3,644.4	2,207.1	826.0	577.2	34.1	32.5	Oct.
–	17.1	90.2	1,055.9	126.6	929.4	0.0	4.5	3,674.8	2,244.5	820.9	575.7	33.8	32.5	Nov.
–	17.3	90.4	1,010.2	107.2	902.9	0.0	4.4	3,661.0	2,236.3	816.2	575.2	33.2	32.5	Dec.
–	16.9	90.0	1,031.4	125.4	906.0	0.0	4.4	3,658.2	2,235.1	819.7	570.7	32.6	32.3	2020 Jan.
–	16.9	86.1	1,046.8	133.2	913.6	0.0	4.4	3,675.9	2,254.4	820.8	568.5	32.2	32.8	Feb.
–	16.9	86.3	1,134.7	147.5	987.2	0.0	4.3	3,716.6	2,304.9	815.5	564.5	31.8	32.5	Mar.
–	17.1	86.4	1,154.9	141.2	1,013.6	0.0	4.3	3,741.9	2,345.4	801.6	563.8	31.1	32.8	Apr.
–	19.4	78.8	1,110.9	131.6	979.3	0.0	7.1	3,775.3	2,376.3	804.7	563.6	30.7	33.3	May
–	20.8	78.8	1,229.5	131.4	1,098.1	0.0	9.4	3,766.3	2,385.3	788.2	562.6	30.3	33.4	June
–	22.2	79.3	1,207.9	125.0	1,082.8	0.0	11.1	3,803.4	2,414.0	798.6	560.9	29.9	33.8	July
–	22.5	79.2	1,211.5	126.2	1,085.3	0.0	11.5	3,820.8	2,427.7	802.9	560.6	29.6	34.0	Aug.
–	22.7	79.2	1,251.5	123.8	1,127.8	0.0	12.0	3,834.2	2,442.8	802.0	560.1	29.3	34.3	Sep.
–	22.8	79.4	1,263.7	131.5	1,132.2	0.0	12.3	3,874.1	2,481.4	804.1	559.7	28.9	34.6	Oct.
–	22.9	78.1	1,244.8	134.6	1,110.2	0.0	12.5	3,894.2	2,515.3	790.8	559.6	28.5	34.4	Nov.
Changes *														
–	– 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
–	– 0.7	+ 0.1	– 8.6	+ 1.6	– 10.2	+ 0.0	– 0.3	+ 122.5	+ 155.8	– 25.7	– 3.5	– 4.1	– 1.4	2019
–	– 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	2019 June
–	– 0.4	+ 0.0	+ 6.8	+ 0.7	+ 6.0	+ 0.0	– 0.0	+ 7.2	+ 15.7	– 7.6	– 0.9	– 0.1	– 0.5	July
–	+ 0.0	– 0.6	+ 7.6	+ 4.5	+ 3.1	+ 0.0	–	+ 21.4	+ 22.6	+ 0.5	– 1.5	– 0.1	– 0.2	Aug.
–	– 0.1	+ 0.1	– 21.4	– 6.3	– 15.2	– 0.0	– 0.0	– 9.3	– 3.7	– 4.1	– 1.3	– 0.3	– 0.2	Sep.
–	+ 0.1	+ 0.2	+ 11.8	+ 7.8	+ 3.9	+ 0.0	– 0.0	+ 15.3	+ 21.7	– 4.3	– 1.8	– 0.3	– 0.0	Oct.
–	– 0.0	+ 0.1	+ 6.7	– 2.7	+ 9.4	–	+ 0.0	+ 30.4	+ 37.4	– 5.1	– 1.6	– 0.3	– 0.0	Nov.
–	+ 0.1	+ 0.2	– 45.8	– 19.3	– 26.4	+ 0.0	– 0.1	– 13.8	– 8.2	– 4.6	– 0.5	– 0.5	– 0.0	Dec.
–	– 0.3	– 0.4	+ 21.2	+ 18.2	+ 3.1	– 0.0	– 0.0	– 2.8	– 1.3	+ 3.5	– 4.5	– 0.6	– 0.1	2020 Jan.
–	– 0.0	– 3.9	+ 15.4	+ 7.8	+ 7.6	– 0.0	+ 0.0	+ 17.7	+ 19.3	+ 1.1	– 2.2	– 0.4	+ 0.4	Feb.
–	– 0.1	+ 0.2	+ 87.9	+ 14.3	+ 73.7	+ 0.0	– 0.0	+ 40.7	+ 50.5	– 5.3	– 4.0	– 0.4	– 0.2	Mar.
–	+ 0.3	+ 0.1	+ 20.2	– 6.2	+ 26.4	+ 0.0	+ 0.0	+ 25.3	+ 40.7	– 14.0	– 0.7	– 0.7	+ 0.2	Apr.
–	+ 2.2	– 0.2	+ 15.6	– 4.6	+ 20.3	– 0.0	+ 2.7	+ 30.5	+ 27.9	+ 3.2	– 0.2	– 0.4	+ 0.6	May
–	+ 1.5	+ 0.0	+ 118.6	– 0.2	+ 118.8	– 0.0	+ 2.3	– 9.0	+ 8.8	– 16.4	– 1.1	– 0.4	+ 0.1	June
–	+ 0.9	+ 0.5	– 21.7	– 6.4	– 15.2	– 0.0	+ 1.2	+ 37.1	+ 28.7	+ 10.5	– 1.6	– 0.4	+ 0.4	July
–	+ 0.3	– 0.1	+ 3.7	+ 1.2	+ 2.4	+ 0.0	+ 0.4	+ 17.4	+ 13.6	+ 4.3	– 0.2	– 0.3	+ 0.2	Aug.
–	+ 0.2	+ 0.0	+ 40.0	– 2.5	+ 42.5	+ 0.0	+ 0.5	+ 13.4	+ 15.1	– 0.9	– 0.5	– 0.4	+ 0.3	Sep.
–	+ 0.1	+ 0.2	+ 12.2	+ 7.7	+ 4.4	–	+ 0.2	+ 40.0	+ 38.6	+ 2.2	– 0.4	– 0.4	+ 0.3	Oct.
–	+ 0.2	+ 0.1	+ 8.3	+ 3.5	+ 4.8	– 0.0	+ 0.3	+ 20.4	+ 34.1	– 13.3	– 0.2	– 0.3	– 0.2	Nov.

including subordinated liabilities. **4** Including liabilities arising from monetary policy 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 *													
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
2019	0.2	1,064.2	814.0	532.7	281.3	1.8	248.5	3.7	795.3	513.1	111.0	402.1	7.7	274.5
2019 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	1,099.0	844.6	563.6	281.0	3.3	251.1	3.8	829.3	548.2	143.9	404.3	8.6	272.5
Aug.	0.2	1,099.5	844.9	562.8	282.1	3.4	251.1	3.9	850.7	564.8	158.0	406.8	9.4	276.4
Sep.	0.2	1,120.8	867.0	583.4	283.5	3.9	249.9	3.9	826.7	539.6	131.1	408.5	8.6	278.5
Oct.	0.2	1,132.8	880.2	590.3	289.9	3.8	248.8	3.9	826.5	544.3	140.7	403.7	9.2	273.0
Nov.	0.2	1,122.8	870.5	585.6	284.9	3.4	248.9	3.8	828.1	541.1	136.8	404.3	9.9	277.1
Dec.	0.2	1,064.2	814.0	532.7	281.3	1.8	248.5	3.7	795.3	513.1	111.0	402.1	7.7	274.5
2020 Jan.	0.2	1,111.1	859.7	578.2	281.5	2.7	248.7	3.8	821.5	536.9	133.0	403.8	7.7	277.0
Feb.	0.2	1,119.0	865.9	590.7	275.2	2.9	250.2	3.8	832.3	543.7	136.8	406.9	8.6	279.9
Mar.	0.3	1,145.4	889.8	615.5	274.4	3.0	252.5	3.5	834.1	543.2	135.7	407.5	11.7	279.2
Apr.	0.3	1,156.2	899.6	626.2	273.4	2.8	253.8	3.5	843.1	552.5	142.6	410.0	11.4	279.2
May	0.3	1,139.4	884.7	613.2	271.5	3.3	251.4	3.7	849.7	559.2	152.6	406.5	12.1	278.4
June	0.3	1,113.8	860.8	592.4	268.5	3.7	249.3	3.8	838.4	538.2	134.7	403.5	15.8	284.5
July	0.3	1,083.1	834.0	574.4	259.6	3.4	245.7	3.9	829.1	536.3	138.8	397.5	15.1	277.6
Aug.	0.3	1,066.8	821.2	563.3	257.9	3.5	242.1	4.1	819.9	531.3	133.7	397.6	15.6	272.9
Sep.	0.2	1,084.3	841.3	583.4	257.9	3.6	239.4	4.1	821.9	530.4	130.3	400.2	15.2	276.3
Oct.	0.3	1,064.7	822.9	564.5	258.5	3.5	238.3	4.1	839.8	539.3	137.7	401.6	16.5	284.1
Nov.	0.2	1,056.0	815.8	563.4	252.4	3.5	236.7	4.0	845.6	539.5	139.8	399.7	13.7	292.4
	Changes *													
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
2019	– 0.0	– 4.1	– 11.3	– 21.9	+ 10.7	+ 0.8	+ 6.3	+ 0.7	+ 26.8	+ 19.9	+ 12.7	+ 7.3	+ 3.0	+ 3.8
2019 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	– 15.1	– 17.4	– 17.3	– 0.1	+ 0.2	+ 2.1	+ 0.0	+ 10.2	+ 9.9	+ 7.7	+ 2.2	+ 2.0	– 1.6
Aug.	+ 0.0	– 3.6	– 3.5	– 3.1	– 0.3	+ 0.1	– 0.2	+ 0.0	+ 19.0	+ 14.5	+ 13.9	+ 0.6	+ 0.8	+ 3.7
Sep.	– 0.0	– 0.2	+ 0.7	+ 1.2	– 0.5	+ 0.4	– 1.4	+ 0.0	– 10.5	– 11.3	– 10.7	– 0.5	– 0.9	+ 1.6
Oct.	+ 0.0	+ 18.1	+ 18.9	+ 9.8	+ 9.1	– 0.1	– 0.8	– 0.1	+ 2.9	+ 7.5	+ 10.1	– 2.6	+ 0.7	– 5.2
Nov.	– 0.0	– 14.2	– 13.8	– 6.7	– 7.1	– 0.4	– 0.0	– 0.1	– 1.7	– 6.1	– 4.7	– 1.4	+ 0.7	+ 3.7
Dec.	+ 0.0	– 53.1	– 51.2	– 50.3	– 0.9	– 1.5	– 0.4	– 0.1	– 29.1	– 24.9	– 24.9	– 0.0	– 2.3	– 1.9
2020 Jan.	– 0.0	+ 42.2	+ 41.2	+ 43.2	– 1.9	+ 0.9	+ 0.1	+ 0.1	+ 23.1	+ 21.1	+ 21.4	– 0.3	+ 0.0	+ 1.9
Feb.	+ 0.0	+ 6.5	+ 4.7	+ 11.5	– 6.8	+ 0.3	+ 1.5	– 0.0	+ 10.1	+ 6.4	+ 3.7	+ 2.7	+ 0.9	+ 2.8
Mar.	+ 0.0	+ 27.5	+ 24.9	+ 25.3	– 0.4	+ 0.1	+ 2.5	– 0.3	+ 3.6	+ 1.1	– 0.7	+ 1.7	+ 3.1	– 0.6
Apr.	+ 0.0	+ 7.4	+ 6.5	+ 5.5	+ 1.0	– 0.2	+ 1.1	– 0.0	+ 6.5	+ 7.2	+ 6.3	+ 0.9	– 0.3	– 0.4
May	– 0.0	– 22.7	– 21.4	– 22.6	+ 1.2	+ 0.5	– 1.8	+ 0.2	+ 3.2	+ 2.4	+ 2.5	– 0.1	+ 0.7	+ 0.1
June	+ 0.0	– 23.5	– 21.8	– 19.6	– 2.2	+ 0.3	– 2.0	+ 0.1	– 9.8	– 19.7	– 17.5	– 2.2	+ 3.7	+ 6.2
July	– 0.0	– 17.9	– 14.4	– 11.2	– 3.2	– 0.2	– 3.3	+ 0.1	– 0.9	+ 5.3	+ 5.9	– 0.6	– 0.7	– 5.4
Aug.	– 0.0	– 14.4	– 11.1	– 10.0	– 1.1	+ 0.1	– 3.4	+ 0.1	– 8.4	– 4.2	– 4.8	+ 0.6	+ 0.5	– 4.7
Sep.	– 0.0	+ 13.9	+ 16.6	+ 18.2	– 1.6	+ 0.1	– 2.8	– 0.0	+ 0.1	– 2.5	– 3.8	+ 1.3	– 0.4	+ 3.0
Oct.	+ 0.0	– 20.8	– 19.5	– 19.8	+ 0.3	– 0.1	– 1.2	+ 0.1	+ 16.7	+ 7.8	+ 6.9	+ 0.9	+ 1.3	+ 7.6
Nov.	– 0.0	– 3.4	– 1.9	+ 1.8	– 3.7	– 0.0	– 1.5	– 0.1	+ 9.8	+ 3.6	+ 2.8	+ 0.8	– 2.7	+ 8.9

* 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)						Period
				Time deposits (including bank savings bonds)						Time deposits (including savings deposits and bank savings bonds)				
		Total	Sight deposits	Total	Short-term	Medium and long-term	Memo item: Fiduciary loans	Total	Sight deposits	Total	Short-term	Medium and long-term	Memo item: Fiduciary loans	
End of year or month *														
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
11.5	21.3	680.6	339.3	341.2	243.2	98.0	–	229.8	112.3	117.4	60.5	57.0	0.1	2019
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	2019 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
12.8	22.0	779.4	436.0	343.4	247.8	95.6	1.3	274.2	127.1	147.1	90.2	56.9	0.1	Aug.
12.8	22.2	806.6	440.4	366.2	269.8	96.4	1.3	244.6	123.1	121.5	63.1	58.4	0.1	Sep.
12.6	21.8	787.8	430.9	356.9	259.3	97.6	1.1	251.8	119.9	131.9	73.3	58.6	0.1	Oct.
12.6	21.6	790.4	452.4	338.0	239.5	98.5	1.1	251.6	120.5	131.1	72.4	58.7	0.1	Nov.
11.5	21.3	680.6	339.3	341.2	243.2	98.0	–	229.8	112.3	117.4	60.5	57.0	0.1	Dec.
11.4	21.4	756.2	433.4	322.8	223.1	99.8	–	247.8	121.8	126.0	68.1	57.8	0.1	2020 Jan.
11.4	19.0	770.5	433.8	336.7	230.1	106.6	–	255.3	129.1	126.2	66.5	59.6	0.1	Feb.
11.4	19.0	826.9	463.3	363.6	250.9	112.6	–	269.0	146.3	122.7	62.8	60.0	0.1	Mar.
11.4	19.0	835.3	438.6	396.7	288.0	108.7	–	274.1	143.0	131.1	69.9	61.2	0.1	Apr.
11.4	19.0	828.1	459.2	368.9	260.8	108.0	–	280.8	150.9	129.9	67.9	62.0	0.1	May
11.3	19.1	835.5	472.5	363.0	247.2	115.9	–	275.7	145.2	130.5	69.5	61.1	0.1	June
11.2	19.0	843.9	489.3	354.7	238.8	115.8	–	270.6	139.4	131.3	72.5	58.8	0.1	July
11.2	19.0	828.9	474.8	354.1	238.8	115.2	–	263.2	134.8	128.3	69.9	58.5	0.1	Aug.
11.4	19.0	832.4	486.5	345.9	226.4	119.6	–	269.6	145.5	124.1	66.0	58.1	0.1	Sep.
11.5	19.0	833.2	487.3	345.9	224.6	121.3	–	269.5	142.6	127.0	68.5	58.4	0.1	Oct.
11.5	19.0	836.8	491.3	345.5	219.0	126.5	–	279.9	154.2	125.8	66.0	59.7	0.1	Nov.
Changes *														
– 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
– 0.3	– 0.9	– 9.5	– 49.4	+ 39.8	+ 28.0	+ 11.8	– 0.0	– 0.8	+ 2.1	– 2.9	– 1.8	– 1.1	– 0.0	2019
– 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	2019 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
+ 0.0	+ 0.0	+ 8.4	– 25.9	+ 34.3	+ 32.8	+ 1.5	+ 0.0	+ 10.5	+ 0.6	+ 10.0	+ 10.3	– 0.4	–	Aug.
– 0.0	+ 0.1	+ 9.8	– 3.1	+ 12.9	+ 12.5	+ 0.4	+ 0.0	– 16.3	+ 2.3	– 18.6	– 20.0	+ 1.4	+ 0.0	Sep.
– 0.2	– 0.3	– 14.6	– 8.1	– 6.5	– 8.2	+ 1.7	– 0.2	+ 8.3	– 2.7	+ 10.9	+ 10.6	+ 0.3	– 0.0	Oct.
+ 0.0	– 0.3	– 0.6	+ 20.3	– 20.9	– 21.4	+ 0.5	+ 0.0	– 1.2	+ 0.2	– 1.4	– 1.4	– 0.0	+ 0.0	Nov.
– 1.1	– 0.2	– 106.0	–111.5	+ 5.5	+ 5.5	+ 0.1	– 1.1	– 20.7	– 7.7	– 12.9	– 11.4	– 1.6	– 0.0	Dec.
– 0.1	+ 0.0	+ 73.0	+ 92.9	– 19.8	– 21.6	+ 1.7	–	+ 16.7	+ 9.2	+ 7.6	+ 7.4	+ 0.2	+ 0.0	2020 Jan.
– 0.0	– 2.4	+ 13.3	+ 5.0	+ 8.4	+ 5.9	+ 2.5	–	+ 7.3	+ 7.2	+ 0.1	– 1.7	+ 1.8	– 0.0	Feb.
+ 0.0	– 0.0	+ 57.2	+ 29.9	+ 27.3	+ 21.1	+ 6.2	–	+ 14.2	+ 17.4	– 3.2	– 3.5	+ 0.4	+ 0.0	Mar.
– 0.0	+ 0.0	+ 6.0	– 25.9	+ 31.9	+ 33.0	– 1.1	–	+ 4.4	– 3.7	+ 8.1	+ 6.9	+ 1.2	– 0.0	Apr.
– 0.0	+ 0.0	– 15.3	+ 9.3	– 24.6	– 24.6	+ 0.0	–	– 1.0	– 0.7	– 0.3	– 1.3	+ 1.0	+ 0.0	May
– 0.2	+ 0.1	+ 8.8	+ 13.9	– 5.1	– 13.1	+ 8.0	–	– 4.7	– 5.6	+ 0.9	+ 1.8	– 0.9	– 0.0	June
– 0.1	+ 0.0	+ 17.6	+ 20.7	– 3.1	– 4.1	+ 1.0	–	– 2.7	– 4.7	+ 2.0	+ 4.0	– 2.0	+ 0.0	July
+ 0.0	– 0.0	– 13.9	– 13.8	– 0.0	+ 0.5	– 0.5	–	– 7.2	– 4.4	– 2.7	– 2.5	– 0.2	– 0.0	Aug.
+ 0.2	+ 0.0	+ 1.0	+ 10.4	– 9.5	– 13.5	+ 4.0	–	+ 5.8	+ 10.4	– 4.6	– 4.1	– 0.5	+ 0.0	Sep.
+ 0.0	– 0.0	+ 0.1	+ 0.5	– 0.4	– 2.0	+ 1.6	–	– 0.6	– 3.2	+ 2.6	+ 2.3	+ 0.3	+ 0.0	Oct.
+ 0.0	+ 0.0	+ 7.9	+ 5.9	+ 2.0	– 3.7	+ 5.7	–	+ 11.6	+ 12.2	– 0.6	– 2.1	+ 1.5	– 0.0	Nov.

IV. Banks

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

€ billion

Period	Lending to domestic non-banks, total		Short-term lending							Medium and long-term	
				to enterprises and households			to general government				to enterprises
	including negotiable money market paper, securities, equalisation claims	excluding negotiable money market paper, securities, equalisation claims	Total	Total	Loans and bills	Negotiable money market paper	Total	Loans	Treasury bills	Total	Total
	End of year or month *										
2010	3,220.9	2,771.3	428.0	283.0	282.8	0.2	145.0	117.2	27.7	2,793.0	2,305.6
2011	3,197.8	2,775.4	383.3	316.5	316.1	0.4	66.8	60.7	6.0	2,814.5	2,321.9
2012	3,220.4	2,786.1	376.1	316.8	316.3	0.5	59.3	57.6	1.7	2,844.3	2,310.9
2013	3,131.6	2,693.2	269.1	217.7	217.0	0.6	51.4	50.8	0.6	2,862.6	2,328.6
2014	3,167.3	2,712.6	257.5	212.7	212.1	0.6	44.8	44.7	0.1	2,909.8	2,376.8
2015	3,233.9	2,764.4	255.5	207.8	207.6	0.2	47.8	47.5	0.2	2,978.3	2,451.4
2016	3,274.3	2,824.2	248.6	205.7	205.4	0.3	42.9	42.8	0.1	3,025.8	2,530.0
2017	3,332.6	2,894.4	241.7	210.9	210.6	0.3	30.7	30.3	0.4	3,090.9	2,640.0
2018	3,394.5	2,990.4	249.5	228.0	227.6	0.4	21.5	21.7	– 0.2	3,145.0	2,732.8
2019	3,521.5	3,119.5	260.4	238.8	238.4	0.4	21.6	18.7	2.9	3,261.1	2,866.9
2019 June	3,467.1	3,067.2	271.3	249.8	249.2	0.6	21.5	20.8	0.7	3,195.8	2,795.2
July	3,476.1	3,075.3	270.3	243.8	243.2	0.6	26.5	24.9	1.6	3,205.9	2,807.7
Aug.	3,491.7	3,087.4	266.2	238.8	238.3	0.5	27.4	25.0	2.4	3,225.5	2,825.7
Sep.	3,499.8	3,094.7	269.2	246.1	245.6	0.6	23.1	19.9	3.2	3,230.6	2,831.0
Oct.	3,506.7	3,104.7	261.6	237.1	236.5	0.6	24.5	21.6	2.8	3,245.1	2,849.5
Nov.	3,523.5	3,121.3	262.6	239.8	239.2	0.6	22.8	20.1	2.7	3,260.9	2,864.3
Dec.	3,521.5	3,119.5	260.4	238.8	238.4	0.4	21.6	18.7	2.9	3,261.1	2,866.9
2020 Jan.	3,528.4	3,126.0	261.5	236.3	235.7	0.6	25.2	22.6	2.6	3,266.9	2,874.2
Feb.	3,544.7	3,142.3	264.8	240.0	239.3	0.7	24.8	20.8	4.0	3,279.9	2,888.9
Mar.	3,580.0	3,174.3	288.4	261.9	261.1	0.8	26.4	22.2	4.2	3,291.6	2,892.2
Apr.	3,594.3	3,185.5	285.0	255.6	254.9	0.7	29.4	22.9	6.5	3,309.3	2,908.0
May	3,620.9	3,204.4	285.3	254.3	253.2	1.1	31.1	22.0	9.1	3,335.6	2,931.7
June	3,621.1	3,206.8	278.9	248.5	247.6	0.8	30.4	23.3	7.2	3,342.2	2,939.8
July	3,625.7	3,217.4	274.8	243.4	242.6	0.8	31.5	24.2	7.3	3,350.9	2,953.2
Aug.	3,629.7	3,219.7	265.6	237.7	236.9	0.8	28.0	19.4	8.6	3,364.0	2,967.3
Sep.	3,634.2	3,224.6	261.9	232.0	231.3	0.7	29.9	22.3	7.7	3,372.3	2,976.0
Oct.	3,651.1	3,237.8	261.0	229.5	228.7	0.7	31.6	23.3	8.2	3,390.1	2,991.5
Nov.	3,661.1	3,247.6	258.7	229.3	228.7	0.6	29.4	22.4	7.0	3,402.4	3,001.7
	Changes *										
2011	– 30.6	– 3.2	– 45.2	+ 33.6	+ 33.3	+ 0.2	– 78.7	– 57.0	– 21.7	+ 14.6	+ 9.4
2012	+ 21.0	+ 9.6	– 9.7	– 1.6	– 1.7	+ 0.1	– 8.2	– 3.8	– 4.3	+ 30.7	+ 10.9
2013	+ 4.4	+ 0.1	– 13.8	– 5.8	– 6.3	+ 0.5	– 8.0	– 7.0	– 1.1	+ 18.2	+ 17.6
2014	+ 36.7	+ 20.5	– 11.6	– 4.5	– 4.5	– 0.0	– 7.1	– 6.5	– 0.6	+ 48.3	+ 52.5
2015	+ 68.9	+ 54.1	+ 1.6	– 1.3	– 0.9	– 0.4	+ 2.9	+ 2.8	+ 0.1	+ 67.2	+ 73.9
2016	+ 43.7	+ 62.7	– 5.2	– 0.3	– 0.4	+ 0.1	– 4.9	– 4.8	– 0.2	+ 48.9	+ 79.8
2017	+ 57.0	+ 70.2	– 6.5	+ 5.6	+ 5.6	+ 0.0	– 12.1	– 12.4	+ 0.3	+ 63.5	+ 103.4
2018	+ 71.5	+ 105.3	+ 6.6	+ 15.8	+ 15.7	+ 0.1	– 9.2	– 8.6	– 0.6	+ 65.0	+ 102.0
2019	+ 126.7	+ 129.1	+ 11.7	+ 11.6	+ 11.6	+ 0.0	+ 0.1	– 3.0	+ 3.1	+ 115.0	+ 132.8
2019 June	+ 21.5	+ 17.6	+ 14.0	+ 13.2	+ 13.5	– 0.3	+ 0.8	+ 0.7	+ 0.1	+ 7.5	+ 9.4
July	+ 9.2	+ 8.2	– 1.0	– 6.1	– 6.0	– 0.0	+ 5.0	+ 4.1	+ 0.9	+ 10.2	+ 12.9
Aug.	+ 15.6	+ 12.1	– 4.2	– 5.1	– 5.0	– 0.1	+ 0.9	+ 0.1	+ 0.8	+ 19.8	+ 18.2
Sep.	+ 8.1	+ 7.3	+ 3.1	+ 7.4	+ 7.3	+ 0.1	– 4.3	– 5.1	+ 0.8	+ 5.1	+ 4.8
Oct.	+ 6.9	+ 10.0	– 7.4	– 8.8	– 8.8	+ 0.0	+ 1.4	+ 1.7	– 0.4	+ 14.4	+ 18.4
Nov.	+ 16.8	+ 16.7	+ 0.9	+ 2.6	+ 2.6	– 0.0	– 1.7	– 1.5	– 0.2	+ 15.9	+ 14.9
Dec.	– 1.9	– 1.8	– 2.0	– 0.8	– 0.7	– 0.2	– 1.2	– 1.4	+ 0.2	+ 0.1	+ 2.5
2020 Jan.	+ 6.8	+ 6.5	+ 1.1	– 2.5	– 2.7	+ 0.2	+ 3.6	+ 3.8	– 0.2	+ 5.7	+ 7.2
Feb.	+ 16.3	+ 16.2	+ 3.3	+ 3.7	+ 3.6	+ 0.1	– 0.4	– 1.7	+ 1.3	+ 13.0	+ 14.7
Mar.	+ 35.3	+ 32.1	+ 23.6	+ 21.9	+ 21.8	+ 0.2	+ 1.7	+ 1.4	+ 0.3	+ 11.7	+ 3.3
Apr.	+ 14.4	+ 11.2	– 3.3	– 6.3	– 6.2	– 0.1	+ 3.0	+ 0.7	+ 2.3	+ 17.7	+ 15.9
May	+ 24.1	+ 16.4	– 2.2	– 3.9	– 4.2	+ 0.4	+ 1.7	– 0.9	+ 2.5	+ 26.3	+ 23.7
June	+ 0.2	+ 2.5	– 6.4	– 5.8	– 5.6	– 0.2	– 0.6	+ 1.3	– 1.9	+ 6.6	+ 7.9
July	+ 4.6	+ 10.5	– 5.9	– 6.9	– 6.8	– 0.1	+ 1.0	+ 0.9	+ 0.1	+ 10.5	+ 15.2
Aug.	+ 4.0	+ 2.4	– 7.5	– 4.1	– 4.1	– 0.0	– 3.5	– 4.9	+ 1.4	+ 11.5	+ 12.6
Sep.	+ 4.6	+ 4.9	– 3.7	– 5.6	– 5.6	– 0.1	+ 2.0	+ 2.9	– 0.9	+ 8.3	+ 8.6
Oct.	+ 16.5	+ 12.9	– 0.9	– 2.6	– 2.6	+ 0.0	+ 1.7	+ 1.1	+ 0.6	+ 17.4	+ 14.6
Nov.	+ 10.6	+ 10.4	– 2.1	– 0.1	+ 0.0	– 0.1	– 2.0	– 0.7	– 1.3	+ 12.7	+ 10.6

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

IV. Banks

lending												
prises and households					to general government							
Loans						Loans						
Total	Medium-term	Long-term	Securities	Memo item: Fiduciary loans	Total	Total	Medium-term	Long-term	Securities [1]	Equalisation claims [2]	Memo item: Fiduciary loans	Period
End of year or month *												
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
2,626.4	301.3	2,325.1	240.5	15.7	394.2	235.9	17.2	218.8	158.2	–	1.5	2019
2,560.3	294.3	2,266.1	234.9	16.2	400.6	237.0	17.9	219.0	163.7	–	1.3	2019 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
2,588.9	298.3	2,290.5	236.8	15.9	399.7	235.2	17.4	217.8	164.5	–	1.2	Aug.
2,594.1	297.2	2,296.8	236.9	15.8	399.6	235.2	17.0	218.2	164.4	–	1.2	Sep.
2,611.0	299.7	2,311.3	238.5	15.9	395.6	235.5	16.9	218.6	160.1	–	1.2	Oct.
2,624.4	301.6	2,322.8	240.0	15.9	396.5	237.6	17.6	220.0	158.9	–	1.2	Nov.
2,626.4	301.3	2,325.1	240.5	15.7	394.2	235.9	17.2	218.8	158.2	–	1.5	Dec.
2,631.8	300.0	2,331.8	242.4	15.7	392.7	236.0	17.0	219.0	156.7	–	1.2	2020 Jan.
2,646.4	302.5	2,344.0	242.5	15.7	391.0	235.7	17.2	218.5	155.3	–	1.2	Feb.
2,654.8	304.5	2,350.2	237.5	15.6	399.4	236.3	17.2	219.1	163.1	–	1.2	Mar.
2,671.3	307.2	2,364.1	236.7	15.9	401.3	236.4	17.3	219.1	164.9	–	1.3	Apr.
2,692.9	310.7	2,382.2	238.9	18.1	403.9	236.3	17.4	218.9	167.6	–	1.3	May
2,701.4	310.8	2,390.6	238.4	19.6	402.4	234.5	17.1	217.4	167.9	–	1.2	June
2,715.7	312.5	2,403.2	237.5	21.0	397.7	234.9	16.7	218.1	162.8	–	1.2	July
2,729.1	313.1	2,416.0	238.2	21.3	396.7	234.4	16.7	217.7	162.3	–	1.2	Aug.
2,737.4	313.1	2,424.2	238.6	21.5	396.3	233.7	16.2	217.5	162.6	–	1.2	Sep.
2,751.8	313.2	2,438.6	239.7	21.6	398.6	234.0	15.9	218.1	164.6	–	1.2	Oct.
2,762.3	311.5	2,450.8	239.4	21.8	400.7	234.2	15.7	218.6	166.4	–	1.2	Nov.
Changes *												
+ 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
+ 126.0	+ 18.9	+ 107.2	+ 6.8	– 0.8	– 17.8	– 5.5	– 2.6	– 2.9	– 12.3	–	+ 0.1	2019
+ 5.6	+ 0.6	+ 5.0	+ 3.9	– 0.0	– 1.9	– 2.2	– 0.3	– 1.9	+ 0.2	–	– 0.0	2019 June
+ 11.7	+ 1.0	+ 10.7	+ 1.2	– 0.4	– 2.7	– 1.6	– 0.5	– 1.0	– 1.1	–	– 0.0	July
+ 17.1	+ 3.3	+ 13.8	+ 1.1	+ 0.0	+ 1.6	– 0.2	– 0.0	– 0.2	+ 1.8	–	+ 0.0	Aug.
+ 4.7	– 0.7	+ 5.5	+ 0.1	– 0.1	+ 0.3	+ 0.4	– 0.4	+ 0.7	– 0.1	–	– 0.0	Sep.
+ 16.8	+ 2.4	+ 14.4	+ 1.6	+ 0.1	– 4.0	+ 0.3	– 0.1	+ 0.4	– 4.3	–	– 0.0	Oct.
+ 13.4	+ 1.9	+ 11.6	+ 1.5	+ 0.0	+ 0.9	+ 2.1	+ 0.7	+ 1.4	– 1.2	–	– 0.0	Nov.
+ 1.9	– 0.2	+ 2.1	+ 0.5	– 0.2	– 2.4	– 1.7	– 0.5	– 1.2	– 0.7	–	+ 0.3	Dec.
+ 5.3	– 1.4	+ 6.7	+ 1.9	– 0.0	– 1.5	+ 0.1	– 0.1	+ 0.2	– 1.6	–	– 0.3	2020 Jan.
+ 14.6	+ 2.4	+ 12.2	+ 0.0	– 0.0	– 1.7	– 0.3	+ 0.1	– 0.5	– 1.3	–	+ 0.0	Feb.
+ 8.3	+ 2.1	+ 6.3	– 5.0	– 0.1	+ 8.4	+ 0.6	+ 0.0	+ 0.6	+ 7.8	–	– 0.0	Mar.
+ 16.7	+ 2.7	+ 14.0	– 0.8	+ 0.2	+ 1.8	– 0.0	+ 0.1	– 0.1	+ 1.8	–	+ 0.0	Apr.
+ 21.5	+ 3.5	+ 18.0	+ 2.2	+ 2.2	+ 2.6	– 0.0	+ 0.2	– 0.2	+ 2.7	–	+ 0.0	May
+ 8.4	+ 0.0	+ 8.4	– 0.5	+ 1.5	– 1.3	– 1.6	– 0.3	– 1.3	+ 0.3	–	– 0.1	June
+ 16.1	+ 1.6	+ 14.5	– 0.9	+ 0.9	– 4.7	+ 0.3	– 0.4	+ 0.7	– 5.1	–	+ 0.0	July
+ 11.9	+ 0.7	+ 11.2	+ 0.7	+ 0.3	– 1.0	– 0.6	– 0.1	– 0.5	– 0.5	–	– 0.0	Aug.
+ 8.2	– 0.0	+ 8.2	+ 0.4	+ 0.1	– 0.4	– 0.7	– 0.4	– 0.3	+ 0.3	–	+ 0.0	Sep.
+ 13.5	+ 0.1	+ 13.5	+ 1.1	+ 0.1	+ 2.8	+ 0.9	– 0.4	+ 1.2	+ 1.9	–	+ 0.0	Oct.
+ 10.9	– 1.2	+ 12.1	– 0.3	+ 0.2	+ 2.1	+ 0.3	– 0.2	+ 0.5	+ 1.9	–	– 0.0	Nov.

IV. Banks

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

€ billion

Period	Lending to domestic enterprises and households (excluding holdings of negotiable money market paper and excluding securities portfolios) [1]														
		of which:				Lending to enterprises and self-employed persons									
			Housing loans												
	Total	Mortgage loans, total	Total	Mortgage loans secured by residential real estate	Other housing loans	Total	of which: Housing loans	Manufacturing	Electricity, gas and water supply; refuse disposal, mining and quarrying	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Agriculture, forestry, fishing and aquaculture	Transportation and storage; post and telecommunications	Financial intermediation (excluding MFIs) and insurance companies
Lending, total															**End of year or quarter ***
2018	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 Sep.	2,839.6	1,487.2	1,450.4	1,197.0	253.4	1,551.7	411.6	150.1	118.6	77.4	139.9	54.8	50.1	166.2	
Dec.	2,864.8	1,512.1	1,470.4	1,213.0	257.4	1,560.5	416.1	146.6	119.0	77.1	141.6	54.2	50.3	168.2	
2020 Mar.	2,915.9	1,533.2	1,488.6	1,225.8	262.8	1,598.9	421.9	155.8	120.1	79.4	143.5	54.5	52.5	176.4	
June	2,949.0	1,558.5	1,510.6	1,246.6	263.9	1,613.5	423.2	164.5	120.6	80.8	138.1	55.4	56.6	175.2	
Sep.	2,968.6	1,580.1	1,537.3	1,265.4	272.0	1,616.8	434.6	157.2	121.1	82.2	135.9	55.5	57.7	173.7	
Short-term lending															
2018	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 Sep.	245.6	–	8.4	–	8.4	213.6	5.0	41.1	5.3	16.7	48.0	4.4	4.5	30.1	
Dec.	238.4	–	8.1	–	8.1	206.2	4.7	35.9	5.6	15.7	48.6	3.8	4.6	27.0	
2020 Mar.	261.1	–	8.3	–	8.3	230.3	4.9	43.4	6.7	17.1	49.5	4.1	6.1	34.6	
June	247.6	–	8.2	–	8.2	217.9	4.7	44.5	6.1	16.9	41.8	4.2	5.4	33.4	
Sep.	231.3	–	8.5	–	8.5	201.4	5.0	36.9	6.5	16.9	38.4	4.2	5.3	30.0	
Medium-term lending															
2018	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 Sep.	297.1	–	36.4	–	36.4	215.4	16.5	27.3	4.9	13.7	19.6	4.7	10.0	50.1	
Dec.	301.3	–	36.6	–	36.6	219.5	16.6	28.5	4.9	13.9	19.7	4.6	10.2	52.0	
2020 Mar.	304.5	–	36.9	–	36.9	222.8	17.0	29.7	5.1	13.9	20.4	4.5	10.4	51.3	
June	310.8	–	37.7	–	37.7	229.8	17.6	33.6	5.2	14.2	19.6	4.5	13.4	50.2	
Sep.	313.1	–	38.0	–	38.0	232.1	17.9	33.1	5.3	14.6	19.2	4.6	14.3	51.4	
Long-term lending															
2018	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 Sep.	2,296.8	1,487.2	1,405.6	1,197.0	208.6	1,122.7	390.2	81.8	108.5	46.9	72.3	45.7	35.6	85.9	
Dec.	2,325.1	1,512.1	1,425.7	1,213.0	212.7	1,134.9	394.8	82.2	108.6	47.6	73.3	45.8	35.5	89.2	
2020 Mar.	2,350.2	1,533.2	1,443.4	1,225.8	217.6	1,145.7	400.0	82.7	108.4	48.4	73.6	45.9	36.0	90.6	
June	2,390.6	1,558.5	1,464.7	1,246.6	218.1	1,165.8	400.8	86.4	109.3	49.7	76.7	46.6	37.8	91.6	
Sep.	2,424.2	1,580.1	1,490.9	1,265.4	225.5	1,183.3	411.6	87.2	109.3	50.7	78.2	46.7	38.2	92.2	
Lending, total															**Change during quarter ***
2019 Q3	+ 29.8	+ 18.0	+ 22.4	+ 15.4	+ 7.0	+ 12.0	+ 6.1	– 0.2	– 2.2	+ 1.3	– 0.6	+ 0.3	– 0.4	+ 4.8	
Q4	+ 25.3	+ 20.1	+ 20.0	+ 13.9	+ 6.1	+ 9.2	+ 4.6	– 3.5	+ 0.5	– 0.3	+ 1.7	– 0.6	+ 0.2	+ 2.0	
2020 Q1	+ 51.0	+ 15.6	+ 17.8	+ 12.4	+ 5.4	+ 38.2	+ 5.4	+ 9.2	+ 1.1	+ 2.3	+ 1.9	+ 0.3	+ 2.2	+ 8.2	
Q2	+ 30.6	+ 17.8	+ 21.0	+ 13.7	+ 7.3	+ 17.1	+ 5.2	+ 8.8	+ 0.3	+ 1.4	– 4.4	+ 0.9	+ 4.1	– 4.0	
Q3	+ 19.7	+ 21.7	+ 26.5	+ 18.8	+ 7.7	– 1.9	+ 6.4	– 7.4	+ 0.5	+ 1.4	– 2.6	+ 0.1	+ 1.1	– 2.1	
Short-term lending															
2019 Q3	– 3.6	–	+ 0.3	–	+ 0.3	– 3.8	+ 0.3	– 1.8	– 2.0	+ 0.2	– 0.8	– 0.2	– 0.6	+ 0.8	
Q4	– 7.0	–	– 0.3	–	– 0.3	– 7.5	– 0.2	– 5.2	+ 0.3	– 1.0	+ 0.6	– 0.6	+ 0.1	– 3.2	
2020 Q1	+ 22.7	–	+ 0.3	–	+ 0.3	+ 24.2	+ 0.2	+ 7.5	+ 1.1	+ 1.4	+ 0.9	+ 0.3	+ 1.4	+ 7.6	
Q2	– 16.0	–	– 0.2	–	– 0.2	– 14.9	– 0.1	+ 1.2	– 0.7	– 0.1	– 7.1	+ 0.1	– 0.7	– 4.2	
Q3	– 16.5	–	+ 0.3	–	+ 0.3	– 16.7	+ 0.3	– 7.6	+ 0.5	– 0.0	– 3.4	– 0.1	– 0.1	– 3.4	
Medium-term lending															
2019 Q3	+ 3.5	–	+ 0.8	–	+ 0.8	+ 3.1	+ 0.5	+ 1.1	– 0.4	+ 0.3	+ 0.1	+ 0.2	– 0.4	+ 1.3	
Q4	+ 4.2	–	+ 0.2	–	+ 0.2	+ 4.1	+ 0.2	+ 1.3	+ 0.0	+ 0.1	+ 0.2	– 0.1	+ 0.2	+ 1.9	
2020 Q1	+ 3.1	–	+ 0.2	–	+ 0.2	+ 3.3	+ 0.4	+ 1.2	+ 0.2	+ 0.0	+ 0.7	– 0.1	+ 0.3	– 0.7	
Q2	+ 6.2	–	+ 0.7	–	+ 0.7	+ 7.4	+ 0.7	+ 3.9	+ 0.2	+ 0.3	– 0.8	+ 0.0	+ 2.9	– 1.0	
Q3	+ 2.3	–	+ 0.2	–	+ 0.2	+ 2.1	+ 0.1	– 0.5	+ 0.0	+ 0.3	– 0.4	+ 0.1	+ 0.9	+ 0.6	
Long-term lending															
2019 Q3	+ 30.0	+ 18.0	+ 21.3	+ 15.4	+ 5.9	+ 12.7	+ 5.3	+ 0.5	+ 0.1	+ 0.7	+ 0.0	+ 0.4	+ 0.6	+ 2.7	
Q4	+ 28.1	+ 20.1	+ 20.1	+ 13.9	+ 6.2	+ 12.6	+ 4.6	+ 0.4	+ 0.2	+ 0.6	+ 1.0	+ 0.1	– 0.1	+ 3.3	
2020 Q1	+ 25.1	+ 15.6	+ 17.3	+ 12.4	+ 4.9	+ 10.7	+ 4.9	+ 0.5	– 0.2	+ 0.9	+ 0.3	+ 0.1	+ 0.5	+ 1.4	
Q2	+ 40.4	+ 17.8	+ 20.4	+ 13.7	+ 6.8	+ 24.6	+ 4.6	+ 3.7	+ 0.8	+ 1.3	+ 3.5	+ 0.7	+ 1.8	+ 1.2	
Q3	+ 33.9	+ 21.7	+ 26.0	+ 18.8	+ 7.2	+ 12.7	+ 6.0	+ 0.7	– 0.0	+ 1.0	+ 1.2	+ 0.1	+ 0.4	+ 0.7	

