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# ❚ Contents

## Abbreviations and symbols

e   Estimated

p   Provisional

pe  Partly estimated

r   Revised

…   Data available at a later date

.   Data unknown, not to be published or not meaningful

0   Less than 0.5 but more than nil

−   Nil

Discrepancies in the totals are due to rounding.

# ❚ Commentaries

## ❚ Economic conditions

### Underlying trends

*German economic activity likely to have more or less stagnated in Q4 2022*

In the final quarter of 2022, real gross domestic product (GDP) is likely to have more or less stagnated, and thus exceeded previous expectations.[1] Overall, the latest data releases were better than had been assumed in the December projection.[2] High inflation and uncertainty surrounding the war in Ukraine weighed on the economy in the fourth quarter, but the situation in the energy markets eased markedly compared with the third quarter. In addition, further fiscal measures were taken which will alleviate some of the pressure households and enterprises are facing due to high energy costs. Moreover, supply bottlenecks in industry and construction became less of an issue. As a result, the business climate brightened over the course of the quarter, according to surveys by the ifo Institute. Output in both industry and construction increased based on data available up to November. However, high inflation dampened households' propensity to spend. On an average of October and November, price-adjusted sales in both the retail and the accommodation and food service sectors fell significantly compared with the third quarter. Car purchases provided positive impetus, by contrast, with motor vehicle registrations increasing extremely robustly in the fourth quarter according to data from the German Association of the Automotive Industry (VDA). This was partly due to advance purchases, as government subsidies for plug-in hybrids were scrapped at the end of 2022 and were reduced for electric vehicles.

*Provisional results show GDP rose by 1.9% in 2022*

According to provisional calculations by the Federal Statistical Office, real GDP rose by 1.9% on the year in 2022 as a whole (and by 2.0% after calendar adjustment). It thus slightly exceeded its pre-pandemic level again. The economic recovery was weakened by Russia's war of aggression against Ukraine. This led to new supply chain problems. The further spike in inflation and uncertainty about energy supply caused by the war weighed on firms and households. Private consumption nevertheless rose steeply, as the lifting of most coronavirus restrictions led to strong catch-up effects. Economic growth was also driven by exports and investment in machinery and equipment. By contrast, construction investment fell amid high construction prices and a substantial increase in lending rates.

### Industry

*Industrial output up somewhat in November*

In November 2022, seasonally adjusted[3] industrial output was somewhat higher on the month (+½%). On an average of October and November, it was up slightly overall on the third quarter (+½%). The energy crisis is mainly affecting energy-intensive industrial sectors.[4] Their output continued to decline steeply compared with the third quarter, whereas output increased markedly in the other industrial sectors as an aggregate. Production of intermediate goods, which encompasses the energy-intensive industrial sectors, dropped significantly. Production of consumer goods also fell considerably, although the manufacture of pharmaceutical products was substantially higher. By contrast, production of capital goods picked up considerably, rising particularly sharply in the automotive industry. According to data from the German Association of the

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**1** The Federal Statistical Office's provisional calculations of GDP for 2022 as a whole are also based on stagnant real GDP in the fourth quarter. See Federal Statistical Office (2023).
**2** See Deutsche Bundesbank (2022a).
**3** Seasonal adjustment here and in the remainder of this text also includes adjustment for calendar variations, provided they can be verified and quantified.
**4** Energy-intensive industrial sectors include the manufacture of chemicals and chemical products, the manufacture of basic metals, the manufacture of non-metallic mineral products, and the manufacture of paper and paperboard.

## Economic conditions in Germany*

Seasonally and calendar adjusted

| Period | Orders received (volume); 2015 = 100 | | | |
| | Industry | | | Main con-struction |
| | Total | of which: | | |
| | | Domestic | Foreign | |
|---|---|---|---|---|
| 2022 Q1 | 112.3 | 103.4 | 119.1 | 127.5 |
| Q2 | 106.2 | 102.3 | 109.1 | 110.4 |
| Q3 | 104.9 | 97.2 | 110.7 | 107.9 |
| Sep. | 102.1 | 96.7 | 106.2 | 103.0 |
| Oct. | 102.7 | 95.1 | 108.5 | 110.5 |
| Nov. | 97.3 | 94.1 | 99.7 | … |

| Period | Output; 2015 = 100 | | | |
| | Industry | | | Con-struction |
| | Total | of which: | | |
| | | Inter-mediate goods | Capital goods | |
|---|---|---|---|---|
| 2022 Q1 | 96.6 | 102.3 | 89.8 | 117.0 |
| Q2 | 95.7 | 101.1 | 89.7 | 113.2 |
| Q3 | 96.4 | 99.3 | 92.6 | 112.8 |
| Sep. | 97.1 | 98.6 | 94.1 | 111.7 |
| Oct. | 96.5 | 96.6 | 95.6 | 115.1 |
| Nov. | 97.0 | 97.7 | 96.3 | 112.6 |

| Period | Foreign trade; € billion | | | Memo item: Current account balance in € billion |
| | Exports | Imports | Balance | |
|---|---|---|---|---|
| 2022 Q1 | 370.79 | 344.03 | 26.76 | 52.56 |
| Q2 | 393.02 | 378.32 | 14.72 | 33.60 |
| Q3 | 400.89 | 394.16 | 6.73 | 16.70 |
| Sep. | 134.39 | 131.80 | 2.59 | 4.96 |
| Oct. | 135.46 | 128.64 | 6.82 | 9.25 |
| Nov. | 135.95 | 125.03 | 10.92 | 15.49 |

| Period | Labour market | | | |
| | Employ-ment | Vacan-cies[1] | Un-employ-ment | Un-employ-ment rate % |
| | Number in thousands | | | % |
|---|---|---|---|---|
| 2022 Q2 | 45,554 | 868 | 2,338 | 5.1 |
| Q3 | 45,597 | 847 | 2,492 | 5.5 |
| Q4 | … | 814 | 2,523 | 5.5 |
| Oct. | 45,657 | 821 | 2,517 | 5.5 |
| Nov. | 45,707 | 814 | 2,533 | 5.5 |
| Dec. | … | 807 | 2,520 | 5.5 |

| Period | Prices; 2015 = 100 | | | |
| | Import prices | Producer prices of industrial products | Con-struction prices[2] | Harmon-ised con-sumer prices |
|---|---|---|---|---|
| 2022 Q2 | 139.3 | 146.9 | 147.9 | 117.5 |
| Q3 | 146.8 | 165.7 | 151.7 | 120.0 |
| Q4 | … | … | 155.4 | 123.1 |
| Oct. | 146.2 | 165.3 | . | 123.4 |
| Nov. | 139.7 | 158.9 | . | 123.9 |
| Dec. | … | … | . | 122.1 |

* 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 and calendar-adjusted.

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Automotive Industry, the number of passenger cars produced suffered a setback in December, but rose significantly when averaged over the fourth quarter.

*Steep drop in demand for industrial products*

Industrial new orders declined steeply in November 2022 after adjustment for seasonal variations (-5¼%). Demand for industrial goods thus fell back below its pre-pandemic level for the first time since August 2020. Although large orders also contributed to this decline, order intake decreased strongly even after factoring them out. On an average of October and November, orders were down considerably on the third quarter (-4¾%). Orders received from the euro area countries fell particularly steeply, but sharply lower demand was also recorded in non-euro area countries and in Germany. The drop in demand affected almost all sectors, with the exception of the manufacture of pharmaceutical products and of motor vehicles and motor vehicle parts. Broken down by main groupings, demand for consumer goods fell only slightly, whereas manufacturers of capital and intermediate goods saw substantially lower incoming orders.

*Nominal industrial sales and goods exports up in November*

Nominal industrial sales experienced a significant month-on-month increase in November 2022 after seasonal adjustment (+1¾%). On an average of October and November, too, they were up markedly on the third quarter (+2%). Sales were distinctly higher in Germany and even saw a major rise outside Germany. While sales of capital and consumer goods rose strongly, sales of intermediate goods were down markedly. In November, nominal goods exports climbed slightly on the month after adjustment for seasonal variations. Averaged over October and November, they were distinctly higher than the third quarter. Since export prices declined, price-adjusted goods exports even saw a major increase (+3¼%). Exports to both euro area and non-euro area countries picked up. Nominal imports of goods declined sharply again in November (-2¾%). On an average of October and November, they were down considerably on the previous quarter

(-3½%). In price-adjusted terms, the decline was much milder (-1%), as import prices for energy, in particular, fell steeply. Imports of goods from both euro area and non-euro area countries decreased slightly in price-adjusted terms.

## Construction

*Construction output boosted by easing of supply-side bottlenecks*

Construction output declined significantly in November 2022 in seasonally adjusted terms (-2¼%). This was due to a steep drop in the finishing trades. Output rose distinctly in the main construction sector, however. Averaged over October and November, construction output increased somewhat on the previous quarter (+1%). While output in the main construction sector saw steep growth, it contracted markedly in the finishing trades. The mild weather in October and November for that time of year was beneficial for construction output. However, according to ifo Institute surveys, the percentage of firms in the main construction sector reporting that weather conditions were hampering construction activity rose again significantly in December. Construction activity in the fourth quarter was probably supported by receding shortages of labour and materials. This is also indicated by the ifo Institute's survey results. By contrast, high construction prices and increased interest rates continued to weigh on demand for construction work. Although new orders in the main construction sector saw a major improvement in October – the latest month for which data are available – they were still considerably lower than the highs of the fourth quarter of 2021. The number of building permits continued to decline sharply. According to ifo Institute surveys, the reach of the order books averaged over the fourth quarter of 2022 lagged somewhat behind the third-quarter average. Even so, the order books are still well stocked.

## Labour market

*Employment up significantly in November, outlook still slightly positive*

In seasonally adjusted terms, employment growth in November 2022 was again stronger than in the six months from April to the end of September. The substantial increase in the minimum wage as from 1 October has had no discernible negative impact. Instead, firms seem to be more optimistic again given the better than recently expected economic situation and outlook. The number of persons in work went up by 50,000 on the month. However, the Federal Employment Agency's initial estimate of employment subject to social security contributions – which only extends to October – is weak by comparison, with only a small increase compared with September 2022. By contrast, there was a relatively strong uptick in the number of persons in exclusively low-paid part-time jobs for the third month in a row. Short-time work for economic reasons was probably used again somewhat more frequently in October than in the previous two months. However, the level of take-up remains moderate. The leading indicators point to slightly positive employment growth in the coming months.

*Slight fall in unemployment*

Registered unemployment fell slightly by 13,000 persons to 2.52 million in December after adjustment for seasonal variations. The unemployment rate remained unchanged due to rounding, holding steady at 5.5%. Part of the decline is attributable to Ukrainian refugees, as they drop out of the unemployment statistics when their participation in a language or integration course makes them unavailable to the labour market. Total underemployment, by contrast, shows a small increase. This figure includes persons taking part in active labour market policy measures and integration measures. Despite positive employment growth, unemployment could tend to rise in the next few months given the large number of persons needing to be integrated. The unemployment barometer of the Institute for Employment Research (IAB) has improved slightly, but remains in negative territory.

# Prices

*Sideways movement in crude oil price, European gas prices down considerably*

Brent crude oil prices fluctuated around US$80 per barrel in December and January. Overall, price-dampening and price-driving factors balanced each other out. The broad lifting of administrative pandemic-related restrictions in China is likely to boost global oil demand in the future. However, the recovery in the Chinese economy initially ground to a halt due to a massive wave of COVID-19 infections. As this report went to press, a barrel of Brent crude oil cost US$84. Futures were being traded at slight discounts (US$1 for deliveries six months ahead and US$3¾ twelve months ahead). Due to mild weather conditions and the fact that gas inventories have even been rising again in some cases, European wholesale gas prices have dropped to €62 per megawatt hour in the past few weeks. This meant gas was around 20% cheaper than one year ago. In the medium and longer term, too, forward quotations are currently signalling significantly lower prices than just a few weeks ago.

*Broad-based price declines at upstream stages of economy*

In November, there were significant price reductions at the upstream stages of the economy. This was primarily due to energy. The costs of importing energy had already fallen in the preceding months and have now gone down again markedly. In addition, for the first time in more than two years, prices for imported non-energy inputs also dropped month on month in November. This was attributable to further price decreases for intermediate and consumer goods. Moreover, the rise in capital goods prices came to a standstill. Prices also retreated at the domestic producer level, albeit somewhat less strongly than in the previous month. Besides price decreases for energy, the prices of other components did not rise any further or even declined somewhat. Nevertheless, import prices in November were up by 14.5% on the year and producer prices by as much as 28.2%.

Consumer price dynamics also continued to weaken in December. This likewise mainly re-lated to energy prices. They declined significantly owing to the government's assumption of monthly gas and district heating bills (December immediate assistance) and a further reduction in crude oil prices. As a result, the Harmonised Index of Consumer Prices (HICP) was 1.5% lower on the month after seasonal adjustment, which constituted the largest decline by far since the introduction of the euro. However, prices of non-energy components continued to rise sharply. This applies both to food and to industrial goods and services. The annual inflation rate in Germany stood at 9.6% in December, thus dropping back into single digits for the first time since August.[5] This decrease is mainly due to the one-off immediate assistance in December, and is therefore likely to be temporary. Starting in January 2023, the gas and electricity price brakes are set to already be included in the official price statistics, but this is likely to dampen the inflation rate less sharply than the immediate assistance in December had done earlier. The core inflation rate, which strips out energy and food prices, climbed slightly by 0.3 percentage point to 5.4%, by contrast. It thus reached a new all-time high.

*Inflation rate temporarily back to single digits in December*

Historically high inflation rates were recorded in 2022. As measured by the HICP, the annual rate of inflation was 8.7%, which was by far the highest figure since the introduction of the euro.[6] This was caused by several factors. Over the course of 2021 already, aggregate demand had risen sharply amid the subsiding coronavirus pandemic. However, this demand could not be met directly, as global supply chains were still severely constrained at the beginning of 2022. These price-driving effects were crucially amplified by Russia's invasion of Ukraine, resulting not only in renewed price surges for

*Historically high inflation in 2022*

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**5** The national consumer price index (CPI) increased by 8.6% on the year, down from 10.0% in November. The CPI rate is currently significantly lower than the HICP rate because services have a higher weight in the CPI owing to the inclusion of owner-occupied housing, and prices for services are not rising as sharply as goods prices at the moment.
**6** As measured by the CPI, the rate in 2022 was 7.9%.

energy commodities but also in a tightening of supply bottlenecks.

## Public finances[7]

### Local government finances

*Local governments record surplus in Q3 2022 – result thus somewhat improved again*

Local governments (core budgets and off-budget entities) posted a surplus of almost €1 billion in the third quarter of 2022. The result thus remained more favourable (+€1 billion) than in the same quarter of the previous year. Revenue again rose substantially, by 8½% (+€6½ billion), with taxes climbing by 13% (+€3½ billion). Growth in receipts from local business tax – a large revenue item – was even somewhat stronger. In this respect, there was no sign of higher energy prices having weighed on corporate profits. State government transfers increased by 7% (+€2 billion) and receipts from fees by 10%. In the latter case, burdens caused by pandemic-related restrictions now seem to have largely been overcome.

*Growth in expenditure reflects, not least, price effects*

At 7%, expenditure growth was also strong. The rise in fixed asset formation and other operating expenditure was even slightly stronger still. Inflation probably continued to play a key role in this. In addition, spending on social benefits rose substantially (+7%, or just over €1 billion). Around one-third of this increase was attributable to spending on benefits for asylum seekers. Accommodation costs for recipients of unemployment benefit II also climbed significantly, owing to the influx of refugees from the war in Ukraine.

*Local governments likely to post considerable surplus for 2022 as a whole*

After the first three quarters of 2022, the cumulated local government deficit was just under €1 billion, which was €5 billion lower than it had been a year earlier. In the final quarter, a fairly large surplus is to be expected again solely as a result of the way income tax shares are booked. This remains true even given weaker tax revenue growth at the end of the year. Local governments are thus likely to post

**Local government fiscal balance**
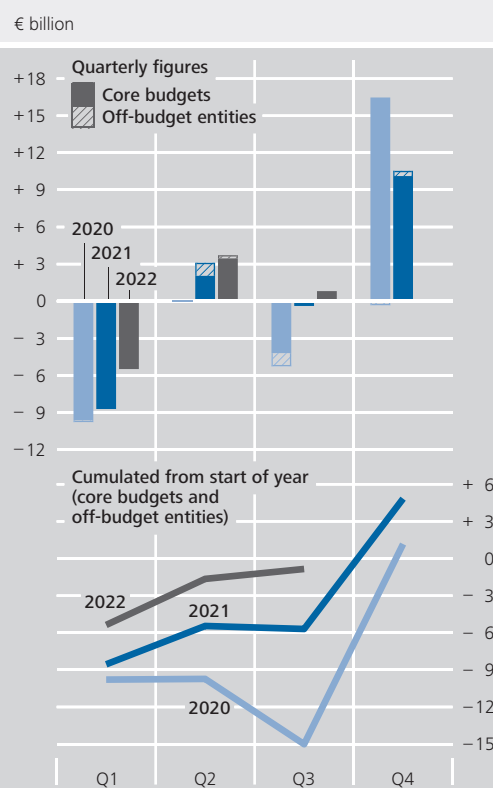
€ billion



Source: Federal Statistical Office.
Deutsche Bundesbank

a considerable surplus for 2022 as a whole (2021 as a whole: +€4½ billion).

*Significantly worse outlook for this year*

The financial result is likely to deteriorate significantly this year. Based on the latest tax estimate and after adjustment for interim legislative changes, revenue growth of 3% can be expected.[8] On the expenditure side, burdens arising from high inflation are mounting. In addition, wage negotiations for central and local government employees are imminent. These are likely to result in much higher wage adjustments than in previous years. Chiefly for this reason, the Federal Government is budgeting for a rise of 11% in its staff expenditure in

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**7** The short commentaries on public finances present cash outturns that were not yet available when the previous quarterly report on public finances (February, May, August and November) went to press. A broad overview of the data can be found in the statistical section of this report. **8** See Deutsche Bundesbank (2022b) for information on the tax estimate from a general government perspective, including interim legislative changes and other uncertainties.

the new financial year, for instance. Given a comparable increase, local government will probably close the year with a budget deficit for the first time since 2014.

## ■ Securities markets

### Bond market

*High net issuance in the German bond market in November 2022*

In November 2022, issuance in the German bond market stood at €148.5 billion in gross terms (previous month: €165.1 billion). After deducting redemptions, which were 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 €35.6 billion. The outstanding volume of foreign debt securities in Germany also rose by €1.2 billion. The funds raised from sales of domestic and foreign debt securities in the German market therefore amounted to €36.8 billion.

### Sales and purchases of debt securities

€ billion

| | 2021 | 2022 | |
| --- | --- | --- | --- |
| Item | Nov. | Oct. | Nov. |
| Sales | 31.5 | 52.7 | 35.6 |
| Domestic debt securities[1] of which: | | | |
|    Bank debt securities | 6.6 | − 6.1 | − 0.5 |
|    Public debt securities | 16.6 | 52.0 | 30.9 |
| Foreign debt securities[2] | 8.2 | − 7.7 | 1.2 |
| Purchases | | | |
| Residents | 34.9 | 64.8 | 5.2 |
|    Credit institutions[3] | − 0.5 | 4.3 | 0.2 |
|    Deutsche Bundesbank | 23.4 | 3.6 | 4.0 |
|    Other sectors[4] of which: | 12.0 | 56.9 | 1.0 |
|      Domestic debt securities | 2.9 | 64.7 | 3.7 |
| Non-residents[2] | 4.9 | − 19.7 | 31.6 |
| Total sales/purchases | 39.7 | 45.0 | 36.8 |

**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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*Net public sector issuance*

The public sector issued debt securities to the tune of €30.9 billion net in the reporting month, compared with €52.0 billion in October. Ultimately, this was solely attributable to central government (€32.9 billion). It issued primarily Treasury discount paper (Bubills: €10.8 billion), but also two-year Treasury notes (Schätze: €6.0 billion) and ten-year and seven-year Federal bonds (Bunds: €5.4 billion and €4.0 billion, respectively). State and local government redeemed capital market liabilities worth €1.9 billion net.

*Enterprises' capital market debt higher*

Domestic enterprises augmented their capital market debt by €5.2 billion net in the reporting month, compared to €6.8 billion in the previous month. Non-financial corporations were by far the chief issuers of new bonds, on balance, but insurers and other financial intermediaries were also active in the market.

*Net redemptions by credit institutions*

The outstanding volume of debt securities issued by domestic credit institutions fell by €0.5 billion in November, following a decline of €6.1 billion in the preceding month. On balance, redemptions principally involved debt securities issued by specialised credit institutions (€2.9 billion) and public Pfandbriefe (€1.0 billion). By contrast, other bank debt securities and mortgage Pfandbriefe were issued in the amount of €2.6 billion and €0.7 billion net, respectively.

*Purchases of debt securities*

Among the various investor groups, foreign investors were the main buyers in November on balance, acquiring German bonds worth €31.6 billion net. The Bundesbank acquired debt securities amounting to €4.0 billion net, predominantly under the Eurosystem's asset purchase programmes. Domestic non-banks and credit institutions purchased bonds worth €1.0 billion and €0.2 billion net, respectively.

### Equity market

*Low net issuance of German equities*

In the reporting month, domestic enterprises placed €0.2 billion worth of new shares in the German equity market (October: €0.6 billion).

In the same period, the outstanding volume of foreign equities in the German market declined by €5.3 billion. On balance, shares were purchased by foreign investors (€1.9 billion) and domestic credit institutions (€1.4 billion). By contrast, domestic non-banks pared back their equity portfolios by €8.3 billion in net terms.

## Mutual funds

*Mutual funds record outflows of funds*

In November, domestic mutual funds redeemed their own shares to the tune of €2.6 billion (previous month: net issuance of €4.0 billion). On balance, this involved only specialised funds reserved for institutional investors (€3.2 billion). Among the various asset classes, outflows of capital were recorded in particular by mixed securities funds (€3.4 billion) and equity funds (€2.5 billion). By contrast, open-end real estate funds and bond funds recorded inflows of €1.3 billion and €1.1 billion, respectively. Foreign mutual funds placed shares worth €3.7 billion in the German market in the reporting month. On balance, domestic non-banks were the primary purchasers, adding a net €1.0 billion worth of mutual fund shares to their portfolios. Domestic credit institutions acquired mutual fund shares for €0.5 billion net, while foreign investors sold domestic fund shares for €0.4 billion on balance.

## ▪ Balance of payments

*Steep rise in current account surplus*

Germany's current account recorded a surplus of €16.9 billion in November 2022, up €11.2 billion on the previous month's level. This was caused by the larger surplus in the goods account and the shift to a surplus in invisible current transactions, which comprise services as well as primary and secondary income.

*Goods account surplus widened*

In November, the surplus in the goods account grew by €6.8 billion on the month to €13.1 billion because receipts recorded a much steeper increase than expenditure.

## Major items of the balance of payments

€ billion

| | 2021 | 2022 | |
| Item | Nov. | Oct. | Nov.**P** |
|---|---|---|---|
| I. Current account | + 20.9 | + 5.7 | + 16.9 |
| 1. Goods | + 14.6 | + 6.3 | + 13.1 |
| Receipts | 126.7 | 133.0 | 140.4 |
| Expenditure | 112.1 | 126.7 | 127.3 |
| Memo item: | | | |
| Foreign trade[1] | + 11.3 | + 5.2 | + 11.1 |
| Exports | 126.0 | 135.3 | 142.8 |
| Imports | 114.6 | 130.1 | 131.7 |
| 2. Services | − 0.1 | − 6.9 | − 2.0 |
| Receipts | 30.2 | 32.5 | 32.1 |
| Expenditure | 30.3 | 39.4 | 34.1 |
| 3. Primary income | + 12.1 | + 11.6 | + 12.3 |
| Receipts | 19.4 | 20.8 | 21.6 |
| Expenditure | 7.4 | 9.2 | 9.3 |
| 4. Secondary income | − 5.7 | − 5.4 | − 6.5 |
| II. Capital account | − 1.1 | − 1.9 | − 2.2 |
| III. Financial account (increase: +) | + 48.4 | + 23.6 | − 6.5 |
| 1. Direct investment | + 21.5 | + 11.2 | − 15.2 |
| Domestic investment abroad | + 39.0 | + 20.6 | − 0.9 |
| Foreign investment in the reporting country | + 17.4 | + 9.4 | + 14.3 |
| 2. Portfolio investment | + 33.2 | + 7.4 | − 31.6 |
| Domestic investment in foreign securities | + 27.9 | − 10.6 | + 1.5 |
| Shares[2] | + 3.7 | − 3.9 | − 3.4 |
| Investment fund shares[3] | + 15.9 | + 0.9 | + 3.7 |
| Short-term debt securities[4] | − 2.4 | − 2.2 | + 1.4 |
| Long-term debt securities[5] | + 10.6 | − 5.5 | − 0.2 |
| Foreign investment in domestic securities | − 5.3 | − 18.0 | + 33.1 |
| Shares[2] | − 9.3 | + 2.4 | + 1.9 |
| Investment fund shares | − 1.0 | − 0.8 | − 0.4 |
| Short-term debt securities[4] | + 12.5 | − 17.8 | + 9.8 |
| Long-term debt securities[5] | − 7.6 | − 2.0 | + 21.8 |
| 3. Financial derivatives[6] | + 10.2 | + 5.9 | + 1.4 |
| 4. Other investment[7] | − 17.6 | − 1.6 | + 38.5 |
| Monetary financial institutions[8] | − 27.5 | − 4.0 | + 20.5 |
| of which: Short-term | − 16.9 | − 0.6 | + 10.8 |
| Enterprises and households[9] | − 8.4 | + 19.5 | + 13.4 |
| General government | − 4.3 | + 2.9 | + 0.6 |
| Bundesbank | + 22.6 | − 20.0 | + 3.9 |
| 5. Reserve assets | + 1.0 | + 0.7 | + 0.4 |
| IV. Errors and omissions[10] | + 28.6 | + 19.8 | − 21.2 |

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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*Invisible current transactions shifted to surplus mainly due to decline in travel expenditure*

Invisible current transactions shifted from a deficit of €0.6 billion in October to a surplus of €3.8 billion. This was mainly due to the deficit in the services account narrowing by €4.9 billion to €2.0 billion, with the seasonal reduction in travel expenditure playing a key role. In addition, net receipts from primary income rose slightly by €0.7 billion to €12.3 billion, mainly owing to residents' higher income from portfolio investment abroad. By contrast, the deficit in the secondary income account widened by €1.2 billion to €6.5 billion, with a considerable contribution to this coming from higher general government payments to the EU budget in connection with financing related to gross national income.

*Portfolio investment sees net capital imports*

In November 2022, financial markets were characterised by somewhat diminishing downside risks to economic activity amid persistently high inflation. Germany's cross-border portfolio investment generated net capital imports of €31.6 billion (October: net capital exports of €7.4 billion). Foreign investors increased their holdings of German securities by €33.1 billion, mainly acquiring bonds (€21.8 billion), money market paper (€9.8 billion) and shares (€1.9 billion). By contrast, they sold mutual fund shares of German enterprises to the tune of €0.4 billion. For their part, resident investors barely purchased foreign securities (€1.5 billion) on balance, adding mutual fund shares (€3.7 billion) and money market paper (€1.4 billion) to their portfolios, whilst offloading shares (€3.4 billion) and bonds (€0.2 billion).

In November, transactions in financial derivatives recorded outflows of €1.4 billion (October: €5.9 billion).

*Direct investment sees capital inflows*

Direct investment generated net capital imports of €15.2 billion in November (October: net capital exports of €11.2 billion). Foreign enterprises boosted their direct investment funds in Germany by €14.3 billion. They mainly topped up their cross-border loans (€12.6 billion), predominantly through financial loans. In addition, foreign companies provided their affiliates in Germany with equity capital (€1.7 billion), with reinvested earnings accounting for more than half of this amount. Conversely, German enterprises scaled back their foreign direct investment by €0.9 billion. They reduced the volume of loans issued to foreign enterprises (€7.2 billion), doing so exclusively by granting fewer financial loans. By contrast, they stepped up their equity capital in affiliates abroad by €6.3 billion, with reinvested earnings playing an important role here, too.

*Net capital exports in other investment*

Other statistically recorded investment – which comprises loans and trade credits (where these do not constitute direct investment), bank deposits and other investments – registered net capital exports amounting to €38.5 billion in November (following net capital imports of €1.6 billion in October). All sectors contributed to this development. The net claims of monetary financial institutions excluding the Bundesbank went up (€20.5 billion), as did those of enterprises and households (€13.4 billion), the Bundesbank (€3.9 billion) and, to a lesser extent, general government (€0.6 billion). The Bundesbank's TARGET2 claims grew by €4.0 billion.

*Reserve assets*

The Bundesbank's reserve assets grew – at transaction values – by €0.4 billion in November.

## ▪ List of references

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# From the monetary pillar to the monetary and financial analysis

*In the summer of 2021, the Governing Council of the ECB, in the latest review of its monetary policy strategy, made it clear that the content of the existing "monetary analysis" had become increasingly broader since its last review in 2003. Against this background, the present article traces the development of the monetary analysis from the beginning of monetary union to the present.*

*At the beginning of monetary union, the two-pillar strategy enabled the ECB Governing Council to look at all information relevant to the monetary policy decision-making process in a structured manner. In this context, the "monetary pillar" initially focused on the money supply. However, the deviation of money growth from its reference value played a prominent role only at the start of monetary union. This was due, amongst other things, to the weakening of the relationship between money growth and inflation and to changes in the macroeconomic environment that confronted monetary policy with new challenges.*

*Following the global financial crisis, studies of the transmission of monetary policy measures via the financial system gained in importance, particularly the deployment and design of the new non-standard monetary policy measures introduced in the low-inflation environment. In addition, the monetary analysis has made valuable contributions to the identification of financial shocks and their impact on the real economy. As a consequence, since the recent strategy review, the ECB Governing Council now uses the term "monetary and financial analysis". This analysis is also tasked with taking greater account of financial stability aspects than it had before.*

*With the pandemic, the energy crisis and high inflation, the issues to be addressed by the monetary and financial analysis have shifted once again. One such issue that arises, for instance, is the extent to which the high money growth in 2020 could have caused the rise in inflation in 2021-22. Our analyses suggest that the strong money growth in the first phase was driven by the build-up of liquidity buffers, which, in and of itself, is not inflationary. Subsequently, money growth and inflation were supported by aggregate demand shocks, which are likely to be attributable to fiscal support measures taken during the COVID-19 pandemic, as well as by an accommodative monetary policy.*

*Against the backdrop of the currently very high inflation rates, the monetary and financial analysis now needs to assess how the monetary policy tightening that began at the end of 2021 is affecting the financing conditions of banks, firms and households. Available data and models suggest that the transmission process is intact and that monetary policy tightening is being transmitted to the real economy as expected. The current monetary policy stance is also confirmed to be appropriate when taking into account the attendant risks to financial stability. Given the stable situation of the euro area banking system at present, it is currently unlikely that the tightening of monetary policy envisaged by the ECB Governing Council will lead to any major negative feedback loops between the financial system and the real economy.*

## Monetary and financial analysis in transition

*2021 strategy review clarified content of the monetary and financial analysis …*

In July 2021, the ECB Governing Council unveiled the results of its review of the Eurosystem's monetary policy strategy and, at the same time, adopted its new strategy.[1] This strategy is designed to address the challenges to monetary policy that have arisen since the last strategy review in 2003. With regard to the monetary analysis, the Eurosystem used the strategy review to bridge the gap between public perception and its own analytical practice: the ECB Governing Council clarified that the content of the monetary analysis had become increasingly broader since 2003 and that it would now cover financial markets and the financial situation of banks, firms and households. In this respect, it was only logical to rebrand the "monetary analysis" as the "monetary and financial analysis".[2]

*… integrated monetary and financial analysis more closely with economic analysis …*

The Eurosystem's strategy review also reflected the lessons for monetary policy learned from the global financial crisis. One key lesson was that there are close links between the real economy and the financial system, which must be taken into account when making monetary policy decisions. Against this background, the ECB Governing Council replaced the previous two-pillar structure, which was characterised by the coexistence of the monetary analysis and the economic analysis, with an integrated analytical framework in which monetary and financial analysis is an integral part. Within this framework, the "economic analysis" and the "monetary and financial analysis" no longer represent two separate perspectives on inflation. Instead, the interrelationships between economic developments and monetary and financial developments are now explicitly taken into account in the assessment of inflation risks and in the orientation of monetary policy. The contents of the analysis are therefore more closely interlinked.

The ECB Governing Council also decided to give more weight to financial stability aspects in the monetary policy debate and assigned this topic to the monetary and financial analysis.[3] Although financial stability is not an independent monetary policy objective, it is a key prerequisite for price stability and is also necessary for effective monetary policy transmission.[4] This poses great analytical challenges because the interrelationships between monetary policy, financial stability and macroprudential policy, and their interaction in various phases of economic and financial cycles, are complex and have not yet been comprehensively researched.[5]

*… and explicitly incorporated financial stability considerations into the monetary and financial analysis*

Against this background, the present article will begin by tracing the development of the monetary analysis from the beginning of monetary union to the 2021 strategy review. It will then discuss the specific issues addressed by the monetary and financial analysis in the current environment of monetary policy tightening.

*Structure of this article*

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**1** For a comprehensive presentation of the results, see Deutsche Bundesbank (2021a).

**2** At the same time, the ECB Governing Council made it clear that the monetary and financial analysis in its new form would no longer be confined to the medium term alone. It would also increasingly look at shorter-term developments, for example as part of its analyses of the transmission of monetary policy impulses through the financial sector.

**3** Financial stability aspects were not alien to the monetary analysis even before the strategy review, especially since bank loans are the main source of trend money growth. However, the strategy review expanded and gave structure to the relevant analytical mandate.

**4** See Deutsche Bundesbank (2015a).

**5** For more on the methodological challenges of a joint analysis of business cycles and medium-term financial cycles, see, for example, WGEM Team on Real and Financial Cycles (2018). The topic is also discussed in Boyarchenko et al. (2022) and Ajello et al. (2022).

## Looking back: The evolution of the monetary analysis from the start of monetary union to the second strategy review

### Diminishing importance of the money growth-inflation relationship

*The Eurosystem's original two-pillar strategy, in which the money supply played a prominent role*

From the outset, a key element of the Eurosystem's monetary policy strategy was to structure the assessment of risks to price stability on the basis of two analytical perspectives (two-pillar strategy). The monetary pillar encompassed the assessment of risks to price stability using monetary indicators, while the economic pillar comprised a broadly based analytical approach with a focus on real economic developments and cost dynamics.[6] Within the monetary pillar, the money supply initially played a prominent role, which was embodied in the formulation of a reference value for the growth of the broad monetary aggregate M3 and its annual review by the ECB Governing Council.[7] In an environment of high uncertainty resulting from the introduction of the single currency, the ECB Governing Council sought to ensure that the relationship between money growth and inflation was sufficiently incorporated into the assessment of risks to price stability. Moreover, as a young institution with no track record of its own, the Eurosystem was concerned with building on the Bundesbank's culture of stability.[8]

*After 2003: Focus on analysing underlying money growth and the information it provides on the trend rate of inflation*

However, even in the early years of monetary union, the information content of money growth for future inflation developments already proved to be limited in the short term. One reason for this was the impact on monetary developments of the non-bank sector's portfolio shifts, which were unrelated to the aggregate demand for goods and thus to potential risks to price stability.[9] Subsequently, the reference value for money growth receded into the background and its annual review was dis-

continued with the 2003 strategy review. The monetary pillar evolved into the monetary analysis that – complementing the economic analysis – was intended to flag medium-term to long-term risks to price stability.[10] This took place due to the empirically documented relationship between the trend components of money growth and inflation. By contrast, corresponding analyses failed to identify a stable relationship between the short-term to medium-term changes in the two time series. The identification of the relevant long-term component of money growth – the "underlying money growth" – was based both on statistical methods and on a comprehensive analysis of the determinants of changes in the money supply, its components and counterparts, including at the sectoral level.[11] An important reason for this comprehensive analysis was the challenge of identifying underlying money growth for the monetary policy decision-making process in real time.[12]

*Empirical evidence shows a weakening of the long-term relationship between money growth and inflation, too*

However, studies published since the mid-2000s show that the long-term relationship between money growth and inflation has also changed over time and weakened in an environment of low and stable inflation rates (see the box on pp. 18 ff.). This evidence suggests that, in such an environment, the long-term component of money growth likewise has only limited information content for monetary policy.

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6 See, for example, European Central Bank (2011), p. 69.
7 The reference value for the annual growth rate of the monetary aggregate M3 was 4.5%.
8 See Issing (2006) and European Central Bank (2000).
9 See Holm-Hadulla et al. (2021a), p. 30 f.
10 The contribution of the economic analysis focused on short-term to medium-term price stability risks.
11 See, for example, Drudi et al. (2010), p. 83 f.
12 See, for example, Drudi et al. (2010), pp. 77 ff. and 96 f. Identifying the long-term trend component of money growth using statistical methods in real time is fraught with great uncertainty. A key reason for this is that, owing to the absence of data on future money growth, two-sided filters cannot be used at the current end. However, one-sided filters, which only consider current data and past observations, are less accurate.

## Empirical evidence concerning the long-term relationship between money growth and inflation

The quantity theory of money predicts a stable, long-term 1:1 relationship between money growth and the growth rate of the price level, i.e. the inflation rate.[1] However, empirical studies published over the past 15-20 years suggest that the long-term relationship between money growth and inflation is subject to change over time.

The first set of analyses includes cross-sectional studies of the relationship between average money growth and inflation rates across different economies over long periods of time.[2] De Grauwe and Polan (2005) take this approach in their examination of the long-term empirical relationship between the growth rates of the monetary aggregates M1 and M2 and of inflation in a sample of more than 100 countries. They show that, in regressions of the inflation rate on the money growth rate, the coefficient of money growth varies with the level of money growth. For average money growth rates below 10%, the regression coefficient is not significantly different from zero.[3]

Teles et al. (2016) use a similar approach to investigate the relationship between M1 growth and the inflation rate of countries where average inflation was below 12% in the sample period. The theoretically expected 1:1 relationship can only be seen if money growth is corrected for the other factors contained in the quantity equation – real GDP growth and changes in the velocity of circulation caused by changes in the opportunity cost of holding money. However, for one subset of countries, whose central banks pursued an implicit or explicit strategy of direct inflation targeting, there was still no evidence of a quantity theory relationship even in this case, i.e. there appears to be no discernible link between money growth and inflation. These countries still show cross-sectional dispersion of (corrected) money growth. However, central banks' stability-oriented monetary policy goes hand in hand with a very low dispersion of inflation, with the result that the correlation between money growth and inflation tends toward zero.

The second set of approaches encompasses time series analyses of the relationship between money growth and inflation in individual economies. Benati (2009) examines the relationship between the trends in the growth rates of various monetary aggregates and inflation and how it changes over time in a number of countries using frequency domain techniques. His results show that, although the trends in money growth and inflation exhibit common fluctuations, the change in the inflation trend associated with a given change in the money growth trend can nevertheless be very small over long periods. Benati explains the results using simulations of a model in which the drivers of money growth and inflation change over time. If unexpected changes in the velocity of money in circulation – i.e. money demand shocks – dominate, a given change in the trend growth of money has only a weak effect on inflation. Periods in which the central bank does not – or, due to external influences, cannot – pursue a stability-oriented monetary policy lead to a sustained increase in inflation and

**1** See Lucas (1996), p. 665.
**2** A well-known example of this analytical approach can be found in McCandless and Weber (1995).
**3** This result is supported by further analyses using panel regressions, see De Grauwe and Polan (2005).

money growth and to the correlation between the changes in the two variables rising towards one.[4]

Sargent and Surico (2011) show that, for the United States, the coefficient of a regression of the inflation trend on the M2 growth trend is also significantly lower than one over longer periods.[5] They develop a quantitative model in which the disappearance of the 1:1 relationship between the long-term trends of money growth and inflation can be explained by changes in the monetary policy reaction function. In their simulations, a credible stability-oriented monetary policy causes the relationship between money growth and the inflation that was previously visible in the data to become weaker or disappear.[6]

Gao et al. (2021) review developments in inflation rates and money growth rates (M1) for a large group of countries, adjusted for short-term fluctuations. They correct money growth for changes in real GDP growth and the opportunity cost of holding money. The graphical comparison shows common fluctuations in the two variables for some of the economies under review. For other countries, including Germany, however, the correlation appears to be weak.[7] The authors attribute these differences to monetary policy regime changes and support this hypothesis with simulations based on a New Keynesian macroeconomic model. In this model framework, the assumption of a time-varying inflation target subject to persistent fluctuations leads to the quantity theory relationship between money growth and inflation becoming visible in the data, while the correlation is weak given a constant inflation target.

The model-based explanations proposed by Benati (2009), Sargent and Surico (2011) and Gao et al. (2021) indicate that the empirical relationship between money growth and inflation is strongly influenced by monetary policy and that the transition to a stability-oriented monetary policy has weakened the relationship that was previously visible between the two variables.

Analyses of the long-term relationship between money growth and inflation in the euro area are complicated by the limited length of the sample period. Mandler and Scharnagl (2023) examine the relationship between growth in the monetary aggregate M3 and the Harmonised Index of Consumer Prices (HICP) inflation rate in the euro area using a dataset ranging from 1970 to 2022.[8] The wavelet analysis-based tools used for this purpose allow the relationship between the time series to be examined for

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**4** In the model, these shocks are presented as trend inflation shocks, see Ascari and Ropele (2009).

**5** Their analysis includes regressions with filtered inflation and money growth rates based on Lucas (1980), and a calculation of the cross-spectral gain for frequency zero using an estimated time-varying vector autoregressive model. Benati (2021) conducts a similar study for 17 countries. He interprets the results of his analyses using a time-varying vector autoregressive model as evidence of a 1:1 relationship between money growth and inflation rate trends. His regression analysis of the low-frequency components of money growth and inflation using the Müller and Watson (2018) approach provides evidence of a weakening of the relationship between money growth and inflation after 1985. However, the estimation uncertainty is very high.

**6** The model assumes a 1:1 relationship between money growth and inflation in the money demand function, i.e. a quantity theory relationship is included in the model via money demand. In the case of an aggressive anti-inflationary monetary policy response, however, this relationship is not reflected in regressions of the trend components, as the central bank prevents the emergence of persistent movements in money growth.

**7** Gao et al. (2021) use the Hodrick-Prescott (HP) filter to remove short-term fluctuations from the time series. However, the properties of the HP filter can create artificial correlations between the two filtered time series; see, for example, Hamilton (2018).

**8** This is an update of the analysis of Mandler and Scharnagl (2014) based on an extended data set reaching as far back as possible. Another difference is a modified bootstrap algorithm for the significance tests which takes account of possible heteroscedasticity. See Mandler and Scharnagl (2023).

possible changes over time and across fluctuations of different lengths.[9]

The authors find evidence of a strong, stable correlation between long-term fluctuations in the growth rate of M3 (corrected for real GDP growth) and the inflation rate with a fluctuation period of 24 to 40 years.[10] For these long-term fluctuations, the relationship between changes in money growth and inflation is close to the 1:1 relationship expected on the basis of quantity theory. Fluctuations in both time series are contemporaneous, i.e. there is no evidence of money growth leading inflation. The lack of a lead of money growth and the problems associated with estimating the relevant long-term fluctuations in money growth at the current end mean that the long-term relationship identified provides very little information on the future inflation

rate that could be utilised for monetary policy purposes.

The results described above are valid for a period between around 1990 and the early 2000s. This is because the estimation of the relationship between the variables using the wavelet approach requires many data points before and after the time period under observation. This approach does not allow a sufficiently accurate assessment of whether the relationship has changed in the period thereafter.

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**9** For more information on wavelet analysis, see the annex in Deutsche Bundesbank (2019b).
**10** The maximum length of the fluctuations that can be analysed using this procedure and this specific dataset length is 40 years.

## Growing importance of analysing the monetary policy transmission process

*Monetary analysis provides information on monetary policy transmission mechanism …*

Despite the change in the assessment of the information content of monetary developments, the monetary analysis has remained a source of important information for the monetary policy decision-making process. The monetary policy transmission process now forms a new focal point of the monetary analysis. This concerns the mechanisms through which changes in monetary policy instruments feed through to economic activity and inflation. With the global financial crisis, potential changes or disruptions to the transmission process and the use of novel monetary policy instruments took centre stage in the monetary policy debate. The monetary analysis has proven to be well suited to providing analyses of the monetary policy transmission process for monetary policy decision-making.[13]

The chart on p. 21 shows a stylised depiction of the transmission of policy rate changes. At the early stages of many of the monetary policy transmission mechanisms, monetary policy instruments affect financial variables.[14] The impact of monetary policy on banks' funding costs and loan supply, i.e. on lending rates and other lending conditions, is of particular importance for the euro area as a bank-based financial system. These are variables that had already featured prominently in the monetary analysis. First, in the balance sheet context, bank lending is the most important determinant of monetary developments. Second, data on banks' lending and deposit rates, as well as information on the loan market from the Bank

*… as the monetary and financial data it studies capture the early stages of the transmission process*

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**13** For an overview of studies on monetary policy transmission from the monetary analysis, see also Holm-Hadulla et al. (2021a).
**14** For an explanation of the transmission channels to developments in loans and the money supply, see Deutsche Bundesbank (2017a). More detailed explanations of the monetary policy transmission mechanisms can be found, for example, in Mishkin (2019), Chapter 26.

## Transmission of policy rate changes



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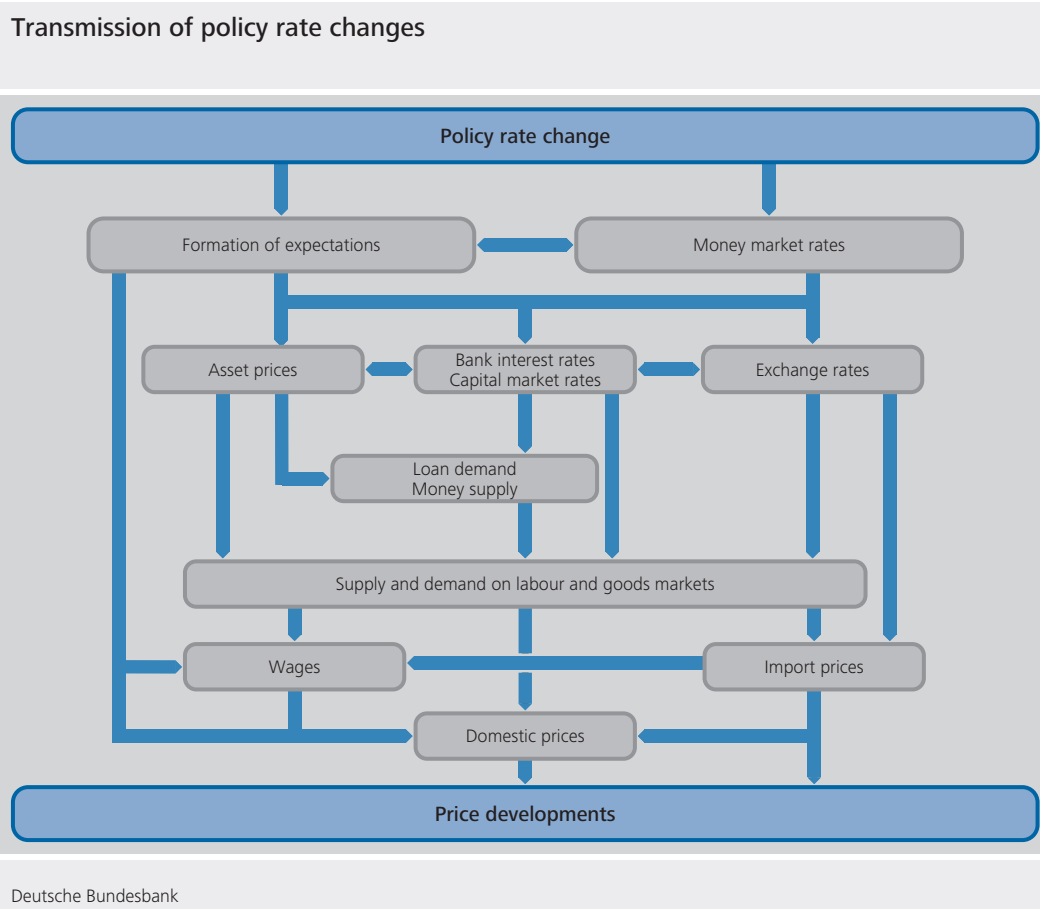
Lending Survey (BLS), have already been used by the monetary analysis to assess the determinants of monetary developments.

*Heterogeneous developments in the euro area have required, amongst other things, the country-specific macroeconomic environment to be taken into account*

In response to the global financial crisis, the Eurosystem cut policy rates sharply. Even after the onset of the sovereign debt crisis, the risk of excessively low inflation required that policy rates be kept low. The observed differences between euro area countries in the pass-through of lower monetary policy rates to lending rates and the weak dynamics of lending raised the question of whether the monetary policy transmission mechanism might be disrupted in certain countries, for example owing to loan supply restrictions. The monetary analysis was thus expanded to include the country-specific macroeconomic environment, developments in sovereign bond markets, the debt situation of the private non-financial sector and bank-specific factors.[15]

With the scope for further monetary policy easing via policy rate cuts largely exhausted as it approached the lower bound, the Eurosystem implemented a series of non-standard monetary policy measures, such as asset purchase programmes (APPs) or targeted longer-term refinancing operations (TLTROs). The stylised depiction of the transmission process of an asset purchase programme on p. 22 illustrates how key transmission mechanisms function via the banking system.[16] Other non-standard measures, such as the TLTROs, were aimed directly at influencing banks' loan supply. With its ana-

*Analysis of the transmission of non-standard monetary policy instruments*

**15** Examples of such analyses of interest rate pass-through include Darracq Paries et al. (2014) and Altavilla et al. (2020). For an analysis of the heterogeneity of loan developments in the euro area, see, for example, Deutsche Bundesbank (2015b). For an analysis of the debt situation in the euro area, see, for example, Deutsche Bundesbank (2014, 2017c).
**16** For more information on the impact of asset purchases for monetary policy purposes on the banking sector, see Deutsche Bundesbank (2017b), p. 27. For more information on the transmission mechanisms of asset purchase programmes, see Deutsche Bundesbank (2016).

Transmission of a monetary policy asset purchase programme*

| Asset purchases |
| --- |

Increase in stock of government bonds on the central bank's balance sheet

Increase in government bond prices / decrease in government bond yields

Signal of low policy rates over a prolonged period

Decrease in general level of interest rates

Increase in asset prices

Decrease in interest rates

Depreciation of domestic currency

Increase in money holdings and loans

Increase in supply and demand on the labour and goods markets

Increase in wages

Increase in import prices

Increase in domestic prices

**Increase in inflation**

* The blue fields denote active intervention in the transmission process by the central bank. For reasons of clarity, the chart does not take into account any feedback effects.
Deutsche Bundesbank

lyses of the transmission process, the monetary analysis made a valuable contribution to the decisions on the deployment, design and (re)calibration of these novel monetary policy instruments.[17]

*Monetary policy transmission in the low interest rate environment*

As the period of low interest rates persisted, interest grew in whether there were characteristics of monetary policy transmission that were specific to the low interest rate environment, such as the transmission of negative policy rates to banks' lending and deposit rates.[18] Other topics included the possible adverse effects of very low or negative policy rates and a very flat yield curve on the loan supply.[19]

*Extensions of the dataset and of the modelling approaches*

For the studies on transmission, the dataset and the models used by the monetary analysis were refined, improved and expanded. The extensions to the model approaches included, amongst other things, approaches using micro data – primarily bank-specific data – and the use of multi-country models to capture pos-

sible differences in monetary policy transmission within the euro area.[20] The use of micro data has enabled researchers to drill deeper into the determinants of lending, examples of which include the relevance of the characteris-

**17** For analyses of the transmission of the TLTROs, see, for example, Barbiero et al. (2021), Barbiero and Burlon (2020) and European Central Bank (2017c). Deutsche Bundesbank (2020a) contains findings on the transmission of the TLTROs and the APP. For more information on the impact of non-standard monetary policy measures on lending rates, see, for example, Altavilla et al. (2020) and European Central Bank (2017a).
**18** See, for example, Altavilla et al. (2022) and Heider et al. (2019).
**19** The focus here was on the effects of the low and negative interest rate policy on bank profitability (see, for example, Altavilla et al. (2018), Altavilla et al. (2022) and European Central Bank (2017a)) and the discussion about the "reversal rate", below which further interest rate cuts restrict the loan supply rather than expand it; see, for example, Deutsche Bundesbank (2022a). For a study on the transmission of the negative interest rate policy via financial markets and the banking sector as well as its impact on the corporate sector, see, for example, Boucinha and Burlon (2021).
**20** See, for example, Mandler and Scharnagl (2020b) and Mandler et al. (2022).

tics of banks and borrowers.[21] Given the importance of financial markets for the transmission of non-standard monetary policy measures, such as the asset purchase programmes, and their impact on banks' funding costs and portfolio decisions, financial market prices and yields have likewise become increasingly important for monetary analysis.[22]

*Comprehensive assessment of financing conditions and indebtedness of firms and households*

With the non-standard measures, the monetary analysis perspective was expanded beyond bank loans and lending rates to a comprehensive assessment of financing conditions of the corporate sector. Both financial market data and information from the financial accounts play a key role in assessing the overall picture of firms' financing conditions. These allow account to be taken of other forms of external financing, such as the issuance of bonds and equity, as well as of firms' internal financing, which can substitute bank loans.[23] In addition, the financial accounting data enable the debt situation of the private non-financial sector, which can also have an impact on the transmission of monetary policy impulses, to be incorporated into the analysis.[24]

## Analysis of the effects of financial shocks

*Identifying financial shocks and assessing their effects on the financial sector and the real economy*

The monetary analysis also continued to contribute to the assessment of risks to price stability by using the information contained in financial variables such as loans, lending rates and financial market yields to examine the impact of financial shocks on the financial sector, the real economy and inflation.[25] The financial system is not just a mechanism that transmits and amplifies economic shocks originating in the real economy.[26] As the global financial crisis, above all, has shown, shocks can also originate in the financial system, spill over from there to the real economy, and have a quantitatively significant impact on economic activity and inflation.[27] Moreover, due to the links and interactions between the real economy and the financial system, financial shocks can also have

negative feedback effects on the financial system through their real economic effects.[28]

However, such shocks are not directly observable – yet they can be indirectly inferred from unexpected changes in economic time series. This requires suitable economic models. Using financial variables and appropriate models, the monetary analysis can identify financial shocks and assess their impact on the financial sector, economic activity and inflation. An example of such an analysis for the euro area is shown in the chart on p. 24. The underlying econometric model combines monetary and financial data (bank loans to non-financial corporations, the monetary aggregate M3, the lending rate, the yield on government bonds, and the difference

*Examples of the importance of loan supply and money demand shocks*

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21 See, for example, Albertazzi et al. (2021), Altavilla et al. (2021) and Arce et al. (2021).
22 See, for example, European Central Bank (2017b) and the analysis of the portfolio rebalancing channel in Albertazzi et al. (2021).
23 For information on the substitution relationship between loans and corporate bonds, see, for example, Altavilla et al. (2019) and Arce et al. (2021). For an analysis of the complementarity and substitution relationships between various forms of external financing, see Mandler and Scharnagl (2020a).
24 See, for example, Deutsche Bundesbank (2021b) and, on the impact of firms' funding structure on monetary policy transmission, Holm-Hadulla et al. (2022) and Holm-Hadulla and Thürwächter (2021).
25 The prevailing paradigm in macroeconomics assumes that an economy converges towards a long-term "steady state", deviations from which are caused by shocks, i.e. exogenous impulses affecting the economy.
26 These mechanisms are based, for example, on asymmetric information, incomplete contracts and incentive problems. These frictions lead, amongst other things, to an external finance premium, i.e. a premium on external financing compared with internal financing and credit rationing. The external financing premium and the availability of loans depend, amongst other things, on the borrower's capital. A decline in equity as a result of a slowing economy can lead to a deterioration in firms' financing conditions, which in turn adversely affects the real economy. These mechanisms are discussed in, for example, Bernanke et al. (1999), Gertler and Gilchrist (2018) and Niepelt (2019), Chapter 8.3.
27 See, for example, Christiano et al. (2010) and Prieto et al. (2016).
28 For an overview, see, for example, Claessens and Kose (2018). One example is a shock-induced deterioration in the real economy's financing conditions that causes economic activity to contract. The increased insolvency risk that could ensue may require banks to increase their loan loss provisions, impair their loan supply, and thus further worsen financing conditions in the economy. Feedback effects are also possible in the case of real economic shocks, whose effects on the financial system can, in turn, spill over to the real economy.

## Shock decomposition of key variables using a VAR model, 2001–19[*]

%, quarterly data

| | | |
|---|---|---|
| ■ Aggregate demand | ■ Monetary policy | ▬ Total |
| ■ Aggregate supply | ■ Money demand | |
| ■ Loan supply | ■ Other[1] | |

**Monetary aggregate M3[2]**

**Loans to non-financial corporations[2]**

**Real gross domestic product[2]**

Enlarged scale
**HICP[2]**

**Shadow rate**

2001   05   10   15   19

**\*** Deviations from an unconditional forecast. See the box on pp. 25 ff. **1** Sum of the contributions of the unidentified shocks. **2** Deviations of the annual growth rate.

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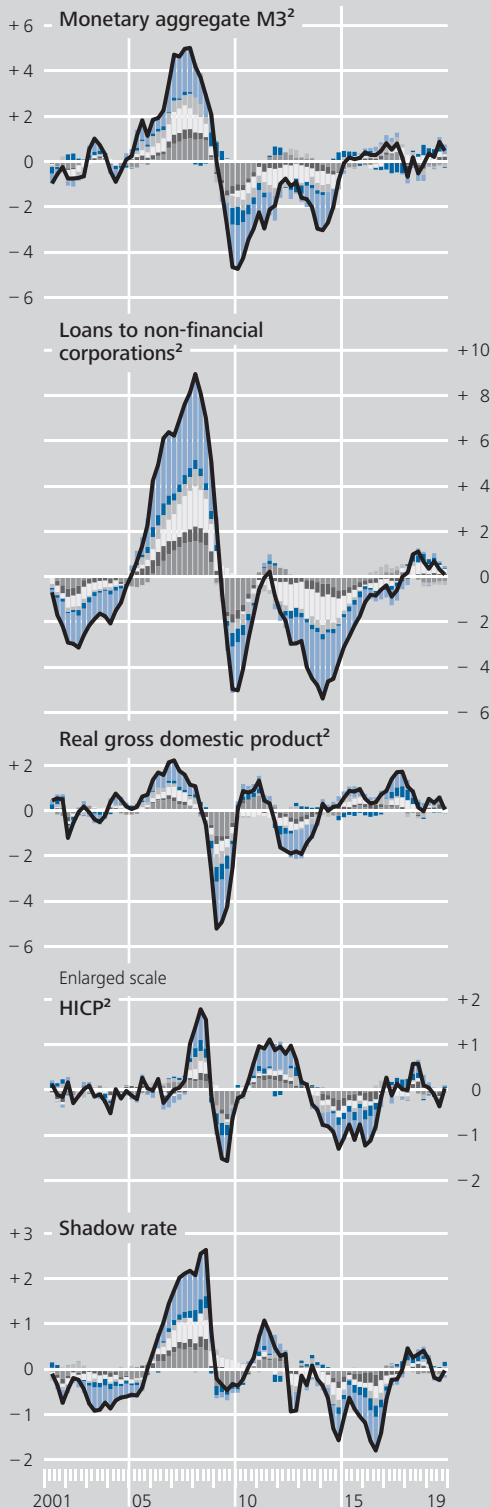
between the yields on corporate bonds and government bonds (excess bond premium)) with real economic data, real gross domestic product (GDP), and the Harmonised Index of Consumer Prices (HICP). It thus allows selected financial shocks and their impact on the real economy to be identified.[29] A shadow rate is used as an indicator of monetary policy (see the box on pp. 25 ff.). Two financial shocks are identified – a loan supply shock and a money demand shock. The loan supply shock represents a change in banks' lending behaviour for given economic fundamentals captured by the other variables.[30] The money demand shock leads to a change in money holdings and to portfolio shifts between riskier assets and money for given economic conditions. It can also be interpreted as an uncertainty shock in which heightened uncertainty in the economy in general or in the financial markets specifically triggers a build-up of liquidity buffers and shifts into safe assets.

The adjacent chart shows the effects of the two financial shocks and other macroeconomic shocks on selected variables up to the end of 2019. The black lines represent the deviations of the annual growth rates of the monetary aggregate M3, loans to non-financial corporations, real GDP, and HICP and of the shadow rate level from a hypothetical simulated model scenario in which no economic shocks hit the euro area. These deviations are decomposed into the contributions of the various shocks. The chart shows that positive and negative loan supply shocks during the credit boom in the second half of the 2000s and during the European sovereign debt crisis had a quantitatively relevant impact on loan and money growth, respectively. Similar effects on GDP

*Loan supply shocks important during the credit boom and sovereign debt crisis, money demand shocks during the financial crisis*

**29** In addition, real economic shocks are also identified. See the box on pp. 25 ff.
**30** In the model used here, a (negative) loan supply shock can represent a number of underlying changes, such as a loss of capital, higher capital requirements, elevated risk assessments, increased risk aversion, etc.

# BVAR model for estimating the effects of macroeconomic shocks on growth in gross domestic product, loans and the money supply and on the inflation rate

The chart on p. 24 shows the results of a Bayesian vector autoregressive (BVAR) model estimated for the euro area.[1] The model contains nine variables: real gross domestic product (GDP), the Harmonised Index of Consumer Prices (HICP), loans to non-financial corporations, the lending rate, the euro area shadow rate of Geiger and Schupp (2018), the average yield on five-year euro area government bonds, the monetary aggregate M3, the difference between the yield on corporate bonds and a risk-free interest rate with the same maturity (excess bond premium),[2] and the yield on five-year US Treasuries. The shadow rate is used as a composite indicator of the Eurosystem's standard and non-standard monetary policy.[3] The US Treasury yield is used to control for possible influences from the US or global capital markets.

The model is estimated using quarterly data covering the period from the second quarter of 2000 to the fourth quarter of 2019.[4] With the exception of the interest rates and the interest rate spread, all of the variables are entered into the estimation as log levels. The estimation is carried out using the approach in Giannone et al. (2015).

The residuals of the model contain the economically interpretable "structural shocks", which are responsible for the fluctuations of the variables around the model's long-term equilibrium, in the form of linear combinations. In order to estimate the impact of the shocks on the model variables, the shocks need to be identified on the basis of assumptions. In the analysis presented here, shocks are identified through the use of sign restrictions, i.e. assumptions about the direction in which a shock moves the model variables.

Five economic shocks are identified. The sign restrictions for each of the shocks are shown in the table on p. 26. The aggregate demand shock comprises exogenous changes in the demand for goods due to changes in consumer preferences or government spending. For the monetary variables, it is assumed that the demand shock leads to greater demand for loans, and thus to a rise in both the volume of loans and the lending rate, as well as to an increase in the money supply (additional money creation through loans, increased nominal money demand due to a higher price level and higher real income). The aggregate supply shock comprises, amongst other things, shocks that affect firms' production technologies or mark-ups, and also energy price shocks. The loan supply shock repre-

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**1** This model is an extended and modified version of that in Mandler and Scharnagl (2020a) and Deutsche Bundesbank (2020b). The extension to include the money demand shock originates from Mandler (2021). **2** This indicator was devised by Gilchrist and Zakrajšek (2012) and is constructed so as to avoid possible distortions caused by duration mismatches. Gilchrist and Mojon (2018) calculate corresponding indicators for the euro area countries; see https://publications.banque-france.fr/en/economic-and-financial-publications-working-papers/credit-risk-euro-area. **3** The shadow rate is calculated using a term structure model. It is the hypothetical short-term interest rate absent the zero lower bound. The shadow rate is influenced by monetary policy measures that affect the yield curve, even if these measures do not affect the actual market short-term interest rate due to the zero lower bound; see Deutsche Bundesbank (2017d). **4** Ending the estimation before the COVID-19 pandemic is intended to avoid potential distortions caused by the pandemic; see Lenza and Primiceri (2022). Nevertheless, the shock decomposition includes the period from the first quarter of 2000 until the third quarter of 2022, i.e. the analysis assumes that the relationships estimated for the preceding period continue to hold true from 2020 onwards.