* 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

Lending to employees and other individuals												Lending to non-profit institutions		
Services sector (including the professions)				Memo items:				Other lending						
	of which:								of which:					
Total	Housing enterprises	Holding companies	Other real estate activities	Lending to self-employed persons [2]	Lending to craft enterprises	Total	Housing loans	Total	Instalment loans [3]	Debit balances on wage, salary and pension accounts	Total	of which: Housing loans	Period
End of year or quarter *													**Lending, total**	
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	2018
794.7	252.9	50.9	200.6	444.7	48.3	1,272.5	1,035.0	237.5	176.4	8.5	15.4	3.8	2019 Sep.
803.6	264.5	51.1	193.9	447.5	47.6	1,288.4	1,050.4	238.0	176.5	7.9	15.9	3.9	Dec.
816.6	273.2	54.2	196.6	450.6	48.0	1,301.0	1,062.8	238.2	178.0	7.9	16.0	3.9	2020 Mar.
822.2	277.8	55.9	198.5	447.1	48.1	1,319.4	1,083.5	235.9	176.9	7.3	16.2	3.9	June
833.5	281.7	55.1	201.9	458.9	48.1	1,335.9	1,098.8	237.0	178.3	7.5	16.0	3.9	Sep.
												Short-term lending	
55.9	12.0	8.1	10.4	24.0	5.2	31.2	3.1	28.2	1.5	8.3	0.5	–	2018
63.5	13.5	9.5	10.7	24.3	5.4	31.5	3.4	28.1	1.6	8.5	0.5	0.0	2019 Sep.
65.0	14.4	9.7	10.2	23.9	4.9	31.6	3.3	28.2	1.3	7.9	0.7	0.0	Dec.
69.0	14.8	12.2	11.1	23.8	5.2	30.0	3.4	26.6	1.4	7.9	0.7	0.0	2020 Mar.
65.5	14.8	11.9	11.4	21.8	4.7	29.0	3.4	25.6	1.4	7.3	0.7	0.0	June
63.1	15.6	10.7	10.9	21.7	4.3	29.3	3.5	25.8	1.3	7.5	0.6	0.0	Sep.
												Medium-term lending	
77.5	14.8	9.9	21.3	31.5	3.5	79.6	19.9	59.7	56.4	–	0.5	0.1	2018
85.1	17.5	11.2	22.6	32.0	3.7	81.3	19.9	61.4	58.0	–	0.5	0.0	2019 Sep.
85.7	18.1	11.0	22.9	31.9	3.5	81.4	19.9	61.4	58.0	–	0.5	0.0	Dec.
87.4	19.1	11.6	23.3	31.9	3.6	81.2	19.8	61.4	58.0	–	0.5	0.0	2020 Mar.
89.0	19.7	12.6	23.5	31.6	3.5	80.4	20.0	60.4	56.9	–	0.6	0.0	June
89.6	20.0	12.6	24.1	31.9	3.6	80.6	20.0	60.6	57.2	–	0.5	0.0	Sep.
												Long-term lending	
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	2018
646.1	222.0	30.3	167.3	388.4	39.2	1,159.7	1,011.7	147.9	116.7	–	14.4	3.7	2019 Sep.
652.9	232.0	30.4	160.9	391.7	39.1	1,175.5	1,027.1	148.3	117.1	–	14.7	3.8	Dec.
660.2	239.3	30.5	162.3	394.9	39.3	1,189.8	1,039.5	150.2	118.6	–	14.8	3.8	2020 Mar.
667.7	243.3	31.4	163.6	393.7	39.9	1,210.0	1,060.1	149.9	118.5	–	14.9	3.8	June
680.8	246.1	31.8	166.9	405.3	40.1	1,226.0	1,075.4	150.7	119.8	–	15.0	3.9	Sep.
Change during quarter *													**Lending, total**	
+ 9.0	+ 5.6	– 0.7	+ 1.2	+ 3.6	– 0.3	+ 17.9	+ 16.3	+ 1.6	+ 1.2	+ 0.5	– 0.1	– 0.0	2019 Q3
+ 9.1	+ 4.2	+ 0.2	+ 0.8	+ 2.8	– 0.6	+ 15.9	+ 15.5	+ 0.4	+ 0.1	– 0.6	+ 0.3	– 0.0	Q4
+ 13.0	+ 4.9	+ 3.1	+ 1.9	+ 3.0	+ 0.5	+ 12.6	+ 12.3	+ 0.2	+ 1.8	+ 0.0	+ 0.2	+ 0.0	2020 Q1
+ 10.0	+ 4.6	+ 1.7	+ 2.1	+ 3.5	+ 0.1	+ 13.4	+ 15.8	– 2.4	– 1.0	– 0.6	+ 0.1	+ 0.0	Q2
+ 7.0	+ 3.9	– 0.8	+ 3.2	+ 5.4	+ 0.0	+ 21.7	+ 20.0	+ 1.6	+ 1.7	+ 0.1	– 0.1	+ 0.0	Q3
												Short-term lending	
+ 0.5	+ 1.0	– 0.8	+ 0.1	– 0.2	– 0.1	+ 0.1	– 0.0	+ 0.2	– 0.2	+ 0.5	+ 0.0	– 0.0	2019 Q3
+ 1.7	+ 0.8	+ 0.3	– 0.3	– 0.5	– 0.5	+ 0.3	– 0.0	+ 0.4	– 0.2	– 0.6	+ 0.1	+ 0.0	Q4
+ 4.0	+ 0.3	+ 2.5	+ 0.9	– 0.1	+ 0.2	– 1.6	+ 0.1	– 1.7	+ 0.1	+ 0.0	+ 0.1	– 0.0	2020 Q1
– 3.5	– 0.1	– 0.3	+ 0.3	– 2.0	– 0.5	– 1.0	– 0.0	– 1.0	+ 0.1	– 0.6	+ 0.0	–	Q2
– 2.6	+ 0.8	– 1.2	– 0.5	– 0.0	– 0.3	+ 0.3	+ 0.1	+ 0.3	– 0.1	+ 0.1	– 0.1	+ 0.0	Q3
												Medium-term lending	
+ 0.9	+ 0.9	+ 0.1	+ 0.2	– 0.1	+ 0.0	+ 0.4	+ 0.3	+ 0.1	+ 0.0		–	– 0.0	– 0.0	2019 Q3
+ 0.5	+ 0.6	– 0.2	+ 0.3	– 0.1	– 0.1	+ 0.1	+ 0.1	+ 0.0	+ 0.0		–	+ 0.0	+ 0.0	Q4
+ 1.8	+ 0.8	+ 0.6	+ 0.3	– 0.1	+ 0.0	– 0.2	– 0.1	– 0.0	– 0.1		–	+ 0.0	– 0.0	2020 Q1
+ 1.8	+ 0.6	+ 1.0	+ 0.3	– 0.1	– 0.0	– 1.3	+ 0.0	– 1.3	– 1.3		–	+ 0.0	– 0.0	Q2
+ 1.1	+ 0.4	– 0.0	+ 0.8	+ 0.0	+ 0.1	+ 0.3	+ 0.0	+ 0.2	+ 0.3		–	– 0.1	+ 0.0	Q3
												Long-term lending	
+ 7.6	+ 3.7	– 0.0	+ 0.9	+ 3.9	– 0.2	+ 17.4	+ 16.0	+ 1.4	+ 1.5		–	– 0.1	– 0.0	2019 Q3
+ 7.0	+ 2.7	+ 0.1	+ 0.9	+ 3.4	– 0.0	+ 15.5	+ 15.4	+ 0.0	+ 0.2		–	+ 0.1	– 0.0	Q4
+ 7.3	+ 3.8	+ 0.1	+ 0.7	+ 3.2	+ 0.2	+ 14.3	+ 12.4	+ 1.9	+ 1.8		–	+ 0.1	+ 0.0	2020 Q1
+ 11.6	+ 4.1	+ 0.9	+ 1.5	+ 5.7	+ 0.6	+ 15.7	+ 15.8	– 0.2	+ 0.2		–	+ 0.1	+ 0.0	Q2
+ 8.6	+ 2.8	+ 0.4	+ 3.0	+ 5.4	+ 0.2	+ 21.1	+ 20.0	+ 1.1	+ 1.5		–	+ 0.1	+ 0.0	Q3

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***
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
2019	3,661.0	2,236.3	816.2	202.7	613.5	52.7	560.8	575.2	33.2	32.5	14.7	0.2
2019 Dec.	3,661.0	2,236.3	816.2	202.7	613.5	52.7	560.8	575.2	33.2	32.5	14.7	0.2
2020 Jan.	3,658.2	2,235.1	819.7	208.4	611.3	52.4	558.9	570.7	32.6	32.3	14.8	0.5
Feb.	3,675.9	2,254.4	820.8	212.2	608.6	52.2	556.4	568.5	32.2	32.8	14.6	0.3
Mar.	3,716.6	2,304.9	815.5	212.7	602.8	50.1	552.7	564.5	31.8	32.5	14.6	0.6
Apr.	3,741.9	2,345.4	801.6	206.0	595.6	48.5	547.1	563.8	31.1	32.8	14.4	1.5
May	3,775.3	2,376.3	804.7	214.1	590.6	47.1	543.5	563.6	30.7	33.3	14.4	0.3
June	3,766.3	2,385.3	788.2	206.7	581.5	44.3	537.2	562.6	30.3	33.4	14.3	0.2
July	3,803.4	2,414.0	798.6	215.6	583.1	46.6	536.5	560.9	29.9	33.8	14.3	0.2
Aug.	3,820.8	2,427.7	802.9	215.0	587.9	45.8	542.0	560.6	29.6	34.0	14.4	0.5
Sep.	3,834.2	2,442.8	802.0	210.1	591.9	48.1	543.8	560.1	29.3	34.3	14.3	0.4
Oct.	3,874.1	2,481.4	804.1	207.6	596.5	50.7	545.8	559.7	28.9	34.6	14.3	0.6
Nov.	3,894.2	2,515.3	790.8	196.4	594.4	48.1	546.3	559.6	28.5	34.4	14.3	0.7
												Changes*
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
2019	+ 122.5	+ 155.8	– 25.7	– 0.8	– 24.9	– 4.1	– 20.7	– 3.5	– 4.1	– 1.4	+ 0.9	– 0.3
2019 Dec.	– 13.8	– 8.2	– 4.6	– 4.8	+ 0.2	+ 0.3	– 0.2	– 0.5	– 0.5	– 0.0	– 0.2	– 0.4
2020 Jan.	– 2.8	– 1.3	+ 3.5	+ 5.7	– 2.2	– 0.3	– 1.9	– 4.5	– 0.6	– 0.1	+ 0.0	+ 0.4
Feb.	+ 17.7	+ 19.3	+ 1.1	+ 3.8	– 2.7	– 0.2	– 2.5	– 2.2	– 0.4	+ 0.4	– 0.2	– 0.2
Mar.	+ 40.7	+ 50.5	– 5.3	+ 0.5	– 5.9	– 2.1	– 3.7	– 4.0	– 0.4	– 0.2	– 0.0	+ 0.3
Apr.	+ 25.3	+ 40.7	– 14.0	– 6.8	– 7.2	– 1.6	– 5.6	– 0.7	– 0.7	+ 0.2	– 0.2	+ 0.9
May	+ 30.5	+ 27.9	+ 3.2	+ 8.1	– 4.9	– 1.3	– 3.6	– 0.2	– 0.4	+ 0.6	+ 0.0	– 1.2
June	– 9.0	+ 8.8	– 16.4	– 7.4	– 9.0	– 2.8	– 6.1	– 1.1	– 0.4	+ 0.1	– 0.1	– 0.1
July	+ 37.1	+ 28.7	+ 10.5	+ 8.9	+ 1.6	+ 2.3	– 0.7	– 1.6	– 0.4	+ 0.4	– 0.0	– 0.0
Aug.	+ 17.4	+ 13.6	+ 4.3	– 0.6	+ 4.9	– 0.7	+ 5.6	– 0.2	– 0.3	+ 0.2	+ 0.1	+ 0.2
Sep.	+ 13.4	+ 15.1	– 0.9	– 4.9	+ 4.0	+ 2.3	+ 1.7	– 0.5	– 0.4	+ 0.3	– 0.1	– 0.1
Oct.	+ 40.0	+ 38.6	+ 2.2	– 3.5	+ 5.7	+ 2.5	+ 3.2	– 0.4	– 0.4	+ 0.3	+ 0.0	+ 0.3
Nov.	+ 20.4	+ 34.1	– 13.3	– 11.2	– 2.1	– 2.6	+ 0.5	– 0.2	– 0.3	– 0.2	– 0.0	+ 0.1
	Domestic government											**End of year or month***
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	–
2019	237.1	74.7	154.9	76.0	78.9	26.1	52.8	3.4	4.1	24.7	2.2	0.2
2019 Dec.	237.1	74.7	154.9	76.0	78.9	26.1	52.8	3.4	4.1	24.7	2.2	0.2
2020 Jan.	236.9	69.1	160.5	81.6	78.9	25.7	53.2	3.2	4.1	24.4	2.2	0.2
Feb.	247.0	74.8	164.8	86.7	78.1	25.4	52.7	3.3	4.1	25.0	2.2	0.2
Mar.	238.6	72.7	158.6	83.1	75.5	23.8	51.7	3.2	4.1	25.0	2.1	0.2
Apr.	228.7	73.9	147.8	75.1	72.7	22.8	50.0	3.1	4.0	25.3	2.1	0.2
May	232.1	81.1	143.9	73.5	70.4	22.0	48.4	3.1	4.0	26.0	2.1	0.2
June	221.4	75.4	139.1	75.0	64.1	18.5	45.5	2.9	3.9	25.8	2.1	0.2
July	226.5	76.7	143.0	73.4	69.6	20.3	49.3	2.8	3.9	25.9	2.1	0.2
Aug.	237.6	79.4	151.3	76.1	75.2	19.4	55.8	2.9	3.9	26.0	2.1	0.2
Sep.	236.6	77.4	152.6	72.4	80.2	21.5	58.7	2.8	3.8	26.1	2.1	0.2
Oct.	240.1	81.5	152.0	68.0	84.0	24.0	60.1	2.8	3.7	26.1	2.1	0.2
Nov.	237.2	83.9	146.8	63.7	83.1	21.3	61.8	2.8	3.7	25.6	2.1	–
												Changes*
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
2019	+ 17.1	+ 11.8	+ 5.8	+ 7.8	– 2.0	– 2.6	+ 0.6	– 0.4	– 0.1	– 0.6	– 0.0	+ 0.2
2019 Dec.	– 8.5	+ 0.0	– 8.3	– 7.9	– 0.4	– 0.3	– 0.0	– 0.2	– 0.0	– 0.0	– 0.0	–
2020 Jan.	– 0.2	– 5.6	+ 5.6	+ 5.6	+ 0.0	– 0.3	+ 0.4	– 0.2	– 0.0	– 0.3	+ 0.0	–
Feb.	+ 10.1	+ 5.7	+ 4.3	+ 5.1	– 0.8	– 0.3	– 0.5	+ 0.1	– 0.0	+ 0.6	–	–
Mar.	– 8.4	– 2.1	– 6.3	– 3.6	– 2.7	– 1.6	– 1.1	– 0.0	+ 0.0	– 0.0	– 0.0	–
Apr.	– 9.9	+ 1.2	– 10.8	– 8.0	– 2.8	– 1.1	– 1.7	– 0.1	– 0.2	+ 0.3	– 0.0	–
May	+ 3.3	+ 7.2	– 3.9	– 1.6	– 2.4	– 0.8	– 1.6	+ 0.0	+ 0.0	+ 0.6	+ 0.0	–
June	– 10.7	– 5.7	– 4.8	+ 1.5	– 6.3	– 3.4	– 2.9	– 0.2	– 0.0	– 0.1	– 0.0	–
July	+ 5.1	+ 1.3	+ 3.9	– 1.6	+ 5.5	+ 1.8	+ 3.7	– 0.1	– 0.0	+ 0.1	+ 0.0	–
Aug.	+ 11.1	+ 2.8	+ 8.3	+ 2.7	+ 5.6	– 0.9	+ 6.5	+ 0.0	– 0.0	+ 0.1	– 0.0	–
Sep.	– 0.8	– 2.1	+ 1.4	– 3.7	+ 5.1	+ 2.1	+ 3.0	– 0.1	– 0.1	+ 0.1	– 0.0	–
Oct.	+ 3.7	+ 4.2	– 0.4	– 4.5	+ 4.0	+ 2.4	+ 1.7	– 0.0	– 0.0	+ 0.0	– 0.0	–
Nov.	– 2.7	+ 2.6	– 5.2	– 4.3	– 0.9	– 2.6	+ 1.7	– 0.0	– 0.0	– 0.5	–	– 0.2

* See Table IV.2, footnote *; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** Including subordinated liabilities and liabilities arising from registered debt securities. **2** Including deposits under savings and loan contracts (see

IV. Banks

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

€ billion

Period	Deposits, total	Sight deposits	Time deposits [1,2]					Savings deposits [3]	Bank savings bonds [4]	Memo item:		
			Total	for up to and including 1 year	for more than 1 year [2]					Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities)	Liabilities arising from repos
					Total	for up to and including 2 years	for more than 2 years					
	Domestic enterprises and households											**End of year or month***
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
2019	3,423.9	2,161.6	661.4	126.7	534.7	26.6	508.0	571.8	29.1	7.8	12.6	0.0
2019 Dec.	3,423.9	2,161.6	661.4	126.7	534.7	26.6	508.0	571.8	29.1	7.8	12.6	0.0
2020 Jan.	3,421.2	2,166.0	659.2	126.8	532.4	26.7	505.7	567.5	28.5	7.9	12.6	0.4
Feb.	3,428.9	2,179.6	656.0	125.5	530.5	26.8	503.7	565.2	28.1	7.7	12.4	0.2
Mar.	3,477.9	2,232.2	656.9	129.6	527.3	26.2	501.0	561.2	27.6	7.5	12.4	0.5
Apr.	3,513.1	2,271.6	653.8	130.9	522.8	25.7	497.1	560.7	27.1	7.4	12.3	1.4
May	3,543.3	2,295.2	660.9	140.6	520.2	25.2	495.1	560.5	26.7	7.4	12.3	0.2
June	3,545.0	2,309.9	649.1	131.7	517.4	25.8	491.6	559.7	26.3	7.5	12.3	0.1
July	3,577.0	2,337.3	655.6	142.1	513.5	26.3	487.2	558.1	26.0	7.9	12.2	0.1
Aug.	3,583.2	2,348.2	651.6	138.8	512.7	26.4	486.3	557.8	25.7	8.0	12.3	0.3
Sep.	3,597.6	2,365.4	649.4	137.7	511.7	26.6	485.1	557.3	25.5	8.2	12.2	0.2
Oct.	3,634.0	2,399.9	652.1	139.7	512.4	26.7	485.7	556.9	25.1	8.5	12.2	0.5
Nov.	3,657.0	2,431.4	644.0	132.7	511.3	26.7	484.5	556.8	24.8	8.8	12.2	0.7
												Changes*
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
2019	+ 105.4	+ 144.0	– 31.5	– 8.6	– 22.9	– 1.5	– 21.4	– 3.1	– 4.0	– 0.8	+ 1.0	– 0.4
2019 Dec.	– 5.3	– 8.2	+ 3.7	+ 3.1	+ 0.6	+ 0.7	– 0.1	– 0.3	– 0.5	– 0.0	– 0.2	– 0.4
2020 Jan.	– 2.7	+ 4.3	– 2.2	+ 0.1	– 2.3	+ 0.0	– 2.3	– 4.3	– 0.6	+ 0.1	+ 0.0	+ 0.4
Feb.	+ 7.7	+ 13.6	– 3.2	– 1.3	– 1.9	+ 0.1	– 2.0	– 2.3	– 0.4	– 0.2	– 0.2	– 0.2
Mar.	+ 49.0	+ 52.6	+ 0.9	+ 4.1	– 3.2	– 0.6	– 2.6	– 4.0	– 0.5	– 0.2	– 0.0	+ 0.3
Apr.	+ 35.2	+ 39.5	– 3.2	+ 1.2	– 4.4	– 0.5	– 3.9	– 0.5	– 0.5	– 0.1	– 0.1	+ 0.9
May	+ 27.1	+ 20.6	+ 7.1	+ 9.7	– 2.6	– 0.5	– 2.0	– 0.2	– 0.4	– 0.1	+ 0.0	– 1.2
June	+ 1.7	+ 14.5	– 11.6	– 8.9	– 2.6	+ 0.6	– 3.3	– 0.9	– 0.4	+ 0.2	– 0.1	– 0.1
July	+ 32.0	+ 27.4	+ 6.5	+ 10.4	– 3.9	+ 0.5	– 4.4	– 1.6	– 0.4	+ 0.3	– 0.0	– 0.0
Aug.	+ 6.3	+ 10.8	– 4.0	– 3.3	– 0.7	+ 0.2	– 0.9	– 0.2	– 0.3	+ 0.1	+ 0.1	+ 0.2
Sep.	+ 14.2	+ 17.2	– 2.2	– 1.2	– 1.1	+ 0.2	– 1.2	– 0.4	– 0.3	+ 0.2	– 0.1	– 0.1
Oct.	+ 36.3	+ 34.4	+ 2.6	+ 1.0	+ 1.7	+ 0.2	+ 1.5	– 0.4	– 0.4	+ 0.3	+ 0.0	+ 0.3
Nov.	+ 23.0	+ 31.6	– 8.1	– 6.9	– 1.2	– 0.0	– 1.2	– 0.1	– 0.3	+ 0.3	– 0.0	+ 0.2
	of which: Domestic enterprises											**End of year or month***
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
2019	1,031.5	614.4	399.7	81.1	318.6	15.5	303.1	6.7	10.7	2.4	10.1	0.0
2019 Dec.	1,031.5	614.4	399.7	81.1	318.6	15.5	303.1	6.7	10.7	2.4	10.1	0.0
2020 Jan.	1,030.8	616.3	397.5	81.7	315.8	15.4	300.3	6.6	10.5	2.4	10.2	0.4
Feb.	1,020.4	608.8	394.7	81.2	313.5	15.6	297.9	6.5	10.4	2.4	10.0	0.2
Mar.	1,080.3	665.3	398.2	87.3	310.9	15.4	295.5	6.5	10.3	2.3	10.0	0.5
Apr.	1,087.9	674.4	397.0	89.9	307.2	15.1	292.0	6.2	10.2	2.3	9.8	1.4
May	1,095.7	676.0	403.5	99.2	304.2	14.5	289.7	6.2	10.1	2.4	9.9	0.2
June	1,090.9	683.7	391.2	90.0	301.2	14.5	286.6	6.2	9.9	2.4	9.8	0.1
July	1,108.0	694.4	397.6	100.6	297.1	14.5	282.6	6.1	9.8	2.4	9.8	0.1
Aug.	1,108.0	698.2	393.8	97.5	296.3	14.6	281.6	6.1	9.9	2.3	9.8	0.3
Sep.	1,114.5	707.3	391.4	96.5	294.9	14.7	280.2	6.0	9.8	2.3	9.7	0.2
Oct.	1,129.9	720.0	394.2	98.6	295.6	14.7	280.9	6.0	9.6	2.3	9.7	0.5
Nov.	1,131.9	729.2	387.3	92.7	294.6	14.8	279.8	5.9	9.5	2.3	9.6	0.7
												Changes*
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
2019	– 3.4	+ 30.4	– 32.8	– 4.8	– 28.0	– 1.6	– 26.4	– 0.3	– 0.7	– 0.4	+ 0.9	– 0.4
2019 Dec.	– 4.7	– 5.8	+ 1.5	+ 3.2	– 1.7	+ 0.6	– 2.3	– 0.2	– 0.2	– 0.0	– 0.2	– 0.4
2020 Jan.	– 0.7	+ 1.9	– 2.2	+ 0.6	– 2.8	– 0.0	– 2.8	– 0.1	– 0.2	+ 0.0	+ 0.0	+ 0.4
Feb.	– 10.5	– 7.6	– 2.8	– 0.5	– 2.3	+ 0.2	– 2.5	– 0.0	– 0.1	– 0.0	– 0.2	– 0.2
Mar.	+ 60.0	+ 56.6	+ 3.5	+ 6.1	– 2.5	– 0.2	– 2.4	– 0.1	– 0.0	– 0.0	– 0.0	+ 0.3
Apr.	+ 7.6	+ 9.2	– 1.2	+ 2.5	– 3.7	– 0.3	– 3.4	– 0.2	– 0.1	– 0.0	– 0.1	+ 0.9
May	+ 4.8	– 1.4	+ 6.4	+ 9.4	– 2.9	– 0.6	– 2.3	– 0.0	– 0.2	+ 0.0	+ 0.0	– 1.2
June	– 4.8	+ 7.5	– 12.1	– 9.2	– 2.9	– 0.0	– 2.9	– 0.0	– 0.2	+ 0.0	– 0.1	– 0.1
July	+ 17.0	+ 10.7	+ 6.4	+ 10.5	– 4.1	– 0.0	– 4.1	– 0.0	– 0.1	– 0.0	– 0.1	– 0.0
Aug.	– 1.7	+ 2.1	– 3.9	– 3.0	– 0.8	+ 0.1	– 0.9	– 0.0	+ 0.0	– 0.1	+ 0.1	+ 0.2
Sep.	+ 7.7	+ 10.4	– 2.5	– 1.0	– 1.5	+ 0.1	– 1.5	– 0.1	– 0.1	+ 0.0	– 0.1	– 0.1
Oct.	+ 15.2	+ 12.6	+ 2.8	+ 1.1	+ 1.7	+ 0.1	+ 1.6	– 0.0	– 0.2	– 0.0	+ 0.0	+ 0.3
Nov.	+ 2.1	+ 9.2	– 6.9	– 5.9	– 1.0	+ 0.1	– 1.1	– 0.1	– 0.1	– 0.1	– 0.1	+ 0.2

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	Deposits of domestic households and non-profit institutions, total	Sight deposits						Time deposits 1,2					
		Total	by creditor group					Total	by creditor group				
			Domestic households				Domestic non-profit institutions		Domestic households				
			Total	Self-employed persons	Employees	Other individuals			Total	Self-employed persons	Employees	Other individuals	
	End of year or month*												
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	2,392.4	1,547.2	1,507.9	266.3	1,081.6	160.1	39.3	261.7	248.3	20.8	190.2	37.3	
2020 June	2,454.0	1,626.2	1,585.3	275.2	1,143.8	166.3	40.9	257.9	244.6	19.9	189.2	35.5	
July	2,469.0	1,642.9	1,602.0	282.4	1,154.4	165.2	40.9	258.0	244.5	19.9	189.2	35.4	
Aug.	2,475.2	1,650.0	1,608.8	284.2	1,160.2	164.5	41.1	257.8	244.2	19.7	190.3	34.2	
Sep.	2,483.1	1,658.1	1,616.7	283.1	1,169.7	164.0	41.4	258.0	244.3	19.5	190.6	34.2	
Oct.	2,504.2	1,679.9	1,638.7	289.7	1,184.0	165.0	41.2	257.8	244.3	19.6	190.6	34.0	
Nov.	2,525.1	1,702.2	1,661.3	290.0	1,205.7	165.6	40.9	256.7	243.7	19.4	189.4	34.9	
	Changes*												
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	+ 108.8	+ 113.6	+ 111.8	+ 18.5	+ 88.7	+ 4.6	+ 1.8	+ 1.2	+ 1.7	– 0.6	+ 1.6	+ 0.7	
2020 June	+ 6.5	+ 7.0	+ 6.9	– 1.4	+ 7.6	+ 0.7	+ 0.2	+ 0.5	+ 0.4	+ 0.6	+ 0.2	– 0.3	
July	+ 15.0	+ 16.7	+ 16.7	+ 7.2	+ 9.4	+ 0.1	+ 0.0	+ 0.1	– 0.1	– 0.0	+ 0.0	– 0.1	
Aug.	+ 8.0	+ 8.7	+ 8.4	+ 1.7	+ 6.6	+ 0.1	+ 0.3	– 0.2	– 0.3	– 0.2	+ 0.1	– 0.2	
Sep.	+ 6.5	+ 6.8	+ 6.5	– 2.2	+ 9.2	– 0.5	+ 0.3	+ 0.3	+ 0.1	– 0.2	+ 0.3	– 0.1	
Oct.	+ 21.0	+ 21.8	+ 22.0	+ 6.6	+ 14.3	+ 1.0	– 0.2	– 0.2	– 0.0	+ 0.1	– 0.1	– 0.1	
Nov.	+ 20.9	+ 22.3	+ 22.6	+ 0.3	+ 21.4	+ 0.8	– 0.3	– 1.1	– 0.6	– 0.3	– 1.2	+ 0.9	

* 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*												
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	237.1	11.2	5.4	1.5	4.2	0.1	11.6	53.8	21.1	17.1	14.5	1.0	13.1
2020 June	221.4	11.8	6.2	1.5	4.1	0.1	11.4	63.8	23.1	25.2	14.7	0.9	14.4
July	226.5	20.1	5.9	2.5	11.6	0.1	11.3	60.7	23.8	21.6	14.5	0.8	14.6
Aug.	237.6	29.8	5.7	5.3	18.8	0.1	11.4	59.6	23.2	21.1	14.4	0.8	14.7
Sep.	236.6	39.0	6.1	6.9	25.9	0.0	11.5	60.0	24.6	20.2	14.5	0.8	14.7
Oct.	240.1	46.6	7.9	6.8	31.8	0.0	11.5	57.6	23.1	19.5	14.3	0.7	14.7
Nov.	237.2	47.6	6.1	6.9	34.5	0.0	11.6	52.4	24.8	13.5	13.4	0.7	14.1
	Changes*												
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	+ 17.1	+ 1.4	+ 0.7	+ 0.2	+ 0.4	+ 0.0	– 0.6	+ 13.8	+ 7.7	+ 5.2	+ 1.1	– 0.2	+ 0.0
2020 June	– 10.7	+ 1.0	+ 0.8	+ 0.2	– 0.1	– 0.0	– 0.2	– 4.9	– 3.8	– 0.8	– 0.3	– 0.0	+ 0.1
July	+ 5.1	+ 8.3	– 0.3	+ 1.1	+ 7.5	–	– 0.0	– 3.1	+ 0.8	– 3.6	– 0.2	– 0.0	+ 0.1
Aug.	+ 11.1	+ 9.8	– 0.2	+ 2.8	+ 7.2	–	+ 0.0	– 1.2	– 0.6	– 0.6	– 0.0	– 0.0	+ 0.1
Sep.	– 0.8	+ 9.2	+ 0.4	+ 1.6	+ 7.1	– 0.0	+ 0.1	+ 0.6	+ 1.4	– 0.9	+ 0.1	– 0.0	+ 0.0
Oct.	+ 3.7	+ 7.5	+ 1.9	– 0.1	+ 5.8	– 0.0	+ 0.0	– 2.4	– 1.5	– 0.7	– 0.2	– 0.0	– 0.0
Nov.	– 2.7	+ 1.0	– 1.8	+ 0.1	+ 2.7	–	+ 0.1	– 5.1	+ 1.8	– 5.9	– 0.9	– 0.0	– 0.6

* See Table IV.2, footnote *; excluding deposits of the Treuhand agency and its successor organisations, of the Federal Railways, East German Railways and Federal Post Office, and, from 1995, of Deutsche Bahn AG, Deutsche Post AG and Deutsche Telekom AG, and of publicly owned enterprises, which are included in "Enterprises". Statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in

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Domestic non-profit institutions	by maturity: up to and including 1 year	more than 1 year [2]: Total	of which: up to and including 2 years	of which: more than 2 years	Savings deposits [3]: Total	Savings deposits [3]: Domestic households	Savings deposits [3]: Domestic non-profit institutions	Bank savings bonds [4]	Memo item: Fiduciary loans	Memo item: Subordinated liabilities (excluding negotiable debt securities) [5]	Memo item: Liabilities arising from repos	Period
End of year or month*												
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
13.3	45.6	216.1	11.2	204.9	565.1	558.1	7.0	18.4	5.4	2.4	–	2019
13.3	41.6	216.3	11.2	205.0	553.5	546.8	6.7	16.4	5.1	2.4	–	2020 June
13.5	41.6	216.4	11.8	204.7	552.0	545.4	6.6	16.1	5.5	2.5	–	July
13.6	41.3	216.5	11.8	204.6	551.7	545.1	6.6	15.8	5.7	2.5	–	Aug.
13.7	41.2	216.8	11.9	204.9	551.3	544.7	6.6	15.7	5.8	2.5	–	Sep.
13.6	41.0	216.8	12.0	204.8	550.9	544.5	6.5	15.5	6.2	2.6	–	Oct.
13.0	40.0	216.6	11.9	204.7	550.9	544.5	6.4	15.3	6.5	2.6	–	Nov.
Changes*												
– 0.2	+ 0.4	+ 2.6	– 1.6	+ 4.2	– 4.5	– 3.9	– 0.6	– 5.0	+ 4.0	+ 0.0	–	2018
– 0.4	– 3.8	+ 5.1	+ 0.1	+ 5.0	– 2.8	– 2.5	– 0.3	– 3.3	– 0.4	+ 0.0	–	2019
+ 0.1	+ 0.3	+ 0.2	+ 0.6	– 0.4	– 0.8	– 0.8	– 0.1	– 0.2	+ 0.2	+ 0.0	–	2020 June
+ 0.2	– 0.1	+ 0.2	+ 0.5	– 0.4	– 1.5	– 1.4	– 0.1	– 0.3	+ 0.3	+ 0.0	–	July
+ 0.1	– 0.2	+ 0.1	+ 0.1	+ 0.0	– 0.2	– 0.2	+ 0.0	– 0.3	+ 0.2	+ 0.0	–	Aug.
+ 0.2	– 0.1	+ 0.4	+ 0.1	+ 0.3	– 0.4	– 0.4	+ 0.0	– 0.2	+ 0.2	+ 0.0	–	Sep.
– 0.2	– 0.2	– 0.0	+ 0.1	– 0.1	– 0.3	– 0.2	– 0.1	– 0.2	+ 0.3	+ 0.0	–	Oct.
– 0.5	– 1.0	– 0.2	– 0.1	– 0.1	– 0.1	+ 0.0	– 0.1	– 0.2	+ 0.3	+ 0.1	–	Nov.

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): Total	Sight deposits	Time deposits [3]: for up to and including 1 year	Time deposits [3]: for more than 1 year	Savings deposits and bank savings bonds [2,4]	Memo item: Fiduciary loans	Social security funds: Total	Sight deposits	Time deposits: for up to and including 1 year	Time deposits: for more than 1 year	Savings deposits and bank savings bonds [2]	Memo item: Fiduciary loans	Period
End of year or month*												
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
65.3	37.4	8.6	14.0	5.4	0.0	106.8	10.8	48.8	46.2	1.1	–	2019
58.8	31.8	8.6	13.3	5.1	0.0	87.0	14.4	39.7	32.1	0.8	–	2020 June
59.4	32.8	8.4	13.1	5.1	0.0	86.2	14.1	40.8	30.5	0.8	–	July
62.4	35.6	8.6	13.1	5.1	0.0	85.8	14.9	41.1	28.9	0.8	–	Aug.
56.9	30.8	8.3	12.9	5.0	0.0	80.7	15.9	37.1	27.0	0.8	–	Sep.
59.6	34.0	8.3	12.5	4.9	0.0	76.2	16.5	33.4	25.5	0.8	–	Oct.
62.2	36.4	8.4	12.5	5.0	0.0	75.1	16.7	34.9	22.8	0.8	–	Nov.
Changes*												
+ 3.6	+ 1.9	+ 1.0	+ 0.6	+ 0.1	+ 0.0	+ 9.9	– 0.0	– 0.8	+10.8	– 0.1	–	2018
– 0.8	+ 2.1	– 1.4	– 1.2	– 0.3	+ 0.0	+ 2.8	+ 1.3	+ 3.7	– 2.2	+ 0.1	–	2019
– 3.5	– 3.0	– 0.2	– 0.2	– 0.1	–	– 3.2	+ 0.3	+ 2.3	– 5.8	– 0.1	–	2020 June
+ 0.6	+ 1.0	– 0.2	– 0.2	– 0.0	–	– 0.7	– 0.2	+ 1.1	– 1.6	– 0.0	–	July
+ 3.0	+ 2.8	+ 0.2	– 0.0	+ 0.0	–	– 0.5	+ 0.8	+ 0.3	– 1.5	– 0.0	–	Aug.
– 5.5	– 4.8	– 0.3	– 0.2	– 0.1	–	– 5.1	+ 1.0	– 4.1	– 2.0	+ 0.0	–	Sep.
+ 3.1	+ 3.2	+ 0.0	– 0.1	– 0.1	–	– 4.5	+ 0.6	– 3.7	– 1.5	– 0.0	–	Oct.
+ 2.5	+ 2.4	+ 0.1	+ 0.0	+ 0.0	–	– 1.1	+ 0.2	+ 1.5	– 2.7	– 0.0	–	Nov.

the following Monthly Report, are not specially marked. **1** Federal Railways Fund, Indemnification Fund, Redemption Fund for Inherited Liabilities, ERP Special Fund, German Unity Fund, Equalisation of Burdens Fund. **2** Including liabilities arising from non-negotiable bearer debt securities. **3** Including deposits under savings and loan contracts. **4** Excluding deposits under savings and loan contracts (see also footnote 3).

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

€ billion

Period	Savings deposits [1]								Memo item: Interest credited on savings deposits	Bank savings bonds, [3] sold to			
		of residents					of non-residents				domestic non-banks		
			at 3 months' notice		at more than 3 months' notice								
	Total	Total	Total	of which: Special savings facilities [2]	Total	of which: Special savings facilities [2]	Total	of which: At 3 months' notice		non-banks, total	Total	of which: With maturities of more than 2 years	foreign non-banks
	End of year or month*												
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	581.8	575.2	540.5	313.2	34.7	24.7	6.6	5.9	2.0	35.9	33.2	25.1	2.6
2020 July	567.3	560.9	531.7	293.2	29.2	19.8	6.4	5.8	0.1	31.8	29.9	23.1	1.9
Aug.	567.0	560.6	531.8	291.2	28.8	19.4	6.3	5.8	0.1	31.5	29.6	22.9	1.9
Sep.	566.5	560.1	531.7	290.3	28.4	19.1	6.3	5.7	0.1	31.1	29.3	22.7	1.9
Oct.	566.0	559.7	531.7	288.3	28.0	18.7	6.3	5.7	0.1	30.7	28.9	22.5	1.9
Nov.	565.8	559.6	532.0	287.4	27.6	18.3	6.3	5.7	0.1	30.4	28.5	22.2	1.9
	Changes*												
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	– 3.9	– 3.5	– 0.6	– 21.3	– 2.8	– 2.5	– 0.4	– 0.3	.	– 5.3	– 4.1	– 2.8	– 1.2
2020 July	– 1.7	– 1.6	– 1.1	– 2.2	– 0.6	– 0.5	– 0.0	– 0.0	.	– 0.4	– 0.4	– 0.2	– 0.0
Aug.	– 0.2	– 0.2	+ 0.2	– 2.0	– 0.4	– 0.4	– 0.0	– 0.0	.	– 0.3	– 0.3	– 0.1	– 0.0
Sep.	– 0.5	– 0.5	– 0.1	– 1.0	– 0.4	– 0.4	– 0.0	– 0.0	.	– 0.4	– 0.4	– 0.2	–
Oct.	– 0.4	– 0.4	– 0.0	– 1.9	– 0.4	– 0.4	– 0.0	– 0.0	.	– 0.4	– 0.4	– 0.2	– 0.0
Nov.	– 0.2	– 0.2	+ 0.3	– 0.9	– 0.4	– 0.4	– 0.0	– 0.0	.	– 0.3	– 0.3	– 0.3	+ 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	
		of which:				with maturities of								
						up to and including 1 year		more than 1 year up to and including 2 years						
	Total	Floating rate bonds [1]	Zero coupon bonds [1,2]	Foreign currency bonds [3,4]	Certificates of deposit	Total	of which: without a nominal guarantee [5]	Total	of which: without a nominal guarantee [5]	more than 2 years	Total	of which: with maturities of more than 2 years	negotiable debt securities	non-negotiable debt securities
	End of year or month*													
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	1,140.7	123.5	28.6	367.7	96.7	117.7	2.6	23.6	4.2	999.4	0.9	0.7	31.5	0.4
2020 July	1,128.7	120.2	25.2	327.9	77.2	94.8	1.8	25.7	3.4	1,008.2	0.9	0.7	33.3	0.4
Aug.	1,127.8	118.8	12.5	328.6	93.6	98.2	1.8	25.6	3.3	1,003.9	1.0	0.8	34.5	0.4
Sep.	1,153.2	119.6	12.4	343.7	106.9	111.0	1.8	25.7	3.3	1,016.5	1.0	0.8	35.2	0.4
Oct.	1,139.8	117.8	12.7	327.1	93.9	98.5	1.8	26.1	3.5	1,015.3	0.9	0.7	35.2	0.4
Nov.	1,134.2	119.3	12.7	322.1	92.3	97.0	1.7	25.5	3.2	1,011.7	1.0	0.8	35.1	0.4
	Changes*													
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	+ 40.6	– 15.9	+ 1.1	+ 11.8	+ 8.4	+ 11.5	– 0.5	+ 1.6	– 1.9	+ 27.4	+ 0.3	+ 0.6	+ 0.8	– 0.3
2020 July	– 18.2	– 4.6	– 2.5	– 16.6	– 9.3	– 10.9	+ 0.1	– 1.4	+ 0.0	– 5.8	+ 0.1	+ 0.0	+ 0.6	–
Aug.	– 1.0	– 1.4	+ 2.3	+ 0.7	+ 1.3	+ 3.4	+ 0.0	– 0.1	– 0.1	– 4.3	+ 0.1	+ 0.1	+ 1.2	–
Sep.	+ 25.5	+ 0.8	– 0.0	+ 15.1	+ 13.3	+ 12.8	+ 0.0	+ 0.2	+ 0.0	+ 12.6	– 0.0	– 0.0	+ 0.8	–
Oct.	– 13.5	– 1.8	+ 0.3	– 16.6	– 13.0	– 12.5	+ 0.0	+ 0.3	+ 0.1	– 1.3	– 0.1	– 0.0	– 0.0	–
Nov.	– 5.6	+ 1.6	– 0.0	– 5.0	– 1.6	– 1.5	– 0.1	– 0.6	– 0.2	– 3.5	+ 0.1	+ 0.1	– 0.1	–

* See Table IV.2, footnote *; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** Including 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																
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	19	237.9	34.0	0.0	16.2	11.4	117.6	28.0	25.9	2.9	21.0	179.7	9.8	1.8	12.0	88.7
2020 Sep.	18	242.1	31.4	0.0	16.1	11.0	123.0	30.7	25.5	2.9	25.4	179.9	8.4	1.7	12.3	6.1
Oct.	18	242.4	31.4	0.0	16.0	10.9	123.5	31.2	25.3	2.9	24.7	179.7	8.6	2.8	12.3	6.3
Nov.	18	243.4	31.3	0.0	16.0	10.9	124.1	31.6	25.5	2.9	25.8	179.7	8.4	2.8	12.3	6.4
Private building and loan associations																
2020 Sep.	10	167.7	16.1	–	6.8	8.1	95.8	26.2	11.3	1.7	22.8	116.6	8.1	1.7	8.4	3.9
Oct.	10	168.1	16.0	–	6.8	8.1	96.3	26.6	11.2	1.7	22.2	116.4	8.3	2.8	8.4	4.1
Nov.	10	168.8	15.7	–	7.0	8.0	96.7	26.9	11.4	1.7	23.1	116.5	8.1	2.8	8.4	4.1
Public building and loan associations																
2020 Sep.	8	74.4	15.4	0.0	9.3	2.8	27.1	4.5	14.2	1.2	2.6	63.3	0.3	–	3.8	2.2
Oct.	8	74.3	15.4	0.0	9.2	2.8	27.3	4.6	14.1	1.2	2.5	63.3	0.3	–	3.8	2.2
Nov.	8	74.6	15.6	0.0	9.1	2.8	27.4	4.7	14.1	1.2	2.7	63.2	0.3	–	3.8	2.3

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		
							Allocations									
							Deposits under savings and loan contracts		Loans under savings and loan contracts 9							
	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	Total	of which: Applied to settlement of interim and bridging loans	Total	of which: Applied to settlement of interim and bridging loans	Newly granted interim and bridging loans and other building loans	Total	of which: Under allocated contracts	Total	of which: Repayments during quarter	Memo item: Housing bonuses received 12
All building and loan associations																
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	27.3	2.1	7.5	49.2	25.8	42.9	16.4	4.2	4.6	3.6	21.9	18.1	6.5	7.2	5.4	0.2
2020 Sep.	2.2	0.0	0.6	4.3	2.1	4.0	1.5	0.3	0.3	0.3	2.2	18.6	6.4	0.5	1.2	0.0
Oct.	2.1	0.0	0.7	4.4	2.3	4.1	1.5	0.4	0.4	0.3	2.2	18.6	6.4	0.6		0.0
Nov.	2.2	0.1	0.7	4.3	2.1	4.1	1.6	0.3	0.3	0.3	2.1	18.7	6.4	0.5		0.0
Private building and loan associations																
2020 Sep.	1.4	0.0	0.3	3.2	1.5	3.0	1.0	0.2	0.2	0.2	1.8	14.0	3.5	0.4	0.9	0.0
Oct.	1.3	0.0	0.4	3.3	1.6	3.2	1.1	0.3	0.3	0.2	1.8	14.0	3.5	0.4		0.0
Nov.	1.4	0.0	0.3	3.1	1.3	3.1	1.1	0.2	0.2	0.2	1.8	14.0	3.4	0.4		0.0
Public building and loan associations																
2020 Sep.	0.7	0.0	0.3	1.1	0.7	1.0	0.4	0.1	0.1	0.1	0.4	4.7	2.9	0.1	0.3	0.0
Oct.	0.7	0.0	0.3	1.1	0.7	0.9	0.4	0.1	0.1	0.1	0.4	4.6	2.9	0.1		0.0
Nov.	0.8	0.0	0.4	1.2	0.8	1.0	0.5	0.1	0.1	0.1	0.4	4.6	2.9	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: German banks (MFIs) with foreign branches and/or foreign subsidiaries	Number of: foreign branches [1] and/or foreign subsidiaries	Balance sheet total [7]	Lending to banks (MFIs): Total	Lending to banks (MFIs): Credit balances and loans: Total	Lending to banks (MFIs): Credit balances and loans: German banks	Lending to banks (MFIs): Credit balances and loans: Foreign banks	Lending to banks (MFIs): Money market paper, securities [2,3]	Lending to non-banks (non-MFIs): Total	Lending to non-banks (non-MFIs): Loans: Total	Lending to non-banks (non-MFIs): Loans: to German non-banks	Lending to non-banks (non-MFIs): Loans: to foreign non-banks	Lending to non-banks (non-MFIs): Money market paper, securities [2]	Other assets [7]: Total	Other assets [7]: of which: Derivative financial instruments in the trading portfolio
Foreign branches															**End of year or month** *
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
2019	52	198	1,453.0	407.3	389.2	216.0	173.2	18.1	534.3	436.1	19.7	416.4	98.2	511.5	361.7
2020 Jan.	52	198	1,597.9	431.9	413.6	224.2	189.4	18.3	566.2	470.8	19.9	450.8	95.4	599.8	433.8
Feb.	52	199	1,725.2	445.3	427.1	240.5	186.6	18.2	583.5	493.8	19.5	474.3	89.7	696.4	534.6
Mar.	52	199	1,888.5	483.7	465.3	248.9	216.4	18.4	590.4	495.8	20.5	475.3	94.6	814.4	650.7
Apr.	52	199	1,875.4	473.2	455.1	261.5	193.7	18.0	584.5	492.6	20.5	472.1	91.9	817.8	646.0
May	52	198	1,823.5	442.7	425.6	248.0	177.6	17.2	571.6	475.7	19.6	456.1	95.9	809.2	632.1
June	52	198	1,780.3	440.7	426.2	250.4	175.8	14.5	559.5	463.9	19.6	444.3	95.6	780.1	608.1
July	51	206	1,774.6	438.1	424.1	264.7	159.4	14.0	546.4	452.9	19.7	433.3	93.5	790.1	625.7
Aug.	51	206	1,684.1	419.5	405.5	250.8	154.8	14.0	535.1	437.8	19.2	418.6	97.2	729.5	563.8
Sep.	51	206	1,672.4	407.7	393.3	242.2	151.1	14.4	544.2	447.5	18.9	428.7	96.7	720.5	543.7
Oct.	51	207	1,638.9	409.7	395.6	243.0	152.6	14.1	537.6	438.4	18.2	420.2	99.2	691.5	524.4
															Changes *
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
2019	+ 3	+15	+ 51.5	− 4.7	− 7.7	+23.9	− 31.6	+ 2.9	+12.6	+ 0.9	− 0.3	+ 1.2	+11.7	+ 30.6	+ 49.6
2020 Feb.	−	+ 1	+126.9	+ 12.9	+ 13.0	+16.4	− 3.4	− 0.1	+16.2	+ 22.0	− 0.5	+ 22.5	− 5.9	+ 96.2	+ 100.2
Mar.	−	−	+163.4	+ 38.8	+ 38.6	+ 8.4	+ 30.2	+ 0.2	+ 8.6	+ 3.5	+ 1.0	+ 2.5	+ 5.1	+ 118.1	+ 116.4
Apr.	−	−	− 13.6	− 12.1	− 11.7	+12.6	− 24.2	− 0.5	− 9.6	− 6.3	+ 0.1	− 6.4	− 3.2	+ 2.8	− 6.4
May	−	− 1	− 50.5	− 27.0	− 26.4	−13.5	− 12.9	− 0.6	− 4.4	− 9.4	− 1.0	− 8.4	+ 5.0	− 7.1	− 9.0
June	−	−	− 42.8	− 1.2	+ 1.4	+ 2.4	− 1.0	− 2.7	− 9.8	− 9.9	+ 0.0	− 9.9	+ 0.1	− 28.7	− 22.8
July	− 1	+ 9	− 3.1	+ 2.4	+ 2.6	+14.3	− 11.7	− 0.2	+ 0.7	+ 0.8	+ 0.1	+ 0.7	− 0.1	+ 12.6	+ 26.8
Aug.	−	−	− 90.2	− 17.9	− 17.9	−13.9	− 4.0	− 0.1	− 9.5	− 13.5	− 0.4	− 13.1	+ 4.1	− 60.2	− 60.6
Sep.	−	−	− 12.5	− 13.1	− 13.5	− 8.6	− 4.9	+ 0.4	+ 5.2	+ 6.5	− 0.4	+ 6.9	− 1.2	− 9.8	− 22.9
Oct.	−	+ 1	− 33.6	+ 1.7	+ 2.0	+ 0.8	+ 1.2	− 0.3	− 7.6	− 10.0	− 0.7	− 9.3	+ 2.4	− 29.1	− 19.6
Foreign subsidiaries															**End of year or month** *
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	0.0
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	0.0
2019	15	41	235.2	52.5	46.7	18.3	28.4	5.7	139.0	116.1	14.4	101.7	22.9	43.7	0.0
2020 Jan.	15	40	240.2	52.4	47.0	20.1	26.9	5.5	141.0	117.5	14.0	103.4	23.6	46.8	0.0
Feb.	15	40	247.0	57.7	52.0	20.3	31.7	5.7	141.4	117.6	14.0	103.5	23.9	47.8	0.0
Mar.	15	40	246.2	55.7	49.3	19.5	29.9	6.4	143.9	121.7	15.1	106.7	22.1	46.7	0.0
Apr.	14	39	244.4	50.8	44.2	19.7	24.5	6.6	143.9	120.6	15.4	105.3	23.3	49.6	0.0
May	14	39	245.7	52.1	45.9	19.4	26.5	6.2	142.9	119.2	15.6	103.6	23.7	50.8	0.0
June	13	38	247.4	53.5	47.2	20.9	26.3	6.4	143.1	118.3	15.1	103.2	24.8	50.7	0.0
July	13	37	238.4	46.0	40.3	19.9	20.4	5.7	141.2	115.8	14.8	101.1	25.4	51.2	0.0
Aug.	12	36	237.6	46.8	41.2	19.6	21.6	5.6	140.9	115.9	14.6	101.3	25.0	49.8	0.0
Sep.	12	36	237.1	49.5	44.2	18.8	25.4	5.3	142.6	117.2	14.2	103.0	25.4	45.1	0.0
Oct.	12	36	235.7	44.4	39.2	18.4	20.8	5.2	142.5	116.9	14.2	102.7	25.6	48.9	0.0
															Changes *
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	± 0.0
2019	− 2	− 2	− 7.2	+ 0.4	+ 0.5	− 1.8	+ 2.3	− 0.2	+ 1.6	+ 3.5	+ 0.5	+ 3.0	− 1.9	− 9.1	± 0.0
2020 Feb.	−	−	+ 6.4	+ 5.1	+ 4.9	+ 0.3	+ 4.6	+ 0.2	+ 0.3	− 0.1	− 0.0	− 0.0	+ 0.3	+ 1.0	± 0.0
Mar.	−	−	− 0.6	− 2.1	− 2.7	− 0.9	− 1.8	+ 0.7	+ 2.6	+ 4.3	+ 1.1	+ 3.2	− 1.7	− 1.1	± 0.0
Apr.	− 1	− 1	− 2.5	− 5.2	− 5.3	+ 0.2	− 5.5	+ 0.2	− 0.3	− 1.4	+ 0.3	− 1.7	+ 1.1	+ 3.0	± 0.0
May	−	−	+ 3.0	+ 2.0	+ 2.3	− 0.3	+ 2.5	− 0.3	− 0.2	− 0.6	+ 0.2	− 0.8	+ 0.4	+ 1.1	± 0.0
June	− 1	− 1	+ 2.0	+ 1.6	+ 1.4	+ 1.5	− 0.1	+ 0.2	+ 0.4	− 0.7	− 0.5	− 0.2	+ 1.2	− 0.1	± 0.0
July	−	− 1	− 5.8	− 5.9	− 5.5	− 0.9	− 4.6	− 0.3	− 0.5	− 1.0	− 0.3	− 0.7	+ 0.5	+ 0.6	± 0.0
Aug.	− 1	− 1	− 0.5	+ 1.0	+ 1.0	− 0.3	+ 1.4	− 0.0	− 0.1	+ 0.2	− 0.2	+ 0.4	− 0.3	− 1.4	± 0.0
Sep.	−	−	− 1.3	+ 2.2	+ 2.6	− 0.9	+ 3.5	− 0.4	+ 1.3	+ 0.9	− 0.4	+ 1.3	+ 0.4	− 4.8	± 0.0
Oct.	−	−	− 1.6	− 5.2	− 5.0	− 0.4	− 4.7	− 0.1	− 0.2	− 0.4	+ 0.0	− 0.4	+ 0.1	+ 3.8	± 0.0

***** In this table "foreign" also includes the country of domicile of the foreign branches and foreign subsidiaries. Statistical breaks 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 country of

IV. Banks

Deposits									Money market paper and debt securities outstanding [5]	Working capital and own funds	Other liabilities [6,7]		Period
	of banks (MFIs)			of non-banks (non-MFIs)									
					German non-banks [4]								
Total	Total	German banks	Foreign banks	Total	Total	Shortterm	Medium and longterm	Foreign non-banks			Total	of which: Derivative financial instruments in the trading portfolio	
End of year or month *												**Foreign branches**	
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
894.1	613.6	453.2	160.4	280.5	12.7	10.1	2.7	267.8	94.6	53.4	410.9	361.1	2019
955.1	659.0	468.1	190.9	296.1	13.6	10.8	2.7	282.5	106.3	54.1	482.4	432.8	2020 Jan.
975.4	660.5	471.1	189.4	314.9	13.7	10.7	3.0	301.2	110.1	54.2	585.5	533.6	Feb.
1,030.8	718.6	458.6	260.0	312.3	15.1	12.0	3.1	297.2	97.2	54.7	705.7	650.4	Mar.
1,028.3	725.0	474.8	250.2	303.4	14.6	11.9	2.7	288.7	92.2	55.0	699.9	644.4	Apr.
994.0	695.4	484.1	211.3	298.7	15.3	13.1	2.2	283.3	93.5	54.7	681.2	630.2	May
979.1	680.0	484.2	195.8	299.1	14.5	12.6	1.9	284.6	85.7	54.3	661.3	607.6	June
959.1	661.2	468.6	192.6	297.9	17.3	15.6	1.8	280.6	80.2	53.5	681.8	624.2	July
943.2	655.1	460.9	194.2	288.1	14.4	12.7	1.7	273.7	74.9	52.4	613.6	563.1	Aug.
945.7	650.5	473.7	176.8	295.2	15.4	13.8	1.7	279.8	76.8	52.6	597.4	544.0	Sep.
932.4	632.6	451.1	181.5	299.9	14.0	12.3	1.7	285.9	76.7	50.9	578.9	523.9	Oct.
Changes *													
− 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
− 7.2	+ 2.4	+ 24.4	− 22.0	− 9.6	+ 1.3	+ 0.4	+ 0.9	− 10.9	+ 3.0	− 0.6	+ 52.0	+ 58.5	2019
+ 19.7	+ 0.9	+ 3.0	− 2.1	+ 18.7	+ 0.1	− 0.1	+ 0.2	+ 18.6	+ 3.4	+ 0.1	+ 103.1	+ 100.8	2020 Feb.
+ 56.0	+ 58.5	− 12.5	+ 71.0	− 2.5	+ 1.4	+ 1.5	− 0.1	− 3.9	− 12.8	+ 0.5	+ 120.2	+ 116.8	Mar.
− 4.6	+ 4.5	+ 16.3	− 11.8	− 9.0	− 0.4	− 0.1	− 0.4	− 8.6	− 5.6	+ 0.3	− 5.8	− 6.1	Apr.
− 29.9	− 25.4	+ 9.3	− 34.7	− 4.5	+ 0.7	+ 1.2	− 0.4	− 5.2	+ 2.8	− 0.3	− 18.6	− 14.2	May
− 14.0	− 14.5	+ 0.1	− 14.6	+ 0.5	− 0.9	− 0.5	− 0.4	+ 1.4	− 7.4	− 0.5	− 20.0	− 22.6	June
− 13.9	− 13.2	− 15.6	+ 2.4	− 0.7	+ 2.9	+ 3.0	− 0.1	− 3.6	− 2.8	− 0.8	+ 20.5	+ 16.6	July
− 15.0	− 5.1	− 7.7	+ 2.5	− 9.8	− 2.9	− 2.9	− 0.0	− 6.9	− 5.0	− 1.1	− 68.2	− 61.1	Aug.
+ 0.4	− 6.7	+ 12.8	− 19.5	+ 7.1	+ 1.0	+ 1.1	− 0.1	+ 6.0	+ 1.1	+ 0.1	− 16.2	− 19.1	Sep.
− 13.6	− 18.3	− 22.6	+ 4.4	+ 4.6	− 1.4	− 1.5	+ 0.0	+ 6.1	− 0.2	− 1.7	− 18.5	− 20.1	Oct.
End of year or month *												**Foreign subsidiaries**	
207.1	96.3	49.8	46.5	110.8	12.0	6.2	5.8	98.8	13.0	24.2	32.3	0.0	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	0.0	2018
165.7	68.7	36.6	32.1	97.0	6.6	3.9	2.7	90.4	16.0	22.1	31.4	0.0	2019
170.1	70.5	37.3	33.2	99.6	6.4	3.6	2.7	93.2	16.5	21.7	32.0	0.0	2020 Jan.
176.3	73.5	38.6	35.0	102.7	6.8	4.1	2.7	95.9	16.4	21.7	32.7	0.0	Feb.
176.1	75.1	39.8	35.3	101.0	6.7	4.1	2.6	94.3	15.6	21.3	33.3	0.0	Mar.
175.3	76.8	43.3	33.6	98.5	6.9	4.4	2.5	91.6	15.8	20.8	32.4	0.0	Apr.
177.7	76.5	42.2	34.3	101.2	7.1	4.5	2.5	94.2	15.5	20.8	31.7	0.0	May
178.8	74.8	41.0	33.7	104.1	6.8	4.3	2.5	97.3	16.4	20.8	31.4	0.0	June
171.1	67.2	38.9	28.3	103.9	7.3	4.8	2.5	96.6	16.6	20.7	30.1	0.0	July
171.1	66.1	38.1	28.0	105.0	7.1	4.6	2.5	97.9	16.5	20.6	29.4	0.0	Aug.
170.3	66.5	37.1	29.4	103.7	6.7	4.2	2.5	97.0	16.8	20.5	29.5	0.0	Sep.
167.9	63.5	35.3	28.3	104.4	7.4	4.9	2.5	96.9	17.7	20.5	29.6	0.0	Oct.
Changes *													
− 37.4	− 25.8	− 13.7	− 12.0	− 11.7	− 2.8	+ 0.2	− 3.0	− 8.8	+ 1.3	− 1.8	− 4.3	± 0.0	2018
− 6.7	− 3.2	+ 0.5	− 3.8	− 3.5	− 2.5	− 2.5	+ 0.0	− 1.0	+ 1.7	− 0.4	− 1.8	± 0.0	2019
+ 6.0	+ 2.9	+ 1.3	+ 1.6	+ 3.0	+ 0.4	+ 0.5	− 0.1	+ 2.6	− 0.1	− 0.0	+ 0.5	± 0.0	2020 Feb.
− 0.1	+ 1.6	+ 1.2	+ 0.4	− 1.7	− 0.1	− 0.0	− 0.1	− 1.6	− 0.8	− 0.4	+ 0.7	± 0.0	Mar.
− 1.1	+ 1.5	+ 3.5	− 2.0	− 2.7	+ 0.2	+ 0.3	− 0.1	− 2.9	+ 0.2	− 0.5	− 1.0	± 0.0	Apr.
+ 3.4	+ 0.2	− 1.1	+ 1.3	+ 3.2	+ 0.2	+ 0.2	− 0.0	+ 3.0	− 0.3	− 0.0	− 0.2	± 0.0	May
+ 1.4	− 1.6	− 1.1	− 0.5	+ 3.0	− 0.2	− 0.2	− 0.0	+ 3.2	+ 0.9	− 0.0	− 0.2	± 0.0	June
− 5.4	− 6.4	− 2.1	− 4.3	+ 1.0	+ 0.5	+ 0.5	− 0.0	+ 0.5	+ 0.2	− 0.1	− 0.5	± 0.0	July
+ 0.2	− 1.0	− 0.8	− 0.2	+ 1.3	− 0.2	− 0.2	− 0.0	+ 1.5	− 0.1	− 0.1	− 0.6	± 0.0	Aug.
− 1.5	+ 0.2	− 1.0	+ 1.1	− 1.7	− 0.3	− 0.3	− 0.0	− 1.3	+ 0.3	− 0.1	− 0.1	± 0.0	Sep.
− 2.5	− 3.0	− 1.9	− 1.2	+ 0.6	+ 0.7	+ 0.7	− 0.0	− 0.1	+ 0.9	− 0.0	− 0.1	± 0.0	Oct.

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]
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	13,485.4	134.9	134.5	1,623.7	1,489.3	0.0
2020 Nov.	14,438.3	144.4	144.0	2,960.7	2,816.7	0.0
Dec. p	14,590.4	145.9	145.5	...	...	...
2021 Jan. 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]
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	3,728,027	27.6	37,280	37,131	486,477	449,346	0
2020 Nov.	4,006,632	27.8	40,066	39,920	884,697	844,776	0
Dec. p	4,020,792	27.6	40,208	40,062	...	...	...
2021 Jan. p	...	...	...	...	...	...	...

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
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	7,684	5,494	2,765	12,273	7,028	109	1,778
2020 Nov.	8,212	6,214	3,158	12,650	7,456	110	2,119
Dec.	8,151	6,371	3,019	12,912	7,547	111	2,028
2021 Jan.	8,511	6,236	3,123	12,920	7,613	114	1,987

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
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	2,627,478	1,272	410,338	577,760	111,183
2020 Nov.	2,883,892	1,662	443,559	561,169	116,350
Dec.	2,923,462	1,607	436,696	560,770	105,880
2021 Jan.	2,946,084	5,935	448,093	560,661	104,201

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 / base rates

% per annum

ECB interest rates										Base rates			
		Main refinancing operations					Main refinancing operations						
Applicable from	Deposit facility	Fixed rate	Minimum bid rate	Marginal lending facility	Applicable from	Deposit facility	Fixed rate	Minimum bid rate	Marginal lending facility	Applicable from	Base rate as per Civil Code [1]	Applicable from	Base rate as per Civil Code [1]
2005 Dec. 6	1.25	–	2.25	3.25	2011 Apr. 13	0.50	1.25	–	2.00	2002 Jan. 1	2.57	2009 Jan. 1	1.62
					July 13	0.75	1.50	–	2.25	July 1	2.47	July 1	0.12
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	2003 Jan. 1	1.97	2011 July 1	0.37
Aug. 9	2.00	–	3.00	4.00						July 1	1.22		
Oct. 11	2.25	–	3.25	4.25	2012 July 11	0.00	0.75	–	1.50			2012 Jan. 1	0.12
Dec. 13	2.50	–	3.50	4.50						2004 Jan. 1	1.14		
					2013 May 8	0.00	0.50	–	1.00	July 1	1.13	2013 Jan. 1	– 0.13
2007 Mar. 14	2.75	–	3.75	4.75	Nov. 13	0.00	0.25	–	0.75			July 1	– 0.38
June 13	3.00	–	4.00	5.00						2005 Jan. 1	1.21		
					2014 June 11	-0.10	0.15	–	0.40	July 1	1.17	2014 Jan. 1	– 0.63
2008 July 9	3.25	–	4.25	5.25	Sep. 10	-0.20	0.05	–	0.30			July 1	– 0.73
Oct. 8	2.75	–	3.75	4.75						2006 Jan. 1	1.37		
Oct. 9	3.25	3.75	–	4.25	2015 Dec. 9	-0.30	0.05	–	0.30	July 1	1.95	2015 Jan. 1	– 0.83
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	2007 Jan. 1	2.70	2016 July 1	– 0.88
										July 1	3.19		
2009 Jan. 21	1.00	2.00	–	3.00	2019 Sep. 18	-0.50	0.00	–	0.25				
Mar. 11	0.50	1.50	–	2.50						2008 Jan. 1	3.32		
Apr. 8	0.25	1.25	–	2.25						July 1	3.19		
May 13	0.25	1.00	–	1.75									

1 Pursuant to Section 247 of the Civil Code.

2. 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	
	€ million		% per annum				
Main refinancing operations							
2020 Dec. 16	344	344	0.00	-	-	-	7
Dec. 23	262	262	0.00	-	-	-	7
Dec. 30	468	468	0.00	-	-	-	7
2021 Jan. 6	180	180	0.00	-	-	-	7
Jan. 13	521	521	0.00	-	-	-	7
Long-term refinancing operations							
2020 Nov. 5	747	747	[2] …	-	-	-	266
Nov. 26	293	293	[2] …	-	-	-	91
Dec. 3	1,881	1,881	[2] …	-	-	-	238
Dec. 16	50,414	50,414	[2] …	-	-	-	1,099
Dec. 17	478	478	[2] …	-	-	-	105

***** 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: a) the average minimum bid rate of the main refinancing operations over the life of this operation including a spread or b) the average deposit facility rate over the life of this operation.

3. Money market rates, by month *

% per annum

Monthly average	€STR [1]	EONIA [1]	EURIBOR [2]				
			One-week funds	One-month funds	Three-month funds	Six-month funds	Twelve-month funds
2020 June	– 0.546	– 0.46	– 0.52	– 0.49	– 0.38	– 0.22	– 0.15
July	– 0.550	– 0.46	– 0.53	– 0.51	– 0.44	– 0.35	– 0.28
Aug.	– 0.553	– 0.47	– 0.53	– 0.52	– 0.48	– 0.43	– 0.36
Sep.	– 0.554	– 0.47	– 0.54	– 0.52	– 0.49	– 0.46	– 0.41
Oct.	– 0.554	– 0.47	– 0.54	– 0.54	– 0.51	– 0.49	– 0.47
Nov.	– 0.556	– 0.47	– 0.55	– 0.54	– 0.52	– 0.51	– 0.48
Dec.	– 0.557	– 0.47	– 0.56	– 0.56	– 0.54	– 0.52	– 0.50

***** 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 from January 4th 1999 until September 30th 2019 based on real turnover according to the act/360 method. Since October 1st 2019 calculated as Euro Short-Term Rate (€STR) + 8.5 basis points spread. **2** Euro interbank offered rate: unweighted average rate calculated by Reuters since 30 December 1998 according to the act/360 method.

VI. Interest rates

4. Interest rates and volumes for outstanding amounts and new business of German banks (MFIs) *
a) Outstanding amounts o

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
2019 Nov.	0.22	57,815	1.12	217,794	– 0.02	63,482	0.85	27,757
Dec.	0.23	57,910	1.12	219,819	– 0.05	66,312	0.84	27,528
2020 Jan.	0.23	57,198	1.11	220,060	– 0.05	65,777	0.83	27,355
Feb.	0.23	56,142	1.10	220,286	– 0.05	65,820	0.84	26,651
Mar.	0.24	54,034	1.10	219,797	– 0.07	68,925	0.82	26,158
Apr.	0.24	52,567	1.09	219,117	– 0.07	71,964	0.82	25,694
May	0.24	53,093	1.08	219,267	– 0.08	80,523	0.83	24,937
June	0.25	53,752	1.07	218,668	– 0.05	77,282	0.85	24,172
July	0.26	53,945	1.06	218,177	– 0.08	86,703	0.90	22,652
Aug.	0.26	53,971	1.03	218,020	– 0.08	82,164	0.89	22,508
Sep.	0.26	54,068	1.02	218,212	– 0.10	82,957	0.92	23,504
Oct.	0.26	53,982	1.01	218,002	– 0.11	84,498	0.89	22,350
Nov.	0.26	52,719	1.00	217,758	– 0.11	80,549	0.85	22,254

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
2019 Nov.	2.07	4,787	1.71	26,726	2.22	1,265,217	7.13	48,412	3.44	87,638	3.67	318,019
Dec.	2.07	4,610	1.71	26,616	2.20	1,268,612	7.12	50,916	3.44	87,320	3.65	316,610
2020 Jan.	2.05	4,755	1.69	26,351	2.18	1,271,558	7.18	49,713	3.43	87,413	3.63	317,814
Feb.	2.01	4,813	1.69	26,388	2.16	1,278,149	7.18	49,016	3.43	87,594	3.62	318,931
Mar.	2.04	4,755	1.68	26,516	2.14	1,284,212	7.33	49,209	3.42	87,284	3.61	318,802
Apr.	1.99	4,673	1.66	26,483	2.12	1,291,221	7.17	45,827	3.41	86,755	3.59	319,658
May	1.97	4,752	1.66	26,603	2.10	1,299,073	7.03	44,605	3.41	86,303	3.57	320,868
June	1.98	4,628	1.65	26,702	2.09	1,303,405	7.05	46,438	3.41	86,046	3.57	319,461
July	1.99	4,720	1.65	26,707	2.06	1,312,369	7.02	45,560	3.41	86,188	3.55	321,139
Aug.	1.98	4,727	1.64	26,690	2.05	1,315,489	6.98	45,609	3.40	86,216	3.53	321,757
Sep.	1.95	4,705	1.62	26,940	2.03	1,329,087	6.96	46,438	3.39	86,231	3.50	322,100
Oct.	1.92	4,792	1.62	26,962	2.00	1,337,259	6.86	45,325	3.38	85,849	3.48	323,886
Nov.	1.92	4,616	1.60	27,072	1.99	1,345,468	6.83	44,787	3.38	85,328	3.46	324,153

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
2019 Nov.	2.21	163,260	1.63	171,713	1.90	739,461
Dec.	2.24	162,074	1.64	171,388	1.88	737,455
2020 Jan.	2.20	161,563	1.64	169,238	1.86	741,004
Feb.	2.21	163,078	1.62	171,571	1.86	745,054
Mar.	2.05	182,434	1.62	174,636	1.84	746,742
Apr.	1.98	185,780	1.63	177,975	1.83	752,025
May	1.95	181,594	1.62	182,819	1.82	761,686
June	2.02	172,708	1.66	184,793	1.81	766,896
July	1.96	169,944	1.66	186,433	1.80	769,953
Aug.	1.98	165,184	1.66	187,678	1.79	779,570
Sep.	2.07	160,014	1.68	186,700	1.77	774,045
Oct.	2.04	157,761	1.68	187,240	1.76	779,595
Nov.	2.06	154,555	1.69	187,341	1.75	784,304

***** 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). **o** 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

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

Reporting period	Households' deposits											
			with an agreed maturity of						redeemable at notice [8] of			
	Overnight		up to 1 year		over 1 year and up to 2 years		over 2 years		up to 3 months		over 3 months	
	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
2019 Nov.	0.01	1,550,441	0.18	2,617	0.66	674	0.58	999	0.12	538,889	0.23	35,551
Dec.	0.01	1,548,036	0.08	3,590	0.49	729	0.60	818	0.12	539,678	0.21	34,476
2020 Jan.	0.01	1,550,487	0.14	4,181	0.44	640	0.63	939	0.11	536,842	0.19	32,999
Feb.	0.00	1,571,470	0.15	3,157	0.39	388	0.58	826	0.11	535,065	0.19	32,449
Mar.	0.00	1,567,320	0.12	2,538	0.40	286	0.60	658	0.11	531,723	0.18	31,794
Apr.	0.00	1,597,323	0.14	3,086	0.49	308	0.69	601	0.11	531,921	0.18	31,083
May	0.00	1,619,447	0.19	3,300	0.59	1,117	0.60	629	0.11	532,140	0.17	30,662
June	0.00	1,626,420	0.17	3,283	0.78	1,455	0.69	854	0.11	532,292	0.18	29,671
July	0.00	1,643,393	0.15	3,296	0.60	1,161	0.74	750	0.10	531,191	0.18	29,168
Aug.	0.00	1,650,273	0.16	2,643	0.59	563	0.64	555	0.10	531,277	0.18	28,764
Sep.	0.00	1,658,764	0.10	3,027	0.51	501	0.61	590	0.10	531,223	0.18	28,417
Oct.	0.00	1,680,565	0.10	3,014	0.44	509	0.60	805	0.10	531,245	0.18	28,001
Nov.	0.00	1,703,498	0.11	2,483	0.49	404	0.61	747	0.10	531,513	0.18	27,578

Reporting period	Non-financial corporations' deposits							
			with an agreed maturity of					
	Overnight		up to 1 year		over 1 year and up to 2 years		over 2 years	
	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
2019 Nov.	– 0.04	476,945	– 0.21	11,165	– 0.03	389	0.32	654
Dec.	– 0.05	476,493	– 0.22	17,148	0.04	554	0.28	911
2020 Jan.	– 0.06	468,336	– 0.11	18,221	0.12	278	0.34	158
Feb.	– 0.06	462,673	– 0.25	12,289	– 0.04	158	x .	x .
Mar.	– 0.07	482,538	– 0.27	20,845	0.04	235	x .	x .
Apr.	– 0.08	495,710	– 0.17	33,483	0.48	288	0.18	78
May	– 0.08	501,848	– 0.24	37,552	0.55	707	0.30	259
June	– 0.08	508,658	– 0.33	31,980	0.37	633	0.38	313
July	– 0.08	520,954	– 0.33	40,301	0.36	592	0.26	208
Aug.	– 0.08	528,905	– 0.34	35,771	– 0.02	170	0.20	164
Sep.	– 0.08	532,597	– 0.36	37,956	– 0.01	112	0.43	275
Oct.	– 0.09	548,227	– 0.36	38,781	0.10	237	0.33	548
Nov.	– 0.09	549,030	– 0.37	30,391	0.04	176	0.35	533

Reporting period	Loans to households											
	Loans for consumption [4] with an initial rate fixation of											
	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
2019 Nov.	5.75	5.73	8,369	6.60	1,654	8.54	493	4.36	3,056	6.32	4,821
Dec.	5.74	5.75	7,033	6.47	1,288	8.59	590	4.38	2,640	6.26	3,804
2020 Jan.	6.07	6.03	10,080	6.85	2,379	8.94	626	4.45	3,307	6.58	6,148
Feb.	5.81	5.81	9,284	6.65	1,995	8.58	538	4.41	3,155	6.34	5,591
Mar.	5.84	5.81	9,742	6.35	1,982	8.46	483	4.57	3,209	6.26	6,050
Apr.	6.31	6.21	7,843	6.08	1,482	8.11	361	5.06	2,291	6.59	5,190
May	5.93	5.80	7,945	6.23	1,620	7.79	494	4.49	2,843	6.39	4,608
June	5.87	5.72	8,758	6.41	1,841	8.62	401	4.39	3,258	6.34	5,099
July	5.74	5.63	9,986	6.52	2,114	8.75	439	4.26	3,744	6.29	5,804
Aug.	5.74	5.62	8,340	6.43	1,738	8.79	391	4.33	3,050	6.18	4,899
Sep.	5.56	5.52	8,638	6.42	1,726	8.53	417	4.12	3,286	6.19	4,936
Oct.	5.73	5.62	8,265	6.36	1,739	8.39	436	4.32	2,905	6.14	4,924
Nov.	5.70	5.62	7,782	6.24	1,560	8.87	568	4.26	2,798	6.06	4,416

For footnotes * and 1 to 6, see p. 44•. For footnote x see p. 47•. **+** 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

4. 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 households for other purposes [5] with an initial rate fixation of									
	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										
2019 Nov.	1.63	5,178	1.58	1,046	1.61	2,022	2.28	722	1.45	2,434
Dec.	1.63	6,393	1.74	1,399	1.66	2,662	2.07	1,016	1.44	2,715
2020 Jan.	1.67	5,644	1.62	1,608	1.63	2,341	2.32	782	1.50	2,521
Feb.	1.77	4,739	1.57	1,108	1.79	1,860	2.52	666	1.53	2,213
Mar.	1.73	5,746	1.76	1,425	1.70	2,347	2.44	821	1.53	2,578
Apr.	1.71	6,505	1.95	2,109	1.73	2,042	2.04	944	1.60	3,519
May	1.80	6,580	1.96	2,043	1.98	2,118	2.07	833	1.63	3,629
June	1.83	6,513	1.95	2,438	1.82	2,252	2.43	1,070	1.63	3,191
July	1.78	5,293	1.61	1,536	1.84	2,241	2.32	774	1.53	2,278
Aug.	1.88	4,210	1.60	1,055	1.94	1,710	2.55	773	1.51	1,727
Sep.	1.83	4,517	1.60	1,170	1.98	1,997	2.37	612	1.51	1,908
Oct.	1.80	4,279	1.60	1,214	1.95	1,832	2.47	578	1.44	1,869
Nov.	1.84	4,023	1.61	930	1.96	1,729	2.44	585	1.51	1,709
of which: Loans to sole proprietors										
2019 Nov.	1.74	3,478	.	.	1.80	1,297	2.40	532	1.48	1,649
Dec.	1.79	4,258	.	.	1.93	1,691	2.40	637	1.47	1,930
2020 Jan.	1.83	3,752	.	.	1.98	1,420	2.47	559	1.51	1,773
Feb.	1.80	3,430	.	.	1.82	1,301	2.57	518	1.53	1,611
Mar.	1.83	3,818	.	.	1.89	1,544	2.48	636	1.52	1,638
Apr.	1.75	4,582	.	.	1.88	1,402	2.02	752	1.60	2,428
May	1.81	5,056	.	.	2.03	1,460	2.14	633	1.64	2,963
June	1.86	4,702	.	.	1.83	1,501	2.46	806	1.68	2,395
July	1.81	3,472	.	.	1.87	1,355	2.30	600	1.57	1,517
Aug.	1.76	2,755	.	.	1.70	1,135	2.47	462	1.55	1,158
Sep.	1.85	3,019	.	.	1.89	1,357	2.53	431	1.55	1,231
Oct.	1.78	2,888	.	.	1.81	1,226	2.50	451	1.47	1,211
Nov.	1.83	2,743	.	.	1.85	1,118	2.53	438	1.55	1,187

Erhebungszeitraum	Loans to households (cont'd)													
	Housing loans [3] with an initial rate fixation of													
	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 year 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													
2019 Nov.	1.31	1.26	22,234	1.41	3,066	1.84	2,206	1.30	1,663	1.09	6,889	1.25	11,475
Dec.	1.34	1.29	20,048	1.48	2,938	1.81	2,396	1.37	1,553	1.14	6,622	1.27	9,477
2020 Jan.	1.39	1.34	21,927	1.47	3,871	1.83	2,545	1.32	1,797	1.16	7,106	1.35	10,479
Feb.	1.33	1.28	20,546	1.36	2,902	1.82	2,019	1.33	1,499	1.13	6,555	1.26	10,474
Mar.	1.27	1.22	25,314	1.38	3,761	1.83	2,503	1.32	1,872	1.07	8,045	1.18	12,894
Apr.	1.29	1.25	24,541	1.51	5,102	1.78	2,525	1.32	1,822	1.11	7,769	1.22	12,425
May	1.37	1.33	22,361	1.65	5,153	1.93	3,000	1.47	1,643	1.12	6,872	1.27	10,845
June	1.38	1.34	22,793	1.63	5,171	1.94	2,235	1.59	1,947	1.17	7,983	1.28	10,628
July	1.32	1.27	24,349	1.44	4,233	1.81	2,518	1.39	1,847	1.12	8,036	1.24	11,949
Aug.	1.28	1.23	21,280	1.41	3,135	1.80	2,209	1.44	1,500	1.07	7,032	1.20	10,539
Sep.	1.26	1.21	21,782	1.35	3,121	1.77	2,213	1.35	1,542	1.07	6,957	1.17	11,070
Oct.	1.24	1.19	23,217	1.24	3,834	1.75	2,362	1.32	1,554	1.03	7,579	1.17	11,722
Nov.	1.22	1.17	23,185	1.28	3,113	1.72	2,372	1.28	1,708	1.03	7,413	1.14	11,692
of which: Collateralised loans [11]													
2019 Nov.	.	1.19	9,173	.	.	1.75	738	1.09	787	1.03	2,848	1.22	4,800
Dec.	.	1.20	8,740	.	.	1.79	758	1.15	719	1.07	2,898	1.19	4,365
2020 Jan.	.	1.26	9,963	.	.	1.77	891	1.14	888	1.07	3,130	1.30	5,054
Feb.	.	1.18	8,867	.	.	1.73	641	1.14	702	1.04	2,785	1.19	4,739
Mar.	.	1.13	11,461	.	.	1.76	828	1.15	925	0.98	3,673	1.13	6,035
Apr.	.	1.16	11,495	.	.	1.70	951	1.21	939	1.03	3,594	1.14	6,011
May	.	1.24	10,084	.	.	1.86	1,046	1.31	835	1.05	3,065	1.22	5,138
June	.	1.26	10,090	.	.	1.84	803	1.41	935	1.10	3,656	1.25	4,696
July	.	1.22	10,687	.	.	1.76	951	1.23	876	1.05	3,621	1.23	5,239
Aug.	.	1.16	9,074	.	.	1.77	748	1.17	673	0.98	3,137	1.17	4,516
Sep.	.	1.14	9,865	.	.	1.75	795	1.14	753	1.00	3,201	1.14	5,116
Oct.	.	1.14	10,142	.	.	1.73	806	1.12	748	1.00	3,239	1.14	5,349
Nov.	.	1.10	10,137	.	.	1.61	819	1.10	823	0.96	3,182	1.11	5,313

For footnotes * and 1 to 6, see p. 44•. For footnotes + and 7 to 10, see p. 45•; footnote 11, see p. 47•.