### Sign restrictions*

| Variable | Shock | | | | |
|---|---|---|---|---|---|
| | Aggregate demand | Aggregate supply | Loan supply | Monetary policy | Money demand |
| GDP | + | − | + | − | − |
| HICP | + | + | . | − | − |
| Loans | + | . | + | − | . |
| Lending rate | + | . | − | + | . |
| Euro area government bond yield | . | . | . | . | + |
| Shadow rate | + | + | + | + | − |
| Money supply | + | . | + | − | + |
| Excess bond premium | . | . | − | + | + |
| US Treasury yield | . | . | . | . | . |

* The restrictions apply to the period in which the shock occurs. Points indicate that no assumption has been made for that variable regarding the direction of the effect of the shock described in the corresponding column.

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sents exogenous changes in banks' supply of loans. An increase in the loan supply leads, amongst other things, to a decline in the lending rate and an increase in real GDP, the volume of loans, and the money supply.[5] The negative response of the excess bond premium to the loan supply shock assumes that firms respond to an expansion in the loan supply by substituting credit financing for bond financing. Therefore, the supply of corporate bonds declines and the yield on corporate bonds falls relative to the yield on government bonds. The monetary policy shock is a deviation of the monetary policy indicator – in this case, the shadow rate – from the monetary policy reaction function estimated in the model, i.e. from the systematic relationship between the policy indicator and the other variables in the model. In the case of a restrictive (positive) monetary policy shock, monetary policy is thus more restrictive than the model would predict given the other variables and other shocks. Alongside the sign restrictions typically used to identify a monetary policy shock, the table shows that the excess bond premium is also assumed to rise following a restrictive monetary policy shock.[6]

In addition to the sign restrictions shown in the table, it is assumed that the coefficients of contemporaneous GDP and the price level in the equation for the shadow rate are positive, which causes the central bank to respond immediately to an increase in output or prices by tightening monetary policy.[7] A money demand shock is identified as the fifth structural shock. This leads to a rise in money holdings, the government bond yield, and the excess bond premium. Money holders sell off non-monetary assets in order to increase their money balances. The positive effect on the excess bond premium assumes that there is a relatively larger reduction in demand for risky assets compared with low-risk and risk-free assets, such as government bonds. In addition to portfolio reallocation, it is assumed that money holders will also increase their money holdings by making fewer purchases, thereby reducing output and the price level. Monetary policy responds to the

5 For more information on the identification assumptions for the loan supply shock, see Mandler and Scharnagl (2020a).
6 See Gertler and Karadi (2015).
7 See Arias et al. (2019).

deflationary effect of the money demand shock through easing, i.e. by accommodating the increased demand for money. Alongside this interpretation of the money demand shock, which is based on money demand theory, there is another alternative interpretation whereby economic agents respond to an exogenous rise in macroeconomic uncertainty: this leads to a reduction in the demand for goods and services, a build-up of precautionary funds, and a shift from risky and less liquid assets to money.

In contrast to the model described on pp. 41 ff., an independent loan demand shock is not identified. As shown on p. 42, a loan demand shock results in changes in the volume of loans and the lending rate, both in the same direction. In the model presented here, this condition is fulfilled by the aggregate demand shock. The aggregate supply shock and the money demand shock may also fundamentally be considered to be components of a loan demand shock, as their identification assumptions do not exclude the possibility of loan volumes and lending rates moving in the same direction. Another difference from the model on pp. 41 ff. is that the loan supply shock defined therein also encompasses the monetary policy shock defined in the model described here, as it leads to the loan volume and lending rate moving in opposite directions.

Economic shocks move the variables out of the long-term equilibrium to which the model converges. The effects of a shock may persist beyond the period in which it occurs, as the changes in the variables caused directly by the shock are transmitted to subsequent periods via the model dynamics (shock propagation). In each period, the deviation of the actual observed variables from their hypothetical paths if the shocks had not occurred thus incorporates

the effects of the current shocks as well as the persisting effects of previous shocks and can be assigned to the categories of shocks described above. The chart on p. 24 shows the decomposition of the deviations of the observed variables from a hypothetical scenario in which the shocks do not occur into the contributions of the various economically interpretable shocks. As the model contains nine variables but identifies only five shocks, four additional unidentified and thus uninterpretable shocks affect the variables.

The Bayesian estimation produces a probability distribution of the shock contributions. However, the charts show only the stacked medians of the contributions of the various shocks and do not provide any information on their statistical distribution. In order to assert that a particular shock played an important role in the development of a particular variable at specific points in time, the estimation uncertainty in the distribution of the shock contributions must also be taken into account. If the distribution of a shock contribution is very wide, it is not possible to make any definitive assertions regarding its direction, even if the median is relatively large. As in Mandler and Scharnagl (2019), this analysis uses percentiles of the distribution of the shock contributions and the ratio of the posterior probabilities of a positive versus negative contribution (or vice versa) of a shock at a given point in time for the assessment. The main article discusses results that can be considered sufficiently reliable on the basis of these analytical tools. One example in which the high degree of estimation uncertainty prevents conclusions from being derived with confidence is the effect of the loan supply shock on loan growth since 2020 in the chart on p. 29. Although, at first glance, the median contribution suggests that the loan supply shock had a quantita-

tively significant impact, the uncertainty surrounding its contribution is so great that the model ultimately does not provide any reliable evidence that loan supply shocks played a significant role during this period.[8]

8 While the other results described in the main text prove to be qualitatively robust for different variations of the model (use of the monetary aggregate M1 instead of M3, extension to include an equity price index, use of another shadow rate), this is not the case for the contribution of the loan supply shock in the recent past. For example, the model does not indicate any relevant median effect of loan supply shocks from 2020 onwards if, instead of the shadow rate of Geiger and Schupp (2018), that of Wu and Xia (2016) is used.

growth and inflation are also evident.[31] In addition, the analysis shows that positive (uncertainty-related) money demand shocks occurred during the initial phase of the global financial crisis, which were clearly reflected in GDP growth and inflation.[32] These are valuable insights that helped decision-makers to assess both the risks to price stability and the transmission process.

## Questions of monetary and financial analysis in the current environment

### High M3 growth at the outbreak of the COVID-19 pandemic

*Illustrative analysis of money growth and inflation since 2020 …*

The macro models used to identify financial shocks are also contributing to the interpretation of economic developments in the current environment. Upon the onset of the COVID-19 pandemic in 2020, the annual growth rate of the monetary aggregate M3 increased to more than 12% before receding over the course of 2021 and 2022. The inflation rate rose steadily over the same period. This raises the question of a possible relationship between the increase in the M3 growth rate and the increase in the inflation rate.

This question can be analysed in the empirical macro model presented on pp. 23 ff. and in the box on pp. 25 ff. The monetary aggregate M3 and the price level are endogenous variables, i.e. they are explained within the model. Their

*… by means of shock decomposition*

31 Further studies on the impact of loan supply shocks in the euro area or in the individual Member States include Bijsterbosch and Falagiarda (2015), Gambetti and Musso (2017), Hristov et al. (2012) and Mandler and Scharnagl (2020a).

32 Qualitatively similar results can be obtained if the analysis is carried out using the monetary aggregate M1 instead of M3. However, the money demand shocks and their impact tend to be stronger for M1. This is likely because uncertainty-related portfolio shifts are particularly reflected in the most liquid components of the monetary aggregate.

dynamics, in conjunction with the other endogenous variables, thus result from the economy's responses to macroeconomic shocks. How the two variables react, and thus their observed correlation, depends on the nature of the shock. A good way to obtain an understanding of money growth and the inflation rate in recent years is therefore to decompose, as described above, the deviations of the variables from a baseline scenario into the contributions of different macroeconomic shocks. The adjacent chart continues the shock decomposition on p. 23 from the first quarter of 2020 to the third quarter of 2022. In addition to the two financial shocks described above (loan supply shock and money demand shock), it also shows the estimated contributions of aggregate demand shocks and aggregate supply shocks as well as monetary policy shocks (which are discussed on pp. 25 ff.). The effects of the shocks are interpreted individually below.

*Money growth accelerated at the outbreak of the pandemic due to money demand shocks, which had a negative impact on inflation, however*

According to the model, money demand shocks made a marked contribution to the acceleration of money growth in 2020. These are likely to reflect, in particular, the heightened uncertainty and the build-up of liquidity reserves at the outbreak of the COVID-19 pandemic. The increased demand for liquidity was accommodated by monetary policy, as assumed in the model. This is represented by the negative contributions of the money demand shocks to the shadow rate. These liquidity buffers were later reduced again, which is reflected in the fact that the contributions of the money demand shock to money growth decline and eventually enter into negative territory. The effect of the money demand shocks on the inflation rate is negative at first, as implied by the identification assumptions, but turns positive as from the end of 2021.[33] At the outbreak of the pandemic, money growth rises

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**33** The model is estimated in the levels of the variables. The positive contribution of the money demand shock to inflation towards from the end of 2021 onward largely reflects a base effect resulting from the, in the short term, negative (but only temporary) impact of a money demand shock on the price level.

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**Shock decomposition of key variables using a VAR model, 2020−22***
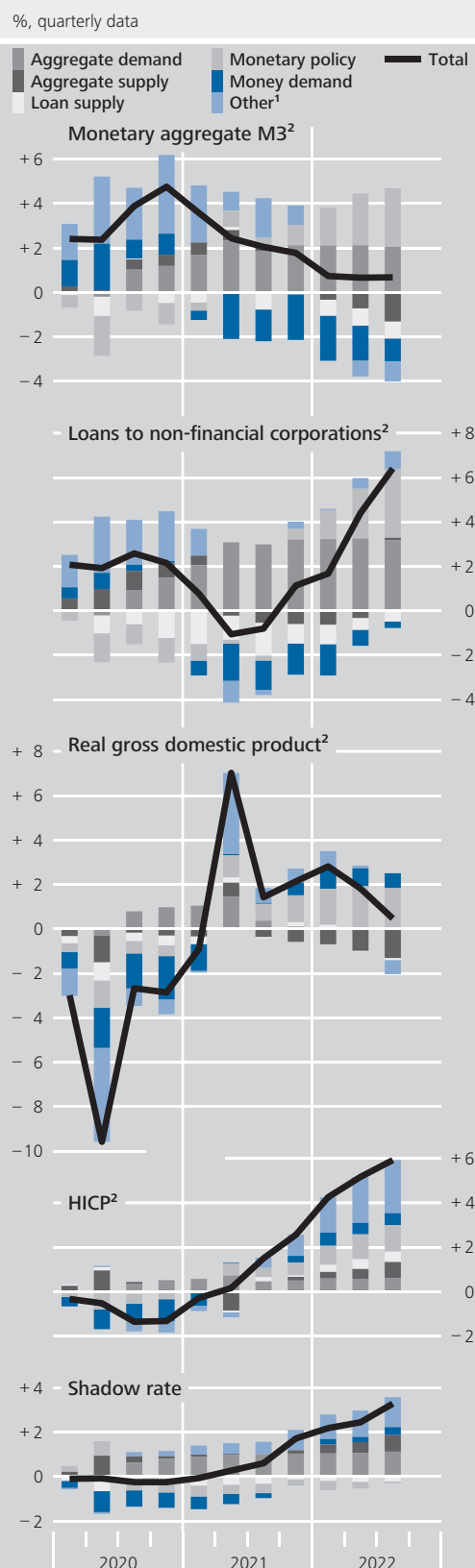
%, quarterly data

Aggregate demand · Monetary policy · **Total**
Aggregate supply · Money demand
Loan supply · Other[1]



Monetary aggregate M3[2]

Loans to non-financial corporations[2]

Real gross domestic product[2]

HICP[2]

Shadow rate

2020   2021   2022

**\*** Deviations from an unconditional forecast. See the box on pp. 25 ff. **1** Sum of the contributions of the unidentified shocks. **2** Deviations of the annual growth rate.

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above the baseline while inflation falls below the baseline of the model. Towards the end of the period under review, money growth declines as inflation rises. These dynamics illustrate the fundamentally countervailing effects of the money demand shock on inflation and the monetary aggregate.

*Expansionary monetary policy raised money growth and inflation …*

In the short run, money growth and inflation are assumed to be affected in the same direction by monetary policy shocks. Monetary policy shocks are deviations of the shadow rate, which is used as a monetary policy indicator, from its "normal" estimated response to the other variables.[34] According to the estimations, monetary policy has been particularly accommodative compared with the model since mid-2020. This has raised both money growth and the inflation rate since mid-2021. At this stage, however, the overall money growth rate had already begun to decline again. The expansionary monetary policy shocks from mid-2020 are reflected in the chart showing the shadow rate.[35] Although the model does not indicate expansionary monetary policy at the end of the period under review, the monetary policy shocks that occurred up to that point may continue to have a positive impact on money growth and inflation for some time to come.

*… and positive aggregate demand shocks*

Unusually strong growth in aggregate demand (positive demand shocks) was a further common driver of money growth and inflation. The shock decomposition of real GDP growth shows that these positive demand shocks occurred between mid-2020 and mid-2021. This suggests that these shocks could reflect fiscal support measures during the COVID-19 pandemic. The impact of these demand shocks on money growth and inflation persists up to the current end. Supply-side disruptions, i.e. aggregate supply shocks, were also increasingly playing a role in the rise in inflation in 2022, impacting positively on the inflation rate, but, at the same time, according to the estimations, tending to adversely affect money growth at the current end.

These results illustrate that the correlation between money growth and inflation at a given point in time depends on which economic shocks are particularly important for the dynamics of the two variables. The increase in money growth in 2020 was initially driven mainly by money demand shocks, which, however, impacted negatively on the price level. It was only in the subsequent phase that aggregate demand shocks and monetary policy shocks became more important for money growth; taken in isolation, they caused both money growth and inflation to rise.[36] However, information on the underlying shocks can be obtained only if monetary developments are analysed holistically along with real economic and financial variables. Focusing on a money growth-inflation relationship that assumes a stable positive correlation between the two variables can therefore lead to misjudgements.

*Interpretation of monetary dynamics depends on underlying shocks*

The results of the model can be related to the consolidated balance sheet of the euro area MFI sector. One of the main reasons for the high money growth during the pandemic was the strong expansion in securities held for monetary policy purposes by the Eurosystem in the context of the low inflation environment; the other was the increased new issuance of government

*The result could reflect the interplay between asset purchases for monetary policy purposes and expansionary fiscal policy*

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**34** The "normal" monetary policy response also includes the response of the shadow rate to the other macroeconomic shocks.

**35** The chart for the shadow rate shows a pronounced restrictive monetary policy shock in the second quarter of 2020, i.e. a more restrictive monetary policy than the normal monetary policy response to the other variables. The fall in output in the second quarter of 2020 was an extreme event compared with the history of GDP movements over the estimation period. The estimated monetary policy reaction function implicitly contained in the model predicts a stronger easing of monetary policy, i.e. a greater decline in the shadow rate than actually occurred, in response to this sharp decline in output. The zero lower bound and limits for possible monetary policy asset purchase programmes would probably not have allowed for monetary policy easing to the extent predicted by the model. In addition, the chart shows that, as early as in the following quarter, the Eurosystem provided an accommodative impulse above and beyond the monetary policy response predicted by the model.

**36** As the expiring money demand shocks and a number of other shocks overcompensated for the impact of the aggregate demand and monetary policy shocks on the deviation of money growth from the baseline, the deviation in the period of rising inflation is largely declining in the chart.

bonds to raise funding for fiscal support measures during the pandemic. The interplay between expansionary fiscal and monetary policy is reflected in the model results, on the one hand, in the positive aggregate demand shocks and their impact on GDP growth and inflation.[37] On the other, it is also part of the expansionary monetary policy shocks and their effects.[38]

*Money creation through lending to the private sector is not reflected in specific shocks*

Bank loans to the private sector were the second major counterpart to the changes in the monetary aggregate M3 since 2020. The positive relationship between loan growth and money growth reflects the money creation process and can, in principle, be caused by any of the shocks contained in the model.[39] In the chart on p. 24, the close relationship between loans and the monetary aggregate over the period up until 2020 is reflected in the fact that the contributions of the various shocks to the growth of loans to non-financial corporations and to M3 growth are often of similar relative importance and tend to point in the same direction for both variables.

*Model can only partly explain rise in inflation*

Overall, the model shows that monetary policy shocks and aggregate demand shocks have played an important role in joint developments in money growth and inflation, while money demand shocks tended to cause countervailing developments of both variables. However, the model is unable to assign a significant part of the upward deviation in the current inflation rate to any of the identified shocks. This is because, amongst other things, the model does not use a broad range of determinants of the inflation process as a basis (for example, it does not include energy prices), but instead focuses on financial variables, consistent with the focus of the monetary and financial analysis.

# Transmission of monetary policy tightening

## Overview

As described above, one of the main tasks of the monetary and financial analysis in its current form is to assess the progress and degree of monetary policy transmission in the early stages of the monetary policy transmission process described on p. 21. Whilst a large number of the above-mentioned transmission analyses were conducted in an environment of very low inflation rates, economic conditions have now changed and, as a result, so too has the monetary policy stance. The economic downturn in 2020 and the rise in inflation in 2021 were shaped by the COVID-19 pandemic. In 2022, macroeconomic developments were also increasingly driven by the outbreak of the war in Ukraine and its economic repercussions. Sharp rises in energy and food prices, continuing disruption to global supply chains and the post-pandemic recovery in demand led to inflation reaching new highs over the course of the year. Strong inflationary pressures, which are expected to persist over the medium term, forced

*Monetary policy addresses high inflation with increased monetary policy tightening*

**37** A demand shock caused by an expansionary fiscal policy impulse leads ceteris paribus to an increase in GDP and in the price level compared with the baseline, to which the central bank responds by tightening monetary policy. In the model, however, this tightening is not strong enough to prevent an increase in the money supply, which means that the fiscal policy shock is temporarily and partially accommodated by monetary policy. The monetary policy accommodation of a demand shock is thus also reflected in the contributions of the demand shock to the decomposition of money growth.
**38** If the central bank responds to an expansionary fiscal policy impulse by tightening its monetary policy to a lesser extent than it would according to its estimated reaction function, GDP and the price level rise relative to the baseline, while the shadow rate falls relative to it. This is depicted in the model as an expansionary monetary policy impulse. Since the model does not contain any fiscal policy variables, fiscal policy impulses cannot be isolated from the monetary policy and aggregate demand shocks. For information on identifying fiscal policy shocks, see, for example, Ramey (2016).
**39** For more information on the money creation process, see Deutsche Bundesbank (2017b). The assumptions made in order to estimate the aggregate demand shock and the monetary policy shock assume a positive correlation between money growth and loan growth, while the assumptions regarding the other shocks do not rule out a positive correlation.

Financing Conditions Dashboard for the euro area: Actual changes in the financing conditions of the non-financial sector as well as predictions of these changes conditional on the macroeconomic environment*

Basis points, latest observation: 9 Jan. 2023

| | − 400 | − 200 | 0 | + 200 | + 400 | + 600 |
|---|---|---|---|---|---|---|

Easing ← → Tightening

Ten-year €STR overnight index swap (nominal)
— Changes since ECB Governing Council meeting of 16 Dec. 2021

Ten-year €STR overnight index swap (real)[1]

Ten-year euro area government bond yield
Changes conditional on macroeconomic environment

Non-financial corporate bond yield (BBB)          Upstream[6]

Bank lending rate for non-financial corporations[2]          Downstream[7]
95% confidence interval

Bank lending rate for households[2]

Aggregate financing costs (nominal)[3]

Aggregate financing costs (real)[3,4]

Growth in bank loans to non-financial corporations[5]

Growth in bank loans to households[5]

Sources: Bloomberg, ECB, and Bundesbank calculations. * Conditional on the growth and inflation gap. Based on the most recent data available in each case. The non-financial sector encompasses non-financial corporations, households and general government. 1 Ten-year €STR overnight index swap less ten-year inflation-linked swap. 2 Volume-weighted average interest rate according to the MFI interest rate statistics. 3 Aggregate index of volume-weighted financing costs of the non-financial sector (AIFC). 4 AIFC less 5y-5y inflation-linked swap. 5 Three-month growth rate of MFI loans according to the BSI statistics with the sign reversed. 6 Refers to indicators at upstream stages of transmission that are directly linked to the financing conditions on the money and capital market. 7 Encompasses downstream indicators that primarily reflect the financing conditions in banks' lending business.

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a rapid tightening of the monetary policy stance in the euro area. In the first half of 2022, the ECB Governing Council discontinued net asset purchases; in July, it reversed its interest rates. Since then, key interest rates have risen by a total of 250 basis points.

*Monetary and financial analysis provides information on regular assessment of monetary policy stance*

In this environment, the monetary and financial analysis must address three core issues. First, it must assess whether banks pass on the monetary policy-induced rise in market interest rates to borrowers to the necessary extent. Second, it must evaluate whether the tightening of financing conditions has the intended dampening effect on the demand for loans among households and firms. And third, the monetary and financial analysis must also keep a close eye on the loan supply side. This is because very loose lending policies among banks could weaken the impact of monetary policy tightening, whilst excessively restrictive lending could lead to undesirable feedback loops between the financial system and the real economy. By

analysing these issues, it is possible to adjust the monetary policy stance to a changing environment in good time, where necessary.

The dashboard shown above provides an initial condensed overview of the assessment of transmission, outlining how financing conditions for the private non-financial sector develop across the monetary policy transmission process. For this purpose, it contains upstream indicators that directly address financing conditions for the money and capital markets, as well as downstream indicators that capture the subsequent stages of monetary policy transmission and mainly reflect financing conditions for banks' lending business. The dashboard shows increases in almost all indicators for 2022, with the tightening observed since December 2021 being more pronounced for upstream indicators than for downstream indicators. This is due to the fact that upstream indicators respond quickly to monetary policy impulses, whereas the corresponding changes in downstream indicators

*Tightening of monetary policy feeds through to financing conditions for private non-financial sector*

typically occur with a time lag. This is illustrated particularly clearly by the growth in bank loans to non-financial corporations, which remained virtually unchanged over the course of 2022.

*Developments in financing conditions thus far in line with macroeconomic environment*

In addition to the summarised depiction of financing conditions, the dashboard shows the results of an empirical analysis in which changes in the indicators are conditioned to the development of the macroeconomic environment. [40] Specifically, this means that changes in the individual indicators are regressed on current and past values of the output and inflation gaps.[41] These estimation models can be used to assess the degree to which changes in the indicators are consistent with macroeconomic developments.[42] It is clear that, taking into account an area of uncertainty (grey lines), the tightening of financing conditions observed since December 2021 is broadly in line with the developments in the macroeconomic environment. This is due, in particular, to the high inflation dynamics. Looking at the point forecasts, the actual tightening shown by the upstream indicators close to the financial market is, in some cases, slightly more pronounced than predicted by the models. This is likely to be attributable, in particular, to markets' reappraisal of the anticipated monetary policy response to the macroeconomic environment. In the case of the downstream indicators, which mainly reflect banking conditions, the increases have thus far been largely in line with expectations.

## Pass-through of higher interest rates in banks' lending business

*Banks' funding costs have risen significantly since the beginning of 2022*

In a bank-based economy such as the euro area, the banking sector's responses to adjustments in the monetary policy stance have a crucial influence on developments in financing conditions for the private non-financial sector. Banks pass on rising financial market interest rates in their lending business to cover their own higher funding costs. As the upper chart on p. 34 shows, banks' funding costs, which had been extremely low for a long time, have risen significantly since the beginning of 2022.

This upward movement was mainly due to the sharp rise in yields on bank debt securities, which, in turn, followed the general trend of money market and capital market interest rates.

Higher interest rates in the financial markets led banks to significantly raise interest rates, which had been close to all-time lows up until that point, on loans to non-financial corporations and loans to households for house purchase. This occurred with a time lag. Empirical models based on historical interrelationships show that, for loans to non-financial corporations and loans to households for house purchase in the euro area, interest rates are generally passed through almost entirely and that this process is largely concluded after one year. In the case of loans to non-financial corporations, developments in market interest rates are mostly passed on within the first few months,

*Banks' interest rate pass-through thus far in line with historical patterns*

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**40** It is assumed that market participants form their expectations about future monetary policy using simple rules, such as the Orphanides rule; see Hartmann and Smets (2018), pp. 21 f. and Orphanides (2003). If the expected output gap and/or the expected inflation gap are positive, market participants expect rising interest rates and vice versa.

**41** The estimates are based on autoregressive distributed lag (ARDL) models of orders $p$ and $q$. Specifically, this means that the dependent variable (change in the indicator compared with the previous period) is regressed on $p$ of its own lags as well as on contemporaneous values and $q$ lags of additional explanatory variables. Within the scope of this analysis, the expected output gap (deviation of expected annualised GDP growth at time $t$ from potential growth approximated using expected growth in six to ten years) and the expected inflation gap (expected inflation in one year minus the inflation target) serve as explanatory variables and describe the macroeconomic environment. Expected values are measured using monthly consensus forecasts, which, using the method developed by Knüppel and Vladu (2016), are converted into annual rates at times $t$ and $t+12$. The lag lengths are selected on the basis of the Schwarz-Bayes information criterion.

**42** As the upstream indicators are entered into the estimation at a weekly frequency, the time dimension of the monthly data from the macroeconomic indicators is transformed accordingly. For the weekly figures on the upstream indicators, this means that only lagged values of the macroeconomic indicators are entered into the regression and these values are kept constant over every week of a given month. This approach is consistent with the fact that the information and data on economic conditions are only available with a certain lag, which means that, using this estimation procedure, the forward-looking financial market variables in a given week are ultimately responding to macroeconomic data from the previous month. For information on a similar approach, see Brave and Kelley (2017).

## Financing cost indicator for euro area banks and contributions by funding sources

%
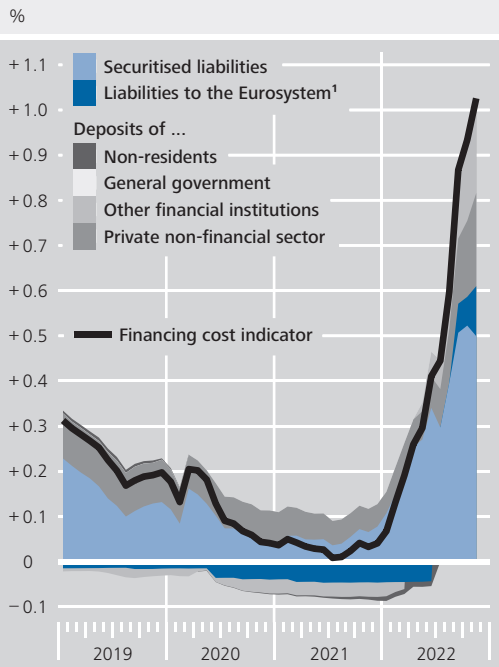


Sources: MFI interest rate statistics, BSI statistics, ECB, European Money Markets Institute, Centralised Securities Database and Bundesbank calculations. **1** Priced at the main refinancing rate.
Deutsche Bundesbank

## Interest rate pass-through in the euro area: forecast and actual interest rate developments

Annual percentages
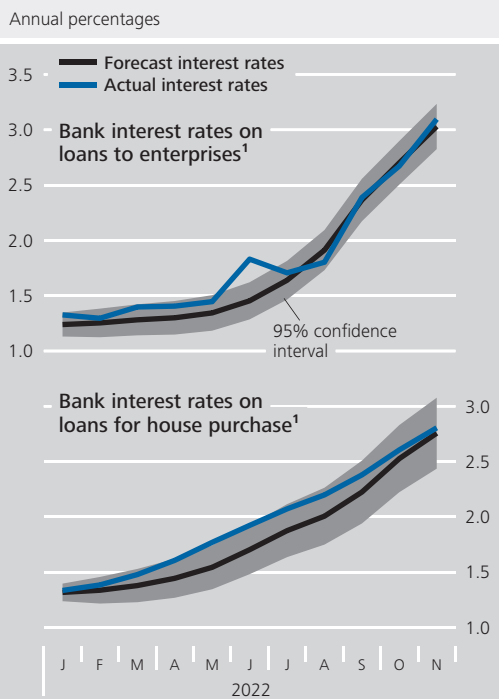


**1** New business according to the harmonised MFI interest rate statistics.
Deutsche Bundesbank

while these take longer to pass through to loans to households for house purchase.[43] In 2022, lending rates in the euro area as a whole developed essentially in line with the historical patterns indicated by the models (see the lower adjacent chart). With a few exceptions, this also applies to the interest rate pass-through in the four largest Member States.

*Models suggest further rise in lending rates*

The models suggest that lending rates will rise further in the coming months. First, it is likely that part of the increase in financial market interest rates over the past few months is not yet reflected in lending rates, but will have a delayed impact. Second, a further hike in lending rates can be expected if market interest rates continue to rise. With regard to lending rates, the models do not yet provide any reason to expect increasing heterogeneity among the euro area countries.

## Development of financing needs of firms and households

*Rising financing costs coincide with high financing needs*

Experience shows that the decline in demand for loans among non-financial corporations and households as a result of higher financing costs requires more time. For instance, some borrowers frontload their borrowing activity in anticipation of rising interest rates. In addition, in a weakening economy, firms' internal financing options diminish, which initially increases their needs for external financing and thus also their demand for bank loans.[44] Furthermore, in the current environment, the increasingly broad-based, massive rise in prices, aggregate supply bottlenecks and acute liquidity shortages among some firms in the energy sector have led to dynamic loan demand despite higher financing costs in the wake of monetary policy tightening. Financing volumes thus remained high for a time or even grew further. A weakening was not observed until the final quarter of 2022, meaning that the tightening of the monetary policy stance is likely to grad-

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43 See Deutsche Bundesbank (2019a).
44 See European Central Bank (2013).

ually achieve its intended impact. In the current environment, it is difficult to say whether these developments in lending are in line with historical patterns or should be regarded as exceptional. This is because the euro area data available for such analyses do not contain periods with similarly high inflation rates. According to the estimation results presented in the dashboard, the developments in lending can be regarded as unremarkable taking into account the broad area of uncertainty in 2022.

*Slowdown in loans to households already clearly identifiable*

With regard to loans to households, signs of a slowdown were already emerging as early as in the middle of the year. Net lending decreased significantly from June 2022 (see the adjacent chart). The corresponding year-on-year growth rate has declined moderately since mid-2022. There was a particular drop in the previously buoyant demand for loans for house purchase, which is the most significant sub-item of loans to households. In this case, the rise in lending rates led to a significantly higher interest burden for newly issued and renegotiated loans. From the second quarter of 2022, the banks surveyed by the BLS identify the rise in the interest rate level as a factor dragging on demand. Furthermore, they cite both the decline in consumer confidence as well as the significant deterioration in the housing market outlook as perceived by borrowers as reasons for the dampened demand (see the chart on p. 39). Indeed, in the euro area, there are mounting signs of a turnaround in the housing market, which boomed during the low interest rate period.

*Shift in non-financial corporations' external financing from market to bank financing …*

The picture is more complex for non-financial corporations, as they generally have access to multiple forms of external financing. Against the backdrop of the tightening of monetary policy in the euro area from the beginning of 2022, there was an increasing shift within external financing from market financing to bank financing (see the upper adjacent chart). The associated reduction in financing by debt securities, which had played an increasingly important role in corporate financing in the wake of



**MFI loans to the private non-financial sector in the euro area***

Month-end data, seasonally adjusted

**To households[1]**
Year-on-year percentage change

Monthly flow in € billion

Reduced scale

**To non-financial corporations[2]**
Year-on-year percentage change

Monthly flow in € billion

2019 2020 2021 2022

Source: ECB. **\*** Adjusted for loan sales and securitisation as well as for positions arising from notional cash pooling services provided by MFIs. **1** Including non-profit institutions serving households. **2** Non-financial corporations and quasi-corporations.

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the global financial crisis, was particularly pronounced (see the box on pp. 37 f.). This was mainly due to the divergence in financing costs. Interest rates on debt securities have risen sharply since the turn of 2021-22 owing to the close linkages between interest rates in the financial markets. Bank lending rates, however, in line with the historical patterns outlined in the above-mentioned interest rate pass-through models, responded with a certain time lag (see the lower adjacent chart). As a result, obtaining financing via debt securities became increasingly unattractive. Overall, both the nominal and the real costs of debt financing for

## Contributions to narrow external financing of non-financial corporations in the euro area

€ billion, quarterly data
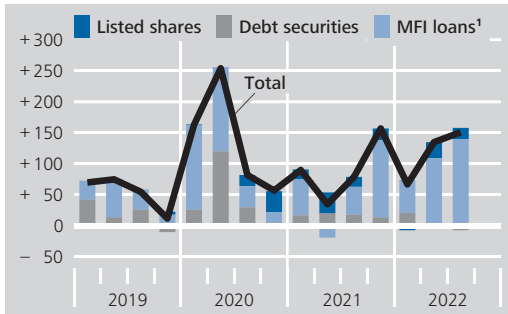


Source: ECB and Bundesbank calculations. **1** Adjusted for seasonal variations as well as for loan sales, securitisation and positions arising from notional cash pooling services provided by MFIs.

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## Financing costs for non-financial corporations in the euro area

%, monthly data
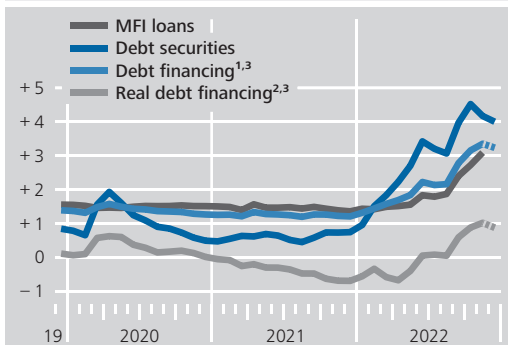


Sources: Bloomberg, ECB, iBoxx, and Bundesbank calculations. **1** Volume-weighted average of loans and debt securities. **2** Less 5y-5y inflation-linked swap. **3** Interest on loans for December 2022 taken as constant on the month.

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non-financial corporations increased clearly over the course of 2022.

*… while firms' financing needs were high*

Another key factor that sustained demand for bank loans despite rising interest rates was the decline in internal financing, i.e. financing from internally generated payment surpluses within firms. The main driver of this development was higher dividend payments by firms, which reduced the available cash flow. The euro area firms participating in the Survey on the Access to Finance (SAFE) also indicated a stronger increase in production costs despite higher sales, which resulted in mounting reports of declining profits. At the same time, financing needs for

working capital and inventories were relatively high and investment activity also remained comparatively robust in nominal terms. A gap therefore opened up between the need for financing and internally generated funds, which was closed by taking out bank loans.

*Demand for loans to firms dynamic at first, with initial signs of weakening recently*

Against this backdrop, banks' aggregate lending to non-financial corporations remained high into the summer. Alongside the aforementioned reasons, government-sponsored large-volume loans to firms in the energy sector also played a role.[45] However, a slowdown in non-financial corporations' demand for loans can also be observed at the current end. Net lending has been in decline since September, and came to a standstill in November (see the chart on p. 35). As a result, the annual growth rate went down moderately in November from a high level. The banks participating in the BLS expected a decline in loan demand in the final quarter of 2022 (see the adjacent chart above). A drop in firms' financing needs for fixed investment was cited as the main factor dampening demand, in line with the deteriorating economic and geopolitical environment. On top of this, there is the rising lending rate, which makes some investments no longer seem lucrative. In the third quarter of 2022, for example, BLS banks for the first time cited higher financing costs as a dampening factor in corporate demand for loans. Furthermore, it is also possible that the now easing supply bottlenecks will lead to lower financing needs for working capital and inventories.

### Developments in banks' loan supply

*Considerable tightening in loan supply policy according to BLS*

It is crucial that the monetary and financial analysis also keeps a close eye on developments in the loan supply, as changes in banks' lending policies can accelerate or weaken the impact of monetary policy tightening. The BLS provides

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**45** In Germany, in particular, these loans were granted via state-owned banks, such as KfW Group, in order to counter the higher energy costs and the resulting increased margin requirements for futures transactions at energy exchanges.

# Shift in the debt financing structure of non-financial corporations from bank loans to debt securities

The expanded monetary and financial analysis takes into account, amongst other things, that the importance of alternative debt financing relative to bank loans[1] for non-financial corporations (NFCs) in the euro area has been growing for some time now.[2] Debt securities have traditionally been the main alternative to bank loans for financing investments in non-financial assets.[3] The role of debt securities has increased markedly since the start of the millennium. However, this development has taken place with temporary fluctuations and a certain degree of heterogeneity at the country level (see the chart on p. 38).

The share of debt securities in non-financial corporate debt in Germany and Italy rose almost continuously from only around 5% in 1999 to just over 23% and 19%, respectively, at the beginning of 2022. In Germany, this was due, in particular, to a relatively strong issuance of debt securities. In Italy, by contrast, the decline in bank loans in the wake of the European debt crisis was the main driving factor. In the case of NFCs in Spain, the share of debt securities initially fell during the bank credit boom at the beginning of the millennium to just 2% at the end of 2005. Since then, however, the share of debt securities has grown steadily, amounting to just over 18% at the beginning of 2022. Both the strong issuance of debt securities and the significant decline in bank loans following the global financial crisis contributed to this. In France, the almost 30% share at the beginning of 1999 was already very high compared with other countries. Debt securities initially became increasingly important up to 2004 on the back of strong issuance. Net issuance then came more or less to a standstill by the end

of 2008. This, combined with strong borrowing from banks, resulted in a declining debt securities share. From 2009 onwards, however, financing through debt securities rebounded significantly, thus appreciably pushing up its share once more. Stronger demand for bank loans caused a sideways movement from the end of 2013. Given these country-specific developments, the share of debt securities in the euro area as a whole increased almost continuously, with the exception of the period of the strong bank credit boom between 2003 and 2008.

The shift from bank loans to debt securities can impact the transmission of monetary policy. The interest rate channel is the focus of theories on monetary policy transmission, with findings suggesting that a tightening of monetary policy increases interest rates on borrowed capital. This, in turn, leads to lower demand for credit and weaker investment. As a result of financial constraints, the financial sector can amplify this channel. Through the banking channel of monetary policy transmission, a tightening of monetary policy restricts banks' credit supply. This leads, amongst other things, to a rise in bank lending rates. If NFCs only make limited use of alternative financing, the interest they pay on borrowed capital will thus increase disproportionately sharply. Against this backdrop, it would be expected

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**1** In this box, the term "bank loans" is used synonymously for "MFI loans".
**2** For a detailed analysis of the shifts in corporate financing see Deutsche Bundesbank (2012, 2018a).
**3** In terms of safeguarding liquidity, trade credits and advances are the main alternative to bank loans. Their importance has likewise increased in recent years. However, as they are less relevant for monetary policy transmission, their role is not examined in detail here.

**Relative importance of bank loans and
debt securities for the financing of
non-financial corporations***

As a percentage of total financing, quarterly
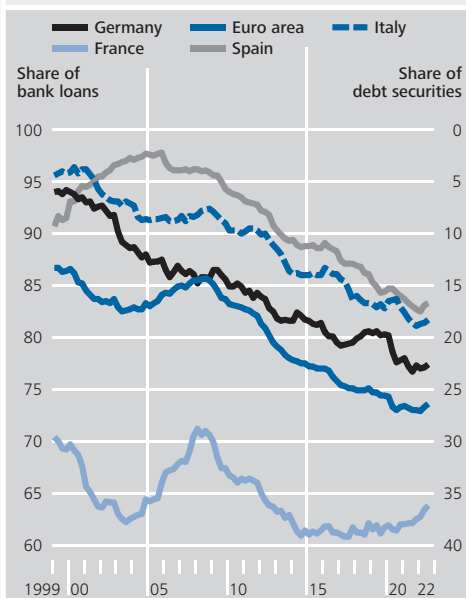


Sources: ECB and Bundesbank calculations. * In order to elim-
inate any influence from price fluctuations, calculations are
made by adding cumulated transactions to initial stocks.
Deutsche Bundesbank

rates. Taken together, a shift in NFC finan-
cing from bank loans to debt securities
could thus change the relative importance
of individual monetary policy transmission
channels. However, this should not funda-
mentally weaken the transmission of mon-
etary policy. The research area briefly out-
lined here, which is still largely in its infancy,
will undoubtedly provide further insights in
this regard over the next few years.

that a high share of debt securities in NFC
financing weakens monetary policy im-
pulses via this channel. A recent study by a
Eurosystem working group confirms this as-
sumption, showing that conventional mon-
etary policy shocks lead to a smaller decline
in GDP in euro area countries that have a
high share of debt securities in NFC finan-
cing than in those with a small share.[4] How-
ever, this result only applies to conventional
monetary policy shocks that are reflected in
changes in short-term interest rates. The ef-
fect is reversed in the case of unconven-
tional monetary policy shocks that affect
the long end of the yield curve, with mon-
etary policy thereby having a stronger im-
pact in euro area countries with a high
share of debt securities. One reason for this
could be the fact that debt securities are
often held by non-bank financial intermedi-
aries. These tend to make comparatively
strong adjustments to their balance sheets
in response to changes in long-term interest

[4] For more in-depth information, see Work stream on
non-bank financial intermediation (2021). Its findings
on monetary policy transmission are based on the
work of Holm-Hadulla and Thürwächter (2021). Similar
results are found at the firm level for the United States
as well. For more information see Crouzet (2021).

## Changes in credit demand* in the euro area and selected explanatory factors**

As a percentage of responses given (net)



Source: Bank Lending Survey. **\*** Difference between the sum of the percentages of banks responding "increased considerably" and "increased somewhat" and the sum of the percentages of banks responding "decreased somewhat" and "decreased considerably". **\*\*** Difference between the sum of the percentages "contributed considerably to higher demand" and "contributed somewhat to higher demand" and the sum of the percentages of banks responding "contributed somewhat to lower demand" and "contributed considerably to lower demand". **1** Expectations for Q4 2022.

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information about the orientation of loan supply policies. BLS banks reported that they had repeatedly tightened their credit standards for loans to non-financial corporations and households in the first three quarters of 2022 (latest data, see the chart above). They justified the stricter standards on the grounds of a perceived heightening of credit risk. For the corporate lending segment, a deterioration in the general economic situation and the economic outlook, as well as industry-specific and firm-specific factors, were cited as the most significant reasons. In the case of loans to households for house purchase, the key issues were not only the deterioration in the general economic situation but also the decline in borrowers' creditworthiness. In addition, there was a decrease in risk tolerance among the BLS banks. The non-standard monetary policy measures also gradually expired in 2022 and, according to BLS data, therefore no longer had an expansionary effect on banks' financing options and lending policies.[46]

Given these indications of a significant tightening of credit standards, the question arises as to whether current restrictive effects on lending caused by loan supply policy exceed the desired degree of monetary policy transmission. For a comprehensive assessment, it is necessary to incorporate the BLS results into a broader context and to evaluate them against the backdrop of the macroeconomic environment. A vector autoregressive model is presented on pp. 41ff. that combines data on the growth and lending rate of loans to non-financial corporations in the euro area with the corresponding BLS data on changes in credit standards and loan demand, conditioning results on GDP growth. While the model registered pronounced restrictive loan supply shocks in the years of the financial and sovereign debt crises as well as in 2021, during the COVID-19 pandemic, there are not yet any signs of an additional restrictive impact through banks for

*No indications of greater loan supply restrictions thus far*

46 See Deutsche Bundesbank (2022b).

## Changes in credit standards* in the euro area and selected explanatory factors**
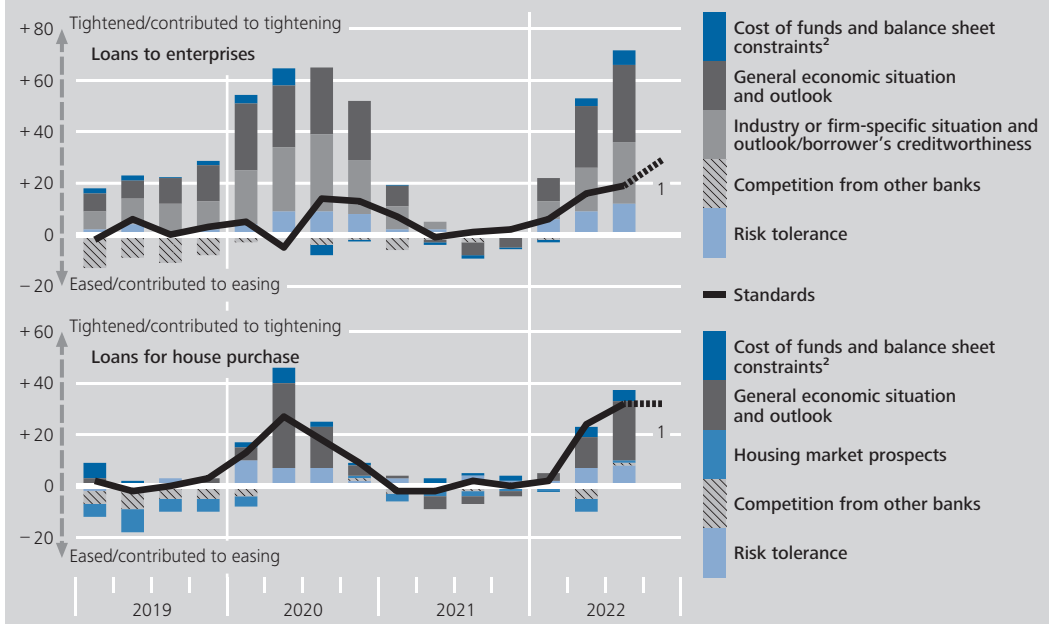
As a percentage of responses given (net)



Source: Bank Lending Survey. **\*** Difference between the sum of the percentages of banks responding "tightened considerably" and "tightened somewhat" and the sum of the percentages of banks responding "eased somewhat" and "eased considerably". **\*\*** Difference between the sum of the percentages "contributed considerably to tightening of credit standards" and "contributed somewhat to tightening of credit standards" and the sum of the percentages of banks responding "contributed somewhat to easing of credit standards" and "contributed considerably to easing of credit standards". **1** Expectations for Q4 2022. **2** Average of the following factors: costs related to a bank's capital position, access to market financing, and liquidity position. Since Q1 2022, the factor "Cost of funds and balance sheet constraints" has been subdivided into the aforementioned separate factors for loans to households.

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2022. The analysis therefore shows that the reported adjustments to credit standards have not had an overly restrictive effect on lending to date. In addition, as shown in the chart on p. 29, the model outlined on pp. 25 ff. indicates that the contributions of the loan supply shocks in the recent past have a negative median. However, as explained in the box on pp. 25 ff., this finding is sensitive to specification choices and the uncertainty surrounding the estimates of these contributions is high. There are therefore doubts regarding the reliability of this result. Overall, model evidence therefore does not point to loan supply shocks having a greater relevance at present.

*So far no indication of major financing bottlenecks in business surveys either*

Surveys of businesses likewise provide no indication of any significant financing restrictions and thus support the model-based estimate. Firms surveyed by SAFE continue to regard access to financing as the least of their worries. The shortage of skilled labour, in particular, currently poses the biggest problem for firms. Surveys conducted by the European Commission also do not indicate any fundamental deterioration in enterprises' financing conditions to date, although there were reports that financing bottlenecks had become more relevant over the course of the year. Firms did not regard them as one of their most pressing concerns, however.

The assessment that supply-side financing constraints are not currently a major factor is also consistent with the available information on the banking sector's capital resources and profitability in the euro area. The indicators available for significant banks directly supervised by the ECB under the Single Supervisory Mechanism (SSM) suggest that the banking sector was well positioned when interest rates began to reverse. Although the Common Equity Tier 1 (CET1) ratio of these banks recently fell slightly, it still tended to be somewhat higher in the first three quarters of 2022 than it had been in the period prior to the start of the pandemic. Earn-

*Banking sector was well positioned at onset of interest rate reversal*

# Identifying loan supply and loan demand using the Bank Lending Survey

An important task of the monetary and financial analysis is to draw conclusions about changes in loan supply and loan demand based on developments in loan growth and the lending rate. Monetary policymakers are particularly interested in whether and, if so, to what extent developments in lending are hindered by supply-side constraints. Restrictive loan supply shocks could prevent the desired monetary policy impulses from being transmitted from the key interest rates to the real economy in the intended way. If this were the case, policymakers would have to take this factor into account when further tightening monetary policy.

However, a multitude of variables have an impact on the loan market, which means that loan supply and loan demand cannot simply be inferred from the statistical data on loan growth and the lending rate. This box outlines an analytical tool that serves this purpose with regard to loans to non-financial corporations in the euro area. To this end, the information on lending volumes from the MFI balance sheet statistics is supplemented by figures from the MFI interest rate statistics on the average rates for (newly issued) loans as well as data from the Bank Lending Survey (BLS). In the BLS, the Eurosystem surveys a sample of 153 banks domiciled in the euro area about credit developments on a quarterly basis. The banks' responses are categorised, amongst other things, into information on changes in their credit standards on the one hand and their assessments of changes in loan demand on the other. From an economic perspective, however, the responses to both of these questions cannot always be attributed definitively to either the loan demand side or the loan supply side.[1] Furthermore, banks provide their responses to the BLS by selecting one of five multiple-choice options[2] – as a result, the aggregate observations are averages or net shares of a qualitative variable. For these reasons, it is not possible to quantitatively decompose loan growth and the lending rate into supply-side and demand-side components directly from the survey responses. Instead, these can only be obtained in conjunction with statistical data.

To this end, a vector autoregressive (VAR) model is used to define equations for loan growth, the lending rate, the change in credit standards according to the BLS (BLS standards), and the change in loan demand according to the BLS (BLS demand). Each equation incorporates the lagged values of its own variable as well as those of each of the other variables as a linear combination. In addition, the model is conditioned on GDP growth, the current and lagged values of which are also factored into each equation. The coefficients of this equation and the residuals, i.e. the unexplained remainders, are estimated using standard statistical methods (ordinary least squares method) for the period from the first quar-

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**1** The questions mainly relate to developments in lending volumes (in new business). However, a decline in lending volumes, for example due to a higher lending rate, that the surveyed bank attributes to loan demand may have actually been caused by a shift in the loan supply curve to which borrowers respond by moving along their loan demand curve, which itself remains unchanged.
**2** For credit standards, the multiple-choice options are "tightened considerably", "tightened somewhat", "remained basically unchanged", "eased somewhat", and "eased considerably". For loan demand, the multiple-choice options are "decreased considerably", "decreased somewhat", "remained basically unchanged", "increased somewhat", and "increased considerably".

## Identifying zero and sign restrictions*

| Variable | Shock | |
|---|---|---|
| | Loan supply | Loan demand |
| Loan growth | + | + |
| Lending rate | − | + |
| BLS standards | + | 0 |
| BLS demand | 0 | + |

* The restrictions apply to the period in which the shock occurs. Conversely to how it is typically depicted, the variable "BLS standards" is defined such that an increase in the variable represents an easing of standards.

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### Residual decomposition of loan growth and the lending rate on loans to non-financial corporations in the euro area

Percentage points
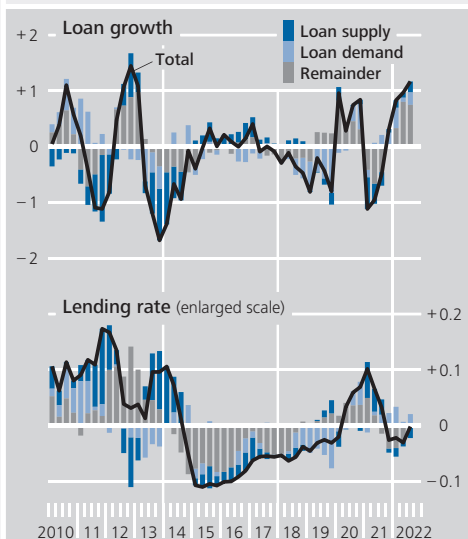


Source: ECB and Bundesbank calculations. Four-quarter moving averages of the contributions of the identified shocks in a VAR model for the annualised change in outstanding loans over the preceding quarter (logarithmic), the lending rate, the change in BLS credit standards, and the change in BLS credit demand (with exogenous GDP growth).

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the lending rate, and eases BLS standards, while BLS demand remains unchanged. An increase in loan demand increases loan growth, raises the lending rate, and increases BLS demand, while BLS standards remain unchanged.[3] The remainder shown in the adjacent chart therefore consists of the components of the residuals that do not correspond to this pattern.

Pronounced restrictive loan supply shocks were thus mainly recorded during the years in which the financial and sovereign debt crises occurred (2010-11 and 2013-14) and in 2021, one of the years of the COVID-19 pandemic (see the adjacent chart). Owing to the government emergency measures, 2020 was not characterised by restrictions to the loan supply. It appears that, to a certain extent, banks caught up on imposing such tightening measures following the uncertainty regarding the future course of the pandemic that was prevalent at the start of 2021. At the current end, the model indicates surprisingly strong lending. This is attributable, first, to expansionary developments in loan demand. Second, despite the recent tightening of credit standards, the loan supply side is also not having a restrictive effect, but instead a slightly expansionary impact compared with the previous year. This is the result of the relatively small rise in interest rates compared with the rise in loan growth: the identification mechanism reveals an expansionary loan demand shock, as this type of shock increases the residual values of both loan growth and the lending rate. At the same time, an expansionary loan supply shock is identified, as

ter of 2003 to the third quarter of 2022. The residuals are then decomposed into supply and demand effects as well as into an unidentified remainder component. This is done by imposing a combination of zero and sign restrictions on the model (see the table above). These restrictions reflect the definitions of loan supply and loan demand, supplemented by the assumed responses of the variables from the BLS: an increase in loan supply increases loan growth, lowers

3 This definition refers to the relative responses of the variables to each other and applies conversely if a reduction in loan supply or a decline in loan demand are assumed. Furthermore, not all of the variables must necessarily change; possible zero responses are also taken into account in the sign restrictions.

the rise in the lending rate is small in relation to the rise in loan growth.

The tightening measures reported in the BLS have therefore not had an impact on lending in the form of loan supply restrictions. In principle, the BLS data on changes in credit standards have a certain lead over lending,[4] so lending would be expected to decline over the coming quarters. However, the model described here shows that, as things currently stand, the tightening is unlikely to go beyond the usual (and, from a monetary policy perspective, desirable) systematic correlation.

**4** For more information on the function of the BLS as a lead of lending, see Deutsche Bundesbank (2022c).

ings, as measured by the return on assets, developed positively in the first three quarters of 2022. The share of non-performing loans on the books of significant banks continued to decline during this period, despite the war in Ukraine. Taken in isolation, the relatively healthy state of the banking sector reduces the risk of additional loan supply-driven constraints, which could lead to negative feedback loops between the financial sector and the real economy.

## Current financial stability issues

*Monetary policy must look at interactions between monetary policy and financial stability*

When assessing the current monetary policy tightening process, the expanded monetary and financial analysis also looks at interactions between monetary policy and financial stability. These are relevant to monetary policy because they can have a considerable impact on economic activity and inflation. In adverse scenarios, there are likely to be negative feedback loops between the financial system and the real economy as well as severe disruptions to the process of monetary policy transmission. In the current environment, the monetary and financial analysis gauges the risks to financial stability posed by the tighter monetary policy stance – which is a necessary response to inflation – and whether this has implications for the future path of inflation and thus for forthcoming monetary policy decisions.

Monetary policy tightening has both positive and negative effects on financial stability. At present, a key question is whether this tightening may further heighten the risks to financial stability caused by the war in Ukraine.

*Monetary policy tightening …*

On the one hand, the war in Ukraine and its economic repercussions led to a significant rise in financial stability risks in the euro area over

*… may entail heightened financial stability risks in the short term …*

the course of 2022.[47] This is because the burdens associated with the war increase the risk that the vulnerabilities built up in previous years – such as growing debt in the government sector and in parts of the corporate sector in some countries as well as the sharp rise in real estate prices – could trigger disorderly adjustments in an adverse scenario. Given the changed environment, credit risk increased for firms and households over the course of 2022, while programmes to mitigate the impact of rising energy prices reduced the fiscal leeway of euro area countries. The associated risks could be amplified by a further tightening of the monetary policy stance, as tightening leads to more stringent financing conditions and falling prices on the financial markets. Both of these factors could reduce asset quality and increase the already elevated market stress caused by the war in Ukraine, making adverse feedback loops between the financial system and the real economy more likely. In addition, increasing interest rates and rising costs of living are dampening demand for residential property, meaning that, in adverse scenarios, it would be conceivable to see falling residential real estate prices, lower collateral values for housing loans and higher future credit defaults.

*… yet price stability-oriented monetary policy also has a positive impact on financial stability*

On the other hand, a monetary policy oriented towards price stability lowers the risks to the financial system posed by high inflation rates and an associated weakening of economic growth. In addition, raising the policy rate, especially when starting from a low interest rate level, has a positive impact on banks' net interest income over the longer term.[48] Furthermore, the tighter monetary policy stance will reduce the build-up of existing financial vulnerabilities in the medium term. For example, it is likely to dampen excessive risk-taking and the search for yield seen on the financial markets in the low interest rate environment of recent years. At the same time, it should reduce the incentives for governments and non-financial corporations to accumulate more debt.

In this environment, the monetary and financial analysis is tasked with observing the relationships between monetary policy and financial stability and determining their implications for monetary policy. Internal analyses indicate that, in its current state, the financial system will be able to cope with the effects of the changed monetary policy stance and absorb the impact of the planned further tightening. The changed macroeconomic environment and the repricing in the financial markets have, in and of themselves, increased the risk of financial amplification effects. However, as outlined in the discussion of banks' loan supply, the euro area banking system is currently in a good state, which should limit negative feedback loops between the financial system and the real economy.[49] In addition, the supervisory authorities of a number of euro area countries have activated macroprudential capital buffers in recent years. If necessary, banks can use these buffers to stabilise their loan supply.

*At present, financial system should be able to cope with side effects of tighter monetary policy …*

At the same time, however, monetary policy must ensure that it does not itself become the cause of disorderly financial market adjustments. It is therefore important for the Governing Council of the ECB to act in a forward-looking manner and communicate its monetary policy clearly and convincingly. The Transmission Protection Instrument (TPI) is also available as a means of countering any unwarranted and disorderly market dynamics that pose a serious threat to the transmission of monetary policy across the euro area. This in itself should already have a stabilising effect.

*… if monetary policy is forward-looking and its stance is clearly communicated*

## ▪ Conclusion

The topics and methods of the monetary and financial analysis have gone through many changes over the years. This is due, first, to the

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47 For a broad discussion of current financial stability risks in the euro area, see European Central Bank (2022a).
48 See Deutsche Bundesbank (2018b) and Busch and Memmel (2017).
49 See European Central Bank (2022b).

*Increasingly broad-based monetary and financial analysis …*

fact that the changing environment has repeatedly presented monetary policy with new challenges. Second, access to additional data sources and advances in methodologies have made it possible to investigate an ever broader range of issues. Through these adjustments, the Eurosystem's monetary and financial analysis has time and again succeeded in making important contributions to the preparation of monetary policy decisions.

*… time and again provides valuable input for monetary policy decision-making process*

The prominent focus on monetary developments at the start of the European monetary union was a legacy of the Bundesbank's culture of stability. However, the empirical evidence of a stable money-price relationship that can be utilised for monetary policy purposes became increasingly weak in the 2000s. Against this background, and in light of the challenges posed by the global financial crisis, the focus of the monetary and financial analysis has progressively shifted towards monetary policy transmission. Work in this analytical area in particular was extensively used to prepare decisions taken during the low interest rate period on the use and design of the new non-standard monetary policy measures. In addition, it has become clear that the monetary and financial analysis can play a valuable role in identifying financial shocks and their impact on the real economy. This topic, too, gained greatly in importance in the wake of the financial and sovereign debt crisis.

*Stronger money growth in 2020 and higher inflation in 2021-22 driven by different causes*

The COVID-19 pandemic, the energy crisis and high inflation have caused another shift in the issues to be addressed by the monetary and financial analysis. One question that has arisen is how the large growth in the monetary aggregate M3 in 2020 might be related to the rise in inflation in 2021-22. Our analyses suggest that the strong money growth seen in the first phase was primarily due to money demand shocks associated with the uncertainty-led increase in money holdings, but that these shocks did not cause a rise in inflation. Subsequently, money growth and inflation were positively affected by aggregate demand shocks, which are

probably attributable to fiscal support measures taken during the COVID-19 pandemic, and by accommodative monetary policy.

The impact of the war in Ukraine on the inflation outlook and the change in the monetary policy stance raise further questions. With regard to transmission, the monetary and financial analysis indicates that monetary policy tightening has so far been having its intended effect on the financing conditions of banks, firms and households, with financing costs having risen on a broad front. Net issuance of corporate bonds has declined significantly since the beginning of the year, even turning negative at times. Net lending to non-financial corporations and households has also weakened recently. Various model calculations suggest that the observed adjustments of financing conditions are consistent with the macroeconomic environment and historical patterns. Moreover, they do not show any indication that the loan supply side is currently generating any additional negative stimuli. It can thus be assumed that the transmission process is intact and that the tighter monetary policy stance is being transmitted to the real economy as intended.

*Transmission process currently considered intact; monetary policy tightening is having its intended effect*

Since the 2021 strategy review, the monetary and financial analysis has also explicitly looked at financial stability aspects. Viewed in isolation, a further tightening of the monetary policy stance may heighten financial stability risks, which have already been elevated by the war in Ukraine and its economic consequences. At the same time, however, a monetary policy oriented towards price stability reduces the risks posed to the financial system by high inflation rates and existing financial vulnerabilities. At the current end, the monetary and financial analysis suggests that the euro area banking system is in a good state and is able to absorb the impact of monetary policy tightening. This, too, bears out the current monetary policy stance. Major negative feedback loops between the financial system and the real economy are not expected at present.