VI. Interest rates

4. 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]		of which: Extended credit card debt		Revolving loans [12] and overdrafts [13] Credit card debt [14]		of which: Revolving loans [12] and overdrafts [13]	
	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
2019 Nov.	7.72	39,142	7.62	30,666	15.11	4,517	2.95	81,340	2.97	80,912
Dec.	7.62	41,902	7.69	32,556	15.11	4,576	3.05	79,862	3.07	79,476
2020 Jan.	7.72	40,805	7.65	32,270	15.13	4,497	2.99	80,217	3.00	79,819
Feb.	7.72	40,187	7.63	31,840	15.14	4,456	2.94	82,171	2.95	81,754
Mar.	7.89	40,211	7.64	32,857	15.19	4,364	2.77	88,805	2.78	88,517
Apr.	7.73	36,930	7.35	30,063	15.19	4,262	2.71	85,888	2.72	85,702
May	7.60	35,719	7.23	28,731	15.24	4,194	2.66	83,133	2.67	82,928
June	7.63	37,486	7.39	30,074	15.22	4,183	2.86	81,829	2.87	81,584
July	7.54	36,402	7.35	28,738	15.19	4,170	2.84	77,749	2.84	77,478
Aug.	7.51	36,716	7.31	29,015	15.08	4,204	2.77	76,935	2.78	76,674
Sep.	7.51	37,568	7.33	30,004	15.04	4,147	2.84	76,376	2.85	76,092
Oct.	7.42	36,256	7.19	28,750	15.03	4,144	2.75	76,056	2.76	75,773
Nov.	7.41	35,700	7.17	28,273	15.06	4,108	2.74	75,596	2.75	75,326

Reporting period	Loans to non-financial corporations (cont'd)															
	Total		of which: Renegotiated loans [9]		Loans up to €1 million [15] with an initial rate fixation of: floating rate or up to 1 year [9]		over 1 year and up to 5 years		over 5 years		Loans over €1 million [15] with an initial rate fixation of: 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																
2019 Nov.	1.27	72,910	1.33	19,516	2.04	10,266	2.48	1,416	1.42	2,206	1.10	48,917	1.43	3,070	1.09	7,990
Dec.	1.29	102,587	1.40	27,151	2.10	10,584	2.40	1,608	1.45	2,396	1.15	73,303	1.36	4,483	1.18	11,129
2020 Jan.	1.24	73,322	1.34	22,883	1.98	10,775	2.45	1,509	1.53	2,545	1.03	51,717	1.39	2,121	1.26	5,911
Feb.	1.19	65,885	1.36	17,452	1.95	9,727	2.45	1,329	1.47	2,019	0.98	43,225	1.30	3,425	1.07	7,058
Mar.	1.20	96,389	1.44	24,539	1.88	10,920	2.34	1,666	1.47	2,503	1.06	69,385	1.31	3,884	1.14	9,067
Apr.	1.35	80,293	1.53	22,726	1.90	8,269	2.05	1,460	1.76	2,525	1.25	53,150	1.27	3,999	1.15	9,620
May	1.38	70,416	1.50	19,086	1.83	8,544	2.23	1,466	2.03	3,000	1.20	41,644	1.27	3,723	1.25	9,345
June	1.36	86,295	1.45	30,002	1.93	10,537	2.35	1,714	1.81	2,235	1.18	53,115	1.69	4,895	1.26	12,072
July	1.43	72,399	1.41	23,407	1.94	10,302	2.35	1,419	1.66	2,518	1.29	44,151	1.55	4,770	1.25	9,141
Aug.	1.52	55,855	1.36	16,568	1.78	8,324	2.39	1,235	1.51	2,209	1.46	35,797	1.62	3,186	1.22	5,659
Sep.	1.37	71,553	1.49	21,841	2.00	10,506	2.42	1,308	1.55	2,213	1.22	45,047	1.42	3,107	1.18	10,041
Oct.	1.37	66,721	1.36	20,690	1.99	10,358	2.38	1,354	1.49	2,362	1.17	42,053	1.73	4,238	1.18	7,163
Nov.	1.35	64,462	1.39	18,016	1.96	9,898	2.25	1,343	1.53	2,372	1.25	37,081	1.47	4,017	0.96	10,476
of which: Collateralised loans [11]																
2019 Nov.	1.35	9,204	.	.	1.87	465	2.47	129	1.19	329	1.47	4,566	1.66	800	0.95	2,915
Dec.	1.38	17,816	.	.	1.71	553	2.43	174	1.28	402	1.41	11,704	1.46	1,422	1.17	3,561
2020 Jan.	1.23	9,108	.	.	1.71	661	2.47	147	1.43	395	1.15	6,021	1.46	316	1.14	1,568
Feb.	1.48	8,690	.	.	1.66	448	2.23	96	1.25	346	1.63	5,276	1.42	822	0.98	1,702
Mar.	x .	x .	.	.	1.74	548	x .	x .	1.20	411	1.29	7,469	1.88	522	1.02	2,620
Apr.	1.34	9,734	.	.	1.72	492	1.56	243	1.22	556	1.39	5,375	1.44	513	1.15	2,555
May	1.48	7,873	.	.	2.02	471	1.73	171	1.90	865	1.43	4,286	1.72	336	1.16	1,744
June	1.39	13,750	.	.	1.81	558	2.05	224	1.71	776	1.31	8,391	1.64	1,048	1.28	2,753
July	1.37	10,021	.	.	1.80	504	1.96	133	1.31	478	1.42	5,085	1.59	1,108	1.10	2,713
Aug.	1.47	7,045	.	.	1.85	362	2.14	123	1.26	369	1.52	4,544	1.79	458	1.05	1,189
Sep.	1.37	11,059	.	.	1.72	508	2.08	105	1.22	353	1.41	7,417	1.85	535	1.03	2,141
Oct.	1.23	8,346	.	.	1.73	480	1.74	111	1.14	374	1.26	4,696	1.11	672	1.08	2,013
Nov.	1.54	9,630	.	.	1.86	375	1.67	98	1.20	367	1.64	5,414	2.01	807	1.18	2,569

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 debt 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 due to 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										
2018 Q1	2,218.0	344.1	394.6	326.9	342.8	664.0	2.3	50.7	33.9	58.6
Q2	2,226.3	346.8	400.1	319.6	346.3	669.9	2.2	53.6	34.1	53.6
Q3	2,224.8	326.3	401.1	327.9	349.4	677.8	2.0	52.9	35.7	51.6
Q4	2,213.5	318.3	400.5	330.4	349.7	665.8	2.0	55.4	36.8	54.6
2019 Q1	2,344.4	332.3	432.0	330.0	380.9	708.8	2.6	59.3	37.1	61.4
Q2	2,407.9	336.8	449.5	339.3	387.8	735.7	3.6	57.9	37.1	60.3
Q3	2,493.0	333.0	469.2	357.2	398.1	768.2	4.6	58.7	38.0	66.0
Q4	2,474.4	317.1	449.3	355.8	407.1	778.2	3.6	64.9	39.8	58.7
2020 Q1	2,431.1	316.8	453.1	365.9	384.8	739.3	4.5	68.3	39.0	59.5
Q2	2,522.1	318.3	460.9	372.0	411.7	789.1	4.3	68.4	39.0	58.6
Q3	2,553.6	311.3	474.8	374.0	414.6	809.9	4.4	67.1	39.3	58.2
Life insurance										
2018 Q1	1,187.6	212.5	198.8	206.7	43.1	481.8	1.2	8.5	19.4	15.5
Q2	1,195.2	215.3	201.6	200.5	46.3	487.9	1.1	8.8	19.5	14.2
Q3	1,194.1	199.7	201.6	209.0	47.3	493.9	1.0	8.8	19.3	13.4
Q4	1,185.3	194.5	200.1	208.4	50.4	484.7	1.0	11.6	20.3	14.3
2019 Q1	1,239.7	202.9	213.7	206.1	52.8	517.7	1.6	10.4	20.3	14.1
Q2	1,291.9	205.8	227.6	214.1	55.4	538.9	2.4	10.0	20.3	17.4
Q3	1,350.0	205.3	242.5	225.2	57.9	563.6	3.1	10.4	20.9	21.0
Q4	1,325.0	194.5	227.6	217.8	61.0	570.4	2.4	13.7	21.1	16.5
2020 Q1	1,296.5	190.6	230.6	221.4	62.0	538.8	2.2	13.7	20.7	16.4
Q2	1,348.1	193.0	234.5	223.6	64.1	577.3	2.8	13.6	20.7	18.6
Q3	1,370.6	188.6	242.3	225.9	65.7	593.0	3.0	13.6	20.9	17.7
Non-life insurance										
2018 Q1	623.2	120.2	112.7	75.1	72.1	167.0	0.3	34.6	9.8	31.5
Q2	621.6	120.1	115.7	72.9	72.9	167.4	0.3	35.6	9.8	27.0
Q3	617.9	116.3	116.1	72.8	73.7	168.9	0.2	34.9	9.8	25.1
Q4	616.2	113.8	117.4	73.7	73.8	167.4	0.2	33.5	10.8	25.6
2019 Q1	655.3	119.1	127.7	74.4	76.1	177.1	0.3	38.1	11.0	31.4
Q2	665.9	119.8	131.6	76.1	78.1	182.4	0.4	37.6	11.0	29.0
Q3	683.1	116.9	136.0	79.9	80.6	189.3	0.4	38.8	11.3	30.0
Q4	674.2	111.1	131.4	79.7	83.5	193.2	0.4	36.1	12.2	26.6
2020 Q1	673.1	110.6	132.8	80.9	81.8	187.1	0.3	38.6	11.9	29.1
Q2	689.3	112.5	134.8	82.6	83.6	197.2	0.4	39.5	12.1	26.7
Q3	698.4	109.4	139.0	83.3	86.2	203.2	0.4	38.5	12.1	26.3
Reinsurance 3										
2018 Q1	407.2	11.4	83.1	45.1	227.6	15.3	0.8	7.6	4.8	11.6
Q2	409.5	11.5	82.9	46.1	227.1	14.6	0.8	9.1	4.8	12.4
Q3	412.7	10.2	83.4	46.0	228.4	15.0	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	449.4	10.2	90.6	49.5	252.0	14.0	0.7	10.8	5.8	15.9
Q2	450.1	11.1	90.4	49.0	254.3	14.4	0.8	10.2	5.8	13.9
Q3	459.9	10.8	90.7	52.1	259.6	15.3	1.0	9.6	5.9	15.0
Q4	475.2	11.5	90.2	58.4	262.6	14.5	0.8	15.1	6.6	15.6
2020 Q1	461.5	15.7	89.7	63.6	241.1	13.3	1.9	15.9	6.3	14.1
Q2	484.7	12.8	91.6	65.8	264.0	14.6	1.1	15.2	6.3	13.3
Q3	484.6	13.3	93.6	64.8	262.6	13.7	1.0	15.0	6.3	14.2
Pension funds 4										
2018 Q1	651.2	94.5	65.3	30.0	26.2	364.6	–	7.4	41.7	21.5
Q2	658.7	94.8	65.7	30.4	28.1	368.2	–	7.6	42.2	21.7
Q3	666.0	92.1	66.3	30.5	29.6	375.1	–	7.9	42.8	21.8
Q4	672.2	91.5	67.5	30.7	30.6	378.0	–	8.1	43.8	22.1
2019 Q1	689.2	89.4	72.0	30.7	31.5	389.8	–	8.3	44.9	22.6
Q2	703.0	87.4	75.6	31.3	32.1	399.3	–	8.5	45.4	23.5
Q3	718.3	85.3	79.2	31.5	33.1	410.9	–	8.6	45.7	23.9
Q4	726.8	84.9	77.8	31.9	33.4	417.2	–	8.8	47.6	25.1
2020 Q1	709.2	81.1	75.2	31.7	33.2	405.1	–	8.9	48.4	25.5
Q2	729.3	80.0	79.5	31.9	33.4	420.4	–	9.0	48.7	26.5
Q3	732.1	80.3	81.1	31.9	33.5	420.2	–	9.0	49.2	27.0

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. * 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 retained 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

€ billion

End of year/quarter	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										
2018 Q1	2,218.0	28.0	61.9	460.2	1,539.4	1,333.8	205.6	1.5	127.0	–
Q2	2,226.3	27.7	64.0	456.8	1,553.7	1,348.0	205.7	1.9	122.2	–
Q3	2,224.8	27.5	65.1	462.3	1,545.4	1,344.1	201.4	2.0	122.4	–
Q4	2,213.5	29.3	64.6	463.1	1,530.3	1,332.4	197.9	1.6	124.6	–
2019 Q1	2,344.4	31.6	68.3	488.3	1,625.8	1,403.7	222.0	1.5	128.9	–
Q2	2,407.9	31.9	69.4	489.6	1,687.3	1,465.9	221.4	1.8	128.0	–
Q3	2,493.0	31.7	69.3	488.4	1,769.2	1,542.9	226.3	2.2	132.2	–
Q4	2,474.4	31.7	75.8	515.2	1,714.7	1,499.5	215.2	1.9	135.2	–
2020 Q1	2,431.1	31.8	82.4	466.7	1,721.4	1,482.7	238.7	2.4	126.4	–
Q2	2,522.1	33.1	82.3	508.2	1,767.6	1,527.7	240.0	1.9	129.0	–
Q3	2,553.6	34.3	80.0	519.9	1,786.1	1,549.5	236.6	1.7	131.6	–
Life insurance										
2018 Q1	1,187.6	4.0	13.3	119.5	1,007.4	1,007.4	–	0.7	42.6	–
Q2	1,195.2	4.1	13.0	119.3	1,017.4	1,017.4	–	0.8	40.6	–
Q3	1,194.1	4.1	12.6	121.0	1,013.7	1,013.7	–	0.9	41.9	–
Q4	1,185.3	4.1	15.2	122.7	1,000.7	1,000.7	–	0.5	42.2	–
2019 Q1	1,239.7	4.1	14.4	120.9	1,058.9	1,058.9	–	0.4	41.1	–
Q2	1,291.9	4.1	14.5	121.8	1,108.6	1,108.6	–	0.4	42.4	–
Q3	1,350.0	3.7	15.6	116.0	1,171.8	1,171.8	–	0.6	42.4	–
Q4	1,325.0	3.6	19.1	127.6	1,129.6	1,129.6	–	0.5	44.6	–
2020 Q1	1,296.5	3.6	19.3	114.4	1,117.6	1,117.6	–	0.6	41.0	–
Q2	1,348.1	3.8	19.2	130.0	1,150.6	1,150.6	–	0.5	43.9	–
Q3	1,370.6	3.9	19.5	137.2	1,165.4	1,165.4	–	0.5	44.1	–
Non-life insurance										
2018 Q1	623.2	1.1	7.7	141.4	423.0	311.1	111.9	0.0	50.0	–
Q2	621.6	1.1	8.1	140.6	424.5	314.3	110.2	0.1	47.2	–
Q3	617.9	1.1	8.0	141.7	420.7	314.0	106.7	0.0	46.4	–
Q4	616.2	1.0	8.3	140.3	416.6	315.5	101.1	0.0	50.0	–
2019 Q1	655.3	1.1	9.3	144.1	448.4	328.9	119.6	0.0	52.4	–
Q2	665.9	1.1	8.8	146.9	459.3	341.5	117.8	0.1	49.7	–
Q3	683.1	1.2	9.1	149.5	471.8	354.8	117.0	0.1	51.4	–
Q4	674.2	1.2	9.3	153.5	457.1	349.4	107.7	0.1	53.0	–
2020 Q1	673.1	1.3	9.8	144.5	468.6	344.4	124.2	0.1	48.9	–
Q2	689.3	1.2	9.5	152.4	478.5	355.6	123.0	0.1	47.6	–
Q3	698.4	1.2	9.6	156.2	482.7	362.3	120.4	0.1	48.6	–
Reinsurance [3]										
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	449.4	26.5	44.6	223.4	118.4	15.9	102.5	1.1	35.5	–
Q2	450.1	26.6	46.1	220.8	119.4	15.8	103.6	1.3	35.9	–
Q3	459.9	26.8	44.7	222.8	125.6	16.3	109.3	1.5	38.5	–
Q4	475.2	26.9	47.4	234.0	128.0	20.6	107.5	1.3	37.7	–
2020 Q1	461.5	26.9	53.3	207.8	135.3	20.8	114.5	1.7	36.5	–
Q2	484.7	28.1	53.5	225.8	138.5	21.5	117.0	1.3	37.6	–
Q3	484.6	29.2	50.9	226.6	138.0	21.8	116.2	1.0	38.9	–
Pension funds [4]										
2018 Q1	651.2	–	7.3	7.6	580.5	580.5	–	–	2.7	53.0
Q2	658.7	–	7.5	7.7	588.1	588.1	–	–	2.8	52.5
Q3	666.0	–	7.7	7.8	595.2	595.2	–	–	2.9	52.4
Q4	672.2	–	7.9	8.0	605.8	605.8	–	–	2.8	47.6
2019 Q1	689.2	–	8.1	8.1	613.9	613.9	–	–	2.9	56.3
Q2	703.0	–	8.1	8.3	619.8	619.8	–	–	2.9	64.0
Q3	718.3	–	8.2	8.4	626.8	626.8	–	–	2.9	72.1
Q4	726.8	–	8.4	8.6	637.5	637.5	–	–	2.9	69.4
2020 Q1	709.2	–	8.6	8.7	639.4	639.4	–	–	3.0	49.6
Q2	729.3	–	8.5	8.8	645.9	645.9	–	–	3.0	63.1
Q3	732.1	–	8.5	8.8	643.2	643.2	–	–	3.0	68.5

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" sector. **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					Purchases					
		Domestic debt securities [1]					Residents					
	Sales = total purchases	Total	Bank debt securities	Corporate bonds (non-MFIs) [2]	Public debt securities	Foreign debt securities [3]	Total [4]	Credit institutions including building and loan associations [5]	Deutsche Bundesbank	Other sectors [6]	Non-residents [7]	
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	– 15,971	– 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	74,483	14,366	
2015	33,024	– 36,010	– 65,778	26,762	3,006	69,034	116,493	– 66,330	121,164	61,659	– 83,471	
2016	71,380	27,429	19,177	18,265	– 10,012	43,951	164,148	– 58,012	187,500	34,660	– 92,768	
2017	53,796	11,563	1,096	7,112	3,356	42,233	140,417	– 71,454	161,012	50,859	– 86,621	
2018	61,984	16,630	33,251	12,433	– 29,055	45,354	99,011	– 24,417	67,328	56,100	– 37,028	
2019	125,037	68,536	29,254	32,505	6,778	56,501	85,203	8,059	2,408	74,736	39,834	
2020 Jan.	40,861	29,951	4,293	10,672	14,987	10,910	7,512	3,447	2,985	1,080	33,349	
Feb.	41,836	33,199	14,383	1,337	17,479	8,637	32,132	9,014	4,202	18,916	9,705	
Mar.	2,160	3,798	– 4,596	– 5,516	13,910	– 1,638	– 10,935	17,837	4,747	– 33,519	13,095	
Apr.	37,012	31,119	2,401	15,964	12,755	5,893	40,472	5,669	17,982	16,821	– 3,460	
May	81,153	79,902	– 1,777	16,851	64,828	1,251	40,102	9,749	35,151	– 4,798	41,050	
June	65,725	47,036	6,695	5,329	35,013	18,689	37,147	9,099	25,469	2,579	28,578	
July	48,626	49,142	– 2,041	15,549	35,635	– 516	18,636	– 15,536	25,721	8,451	29,990	
Aug.	55,841	60,373	1,689	8,741	49,943	– 4,532	313	– 7,604	18,004	– 10,087	55,527	
Sep.	69,646	66,381	23,528	23,698	19,155	3,264	19,086	1,689	22,121	– 4,724	50,559	
Oct.	624	– 17,888	– 16,297	2,061	– 3,653	18,512	48,486	9,298	24,556	14,631	– 47,862	
Nov.	21,331	26,550	– 995	495	27,050	– 5,219	30,276	1,513	27,659	1,104	– 8,945	

€ million

Period	Shares						
		Sales		Purchases			
				Residents			
	Sales = total purchases	Domestic shares [8]	Foreign shares [9]	Total [10]	Credit institutions [5]	Other sectors [11]	Non-residents [12]
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	30,896	4,409	26,487	31,037	– 5,143	36,180	– 141
2017	53,024	15,570	37,454	51,372	7,031	44,341	1,652
2018	58,446	16,188	42,258	84,528	– 11,184	95,712	– 26,082
2019	45,092	9,076	36,015	29,463	– 1,119	30,582	15,629
2020 Jan.	6,836	795	6,041	6,946	– 286	7,232	– 110
Feb.	2,975	416	2,559	1,000	– 947	1,947	1,975
Mar.	– 2,200	566	– 2,766	5,605	– 7,442	13,047	– 7,805
Apr.	4,869	235	4,634	10,760	– 1,266	12,026	– 5,891
May	7,487	1,370	6,117	9,396	371	9,025	– 1,909
June	5,064	685	4,379	6,320	2,509	3,811	– 1,256
July	9,101	2,144	6,957	25,177	676	24,501	– 16,076
Aug.	9,459	2,900	6,559	8,808	1,020	7,788	652
Sep.	27,388	20,689	6,699	26,771	161	26,610	617
Oct.	5,083	1,057	4,027	5,316	342	4,974	– 233
Nov.	9,824	220	9,604	10,026	1,919	8,107	– 202

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					Corporate bonds (non-MFIs) 2	Public debt securities
		Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special-purpose credit institutions	Other bank debt securities		
	Gross sales							
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
2019	1,285,541	783,977	38,984	9,587	607,900	127,504	94,367	407,197
2020 Mar.	115,696	55,561	7,719	4,505	39,367	3,970	10,452	49,684
Apr.	175,116	69,399	4,405	4,750	51,309	8,936	23,003	82,713
May	170,970	56,055	9	125	48,088	7,833	28,199	86,715
June	166,901	71,340	6,736	1,750	53,696	9,158	18,489	77,072
July	169,956	61,678	1,366	20	55,810	4,483	21,023	87,255
Aug.	144,802	56,957	16	13	53,343	3,585	8,547	79,298
Sep.	177,300	75,616	3,186	250	65,309	6,872	14,767	86,916
Oct.	127,246	61,836	2,174	265	55,991	3,406	10,055	55,354
Nov.	119,070	61,567	648	300	53,206	7,413	10,624	46,879
	of which: Debt securities with maturities of more than four years 4							
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
2019	396,617	174,390	26,832	6,541	96,673	44,346	69,682	152,544
2020 Mar.	30,174	13,703	3,859	1,905	5,833	2,106	865	15,607
Apr.	41,373	10,274	2,165	1,300	5,943	866	8,561	22,538
May	65,814	12,372	9	125	8,134	4,104	12,419	41,024
June	60,991	17,946	5,561	1,500	5,198	5,686	9,125	33,920
July	60,086	14,074	1,366	20	11,331	1,356	13,242	32,769
Aug.	42,389	6,750	16	13	5,299	1,422	1,597	34,043
Sep.	61,762	18,442	3,036	250	9,713	5,443	7,430	35,889
Oct.	38,532	11,516	1,620	15	7,838	2,042	5,390	21,626
Nov.	34,225	10,781	548	50	4,788	5,395	5,877	17,567
	Net sales 5							
2008	119,472	8,517	15,052	– 65,773	25,165	– 34,074	82,653	28,302
2009	76,441	– 75,554	858	– 80,646	25,579	– 21,345	48,508	103,482
2010	21,566	– 87,646	– 3,754	– 63,368	28,296	– 48,822	23,748	85,464
2011	22,518	– 54,582	1,657	– 44,290	32,904	– 44,852	– 3,189	80,289
2012	– 85,298	– 100,198	– 4,177	– 41,660	– 3,259	– 51,099	– 6,401	21,298
2013	– 140,017	– 125,932	– 17,364	– 37,778	– 4,027	– 66,760	1,394	– 15,479
2014	– 34,020	– 56,899	– 6,313	– 23,856	– 862	– 25,869	10,497	12,383
2015	– 65,147	– 77,273	9,271	– 9,754	– 2,758	– 74,028	25,300	– 13,174
2016 3	21,951	10,792	2,176	– 12,979	16,266	5,327	18,177	– 7,020
2017 3	2,669	5,954	6,389	– 4,697	18,788	– 14,525	6,828	– 10,114
2018	2,758	26,648	19,814	– 6,564	18,850	– 5,453	9,738	– 33,630
2019	59,719	28,750	13,098	– 3,728	26,263	– 6,885	30,449	519
2020 Mar.	10,873	2,608	5,741	3,137	– 134	– 6,136	– 4,187	12,452
Apr.	34,368	3,134	1,210	4,324	– 1,083	– 1,317	11,594	19,640
May	82,872	1,010	– 1,593	– 604	4,536	– 1,330	14,387	67,476
June	47,941	10,175	3,362	1,664	5,404	– 255	2,856	34,910
July	37,510	– 4,679	– 1,443	– 714	240	– 2,762	12,135	30,054
Aug.	61,259	1,724	– 1,512	– 136	4,496	– 1,124	465	59,069
Sep.	43,924	19,271	– 1,493	– 45	20,898	– 90	3,350	21,302
Oct.	– 13,555	– 14,240	– 1,656	– 608	– 10,488	– 1,488	– 765	1,450
Nov.	13,942	193	– 1,049	– 907	– 910	3,058	– 235	13,984

***** For definitions, see the explanatory notes in Statistical Series - Securities Issues Statistics on pages 43 f. **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. **6** Methodological changes since January 2020. — The figures for the most recent date are provisional. Revisions are not specially marked.

VIII. Capital market

3. Amounts outstanding of debt securities issued by residents *

€ million, nominal value

End of year or month/ Maturity in years	Total	Bank debt securities					Corporate bonds (non-MFIs)	Public debt securities
		Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special-purpose credit institutions	Other bank debt securities		
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 1,570,490	147,529	232,954	544,517	1 645,491	250,774	1 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 1,414,349	145,007	147,070	574,163	1 548,109	1 220,456	1 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	2 302,543	1,617,244
2018	3,091,303	1,194,160	161,088	51,439	670,062	1 311,572	1 2 313,527	1,583,616
2019	2 3,149,373	1,222,911	174,188	47,712	696,325	304,686	2 342,325	1,584,136
2020 Mar.	2 3,161,739	1,191,655	187,630	49,962	692,049	262,015	2 339,172	1,630,911
Apr.	3,204,248	1,200,654	188,949	54,307	696,203	261,194	351,258	1,652,335
May	3,282,783	1,199,035	189,074	57,391	693,994	258,576	365,185	1,718,563
June	2 3,328,134	2 1,205,292	192,323	59,050	697,628	2 256,290	368,001	1,754,841
July	3,343,839	1,186,873	190,611	58,228	685,891	252,143	379,558	1,777,408
Aug.	2 3,402,114	1,187,546	189,114	58,096	689,290	251,046	2 378,952	1,835,616
Sep.	3,450,419	1,209,935	187,644	58,079	713,010	251,202	382,932	1,857,552
Oct.	2 3,438,813	2 1,195,890	186,057	57,474	703,561	2 248,798	382,354	1,860,569
Nov.	3,448,097	1,191,676	184,909	56,543	698,698	251,525	381,969	1,874,452
Breakdown by remaining period to maturity 3							**Position at end-November 2020**	
bis unter 2	1 117 338	419 205	48 553	16 468	280 168	74 015	67 055	631 079
2 bis unter 4	672 152	290 074	48 302	15 061	171 982	54 729	64 883	317 195
4 bis unter 6	483 722	192 769	35 068	11 040	97 482	49 179	59 957	230 996
6 bis unter 8	379 350	135 867	28 975	7 259	68 364	31 268	41 391	202 092
8 bis unter 10	266 246	72 779	14 080	3 608	40 229	14 862	26 767	166 700
10 bis unter 15	160 745	38 219	6 620	2 109	17 691	11 799	33 224	89 302
15 bis unter 20	113 004	20 472	2 257	835	15 163	2 218	9 737	82 795
20 und darüber	255 539	22 290	1 054	163	7 619	13 454	78 954	154 294

***** Including debt securities temporarily held in the issuers' portfolios. **1** Sectoral reclassification of debt securities. **2** Adjustments due to the change in the country of residence of the issuers or debt securities. **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** Methodological changes since January 2020. — The figures for the most recent date are provisional. Revisions are not specially marked.

4. Shares in circulation issued by residents *

€ million, nominal value

Period	Share capital = circulation at end of period under review	Net increase or net decrease (-) during period under review	Change in domestic public limited companies' capital due to						Memo item: Share circulation at market values (market capitalisation) level at end of period under review 2
			cash payments and exchange of convertible bonds 1	issue of bonus shares	contribution of claims and other real assets	merger and transfer of assets	change of legal form	reduction of capital and liquidation	
2008	168,701	4,142	5,006	1,319	152	– 428	– 608	– 1,306	830,622
2009	175,691	6,989	12,476	398	97	– 3,741	– 1,269	– 974	927,256
2010	174,596	– 1,096	3,265	497	178	– 486	– 993	– 3,569	1,091,220
2011	177,167	2,570	6,390	552	462	– 552	– 762	– 3,532	924,214
2012	178,617	1,449	3,046	129	570	– 478	594	– 2,411	1,150,188
2013	171,741	– 6,879	2,971	718	476	– 1,432	– 619	– 8,992	1,432,658
2014	177,097	5,356	5,332	1,265	1,714	– 465	– 1,044	– 1,446	1,478,063
2015	177,416	319	4,634	397	599	– 1,394	– 1,385	– 2,535	1,614,442
2016	176,355	– 1,062	3,272	319	337	– 953	– 2,165	– 1,865	1,676,397
2017	178,828	2,471	3,894	776	533	– 457	– 661	– 1,615	1,933,733
2018	180,187	1,357	3,670	716	82	– 1,055	– 1,111	– 946	1,634,155
2019 3 4	183,461	1,700	2,411	2,419	542	– 858	– 65	– 2,747	1,950,224
2020 Mar.	181,792	– 1,455	78	40	–	–	12	– 1,584	1,475,909
Apr.	181,785	– 4	77	–	–	– 22	– 1	– 58	1,657,055
May	181,471	– 314	163	87	26	– 576	– 1	– 12	1,741,382
June	180,042	– 1,430	83	4	1	– 1,112	– 350	– 56	1,784,980
July	180,473	431	470	19	–	– 3	– 6	– 48	1,799,062
Aug.	180,820	409	434	36	–	– 23	22	– 61	1,887,713
Sep.	182,039	604	896	10	60	– 3	– 23	– 335	1,870,873
Oct.	182,165	36	82	18	–	– 5	– 9	– 50	1,727,080
Nov.	181,879	– 340	47	–	1	– 219	– 11	– 158	1,884,308

***** Excluding shares of public limited investment companies. **1** Including shares issued out of company profits. **2** All marketplaces. Source: Bundesbank calculations based on data of the Herausgebergemeinschaft Wertpapier-Mit teilungen and Deutsche Börse AG. **3** Methodological changes since October 2019. **4** Changes due to statistical adjustments.

VIII. Capital market

5. Yields and indices on German securities

Period	Yields on debt securities outstanding issued by residents [1]							Price indices [2,3]			
		Public debt securities			Bank debt securities			Debt securities		Shares	
			Listed Federal securities								
	Total	Total	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	Corporate bonds (non-MFIs)	German bond index (REX)	iBoxx € Germany price index	CDAX share price index	German share index (DAX)
	% per annum							Average daily rate	End-1998 = 100	End-1987 = 100	End-1987 = 1,000
2009	3.2	3.1	3.0	3.2	3.5	4.0	5.5	123.62	100.12	320.32	5,957.43
2010	2.5	2.4	2.4	2.7	2.7	3.3	4.0	124.96	102.95	368.72	6,914.19
2011	2.6	2.4	2.4	2.6	2.9	3.5	4.3	131.48	109.53	304.60	5,898.35
2012	1.4	1.3	1.3	1.5	1.6	2.1	3.7	135.11	111.18	380.03	7,612.39
2013	1.4	1.3	1.3	1.6	1.3	2.1	3.4	132.11	105.92	466.53	9,552.16
2014	1.0	1.0	1.0	1.2	0.9	1.7	2.9	139.68	114.37	468.39	9,805.55
2015	0.5	0.4	0.4	0.5	0.5	1.2	2.4	139.52	112.42	508.80	10,743.01
2016	0.1	0.0	0.0	0.1	0.3	1.0	2.1	142.50	112.72	526.55	11,481.06
2017	0.3	0.2	0.2	0.3	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	1.0	2.5	141.84	109.71	474.85	10,558.96
2019	– 0.1	– 0.2	– 0.3	– 0.3	0.1	0.3	2.5	143.72	111.32	575.80	13,249.01
2020	– 0.2	– 0.4	– 0.5	– 0.5	– 0.0	0.1	1.7	146.15	113.14	586.72	13,718.78
2020 July	– 0.2	– 0.4	– 0.5	– 0.5	– 0.1	0.0	1.3	145.85	113.27	522.53	12,313.36
Aug.	– 0.2	– 0.4	– 0.5	– 0.5	– 0.1	– 0.0	1.2	145.81	111.72	549.79	12,945.38
Sep.	– 0.2	– 0.4	– 0.5	– 0.5	– 0.1	– 0.0	1.1	145.96	112.79	544.40	12,760.73
Oct.	– 0.3	– 0.5	– 0.6	– 0.6	– 0.2	– 0.1	1.1	146.56	113.81	492.31	11,556.48
Nov.	– 0.3	– 0.5	– 0.6	– 0.6	– 0.2	– 0.1	0.9	146.22	113.19	564.23	13,291.16
Dec.	– 0.3	– 0.5	– 0.6	– 0.6	– 0.2	– 0.1	0.8	146.15	113.14	586.72	13,718.78

1 Bearer debt securities with maximum maturities according to the terms of issue of over 4 years. Structured debt securities, 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 outstanding 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. Adjustment of the scope of securities included on 1 May 2020. **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

€ million

Period	Sales								Purchases					
		Open-end domestic mutual funds [1] (sales receipts)							Residents					
			Mutual funds open to the general public							Credit institutions including building and loan associations [2]		Other sectors [3]		
				of which:										
	Sales = total purchases	Total	Total	Money market funds	Securities-based funds	Real estate funds	Specialised funds	Foreign funds [4]	Total	Total	of which: Foreign mutual fund shares	Total	of which: Foreign mutual fund shares	Non-residents [5]
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	156,985	119,369	21,301	– 342	11,131	7,384	98,068	37,615	163,934	2,877	– 3,172	161,057	40,787	– 6,947
2017	153,484	94,921	29,560	– 235	21,970	4,406	65,361	58,562	156,002	4,938	1,048	151,064	57,514	– 2,520
2018	131,958	103,694	15,279	377	4,166	6,168	88,415	28,263	138,254	2,979	– 2,306	135,275	30,569	– 6,298
2019	175,476	122,546	17,032	– 447	5,097	10,580	105,514	52,930	180,439	2,719	– 812	177,720	53,742	– 4,961
2020 May	9,255	3,378	2,921	– 156	2,471	380	457	5,877	9,666	143	– 164	9,523	6,041	– 411
June	10,087	7,065	1,789	– 181	1,634	471	5,276	3,022	9,668	– 2,048	15	11,716	3,007	419
July	18,259	7,417	1,671	– 195	1,460	400	5,746	10,842	17,389	– 143	– 89	17,532	10,931	870
Aug.	16,662	6,268	2,049	12	1,759	297	4,219	10,394	16,630	740	– 104	15,890	10,498	32
Sep.	16,160	10,083	1,146	112	– 18	1,052	8,937	6,077	17,415	– 705	250	18,120	5,827	– 1,254
Oct.	15,409	11,677	713	33	– 99	853	10,964	3,731	15,788	939	– 90	14,849	3,821	– 380
Nov.	15,181	7,541	3,796	– 107	3,297	630	3,745	7,640	14,324	– 116	502	14,440	7,138	857

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	2017	2018	2019	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3
Acquisition of financial assets									
Currency and deposits	46.39	21.80	25.89	– 9.14	37.45	16.34	8.56	50.08	43.44
Debt securities	– 7.53	5.24	– 2.23	– 1.31	– 0.59	– 0.94	0.15	2.47	0.57
Short-term debt securities	– 2.97	1.42	– 1.31	– 1.26	0.33	– 0.31	– 0.32	0.53	1.25
Long-term debt securities	– 4.55	3.82	– 0.91	– 0.05	– 0.92	– 0.63	0.47	1.94	– 0.68
Memo item:									
Debt securities of domestic sectors	– 3.64	0.65	– 0.47	– 0.24	– 0.46	– 0.31	– 0.04	1.79	– 0.48
Non-financial corporations	– 0.61	0.59	0.51	– 0.25	0.31	– 0.25	– 0.02	0.20	0.13
Financial corporations	– 0.52	1.40	– 0.56	0.08	– 0.71	0.18	– 0.16	0.59	– 0.41
General government	– 2.50	– 1.34	– 0.41	– 0.07	– 0.05	– 0.24	0.14	1.00	– 0.20
Debt securities of the rest of the world	– 3.88	4.60	– 1.76	– 1.06	– 0.13	– 0.63	0.19	0.68	1.06
Loans	56.22	– 25.67	2.21	– 6.79	– 7.51	4.39	– 1.00	9.56	3.45
Short-term loans	27.83	– 0.14	7.85	– 7.92	– 5.41	6.29	– 1.34	16.87	6.87
Long-term loans	28.39	– 25.53	– 5.64	1.13	– 2.11	– 1.90	0.34	– 7.31	– 3.42
Memo item:									
Loans to domestic sectors	24.05	– 10.63	– 9.00	– 5.70	– 7.02	2.86	– 1.17	6.18	8.37
Non-financial corporations	15.23	– 10.03	– 8.19	– 6.71	– 8.09	5.67	– 1.29	6.25	8.95
Financial corporations	8.42	– 0.97	– 1.03	0.96	1.01	– 2.87	0.11	– 0.07	– 0.58
General government	0.40	0.36	0.22	0.06	0.06	0.06	0.00	0.00	0.00
Loans to the rest of the world	32.17	– 15.03	11.21	– 1.09	– 0.50	1.54	0.17	3.38	– 4.92
Equity and investment fund shares	79.82	120.60	76.61	10.76	33.88	17.68	56.68	– 3.29	22.72
Equity	71.73	118.60	67.61	9.07	30.68	16.14	55.82	– 4.44	17.79
Listed shares of domestic sectors	– 3.82	18.82	6.18	– 3.35	15.19	– 7.49	– 1.51	– 17.07	10.02
Non-financial corporations	– 3.76	18.27	4.62	– 3.32	15.24	– 9.14	– 1.32	– 16.89	10.15
Financial corporations	– 0.06	0.55	1.55	– 0.03	– 0.05	1.65	– 0.19	– 0.18	– 0.14
Listed shares of the rest of the world	6.99	– 3.84	5.55	1.14	2.80	0.55	0.72	– 1.45	3.44
Other equity [1]	68.56	103.62	55.88	11.28	12.68	23.08	56.61	14.08	4.34
Investment fund shares	8.09	2.01	9.00	1.69	3.21	1.54	0.85	1.14	4.93
Money market fund shares	– 0.85	– 0.53	1.78	0.23	– 0.03	1.61	– 1.80	0.98	3.27
Non-MMF investment fund shares	8.94	2.54	7.22	1.46	3.24	– 0.08	2.65	0.17	1.66
Insurance technical reserves	1.56	0.38	1.63	0.44	0.38	0.32	0.32	0.61	0.69
Financial derivatives	– 11.32	2.15	0.52	– 7.36	– 3.73	10.57	– 0.24	– 9.63	1.08
Other accounts receivable	155.71	11.07	– 62.59	– 40.07	– 5.66	– 41.15	0.05	– 57.10	42.68
Total	320.86	135.58	42.05	– 53.47	54.23	7.21	64.51	– 7.29	114.62
External financing									
Debt securities	8.56	7.08	19.19	5.87	5.00	2.55	5.75	23.51	10.16
Short-term securities	0.60	4.08	2.74	1.75	0.46	– 0.70	1.60	2.78	– 3.91
Long-term securities	7.95	3.00	16.45	4.12	4.54	3.25	4.15	20.73	14.06
Memo item:									
Debt securities of domestic sectors	7.09	3.94	7.03	0.17	2.67	0.14	1.31	11.05	4.97
Non-financial corporations	– 0.61	0.59	0.51	– 0.25	0.31	– 0.25	– 0.02	0.20	0.13
Financial corporations	9.16	3.35	5.72	0.91	2.38	– 0.03	1.81	10.77	5.36
General government	0.01	0.01	0.47	– 0.61	– 0.04	0.42	– 0.10	– 0.19	0.05
Households	– 1.47	– 0.01	0.34	0.12	0.03	– 0.01	– 0.39	0.26	– 0.57
Debt securities of the rest of the world	1.46	3.14	12.15	5.69	2.33	2.41	4.44	12.46	5.19
Loans	99.28	126.08	76.53	38.82	10.73	4.26	29.73	20.88	6.54
Short-term loans	23.11	60.22	19.68	17.70	– 6.91	– 7.39	8.31	– 19.84	10.03
Long-term loans	76.18	65.87	56.85	21.12	17.64	11.66	21.43	40.72	– 3.50
Memo item:									
Loans from domestic sectors	51.38	70.84	49.76	18.18	– 6.61	18.51	12.92	23.86	11.75
Non-financial corporations	15.23	– 10.03	– 8.19	– 6.71	– 8.09	5.67	– 1.29	6.25	8.95
Financial corporations	37.30	79.39	57.25	24.25	1.80	8.76	18.35	0.98	– 8.92
General government	– 1.16	1.48	0.70	0.64	– 0.33	4.07	– 4.15	16.63	11.72
Loans from the rest of the world	47.91	55.25	26.78	20.64	17.35	– 14.24	16.81	– 2.98	– 5.22
Equity	33.18	20.63	17.97	4.19	3.82	4.83	6.51	9.69	36.54
Listed shares of domestic sectors	8.46	73.23	– 24.47	– 34.72	15.17	– 9.39	7.19	– 11.57	11.17
Non-financial corporations	– 3.76	18.27	4.62	– 3.32	15.24	– 9.14	– 1.32	– 16.89	10.15
Financial corporations	11.11	46.75	– 33.11	– 32.78	– 0.68	0.60	1.64	1.74	– 0.63
General government	0.51	0.53	– 0.01	0.04	0.04	– 0.05	0.20	0.09	– 0.01
Households	0.60	7.67	4.03	1.33	0.57	– 0.80	6.66	3.50	1.67
Listed shares of the rest of the world	– 4.12	– 31.96	– 1.61	2.75	– 14.41	14.28	– 5.94	16.44	14.51
Other equity [1]	28.84	– 20.65	44.05	36.17	3.06	– 0.06	5.26	4.83	10.86
Insurance technical reserves	6.89	6.08	2.81	0.70	0.70	0.70	0.70	0.70	0.70
Financial derivatives and employee stock options	1.35	– 0.49	– 1.38	– 2.06	2.69	– 3.21	1.49	– 2.26	– 1.49
Other accounts payable	58.94	22.29	7.95	– 18.43	16.19	– 2.20	– 17.20	– 48.74	42.02
Total	208.20	181.66	123.07	29.10	39.14	6.94	26.99	3.78	94.46

1 Including unlisted shares.

IX. Financial accounts

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

End of year/quarter; € billion

Item	2017	2018	2019	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3
Financial assets									
Currency and deposits	550.8	560.2	556.8	508.7	558.4	556.8	577.2	609.6	679.6
Debt securities	47.0	50.8	49.6	51.0	51.1	49.6	48.2	51.5	51.5
Short-term debt securities	3.5	4.9	3.7	3.6	3.9	3.7	3.4	3.8	5.1
Long-term debt securities	43.5	45.9	45.9	47.4	47.1	45.9	44.9	47.7	46.3
Memo item:									
Debt securities of domestic sectors	21.1	21.3	21.1	22.1	21.7	21.1	20.3	22.3	21.9
Non-financial corporations	4.0	4.5	5.0	5.0	5.3	5.0	4.7	5.0	5.1
Financial corporations	12.7	13.8	13.6	14.2	13.6	13.6	12.9	13.6	13.2
General government	4.4	3.0	2.6	2.9	2.9	2.6	2.7	3.7	3.5
Debt securities of the rest of the world	25.8	29.5	28.4	29.0	29.3	28.4	28.0	29.2	29.6
Loans	620.9	591.4	595.3	597.4	591.8	595.3	593.9	602.8	604.4
Short-term loans	495.1	491.1	499.9	498.4	494.1	499.9	498.2	514.6	520.3
Long-term loans	125.8	100.3	95.4	99.0	97.8	95.4	95.7	88.2	84.1
Memo item:									
Loans to domestic sectors	402.1	391.5	382.5	386.7	379.7	382.5	381.4	387.5	395.9
Non-financial corporations	297.8	287.8	279.6	282.0	273.9	279.6	278.3	284.6	293.5
Financial corporations	97.6	96.7	95.6	97.5	98.5	95.6	95.8	95.7	95.1
General government	6.7	7.1	7.3	7.2	7.2	7.3	7.3	7.3	7.3
Loans to the rest of the world	218.8	199.9	212.8	210.7	212.2	212.8	212.6	215.3	208.5
Equity and investment fund shares	2,152.9	2,110.7	2,345.1	2,213.2	2,242.7	2,345.1	2,135.2	2,301.8	2,331.1
Equity	1,981.3	1,944.3	2,155.1	2,032.6	2,056.1	2,155.1	1,959.3	2,115.3	2,137.6
Listed shares of domestic sectors	332.2	302.6	342.0	319.7	328.8	342.0	288.4	337.2	352.5
Non-financial corporations	325.3	296.0	332.9	312.1	321.4	332.9	281.4	329.6	346.0
Financial corporations	6.8	6.6	9.0	7.7	7.3	9.0	7.0	7.6	6.5
Listed shares of the rest of the world	48.3	40.2	50.7	45.8	47.8	50.7	45.3	47.3	55.2
Other equity [1]	1,600.8	1,601.6	1,762.4	1,667.1	1,679.5	1,762.4	1,625.7	1,730.7	1,729.9
Investment fund shares	171.7	166.4	190.0	180.6	186.6	190.0	175.8	186.6	193.5
Money market fund shares	1.6	1.0	3.2	1.2	1.2	3.2	1.4	2.4	5.7
Non-MMF investment fund shares	170.1	165.4	186.8	179.3	185.4	186.8	174.4	184.2	187.9
Insurance technical reserves	54.2	56.3	59.1	57.7	58.4	59.1	59.9	60.6	61.4
Financial derivatives	34.1	33.4	31.5	32.6	32.1	31.5	44.9	34.7	29.7
Other accounts receivable	1,122.7	1,154.8	1,231.4	1,181.3	1,206.3	1,231.4	1,186.3	1,094.0	1,157.5
Total	4,582.7	4,557.6	4,868.9	4,642.0	4,740.7	4,868.9	4,645.6	4,755.1	4,915.2
Liabilities									
Debt securities	210.6	187.8	214.0	205.6	217.0	214.0	229.3	245.8	256.7
Short-term securities	3.4	6.1	8.8	9.1	9.5	8.8	14.0	16.8	12.6
Long-term securities	207.2	181.6	205.2	196.5	207.4	205.2	215.2	229.0	244.1
Memo item:									
Debt securities of domestic sectors	83.1	79.6	88.5	86.4	89.1	88.5	85.0	100.3	106.8
Non-financial corporations	4.0	4.5	5.0	5.0	5.3	5.0	4.7	5.0	5.1
Financial corporations	64.4	61.0	68.6	66.7	69.2	68.6	67.1	81.2	88.0
General government	0.1	0.1	0.6	0.2	0.2	0.6	0.5	0.3	0.4
Households	14.5	14.0	14.4	14.5	14.5	14.4	12.8	13.8	13.3
Debt securities of the rest of the world	127.4	108.2	125.5	119.2	127.8	125.5	144.2	145.5	149.9
Loans	1,629.4	1,748.0	1,826.9	1,810.0	1,824.7	1,826.9	1,856.8	1,879.0	1,889.1
Short-term loans	650.7	710.2	732.9	745.8	740.8	732.9	741.2	719.9	728.4
Long-term loans	978.7	1,037.8	1,094.0	1,064.2	1,083.8	1,094.0	1,115.6	1,159.1	1,160.8
Memo item:									
Loans from domestic sectors	1,223.5	1,279.6	1,328.3	1,316.8	1,311.1	1,328.3	1,341.2	1,367.0	1,377.1
Non-financial corporations	297.8	287.8	279.6	282.0	273.9	279.6	278.3	284.6	293.5
Financial corporations	873.2	938.9	994.9	984.7	987.3	994.9	1,012.6	1,015.2	1,004.5
General government	52.5	52.9	53.8	50.1	49.9	53.8	50.3	67.3	79.2
Loans from the rest of the world	405.8	468.4	498.6	493.2	513.6	498.6	515.6	511.9	512.0
Equity	3,078.3	2,707.0	3,108.1	2,894.0	2,900.3	3,108.1	2,579.1	2,956.5	3,097.3
Listed shares of domestic sectors	721.3	659.3	733.5	682.4	692.4	733.5	595.2	710.9	747.3
Non-financial corporations	325.3	296.0	332.9	312.1	321.4	332.9	281.4	329.6	346.0
Financial corporations	149.6	161.9	157.4	145.9	145.7	157.4	126.2	150.1	156.0
General government	46.0	41.6	51.8	45.0	47.9	51.8	41.8	50.5	53.3
Households	200.4	159.8	191.3	179.5	177.4	191.3	145.7	180.8	192.0
Listed shares of the rest of the world	960.5	764.8	959.2	859.9	857.6	959.2	689.3	856.3	923.6
Other equity [1]	1,396.5	1,282.9	1,415.5	1,351.6	1,350.2	1,415.5	1,294.7	1,389.2	1,426.4
Insurance technical reserves	263.7	269.8	272.6	271.2	271.9	272.6	273.3	274.0	274.7
Financial derivatives and employee stock options	63.1	65.3	67.5	79.0	85.4	67.5	88.0	89.2	85.1
Other accounts payable	1,124.9	1,174.3	1,305.7	1,202.4	1,262.9	1,305.7	1,254.8	1,214.9	1,264.2
Total	6,369.9	6,152.2	6,794.8	6,462.2	6,562.1	6,794.8	6,281.2	6,659.3	6,867.0

1 Including unlisted shares.

IX. Financial accounts

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

€ billion

Item	2017	2018	2019	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3
Acquisition of financial assets									
Currency and deposits	107.93	138.24	139.86	42.36	23.65	49.04	24.14	72.49	41.33
Currency	21.42	30.20	32.86	8.52	10.36	10.15	19.55	16.39	11.79
Deposits	86.51	108.04	107.01	33.83	13.29	38.89	4.59	56.10	29.53
Transferable deposits	99.78	109.88	111.01	34.39	17.27	42.16	18.74	58.64	31.76
Time deposits	– 4.03	6.79	1.47	– 0.79	– 0.30	0.70	– 3.11	– 0.85	0.41
Savings deposits (including savings certificates)	– 9.24	– 8.63	– 5.47	0.23	– 3.68	– 3.97	– 11.04	– 1.70	– 2.63
Debt securities	– 8.39	1.62	– 1.85	0.60	– 1.35	– 1.61	– 1.47	0.35	– 1.67
Short-term debt securities	– 0.20	– 0.13	– 0.53	– 0.13	– 0.19	0.02	– 0.03	0.16	0.10
Long-term debt securities	– 8.19	1.74	– 1.32	0.73	– 1.16	– 1.63	– 1.44	0.19	– 1.78
Memo item:									
Debt securities of domestic sectors	– 5.11	2.24	– 2.93	0.28	– 1.52	– 2.38	– 0.14	0.52	– 1.17
Non-financial corporations	– 1.45	– 0.10	0.21	0.08	– 0.04	– 0.04	– 0.32	0.18	– 0.56
Financial corporations	– 2.68	2.81	– 2.22	0.27	– 1.31	– 1.75	– 0.35	0.45	– 0.36
General government	– 0.99	– 0.46	– 0.92	– 0.07	– 0.18	– 0.58	0.53	– 0.11	– 0.25
Debt securities of the rest of the world	– 3.27	– 0.62	1.08	0.32	0.18	0.77	– 1.32	– 0.17	– 0.50
Equity and investment fund shares	55.17	38.44	49.78	10.90	11.96	16.20	19.39	29.00	20.30
Equity	14.88	18.84	18.94	4.29	4.40	3.43	13.62	15.61	11.56
Listed shares of domestic sectors	0.85	9.44	6.61	1.43	1.11	– 0.24	8.07	6.35	1.97
Non-financial corporations	0.49	6.28	3.52	1.31	0.88	– 1.19	6.47	3.41	1.71
Financial corporations	0.36	3.16	3.09	0.12	0.23	0.95	1.61	2.94	0.27
Listed shares of the rest of the world	9.87	4.37	7.46	1.72	2.19	2.58	3.02	6.44	7.39
Other equity [1]	4.16	5.03	4.86	1.13	1.10	1.08	2.53	2.82	2.19
Investment fund shares	40.29	19.60	30.84	6.61	7.57	12.78	5.76	13.39	8.75
Money market fund shares	– 0.30	– 0.22	– 0.32	– 0.01	0.18	– 0.37	0.38	– 0.10	0.10
Non-MMF investment fund shares	40.59	19.81	31.16	6.62	7.39	13.14	5.38	13.49	8.64
Non-life insurance technical reserves and provision for calls under standardised guarantees	20.23	15.80	17.93	3.45	4.46	6.57	5.29	5.62	5.56
Life insurance and annuity entitlements	37.42	28.18	38.28	9.24	8.62	9.52	10.63	6.80	6.19
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	35.52	37.28	27.51	6.59	4.98	4.75	11.53	7.55	7.04
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]	– 25.91	– 9.52	– 3.68	– 7.80	7.23	– 25.15	20.88	– 11.64	8.90
Total	221.96	250.03	267.83	65.34	59.56	59.32	90.39	110.18	87.64
External financing									
Loans	55.38	68.41	81.16	23.84	24.85	16.59	13.13	17.63	27.53
Short-term loans	– 2.19	2.44	0.92	0.87	– 0.62	0.20	– 1.58	– 2.29	– 0.52
Long-term loans	57.57	65.97	80.23	22.97	25.47	16.39	14.71	19.91	28.05
Memo item:									
Mortgage loans	47.24	57.42	67.17	16.62	21.66	19.79	15.69	18.47	25.54
Consumer loans	11.25	11.14	14.42	6.56	3.67	– 1.96	– 2.67	– 2.05	1.08
Entrepreneurial loans	– 3.11	– 0.14	– 0.43	0.66	– 0.49	– 1.25	0.10	1.21	0.91
Memo item:									
Loans from monetary financial institutions	49.99	61.72	73.41	21.22	21.09	18.60	15.52	17.96	27.32
Loans from other financial institutions	5.40	6.69	7.74	2.62	3.76	– 2.01	– 2.39	– 0.34	0.21
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	0.66	0.80	0.31	0.10	0.20	– 0.50	– 0.17	0.25	0.31
Total	56.04	69.21	81.46	23.94	25.04	16.09	12.96	17.88	27.84

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	2017	2018	2019	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3
Financial assets									
Currency and deposits	2,317.5	2,457.4	2,597.3	2,524.6	2,548.3	2,597.3	2,621.4	2,693.9	2,734.9
Currency	197.1	227.3	260.2	239.6	250.0	260.2	279.7	296.1	307.9
Deposits	2,120.3	2,230.1	2,337.1	2,285.0	2,298.3	2,337.1	2,341.7	2,397.8	2,427.0
Transferable deposits	1,288.4	1,398.0	1,509.1	1,449.6	1,466.9	1,509.1	1,527.8	1,586.4	1,617.9
Time deposits	245.4	252.4	253.9	253.5	253.2	253.9	250.8	249.9	250.3
Savings deposits (including savings certificates)	586.5	579.7	574.2	581.9	578.2	574.2	563.2	561.5	558.8
Debt securities	122.5	117.5	121.4	123.1	122.5	121.4	108.9	114.5	113.5
Short-term debt securities	2.5	2.1	1.6	1.8	1.6	1.6	1.5	1.7	1.8
Long-term debt securities	120.0	115.4	119.7	121.2	120.9	119.7	107.4	112.7	111.7
Memo item:									
Debt securities of domestic sectors	82.9	80.2	81.4	84.5	83.4	81.4	72.3	76.7	76.1
Non-financial corporations	12.6	12.1	12.4	12.6	12.5	12.4	11.0	11.8	11.3
Financial corporations	66.4	64.6	66.6	68.6	67.7	66.6	58.2	62.0	62.1
General government	3.9	3.4	2.5	3.3	3.2	2.5	3.1	3.0	2.7
Debt securities of the rest of the world	39.6	37.4	39.9	38.6	39.2	39.9	36.6	37.8	37.4
Equity and investment fund shares	1,242.6	1,160.4	1,382.1	1,290.3	1,320.0	1,382.1	1,216.2	1,369.8	1,418.2
Equity	646.7	587.0	701.9	659.1	670.0	701.9	614.3	703.9	730.6
Listed shares of domestic sectors	227.9	184.1	223.9	210.1	209.3	223.9	171.7	209.2	217.3
Non-financial corporations	191.5	151.9	182.3	171.0	169.3	182.3	138.7	172.3	183.6
Financial corporations	36.4	32.2	41.6	39.1	40.0	41.6	33.0	36.9	33.7
Listed shares of the rest of the world	103.3	100.2	136.3	120.1	126.2	136.3	116.9	144.7	156.1
Other equity [1]	315.5	302.7	341.7	328.8	334.5	341.7	325.7	350.0	357.2
Investment fund shares	595.9	573.4	680.2	631.2	650.0	680.2	601.9	665.9	687.7
Money market fund shares	2.7	2.4	2.3	2.3	2.5	2.3	2.7	2.7	2.7
Non-MMF investment fund shares	593.2	571.1	678.0	628.9	647.5	678.0	599.2	663.2	684.9
Non-life insurance technical reserves and provision for calls under standardised guarantees	360.1	375.9	393.8	382.8	387.2	393.8	399.1	404.7	410.3
Life insurance and annuity entitlements	991.4	1,011.1	1,069.1	1,041.6	1,054.7	1,069.1	1,080.2	1,087.4	1,093.9
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	846.5	883.8	911.4	894.0	899.6	911.4	922.9	930.4	937.5
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]	31.1	29.6	29.6	31.5	32.3	29.6	29.0	29.6	30.0
Total	5,911.7	6,035.7	6,504.8	6,287.9	6,364.6	6,504.8	6,377.7	6,630.3	6,738.3
Liabilities									
Loans	1,711.8	1,775.6	1,857.8	1,816.3	1,841.1	1,857.8	1,871.0	1,886.6	1,915.3
Short-term loans	54.4	58.1	58.8	59.4	58.8	58.8	57.2	54.9	54.2
Long-term loans	1,657.3	1,717.5	1,799.0	1,756.9	1,782.4	1,799.0	1,813.8	1,831.7	1,861.1
Memo item:									
Mortgage loans	1,247.3	1,307.9	1,378.6	1,337.4	1,359.0	1,378.6	1,394.4	1,412.5	1,438.8
Consumer loans	211.8	218.1	231.4	229.7	233.3	231.4	228.8	226.0	227.0
Entrepreneurial loans	252.7	249.7	247.7	249.2	248.8	247.7	247.8	248.1	249.5
Memo item:									
Loans from monetary financial institutions	1,610.0	1,667.2	1,741.6	1,701.8	1,722.9	1,741.6	1,757.2	1,773.2	1,801.6
Loans from other financial institutions	101.8	108.5	116.2	114.5	118.2	116.2	113.8	113.5	113.7
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	17.3	18.3	19.2	20.4	20.8	19.2	20.7	21.0	20.5
Total	1,729.1	1,793.9	1,877.0	1,836.7	1,862.0	1,877.0	1,891.7	1,907.7	1,935.8

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/surplus[1]									
2014	+ 17.0	+ 15.5	+ 2.0	– 3.9	+ 3.4	+ 0.6	+ 0.5	+ 0.1	– 0.1	+ 0.1
2015	+ 29.1	+ 17.6	+ 4.6	+ 3.7	+ 3.2	+ 1.0	+ 0.6	+ 0.2	+ 0.1	+ 0.1
2016	+ 36.4	+ 13.7	+ 7.7	+ 6.3	+ 8.7	+ 1.2	+ 0.4	+ 0.2	+ 0.2	+ 0.3
2017 **p**	+ 44.4	+ 7.8	+ 13.9	+ 11.4	+ 11.2	+ 1.4	+ 0.2	+ 0.4	+ 0.4	+ 0.3
2018 **p**	+ 61.6	+ 20.8	+ 12.1	+ 12.8	+ 16.0	+ 1.8	+ 0.6	+ 0.4	+ 0.4	+ 0.5
2019 **p**	+ 52.5	+ 22.7	+ 16.0	+ 5.1	+ 8.7	+ 1.5	+ 0.7	+ 0.5	+ 0.1	+ 0.3
2018 H1 **p**	+ 51.3	+ 18.9	+ 15.5	+ 7.7	+ 9.3	+ 3.1	+ 1.1	+ 0.9	+ 0.5	+ 0.6
H2 **p**	+ 10.3	+ 1.9	– 3.4	+ 5.1	+ 6.7	+ 0.6	+ 0.1	– 0.2	+ 0.3	+ 0.4
2019 H1 **p**	+ 46.5	+ 19.0	+ 13.0	+ 6.4	+ 8.1	+ 2.7	+ 1.1	+ 0.8	+ 0.4	+ 0.5
H2 **p**	+ 6.0	+ 3.7	+ 3.0	– 1.3	+ 0.6	+ 0.3	+ 0.2	+ 0.2	– 0.1	+ 0.0
2020 H1 **pe**	– 54.2	– 29.2	– 11.9	– 1.9	– 11.4	– 3.3	– 1.8	– 0.7	– 0.1	– 0.7
	Debt level[2]									End of year or quarter
2014	2,213.6	1,395.8	658.2	176.1	1.4	75.6	47.7	22.5	6.0	0.0
2015	2,188.4	1,371.6	658.2	176.3	1.4	72.3	45.3	21.8	5.8	0.0
2016	2,171.6	1,365.2	640.9	178.0	1.1	69.3	43.6	20.4	5.7	0.0
2017 **p**	2,122.2	1,349.7	613.6	175.2	0.8	65.1	41.4	18.8	5.4	0.0
2018 **p**	2,073.6	1,322.5	599.8	167.4	0.7	61.8	39.4	17.9	5.0	0.0
2019 **p**	2,057.2	1,299.4	609.4	165.1	0.7	59.6	37.7	17.7	4.8	0.0
2018 Q1 **p**	2,100.3	1,337.1	604.1	174.0	1.0	64.0	40.7	18.4	5.3	0.0
Q2 **p**	2,085.8	1,328.7	600.6	172.5	0.9	62.9	40.1	18.1	5.2	0.0
Q3 **p**	2,086.2	1,334.9	599.9	167.2	0.8	62.6	40.0	18.0	5.0	0.0
Q4 **p**	2,073.6	1,322.5	599.8	167.4	0.7	61.8	39.4	17.9	5.0	0.0
2019 Q1 **p**	2,083.9	1,324.0	611.7	165.7	0.7	61.6	39.2	18.1	4.9	0.0
Q2 **p**	2,074.3	1,319.9	609.9	164.3	0.7	61.1	38.9	18.0	4.8	0.0
Q3 **p**	2,091.2	1,327.6	619.9	163.7	0.6	61.0	38.7	18.1	4.8	0.0
Q4 **p**	2,057.2	1,299.4	609.4	165.1	0.7	59.6	37.7	17.7	4.8	0.0
2020 Q1 **p**	2,107.0	1,327.0	628.7	165.1	0.8	61.0	38.4	18.2	4.8	0.0
Q2 **p**	2,276.0	1,473.1	650.4	165.3	1.0	67.4	43.6	19.3	4.9	0.0
Q3 **p**	2,345.2	1,535.9	656.9	166.6	4.6	70.0	45.9	19.6	5.0	0.1

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: Taxes	Social contributions	Other	Total	of which: Social benefits	Compensation of employees	Intermediate consumption	Gross capital formation	Interest	Other		
	€ billion												
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	1,364.9	705.1	501.2	158.6	1,335.8	721.9	233.0	153.0	64.5	42.2	121.2	+ 29.1	1,213.3
2016	1,426.7	739.2	524.3	163.3	1,390.4	754.5	240.7	162.5	68.1	37.3	127.2	+ 36.4	1,270.4
2017 **p**	1,485.2	773.1	549.5	162.5	1,440.8	783.9	250.1	168.4	71.6	33.7	133.0	+ 44.4	1,329.4
2018 **p**	1,553.8	808.0	572.6	173.2	1,492.2	806.0	259.6	173.4	78.7	31.1	143.5	+ 61.6	1,387.6
2019 **p**	1,610.6	834.1	597.5	179.0	1,558.1	845.9	271.5	181.9	86.2	27.5	145.1	+ 52.5	1,438.7
	As a percentage of GDP												
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	45.1	23.3	16.6	5.2	44.1	23.9	7.7	5.1	2.1	1.4	4.0	+ 1.0	40.1
2016	45.5	23.6	16.7	5.2	44.4	24.1	7.7	5.2	2.2	1.2	4.1	+ 1.2	40.5
2017 **p**	45.6	23.7	16.9	5.0	44.2	24.0	7.7	5.2	2.2	1.0	4.1	+ 1.4	40.8
2018 **p**	46.3	24.1	17.1	5.2	44.5	24.0	7.7	5.2	2.3	0.9	4.3	+ 1.8	41.3
2019 **p**	46.7	24.2	17.3	5.2	45.2	24.5	7.9	5.3	2.5	0.8	4.2	+ 1.5	41.7
	Percentage growth rates												
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	+ 3.9	+ 4.8	+ 3.9	+ 0.0	+ 3.0	+ 4.4	+ 2.4	+ 4.0	+ 6.6	– 10.5	– 1.8	.	+ 4.6
2016	+ 4.5	+ 4.8	+ 4.6	+ 2.9	+ 4.1	+ 4.5	+ 3.3	+ 6.2	+ 5.6	– 11.7	+ 4.9	.	+ 4.7
2017 **p**	+ 4.1	+ 4.6	+ 4.8	– 0.4	+ 3.6	+ 3.9	+ 3.9	+ 3.6	+ 5.1	– 9.5	+ 4.6	.	+ 4.6
2018 **p**	+ 4.6	+ 4.5	+ 4.2	+ 6.6	+ 3.6	+ 2.8	+ 3.8	+ 3.0	+ 9.8	– 7.8	+ 7.8	.	+ 4.4
2019 **p**	+ 3.6	+ 3.2	+ 4.4	+ 3.3	+ 4.4	+ 4.9	+ 4.6	+ 4.9	+ 9.6	– 11.6	+ 1.1	.	+ 3.7

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

	Central, state and local government [1]									Social security funds [2]			General government, total		
	Revenue			Expenditure											
		of which:			of which: [3]										
Period	Total [4]	Taxes	Financial transactions [5]	Total [4]	Personnel expenditure	Current grants	Interest	Fixed asset formation	Financial transactions [5]	Deficit/ surplus	Revenue [6]	Expenditure	Deficit/ surplus	Revenue	Expenditure	Deficit/ surplus
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	951.8	776.3	6.2	905.6	272.5	338.0	39.2	55.8	16.1	+ 46.2	656.2	642.5	+ 13.6	1,490.7	1,430.9	+ 59.8
2019 p	1,010.4	799.4	11.2	975.4	285.9	349.7	33.6	62.9	16.8	+ 35.0	684.7	676.6	+ 8.0	1,573.7	1,530.6	+ 43.1
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	10.2	3.3	+ 10.5	163.3	166.4	– 3.1	374.3	366.8	+ 7.5
Q2 p	256.3	201.7	2.0	233.4	67.5	87.0	12.2	13.0	2.6	+ 22.8	169.9	168.4	+ 1.5	396.1	371.9	+ 24.3
Q3 p	245.3	194.7	3.4	236.7	70.9	86.2	4.5	16.4	3.1	+ 8.6	168.8	170.3	– 1.5	384.0	376.9	+ 7.1
Q4 p	269.3	210.6	3.2	272.1	76.1	87.5	5.1	22.5	7.7	– 2.8	181.9	172.6	+ 9.3	420.9	414.4	+ 6.5
2020 Q1 p	244.8	197.4	2.5	239.1	75.6	90.5	11.9	12.0	2.6	+ 5.7	168.3	175.7	– 7.4	380.0	381.7	– 1.7
Q2 p	212.1	158.0	2.7	269.2	69.5	119.2	8.6	15.4	3.4	– 57.1	175.9	187.0	– 11.1	354.6	422.9	– 68.2

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

	Central government			State government [2,3]			Local government [3]		
Period	Revenue [1]	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus
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	420.5	400.1	+ 20.4	271.8	261.5	+ 10.2
2019 p	382.5	369.2	+ 13.3	437.3	419.5	+ 17.9	284.2	278.1	+ 6.1
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
Q2 p	97.7	90.3	+ 7.4	106.0	97.5	+ 8.5	70.6	65.9	+ 4.7
Q3 p	93.2	91.3	+ 1.9	107.9	102.6	+ 5.2	69.1	69.2	– 0.1
Q4 p	106.9	101.5	+ 5.4	115.6	118.2	– 2.6	84.5	78.4	+ 6.0
2020 Q1 p	92.3	90.4	+ 1.9	105.6	102.4	+ 3.2	57.9	67.7	– 9.8
Q2 p	70.8	114.8	– 44.0	108.2	125.3	– 17.1	69.4	69.4	+ 0.1
Q3 p	83.8	105.5	– 21.7	112.9	113.7	– 0.8	67.5	72.6	– 5.1

Source: Bundesbank calculations based on Federal Statistical Office data. **1** Any amounts of the Bundesbank's profit distribution exceeding the reference value that were used to repay parts of the debt of central government's special funds are not included here. **2** Including the local authority level of the city states Berlin, Bremen and Hamburg. **3** 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	Total	Central and state government and European Union				Local government [3]	Balance of untransferred tax shares [4]	Memo item: Amounts deducted in the Federal budget [5]
		Total	Central government [1]	State government [1]	European Union [2]			
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
2019	799,416	684,491	355,050	298,519	30,921	114,902	+ 23	25,998
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	202,383	172,563	90,883	75,455	6,224	29,784	+ 37	6,179
Q3	193,918	166,676	86,117	72,677	7,882	27,569	– 327	7,402
Q4	210,062	182,556	98,381	78,809	5,365	37,733	– 10,227	6,146
2020 Q1	198,351	168,099	83,086	75,420	9,593	18,875	+ 11,377	6,855
Q2	158,161	135,185	68,653	59,557	6,974	25,107	– 2,131	6,997
Q3	...	156,397	78,502	72,613	5,282	...	...	9,705
2019 Oct.	.	46,677	23,836	20,239	2,602	.	.	2,049
Nov.	.	47,730	26,134	20,344	1,252	.	.	2,049
2020 Oct.	.	42,440	19,976	19,762	2,702	.	.	2,236
Nov.	.	44,201	18,862	20,579	4,760	.	.	2,236

Sources: Federal Ministry of Finance, Federal Statistical Office and Bundesbank calculations. **1** Before deducting or adding supplementary central government transfers, 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	Total [1]	Joint taxes									Central government taxes [7]	State government taxes [7]	EU customs duties	Memo item: Local government share in joint taxes
		Income taxes [2]					Value added taxes (VAT) [5]			Local business tax transfers [6]				
		Total	Wage tax [3]	Assessed income tax	Corporation tax	Investment income tax [4]	Total	Domestic VAT	Import VAT					
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
2019	735,869	344,016	219,660	63,711	32,013	28,632	243,256	183,113	60,143	8,114	109,548	25,850	5,085	51,379
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
Q3	179,020	81,267	53,668	13,614	7,607	6,379	61,057	45,976	15,081	2,221	26,654	6,485	1,336	12,344
Q4	196,300	89,619	60,632	16,575	7,128	5,284	62,696	47,175	15,520	3,660	32,301	6,746	1,279	13,745
2020 Q1	181,350	88,009	53,389	18,711	8,495	7,415	60,060	46,038	14,022	244	24,517	7,406	1,114	13,251
Q2	146,360	69,928	50,760	10,633	2,348	6,187	44,262	31,625	12,638	1,170	23,525	6,326	1,149	11,175
Q3	168,308	73,766	47,470	13,492	5,411	7,392	59,819	47,933	11,886	796	25,930	6,784	1,212	11,910
2019 Oct.	49,839	17,560	16,314	– 32	– 144	1,422	19,404	14,453	4,951	1,634	8,608	2,213	420	3,162
Nov.	51,115	17,840	17,416	– 263	– 622	1,308	21,996	16,452	5,544	273	8,399	2,130	477	3,385
2020 Oct.	45,454	16,044	14,587	– 234	67	1,625	17,605	13,756	3,849	755	8,174	2,383	491	3,014
Nov.	47,545	18,208	16,425	– 128	– 130	2,040	18,511	14,343	4,168	158	8,081	2,252	335	3,344

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:-, 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 2019: 48.9:47.7:3.4. The EU share is deducted from central government's share. **6** Respective percentage share of central and state government for 2019: 24.0:76.0. **7** For the breakdown, see Table X. 7.

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7. Central, state and local government: individual taxes

€ million

Period	Central government taxes [1]								State government taxes [1]				Local government taxes		
	Energy tax	Solidarity surcharge	Tobacco tax	Insurance tax	Motor vehicle tax	Electricity tax	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]	of which: Real property taxes
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
2019	40,683	19,646	14,257	14,136	9,372	6,689	2,118	2,648	15,789	6,987	1,975	1,099	71,661	55,527	14,439
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	17,959	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	19,163	14,869	3,881
Q3	10,519	4,624	3,667	2,770	2,251	1,639	515	668	3,923	1,824	474	264	17,118	12,659	4,019
Q4	15,379	5,086	4,507	2,281	2,035	1,745	538	730	4,223	1,798	488	237	17,422	13,861	3,190
2020 Q1	4,966	4,930	2,413	6,766	2,634	1,708	562	537	4,525	1,981	542	358	17,245	13,391	3,403
Q2	8,117	4,235	3,772	2,606	2,426	1,585	455	328	3,566	2,154	425	181	12,971	8,842	3,895
Q3	9,985	4,365	3,978	2,817	2,366	1,499	506	414	3,730	2,262	509	283	...	...	...
2019 Oct.	3,534	1,038	1,683	669	712	580	167	226	1,417	568	148	80	.	.	.
Nov.	3,379	1,047	1,359	943	699	574	157	241	1,315	568	176	71	.	.	.
2020 Oct.	3,283	1,044	1,439	685	755	644	167	157	1,373	737	185	89	.	.	.
Nov.	3,453	1,076	1,052	963	656	554	183	143	1,347	651	178	77	.	.	.

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]			Deficit/ surplus	Assets [1,4]					Memo item: Administrative assets
	Total	of which: Contributions [3]	of which: Payments from central government	Total	of which: Pension payments	of which: Pensioners' health insurance		Total	Deposits [5]	Securities	Equity interests, mortgages and other loans [6]	Real estate	
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
2019	327,298	232,014	94,467	325,436	277,282	20,960	+ 1,861	42,963	40,531	2,074	303	56	3,974
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
Q3	80,305	56,637	23,481	82,716	70,633	5,330	– 2,411	38,386	36,876	1,183	271	56	3,995
Q4	86,756	63,133	23,413	82,849	70,674	5,333	+ 3,907	42,945	40,539	2,074	276	56	3,987
2020 Q1	80,578	55,999	24,436	82,622	70,829	5,346	– 2,045	40,840	38,636	1,848	300	56	3,966
Q2	82,098	57,515	24,413	82,875	70,889	5,346	– 777	39,779	37,975	1,446	304	55	3,949
Q3	82,689	58,109	24,418	86,497	74,054	5,591	– 3,808	36,898	35,197	1,333	313	55	3,925

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 subsequently. **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.

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9. Federal Employment Agency: budgetary development*

€ million

Period	Revenue				Expenditure							Deficit/ surplus	Deficit-offsetting grant or loan from central government
	Total 1	of which:			Total	of which:							
		Contributions	Insolvency compensation levy	Central government subscriptions		Unemployment benefit 2	Short-time working benefits 3	Job promotion 4	Reintegration payment 5	Insolvency benefit payment	Administrative expenditure 6		
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	–
2019	35,285	29,851	638	–	33,154	15,009	772	7,302	.	842	6,252	+ 2,131	–
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	–
Q3	8,650	7,263	162	–	7,829	3,682	68	1,711	.	190	1,510	+ 821	–
Q4	9,581	8,121	172	–	8,592	3,685	98	1,941	.	230	1,816	+ 989	–
2020 Q1	8,123	6,851	153	–	9,301	4,469	392	1,934	.	235	1,470	– 1,179	–
Q2	7,906	6,691	151	–	17,005	4,869	7,977	1,793	.	254	1,407	– 9,099	–
Q3	8,350	6,934	153	–	18,619	5,737	8,637	1,701	.	472	1,414	– 10,269	–

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:							
		Contributions 2	Central government funds 3		Hospital treatment	Pharmaceuticals	Medical treatment	Dental treatment 4	Remedies and therapeutic appliances	Sickness benefits	Administrative expenditure 5	
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
2019	251,295	233,125	14,500	252,440	77,551	40,635	41,541	15,010	17,656	14,402	11,136	– 1,145
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
Q3	62,143	57,763	3,625	62,716	19,109	10,229	10,278	3,630	4,467	3,558	2,804	– 573
Q4	67,094	61,884	3,625	64,075	19,497	10,353	10,455	3,821	4,713	3,659	2,975	+ 3,019
2020 Q1	61,949	57,419	3,625	66,438	20,049	11,086	10,806	3,804	4,470	4,061	2,816	– 4,489
Q2	68,108	58,096	9,359	69,487	17,674	10,492	10,908	3,389	3,986	4,143	2,980	– 1,378
Q3	70,130	59,403	10,151	71,063	20,913	10,567	11,642	3,774	4,852	3,829	2,970	– 934

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 employment. 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.

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

€ million

Period	Revenue 1		Expenditure 1						Deficit/ surplus	
				of which:						
	Total	of which: Contributions 2	Total	Non-cash care benefits	Inpatient care	Nursing benefit	Contributions to pension insurance scheme 3	Administrative expenditure		
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	37,949	37,886	41,265	4,778	12,957	10,809	2,093	1,586	–	3,315
2019	47,228	46,508	44,008	4,990	13,043	11,689	2,392	1,781	+	3,220
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
Q3	11,734	11,557	11,159	1,288	3,277	2,972	598	450	+	576
Q4	12,592	12,413	11,252	1,288	3,296	3,064	626	433	+	1,339
2020 Q1	11,693	11,473	11,444	1,288	3,280	3,067	633	489	+	249
Q2	11,921	11,732	11,816	1,266	3,281	3,173	664	468	+	105
Q3	13,924	11,938	12,890	1,382	3,285	3,249	682	500	+	1,033

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	Change in money market deposits 3
	Gross 2	Net		
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
2019	+ 185,070	+ 63	– 8,044	– 914
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
Q3	+ 48,053	+ 4,030	+ 176	– 5,093
Q4	+ 31,817	– 12,738	– 5,768	– 1,849
2020 Q1	+ 65,656	+ 31,296	+ 9,236	+ 1,698
Q2	+ 185,560	+ 126,585	+ 31,212	– 7,314
Q3	+ 159,067	+ 80,783	– 6,080	+ 588

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
		Bundesbank	Domestic MFIs pe	Other domestic financial corporations pe	Other domestic creditors 1	
2013	2,211,421	12,438	661,141	190,555	43,675	1,303,612
2014	2,213,569	12,774	632,927	190,130	44,640	1,333,098
2015	2,188,404	85,952	621,415	186,661	48,583	1,245,794
2016	2,171,646	205,391	598,526	179,755	45,046	1,142,929
2017	2,122,248	319,159	552,504	175,617	42,121	1,032,847
2018	2,073,595	364,731	508,821	181,077	42,009	976,956
2019 p	2,057,166	366,562	476,020	177,601	49,707	987,276
2018 Q1	2,100,279	329,387	529,897	176,495	42,221	1,022,280
Q2	2,085,756	344,279	514,227	179,856	41,938	1,005,455
Q3	2,086,219	356,899	502,476	180,464	42,726	1,003,653
Q4	2,073,595	364,731	508,821	181,077	42,009	976,956
2019 Q1 p	2,083,861	359,884	498,724	179,512	42,186	1,003,554
Q2 p	2,074,252	361,032	492,046	179,168	41,438	1,000,567
Q3 p	2,091,213	358,813	489,832	179,228	47,831	1,015,509
Q4 p	2,057,166	366,562	476,020	177,601	49,707	987,276
2020 Q1 p	2,106,967	371,076	496,703	180,477	53,007	1,005,705
Q2 p	2,275,956	424,141	561,892	181,288	52,631	1,056,004
Q3 p	2,345,226	468,723	534,784	184,051	50,603	1,107,065

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: Short-term debt securities (up to one year)	Debt securities by original maturity: Long-term debt securities (more than one year)	Loans by original maturity: Short-term loans (up to one year)	Loans by original maturity: Long-term loans (more than one year)	Memo item: [2] Debt vis-à-vis other government subsectors	Memo item: [2] Claims vis-à-vis other government subsectors
General government								
2013	2,211,421	10,592	85,836	1,470,698	100,594	543,700	.	.
2014	2,213,569	12,150	72,618	1,501,494	95,896	531,412	.	.
2015	2,188,404	14,303	65,676	1,499,010	89,074	520,341	.	.
2016	2,171,646	15,845	69,715	1,483,871	94,976	507,239	.	.
2017	2,122,248	14,651	48,789	1,484,462	86,513	487,832	.	.
2018 Q1	2,100,279	12,472	48,431	1,479,513	76,260	483,604	.	.
Q2	2,085,756	12,636	54,933	1,465,727	73,256	479,204	.	.
Q3	2,086,219	15,607	59,989	1,465,852	68,923	475,847	.	.
Q4	2,073,595	14,833	52,572	1,456,543	75,999	473,648	.	.
2019 Q1 p	2,083,861	15,663	64,218	1,460,634	71,234	472,112	.	.
Q2 p	2,074,252	12,868	56,256	1,463,027	74,511	467,589	.	.
Q3 p	2,091,213	17,586	62,602	1,465,529	79,144	466,353	.	.
Q4 p	2,057,166	14,595	49,180	1,459,128	68,519	465,743	.	.
2020 Q1 p	2,106,967	11,564	70,930	1,472,976	88,092	463,406	.	.
Q2 p	2,275,956	13,282	122,238	1,534,559	145,855	460,021	.	.
Q3 p	2,345,226	12,057	180,449	1,581,740	110,908	460,071	.	.
Central government								
2013	1,389,791	10,592	78,996	1,113,029	64,970	122,204	2,696	10,303
2014	1,395,841	12,150	64,230	1,141,973	54,388	123,100	1,202	12,833
2015	1,371,573	14,303	49,512	1,138,951	45,256	123,550	1,062	13,577
2016	1,365,248	15,845	55,208	1,123,853	50,004	120,337	556	8,478
2017	1,349,683	14,651	36,297	1,131,896	47,761	119,078	1,131	10,603
2018 Q1	1,337,071	12,472	35,923	1,132,746	37,211	118,719	1,065	9,887
Q2	1,328,657	12,636	42,888	1,119,893	35,048	118,192	1,036	10,693
Q3	1,334,898	15,607	46,614	1,118,470	36,633	117,575	817	10,260
Q4	1,322,526	14,833	42,246	1,107,140	42,057	116,250	933	9,959
2019 Q1 p	1,323,993	15,663	50,032	1,102,604	39,185	116,508	809	11,566
Q2 p	1,319,861	12,868	42,752	1,109,057	38,950	116,234	835	13,845
Q3 p	1,327,584	17,586	48,934	1,105,439	39,067	116,558	704	13,833
Q4 p	1,299,384	14,595	38,480	1,101,866	28,592	115,850	605	10,285
2020 Q1 p	1,327,045	11,564	56,680	1,103,935	38,708	116,157	546	8,229
Q2 p	1,473,063	13,282	109,221	1,139,513	95,511	115,536	510	7,262
Q3 p	1,535,879	12,057	166,564	1,178,717	62,993	115,548	555	12,092
State government								
2013	663,944	–	6,847	360,706	11,921	284,470	12,141	2,655
2014	658,164	–	8,391	361,916	19,245	268,612	14,825	2,297
2015	658,234	–	16,169	362,376	22,133	257,557	15,867	2,348
2016	640,887	–	14,515	361,996	19,266	245,110	11,273	1,694
2017	613,601	–	12,543	354,688	18,412	227,958	14,038	2,046
2018 Q1	604,075	–	12,548	349,682	17,372	224,473	12,997	1,882
Q2	600,595	–	12,073	348,833	17,668	222,020	13,952	2,018
Q3	599,864	–	13,392	350,399	15,235	220,838	13,674	1,936
Q4	599,845	–	10,332	352,376	17,647	219,490	14,035	1,891
2019 Q1 p	611,666	–	14,190	361,293	18,657	217,526	15,229	2,004
Q2 p	609,890	–	13,508	357,571	24,068	214,743	17,631	1,887
Q3 p	619,884	–	13,671	363,723	29,048	213,442	17,755	1,957
Q4 p	609,431	–	10,703	361,084	25,049	212,595	14,934	1,831
2020 Q1 p	628,741	–	14,252	372,596	33,131	208,762	12,233	1,815
Q2 p	650,402	–	13,020	398,890	32,826	205,665	11,073	2,183
Q3 p	656,915	–	13,888	407,381	30,727	204,920	11,940	2,263
Local government								
2013	173,759	–	–	646	25,325	147,788	2,523	530
2014	176,120	–	–	1,297	26,009	148,814	1,959	734
2015	176,259	–	–	2,047	27,414	146,798	2,143	463
2016	178,016	–	–	2,404	26,941	148,671	1,819	431
2017	175,220	–	–	3,082	24,503	147,636	1,881	466
2018 Q1	173,997	–	–	2,426	24,662	146,909	1,777	460
Q2	172,519	–	–	2,561	24,467	145,490	1,909	465
Q3	167,189	–	1	2,703	20,543	143,943	2,031	485
Q4	167,403	–	1	3,046	20,344	144,012	1,884	497
2019 Q1 p	165,673	–	1	2,960	18,801	143,911	2,139	498
Q2 p	164,257	–	–	2,961	18,757	142,538	2,016	525
Q3 p	163,691	–	–	3,016	18,517	142,158	2,065	555
Q4 p	165,057	–	–	2,996	19,052	143,009	1,862	532
2020 Q1 p	165,094	–	–	3,128	18,125	143,842	1,893	528
Q2 p	165,331	–	–	3,094	18,306	143,931	2,221	367
Q3 p	166,593	–	–	2,961	18,912	144,720	2,312	398

For footnotes see end of table.

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14. Maastricht debt by instrument (cont'd)

€ 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
Social security funds								
2013	1,287	–	–	–	360	927	–	3,872
2014	1,430	–	–	–	387	1,043	–	2,122
2015	1,411	–	–	–	446	965	–	2,685
2016	1,143	–	–	–	473	670	–	3,044
2017	792	–	–	–	247	545	–	3,934
2018 Q1	975	–	–	–	424	551	–	3,610
Q2	883	–	–	–	383	500	–	3,721
Q3	790	–	–	–	400	390	–	3,841
Q4	674	–	–	–	372	302	–	4,506
2019 Q1 **p**	707	–	–	–	437	270	–	4,110
Q2 **p**	726	–	–	–	541	185	–	4,224
Q3 **p**	578	–	–	–	375	203	–	4,179
Q4 **p**	695	–	–	–	359	336	–	4,753
2020 Q1 **p**	759	–	–	–	271	488	–	4,100
Q2 **p**	964	–	–	–	565	399	–	3,993
Q3 **p**	4,602	–	–	–	4,210	392	3,956	4,011

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)	Total [1]	Currency and deposits [2]		Debt securities									Loans [1]
		Total [1]	of which: [3] Federal day bond	Total [1]	of which: [3] Federal bonds (Bunds)	Federal notes (Bobls)	Inflation-linked Federal bonds (Bunds) [4]	Inflation-linked Federal notes (Bobls) [4]	Capital indexation of inflation-linked securities	Federal Treasury notes (Schätze) [5]	Treasury discount paper (Bubills) [6]	Federal savings notes	
2007	983,807	6,675	.	917,584	564,137	173,949	10,019	3,444	506	102,083	37,385	10,287	59,548
2008	1,015,846	12,466	3,174	928,754	571,913	164,514	12,017	7,522	1,336	105,684	40,795	9,649	74,626
2009	1,082,101	9,981	2,495	1,013,072	577,798	166,471	16,982	7,748	1,369	113,637	104,409	9,471	59,048
2010	1,333,248	10,890	1,975	1,084,019	602,624	185,586	25,958	9,948	2,396	126,220	85,867	8,704	238,339
2011	1,343,276	10,429	2,154	1,121,331	615,200	199,284	29,313	14,927	3,961	130,648	58,297	8,208	211,516
2012	1,387,104	9,742	1,725	1,177,168	631,425	217,586	35,350	16,769	5,374	117,719	56,222	6,818	200,194
2013	1,389,791	10,592	1,397	1,192,025	643,200	234,759	41,105	10,613	4,730	110,029	50,004	4,488	187,174
2014	1,395,841	12,150	1,187	1,206,203	653,823	244,633	48,692	14,553	5,368	103,445	27,951	2,375	177,488
2015	1,371,573	14,303	1,070	1,188,463	663,296	232,387	59,942	14,553	5,607	96,389	18,536	1,305	168,806
2016	1,365,248	15,845	1,010	1,179,062	670,245	221,551	51,879	14,585	3,602	95,727	23,609	737	170,341
2017	1,349,683	14,651	966	1,168,193	693,687	203,899	58,365	14,490	4,720	91,013	10,037	289	166,839
2018	1,322,526	14,833	921	1,149,386	710,513	182,847	64,647	–	5,139	86,009	12,949	48	158,307
2019 **p**	1,299,384	14,595	–	1,140,346	719,747	174,719	69,805	–	6,021	89,230	13,487	.	144,442
2018 Q1	1,337,071	12,472	951	1,168,669	699,638	193,811	60,778	14,455	4,421	94,282	9,031	219	155,930
Q2	1,328,657	12,636	941	1,162,780	710,784	185,042	62,863	–	4,276	92,639	15,049	141	153,240
Q3	1,334,898	15,607	932	1,165,084	703,682	194,356	64,304	–	4,548	90,575	17,340	75	154,208
Q4	1,322,526	14,833	921	1,149,386	710,513	182,847	64,647	–	5,139	86,009	12,949	48	158,307
2019 Q1 **p**	1,323,993	15,663	902	1,152,636	709,008	178,900	66,531	–	4,191	89,782	18,288	31	155,693
Q2 **p**	1,319,861	12,868	852	1,151,809	720,904	173,313	68,110	–	5,691	91,024	15,042	19	155,184
Q3 **p**	1,327,584	17,586	822	1,154,373	711,482	183,268	69,088	–	5,639	90,416	18,100	–	155,625
Q4 **p**	1,299,384	14,595	–	1,140,346	719,747	174,719	69,805	–	6,021	89,230	13,487	.	144,442
2020 Q1 **p**	1,327,045	11,564	.	1,160,616	721,343	182,095	71,028	–	5,310	91,084	23,572	.	154,865
Q2 **p**	1,473,063	13,282	.	1,248,734	774,587	178,329	56,061	–	3,752	95,622	79,987	.	211,047
Q3 **p**	1,535,879	12,057	.	1,345,281	796,338	191,388	57,144	–	3,737	99,276	127,478	.	178,541

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	2018	2019	2020	2018	2019	2020	2019 Q1	2019 Q2	2019 Q3	2019 Q4	2020 Q1	2020 Q2	2020 Q3
	Index 2015 = 100			Annual percentage change									
At constant prices, chained													
I. Origin of domestic product													
Production sector (excluding construction)	109.3	105.4	95.1	0.7	– 3.6	– 9.7	– 1.9	– 5.1	– 2.9	– 4.3	– 5.9	– 21.2	– 10.3
Construction	103.7	107.3	108.7	1.7	3.5	1.4	6.3	2.3	4.7	1.4	7.0	2.7	– 2.6
Wholesale/retail trade, transport and storage, hotel and restaurant services	107.5	109.7	102.8	2.3	2.1	– 6.3	2.2	1.1	3.4	1.7	– 0.2	– 14.5	– 3.4
Information and communication	115.8	120.2	118.8	7.0	3.8	– 1.1	4.4	3.7	4.2	2.8	0.8	– 2.8	– 0.8
Financial and insurance activities	97.1	99.1	98.6	– 3.6	2.0	– 0.5	0.3	2.4	3.6	1.9	0.9	– 0.5	– 1.0
Real estate activities	100.8	101.8	101.2	0.3	1.0	– 0.5	0.7	0.7	1.2	1.5	0.8	– 1.3	– 0.7
Business services [1]	109.8	110.8	102.0	2.4	0.9	– 7.9	1.6	0.3	1.0	0.7	– 1.7	– 13.5	– 8.4
Public services, education and health	105.7	107.4	105.1	1.4	1.6	– 2.2	1.8	1.3	1.9	1.5	0.0	– 8.3	– 0.1
Other services	101.0	102.1	90.6	1.6	1.1	– 11.3	1.1	1.0	1.6	0.7	– 2.3	– 20.3	– 6.3
Gross value added	106.4	106.9	101.3	1.3	0.4	– 5.2	1.0	– 0.3	1.1	0.0	– 1.4	– 11.6	– 4.5
Gross domestic product [2]	106.2	106.8	101.5	1.3	0.6	– 5.0	1.0	– 0.3	1.2	0.2	– 1.7	– 11.3	– 3.9
II. Use of domestic product													
Private consumption [3]	105.6	107.2	100.8	1.5	1.6	– 6.0	1.3	1.7	2.2	1.0	– 1.4	– 13.0	– 3.7
Government consumption	107.0	109.9	113.7	1.2	2.7	3.4	2.3	1.7	3.6	3.2	2.9	4.8	4.3
Machinery and equipment	112.1	112.7	98.6	4.4	0.5	– 12.5	2.8	1.1	1.7	– 2.7	– 9.2	– 23.6	– 9.8
Premises	107.4	111.5	113.1	2.6	3.8	1.5	6.8	2.5	4.1	2.2	6.1	1.3	– 0.7
Other investment [4]	114.2	117.3	116.0	4.5	2.7	– 1.1	2.9	2.5	2.9	2.6	– 1.1	– 1.4	– 0.7
Changes in inventories [5,6]	.	.	.	– 0.1	– 0.7	– 0.7	0.1	– 0.2	– 1.7	– 1.1	– 0.7	– 0.4	– 1.9
Domestic demand	107.7	109.0	104.5	1.8	1.2	– 4.1	2.3	1.6	0.9	0.2	– 0.9	– 8.3	– 3.9
Net exports [6]	.	.	.	– 0.4	– 0.6	– 1.1	– 1.1	– 1.7	0.4	0.0	– 0.9	– 3.5	– 0.2
Exports	109.8	110.8	99.9	2.3	1.0	– 9.9	1.7	– 1.3	2.7	0.8	– 3.2	– 22.4	– 9.1
Imports	114.1	117.0	106.9	3.6	2.6	– 8.6	4.7	2.7	2.0	0.9	– 1.6	– 17.2	– 9.8
Gross domestic product [2]	106.2	106.8	101.5	1.3	0.6	– 5.0	1.0	– 0.3	1.2	0.2	– 1.7	– 11.3	– 3.9
At current prices (€ billion)													
III. Use of domestic product													
Private consumption [3]	1,755.4	1,806.9	1,708.9	3.0	2.9	– 5.4	2.4	3.3	3.6	2.3	0.3	– 11.7	– 4.0
Government consumption	670.3	704.5	750.6	3.4	5.1	6.5	4.8	4.2	6.0	5.4	5.7	8.2	5.6
Machinery and equipment	235.6	240.1	212.9	5.0	1.9	– 11.3	3.8	2.4	3.3	– 1.2	– 7.8	– 22.5	– 8.6
Premises	344.9	373.7	385.7	7.4	8.4	3.2	12.3	7.4	8.3	6.0	9.6	4.1	– 0.2
Other investment [4]	128.8	134.2	134.6	6.9	4.2	0.4	4.4	3.9	4.3	4.1	0.3	0.1	0.7
Changes in inventories [5]	15.0	– 10.3	– 52.1	.	.	.	.	.	.	.	.	.	.
Domestic use	3,150.0	3,249.1	3,140.6	3.9	3.1	– 3.3	4.2	3.8	2.7	2.0	1.1	– 7.6	– 3.8
Net exports	206.4	199.9	188.4	.	.	.	.	.	.	.	.	.	.
Exports	1,590.0	1,617.4	1,451.5	3.3	1.7	– 10.3	3.1	– 0.4	3.0	1.2	– 2.9	– 22.7	– 9.9
Imports	1,383.6	1,417.4	1,263.1	5.6	2.4	– 10.9	5.9	3.4	1.0	– 0.2	– 2.6	– 20.8	– 12.3
Gross domestic product [2]	3,356.4	3,449.1	3,329.0	3.0	2.8	– 3.5	3.0	1.9	3.6	2.5	0.7	– 9.2	– 3.1
IV. Prices (2015 = 100)													
Private consumption	103.7	105.1	105.8	1.5	1.3	0.6	1.1	1.6	1.4	1.3	1.7	1.4	– 0.3
Gross domestic product	104.4	106.7	108.4	1.7	2.2	1.6	1.9	2.2	2.4	2.3	2.4	2.3	0.8
Terms of trade	100.1	100.9	103.1	– 0.8	0.9	2.1	0.3	0.2	1.4	1.5	1.4	4.2	1.9
V. Distribution of national income													
Compensation of employees	1,771.8	1,845.9	1,836.4	4.5	4.2	– 0.5	4.5	4.4	4.5	3.5	3.0	– 3.2	– 0.7
Entrepreneurial and property income	738.3	718.2	664.0	– 0.5	– 2.7	– 7.5	– 1.9	– 6.1	0.1	– 3.4	– 3.4	– 23.5	– 7.8
National income	2,510.1	2,564.1	2,500.4	3.0	2.2	– 2.5	2.4	1.4	3.1	1.7	1.0	– 8.6	– 2.8
Memo item: Gross national income	3,447.4	3,542.8	3,427.2	3.3	2.8	– 3.3	3.1	2.2	3.5	2.3	0.8	– 8.8	– 3.1

Source: Federal Statistical Office; figures computed in November 2020. Initial annual results for 2020: figures computed in January 2021. **1** Professional, scientific, technical, administration and support service activities. **2** Gross value added plus taxes on products (netted with subsidies on products). **3** Including non-profit institutions serving households. **4** Intellectual property rights (inter alia, computer software and entertainment, literary or artistic originals) and cultivated assets. **5** Including net increase in valuables. **6** Contribution of growth to GDP.