*Monetary policy tightening currently appears manageable for the financial system*

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# ❚ Term structures in economic analysis

*The path of interest rates of different maturities provides a wide range of information on how monetary policy, business cycle developments and the inflation outlook interact. When analysing interest rate developments, central banks pay particular attention to the impact of monetary policy measures on different maturity segments of the yield curve. Using term structure models, it is possible to look at the determinants of interest rates in detail. In particular, the models allow us to identify different interest rate components that cannot be observed directly. These include, above all, "pure" interest rate expectations and different risk premia.*

*In principle, a yield curve can be derived from various instruments of interest-bearing securities. For monetary policymakers, the €STR yield curve is of interest in the first instance, as the euro short-term rate (€STR) is closely linked to the policy rates. The yield curve of Federal securities also provides important information on bond-specific aspects, such as safety, scarcity and liquidity, which are likewise important for the transmission of monetary policy.*

*In the current setting, the path of the €STR yield curve indicates further rising policy rates until autumn 2023. However, the curve currently overstates "pure" expectations about the further hike in policy rates. This is because the continued high degree of uncertainty about how inflation will develop entails interest rate risk for market participants. To compensate for this, they demand risk premia in the form of higher term premia. Long-term interest rates have also risen significantly since the beginning of 2022. In this case, too, longer-term term premia increased alongside "pure" interest rate expectations.*

*Higher inflation expectations and inflation risk premia were the initial economic drivers of the increase in longer-term yields since the start of 2022. Investors demand the latter to compensate for unexpectedly high future inflation. Owing to the inflation dynamics, the Eurosystem subsequently introduced monetary policy tightening measures. This also led to significantly rising (inflation-adjusted) real interest rates in the second half of 2022. In addition, the yield-lowering effect of the Eurosystem's monetary policy purchase programmes on term premia gradually declined. This was initially driven by the end of net purchases and later by the ECB Governing Council's anticipated announcement that the full reinvestment of asset holdings would come to an end.*

*Term premia have risen lately, but are still at a historically low level. Experience gained over the past few decades with supply shocks such as those in the 1970s has shown that, after a prolonged period of strong inflationary pressures, term premia have remained at an elevated level. This was due to a high degree of perceived inflation uncertainty. Even after inflation was successfully tamed in the 1980s, this uncertainty initially persisted. In terms of the current setting, combating inflation in the Eurosystem is the highest priority in order to prevent any doubts arising as to monetary policy's pursuit of stability.*

# Introduction

*Yield curve contains important monetary policy and economic information*

The yield curve describes the relationship between the maturity of bonds and their interest rates. For central banks, studying interest rate movements along the yield curve provides valuable insights for monetary policy analysis. To put it simply, monetary policymakers change the monetary policy stance by adjusting policy rates or – as introduced in the low interest rate environment – by purchasing assets. They thus influence the interest rates of different maturities, which help shape the macroeconomic environment and inflation developments through changed general financing conditions. This typically gives rise to a close relationship between the use of monetary policy instruments and general financing conditions. Movements in the yield curve therefore give monetary policymakers information about the transmission of monetary policy measures. At the same time, they provide valuable indications of market participants' expectations and risks relating to the macroeconomic situation and the inflation outlook. This is why the Bundesbank has traditionally paid great attention to developments in the yield curve.[1]

*Term structure models disentangle risk premia from expectations*

Identifying the drivers of interest rate movements can give us a greater understanding of them. Term structure models decompose interest rate movements into expected short-term interest rates that cannot be directly observed – "pure" interest rate expectations – and into risk premia that cannot be directly observed. Conceptually, pure interest rate expectations can be determined using the historical dynamics of interest rates, supplemented, where applicable, by macroeconomic data or surveys that are not affected by risk aspects. The term premium is then the difference between the observed interest rates and the interest rate expectations derived from the model. This decomposition can be used as a basis for analysing the impact of policy rate changes and non-standard monetary policy measures, amongst other things. The main issue to be explored is the extent to which the observed interest rates reflect "pure" interest rate expectations of market participants and what portion of the interest rates constitutes compensation for the assumption of various risks (see the upper chart on p. 55).

*Components of risk premia*

Depending on the type of asset, risk-averse market participants require risk premia for different types of risk. These include, in particular, the risk of an unexpected change in future interest rates (interest rate risk) and the risk of default on a payment or loan (credit risk). In addition, market participants wish to be compensated for the risk that, in an environment of shrinking market liquidity, securities can only be sold off quickly at a discount (liquidity risk). Finally, investors may be willing to accept a lower yield (i.e. higher price) if, for example, they are seeking a specific asset for regulatory reasons that is, however, difficult to obtain (scarcity premium). Generally speaking, investors demand a positive risk premium for investments with high payouts when the economy is faring well and low payouts when it is doing badly. Securities with high payouts in bad times have an insurance element. Investors are willing to pay a premium for such assets or to forego a yield. As with insurance, the risk premium is negative in this case.

*Article discusses policy rate expectations, …*

The first section of this article discusses how the yield curve of overnight index swaps (OISs) of different maturities can be decomposed into the components mentioned above. OIS rates are based on swap agreements in which two parties swap an agreed fixed interest rate against a series of overnight floating interest rates over a set term. The overnight floating rate is pegged to the movement of the €STR.[2] OIS rates for short and medium-term maturities are therefore

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**1** The first Bundesbank Monthly Report with an article on yield curves was published in 1971; see Deutsche Bundesbank (1971). More recently, the specificities of estimating yield curves during the financial crisis were discussed in Deutsche Bundesbank (2013) and the zero lower bound on interest rates in Deutsche Bundesbank (2017a).
**2** The €STR is an overnight interest rate calculated by the ECB on the basis of individual transactions between banks and financial counterparties. Before the €STR was introduced, OIS agreements were based on the EONIA.

closely tied to the Eurosystem's monetary policy toolkit (see the lower chart on this page). The OIS rates provide information on the priced-in "pure" expectations of future monetary policy measures and the associated interest rate uncertainty as assessed by market participants.

*… the special role of Federal securities …*

The second section of this article focuses on yields of Federal securities. Owing to their excellent credit quality, Federal securities are considered to be default-free and provide the benchmark in the euro area for euro-denominated debt securities overall. For example, they form the basis against which corporate bonds or government debt instruments issued by other jurisdictions are priced.[3] Federal securities yields follow a similar path to OIS rates of matching maturity. However, they are also subject to bond market-specific influences, which result in an interest rate spread between the OIS rate and the Federal bond (Bund) yield (see the adjacent chart). The analysis focuses on additional premia for particular safety, high scarcity and high liquidity. These have become more important in recent years with the use of non-standard monetary policy measures.

*… and the economic drivers of interest rate movements*

Finally, the third section of this article deals with the relationship between interest rates, inflation and the real economy. By analysing inflation-related and real components of the yield curve, we can gain a deeper understanding of the impact of inflation expectations, the growth outlook and the associated uncertainties on the yield curve. This section also addresses the questions of how well a recession can be predicted on the basis of yield curves and how monetary policy should respond to the current high price increases given the experience gained from earlier periods of high inflation.

## Policy rate expectations and interest rate risk

*Short-term swap rates dominated by policy rate expectations*

By varying their policy rates, monetary policymakers influence the slope, curvature and level of the yield curve. Based on an OIS term struc-



Determinants of interest rate movements
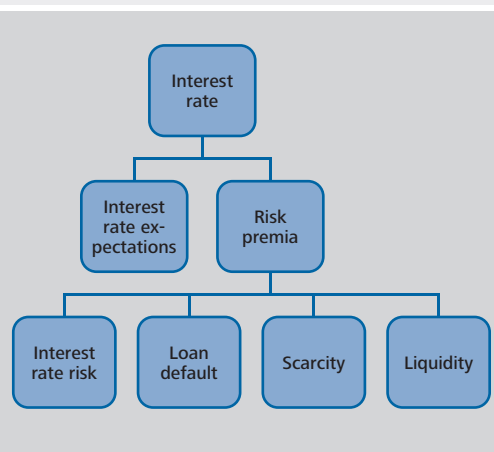
Deutsche Bundesbank



Interest rates in the euro area

%, month-end data
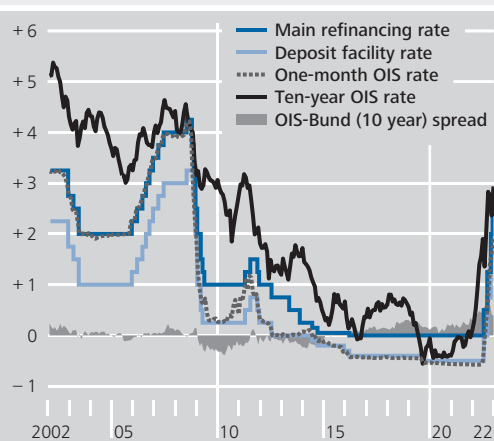
Sources: Bloomberg, ECB and Bundesbank calculations.
Deutsche Bundesbank

ture model, the upper chart on the next page shows the decomposition of the two-year OIS rate into the average expected €STR path (expectation component) and the term premium since 2013.[4] A large part of the variation in this

**3** See Deutsche Bundesbank (2017b).
**4** See Geiger and Schupp (2018). A key aspect of this model is the explicit inclusion of a binding lower bound. The specification of the lower bound takes into account both current and expected future changes in the effective lower bound. This means that the model is capable of mapping how policy rates have gradually moved into negative territory. As regards model estimation, the approach also considers short and long-term interest rate surveys to ensure that expectations derived from the yield curve about the future path of short rates are as consistent as possible with the survey results.

## Decomposition of the two-year OIS rate

%, month-end data
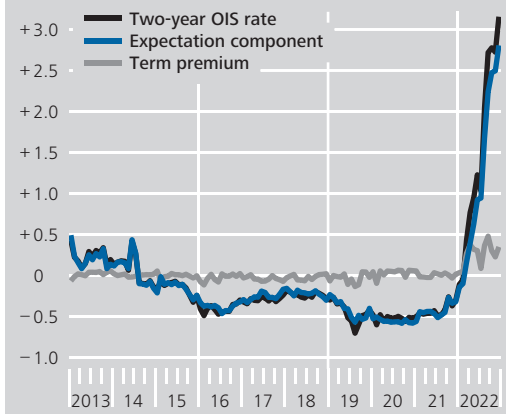


Sources: Bloomberg, ECB and Bundesbank calculations based on Geiger and Schupp (2018).
Deutsche Bundesbank

## OIS forward curve and expected €STR path

%, month-end data
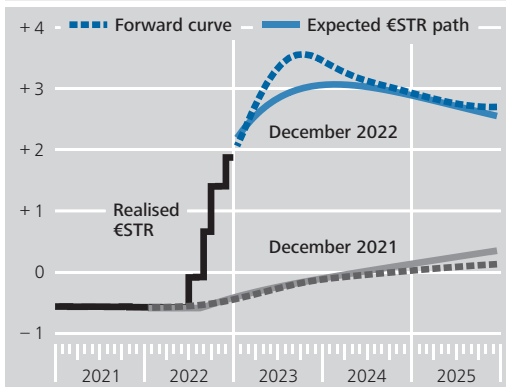


Sources: Bloomberg, ECB and Bundesbank calculations based on Geiger and Schupp (2018).
Deutsche Bundesbank

maturity segment is driven by the expectation component.

*Communication of monetary policy influences policy rate expectations …*

The degree of monetary policy accommodation hinges not only on the actual level of the policy rate but also on the expected future path of policy rates. This is because policy rate expectations have a major impact on general financing conditions. Through its monetary policy communication, the central bank can seek to influence the expectations market participants have about the future development of policy rates.

*… indirectly via central bank assessments of economic outlook …*

The central bank can indirectly influence policy rate expectations by communicating its assessment of the economic and inflation outlook. This gives market participants the opportunity to readjust their expectations about the perceived future path of policy rates accordingly.[5]

*… and directly via forward guidance*

The central bank can also directly influence market participants' policy rate expectations, however. It does so by explicitly describing the path it intends policy rates to take. In doing this, it also aims to reduce uncertainty about the medium and longer-term path of interest rates and thereby to lower term premia. One such form of explicit communication about future policy rates, known as forward guidance, started to become more prominent in the Eurosystem from July 2013. At that time, the scope for policy rate cuts was increasingly limited by the perceived lower bound. The result of this communication, targeting interest rate expectations and the term premium, was that OIS rates with medium-term maturities continuously converged with the deposit facility rate (see the upper chart on this page). The forward guidance increased the downward pressure on medium-term interest rates because the Governing Council of the ECB explicitly communicated that policy rates could fall further below the previously perceived lower bound ("easing bias"). It thus signalled even greater downside risks for the future path of interest rates, which was reflected in temporarily negative term premia in these maturity segments.

*Markets expecting further policy rate hikes in 2023*

This pattern underwent a significant change at the beginning of last year. Since then, inflation in the euro area has accelerated further amidst Russia's attack on Ukraine. The Governing Council of the ECB subsequently adjusted its forward guidance by first removing the easing bias in March 2022 and, since July 2022, emphasising that future policy rate developments will be data-dependent. From July to Decem-

**5** This "information effect" of monetary policy communication has received academic attention recently. See Jarociński and Karadi (2020) or Kerßenfischer (2022).

ber, the Governing Council decided on several large interest rate hikes totalling 250 basis points. As at the end of December 2022, market participants consider a maximum €STR of 3.0% to be the most likely level (see the lower chart on p. 56). Market participants therefore expect further interest rate changes in view of the persistently high inflationary pressures. The expected €STR is up to 50 basis points lower than the observed €STR forward rates. This positive term premium suggests that market participants mainly see a risk of interest rate hikes in the context of high inflation uncertainty.

*Duration risk an important element of OIS term premium*

The relative importance of the term premium on the OIS rate increases as the maturity lengthens. The longer the capital of a fixed-income security is tied up, the greater the effect of interest rate changes on the value of the swap (duration). Higher uncertainty about the path of interest rates is thus "automatically" translated into higher premia as the maturity increases. At present, the term premium for the ten-year OIS rate is 75 basis points, compared with 40 basis points for the two-year OIS rate.

*Purchase programmes reduce term premia*

Of particular importance to monetary policy is the fact that the estimated term premium has declined significantly since 2014 and was in negative territory until the start of 2022. This was largely due to forward guidance as well as the Eurosystem's broad-based purchase programmes. These include the asset purchase programme (APP) announced in January 2015 and, from March 2020, the pandemic emergency purchase programme (PEPP). Both were subsequently increased and expanded.[6] The programmes primarily took effect through a mechanism referred to in the literature as duration extraction. The Eurosystem added duration risk to central bank balance sheets by purchasing debt securities held by other investors using central bank money that is not exposed to interest rate risk. This reduced the aggregate duration risk to which non-Eurosystem balance sheets were exposed. Investors were

### Decomposition of the ten-year OIS rate

%, month-end data



Sources: Bloomberg, ECB and Bundesbank calculations based on Geiger and Schupp (2018).
Deutsche Bundesbank

thus prepared to accept a lower yield by way of lower to negative term premia.[7]

With regard to monetary policy transmission, it is important to be able to gauge the functional relationship between purchase programmes, duration extraction and the level of the term premium. To do so, an expanded OIS term structure model can be used which explicitly takes into account the aggregate duration risk of non-Eurosystem investors and quantifies the effect on the term premium.[8]

*Eurosystem's duration extraction lowers term premium …*

The upper chart on p. 58 shows the effect of the APP and PEPP on the OIS term premium. The estimations indicate that the ten-year OIS rate was around 100 basis points lower by the end of 2020 than in the counterfactual scenario in which the Eurosystem had not bought bonds. The end of net purchases under the PEPP (March 2022) and the APP (July 2022) and adjusted market expectations of a shorter re-investment period saw the aggregate duration

*… and dissipates only gradually in subsequent years*

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**6** See Rostagno et al. (2021) and https://www.ecb.europa.eu/mopo/implement/app/html/index.en.html for an overview of the evolution of the Eurosystem's purchase programmes.
**7** See Li and Wei (2018) as well as Eser et al. (2019).
**8** For details, see Deutsche Bundesbank (2019). For an analysis of the effects on Bund yields in the run-up to the announcement of the purchase programmes, see also Lemke and Werner (2020).

## Estimated contribution of bond purchases* to OIS rates

Basis points, end-of-quarter data
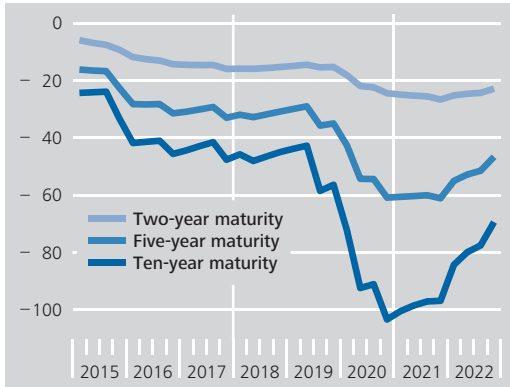


Sources: Bloomberg, ECB and Bundesbank calculations. * Under the APP and PEPP.

Deutsche Bundesbank

## OIS rate and Bund yield as well as their interest rate spread

Monthly averages
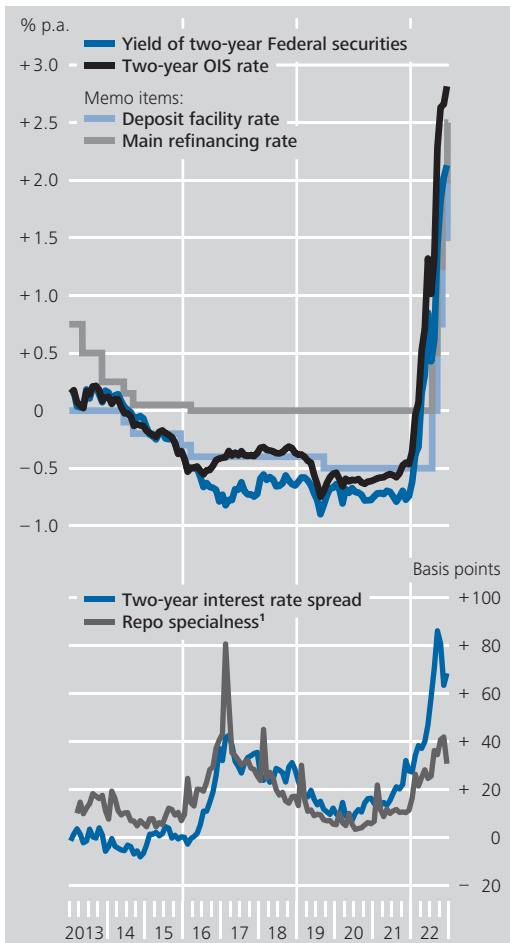


Sources: Bloomberg, NEX, EUREX and Bundesbank calculations. **1** Interest rate premium when certain German Federal securities are pledged as collateral for a secured overnight money market loan (repo transaction) rather than unspecified general collateral.

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risk in the market rise again. In line with this, the yield-lowering effect of the purchase programmes decreased in 2022. In order to ensure consistency with the monetary policy stance, the Governing Council of the ECB decided at its December 2022 meeting to reduce monetary policy asset holdings at a measured and predictable pace from March 2023 onwards. The portfolios will be reduced by €15 billion per month on average until the end of the second quarter of 2023, in order to reduce the yield-lowering effects on the term premium. The subsequent pace of the decline will be determined over time. According to the estimations, however, the decrease in term premia induced by the asset purchases persists for years – in fact, for as long as the Eurosystem's balance sheet contains duration risk.

# The special role of Bunds: benchmark status and scarcity

Yields on Federal securities have been lower than OIS rates for some years now. For example, the two-year OIS rate was close to the deposit facility rate between 2017 and 2021 given the effect of the forward guidance described above. OIS rates are largely constrained downwards by the Eurosystem's deposit facility rate and the perceived lower bound. Two-year Federal securities yields, however, were significantly lower than the deposit facility rate for a time. During the purchase programmes, Bund yields fell more sharply than OIS rates of the same maturity (see the adjacent lower chart). However, this cannot be due to credit quality, as both instruments are considered virtually default-free by market participants. The special role of Federal securities is also shown by the fact that, in the secured short-term money market, interest rate reductions are granted if German Federal securities are provided as collateral.[9] This

*Yields on Federal securities lower than OIS rates*

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**9** For a general overview of the repo market, see Deutsche Bundesbank (2022a). For more on the impact of the asset purchase programmes on the repo market with German collateral, see Baltzer et al. (2022).

interest rate reduction is referred to as repo specialness and was at an all-time high in the autumn of 2022.[10]

*Federal securities: benchmark for valuation*

There are many reasons for the size of the two interest rate spreads mentioned above. Federal securities are the benchmark in the euro area. The Federal securities market is a reference market for numerous euro-denominated financial products. For example, the prices of Federal securities are the benchmark for all government bond prices in the euro area as a whole.

*High level of safety, liquidity and scarcity of Federal securities*

Owing to the combination of good credit quality and high issue volumes, Federal securities are very liquid across all the typical dimensions, such as "breadth" (trading costs at a given volume), "depth" (tradable volume at a given price) and "resilience" (the half-life of random price fluctuations). The high level of liquidity can also be seen, for example, in the fact that the bond futures with the highest turnover in the euro area are based on Federal securities.

*Federal securities a safe haven in times of crisis*

Federal securities are a good default-free way to put away liquid funds even in times of crisis – unlike swaps. Liquidity and scarcity premia therefore rise in times of crisis (safe haven effects). Market participants are willing to pay a higher price (convenience premium) for the advantage of access to a Bund which is scarce in such market situations as well. This can be readily seen in the OIS rate-Bund yield spread at the start of the COVID-19 crisis, for example.[11]

*Demand caused by regulation: scarcity premia …*

Institutional investors also hold Federal securities for reasons relating to monetary policy and regulation. This primarily concerns banks (Basel rules, collateral for derivatives), insurers (solvency rules) and central banks (exchange rate management, reserve maintenance, monetary policy objectives).[12] This is the reason for what is known as a scarcity premium. This premium cannot be explained by traditional interest rate risk or counterparty credit risk. The monetary policy purchase programmes increase this scar-

city premium, as they reduce the freely tradable Federal securities in free float.[13]

*… influence indicators derived from interest rates*

The special factors listed here, which have time-varying effects of different magnitudes on Bund prices, impair the quality of the economic indicators derived from them. This should be taken into account when making statements on expected policy rate changes, inflation expectations and the economic outlook, which will be discussed in the next section.

## The yield curve: statements about the economy and inflation

*Yield curve's relationship to economy and inflation*

Economic developments and inflation dynamics are fundamental drivers of the yield curve. First, monetary policy responds to a changed inflation outlook, which is reflected in the path of interest rates. Second, the yield curve reflects market participants' expectations about future inflation and economic developments. The following section examines the impact of inflation expectations and the growth outlook on the yield curve.

## Real and inflation-related components of the nominal yield curve

*Real yields on inflation-linked bonds*

Inflation-linked bonds provide a direct and forward-looking market assessment of the expected real interest rate and thus an indirect as-

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**10** The particularly high repo rates at the end of the year are not due to the scarcity of securities, but rather to specific reporting dates under banking regulation; see Munyan (2015).
**11** For a comparison among euro area countries, see Jiang et al. (2021). Bletzinger et al. (2022) and Carriero et al. (2022) find such a premium compared with bonds issued by the EU or EFSF as well.
**12** See, for example, Cohen et al. (2018) and Domanski et al. (2017).
**13** For information on changes in the holder structure and the free float of Federal securities, see Deutsche Bundesbank (2018) and Deutsche Bundesbank (2022b). Deutsche Bundesbank (2022c) looks at their implications for the state of the market for Federal securities.

## Illustration of yield components and their aggregates

| Real term premium | + | Inflation risk premium | = | Nominal term premium |
|---|---|---|---|---|
| + | | + | | + |
| Real short-term interest rate expectations | + | Implicitly expected inflation | = | Nominal short-term interest rate expectations |
| = | | = | | = |
| Real yield | + | Implicit inflation compensation | = | Nominal yield |

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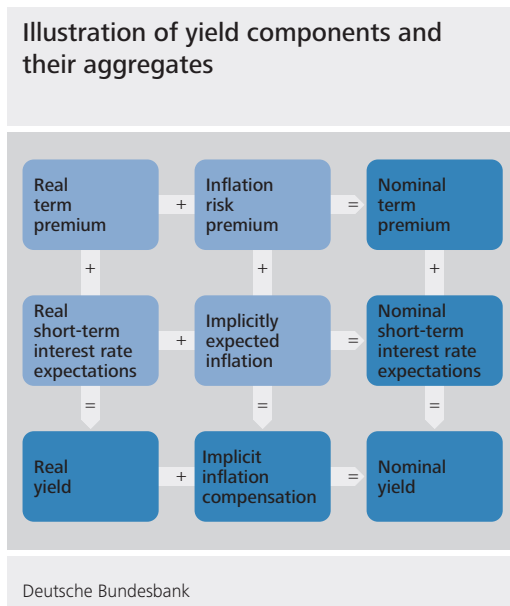
flationary scenarios in their calculations given very low inflation expectations.

*Relevance of inflation risk premium to monetary policy*

When it comes to monetary policy analysis, it is important to take account of the inflation risk premium. First, as stated above, the calculated bond-based compensation for inflation only corresponds to "pure" inflation expectations if it is adjusted for the inflation risk premium. Second, it affects monetary policy transmission from short-term to long-term yields. This is because changes in inflation risk premia in long-term yields can, for example, strengthen or weaken the monetary policy steering intended via the policy rate. Given a low and relatively stable inflation risk premium, monetary policy impulses can also be transmitted more directly to financing conditions. At the same time, a low inflation risk premium reflects market participants' high confidence in the determination and ability of monetary policymakers to achieve the inflation target.

*Link between interest rates and long-term growth*

The real rate of interest on financial assets is closely tied to expected real economic developments. In particular, it is based on the return on investments along the path of economic development and is influenced in the longer term by potential output growth.[14] One result of this is that deteriorating real interest rate expectations could be seen as an indication that market participants are revising their real growth expectations downwards.

*Cyclical properties of real term premia*

From a conceptual point of view, real term premia can be positive or negative. In other words, investors can either demand a higher yield on a long-term investment or be willing to accept a lower yield by way of these premia. For risk-averse investors, the option of being able to hedge their consumption even in bad times is crucial.[15]

sessment of economic developments. For inflation-linked bonds, the coupon and principal increase with the inflation rate, meaning that a real yield can be calculated. Like yields on nominal bonds, real yields on inflation-linked bonds can also be decomposed into a "pure" expectation component and a term premium.

*Market-based inflation outlook from real and nominal bond yields*

Based on the difference between nominal and real yield curves, it is possible to draw conclusions about the implicit inflation compensation in bond markets at different maturities. For example, implicitly expected inflation can be calculated as the difference between nominal and real short-term interest rate expectations (see the chart above). These data thus give the Eurosystem useful, real-time information about market participants' inflation outlook. The difference between the nominal term premium and the real term premium also yields the inflation risk premium. Inflation-linked bonds in fact not only protect investors against expected inflation. This type of bond also safeguards the purchasing power of the invested euros against an unexpected increase in inflation. In most cases, risk-averse investors are willing to pay a positive inflation risk premium for this additional security. In recent years, however, the inflation risk premium has also been negative at times. At that time, investors also included de-

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**14** This view closely corresponds to the question as to the fundamental drivers of real interest rate developments. The equilibrium real interest rate can be described as the real short-term interest rate that closes the gap between realised growth and growth potential and stabilises the inflation rate. For more information, see Brand et al. (2018), Deutsche Bundesbank (2001) or Bliss (1999).
**15** The macroeconomic literature derives general properties of (real) term premia; see Chien and Lee (2019) and Campbell (1986).

*Negative real term premium*

If, say, the yield on real bonds were to decrease in an environment of weakening growth expectations, real long-term bonds would provide a hedging opportunity for investors' desired consumption level. This is because a declining yield means that the value of the bond increases and that a real gain is achieved in the event of a sale. Investors are then willing to accept a lower yield. This is reflected in a negative real term premium. The bond will then have an insurance element. This is usually the case when growth expectations weaken, inflation falls and monetary policymakers subsequently loosen the monetary policy stance.

*Positive real term premium*

If, conversely, in an imminent recessionary phase, real bond yields rise and the market values of real bonds fall, investors typically demand compensation. This is then a positive real term premium. This could happen if the economic outlook deteriorates whilst inflation expectations rise. In such an environment, possibly driven by supply shocks, monetary policymakers tighten the monetary policy stance in order to stabilise inflation expectations, despite the looming economic downturn. The bond does not have an insurance element in this situation.

*Empirical characteristics of inflation risk premia and real term premia*

Studies have shown that real term premia tend to be countercyclical and increase during recessions.[16] Empirical and more heavily model-based studies also reveal the factors that have played an important role in the historical evolution of real term premia and inflation risk premia.[17] Market participants demand a higher inflation risk premium if the inflation outlook appears uncertain. The inflation risk premium is also higher if (nominal) short-term interest rates are more volatile. This could be the case, for example, if the monetary policy stance changes rapidly and market participants are uncertain about the intended monetary policy stance. A countercyclical relationship can be discerned in relation to economic activity: higher unemployment or low consumer confidence are usually associated with high inflation risk premia. In the past, periods of recession have often been



**Relative liquidity and scarcity of inflation-linked Federal securities***

Basis points, monthly averages
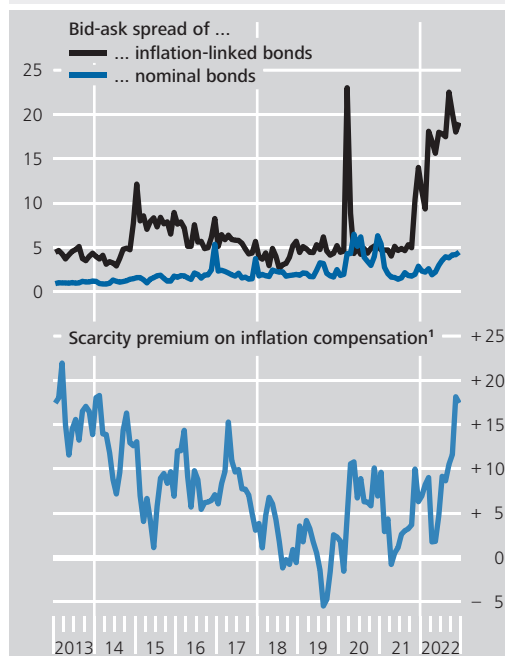
Sources: Bloomberg, MTS and Bundesbank calculations. * Median of all inflation-linked bonds and equivalent nominal bonds. **1** Difference between the asset swap rates of linked and nominal bonds.

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associated with high inflation. This is another reason why, in such times, investors have demanded greater compensation for assuming inflation risk. Monetary policy also influences the size of the inflation risk premium. Focusing heavily on the price stability objective, monetary policy is able to contribute to lower inflation risk premia, especially in the medium term. The sooner monetary policymakers are able to credibly commit to the inflation target, the greater the impact on inflation risk premia.[18] One major way in which this can be achieved is if monetary policymakers provide credible, forward-looking communication on the interest rate path they intend to take to ensure that the inflation target is met.

In times of crisis, in particular, liquidity differences between inflation-linked and nominal

*Liquidity premia*

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16 See Christensen and Rudebusch (2019).
17 See Abrahams et al. (2016).
18 See Kliem and Meyer-Gohde (2022).

# Decomposition of nominal yields into real and inflation-related components using short time series

Together with the yields on inflation-linked Federal securities, the yields on nominal Federal securities can be broken down into real and inflation-related sub-components in the model. This type of combined estimation then allows all components of nominal yields to be calculated as shown in the chart on p. 64. A detailed decomposition of this kind provides deeper insights into nominal interest rate developments.

The Bundesbank has calculated yield curve parameters for inflation-linked Federal securities since 2011 – prior to this, insufficient data points were available along the maturity spectrum to ensure stable estimates.[1] This period is relatively short, which may pose a problem as the estimation parameters of the yield curve can be biased when using fairly short time series. The bias is signalled by the fact that the estimation results for the long-term expectation component are excessively stable, whereas the term premia component is excessively volatile. Therefore, a model approach that takes into account the challenge of a short data history works well for analysing the yield curve of inflation-linked Federal securities.

The sub-components in the chart on p. 64 are estimated in two steps.[2] The first step is to estimate a term structure model using data on the nominal interest rate structure for Germany starting from 1999.[3] This produces nominal expectations about the future short-term interest rate and term premia. Based on this estimation, a restriction is imposed on the real estimation. To this end, the variance of changes in the nominal expectation component from 2011 to the present day is calculated. The second step consists of estimating the model for real

yields whilst imposing a restriction. The restriction is that the variance of changes in the real expectation component matches the variance of changes in the nominal expectation component from the first step. The estimation is thus based on the hypothesis that the statistical properties of real and nominal short-term interest rate expectations are similar. For the expectation component of long-term bond yields, this requires anchored long-term inflation expectations. This estimation results in a relatively stable decomposition of real yields into real term premia and the real expectation component. Inflation expectations and the inflation risk premium are derived from the difference between the nominal and real equivalents.

In this approach, the scope for interpretation is limited in two regards. First, the real and the nominal term structure models are estimated separately. Other models estimate the nominal and real term structures together in a joint model approach.[4] Unlike modelling performed in a joint model, the separate estimation does not allow for any statements about the statistical relation-

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**1** The Federal Government issued the first inflation-linked bond in 2006. It had an original maturity of ten years. Further bonds and other residual maturities followed later.
**2** For a more detailed discussion of the restriction concept and how it relates to the literature, see Halberstadt (2021). The discussion paper restricts the variance of changes in average expected future short rates, whereas the analysis presented here restricts the variance of changes in average short-term interest rate expectations over ten years. The alternative calibration used in the discussion paper aims at binding the model-implied variance of short-term interest rate expectations to that of short rate expectations from surveys.
**3** Using the model developed by Adrian et al. (2013).
**4** See Pericoli (2019), D'Amico et al. (2018) or Abrahams et al. (2016).

ships between the real and nominal model parameters. Moreover, comparing the statistical properties of separate model estimations for real and nominal yields with those of an estimation in a closed model approach shows that a joint estimation of both yield curves allows a smaller model framework with fewer factors and parameters to be used with no significant deterioration in estimation quality.[5]

Second, the impact of liquidity differences in the real and nominal bond markets cannot be estimated in the analysis presented here. However, models that do take these liquidity differences into account are only able to determine the associated premia with high levels of imprecision (see margin heading "Liquidity premia" beginning on p. 61).

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**5** See Christensen et al. (2008).

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Federal securities play a major role and make it more difficult to interpret changes in interest rates.[19] Specifically, inflation-linked bonds have lower market liquidity than their nominal equivalents, which is reflected in considerably wider trading ranges than those for nominal bonds (see the chart on p. 61). However, separately identifying liquidity premia in a model with nominal and real yields is a highly imprecise exercise.[20]

*Scarcity premium understates inflation compensation*

In addition, the scarcity premia mentioned above also play a role in determining market-based inflation compensation – the difference between nominal and real bonds. The scarcity premia on nominal bonds are higher than those of real bonds. Inflation compensation therefore tends to be underestimated, currently by around 20 basis points (see the chart on p. 61).[21] This is another aspect that makes economic interpretation more difficult. This is especially true in times of crisis, when fluctuations in the scarcity premium are particularly pronounced.

The large number of influencing and disruptive factors suggests that there may be methods with different focal points for modelling and quantifying yield curve components. The box on pp. 62 f. outlines a specific method for decomposing nominal yield movements into their real components and the impact of inflation since the outbreak of the coronavirus pandemic in the chart on p. 64. This method allows for, above all, the challenge posed by the short historical availability of inflation-linked German bonds. It should be noted, though, that liquidity and scarcity premia were not taken into account. The decomposition of the ten-year Bund yield calculated in this manner illustrates the change in the significance of inflation-related

*Development of sub-components since coronavirus pandemic outbreak*

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**19** European Central Bank (2021) addresses this issue for the euro area. Abrahams et al. (2016) and D'Amico et al. (2018) tackle the subject matter for US government bonds.
**20** In addition to the other references in this paragraph, see also Andreasen et al. (2021) and Christensen (2022).
**21** Fleckenstein et al. (2014) find a comparable premium on inflation-linked US government bonds.

### Development of Federal securities yield: nominal and real components

Basis points, month-end data, change since start of 2020



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tercyclical development of the real term premium. Based on the model estimates, the real short-term interest rate expectations in the summer of 2022 reflected a gloomy economic outlook. For example, the contribution of real short-term interest rate expectations was lower in July and August 2022, when gas prices in spot markets peaked.

## Yield curve components by historical standards

*Yield curve and business cycle since 1967*

What can be learned from the historical evolution of yield curve components and applied to the current situation, in which the economic outlook is deteriorating and high inflation rates are being observed? The following section focuses on two aspects. It looks, first, at how well a recession can be predicted on the basis of yield curves and, second, how monetary policy should respond to the current high inflation rate. To this end, the nominal yield on ten-year Bunds is decomposed on the basis of a term structure model into a nominal expectation component and a nominal term premium, starting from 1967 (see the chart on p. 69).[23] A further breakdown into real components, as in the previous section, is not possible for this long period, as inflation-linked bonds are a fairly new financial instrument.

In the past, before recessions, the short-term expectation component has risen so sharply

components over the past few years.[22] While they were still lowering yields at the start of the coronavirus pandemic, the inflation risk premium was already contributing to higher yields over the course of 2021. This indicates that market participants already saw unexpectedly high inflation developments as a possibility at this stage. They demanded higher risk compensation for this increased uncertainty. From the second half of 2021 onwards, the increase in yields then also increasingly reflected higher inflation expectations. The monetary policy tightening measures subsequently introduced by the Eurosystem also contributed to higher real yields last year. In particular, investors increasingly demanded a higher real term premium for investing in long-term inflation-linked bonds. In view of the massive supply shocks, this may have reflected greater uncertainty about economic developments and a diminishing risk appetite in the context of rising policy rates. This development is therefore consistent with the above-mentioned findings of a stronger coun-

22 The chart illustrates the components' contributions to the change in nominal yield. The model employed here using bond data provides trading-day results. Owing to the specified influencing and disruptive factors, the level of inflation-related yield components can be determined more reliably on the basis of survey-based long-term inflation expectations.

23 The decomposition of interest rate developments follows the approach of Speck (2023). This makes it possible to estimate a term structure model with simple linear regressions, even if there is no observable short-term interest rate of one-month maturity as for Federal securities. As an extension of existing linear regression approaches such as Adrian et al. (2013), the approach avoids a numerical optimisation as in Joslin et al. (2010). The estimated model is a classic, exponential-affine term structure model with a homogeneous error variance term excluding macroeconomic variables.

# Current drivers of market-based probabilities of recession based on the yield curve

The shape of the yield curve is a closely watched economic indicator of short-term economic growth among financial market participants, with particular attention being paid to a flat, or even falling, yield curve. A rule of thumb of sorts has been established in financial markets: long-term rates falling below short-term rates, known as inversion, can be interpreted as a recessionary signal.

Persistent global price pressures and the accompanying decline in private consumption and investment have been casting a shadow over the economic outlook since late 2021. In Europe, high energy prices and the uncertainty they have brought about are also dimming economic prospects. In this context, a flattening of the yield curve observed since the summer of 2022 – not only in Germany but also in other countries inside and outside the euro area – raises the question as to whether this is currently indicative of a looming recession.

On a long-term historical average, the yield curve is sloping upwards. A flattening yield curve may reflect reduced compensation for interest rate risk, but also decreased short-term interest rate expectations.

There can be various reasons for the statistical relationship between the yield curve inverting and a recession occurring. Amongst other things, the prospect of rising inflation may prompt the central bank to raise its policy rates. If, for example, this causes market participants to expect lower inflationary pressures in the medium to long term and an economic slowdown, yields at the short end of the yield curve will see stronger growth than at the long end. However, a flattening of the curve may also be the result of market participants anticipating a more accommodative monetary policy in the future if, looking ahead, they believe that the central bank could lower policy rates in response to an economic slowdown.[1]

Historically, this relationship between a flattening of the yield curve and an increase in recession risk is clear to see. When short-term yields have risen above long-term yields in the past, a recession has often followed. This pattern has been studied empirically for both Germany and the United States.[2] In the latter's case, an inversion of the US Treasury yield curve has preceded each of the last eight recessions. A false positive, when an inversion of this yield curve was not followed by a recession in about a year, last occurred in 1966.[3]

Econometric methods can be used to estimate the probability of a flattening or inversion of the yield curve preceding an economic downturn: specifically, using logistic regression, the slope of the yield curve is assigned a level of probability with which a recession will occur within one year. The slope is measured by the term spread between ten-year and three-month government bond yields (10Y-3M) and the spread between ten-year and two-year yields (10Y-

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**1** For a discussion of possible scenarios involving an inversion of the yield curve and practical aspects of estimating probabilities of recession from term spreads, see Estrella and Trubin (2006).
**2** For references to literature and an earlier study using German data, see Deutsche Bundesbank (2013). Estrella and Mishkin (1998) analyse the performance of the term spread and other financial variables as predictors of US recessions.
**3** See Federal Reserve Bank of Cleveland (2022). The website also provides up-to-date estimates of the probability of a US recession.

Estimated probability of recession based on the term spreads of Federal securities

Monthly data

Daily data

% **Probability of entering a recession within the next 12 months**

Term spreads
— 10 years – 3 months
— 10 years – 2 years
---- 10 years – 3 months[1]

Percentage points

4 **Observed term spreads**

Recession phases according to German Council of Economic Experts

1997 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22

J F M A M J J A S O N D
2022

**1** Adjusted for the estimated impact of asset purchase programmes (APP, PEPP) on the ten-year Bund yield.
Deutsche Bundesbank

2Y). In estimates using US data, recessions are usually dated as defined by the NBER. The German Council of Economic Experts uses a similar method to define recession phases for Germany.[4]

In the above chart, these German recession phases are each assigned a probability of recession based on various term spreads. The three recessions that have occurred in Germany since 1997 were each preceded by periods in which the yield curve inverted. The estimate shows recession probabilities of over 40% for these periods, indicating that an inversion is not a sure sign of a looming recession. Instead, an inversion signals a significantly above-average probability of recession compared with periods of larger term spreads.[5] The probability of recession steadily increases as the term spread decreases. Given the distribution function in the chart on p. 67, a term spread of zero is therefore an arbitrary value that is

assigned a relatively high probability of a future recession.

While, prior to 2022, the recessionary signals from the two measures employed to calculate the slope were similarly clear, their strength has diverged since the start of 2022 due to the maturities the measures use. Based on the 10Y-2Y spread, the probability of recession stood at 52% as at the end of December 2022. This is thus far stronger than the signal from the 10Y-3M spread, which, for that point in time, indicated an only 17% probability of a looming

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**4** While the main term spread found in the literature is the 10Y-3M spread, some market participants also make use of the 10Y-2Y spread. For information on dating business cycles, see Breuer et al. (2022). The German Council of Economic Experts publishes and keeps these data up to date on its website.
**5** Haubrich (2006) reports similar findings for the United States. For a discussion of models used to forecast economic downturns, see Deutsche Bundesbank (2020).

recession.[6] The technical reason for this discrepancy is the exceptional shape of the yield curve. The slope is very steep, especially in the maturity range of up to two years, before flattening off somewhat in the subsequent medium to long-term maturity range. This maturity-specific difference reflects two things. First, market participants have been expecting the Eurosystem to continue to rapidly normalise monetary policy in view of the medium-term inflation outlook – that is to say, market participants and the Eurosystem have been anticipating inflation rates above the inflation target of 2% over the medium-term forecast horizon. Second, the flat yield curve for medium to longer-term maturities reflects recessionary concerns. As current inflationary pressures are very pronounced, market participants do not currently expect the central bank to react to a deterioration in the economic outlook by cutting policy rates. Monetary policy needs to be tightened to achieve its aim of 2% inflation over the medium term, even if a recession could occur. At the current end, this market view is captured more by the 10Y-2Y spread than by the 10Y-3M spread.[7] The volatile term spreads of recent months have translated into volatile recession probabilities via the estimated relationship.

Non-standard monetary policy measures have also influenced the steepness of the yield curve in recent years. The asset purchase programme (APP) and the pandemic emergency purchase programme (PEPP) were aimed, in particular, at reducing long-term yields in the capital market. As a result, the term premium fell to historically low and, at times, negative levels.[8] When term premia are low, even expectations of small interest rate cuts can bring about inversions. From this, the model then tends to derive higher probabilities of recession. The impact of non-standard monetary policy



**Distribution of recession probabilities as a function of term spreads**

Term spreads
— 10 years – 3 months
— 10 years – 2 years
···· 10 years – 3 months[1]
● Current forecast

Term spread in percentage points
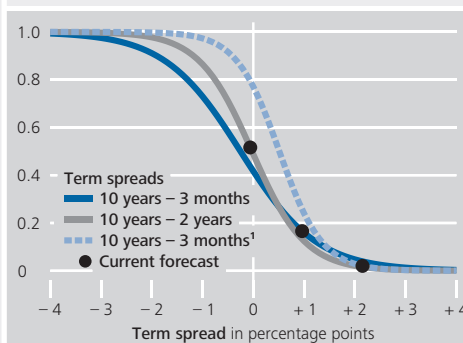
Sources: German Council of Economic Experts and Bundesbank calculations. **1** Adjusted for the estimated impact of asset purchase programmes (APP, PEPP) on the ten-year Bund yield.
Deutsche Bundesbank

measures of this kind on long-term yields is not directly measurable. However, it can be estimated using structural models. The first step is to determine the impact of the two purchase programmes, which have been running since 2015, on the ten-year Bund yield. The various term spreads that are

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**6** Bauer and Mertens (2022) discuss a similar pattern for the US yield curve.
**7** In recent months, the gap between the two term spreads has revealed the market developments to which investors have been paying particular attention. In the summer of 2022, recessionary concerns prevailed. Markets were expecting monetary policy to move away from its original tightening path. As a result, the short end of the yield curve flattened significantly between June and August, bringing the two term spreads back closer together. The probability of recession calculated from the 10Y-3M term spread therefore also increased significantly for a time during these months.
**8** The purchase programmes have contributed to lower long-term yields via the expectations component, but above all via the term premium; see Deutsche Bundesbank (2016).

then used in the recession estimates are adjusted for this effect.[9]

The impact of this adjustment on the probability of recession is particularly evident for 2020 and 2021, the years shaped by the pandemic. While the unadjusted term spreads foresaw a significantly higher risk of recession for the entire period, the probability of a recession fell rapidly after the outbreak of the pandemic in the spring of 2020 in the case of the adjusted 10Y-3M term spread. Since the Eurosystem had a major impact on long-term government bond yields through its purchases under the PEPP (and the continuation of the APP at the same time), the probability of recession is significantly higher over this period based on the unadjusted term spreads. Adjustment eliminates any potential "false signals", though it does come with its own specific limitations. For example, this approach cannot account for whether market participants expect adjustments to the purchase programmes. This becomes evident in the second half of 2014, when expectations about the upcoming launch of the APP led to a significant drop in longer-term yields even before any actual decision was made regarding the programme. As these effects are not captured, the adjusted term spread also assesses the risk of recession in 2014 as high. A similar effect could also materialise at present. Changes in market participants' expectations about an earlier reduction in the Eurosystem's securities holdings from 2023 are already reducing the dampening effect of the securities holdings on long-term interest rates. At the current end, therefore, probabilities of recession based on the adjusted term spread tend to be deemed as lower.

9 Specifically, the Eurosystem's bond purchases under the APP and PEPP are modelled in the DSGE model of Kühl (2018). With the announcement of each purchase programme, agents internalise the future course of those programmes, but adjust their expectations with each calibration of the programmes. The model allows for the calculation of what are known as duration extraction effects, which are regarded as one of the main channels for the impact of bond purchases on yields (see, for example, Krishnamurthy and Vissing-Jorgensen (2012)). Expectations about possible adjustments to the purchase programmes or other possible effects of such programmes (such as signalling effects) are not taken into account. Only the term spread between the ten-year and three-month yields is adjusted for the effect of the purchase programmes. The reason for this is that the three-month yield is influenced more by the policy rate than by purchase programmes, and an adjustment of the ten-year yield is therefore sufficient. For the term spread between the ten-year and two-year yields, both maturities would have had to be adjusted, which is not possible using the Kühl (2018) model.

## Components of ten-year Bund yield and economic development

%, month-end data



Sources: ECB, Federal Statistical Office and Bundesbank calculations based on Speck (2023). **1** Policy rate: up to 1985, the Bundesbank's Lombard rate, then the Bundesbank's repo rate until the introduction of the euro and thereafter the Eurosystem's minimum bid rate on refinancing operations.
Deutsche Bundesbank

*Development of yield curve before recessions*

that short-term yields have sometimes exceeded long-term yields. The slope of the yield curve was thus a summary of expectations regarding the degree of monetary policy restriction and, with that in mind, cyclical risk (for information on the indicator function of the yield curve for future recessions, see the box on pp. 65 ff.). At the current end, it signals a fairly high probability of recession by historical standards. However, it should be noted when interpreting the situation that the level of the derived probability does not necessarily provide an indication of the severity or duration of a possible recession.

*Term premia up after oil crises*

Another historical pattern is the evolution of the term premium over the business cycle. The nominal term premium, which includes the inflation risk premium, increased worldwide with a time lag in the 1970s as a result of the oil price shocks. The reason for this was that the degree by which the monetary policy stance was restricted in the major currency areas was

not sufficient at that time to quickly stabilise the inflation process. While central banks did also raise policy rates in the 1970s – in some cases significantly – in view of soaring inflation rates,[24] inflation and interest rate volatility were strong. The associated uncertainty was accompanied by rising inflation risk premia globally. Only a few central banks, such as the Bundesbank and the Swiss National Bank, were able – with greater emphasis on rules-based conduct geared towards price stability – to curb inflation and the inflation risk premium somewhat more strongly. On the whole, however, this inflation uncertainty, and thus the nominal term premium, remained comparatively high – even after inflation was successfully reined in in the 1980s.

At present, the term premium and the inflation risk premium are at a rising, but historically still

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24 See Lubik and Schorheide (2004), Pflueger (2022) and Enders et al. (2022).

*Currently, term premia are still historically low*

very low, level. For example, the nominal term premium on ten-year Bunds since 1967 has averaged around 190 basis points, whereas it stood at just under 10 basis points as at the end of December 2022. The Eurosystem's duration extraction via the monetary policy purchase programmes described in the previous sections as well as the incipient securities scarcity were the two main factors to push the term premium to this low level. This has caused potential for setbacks to build up.

*Stability-oriented monetary policy guarantees low term premia*

The historical co-movement of inflation and the term premium is a warning sign for European monetary policy. Experience gained over the past few decades with supply shocks has shown that, even after successful disinflation, as in the 1980s, the term premium – once it has risen – initially remains at a high level.[25] The fight against inflation must therefore be made top priority in order to ensure that the credibility of monetary policy remains intact.[26] Otherwise, there is a risk of market participants' uncertainty about inflation developments translating into a de-anchoring of inflation expectations in the medium and long term.

## ■ Summary

*Yield curve as a valuable source of information for monetary policy*

The yield curve contains valuable and up-to-date information for monetary policy. It reflects economic developments and the impact of monetary policy measures. This article discusses how the Bundesbank uses this information with the aid of numerous term structure models. In the current environment of persistently high inflation, the analyses show that

market participants expect further policy rate hikes. In addition, since the end of active net asset purchases and the reduction of the monetary policy securities portfolio announced in December 2022, the impact of asset purchase programmes on interest rates has been gradually declining. This was recently reflected in rising nominal term premia, which came under additional upward pressure in the context of very high inflation and cyclical risk.

*Market-specific influences on bond yields*

However, yields on Federal securities also include liquidity premia, which make it more difficult to interpret changes in interest rates as a mirror of expectations surrounding economic developments. In practice, regulatory and institutional factors also influence the level and course of yields on Federal securities and their components.

*Inflation risk premia can only be kept low by means of credible monetary policy*

In the past, nominal term premia have risen in particular when, faced with a supply-driven rise in inflation, market participants doubted the central bank's determination to combat inflation. A monetary policy that is consistently geared to the inflation target can ensure that inflation expectations do not become de-anchored in view of the current high level of inflation uncertainty. This also reduces the risk of higher interest rates resulting from permanently increased risk premia.

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25 Deutsche Bundesbank (2022d) suggests that the latest energy price hikes are even more supply-driven than in the 1970s.
26 Palomino (2012) shows that a credible, time-consistent monetary policy can reduce the inflation risk premium more strongly than a discretionary monetary policy strategy with a lower emphasis on the inflation rate over the business cycle.

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# ▎Mobile payment usage in Germany

*Mobile payments have gained a foothold in Germany in recent years. The Bundesbank's representative studies on payment behaviour in Germany, which are carried out at regular intervals, show that this is true of both smartphone payments at the point of sale (POS) and mobile payments between individuals (peer-to-peer, or P2P). In the Bank's most recent study, 5,870 people were asked by telephone about their use of payment instruments and their attitudes towards these. 4,197 of the respondents subsequently filled out a three-day payments diary.*

*The survey responses reveal that around 3% of transactions at the POS and 3% of P2P payments were made by smartphone in 2021. This means that mobile payments are still lagging far behind cash and debit and credit cards. However, multiple factors in the study suggest that mobile payments could gain traction in the future. These include, amongst other things, socio-demographic characteristics such as age, as well as respondents' attitudes towards paying with cash and their online purchasing behaviour, for example. In addition, provider-side market developments such as the availability of near-field communication (NFC) technology for retailers and customers, coupled with regulatory changes, are also likely to boost the uptake of mobile payments.*

*This article complements the analysis of data from the payment behaviour study with an assessment of the regional prevalence of mobile payments at the POS across German federal states. This aspect merits further investigation as these payments become more widespread. A comparison with other euro area countries shows that Germany has been slower so far in adopting mobile payment methods than most of these countries.*

*Efforts to establish instant payments as an integral component of European payments in future open up additional potential for the expansion of mobile payment methods. This is because instant payments, combined with state-of-the-art wallet solutions, could provide the basis for attractive service enhancements in mobile payments at the POS, in e-commerce and in P2P transactions. The Bundesbank therefore welcomes pan-European private market initiatives such as the European Payments Initiative (EPI). In addition, the insights into user behaviour and preferences can also yield important findings that will enrich discussions surrounding the design of a potential digital euro.*

# Introduction: Increasing use of mobile payment methods in Germany

The rapid proliferation of smartphones and wearables[1] worldwide and the increasing digitalisation of society and the economy mean that the global market for mobile payments has seen very dynamic growth in recent years.[2] Asia, especially, has witnessed the emergence of "super apps" – solutions that aim to combine not just payments but also a wide range of everyday services on a single platform. But Germany, too, is experiencing marked growth in mobile payments, albeit from a low starting level.

Mobile payments are payments initiated by smartphone or wearable. In principle, they can be used in different payment situations, such as at the POS or in peer-to-peer (P2P) payments.[3]

The Bundesbank publication "Payment behaviour in Germany in 2021" provides an overview of the use of mobile payment methods in Germany, amongst other things.[4] This study saw the market research institute forsa conduct telephone interviews with 5,870 people on behalf of the Bundesbank about their payment behaviour and attitudes towards various means of payment between 8 September and 5 December 2021. 4,197 of the respondents subsequently filled out a three-day payments diary. The sample is representative of the German-speaking population aged 18 and over in the Federal Republic of Germany in terms of the respondents' age, gender, level of education and place of residence. The mobile payment methods covered by this study included Apple Pay and Google Pay, banks' own payment apps, Payback Pay and chain store payment apps. PayPal and the giropay/Kwitt[5] payment app offered by the German banking industry were also included, but only for P2P payments.

Many of these mobile payment methods can be used for e-commerce, which sometimes makes it difficult to clearly distinguish them from the general use of e-payment methods.[6] This has led many studies, and this article, too, to define mobile payments as payments made at physical locations (i.e. at the POS) and as P2P payments.[7]

An earlier article has already demonstrated that, in addition to the growing importance of e-commerce and thus the proliferation of specialised e-payment methods, broader smartphone use has also spurred the development of new solutions for paying at the POS.[8] In 2021, according to the Bundesbank's most recent payment behaviour study, 38% of respondents making mobile payments at the POS utilised Apple Pay, followed by banks' and savings banks' payment apps (25%) and Google Pay (18%).[9] Mobile payment methods can often also be used for P2P payments. Study participants mostly turned to PayPal or giropay/Kwitt for this purpose.[10]

The increasing uptake of mobile payments at the POS is reflected in the Bundesbank's previous surveys on payment behaviour: in 2017, only 2% of respondents stated that they had already paid by smartphone at least once in a

*Mobile payments slowly gaining traction in Germany*

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1 These include, for example, fitness wristbands and smart watches. Some of these devices support NFC-enabled payments.
2 The Bundesbank illuminated trends and developments in payments most recently in its September 2012, December 2013 and June 2019 Monthly Reports. See Deutsche Bundesbank (2012, 2013, 2019).
3 E-commerce payments do not count as mobile payments, even where the online purchase is made via smartphone. P2P payments are money sent via an app to family, friends or acquaintances.
4 See Deutsche Bundesbank (2022a).
5 The P2P payment solution Kwitt is being incorporated into the giropay payment service offered by German banks and savings banks.
6 Examples include PayPal, Klarna/Sofort (Pay now) and the German banking industry's giropay/paydirekt service.
7 Unless stated otherwise, the figures and statistics provided in this article are taken from the latest Bundesbank study on payment behaviour. The shares of turnover and transactions accounted for by individual means of payment as well as the importance of payment locations were calculated on the basis of the entries in the payments diaries. The other data are based on respondents' assessments as derived from the questionnaires. See Deutsche Bundesbank (2022a).
8 See Deutsche Bundesbank (2019).
9 See Deutsche Bundesbank (2022a).
10 See Deutsche Bundesbank (2022a).

store; by 2020, this figure had risen to 11% within the space of three years. In 2021, 15% of all respondents were already reporting that they had utilised this payment method at least once.[11] Growth was evident, too, in the shares of mobile payment methods used for the transactions and turnover at the POS recorded in the payments diaries (see the adjacent chart): while they were still too small to be visible in 2017, 2% of all transactions and turnover at the POS were already being settled using mobile payment methods in 2020. In 2021, their market share grew to around 3%.[12]

With regard to P2P payments by smartphone, 5% of all respondents stated in the Bundesbank's 2017 payment behaviour study that they had already sent or received money using an app at least once. In 2020 and 2021, that figure had already increased to 27% and 28%, respectively.[13] However, these high percentages are not yet reflected in the payments diaries, with a mere 3% of P2P transactions and turnover being settled using a mobile app in 2021.

## Factors influencing the use of mobile payment methods

*2021 payment behaviour study used as basis for present evaluation*

This article now turns to the factors influencing the use of smartphone payments at the POS and the use of P2P payment methods, drawing on respondents' feedback to qualitative questions in the 2021 payment behaviour study described above.[14] The first step is to present the individual impact of socio-demographic characteristics as well as certain personal attitudes and respondent behaviours, before using a regression approach to test the results. The following section begins by studying the persons who indicate that they have already paid by smartphone at the POS.[15] Next, those who have made P2P payments are considered.

### Share of mobile payments in Germany at the point of sale (POS)*

%

**By turnover**

| Year | Value |
|------|-------|
| 2021 | 2.7 |
| 2020 | 2.1 |
| 2017 | 0.0 |

**By number of transactions**

| Year | Value |
|------|-------|
| 2021 | 2.6 |
| 2020 | 2.2 |
| 2017 | 0.0 |
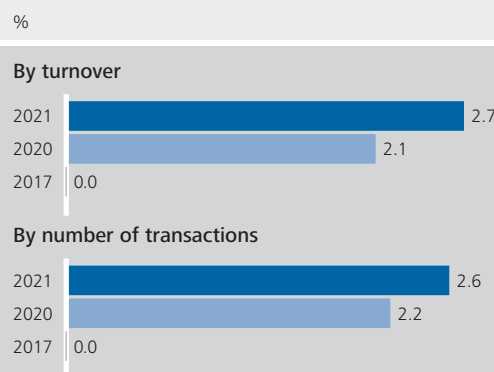
**\*** Relative share of turnover and transactions accounted for by mobile payment methods at the POS (day-to-day retail purchases and retail purchases of durable goods, payments at petrol stations and pharmacies).

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## Descriptive analysis of survey results

*Possible explanatory factors behind using a smartphone for payment*

The respondents were asked whether they had already made at least one mobile payment at the POS, to which they could answer either "yes" or "no". The next step was to investigate how far the following factors were useful in explaining the respondents' behaviour: gender, age, level of school education, employment and the financial situation of the respondent's household (the possible answers for the latter being "very good", "good", "not so good" and "bad"). This investigation was also based on how the respondents had answered the questions on behaviour and preferences, such as

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**11** See Deutsche Bundesbank (2018, 2021, 2022a). In the 2020 and 2021 payment behaviour studies, the subsample is all smartphone owners (84% and 89% of respondents, respectively). Based on this subsample, 13% (2020) and 17% (2021) of smartphone owners state that they have already used mobile payments at the POS at least once.
**12** This corresponds to 236 mobile payments at the POS, as recorded in the payments diary, with a total value of €7,638.
**13** See Deutsche Bundesbank (2018, 2021, 2022a). Sample: all respondents.
**14** On account of the methodology used, the data in the following analyses are not weighted to make them representative of the population. Individual percentages may therefore differ from the weighted values presented in the Bundesbank's payment behaviour studies.
**15** A total of 932 respondents stated that they had paid by smartphone at the POS at least once before.

concerning (1) how frequently they make internet purchases, (2) their use of online banking, (3) their trust in certain companies to handle personal data responsibly, (4) concerns about how personal data could be used, and (5) their preference for cash versus non-cash means of payment.

*Indicators for mobile payment methods at the POS*

The table on p. 79 provides a comprehensive overview of the surveyed behaviours and preferences as well as the attributes used. Column "*N*" shows how many study participants answered the questions listed above (a total of 5,119 persons), while the "Total" column lists the shares of respondents who agree with the attributes of the variable in question or to whom they apply. For example, 5,113 people answered the question of which means of payment they prefer to use at the POS if the choice is theirs. Of these respondents, a total of 24% favour cash, while 47% prefer to pay by card or another non-cash means of payment.

The next columns, "Users" and "Non-users", show the differences in responses between individuals who use a mobile device for POS payments and those who do not. In this case, 9% of mobile payers ("users") prefer cash and 71% favour cards or other non-cash means of payment. By contrast, 28% of those who have never used mobile payment methods ("non-users") show a preference for cash, while 42% prefer to use cards or other non-cash means of payment. The deviation of the mean values in the responses of these two groups (the "Difference" column) and the *t*-values[16] in the last column shows the extent to which the variable in question has an impact on mobile payments at the POS, if at all. In this exercise, the aforementioned determinants are considered independently of each other.

*Mobile payments more frequent among card users, internet buyers and online banking customers*

On balance, people who (1) favour cards or non-cash means of payment, (2) make internet purchases once a week or more, and (3) bank online are particularly inclined to use their smartphones or wearables to pay at the POS. Other important factors for mobile payments at the POS are whether respondents (4) work full-time, (5) have a higher-grade school leaving certificate, and (6) are 35 to under 45 years of age. Moreover, (7) the option to use cash is not important at all or not so important to them. By contrast, non-users of such means of payment comprise somewhat more women and persons aged 65 and older, as well as those respondents who rarely shop online, prefer to use cash at the POS and consider cash usage to be very important.

Another factor associated with mobile payments is whether respondents trust technology companies to handle personal data responsibly. The proliferation of Apple and Google's mobile payment methods is presumably important in this regard. Overall, female respondents tend to trust technology companies less (difference of 6 percentage points between the genders). In addition, respondents who have already bought or paid with crypto-tokens have more of a tendency to make mobile payments than those who are planning to neither purchase nor use them. Here, this factor is interpreted as an indicator of participants' willingness to adopt new technology. That said, only 5% of respondents actually reported owning crypto-tokens or using them as a means of payment. Due to the small size of the reporting sample, though, the statistical estimation is less robust, meaning that the actual influence of this factor merits further investigation. The same holds for the concern that money could be stolen from an account as a result of data misuse.

*Trust in technology companies and willingness to adopt new technology could also influence use of mobile payments*

For all the other factors considered in the table on p. 79, there is little difference between the mean values of the two groups, with the result that they cannot independently explain the use of mobile payment methods at the POS, even if the *t*-test values are significant in some cases. The statistical analysis presented further below aims to shed more light on this matter.

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**16** The more the *t*-value differs from zero, the more likely it is that the examined variable in isolation has an impact on the use or non-use of mobile payments.