XI. Economic conditions in Germany

2. Output in the production sector *

Adjusted for working-day variations **o**

	Production sector, total	of which: Construction	of which: Energy	Industry: Total	Industry: of which: by main industrial grouping: Intermediate goods	Capital goods	Durable goods	Non-durable goods	Industry: of which: by economic sector: Manufacture of basic metals and fabricated metal products	Manufacture of computers, electronic and optical products and electrical equipment	Macinery and equipment	Motor vehicels, trailers and semi-trailers
2015 = 100												
% of total [1]	100	14,04	6,37	79,59	29,45	36,98	2.27	10,89	10,31	9,95	12,73	14,16
Period												
2016	101.5	105.3	98.6	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	104.8	104.9	105.0	106.9	103.0	106.2	107.0	104.1	105.3
2018 [2]	105.8	108.9	97.4	105.9	105.5	106.0	106.1	106.9	107.3	109.0	106.5	103.5
2019	102.5	112.7	90.4	101.7	101.8	101.4	106.2	101.0	102.8	106.5	103.5	92.0
2019 Q3	102.3	119.1	81.1	101.1	102.0	100.1	104.2	101.1	102.7	107.5	102.0	89.1
Q4	103.4	124.2	94.3	100.5	97.2	102.0	109.2	102.7	97.2	106.0	108.6	84.9
2020 Q1	96.4	100.2	94.0	95.9	101.1	90.5	101.5	99.0	98.0	103.5	91.3	79.1
Q2	84.1	115.7	72.7	79.5	85.6	70.9	84.9	91.2	78.7	89.1	81.4	44.1
Q3 x	93.9	118.6	77.2	90.8	94.3	84.7	98.3	100.5	90.6	96.8	86.6	71.9
2019 Nov.	108.7	126.4	95.2	106.7	103.3	108.6	116.3	107.4	105.0	111.1	108.7	97.9
Dec.	96.6	124.4	95.9	91.8	83.3	97.7	97.2	93.6	82.2	98.2	116.6	66.8
2020 Jan.	92.2	86.0	99.3	92.7	98.6	86.1	98.7	97.6	95.0	99.8	83.3	79.6
Feb.	97.0	97.3	92.0	97.4	100.8	94.3	103.2	97.4	98.4	102.8	91.1	90.3
Mar.	99.9	117.3	90.6	97.6	103.9	91.0	102.7	102.1	100.5	107.9	99.5	67.4
Apr.	76.9	112.7	72.9	70.9	84.1	54.9	72.4	89.0	74.0	86.0	70.9	14.6
May	82.2	113.1	71.6	77.7	83.4	69.5	85.2	88.6	77.0	86.0	77.5	45.6
June	93.3	121.2	73.7	90.0	89.4	88.2	97.2	96.1	85.0	95.2	95.8	72.1
July x	93.7	119.3	75.4	90.6	93.0	85.8	93.4	99.7	87.3	94.1	86.4	76.2
Aug. x	88.3	113.8	76.3	84.7	91.3	75.6	92.1	96.4	86.9	93.8	79.1	57.4
Sep. x	99.6	122.6	79.8	97.2	98.6	92.8	109.3	105.4	97.7	102.4	94.3	82.0
Oct. x	102.2	126.1	91.8	98.8	103.1	93.0	108.8	105.0	100.5	103.3	90.2	85.4
Nov. x,p	105.9	130.2	90.0	102.9	104.3	101.3	114.7	102.0	103.6	110.6	98.9	92.5
Annual percentage change												
2016	+ 1.8	+ 5.7	− 1.4	+ 1.4	+ 1.1	+ 1.6	+ 3.0	+ 1.2	+ 1.8	+ 1.3	− 0.1	+ 2.5
2017	+ 3.3	+ 3.2	+ 0.3	+ 3.7	+ 4.0	+ 3.7	+ 4.2	+ 2.0	+ 4.5	+ 5.9	+ 4.5	+ 3.1
2018 [2]	+ 0.9	+ 0.2	− 1.5	+ 1.0	+ 0.6	+ 1.0	− 0.7	+ 3.8	+ 1.0	+ 1.9	+ 2.3	− 1.7
2019	− 3.1	+ 3.5	− 7.2	− 4.0	− 3.5	− 4.3	+ 0.1	− 5.5	− 4.2	− 2.3	− 2.8	− 11.1
2019 Q3	− 3.7	+ 2.6	− 13.0	− 4.3	− 4.4	− 2.9	+ 0.1	− 9.2	− 4.9	− 2.5	− 3.0	− 7.6
Q4	− 4.0	+ 1.8	− 5.6	− 5.0	− 4.6	− 6.7	+ 2.7	− 2.2	− 7.3	− 4.0	− 6.2	− 13.0
2020 Q1	− 5.0	+ 6.8	− 8.2	− 6.7	− 3.5	− 10.8	− 6.2	− 1.4	− 7.9	− 3.7	− 9.2	− 19.5
Q2	− 18.1	+ 1.7	− 13.0	− 22.3	− 17.2	− 30.6	− 17.6	− 8.4	− 25.0	− 15.1	− 20.7	− 53.8
Q3 x	− 8.3	− 0.4	− 4.9	− 10.1	− 7.5	− 15.4	− 5.7	− 0.6	− 11.7	− 10.0	− 15.1	− 19.4
2019 Nov.	− 2.3	+ 3.6	− 3.8	− 3.4	− 3.6	− 4.3	+ 3.8	− 0.9	− 6.3	− 3.1	− 4.1	− 9.2
Dec.	− 5.2	+ 0.5	− 7.0	− 6.2	− 6.4	− 7.7	+ 2.6	− 2.2	− 9.1	− 5.5	− 6.8	− 17.1
2020 Jan.	− 1.3	+ 14.1	− 9.1	− 2.7	− 2.3	− 3.6	− 2.0	− 1.6	− 6.0	− 0.8	− 5.1	− 7.2
Feb.	− 1.6	+ 4.4	− 5.0	− 2.3	− 0.1	− 5.6	− 1.9	+ 2.9	− 4.3	+ 0.5	− 6.6	− 9.2
Mar.	− 11.1	+ 4.0	− 10.4	− 13.8	− 7.6	− 20.9	− 13.6	− 5.0	− 12.8	− 9.8	− 14.4	− 38.5
Apr.	− 24.5	± 0.0	− 17.3	− 29.7	− 18.9	− 44.5	− 28.2	− 10.7	− 29.5	− 16.3	− 28.6	− 84.3
May	− 19.2	+ 1.6	− 15.1	− 23.4	− 19.1	− 30.8	− 16.1	− 11.3	− 25.7	− 17.0	− 22.0	− 52.7
June	− 10.9	+ 3.3	− 6.0	− 14.0	− 13.6	− 17.6	− 8.9	− 3.2	− 19.9	− 12.1	− 12.4	− 25.9
July x	− 9.5	− 2.2	− 7.4	− 11.2	− 10.3	− 15.0	− 6.2	− 1.9	− 16.4	− 10.8	− 16.0	− 16.4
Aug. x	− 8.7	± 0.0	− 5.0	− 10.8	− 7.2	− 17.1	− 3.9	− 2.2	− 10.6	− 9.0	− 15.9	− 25.3
Sep. x	− 6.7	+ 1.0	− 2.3	− 8.5	− 5.1	− 14.2	− 6.8	+ 2.3	− 8.3	− 10.1	− 13.6	− 17.6
Oct. x	− 2.7	+ 3.5	± 0.0	− 4.1	− 1.7	− 6.6	− 4.6	− 2.1	− 3.8	− 4.9	− 10.2	− 5.0
Nov. x,p	− 2.6	+ 3.0	− 5.5	− 3.6	+ 1.0	− 6.7	− 1.4	− 5.0	− 1.3	− 0.5	− 9.0	− 5.5

Source of the unadjusted figures: Federal Statistical Office. * For explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Tabels III.1.a to III.1.c **o** Using JDemetra+ 2.2.2 (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. **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 **o**

Period	Industry		of which: Intermediate goods		Capital goods		Consumer goods		of which: 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	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change
Total												
2016	100.7	+ 0.9	98.9	− 0.9	101.9	+ 2.1	100.6	+ 0.8	105.3	+ 5.6	99.0	− 0.8
2017	108.6	+ 7.8	109.4	+ 10.6	108.5	+ 6.5	105.7	+ 5.1	116.5	+ 10.6	102.2	+ 3.2
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
2019	104.9	− 5.1	103.5	− 7.2	105.4	− 4.1	107.0	− 2.7	123.3	+ 3.7	101.7	− 5.0
2019 Nov.	106.2	− 5.6	103.2	− 7.3	107.3	− 5.9	111.6	+ 5.6	138.1	+ 13.5	102.9	+ 2.5
Dec.	102.2	− 8.4	92.6	− 4.3	109.2	− 11.1	93.7	− 2.3	120.5	+ 10.0	84.9	− 7.1
2020 Jan.	107.4	− 0.6	110.1	− 1.2	105.4	− 0.5	110.5	+ 2.4	131.9	+ 11.3	103.5	− 0.8
Feb.	104.9	+ 2.2	105.6	+ 0.9	103.1	+ 2.2	114.9	+ 7.6	125.5	+ 9.6	111.4	+ 6.8
Mar.	98.7	− 15.6	108.6	− 4.8	90.5	− 23.8	114.3	− 0.8	125.5	− 2.3	110.7	− 0.2
Apr.	65.7	− 37.0	77.6	− 26.2	54.8	− 47.1	93.0	− 11.9	92.7	− 19.4	93.1	− 9.2
May	71.4	− 29.7	77.0	− 25.2	64.8	− 35.4	96.4	− 7.1	115.2	+ 1.9	90.2	− 10.4
June	96.8	− 10.8	87.0	− 17.4	102.4	− 7.7	100.5	− 4.6	120.1	− 0.8	94.1	− 6.1
July	96.0	− 7.2	94.2	− 8.4	96.0	− 6.7	104.4	− 5.6	120.5	− 1.0	99.1	− 7.3
Aug.	91.2	− 2.0	90.2	− 6.0	90.2	+ 0.3	104.0	+ 0.3	124.3	+ 2.6	97.3	− 0.8
Sep.	103.8	− 1.5	101.3	+ 1.2	104.4	− 3.7	111.0	+ 2.4	146.2	+ 4.6	99.5	+ 1.4
Oct.	108.1	+ 1.8	108.2	+ 4.0	107.7	+ 0.8	110.9	− 0.6	145.9	+ 13.9	99.4	− 6.3
Nov. p	112.6	+ 6.0	114.2	+ 10.7	111.8	+ 4.2	110.5	− 1.0	139.6	+ 1.1	100.9	− 1.9
From the domestic market												
2016	99.8	± 0.0	97.6	− 2.2	101.8	+ 2.1	98.0	− 1.8	103.1	+ 3.4	96.3	− 3.5
2017	107.0	+ 7.2	107.1	+ 9.7	107.8	+ 5.9	101.6	+ 3.7	108.7	+ 5.4	99.3	+ 3.1
2018	107.1	+ 0.1	108.5	+ 1.3	106.6	− 1.1	102.9	+ 1.3	114.7	+ 5.5	98.9	− 0.4
2019	101.2	− 5.5	99.1	− 8.7	102.9	− 3.5	101.2	− 1.7	116.2	+ 1.3	96.2	− 2.7
2019 Nov.	102.8	− 8.4	100.7	− 9.3	103.5	− 9.1	109.6	+ 1.3	135.7	+ 11.9	100.8	− 2.9
Dec.	93.6	− 7.7	84.1	− 8.1	102.3	− 8.2	89.2	− 1.9	107.4	+ 8.4	83.1	− 5.7
2020 Jan.	100.6	− 6.6	104.1	− 3.4	97.4	− 10.4	102.2	+ 2.0	111.0	+ 3.3	99.2	+ 1.5
Feb.	101.9	− 2.8	99.8	− 2.8	103.0	− 3.1	105.9	− 1.0	110.5	+ 0.2	104.4	− 1.4
Mar.	96.8	− 13.8	102.8	− 5.9	89.7	− 22.3	110.2	+ 2.2	107.9	− 15.3	111.0	+ 9.7
Apr.	67.7	− 32.4	74.6	− 25.4	59.5	− 40.9	83.4	− 13.3	74.0	− 31.9	86.6	− 5.9
May	74.9	− 24.6	75.1	− 24.7	72.3	− 27.2	91.6	− 4.9	109.8	+ 3.7	85.5	− 8.2
June	104.9	+ 4.2	82.0	− 17.3	126.0	+ 22.7	94.8	− 1.5	110.9	+ 4.9	89.4	− 3.9
July	94.6	− 7.6	92.8	− 7.8	95.8	− 7.5	97.5	− 6.1	103.8	− 9.4	95.3	− 4.9
Aug.	88.1	− 3.2	88.4	− 3.0	86.1	− 4.2	99.9	+ 2.4	112.1	+ 3.7	95.8	+ 1.8
Sep.	98.9	− 1.4	95.0	− 0.2	101.8	− 2.3	101.4	− 2.1	126.1	− 4.1	93.1	− 1.1
Oct.	103.5	+ 4.4	105.8	+ 7.4	101.5	+ 3.0	104.3	− 2.5	120.6	− 8.6	98.8	+ 0.2
Nov. p	107.9	+ 5.0	113.1	+ 12.3	103.9	+ 0.4	105.1	− 4.1	124.9	− 8.0	98.4	− 2.4
From abroad												
2016	101.5	+ 1.7	100.3	+ 0.5	101.9	+ 2.1	102.6	+ 2.8	107.0	+ 7.2	101.1	+ 1.3
2017	109.8	+ 8.2	111.9	+ 11.6	108.9	+ 6.9	108.9	+ 6.1	122.8	+ 14.8	104.5	+ 3.4
2018	113.0	+ 2.9	114.6	+ 2.4	111.9	+ 2.8	115.5	+ 6.1	122.2	− 0.5	113.4	+ 8.5
2019	107.7	− 4.7	108.3	− 5.5	106.9	− 4.5	111.5	− 3.5	129.1	+ 5.6	105.9	− 6.6
2019 Nov.	108.8	− 3.5	106.0	− 5.0	109.6	− 4.0	113.1	+ 9.1	140.1	+ 14.8	104.5	+ 6.9
Dec.	108.7	− 9.0	101.8	− 0.8	113.3	− 12.6	97.1	− 2.6	131.1	+ 11.2	86.2	− 8.2
2020 Jan.	112.6	+ 4.1	116.5	+ 1.0	110.3	+ 5.9	117.0	+ 2.8	148.8	+ 16.9	106.8	− 2.4
Feb.	107.1	+ 6.0	111.8	+ 4.7	103.1	+ 5.6	121.8	+ 14.3	137.6	+ 16.8	116.7	+ 13.3
Mar.	100.1	− 16.9	114.9	− 3.7	91.0	− 24.7	117.5	− 2.9	139.6	+ 8.0	110.4	− 6.7
Apr.	64.1	− 40.4	80.8	− 27.0	51.9	− 50.7	100.4	− 11.1	107.7	− 10.3	98.0	− 11.4
May	68.8	− 33.3	79.0	− 25.6	60.3	− 40.2	100.1	− 8.7	119.6	+ 0.7	93.8	− 12.0
June	90.6	− 20.8	92.5	− 17.3	88.1	− 23.9	104.9	− 6.8	127.5	− 4.5	97.7	− 7.7
July	97.0	− 6.9	95.7	− 8.9	96.1	− 6.2	109.8	− 5.3	133.9	+ 5.0	102.0	− 9.0
Aug.	93.6	− 1.2	92.1	− 9.1	92.7	+ 3.1	107.1	− 1.3	134.1	+ 1.9	98.4	− 2.7
Sep.	107.5	− 1.6	108.1	+ 2.7	105.9	− 4.5	118.5	+ 5.7	162.4	+ 10.9	104.4	+ 3.3
Oct.	111.6	+ 0.1	110.7	+ 0.6	111.5	− 0.3	116.0	+ 0.8	166.2	+ 32.9	99.8	− 10.7
Nov. p	116.1	+ 6.7	115.3	+ 8.8	116.6	+ 6.4	114.6	+ 1.3	151.5	+ 8.1	102.8	− 1.6

Source of the unadjusted figures: Federal Statistical Office. * At current prices; for explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Tables III.2.a to III.2.c. **o** Using JDemetra+ 2.2.2 (X13).

XI. Economic conditions in Germany

4. Orders received by construction *

Adjusted for working-day variations **o**

Zeit	Total		Breakdown by type of construction										Breakdown by client **1**			
			Structural engineering													
			Total		Residential construction		Industrial construction		Public sector construction		Civil engineering		Industrial clients		Public sector **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	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change
2016	114.4	+ 14.5	115.0	+ 15.1	116.9	+ 17.0	114.9	+ 15.0	108.9	+ 9.1	113.7	+ 13.8	111.7	+ 11.8	116.0	+ 16.1
2017	122.4	+ 7.0	123.1	+ 7.0	123.1	+ 5.3	123.4	+ 7.4	121.8	+ 11.8	121.6	+ 6.9	119.8	+ 7.3	125.0	+ 7.8
2018	134.7	+ 10.0	131.2	+ 6.6	136.6	+ 11.0	127.9	+ 3.6	125.2	+ 2.8	138.8	+ 14.1	135.6	+ 13.2	132.4	+ 5.9
2019	146.0	+ 8.4	145.1	+ 10.6	150.2	+ 10.0	142.2	+ 11.2	138.9	+ 10.9	147.1	+ 6.0	147.9	+ 9.1	141.3	+ 6.7
2019 Oct.	136.8	+ 3.6	137.4	+ 6.8	154.8	+ 9.6	124.2	+ 1.6	129.6	+ 17.0	136.2	+ 0.1	135.1	+ 0.4	127.9	+ 3.4
Nov.	145.4	+ 13.1	154.8	+ 23.2	149.7	+ 7.3	166.8	+ 42.3	127.1	+ 13.6	134.5	+ 1.9	167.9	+ 22.6	117.1	+ 4.1
Dec.	148.2	− 1.3	148.9	+ 2.2	178.2	+ 7.0	131.1	− 3.0	119.1	+ 2.4	147.3	− 5.2	154.3	− 5.7	122.9	− 1.3
2020 Jan.	129.3	+ 10.2	134.0	+ 10.9	137.4	+ 11.0	134.0	+ 8.3	122.8	+ 23.0	123.9	+ 9.3	140.8	+ 11.2	111.3	+ 8.3
Feb.	134.5	+ 1.2	143.0	+ 10.5	148.3	+ 24.6	141.0	+ 4.9	133.1	− 8.3	124.6	− 9.1	139.3	+ 5.2	120.5	− 15.1
Mar.	158.8	− 7.5	154.0	− 6.0	169.6	− 0.5	141.1	− 10.9	150.6	− 7.6	164.4	− 9.1	155.2	− 6.6	156.4	− 12.5
Apr.	149.6	− 2.3	134.0	− 10.1	131.6	− 12.1	137.2	− 9.5	130.1	− 5.0	167.6	+ 6.1	140.3	− 3.6	171.1	+ 4.4
May	138.9	− 6.0	124.1	− 14.2	146.7	− 0.1	103.2	− 30.7	127.9	+ 5.0	156.2	+ 3.2	121.6	− 18.0	154.2	+ 4.3
June	167.7	+ 3.5	153.2	− 5.3	165.1	+ 4.2	139.5	− 14.9	164.8	+ 0.7	184.7	+ 13.5	144.4	− 12.9	196.1	+ 22.4
July	148.9	− 3.2	151.5	+ 2.4	157.8	+ 2.1	136.8	− 3.6	186.0	+ 25.7	145.8	− 9.3	136.5	− 10.4	157.7	+ 1.7
Aug.	136.9	+ 1.6	135.6	± 0.0	159.6	+ 14.6	114.4	− 12.9	135.4	− 2.7	138.4	+ 3.6	130.4	− 5.0	130.5	+ 1.2
Sep.	151.4	+ 2.4	156.8	+ 6.9	173.4	+ 10.4	140.8	+ 7.9	162.2	− 6.2	145.2	− 2.8	146.0	+ 1.7	144.4	− 2.2
Oct.	142.3	+ 4.0	150.6	+ 9.6	181.5	+ 17.2	126.8	+ 2.1	137.9	+ 6.4	132.5	− 2.7	141.3	+ 4.6	119.5	− 6.6

Source of the unadjusted figures: Federal Statistical Office. * At current prices; excluding value added tax; for explanatory notes, see Statistical Series – Seasonally adjusted business statistics, Table III.2.f. **o** Using JDemetra+ 2.2.2 (X13). **1** Excluding residential construction. **2** Including road construction.

5. Retail trade turnover *

Adjusted for calendar variations **o**

Zeit	Total				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, foodwear and leather goods		Information and communications equipment		Construction and flooring materials, household appliances, furniture		Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles			
	At current prices		At 2015 prices		At current prices											
	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 = 100	Annual percentage change
2016	102.5	+ 2.4	102.1	+ 2.0	101.7	+ 1.6	101.0	+ 0.8	99.9	− 0.3	101.5	+ 1.3	103.9	+ 3.9	109.5	+ 9.4
2017	107.6	+ 5.0	105.8	+ 3.6	105.9	+ 4.1	108.1	+ 7.0	106.2	+ 6.3	103.0	+ 1.5	107.7	+ 3.7	120.5	+ 10.0
2018	110.7	+ 2.9	107.5	+ 1.6	109.6	+ 3.5	105.6	− 2.3	107.1	+ 0.8	103.1	+ 0.1	112.5	+ 4.5	127.7	+ 6.0
2019 **3**	114.9	+ 3.8	110.9	+ 3.2	112.1	+ 2.3	106.7	+ 1.0	108.8	+ 1.6	107.1	+ 3.9	118.5	+ 5.3	138.4	+ 8.4
2019 Nov.	123.5	+ 3.9	118.8	+ 3.6	114.9	+ 5.0	115.9	+ 3.3	133.1	+ 1.0	116.0	+ 3.5	124.0	+ 5.0	164.6	+ 1.2
Dec.	133.1	+ 3.3	128.2	+ 2.3	127.9	+ 1.1	118.9	− 2.9	159.1	+ 1.1	113.3	+ 3.3	133.2	+ 6.9	172.0	+ 11.7
2020 Jan.	107.9	+ 3.5	104.1	+ 2.3	103.9	+ 1.6	88.3	− 2.4	113.3	+ 1.7	96.5	+ 4.9	120.2	+ 5.7	138.4	+ 5.4
Feb.	105.8	+ 3.7	101.4	+ 2.4	108.6	+ 7.1	80.7	− 6.6	96.7	+ 2.5	97.1	+ 3.3	114.6	+ 3.5	126.9	+ 4.1
Mar.	118.1	+ 1.8	112.9	+ 0.4	130.7	+ 14.9	49.3	− 53.9	83.6	− 21.4	107.1	− 6.6	135.4	+ 14.7	154.5	+ 15.5
Apr.	110.7	− 4.2	105.2	− 5.5	125.1	+ 10.3	29.0	− 74.7	55.2	− 40.4	100.5	− 12.7	112.7	− 3.4	173.9	+ 28.5
May	123.1	+ 8.6	117.3	+ 7.8	127.6	+ 14.1	78.1	− 23.8	93.8	+ 0.9	127.1	+ 15.8	111.7	− 3.7	169.5	+ 32.8
June	121.0	+ 5.2	115.7	+ 4.3	119.4	+ 3.4	96.2	− 16.3	101.5	+ 3.5	121.7	+ 14.2	117.4	+ 2.0	163.3	+ 24.0
July	122.7	+ 6.3	117.3	+ 5.0	119.3	+ 4.7	98.2	− 5.6	107.6	+ 13.5	125.1	+ 15.4	120.7	+ 0.2	156.9	+ 14.4
Aug.	120.1	+ 8.2	114.8	+ 6.8	121.0	+ 9.1	90.7	− 8.0	102.4	+ 0.2	116.8	+ 15.5	116.8	+ 1.8	155.6	+ 25.2
Sep.	118.8	+ 6.0	113.1	+ 4.8	114.0	+ 7.0	100.4	− 8.8	102.6	− 7.2	117.4	+ 13.4	120.2	+ 2.1	159.0	+ 14.2
Oct.	128.2	+ 9.4	121.8	+ 8.2	122.2	+ 8.3	109.4	− 6.2	117.7	+ 6.7	128.9	+ 16.1	126.6	+ 3.9	180.1	+ 27.2
Nov.	134.8	+ 9.1	128.5	+ 8.2	123.3	+ 7.3	91.7	− 20.9	148.3	+ 11.4	139.5	+ 20.3	129.6	+ 4.5	220.4	+ 33.9

Source of the unadjusted figures: Federal Statistical Office. * Excluding value added tax; for explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Table III.4.c. **o** Using JDemetra+ 2.2.2 (X13). **1** Including stalls and markets. **2** Excluding stores, stalls and markets. **3** As of January 2019 figures are provisional, partially 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					Solely jobs exempt from social contributions 2	Short-time workers 3		Unemployment 4		Unemployment rate 4, 5 in %	Vacancies, 4, 6 thousands
			Total		of which:					of which:		of which:		
	Thousands	Annual percentage change	Thousands	Annual percentage change	Production sector	Services excluding temporary employment	Temporary employment		Total	Cyclically induced	Total	Assigned to the legal category of the Third Book of the Social Security Code (SGB III)		
					Thousands									
2016	43,661	+ 1.2	31,508	+ 2.2	9,028	21,407	834	4,804	128	42	2,691	822	6.1	655
2017	44,262	+ 1.4	32,234	+ 2.3	9,146	21,980	868	4,742	114	24	2,533	7 855	5.7	731
2018	44,868	+ 1.4	32,964	+ 2.3	9,349	22,532	840	4,671	118	25	2,340	802	5.2	796
2019	45,268	+ 0.9	33,518	+ 1.7	9,479	23,043	751	4,579	145	60	8 2,267	827	8 5.0	774
2020	...	...	...	...	...	...	...	...	...	...	2,695	1,137	5.9	613
2017 Q4	44,699	+ 1.4	32,759	+ 2.3	9,263	22,354	900	4,711	82	15	2,381	780	5.3	771
2018 Q1	44,398	+ 1.5	32,563	+ 2.4	9,214	22,279	843	4,664	325	24	2,525	909	5.7	760
Q2	44,790	+ 1.4	32,802	+ 2.3	9,296	22,414	843	4,701	23	14	2,325	760	5.1	794
Q3	45,028	+ 1.3	33,040	+ 2.2	9,387	22,546	855	4,694	35	27	2,311	784	5.1	828
Q4	45,257	+ 1.2	33,452	+ 2.1	9,498	22,890	819	4,627	88	35	2,200	755	4.9	804
2019 Q1	44,920	+ 1.2	33,214	+ 2.0	9,419	22,803	761	4,581	303	34	2,360	892	5.2	780
Q2	45,240	+ 1.0	33,388	+ 1.8	9,455	22,932	750	4,615	51	43	8 2,227	778	8 4.9	795
Q3	45,376	+ 0.8	33,548	+ 1.5	9,491	23,049	753	4,598	66	58	2,276	827	5.0	794
Q4	45,538	+ 0.6	33,924	+ 1.4	9,551	23,388	738	4,522	161	105	2,204	811	4.8	729
2020 Q1	r 45,067	r + 0.3	33,642	+ 1.3	9,439	23,284	686	4,458	1,219	949	2,385	960	5.2	683
Q2	r 44,624	r – 1.4	33,415	+ 0.1	9,387	23,137	640	4,235	5,399	5,388	2,770	1,154	9 6.0	593
Q3	r 44,662	r – 1.6	10 33,424	10 – 0.4	10 9,360	10 23,171	10 639	10 4,263	...	10 2,697	2,904	1,266	6.3	583
Q4	...	...	...	...	...	...	...	...	...	...	2,722	1,167	5.9	595
2017 Aug.	44,385	+ 1.4	32,396	+ 2.3	9,189	22,060	896	4,739	28	15	2,545	855	5.7	765
Sep.	44,621	+ 1.3	32,732	+ 2.3	9,272	22,304	901	4,711	28	16	2,449	800	5.5	773
Oct.	44,693	+ 1.3	32,778	+ 2.3	9,274	22,355	901	4,696	27	16	2,389	772	5.4	780
Nov.	44,763	+ 1.4	32,830	+ 2.4	9,278	22,395	916	4,720	26	16	2,368	772	5.3	772
Dec.	44,640	+ 1.4	32,609	+ 2.4	9,202	22,319	867	4,722	194	12	2,385	796	5.3	761
2018 Jan.	44,345	+ 1.6	32,504	+ 2.5	9,191	22,249	841	4,660	287	23	2,570	941	5.8	736
Feb.	44,376	+ 1.5	32,551	+ 2.4	9,223	22,262	838	4,642	359	23	2,546	927	5.7	764
Mar.	44,472	+ 1.4	32,660	+ 2.3	9,253	22,334	837	4,656	327	27	2,458	859	5.5	778
Apr.	44,646	+ 1.4	32,782	+ 2.4	9,291	22,404	840	4,686	23	13	2,384	796	5.3	784
May	44,826	+ 1.5	32,857	+ 2.3	9,310	22,450	845	4,718	21	12	2,315	751	5.1	793
June	44,898	+ 1.3	32,870	+ 2.2	9,325	22,439	853	4,742	25	16	2,276	735	5.0	805
July	44,930	+ 1.3	32,844	+ 2.2	9,339	22,396	860	4,736	22	14	2,325	788	5.1	823
Aug.	44,981	+ 1.3	33,131	+ 2.3	9,412	22,609	856	4,664	41	33	2,351	804	5.2	828
Sep.	45,173	+ 1.2	33,422	+ 2.1	9,496	22,827	842	4,619	42	34	2,256	759	5.0	834
Oct.	45,262	+ 1.3	33,488	+ 2.2	9,515	22,895	827	4,616	46	37	2,204	742	4.9	824
Nov.	45,325	+ 1.3	33,513	+ 2.1	9,513	22,934	822	4,638	51	43	2,186	745	4.8	807
Dec.	45,184	+ 1.2	33,286	+ 2.1	9,434	22,854	773	4,637	166	26	2,210	777	4.9	781
2019 Jan.	44,866	+ 1.2	33,156	+ 2.0	9,405	22,762	763	4,574	354	42	2,406	919	5.3	758
Feb.	44,908	+ 1.2	33,199	+ 2.0	9,416	22,794	758	4,564	310	29	2,373	908	5.3	784
Mar.	44,985	+ 1.2	33,286	+ 1.9	9,442	22,855	749	4,574	246	32	2,301	850	5.1	797
Apr.	45,146	+ 1.1	33,383	+ 1.8	9,457	22,925	753	4,607	49	40	2,229	795	4.9	796
May	45,269	+ 1.0	33,433	+ 1.8	9,462	22,968	749	4,627	53	45	8 2,236	772	8 4.9	792
June	45,304	+ 0.9	33,407	+ 1.6	9,455	22,948	750	4,646	51	43	2,216	766	4.9	798
July	45,315	+ 0.9	33,360	+ 1.6	9,450	22,901	757	4,644	55	47	2,275	825	5.0	799
Aug.	45,305	+ 0.7	33,610	+ 1.4	9,505	23,101	750	4,568	60	51	2,319	848	5.1	795
Sep.	45,509	+ 0.7	33,938	+ 1.5	9,583	23,341	754	4,517	84	75	2,234	808	4.9	787
Oct.	45,578	+ 0.7	33,966	+ 1.4	9,567	23,398	748	4,510	111	102	2,204	795	4.8	764
Nov.	45,601	+ 0.6	33,968	+ 1.4	9,559	23,423	742	4,532	124	115	2,180	800	4.8	736
Dec.	45,434	+ 0.6	33,740	+ 1.4	9,474	23,344	694	4,531	247	97	2,227	838	4.9	687
2020 Jan.	r 45,096	r + 0.5	33,608	+ 1.4	9,432	23,255	689	4,471	382	133	2,426	985	5.3	668
Feb.	r 45,104	r + 0.4	33,624	+ 1.3	9,427	23,278	683	4,461	439	134	2,396	971	5.3	690
Mar.	r 45,000	r ± 0.0	33,648	+ 1.1	9,440	23,290	675	4,350	2,834	2,580	2,335	925	5.1	691
Apr.	r 44,722	r – 0.9	33,430	+ 0.1	9,396	23,141	643	4,194	6,007	5,995	2,644	1,093	5.8	626
May	r 44,575	r – 1.5	33,328	– 0.3	9,367	23,083	624	4,206	5,726	5,715	2,813	1,172	9 6.1	584
June	r 44,576	r – 1.6	33,323	– 0.3	9,355	23,084	629	4,260	4,464	4,452	2,853	1,197	6.2	570
July	r 44,602	r – 1.6	10 33,236	10 – 0.4	10 9,324	10 23,026	10 635	10 4,293	...	10 3,296	2,910	1,258	6.3	573
Aug.	r 44,594	r – 1.6	10 33,480	10 – 0.4	10 9,367	10 23,218	10 641	10 4,253	...	10 2,528	2,955	1,302	6.4	584
Sep.	r 44,789	r – 1.6	10 33,791	10 – 0.4	10 9,422	10 23,455	10 656	10 4,227	...	10 2,268	2,847	1,238	6.2	591
Oct.	r 44,857	r – 1.6	10 33,857	10 – 0.3	10 9,410	10 23,526	10 670	10 4,206	...	10 1,986	2,760	1,183	6.0	602
Nov.	11 44,867	11 – 1.6	...	...	...	...	...	...	...	...	2,699	1,152	5.9	601
Dec.	...	...	...	...	...	...	...	...	...	...	2,707	1,166	5.9	581

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 and seasonal jobs, 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** Statistical break due to late recording of unemployed persons in the legal category of the Second Book of the Social Security Code (SGB II). **9** From May 2020, calculated on the basis of new labour force figures. **10** Unadjusted figures estimated by the Federal Employment Agency. In 2018 and 2019, the estimated values for Germany deviated from the final data by a maximum of 0.1% for employees subject to social contributions, by a maximum of 0.7% for persons solely in jobs exempt from social contributions, and by a maximum of 55.3% for cyclically induced short-time work. **11** Initial preliminary estimate by the Federal Statistical Office.

XI. Economic conditions in Germany

7. Prices

Period	Harmonised Index of Consumer Prices						Memo item: Consumer price index (national concept)	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				of which:								
	Total 2	Food 3	Non-energy industrial goods 4	Energy 4, 5	Services 2, 4	Actual rents for housing					Exports	Imports	Energy 8	Other raw materials 9
	2015 = 100													
Index level														
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	109.0	101.9	102.7	124.6	106.2
2019	105.5	108.4	104.2	103.7	105.7	106.1	105.3	115.3	104.8	111.5	102.4	101.7	110.0	108.1
2020	10,e 105.8	...	...	...	...	...	10,e 105.8	10 117.0	...	...	...	...	73.4	111.6
2019 Feb.	103.9	107.9	103.4	101.7	103.6	105.6	103.8	114.0	105.0	112.1	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	113.0	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	115.5	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	115.7	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	115.1	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	114.3	102.4	101.1	105.7	113.0
Aug.	106.3	108.8	103.4	103.8	107.8	106.3	106.0	115.8	104.5	112.5	102.3	100.5	100.2	106.0
Sep.	106.2	108.8	104.7	103.8	106.9	106.4	106.0		104.6	109.9	102.4	101.1	105.9	107.5
Oct.	106.3	108.6	105.0	103.8	106.9	106.6	106.1		104.4	110.3	102.4	101.0	105.7	107.1
Nov.	105.4	109.0	105.2	103.7	104.9	106.7	105.3	116.4	104.4	112.1	102.4	101.5	110.5	106.9
Dec.	106.0	109.2	105.1	103.6	106.1	106.8	105.8		104.5	114.5	102.5	101.7	112.5	110.4
2020 Jan.	105.1	110.1	104.0	104.9	104.3	107.0	105.2		105.3	11 113.3	102.7	101.3	107.4	112.2
Feb.	105.7	111.2	104.3	103.9	105.2	107.1	105.6	117.8	104.9	114.2	102.6	100.4	94.3	108.7
Mar.	105.8	111.0	105.2	101.6	105.5	107.3	105.7		104.1	113.8	101.9	96.9	61.3	104.9
Apr.	106.2	112.2	105.4	98.6	106.7	107.4	106.1		103.4	112.5	101.5	95.2	49.7	101.0
May	106.2	112.5	105.4	97.4	106.7	107.5	106.0	118.3	103.0	109.2	101.3	95.5	55.5	102.1
June	106.9	112.7	104.8	98.7	108.1	107.6	106.6		103.0	110.0	101.3	96.1	65.2	105.1
July	10 106.4	10 110.2	10 102.5	10 98.0	10 109.4	10 107.7	10 106.1		103.2	107.5	101.3	96.4	68.3	107.5
Aug.	10 106.2	10 110.1	10 102.6	10 97.6	10 109.0	10 107.8	10 106.0	10 115.7	103.2	104.8	101.2	96.5	71.2	111.7
Sep.	10 105.8	10 109.9	10 103.6	10 96.9	10 108.0	10 107.8	10 105.8		103.6	103.3	101.3	96.8	70.4	117.9
Oct.	10 105.8	10 110.2	10 103.9	10 97.0	10 107.6	10 108.0	10 105.9		103.7	103.8	101.4	97.1	73.4	118.9
Nov.	10 104.7	10 110.3	10 104.0	10 96.0	10 105.5	10 108.1	10 105.0	10 116.0	103.9	103.8	101.8	97.6	77.8	120.4
Dec.	10,e 105.3	...	...	...	...	...	10,e 105.5		...	...	...	...	86.6	128.9
Annual percentage change														
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	+ 0.4	+ 1.2	+ 2.6	+ 25.1	– 0.8
2019	+ 1.4	+ 1.6	+ 1.1	+ 1.4	+ 1.5	+ 1.5	+ 1.4	+ 4.6	+ 1.1	+ 2.3	+ 0.5	– 1.0	– 11.7	+ 1.8
2020	10,e + 0.4	...	...	...	...	...	10,e + 0.5	10 + 1.5	...	...	...	...	– 33.3	+ 3.2
2019 Feb.	+ 1.7	+ 1.6	+ 1.3	+ 3.2	+ 1.7	+ 1.5	+ 1.5	+ 5.3	+ 2.6	+ 7.0	+ 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	+ 6.8	+ 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	+ 9.4	+ 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	+ 10.8	+ 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	+ 10.0	+ 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	+ 6.7	+ 0.2	– 2.1	– 18.6	+ 6.8
Aug.	+ 1.0	+ 2.3	+ 1.1	+ 0.7	+ 0.7	+ 1.4	+ 1.4	+ 4.3	+ 0.3	+ 1.8	– 0.1	– 2.7	– 23.2	+ 0.3
Sep.	+ 0.9	+ 1.6	+ 0.9	– 1.2	+ 1.2	+ 1.4	+ 1.2		– 0.1	– 1.5	± 0.0	– 2.5	– 24.8	+ 4.7
Oct.	+ 0.9	+ 1.4	+ 0.9	– 2.2	+ 1.3	+ 1.5	+ 1.1		– 0.6	– 1.0	– 0.2	– 3.5	– 27.0	+ 1.5
Nov.	+ 1.2	+ 1.9	+ 1.1	– 4.0	+ 2.4	+ 1.5	+ 1.1	+ 3.9	– 0.7	+ 0.4	– 0.1	– 2.1	– 10.7	+ 1.6
Dec.	+ 1.5	+ 2.1	+ 1.3	+ 0.1	+ 2.0	+ 1.5	+ 1.5		– 0.2	+ 2.6	+ 0.4	– 0.7	+ 1.0	+ 7.0
2020 Jan.	+ 1.6	+ 2.5	+ 1.1	+ 3.3	+ 1.4	+ 1.5	+ 1.7		+ 0.2	11 + 1.6	+ 0.5	– 0.9	– 4.4	+ 7.5
Feb.	+ 1.7	+ 3.1	+ 0.9	+ 2.2	+ 1.5	+ 1.4	+ 1.7	+ 3.3	– 0.1	+ 1.9	+ 0.3	– 2.0	– 17.5	– 0.6
Mar.	+ 1.3	+ 3.1	+ 1.3	– 0.8	+ 1.3	+ 1.5	+ 1.4		– 0.8	+ 0.7	– 0.5	– 5.5	– 46.8	– 3.1
Apr.	+ 0.8	+ 4.0	+ 0.8	– 5.6	+ 1.3	+ 1.5	+ 0.9		– 1.9	– 2.6	– 1.1	– 7.4	– 58.3	– 7.2
May	+ 0.5	+ 3.9	+ 0.8	– 8.2	+ 1.3	+ 1.5	+ 0.6	+ 2.9	– 2.2	– 5.6	– 1.2	– 7.0	– 52.4	– 4.2
June	+ 0.8	+ 4.0	+ 0.7	– 5.9	+ 1.4	+ 1.4	+ 0.9		– 1.8	– 4.4	– 1.0	– 5.1	– 36.6	– 3.2
July	10 ± 0.0	10 + 1.4	10 – 0.8	10 – 6.4	10 + 1.4	10 + 1.4	10 – 0.1		– 1.7	– 5.9	– 1.1	– 4.6	– 35.4	– 4.9
Aug.	10 – 0.1	10 + 1.2	10 – 0.8	10 – 6.0	10 + 1.1	10 + 1.4	10 ± 0.0	10 – 0.1	– 1.2	– 6.8	– 1.1	– 4.0	– 28.9	+ 5.4
Sep.	10 – 0.4	10 + 1.0	10 – 1.1	10 – 6.6	10 + 1.0	10 + 1.3	10 – 0.2		– 1.0	– 6.0	– 1.1	– 4.3	– 33.5	+ 9.7
Oct.	10 – 0.5	10 + 1.5	10 – 1.0	10 – 6.6	10 + 0.7	10 + 1.3	10 – 0.2		– 0.7	– 5.9	– 1.0	– 3.9	– 30.6	+ 11.0
Nov.	10 – 0.7	10 + 1.2	10 – 1.1	10 – 7.4	10 + 0.6	10 + 1.3	10 – 0.3	10 – 0.3	– 0.5	– 7.4	– 0.6	– 3.8	– 29.6	+ 12.6
Dec.	10,e – 0.7	...	...	...	...	...	10,e – 0.3		...	...	...	...	– 23.0	+ 16.8

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** Influenced by a temporary reduction of value added tax. **11** From January 2020 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
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	410.5	4.2	1,273.8	4.0	1,782.3	2.8	179.4	5.1	10.1
2016	1,337.4	4.0	896.3	3.8	426.2	3.8	1,322.5	3.8	1,841.5	3.3	187.8	4.7	10.2
2017	1,394.1	4.2	931.6	3.9	440.9	3.4	1,372.5	3.8	1,905.9	3.5	201.9	7.5	10.6
2018	1,461.3	4.8	975.2	4.7	452.8	2.7	1,428.0	4.0	1,970.8	3.4	215.4	6.7	10.9
2019	1,521.6	4.1	1,020.3	4.6	470.8	4.0	1,491.1	4.4	2,027.1	2.9	220.3	2.2	10.9
2019 Q2	371.6	4.4	243.7	4.9	116.4	4.1	360.2	4.7	500.3	3.1	51.0	1.3	10.2
Q3	378.1	4.5	259.1	5.1	118.9	4.4	378.0	4.9	506.1	3.5	46.6	2.1	9.2
Q4	416.6	3.3	278.4	3.6	117.8	4.3	396.2	3.8	512.5	2.4	49.7	2.6	9.7
2020 Q1	365.7	2.9	246.1	3.0	123.9	5.2	370.0	3.7	521.9	2.7	85.5	17.0	16.4
Q2	355.4	– 4.3	234.6	– 3.8	128.0	10.0	362.6	0.7	496.1	– 0.8	99.5	95.2	20.1
Q3	372.9	– 1.4	257.9	– 0.5	131.2	10.3	389.1	2.9	509.7	0.7	68.8	47.7	13.5

Source: Federal Statistical Office; figures computed in November 2020. * 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
2012	92.5	2.6	92.7	2.5	92.7	2.8	92.7	2.8	92.4	2.9
2013	94.8	2.5	95.0	2.5	95.0	2.5	95.0	2.5	94.4	2.2
2014	97.7	3.1	97.8	2.9	97.7	2.8	97.7	2.8	97.2	2.9
2015	100.0	2.3	100.0	2.3	100.0	2.3	100.0	2.4	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	2.0	104.3	2.1	104.5	2.3	105.1	2.5
2018	107.1	2.8	107.1	2.8	107.0	2.7	107.3	2.7	108.4	3.2
2019	110.2	2.9	110.2	2.9	109.7	2.5	110.0	2.5	111.6	2.9
2019 Q2	103.0	2.1	103.0	2.1	102.9	2.2	109.8	2.2	109.2	3.1
Q3	114.1	4.3	114.1	4.2	112.4	2.6	110.5	2.4	110.9	3.4
Q4	121.8	2.4	121.8	2.3	121.8	2.4	110.7	2.3	121.3	2.4
2020 Q1	104.2	2.4	104.2	2.3	104.2	2.4	111.6	2.4	107.5	2.3
Q2	104.9	1.9	104.9	1.9	105.0	2.1	112.1	2.1	105.5	– 3.4
Q3	116.2	1.8	116.1	1.8	114.4	1.8	112.4	1.8	110.5	– 0.4
2020 May	105.2	2.2	105.2	2.2	105.3	2.2	112.1	2.2	.	.
June	104.7	1.5	104.6	1.4	104.8	2.1	112.2	2.1	.	.
July	138.5	1.9	138.4	1.9	133.3	1.8	112.4	1.9	.	.
Aug.	105.1	1.8	105.1	1.8	105.0	1.8	112.4	1.8	.	.
Sep.	104.9	1.7	104.9	1.7	105.0	1.7	112.5	1.7	.	.
Oct.	105.1	1.7	105.0	1.8	105.1	1.7	112.5	1.7	.	.
Nov.	160.6	2.2	160.5	2.2	159.9	1.9	112.6	1.7	.	.

1 Current data are normally revised on account of additional reports. **2** Excluding one-off payments and covenants (capital formation benefits, special payments, such as annual bonuses, holiday pay, Christmas bonuses (13th monthly salary payment) and retirement provisions). **3** Source: Federal Statistical Office; figures computed in November 2020.

XI. Economic conditions in Germany

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

End of year/half

Period	Assets									Equity and liabilities						
			of which:				of which:				Liabilities					
												Long-term		Short-term		
															of which:	
	Total assets	Non-current assets	Intangible assets	Tangible assets	Financial assets	Current assets	Inventories	Trade receivables	Cash 1	Equity	Total	Total	of which: Financial debt	Total	Financial debt	Trade payables
	Total (€ billion)															
2016	2,364.3	1,476.7	492.3	595.8	288.9	887.5	226.8	217.4	149.0	670.7	1,693.6	888.6	482.0	805.0	249.0	192.8
2017	2,396.3	1,488.2	498.6	602.8	295.9	908.0	230.6	225.1	156.2	757.2	1,639.1	866.4	495.7	772.7	236.1	195.6
2018 3	2,589.6	1,537.1	540.8	611.1	288.5	1,052.5	249.5	234.9	172.6	790.3	1,799.3	925.8	558.7	873.5	257.5	205.1
2019	2,801.3	1,770.1	586.3	737.5	333.4	1,031.2	257.6	237.8	168.5	821.5	1,979.8	1,091.3	676.3	888.5	289.8	207.7
2018 H2	2,589.6	1,537.1	540.8	611.1	288.5	1,052.5	249.5	234.9	172.6	790.3	1,799.3	925.8	558.7	873.5	257.5	205.1
2019 H1	2,702.6	1,657.9	549.7	682.9	314.5	1,044.7	269.2	240.5	140.5	777.5	1,925.1	1,024.3	613.9	900.8	301.7	210.8
H2	2,801.3	1,770.1	586.3	737.5	333.4	1,031.2	257.6	237.8	168.5	821.5	1,979.8	1,091.3	676.3	888.5	289.8	207.7
2020 H1 p	2,892.2	1,801.3	625.0	734.3	319.7	1,090.9	257.6	216.6	220.8	794.2	2,097.9	1,183.9	754.2	914.0	335.6	179.8
	As a percentage of total assets															
2016	100.0	62.5	20.8	25.2	12.2	37.5	9.6	9.2	6.3	28.4	71.6	37.6	20.4	34.1	10.5	8.2
2017	100.0	62.1	20.8	25.2	12.4	37.9	9.6	9.4	6.5	31.6	68.4	36.2	20.7	32.3	9.9	8.2
2018 3	100.0	59.4	20.9	23.6	11.1	40.6	9.6	9.1	6.7	30.5	69.5	35.8	21.6	33.7	9.9	7.9
2019	100.0	63.2	20.9	26.3	11.9	36.8	9.2	8.5	6.0	29.3	70.7	39.0	24.1	31.7	10.3	7.4
2018 H2	100.0	59.4	20.9	23.6	11.1	40.6	9.6	9.1	6.7	30.5	69.5	35.8	21.6	33.7	9.9	7.9
2019 H1	100.0	61.4	20.3	25.3	11.6	38.7	10.0	8.9	5.2	28.8	71.2	37.9	22.7	33.3	11.2	7.8
H2	100.0	63.2	20.9	26.3	11.9	36.8	9.2	8.5	6.0	29.3	70.7	39.0	24.1	31.7	10.3	7.4
2020 H1 p	100.0	62.3	21.6	25.4	11.1	37.7	8.9	7.5	7.6	27.5	72.5	40.9	26.1	31.6	11.6	6.2
	Groups with a focus on the production sector (€ billion) 2															
2016	1,956.8	1,182.2	347.2	482.0	271.6	774.7	212.9	175.0	117.1	535.3	1,421.5	732.7	383.2	688.8	225.1	142.2
2017	1,989.4	1,190.8	351.5	484.0	281.8	798.6	215.8	181.4	128.6	609.9	1,379.5	719.1	397.8	660.3	218.4	150.1
2018 3	2,149.9	1,215.7	388.2	473.3	277.5	934.2	234.6	188.7	139.3	637.2	1,512.7	760.3	442.4	752.4	236.2	152.6
2019	2,303.6	1,396.8	419.6	565.7	319.7	906.8	243.8	188.7	136.9	662.7	1,640.9	887.5	523.8	753.4	257.5	158.1
2018 H2	2,149.9	1,215.7	388.2	473.3	277.5	934.2	234.6	188.7	139.3	637.2	1,512.7	760.3	442.4	752.4	236.2	152.6
2019 H1	2,229.7	1,297.6	388.9	517.9	302.7	932.0	255.6	194.2	115.8	629.6	1,600.0	831.4	473.9	768.6	265.8	164.3
H2	2,303.6	1,396.8	419.6	565.7	319.7	906.8	243.8	188.7	136.9	662.7	1,640.9	887.5	523.8	753.4	257.5	158.1
2020 H1 p	2,305.5	1,352.3	406.4	547.5	303.4	953.3	244.0	171.8	171.4	615.2	1,690.4	912.2	548.5	778.2	294.6	137.1
	As a percentage of total assets															
2016	100.0	60.4	17.7	24.6	13.9	39.6	10.9	8.9	6.0	27.4	72.6	37.4	19.6	35.2	11.5	7.3
2017	100.0	59.9	17.7	24.3	14.2	40.1	10.9	9.1	6.5	30.7	69.3	36.2	20.0	33.2	11.0	7.5
2018 3	100.0	56.6	18.1	22.0	12.9	43.5	10.9	8.8	6.5	29.6	70.4	35.4	20.6	35.0	11.0	7.1
2019	100.0	60.6	18.2	24.6	13.9	39.4	10.6	8.2	5.9	28.8	71.2	38.5	22.7	32.7	11.2	6.9
2018 H2	100.0	56.6	18.1	22.0	12.9	43.5	10.9	8.8	6.5	29.6	70.4	35.4	20.6	35.0	11.0	7.1
2019 H1	100.0	58.2	17.4	23.2	13.6	41.8	11.5	8.7	5.2	28.2	71.8	37.3	21.3	34.5	11.9	7.4
H2	100.0	60.6	18.2	24.6	13.9	39.4	10.6	8.2	5.9	28.8	71.2	38.5	22.7	32.7	11.2	6.9
2020 H1 p	100.0	58.7	17.6	23.8	13.2	41.4	10.6	7.5	7.4	26.7	73.3	39.6	23.8	33.8	12.8	6.0
	Groups with a focus on the services sector (€ billion)															
2016	407.4	294.6	145.1	113.8	17.3	112.8	13.9	42.4	31.9	135.4	272.1	155.9	98.8	116.1	24.0	50.5
2017	406.9	297.4	147.1	118.8	14.1	109.5	14.8	43.6	27.6	147.2	259.6	147.3	97.9	112.4	17.6	45.5
2018 3	439.7	321.3	152.7	137.9	11.0	118.3	14.9	46.1	33.3	153.1	286.6	165.5	116.3	121.1	21.3	52.5
2019	497.7	373.3	166.7	171.8	13.7	124.4	13.7	49.1	31.6	158.8	338.9	203.8	152.6	135.1	32.3	49.6
2018 H2	439.7	321.3	152.7	137.9	11.0	118.3	14.9	46.1	33.3	153.1	286.6	165.5	116.3	121.1	21.3	52.5
2019 H1	472.9	360.3	160.8	165.1	11.8	112.6	13.7	46.3	24.7	147.9	325.0	192.8	140.0	132.2	35.9	46.5
H2	497.7	373.3	166.7	171.8	13.7	124.4	13.7	49.1	31.6	158.8	338.9	203.8	152.6	135.1	32.3	49.6
2020 H1 p	586.6	449.0	218.7	186.8	16.3	137.6	13.7	44.9	49.4	179.1	407.6	271.7	205.7	135.9	40.9	42.6
	As a percentage of total assets															
2016	100.0	72.3	35.6	27.9	4.3	27.7	3.4	10.4	7.8	33.2	66.8	38.3	24.3	28.5	5.9	12.4
2017	100.0	73.1	36.2	29.2	3.5	26.9	3.7	10.7	6.8	36.2	63.8	36.2	24.1	27.6	4.3	11.2
2018 3	100.0	73.1	34.7	31.4	2.5	26.9	3.4	10.5	7.6	34.8	65.2	37.6	26.5	27.6	4.8	11.9
2019	100.0	75.0	33.5	34.5	2.8	25.0	2.8	9.9	6.4	31.9	68.1	41.0	30.7	27.2	6.5	10.0
2018 H2	100.0	73.1	34.7	31.4	2.5	26.9	3.4	10.5	7.6	34.8	65.2	37.6	26.5	27.6	4.8	11.9
2019 H1	100.0	76.2	34.0	34.9	2.5	23.8	2.9	9.8	5.2	31.3	68.7	40.8	29.6	28.0	7.6	9.8
H2	100.0	75.0	33.5	34.5	2.8	25.0	2.8	9.9	6.4	31.9	68.1	41.0	30.7	27.2	6.5	10.0
2020 H1 p	100.0	76.5	37.3	31.9	2.8	23.5	2.3	7.7	8.4	30.5	69.5	46.3	35.1	23.2	7.0	7.3

***** Non-financial groups admitted to the Prime Standard segment of the Frankfurt Stock Exchange which publish IFRS consolidated financial statements on a quarterly or half-yearly basis and make a noteworthy contribution to value added in Germany. Excluding groups engaged in real estate activities. **1** Including cash equivalents. **2** Including groups in agriculture and forestry. **3** From H1 2018 or 2018 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				
					Weighted average		Distribution 2					Weighted average		Distribution 2		
							First quartile	Median	Third quartile					First quartile	Median	Third quartile
	€ billion 3	Annual percentage change 4	€ billion 3	Annual percentage change 4	%	Annual change in percentage points 4	%	%	%	€ billion 3	Annual percentage change 4	%	Annual change in percentage points 4	%	%	%
Total																
2012	1,532.5	6.6	188.7	3.2	12.3	– 0.4	5.4	10.2	17.4	95.6	– 7.7	6.2	– 0.9	2.0	6.1	10.9
2013	1,540.6	– 0.6	187.0	– 2.8	12.1	– 0.3	5.2	10.3	18.4	99.4	5.5	6.5	0.4	1.9	5.9	11.0
2014	1,565.1	1.0	198.7	4.9	12.7	0.5	5.9	10.3	17.4	109.2	8.5	7.0	0.5	1.9	6.1	11.1
2015	1,634.6	6.9	196.0	– 1.1	12.0	– 1.0	6.1	10.6	17.8	91.5	– 16.4	5.6	– 1.5	1.7	6.6	11.3
2016	1,625.0	– 0.4	214.5	7.9	13.2	1.0	6.7	11.4	17.9	111.8	9.1	6.9	0.5	2.6	6.7	12.0
2017	1,720.2	5.1	243.5	14.6	14.2	1.2	6.8	11.0	18.0	142.0	33.3	8.3	1.8	2.5	6.8	12.0
2018 6	1,707.6	0.7	232.8	– 0.9	13.6	– 0.2	6.1	10.6	17.7	129.2	– 6.3	7.6	– 0.6	2.1	6.5	11.9
2019	1,765.5	2.6	233.7	0.4	13.2	– 0.3	6.9	12.2	19.1	105.5	– 17.9	6.0	– 1.5	1.5	5.8	11.7
2015 H2	830.9	5.1	93.4	– 7.6	11.2	– 1.5	6.3	11.5	18.1	32.6	– 36.7	3.9	– 2.6	2.3	7.1	11.7
2016 H1	782.3	– 1.9	111.6	6.2	14.3	1.1	5.9	10.4	17.7	65.5	2.7	8.4	0.3	1.6	6.4	11.3
H2	842.8	1.1	102.9	9.8	12.2	1.0	6.9	11.9	19.0	46.3	20.9	5.5	0.8	3.0	7.5	12.5
2017 H1	844.4	6.8	125.7	14.6	14.9	1.0	5.7	10.1	17.2	78.5	29.6	9.3	1.6	1.8	5.8	11.6
H2	879.0	3.5	117.5	14.6	13.4	1.3	6.9	12.0	19.1	63.0	38.2	7.2	1.8	3.0	7.4	12.4
2018 H1 6	848.6	– 0.1	120.8	– 2.2	14.2	– 0.3	5.1	10.5	18.0	72.7	– 5.3	8.6	– 0.5	1.7	6.3	12.4
H2	869.8	1.4	114.5	0.5	13.2	– 0.1	6.3	11.1	17.7	58.0	– 7.7	6.7	– 0.6	2.1	6.7	12.2
2019 H1	861.7	2.7	112.4	– 4.0	13.0	– 0.9	6.5	11.6	18.5	53.4	– 23.3	6.2	– 2.1	1.5	5.7	11.7
H2	904.2	2.4	121.3	4.8	13.4	0.3	6.5	11.8	19.9	52.1	– 11.3	5.8	– 0.9	0.8	6.1	12.4
2020 H1 p	744.9	– 14.4	78.3	– 34.5	10.5	– 3.0	4.8	9.9	16.6	7.9	– 88.8	1.1	– 5.4	– 2.2	3.5	8.9
Groups with a focus on the production sector 5																
2012	1,193.3	7.8	144.5	5.3	12.1	– 0.3	5.8	10.3	16.5	84.7	2.3	7.1	– 0.4	1.9	6.2	10.0
2013	1,199.6	– 0.8	142.6	– 2.6	11.9	– 0.2	5.1	10.3	16.0	77.5	– 5.8	6.5	– 0.3	1.6	5.9	10.5
2014	1,220.9	1.0	152.2	5.9	12.5	0.6	5.7	10.0	15.5	85.2	9.7	7.0	0.6	1.6	6.0	10.5
2015	1,310.5	7.0	149.1	– 2.6	11.4	– 1.1	6.3	10.5	16.3	69.1	– 19.7	5.3	– 1.7	2.1	6.6	10.4
2016	1,296.6	– 0.8	162.1	6.4	12.5	0.8	6.6	10.7	16.2	84.9	4.3	6.6	0.3	2.9	6.4	10.7
2017	1,396.8	5.5	187.6	16.6	13.4	1.3	6.8	11.0	15.8	112.6	40.5	8.1	2.0	3.2	6.7	10.5
2018 6	1,368.5	1.0	175.8	– 1.6	12.8	– 0.3	6.8	10.6	15.8	100.7	– 7.1	7.4	– 0.6	2.7	6.8	11.3
2019	1,411.8	2.0	168.2	– 4.4	11.9	– 0.8	6.6	11.3	16.6	76.3	– 23.7	5.4	– 1.8	1.2	5.7	10.1
2015 H2	661.1	5.3	66.6	– 13.1	10.1	– 2.1	5.3	11.2	15.9	18.6	– 52.4	2.8	– 3.3	1.8	7.0	10.7
2016 H1	625.5	– 2.3	86.6	1.8	13.8	0.5	6.7	10.6	15.9	52.7	– 6.4	8.4	– 0.3	2.9	6.4	10.1
H2	671.2	0.7	75.5	12.0	11.3	1.1	6.2	11.3	16.6	32.2	34.3	4.8	0.9	2.6	6.6	10.7
2017 H1	695.6	7.3	101.6	18.7	14.6	1.4	6.1	10.2	16.1	66.4	37.3	9.5	2.1	2.4	5.9	11.0
H2	701.8	3.7	86.0	14.2	12.3	1.1	6.9	11.7	16.9	46.2	45.5	6.6	1.9	3.4	7.2	10.8
2018 H1 6	682.3	– 0.1	95.0	– 3.4	13.9	– 0.5	6.5	10.8	16.7	60.0	– 6.0	8.8	– 0.6	2.9	6.6	11.5
H2	695.8	2.0	83.2	0.6	12.0	– 0.2	6.2	11.1	16.1	42.1	– 8.8	6.1	– 0.7	1.9	6.4	11.2
2019 H1	690.3	2.4	83.4	– 8.8	12.1	– 1.5	7.1	10.7	16.1	41.9	– 26.8	6.1	– 2.4	1.7	5.8	9.5
H2	721.5	1.7	84.9	0.4	11.8	– 0.2	5.9	10.8	16.9	34.4	– 19.6	4.8	– 1.3	0.6	5.2	11.2
2020 H1 p	581.0	– 16.0	49.0	– 42.9	8.4	– 3.9	4.4	8.8	15.0	0.2	– 102.6	0.0	– 6.3	– 2.2	3.1	7.9
Groups with a focus on the services sector																
2012	339.2	2.8	44.1	– 3.4	13.0	– 0.8	5.1	9.7	22.7	10.9	– 46.8	3.2	– 3.0	2.1	5.7	12.3
2013	341.0	– 0.1	44.4	– 3.5	13.0	– 0.5	5.2	9.3	20.7	21.9	82.2	6.4	2.9	2.4	5.9	11.8
2014	344.2	0.8	46.5	1.8	13.5	0.1	6.0	12.3	22.6	24.1	4.3	7.0	0.2	2.6	6.3	13.7
2015	324.1	6.1	46.9	4.0	14.5	– 0.3	5.9	11.1	22.1	22.3	– 3.8	6.9	– 0.7	1.3	6.7	13.9
2016	328.4	1.3	52.5	12.8	16.0	1.6	6.8	13.4	25.1	26.9	24.4	8.2	1.5	2.3	8.2	15.3
2017	323.4	3.5	55.9	8.3	17.3	0.8	6.8	11.5	23.0	29.4	11.4	9.1	0.6	2.1	7.2	15.1
2018 6	339.2	– 0.6	57.1	1.3	16.8	0.3	5.5	10.5	24.7	28.5	– 3.5	8.4	– 0.3	1.4	5.8	16.6
2019	353.7	4.8	65.4	15.2	18.5	1.7	6.9	13.7	24.5	29.2	2.8	8.3	– 0.2	2.4	6.2	16.2
2015 H2	169.9	4.5	26.8	9.9	15.8	0.8	6.6	11.8	23.5	14.1	9.0	8.3	0.4	2.4	7.6	15.0
2016 H1	156.8	– 0.4	25.0	24.0	16.0	3.1	5.1	10.2	23.4	12.8	61.2	8.2	3.1	1.0	6.2	14.6
H2	171.6	2.9	27.4	4.2	16.0	0.2	7.4	13.3	24.3	14.1	3.0	8.2	0.0	4.0	8.9	17.1
2017 H1	148.8	4.6	24.2	0.4	16.2	– 0.6	5.2	9.8	21.0	12.1	0.3	8.2	– 0.3	1.2	5.6	14.5
H2	177.1	2.5	31.5	15.6	17.8	2.0	6.6	12.5	24.6	16.8	21.6	9.5	1.5	2.9	7.8	17.9
2018 H1 6	166.3	0.2	25.9	2.8	15.6	0.4	3.8	9.5	22.7	12.6	– 1.9	7.6	– 0.2	– 0.9	4.7	15.3
H2	174.0	– 1.3	31.3	– 0.0	18.0	0.2	6.7	11.3	25.6	15.9	– 4.6	9.1	– 0.3	2.2	7.0	17.8
2019 H1	171.4	4.0	29.0	13.1	16.9	1.4	5.7	12.3	24.4	11.6	– 7.5	6.7	– 0.9	0.0	4.9	14.5
H2	182.7	5.5	36.5	16.9	20.0	1.9	7.1	15.1	24.4	17.7	10.9	9.7	0.5	1.8	8.2	16.3
2020 H1 p	163.9	– 8.0	29.2	– 9.5	17.8	– 0.3	5.6	10.8	21.2	7.7	– 36.8	4.7	– 2.1	– 2.2	4.3	10.9

* Non-financial groups admitted to the Prime Standard segment of the Frankfurt Stock Exchange which publish IFRS consolidated financial statements on a quarterly or half-yearly basis and make a noteworthy contribution to value added in Germany. Excluding groups engaged in real estate activities. **1** Earnings before interest, taxes, depreciation and amortisation. **2** Quantile data are based on the groups' unweighted return on sales. **3** 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 Series 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	2017 r	2018 r	2019 r	2020					
				Q1 r	Q2 r	Q3 r	Aug. r	Sep. r	Oct. p
A. Current account	+ 348,628	+ 333,051	+ 273,959	+ 32,047	+ 29,786	+ 82,881	+ 22,573	+ 35,285	+ 34,071
1. Goods									
Exports	2,263,926	2,331,956	2,410,072	578,513	463,528	547,301	162,508	195,555	207,317
Imports	1,919,016	2,047,078	2,083,506	501,885	407,848	451,402	137,972	160,068	168,312
Balance	+ 344,910	+ 284,875	+ 326,567	+ 76,629	+ 55,681	+ 95,899	+ 24,536	+ 35,487	+ 39,005
2. Services									
Receipts	891,015	942,292	998,870	221,219	190,482	202,234	62,956	70,538	72,425
Expenditure	803,275	829,232	941,048	236,169	179,426	184,350	59,262	61,187	64,563
Balance	+ 87,736	+ 113,062	+ 57,820	– 14,950	+ 11,056	+ 17,882	+ 3,693	+ 9,350	+ 7,862
3. Primary income									
Receipts	772,715	850,348	853,522	189,931	184,760	170,651	56,133	59,062	52,736
Expenditure	719,016	763,367	812,233	172,201	185,302	171,407	52,969	57,862	53,700
Balance	+ 53,695	+ 86,980	+ 41,289	+ 17,730	– 542	– 757	+ 3,163	+ 1,200	– 964
4. Secondary income									
Receipts	106,517	110,225	113,362	27,802	28,494	26,552	8,349	9,163	9,123
Expenditure	244,234	262,093	265,078	75,163	64,903	56,695	17,168	19,915	20,955
Balance	– 137,718	– 151,867	– 151,718	– 47,362	– 36,409	– 30,144	– 8,820	– 10,752	– 11,832
B. Capital account	– 20,154	– 37,547	– 26,247	+ 55	– 4,971	+ 935	+ 1,659	– 337	+ 966
C. Financial account (increase: +)	+ 350,126	+ 299,842	+ 213,861	+ 14,108	+ 41,384	+ 94,502	+ 51,426	+ 43,811	+ 34,639
1. Direct investment	+ 48,150	+ 138,829	– 72,013	+ 26,788	– 91,948	+ 55,104	+ 23,887	+ 7,007	+ 19,002
By resident units abroad	+ 373,767	– 257,732	+ 24,688	– 33,012	+ 81,668	+ 39,295	+ 16,434	– 41,277	+ 11,978
By non-resident units in the euro area	+ 325,618	– 396,561	+ 96,703	– 59,800	+ 173,616	– 15,809	– 7,453	– 48,284	– 7,024
2. Portfolio investment	+ 360,923	+ 203,089	– 46,910	– 188,559	+ 182,065	– 26,920	+ 24,321	– 1,792	+ 85,942
By resident units abroad	+ 651,684	+ 191,892	+ 436,135	– 128,963	+ 383,242	+ 86,759	+ 57,761	+ 19,494	+ 68,807
Equity and investment fund shares	+ 204,701	+ 32,432	+ 69,192	– 51,743	+ 94,766	+ 78,278	+ 29,180	+ 36,365	+ 37,711
Long-term debt securities	+ 372,783	+ 209,557	+ 361,996	– 29,957	+ 133,178	+ 31,869	+ 29,363	+ 3,671	+ 33,760
Short-term debt securities	+ 74,200	– 50,092	+ 4,949	– 47,264	+ 155,297	– 23,388	– 782	– 20,542	– 2,664
By non-resident units in the euro area	+ 290,762	– 11,195	+ 483,046	+ 59,596	+ 201,177	+ 113,679	+ 33,440	+ 21,286	– 17,135
Equity and investment fund shares	+ 420,681	+ 111,645	+ 256,050	– 71,862	+ 115,756	+ 53,326	+ 19,415	– 25,202	+ 26,914
Long-term debt securities	– 137,420	– 58,191	+ 220,268	+ 54,137	– 13,472	+ 26,735	+ 1,938	+ 32,729	– 47,981
Short-term debt securities	+ 7,502	– 64,646	+ 6,727	+ 77,320	+ 98,892	+ 33,618	+ 12,086	+ 13,759	+ 3,932
3. Financial derivatives and employee stock options	+ 22,866	+ 40,232	– 2,802	+ 12,283	+ 38,018	– 30,954	– 14,419	– 21,604	– 985
4. Other investment	– 80,533	– 107,387	+ 332,354	+ 160,172	– 89,964	+ 93,888	+ 16,332	+ 57,564	– 72,230
Eurosystem	– 179,203	– 134,123	+ 142,555	– 58,745	+ 44,069	+ 7,480	+ 7,637	– 43,268	+ 30,463
General government	+ 24,973	– 4,974	– 508	+ 4,086	– 8,047	+ 16,505	+ 4,025	+ 9,640	– 13,293
MFIs (excluding the Eurosystem)	+ 144,399	+ 107,972	+ 182,293	+ 129,941	– 135,764	+ 53,719	– 2,181	+ 114,446	– 100,128
Enterprises and households	– 70,708	– 76,261	+ 8,018	+ 84,889	+ 9,776	+ 16,185	+ 6,851	– 23,254	+ 10,728
5. Reserve assets	– 1,277	+ 25,080	+ 3,231	+ 3,425	+ 3,212	+ 3,383	+ 1,304	+ 2,637	+ 2,911
D. Net errors and omissions	+ 21,651	+ 4,337	– 33,851	– 17,993	+ 16,570	+ 10,686	+ 27,194	+ 8,863	– 398

* 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						Balance of capital account [4]	Financial account (Net lending: +/net borrowing: -)		Errors and omissions [5]
	Total	Goods (f.o.b./f.o.b.) [1] Total	of which: Supplementary trade items [2]	Services [3]	Primary income	Secondary income		Total	of which: Reserve assets	
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	+ 184,352	+ 203,802	– 12,523	– 39,321	+ 63,284	– 43,413	– 563	+ 226,014	+ 838	+ 42,224
2014	+ 210,906	+ 219,629	– 14,296	– 25,303	+ 57,752	– 41,172	+ 2,936	+ 240,258	– 2,564	+ 26,416
2015	+ 260,286	+ 248,394	– 15,405	– 18,516	+ 69,262	– 38,854	– 48	+ 234,392	– 2,213	– 25,845
2016	+ 266,689	+ 252,409	– 19,921	– 20,987	+ 76,199	– 40,931	+ 2,142	+ 261,123	+ 1,686	– 7,708
2017	+ 253,883	+ 252,831	– 15,448	– 24,372	+ 75,419	– 49,995	– 2,999	+ 283,208	– 1,269	+ 32,323
2018	+ 247,471	+ 226,275	– 20,613	– 19,686	+ 89,453	– 48,571	+ 436	+ 236,936	+ 392	– 10,971
2019	+ 244,797	+ 221,800	– 28,012	– 21,703	+ 92,312	– 47,612	– 323	+ 205,543	– 544	– 38,932
2017 Q4	+ 72,464	+ 59,651	– 6,472	– 2,974	+ 28,816	– 13,029	– 3,322	+ 80,237	– 1,446	+ 11,094
2018 Q1	+ 72,518	+ 64,662	– 1,877	– 2,379	+ 24,754	– 14,520	+ 3,656	+ 75,991	+ 699	– 183
Q2	+ 65,001	+ 65,174	– 3,051	– 2,912	+ 8,042	– 5,302	– 508	+ 61,968	– 374	– 2,526
Q3	+ 51,101	+ 51,183	– 4,170	– 12,695	+ 24,845	– 12,232	– 1,642	+ 40,976	– 493	– 8,482
Q4	+ 58,852	+ 45,257	– 11,515	– 1,700	+ 31,812	– 16,517	– 1,069	+ 58,001	+ 560	+ 219
2019 Q1	+ 64,465	+ 56,962	– 4,195	– 1,755	+ 25,936	– 16,677	+ 844	+ 40,491	– 63	– 24,818
Q2	+ 53,626	+ 53,142	– 7,003	– 3,998	+ 10,714	– 6,232	– 406	+ 42,597	+ 444	– 10,623
Q3	+ 58,947	+ 59,752	– 6,859	– 13,011	+ 24,513	– 12,308	+ 197	+ 29,606	– 349	– 29,538
Q4	+ 67,759	+ 51,945	– 9,954	– 2,939	+ 31,148	– 12,395	– 958	+ 92,848	– 576	+ 26,047
2020 Q1	+ 65,441	+ 53,574	– 2,210	– 1,125	+ 27,016	– 14,024	– 541	+ 42,281	+ 133	– 22,618
Q2	+ 36,120	+ 28,429	– 1,594	+ 3,482	+ 13,319	– 9,111	+ 459	+ 48,544	+ 243	+ 11,965
Q3	+ 62,801	+ 57,006	– 675	– 6,562	+ 22,296	– 9,939	– 1,007	+ 70,432	– 1,276	+ 8,639
2018 June	+ 26,939	+ 22,843	– 1,388	– 1,513	+ 8,483	– 2,874	– 485	+ 21,439	+ 213	– 5,016
July	+ 14,275	+ 16,174	– 764	– 4,944	+ 7,857	– 4,812	– 368	+ 6,223	+ 266	– 7,684
Aug.	+ 16,805	+ 17,232	– 1,536	– 5,192	+ 8,462	– 3,697	– 41	+ 23,333	– 640	+ 6,569
Sep.	+ 20,020	+ 17,777	– 1,870	– 2,560	+ 8,526	– 3,723	– 1,234	+ 11,420	– 119	– 7,366
Oct.	+ 18,495	+ 18,411	– 1,812	– 4,210	+ 8,651	– 4,357	– 945	+ 3,533	+ 700	– 14,017
Nov.	+ 20,435	+ 16,693	– 4,707	+ 510	+ 8,799	– 5,566	– 586	+ 25,067	– 124	+ 5,218
Dec.	+ 19,921	+ 10,153	– 4,995	+ 2,000	+ 14,362	– 6,595	+ 462	+ 29,401	– 17	+ 9,018
2019 Jan.	+ 17,769	+ 14,465	– 2,284	– 983	+ 9,324	– 5,037	+ 2,163	+ 16,856	+ 158	– 3,076
Feb.	+ 15,814	+ 17,758	– 1,453	– 405	+ 6,479	– 8,018	+ 143	+ 15,799	+ 112	– 158
Mar.	+ 30,883	+ 24,739	– 459	– 368	+ 10,133	– 3,622	– 1,463	+ 7,836	– 333	– 21,584
Apr.	+ 20,638	+ 17,568	– 2,277	– 715	+ 7,453	– 3,668	– 73	+ 20,138	+ 547	– 427
May	+ 13,402	+ 19,259	– 2,905	– 258	– 6,395	+ 797	– 37	+ 5,567	+ 182	– 7,798
June	+ 19,586	+ 16,315	– 1,821	– 3,025	+ 9,656	– 3,361	– 296	+ 16,892	– 285	– 2,397
July	+ 19,402	+ 21,458	– 2,739	– 4,723	+ 7,265	– 4,599	+ 201	+ 8,459	+ 348	– 11,144
Aug.	+ 16,008	+ 16,983	– 1,358	– 5,514	+ 8,747	– 4,208	+ 773	+ 8,178	+ 755	– 8,604
Sep.	+ 23,537	+ 21,311	– 2,762	– 2,774	+ 8,501	– 3,501	– 777	+ 12,970	– 1,452	– 9,790
Oct.	+ 18,990	+ 21,317	– 2,866	– 6,137	+ 8,431	– 4,621	– 893	+ 32,238	– 107	+ 14,141
Nov.	+ 23,515	+ 17,876	– 2,549	+ 480	+ 8,727	– 3,568	– 498	+ 34,837	– 356	+ 11,820
Dec.	+ 25,253	+ 12,751	– 4,539	+ 2,718	+ 13,990	– 4,206	+ 433	+ 25,773	– 113	+ 86
2020 Jan.	+ 16,607	+ 14,306	– 744	– 740	+ 10,194	– 7,153	+ 301	+ 3,033	+ 898	– 13,875
Feb.	+ 23,347	+ 20,495	– 1,664	– 243	+ 7,275	– 4,181	+ 65	+ 20,957	+ 750	– 2,454
Mar.	+ 25,487	+ 18,773	+ 199	– 142	+ 9,547	– 2,690	– 907	+ 18,292	– 1,514	– 6,289
Apr.	+ 8,896	+ 3,957	– 536	+ 791	+ 8,471	– 4,324	+ 132	+ 15,176	+ 950	+ 6,148
May	+ 6,953	+ 9,331	+ 870	+ 1,142	– 88	– 3,432	+ 65	+ 3,774	+ 33	– 3,244
June	+ 20,272	+ 15,141	– 1,928	+ 1,550	+ 4,936	– 1,354	+ 262	+ 29,594	– 740	+ 9,061
July	+ 21,055	+ 20,102	– 247	– 2,649	+ 7,158	– 3,556	– 901	+ 12,598	– 611	– 7,556
Aug.	+ 16,566	+ 14,349	– 18	– 2,966	+ 8,359	– 3,176	+ 614	+ 38,349	– 611	+ 21,168
Sep.	+ 25,179	+ 22,554	– 410	– 947	+ 6,779	– 3,207	– 720	+ 19,485	– 53	– 4,974
Oct.	+ 22,871	+ 20,311	– 618	– 380	+ 7,231	– 4,292	– 1,287	+ 29,176	+ 140	+ 7,593
Nov. p	+ 21,254	+ 18,544	– 958	+ 1,940	+ 8,248	– 7,478	– 901	+ 15,856	+ 89	– 4,498

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		2017	2018	2019	2020 Jan./Nov. p	July	Aug.	Sep.	Oct.	Nov. p
All countries 1	Exports	1,278,958	1,317,440	1,328,152	1,103,945	102,327	91,259	109,834	112,096	111,732
	Imports	1,031,013	1,088,720	1,104,141	938,761	83,113	79,405	89,249	92,731	94,579
	Balance	+ 247,946	+ 228,720	+ 224,010	+ 165,184	+ 19,214	+ 11,854	+ 20,585	+ 19,365	+ 17,153
I. European countries	Exports	872,427	900,141	902,831	757,249	68,328	63,155	76,563	77,558	76,965
	Imports	699,677	744,575	747,692	625,504	55,009	51,928	59,971	62,947	64,044
	Balance	+ 172,749	+ 155,566	+ 155,140	+ 131,745	+ 13,319	+ 11,227	+ 16,592	+ 14,611	+ 12,920
1. EU Member States (27)	Exports	664,410	696,480	698,257	582,863	52,369	48,148	59,165	59,729	59,510
	Imports	549,250	586,433	593,251	501,262	44,491	42,300	48,941	50,490	51,662
	Balance	+ 115,160	+ 110,047	+ 105,006	+ 81,601	+ 7,879	+ 5,848	+ 10,225	+ 9,239	+ 7,847
Euro area (19) countries	Exports	471,213	492,469	492,308	404,936	36,852	32,402	41,132	41,158	41,053
	Imports	378,700	405,810	409,863	341,763	30,118	28,648	32,771	33,795	34,276
	Balance	+ 92,513	+ 86,659	+ 82,445	+ 63,172	+ 6,733	+ 3,754	+ 8,361	+ 7,363	+ 6,777
of which:										
Austria	Exports	62,656	65,027	66,076	55,385	4,957	4,723	5,494	5,632	5,537
	Imports	40,686	42,994	44,059	36,883	3,649	2,884	3,555	3,685	3,791
	Balance	+ 21,970	+ 22,033	+ 22,017	+ 18,502	+ 1,309	+ 1,839	+ 1,939	+ 1,947	+ 1,747
Belgium and Luxembourg	Exports	50,071	50,389	52,006	44,455	3,928	3,622	4,519	4,655	4,464
	Imports	43,689	49,315	46,322	36,799	3,082	3,032	3,364	3,687	3,668
	Balance	+ 6,381	+ 1,074	+ 5,683	+ 7,656	+ 846	+ 590	+ 1,155	+ 968	+ 796
France	Exports	105,687	105,359	106,564	83,738	7,757	6,459	8,441	8,508	8,408
	Imports	64,329	65,024	66,199	51,999	4,346	4,153	4,819	5,163	5,727
	Balance	+ 41,359	+ 40,335	+ 40,364	+ 31,739	+ 3,411	+ 2,306	+ 3,623	+ 3,346	+ 2,681
Italy	Exports	65,422	69,813	67,887	55,891	5,291	4,088	5,699	5,919	5,923
	Imports	55,342	60,223	57,100	49,424	4,662	4,130	4,692	5,072	5,254
	Balance	+ 10,080	+ 9,591	+ 10,786	+ 6,467	+ 630	– 42	+ 1,007	+ 847	+ 668
Netherlands	Exports	84,661	91,061	91,528	76,935	6,801	6,414	7,650	7,293	7,570
	Imports	90,597	97,709	97,816	81,124	6,976	6,728	7,557	7,803	7,766
	Balance	– 5,935	– 6,649	– 6,288	– 4,189	– 175	– 314	+ 94	– 511	– 196
Spain	Exports	43,067	44,184	44,218	34,517	3,242	2,521	3,556	3,635	3,591
	Imports	31,396	32,399	33,126	28,856	2,705	2,136	2,729	2,894	3,050
	Balance	+ 11,671	+ 11,785	+ 11,092	+ 5,661	+ 537	+ 385	+ 826	+ 741	+ 542
Other EU Member States	Exports	193,198	204,011	205,949	177,927	15,517	15,746	18,034	18,571	18,457
	Imports	170,551	180,623	183,387	159,499	14,372	13,653	16,170	16,695	17,387
	Balance	+ 22,647	+ 23,388	+ 22,561	+ 18,428	+ 1,145	+ 2,094	+ 1,864	+ 1,876	+ 1,070
2. Other European countries	Exports	208,016	203,661	204,575	174,386	15,959	15,006	17,398	17,829	17,455
	Imports	150,427	158,142	154,441	124,241	10,519	9,627	11,031	12,457	12,382
	Balance	+ 57,589	+ 45,519	+ 50,134	+ 50,145	+ 5,440	+ 5,379	+ 6,367	+ 5,372	+ 5,073
of which:										
Switzerland	Exports	53,913	54,021	56,345	52,276	4,757	4,313	4,745	4,911	5,081
	Imports	45,689	45,913	45,824	41,982	3,800	3,094	3,774	4,215	4,036
	Balance	+ 8,224	+ 8,108	+ 10,521	+ 10,294	+ 957	+ 1,219	+ 972	+ 696	+ 1,045
United Kingdom	Exports	85,440	82,164	79,166	61,856	5,517	5,618	6,377	6,521	6,465
	Imports	36,820	37,025	38,397	31,865	2,438	2,458	2,804	2,958	3,145
	Balance	+ 48,620	+ 45,139	+ 40,770	+ 29,991	+ 3,079	+ 3,160	+ 3,573	+ 3,563	+ 3,320
II. Non-European countries	Exports	403,490	413,483	421,728	345,082	33,892	27,974	33,179	34,425	34,486
	Imports	328,606	342,980	355,390	311,903	27,994	27,250	29,107	29,607	30,353
	Balance	+ 74,884	+ 70,503	+ 66,338	+ 33,180	+ 5,898	+ 724	+ 4,072	+ 4,818	+ 4,133
1. Africa	Exports	25,431	22,524	23,627	18,293	1,587	1,451	1,709	1,763	1,763
	Imports	20,428	22,542	24,475	16,860	1,482	1,400	1,572	1,512	1,891
	Balance	+ 5,003	– 18	– 848	+ 1,432	+ 105	+ 51	+ 137	+ 251	– 128
2. America	Exports	154,644	158,952	165,602	129,419	12,730	10,628	12,719	13,358	12,834
	Imports	89,927	92,444	100,007	86,295	7,190	7,651	8,391	8,414	8,379
	Balance	+ 64,717	+ 66,508	+ 65,595	+ 43,124	+ 5,540	+ 2,977	+ 4,328	+ 4,943	+ 4,454
of which:										
United States	Exports	111,805	113,341	118,680	94,696	9,328	7,689	9,339	9,908	9,572
	Imports	61,902	64,493	71,334	62,203	5,232	5,590	6,227	5,821	5,824
	Balance	+ 49,903	+ 48,847	+ 47,346	+ 32,493	+ 4,097	+ 2,099	+ 3,112	+ 4,088	+ 3,748
3. Asia	Exports	212,070	219,716	221,278	187,651	18,551	15,103	17,849	18,372	19,033
	Imports	214,393	224,355	227,036	205,163	18,980	17,927	18,805	19,427	19,743
	Balance	– 2,323	– 4,639	– 5,759	– 17,512	– 429	– 2,824	– 956	– 1,055	– 710
of which:										
Middle East	Exports	33,104	29,144	28,663	22,088	2,136	1,876	1,964	2,116	2,077
	Imports	6,963	8,156	7,460	5,365	474	513	528	502	406
	Balance	+ 26,141	+ 20,989	+ 21,202	+ 16,723	+ 1,662	+ 1,363	+ 1,436	+ 1,614	+ 1,671
Japan	Exports	19,546	20,436	20,662	15,844	1,450	1,137	1,471	1,478	1,580
	Imports	22,955	23,710	23,904	19,550	1,708	1,538	1,661	1,920	1,967
	Balance	– 3,410	– 3,275	– 3,243	– 3,706	– 259	– 402	– 190	– 443	– 388
People's Republic of China 2	Exports	86,141	93,004	95,984	86,605	8,725	7,306	8,459	8,653	9,331
	Imports	101,837	106,065	110,054	105,831	10,300	9,382	9,717	10,103	10,439
	Balance	– 15,695	– 13,061	– 14,070	– 19,227	– 1,575	– 2,076	– 1,258	– 1,450	– 1,108
New industrial countries and emerging markets of Asia 3	Exports	53,425	54,995	54,164	46,444	4,590	3,544	4,132	4,375	4,254
	Imports	50,873	52,945	51,748	44,069	3,821	3,561	3,806	3,987	4,124
	Balance	+ 2,552	+ 2,050	+ 2,416	+ 2,375	+ 769	– 17	+ 326	+ 388	+ 129
4. Oceania and polar regions	Exports	11,344	12,291	11,221	9,720	1,024	793	903	933	856
	Imports	3,857	3,639	3,872	3,585	343	273	339	254	339
	Balance	+ 7,487	+ 8,652	+ 7,349	+ 6,135	+ 682	+ 520	+ 564	+ 679	+ 517

* 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. EU excl. UK. **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		
		of which:									
	Total	Transport	Travel [2]	Financial services	Charges for the use of intellectual property	Telecommunications, computer and information services	Other business services	Government goods and services [3]	Compensation of employees	Investment income	Other primary income [4]
2015	– 18,516	– 5,203	– 36,595	+ 8,621	+ 12,602	– 3,920	– 1,216	+ 3,161	+ 1,114	+ 68,506	– 358
2016	– 20,987	– 5,950	– 38,247	+ 8,612	+ 15,790	– 7,156	– 1,520	+ 3,092	+ 474	+ 76,800	– 1,076
2017	– 24,372	– 3,723	– 43,558	+ 9,663	+ 14,759	– 8,181	– 690	+ 2,177	– 521	+ 77,314	– 1,374
2018	– 19,686	– 1,808	– 44,543	+ 9,610	+ 17,240	– 7,477	– 358	+ 3,324	– 1,065	+ 91,442	– 924
2019	– 21,703	+ 536	– 46,098	+ 10,302	+ 17,889	– 9,330	– 2,798	+ 3,568	– 1,347	+ 94,453	– 793
2019 Q1	– 1,755	– 438	– 6,692	+ 2,057	+ 4,481	– 2,559	– 573	+ 921	+ 361	+ 26,360	– 785
Q2	– 3,998	+ 422	– 10,382	+ 2,592	+ 4,366	– 1,921	– 1,204	+ 934	– 537	+ 13,434	– 2,183
Q3	– 13,011	+ 344	– 18,603	+ 2,811	+ 3,263	– 2,267	– 386	+ 936	– 1,078	+ 26,837	– 1,245
Q4	– 2,939	+ 208	– 10,422	+ 2,841	+ 5,778	– 2,584	– 635	+ 777	– 93	+ 27,821	+ 3,420
2020 Q1	– 1,125	– 452	– 5,386	+ 1,857	+ 4,387	– 2,259	– 926	+ 785	+ 407	+ 27,603	– 994
Q2	+ 3,482	– 1,288	– 1,490	+ 2,433	+ 4,946	– 1,491	– 1,431	+ 786	– 51	+ 15,753	– 2,384
Q3	– 6,562	– 1,632	– 8,360	+ 2,384	+ 3,523	– 1,923	– 1,830	+ 798	– 1,056	+ 24,474	– 1,123
2020 Jan.	– 740	+ 43	– 1,694	+ 893	+ 1,144	– 810	– 804	+ 290	+ 112	+ 10,433	– 351
Feb.	– 243	+ 51	– 1,967	+ 545	+ 1,425	– 641	– 46	+ 241	+ 136	+ 7,381	– 242
Mar.	– 142	– 546	– 1,725	+ 419	+ 1,818	– 808	– 77	+ 254	+ 159	+ 9,789	– 401
Apr.	+ 791	– 348	– 194	+ 907	+ 1,659	– 880	– 963	+ 267	+ 12	+ 8,982	– 523
May	+ 1,142	– 555	– 117	+ 747	+ 1,456	– 632	– 434	+ 242	+ 27	+ 1,339	– 1,454
June	+ 1,550	– 385	– 1,179	+ 779	+ 1,832	+ 21	– 33	+ 277	– 90	+ 5,432	– 406
July	– 2,649	– 375	– 2,320	+ 1,006	+ 682	– 866	– 1,009	+ 273	– 373	+ 7,984	– 453
Aug.	– 2,966	– 470	– 3,530	+ 601	+ 1,382	– 843	– 517	+ 254	– 330	+ 8,997	– 308
Sep.	– 947	– 787	– 2,510	+ 778	+ 1,459	– 214	– 304	+ 271	– 352	+ 7,494	– 362
Oct.	– 380	– 635	– 1,673	+ 1,031	+ 1,236	– 702	– 121	+ 259	– 50	+ 7,716	– 434
Nov. p	+ 1,940	– 309	+ 27	+ 586	+ 1,699	– 569	– 174	+ 193	– 40	+ 8,759	– 471

1 Including freight and insurance costs of foreign trade. **2** Since 2001 the sample results of a household survey have been used on the expenditure side. **3** Domestic public authorities' receipts from and expenditure on services, not included elsewhere; including the receipts from foreign military bases. **4** Includes, inter alia, taxes on leasing, production and imports transferred to the EU as well as subsidies received from the EU.