## Mobile payments at the point of sale (POS)

| Variable[1] | N[2] | Mean | | | Difference[6] | t-value[7] |
|---|---|---|---|---|---|---|
| | | Total[3] | Users[4] | Non-users[5] | | |
| Mobile payments at the POS | 5,119 | 0.182 | . | . | . | . |
| Online purchases | 5,020 | . | . | . | . | . |
|   Weekly[8] | . | 0.207 | 0.399 | 0.164 | 0.236 | 13.79*** |
|   Monthly[8] | . | 0.496 | 0.503 | 0.494 | 0.009 | 0.48 |
|   Yearly[8] | . | 0.166 | 0.074 | 0.187 | − 0.113 | 10.71*** |
|   Less frequently | . | 0.045 | 0.012 | 0.053 | − 0.041 | 8.18*** |
|   Never | . | 0.086 | 0.012 | 0.102 | − 0.091 | 15.29*** |
| Online banking | 5,000 | 0.789 | 0.957 | 0.751 | 0.206 | 21.60*** |
| Crypto-tokens | 5,016 | . | . | . | . | . |
|   Purchased/paid with | . | 0.050 | 0.134 | 0.031 | 0.103 | 8.83*** |
|   Purchase/use planned | . | 0.040 | 0.070 | 0.034 | 0.036 | 4.06*** |
|   Purchase/use not planned | . | 0.871 | 0.779 | 0.892 | − 0.112 | 7.66*** |
|   Never heard of them | . | 0.039 | 0.017 | 0.044 | − 0.027 | 5.10*** |
| Responsible handling of payment data | | | | | | |
|   Technology companies | 2,465 | 0.172 | 0.274 | 0.150 | 0.124 | 5.45*** |
|   Start-ups/fintech firms | 2,151 | 0.158 | 0.234 | 0.141 | 0.093 | 4.10*** |
|   Own bank/savings bank | 2,532 | 0.934 | 0.938 | 0.933 | 0.004 | 0.35 |
|   Other bank/savings bank | 2,385 | 0.832 | 0.890 | 0.819 | 0.071 | 4.09*** |
| Data concerns | | | | | | |
|   Used for criminal acts | 2,539 | 0.582 | 0.559 | 0.587 | − 0.028 | 1.10 |
|   Who will use data for what purpose | 2,549 | 0.713 | 0.667 | 0.723 | − 0.056 | 2.31** |
|   Who will save data | 2,545 | 0.685 | 0.643 | 0.694 | − 0.051 | 2.08** |
|   Money stolen from account | 2,554 | 0.477 | 0.384 | 0.497 | − 0.113 | 4.47*** |
|   Blackmail | 2,553 | 0.272 | 0.276 | 0.271 | 0.005 | 0.019 |
|   Put at a disadvantage | 2,544 | 0.364 | 0.355 | 0.366 | − 0.011 | 0.44 |
|   State authorities | 2,546 | 0.300 | 0.253 | 0.311 | − 0.058 | 2.54** |
| Preference | 5,113 | . | . | . | . | . |
|   Cash | . | 0.242 | 0.091 | 0.275 | − 0.184 | 15.71*** |
|   Card/non-cash | . | 0.470 | 0.708 | 0.417 | 0.291 | 17.34*** |
|   Unclear | . | 0.288 | 0.201 | 0.308 | − 0.107 | 7.12*** |
| Option to use cash | 5,117 | . | . | . | . | . |
|   Very important | . | 0.350 | 0.200 | 0.383 | − 0.184 | 12.16*** |
|   Fairly important | . | 0.311 | 0.232 | 0.329 | − 0.097 | 6.21*** |
|   Not so important | . | 0.262 | 0.367 | 0.239 | 0.129 | 7.55*** |
|   Not important at all | . | 0.077 | 0.201 | 0.049 | 0.151 | 11.18*** |
| Female | 5,119 | 0.497 | 0.332 | 0.533 | − 0.202 | 11.70*** |
| Age groups | 5,119 | . | . | . | . | . |
|   18 to under 25 years | . | 0.096 | 0.161 | 0.081 | 0.080 | 6.25*** |
|   25 to under 35 years | . | 0.098 | 0.155 | 0.085 | 0.069 | 5.51*** |
|   35 to under 45 years | . | 0.172 | 0.279 | 0.148 | 0.131 | 8.34*** |
|   45 to under 55 years | . | 0.132 | 0.117 | 0.136 | − 0.019 | 1.59 |
|   55 to under 65 years | . | 0.219 | 0.159 | 0.232 | − 0.073 | 5.38*** |
|   65 years and older | . | 0.284 | 0.130 | 0.318 | − 0.188 | 14.29*** |
| Level of school education | 5,116 | . | . | . | . | . |
|   Student/no school leaving certificate | . | 0.010 | 0.011 | 0.010 | 0.001 | 0.25 |
|   Primary/lower secondary education | . | 0.151 | 0.071 | 0.169 | − 0.098 | 9.58*** |
|   Higher secondary education | . | 0.320 | 0.241 | 0.338 | − 0.098 | 6.17*** |
|   University of applied sciences entrance diploma | . | 0.097 | 0.124 | 0.091 | 0.033 | 2.83*** |
|   Upper secondary school leaving certificate | . | 0.422 | 0.554 | 0.393 | 0.161 | 8.99*** |
| Employment | 5,113 | . | . | . | . | . |
|   Full-time | . | 0.364 | 0.512 | 0.331 | 0.181 | 10.12*** |
|   Part-time | . | 0.135 | 0.113 | 0.140 | − 0.027 | 2.34** |
|   Other | . | 0.066 | 0.063 | 0.067 | − 0.003 | 0.35 |
|   Student | . | 0.051 | 0.080 | 0.044 | 0.035 | 3.74*** |
|   Unemployed | . | 0.015 | 0.010 | 0.016 | − 0.006 | 1.57 |
|   Retired/unable to work | . | 0.298 | 0.141 | 0.333 | − 0.192 | 14.18*** |
|   Self-employed | . | 0.072 | 0.082 | 0.070 | 0.012 | 1.18 |
| Financial situation | 5,116 | . | . | . | . | . |
|   Very good | . | 0.215 | 0.285 | 0.199 | 0.086 | 5.37*** |
|   Good | . | 0.676 | 0.630 | 0.686 | − 0.057 | 3.26*** |
|   Not so good | . | 0.850 | 0.066 | 0.089 | − 0.024 | 2.59*** |
|   Bad | . | 0.024 | 0.019 | 0.025 | − 0.006 | 1.08 |

1 All the variables shown are dummy variables, i.e. if the respective characteristic applies, they take on the value of 1; otherwise they take on the value of 0. 2 Number of persons who answered the question. 3 Mean value for all $N$ to whom the respective characteristic applies, i.e. the variable takes on the value of 1. 4 All $N$ who indicated in the questionnaire that they use their smartphone to make mobile payments at the POS. 5 $N$ who do not use their smartphone to make mobile payments at the POS. 6 Difference in the mean values of the user and non-user groups. 7 The $t$-value refers to a test of whether the calculated difference is significantly different from 0. The calculation of the $t$-test statistic values takes into account unequal variances between users and non-users. ***/** indicates significance at the 1% and 5% levels. 8 Online purchases at least once per week/per month/per year.

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The same analytical approach and factors as above can be applied to explain the use of mobile devices for P2P payments. The distinction between "users" and "non-users" in this case is based on whether respondents have already utilised an app to send money to family, friends or acquaintances at least once, which, as above, is asked as a "yes"/"no" question. Overall, the results presented in the table on p. 81 are broadly in line with the remarks on mobile payments at the POS.

Reports from other countries such as Sweden[17] and China show that people who have had positive experiences with mobile P2P methods are more likely to be willing to employ mobile payments at the POS as well. If a similar mechanism plays out in Germany, too, this could lead to mobile payments at the POS gaining in importance in future. After all, 34% of respondents who own a smartphone and are familiar with PayPal or giropay/Kwitt reported that they have already used these at least once to send money to friends or family. Yet the uptake of mobile payments at the POS has been lower to date, with only 18% of respondents owning a smartphone and being familiar with at least one mobile payment method reporting that they have already used these to pay at the POS.

## Regression analysis of factors for mobile payments at the POS and in P2P transactions

To gain a clearer picture of how the determinants investigated so far affect smartphone payments at the POS on the one hand and P2P payments on the other, a logistic regression model was estimated in each case.[18] For ease of interpretation, the average marginal effects relative to the relevant reference group are studied in the following. These are presented separately for POS and P2P in the chart on p. 82 for four main factors with the following reference groups: (1) frequency of internet purchases: at least once per week, (2) use of

crypto-tokens: already purchased or paid with crypto-tokens, (3) importance of option to use cash: not so important, and (4) age group: 45 to under 55 years.[19]

As already suggested by the descriptive statistics on smartphone payments at the POS and on the use of P2P payments, the probability of use decreases in both cases as online activity declines. Compared with respondents who make internet purchases at least once a week (reference group), the probability of making mobile payments at the POS and of using P2P payment methods is consistently significantly lower for individuals who shop online less frequently. For those who make online purchases at least once a month, the probability is 10 percentage points lower than that of the reference group in both cases, for example. By contrast, banking online is associated with a 10 and 11 percentage point higher probability of making mobile POS and P2P payments, respectively.[20]

There therefore appears to be a positive mediating effect between familiarity with the online world and mobile payment applications. Such mediating effects have also been documented for other countries, such as the United States,[21] China[22] and India.[23] Furthermore, the data can be interpreted as indicating that willingness to adopt new technology has a positive impact on the use of mobile devices in payments. That hypothesis is also supported by the observed rela-

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17 See Sveriges Riksbank (2022).
18 For an overview of the logistic regression analysis, see Amemiya (1981) and McFadden (1984).
19 The evaluation included effects that are statistically significant at the 1% and 5% levels. The marginal effect indicates the magnitude of the difference in the probability of use of the dependent variable (in this case, mobile payment at the POS or P2P) of a person with the observed characteristic (e.g. 18 to under 25 years of age) compared with the reference group (e.g. 45 to under 55 years of age). The mean of the differences in the probability of use across all observations in the dataset then gives the average marginal effect.
20 As this is a dummy variable (reference group: non-use of online banking), it was omitted from the chart.
21 See Garrett et al. (2014).
22 See Su et al. (2018).
23 See Singh and Srivastava (2020).

## Smartphone payments between individuals (P2P)

| Variable[1] | N[2] | Mean | | | Difference[6] | t-value[7] |
|---|---|---|---|---|---|---|
| | | Total[3] | Users[4] | Non-users[5] | | |
| P2P use | 4,958 | 0.323 | . | . | . | . |
| Online purchases | 4,880 | . | . | . | . | . |
|   Weekly[8] | . | 0.212 | 0.363 | 0.139 | 0.224 | 16.64*** |
|   Monthly[8] | . | 0.502 | 0.549 | 0.479 | 0.070 | 4.59*** |
|   Yearly[8] | . | 0.166 | 0.076 | 0.210 | − 0.134 | 13.75*** |
|   Less frequently | . | 0.043 | 0.006 | 0.061 | − 0.055 | 11.88*** |
|   Never | . | 0.076 | 0.006 | 0.111 | − 0.105 | 18.14*** |
| Online banking | 4,859 | 0.799 | 0.942 | 0.729 | 0.213 | 21.89*** |
| Crypto-tokens | 4,859 | . | . | . | . | . |
|   Purchased/paid with | . | 0.051 | 0.116 | 0.021 | 0.095 | 11.15*** |
|   Purchase/use planned | . | 0.041 | 0.072 | 0.027 | 0.045 | 6.28*** |
|   Purchase/use not planned | . | 0.872 | 0.796 | 0.907 | − 0.111 | 9.75*** |
|   Never heard of them | . | 0.036 | 0.017 | 0.045 | − 0.028 | 5.80*** |
| Responsible handling of payment data | | | | | | |
|   Technology companies | 2,380 | 0.172 | 0.223 | 0.148 | 0.075 | 4.30*** |
|   Start-ups/fintech firms | 2,087 | 0.160 | 0.230 | 0.126 | 0.104 | 5.65*** |
|   Own bank/savings bank | 2,441 | 0.934 | 0.944 | 0.929 | 0.015 | 1.42 |
|   Other bank/savings bank | 2,311 | 0.834 | 0.896 | 0.804 | 0.092 | 6.12*** |
| Data concerns | | | | | | |
|   Used for criminal acts | 2,449 | 0.584 | 0.548 | 0.601 | − 0.052 | 2.44** |
|   Who will use data for what purpose | 2,457 | 0.716 | 0.713 | 0.718 | − 0.005 | 0.25 |
|   Who will save data | 2,454 | 0.687 | 0.681 | 0.690 | − 0.009 | 0.43 |
|   Money stolen from account | 2,463 | 0.480 | 0.414 | 0.512 | − 0.098 | 4.58*** |
|   Blackmail | 2,462 | 0.271 | 0.262 | 0.275 | − 0.013 | 0.66 |
|   Put at a disadvantage | 2,453 | 0.362 | 0.359 | 0.364 | − 0.005 | 0.26 |
|   State authorities | 2,456 | 0.298 | 0.278 | 0.307 | − 0.029 | 1.47 |
| Preference | 4,952 | . | . | . | . | . |
|   Cash | . | 0.238 | 0.138 | 0.286 | − 0.148 | 12.74*** |
|   Card/non-cash | . | 0.474 | 0.617 | 0.406 | 0.210 | 14.19*** |
|   Unclear | . | 0.288 | 0.246 | 0.308 | − 0.062 | 4.65*** |
| Option to use cash | 4,955 | . | . | . | . | . |
|   Very important | . | 0.348 | 0.245 | 0.397 | − 0.151 | 11.07*** |
|   Fairly important | . | 0.309 | 0.257 | 0.333 | − 0.077 | 5.63*** |
|   Not so important | . | 0.265 | 0.359 | 0.220 | 0.138 | 9.91*** |
|   Not important at all | . | 0.079 | 0.140 | 0.050 | 0.090 | 9.50*** |
| Female | 4,958 | 0.495 | 0.430 | 0.526 | − 0.096 | 6.39*** |
| Age groups | 4,958 | . | . | . | . | . |
|   18 to under 25 years | . | 0.099 | 0.198 | 0.052 | 0.146 | 13.67*** |
|   25 to under 35 years | . | 0.101 | 0.200 | 0.054 | 0.146 | 13.60*** |
|   35 to under 45 years | . | 0.176 | 0.294 | 0.120 | 0.174 | 13.70*** |
|   45 to under 55 years | . | 0.135 | 0.129 | 0.137 | − 0.008 | 0.82 |
|   55 to under 65 years | . | 0.222 | 0.126 | 0.268 | − 0.141 | 12.52*** |
|   65 years and older | . | 0.268 | 0.054 | 0.370 | − 0.316 | 31.40*** |
| Level of school education | 4,955 | . | . | . | . | . |
|   Student/no school leaving certificate | . | 0.010 | 0.011 | 0.009 | 0.002 | 0.75 |
|   Primary/lower secondary education | . | 0.147 | 0.056 | 0.190 | − 0.134 | 15.06*** |
|   Higher secondary education | . | 0.320 | 0.215 | 0.369 | − 0.155 | 11.70*** |
|   University of applied sciences entrance diploma | . | 0.097 | 0.121 | 0.086 | 0.035 | 3.69*** |
|   Upper secondary school leaving certificate | . | 0.427 | 0.597 | 0.346 | 0.251 | 17.03*** |
| Employment | 4,953 | . | . | . | . | . |
|   Full-time | . | 0.372 | 0.517 | 0.303 | 0.214 | 14.47*** |
|   Part-time | . | 0.138 | 0.153 | 0.131 | 0.022 | 2.03** |
|   Other | . | 0.067 | 0.080 | 0.061 | 0.019 | 2.34** |
|   Student | . | 0.052 | 0.103 | 0.027 | 0.076 | 9.33*** |
|   Unemployed | . | 0.015 | 0.013 | 0.015 | − 0.002 | 0.58 |
|   Retired/unable to work | . | 0.283 | 0.061 | 0.389 | − 0.328 | 31.71*** |
|   Self-employed | . | 0.073 | 0.073 | 0.073 | − 0.001 | 0.06 |
| Financial situation | 4,955 | . | . | . | . | . |
|   Very good | . | 0.217 | 0.255 | 0.199 | 0.056 | 4.34*** |
|   Good | . | 0.676 | 0.657 | 0.685 | − 0.028 | 1.96** |
|   Not so good | . | 0.084 | 0.064 | 0.093 | − 0.029 | 3.72*** |
|   Bad | . | 0.023 | 0.024 | 0.023 | 0.001 | 0.32 |

**1** All the variables shown are dummy variables, i.e. if the respective characteristic applies, they take on the value of 1; otherwise they take on the value of 0. **2** Number of persons who answered the question. **3** Mean value for all *N* to whom the respective characteristic applies, i.e. the variable takes on the value of 1. **4** All *N* who indicated in the questionnaire that they have used an app to send money to family, friends or acquaintances (P2P). **5** *N* who have not used an app for P2P payments. **6** Difference in the mean values of the user and non-user groups. **7** The *t*-value refers to a test of whether the calculated difference is significantly different from 0. The calculation of the *t*-test statistic values takes into account unequal variances between users and non-users. ***/** indicates significance at the 1% and 5% levels. **8** Online purchases at least once per week/per month/per year.

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## Average marginal effects on the probability of paying by smartphone*

Percentage points
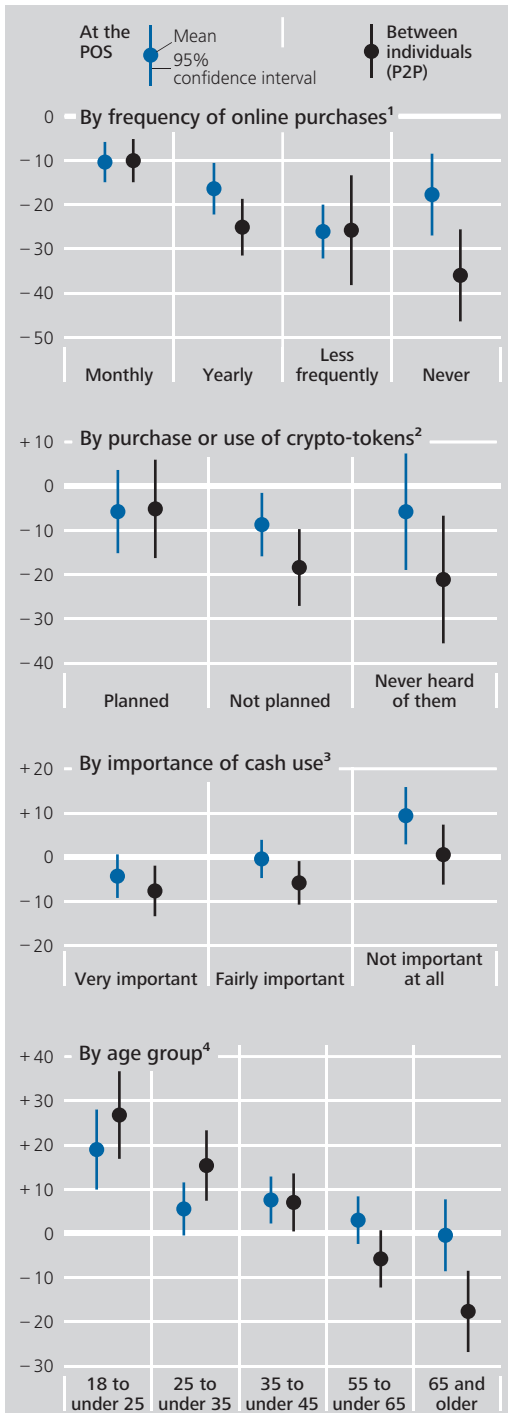


* The marginal effect indicates the magnitude of the difference in the probability of use of a person with the observed characteristic compared with the reference group (e.g. a person who makes online purchases on a monthly basis compared with persons who make online purchases on a weekly basis). The mean of the differences in the probability of use across all observations in the dataset then gives the average marginal effect. **1** Reference group: persons who make online purchases at least once per week. **2** Reference group: persons who have already purchased or paid with crypto-tokens. **3** Reference group: option to use cash not so important. **4** Reference group: 45 to under 55 years.

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tionships between the attitude towards crypto-tokens and the use of mobile payment methods. Another possible indication is that the probability of using mobile payments at the POS is 6 percentage points higher among the respondents who believe that personal data are being handled responsibly by technology companies. Incidentally, the significance of the willingness to adopt new technology was also borne out by a qualitative study drawn up for the Eurosystem in 2022 in connection with the digital euro project.[24]

The attitude towards cash is another significant indicator for the use of mobile payment applications. Respondents who prefer to pay with cash at the POS are 15 percentage points less likely to turn to mobile payment methods. Where respondents have no clear preference for either cash or non-cash means of payment, the probability of them using mobile payment methods decreases by 6 percentage points. For P2P payments, meanwhile, the preferred means of payment holds no relevance.[25] An analysis of the importance of cash use yields similar insights. For example, the probability of making payments via mobile devices drops by 5 (POS) and 8 percentage points (P2P) for respondents for whom cash use is very or fairly important.

*Younger age groups more likely to use mobile payment applications*

An analysis by age group shows that the probability of paying with a mobile device is up to 19 (POS) and 27 percentage points (P2P) higher for the younger age group (18 to under 45 years) than for the reference group (45 to under 55 years). For P2P payments, furthermore, the probability of use for respondents in the higher age groups (65 years and older) is up to 18 percentage points lower compared with the reference group, whereas for mobile payments at the POS, no significant effect is discernible with increasing age. This means that the probability of making P2P payments decreases with age across all groups; in the

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**24** See Kantar (2022).
**25** As the effects for P2P payments are not significant, they were omitted from the chart.

case of mobile POS payments, this can only be observed up to the reference group age. The negative correlation between age and use of mobile payment applications is also well documented in the literature.[26]

The opinion that technology companies handle personal data responsibly is associated with a 6 percentage point higher probability of using mobile payments at the POS. Where P2P payments by app are concerned, the probability of use decreases by 9 and 7 percentage points, respectively, among respondents with a lower or higher secondary school leaving certificate compared with the reference group (upper secondary school leaving certificate).

In summary, it is evident that above all experience with internet applications, a willingness to try out new technology, attitudes towards cash and age are good indicators of the use of mobile payments at the POS and in P2P transactions. The empirical analysis was therefore able to confirm the findings of the previous descriptive study.

## Geographical proliferation of mobile payments at the POS in Germany and Europe

The next step is to add a geographical dimension to this analysis of the key determinants of mobile payments at the POS.

## Regional comparison at federal state level

*Use of mobile payment methods at the POS varies across regions*

The chart on p. 84 is based on transaction data taken from the payments diaries completed as part of the latest payment behaviour study, according to which 2.6% of transactions at the POS in Germany were made using mobile payment methods in 2021. Broken down by federal state, the distribution is fairly heterogeneous, with Rhineland-Palatinate, Hesse and the northern federal states – except for Ham-

**Share of mobile payments at the point of sale (POS) by federal state***
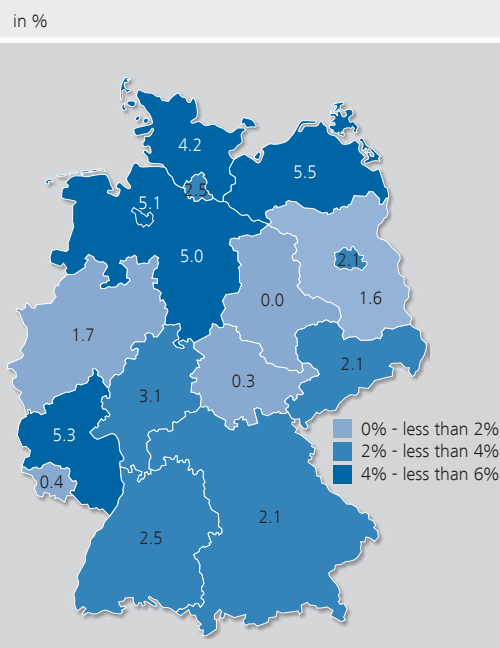
in %



* Relative share of transactions executed using mobile payment methods at the POS (day-to-day retail purchases and retail purchases of durable goods, payments at petrol stations and pharmacies).

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burg – accounting for an above-average number of mobile payments. Mecklenburg-West Pomerania leads this group with a share of 5.5%. All the other federal states fall short of the average, with Hamburg and Baden-Württemberg coming in just below that level, at 2.5% each. The number of mobile payments is particularly small in Saxony-Anhalt, Thuringia and Saarland. As the number of transactions at the federal state level is still relatively small in absolute terms, an empirical analysis of the causes of these differences would not yet be meaningful. Future Bundesbank payment behaviour studies, however, could permit a more detailed analysis of regional differences as the volume of mobile POS payments continues to rise.

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26 See Garrett et al. (2014), Li et al. (2020) and Kantar (2022).

## Share of mobile payments in the euro area*

in %

0% - less than 2%
2% - less than 3%
3% - less than 4%
4% - less than 6%
More than 6%



Source: ECB (2022). * Relative share of transactions executed using mobile payment methods at physical locations (excluding P2P payments).

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## Comparison across euro area countries

*Mobile payments in the euro area particularly popular in Finland and the Netherlands*

To get a better idea of where Germany stands with regard to smartphone payments, it is worth looking at how the country shapes up relative to its euro area peers in the SPACE study prepared by the European Central Bank (ECB).[27] Just like the Bundesbank's payment behaviour study, the SPACE study looks at people's payment habits and attitudes towards the available means of payment as well as trends in payment transactions, but does so throughout the euro area. To this end, the market research institute Kantar conducted a representative survey among a total of 50,000 persons in all euro area countries (except Germany and the Netherlands) by telephone and online, and had the respondents complete a payments diary. The study was rounded out by incorporating data from the national payment behaviour surveys conducted in Germany and the Netherlands.

The average share of mobile transactions at physical payment locations excluding P2P payments is 3% in the euro area. The adjacent chart shows the results for all the euro area countries. Eleven countries are above this level and eight below it. Of particular note are the high percentages in Finland (6.4%) and the Netherlands (10.5%), the latter percentage reflecting the strong popularity of Apple Pay and Google Pay in the Netherlands. Card payments at the POS reached a very high level as well (80%), with the vast majority being contactless or smartphone/wearable transactions.[28] Ireland and Latvia are also well above the euro area average at just below 6%, possibly reflecting a relative openness to technology and advances in digitalisation in these countries. The same could also be said about the other Baltic States and Slovakia, where the shares of mobile transactions lie between 3.2% and 3.8%. The above-average percentages in Spain and Portugal, meanwhile, could be attributable, at least in part, to the national mobile payment systems Bizum and MB Way. At a share of 2.4%[29] for mobile payments, Germany occupies a mid-table position in Europe, albeit below the euro area average. This raises the question of why developments in Germany in this respect have so far been rather lacking in momentum.

## Possible reasons for the low uptake of mobile payments in Germany so far

The still moderate growth overall of mobile payments in Germany can be traced back to various economic and technological factors as well as market-specific growth paths that are always affected to a degree by whether the network effects needed in payments have been achieved or not. Originally, efforts were made

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27 See European Central Bank (2022).
28 See De Nederlandsche Bank and Dutch Payments Association (2021).
29 This differs from the value reported in the Bundesbank's payment behaviour study owing to a different methodological definition.

in Germany to use optical methods such as barcodes or QR codes for mobile payments. These first initiatives were set in motion either by retailers or mobile telephone operators, rather than originating in the banking industry. One early QR code-based payment solution was Yapital, a subsidiary of the Otto group.[30] However, due to an insufficient number of users, operations were discontinued back at the beginning of 2016.

Solutions that are still in the market are QR code-based POS payment methods such as Payback Pay – which is an enhancement to the well-known multi-partner bonus programme – and the chain store payment apps.

*Card schemes rely on NFC*

NFC technology, by contrast, is used in a form of mobile payment method that is employed by both the German girocard and international contactless card schemes.[31] While girocard has only been rolled out in bulk with the contactless function since 2017,[32] Mastercard and Visa already came equipped with an NFC chip several years earlier. However, acceptance among retailers was slow, which limited the spread of contactless payments. Things only changed when the two card schemes forced their retailer customers to use NFC-enabled terminals by no later than 2020.

*Mobile credit cards available for some time now, but less widespread among general public*

Initially, it was only possible to use the credit cards issued by international card schemes – but not girocard, which is widespread in Germany. However, according to the payment behaviour study, only 54% of respondents currently have a credit card. Of these, 32% have added that card to a payment app. By contrast, according to the study, almost all respondents own debit cards, most of which are girocards, but only 23% have registered their card in a payment app.

Evidently, the application landscape for mobile payments is still highly fragmented by smartphone operating system and centred around international card schemes: in general, NFC payments using credit and debit cards issued by international schemes are possible via Apple Pay and Google Pay, provided they cooperate with the card-issuing bank. Android generally allows the NFC interface to be used by bank-owned payment apps – including with girocard. On iOS devices, on the other hand, the NFC interface was long the reserve of Apple Pay. To add girocard to Apple Pay, additional technical modifications need to be made to facilitate payment processing, alongside the appropriate contractual agreements. Thus, the ability to use NFC in mobile payments at the POS depends on the available card, the card-issuing bank and the smartphone's operating system. The amendments to Section 58a of the German Payment Services Oversight Act[33] as well as the EU's Digital Markets Act[34] are designed to facilitate access to the NFC interface. This might increase the use of girocard for mobile payments, which, given their popularity and proliferation among the general public, could help to fuel further growth in mobile payments.[35]

As mentioned above, card issuers generally need to cooperate with wallet providers in order to use digital wallets outside of bank-owned payment apps. Savings banks and credit cooperatives spent a long time focused on enabling girocard to be integrated into third-party wallets such as Apple Pay in the same way as it is in the bank's own apps.[36] Only since the end of 2019 have customers of both types of banks been able to use Apple Pay in combination with their credit card. And since the third quarter of 2020, it has been possible to add giro-

*Cooperation is necessary to add payment cards to third-party wallets*

**30** See De la Motte (2015) and Streit (2015).
**31** See the box on how mobile payments work at the point of sale on p. 86.
**32** See Association of German Banks (2018).
**33** Amongst other things, Section 58a of the Payment Services Oversight Act *(Zahlungsdiensteaufsichtsgesetz)* governs access to technical infrastructure services (e.g. on a smartphone) in the provision of payment services or conduct of electronic money business.
**34** Regulation (EU) 2022/1925 of the European Parliament and of the Council of 14 September 2022 on contestable and fair markets in the digital sector (Digital Markets Act), OJ L 265, 12 October 2022, pp. 1-66, http://data.europa.eu/eli/reg/2022/1925/oj
**35** See also Baumgartner (2020).
**36** See Benkelberg (2019).

# How mobile payments work at the point of sale

Two factors are usually required for mobile payments at the point of sale (POS): the customer needs a smartphone or wearable that comes with a payment function, plus a debit or credit card that is stored virtually on that device in a suitable wallet. Technically speaking, then, mobile payments at the POS are generally contactless card payments initiated from the mobile device.[1] That device is scanned over the payment terminal to allow the payment app to exchange the payment information with the POS terminal via the smartphone or wearable's NFC (near-field communication) antenna. In a smartphone payment, authentication – i.e. verification of the user's identity – takes place either with the aid of biometric verification methods such as a fingerprint or face scan or – as in the case of wearable payments – by entering the device's PIN.[2] The payment messages exchanged via NFC are processed via the infrastructure of the respective card scheme, as with payments by physical card.

To reduce fraud risks, payment details are stored not on the device's operating system, which is where the bulk of other data is kept, but either provisioned into a secure element built into the mobile device (e.g. a chip embedded in the device's SIM card) or stored remotely on cloud servers operated by a suitable provider (a configuration known as host card emulation, or HCE).[3]

One key difference between contactless card payments and mobile payments concerns the nature of the information exchanged between device and terminal. Whilst a contactless payment made using a physical card involves the direct transfer of the associated card information, in a mobile payment only tokenised payment details are stored and transferred. In this context, tokenised means that a designated technical service provider – the token service provider – generates one or more new virtual card numbers, known as payment tokens, from an existing card number.[4] These are placed, or provisioned, into a smartphone's or wearable's wallet when the device connects to the internet. Third parties such as retailers are unable to match the payment token with a physical card. Payment tokens are each virtual cards in their own right and are time-limited and, in some cases, domain and purpose-specific. For the most part, they can only be used for a single transaction. This means that if the device is hacked or stolen, the information on it is only usable for a limited amount of time and money. To add a further layer of security for mobile payments, the digital wallet generates a dynamic cryptogram that is sent to the terminal together with the payment token. Without that cryptogram the payment token is useless.

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**1** See Payment Systems Regulator (2018). Some providers, such as Payback Pay, or the payment apps operated by some chain stores take a different approach, settling the payment by debiting the amount directly from the payer's bank account. Likewise, payments made via the PayPal app or website are not a card-based mobile payment method but a transfer of electronic money, because the virtual card is used only to charge the user's electronic money account with PayPal, not for the payment transaction itself. See Göbel (2021).
**2** See Baumgartner (2019a), Oppong (2020) and Deutsche Bundesbank (2022a). Depending on the device and payment app used, it is also sufficient to enter the PIN once (e.g. by scanning the smartwatch).
**3** See Payment Systems Regulator (2018) and Roland (2022).
**4** See Payment Systems Regulator (2018), Baumgartner (2019a, 2019b) and Roland (2022).

card to Apple Pay, but only if that card was issued by a savings bank.[37]

*Card issuers may incur additional fees that could lower earnings*

In addition, there are reports from the market that the cooperating institutions are required to pay a fee of up to 0.15% of the transaction value for each Apple Pay payment when a credit card is added and 0.05% for debit cards.[38] This reduces card issuers' earnings. For them, an interchange fee, or "authorisation fee" in the case of girocard – payable by the retailer per transaction – is an important source of income. Interchange fees generally amount to 0.3% of the transaction value for credit cards and 0.2% for debit cards issued by the international schemes.[39] According to the latest survey conducted by the EHI Retail Institute in spring 2022, authorisation fees for girocard payments averaged 0.17% of the transaction value, and came to 0.14% on average for large enterprises.[40] In view of these costs paid to third-party wallet providers, issuing cards could make less and less commercial sense for the banks concerned. This is probably one of the reasons why girocard has so far only been partially integrated into the wallet products offered by major technology providers.

On top of the reasons cited so far for the as yet low uptake of NFC payments at the POS using a smartphone, users are concerned that mobile payments might entail security risks. For example, 42% of respondents in the payment behaviour study stated that they did not make mobile payments because they seemed too insecure. Many consumers still appear to be unaware of the additional level of security provided by tokenisation compared with a physical card payment.[41]

## ■ Outlook

*Demographic developments and growth in online shopping could help to increase mobile payments*

This analysis has shown that the use of smartphones to make payments at the POS or to send money P2P is above-average among younger age groups in particular. Demographic developments thus make it likely that the use

of mobile payment methods will increase in the future. Moreover, buyers are more inclined to make mobile payments when they are familiar with shopping and banking online. If the general public's uptake of mobile internet services evolves as it has done in recent years,[42] and online shopping and banking therefore continue to grow, this could also help spread the use of mobile payments.

Furthermore, a certain degree of openness to technological trends is likely to boost the willingness to pay by smartphone at the POS or in P2P transactions, as is the growing trend towards preferring non-cash means of payment at the POS.[43]

Experience has shown that for an innovative – and therefore also mobile – payment method to succeed, it needs to offer consumers an additional benefit in the form of greater convenience, such as in how long the payment process takes. Two recent studies show that payments by smartphone or wearable are fastest compared with other means of payment, taking an average of 11 and 14 seconds, respectively.[44]

The reasons for the low prevalence of mobile payments in Germany to date were the late availability of the infrastructure needed to settle NFC-based payments and the cautious cooperation of banks and savings banks with third-party providers. However, these barriers are gradually being removed – including through appropriate regulation. In particular, the prospect of being able to use any girocard regardless of the issuing institution in the relevant digital wallets is likely to boost smartphone payments.

*Legal changes could also further strengthen mobile payments, …*

37 See Baumgartner (2020) and Göbel (2021).
38 See Klotz (2015) and Baumgartner (2019a, 2020).
39 For more information on the capping of interchange fees, see European Commission (2015).
40 See Rüter (2022).
41 See Deutsche Bundesbank (2022a) and the box on p. 86.
42 See Initiative D21 e. V. (2022).
43 See Deutsche Bundesbank (2022b).
44 See Deutsche Bundesbank (2022b) and girocard (2022).

Alongside banks and savings banks, PayPal is also looking to capitalise on its popularity and broad user base[45] in online and P2P payments to expand into the POS business field, where payments can be made using a QR code or – in conjunction with Google Pay and Mastercard – via NFC. To date, Bluecode has been a niche product for making payments at the POS. It works on the basis of an optical code and is part of the European Mobile Payment Systems Association (EMPSA). The main purpose of this association is to link payment apps in different European countries so that they can be used seamlessly across multiple countries.[46] An alternative approach is the creation of a completely new pan-European mobile payment method based on instant payments and QR codes to initiate payment. This is currently being discussed by various European banks, especially in France, Germany, Belgium and the Netherlands, under the acronym EPI. In Germany, the initiative is supported by large parts of the banking industry.

*… such as the EU's commitment to use instant payments*

Instant payments in particular have the potential to form the basis for mobile POS, e-commerce and P2P payment applications in the future. In the past, successful mobile payment solutions have been developed in some European countries, such as Sweden, Denmark and Spain, that focused initially on P2P payments before being gradually expanded to e-commerce and the POS. With Europe's payments market still fragmented – as is also evident from the analysis of mobile payments at physical locations in the euro area[47] – the Bundesbank believes that the opportunity should be taken to establish a pan-European mobile payment method based on instant payments, as is envisaged with EPI, for example. The planned European regulation of instant payments may support this process.[48] At the same time, the existing insights into payment behaviour could be leveraged to examine – as part of the Eurosystem's work on the topic – the design features that a digital euro would need to have in order to be perceived as an attractive means of payment.[49]

Overall, the uptake of mobile payment methods is likely to increase significantly over the next few years. However, it remains to be seen how quickly the factors identified here will pick up momentum and how regulatory developments will affect payments in the coming years.

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**45** 45% (91%) of respondents in the payment behaviour study report they usually use this method for online purchases (P2P payments). See Deutsche Bundesbank (2022a).
**46** See Pirkner (2020) and Schneider (2019).
**47** See the chart on p. 84.
**48** See COM (2022) 546 final, Proposal for a Regulation of the European Parliament and of the Council of 26 October 2022 amending Regulations (EU) No 260/2012 and (EU) 2021/1230 as regards instant credit transfers in euro.
**49** For more information on the digital euro, see https://www.bundesbank.de/en/tasks/payment-systems/digital-euro/digital-euro-frequently-asked-questions

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# Access to cash in Germany: analyses of the spatial availability of cash withdrawal facilities

*In the December 2022 issue of the Monthly Report, the Bundesbank's experts demonstrated that the overwhelming majority of citizens consider the effort involved in getting to an ATM or to a bank counter to be low or very low. The average time required per withdrawal is approximately nine minutes. These results are based on the responses to a representative public survey. This article will use location data to analyse the spatial availability of cash withdrawal facilities in order to obtain a broader picture of access to cash in Germany.*

*Cash is in demand in Germany as a means of payment and store of value; only if cash is available can citizens decide freely how they wish to pay and save. Cash is likewise important to ensure financial inclusion for all in our society, and it may constitute the only means of payment available at short notice in emergency and crisis situations. The Bundesbank, together with the other Eurosystem central banks, is therefore committed to ensuring that euro banknotes and coins remain available as a means of payment and store of value at all times going forward.*

*Consumers stock up on cash at automated teller machines (ATMs) and bank counters, in particular. At the same time, a steady dismantling of these traditional sources of cash has been observed in recent years. While the number of ATMs in Germany stood at around 59,000 in 2018, this figure had shrunk to just over 55,000 ATMs by 2021. In the same period, the number of bank branches fell from just under 30,000 to roughly 23,000; compared with 2006, the number even halved. At the same time, however, options to withdraw cash at the point of sale have gained in importance in recent years.*

*What can be said about access to cash in Germany in the light of these diverging developments? Analyses of the geographical distribution and availability of cash withdrawal facilities in municipalities show that 79.8 million citizens, or 96% of Germany's population, can withdraw cash at a bank branch or an ATM located in their own municipality. At the same time, however, the residents of a number of municipalities have to leave their municipalities to reach the nearest source of cash withdrawals.*

*In general, citizens have to cover an average of 1.7 km to withdraw cash at the nearest ATM or bank counter. 76.3 million consumers, around 92% of the population, have the option of withdrawing cash at a point of sale within their municipality. The average distance to the nearest point of sale is 2.9 km. In most cases, therefore, bank-based sources of cash are geographically more attractive for withdrawals.*

*These results suggest that the population of Germany is currently well supplied with cash thanks to a dense network of cash withdrawal facilities. However, the cash infrastructure will remain intact only if credit institutions in Germany continue to meet their responsibilities for the cash supply going forward.*

## Importance of cash and withdrawal sources

*Cash widely used in Germany as a means of payment and store of value*

Cash is widely used in Germany as a means of payment and store of value. According to the results of the Bundesbank's recently published payment behaviour study, respondents carry an average of €100 in cash in their wallets and use cash to settle 58% of their day-to-day payments.[1] Measured by turnover, 30% of all payments are settled in cash. This makes cash the most commonly used means of payment in Germany. Even respondents who said that they prefer to use cashless payment options to pay for their day-to-day expenditure carry an average of €77 in cash around with them.[2] Only 4% of citizens do not carry any cash. Those surveyed even hold significantly higher amounts of cash as a reserve at home.[3]

*Cash withdrawals mainly at ATMs and bank counters*

Most cash is still obtained at ATMs[4] and bank counters. These traditional points of access to cash are used for 92% of all withdrawals, by value, of which 81% alone are made at ATMs (see the chart below). With a share of 11% of withdrawals in value terms, bank counters are the second most important source of cash. The cash infrastructure operated by credit institutions thus plays a key role in the supply of cash to the German population. Credit institutions hold cash in order to supply their customers.

However, monetary policy developments have resulted in additional one-off effects on credit institutions' cash holdings, which are explained in greater detail in the box on pp. 96 f.

*Decline in bank-based cash infrastructure*

For some years, however, we have been seeing a decline in bank-based cash infrastructure. It is particularly striking how the branch network has been thinned out (see the chart on p. 95). The number of bank branches has declined by almost 19,000 since 2007, from around 42,000 bank branches back then to in the region of 23,000 in 2021. By contrast, the number of ATMs remained virtually constant for a long time and has declined slightly since 2018. Since then, operators have taken around 3,500 ATMs out of service. This development raises questions about access to cash in Germany: what is the current situation regarding the availability of cash withdrawal facilities? And what risks could arise for the cash supply in the future if credit institutions significantly pare back their cash withdrawal services?

*Point of sale as an alternative to ATMs and bank counters?*

In addition to traditional sources of cash, citizens can also obtain cash at selected points of sale.[5] Consumers are increasingly taking up this option (see the adjacent chart). Whilst only 2% of all cash withdrawals in value terms were made at a point of sale in 2017, this share stood at 8% in 2021.[6] Against this backdrop, the question is to what extent these alternative

### Different withdrawal sources as a percentage of total annual withdrawals

%



Source: 2021 payment behaviour study.
Deutsche Bundesbank

1 See Deutsche Bundesbank (2022a).
2 Carrying a cash reserve proved useful for many consumers in connection with the spate of disruptions to card payments experienced in the retail sector in the second half of May 2022; see Deutsche Bundesbank (2022b).
3 See Deutsche Bundesbank (2022c) and Eschelbach and Schneider (2020).
4 ATMs are either pure cash dispensers or customer-operated cash recycling machines, which allow both cash withdrawals and cash deposits.
5 Cash transactions at the point of sale can be carried out via cashback and/or cash-in-shop procedures. In a cashback transaction, cash is withdrawn during the process of paying at the cash register. Cash-in-shop services allow customers to both withdraw and deposit cash. This does not require a purchase as the transaction formally constitutes an activity outsourced by the withdrawing party's credit institution.
6 For further analyses of withdrawal behaviour, see Deutsche Bundesbank (2022a).

sources of cash can, in the future, complement traditional banking industry services.

In the light of the developments outlined above, this article looks at the spatial availability of withdrawal facilities in Germany. What does a possible decline in bank-based infrastructure mean in terms of access to cash? And what role can alternative point-of-sale cash withdrawal options play in the future?

## Dataset for the analyses

*Geographical data are predominantly supplied directly by credit institutions and other cash handlers*

The analyses use geographical data on the locations of ATMs, bank branches and points of sale offering cash services. Credit institutions and other cash handlers directly supplied the majority of the geographical data for the reference year 2021. If only the postal address was available for a point of access to cash, geocoding was used to translate it into coordinates.[7] Further geographical data for bank branches and ATMs as well as for points of sale allowing cash withdrawals were obtained from Open-StreetMap[8] and from the Federal Agency for Cartography and Geodesy. The data on municipalities' population size and surface area and other geodata were likewise supplied by the Federal Agency for Cartography and Geodesy.[9]

*Analyses focus on cash withdrawal facilities*

For the purposes of the following analyses, the various cash withdrawal options supplied by one provider at the same site (for example, several ATMs at one location or bank counters within a branch) are treated as one cash withdrawal point. A supermarket with several cash registers and thus withdrawal options is also treated as a single cash source. The analyses do not, therefore, provide any information on the number of ATMs, bank counters or cash registers allowing cash withdrawals that are available at a cash access point. Instead, the following analyses focus on the spatial availability of cash withdrawal facilities.

### Number of ATMs and bank branches in Germany

In thousands
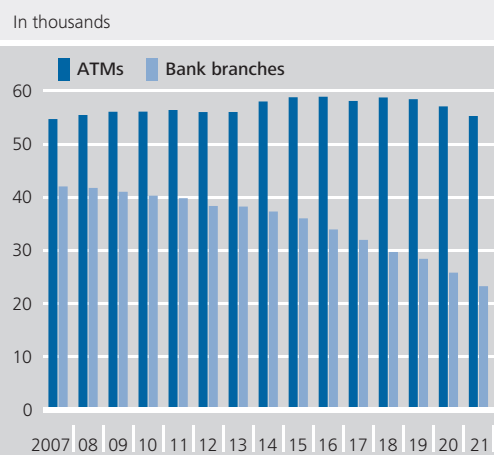


Deutsche Bundesbank

## Cash withdrawal facilities within municipalities

*Total of 77,669 cash withdrawal facilities in Germany*

In 2021, citizens were able to withdraw cash at a total of 77,669 different facilities throughout Germany. 49,874 cash withdrawal facilities were traditional sources of cash such as bank branches and ATMs. Alternative cash withdrawal options at the point of sale constituted around 36% of all cash withdrawal facilities, or 27,795 in total. In purely arithmetical terms, individuals thus had at their disposal around nine cash withdrawal facilities per 10,000 inhabit-

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**7** Put simply, geocoding involves converting postal addresses into coordinates (latitude and longitude). The geocoded location data are then checked for plausibility and accuracy on a random basis and, if necessary, corrected. Although location data are checked carefully, geographic inaccuracies cannot be ruled out entirely.
**8** OpenStreetMap is a non-commercial, community-operated online platform for geographical data, see https://www.openstreetmap.org; last accessed on 8 December 2022. The data are made available under the Open Database License (see https://www.openstreetmap.org/copyright, last accessed on 8 December 2022).
**9** Data on ATMs are contained in the Points of Interest Bund (POI-Bund) dataset (see https://gdz.bkg.bund.de/index.php/default/points-of-interest-bund-poi-bund.html). Information on surface area, population size, coordinates of the centre of the municipality and other geodata are taken from the data package "VG250-31.12." (see https://gdz.bkg.bund.de/index.php/default/verwaltungsgebiete-1-250-000-mit-einwohnerzahlen-stand-31-12-vg250-ew-31-12.html).

# Developments in the cash holdings of monetary financial institutions in Germany

Credit institutions hold cash primarily so that they can supply their customers with banknotes and coins. Individuals withdraw this money at cash dispensers (ATMs) or bank counters for consumption purposes or to store as a cash reserve. The retail trade, meanwhile, mainly needs coins and low-value banknote denominations that can be used as change. At the end of the chain, it is the job of credit institutions to cover this demand. This makes them an important part of the German cash cycle.[1]

Holding cash entails costs for credit institutions, meaning they generally strive to keep their holdings to a minimum for economic reasons. The associated costs include direct costs arising, for example, from transport and storage as well as the insurance of cash against involuntary loss. In addition, holding cash gives rise to opportunity costs, since the physically tied-up capital cannot be invested in other, possibly more profitable, forms of investment. From a liquidity perspective, too, cash holdings tend to be a less attractive option for credit institutions than keeping deposits on an account with a central bank.

However, the period from 2016 onwards saw notable one-off developments in the statistically recorded cash holdings of monetary financial institutions (MFIs) in Germany, around the time the Eurosystem began pursuing an exceedingly low interest rate policy.[2] Seasonal fluctuations aside, cash holdings were largely within a range of €13 billion to €16 billion at the end of 2015 (see the chart entitled "Cash holdings of monetary financial institutions in Germany" on p. 97).[3] It can be assumed that these amounts were what credit institutions held to satisfy regular customer demand.

Cash holdings rose significantly, albeit irregularly from the start of 2016. At the end of 2016, they were already significantly higher than they had been at the same point in the previous year, amounting to €26.0 billion. By the end of 2019, cash holdings had risen to a total of €43.4 billion and, in March 2020, reached €48.1 billion, going on to hold broadly steady around that level over the next two years.[4] At the end of June 2022, cash holdings hit their highest level so far – €51.8 billion – before falling significantly in the following months. While the total amount of cash held by MFIs in Germany had already dropped down to €42.3 billion at the end of July, it declined by €18.7 billion in August, by €2.9 billion in September and by €0.7 billion in the following month. At €20.0 billion, cash holdings at the end of October 2022 were thus much closer to the level recorded in 2015.

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**1** For a description of the German cash cycle, see Deutsche Bundesbank (2011).
**2** Besides credit institutions, monetary financial institutions also include money market funds, which generally do not hold cash. In addition to euro cash, cash holdings also cover cash in other currencies as well as postage stamps and court fee stamps. Given that the total value of these is negligible, they are not taken into account separately. For a look at developments in credit institutions' cash holdings, see Deutsche Bundesbank (2018).
**3** Seasonal fluctuations include, in particular, a regularly occurring increase at the end of the year, stemming from consumers' cash spending in connection with Christmas trading.
**4** In March 2020, cash holdings of MFIs saw a net increase of €7.9 billion. This growth in cash holdings is likely to have been driven in part by precautionary motives related to the coronavirus pandemic.

Looking at the figures for banknote lodgements at the Bundesbank in 2022 (see the lower chart on this page), it can be seen that they started going up significantly in July, from calendar week 28 onwards. This increase is almost entirely attributable to substantial lodgements of €500 and €200 banknotes. In terms of value, the amounts being paid in remained at a discernibly elevated level until the end of August (calendar week 34/35), before moving towards the previous year's level over the following period. Even so, up to the end of October (calendar week 43), lodgements remained slightly higher than the corresponding figures for the previous year. One aspect worthy of note is the exceptionally high share of first series €200 banknotes at times; these accounted for more than half of the lodgements of €200 banknotes in some calendar weeks.

Overall, the observations suggest that the evolution of MFIs' cash holdings in Germany since 2016 has been heavily influenced by one-off monetary policy effects. The sharp rise in the cash holdings recorded in the statistics is likely to be the result of credit institutions shifting some liquid funds away from the negatively remunerated deposit facility into banknotes as a way of avoiding negative interest rates.[5] As interest rates started to turn around, the additional holdings then quickly flowed back to the Bundesbank.

Now that the European Central Bank's interest rate on the deposit facility is back in positive territory, the economic motives for keeping additional cash holdings to avoid negative interest rates no longer apply; this means that the phenomenon of the strong expansion in cash holdings on the part of credit institutions has probably come to an end. Instead, it is to be expected that the demand for cash stemming from credit institutions' customer base will resume its position as a key factor determining the maintenance of cash holdings by MFIs.
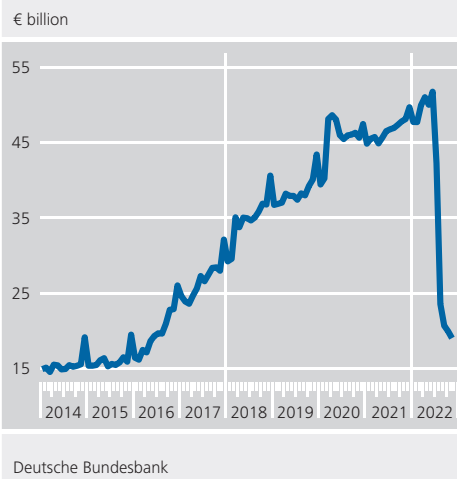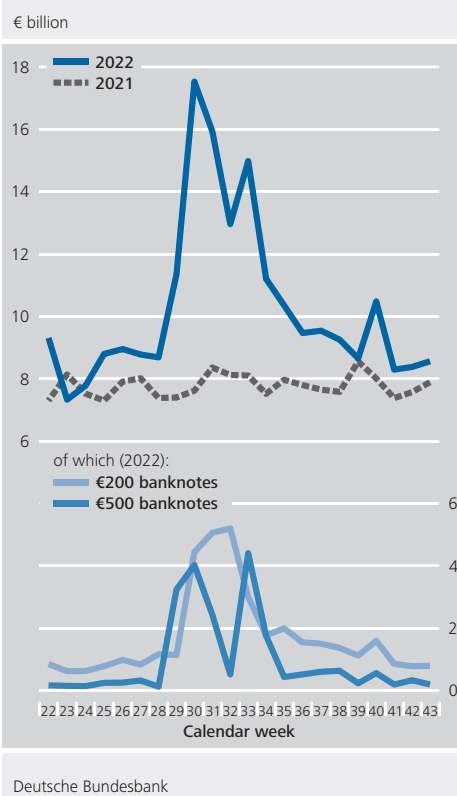
**Cash holdings of monetary financial institutions in Germany**

€ billion



Deutsche Bundesbank

**Banknote lodgements at the Bundesbank**

€ billion



Deutsche Bundesbank

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5 See Deutsche Bundesbank (2022d).

## Geographic distribution of cash withdrawal facilities



○ ATMs    • Bank counters    ✕ Points of sale

Source of map: Federal Agency for Cartography and Geodesy.
Deutsche Bundesbank
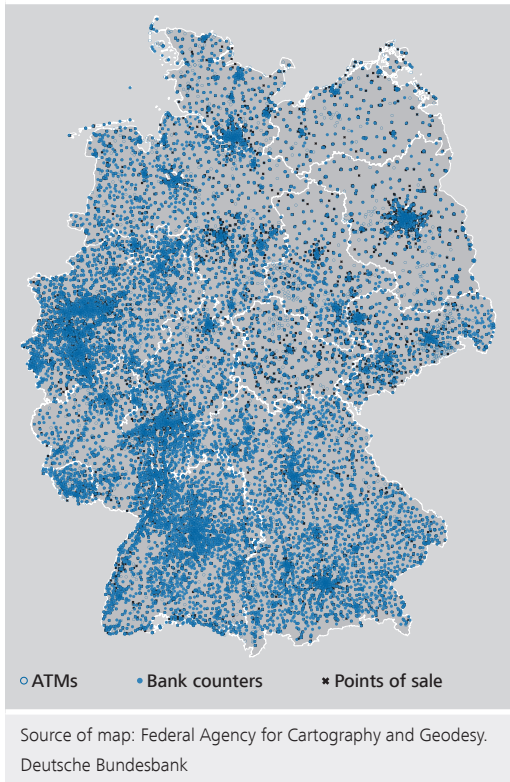
ants: six traditional and roughly three alternative options.

The chart above provides an overview of the geographical distribution of traditional and alternative cash withdrawal facilities in Germany. A striking feature is that traditional and alternative withdrawal facilities tend to be located together (see also the chart on p. 100). For example, most locations host both traditional (ATM: dark blue circle, bank counter: light blue dot) and alternative (black cross) cash withdrawal facilities. In addition, there are regions with a cluster of cash withdrawal facilities, while the network of cash points is sparser in other regions. There is a dense network of cash withdrawal facilities particularly in the west and south of Germany and in conurbations, while fewer cash withdrawal facilities are available in the east of Germany.

Looking at the availability of traditional and alternative cash withdrawal facilities at the muni-

cipal level, the 11,007 German municipalities[10] can be divided into four groups based on the quality of the provision of cash withdrawal facilities: first, municipalities in which there is at least one traditional and at least one alternative cash withdrawal facility; second, municipalities with only traditional withdrawal facilities; third, municipalities with only alternative cash withdrawal facilities; and, fourth, municipalities with neither option for accessing cash. As can be seen in the table and in the chart on p. 99, 4,686 municipalities in Germany have no cash withdrawal facilities. These municipalities are home to around 3.1 million people, or 3.7% of the total population.[11]

*3.1 million citizens without access to cash within their municipality*

However, most citizens have at their disposal a point of access to cash in their home municipality. 96% of Germany's total population, namely 79.8 million citizens, have traditional cash withdrawal facilities within their municipality. Around 76.3 million citizens, or 91.8% of the total population, do not need to leave their municipality to make a point-of-sale cash withdrawal. These results suggest that access to cash in Germany is currently good despite a number of municipalities having no cash withdrawal facilities.

*96% of the total population of Germany has access to traditional cash withdrawal facilities within their municipality*

A total of 76.1 million citizens, or 91.5% of Germany's population, and thus by far the largest group of the population, live in municipalities with at least one traditional as well as one alternative cash withdrawal facility. Among the municipalities with just one source of cash, municipalities with at least one traditional cash withdrawal facility predominate. This constellation applies to 1,779 municipalities, which are home to 3.7 million people. The municipalities in question are primarily located in the south of Germany. Only a small proportion of the total population, namely 0.3%, lives in municipalities in which there is the option of withdrawing cash at a point of sale, but not at a bank coun-

*Point of sale rarely a municipality's only cash withdrawal facility*

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**10** The number of municipalities refers to the cut-off date of 31 December 2021.
**11** Of the 4,686 municipalities, 208 are uninhabited.

## Cash withdrawal facilities in municipalities

Number of municipalities (upper line) with such facilities and their total population (lower line)

| Facilities | | Point of sale | | | | | |
|---|---|---|---|---|---|---|---|
| | | Available | | Not available | | Total | |
| | | Number | % | Number | % | Number | % |
| Traditional source of cash | Available | 4,418 76,109,916 | 40.1 91.5 | 1,779 3,713,646 | 16.2 4.5 | 6,197 79,823,562 | 56.3 96.0 |
| | Not available | 124 234,719 | 1.1 0.3 | [1] 4,686 3,108,430 | 42.6 3.7 | 4,810 3,343,149 | 43.7 4.0 |
| | Total | 4,542 76,344,635 | 41.2 91.8 | 6,465 [2] 6,822,076 | 58.7 8.2 | [3] 11,007 [3] 83,166,711 | 100.0 100.0 |

**1** Sample includes 208 uninhabited municipalities. **2** Rounding error. **3** Data as at 31 December 2021.

Deutsche Bundesbank

ter or an ATM. With just a few exceptions, these municipalities are located in the eastern federal states. Taken together, the point of sale therefore generally complements the banking industry's existing cash services and is only very rarely the sole source of cash within a municipality.

*Number of cash withdrawal facilities increases with population size*

As shown in the chart on p. 100, the number of cash withdrawal facilities available within a municipality is positively correlated with its respective number of inhabitants. One logical explanation for this strong correlation is the higher demand for cash – and thus for points of access to cash – associated with a higher number of inhabitants. The characteristics of municipalities with and without cash withdrawal facilities are compared in the box on p. 101.

*Alternative withdrawal facilities complement bank branches and ATMs*

Furthermore, there is a positive correlation between the number of traditional and alternative cash withdrawal facilities within a municipality (see the chart on p. 100). This confirms the impression expressed above that alternative withdrawal sources complement the cash withdrawal infrastructure provided by credit institutions.

In that sense, points of sale do not represent any kind of substitute for ATMs and bank coun-

ters either, especially given the prominent position occupied by the bank-based cash infrastructure in the cash cycle. For instance, the bulk of withdrawals effected at the point of sale – much like change – do not have to be checked for quality beforehand. As a result,

## Cash withdrawal facilities in municipalities
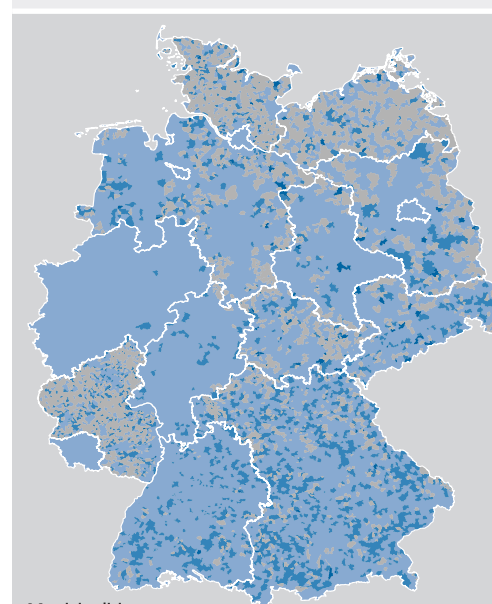


Municipalities …
- … with a traditional and an alternative withdrawal facility
- … with a traditional, but without an alternative withdrawal facility
- … without a traditional, but with an alternative withdrawal facility
- … without any withdrawal facility

Source of map: Federal Agency for Cartography and Geodesy.

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## Number of cash sources in municipalities

**Relationship between the number of inhabitants and the number of cash sources available[1]**

Cash sources



**Relationship between the number of traditional cash withdrawal facilities[2] and the number of points of sale**

Points of sale



Sources: viafintech GmbH, credit institutions, Federal Agency for Cartography and Geodesy, OpenStreetMap.org and Bundesbank calculations. **1** Cash sources comprise bank counters, ATMs and points of sale with cash services. **2** Distinct bank counters and ATMs. No double counting of sites.

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money that is no longer fit for circulation can continue to pass between consumers and retailers without being withdrawn from circulation. By contrast, credit institutions can and must make a proper check of the quality and authenticity of banknotes and coins. Their heavy involvement in the cash cycle therefore remains essential. The same applies to the central bank: it is able to carry out a particularly reliable authenticity check and it permanently removes banknotes that are no longer fit for circulation from the cycle by destroying them. At the same time, the central bank provides "fresh" cash that is brought into the cycle first and foremost via the banking industry – be it

through the provision of change to retailers or directly to consumers in the form of withdrawals.[12]

# Distance to the nearest source of cash withdrawals

It seems most citizens live in municipalities with a good amount of available cash sources. However, the distance to the nearest source of cash withdrawals is also important, as this is likely to be closely related to the effort individuals perceive to be involved in withdrawing cash. For the following analysis, the distances between the centre of a municipality and the nearest source of cash withdrawals are therefore evaluated. The distance is the length of the straight line between the centre of an inhabited municipality and a source of cash withdrawals – in other words, the route "as the crow flies".[13] Although this means that the results presented below underestimate the actual effort involved in accessing cash, they nevertheless serve as a useful guide, especially when comparing various sub-groups.[14]

12 The average withdrawal amount at bank counters is €736 per use, while an average of €230 and €94, respectively, is obtained per withdrawal at ATMs and at the point of sale; see Deutsche Bundesbank (2022a). Cash withdrawals are generally subject to a withdrawal limit that is higher for withdrawals at traditional cash sources than at alternative points of access to cash. For a description of the cash cycle in Germany, see Beermann (2022) and Deutsche Bundesbank (2011).

13 Calculating distances "as the crow flies" is a commonly used approach in the literature on access to cash; see Restrepo (2021), Caddy and Zhang (2021), Tischer et al. (2020) and European Central Bank (2022). An alternative and more accurate – but much more complex – approach is to calculate the distance taking into account the transport network. See Stix (2020), Trütsch (2022) and Banque de France (2019). However, Stix (2020) and contributions from other fields of research show that calculating distances as the crow flies provides a very good approximation of the actual distance resulting from taking into account the transport network – see Boscoe et al. (2012).

14 First, calculating the distance as a straight line leads to the actual distance that has to be travelled to reach the source of cash withdrawals being underestimated. Second, it is implicitly assumed that the homes of all inhabitants of a municipality are concentrated in the centre of the municipality and are not distributed more broadly or located on the outskirts. This overestimates the actual spatial proximity of citizens to the sources of cash withdrawals.

# Characteristics of municipalities with and without a cash withdrawal facility

The table below shows selected differences between municipalities with cash withdrawal facilities and those without. As expected, residents of municipalities without their own source of cash have to travel considerably longer distances to get to the nearest cash withdrawal facility. While residents of municipalities with a cash withdrawal facility have to travel roughly 0.2 km on average to the nearest cash withdrawal facility, those living in municipalities without a cash withdrawal facility must travel an average of 3.6 km to reach their nearest source of cash. A comparison of the distances to be travelled to the different cash withdrawal facilities shows that the residents of municipalities without a cash withdrawal facility have to travel an average of 4.2 km to the nearest bank counter and an average of 3.8 km to the nearest ATM. The nearest point-of-sale cash withdrawal point is an average of 4.6 km away. By contrast, the residents of municipalities with a cash withdrawal facility have to travel 0.7 km on average to reach their nearest bank counter and 0.3 km to the nearest ATM. The distance to the nearest point of sale offering cash services is 1.7 km, on average.[1]

In addition, municipalities without a cash withdrawal facility have fewer inhabitants and are, at the same time, more sparsely populated. On average, the 6,321 municipalities with a cash withdrawal facility are each home to 12,665 people. By contrast, the 4,478 municipalities without a cash withdrawal facility have roughly 694 inhabitants, on average.

Municipalities with a cash withdrawal facility are therefore, on average, home to 18 times more residents than municipalities without a cash withdrawal facility. In average terms, municipalities with a cash withdrawal facility are roughly four times as densely populated as municipalities with no option for withdrawing cash and thus have a significantly larger surface area.

## Characteristics of municipalities with and without a cash withdrawal facility[*]

Distance between the centre of the municipality and the cash withdrawal facility, in km (in brackets: standard deviation)

| Mean distance to the nearest … | Municipalities with a cash withdrawal facility | Municipalities without a cash withdrawal facility |
|---|---|---|
| Cash withdrawal facility | 0.2 (0.4) | 3.6 (1.8) |
| Bank counter | 0.7 (1.5) | 4.2 (2.0) |
| ATM | 0.3 (0.8) | 3.8 (1.8) |
| Point of sale | 1.7 (2.3) | 4.6 (2.2) |

Number of inhabitants (in brackets: population density per km²)

| | | |
|---|---|---|
| Mean | 12,665.4 (269.0) | 694.2 (75.3) |
| 25th percentile[1] | 2,250.5 (81.6) | 291 (31.7) |
| 50th percentile | 4,533 (148.8) | 551 (54.0) |
| 75th percentile | 10,069.3 (297.5) | 915 (91.8) |
| 95th percentile | 36,171.8 (938.3) | 1,726.4 (206.1) |
| Number of municipalities | 6,321 | [2] 4,478 |
| Number of inhabitants | 80,058,281 | 3,108,430 |

* Municipalities with or without at least one cash withdrawal facility of any type. The distance is the shortest route ("as the crow flies") between the centre of the municipality and the cash withdrawal facility. Figures are rounded. 1 For example, looking at municipalities with a cash withdrawal facility, the 25th percentile figure means that 25% of these municipalities have no more than 2,250.5 inhabitants (81.6 inhabitants per km²). 2 Uninhabited municipalities are excluded.

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1 These data are computed by first calculating the distance from the centre of the municipality to the nearest bank counter, ATM and point of sale for each municipality. The nearest cash withdrawal facility is defined as the one where this distance is shortest. Subsequently, means are formed for the two groups, namely municipalities with and those without cash withdrawal facilities. As the mean distance to the nearest cash withdrawal facility takes into account all the different types of withdrawal sources, it is necessarily shorter than the mean distance obtained by looking at the bank branches, ATMs and points of sale separately.

## Distance to the nearest source of cash withdrawals

| Cash source | Counter | ATM | Point of sale | Total |
|---|---|---|---|---|
| Average distance (in km) | 2.1 | 1.8 | 2.9 | 1.6 |
| Inhabitants (percentage of population) whose nearest source of cash withdrawals is within a radius of … | | | | |
| up to 1 km | 77,534,014 (93.2) | 78,786,632 (94.7) | 73,996,562 (89.0) | 79,303,341 (95.4) |
| 1 to 5 km | 4,407,965 (5.3) | 3,613,459 (4.3) | 6,936,090 (8.3) | 3,284,914 (3.9) |
| 5 to 10 km | 1,162,638 (1.4) | 744,974 (0.9) | 2,124,756 (2.6) | 566,113 (0.7) |
| 10 to 15 km | 60,946 (0.1) | 21,646 (0.03) | 105,371 (0.1) | 12,343 (0.01) |
| more than 15 km | 1,148 (0.001) | 0 (0) | 3,932 (0.005) | 0 (0) |

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*The nearest source of cash withdrawals is no further than 1 km away for 79.3 million citizens, …*

Citizens have to travel an average of 1.6 km to get to their nearest cash withdrawal facility. For 79.3 million citizens, their nearest source of cash withdrawals of any kind is no further than 1 km away from the centre of their municipality. This corresponds to 95.4% of the entire population in Germany. 3.3 million citizens have to travel more than 1 km, but no further than 5 km to reach their nearest source of cash withdrawals. The nearest cash withdrawal source is located between 5 km and 10 km away for 0.6 million citizens. No municipality's nearest withdrawal facility is further than 15 km away from its centre – regardless of whether the municipality itself has a cash withdrawal source or not (see the table above).[15]

*… and no citizen lives more than 15 km away from their nearest cash withdrawal point, …*

*… which is primarily due to the availability of ATMs and bank branches*

ATMs are usually the geographically closest withdrawal option for most inhabitants. Around 78.8 million citizens have to travel no further than 1 km to get to their nearest ATM. Bank counters are accessible within a 1 km radius for 77.5 million inhabitants. Roughly 74 million citizens have to travel no further than 1 km to be able to carry out cash transactions at their nearest point of sale. There are no cases where the nearest ATM is located more than 15 km from the centre of a municipality. By contrast, 1,148 citizens have to travel more

### Maximum distance to the nearest source of cash withdrawals of any kind



Nearest source of cash withdrawals is no further away than …
- … 1 km
- … 5 km
- … 10 km
- … 15 km
- Uninhabited municipalities

Source of map: Federal Agency for Cartography and Geodesy. Deutsche Bundesbank

**15** The nearest is not necessarily the best source of cash withdrawals for citizens; for instance, say the nearest traditional cash withdrawal source is operated by a credit institution belonging to a different group than the credit institution that the individual banks with. In this case, the saving in distance may not offset any additional costs that might be incurred as a result of using the cash withdrawal source. Or if the withdrawal facility in mind is not the nearest, but is located on a route they travel in their day-to-day lives anyway.

## Availability of alternative options

ATMs and bank counters are by far the most important source of cash. If the nearest traditional cash withdrawal facility were to close, how much further would people have to travel to find a facility? In order to assess the availability and reachability of alternatives to traditional cash withdrawal facilities, the analysis below is limited to municipalities in which a bank counter or ATM is the nearest source of cash. This constellation applies to 8,087 municipalities that are home to a total of 64.3 million people, corresponding to a population share of 77.3%. It thus covers more than three-quarters of the total population of Germany. The additional distance to the second-nearest cash withdrawal facility is then calculated for these municipalities.

On average, people in these municipalities must travel an additional 0.8 km in order to withdraw cash at an alternative facility (see the table below).[1] As traditional and alternative cash withdrawal facilities can differ considerably in the range of services offered (e.g. opening hours, maximum withdrawal amounts, available denominations), it is appropriate to take a differentiated view and examine each type of alternative option. In order to reach alternative bank counters and ATMs, people must travel an additional 1 km on average. This corresponds to an extension of the distance to be travelled by 72.8%. On average, points of sale offering cash services are more than twice as far away; people have to cover an extra 1.6 km to compensate for the loss of a traditional cash source by travelling to an appropriate point of sale.

These observations once again underline the central importance of bank-based infrastructure for the supply of cash in Germany. Moreover, the results suggest that, despite the current good supply situation in Germany, an erosion of the cash infrastructure represented by the closure of an increasing number of withdrawal facilities would likely significantly increase the time and effort involved in obtaining cash.

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1 This statement only refers to the additional distance to be travelled in order to reach the alternative facility. The time and effort may be greater if the nearest alternative facility charges for obtaining cash and the client therefore chooses to make a significantly longer journey to reach a withdrawal facility where cash can be withdrawn free of charge.

**Nearest alternative to traditional cash withdrawal facility***

| Average additional distance to the alternative location | Nearest alternative | | |
| --- | --- | --- | --- |
| | Traditional | Point of sale | Total |
| km | 1.0 | 1.6 | 0.8 |
| % | 72.8 | 120.8 | 56.5 |

* Only inhabited municipalities where the nearest source of cash is a traditional cash withdrawal facility are considered.

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than 15 km to be able to obtain cash at their nearest bank counter and 3,932 have further than 15 km to go to reach the closest point of sale offering cash services.

The fact that bank counters or ATMs are the nearest source of cash withdrawals for 64.3 million citizens – 77.3% of the total population – highlights the importance of the bank-based cash infrastructure for access to cash in Germany. Points of sale offering cash services, meanwhile, are the geographically closest cash withdrawal option for 18.9 million inhabitants. An average of 1.8 km has to be travelled to reach the nearest ATM. The nearest bank counter is 2.1 km away on average.[16] Meanwhile, the average distance to the nearest point of sale is 2.9 km across all inhabited municipalities, as indicated in the table on p. 102.

*Public surveys confirm good access to cash in Germany*

Good access to cash in Germany is therefore guaranteed overall. This result is also confirmed by public surveys, which reveal citizens consider the existing infrastructure of points of access to cash to be good. Overall, 93% of respondents find it fairly easy or very easy to get to an ATM or bank counter. In most cases, they combine going to a bank-based cash source with going shopping (47%) or to work (17%). 15% of respondents make a separate trip to an ATM or bank counter from home. Respondents take an average of nine minutes to withdraw cash.[17]

*Paring back of bank-based cash infrastructure harbours the risk of a self-reinforcing downward spiral …*

A dense network of cash withdrawal points helps to ensure that citizens can freely choose their preferred means of payment. It also makes the supply and removal of cash easier, contributing to an efficient cash cycle. However, the reduction of bank branches and ATMs over the past few years in particular has heightened fears that access to cash could deteriorate in future. Such developments pose the risk of a self-reinforcing downward spiral. Surveys conducted by the Bundesbank reveal that 13% of respondents would use less cash if their time spent travelling to a cash withdrawal facility were to increase by five minutes. If respond-

*… that ends up placing the availability and use of cash at stake*

ents needed 15 minutes longer to reach a cash withdrawal facility, 20% of them would use cash less frequently as a means of payment.[18] The decline in the use of cash in turn heightens the pressure on the existing bank-based cash infrastructure, meaning that a further stripping away of ATMs and bank counters could have a self-reinforcing effect. It is therefore important that credit institutions continue to operate an appropriate number of cash withdrawal facilities and thus continue to fulfil their responsibility to supply the population with cash. This will ensure that euro banknotes and coins also always remain available as a means of payment and store of value in future and can be obtained without requiring a greater amount of effort.[19] The box on p. 103 looks at how closures of cash withdrawal facilities might affect the cash supply.

## Summary

Cash has a special role in society. It is the most commonly used means of payment in Germany and is also in demand as a store of value. Cash protects privacy since, unlike with digital means of payment, no personal data are collected when transactions are conducted. It safeguards financial inclusion of all groups in society and might be the only means of payment that is available at short notice and viable for use in an emergency or crisis situation.

In order to obtain cash, the overwhelming majority of citizens use traditional sources of cash withdrawals, such as bank counters and ATMs. At the same time, the bank-based cash infrastructure is in a state of change. The reduction of ATMs and bank counters that we are seeing

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**16** Taken together, the nearest traditional withdrawal facility is located 1.7 km away from the centre of a municipality on average.
**17** See Deutsche Bundesbank (2022a, 2022b).
**18** See Deutsche Bundesbank (2022b).
**19** Ensuring the availability of cash at all times and promoting access to cash services are key elements of the Eurosystem's cash strategy. See https://www.ecb.europa.eu/euro/cash_strategy/html/index.en.html

harbours the risk that the existing network of cash withdrawal sources will develop cracks and it will become more difficult to supply citizens with cash via bank-based cash infrastructure. In this context, the remarks in this article also demonstrate that the point of sale can complement the banking industry's cash supply services, but cannot replace them.

The analysis of information on the locations of withdrawal facilities shows that, together, traditional and alternative withdrawal sources currently make up a dense network of cash withdrawal options. It is therefore easily possible to access cash in Germany at present. At the same time, there are already a number of municipalities in Germany that do not have any option for withdrawing cash within their boundaries. The 3.1 million citizens who this affects have to travel considerably further to obtain cash, which may involve a greater amount of effort to access cash and can influence the choice of their preferred means of payment.

However, citizens should always be free to decide how they want to pay. As part of its cash strategy, the Eurosystem aims to ensure that euro banknotes and coins will continue to be available and generally accepted as a means of payment and store of value in the future. This also includes providing the general public with cash via an adequate supply of cash withdrawal sources. The Bundesbank will thus continue to closely monitor access to cash in Germany.

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# Statistical
# Section

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## ◾ XII. External sector

# 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] | €STR [5,7] | 3 month EURIBOR [6,7] | Yield on European government bonds outstanding [8] |
| | Annual percentage change | | | | | | | % p.a. as a monthly average | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2021 Apr. | 12.4 | 9.2 | 9.4 | 9.4 | 7.3 | 3.4 | − 0.3 | − 0.57 | − 0.54 | 0.1 |
| May | 11.7 | 8.4 | 8.6 | 8.8 | 6.3 | 2.9 | − 1.0 | − 0.56 | − 0.54 | 0.2 |
| June | 11.7 | 8.3 | 8.4 | 8.3 | 6.0 | 3.3 | − 0.6 | − 0.56 | − 0.54 | 0.2 |
| July | 11.0 | 7.7 | 7.8 | 8.1 | 5.8 | 3.1 | − 0.5 | − 0.57 | − 0.55 | 0.0 |
| Aug. | 11.1 | 7.8 | 8.0 | 7.8 | 5.5 | 2.8 | − 0.8 | − 0.57 | − 0.55 | − 0.1 |
| Sep. | 11.1 | 7.6 | 7.6 | 7.8 | 5.6 | 3.3 | − 0.7 | − 0.57 | − 0.55 | 0.1 |
| Oct. | 10.7 | 7.5 | 7.7 | 7.5 | 5.6 | 3.6 | − 0.3 | − 0.57 | − 0.55 | 0.2 |
| Nov. | 10.1 | 7.1 | 7.4 | 7.3 | 5.8 | 3.7 | − 0.5 | − 0.57 | − 0.57 | 0.2 |
| Dec. | 9.8 | 6.9 | 6.9 | 6.9 | 6.1 | 3.9 | − 0.5 | − 0.58 | − 0.58 | 0.1 |
| 2022 Jan. | 9.1 | 6.8 | 6.5 | 6.6 | 6.2 | 4.3 | − 0.3 | − 0.58 | − 0.56 | 0.4 |
| Feb. | 9.1 | 6.7 | 6.4 | 6.4 | 6.2 | 4.4 | − 0.6 | − 0.58 | − 0.53 | 0.8 |
| Mar. | 8.8 | 6.6 | 6.3 | 6.2 | 6.1 | 4.4 | − 0.7 | − 0.58 | − 0.50 | 0.9 |
| Apr. | 8.2 | 6.3 | 6.1 | 6.1 | 6.4 | 5.0 | − 0.1 | − 0.58 | − 0.45 | 1.4 |
| May | 7.9 | 6.1 | 5.8 | 5.9 | 6.2 | 5.1 | 0.0 | − 0.59 | − 0.39 | 1.7 |
| June | 7.2 | 5.9 | 5.8 | 5.8 | 6.3 | 5.4 | − 0.0 | − 0.58 | − 0.24 | 2.2 |
| July | 6.8 | 5.9 | 5.7 | 5.9 | 5.9 | 5.4 | − 0.1 | − 0.51 | 0.04 | 1.9 |
| Aug. | 6.8 | 6.3 | 6.1 | 6.0 | 5.7 | 5.7 | − 0.1 | − 0.09 | 0.40 | 1.8 |
| Sep. | 5.6 | 6.2 | 6.3 | 5.8 | 5.5 | 5.7 | − 0.1 | 0.36 | 1.01 | 2.6 |
| Oct. | 3.8 | 5.2 | 5.1 | 5.4 | 5.1 | 5.3 | − 0.4 | 0.66 | 1.43 | 3.0 |
| Nov. | 2.4 | 4.7 | 4.8 | ... | 4.7 | 5.2 | 0.1 | 1.37 | 1.83 | 2.7 |
| Dec. | ... | ... | ... | ... | ... | ... | ... | 1.57 | 2.06 | 2.8 |

**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 Short-Term Rate. **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 | | | | | | | | 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2021 Apr. | + 35,680 | + 29,390 | + 13,969 | + 4,306 | + 31,029 | + 6,654 | − 28,613 | + 593 | 1.1979 | 100.6 | 94.4 |
| May | + 11,655 | + 26,792 | + 31,896 | + 5,619 | + 79,738 | − 7,115 | − 47,669 | + 1,323 | 1.2146 | 100.8 | 94.4 |
| June | + 30,929 | + 31,423 | + 67,526 | − 11,569 | + 44,284 | − 2,680 | + 32,294 | + 5,198 | 1.2047 | 100.3 | 93.8 |
| July | + 36,184 | + 34,230 | + 27,732 | + 46,148 | − 8,774 | + 18,412 | − 27,716 | − 337 | 1.1822 | 99.7 | 93.5 |
| Aug. | + 20,453 | + 17,141 | + 30,743 | + 61,459 | + 12,932 | + 2,203 | − 167,932 | + 122,082 | 1.1772 | 99.4 | 93.2 |
| Sep. | + 33,113 | + 22,270 | + 14,640 | + 13,409 | + 14,477 | + 2,664 | − 17,314 | + 1,404 | 1.1770 | 99.5 | 93.3 |
| Oct. | + 6,509 | + 12,929 | + 16,507 | + 28,579 | + 20,476 | + 13,355 | − 49,072 | + 3,170 | 1.1601 | 98.5 | 92.4 |
| Nov. | + 13,798 | + 14,908 | − 3,655 | + 4,881 | + 56,566 | + 25,649 | − 91,292 | + 540 | 1.1414 | 97.6 | 91.7 |
| Dec. | + 21,918 | + 9,975 | + 13,623 | + 25,582 | + 5,571 | + 1,183 | − 17,890 | − 822 | 1.1304 | 97.1 | 91.2 |
| 2022 Jan. | − 9,368 | − 9,807 | + 9,160 | − 16,757 | + 86,510 | + 3,703 | − 61,974 | − 2,320 | 1.1314 | 96.6 | 91.2 |
| Feb. | − 764 | + 3,533 | + 4,907 | + 26,530 | − 25,164 | − 2,785 | + 4,800 | + 1,527 | 1.1342 | 96.9 | 91.7 |
| Mar. | + 5,422 | + 4,220 | − 20,555 | + 4,465 | − 109,688 | − 2,488 | + 87,250 | − 95 | 1.1019 | 95.9 | 91.4 |
| Apr. | − 16,578 | − 11,525 | − 43,946 | + 3,614 | + 18,095 | + 27,513 | − 92,461 | − 707 | 1.0819 | 95.2 | 90.0 |
| May | − 29,900 | − 5,063 | + 40,312 | + 114,016 | + 6,577 | + 1,532 | − 83,024 | + 1,211 | 1.0579 | 95.6 | 90.4 |
| June | − 4,416 | − 5,973 | + 28,343 | − 5,306 | − 65,951 | − 144 | + 97,929 | + 1,815 | 1.0566 | 95.9 | 90.6 |
| July | − 20,764 | − 13,084 | + 7,802 | − 12,876 | + 36,528 | + 11,603 | − 29,091 | + 1,638 | 1.0179 | 94.1 | 89.1 |
| Aug. | − 31,641 | − 27,420 | + 7,980 | − 30,019 | − 60,878 | + 14,903 | + 65,850 | + 2,164 | 1.0128 | 93.6 | 88.8 |
| Sep. | − 22,025 | − 10,296 | − 49,979 | + 24,899 | − 154,050 | + 17,624 | + 57,955 | + 3,592 | 0.9904 | 94.2 | p 89.8 |
| Oct. | − 4,394 | − 2,614 | + 21,946 | + 8,649 | − 41,133 | + 7,176 | + 43,478 | + 3,776 | 0.9826 | 94.8 | p 91.0 |
| Nov. | ... | ... | ... | ... | ... | ... | ... | ... | 1.0201 | 96.0 | p 91.8 |
| Dec. | ... | ... | ... | ... | ... | ... | ... | ... | 1.0589 | 97.0 | p 92.7 |

**\*** 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 11, pp. 82•/ 83•. **2** Including employee stock options. **3** Bundesbank calculation. Vis-á-vis the currencies of the extended EER group of trading partners (fixed composition). **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 | | | | | | | | | | |
| 2020 | − 6.1 | − 5.4 | − 3.7 | − 0.6 | − 2.4 | − 7.8 | − 9.0 | 6.2 | − 9.0 | − 2.2 |
| 2021 | 5.3 | 6.1 | 2.6 | 8.0 | 3.0 | 6.8 | 8.4 | 13.6 | 6.7 | 4.1 |
| 2022 | ... | ... | 1.9 | ... | ... | ... | ... | ... | ... | ... |
| 2021 Q2 | 14.2 | 14.4 | 10.6 | 13.9 | 7.6 | 19.0 | 14.3 | 19.5 | 17.1 | 9.9 |
| Q3 | 3.9 | 4.8 | 1.8 | 8.4 | 3.2 | 3.7 | 12.4 | 10.4 | 4.5 | 4.5 |
| Q4 | 4.8 | 6.1 | 1.2 | 7.4 | 3.1 | 4.8 | 8.2 | 13.8 | 5.9 | 2.7 |
| 2022 Q1 | 5.5 | 5.2 | 3.9 | 4.5 | 4.0 | 4.9 | 9.3 | 11.8 | 6.1 | 5.6 |
| Q2 | 4.2 | 4.0 | 1.7 | 0.4 | 2.7 | 4.2 | 7.5 | 12.4 | 4.7 | 2.9 |
| Q3 | 2.3 | 1.9 | 1.2 | − 2.4 | 1.5 | 1.0 | 2.1 | 10.9 | 2.4 | − 0.5 |
| **Industrial production 2** Annual percentage change | | | | | | | | | | |
| 2019 | − 0.7 | 4.8 | − 3.2 | 7.1 | − 1.6 | 0.5 | − 0.7 | 7.0 | − 1.1 | 0.8 |
| 2020 | − 7.7 | − 3.8 | − 9.6 | − 2.8 | − 3.2 | − 10.9 | − 2.1 | 14.5 | − 11.5 | − 1.8 |
| 2021 | 8.0 | 16.8 | 4.7 | 6.8 | 4.0 | 5.9 | 10.4 | 16.4 | 12.2 | 6.5 |
| 2021 Q2 | 23.7 | 29.8 | 20.3 | 15.0 | 4.2 | 22.4 | 15.5 | 33.2 | 32.6 | 12.6 |
| Q3 | 5.9 | 19.4 | 2.5 | 7.2 | 4.5 | 2.6 | 9.9 | 27.6 | 4.9 | 6.3 |
| Q4 | 0.2 | 11.2 | − 1.2 | 5.6 | 7.3 | − 0.4 | 11.9 | − 18.2 | 4.6 | 3.5 |
| 2022 Q1 | − 0.2 | 6.4 | − 1.2 | 4.1 | 3.4 | 0.1 | 4.9 | − 15.0 | 1.4 | 4.0 |
| Q2 | 0.4 | − 5.1 | − 1.3 | 2.9 | 6.9 | 0.1 | 3.1 | − 7.3 | 2.0 | 3.6 |
| Q3 | 1.7 | − 3.6 | p 1.8 | − 4.8 | 3.1 | 0.4 | 3.6 | 4.0 | 0.0 | − 2.6 |
| **Capacity utilisation in industry 3** As a percentage of full capacity | | | | | | | | | | |
| 2020 | 74.5 | 75.5 | 77.3 | 67.6 | 76.9 | 73.8 | 71.0 | 68.8 | 53.4 | 72.0 |
| 2021 | 81.4 | 80.1 | 84.8 | 78.1 | 81.2 | 81.1 | 75.6 | 78.2 | 76.5 | 75.3 |
| 2022 | 82.2 | 79.1 | 85.2 | 71.7 | 80.9 | 81.7 | 75.9 | 80.0 | 78.4 | 75.0 |
| 2021 Q3 | 83.0 | 80.8 | 86.1 | 77.7 | 81.5 | 82.9 | 77.9 | 80.8 | 77.5 | 75.5 |
| Q4 | 82.7 | 81.2 | 85.8 | 83.5 | 82.7 | 82.0 | 77.3 | 81.7 | 77.8 | 76.7 |
| 2022 Q1 | 82.4 | 80.0 | 85.9 | 72.6 | 81.9 | 82.7 | 76.8 | 78.9 | 78.6 | 75.5 |
| Q2 | 82.5 | 80.1 | 85.1 | 70.4 | 80.2 | 82.2 | 76.6 | 82.6 | 78.5 | 75.6 |
| Q3 | 82.3 | 78.9 | 85.0 | 74.3 | 80.8 | 81.7 | 74.6 | 79.7 | 78.5 | 75.7 |
| Q4 | 81.4 | 77.2 | 84.9 | 69.5 | 80.8 | 80.3 | 75.5 | 78.7 | 77.9 | 73.3 |
| **Standardised unemployment rate 4** As a percentage of civilian labour force | | | | | | | | | | |
| 2020 | 7.8 | 5.6 | 3.6 | 7.0 | 7.8 | 7.8 | 16.3 | 5.6 | 9.2 | 8.1 |
| 2021 | e 7.7 | e 6.3 | 3.6 | e 6.2 | e 7.7 | e 7.9 | e 14.8 | e 6.3 | e 9.5 | e 7.6 |
| 2022 | ... | ... | ... | e 5.6 | ... | ... | ... | e 4.5 | ... | ... |
| 2022 July | 6.6 | 5.5 | 3.0 | 6.0 | 7.1 | 7.3 | 12.3 | 4.3 | 8.0 | 6.9 |
| Aug. | 6.7 | 5.4 | 3.0 | 5.8 | 7.2 | 7.2 | 12.3 | 4.4 | 8.0 | 7.0 |
| Sep. | 6.6 | 5.4 | 3.0 | 5.4 | 7.2 | 7.1 | 12.0 | 4.4 | 7.9 | 7.1 |
| Oct. | 6.5 | 5.4 | 3.0 | 5.5 | 6.4 | 7.1 | 11.5 | 4.4 | 7.9 | 7.1 |
| Nov. | 6.5 | 5.5 | 3.0 | 5.5 | 6.7 | 7.0 | 11.4 | 4.4 | 7.8 | 7.2 |
| Dec. | ... | ... | ... | ... | ... | ... | ... | 4.3 | ... | ... |
| **Harmonised Index of Consumer Prices** Annual percentage change | | | | | | | | | | |
| 2020 | 0.3 | 0.4 | 5 0.4 | − 0.6 | 0.4 | 0.5 | − 1.3 | − 0.5 | − 0.1 | 0.1 |
| 2021 | 2.6 | 3.2 | 5 3.2 | 4.5 | 2.1 | 2.1 | 0.6 | 2.4 | 1.9 | 3.2 |
| 2022 | 8.4 | 10.3 | 8.7 | 19.4 | 7.2 | 5.9 | 9.3 | 8.1 | 8.7 | 17.2 |
| 2022 July | 8.9 | 10.4 | 8.5 | 23.2 | 8.0 | 6.8 | 11.3 | 9.6 | 8.4 | 21.3 |
| Aug. | 9.1 | 10.5 | 8.8 | 25.2 | 7.9 | 6.6 | 11.2 | 9.0 | 9.1 | 21.4 |
| Sep. | 9.9 | 12.1 | 10.9 | 24.1 | 8.4 | 6.2 | 12.1 | 8.6 | 9.4 | 22.0 |
| Oct. | 10.6 | 13.1 | 11.6 | 22.5 | 8.4 | 7.1 | 9.5 | 9.4 | 12.6 | 21.7 |
| Nov. | 10.1 | 10.5 | 11.3 | 21.4 | 9.1 | 7.1 | 8.8 | 9.0 | 12.6 | 21.7 |
| Dec. | 9.2 | 10.2 | 9.6 | 17.5 | 8.8 | 6.7 | 7.6 | 8.2 | 12.3 | 20.7 |
| **General government financial balance 6** As a percentage of GDP | | | | | | | | | | |
| 2020 | − 7.0 | − 9.0 | − 4.3 | − 5.5 | − 5.5 | − 9.0 | − 9.9 | − 5.0 | − 9.5 | − 4.3 |
| 2021 | − 5.1 | − 5.6 | − 3.7 | − 2.4 | − 2.7 | − 6.5 | − 7.5 | − 1.7 | − 7.2 | − 7.0 |
| 2022 | ... | ... | − 2.6 | ... | ... | ... | ... | ... | ... | ... |
| **General government debt 6** As a percentage of GDP | | | | | | | | | | |
| 2019 | 83.9 | 97.6 | 58.9 | 8.5 | 64.9 | 97.4 | 180.6 | 57.0 | 134.1 | 36.5 |
| 2020 | 97.0 | 112.0 | 68.0 | 18.5 | 74.8 | 115.0 | 206.3 | 58.4 | 154.9 | 42.0 |
| 2021 | 95.4 | 109.2 | 68.6 | 17.6 | 72.4 | 112.8 | 194.5 | 55.4 | 150.3 | 43.6 |

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 and calendar 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

| Lithuania | Luxembourg | Malta | Netherlands | Austria | Portugal | Slovakia | Slovenia | Spain | Cyprus | Period |
|---|---|---|---|---|---|---|---|---|---|---|
| − 0.0 | − 0.8 | − 8.6 | − 3.9 | − 6.5 | − 8.3 | − 3.4 | − 4.3 | − 11.3 | − 4.4 | 2020 |
| 6.0 | 5.1 | 11.7 | 4.9 | 4.6 | 5.5 | 3.0 | 8.2 | 5.5 | 6.6 | 2021 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2022 |
| 9.1 | 10.6 | 17.1 | 10.2 | 13.0 | 16.3 | 9.9 | 16.2 | 17.9 | 12.1 | 2021 Q2 |
| 5.6 | 2.0 | 15.8 | 5.4 | 5.4 | 5.3 | 1.4 | 5.1 | 4.2 | 8.2 | Q3 |
| 6.5 | 4.0 | 13.4 | 6.2 | 6.0 | 6.7 | 1.3 | 10.5 | 6.6 | 6.9 | Q4 |
| 4.8 | 3.0 | 8.3 | 6.7 | 9.2 | 11.3 | 2.9 | 9.7 | 6.8 | 6.7 | 2022 Q1 |
| 1.7 | 1.6 | 9.4 | 5.2 | 6.1 | 7.9 | 1.3 | 8.3 | 6.8 | 5.9 | Q2 |
| 1.8 | 2.9 | 5.2 | 3.1 | 1.7 | 5.0 | 1.4 | 3.4 | 5.1 | 5.5 | Q3 |

**Industrial production [2]**
Annual percentage change

| Lithuania | Luxembourg | Malta | Netherlands | Austria | Portugal | Slovakia | Slovenia | Spain | Cyprus | Period |
|---|---|---|---|---|---|---|---|---|---|---|
| 2.9 | − 3.2 | 1.1 | − 0.9 | − 0.1 | − 2.2 | 0.5 | 3.1 | 0.5 | 4.4 | 2019 |
| − 1.7 | − 10.8 | − 0.3 | − 3.9 | − 5.9 | − 7.3 | − 9.1 | − 5.2 | − 9.8 | − 7.3 | 2020 |
| 20.0 | 8.4 | − 0.2 | 5.0 | 11.3 | 3.5 | 10.4 | 10.2 | 7.5 | 6.4 | 2021 |
| 25.0 | 24.0 | 14.4 | 10.0 | 24.2 | 24.3 | 35.8 | 25.5 | 27.2 | 21.2 | 2021 Q2 |
| 17.8 | 3.6 | − 0.0 | 6.8 | 9.1 | − 3.8 | 0.9 | 6.2 | 1.9 | 4.5 | Q3 |
| 23.9 | 3.0 | − 5.4 | 4.4 | 10.4 | − 1.7 | 4.0 | 7.9 | 1.8 | 1.0 | Q4 |
| 23.5 | 0.2 | − 2.0 | 1.9 | 11.2 | − 2.9 | − 1.7 | 6.3 | 1.7 | 3.3 | 2022 Q1 |
| 8.8 | − 1.7 | − 5.5 | 4.8 | 10.0 | 2.0 | − 4.8 | 3.1 | 5.2 | 3.1 | Q2 |
| 9.4 | − 0.2 | 10.0 | 2.2 | 6.6 | 1.3 | − 3.4 | 2.3 | 4.6 | − 0.7 | Q3 |

**Capacity utilisation in industry [3]**
As a percentage of full capacity

| Lithuania | Luxembourg | Malta | Netherlands | Austria | Portugal | Slovakia | Slovenia | Spain | Cyprus | Period |
|---|---|---|---|---|---|---|---|---|---|---|
| 73.0 | 72.5 | 70.7 | 78.3 | 79.5 | 74.9 | 79.5 | 78.5 | 74.4 | 51.5 | 2020 |
| 76.7 | 82.0 | 76.8 | 82.4 | 87.1 | 79.2 | 82.2 | 84.5 | 77.8 | 51.3 | 2021 |
| 77.7 | 80.8 | 64.7 | 83.7 | 87.7 | 81.9 | 83.3 | 85.0 | 78.7 | 58.3 | 2022 |
| 77.4 | 83.7 | 78.4 | 83.8 | 89.5 | 78.9 | 81.9 | 85.9 | 77.5 | 50.3 | 2021 Q3 |
| 78.6 | 81.8 | 75.2 | 83.7 | 88.6 | 80.2 | 82.1 | 85.3 | 79.2 | 55.4 | Q4 |
| 78.0 | 81.9 | 62.9 | 84.0 | 88.4 | 81.8 | 82.8 | 86.1 | 78.8 | 55.4 | 2022 Q1 |
| 77.5 | 79.9 | 64.6 | 84.3 | 88.9 | 82.5 | 83.9 | 85.2 | 80.0 | 58.3 | Q2 |
| 78.4 | 81.4 | 67.6 | 83.9 | 87.8 | 81.6 | 83.5 | 84.6 | 78.9 | 58.4 | Q3 |
| 76.9 | 79.8 | 63.6 | 82.6 | 85.6 | 81.6 | 83.0 | 84.1 | 77.2 | 60.9 | Q4 |

**Standardised unemployment rate [4]**
As a percentage of civilian labour force

| Lithuania | Luxembourg | Malta | Netherlands | Austria | Portugal | Slovakia | Slovenia | Spain | Cyprus | Period |
|---|---|---|---|---|---|---|---|---|---|---|
| 8.6 | 6.8 | 4.4 | 3.9 | 5.4 | 6.9 | 6.7 | 5.0 | 15.5 | 7.6 | 2020 |
| e 7.1 | e 5.4 | e 3.4 | e 4.2 | e 6.2 | e 6.6 | e 6.9 | e 4.8 | e 14.8 | e 7.5 | 2021 |
| ... | ... | ... | ... | ... | e 6.1 | ... | ... | ... | ... | 2022 |
| 5.8 | 4.3 | 2.9 | 3.6 | 4.6 | 5.9 | 6.1 | 4.1 | 12.6 | 7.0 | 2022 July |
| 5.9 | 4.4 | 2.9 | 3.8 | 5.2 | 6.0 | 6.0 | 4.0 | 12.7 | 7.0 | Aug. |
| 6.0 | 4.5 | 3.0 | 3.8 | 5.1 | 6.1 | 6.0 | 4.0 | 12.7 | 6.9 | Sep. |
| 6.1 | 4.6 | 3.1 | 3.7 | 4.6 | 6.0 | 5.9 | 4.1 | 12.5 | 6.9 | Oct. |
| 5.9 | 4.6 | 3.2 | 3.6 | 5.6 | 6.4 | 5.9 | 4.2 | 12.4 | 7.5 | Nov. |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | Dec. |

**Harmonised Index of Consumer Prices**
Annual percentage change

| Lithuania | Luxembourg | Malta | Netherlands | Austria | Portugal | Slovakia | Slovenia | Spain | Cyprus | Period |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.1 | 0.0 | 0.8 | 1.1 | 1.4 | − 0.1 | 2.0 | − 0.3 | − 0.3 | − 1.1 | 2020 |
| 4.6 | 3.5 | 0.7 | 2.8 | 2.8 | 0.9 | 2.8 | 2.0 | 3.0 | 2.3 | 2021 |
| 18.9 | 8.2 | 6.1 | 11.6 | 8.6 | 8.1 | 12.1 | 9.3 | 8.3 | 8.1 | 2022 |
| 20.9 | 9.3 | 6.8 | 11.6 | 9.4 | 9.4 | 12.8 | 11.7 | 10.7 | 10.6 | 2022 July |
| 21.1 | 8.6 | 7.0 | 13.7 | 9.3 | 9.3 | 13.4 | 11.5 | 10.5 | 9.6 | Aug. |
| 22.5 | 8.8 | 7.4 | 17.1 | 11.0 | 9.8 | 13.6 | 10.6 | 9.0 | 9.0 | Sep. |
| 22.1 | 8.8 | 7.4 | 16.8 | 11.6 | 10.6 | 14.5 | 10.3 | 7.3 | 8.6 | Oct. |
| 21.4 | 7.3 | 7.2 | 11.3 | 11.2 | 10.2 | 15.1 | 10.8 | 6.7 | 8.1 | Nov. |
| 20.0 | 6.2 | 7.3 | 11.0 | 10.5 | 9.8 | 15.0 | 10.8 | 5.5 | 7.6 | Dec. |

**General government financial balance [6]**
As a percentage of GDP

| Lithuania | Luxembourg | Malta | Netherlands | Austria | Portugal | Slovakia | Slovenia | Spain | Cyprus | Period |
|---|---|---|---|---|---|---|---|---|---|---|
| − 7.0 | − 3.4 | − 9.4 | − 3.7 | − 8.0 | − 5.8 | − 5.4 | − 7.7 | − 10.1 | − 5.8 | 2020 |
| − 1.0 | 0.8 | − 7.8 | − 2.6 | − 5.9 | − 2.9 | − 5.5 | − 4.7 | − 6.9 | − 1.7 | 2021 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2022 |

**General government debt [6]**
As a percentage of GDP

| Lithuania | Luxembourg | Malta | Netherlands | Austria | Portugal | Slovakia | Slovenia | Spain | Cyprus | Period |
|---|---|---|---|---|---|---|---|---|---|---|
| 35.8 | 22.4 | 40.7 | 48.5 | 70.6 | 116.6 | 48.0 | 65.4 | 98.2 | 90.4 | 2019 |
| 46.3 | 24.5 | 53.3 | 54.7 | 82.9 | 134.9 | 58.9 | 79.6 | 120.4 | 113.5 | 2020 |
| 43.7 | 24.5 | 56.3 | 52.4 | 82.3 | 125.5 | 62.2 | 74.5 | 118.3 | 101.0 | 2021 |

quarterly data seasonally adjusted. Data collection at the beginning of the quarter. **4** Monthly data seasonally adjusted. **5** Influenced by a temporary reduction of value added tax between July and December 2020. **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] |
| 2021 Apr. | 55.9 | 13.3 | 8.6 | 42.6 | 29.0 | − 11.4 | 104.5 | 115.9 | − 36.9 | − 23.9 | − 0.1 | − 7.5 | − 5.4 |
| May | 124.9 | 48.3 | 15.2 | 76.6 | 77.6 | − 2.6 | 24.5 | 21.8 | − 23.5 | − 1.2 | − 0.2 | − 15.1 | − 6.9 |
| June | 94.5 | 37.2 | 0.8 | 57.3 | 58.6 | 9.2 | − 74.4 | − 83.7 | 26.8 | − 6.1 | − 0.4 | − 4.2 | 37.6 |
| July | 112.9 | 56.0 | 8.1 | 56.8 | 50.3 | − 4.2 | 74.3 | 78.6 | 3.1 | − 4.7 | − 0.6 | 9.3 | − 0.8 |
| Aug. | 35.0 | − 16.7 | − 7.8 | 51.7 | 60.9 | − 4.7 | 141.2 | 146.0 | − 5.9 | − 7.3 | − 0.4 | − 7.0 | 8.9 |
| Sep. | 107.4 | 72.9 | 3.6 | 34.5 | 43.2 | − 40.1 | − 58.2 | − 18.1 | 16.6 | − 4.5 | − 0.4 | 8.3 | 13.2 |
| Oct. | 80.7 | 68.3 | 21.4 | 12.3 | 18.5 | − 7.6 | 194.4 | 202.0 | 11.4 | − 10.7 | − 0.7 | 16.8 | 6.0 |
| Nov. | 156.1 | 89.3 | − 3.6 | 66.8 | 67.5 | − 26.5 | 15.0 | 41.5 | − 7.0 | − 10.6 | − 0.7 | 1.8 | 2.5 |
| Dec. | 53.0 | 27.8 | 20.3 | 25.2 | 22.7 | − 56.5 | − 205.4 | − 149.0 | 4.5 | 18.0 | − 0.8 | − 25.0 | 12.2 |
| 2022 Jan. | 166.4 | 91.4 | − 10.2 | 75.0 | 64.7 | 0.8 | 136.3 | 135.5 | − 18.2 | − 14.7 | − 0.1 | 9.3 | − 12.7 |
| Feb. | 109.5 | 43.1 | 2.0 | 66.5 | 73.8 | − 12.7 | 82.6 | 95.3 | − 21.2 | − 12.6 | − 0.4 | − 3.5 | − 4.8 |
| Mar. | 158.4 | 113.2 | 26.4 | 45.3 | 36.0 | − 1.7 | − 20.5 | − 18.9 | − 0.1 | 2.8 | − 0.7 | − 21.8 | 19.6 |
| Apr. | 112.1 | 96.9 | 20.1 | 15.2 | 5.2 | − 98.8 | − 78.7 | 20.0 | 8.5 | − 10.5 | − 0.2 | 1.3 | 17.9 |
| May | 107.1 | 65.1 | − 18.8 | 42.1 | 49.5 | − 58.4 | 40.2 | 98.6 | − 16.1 | 3.1 | − 3.3 | − 21.1 | 5.3 |
| June | 114.9 | 82.3 | − 9.0 | 32.6 | 33.5 | 102.9 | − 25.7 | − 128.6 | 23.0 | − 4.9 | − 0.4 | 1.0 | 27.2 |
| July | 30.4 | 59.3 | − 2.9 | − 28.9 | − 28.8 | 11.9 | 63.5 | 75.4 | 0.0 | − 11.5 | − 0.4 | − 3.8 | 15.7 |
| Aug. | − 11.1 | 25.6 | − 18.8 | − 36.8 | − 31.1 | 47.3 | 69.8 | 22.5 | − 10.1 | − 22.1 | 0.7 | 2.0 | 9.3 |
| Sep. | 87.8 | 84.1 | − 0.0 | 3.8 | 2.6 | − 52.8 | − 200.2 | − 147.4 | 17.6 | − 16.4 | − 0.4 | 3.6 | 30.8 |
| Oct. | − 12.9 | − 0.3 | − 6.1 | − 12.6 | − 9.6 | 6.1 | 169.8 | 175.9 | − 11.2 | − 14.8 | − 0.0 | 11.7 | − 8.1 |
| Nov. | 87.2 | 79.1 | 24.2 | 8.1 | 13.9 | 7.2 | − 47.2 | − 54.4 | 29.5 | 1.6 | − 0.1 | 30.6 | − 2.6 |

### 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] |
| 2021 Apr. | 11.4 | 0.5 | 2.4 | 10.8 | 7.0 | 67.3 | 25.3 | − 42.0 | 9.3 | − 2.4 | − 0.3 | 6.4 | 5.6 |
| May | 33.4 | 16.8 | 3.2 | 16.6 | 18.9 | − 35.0 | − 10.9 | 24.1 | − 10.3 | − 2.8 | − 0.1 | − 7.3 | 0.0 |
| June | 30.0 | 8.7 | 2.4 | 21.4 | 22.3 | − 36.1 | − 5.3 | 30.8 | 3.2 | − 3.4 | − 0.2 | − 7.3 | 14.1 |
| July | 42.9 | 22.4 | 2.2 | 20.4 | 18.4 | 42.8 | − 14.6 | − 57.4 | 5.1 | − 1.8 | − 0.3 | 4.3 | 2.8 |
| Aug. | 28.5 | 16.6 | 1.6 | 11.9 | 15.7 | − 18.0 | 18.2 | 36.2 | 2.0 | − 0.5 | − 0.2 | 0.9 | 1.9 |
| Sep. | 33.1 | 16.7 | 5.4 | 16.4 | 16.5 | − 92.2 | − 0.7 | 91.5 | 3.8 | − 2.2 | − 0.2 | 2.6 | 3.6 |
| Oct. | 37.8 | 34.7 | 7.2 | 3.0 | − 0.6 | 47.0 | 47.6 | 0.7 | 18.6 | 1.4 | − 0.2 | 15.6 | 1.8 |
| Nov. | 54.0 | 28.5 | 3.4 | 25.4 | 28.0 | − 59.0 | − 4.2 | 54.8 | 5.0 | − 0.6 | − 0.2 | 4.7 | 1.1 |
| Dec. | 12.8 | 10.9 | 6.8 | 2.0 | 4.7 | − 122.9 | − 47.1 | 75.8 | − 2.3 | 9.1 | − 0.2 | − 13.2 | 2.0 |
| 2022 Jan. | 40.4 | 31.0 | 1.4 | 9.4 | 7.5 | 111.9 | 72.2 | − 39.7 | − 4.0 | − 1.1 | − 0.8 | 12.6 | − 14.8 |
| Feb. | 32.7 | 27.6 | 3.4 | 5.2 | 7.2 | 16.0 | 21.9 | 5.9 | 5.1 | − 1.3 | − 0.2 | 7.0 | − 0.4 |
| Mar. | 37.0 | 23.3 | 4.1 | 13.7 | 12.9 | − 44.2 | − 22.2 | 22.0 | 6.1 | − 2.0 | − 0.2 | 4.1 | 4.2 |
| Apr. | 19.0 | 18.9 | 2.7 | 0.1 | − 4.5 | 19.1 | − 13.0 | − 32.1 | 4.4 | − 2.7 | − 0.2 | 3.2 | 4.1 |
| May | 39.1 | 28.5 | 3.5 | 10.6 | 13.5 | − 29.8 | − 0.9 | 28.9 | 2.0 | − 2.4 | − 0.2 | 2.0 | 2.5 |
| June | 32.6 | 25.5 | − 4.1 | 7.1 | 4.8 | − 22.4 | − 9.4 | 13.0 | 3.8 | − 3.1 | − 0.2 | − 3.8 | 10.8 |
| July | 18.2 | 30.6 | 10.6 | − 12.4 | − 13.4 | 42.7 | 4.3 | − 38.5 | 9.3 | − 2.0 | − 0.2 | 8.5 | 3.0 |
| Aug. | 26.0 | 39.4 | − 0.2 | − 13.4 | − 11.4 | − 50.3 | 6.7 | 57.1 | 3.0 | − 0.0 | − 0.1 | 0.8 | 2.3 |
| Sep. | 21.5 | 23.1 | 0.1 | − 1.7 | − 4.5 | − 27.4 | 1.6 | 29.0 | 4.1 | − 0.3 | 0.0 | − 0.6 | 5.0 |
| Oct. | 12.8 | 10.5 | − 0.2 | 2.3 | 1.9 | 45.1 | 20.4 | − 24.7 | − 7.6 | − 1.2 | 0.2 | 3.2 | − 9.8 |
| Nov. | 25.3 | 26.1 | 1.4 | − 0.9 | 0.8 | 39.4 | 9.1 | − 30.2 | 10.2 | 2.3 | 0.2 | 7.1 | 0.6 |

* The data in this table are based on the consolidated balance sheet of monetary financial institutions (MFIs) (Table II.2); statistical breaks have been eliminated from the flow figures (see also the "Notes on the figures" in the "Explanatory notes" 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) | | | | | | | 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 [4] | of which: Intra-Eurosystem liability/claim related to banknote issue | Total | Money stock M2 | | | | | | | | | |
| | | | | 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] | | | | | | |
| − 32.3 | 14.1 | 0.0 | 94.5 | 69.1 | 88.9 | 8.5 | 80.4 | − 27.9 | 8.1 | 15.3 | 8.9 | 6.8 | 2021 Apr. |
| − 8.5 | 48.9 | 0.0 | 110.1 | 115.6 | 116.7 | 13.2 | 103.5 | − 11.7 | 10.7 | − 4.1 | − 8.9 | 8.1 | May |
| 16.8 | − 4.3 | 0.0 | 74.0 | 88.1 | 119.7 | 10.5 | 109.2 | − 33.9 | 2.3 | − 10.8 | − 8.4 | − 4.6 | June |
| 0.4 | − 55.8 | 0.0 | 151.2 | 113.5 | 103.3 | 14.6 | 88.6 | 10.5 | − 0.3 | 17.4 | 22.6 | 7.4 | July |
| 26.6 | − 10.6 | 0.0 | 28.3 | 33.4 | 32.4 | 1.7 | 30.7 | − 2.5 | 3.6 | − 12.3 | 5.3 | − 6.2 | Aug. |
| 6.5 | − 0.8 | 0.0 | 31.1 | 60.4 | 76.0 | 5.3 | 70.8 | − 16.5 | 0.8 | 12.7 | − 31.1 | 2.9 | Sep. |
| − 2.4 | − 72.9 | 0.0 | 136.0 | 84.7 | 70.5 | 6.8 | 63.7 | 19.2 | − 5.0 | 13.2 | 31.5 | 7.5 | Oct. |
| − 48.5 | 84.9 | 0.0 | 95.7 | 83.7 | 102.7 | 6.0 | 96.7 | − 19.7 | 0.7 | − 4.4 | 26.2 | − 5.2 | Nov. |
| − 44.5 | − 22.2 | 0.0 | 84.6 | 114.4 | 104.0 | 20.6 | 83.3 | 6.9 | 3.6 | − 41.8 | − 6.7 | − 7.0 | Dec. |
| 68.1 | 91.0 | 0.0 | − 21.4 | − 23.9 | − 51.4 | 1.0 | − 52.4 | 14.9 | 12.6 | 63.5 | − 23.2 | 8.6 | 2022 Jan. |
| 44.6 | 31.8 | 0.0 | 41.1 | 69.7 | 76.6 | 9.1 | 67.4 | − 14.8 | 8.0 | 9.4 | − 37.2 | − 0.3 | Feb. |
| 13.7 | 52.0 | 0.0 | 98.8 | 113.2 | 93.1 | 22.5 | 70.6 | 16.0 | 4.0 | − 21.8 | − 3.4 | − 2.1 | Mar. |
| − 22.1 | − 95.2 | 0.0 | 95.8 | 58.0 | 52.9 | 11.2 | 41.7 | 2.8 | 2.3 | 28.8 | 20.2 | 16.5 | Apr. |
| − 28.9 | 47.9 | 0.0 | 53.0 | 62.7 | 69.0 | 7.8 | 61.2 | − 18.2 | 11.9 | 4.4 | − 10.1 | − 5.1 | May |
| 69.6 | 71.3 | 0.0 | 72.1 | 78.5 | 51.8 | 6.6 | 45.1 | 23.6 | 3.1 | − 35.5 | − 1.0 | 11.1 | June |
| − 31.2 | −112.1 | 0.0 | 151.7 | 118.8 | 64.2 | 8.6 | 55.6 | 49.5 | 5.1 | 27.0 | − 2.0 | 18.0 | July |
| − 80.3 | 56.0 | 0.0 | 85.4 | 77.9 | 29.4 | − 4.6 | 34.1 | 38.4 | 10.1 | − 21.5 | 6.8 | 7.4 | Aug. |
| 7.3 | − 40.3 | 0.0 | 62.4 | 58.6 | − 44.9 | − 1.6 | − 43.3 | 103.9 | − 0.5 | − 21.8 | − 8.4 | 22.3 | Sep. |
| − 5.4 | 64.1 | 0.0 | − 64.0 | − 78.8 | − 155.6 | − 0.4 | − 155.2 | 81.7 | − 5.0 | 5.6 | 33.7 | − 26.9 | Oct. |
| − 10.5 | − 17.8 | 0.0 | 76.8 | 22.1 | − 29.9 | − 3.5 | − 26.4 | 60.2 | − 8.2 | 27.7 | 23.9 | 20.2 | 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] | | | | | | maturities with maturities of up to 2 years (incl. money market paper)(net) [7] | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | of which: Intra-Eurosystem liability/claim related to banknote issue [9,11] | Currency in circulation | Components of the money stock | | | | | Money market fund shares (net) [7,8] | | |
| | | | | Total | Overnight deposits | Deposits with an agreed maturity of up to 2 years | Deposits at agreed notice of up to 3 months [6] | Repo transactions | | | |
| − 7.4 | 71.2 | 0.7 | 2.6 | 5.5 | 13.9 | − 5.2 | 0.7 | − 3.4 | − 0.1 | − 0.4 | 2021 Apr. |
| 18.8 | − 44.9 | 3.0 | 2.9 | 34.8 | 27.8 | − 2.8 | 0.6 | 1.7 | − 0.1 | 2.0 | May |
| 6.0 | − 14.0 | 3.1 | 2.3 | − 1.2 | 7.1 | − 8.0 | − 0.4 | − 0.2 | 0.1 | 0.3 | June |
| − 12.0 | 75.2 | 4.2 | 3.7 | 17.4 | 21.2 | − 4.1 | − 0.3 | 0.6 | − 0.1 | 0.1 | July |
| 0.7 | − 13.2 | 2.9 | 0.2 | 21.0 | 20.4 | − 1.6 | − 0.3 | 0.1 | 0.0 | 2.3 | Aug. |
| 7.1 | − 77.3 | 4.6 | 0.8 | 7.3 | 7.6 | − 1.3 | − 0.6 | 1.5 | − 0.0 | 0.1 | Sep. |
| − 3.9 | 53.7 | 3.3 | 1.6 | 16.4 | 3.9 | 13.0 | − 0.4 | − 0.4 | − 0.1 | 0.4 | Oct. |
| 7.2 | − 42.3 | 3.7 | 1.2 | 25.0 | 40.9 | − 12.3 | − 0.1 | − 4.7 | − 0.3 | 1.4 | Nov. |
| 27.8 | − 135.3 | 5.3 | 4.5 | 0.4 | − 12.8 | 9.1 | 1.6 | − 0.3 | 0.3 | 1.7 | Dec. |
| − 38.1 | 166.0 | 1.3 | 0.8 | 28.4 | 22.4 | 9.3 | 0.3 | − 1.2 | 0.0 | − 2.4 | 2022 Jan. |
| 2.5 | 14.4 | 3.0 | 2.2 | 26.8 | 23.3 | 1.1 | 0.3 | 1.1 | 0.1 | 0.8 | Feb. |
| − 0.1 | − 13.2 | 5.8 | 4.2 | − 0.1 | − 7.4 | 8.4 | − 1.6 | 0.5 | 0.2 | − 0.1 | Mar. |
| − 3.0 | 32.9 | 3.4 | 2.3 | 3.7 | − 3.4 | 10.4 | − 0.4 | 2.0 | − 0.2 | − 0.6 | Apr. |
| 22.5 | − 30.3 | 3.4 | 2.7 | 15.1 | 22.5 | − 7.4 | − 1.2 | 0.4 | 0.2 | 0.7 | May |
| 14.9 | − 37.5 | 3.7 | 0.5 | 29.0 | 19.6 | 7.5 | − 1.6 | 0.6 | − 0.0 | 2.9 | June |
| − 38.2 | 55.3 | − 5.3 | 9.1 | 34.6 | 5.7 | 23.6 | − 1.7 | 4.3 | 0.1 | 2.6 | July |
| − 24.1 | − 71.1 | − 11.7 | 12.5 | 67.9 | 56.8 | 13.9 | − 2.4 | − 1.8 | 0.1 | 1.4 | Aug. |
| 4.7 | − 1.1 | 3.3 | 0.3 | − 13.6 | − 56.8 | 45.1 | − 5.3 | − 2.6 | 0.1 | 6.0 | Sep. |
| 5.1 | 65.9 | 0.1 | 0.1 | − 5.4 | − 32.1 | 36.8 | − 3.3 | − 0.2 | 0.1 | − 6.7 | Oct. |
| 22.6 | 13.5 | − 0.0 | − 0.3 | 18.4 | 11.4 | 5.4 | − 5.5 | 3.2 | 0.0 | 3.8 | 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 | | | | | | | | | Claims on non-euro area residents | Other assets |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Lending to non-banks (non-MFIs) in the euro area | | | | | | | | | | |
| | | Total | Enterprises and households | | | | General government | | | | |
| | | | Total | Loans | Debt securities 2 | Shares and other equities | Total | Loans | Debt securities 3 | | |
| **Euro area (€ billion) 1** | | | | | | | | | | | |
| 2020 Oct. | 30,687.0 | 20,162.5 | 14,376.6 | 12,054.8 | 1,520.5 | 801.3 | 5,785.9 | 1,004.2 | 4,781.7 | 6,337.4 | 4,187.0 |
| Nov. | 30,749.4 | 20,292.0 | 14,457.7 | 12,090.4 | 1,542.2 | 825.0 | 5,834.4 | 1,003.4 | 4,831.0 | 6,331.0 | 4,126.4 |
| Dec. | 30,438.8 | 20,266.1 | 14,438.3 | 12,042.9 | 1,532.2 | 863.2 | 5,827.8 | 990.2 | 4,837.6 | 6,108.9 | 4,063.8 |
| 2021 Jan. | 30,643.8 | 20,387.8 | 14,466.2 | 12,067.8 | 1,535.8 | 862.6 | 5,921.6 | 999.4 | 4,922.1 | 6,299.8 | 3,956.2 |
| Feb. | 30,546.3 | 20,463.6 | 14,500.5 | 12,090.1 | 1,541.1 | 869.3 | 5,963.1 | 992.4 | 4,970.6 | 6,300.7 | 3,782.0 |
| Mar. | 30,827.0 | 20,653.7 | 14,576.8 | 12,185.3 | 1,512.6 | 879.0 | 6,076.9 | 993.3 | 5,083.5 | 6,360.7 | 3,812.6 |
| Apr. | 30,752.9 | 20,667.2 | 14,566.6 | 12,169.2 | 1,509.7 | 887.7 | 6,100.6 | 1,007.2 | 5,093.4 | 6,396.3 | 3,689.5 |
| May | 30,890.4 | 20,788.2 | 14,612.8 | 12,198.6 | 1,521.6 | 892.6 | 6,175.5 | 1,006.2 | 5,169.2 | 6,434.1 | 3,668.1 |
| June | 30,991.0 | 20,890.7 | 14,652.8 | 12,234.6 | 1,530.0 | 888.3 | 6,237.8 | 1,004.8 | 5,233.1 | 6,400.0 | 3,700.3 |
| July | 31,313.8 | 21,028.7 | 14,708.3 | 12,278.0 | 1,543.6 | 886.7 | 6,320.4 | 1,011.3 | 5,309.1 | 6,504.2 | 3,781.0 |
| Aug. | 31,438.1 | 21,047.9 | 14,684.9 | 12,261.1 | 1,533.4 | 890.4 | 6,363.1 | 1,002.3 | 5,360.8 | 6,653.5 | 3,736.6 |
| Sep. | 31,473.8 | 21,133.9 | 14,757.6 | 12,331.3 | 1,534.9 | 891.4 | 6,376.3 | 993.6 | 5,382.7 | 6,620.6 | 3,719.3 |
| Oct. | 31,778.7 | 21,201.7 | 14,817.7 | 12,379.4 | 1,548.1 | 890.2 | 6,384.0 | 987.7 | 5,396.3 | 6,825.2 | 3,751.9 |
| Nov. | 32,193.0 | 21,381.2 | 14,911.2 | 12,478.0 | 1,542.2 | 891.0 | 6,470.0 | 985.8 | 5,484.2 | 6,917.3 | 3,894.5 |
| Dec. | 31,777.5 | 21,384.4 | 14,917.1 | 12,462.9 | 1,567.2 | 887.0 | 6,467.3 | 988.5 | 5,478.8 | 6,738.8 | 3,654.3 |
| 2022 Jan. | 32,405.1 | 21,564.5 | 15,039.5 | 12,601.7 | 1,553.3 | 884.5 | 6,525.0 | 999.2 | 5,525.8 | 6,909.7 | 3,930.9 |
| Feb. | 32,589.1 | 21,620.2 | 15,066.9 | 12,636.6 | 1,553.7 | 876.5 | 6,553.3 | 991.8 | 5,561.5 | 7,007.2 | 3,961.7 |
| Mar. | 32,936.3 | 21,736.9 | 15,175.9 | 12,721.8 | 1,587.5 | 866.6 | 6,561.0 | 1,001.4 | 5,559.6 | 6,994.9 | 4,204.5 |
| Apr. | 33,568.8 | 21,763.8 | 15,253.7 | 12,805.0 | 1,597.6 | 851.1 | 6,510.0 | 1,011.3 | 5,498.8 | 7,061.9 | 4,743.1 |
| May | 33,481.4 | 21,815.9 | 15,304.2 | 12,877.8 | 1,568.3 | 858.1 | 6,511.7 | 1,003.9 | 5,507.7 | 7,012.1 | 4,653.5 |
| June | 33,884.9 | 21,884.2 | 15,371.8 | 12,971.6 | 1,569.1 | 831.1 | 6,512.4 | 1,003.0 | 5,509.3 | 7,063.5 | 4,937.3 |
| July | 33,877.1 | 21,983.2 | 15,450.2 | 13,042.3 | 1,578.7 | 829.2 | 6,533.1 | 1,003.0 | 5,530.1 | 7,216.8 | 4,677.0 |
| Aug. | 34,342.2 | 21,870.6 | 15,457.7 | 13,078.2 | 1,553.8 | 825.7 | 6,412.9 | 996.9 | 5,416.0 | 7,301.6 | 5,170.0 |
| Sep. | 34,620.0 | 21,900.7 | 15,557.1 | 13,190.4 | 1,545.0 | 821.7 | 6,343.6 | 998.1 | 5,345.5 | 7,241.3 | 5,478.1 |
| Oct. | 34,551.5 | 21,890.0 | 15,551.7 | 13,189.1 | 1,533.0 | 829.6 | 6,338.3 | 995.2 | 5,343.1 | 7,336.4 | 5,325.1 |
| Nov. | 34,215.2 | 22,005.0 | 15,621.6 | 13,228.8 | 1,552.1 | 840.6 | 6,383.5 | 989.7 | 5,393.8 | 7,197.1 | 5,013.0 |
| **German contribution (€ billion)** | | | | | | | | | | | |
| 2020 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 |
| Dec. | 7,172.5 | 4,839.4 | 3,695.5 | 3,216.4 | 214.7 | 264.5 | 1,143.9 | 286.4 | 857.4 | 1,224.1 | 1,109.1 |
| 2021 Jan. | 7,220.7 | 4,865.5 | 3,705.9 | 3,224.4 | 216.4 | 265.1 | 1,159.6 | 286.5 | 873.1 | 1,307.6 | 1,047.6 |
| Feb. | 7,182.0 | 4,885.0 | 3,724.3 | 3,238.8 | 217.4 | 268.1 | 1,160.7 | 283.8 | 877.0 | 1,305.0 | 991.9 |
| Mar. | 7,233.5 | 4,939.8 | 3,761.1 | 3,273.4 | 217.3 | 270.4 | 1,178.7 | 282.6 | 896.1 | 1,315.4 | 978.3 |
| Apr. | 7,228.4 | 4,946.1 | 3,760.5 | 3,270.3 | 217.6 | 272.6 | 1,185.6 | 285.7 | 899.9 | 1,333.6 | 948.6 |
| May | 7,228.0 | 4,977.5 | 3,777.2 | 3,283.3 | 219.5 | 274.4 | 1,200.3 | 283.4 | 916.9 | 1,329.8 | 920.7 |
| June | 7,277.1 | 5,009.8 | 3,786.4 | 3,290.4 | 220.8 | 275.2 | 1,223.4 | 282.3 | 941.1 | 1,325.1 | 942.1 |
| July | 7,362.7 | 5,062.4 | 3,808.5 | 3,310.2 | 221.9 | 276.4 | 1,253.9 | 284.4 | 969.5 | 1,317.4 | 982.9 |
| Aug. | 7,395.2 | 5,087.3 | 3,824.6 | 3,325.1 | 221.4 | 278.1 | 1,262.8 | 280.8 | 982.0 | 1,336.0 | 971.9 |
| Sep. | 7,398.6 | 5,110.8 | 3,840.8 | 3,336.4 | 224.7 | 279.7 | 1,270.1 | 280.7 | 989.4 | 1,335.1 | 952.6 |
| Oct. | 7,461.0 | 5,147.0 | 3,874.5 | 3,363.5 | 228.6 | 282.4 | 1,272.5 | 284.4 | 988.0 | 1,385.2 | 928.8 |
| Nov. | 7,575.0 | 5,210.7 | 3,904.2 | 3,389.9 | 229.0 | 285.3 | 1,306.4 | 280.7 | 1,025.7 | 1,396.4 | 967.9 |
| Dec. | 7,475.8 | 5,212.1 | 3,914.7 | 3,393.2 | 237.0 | 284.5 | 1,297.4 | 278.0 | 1,019.5 | 1,355.9 | 907.8 |
| 2022 Jan. | 7,787.0 | 5,243.9 | 3,944.7 | 3,422.9 | 235.8 | 286.0 | 1,299.2 | 279.9 | 1,019.3 | 1,433.6 | 1,109.5 |
| Feb. | 7,871.3 | 5,262.9 | 3,968.5 | 3,445.2 | 238.0 | 285.3 | 1,294.3 | 277.8 | 1,016.5 | 1,464.4 | 1,144.0 |
| Mar. | 7,997.7 | 5,280.7 | 3,990.2 | 3,464.4 | 240.6 | 285.2 | 1,290.6 | 278.6 | 1,012.0 | 1,447.5 | 1,269.5 |
| Apr. | 8,259.4 | 5,278.9 | 4,008.0 | 3,481.9 | 240.1 | 286.1 | 1,270.9 | 283.2 | 987.7 | 1,464.0 | 1,516.5 |
| May | 8,228.4 | 5,304.5 | 4,034.5 | 3,506.0 | 240.8 | 287.7 | 1,270.0 | 280.3 | 989.7 | 1,445.0 | 1,479.0 |
| June | 8,413.5 | 5,322.6 | 4,058.9 | 3,537.6 | 237.8 | 283.5 | 1,263.7 | 282.5 | 981.2 | 1,466.1 | 1,624.8 |
| July | 8,287.9 | 5,375.0 | 4,096.1 | 3,560.3 | 252.7 | 283.2 | 1,278.8 | 283.6 | 995.2 | 1,481.5 | 1,431.4 |
| Aug. | 8,546.0 | 5,364.5 | 4,132.0 | 3,600.0 | 249.1 | 282.9 | 1,232.5 | 281.5 | 951.0 | 1,492.4 | 1,689.0 |
| Sep. | 8,857.6 | 5,356.3 | 4,153.9 | 3,624.8 | 246.1 | 283.0 | 1,202.4 | 284.3 | 918.1 | 1,502.4 | 1,998.8 |
| Oct. | 8,826.7 | 5,366.0 | 4,163.6 | 3,634.6 | 245.9 | 283.1 | 1,202.4 | 284.8 | 917.5 | 1,509.0 | 1,951.8 |
| Nov. | 8,653.8 | 5,402.0 | 4,189.2 | 3,656.3 | 249.8 | 283.1 | 1,212.8 | 283.4 | 929.4 | 1,502.4 | 1,749.4 |