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

€ million

Period		General government			All sectors excluding general government [2]		
			of which:			of which:	
	Total	Total	Current international cooperation [1]	Current taxes on income, wealth, etc.	Total	Personal transfers between resident and non-resident households [3]	of which: Workers' remittances
2015	– 38,854	– 24,087	– 6,805	+ 10,455	– 14,766	– 3,540	– 3,523
2016	– 40,931	– 25,417	– 11,516	+ 10,739	– 15,514	– 4,214	– 4,196
2017	– 49,995	– 22,488	– 9,852	+ 10,372	– 27,506	– 4,632	– 4,613
2018	– 48,571	– 28,524	– 10,098	+ 10,275	– 20,047	– 5,152	– 5,142
2019	– 47,612	– 28,599	– 10,428	+ 11,758	– 19,013	– 5,445	– 5,431
2019 Q1	– 16,677	– 12,363	– 2,794	+ 2,093	– 4,314	– 1,360	– 1,358
Q2	– 6,232	– 591	– 1,354	+ 6,701	– 5,641	– 1,361	– 1,358
Q3	– 12,308	– 7,712	– 1,890	+ 1,616	– 4,595	– 1,363	– 1,358
Q4	– 12,395	– 7,933	– 4,389	+ 1,348	– 4,462	– 1,363	– 1,358
2020 Q1	– 14,024	– 9,690	– 2,318	+ 2,477	– 4,334	– 1,482	– 1,477
Q2	– 9,111	– 5,165	– 2,262	+ 4,183	– 3,946	– 1,480	– 1,477
Q3	– 9,939	– 6,231	– 3,249	+ 2,004	– 3,708	– 1,481	– 1,477
2020 Jan.	– 7,153	– 5,705	– 1,060	+ 331	– 1,448	– 494	– 492
Feb.	– 4,181	– 2,689	– 645	+ 1,049	– 1,492	– 494	– 492
Mar.	– 2,690	– 1,296	– 614	+ 1,097	– 1,394	– 494	– 492
Apr.	– 4,324	– 2,961	– 483	+ 243	– 1,363	– 494	– 492
May	– 3,432	– 2,212	– 688	+ 2,307	– 1,221	– 493	– 492
June	– 1,354	+ 8	– 1,091	+ 1,632	– 1,362	– 494	– 492
July	– 3,556	– 2,129	– 1,085	+ 631	– 1,427	– 493	– 492
Aug.	– 3,176	– 2,210	– 1,149	+ 167	– 967	– 495	– 492
Sep.	– 3,207	– 1,893	– 1,015	+ 1,206	– 1,314	– 493	– 492
Oct.	– 4,292	– 2,929	– 965	+ 520	– 1,363	– 494	– 492
Nov. p	– 7,478	– 5,906	– 1,390	+ 257	– 1,572	– 494	– 492

1 Excluding capital transfers, where identifiable. Includes current international cooperation and other current transfers. **2** Includes insurance premiums and claims (excluding life insurance policies). **3** Transfers between resident and non-resident households.

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

€ million

Period	Total	Non-produced non-financial assets	Capital transfers
2015	– 48	+ 1,787	– 1,835
2016	+ 2,142	+ 3,219	– 1,077
2017	– 2,999	+ 922	– 3,921
2018	+ 436	+ 3,453	– 3,017
2019	– 323	+ 2,795	– 3,118
2019 Q1	+ 844	+ 652	+ 192
Q2	– 406	+ 20	– 426
Q3	+ 197	+ 1,271	– 1,073
Q4	– 958	+ 853	– 1,811
2020 Q1	– 541	– 741	+ 200
Q2	+ 459	+ 665	– 206
Q3	– 1,007	– 60	– 947
2020 Jan.	+ 301	+ 32	+ 269
Feb.	+ 65	– 267	+ 331
Mar.	– 907	– 507	– 400
Apr.	+ 132	+ 192	– 60
May	+ 65	– 36	+ 101
June	+ 262	+ 508	– 247
July	– 901	– 459	– 442
Aug.	+ 614	+ 699	– 85
Sep.	– 720	– 300	– 420
Oct.	– 1,287	– 778	– 509
Nov. p	– 901	– 387	– 513

XII. External sector

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

€ million

Item	2017	2018	2019	2020					
				Q1	Q2	Q3	Sep.	Oct.	Nov. p
I. Net domestic investment abroad (increase: +)	+ 406,588	+ 390,059	+ 213,212	+ 277,296	+ 137,496	+ 233,444	+ 121,035	– 52,764	+ 90,904
1. Direct investment	+ 143,931	+ 148,042	+ 119,972	+ 51,695	+ 5,278	+ 17,899	– 4,094	+ 13,140	+ 35,728
Equity	+ 92,843	+ 147,471	+ 105,956	+ 41,164	+ 22,728	+ 12,894	– 2,836	+ 3,202	+ 12,805
of which: Reinvestment of earnings 1	+ 32,233	+ 34,769	+ 40,983	+ 16,572	+ 4,033	+ 10,486	+ 1,689	+ 4,657	+ 4,259
Debt instruments	+ 51,088	+ 571	+ 14,016	+ 10,531	– 17,451	+ 5,005	– 1,258	+ 9,938	+ 22,923
2. Portfolio investment	+ 115,466	+ 83,229	+ 123,681	+ 8,730	+ 59,227	+ 44,406	+ 15,454	+ 26,472	+ 11,075
Shares 2	+ 14,673	+ 9,613	+ 14,248	+ 4,988	+ 18,970	+ 18,877	+ 6,112	+ 4,228	+ 8,654
Investment fund shares 3	+ 58,562	+ 28,263	+ 52,930	– 14,167	+ 14,425	+ 27,313	+ 6,077	+ 3,731	+ 7,640
Long-term debt securities 4	+ 42,724	+ 41,577	+ 54,493	+ 15,801	+ 23,042	– 839	+ 3,687	+ 15,221	– 3,433
Short-term debt securities 5	– 492	+ 3,776	+ 2,009	+ 2,107	+ 2,790	– 944	– 422	+ 3,291	– 1,786
3. Financial derivatives and employee stock options 6	+ 10,974	+ 23,126	+ 22,383	+ 32,058	+ 31,257	+ 26,530	+ 5,643	+ 831	+ 9,004
4. Other investment 7	+ 137,485	+ 135,271	– 52,280	+ 184,680	+ 41,492	+ 145,885	+ 104,086	– 93,346	+ 35,008
Monetary financial institutions 8	– 20,985	+ 49,862	+ 9,292	+ 104,408	– 47,120	– 12,604	+ 13,836	– 11,898	+ 1,908
Long-term	+ 19,642	+ 4,462	+ 18,194	– 4,261	– 1,101	– 4,145	– 60	+ 1,425	– 3,033
Short-term	– 40,627	+ 45,400	– 8,901	+ 108,669	– 46,019	– 8,459	+ 13,896	– 13,323	+ 4,942
Enterprises and households 9	+ 5,827	+ 37,324	+ 13,584	+ 32,751	+ 27,397	+ 38,245	+ 27,625	– 10,518	+ 17,373
Long-term	– 2,291	+ 17,182	+ 10,566	+ 9,160	+ 5,849	+ 39,654	+ 24,929	– 16,987	+ 1,688
Short-term	+ 8,118	+ 20,143	+ 3,018	+ 23,591	+ 21,549	– 1,409	+ 2,696	+ 6,469	+ 15,685
General government	– 3,993	– 8,710	– 4,242	+ 4,385	+ 1,014	+ 1,540	+ 2,461	– 742	– 1,045
Long-term	– 4,408	– 999	– 3,103	– 289	– 154	– 530	+ 19	– 227	+ 52
Short-term	+ 415	– 7,711	– 1,139	+ 4,674	+ 1,168	+ 2,070	+ 2,442	– 515	– 1,097
Bundesbank	+ 156,637	+ 56,795	– 70,915	+ 43,136	+ 60,201	+ 118,704	+ 60,165	– 70,188	+ 16,772
5. Reserve assets	– 1,269	+ 392	– 544	+ 133	+ 243	– 1,276	– 53	+ 140	+ 89
II. Net foreign investment in the reporting country (increase: +)	+ 123,380	+ 153,123	+ 7,670	+ 235,015	+ 88,952	+ 163,012	+ 101,550	– 81,941	+ 75,048
1. Direct investment	+ 105,218	+ 143,602	+ 64,284	+ 30,053	+ 1,499	+ 28,503	– 771	+ 7,839	+ 29,927
Equity	+ 40,568	+ 60,751	+ 40,113	+ 10,536	+ 4,806	+ 2,377	+ 5,778	+ 4,587	+ 8,984
of which: Reinvestment of earnings 1	+ 17,094	+ 15,743	+ 17,310	+ 6,006	+ 1,110	+ 2,273	+ 956	+ 1,124	– 531
Debt instruments	+ 64,650	+ 82,851	+ 24,172	+ 19,517	– 3,307	+ 26,125	– 6,548	+ 3,252	+ 20,943
2. Portfolio investment	– 89,846	– 73,978	+ 28,479	+ 49,231	+ 57,347	+ 136,391	+ 49,906	– 48,729	– 8,391
Shares 2	– 705	– 30,651	– 6,392	– 6,120	– 9,056	+ 667	+ 601	– 488	– 303
Investment fund shares 3	– 2,519	– 6,298	– 4,963	– 797	+ 235	– 353	– 1,254	– 380	+ 857
Long-term debt securities 4	– 72,291	– 41,376	+ 32,911	+ 29,298	+ 34,249	+ 86,634	+ 28,502	– 36,311	– 2,463
Short-term debt securities 5	– 14,330	+ 4,348	+ 6,923	+ 26,850	+ 31,919	+ 49,442	+ 22,058	– 11,551	– 6,482
3. Other investment 7	+ 108,008	+ 83,499	– 85,093	+ 155,731	+ 30,106	– 1,881	+ 52,414	– 41,051	+ 53,513
Monetary financial institutions 8	+ 17,508	– 35,902	– 10,010	+ 181,993	– 1,879	+ 1,339	+ 7,888	– 859	+ 19,917
Long-term	+ 7,574	– 8,433	+ 10,968	+ 12,909	+ 8,172	+ 1,971	+ 3,608	+ 1,952	+ 7,199
Short-term	+ 9,935	– 27,469	– 20,978	+ 169,084	– 10,051	– 632	+ 4,280	– 2,811	+ 12,718
Enterprises and households 9	+ 22,063	+ 14,829	+ 21,959	+ 26,093	+ 29,490	– 24,000	– 1,697	– 6,868	+ 24,730
Long-term	+ 6,881	+ 7,805	+ 12,412	+ 5,945	– 108	+ 6,064	– 451	+ 1,667	– 1,266
Short-term	+ 15,182	+ 7,024	+ 9,547	+ 20,149	+ 29,598	– 30,064	– 1,246	– 8,535	+ 25,996
General government	– 8,719	+ 2,926	+ 257	+ 3,478	+ 1,364	– 10,520	– 2,958	– 2,933	+ 2,227
Long-term	– 3,724	+ 697	+ 133	+ 565	– 104	– 193	– 4	– 90	– 122
Short-term	– 4,996	+ 2,230	+ 124	+ 2,914	+ 1,468	– 10,327	– 2,954	– 2,843	+ 2,349
Bundesbank	+ 77,156	+ 101,646	– 97,299	– 55,834	+ 1,131	+ 31,300	+ 49,181	– 30,391	+ 6,638
III. Net financial account (net lending: +/net borrowing: -)	+ 283,208	+ 236,936	+ 205,543	+ 42,281	+ 48,544	+ 70,432	+ 19,485	+ 29,176	+ 15,856

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 o

€ million

End of reporting period	External assets									External liabilities 3,4	Net external position (col. 1 minus col. 10)
	Total	Reserve assets					Other investment		Portfolio investment 2		
		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			
	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	668,673	474,172
2018	1,209,982	173,138	121,445	14,378	5,518	31,796	980,560	966,190	56,284	770,688	439,293
2019	1,160,971	199,295	146,562	14,642	6,051	32,039	909,645	895,219	52,031	673,626	487,345
2020	1,429,236	219,127	166,904	14,014	8,143	30,066	1,152,757	1,136,002	57,353	781,339	647,898
2018 May	1,198,995	171,469	120,871	14,287	4,172	32,139	973,323	956,150	54,203	656,505	542,490
June	1,213,511	167,078	116,291	14,245	4,983	31,559	991,577	976,266	54,857	701,011	512,500
July	1,147,878	163,308	112,693	14,131	4,881	31,603	930,107	913,270	54,463	666,323	481,554
Aug.	1,145,283	162,346	111,986	14,208	4,879	31,273	929,073	912,448	53,864	644,636	500,647
Sep.	1,189,175	161,078	110,755	14,236	4,889	31,199	973,380	956,487	54,717	686,368	502,807
Oct.	1,167,004	168,272	116,314	14,440	5,259	32,258	943,644	927,555	55,089	664,608	502,396
Nov.	1,184,703	168,198	116,409	14,405	5,244	32,140	960,478	941,130	56,026	674,449	510,254
Dec.	1,209,982	173,138	121,445	14,378	5,518	31,796	980,560	966,190	56,284	770,688	439,293
2019 Jan.	1,123,169	176,720	124,811	14,424	5,486	31,999	890,410	868,142	56,039	648,602	474,568
Feb.	1,127,455	178,016	125,793	14,496	5,510	32,217	894,226	872,698	55,214	634,080	493,375
Mar.	1,190,416	178,088	125,302	14,629	5,561	32,596	958,243	941,310	54,086	655,655	534,761
Apr.	1,167,188	177,378	124,046	14,622	6,228	32,482	935,563	919,696	54,247	627,265	539,923
May	1,186,394	180,073	126,092	14,637	6,150	33,193	952,038	934,640	54,283	618,780	567,614
June	1,201,041	187,401	134,470	14,473	6,081	32,377	960,158	942,319	53,482	649,898	551,143
July	1,134,349	193,244	139,163	14,613	6,391	33,077	888,584	870,903	52,521	622,006	512,343
Aug.	1,173,640	205,331	149,696	14,703	6,379	34,553	915,546	897,901	52,763	638,696	534,944
Sep.	1,185,142	202,285	147,611	14,831	6,396	33,447	930,892	915,342	51,965	626,128	559,014
Oct.	1,103,094	199,858	146,284	14,663	6,287	32,624	852,754	837,377	50,482	597,432	505,662
Nov.	1,134,129	197,047	143,253	14,799	6,116	32,879	885,524	870,520	51,558	591,913	542,217
Dec.	1,160,971	199,295	146,562	14,642	6,051	32,039	909,645	895,219	52,031	673,626	487,345
2020 Jan.	1,090,725	209,432	154,867	14,785	6,110	33,671	828,120	811,435	53,173	582,526	508,198
Feb.	1,106,033	215,748	159,889	14,857	5,989	35,014	836,782	821,562	53,503	577,841	528,192
Mar.	1,218,815	213,722	158,677	14,812	5,965	34,268	952,781	935,126	52,312	617,919	600,896
Apr.	1,214,851	226,903	170,359	14,935	6,857	34,753	934,333	918,814	53,615	616,319	598,532
May	1,209,328	223,125	167,780	14,650	6,787	33,908	931,521	916,145	54,682	612,403	596,925
June	1,294,167	226,135	170,728	14,603	6,955	33,849	1,012,982	995,083	55,050	618,825	675,342
July	1,323,691	233,547	180,400	14,179	7,465	31,503	1,034,282	1,019,214	55,862	599,189	724,503
Aug.	1,358,137	230,309	177,973	14,129	7,423	30,784	1,071,521	1,056,231	56,307	600,390	757,747
Sep.	1,414,933	227,150	173,979	14,293	7,632	31,246	1,131,686	1,115,189	56,097	649,781	765,151
Oct.	1,346,367	227,767	174,433	14,346	7,656	31,332	1,061,498	1,047,327	57,102	619,445	726,922
Nov.	1,347,202	212,286	159,737	14,193	7,535	30,820	1,078,270	1,060,263	56,647	625,921	721,282
Dec.	1,429,236	219,127	166,904	14,014	8,143	30,066	1,152,757	1,136,002	57,353	781,339	647,898

o 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. External positions of enterprises *

€ million

End of reporting period	Claims on non-residents							Liabilities to non-residents						
			Claims on foreign non-banks							Liabilities to non-banks				
					from trade credits							from trade credits		
	Total	Balances with foreign banks	Total	from financial operations	Total	Credit terms granted	Advance payments effected	Total	Loans from foreign banks	Total	from financial operations	Total	Credit terms used	Advance payments received
Rest of the world														
2016	877,815	246,093	631,722	421,163	210,558	196,385	14,173	1,055,685	132,817	922,868	725,655	197,213	124,628	72,585
2017	897,685	218,669	679,016	453,895	225,121	211,461	13,660	1,107,500	142,473	965,027	764,104	200,923	130,887	70,036
2018	929,542	234,581	694,961	463,631	231,330	217,163	14,167	1,210,748	143,373	1,067,374	860,496	206,878	135,879	70,999
2019	947,344	225,353	721,991	489,939	232,052	216,675	15,377	1,257,797	162,100	1,095,697	888,066	207,630	134,394	73,236
2020 June	975,229	254,117	721,112	510,166	210,947	195,052	15,895	1,330,129	203,271	1,126,858	934,616	192,242	115,882	76,361
July	975,280	254,803	720,478	507,223	213,255	197,218	16,037	1,340,169	196,590	1,143,579	949,361	194,217	116,893	77,324
Aug.	986,363	266,626	719,737	510,559	209,178	193,214	15,964	1,338,975	188,054	1,150,920	959,588	191,333	113,525	77,808
Sep.	1,010,961	287,725	723,236	503,397	219,839	203,767	16,072	1,332,854	183,201	1,149,653	946,054	203,599	126,524	77,075
Oct.	1,007,939	271,800	736,139	507,639	228,499	212,649	15,851	1,343,150	173,306	1,169,843	957,633	212,210	132,723	79,488
Nov.	1,044,153	272,440	771,713	538,864	232,849	216,272	16,577	1,386,545	176,489	1,210,056	993,980	216,076	136,626	79,450
EU Member States (27 excl. GB)														
2016	520,274	188,982	331,292	248,172	83,121	74,410	8,711	672,896	89,243	583,653	509,751	73,902	52,626	21,275
2017	519,346	167,197	352,148	260,241	91,907	83,432	8,475	715,975	92,715	623,260	540,950	82,310	62,079	20,231
2018	542,346	176,454	365,892	273,495	92,397	84,139	8,258	787,342	86,085	701,257	618,154	83,103	62,625	20,477
2019	560,077	175,004	385,073	294,466	90,607	82,278	8,330	804,572	88,201	716,371	631,133	85,238	63,845	21,392
2020 June	585,834	195,133	390,701	304,935	85,766	77,265	8,501	859,671	118,270	741,401	662,197	79,204	56,279	22,926
July	583,436	191,914	391,522	306,807	84,714	75,983	8,731	874,183	110,177	764,006	684,264	79,743	56,675	23,067
Aug.	591,126	203,358	387,768	305,361	82,407	73,692	8,715	874,563	109,859	764,705	687,362	77,343	54,281	23,061
Sep.	618,732	221,907	396,826	307,654	89,172	80,387	8,785	860,614	97,792	762,821	679,006	83,815	60,791	23,024
Oct.	610,828	207,421	403,407	309,901	93,506	84,649	8,856	876,598	102,236	774,362	686,246	88,116	64,119	23,997
Nov.	622,761	208,069	414,691	319,079	95,613	86,575	9,038	883,095	96,225	786,870	693,674	93,196	69,085	24,111
Extra-EU Member States (27 incl. GB)														
2016	357,541	57,112	300,429	172,992	127,438	121,976	5,462	382,789	43,574	339,215	215,904	123,311	72,002	51,310
2017	378,339	51,472	326,867	193,654	133,214	128,029	5,185	391,525	49,758	341,767	223,154	118,613	68,809	49,804
2018	387,196	58,127	329,068	190,135	138,933	133,024	5,909	423,406	57,288	366,117	242,342	123,776	73,254	50,522
2019	387,267	50,349	336,918	195,473	141,444	134,397	7,047	453,224	73,899	379,326	256,933	122,392	70,549	51,843
2020 June	389,395	58,984	330,411	205,230	125,181	117,787	7,393	470,458	85,001	385,457	272,419	113,038	59,603	53,435
July	391,844	62,888	328,956	200,415	128,541	121,235	7,305	465,986	86,413	379,573	265,098	114,475	60,218	54,257
Aug.	395,237	63,268	331,969	205,198	126,771	119,522	7,249	464,411	78,196	386,216	272,226	113,990	59,244	54,746
Sep.	392,229	65,818	326,411	195,744	130,667	123,380	7,286	472,240	85,408	386,832	267,048	119,784	65,733	54,051
Oct.	397,111	64,379	332,732	197,738	134,994	128,000	6,994	466,551	71,070	395,481	271,387	124,094	68,604	55,490
Nov.	421,393	64,371	357,022	219,785	137,237	129,697	7,540	503,450	80,264	423,186	300,306	122,880	67,541	55,338
Euro area (19)														
2016	450,914	171,302	279,612	214,911	64,701	57,972	6,729	613,595	70,202	543,393	487,188	56,204	41,334	14,870
2017	451,219	150,346	300,873	228,761	72,112	64,643	7,469	650,641	75,398	575,243	509,470	65,773	50,395	15,378
2018	466,584	156,425	310,159	238,570	71,588	64,391	7,197	723,072	68,499	654,573	588,121	66,452	50,655	15,797
2019	484,879	156,743	328,135	257,791	70,344	62,945	7,399	733,299	68,393	664,906	597,241	67,664	50,955	16,710
2020 June	504,206	172,924	331,282	264,849	66,433	58,989	7,443	785,117	96,167	688,950	626,885	62,065	44,310	17,755
July	503,799	171,546	332,253	266,887	65,366	57,739	7,627	798,703	88,669	710,033	648,187	61,846	44,029	17,817
Aug.	514,981	185,746	329,235	265,935	63,300	55,708	7,592	801,812	90,321	711,491	651,296	60,195	42,378	17,816
Sep.	539,470	203,462	336,008	268,026	67,982	60,333	7,649	786,086	78,524	707,562	643,019	64,543	47,032	17,511
Oct.	529,802	188,516	341,287	270,262	71,024	63,298	7,726	799,680	82,612	717,067	650,271	66,796	48,997	17,799
Nov.	536,018	184,449	351,569	278,837	72,732	64,955	7,777	802,962	76,691	726,271	655,761	70,510	52,635	17,875
Extra-Euro area (19)														
2016	426,901	74,791	352,110	206,252	145,857	138,413	7,444	442,090	62,615	379,475	238,467	141,009	83,294	57,715
2017	446,465	68,323	378,142	225,134	153,008	146,818	6,191	456,859	67,076	389,784	254,634	135,149	80,492	54,658
2018	462,958	78,156	384,802	225,060	159,742	152,772	6,970	487,676	74,875	412,801	272,375	140,426	85,224	55,202
2019	462,465	68,610	393,855	232,148	161,708	153,730	7,978	524,498	93,707	430,791	290,825	139,966	83,440	56,526
2020 June	471,023	81,193	389,830	245,316	144,514	136,062	8,451	545,011	107,104	437,907	307,730	130,177	71,572	58,605
July	471,482	83,257	388,225	240,336	147,889	139,480	8,409	541,466	107,921	433,545	301,174	132,371	72,864	59,507
Aug.	471,382	80,881	390,502	244,624	145,878	137,506	8,371	537,163	97,734	439,430	308,292	131,138	71,147	59,991
Sep.	471,491	84,262	387,229	235,371	151,857	143,435	8,423	546,768	104,676	442,092	303,036	139,056	79,492	59,564
Oct.	478,136	83,284	394,852	237,377	157,475	149,351	8,124	543,470	90,694	452,776	307,362	145,414	83,725	61,689
Nov.	508,135	87,991	420,144	260,027	160,117	151,317	8,800	583,583	99,798	483,785	338,220	145,565	83,991	61,575

***** 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 XII.7.

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
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
2019	1.6109	1.4855	7.7355	7.4661	122.01	9.8511	10.5891	1.1124	0.87777	1.1195
2020	1.6549	1.5300	7.8747	7.4542	121.85	10.7228	10.4848	1.0705	0.88970	1.1422
2019 Aug.	1.6431	1.4768	7.8581	7.4602	118.18	9.9742	10.7356	1.0892	0.91554	1.1126
Sep.	1.6162	1.4578	7.8323	7.4634	118.24	9.9203	10.6968	1.0903	0.89092	1.1004
Oct.	1.6271	1.4581	7.8447	7.4693	119.51	10.1165	10.8023	1.0981	0.87539	1.1053
Nov.	1.6181	1.4630	7.7571	7.4720	120.34	10.1087	10.6497	1.0978	0.85761	1.1051
Dec.	1.6154	1.4640	7.7974	7.4720	121.24	10.0429	10.4827	1.0925	0.84731	1.1113
2020 Jan.	1.6189	1.4523	7.6832	7.4729	121.36	9.9384	10.5544	1.0765	0.84927	1.1100
Feb.	1.6356	1.4485	7.6302	7.4713	120.03	10.1327	10.5679	1.0648	0.84095	1.0905
Mar.	1.7788	1.5417	7.7675	7.4703	118.90	11.2943	10.8751	1.0591	0.89460	1.1063
Apr.	1.7271	1.5287	7.6858	7.4617	116.97	11.3365	10.8845	1.0545	0.87547	1.0862
May	1.6724	1.5219	7.7482	7.4577	116.87	10.9862	10.5970	1.0574	0.88685	1.0902
June	1.6322	1.5254	7.9734	7.4548	121.12	10.7298	10.4869	1.0712	0.89878	1.1255
July	1.6304	1.5481	8.0352	7.4467	122.38	10.6544	10.3538	1.0711	0.90467	1.1463
Aug.	1.6433	1.5654	8.1954	7.4460	125.40	10.5797	10.3087	1.0767	0.90081	1.1828
Sep.	1.6307	1.5586	8.0333	7.4418	124.50	10.7769	10.4279	1.0786	0.90947	1.1792
Oct.	1.6521	1.5559	7.9225	7.4424	123.89	10.9220	10.3967	1.0739	0.90741	1.1775
Nov.	1.6266	1.5472	7.8152	7.4459	123.61	10.7453	10.2311	1.0785	0.89605	1.1838
Dec.	1.6166	1.5595	7.9602	7.4412	126.28	10.6008	10.1736	1.0814	0.90624	1.2170

* 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 Series 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 *

Q1 1999 = 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-42 2		Based on the deflators of total sales 3 vis-à-vis				Based on consumer price indices vis-à-vis		
							26 selected industrial countries 4						
								of which:					
	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	Total	Euro area countries	Non-euro area countries	37 countries 5	26 selected industrial countries 4	37 countries 5	60 countries 6
1999	96.3	96.1	96.0	96.1	96.5	95.9	97.9	99.5	95.9	97.7	98.2	98.1	97.8
2000	87.2	86.8	86.1	85.7	88.1	86.1	91.9	97.4	85.5	91.1	93.0	92.2	91.2
2001	87.6	87.1	86.7	86.7	90.2	86.9	91.7	96.5	86.1	90.5	92.9	91.6	91.0
2002	89.9	90.2	89.8	90.4	94.5	90.5	92.4	95.6	88.6	91.1	93.4	92.1	91.9
2003	100.5	101.4	101.0	101.7	106.4	101.5	95.9	94.7	97.7	95.3	97.0	96.6	96.8
2004	104.3	105.2	104.0	105.0	110.8	105.3	96.2	93.5	100.2	95.6	98.4	98.1	98.4
2005	102.9	103.9	102.0	103.3	109.0	102.9	94.8	91.9	99.0	93.3	98.4	97.1	96.8
2006	102.9	103.9	101.4	102.2	109.1	102.3	93.6	90.3	98.4	91.6	98.5	96.7	96.0
2007	106.4	106.9	103.6	104.5	112.7	104.5	94.5	89.5	102.2	92.0	100.9	98.2	97.4
2008	110.2	109.8	105.9	108.9	117.4	106.9	94.9	88.3	105.3	91.3	102.3	98.4	97.6
2009	111.7	110.6	107.0	114.6	120.5	108.0	95.2	89.1	104.8	92.0	101.9	98.5	98.0
2010	104.5	102.9	98.8	106.6	111.9	99.0	92.6	88.7	98.3	88.2	98.7	94.2	92.5
2011	104.3	102.0	96.9	105.0	112.7	98.6	92.2	88.5	97.7	87.4	98.2	93.4	91.9
2012	98.6	96.8	91.4	99.0	107.5	93.8	90.1	88.3	92.6	84.7	95.9	90.5	89.0
2013	102.2	99.9	94.3	102.0	112.2	96.8	92.4	88.8	97.6	86.7	98.2	92.3	90.9
2014	102.4	99.3	94.2	102.7	114.6	97.2	93.0	89.6	97.8	87.4	98.2	92.5	91.5
2015	92.6	89.6	85.8	92.4	106.1	88.7	89.8	90.3	89.0	83.6	94.4	87.8	87.0
2016	95.3	91.6	88.0	p 93.6	110.1	90.7	90.6	90.7	90.5	84.9	95.1	88.8	88.2
2017	97.5	93.5	89.1	p 94.3	112.4	91.9	91.8	90.7	93.2	85.6	96.4	89.9	89.0
2018	100.0	95.7	90.5	p 95.8	117.3	95.1	92.8	90.7	96.0	86.4	97.7	91.1	90.9
2019	98.2	93.3	88.7	p 93.1	115.5	92.4	91.9	91.0	93.2	85.6	96.4	89.9	89.5
2020	99.7	p 93.7	...	...	119.4	p 94.0	...	...	...	...	p 96.5	p 90.1	p 90.3
2018 July	100.2	96.0			117.4	95.2					97.4	91.1	90.8
Aug.	99.9	95.5	90.4	p 96.1	117.8	95.4	92.7	90.6	95.6	86.4	97.3	91.0	91.0
Sep.	100.4	96.0			119.1	96.4					97.7	91.5	91.8
Oct.	99.7	95.5			117.8	95.3					97.3	91.1	91.1
Nov.	99.2	95.0	89.9	p 94.9	116.8	94.5	92.5	91.0	94.8	86.3	97.3	91.0	90.8
Dec.	99.3	94.8			117.0	94.3					97.2	90.8	90.6
2019 Jan.	98.8	94.3			116.3	93.7					96.8	90.4	90.1
Feb.	98.4	93.8	88.8	p 93.5	115.6	93.1	92.0	90.7	93.8	85.5	96.7	90.1	89.7
Mar.	97.9	93.2			115.2	92.5					96.4	89.7	89.4
Apr.	97.7	93.0			115.0	92.3					96.5	89.8	89.4
May	98.2	93.4	88.5	p 93.2	115.7	92.8	92.0	90.9	93.5	85.5	96.6	90.1	89.7
June	98.8	93.9			116.2	93.1					96.8	90.2	89.9
July	98.4	93.4			115.4	92.3					96.7	90.1	89.5
Aug.	98.9	93.9	88.9	p 93.5	116.2	93.0	92.0	91.2	93.1	85.7	96.5	90.2	89.8
Sep.	98.2	93.1			115.3	92.1					96.2	89.9	89.3
Oct.	98.1	92.9			115.3	91.9					96.2	89.8	89.2
Nov.	97.5	92.2	88.4	p 92.2	114.6	91.3	91.7	91.3	92.3	85.5	96.0	89.4	88.9
Dec.	97.4	92.1			114.7	91.1					95.9	89.4	88.8
2020 Jan.	97.0	91.4			114.2	90.5					95.9	89.1	88.4
Feb.	96.3	90.7	88.0	p 92.9	113.5	89.9	91.4	91.3	91.5	85.3	95.6	88.8	88.2
Mar.	99.0	93.1			117.8	p 93.2					96.6	90.2	p 90.2
Apr.	98.2	92.6			117.5	p 93.0					96.3	90.1	p 90.3
May	98.4	92.8	88.6	p 93.9	117.6	p 93.0	91.3	91.2	91.3	85.7	96.2	90.1	p 90.2
June	99.8	94.0			119.1	p 94.1					96.9	90.7	p 90.8
July	100.5	94.6			120.3	p 94.9					96.0	89.9	p 90.2
Aug.	101.6	95.1	90.0	p 94.0	122.4	p 96.0	p 92.4	p 91.2	93.9	p 86.6	97.0	90.7	p 91.3
Sep.	101.6	95.0			122.5	p 95.9					96.8	90.6	p 91.2
Oct.	101.4	p 94.9			122.4	p 95.8					96.6	p 90.5	p 91.0
Nov.	100.7	p 94.4	...	...	121.6	p 95.2	...	...	...	...	p 96.6	p 90.1	p 90.6
Dec.	101.9	p 95.5			123.0	p 96.1					p 97.2	p 90.7	p 91.1

***** 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. A decline in the figures implies an increase in competitiveness. The weights are based on trade in manufactured goods and services. For more detailed information on methodology and weighting scale, see the website of the Deutsche Bundesbank (https://www.bundesbank.de/content/796162). **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 and additionally Algeria, Argentina, Brazil, Chile, Colombia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, Peru, Philippines, the Russian Federation, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey, Ukraine and the United Arab Emirates. **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-42.

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 printed publications are available free of charge to interested parties and may be obtained through the Bundesbank's order portal. Up-to-date figures for selected statistical datasets are available on the Bundesbank's website. In addition, the new Statistical Series provide a new basic structure and advanced options for using data and are also available on the Bundesbank's website.

Annual Report

Financial Stability Review

Monthly Report

A list of the articles published in the period from 2010 to 2020 is available on the Bundesbank's website.

Monthly Report articles

February 2020
- The current economic situation in Germany

March 2020
- German balance of payments in 2019
- Households' digital purchases in the balance of payments
- New benchmark rates, new challenges: introducing the €STR in the euro area

April 2020
- Sectoral portfolio adjustments in the euro area during the low interest rate period
- The EU budget and its financing: looking back and ahead

May 2020
- The current economic situation in Germany

June 2020
- Outlook for the German economy for 2020 to 2022
- Cash withdrawals and payments in urban and rural areas

July 2020
- The German current account surplus through the lens of macroeconomic models
- Cash hoarding by German households – how much cash do they store and why?

August 2020
- The current economic situation in Germany

September 2020
- The impact of monetary policy on the euro's exchange rate
- Global financial interconnectedness and spillovers between the G20 countries
- The performance of German credit institutions in 2019

October 2020
- Developments in the German banking system during the negative interest rate policy period
- Patterns of international business cycles
- The protracted rise in residential property prices in Germany from a macroeconomic perspective: transmission channels and fundamental determinants
- State government budgets: results for 2019

November 2020
- The current economic situation in Germany

December 2020
- Outlook for the German economy for 2021 to 2023
- The informative value of national fiscal indicators in respect of debt at the European level
- Risk Reduction Act – the national implementation of the European banking package
- German enterprises' profitability and financing in 2019

January 2021
- The slowdown in euro area productivity growth
- Methodology and analytical options for the expanded statistics on banking groups' securities holdings
- The two-tier system for reserve remuneration and its impact on banks and financial markets

Statistical Series*

Banks
- Banking statistics, monthly
- Statistics on payments and securities trading, September

Corporate financial statements
- Consolidated financial statement statistics, June/December
- Financial statement statistics (extrapolated results), December
- Financial statement statistics (ratios), May
- Financial statement statistics (ratios – provisional data), May

Economic activity and prices
- Seasonally adjusted business statistics, monthly

Exchange rates
- Exchange rate statistics, monthly

External sector
- Balance of payments statistics, monthly
- Direct investment statistics, April
- International investment position and external debt, monthly

Macroeconomic accounting systems
- Financial accounts, June

Money and capital markets
- Capital market indicators, monthly
- Investment funds statistics, monthly
- Securities issues statistics, monthly

Special Statistical Publications

1 Banking statistics guidelines, July 2020[2]

2 Banking statistics, customer classification, July 2020[2]

For footnotes, see p. 88•.

3 Aufbau der bankstatistischen Tabellen, July 2013[1,2]

7 Notes on the coding list for the balance of payments statistics, September 2013

Special Publications

Makro-ökonometrisches Mehr-Länder-Modell, November 1996[1]

Europäische Organisationen und Gremien im Bereich von Währung und Wirtschaft, May 1997[1]

Die Zahlungsbilanz der ehemaligen DDR 1975 bis 1989, August 1999[1]

The market for German Federal securities, May 2000

Macro-Econometric Multi-Country Model: MEMMOD, June 2000

Bundesbank Act, September 2002

Die Europäische Union: Grundlagen und Politikbereiche außerhalb der Wirtschafts- und Währungsunion, April 2005[1]

Die Deutsche Bundesbank – Aufgabenfelder, rechtlicher Rahmen, Geschichte, April 2006[1]

European economic and monetary union, April 2008

Weltweite Organisationen und Gremien im Bereich von Währung und Wirtschaft, March 2013[1]

Discussion Papers°

50/2020
Interest rate pegs and the reversal puzzle: On the role of anticipation

51/2020
Classification of monetary and fiscal dominance regimes using machine learning techniques

52/2020
Anticipation effects of protectionist U.S. trade policies

53/2020
Real effects of foreign exchange risk migration: Evidence from matched firm-bank microdata

54/2020
Sovereign risk and bank fragility

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A random forest-based approach to identifying the most informative seasonality tests

56/2020
Bank capital forbearance and serial gambling

57/2020
Demographic change and the rate of return in PAYG pension systems

58/2020
Performance of maturity transformation strategies

59/2020
Hampered interest rate pass-through – A supply side story?

60/2020
Global oil prices and the macroeconomy: The role of tradeable manufacturing versus non-tradeable services

61/2020
Monetary policy, firm exit and productivity

62/2020
GMM weighting matrices in cross-sectional asset pricing tests

For footnotes, see p. 88•.

63/2020
Buried in the vaults of central banks – Monetary gold hoarding and the slide into the Great Depression

64/2020
Demographic change and the German current account surplus

65/2020
US business cycle dynamics at the zero lower bound

66/2020
"The devil is in the details, but so is salvation" – Different approaches in money market measurement

67/2020
Global value chain participation and exchange rate pass-through

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 Gesetz über das Kreditwesen, January 2008[1]

2a Solvency Regulation and Liquidity Regulation, February 2008[2]

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* The Statistical Series replace the Statistical Supplements and, in part, the Special Statistical Publications; they will be provided exclusively on the Bundesbank's website under Publications/Statistics.
o Discussion papers published from 2000 are available online.
1 Publication available in German only.
2 Available only as a download.