* 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** | | |
| 1,338.1 | 14,814.8 | 13,431.7 | 13,545.6 | 8,266.0 | 783.3 | 181.9 | 1,880.4 | 2,394.6 | 39.4 | 2020 Oct. |
| 1,349.9 | 14,813.0 | 13,527.2 | 13,621.6 | 8,358.3 | 756.5 | 179.6 | 1,885.7 | 2,402.5 | 39.0 | Nov. |
| 1,370.7 | 14,772.9 | 13,620.6 | 13,728.8 | 8,459.6 | 772.0 | 176.9 | 1,877.6 | 2,404.2 | 38.5 | Dec. |
| 1,373.3 | 14,873.9 | 13,631.3 | 13,752.9 | 8,505.4 | 743.9 | 173.8 | 1,870.6 | 2,421.0 | 38.1 | 2021 Jan. |
| 1,380.6 | 14,957.8 | 13,678.6 | 13,807.8 | 8,569.6 | 733.7 | 169.2 | 1,865.1 | 2,432.5 | 37.7 | Feb. |
| 1,391.1 | 15,076.4 | 13,757.0 | 13,913.7 | 8,654.9 | 753.5 | 164.3 | 1,858.8 | 2,444.8 | 37.4 | Mar. |
| 1,399.6 | 15,061.0 | 13,775.4 | 13,936.1 | 8,727.0 | 731.8 | 159.5 | 1,827.5 | 2,453.0 | 37.3 | Apr. |
| 1,412.8 | 15,147.4 | 13,870.8 | 14,018.1 | 8,811.2 | 724.4 | 155.5 | 1,826.2 | 2,463.6 | 37.1 | May |
| 1,423.2 | 15,241.8 | 13,943.4 | 14,091.4 | 8,917.7 | 698.2 | 150.4 | 1,822.0 | 2,466.2 | 36.8 | June |
| 1,437.6 | 15,335.4 | 14,017.3 | 14,185.7 | 9,006.8 | 705.9 | 153.6 | 1,817.0 | 2,466.2 | 36.3 | July |
| 1,439.2 | 15,386.3 | 14,039.3 | 14,196.7 | 9,030.0 | 707.3 | 151.2 | 1,809.9 | 2,462.4 | 35.9 | Aug. |
| 1,444.5 | 15,442.5 | 14,075.3 | 14,239.8 | 9,093.0 | 701.2 | 140.0 | 1,806.7 | 2,463.3 | 35.6 | Sep. |
| 1,450.3 | 15,504.6 | 14,139.4 | 14,312.3 | 9,166.1 | 709.0 | 148.0 | 1,795.5 | 2,458.8 | 34.9 | Oct. |
| 1,456.3 | 15,518.4 | 14,188.5 | 14,345.4 | 9,224.1 | 697.5 | 143.3 | 1,786.3 | 2,459.8 | 34.3 | Nov. |
| 1,477.0 | 15,579.6 | 14,310.0 | 14,464.4 | 9,316.4 | 714.5 | 131.3 | 1,805.2 | 2,463.5 | 33.6 | Dec. |
| 1,477.9 | 15,636.9 | 14,277.0 | 14,469.0 | 9,294.6 | 707.9 | 135.3 | 1,820.2 | 2,478.2 | 32.9 | 2022 Jan. |
| 1,487.0 | 15,731.6 | 14,323.8 | 14,506.2 | 9,356.7 | 688.6 | 134.3 | 1,807.7 | 2,486.2 | 32.7 | Feb. |
| 1,509.6 | 15,840.4 | 14,415.6 | 14,599.9 | 9,439.7 | 703.7 | 123.5 | 1,809.7 | 2,491.1 | 32.2 | Mar. |
| 1,520.7 | 15,876.3 | 14,464.4 | 14,654.1 | 9,493.9 | 709.3 | 123.5 | 1,802.0 | 2,493.3 | 32.1 | Apr. |
| 1,528.5 | 15,891.7 | 14,510.7 | 14,682.1 | 9,537.7 | 686.5 | 120.2 | 1,803.2 | 2,505.6 | 28.9 | May |
| 1,535.1 | 16,040.6 | 14,573.9 | 14,750.5 | 9,583.0 | 705.9 | 123.4 | 1,800.2 | 2,509.4 | 28.5 | June |
| 1,543.7 | 16,119.8 | 14,673.8 | 14,872.9 | 9,667.1 | 744.8 | 127.1 | 1,791.0 | 2,514.8 | 28.1 | July |
| 1,539.1 | 16,103.7 | 14,734.9 | 14,927.3 | 9,695.1 | 782.4 | 125.9 | 1,770.0 | 2,525.0 | 28.9 | Aug. |
| 1,537.5 | 16,201.7 | 14,787.5 | 15,038.6 | 9,685.1 | 918.4 | 125.5 | 1,756.3 | 2,524.8 | 28.5 | Sep. |
| 1,537.1 | 16,095.8 | 14,708.2 | 14,936.7 | 9,520.5 | 994.4 | 130.3 | 1,741.6 | 2,522.3 | 27.6 | Oct. |
| 1,533.6 | 16,085.2 | 14,722.8 | 14,917.7 | 9,455.6 | 1,044.5 | 134.7 | 1,740.8 | 2,514.5 | 27.6 | Nov. |
| | | | | | | | | **German contribution (€ billion)** | | |
| 303.6 | 4,245.3 | 3,935.3 | 3,781.4 | 2,476.4 | 165.4 | 30.5 | 549.7 | 531.5 | 28.0 | 2020 Oct. |
| 306.6 | 4,260.2 | 3,961.8 | 3,804.4 | 2,507.7 | 157.7 | 30.6 | 549.0 | 531.8 | 27.6 | Nov. |
| 312.2 | 4,228.5 | 3,954.1 | 3,801.5 | 2,500.9 | 160.3 | 31.0 | 548.8 | 533.1 | 27.3 | Dec. |
| 313.1 | 4,218.7 | 3,980.7 | 3,829.7 | 2,541.7 | 147.0 | 31.0 | 548.5 | 534.8 | 26.8 | 2021 Jan. |
| 314.6 | 4,245.1 | 3,990.0 | 3,837.4 | 2,555.8 | 141.0 | 31.1 | 547.0 | 536.0 | 26.4 | Feb. |
| 317.3 | 4,264.3 | 4,011.8 | 3,863.4 | 2,579.8 | 145.1 | 31.7 | 544.6 | 536.1 | 26.1 | Mar. |
| 319.9 | 4,262.2 | 4,013.0 | 3,874.5 | 2,594.4 | 143.0 | 31.9 | 542.5 | 536.8 | 25.8 | Apr. |
| 322.8 | 4,308.8 | 4,040.3 | 3,895.1 | 2,613.5 | 146.0 | 32.2 | 540.4 | 537.4 | 25.7 | May |
| 325.1 | 4,311.0 | 4,035.3 | 3,890.5 | 2,619.4 | 139.3 | 31.9 | 537.5 | 537.0 | 25.5 | June |
| 328.8 | 4,313.9 | 4,047.3 | 3,911.3 | 2,645.8 | 136.0 | 31.4 | 536.0 | 536.7 | 25.2 | July |
| 329.0 | 4,333.1 | 4,065.2 | 3,923.1 | 2,659.1 | 135.6 | 31.3 | 535.7 | 536.4 | 25.0 | Aug. |
| 329.8 | 4,340.5 | 4,064.1 | 3,919.8 | 2,662.1 | 132.2 | 31.2 | 533.6 | 535.8 | 24.8 | Sep. |
| 331.4 | 4,354.3 | 4,080.9 | 3,950.3 | 2,681.4 | 143.0 | 31.1 | 534.8 | 535.5 | 24.6 | Oct. |
| 332.6 | 4,390.5 | 4,107.1 | 3,968.0 | 2,710.9 | 132.5 | 30.3 | 534.6 | 535.5 | 24.3 | Nov. |
| 337.1 | 4,425.2 | 4,113.0 | 3,968.5 | 2,691.5 | 141.2 | 30.1 | 544.6 | 537.0 | 24.1 | Dec. |
| 337.9 | 4,418.1 | 4,139.2 | 4,006.8 | 2,737.3 | 135.4 | 29.7 | 543.6 | 537.4 | 23.4 | 2022 Jan. |
| 340.1 | 4,444.1 | 4,161.0 | 4,017.1 | 2,752.3 | 132.4 | 29.4 | 542.3 | 537.7 | 23.1 | Feb. |
| 344.3 | 4,441.6 | 4,159.0 | 4,014.6 | 2,755.3 | 130.7 | 29.3 | 540.4 | 536.0 | 22.9 | Mar. |
| 346.7 | 4,445.6 | 4,158.1 | 4,019.8 | 2,754.8 | 140.0 | 29.4 | 537.7 | 535.1 | 22.7 | Apr. |
| 349.4 | 4,478.3 | 4,170.7 | 4,016.7 | 2,769.9 | 125.8 | 29.7 | 534.8 | 533.9 | 22.6 | May |
| 349.9 | 4,517.1 | 4,194.6 | 4,031.6 | 2,787.1 | 127.8 | 30.1 | 531.9 | 532.3 | 22.4 | June |
| 359.0 | 4,507.6 | 4,222.4 | 4,070.3 | 2,813.6 | 142.1 | 31.0 | 530.6 | 530.6 | 22.3 | July |
| 371.5 | 4,552.6 | 4,289.4 | 4,135.2 | 2,870.1 | 153.3 | 30.6 | 530.7 | 528.3 | 22.2 | Aug. |
| 371.8 | 4,541.5 | 4,267.4 | 4,135.1 | 2,834.9 | 193.7 | 30.9 | 530.3 | 523.0 | 22.2 | Sep. |
| 371.8 | 4,546.8 | 4,270.2 | 4,140.4 | 2,804.0 | 233.2 | 31.6 | 529.3 | 519.8 | 22.4 | Oct. |
| 371.5 | 4,579.0 | 4,283.7 | 4,146.4 | 2,805.5 | 240.3 | 32.3 | 531.4 | 514.4 | 22.6 | 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)

| | 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] | | | | | | |
| End of month | 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]** | | | | | | | | | | | | | |
| 2020 Oct. | 831.5 | 437.6 | 277.4 | 69.6 | 20.8 | 47.0 | 19.5 | 3.4 | 243.1 | 242.9 | 609.3 | 2,043.2 | 1,418.6 |
| Nov. | 733.0 | 458.4 | 307.1 | 64.6 | 17.8 | 46.1 | 19.4 | 3.3 | 246.4 | 246.4 | 610.3 | 2,025.2 | 1,406.4 |
| Dec. | 604.8 | 439.3 | 294.7 | 60.3 | 17.2 | 44.8 | 19.0 | 3.3 | 221.4 | 221.3 | 625.9 | 1,995.5 | 1,386.3 |
| 2021 Jan. | 683.2 | 437.8 | 294.4 | 58.9 | 17.4 | 44.1 | 19.2 | 3.8 | 251.6 | 251.5 | 644.4 | 1,990.9 | 1,369.7 |
| Feb. | 713.6 | 436.4 | 296.4 | 54.3 | 19.0 | 43.9 | 19.2 | 3.7 | 254.6 | 254.5 | 613.7 | 2,004.4 | 1,369.6 |
| Mar. | 733.1 | 429.6 | 295.4 | 52.1 | 16.4 | 43.2 | 18.9 | 3.7 | 236.5 | 236.5 | 609.1 | 2,005.5 | 1,357.4 |
| Apr. | 700.9 | 424.0 | 293.9 | 48.5 | 16.2 | 42.9 | 18.9 | 3.6 | 251.1 | 251.0 | 617.9 | 1,991.6 | 1,350.5 |
| May | 692.4 | 436.9 | 308.3 | 47.7 | 15.9 | 42.4 | 19.1 | 3.5 | 246.7 | 246.7 | 608.4 | 1,980.7 | 1,339.4 |
| June | 709.2 | 441.2 | 314.0 | 46.6 | 16.3 | 42.0 | 18.8 | 3.5 | 236.5 | 236.5 | 600.0 | 1,984.2 | 1,332.5 |
| July | 709.6 | 440.1 | 313.9 | 45.6 | 16.6 | 42.0 | 18.6 | 3.5 | 253.9 | 253.9 | 622.6 | 1,999.3 | 1,334.0 |
| Aug. | 736.1 | 453.5 | 329.1 | 43.9 | 17.0 | 42.0 | 18.0 | 3.4 | 241.7 | 241.7 | 627.9 | 1,988.5 | 1,334.0 |
| Sep. | 742.6 | 460.1 | 334.6 | 46.3 | 16.6 | 41.3 | 18.1 | 3.3 | 257.3 | 257.2 | 596.8 | 2,011.7 | 1,343.3 |
| Oct. | 740.3 | 451.9 | 323.3 | 48.1 | 18.0 | 41.6 | 17.7 | 3.3 | 270.3 | 270.3 | 628.3 | 2,038.4 | 1,355.8 |
| Nov. | 691.5 | 481.6 | 349.8 | 50.3 | 19.1 | 41.7 | 17.5 | 3.3 | 266.4 | 266.4 | 654.5 | 2,046.8 | 1,355.2 |
| Dec. | 646.7 | 468.4 | 337.4 | 49.7 | 19.4 | 41.1 | 17.6 | 3.2 | 224.7 | 223.5 | 647.7 | 2,019.9 | 1,346.8 |
| 2022 Jan. | 711.0 | 456.9 | 307.3 | 67.4 | 19.6 | 41.2 | 17.6 | 3.8 | 288.5 | 288.3 | 624.5 | 2,048.9 | 1,351.2 |
| Feb. | 755.6 | 469.9 | 314.1 | 73.5 | 19.8 | 41.3 | 17.6 | 3.7 | 297.9 | 297.7 | 587.2 | 2,044.7 | 1,358.5 |
| Mar. | 769.7 | 470.9 | 304.7 | 82.5 | 20.5 | 42.4 | 17.3 | 3.4 | 276.2 | 276.0 | 583.8 | 2,026.7 | 1,358.5 |
| Apr. | 747.7 | 474.5 | 306.7 | 83.4 | 21.2 | 42.6 | 17.2 | 3.4 | 306.2 | 306.0 | 604.0 | 2,073.8 | 1,362.6 |
| May | 718.8 | 490.8 | 316.7 | 88.4 | 22.3 | 43.3 | 16.8 | 3.3 | 308.8 | 308.7 | 593.9 | 2,038.0 | 1,337.6 |
| June | 788.4 | 501.8 | 325.2 | 90.9 | 22.9 | 43.3 | 16.2 | 3.2 | 274.0 | 273.8 | 592.9 | 2,069.2 | 1,360.9 |
| July | 757.2 | 489.8 | 302.8 | 100.4 | 24.2 | 42.9 | 16.2 | 3.3 | 302.1 | 302.0 | 590.8 | 2,090.8 | 1,360.8 |
| Aug. | 676.9 | 499.6 | 309.1 | 104.6 | 24.0 | 42.5 | 16.1 | 3.2 | 280.9 | 280.9 | 597.5 | 2,113.4 | 1,375.0 |
| Sep. | 684.3 | 478.8 | 281.7 | 111.2 | 24.5 | 42.3 | 16.0 | 3.2 | 259.6 | 259.6 | 589.1 | 2,154.1 | 1,415.1 |
| Oct. | 678.9 | 480.2 | 287.2 | 109.2 | 24.3 | 41.5 | 14.7 | 3.2 | 264.9 | 264.8 | 622.8 | 2,129.8 | 1,412.9 |
| Nov. | 668.8 | 498.7 | 306.3 | 109.2 | 25.1 | 40.8 | 14.2 | 3.2 | 291.7 | 291.7 | 646.7 | 2,155.4 | 1,441.1 |
| **German contribution (€ billion)** | | | | | | | | | | | | | |
| 2020 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 | 515.5 | 296.1 |
| Dec. | 189.2 | 237.8 | 131.9 | 52.8 | 13.5 | 36.8 | 2.5 | 0.2 | 12.2 | 12.2 | 2.5 | 503.3 | 290.1 |
| 2021 Jan. | 148.9 | 240.1 | 136.5 | 51.6 | 13.5 | 35.8 | 2.4 | 0.2 | 8.4 | 8.4 | 2.4 | 503.3 | 284.6 |
| Feb. | 164.3 | 243.4 | 142.8 | 47.3 | 15.2 | 35.5 | 2.5 | 0.2 | 6.0 | 6.0 | 2.4 | 510.0 | 288.4 |
| Mar. | 161.9 | 239.0 | 144.4 | 44.9 | 12.7 | 34.4 | 2.4 | 0.2 | 11.0 | 11.0 | 2.9 | 523.3 | 289.8 |
| Apr. | 154.6 | 233.1 | 142.4 | 41.5 | 12.5 | 34.1 | 2.4 | 0.2 | 7.6 | 7.6 | 2.8 | 524.3 | 296.2 |
| May | 173.3 | 240.3 | 150.8 | 41.0 | 12.5 | 33.4 | 2.4 | 0.2 | 9.2 | 9.2 | 2.2 | 518.0 | 293.2 |
| June | 179.3 | 241.2 | 152.9 | 39.9 | 13.0 | 32.8 | 2.4 | 0.2 | 9.0 | 9.0 | 2.3 | 515.5 | 294.6 |
| July | 167.3 | 235.3 | 148.0 | 38.9 | 13.3 | 32.5 | 2.4 | 0.2 | 9.6 | 9.6 | 2.2 | 518.3 | 295.1 |
| Aug. | 168.1 | 241.8 | 155.7 | 37.3 | 13.9 | 32.4 | 2.4 | 0.2 | 9.7 | 9.7 | 2.2 | 522.4 | 303.1 |
| Sep. | 175.2 | 245.6 | 158.2 | 39.8 | 13.4 | 31.7 | 2.3 | 0.2 | 11.2 | 11.2 | 2.2 | 530.1 | 305.5 |
| Oct. | 171.3 | 232.7 | 142.7 | 40.9 | 14.8 | 31.8 | 2.3 | 0.2 | 10.8 | 10.8 | 2.1 | 547.9 | 316.4 |
| Nov. | 178.4 | 244.1 | 155.2 | 38.8 | 16.1 | 31.6 | 2.2 | 0.2 | 6.1 | 6.1 | 1.8 | 556.5 | 324.8 |
| Dec. | 206.2 | 250.5 | 161.9 | 39.1 | 16.4 | 30.7 | 2.3 | 0.2 | 5.8 | 4.8 | 2.1 | 547.6 | 316.3 |
| 2022 Jan. | 168.1 | 243.3 | 139.1 | 54.6 | 16.5 | 30.7 | 2.2 | 0.2 | 4.7 | 4.7 | 2.2 | 562.8 | 325.1 |
| Feb. | 170.6 | 256.3 | 147.8 | 59.2 | 16.3 | 30.6 | 2.2 | 0.2 | 5.8 | 5.8 | 2.3 | 572.5 | 338.8 |
| Mar. | 170.6 | 256.4 | 137.6 | 68.8 | 17.0 | 30.7 | 2.2 | 0.1 | 6.3 | 6.3 | 2.4 | 581.5 | 354.8 |
| Apr. | 167.6 | 258.2 | 137.6 | 70.0 | 17.6 | 30.6 | 2.2 | 0.2 | 4.4 | 4.4 | 2.2 | 596.5 | 357.3 |
| May | 190.1 | 271.4 | 144.2 | 75.3 | 18.5 | 31.1 | 2.2 | 0.2 | 4.8 | 4.8 | 2.4 | 596.8 | 359.0 |
| June | 205.0 | 280.5 | 147.7 | 80.5 | 19.0 | 31.0 | 2.2 | 0.1 | 5.4 | 5.4 | 2.3 | 604.2 | 362.6 |
| July | 166.8 | 270.4 | 128.3 | 89.0 | 20.2 | 30.6 | 2.2 | 0.1 | 9.8 | 9.8 | 2.4 | 613.8 | 369.1 |
| Aug. | 142.7 | 274.6 | 129.4 | 92.2 | 20.4 | 30.4 | 2.2 | 0.1 | 8.0 | 8.0 | 2.3 | 625.7 | 384.5 |
| Sep. | 147.4 | 259.1 | 109.0 | 96.6 | 20.8 | 30.3 | 2.2 | 0.1 | 5.4 | 5.4 | 2.4 | 640.0 | 395.3 |
| Oct. | 152.5 | 253.9 | 108.1 | 93.1 | 20.5 | 30.1 | 2.1 | 0.1 | 5.2 | 5.2 | 2.5 | 633.9 | 398.1 |
| Nov. | 175.5 | 257.1 | 114.9 | 88.9 | 21.5 | 29.8 | 1.9 | 0.1 | 8.4 | 8.4 | 2.5 | 634.6 | 402.6 |

* 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

| | | | | | | | Other liability items | | Memo item: Monetary aggregates 7 (from 2002 German contribution excludes currency in circulation) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| issued (net) 3 | | | | | | | | | | | | | | |
| With maturities of | | | | | | | | of which: Intra-Eurosystem-liability/ claim related to banknote issue 9 | | | | | | |
| 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 | | | 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** | | | | | | | | | | | | | | |
| − 2.2 | 15.2 | 2,030.1 | 4,789.8 | 3,038.2 | − 47.9 | 3,858.5 | 0.0 | 10,025.3 | 13,516.4 | 14,233.1 | 7,038.6 | 165.3 | 2020 Oct. |
| − 1.5 | 17.4 | 2,009.2 | 4,868.1 | 2,995.8 | − 44.2 | 3,884.8 | 0.0 | 10,167.5 | 13,629.7 | 14,354.2 | 6,979.2 | 174.0 | Nov. |
| − 4.6 | 16.9 | 1,983.2 | 4,671.6 | 3,020.5 | − 11.3 | 3,771.5 | 0.0 | 10,278.9 | 13,750.6 | 14,480.1 | 6,967.9 | 176.0 | Dec. |
| 1.9 | 15.7 | 1,973.3 | 4,821.4 | 2,998.4 | − 10.2 | 3,700.0 | 0.0 | 10,326.2 | 13,784.9 | 14,551.1 | 6,928.3 | 177.5 | 2021 Jan. |
| 13.8 | 16.4 | 1,974.2 | 4,872.9 | 2,953.0 | − 10.8 | 3,520.1 | 0.0 | 10,398.7 | 13,851.2 | 14,604.3 | 6,877.6 | 176.8 | Feb. |
| − 0.7 | 16.9 | 1,989.3 | 4,944.3 | 2,967.6 | 15.9 | 3,580.6 | 0.0 | 10,490.3 | 13,964.5 | 14,699.1 | 6,899.9 | 173.1 | Mar. |
| 6.5 | 16.6 | 1,968.5 | 4,989.3 | 2,948.0 | 10.5 | 3,484.0 | 0.0 | 10,569.9 | 14,021.8 | 14,781.1 | 6,827.9 | 173.5 | Apr. |
| 14.8 | 15.9 | 1,950.0 | 4,995.9 | 2,968.5 | 53.4 | 3,476.5 | 0.0 | 10,684.4 | 14,134.6 | 14,887.1 | 6,827.9 | 176.1 | May |
| 10.6 | 16.1 | 1,957.6 | 4,964.4 | 2,979.9 | 57.4 | 3,503.6 | 0.0 | 10,811.2 | 14,231.7 | 14,971.2 | 6,841.7 | 180.3 | June |
| 16.9 | 17.1 | 1,965.4 | 5,051.0 | 3,024.8 | 38.9 | 3,550.3 | 0.0 | 10,915.0 | 14,345.5 | 15,122.6 | 6,888.9 | 180.9 | July |
| 11.9 | 16.3 | 1,960.4 | 5,201.1 | 3,024.5 | 29.8 | 3,499.0 | 0.0 | 10,956.6 | 14,380.6 | 15,153.0 | 6,876.1 | 182.3 | Aug. |
| 14.0 | 17.9 | 1,979.8 | 5,226.5 | 2,997.6 | 16.1 | 3,480.9 | 0.0 | 11,035.4 | 14,444.9 | 15,191.8 | 6,864.3 | 187.4 | Sep. |
| 21.2 | 17.8 | 1,999.5 | 5,426.3 | 2,999.7 | − 22.8 | 3,483.7 | 0.0 | 11,103.9 | 14,527.5 | 15,325.1 | 6,874.4 | 188.2 | Oct. |
| 19.3 | 17.8 | 2,009.6 | 5,510.3 | 3,037.4 | 21.6 | 3,681.2 | 0.0 | 11,196.0 | 14,607.5 | 15,421.1 | 6,912.5 | 189.7 | Nov. |
| 12.5 | 18.0 | 1,989.4 | 5,375.7 | 3,024.0 | 54.2 | 3,374.7 | 0.0 | 11,299.6 | 14,721.8 | 15,505.9 | 6,896.4 | 195.0 | Dec. |
| 22.2 | 18.0 | 2,008.7 | 5,548.2 | 2,999.6 | 62.3 | 3,718.2 | 0.0 | 11,252.2 | 14,701.8 | 15,489.7 | 6,906.4 | 196.0 | 2022 Jan. |
| 33.6 | 5.4 | 2,005.7 | 5,634.3 | 2,995.1 | 55.2 | 3,756.0 | 0.0 | 11,331.1 | 14,772.8 | 15,531.0 | 6,886.1 | 195.0 | Feb. |
| 30.8 | 6.2 | 1,989.8 | 5,624.2 | 3,006.6 | 81.4 | 3,987.4 | 0.0 | 11,425.5 | 14,887.7 | 15,631.6 | 6,884.1 | 195.1 | Mar. |
| 39.0 | 16.2 | 2,018.6 | 5,759.4 | 2,986.3 | 46.6 | 4,395.5 | 0.0 | 11,494.6 | 14,966.5 | 15,751.2 | 6,885.0 | 197.2 | Apr. |
| 34.0 | 15.6 | 1,988.4 | 5,813.4 | 2,924.7 | 59.5 | 4,322.9 | 0.0 | 11,558.0 | 15,021.7 | 15,795.7 | 6,791.8 | 199.0 | May |
| 47.8 | 14.4 | 2,007.0 | 5,734.2 | 2,916.7 | 76.2 | 4,646.0 | 0.0 | 11,618.3 | 15,111.5 | 15,881.3 | 6,799.0 | 199.4 | June |
| 15.1 | 16.4 | 2,059.3 | 5,862.8 | 2,978.1 | 75.1 | 4,313.9 | 0.0 | 11,693.5 | 15,245.0 | 15,999.9 | 6,902.6 | 203.9 | July |
| 16.7 | 19.0 | 2,077.7 | 5,914.8 | 2,903.3 | 94.2 | 4,795.3 | 0.0 | 11,716.4 | 15,318.0 | 16,077.6 | 6,825.7 | 196.7 | Aug. |
| 35.5 | 19.6 | 2,099.0 | 5,898.0 | 2,862.6 | 19.3 | 5,098.1 | 0.0 | 11,678.0 | 15,420.5 | 16,181.4 | 6,791.9 | 195.9 | Sep. |
| 2.9 | 24.1 | 2,102.8 | 6,042.3 | 2,836.4 | 42.6 | 4,979.7 | 0.0 | 11,518.1 | 15,336.1 | 16,110.3 | 6,753.1 | 196.0 | Oct. |
| 23.2 | 24.2 | 2,107.9 | 5,881.5 | 2,873.0 | 58.6 | 4,689.5 | 0.0 | 11,473.7 | 15,338.0 | 16,166.3 | 6,793.3 | 200.3 | Nov. |
| **German contribution (€ billion)** | | | | | | | | | | | | | | |
| 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 | 2020 Oct. |
| 10.0 | 7.1 | 498.4 | 923.3 | 780.2 | − 1,109.5 | 1,859.4 | 470.7 | 2,639.3 | 3,433.2 | 3,461.8 | 1,893.5 | 0.0 | Nov. |
| 9.0 | 6.6 | 487.7 | 985.7 | 787.5 | − 1,192.0 | 1,844.9 | 473.1 | 2,632.8 | 3,426.1 | 3,456.4 | 1,888.4 | 0.0 | Dec. |
| 7.8 | 6.8 | 488.7 | 1,026.4 | 778.3 | − 1,113.3 | 1,796.5 | 474.2 | 2,678.2 | 3,458.5 | 3,483.9 | 1,878.3 | 0.0 | 2021 Jan. |
| 7.4 | 7.5 | 495.1 | 1,007.6 | 756.3 | − 1,095.7 | 1,750.3 | 476.5 | 2,698.6 | 3,471.7 | 3,494.9 | 1,860.6 | 0.0 | Feb. |
| 8.1 | 6.8 | 508.4 | 1,080.1 | 754.4 | − 1,144.4 | 1,742.0 | 479.0 | 2,724.1 | 3,497.0 | 3,525.7 | 1,868.2 | 0.0 | Mar. |
| 7.8 | 6.6 | 510.0 | 1,029.5 | 759.2 | − 1,074.2 | 1,717.0 | 479.7 | 2,736.8 | 3,505.0 | 3,529.7 | 1,871.8 | 0.0 | Apr. |
| 9.6 | 6.7 | 501.7 | 1,051.5 | 768.2 | − 1,126.5 | 1,696.6 | 482.8 | 2,764.3 | 3,535.8 | 3,563.5 | 1,869.6 | 0.0 | May |
| 9.8 | 6.9 | 498.8 | 1,088.2 | 775.4 | − 1,149.4 | 1,724.5 | 485.9 | 2,772.3 | 3,535.7 | 3,563.7 | 1,870.2 | 0.0 | June |
| 9.8 | 7.0 | 501.5 | 1,031.5 | 795.8 | − 1,075.6 | 1,767.0 | 490.0 | 2,793.9 | 3,552.6 | 3,581.2 | 1,891.2 | 0.0 | July |
| 12.7 | 6.5 | 503.2 | 1,068.1 | 793.5 | − 1,088.4 | 1,754.6 | 492.9 | 2,814.8 | 3,571.7 | 3,602.8 | 1,889.9 | 0.0 | Aug. |
| 13.1 | 7.0 | 510.1 | 1,165.5 | 781.6 | − 1,156.2 | 1,723.6 | 497.5 | 2,820.3 | 3,575.1 | 3,608.5 | 1,881.9 | 0.0 | Sep. |
| 13.3 | 7.2 | 527.5 | 1,165.8 | 783.9 | − 1,110.5 | 1,706.6 | 500.8 | 2,824.1 | 3,591.6 | 3,625.0 | 1,902.8 | 0.0 | Oct. |
| 14.5 | 7.4 | 534.6 | 1,227.7 | 803.0 | − 1,154.8 | 1,744.2 | 504.5 | 2,866.1 | 3,621.4 | 3,651.2 | 1,928.3 | 0.0 | Nov. |
| 16.1 | 7.5 | 524.0 | 1,305.6 | 796.1 | − 1,297.0 | 1,690.3 | 509.8 | 2,853.4 | 3,619.4 | 3,651.0 | 1,919.7 | 0.0 | Dec. |
| 13.6 | 7.7 | 541.5 | 1,271.1 | 778.4 | − 1,169.6 | 1,919.3 | 511.1 | 2,876.4 | 3,652.3 | 3,680.4 | 1,917.7 | 0.0 | 2022 Jan. |
| 14.7 | 7.5 | 550.4 | 1,275.8 | 774.8 | − 1,172.9 | 1,969.0 | 514.2 | 2,900.0 | 3,677.2 | 3,707.4 | 1,921.4 | 0.0 | Feb. |
| 14.8 | 7.3 | 559.5 | 1,299.3 | 781.2 | − 1,190.8 | 2,076.2 | 520.0 | 2,892.9 | 3,677.0 | 3,707.8 | 1,934.7 | 0.0 | Mar. |
| 14.6 | 7.1 | 574.8 | 1,284.0 | 769.2 | − 1,168.1 | 2,325.6 | 523.3 | 2,892.4 | 3,686.6 | 3,715.1 | 1,935.2 | 0.0 | Apr. |
| 14.9 | 7.3 | 574.6 | 1,307.0 | 748.6 | − 1,199.2 | 2,289.8 | 526.8 | 2,914.0 | 3,699.5 | 3,728.9 | 1,911.8 | 0.0 | May |
| 18.7 | 6.6 | 578.9 | 1,317.0 | 743.1 | − 1,255.4 | 2,479.8 | 530.5 | 2,934.8 | 3,726.6 | 3,759.7 | 1,907.5 | 0.0 | June |
| 21.2 | 6.8 | 585.8 | 1,287.5 | 779.7 | − 1,189.6 | 2,276.7 | 525.2 | 2,941.9 | 3,757.1 | 3,797.3 | 1,949.2 | 0.0 | July |
| 21.8 | 7.6 | 596.2 | 1,349.3 | 739.6 | − 1,271.6 | 2,540.1 | 513.5 | 2,999.5 | 3,826.5 | 3,866.3 | 1,919.1 | 0.0 | Aug. |
| 27.5 | 8.1 | 604.3 | 1,385.2 | 711.9 | − 1,287.1 | 2,858.3 | 516.8 | 2,944.0 | 3,811.2 | 3,854.6 | 1,899.2 | 0.0 | Sep. |
| 19.1 | 9.7 | 605.0 | 1,355.1 | 693.8 | − 1,215.2 | 2,804.7 | 516.8 | 2,912.1 | 3,812.3 | 3,848.8 | 1,880.8 | 0.0 | Oct. |
| 21.4 | 11.0 | 602.2 | 1,309.7 | 714.6 | − 1,191.2 | 2,596.3 | 516.8 | 2,920.3 | 3,819.6 | 3,862.9 | 1,900.7 | 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 systems liquidity position *
### Stocks

€ billion; period averages of daily positions

| | Liquidity-providing factors | | | | | Liquidity-absorbing factors | | | | | Credit institutions' current account balances (including minimum reserves) [7] | Base money [8] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Monetary policy operations of the Eurosystem | | | | | | | | | | |
| Reserve maintenance period ending in [1] | 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]** | | | | | | | | | | | | |
| 2020 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 |
| 2021 Jan. | 848.6 | 0.3 | 1,792.6 | 0.0 | 3,712.9 | 586.9 | 0.0 | 1,429.4 | 530.3 | 778.4 | 3,029.4 | 5,045.7 |
| Feb. | . | . | . | . | . | . | . | . | . | . | . | . |
| Mar. | 834.9 | 0.4 | 1,792.4 | 0.0 | 3,825.1 | 598.0 | 0.0 | 1,433.4 | 595.8 | 667.9 | 3,157.7 | 5,189.1 |
| Apr. | 816.7 | 0.3 | 2,054.6 | 0.0 | 3,951.4 | 676.4 | 0.0 | 1,447.7 | 644.5 | 633.4 | 3,421.1 | 5,545.2 |
| May | . | . | . | . | . | . | . | . | . | . | . | . |
| June | 809.8 | 0.2 | 2,107.0 | 0.0 | 4,092.7 | 706.5 | 0.0 | 1,465.8 | 586.7 | 659.1 | 3,591.7 | 5,763.9 |
| July | 821.7 | 0.1 | 2,196.0 | 0.0 | 4,244.5 | 736.6 | 0.0 | 1,485.8 | 652.3 | 734.5 | 3,653.1 | 5,875.5 |
| Aug. | . | . | . | . | . | . | . | . | . | . | . | . |
| Sep. | 826.7 | 0.2 | 2,213.2 | 0.0 | 4,378.9 | 766.6 | 0.0 | 1,499.9 | 635.7 | 790.4 | 3,726.2 | 5,992.8 |
| Oct. | . | . | . | . | . | . | . | . | . | . | . | . |
| Nov. | 835.1 | 0.2 | 2,209.9 | 0.0 | 4,512.3 | 738.5 | 0.0 | 1,507.4 | 671.3 | 833.7 | 3,806.5 | 6,052.4 |
| Dec. | 839.2 | 0.2 | 2,208.8 | 0.0 | 4,655.6 | 745.0 | 0.0 | 1,521.4 | 628.3 | 965.7 | 3,843.3 | 6,109.7 |
| 2022 Jan. | . | . | . | . | . | . | . | . | . | . | . | . |
| Feb. | 877.7 | 0.3 | 2,201.5 | 0.0 | 4,750.2 | 734.2 | 0.0 | 1,540.6 | 582.0 | 1,160.5 | 3,812.3 | 6,087.1 |
| Mar. | 887.2 | 0.3 | 2,201.3 | 0.0 | 4,842.0 | 746.0 | 0.0 | 1,550.6 | 642.6 | 1,091.1 | 3,900.8 | 6,197.3 |
| Apr. | 913.2 | 0.4 | 2,199.8 | 0.0 | 4,889.2 | 714.9 | 0.0 | 1,575.9 | 667.8 | 1,116.7 | 3,927.3 | 6,218.1 |
| May | . | . | . | . | . | . | . | . | . | . | . | . |
| June | 934.2 | 0.5 | 2,198.8 | 0.0 | 4,939.1 | 681.3 | 0.0 | 1,591.5 | 624.1 | 1,129.1 | 4,046.1 | 6,319.0 |
| July | 943.7 | 1.0 | 2,149.4 | 0.0 | 4,958.8 | 678.7 | 0.0 | 1,604.0 | 667.6 | 1,158.0 | 3,943.3 | 6,226.0 |
| Aug. | . | . | . | . | . | . | . | . | . | . | . | . |
| Sep. | 950.1 | 1.7 | 2,124.9 | 0.0 | 4,954.8 | 707.0 | 0.0 | 1,585.3 | 553.9 | 1,249.2 | 3,936.1 | 6,228.5 |
| Oct. | . | . | . | . | . | . | . | . | . | . | . | . |
| Nov. | 955.8 | 4.0 | 2,118.8 | 0.0 | 4,948.3 | 4,490.0 | 0.0 | 1,563.7 | 536.7 | 1,104.4 | 332.0 | 6,385.7 |
| Dec. | 960.4 | 1.9 | 1,947.1 | 0.0 | 4,946.1 | 4,521.5 | 0.0 | 1,560.8 | 492.5 | 1,066.9 | 213.8 | 6,296.2 |
| **Deutsche Bundesbank** | | | | | | | | | | | | |
| 2020 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 |
| 2021 Jan. | 208.3 | 0.1 | 341.1 | 0.0 | 791.3 | 178.9 | 0.0 | 347.3 | 189.4 | − 252.8 | 878.0 | 1,404.2 |
| Feb. | . | . | . | . | . | . | . | . | . | . | . | . |
| Mar. | 205.3 | 0.1 | 341.0 | 0.0 | 816.9 | 177.5 | 0.0 | 348.3 | 172.7 | − 298.0 | 962.8 | 1,488.6 |
| Apr. | 198.0 | 0.0 | 407.3 | 0.0 | 845.8 | 203.0 | 0.0 | 351.7 | 187.4 | − 300.4 | 1,008.9 | 1,563.5 |
| May | . | . | . | . | . | . | . | . | . | . | . | . |
| June | 194.3 | 0.0 | 420.5 | 0.0 | 884.3 | 208.5 | 0.0 | 356.8 | 187.3 | − 301.9 | 1,046.7 | 1,612.0 |
| July | 197.4 | 0.0 | 434.3 | 0.0 | 918.5 | 204.2 | 0.0 | 362.0 | 206.8 | − 270.8 | 1,046.2 | 1,612.4 |
| Aug. | . | . | . | . | . | . | . | . | . | . | . | . |
| Sep. | 199.0 | 0.1 | 436.7 | 0.0 | 950.8 | 210.7 | 0.0 | 365.0 | 204.3 | − 240.8 | 1,045.3 | 1,621.0 |
| Oct. | . | . | . | . | . | . | . | . | . | . | . | . |
| Nov. | 200.3 | 0.1 | 439.1 | 0.0 | 978.5 | 204.4 | 0.0 | 367.4 | 217.7 | − 235.2 | 1,061.6 | 1,633.3 |
| Dec. | 201.3 | 0.0 | 440.3 | 0.0 | 1,015.8 | 206.4 | 0.0 | 370.9 | 220.4 | − 219.4 | 1,077.1 | 1,654.4 |
| 2022 Jan. | . | . | . | . | . | . | . | . | . | . | . | . |
| Feb. | 212.4 | 0.3 | 421.7 | 0.0 | 1,034.0 | 204.5 | 0.0 | 374.6 | 205.6 | − 165.1 | 1,048.8 | 1,627.9 |
| Mar. | 215.6 | 0.1 | 421.7 | 0.0 | 1,057.9 | 211.8 | 0.0 | 378.1 | 191.1 | − 193.7 | 1,108.0 | 1,698.0 |
| Apr. | 223.9 | 0.1 | 420.8 | 0.0 | 1,068.7 | 197.7 | 0.0 | 384.9 | 196.7 | − 189.1 | 1,123.3 | 1,705.9 |
| May | . | . | . | . | . | . | . | . | . | . | . | . |
| June | 230.4 | 0.1 | 420.2 | 0.0 | 1,087.4 | 189.9 | 0.0 | 388.0 | 196.9 | − 183.1 | 1,147.4 | 1,725.3 |
| July | 231.7 | 0.3 | 409.1 | 0.0 | 1,084.3 | 185.8 | 0.0 | 390.3 | 214.9 | − 175.4 | 1,109.7 | 1,685.8 |
| Aug. | . | . | . | . | . | . | . | . | . | . | . | . |
| Sep. | 232.1 | 0.3 | 403.6 | 0.0 | 1,076.8 | 228.5 | 0.0 | 379.5 | 157.9 | − 161.8 | 1,108.8 | 1,716.8 |
| Oct. | . | . | . | . | . | . | . | . | . | . | . | . |
| Nov. | 231.7 | 0.8 | 400.5 | 0.0 | 1,071.5 | 1,304.0 | 0.0 | 379.0 | 127.2 | − 231.4 | 125.9 | 1,808.8 |
| Dec. | 232.4 | 0.5 | 352.5 | 0.0 | 1,079.2 | 1,346.6 | 0.0 | 378.8 | 121.0 | − 242.4 | 60.5 | 1,785.9 |

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** | |
| + 0.7 | − 0.8 | + 46.6 | ± 0.0 | + 138.9 | + 74.7 | ± 0.0 | + 14.8 | − 102.0 | + 34.2 | + 163.7 | + 253.2 | 2020 Dec. |
| − 16.5 | − 0.2 | + 38.2 | ± 0.0 | + 98.2 | + 51.5 | ± 0.0 | + 25.5 | − 116.7 | + 90.7 | + 68.7 | + 145.7 | 2021 Jan. Feb. |
| − 13.7 | + 0.1 | − 0.2 | ± 0.0 | + 112.2 | + 11.1 | ± 0.0 | + 4.0 | + 65.5 | − 110.5 | + 128.3 | + 143.4 | Mar. |
| − 18.2 | − 0.1 | + 262.2 | ± 0.0 | + 126.3 | + 78.4 | ± 0.0 | + 14.3 | + 48.7 | − 34.5 | + 263.4 | + 356.1 | Apr. May |
| − 6.9 | − 0.1 | + 52.4 | ± 0.0 | + 141.3 | + 30.1 | ± 0.0 | + 18.1 | − 57.8 | + 25.7 | + 170.6 | + 218.7 | June |
| + 11.9 | − 0.1 | + 89.0 | ± 0.0 | + 151.8 | + 30.1 | ± 0.0 | + 20.0 | + 65.6 | + 75.4 | + 61.4 | + 111.6 | July Aug. |
| + 5.0 | + 0.1 | + 17.2 | ± 0.0 | + 134.4 | + 30.0 | ± 0.0 | + 14.1 | − 16.6 | + 55.9 | + 73.1 | + 117.3 | Sep. |
| + 8.4 | ± 0.0 | − 3.3 | ± 0.0 | + 133.4 | − 28.1 | ± 0.0 | + 7.5 | + 35.6 | + 43.3 | + 80.3 | + 59.6 | Oct. Nov. |
| + 4.1 | ± 0.0 | − 1.1 | ± 0.0 | + 143.3 | + 6.5 | ± 0.0 | + 14.0 | − 43.0 | + 132.0 | + 36.8 | + 57.3 | Dec. |
| + 38.5 | + 0.1 | − 7.3 | ± 0.0 | + 94.6 | − 10.8 | ± 0.0 | + 19.2 | − 46.3 | + 194.8 | − 31.0 | − 22.6 | 2022 Jan. Feb. |
| + 9.5 | ± 0.0 | − 0.2 | ± 0.0 | + 91.8 | + 11.8 | ± 0.0 | + 10.0 | + 60.6 | − 69.4 | + 88.5 | + 110.2 | Mar. |
| + 26.0 | + 0.1 | − 1.5 | ± 0.0 | + 47.2 | − 31.1 | ± 0.0 | + 25.3 | + 25.2 | + 25.6 | + 26.5 | + 20.8 | Apr. May |
| + 21.0 | + 0.1 | − 1.0 | ± 0.0 | + 49.9 | − 33.6 | ± 0.0 | + 15.6 | − 43.7 | + 12.4 | + 118.8 | + 100.9 | June |
| + 9.5 | + 0.5 | − 49.4 | ± 0.0 | + 19.7 | − 2.6 | ± 0.0 | + 12.5 | + 43.5 | + 28.9 | − 102.8 | − 93.0 | July Aug. |
| + 6.4 | + 0.7 | − 24.5 | ± 0.0 | − 4.0 | + 28.3 | ± 0.0 | − 18.7 | − 113.7 | + 91.2 | − 7.2 | + 2.5 | Sep. |
| + 5.7 | + 2.3 | − 6.1 | ± 0.0 | − 6.5 | +3,783.0 | ± 0.0 | − 21.6 | − 17.2 | − 144.8 | −3,604.1 | + 157.2 | Oct. Nov. |
| + 4.6 | − 2.1 | − 171.7 | ± 0.0 | − 2.2 | + 31.5 | ± 0.0 | − 2.9 | − 44.2 | − 37.5 | − 118.2 | − 89.5 | Dec. |
| | | | | | | | | | | | **Deutsche Bundesbank** | |
| + 0.9 | − 0.4 | + 14.4 | + 0.0 | + 39.8 | + 21.1 | ± 0.0 | + 3.1 | − 36.8 | + 8.4 | + 58.7 | + 82.9 | 2020 Dec. |
| − 4.7 | − 0.2 | + 7.1 | + 0.0 | + 22.6 | + 12.3 | ± 0.0 | + 6.1 | − 28.5 | + 41.7 | − 6.7 | + 11.7 | 2021 Jan. Feb. |
| − 3.0 | − 0.0 | − 0.1 | − 0.0 | + 25.6 | − 1.4 | ± 0.0 | + 1.0 | − 16.7 | − 45.2 | + 84.8 | + 84.4 | Mar. |
| − 7.3 | − 0.1 | + 66.3 | + 0.0 | + 28.8 | + 25.5 | ± 0.0 | + 3.4 | + 14.7 | − 2.4 | + 46.0 | + 74.9 | Apr. May |
| − 3.7 | + 0.0 | + 13.2 | + 0.0 | + 38.6 | + 5.5 | ± 0.0 | + 5.1 | − 0.1 | − 1.5 | + 37.9 | + 48.5 | June |
| + 3.1 | − 0.0 | + 13.8 | − 0.0 | + 34.2 | − 4.3 | ± 0.0 | + 5.2 | + 19.4 | + 31.1 | − 0.5 | + 0.4 | July Aug. |
| + 1.6 | + 0.1 | + 2.4 | + 0.0 | + 32.3 | + 6.5 | ± 0.0 | + 3.0 | − 2.5 | + 29.9 | − 0.9 | + 8.6 | Sep. |
| + 1.3 | + 0.0 | + 2.4 | − 0.0 | + 27.8 | − 6.4 | ± 0.0 | + 2.4 | + 13.4 | + 5.7 | + 16.3 | + 12.3 | Oct. Nov. |
| + 1.0 | − 0.1 | + 1.2 | − 0.0 | + 37.3 | + 2.1 | ± 0.0 | + 3.5 | + 2.7 | + 15.7 | + 15.6 | + 21.1 | Dec. |
| + 11.1 | + 0.2 | − 18.6 | + 0.0 | + 18.2 | − 2.0 | ± 0.0 | + 3.7 | − 14.7 | + 54.3 | − 28.3 | − 26.6 | 2022 Jan. Feb. |
| + 3.2 | − 0.1 | − 0.0 | + 0.0 | + 23.9 | + 7.4 | ± 0.0 | + 3.5 | − 14.5 | − 28.6 | + 59.2 | + 70.1 | Mar. |
| + 8.2 | − 0.0 | − 0.9 | − 0.0 | + 10.8 | − 14.2 | ± 0.0 | + 6.8 | + 5.6 | + 4.6 | + 15.2 | + 7.9 | Apr. May |
| + 6.6 | + 0.1 | − 0.6 | − 0.0 | + 18.7 | + 7.7 | ± 0.0 | + 3.0 | + 0.2 | + 6.0 | + 24.1 | + 19.4 | June |
| + 1.3 | + 0.2 | − 11.1 | − 0.0 | − 3.1 | − 4.1 | ± 0.0 | + 2.4 | + 18.0 | + 7.7 | − 37.7 | − 39.5 | July Aug. |
| + 0.4 | + 0.0 | − 5.5 | − 0.0 | − 7.5 | + 42.7 | ± 0.0 | − 10.8 | − 57.1 | + 13.5 | − 0.9 | + 31.0 | Sep. |
| − 0.5 | + 0.5 | − 3.1 | + 0.0 | − 5.3 | +1,075.5 | ± 0.0 | − 0.6 | − 30.7 | − 69.6 | − 982.9 | + 92.0 | Oct. Nov. |
| + 0.7 | − 0.4 | − 48.0 | + 0.0 | + 7.7 | + 42.7 | ± 0.0 | − 0.1 | − 6.2 | − 11.0 | − 65.4 | − 22.9 | 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-pro viding 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] | | | | | | | | | |
| 2022 June 17 | 8,827.9 | 604.3 | 503.8 | 220.2 | 283.6 | 25.0 | 11.2 | 11.2 | – |
| 24 | 8,836.0 | 604.3 | 502.6 | 220.2 | 282.4 | 26.6 | 12.1 | 12.1 | – |
| July 1 | 8,788.8 | 604.3 | 519.3 | 225.9 | 293.4 | 26.9 | 11.6 | 11.6 | – |
| 8 | 8,774.4 | 604.3 | 519.0 | 226.6 | 292.4 | 27.5 | 10.3 | 10.3 | – |
| 15 | 8,765.7 | 604.3 | 519.5 | 226.6 | 292.9 | 27.0 | 10.3 | 10.3 | – |
| 22 | 8,768.3 | 604.3 | 520.3 | 226.6 | 293.7 | 26.3 | 10.2 | 10.2 | – |
| 29 | 8,764.5 | 604.3 | 521.1 | 226.6 | 294.5 | 25.7 | 10.3 | 10.3 | – |
| Aug. 5 | 8,746.0 | 604.3 | 520.5 | 226.6 | 293.9 | 26.8 | 9.8 | 9.8 | – |
| 12 | 8,747.8 | 604.3 | 520.7 | 226.6 | 294.1 | 26.6 | 9.9 | 9.9 | – |
| 19 | 8,750.7 | 604.3 | 521.4 | 226.6 | 294.7 | 26.5 | 9.9 | 9.9 | – |
| 26 | 8,750.0 | 604.3 | 523.4 | 227.1 | 296.3 | 25.4 | 10.0 | 10.0 | – |
| Sep. 2 | 8,756.8 | 604.3 | 523.8 | 227.6 | 296.2 | 25.3 | 10.4 | 10.4 | – |
| 9 | 8,759.1 | 604.3 | 525.5 | 227.8 | 297.8 | 23.8 | 10.5 | 10.5 | – |
| 16 | 8,756.9 | 604.3 | 526.6 | 227.8 | 298.8 | 24.0 | 10.7 | 10.7 | – |
| 23 | 8,777.4 | 604.3 | 528.0 | 227.8 | 300.2 | 23.3 | 11.2 | 11.2 | – |
| 30 | 8,810.1 | 592.8 | 544.7 | 234.6 | 310.1 | 25.6 | 10.8 | 10.8 | – |
| Oct. 7 | 8,772.0 | 592.8 | 545.3 | 234.6 | 310.7 | 25.8 | 10.7 | 10.7 | – |
| 14 | 8,778.1 | 592.8 | 547.2 | 234.6 | 312.6 | 24.9 | 10.4 | 10.4 | – |
| 21 | 8,774.8 | 592.8 | 548.5 | 235.2 | 313.3 | 25.4 | 10.8 | 10.8 | – |
| 28 | 8,770.7 | 592.8 | 549.2 | 236.0 | 313.2 | 25.7 | 11.4 | 11.4 | – |
| Nov. 4 | 8,761.7 | 592.8 | 553.0 | 237.3 | 315.7 | 23.2 | 11.4 | 11.4 | – |
| 11 | 8,764.7 | 592.8 | 550.9 | 237.3 | 313.5 | 25.2 | 11.4 | 11.4 | – |
| 18 | 8,769.1 | 592.8 | 549.2 | 237.4 | 311.8 | 25.8 | 11.3 | 11.3 | – |
| 25 | 8,471.4 | 592.8 | 549.8 | 238.1 | 311.7 | 26.3 | 11.3 | 11.3 | – |
| Dec. 2 | 8,470.9 | 592.8 | 549.8 | 238.5 | 311.4 | 25.6 | 11.1 | 11.1 | – |
| 9 | 8,480.2 | 592.9 | 552.1 | 238.5 | 313.6 | 23.4 | 11.2 | 11.2 | – |
| 16 | 8,477.2 | 592.9 | 551.5 | 238.3 | 313.2 | 23.3 | 11.1 | 11.1 | – |
| 23 | 7,985.5 | 592.9 | 552.2 | 239.2 | 313.0 | 23.8 | 14.1 | 14.1 | – |
| 30 | 7,955.8 | 592.9 | 523.2 | 228.5 | 294.7 | 20.4 | 14.1 | 14.1 | – |
| 2023 Jan. 6 | 7,968.0 | 593.0 | 526.0 | 229.7 | 296.3 | 20.6 | 11.9 | 11.9 | – |
| **Deutsche Bundesbank** | | | | | | | | | |
| 2022 June 17 | 2,999.7 | 187.6 | 90.9 | 56.1 | 34.8 | 0.0 | 0.9 | 0.9 | – |
| 24 | 2,968.5 | 187.6 | 91.1 | 56.1 | 35.1 | 0.0 | 1.8 | 1.8 | – |
| July 1 | 3,013.1 | 187.6 | 93.6 | 57.7 | 35.9 | 0.0 | 1.5 | 1.5 | – |
| 8 | 2,950.0 | 187.6 | 93.4 | 57.7 | 35.8 | 0.0 | – | – | – |
| 15 | 2,946.9 | 187.6 | 93.3 | 57.7 | 35.7 | 0.0 | – | – | – |
| 22 | 2,941.3 | 187.6 | 93.4 | 57.7 | 35.7 | 0.0 | – | – | – |
| 29 | 2,964.1 | 187.6 | 93.1 | 57.6 | 35.5 | 0.0 | 0.1 | 0.1 | – |
| Aug. 5 | 2,998.7 | 187.6 | 93.1 | 57.6 | 35.5 | 0.0 | – | – | – |
| 12 | 3,024.8 | 187.6 | 92.9 | 57.7 | 35.2 | 0.0 | – | – | – |
| 19 | 3,028.6 | 187.6 | 93.1 | 57.7 | 35.5 | 0.0 | – | – | – |
| 26 | 3,060.0 | 187.6 | 93.5 | 57.7 | 35.9 | 0.0 | – | – | – |
| Sep. 2 | 3,042.0 | 187.6 | 93.2 | 57.9 | 35.4 | 0.0 | – | – | – |
| 9 | 3,020.3 | 187.6 | 93.0 | 57.9 | 35.2 | 0.0 | – | – | – |
| 16 | 3,036.5 | 187.6 | 93.7 | 57.9 | 35.9 | 0.0 | – | – | – |
| 23 | 3,014.7 | 187.6 | 94.3 | 57.9 | 36.5 | 0.0 | – | – | – |
| 30 | 3,064.3 | 184.0 | 97.2 | 59.6 | 37.6 | 0.0 | – | – | – |
| Oct. 7 | 3,057.7 | 184.0 | 97.5 | 59.6 | 37.9 | 0.0 | – | – | – |
| 14 | 3,060.7 | 184.0 | 97.4 | 59.6 | 37.8 | 0.0 | – | – | – |
| 21 | 3,026.3 | 184.0 | 97.3 | 59.6 | 37.7 | 0.0 | – | – | – |
| 28 | 3,037.7 | 184.0 | 97.6 | 59.7 | 37.9 | 0.0 | – | – | – |
| Nov. 4 | 3,053.2 | 184.0 | 98.1 | 60.2 | 37.9 | 0.0 | – | – | – |
| 11 | 3,053.5 | 184.0 | 98.1 | 60.2 | 37.9 | 0.0 | – | – | – |
| 18 | 3,045.4 | 184.0 | 98.1 | 60.2 | 37.9 | 0.0 | – | – | – |
| 25 | 2,959.7 | 184.0 | 98.3 | 60.2 | 38.1 | 0.0 | – | – | – |
| Dec. 2 | 2,950.5 | 184.0 | 98.3 | 60.5 | 37.8 | 0.0 | – | – | – |
| 9 | 2,968.1 | 184.0 | 98.3 | 60.5 | 37.8 | 0.0 | – | – | – |
| 16 | 2,971.8 | 184.0 | 98.2 | 60.5 | 37.7 | 0.0 | – | – | – |
| 23 | 2,875.6 | 184.0 | 98.1 | 60.8 | 37.3 | 0.0 | 2.9 | 2.9 | – |
| 30 | 2,905.7 | 184.0 | 92.5 | 58.0 | 34.4 | 0.0 | 3.4 | 3.4 | – |
| 2023 Jan. 6 | 2,836.4 | 184.0 | 92.2 | 58.0 | 34.2 | 0.0 | – | – | – |

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

## III. Consolidated financial statement of the Eurosystem

| Lending to euro area credit institutions related to monetary policy operations denominated in euro | | | | | | | Other claims on euro area credit institutions denominated in euro | Securities of euro area residents in euro | | | General government debt denominated in euro | Other assets | As at reporting date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | Main re-financing opera-tions | Longer-term re-financing opera-tions | Fine-tuning reverse opera-tions | Structural reverse opera-tions | Marginal lending facility | Credits related to margin calls | | Total | Securities held for monetary policy purposes | Other securities | | | |
| | | | | | | | | | | | | | **Eurosystem [1]** |
| 2,199.5 | 0.7 | 2,198.8 | – | – | – | – | 36.4 | 5,125.1 | 4,959.2 | 165.9 | 22.1 | 300.5 | 2022 June 17 |
| 2,199.5 | 0.7 | 2,198.8 | – | – | – | – | 32.2 | 5,130.7 | 4,963.7 | 167.0 | 22.1 | 305.9 | 24 |
| 2,126.1 | 1.5 | 2,124.6 | – | – | – | – | 34.5 | 5,129.1 | 4,963.5 | 165.6 | 21.7 | 315.4 | July 1 |
| 2,125.6 | 1.0 | 2,124.6 | – | – | 0.0 | – | 28.4 | 5,123.0 | 4,956.9 | 166.1 | 21.7 | 314.6 | 8 |
| 2,125.5 | 0.9 | 2,124.6 | – | – | – | – | 28.8 | 5,119.3 | 4,953.9 | 165.4 | 21.7 | 309.4 | 15 |
| 2,125.6 | 1.0 | 2,124.6 | – | – | 0.0 | – | 27.6 | 5,123.3 | 4,956.7 | 166.6 | 21.7 | 309.1 | 22 |
| 2,125.8 | 1.1 | 2,124.7 | – | – | 0.0 | – | 30.8 | 5,125.6 | 4,958.9 | 166.8 | 21.7 | 299.2 | 29 |
| 2,125.6 | 0.9 | 2,124.7 | – | – | – | – | 15.2 | 5,117.9 | 4,952.2 | 165.7 | 21.7 | 304.2 | Aug. 5 |
| 2,125.6 | 0.9 | 2,124.7 | – | – | 0.0 | – | 15.5 | 5,119.7 | 4,953.4 | 166.4 | 21.7 | 303.7 | 12 |
| 2,125.5 | 0.8 | 2,124.7 | – | – | – | – | 13.2 | 5,123.8 | 4,956.7 | 167.2 | 21.7 | 304.4 | 19 |
| 2,125.5 | 0.7 | 2,124.7 | – | – | 0.0 | – | 12.9 | 5,123.1 | 4,955.5 | 167.6 | 21.7 | 303.8 | 26 |
| 2,129.3 | 3.9 | 2,125.4 | – | – | 0.0 | – | 14.8 | 5,122.4 | 4,956.5 | 165.9 | 21.7 | 304.9 | Sep. 2 |
| 2,129.1 | 3.7 | 2,125.4 | – | – | – | – | 13.7 | 5,121.5 | 4,955.3 | 166.3 | 21.7 | 309.0 | 9 |
| 2,129.3 | 3.9 | 2,125.4 | – | – | – | – | 22.4 | 5,112.4 | 4,945.7 | 166.7 | 21.7 | 305.5 | 16 |
| 2,129.1 | 3.7 | 2,125.4 | – | – | – | – | 32.0 | 5,116.9 | 4,949.9 | 167.1 | 21.7 | 310.9 | 23 |
| 2,120.8 | 4.5 | 2,116.0 | – | – | 0.3 | – | 32.2 | 5,109.5 | 4,943.0 | 166.5 | 21.7 | 351.8 | 30 |
| 2,119.7 | 3.7 | 2,116.0 | – | – | 0.0 | – | 19.3 | 5,109.9 | 4,943.6 | 166.2 | 21.7 | 326.8 | Oct. 7 |
| 2,119.7 | 3.6 | 2,116.0 | – | – | 0.0 | – | 17.7 | 5,120.2 | 4,953.3 | 166.9 | 21.7 | 323.3 | 14 |
| 2,119.7 | 3.6 | 2,116.0 | – | – | – | – | 13.3 | 5,118.3 | 4,951.0 | 167.3 | 21.7 | 324.3 | 21 |
| 2,120.9 | 4.6 | 2,116.3 | – | – | – | – | 16.1 | 5,111.0 | 4,946.9 | 164.2 | 21.7 | 321.8 | 28 |
| 2,119.4 | 3.1 | 2,116.3 | – | – | – | – | 19.6 | 5,104.1 | 4,942.1 | 162.1 | 21.7 | 316.5 | Nov. 4 |
| 2,117.8 | 1.5 | 2,116.3 | – | – | 0.0 | – | 16.3 | 5,108.3 | 4,945.1 | 163.2 | 21.7 | 320.1 | 11 |
| 2,117.9 | 1.6 | 2,116.3 | – | – | 0.0 | – | 17.2 | 5,113.5 | 4,949.8 | 163.7 | 21.7 | 319.7 | 18 |
| 1,821.8 | 1.8 | 1,820.0 | – | – | 0.0 | – | 19.4 | 5,109.0 | 4,944.3 | 164.7 | 21.7 | 319.1 | 25 |
| 1,822.9 | 2.6 | 1,820.2 | – | – | – | – | 18.8 | 5,111.8 | 4,946.3 | 165.5 | 21.7 | 316.3 | Dec. 2 |
| 1,821.6 | 1.4 | 1,820.2 | – | – | – | – | 18.8 | 5,118.2 | 4,952.3 | 165.9 | 21.7 | 320.3 | 9 |
| 1,821.7 | 1.5 | 1,820.2 | – | – | – | – | 29.1 | 5,106.2 | 4,940.8 | 165.4 | 21.7 | 319.8 | 16 |
| 1,322.9 | 1.3 | 1,321.4 | – | – | 0.2 | – | 26.6 | 5,109.3 | 4,944.1 | 165.3 | 21.7 | 322.1 | 23 |
| 1,324.3 | 2.4 | 1,321.4 | – | – | 0.5 | – | 31.1 | 5,102.2 | 4,937.2 | 165.0 | 21.6 | 325.9 | 30 |
| 1,322.5 | 1.1 | 1,321.4 | – | – | – | – | 31.8 | 5,123.7 | 4,942.3 | 181.5 | 21.6 | 316.8 | 2023 Jan. 6 |
| | | | | | | | | | | | | | **Deutsche Bundesbank** |
| 420.2 | 0.1 | 420.2 | – | – | 0.0 | – | 6.3 | 1,093.9 | 1,093.9 | – | 4.4 | 1,195.4 | 2022 June 17 |
| 420.3 | 0.1 | 420.2 | – | – | 0.0 | – | 5.3 | 1,091.2 | 1,091.2 | – | 4.4 | 1,166.7 | 24 |
| 404.2 | 0.7 | 403.6 | – | – | 0.0 | – | 4.2 | 1,091.1 | 1,091.1 | – | 4.4 | 1,226.4 | July 1 |
| 403.8 | 0.3 | 403.6 | – | – | 0.0 | – | 4.2 | 1,078.6 | 1,078.6 | – | 4.4 | 1,178.0 | 8 |
| 403.8 | 0.3 | 403.6 | – | – | 0.0 | – | 5.6 | 1,079.4 | 1,079.4 | – | 4.4 | 1,172.7 | 15 |
| 403.9 | 0.4 | 403.6 | – | – | 0.0 | – | 5.2 | 1,075.7 | 1,075.7 | – | 4.4 | 1,171.1 | 22 |
| 404.0 | 0.4 | 403.6 | – | – | 0.0 | – | 0.6 | 1,077.2 | 1,077.2 | – | 4.4 | 1,197.1 | 29 |
| 403.7 | 0.1 | 403.6 | – | – | 0.0 | – | 0.3 | 1,077.7 | 1,077.7 | – | 4.4 | 1,231.8 | Aug. 5 |
| 403.8 | 0.2 | 403.6 | – | – | 0.0 | – | 0.2 | 1,078.5 | 1,078.5 | – | 4.4 | 1,257.4 | 12 |
| 403.8 | 0.2 | 403.6 | – | – | 0.0 | – | 0.1 | 1,079.1 | 1,079.1 | – | 4.4 | 1,260.5 | 19 |
| 403.7 | 0.1 | 403.6 | – | – | 0.0 | – | 0.1 | 1,076.1 | 1,076.1 | – | 4.4 | 1,294.4 | 26 |
| 404.5 | 0.8 | 403.7 | – | – | 0.0 | – | 0.3 | 1,078.5 | 1,078.5 | – | 4.4 | 1,273.4 | Sep. 2 |
| 403.9 | 0.3 | 403.7 | – | – | 0.0 | – | 0.0 | 1,073.5 | 1,073.5 | – | 4.4 | 1,257.7 | 9 |
| 404.1 | 0.5 | 403.7 | – | – | 0.0 | – | 2.5 | 1,069.5 | 1,069.5 | – | 4.4 | 1,274.6 | 16 |
| 404.2 | 0.5 | 403.7 | – | – | 0.0 | – | 3.2 | 1,069.8 | 1,069.8 | – | 4.4 | 1,251.1 | 23 |
| 400.7 | 1.4 | 399.3 | – | – | 0.0 | – | 3.5 | 1,072.2 | 1,072.2 | – | 4.4 | 1,302.1 | 30 |
| 399.8 | 0.5 | 399.3 | – | – | 0.0 | – | 3.0 | 1,067.0 | 1,067.0 | – | 4.4 | 1,302.0 | Oct. 7 |
| 399.9 | 0.6 | 399.3 | – | – | 0.0 | – | 2.5 | 1,070.4 | 1,070.4 | – | 4.4 | 1,302.0 | 14 |
| 399.9 | 0.7 | 399.3 | – | – | 0.0 | – | 2.5 | 1,071.9 | 1,071.9 | – | 4.4 | 1,266.2 | 21 |
| 401.0 | 1.7 | 399.3 | – | – | 0.0 | – | 2.9 | 1,075.2 | 1,075.2 | – | 4.4 | 1,272.7 | 28 |
| 399.7 | 0.5 | 399.3 | – | – | 0.0 | – | 2.3 | 1,077.9 | 1,077.9 | – | 4.4 | 1,286.7 | Nov. 4 |
| 399.7 | 0.4 | 399.3 | – | – | 0.0 | – | 2.6 | 1,078.9 | 1,078.9 | – | 4.4 | 1,285.8 | 11 |
| 399.8 | 0.6 | 399.3 | – | – | 0.0 | – | 3.2 | 1,081.1 | 1,081.1 | – | 4.4 | 1,274.6 | 18 |
| 318.0 | 0.5 | 317.4 | – | – | 0.0 | – | 2.8 | 1,079.1 | 1,079.1 | – | 4.4 | 1,273.0 | 25 |
| 318.4 | 0.9 | 317.4 | – | – | 0.0 | – | 3.5 | 1,080.9 | 1,080.9 | – | 4.4 | 1,260.9 | Dec. 2 |
| 317.6 | 0.2 | 317.4 | – | – | 0.0 | – | 3.1 | 1,082.8 | 1,082.8 | – | 4.4 | 1,277.7 | 9 |
| 317.6 | 0.1 | 317.4 | – | – | 0.0 | – | 3.7 | 1,072.9 | 1,072.9 | – | 4.4 | 1,290.8 | 16 |
| 236.4 | 0.4 | 235.9 | – | – | 0.2 | – | 4.9 | 1,073.8 | 1,073.8 | – | 4.4 | 1,270.9 | 23 |
| 237.5 | 1.1 | 235.9 | – | – | 0.5 | – | 8.3 | 1,073.0 | 1,073.0 | – | 4.4 | 1,302.6 | 30 |
| 236.1 | 0.2 | 235.9 | – | – | 0.0 | – | 4.5 | 1,074.5 | 1,074.5 | – | 4.4 | 1,240.6 | 2023 Jan. 6 |

## III. Consolidated financial statement of the Eurosystem

### 2. Liabilities *

€ billion

| As at reporting date | Total liabilities | Banknotes in circulation [1] | Liabilities to euro area credit institutions related to monetary policy operations denominated in euro | | | | | | Other liabilities to euro area credit institutions denominated in euro | Debt certificates issued | Liabilities to other euro area residents denominated in euro | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | Current accounts (covering the minimum reserve system) | Deposit facility | Fixed-term deposits | Fine-tuning reverse operations | Deposits related to margin calls | | | Total | General government | Other liabilities |
| **Eurosystem [3]** | | | | | | | | | | | | | |
| 2022 June 17 | 8,827.9 | 1,599.6 | 4,675.5 | 4,139.0 | 534.3 | – | – | 2.3 | 49.0 | – | 847.3 | 686.2 | 161.1 |
| 24 | 8,836.0 | 1,600.2 | 4,642.9 | 3,986.7 | 654.2 | – | – | 2.0 | 51.0 | – | 895.7 | 715.0 | 180.7 |
| July 1 | 8,788.8 | 1,603.6 | 4,591.8 | 3,853.3 | 736.3 | – | – | 2.1 | 71.0 | – | 835.0 | 647.3 | 187.7 |
| 8 | 8,774.4 | 1,606.4 | 4,642.8 | 3,914.7 | 726.0 | – | – | 2.1 | 55.9 | – | 819.9 | 627.7 | 192.2 |
| 15 | 8,765.7 | 1,608.7 | 4,622.9 | 3,910.3 | 710.3 | – | – | 2.3 | 49.8 | – | 835.3 | 646.0 | 189.3 |
| 22 | 8,768.3 | 1,606.8 | 4,605.1 | 3,904.4 | 698.5 | – | – | 2.2 | 50.9 | – | 843.5 | 656.8 | 186.7 |
| 29 | 8,764.5 | 1,600.9 | 4,568.6 | 3,855.5 | 711.1 | – | – | 2.1 | 60.5 | – | 844.2 | 641.9 | 202.2 |
| Aug. 5 | 8,746.0 | 1,595.8 | 4,625.6 | 3,959.7 | 664.1 | – | – | 1.8 | 53.0 | – | 744.3 | 546.8 | 197.5 |
| 12 | 8,747.8 | 1,591.9 | 4,642.2 | 3,975.0 | 665.5 | – | – | 1.7 | 52.9 | – | 738.6 | 543.6 | 194.9 |
| 19 | 8,750.7 | 1,584.0 | 4,598.5 | 3,941.0 | 655.6 | – | – | 1.8 | 49.4 | – | 784.5 | 583.8 | 200.7 |
| 26 | 8,750.0 | 1,578.0 | 4,572.8 | 3,922.3 | 648.6 | – | – | 1.8 | 47.9 | – | 813.3 | 595.6 | 217.7 |
| Sep. 2 | 8,756.8 | 1,575.5 | 4,707.9 | 4,035.2 | 670.7 | – | – | 2.0 | 51.5 | – | 692.8 | 504.8 | 187.9 |
| 9 | 8,759.1 | 1,573.6 | 4,803.0 | 3,806.8 | 994.3 | – | – | 1.8 | 55.9 | – | 626.9 | 472.8 | 154.1 |
| 16 | 8,756.9 | 1,569.3 | 4,816.5 | 548.1 | 4,266.6 | – | – | 1.8 | 72.2 | – | 655.8 | 518.1 | 137.7 |
| 23 | 8,777.4 | 1,564.9 | 4,810.4 | 403.4 | 4,405.2 | – | – | 1.8 | 63.4 | – | 678.5 | 543.1 | 135.4 |
| 30 | 8,810.1 | 1,566.0 | 4,698.7 | 318.3 | 4,378.2 | – | – | 2.3 | 76.4 | – | 768.0 | 557.2 | 210.7 |
| Oct. 7 | 8,772.0 | 1,562.4 | 4,880.3 | 251.4 | 4,626.7 | – | – | 2.1 | 62.3 | – | 618.0 | 483.8 | 134.2 |
| 14 | 8,778.1 | 1,561.9 | 4,854.2 | 232.2 | 4,619.7 | – | – | 2.3 | 54.1 | – | 668.3 | 541.1 | 127.2 |
| 21 | 8,774.8 | 1,559.8 | 4,841.5 | 215.6 | 4,623.0 | – | – | 2.9 | 59.7 | – | 676.4 | 551.0 | 125.4 |
| 28 | 8,770.7 | 1,562.9 | 4,801.3 | 231.0 | 4,567.5 | – | – | 2.8 | 53.7 | – | 706.8 | 578.0 | 128.8 |
| Nov. 4 | 8,761.7 | 1,562.5 | 4,859.1 | 240.2 | 4,616.1 | – | – | 2.8 | 49.0 | – | 626.1 | 499.6 | 126.5 |
| 11 | 8,764.7 | 1,560.1 | 4,909.8 | 215.0 | 4,692.0 | – | – | 2.8 | 48.5 | – | 623.3 | 502.4 | 120.8 |
| 18 | 8,769.1 | 1,558.2 | 4,853.3 | 211.5 | 4,638.9 | – | – | 2.8 | 49.0 | – | 681.5 | 568.4 | 113.1 |
| 25 | 8,471.4 | 1,557.7 | 4,553.5 | 203.4 | 4,348.5 | – | – | 1.6 | 45.6 | – | 675.3 | 558.8 | 116.5 |
| Dec. 2 | 8,470.9 | 1,560.1 | 4,665.7 | 190.2 | 4,474.0 | – | – | 1.6 | 43.1 | – | 577.6 | 450.8 | 126.8 |
| 9 | 8,480.2 | 1,563.4 | 4,675.6 | 197.9 | 4,476.1 | – | – | 1.6 | 48.9 | – | 558.4 | 431.2 | 127.2 |
| 16 | 8,477.2 | 1,564.9 | 4,647.4 | 203.8 | 4,441.9 | – | – | 1.6 | 47.5 | – | 547.5 | 427.8 | 119.7 |
| 23 | 7,985.5 | 1,571.6 | 4,198.7 | 193.1 | 4,004.4 | – | – | 1.2 | 58.4 | – | 484.4 | 371.4 | 113.0 |
| 30 | 7,955.8 | 1,572.0 | 3,998.9 | 218.9 | 3,778.8 | – | – | 1.2 | 78.3 | – | 564.6 | 436.8 | 127.8 |
| 2023 Jan. 6 | 7,968.0 | 1,572.5 | 4,288.8 | 202.3 | 4,085.3 | – | – | 1.2 | 53.7 | – | 433.6 | 327.0 | 106.6 |
| **Deutsche Bundesbank** | | | | | | | | | | | | | |
| 2022 June 17 | 2,999.7 | 390.9 | 1,297.9 | 1,181.7 | 114.0 | – | – | 2.2 | 17.6 | – | 297.8 | 250.7 | 47.1 |
| 24 | 2,968.5 | 390.9 | 1,295.7 | 1,154.4 | 139.3 | – | – | 2.0 | 15.5 | – | 284.3 | 231.7 | 52.5 |
| July 1 | 3,013.1 | 389.1 | 1,322.5 | 1,106.4 | 214.0 | – | – | 2.1 | 24.8 | – | 277.5 | 218.1 | 59.5 |
| 8 | 2,950.0 | 390.6 | 1,303.6 | 1,087.8 | 213.8 | – | – | 2.0 | 21.9 | – | 255.1 | 186.8 | 68.3 |
| 15 | 2,946.9 | 391.6 | 1,280.1 | 1,077.7 | 200.3 | – | – | 2.1 | 19.1 | – | 275.6 | 212.4 | 63.2 |
| 22 | 2,941.3 | 389.4 | 1,295.5 | 1,080.1 | 213.4 | – | – | 2.0 | 21.0 | – | 253.9 | 195.1 | 58.8 |
| 29 | 2,964.1 | 388.3 | 1,285.6 | 1,076.5 | 207.1 | – | – | 2.0 | 22.2 | – | 245.3 | 175.5 | 69.8 |
| Aug. 5 | 2,998.7 | 383.3 | 1,317.4 | 1,091.8 | 223.7 | – | – | 1.8 | 20.4 | – | 231.9 | 164.9 | 67.0 |
| 12 | 3,024.8 | 379.7 | 1,340.9 | 1,116.0 | 223.2 | – | – | 1.7 | 23.0 | – | 232.2 | 161.9 | 70.2 |
| 19 | 3,028.6 | 373.2 | 1,317.7 | 1,101.0 | 214.9 | – | – | 1.7 | 19.8 | – | 262.1 | 183.1 | 79.0 |
| 26 | 3,060.0 | 370.7 | 1,348.4 | 1,133.9 | 212.7 | – | – | 1.8 | 22.3 | – | 253.3 | 153.5 | 99.8 |
| Sep. 2 | 3,042.0 | 382.4 | 1,381.1 | 1,148.7 | 230.5 | – | – | 1.8 | 22.8 | – | 218.4 | 140.3 | 78.2 |
| 9 | 3,020.3 | 382.1 | 1,392.6 | 1,101.0 | 289.9 | – | – | 1.8 | 29.1 | – | 191.7 | 121.5 | 70.2 |
| 16 | 3,036.5 | 381.5 | 1,406.2 | 254.0 | 1,150.5 | – | – | 1.8 | 30.5 | – | 212.1 | 140.1 | 72.0 |
| 23 | 3,014.7 | 380.6 | 1,402.6 | 174.9 | 1,225.9 | – | – | 1.8 | 23.3 | – | 181.8 | 116.0 | 65.8 |
| 30 | 3,064.3 | 379.8 | 1,424.3 | 107.7 | 1,314.7 | – | – | 1.9 | 21.8 | – | 196.3 | 129.9 | 66.4 |
| Oct. 7 | 3,057.7 | 377.2 | 1,473.7 | 79.0 | 1,392.9 | – | – | 1.8 | 23.7 | – | 161.1 | 101.0 | 60.0 |
| 14 | 3,060.7 | 377.6 | 1,450.5 | 67.8 | 1,380.8 | – | – | 2.0 | 17.1 | – | 192.6 | 138.0 | 54.6 |
| 21 | 3,026.3 | 377.4 | 1,437.9 | 55.4 | 1,379.7 | – | – | 2.8 | 18.9 | – | 176.1 | 124.7 | 51.4 |
| 28 | 3,037.7 | 379.1 | 1,432.3 | 59.4 | 1,370.1 | – | – | 2.8 | 19.7 | – | 190.7 | 139.7 | 51.0 |
| Nov. 4 | 3,053.2 | 378.9 | 1,436.8 | 74.0 | 1,360.0 | – | – | 2.8 | 13.7 | – | 182.4 | 132.3 | 50.1 |
| 11 | 3,053.5 | 378.1 | 1,472.4 | 55.0 | 1,414.6 | – | – | 2.8 | 15.9 | – | 168.3 | 124.3 | 43.9 |
| 18 | 3,045.4 | 377.6 | 1,433.2 | 53.9 | 1,376.5 | – | – | 2.7 | 16.1 | – | 199.0 | 155.1 | 43.9 |
| 25 | 2,959.7 | 377.5 | 1,366.1 | 55.9 | 1,308.6 | – | – | 1.6 | 14.1 | – | 177.5 | 131.1 | 46.4 |
| Dec. 2 | 2,950.5 | 378.8 | 1,394.0 | 50.6 | 1,341.8 | – | – | 1.6 | 13.1 | – | 155.2 | 102.0 | 53.1 |
| 9 | 2,968.1 | 380.1 | 1,403.8 | 59.2 | 1,343.1 | – | – | 1.6 | 17.8 | – | 143.9 | 91.3 | 52.6 |
| 16 | 2,971.8 | 381.6 | 1,359.1 | 59.3 | 1,298.2 | – | – | 1.6 | 13.9 | – | 161.1 | 111.3 | 49.9 |
| 23 | 2,875.6 | 383.9 | 1,283.1 | 53.2 | 1,228.8 | – | – | 1.1 | 12.8 | – | 138.9 | 94.5 | 44.4 |
| 30 | 2,905.7 | 381.3 | 1,200.1 | 66.6 | 1,132.3 | – | – | 1.2 | 21.3 | – | 177.6 | 132.5 | 45.1 |
| 2023 Jan. 6 | 2,836.4 | 377.2 | 1,287.0 | 64.7 | 1,221.1 | – | – | 1.2 | 14.3 | – | 102.6 | 66.8 | 35.8 |

**\*** The consolidated financial statement of the Eurosystem comprises the financial statement of the European Central Bank (ECB) and the financial statements of the national central banks of the euro area Member States (NCBs). The balance sheet items for foreign currency, securities, gold and financial instruments are valued at market rates at the end of the 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 |
| 422.3 | 11.1 | 6.2 | 6.2 | – | 180.2 | 322.9 | – | 598.9 | 114.9 | 2022 June 17 |
| 410.6 | 10.9 | 6.9 | 6.9 | – | 180.2 | 323.7 | – | 598.9 | 114.9 | 24 |
| 434.0 | 11.5 | 6.2 | 6.2 | – | 184.9 | 327.5 | – | 608.5 | 114.8 | July 1 |
| 396.5 | 11.4 | 6.1 | 6.1 | – | 184.9 | 327.0 | – | 608.5 | 114.8 | 8 |
| 397.2 | 11.5 | 5.9 | 5.9 | – | 184.9 | 326.2 | – | 608.5 | 114.8 | 15 |
| 412.1 | 11.3 | 6.0 | 6.0 | – | 184.9 | 324.3 | – | 608.5 | 114.8 | 22 |
| 442.2 | 11.5 | 5.7 | 5.7 | – | 184.9 | 322.7 | – | 608.5 | 114.8 | 29 |
| 476.1 | 11.3 | 5.9 | 5.9 | – | 184.9 | 325.6 | – | 608.5 | 114.8 | Aug. 5 |
| 473.7 | 11.1 | 5.8 | 5.8 | – | 184.9 | 323.3 | – | 608.5 | 114.8 | 12 |
| 484.8 | 11.4 | 6.2 | 6.2 | – | 184.9 | 323.7 | – | 608.5 | 114.8 | 19 |
| 489.8 | 11.4 | 6.7 | 6.7 | – | 184.9 | 321.8 | – | 608.5 | 114.8 | 26 |
| 478.6 | 11.3 | 6.4 | 6.4 | – | 184.9 | 324.7 | – | 608.5 | 114.8 | Sep. 2 |
| 447.8 | 11.7 | 5.9 | 5.9 | – | 184.9 | 326.1 | – | 608.5 | 114.7 | 9 |
| 391.9 | 11.1 | 6.5 | 6.5 | – | 184.9 | 325.3 | – | 608.5 | 114.7 | 16 |
| 407.5 | 11.0 | 7.0 | 7.0 | – | 184.9 | 326.5 | – | 608.5 | 114.7 | 23 |
| 440.3 | 11.6 | 6.8 | 6.8 | – | 189.9 | 326.1 | – | 611.7 | 114.7 | 30 |
| 392.3 | 11.5 | 6.9 | 6.9 | – | 189.9 | 321.9 | – | 611.7 | 114.7 | Oct. 7 |
| 385.1 | 11.5 | 6.9 | 6.9 | – | 189.9 | 319.7 | – | 611.7 | 114.7 | 14 |
| 384.8 | 11.9 | 6.1 | 6.1 | – | 189.9 | 318.3 | – | 611.7 | 114.7 | 21 |
| 391.0 | 12.2 | 6.1 | 6.1 | – | 189.9 | 320.3 | – | 611.7 | 114.7 | 28 |
| 410.8 | 12.5 | 5.8 | 5.8 | – | 189.9 | 319.6 | – | 611.7 | 114.7 | Nov. 4 |
| 368.4 | 12.5 | 5.8 | 5.8 | – | 189.9 | 320.1 | – | 611.7 | 114.7 | 11 |
| 365.2 | 12.6 | 5.7 | 5.7 | – | 189.9 | 327.3 | – | 611.7 | 114.7 | 18 |
| 383.3 | 12.7 | 5.5 | 5.5 | – | 189.9 | 321.5 | – | 611.7 | 114.7 | 25 |
| 372.5 | 12.2 | 5.6 | 5.6 | – | 189.9 | 318.0 | – | 611.7 | 114.6 | Dec. 2 |
| 379.9 | 12.2 | 5.9 | 5.9 | – | 189.9 | 319.7 | – | 611.7 | 114.6 | 9 |
| 413.6 | 12.6 | 5.3 | 5.3 | – | 189.9 | 322.2 | – | 611.7 | 114.6 | 16 |
| 430.2 | 12.5 | 5.1 | 5.1 | – | 189.9 | 308.5 | – | 611.7 | 114.6 | 23 |
| 540.7 | 11.7 | 4.7 | 4.7 | – | 181.1 | 302.7 | – | 586.4 | 114.6 | 30 |
| 424.8 | 11.0 | 4.8 | 4.8 | – | 182.4 | 292.5 | – | 588.7 | 115.3 | 2023 Jan. 6 |
| | | | | | | | | | | Deutsche Bundesbank |
| 189.8 | 0.5 | 0.7 | 0.7 | – | 46.8 | 40.3 | 526.8 | 185.0 | 5.7 | 2022 June 17 |
| 175.9 | 0.5 | 0.9 | 0.9 | – | 46.8 | 40.5 | 526.8 | 185.0 | 5.7 | 24 |
| 187.7 | 0.6 | 0.1 | 0.1 | – | 48.0 | 39.6 | 530.5 | 187.1 | 5.7 | July 1 |
| 166.1 | 0.6 | 0.1 | 0.1 | – | 48.0 | 41.0 | 530.5 | 187.1 | 5.7 | 8 |
| 167.6 | 0.6 | – 0.0 | – 0.0 | – | 48.0 | 40.9 | 530.5 | 187.1 | 5.7 | 15 |
| 168.5 | 0.4 | 0.2 | 0.2 | – | 48.0 | 41.2 | 530.5 | 187.1 | 5.7 | 22 |
| 214.6 | 0.4 | – 0.0 | – 0.0 | – | 48.0 | 41.7 | 525.2 | 187.1 | 5.7 | 29 |
| 237.4 | 0.4 | 0.1 | 0.1 | – | 48.0 | 41.8 | 525.2 | 187.1 | 5.7 | Aug. 5 |
| 240.8 | 0.4 | – 0.0 | – 0.0 | – | 48.0 | 41.8 | 525.2 | 187.1 | 5.7 | 12 |
| 247.3 | 0.4 | 0.3 | 0.3 | – | 48.0 | 41.9 | 525.2 | 187.1 | 5.7 | 19 |
| 256.2 | 0.4 | 0.8 | 0.8 | – | 48.0 | 41.9 | 525.2 | 187.1 | 5.7 | 26 |
| 240.0 | 0.4 | 0.2 | 0.2 | – | 48.0 | 42.4 | 513.5 | 187.1 | 5.7 | Sep. 2 |
| 226.8 | 0.4 | 0.1 | 0.1 | – | 48.0 | 43.2 | 513.5 | 187.1 | 5.7 | 9 |
| 207.6 | 0.4 | 0.6 | 0.6 | – | 48.0 | 43.3 | 513.5 | 187.1 | 5.7 | 16 |
| 227.2 | 0.4 | 1.1 | 1.1 | – | 48.0 | 43.3 | 513.5 | 187.1 | 5.7 | 23 |
| 241.7 | 0.6 | 0.6 | 0.6 | – | 49.3 | 41.8 | 516.8 | 185.6 | 5.7 | 30 |
| 221.4 | 0.6 | 0.7 | 0.7 | – | 49.3 | 42.0 | 516.8 | 185.6 | 5.7 | Oct. 7 |
| 222.7 | 0.6 | 0.5 | 0.5 | – | 49.3 | 41.8 | 516.8 | 185.6 | 5.7 | 14 |
| 216.3 | 0.6 | – 0.0 | – 0.0 | – | 49.3 | 41.7 | 516.8 | 185.6 | 5.7 | 21 |
| 216.3 | 0.6 | – 0.0 | – 0.0 | – | 49.3 | 41.6 | 516.8 | 185.6 | 5.7 | 28 |
| 241.0 | 0.6 | – 0.0 | – 0.0 | – | 49.3 | 42.5 | 516.8 | 185.6 | 5.7 | Nov. 4 |
| 218.8 | 0.6 | – 0.0 | – 0.0 | – | 49.3 | 42.0 | 516.8 | 185.6 | 5.7 | 11 |
| 219.7 | 0.6 | – 0.0 | – 0.0 | – | 49.3 | 41.6 | 516.8 | 185.6 | 5.7 | 18 |
| 226.6 | 0.6 | – 0.0 | – 0.0 | – | 49.3 | 39.9 | 516.8 | 185.6 | 5.7 | 25 |
| 210.1 | 0.6 | – 0.0 | – 0.0 | – | 49.3 | 41.4 | 516.8 | 185.6 | 5.7 | Dec. 2 |
| 223.4 | 0.6 | – 0.0 | – 0.0 | – | 49.3 | 41.0 | 516.8 | 185.6 | 5.7 | 9 |
| 257.2 | 0.6 | – 0.0 | – 0.0 | – | 49.3 | 40.9 | 516.8 | 185.6 | 5.7 | 16 |
| 260.4 | 0.1 | – 0.0 | – 0.0 | – | 49.3 | 39.0 | 516.8 | 185.6 | 5.7 | 23 |
| 333.6 | 0.1 | – | – | – | 47.0 | 38.5 | 518.9 | 181.7 | 5.7 | 30 |
| 261.3 | 0.1 | 0.0 | 0.0 | – | 47.0 | 37.8 | 521.6 | 181.7 | 5.7 | 2023 Jan. 6 |

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 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | to banks in the home country | | | to banks in other Member States | | | Total | to non-banks in the home country | | |
| | | | | | | | | | | | Total | Enterprises and households | |
| | | | | Total | Loans | Securities issued by banks | Total | Loans | Securities issued by banks | | | Total | Loans |
| | | | | | | | | | | | | | |
| **End of year or month** | | | | | | | | | | | | | |
| 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 |
| 2020 | 8,943.3 | 47.5 | 2,622.7 | 2,177.9 | 1,913.5 | 264.4 | 444.8 | 307.1 | 137.7 | 4,179.6 | 3,709.8 | 3,297.0 | 2,993.1 |
| 2021 | 9,172.2 | 49.7 | 2,789.6 | 2,333.0 | 2,069.6 | 263.4 | 456.6 | 324.4 | 132.2 | 4,350.4 | 3,860.4 | 3,468.8 | 3,147.6 |
| 2021 Feb. | 9,148.1 | 45.5 | 2,824.0 | 2,328.8 | 2,060.6 | 268.2 | 495.2 | 361.1 | 134.1 | 4,210.4 | 3,731.9 | 3,318.5 | 3,011.4 |
| Mar. | 9,261.9 | 45.7 | 2,904.5 | 2,419.8 | 2,145.0 | 274.8 | 484.8 | 351.2 | 133.6 | 4,245.8 | 3,762.0 | 3,347.6 | 3,038.5 |
| Apr. | 9,269.2 | 44.9 | 2,935.1 | 2,441.4 | 2,168.7 | 272.8 | 493.7 | 360.0 | 133.7 | 4,236.4 | 3,756.9 | 3,347.0 | 3,036.8 |
| May | 9,277.1 | 45.7 | 2,974.7 | 2,485.3 | 2,212.9 | 272.4 | 489.4 | 355.6 | 133.9 | 4,246.1 | 3,772.8 | 3,363.3 | 3,049.8 |
| June | 9,293.7 | 46.5 | 2,959.9 | 2,469.9 | 2,197.4 | 272.5 | 490.0 | 356.7 | 133.3 | 4,253.7 | 3,772.0 | 3,370.7 | 3,056.9 |
| July | 9,321.9 | 46.8 | 2,943.6 | 2,448.2 | 2,178.3 | 269.9 | 495.3 | 361.1 | 134.2 | 4,270.2 | 3,788.1 | 3,386.0 | 3,071.8 |
| Aug. | 9,319.3 | 46.9 | 2,950.1 | 2,457.4 | 2,188.5 | 268.8 | 492.8 | 359.5 | 133.3 | 4,283.3 | 3,799.4 | 3,400.4 | 3,085.0 |
| Sep. | 9,325.3 | 47.4 | 2,952.3 | 2,472.9 | 2,203.6 | 269.3 | 479.4 | 344.9 | 134.5 | 4,303.0 | 3,812.2 | 3,409.8 | 3,093.8 |
| Oct. | 9,395.0 | 47.8 | 2,979.8 | 2,490.1 | 2,221.1 | 269.0 | 489.7 | 356.2 | 133.5 | 4,322.0 | 3,832.5 | 3,437.3 | 3,117.5 |
| Nov. | 9,495.5 | 48.1 | 3,008.0 | 2,519.5 | 2,253.4 | 266.1 | 488.5 | 355.4 | 133.1 | 4,352.1 | 3,856.4 | 3,459.8 | 3,138.9 |
| Dec. | 9,172.2 | 49.7 | 2,789.6 | 2,333.0 | 2,069.6 | 263.4 | 456.6 | 324.4 | 132.2 | 4,350.4 | 3,860.4 | 3,468.8 | 3,147.6 |
| 2022 Jan. | 9,717.0 | 47.7 | 3,029.2 | 2,522.4 | 2,258.2 | 264.2 | 506.8 | 375.0 | 131.8 | 4,378.1 | 3,875.3 | 3,484.8 | 3,162.4 |
| Feb. | 9,842.7 | 47.7 | 3,082.6 | 2,564.8 | 2,299.1 | 265.8 | 517.8 | 383.9 | 133.9 | 4,396.3 | 3,889.1 | 3,504.4 | 3,181.6 |
| Mar. | 9,962.9 | 50.0 | 3,066.9 | 2,546.2 | 2,281.9 | 264.3 | 520.7 | 387.1 | 133.7 | 4,426.8 | 3,916.4 | 3,526.5 | 3,204.1 |
| Apr. | 10,268.8 | 51.0 | 3,112.2 | 2,578.0 | 2,313.7 | 264.2 | 534.2 | 400.5 | 133.8 | 4,434.6 | 3,929.2 | 3,546.3 | 3,223.8 |
| May | 10,258.0 | 50.0 | 3,122.7 | 2,592.6 | 2,326.2 | 266.4 | 530.1 | 397.8 | 132.3 | 4,460.3 | 3,949.5 | 3,567.4 | 3,244.7 |
| June | 10,428.9 | 51.8 | 3,096.5 | 2,570.9 | 2,306.2 | 264.7 | 525.6 | 394.1 | 131.5 | 4,494.4 | 3,969.5 | 3,589.6 | 3,268.8 |
| July | 10,267.9 | 42.3 | 3,086.0 | 2,557.4 | 2,291.5 | 266.0 | 528.6 | 396.8 | 131.8 | 4,528.3 | 4,008.2 | 3,627.9 | 3,293.6 |
| Aug. | 10,627.2 | 23.6 | 3,166.4 | 2,625.3 | 2,359.2 | 266.1 | 541.1 | 409.1 | 132.0 | 4,555.4 | 4,039.2 | 3,664.4 | 3,331.1 |
| Sep. | 11,063.0 | 20.7 | 3,268.0 | 2,714.2 | 2,442.2 | 272.0 | 553.7 | 419.7 | 134.0 | 4,579.6 | 4,057.2 | 3,685.0 | 3,351.1 |
| Oct. | 11,036.0 | 20.0 | 3,259.8 | 2,696.8 | 2,424.2 | 272.6 | 563.0 | 416.3 | 146.7 | 4,591.1 | 4,077.8 | 3,699.7 | 3,365.9 |
| Nov. | 10,762.2 | 19.1 | 3,180.1 | 2,630.6 | 2,360.1 | 270.5 | 549.5 | 403.2 | 146.2 | 4,610.5 | 4,089.3 | 3,715.1 | 3,379.2 |
| **Changes 3** | | | | | | | | | | | | | |
| 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 |
| 2020 | 769.5 | 4.1 | 505.4 | 524.2 | 512.6 | 11.6 | − 18.8 | 16.2 | − 2.6 | 161.0 | 130.0 | 132.3 | 132.2 |
| 2021 | 207.2 | 2.2 | 161.3 | 155.6 | 156.4 | − 0.8 | 5.7 | 11.7 | − 5.9 | 175.7 | 154.6 | 173.7 | 155.9 |
| 2021 Mar. | 100.0 | 0.2 | 78.0 | 90.0 | 83.7 | 6.3 | − 12.0 | − 11.5 | − 0.5 | 34.3 | 29.7 | 28.8 | 27.0 |
| Apr. | 21.2 | − 0.8 | 33.6 | 23.0 | 24.6 | − 1.6 | 10.6 | 10.5 | 0.2 | − 8.8 | − 5.2 | − 0.1 | − 1.1 |
| May | 10.7 | 0.8 | 38.9 | 44.1 | 44.4 | − 0.3 | − 5.2 | − 5.5 | 0.3 | 10.4 | 16.0 | 15.7 | 13.0 |
| June | 5.3 | 0.9 | − 17.1 | − 16.3 | − 15.8 | − 0.5 | − 0.8 | − 0.2 | − 0.6 | 7.3 | − 0.5 | 7.6 | 6.7 |
| July | 26.3 | 0.2 | − 15.0 | − 19.5 | − 17.5 | − 2.0 | 4.5 | 4.4 | 0.1 | 17.3 | 16.4 | 15.6 | 15.3 |
| Aug. | − 3.9 | 0.2 | 6.7 | 9.3 | 10.3 | − 1.0 | − 2.6 | − 1.7 | − 0.9 | 13.2 | 11.2 | 14.7 | 13.4 |
| Sep. | 3.0 | 0.4 | 0.1 | 14.4 | 13.9 | 0.5 | − 14.4 | − 15.6 | 1.3 | 19.8 | 13.0 | 9.4 | 8.8 |
| Oct. | 70.4 | 0.5 | 27.7 | 17.3 | 17.6 | − 0.3 | 10.5 | 11.4 | − 1.0 | 19.2 | 20.6 | 28.0 | 24.1 |
| Nov. | 95.5 | 0.3 | 26.6 | 29.2 | 32.2 | − 3.0 | − 2.5 | − 2.1 | − 0.5 | 30.6 | 25.2 | 22.1 | 21.0 |
| Dec. | − 326.2 | 1.6 | − 218.7 | − 186.4 | − 183.6 | − 2.8 | − 32.2 | − 31.2 | − 1.0 | − 0.9 | 4.7 | 9.4 | 9.1 |
| 2022 Jan. | 340.3 | − 1.9 | 238.6 | 189.0 | 186.9 | 2.1 | 49.6 | 49.7 | − 0.1 | 28.1 | 15.4 | 16.2 | 14.9 |
| Feb. | 128.5 | − 0.0 | 52.7 | 41.4 | 39.7 | 1.7 | 11.3 | 9.1 | 2.2 | 20.4 | 15.8 | 21.3 | 20.9 |
| Mar. | 119.7 | 2.2 | − 15.5 | − 18.4 | − 17.2 | − 1.2 | 2.9 | 3.0 | − 0.1 | 31.4 | 27.6 | 22.2 | 22.6 |
| Apr. | 283.1 | 1.0 | 41.6 | 30.8 | 30.8 | 0.0 | 10.8 | 10.6 | 0.2 | 7.5 | 12.8 | 19.7 | 19.4 |
| May | 1.1 | − 1.0 | 12.4 | 15.3 | 12.8 | 2.5 | − 2.9 | − 1.5 | − 1.3 | 27.4 | 21.2 | 21.6 | 21.3 |
| June | 178.6 | 1.7 | − 28.2 | − 22.2 | − 20.6 | − 1.6 | 6.0 | 5.3 | − 0.6 | 32.9 | 19.9 | 22.0 | 23.7 |
| July | − 177.9 | − 9.5 | − 12.8 | − 14.2 | − 15.0 | 0.8 | 1.4 | 1.4 | 0.0 | 29.7 | 36.0 | 36.0 | 22.6 |
| Aug. | 359.0 | − 18.7 | 83.5 | 71.7 | 70.7 | 1.0 | 11.8 | 11.3 | 0.4 | 28.1 | 31.4 | 36.5 | 37.5 |
| Sep. | 428.4 | − 2.9 | 99.8 | 88.6 | 82.4 | 6.2 | 11.3 | 9.0 | 2.3 | 27.0 | 17.2 | 19.5 | 18.7 |
| Oct. | − 19.3 | − 0.7 | − 6.7 | − 17.0 | − 17.7 | 0.6 | 10.3 | − 2.4 | 12.7 | 12.4 | 21.1 | 15.3 | 15.5 |
| Nov. | − 269.9 | − 0.9 | − 79.7 | − 66.0 | − 63.9 | − 2.1 | − 13.7 | − 13.1 | − 0.6 | 19.5 | 12.2 | 16.3 | 14.3 |

* This table serves to supplement the "Overall monetary survey" in Section II. Unlike the other tables in Section IV, this table includes - in addition to the figures reported by banks (including building and loan associations) - data from money market funds. **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** | | | | | | | | | | | | | |
| 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 |
| 303.9 | 412.8 | 252.3 | 160.5 | 469.8 | 327.5 | 222.2 | 142.3 | 29.7 | 112.7 | 1,003.2 | 751.2 | 1,090.3 | 2020 |
| 321.2 | 391.6 | 245.1 | 146.5 | 490.1 | 362.7 | 244.0 | 127.4 | 28.4 | 99.0 | 1,094.2 | 853.3 | 888.3 | 2021 |
| 307.1 | 413.4 | 250.6 | 162.9 | 478.5 | 334.5 | 227.0 | 144.0 | 28.8 | 115.2 | 1,093.8 | 843.9 | 974.4 | 2021 Feb. |
| 309.1 | 414.4 | 249.3 | 165.1 | 483.8 | 339.4 | 232.3 | 144.4 | 28.9 | 115.5 | 1,105.7 | 855.5 | 960.1 | Mar. |
| 310.2 | 409.9 | 251.0 | 158.9 | 479.5 | 339.8 | 232.3 | 139.7 | 30.3 | 109.4 | 1,122.5 | 876.2 | 930.3 | Apr. |
| 313.5 | 409.5 | 250.6 | 158.9 | 473.2 | 339.1 | 231.9 | 134.1 | 28.4 | 105.7 | 1,108.3 | 862.4 | 902.3 | May |
| 313.8 | 401.4 | 249.1 | 152.3 | 481.7 | 339.4 | 231.8 | 142.3 | 28.8 | 113.5 | 1,111.0 | 864.8 | 922.5 | June |
| 314.2 | 402.2 | 251.3 | 150.8 | 482.0 | 344.2 | 236.6 | 137.8 | 28.6 | 109.2 | 1,097.1 | 849.1 | 964.3 | July |
| 315.4 | 398.9 | 248.0 | 150.9 | 484.0 | 346.1 | 238.8 | 137.9 | 28.3 | 109.6 | 1,084.8 | 839.7 | 954.2 | Aug. |
| 316.0 | 402.4 | 248.3 | 154.1 | 490.7 | 352.5 | 241.7 | 138.2 | 27.9 | 110.3 | 1,087.9 | 840.8 | 934.8 | Sep. |
| 319.9 | 395.1 | 249.7 | 145.4 | 489.5 | 356.0 | 244.3 | 133.4 | 30.3 | 103.2 | 1,134.6 | 889.6 | 910.9 | Oct. |
| 320.9 | 396.5 | 247.8 | 148.8 | 495.7 | 361.6 | 249.6 | 134.1 | 28.5 | 105.6 | 1,137.3 | 892.4 | 950.0 | Nov. |
| 321.2 | 391.6 | 245.1 | 146.5 | 490.1 | 362.7 | 244.0 | 127.4 | 28.4 | 99.0 | 1,094.2 | 853.3 | 888.3 | Dec. |
| 322.4 | 390.6 | 246.9 | 143.6 | 502.7 | 377.7 | 260.4 | 125.0 | 28.5 | 96.5 | 1,171.3 | 925.2 | 1,090.8 | 2022 Jan. |
| 322.8 | 384.8 | 244.7 | 140.0 | 507.2 | 381.4 | 262.7 | 125.8 | 28.6 | 97.2 | 1,190.1 | 939.6 | 1,125.9 | Feb. |
| 322.3 | 390.0 | 245.2 | 144.8 | 510.4 | 379.5 | 259.4 | 130.9 | 29.0 | 101.9 | 1,169.2 | 921.9 | 1,249.9 | Mar. |
| 322.5 | 382.9 | 246.5 | 136.4 | 505.4 | 378.8 | 257.8 | 126.7 | 32.2 | 94.4 | 1,174.5 | 926.0 | 1,496.5 | Apr. |
| 322.7 | 382.1 | 244.5 | 137.7 | 510.9 | 383.7 | 260.7 | 127.1 | 31.4 | 95.7 | 1,166.1 | 917.3 | 1,458.8 | May |
| 320.9 | 379.9 | 244.9 | 135.0 | 524.9 | 388.1 | 268.4 | 136.8 | 33.2 | 103.6 | 1,182.4 | 925.1 | 1,603.8 | June |
| 334.3 | 380.3 | 245.8 | 134.5 | 520.2 | 383.8 | 266.0 | 136.4 | 33.4 | 103.0 | 1,199.9 | 941.5 | 1,411.5 | July |
| 333.3 | 374.8 | 243.4 | 131.4 | 516.2 | 387.1 | 268.6 | 129.1 | 33.7 | 95.4 | 1,211.7 | 952.6 | 1,670.0 | Aug. |
| 333.9 | 372.2 | 244.5 | 127.7 | 522.4 | 390.5 | 273.1 | 132.0 | 35.4 | 96.6 | 1,220.9 | 961.0 | 1,973.3 | Sep. |
| 333.8 | 378.1 | 246.0 | 132.1 | 513.3 | 385.7 | 268.4 | 127.6 | 34.4 | 93.2 | 1,234.2 | 975.7 | 1,930.8 | Oct. |
| 335.9 | 374.2 | 246.3 | 127.9 | 521.1 | 394.0 | 276.5 | 127.1 | 32.7 | 94.4 | 1,224.6 | 963.4 | 1,728.0 | Nov. |
| **Changes 3** | | | | | | | | | | | | | |
| 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 | – 2.4 | – 1.7 | – 0.7 | 31.0 | 30.6 | 20.9 | 0.3 | – 0.4 | 0.7 | – 9.7 | – 8.2 | 108.8 | 2020 |
| 17.8 | – 19.1 | – 6.1 | – 13.1 | 21.1 | 35.5 | 22.6 | – 14.3 | – 1.1 | – 13.2 | 71.7 | 84.9 | – 203.7 | 2021 |
| 1.9 | 0.9 | – 1.3 | 2.2 | 4.6 | 4.2 | 4.9 | 0.4 | 0.1 | 0.3 | 2.8 | 3.3 | – 15.3 | 2021 Mar. |
| 1.0 | – 5.0 | 1.7 | – 6.7 | – 3.6 | 0.9 | 0.7 | – 4.5 | 1.5 | – 6.0 | 26.0 | 29.0 | – 28.8 | Apr. |
| 2.7 | – 0.4 | – 0.3 | 0.7 | – 5.6 | – 0.1 | 0.3 | – 5.5 | – 1.9 | – 3.6 | – 11.4 | – 11.4 | – 28.0 | May |
| 0.8 | – 8.1 | – 1.4 | – 6.7 | 7.8 | – 0.4 | – 0.6 | 8.2 | 0.4 | 7.7 | – 5.7 | – 5.3 | 19.9 | June |
| 0.4 | 0.7 | 2.3 | – 1.5 | 1.0 | 5.6 | 4.8 | – 4.7 | – 0.2 | 4.5 | – 15.0 | – 16.5 | 38.7 | July |
| 1.2 | – 3.4 | – 3.5 | 0.1 | 1.9 | 1.8 | 2.2 | 0.1 | – 0.3 | 0.4 | – 13.1 | – 10.0 | – 10.8 | Aug. |
| 0.6 | 3.6 | – 0.3 | 3.2 | 6.8 | 6.3 | 2.9 | 0.5 | – 0.4 | 0.9 | 0.1 | – 1.5 | – 17.4 | Sep. |
| 3.9 | – 7.4 | 1.2 | – 8.7 | – 1.4 | 3.5 | 2.6 | – 4.8 | 2.3 | – 7.2 | 47.6 | 49.5 | – 24.6 | Oct. |
| 1.1 | 3.0 | – 0.9 | 4.0 | 5.5 | 4.8 | 4.4 | 0.6 | 1.6 | 2.2 | – 4.5 | – 3.6 | 42.4 | Nov. |
| 0.3 | – 4.7 | – 2.6 | – 2.2 | – 5.6 | 0.9 | – 5.3 | 6.5 | 0.1 | 6.3 | – 45.9 | – 41.0 | 62.3 | Dec. |
| 1.3 | – 0.8 | 1.8 | – 2.6 | 12.7 | 14.8 | 16.0 | – 2.1 | 0.2 | 2.2 | 72.3 | 66.7 | 3.3 | 2022 Jan. |
| 0.5 | – 5.5 | – 2.1 | – 3.4 | 4.6 | 3.7 | 2.5 | 0.9 | 0.1 | 0.8 | 20.6 | 15.8 | 34.9 | Feb. |
| – 0.4 | 5.5 | 0.5 | 5.0 | 3.8 | – 1.7 | 3.3 | 5.5 | 0.4 | 5.1 | – 22.2 | – 19.2 | 123.7 | Mar. |
| 0.2 | – 6.8 | 1.4 | – 8.2 | – 5.3 | – 1.6 | – 2.7 | 3.7 | 3.2 | 6.9 | – 13.8 | – 14.2 | 246.6 | Apr. |
| 0.3 | – 0.4 | – 2.0 | 1.6 | 6.2 | 5.4 | 3.3 | 0.8 | – 0.8 | 1.7 | – 1.0 | – 2.0 | – 36.6 | May |
| – 1.7 | – 2.1 | 0.4 | – 2.5 | 13.0 | 3.0 | 6.1 | 10.0 | 1.9 | 8.1 | – 10.0 | – 18.2 | 182.3 | June |
| 13.4 | 0.0 | 0.9 | – 0.8 | – 6.3 | – 5.2 | – 2.9 | – 1.1 | 0.1 | – 1.3 | 7.8 | 8.0 | – 193.2 | July |
| – 1.0 | – 5.1 | – 2.3 | – 2.8 | – 3.3 | 3.4 | 2.5 | 6.7 | 0.4 | 7.0 | 7.2 | 6.5 | 258.9 | Aug. |
| 0.8 | – 2.4 | 1.1 | – 3.5 | 9.9 | 3.3 | 4.0 | 6.6 | 1.7 | 4.8 | 0.7 | 0.1 | 303.7 | Sep. |
| – 0.3 | 5.9 | 1.4 | 4.4 | – 8.7 | – 4.4 | – 4.6 | – 4.3 | – 1.0 | – 3.3 | 19.7 | 20.4 | – 44.0 | Oct. |
| 2.0 | – 4.2 | 0.0 | – 4.2 | 7.3 | 8.2 | 8.6 | – 0.9 | – 1.7 | 0.8 | – 9.4 | – 11.8 | – 199.4 | 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 Total | of banks in the home country | of banks in other Member States | Deposits of non-banks (non-MFIs) in the euro area Total | Deposits of non-banks in the home country Total | Overnight | With agreed maturities Total | of which: up to 2 years | At agreed notice Total | of which: up to 3 months | Deposits of non-banks Total | Overnight |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | End of year or month | |
| 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 |
| 2020 | 8,943.3 | 1,493.2 | 1,237.0 | 256.3 | 4,021.6 | 3,836.7 | 2,508.4 | 767.8 | 227.1 | 560.5 | 533.2 | 135.1 | 57.0 |
| 2021 | 9,172.2 | 1,628.6 | 1,338.6 | 289.9 | 4,129.9 | 3,931.8 | 2,649.3 | 721.3 | 203.9 | 561.2 | 537.1 | 153.8 | 70.7 |
| 2021 Feb. | 9,148.1 | 1,584.4 | 1,261.7 | 322.7 | 4,053.2 | 3,865.2 | 2,552.4 | 750.1 | 214.1 | 562.6 | 536.1 | 137.7 | 68.2 |
| Mar. | 9,261.9 | 1,634.1 | 1,336.6 | 297.6 | 4,068.3 | 3,876.2 | 2,569.2 | 744.7 | 212.3 | 562.3 | 536.2 | 142.2 | 71.0 |
| Apr. | 9,269.2 | 1,659.9 | 1,344.1 | 315.8 | 4,079.3 | 3,886.3 | 2,588.3 | 735.3 | 205.8 | 562.7 | 536.9 | 143.0 | 70.2 |
| May | 9,277.1 | 1,661.1 | 1,353.0 | 308.1 | 4,103.8 | 3,909.2 | 2,614.0 | 732.0 | 205.0 | 563.2 | 537.5 | 146.4 | 70.4 |
| June | 9,293.7 | 1,670.8 | 1,357.4 | 313.4 | 4,088.4 | 3,890.3 | 2,605.4 | 722.3 | 198.1 | 562.6 | 537.1 | 151.3 | 76.7 |
| July | 9,321.9 | 1,682.5 | 1,362.0 | 320.4 | 4,110.8 | 3,918.9 | 2,638.6 | 718.3 | 196.7 | 562.0 | 536.8 | 146.4 | 74.0 |
| Aug. | 9,319.3 | 1,686.5 | 1,365.8 | 320.7 | 4,119.2 | 3,925.6 | 2,648.6 | 715.5 | 194.1 | 561.5 | 536.6 | 147.8 | 74.7 |
| Sep. | 9,325.3 | 1,667.9 | 1,354.2 | 313.6 | 4,108.9 | 3,913.6 | 2,640.2 | 712.7 | 194.3 | 560.7 | 535.9 | 148.8 | 77.1 |
| Oct. | 9,395.0 | 1,690.9 | 1,364.7 | 326.2 | 4,140.0 | 3,942.6 | 2,657.0 | 725.5 | 206.4 | 560.1 | 535.6 | 151.4 | 78.1 |
| Nov. | 9,495.5 | 1,718.6 | 1,374.9 | 343.8 | 4,154.1 | 3,956.1 | 2,678.9 | 717.4 | 200.2 | 559.8 | 535.5 | 151.4 | 82.5 |
| Dec. | 9,172.2 | 1,628.6 | 1,338.6 | 289.9 | 4,129.9 | 3,931.8 | 2,649.3 | 721.3 | 203.9 | 561.2 | 537.1 | 153.8 | 70.7 |
| 2022 Jan. | 9,717.0 | 1,725.2 | 1,363.7 | 361.5 | 4,195.2 | 3,979.5 | 2,686.4 | 732.3 | 215.9 | 560.7 | 537.4 | 166.7 | 86.2 |
| Feb. | 9,842.7 | 1,743.7 | 1,369.7 | 374.0 | 4,209.7 | 3,993.9 | 2,699.7 | 733.4 | 217.5 | 560.8 | 537.7 | 169.3 | 90.1 |
| Mar. | 9,962.9 | 1,737.5 | 1,367.8 | 369.8 | 4,212.3 | 3,990.1 | 2,690.3 | 740.9 | 226.7 | 559.0 | 536.1 | 177.7 | 99.4 |
| Apr. | 10,268.8 | 1,766.8 | 1,384.4 | 382.3 | 4,223.7 | 4,003.6 | 2,700.1 | 745.6 | 234.6 | 557.9 | 535.2 | 175.5 | 93.4 |
| May | 10,258.0 | 1,765.9 | 1,393.7 | 372.2 | 4,236.1 | 4,013.3 | 2,718.3 | 738.4 | 229.4 | 556.5 | 534.0 | 176.2 | 97.1 |
| June | 10,428.9 | 1,744.4 | 1,384.7 | 359.7 | 4,235.0 | 4,008.2 | 2,708.8 | 744.7 | 238.3 | 554.7 | 532.4 | 180.5 | 102.7 |
| July | 10,267.9 | 1,772.1 | 1,383.3 | 388.9 | 4,267.6 | 4,041.3 | 2,722.8 | 765.6 | 259.2 | 552.9 | 530.7 | 179.5 | 99.0 |
| Aug. | 10,627.2 | 1,785.7 | 1,403.5 | 382.2 | 4,322.0 | 4,089.0 | 2,760.7 | 777.8 | 272.2 | 550.5 | 528.3 | 185.0 | 103.0 |
| Sep. | 11,063.0 | 1,814.5 | 1,415.7 | 398.8 | 4,342.6 | 4,105.7 | 2,748.5 | 812.0 | 306.6 | 545.2 | 523.1 | 191.1 | 102.4 |
| Oct. | 11,036.0 | 1,837.4 | 1,419.0 | 418.4 | 4,359.6 | 4,122.0 | 2,741.6 | 838.3 | 334.6 | 542.1 | 519.8 | 190.0 | 92.4 |
| Nov. | 10,762.2 | 1,773.7 | 1,345.0 | 428.7 | 4,401.3 | 4,132.6 | 2,752.4 | 843.3 | 344.7 | 536.8 | 514.3 | 193.3 | 96.9 |
| | | | | | | | | | | | | Changes 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 |
| 2020 | 769.5 | 340.0 | 317.0 | 23.0 | 244.9 | 188.4 | 277.6 | − 74.7 | − 34.9 | − 14.5 | − 7.2 | 18.7 | 1.8 |
| 2021 | 207.2 | 133.4 | 103.4 | 30.0 | 107.3 | 96.2 | 141.4 | − 45.8 | − 23.3 | 0.6 | 3.9 | 16.6 | 13.6 |
| 2021 Mar. | 100.0 | 47.8 | 73.8 | − 26.0 | 13.6 | 9.9 | 15.8 | − 5.6 | − 1.9 | − 0.3 | 0.1 | 4.0 | 2.5 |
| Apr. | 21.2 | 27.6 | 8.3 | 19.3 | 12.5 | 11.2 | 20.1 | − 9.4 | − 6.5 | 0.4 | 0.7 | 1.2 | − 0.6 |
| May | 10.7 | 0.6 | 9.1 | − 8.5 | 24.9 | 23.2 | 26.0 | − 3.2 | − 0.7 | 0.5 | 0.6 | 3.5 | 0.3 |
| June | 5.3 | 8.2 | 3.7 | 4.4 | − 16.6 | − 19.8 | − 9.4 | − 9.8 | − 7.1 | − 0.6 | − 0.4 | 4.5 | 6.1 |
| July | 26.3 | 14.4 | 7.4 | 7.0 | 22.3 | 28.6 | 33.2 | − 4.1 | − 1.4 | 0.6 | − 0.3 | − 4.9 | − 3.1 |
| Aug. | − 3.9 | 3.9 | 3.7 | 0.2 | 7.8 | 6.5 | 9.9 | − 2.8 | − 2.6 | − 0.5 | − 0.3 | 0.9 | 0.2 |
| Sep. | 3.0 | − 19.5 | − 11.7 | − 7.8 | − 7.3 | − 8.9 | − 6.5 | − 1.6 | 0.4 | − 0.8 | − 0.6 | 0.7 | 2.7 |
| Oct. | 70.4 | 24.1 | 11.2 | 12.9 | 31.1 | 29.1 | 16.8 | 12.9 | 12.1 | − 0.6 | − 0.4 | 2.5 | 1.1 |
| Nov. | 95.5 | 26.4 | 9.6 | 16.7 | 12.9 | 12.5 | 21.1 | − 8.4 | − 6.2 | − 0.3 | − 0.1 | 0.3 | 4.2 |
| Dec. | − 326.2 | − 90.4 | − 36.3 | − 54.1 | − 24.3 | − 24.3 | − 29.6 | 3.9 | 3.7 | 1.4 | 1.6 | 2.4 | − 11.9 |
| 2022 Jan. | 340.3 | 93.8 | 23.2 | 70.6 | 64.3 | 47.0 | 36.5 | 10.9 | 11.9 | 0.4 | 0.3 | 12.6 | 15.3 |
| Feb. | 128.5 | 19.3 | 6.1 | 13.2 | 14.2 | 14.6 | 13.4 | 1.1 | 1.6 | 0.1 | 0.3 | 2.2 | 3.5 |
| Mar. | 119.7 | − 6.6 | − 2.1 | − 4.5 | 2.2 | − 4.2 | − 9.7 | 7.3 | 9.2 | − 1.8 | − 1.6 | 8.3 | 9.3 |
| Apr. | 283.1 | 25.1 | 15.6 | 9.5 | 8.0 | 11.0 | 7.5 | 4.1 | 7.2 | − 0.6 | − 0.4 | − 3.1 | − 6.6 |
| May | 1.1 | 0.7 | 9.8 | − 9.1 | 13.6 | 10.6 | 18.9 | − 6.9 | − 5.0 | − 1.3 | − 1.2 | 1.0 | 3.9 |
| June | 178.6 | − 24.2 | − 9.7 | − 14.5 | − 2.8 | − 6.6 | − 10.7 | 5.9 | 8.5 | − 1.8 | − 1.6 | 4.1 | 5.6 |
| July | − 177.9 | 24.6 | − 1.6 | 26.2 | 29.3 | 30.8 | 13.0 | 19.6 | 19.9 | − 1.8 | − 1.7 | 2.0 | − 3.9 |
| Aug. | 359.0 | 15.5 | 23.0 | − 7.5 | 53.6 | 47.1 | 37.2 | 12.4 | 12.9 | − 2.4 | − 2.4 | 5.3 | 3.8 |
| Sep. | 428.4 | 25.2 | 11.7 | 13.5 | 19.0 | 15.4 | − 13.3 | 34.0 | 34.1 | − 5.3 | − 5.3 | 5.6 | − 0.9 |
| Oct. | − 19.3 | 24.2 | 3.8 | 20.3 | 17.2 | 16.2 | − 7.3 | 26.6 | 28.2 | − 3.1 | − 3.3 | − 0.7 | − 9.7 |
| Nov. | − 269.9 | − 63.6 | − 73.9 | 10.3 | 42.7 | 19.0 | 11.9 | 12.3 | 10.2 | − 5.3 | − 5.4 | 3.8 | 4.5 |

* This table serves to supplement the "Overall monetary survey" in Section II. Unlike the other tables in Section IV, this table includes - in addition to the figures reported by banks (including building and loan associations) - data from money market funds. **1** See footnote 1 in Table IV.2. **2** Excluding deposits of central 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 | | | | | | | of which: with maturities of up to 2 years [3] | | | | |
| Total | of which: up to 2 years | Total | of which: up to 3 months | Total | of which: domestic central governments | | | Total | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **End of year or month** | | | | | | | | | | | | | |
| 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 |
| 75.6 | 30.6 | 2.6 | 2.3 | 49.8 | 48.6 | 9.4 | 2.5 | 1,056.9 | 21.2 | 617.6 | 710.8 | 1,031.3 | 2020 |
| 80.7 | 22.8 | 2.4 | 2.2 | 44.2 | 43.5 | 2.2 | 2.3 | 1,110.8 | 27.5 | 757.2 | 732.3 | 809.0 | 2021 |
| 67.0 | 20.5 | 2.5 | 2.3 | 50.3 | 48.2 | 4.5 | 2.5 | 1,068.3 | 19.6 | 803.5 | 702.4 | 929.4 | 2021 Feb. |
| 68.7 | 22.0 | 2.5 | 2.3 | 49.9 | 48.9 | 6.7 | 2.9 | 1,090.4 | 21.5 | 833.7 | 712.0 | 913.8 | Mar. |
| 70.3 | 23.2 | 2.5 | 2.3 | 50.0 | 48.6 | 5.1 | 2.9 | 1,091.8 | 21.0 | 839.1 | 705.9 | 885.3 | Apr. |
| 73.5 | 26.7 | 2.5 | 2.3 | 48.2 | 46.6 | 6.0 | 2.3 | 1,087.7 | 23.5 | 854.7 | 702.7 | 858.8 | May |
| 72.0 | 25.9 | 2.5 | 2.3 | 46.9 | 45.6 | 4.5 | 2.3 | 1,084.6 | 23.8 | 836.9 | 725.4 | 880.7 | June |
| 69.9 | 22.9 | 2.5 | 2.3 | 45.5 | 44.3 | 6.0 | 2.3 | 1,087.2 | 23.5 | 800.0 | 719.2 | 913.9 | July |
| 70.7 | 24.0 | 2.5 | 2.3 | 45.8 | 44.0 | 7.4 | 2.3 | 1,089.9 | 25.5 | 790.7 | 725.0 | 898.4 | Aug. |
| 69.2 | 22.4 | 2.5 | 2.2 | 46.6 | 45.2 | 7.3 | 2.2 | 1,100.5 | 25.1 | 840.1 | 735.9 | 862.6 | Sep. |
| 70.9 | 23.4 | 2.4 | 2.2 | 46.1 | 45.2 | 7.4 | 2.2 | 1,118.0 | 24.6 | 866.7 | 729.5 | 840.3 | Oct. |
| 66.4 | 17.4 | 2.4 | 2.2 | 46.6 | 45.5 | 4.2 | 2.1 | 1,123.9 | 26.0 | 883.1 | 736.5 | 872.8 | Nov. |
| 80.7 | 22.8 | 2.4 | 2.2 | 44.2 | 43.5 | 2.2 | 2.3 | 1,110.8 | 27.5 | 757.2 | 732.3 | 809.0 | Dec. |
| 78.1 | 20.3 | 2.4 | 2.2 | 48.9 | 45.5 | 3.0 | 2.3 | 1,126.9 | 25.3 | 907.4 | 721.2 | 1,036.0 | 2022 Jan. |
| 76.8 | 19.8 | 2.4 | 2.2 | 46.4 | 42.8 | 2.4 | 2.4 | 1,141.1 | 26.2 | 945.9 | 717.7 | 1,080.0 | Feb. |
| 75.9 | 19.0 | 2.4 | 2.2 | 44.5 | 42.1 | 2.8 | 2.5 | 1,148.9 | 25.9 | 926.4 | 736.8 | 1,195.6 | Mar. |
| 79.8 | 22.5 | 2.4 | 2.2 | 44.6 | 42.2 | 2.3 | 2.3 | 1,161.1 | 26.3 | 939.2 | 734.6 | 1,438.9 | Apr. |
| 76.8 | 19.9 | 2.3 | 2.1 | 46.6 | 42.8 | 1.9 | 2.5 | 1,164.1 | 27.7 | 958.5 | 732.3 | 1,396.8 | May |
| 75.5 | 19.1 | 2.3 | 2.1 | 46.2 | 43.0 | 2.0 | 2.5 | 1,164.7 | 32.2 | 945.7 | 752.0 | 1,582.6 | June |
| 78.1 | 23.2 | 2.3 | 2.1 | 46.8 | 44.0 | 4.2 | 2.5 | 1,177.1 | 35.9 | 926.6 | 743.6 | 1,374.2 | July |
| 79.7 | 24.3 | 2.3 | 2.1 | 47.9 | 44.0 | 4.8 | 2.4 | 1,183.7 | 38.6 | 950.2 | 741.8 | 1,636.6 | Aug. |
| 86.4 | 31.2 | 2.3 | 2.1 | 45.9 | 43.3 | 3.2 | 2.5 | 1,203.3 | 45.8 | 987.2 | 758.0 | 1,951.6 | Sep. |
| 95.4 | 39.7 | 2.2 | 2.1 | 47.6 | 44.9 | 4.0 | 2.6 | 1,202.6 | 39.4 | 980.8 | 751.8 | 1,897.2 | Oct. |
| 94.2 | 31.7 | 2.2 | 2.0 | 75.4 | 71.1 | 4.7 | 2.6 | 1,202.8 | 42.6 | 939.6 | 746.8 | 1,690.7 | Nov. |
| **Changes [4]** | | | | | | | | | | | | | |
| – 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 |
| 17.0 | 14.3 | – 0.1 | – 0.1 | 37.8 | 37.3 | 3.6 | 0.6 | 11.8 | – 9.3 | 61.6 | – 1.5 | 108.5 | 2020 |
| 3.1 | – 8.0 | – 0.2 | – 0.1 | – 5.5 | – 5.0 | – 7.9 | 0.3 | 40.6 | 6.9 | 124.9 | 16.6 | – 207.9 | 2021 |
| 1.5 | 1.3 | – 0.0 | 0.0 | – 0.4 | 0.8 | 2.1 | 0.5 | 15.7 | 1.7 | 24.0 | 7.1 | – 10.8 | 2021 Mar. |
| 1.8 | 1.3 | – 0.0 | 0.0 | 0.1 | – 0.4 | – 2.2 | – 0.1 | 7.3 | – 0.4 | 11.1 | – 3.7 | – 31.3 | Apr. |
| 3.2 | 3.5 | – 0.0 | 0.0 | – 1.8 | – 1.9 | 0.9 | – 0.1 | – 2.7 | 2.5 | 17.0 | – 2.8 | – 27.1 | May |
| – 1.6 | – 0.9 | – 0.0 | 0.0 | – 1.3 | – 1.0 | – 1.5 | 0.1 | – 7.7 | 0.2 | – 22.7 | 20.9 | 24.6 | June |
| – 1.8 | – 2.7 | – 0.0 | 0.0 | – 1.4 | – 1.3 | 1.5 | – 0.1 | 2.3 | – 0.2 | – 37.2 | – 5.4 | 28.5 | July |
| 0.7 | 1.0 | – 0.0 | 0.0 | 0.3 | – 0.2 | 1.4 | – 0.0 | 2.2 | 2.0 | – 9.9 | 5.6 | – 14.9 | Aug. |
| – 1.9 | – 1.6 | – 0.0 | 0.0 | 0.8 | 1.2 | – 0.1 | – 0.0 | 7.0 | – 0.5 | 45.5 | 10.0 | – 32.4 | Sep. |
| 1.5 | 0.9 | – 0.0 | 0.0 | – 0.5 | 0.0 | 0.1 | 0.1 | 17.3 | – 0.5 | 27.1 | – 6.4 | – 22.8 | Oct. |
| – 4.5 | – 6.1 | – 0.0 | 0.0 | 0.7 | 0.4 | – 3.2 | – 0.1 | 1.7 | 1.4 | 11.7 | 5.9 | 40.3 | Nov. |
| 14.3 | 5.4 | 0.0 | 0.0 | – 2.4 | – 2.0 | – 2.0 | 0.2 | – 14.2 | 1.4 | – 127.3 | – 4.6 | – 63.4 | Dec. |
| – 2.7 | – 2.6 | – 0.0 | 0.0 | 4.7 | 2.0 | 0.7 | – 0.0 | 13.4 | – 2.3 | 146.6 | – 18.3 | 39.8 | 2022 Jan. |
| – 1.3 | – 0.5 | – 0.0 | 0.0 | – 2.5 | – 2.7 | – 0.5 | 0.1 | 15.0 | 1.0 | 39.4 | – 3.2 | 44.2 | Feb. |
| – 1.0 | – 0.8 | – 0.0 | 0.0 | – 2.0 | – 0.6 | 0.3 | 0.2 | 6.9 | – 0.3 | – 20.7 | 19.0 | 118.4 | Mar. |
| 3.6 | 3.2 | – 0.0 | 0.0 | 0.1 | 0.0 | – 0.5 | – 0.3 | 3.4 | 0.2 | 0.4 | – 5.8 | 252.8 | Apr. |
| – 2.9 | – 2.5 | – 0.0 | 0.0 | 2.0 | 0.6 | – 0.4 | 0.2 | 6.4 | 1.4 | 23.9 | – 1.0 | – 42.4 | May |
| – 1.5 | – 1.0 | – 0.0 | 0.0 | – 0.4 | 0.2 | 0.1 | – 0.0 | – 4.8 | 4.3 | – 6.3 | 17.6 | 199.0 | June |
| 1.9 | 3.7 | – 0.0 | 0.0 | 0.5 | 1.1 | 2.1 | 0.1 | 9.1 | 3.5 | – 24.8 | – 10.5 | – 207.8 | July |
| 1.6 | 1.0 | – 0.0 | 0.0 | 1.1 | 0.0 | 0.6 | – 0.1 | 4.1 | 2.7 | 20.1 | – 3.1 | 268.3 | Aug. |
| 6.5 | 6.7 | – 0.0 | 0.0 | – 2.0 | – 0.7 | – 1.6 | 0.1 | 15.8 | 7.0 | 31.8 | 14.9 | 323.1 | Sep. |
| 9.1 | 8.7 | – 0.0 | 0.0 | 1.7 | 1.6 | 0.8 | 0.1 | 1.8 | – 6.3 | – 2.8 | 5.3 | – 55.3 | Oct. |
| – 8.3 | – 8.3 | – 0.0 | 0.0 | 27.5 | 25.8 | 0.7 | 0.0 | – 2.6 | 0.5 | – 41.2 | – 2.2 | – 203.8 | 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) Total | of which: Balances and loans | Securities issued by banks | Lending to non-banks (non-MFIs) Total | of which: Loans for up to and including 1 year | for more than 1 year | Bills | Securities issued by non-banks | Participating interests | Other assets [1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All categories of banks** | | | | | | | | | | | | | |
| 2022 June | 1,432 | 10,491.7 | 1,143.9 | 2,695.5 | 2,222.0 | 470.5 | 4,835.6 | 467.9 | 3,657.7 | 0.3 | 692.3 | 94.9 | 1,721.8 |
| July | 1,425 | 10,330.6 | 1,127.2 | 2,702.9 | 2,227.8 | 471.4 | 4,874.4 | 464.5 | 3,690.2 | 0.3 | 703.2 | 96.2 | 1,529.9 |
| Aug. | 1,417 | 10,690.2 | 1,150.7 | 2,746.8 | 2,270.5 | 471.6 | 4,907.5 | 484.8 | 3,714.3 | 0.2 | 690.9 | 95.8 | 1,789.3 |
| Sep. | 1,407 | 11,124.8 | 144.9 | 3,861.7 | 3,377.0 | 479.0 | 4,929.2 | 492.3 | 3,732.3 | 0.3 | 688.2 | 96.3 | 2,092.8 |
| Oct. | 1,395 | 11,098.4 | 106.9 | 3,888.9 | 3,402.1 | 482.0 | 4,945.2 | 486.2 | 3,754.6 | 0.3 | 687.4 | 96.4 | 2,061.0 |
| Nov. | 1,390 | 10,825.9 | 109.3 | 3,797.2 | 3,313.5 | 479.3 | 4,964.5 | 494.3 | 3,762.5 | 0.2 | 691.3 | 96.2 | 1,858.7 |
| **Commercial banks [6]** | | | | | | | | | | | | | |
| 2022 Oct. | 244 | 5,157.3 | 31.1 | 1,855.3 | 1,769.7 | 85.0 | 1,563.7 | 308.6 | 1,021.5 | 0.2 | 223.2 | 31.6 | 1,675.6 |
| Nov. | 244 | 4,957.0 | 54.8 | 1,786.5 | 1,703.1 | 82.6 | 1,572.4 | 315.9 | 1,019.9 | 0.2 | 227.2 | 31.4 | 1,512.0 |
| **Big banks [7]** | | | | | | | | | | | | | |
| 2022 Oct. | 3 | 2,685.1 | 8.0 | 774.7 | 744.4 | 30.3 | 726.7 | 145.0 | 459.0 | 0.0 | 117.1 | 26.3 | 1,149.3 |
| Nov. | 3 | 2,525.9 | 37.1 | 712.3 | 682.0 | 30.3 | 722.8 | 142.6 | 453.6 | 0.0 | 122.2 | 26.1 | 1,027.7 |
| **Regional banks and other commercial banks** | | | | | | | | | | | | | |
| 2022 Oct. | 135 | 1,980.3 | 19.6 | 743.4 | 689.6 | 53.2 | 698.3 | 114.0 | 480.6 | 0.1 | 99.8 | 4.6 | 514.5 |
| Nov. | 135 | 1,955.0 | 13.4 | 756.5 | 705.0 | 50.9 | 708.7 | 123.6 | 482.0 | 0.1 | 99.0 | 4.6 | 471.8 |
| **Branches of foreign banks** | | | | | | | | | | | | | |
| 2022 Oct. | 106 | 491.9 | 3.5 | 337.3 | 335.7 | 1.6 | 138.7 | 49.6 | 81.9 | 0.1 | 6.3 | 0.7 | 11.8 |
| Nov. | 106 | 476.0 | 4.3 | 317.8 | 316.1 | 1.4 | 140.9 | 49.7 | 84.2 | 0.0 | 6.0 | 0.7 | 12.4 |
| **Landesbanken** | | | | | | | | | | | | | |
| 2022 Oct. | 6 | 989.1 | 14.5 | 387.3 | 337.0 | 50.1 | 429.4 | 47.4 | 343.3 | 0.0 | 35.8 | 9.4 | 148.5 |
| Nov. | 6 | 952.6 | 1.9 | 385.1 | 334.1 | 50.7 | 430.9 | 47.0 | 344.2 | 0.0 | 36.9 | 9.4 | 125.4 |
| **Savings banks** | | | | | | | | | | | | | |
| 2022 Oct. | 362 | 1,591.0 | 29.7 | 308.7 | 188.6 | 119.9 | 1,212.9 | 53.0 | 983.5 | – | 176.1 | 15.5 | 24.3 |
| Nov. | 362 | 1,588.6 | 28.1 | 304.9 | 185.2 | 119.5 | 1,215.2 | 52.9 | 987.6 | – | 174.4 | 15.5 | 24.8 |
| **Credit cooperatives** | | | | | | | | | | | | | |
| 2022 Oct. | 738 | 1,178.3 | 18.7 | 237.6 | 121.5 | 115.1 | 874.4 | 32.9 | 717.4 | 0.0 | 124.1 | 19.6 | 28.1 |
| Nov. | 733 | 1,179.0 | 17.3 | 235.9 | 120.5 | 114.3 | 878.1 | 33.1 | 720.8 | 0.0 | 124.2 | 19.6 | 28.1 |
| **Mortgage banks** | | | | | | | | | | | | | |
| 2022 Oct. | 9 | 234.4 | 2.4 | 28.7 | 22.0 | 6.5 | 197.8 | 2.8 | 180.1 | – | 14.9 | 0.1 | 5.4 |
| Nov. | 9 | 227.8 | 1.2 | 22.9 | 16.1 | 6.6 | 197.9 | 2.7 | 180.5 | – | 14.6 | 0.1 | 5.5 |
| **Building and loan associations** | | | | | | | | | | | | | |
| 2022 Oct. | 18 | 259.6 | 0.6 | 46.3 | 31.0 | 15.3 | 208.6 | 1.3 | 183.9 | . | 23.4 | 0.3 | 3.8 |
| Nov. | 18 | 259.6 | 0.4 | 46.0 | 30.6 | 15.4 | 209.0 | 1.3 | 184.5 | . | 23.2 | 0.3 | 3.9 |
| **Banks with special, development and other central support tasks** | | | | | | | | | | | | | |
| 2022 Oct. | 18 | 1,688.6 | 10.0 | 1,024.9 | 932.4 | 90.2 | 458.5 | 40.3 | 324.9 | – | 90.0 | 20.0 | 175.4 |
| Nov. | 18 | 1,661.4 | 5.6 | 1,015.9 | 923.9 | 90.1 | 461.0 | 41.5 | 325.0 | – | 90.8 | 20.0 | 158.9 |
| **Memo item:    Foreign banks [8]** | | | | | | | | | | | | | |
| 2022 Oct. | 141 | 2,531.3 | 15.7 | 1,001.3 | 964.5 | 36.3 | 669.4 | 160.7 | 400.3 | 0.2 | 103.0 | 3.6 | 841.3 |
| Nov. | 141 | 2,455.6 | 13.2 | 985.3 | 950.6 | 34.1 | 684.0 | 169.9 | 402.0 | 0.1 | 106.6 | 3.6 | 769.5 |
| **of which: Banks majority-owned by foreign banks [9]** | | | | | | | | | | | | | |
| 2022 Oct. | 35 | 2,039.4 | 12.2 | 664.0 | 628.8 | 34.7 | 530.8 | 111.2 | 318.4 | 0.1 | 96.7 | 2.9 | 829.5 |
| Nov. | 35 | 1,979.6 | 8.9 | 667.6 | 634.5 | 32.7 | 543.1 | 120.2 | 317.8 | 0.1 | 100.6 | 2.9 | 757.1 |

* Assets and liabilities of monetary financial institutions (MFIs) in Germany. The assets and liabilities of foreign branches, of money market funds (which are also classified as MFIs) and of the Bundesbank are not included. For the definitions of the respective items, see the footnotes to Table IV.3. **1** Owing to the Act Modernising Accounting Law (Gesetz zur Modernisierung des Bilanzrechts) of 25 May 2009, derivative financial instruments in the trading portfolio (trading portfolio derivatives) within the meaning of Section 340e (3) sentence 1 of the German Commercial Code (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 the Statistical Series Banking statistics, in Tables I.1 to I.3. **2** For building and loan associations: including deposits under savings

**IV. Banks**

| Deposits of banks (MFIs) | | | Deposits of non-banks (non-MFIs) | | | | | | | | Bearer debt securities outstanding [5] | Capital including published reserves, participation rights capital, funds for general banking risks | Other liabilities [1] | End of month |
| | 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 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | **All categories of banks** |
| 2,484.9 | 772.6 | 1,712.3 | 4,439.4 | 2,937.1 | 272.0 | 645.8 | 62.8 | 560.4 | 537.6 | 24.0 | 1,273.7 | 585.7 | 1,708.0 | 2022 June |
| 2,490.7 | 743.1 | 1,747.6 | 4,476.6 | 2,950.6 | 296.0 | 647.2 | 65.6 | 558.6 | 535.9 | 24.2 | 1,274.3 | 586.4 | 1,502.6 | July |
| 2,523.9 | 746.9 | 1,777.0 | 4,534.7 | 2,998.1 | 309.1 | 646.3 | 70.2 | 556.1 | 533.5 | 25.1 | 1,276.5 | 587.5 | 1,767.5 | Aug. |
| 2,585.3 | 788.2 | 1,797.1 | 4,559.0 | 2,987.1 | 354.5 | 640.7 | 64.0 | 550.7 | 528.1 | 26.1 | 1,309.4 | 588.6 | 2,082.6 | Sep. |
| 2,607.9 | 795.7 | 1,812.2 | 4,570.2 | 2,968.7 | 385.1 | 640.5 | 64.3 | 547.6 | 524.8 | 28.3 | 1,299.9 | 588.5 | 2,032.0 | Oct. |
| 2,495.8 | 747.5 | 1,748.3 | 4,619.6 | 3,003.0 | 395.9 | 646.8 | 68.4 | 542.2 | 519.3 | 31.7 | 1,291.9 | 590.1 | 1,828.4 | Nov. |
| | | | | | | | | | | | | | | **Commercial banks [6]** |
| 1,381.9 | 612.1 | 769.7 | 1,804.7 | 1,251.9 | 213.5 | 233.0 | 63.7 | 96.1 | 92.8 | 10.2 | 184.2 | 198.6 | 1,587.9 | 2022 Oct. |
| 1,332.8 | 568.2 | 764.5 | 1,817.9 | 1,257.3 | 220.1 | 235.2 | 65.3 | 94.7 | 91.3 | 10.7 | 186.8 | 200.1 | 1,419.4 | Nov. |
| | | | | | | | | | | | | | | **Big banks [7]** |
| 523.7 | 197.9 | 325.8 | 871.8 | 591.4 | 122.8 | 75.0 | 33.3 | 81.5 | 78.8 | 1.1 | 137.4 | 72.6 | 1,079.6 | 2022 Oct. |
| 491.4 | 192.0 | 299.4 | 873.2 | 588.5 | 124.0 | 79.2 | 31.6 | 80.4 | 77.7 | 1.1 | 139.4 | 73.7 | 948.2 | Nov. |
| | | | | | | | | | | | | | | **Regional banks and other commercial banks** |
| 569.7 | 250.1 | 319.6 | 757.0 | 535.9 | 63.1 | 134.6 | 30.4 | 14.3 | 13.7 | 9.1 | 46.4 | 110.7 | 496.5 | 2022 Oct. |
| 570.5 | 239.9 | 330.6 | 769.5 | 545.2 | 67.4 | 133.4 | 33.7 | 14.0 | 13.4 | 9.5 | 46.9 | 111.2 | 457.0 | Nov. |
| | | | | | | | | | | | | | | **Branches of foreign banks** |
| 288.5 | 164.2 | 124.4 | 175.9 | 124.6 | 27.5 | 23.4 | – | 0.3 | 0.3 | 0.1 | 0.4 | 15.2 | 11.8 | 2022 Oct. |
| 270.9 | 136.4 | 134.5 | 175.3 | 123.6 | 28.7 | 22.6 | – | 0.3 | 0.3 | 0.1 | 0.4 | 15.2 | 14.2 | Nov. |
| | | | | | | | | | | | | | | **Landesbanken** |
| 289.7 | 51.4 | 238.3 | 308.4 | 157.4 | 74.8 | 70.6 | 0.6 | 5.5 | 5.4 | 0.1 | 191.7 | 43.1 | 156.2 | 2022 Oct. |
| 277.7 | 54.1 | 223.6 | 308.4 | 166.8 | 66.5 | 69.5 | 0.5 | 5.4 | 5.3 | 0.2 | 191.9 | 43.1 | 131.5 | Nov. |
| | | | | | | | | | | | | | | **Savings banks** |
| 205.7 | 3.2 | 202.5 | 1,179.2 | 865.0 | 17.6 | 13.9 | – | 269.9 | 254.5 | 12.7 | 16.4 | 137.4 | 52.3 | 2022 Oct. |
| 195.0 | 3.8 | 191.1 | 1,187.2 | 869.3 | 21.4 | 14.0 | – | 267.5 | 251.9 | 15.0 | 16.6 | 137.4 | 52.5 | Nov. |
| | | | | | | | | | | | | | | **Credit cooperatives** |
| 178.7 | 2.7 | 176.0 | 854.2 | 626.4 | 29.1 | 18.3 | – | 175.6 | 171.7 | 4.8 | 8.6 | 101.2 | 35.5 | 2022 Oct. |
| 175.6 | 2.7 | 172.9 | 857.9 | 626.6 | 32.9 | 18.8 | – | 174.2 | 170.3 | 5.4 | 8.6 | 101.4 | 35.6 | Nov. |
| | | | | | | | | | | | | | | **Mortgage banks** |
| 60.1 | 3.8 | 56.2 | 53.7 | 2.7 | 5.0 | 46.0 | – | – | – | . | 103.4 | 10.4 | 6.9 | 2022 Oct. |
| 53.3 | 3.8 | 49.6 | 53.5 | 2.5 | 5.3 | 45.7 | 0.1 | – | – | . | 103.4 | 10.4 | 7.1 | Nov. |
| | | | | | | | | | | | | | | **Building and loan associations** |
| 39.1 | 2.8 | 36.4 | 193.1 | 3.9 | 1.4 | 187.3 | – | 0.5 | 0.5 | 0.1 | 5.1 | 12.1 | 10.1 | 2022 Oct. |
| 39.3 | 3.2 | 36.1 | 193.1 | 3.9 | 1.4 | 187.3 | – | 0.5 | 0.5 | 0.1 | 5.1 | 12.1 | 9.9 | Nov. |
| | | | | | | | | | | | | | | **Banks with special, development and other central support tasks** |
| 452.6 | 119.6 | 333.1 | 176.9 | 61.5 | 43.7 | 71.4 | 0.1 | – | – | . | 790.4 | 85.6 | 183.1 | 2022 Oct. |
| 422.2 | 111.7 | 310.5 | 201.7 | 76.7 | 48.3 | 76.3 | 2.4 | – | – | . | 779.6 | 85.6 | 172.4 | Nov. |
| | | | | | | | | | | | | | | **Memo item: Foreign banks [8]** |
| 822.6 | 415.8 | 406.8 | 743.9 | 536.4 | 88.9 | 98.3 | 31.8 | 16.9 | 16.6 | 3.4 | 43.6 | 95.9 | 825.2 | 2022 Oct. |
| 809.2 | 378.6 | 430.5 | 750.3 | 539.2 | 90.5 | 100.4 | 35.8 | 16.4 | 16.1 | 3.9 | 44.6 | 96.3 | 755.2 | Nov. |
| | | | | | | | | | | | | | | **of which: Banks majority-owned by foreign banks [9]** |
| 534.1 | 251.6 | 282.4 | 568.0 | 411.9 | 61.4 | 74.9 | 31.8 | 16.6 | 16.3 | 3.4 | 43.2 | 80.7 | 813.4 | 2022 Oct. |
| 538.3 | 242.2 | 296.0 | 575.1 | 415.7 | 61.8 | 77.7 | 35.8 | 16.1 | 15.8 | 3.8 | 44.2 | 81.1 | 740.9 | Nov. |

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 Series 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 *** |
| 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 |
| 2020 | 47.2 | 792.9 | 1,367.9 | 1,119.7 | 0.0 | 0.7 | 247.5 | 8.8 | 3,647.0 | 3,245.1 | 0.2 | 4.0 | 397.7 |
| 2021 | 49.4 | 905.0 | 1,409.6 | 1,163.7 | – | 0.5 | 245.3 | 10.3 | 3,798.1 | 3,392.4 | 0.3 | 2.6 | 402.8 |
| 2021 June | 46.1 | 1,042.8 | 1,409.7 | 1,153.8 | 0.0 | 0.8 | 255.1 | 10.3 | 3,709.2 | 3,305.7 | 0.2 | 5.8 | 397.6 |
| July | 46.3 | 1,059.2 | 1,372.0 | 1,118.1 | 0.0 | 0.8 | 253.2 | 10.3 | 3,725.3 | 3,322.9 | 0.2 | 6.1 | 396.2 |
| Aug. | 46.5 | 1,015.2 | 1,425.2 | 1,172.4 | 0.0 | 0.8 | 252.1 | 10.3 | 3,736.4 | 3,332.8 | 0.1 | 5.7 | 397.8 |
| Sep. | 47.1 | 1,054.9 | 1,399.9 | 1,147.7 | 0.0 | 0.7 | 251.5 | 10.3 | 3,749.8 | 3,341.9 | 0.1 | 4.4 | 403.3 |
| Oct. | 47.6 | 1,052.4 | 1,419.3 | 1,167.7 | 0.0 | 0.7 | 250.9 | 10.3 | 3,770.2 | 3,366.9 | 0.2 | 5.0 | 398.0 |
| Nov. | 47.9 | 1,068.7 | 1,432.2 | 1,183.6 | – | 0.7 | 248.0 | 10.0 | 3,794.0 | 3,386.4 | 0.2 | 5.6 | 401.9 |
| Dec. | 49.4 | 905.0 | 1,409.6 | 1,163.7 | – | 0.5 | 245.3 | 10.3 | 3,798.1 | 3,392.4 | 0.3 | 2.6 | 402.8 |
| 2022 Jan. | 47.4 | 1,066.0 | 1,439.2 | 1,191.8 | – | 0.7 | 246.7 | 10.1 | 3,812.8 | 3,409.0 | 0.2 | 3.1 | 400.5 |
| Feb. | 47.2 | 1,094.0 | 1,453.6 | 1,204.6 | – | 0.3 | 248.7 | 10.0 | 3,826.5 | 3,426.0 | 0.2 | 5.0 | 395.3 |
| Mar. | 49.5 | 1,086.3 | 1,442.6 | 1,195.1 | – | 0.3 | 247.3 | 10.0 | 3,853.8 | 3,449.0 | 0.2 | 3.3 | 401.3 |
| Apr. | 50.4 | 1,200.5 | 1,360.3 | 1,112.8 | – | 0.6 | 246.9 | 9.9 | 3,866.6 | 3,470.0 | 0.2 | 3.5 | 392.9 |
| May | 49.4 | 1,122.8 | 1,452.7 | 1,202.9 | – | 0.7 | 249.1 | 9.9 | 3,886.7 | 3,488.9 | 0.2 | 3.2 | 394.4 |
| June | 51.1 | 1,090.9 | 1,462.8 | 1,214.8 | – | 0.8 | 247.2 | 9.8 | 3,906.6 | 3,513.4 | 0.2 | 3.7 | 389.3 |
| July | 41.6 | 1,084.2 | 1,454.9 | 1,206.8 | – | 0.8 | 247.2 | 9.8 | 3,945.0 | 3,539.1 | 0.2 | 3.6 | 402.2 |
| Aug. | 23.1 | 1,126.7 | 1,480.7 | 1,232.0 | – | 1.3 | 247.5 | 9.9 | 3,976.0 | 3,574.3 | 0.1 | 3.9 | 397.7 |
| Sep. | 20.4 | 122.4 | 2,573.9 | 2,319.2 | – | 1.4 | 253.2 | 9.8 | 3,993.6 | 3,595.3 | 0.2 | 3.6 | 394.5 |
| Oct. | 19.7 | 86.6 | 2,592.3 | 2,337.0 | – | 1.5 | 253.7 | 10.0 | 4,014.1 | 3,611.6 | 0.2 | 4.3 | 398.0 |
| Nov. | 18.8 | 89.3 | 2,523.5 | 2,270.3 | – | 1.5 | 251.7 | 11.1 | 4,025.7 | 3,625.3 | 0.2 | 3.6 | 396.7 |
| | | | | | | | | | | | | | **Changes *** |
| 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 |
| 2020 | + 4.1 | + 316.4 | + 201.2 | + 191.6 | – 0.0 | + 0.0 | + 9.6 | + 4.3 | + 123.2 | + 123.6 | – 0.1 | + 0.7 | – 1.0 |
| 2021 | + 2.2 | + 111.8 | + 44.1 | + 46.3 | – 0.0 | – 0.2 | – 2.0 | + 1.5 | + 152.2 | + 147.8 | + 0.0 | – 2.2 | + 6.6 |
| 2021 June | + 0.6 | – 1.9 | – 13.6 | – 13.3 | – 0.0 | – 0.1 | – 0.3 | + 0.1 | – 0.4 | + 5.5 | + 0.0 | + 1.3 | – 7.1 |
| July | + 0.2 | + 15.3 | – 35.1 | – 33.1 | – | – 0.0 | – 1.9 | + 0.1 | + 16.1 | + 17.2 | + 0.0 | + 0.3 | – 1.4 |
| Aug. | + 0.2 | – 43.8 | + 53.4 | + 54.4 | – | – 0.1 | – 1.1 | – 0.0 | + 10.9 | + 9.7 | – 0.0 | – 0.5 | + 1.7 |
| Sep. | + 0.6 | + 39.7 | – 26.2 | – 25.5 | + 0.0 | – 0.1 | – 0.6 | – 0.0 | + 13.5 | + 9.2 | + 0.0 | – 1.2 | + 5.4 |
| Oct. | + 0.5 | – 2.4 | + 19.5 | + 20.0 | + 0.0 | – 0.0 | – 0.5 | – 0.1 | + 20.5 | + 25.1 | + 0.0 | + 0.6 | – 5.2 |
| Nov. | + 0.3 | + 16.6 | + 12.9 | + 15.9 | – 0.0 | – 0.0 | – 2.9 | – 0.3 | + 25.5 | + 20.4 | + 0.0 | + 0.6 | + 4.5 |
| Dec. | + 1.6 | – 163.6 | – 22.4 | – 19.6 | – | – 0.1 | – 2.7 | + 0.3 | + 4.3 | + 6.2 | + 0.1 | – 3.0 | + 0.9 |
| 2022 Jan. | – 2.0 | + 161.0 | + 27.8 | + 26.3 | – | + 0.1 | + 1.4 | – 0.3 | + 14.7 | + 16.6 | – 0.1 | + 0.5 | – 2.3 |
| Feb. | – 0.2 | + 28.0 | + 13.1 | + 11.5 | – | + 0.4 | + 2.0 | – 0.1 | + 15.1 | + 18.4 | + 0.0 | + 1.9 | – 5.2 |
| Mar. | + 2.3 | – 7.8 | – 10.9 | – 9.5 | – | – 0.0 | – 1.4 | – 0.0 | + 27.3 | + 23.0 | – 0.0 | – 1.7 | + 6.0 |
| Apr. | + 0.9 | + 114.2 | – 82.3 | – 82.3 | – | + 0.3 | – 0.4 | – 0.0 | + 13.1 | + 21.3 | + 0.0 | + 0.2 | – 8.4 |
| May | – 1.0 | – 77.7 | + 92.4 | + 90.0 | – | + 0.1 | + 2.3 | – 0.0 | + 20.1 | + 18.9 | – 0.1 | – 0.3 | + 1.5 |
| June | + 1.7 | – 31.9 | + 10.1 | + 11.9 | – | + 0.1 | – 1.9 | – 0.1 | + 19.9 | + 24.5 | – 0.0 | + 0.5 | – 5.1 |
| July | – 9.5 | – 6.8 | – 7.5 | – 7.6 | – | + 0.1 | – 0.0 | – 0.1 | + 36.1 | + 23.5 | + 0.0 | – 0.1 | + 12.7 |
| Aug. | – 18.5 | + 42.5 | + 29.0 | + 28.3 | – | + 0.2 | + 0.5 | + 0.1 | + 30.9 | + 35.1 | – 0.0 | + 0.3 | – 4.5 |
| Sep. | – 2.7 | – 1,004.3 | + 1,092.9 | + 1,087.0 | – | + 0.2 | + 5.7 | – 0.0 | + 16.5 | + 19.9 | + 0.1 | – 0.3 | – 3.2 |
| Oct. | – 0.7 | – 35.8 | + 18.5 | + 17.8 | – | + 0.1 | + 0.6 | + 0.2 | + 20.7 | + 16.6 | – 0.0 | + 0.7 | + 3.5 |
| Nov. | – 0.8 | + 2.7 | – 68.5 | – 66.4 | – | – 0.0 | – 2.1 | + 1.1 | + 12.0 | + 14.0 | – 0.0 | – 0.7 | – 1.3 |

* See Table IV.2, footnote *; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** Excluding debt securities arising from the exchange of equalisation claims (see also footnote 2). **2** Including debt securities arising from the exchange of equalisation claims. **3** Including liabilities arising from registered debt securities, registered money market paper and non-negotiable bearer debt securities;

**IV. Banks**

| Equalisation claims 2 | Memo item: Fiduciary loans | Participating interests in domestic banks and enterprises | Deposits of domestic banks (MFIs) 3 | | | | | Deposits of domestic non-banks (non-MFIs) | | | | | | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | Sight deposits 4 | Time deposits 4 | Redis-counted bills 5 | Memo item: Fiduciary loans | Total | Sight de-posits | Time deposits 6 | Savings de-posits 7 | Bank savings bonds 8 | Memo item: Fiduciary loans | |
| **End of year or month *** | | | | | | | | | | | | | | |
| – | 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 |
| – | 23.5 | 78.3 | 1,236.7 | 125.0 | 1,111.6 | 0.0 | 13.1 | 3,885.2 | 2,513.0 | 783.3 | 560.6 | 28.3 | 34.4 | 2020 |
| – | 25.7 | 79.2 | 1,338.4 | 117.2 | 1,221.3 | 0.0 | 16.4 | 3,976.3 | 2,654.6 | 736.0 | 561.2 | 24.5 | 34.2 | 2021 |
| – | 25.0 | 78.7 | 1,357.0 | 132.7 | 1,224.3 | 0.0 | 15.8 | 3,936.4 | 2,612.1 | 735.7 | 562.6 | 26.1 | 34.6 | 2021 June |
| – | 25.1 | 78.1 | 1,360.7 | 136.1 | 1,224.5 | 0.0 | 15.9 | 3,964.6 | 2,646.0 | 730.7 | 562.0 | 25.9 | 34.5 | July |
| – | 25.2 | 78.2 | 1,364.7 | 135.3 | 1,229.4 | 0.0 | 16.1 | 3,971.0 | 2,656.0 | 727.8 | 561.5 | 25.6 | 34.3 | Aug. |
| – | 25.2 | 79.0 | 1,353.8 | 128.9 | 1,224.9 | 0.0 | 16.2 | 3,960.3 | 2,647.9 | 726.1 | 560.7 | 25.5 | 34.1 | Sep. |
| – | 25.1 | 79.0 | 1,363.6 | 132.9 | 1,230.7 | 0.0 | 16.2 | 3,989.1 | 2,664.3 | 739.3 | 560.1 | 25.3 | 33.9 | Oct. |
| – | 25.2 | 79.1 | 1,373.9 | 135.2 | 1,238.6 | 0.0 | 16.3 | 4,002.4 | 2,685.9 | 731.8 | 559.9 | 24.8 | 33.6 | Nov. |
| – | 25.7 | 79.2 | 1,338.4 | 117.2 | 1,221.3 | 0.0 | 16.4 | 3,976.3 | 2,654.6 | 736.0 | 561.2 | 24.5 | 34.2 | Dec. |
| – | 25.7 | 78.6 | 1,363.7 | 137.2 | 1,226.5 | 0.0 | 16.4 | 4,025.9 | 2,690.9 | 750.0 | 560.8 | 24.2 | 33.9 | 2022 Jan. |
| – | 25.7 | 78.7 | 1,369.7 | 140.5 | 1,229.2 | 0.0 | 16.6 | 4,037.8 | 2,704.5 | 748.5 | 560.9 | 23.9 | 33.8 | Feb. |
| – | 25.8 | 78.7 | 1,367.7 | 137.7 | 1,230.1 | 0.0 | 16.5 | 4,033.7 | 2,695.6 | 755.2 | 559.0 | 23.9 | 33.8 | Mar. |
| – | 25.9 | 78.7 | 1,384.4 | 140.6 | 1,243.8 | 0.0 | 16.7 | 4,046.7 | 2,705.6 | 759.4 | 557.9 | 23.8 | 33.8 | Apr. |
| – | 26.2 | 78.6 | 1,393.7 | 142.7 | 1,251.0 | 0.0 | 17.1 | 4,056.8 | 2,724.3 | 752.1 | 556.6 | 23.8 | 33.6 | May |
| – | 26.1 | 78.8 | 1,384.7 | 147.1 | 1,237.6 | 0.0 | 16.9 | 4,051.8 | 2,714.4 | 758.8 | 554.8 | 23.8 | 33.4 | June |
| – | 25.9 | 80.3 | 1,383.3 | 134.3 | 1,249.0 | 0.0 | 16.6 | 4,086.4 | 2,729.0 | 780.4 | 553.0 | 24.1 | 33.0 | July |
| – | 25.9 | 79.8 | 1,403.5 | 136.0 | 1,267.5 | – | 16.5 | 4,134.3 | 2,766.8 | 792.0 | 550.6 | 25.0 | 33.0 | Aug. |
| – | 25.8 | 80.2 | 1,415.7 | 149.2 | 1,266.5 | 0.0 | 16.7 | 4,149.9 | 2,755.6 | 823.1 | 545.2 | 25.9 | 33.2 | Sep. |
| – | 25.8 | 80.4 | 1,419.0 | 138.1 | 1,280.9 | 0.0 | 16.1 | 4,168.4 | 2,748.7 | 849.3 | 542.2 | 28.1 | 33.6 | Oct. |
| – | 25.9 | 80.2 | 1,345.0 | 135.4 | 1,209.6 | 0.0 | 16.1 | 4,205.6 | 2,767.9 | 869.3 | 536.9 | 31.5 | 34.8 | Nov. |
| **Changes *** | | | | | | | | | | | | | | |
| – | − 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 | − 3.4 | − 4.1 | − 1.4 | 2019 |
| – | + 5.7 | − 3.3 | + 313.4 | + 23.2 | + 290.2 | − 0.0 | + 8.2 | + 221.6 | + 273.7 | − 32.7 | − 14.5 | − 4.9 | + 1.9 | 2020 |
| – | + 2.3 | + 1.0 | + 105.2 | − 7.4 | + 112.6 | + 0.0 | + 3.3 | + 95.3 | + 144.3 | − 46.2 | + 0.7 | − 3.5 | − 0.2 | 2021 |
| – | + 0.2 | + 0.1 | + 5.0 | − 7.3 | + 12.3 | + 0.0 | + 0.3 | − 19.8 | − 8.5 | − 10.5 | − 0.6 | − 0.2 | − 0.0 | 2021 June |
| – | + 0.1 | + 0.1 | + 6.6 | + 3.5 | + 3.1 | – | + 0.1 | + 28.2 | + 33.9 | − 5.0 | − 0.6 | − 0.2 | − 0.1 | July |
| – | + 0.2 | + 0.1 | + 4.1 | − 0.8 | + 4.9 | − 0.0 | + 0.2 | + 6.4 | + 10.0 | − 2.9 | − 0.5 | − 0.2 | − 0.2 | Aug. |
| – | + 0.0 | + 0.7 | − 10.6 | − 6.4 | − 4.2 | + 0.0 | + 0.1 | − 6.7 | − 5.4 | − 0.3 | − 0.8 | − 0.2 | − 0.2 | Sep. |
| – | − 0.1 | + 0.1 | + 10.5 | + 4.0 | + 6.5 | + 0.0 | + 0.0 | + 28.8 | + 16.4 | + 13.2 | − 0.6 | − 0.2 | − 0.2 | Oct. |
| – | + 0.1 | + 0.1 | + 10.2 | + 2.3 | + 7.9 | – | + 0.1 | + 13.3 | + 21.5 | − 7.6 | − 0.2 | − 0.3 | − 0.3 | Nov. |
| – | + 0.5 | + 0.1 | − 35.4 | − 18.0 | − 17.4 | + 0.0 | + 0.0 | − 25.9 | − 31.2 | + 4.1 | + 1.4 | − 0.2 | + 0.6 | Dec. |
| – | − 0.0 | − 0.6 | + 23.5 | + 18.3 | + 5.2 | − 0.0 | + 0.0 | + 49.6 | + 36.3 | + 14.1 | − 0.4 | − 0.4 | − 0.3 | 2022 Jan. |
| – | + 0.0 | + 0.1 | + 6.0 | + 3.3 | + 2.7 | − 0.0 | + 0.2 | + 11.9 | + 13.6 | − 1.6 | + 0.1 | − 0.2 | − 0.2 | Feb. |
| – | + 0.1 | + 0.0 | − 1.9 | − 2.8 | + 0.8 | – | − 0.0 | − 4.1 | − 9.0 | + 6.6 | − 1.8 | + 0.0 | – | Mar. |
| – | + 0.2 | − 0.0 | + 16.7 | + 3.0 | + 13.7 | – | + 0.2 | + 13.0 | + 9.5 | + 4.2 | − 0.6 | − 0.1 | + 0.0 | Apr. |
| – | + 0.3 | − 0.1 | + 9.4 | + 2.2 | + 7.2 | − 0.0 | + 0.3 | + 10.1 | + 18.8 | − 7.3 | − 1.3 | + 0.0 | − 0.2 | May |
| – | − 0.1 | + 0.2 | − 9.0 | + 4.4 | − 13.4 | − 0.0 | − 0.2 | − 5.0 | − 9.9 | + 6.7 | − 1.8 | − 0.0 | − 0.1 | June |
| – | − 0.2 | + 1.5 | − 1.1 | − 12.4 | + 11.2 | – | − 0.3 | + 33.5 | + 14.3 | + 20.7 | − 1.8 | + 0.3 | − 0.5 | July |
| – | − 0.0 | + 0.1 | + 23.3 | + 1.8 | + 21.6 | − 0.0 | − 0.1 | + 48.1 | + 37.8 | + 11.8 | − 2.4 | + 0.9 | + 0.0 | Aug. |
| – | − 0.0 | + 0.4 | + 12.2 | + 13.2 | − 0.9 | + 0.0 | + 0.1 | + 15.6 | − 11.4 | + 31.3 | − 5.3 | + 0.9 | + 0.2 | Sep. |
| – | − 0.0 | + 0.1 | + 3.5 | − 10.9 | + 14.4 | + 0.0 | − 0.5 | + 17.4 | − 8.0 | + 26.2 | − 3.1 | + 2.2 | + 0.4 | Oct. |
| – | + 0.1 | − 0.1 | − 73.9 | − 2.6 | − 71.3 | − 0.0 | − 0.1 | + 45.3 | + 20.1 | + 27.1 | − 5.3 | + 3.4 | + 1.3 | 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 *** | |
| 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 |
| 2020 | 0.2 | 1,024.3 | 784.8 | 532.1 | 252.8 | 2.6 | 236.8 | 4.0 | 822.8 | 523.0 | 125.4 | 397.5 | 11.3 | 288.5 |
| 2021 | 0.3 | 1,100.7 | 877.5 | 614.7 | 262.7 | 0.4 | 222.8 | 3.5 | 871.2 | 572.2 | 151.5 | 420.7 | 8.0 | 290.9 |
| 2021 June | 0.4 | 1,159.3 | 930.3 | 666.6 | 263.7 | 2.5 | 226.4 | 3.9 | 855.1 | 551.6 | 146.7 | 404.9 | 10.5 | 293.0 |
| July | 0.4 | 1,139.3 | 910.4 | 651.3 | 259.1 | 1.9 | 227.0 | 3.8 | 867.2 | 565.0 | 158.4 | 406.6 | 13.1 | 289.2 |
| Aug. | 0.4 | 1,125.9 | 899.8 | 647.9 | 251.8 | 1.6 | 224.5 | 3.7 | 867.4 | 566.7 | 158.7 | 407.9 | 15.3 | 285.5 |
| Sep. | 0.3 | 1,113.1 | 885.7 | 634.6 | 251.1 | 1.1 | 226.3 | 3.6 | 876.0 | 569.3 | 156.6 | 412.7 | 15.1 | 291.6 |
| Oct. | 0.3 | 1,166.7 | 940.5 | 672.2 | 268.2 | 0.9 | 225.3 | 3.5 | 878.0 | 579.6 | 164.1 | 415.5 | 17.7 | 280.6 |
| Nov. | 0.3 | 1,164.8 | 940.3 | 674.7 | 265.6 | 0.8 | 223.7 | 3.4 | 888.2 | 585.6 | 164.4 | 421.2 | 14.3 | 288.3 |
| Dec. | 0.3 | 1,100.7 | 877.5 | 614.7 | 262.7 | 0.4 | 222.8 | 3.5 | 871.2 | 572.2 | 151.5 | 420.7 | 8.0 | 290.9 |
| 2022 Jan. | 0.3 | 1,200.2 | 977.7 | 714.1 | 263.6 | 1.2 | 221.3 | 3.5 | 911.6 | 610.7 | 187.0 | 423.7 | 10.3 | 290.7 |
| Feb. | 0.5 | 1,222.3 | 998.7 | 734.3 | 264.4 | 1.6 | 222.0 | 3.6 | 923.5 | 615.2 | 191.4 | 423.7 | 9.4 | 298.9 |
| Mar. | 0.5 | 1,224.2 | 999.2 | 729.8 | 269.4 | 1.0 | 224.1 | 3.6 | 906.5 | 597.4 | 171.8 | 425.6 | 10.3 | 298.9 |
| Apr. | 0.6 | 1,229.5 | 1,003.6 | 734.1 | 269.6 | 1.6 | 224.3 | 3.6 | 914.4 | 612.0 | 180.9 | 431.1 | 13.1 | 289.2 |
| May | 0.6 | 1,222.8 | 996.5 | 730.7 | 265.8 | 1.7 | 224.7 | 3.6 | 914.3 | 609.9 | 182.1 | 427.9 | 13.5 | 290.9 |
| June | 0.6 | 1,232.7 | 1,007.2 | 742.2 | 265.0 | 2.2 | 223.3 | 3.6 | 929.1 | 612.4 | 181.1 | 431.2 | 13.7 | 303.0 |
| July | 0.6 | 1,248.0 | 1,021.1 | 748.0 | 273.1 | 2.7 | 224.2 | 3.5 | 929.4 | 615.7 | 177.0 | 438.7 | 12.7 | 301.0 |
| Aug. | 0.5 | 1,266.1 | 1,038.5 | 756.2 | 282.4 | 3.4 | 224.2 | 3.4 | 931.5 | 624.9 | 183.9 | 441.0 | 13.4 | 293.2 |
| Sep. | 0.3 | 1,287.8 | 1,057.9 | 771.9 | 286.0 | 4.2 | 225.8 | 3.8 | 935.5 | 629.4 | 185.2 | 444.2 | 12.4 | 293.7 |
| Oct. | 0.3 | 1,296.6 | 1,065.2 | 787.3 | 277.9 | 3.1 | 228.3 | 3.4 | 931.2 | 629.3 | 182.0 | 447.3 | 12.5 | 289.5 |
| Nov. | 0.2 | 1,273.7 | 1,043.2 | 766.3 | 276.9 | 2.9 | 227.6 | 3.5 | 938.8 | 631.7 | 187.5 | 444.2 | 12.5 | 294.6 |
| | | | | | | | | | | | | | **Changes *** | |
| 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 |
| 2020 | − 0.0 | − 32.0 | − 22.4 | − 6.6 | − 15.8 | + 0.9 | − 10.5 | + 0.3 | + 34.4 | + 14.7 | + 9.0 | + 5.7 | + 3.6 | + 16.1 |
| 2021 | + 0.0 | + 52.8 | + 71.1 | + 68.9 | + 2.2 | − 2.5 | − 15.8 | − 0.5 | + 37.8 | + 39.7 | + 29.8 | + 9.9 | − 3.2 | + 1.4 |
| 2021 June | + 0.2 | − 4.1 | − 3.7 | − 6.3 | + 2.6 | + 0.1 | − 0.5 | − 0.0 | − 4.9 | − 1.8 | − 1.7 | − 0.2 | − 1.5 | + 8.2 |
| July | + 0.0 | − 21.8 | − 20.5 | − 15.7 | − 4.8 | − 0.6 | − 0.7 | − 0.1 | + 12.9 | + 13.0 | + 11.7 | + 1.4 | + 2.6 | − 2.8 |
| Aug. | − 0.0 | − 13.9 | − 11.2 | − 3.6 | − 7.6 | − 0.2 | − 2.5 | − 0.1 | − 0.1 | + 1.4 | + 0.3 | + 1.1 | + 2.2 | − 3.8 |
| Sep. | − 0.1 | − 18.7 | − 19.8 | − 17.0 | − 2.9 | − 0.6 | + 1.7 | − 0.1 | + 10.0 | + 4.6 | + 1.2 | + 3.4 | − 0.2 | + 5.6 |
| Oct. | + 0.0 | + 54.3 | + 55.5 | + 38.3 | + 17.3 | − 0.1 | − 1.1 | − 0.1 | + 1.5 | + 9.9 | + 7.6 | + 2.3 | + 2.6 | − 11.0 |
| Nov. | − 0.0 | − 5.7 | − 3.9 | + 0.2 | − 4.0 | − 0.1 | − 1.8 | − 0.1 | + 5.4 | + 1.8 | + 1.1 | + 0.7 | + 3.4 | + 7.1 |
| Dec. | − 0.0 | − 65.7 | − 64.3 | − 60.9 | − 3.5 | − 0.5 | − 0.9 | + 0.0 | − 17.8 | − 14.0 | − 12.7 | − 1.4 | + 6.3 | + 2.5 |
| 2022 Jan. | + 0.1 | + 95.8 | + 96.6 | + 97.4 | − 0.8 | + 0.8 | − 1.7 | + 0.1 | + 37.7 | + 36.2 | + 34.8 | + 1.4 | + 2.3 | − 0.7 |
| Feb. | + 0.2 | + 23.2 | + 22.1 | + 20.8 | + 1.2 | + 0.4 | + 0.7 | + 0.0 | + 12.7 | + 5.2 | + 4.6 | + 0.5 | − 0.8 | + 8.4 |
| Mar. | − 0.0 | − 0.0 | − 1.5 | − 5.8 | + 4.3 | − 0.6 | + 2.1 | + 0.0 | − 18.3 | − 18.9 | − 20.1 | + 1.2 | + 0.8 | − 0.2 |
| Apr. | + 0.1 | − 9.7 | − 10.2 | − 4.6 | − 5.6 | + 0.6 | − 0.1 | + 0.0 | − 1.7 | + 6.8 | + 6.8 | + 0.0 | + 2.8 | − 11.3 |
| May | + 0.0 | − 1.1 | − 1.8 | − 0.1 | − 1.7 | + 0.1 | + 0.5 | + 0.0 | + 3.7 | + 1.1 | + 2.2 | − 1.1 | + 0.4 | + 2.2 |
| June | + 0.0 | − 15.4 | − 14.4 | − 10.3 | − 4.1 | + 0.5 | − 1.6 | + 0.0 | + 9.7 | − 1.7 | − 2.3 | + 0.6 | + 0.2 | + 11.2 |
| July | − 0.0 | + 8.4 | + 7.3 | + 1.7 | + 5.6 | + 0.5 | + 0.7 | − 0.1 | − 4.7 | − 0.7 | − 5.3 | + 4.6 | − 1.1 | − 2.9 |
| Aug. | − 0.1 | + 13.9 | + 13.2 | + 6.0 | + 7.2 | + 0.7 | − 0.0 | − 0.2 | + 0.1 | + 7.7 | + 6.3 | + 1.4 | + 0.7 | − 8.4 |
| Sep. | − 0.2 | + 15.0 | + 12.6 | + 11.8 | + 0.8 | + 0.8 | + 1.6 | + 0.4 | + 3.2 | + 1.4 | − 0.2 | + 1.6 | − 1.0 | + 2.9 |
| Oct. | + 0.0 | + 13.4 | + 11.9 | + 18.2 | − 6.3 | − 1.0 | + 2.5 | − 0.3 | − 2.2 | + 1.4 | − 2.9 | + 4.3 | + 0.0 | − 3.6 |
| Nov. | − 0.1 | − 9.4 | − 8.7 | − 13.4 | + 4.7 | − 0.2 | − 0.4 | + 0.1 | + 16.7 | + 9.9 | + 5.7 | + 4.2 | − 0.0 | + 6.8 |

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

**IV. Banks**

| Memo item: Fiduciary loans | Participating interests in foreign banks and enterprises | Deposits of foreign banks (MFIs) | | Time deposits (including bank savings bonds) | | | Memo item: Fiduciary loans | Deposits of foreign non-banks (non-MFIs) | | Time deposits (including savings deposits and bank savings bonds) | | | Memo item: Fiduciary loans | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Sight deposits | Total | Short-term | Medium and long-term | | Total | Sight deposits | Total | Short-term | Medium and long-term | | |
| **End of year or month \*** | | | | | | | | | | | | | | |
| 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 |
| 11.3 | 17.2 | 761.2 | 428.8 | 332.5 | 205.1 | 127.3 | – | 258.5 | 133.3 | 125.2 | 65.6 | 59.7 | 0.1 | 2020 |
| 11.1 | 16.6 | 914.6 | 456.0 | 458.6 | 301.5 | 157.2 | 0.0 | 288.2 | 141.9 | 146.2 | 68.7 | 77.6 | 0.1 | 2021 |
| 11.3 | 16.5 | 1,016.2 | 539.5 | 476.7 | 335.5 | 141.3 | – | 290.8 | 148.4 | 142.5 | 79.9 | 62.6 | 0.1 | 2021 June |
| 11.2 | 16.0 | 981.6 | 525.0 | 456.6 | 304.9 | 151.7 | – | 292.2 | 151.7 | 140.5 | 79.3 | 61.2 | 0.1 | July |
| 11.2 | 16.3 | 969.4 | 513.0 | 456.4 | 293.0 | 163.5 | 0.0 | 298.4 | 158.9 | 139.6 | 78.8 | 60.8 | 0.1 | Aug. |
| 11.2 | 16.3 | 1,003.9 | 528.2 | 475.8 | 315.7 | 160.1 | – | 306.0 | 164.0 | 142.0 | 81.5 | 60.4 | 0.1 | Sep. |
| 11.2 | 16.3 | 1,031.2 | 550.5 | 480.7 | 320.4 | 160.3 | 0.0 | 320.9 | 169.8 | 151.1 | 83.3 | 67.8 | 0.1 | Oct. |
| 11.3 | 16.4 | 1,068.2 | 565.4 | 502.8 | 335.0 | 167.9 | 0.0 | 315.5 | 171.3 | 144.2 | 75.5 | 68.7 | 0.1 | Nov. |
| 11.1 | 16.6 | 914.6 | 456.0 | 458.6 | 301.5 | 157.2 | 0.0 | 288.2 | 141.9 | 146.2 | 68.7 | 77.6 | 0.1 | Dec. |
| 11.1 | 16.1 | 1,098.5 | 635.9 | 462.7 | 321.8 | 140.8 | 0.0 | 339.9 | 177.2 | 162.7 | 82.1 | 80.5 | 0.1 | 2022 Jan. |
| 11.1 | 16.0 | 1,130.4 | 640.4 | 490.0 | 349.8 | 140.2 | 0.0 | 361.2 | 194.5 | 166.7 | 87.0 | 79.7 | 0.1 | Feb. |
| 11.1 | 15.7 | 1,113.8 | 632.7 | 481.1 | 349.8 | 131.3 | 0.0 | 361.6 | 200.0 | 161.6 | 82.0 | 79.6 | 0.1 | Mar. |
| 11.1 | 15.7 | 1,113.7 | 600.6 | 513.2 | 381.7 | 131.4 | 0.0 | 384.6 | 201.5 | 183.2 | 102.6 | 80.6 | 0.1 | Apr. |
| 11.1 | 15.7 | 1,127.5 | 640.4 | 487.1 | 351.4 | 135.7 | 0.0 | 382.0 | 217.1 | 164.9 | 85.0 | 79.9 | 0.2 | May |
| 11.0 | 15.9 | 1,100.2 | 625.5 | 474.7 | 340.6 | 134.1 | 0.0 | 387.6 | 222.7 | 164.9 | 82.5 | 82.4 | 0.3 | June |
| 10.6 | 15.8 | 1,107.4 | 608.8 | 498.6 | 359.0 | 139.6 | 0.0 | 390.2 | 221.6 | 168.6 | 87.5 | 81.1 | 0.3 | July |
| 10.6 | 15.8 | 1,120.4 | 610.9 | 509.5 | 360.5 | 149.0 | 0.0 | 400.4 | 231.3 | 169.2 | 87.4 | 81.8 | 0.2 | Aug. |
| 10.6 | 15.9 | 1,169.6 | 639.0 | 530.6 | 373.0 | 157.6 | 0.0 | 409.1 | 231.4 | 177.7 | 95.7 | 82.0 | 0.2 | Sep. |
| 10.6 | 15.9 | 1,188.9 | 657.6 | 531.3 | 372.1 | 159.2 | 0.0 | 401.8 | 220.0 | 181.8 | 100.0 | 81.8 | 0.2 | Oct. |
| 10.6 | 15.8 | 1,150.7 | 612.1 | 538.7 | 385.9 | 152.7 | – | 414.1 | 235.1 | 179.0 | 91.2 | 87.7 | 0.1 | Nov. |
| **Changes \*** | | | | | | | | | | | | | | |
| – 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 | + 25.2 | – 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 | – 3.9 | + 83.8 | + 87.8 | – 4.1 | – 34.7 | + 30.6 | – | + 23.6 | + 13.8 | + 9.8 | + 7.1 | + 2.8 | + 0.0 | 2020 |
| – 0.2 | – 0.8 | + 136.6 | + 19.8 | + 116.8 | + 89.2 | + 27.6 | + 0.0 | + 22.7 | + 6.4 | + 16.3 | + 0.0 | + 16.3 | – 0.0 | 2021 |
| – 0.1 | – 0.0 | – 1.9 | + 23.7 | – 25.6 | – 27.4 | + 1.8 | – | – 14.8 | – 0.6 | – 14.2 | – 9.0 | – 5.2 | – 0.0 | 2021 June |
| – 0.1 | – 0.5 | – 34.8 | – 14.6 | – 20.2 | – 30.6 | + 10.4 | – | + 1.3 | + 2.9 | – 1.6 | – 0.3 | – 1.3 | + 0.0 | July |
| + 0.0 | + 0.2 | – 12.8 | – 12.3 | – 0.5 | – 12.2 | + 11.7 | + 0.0 | + 5.7 | + 6.7 | – 1.1 | – 0.6 | – 0.5 | – 0.0 | Aug. |
| – 0.0 | + 0.0 | + 30.5 | + 12.9 | + 17.6 | + 21.4 | – 3.9 | – 0.0 | + 6.7 | + 4.9 | + 1.7 | + 2.3 | – 0.6 | + 0.0 | Sep. |
| + 0.0 | + 0.1 | + 27.9 | + 22.7 | + 5.2 | + 5.1 | + 0.2 | + 0.0 | + 14.7 | + 5.8 | + 9.0 | + 1.6 | + 7.4 | – 0.0 | Oct. |
| + 0.0 | + 0.1 | + 32.3 | + 12.5 | + 19.9 | + 13.0 | + 6.9 | – | – 6.3 | + 0.8 | – 7.1 | – 8.4 | + 1.3 | – 0.0 | Nov. |
| – 0.1 | + 0.2 | – 155.0 | –110.1 | – 44.9 | – 34.0 | – 10.9 | – | – 27.7 | – 29.6 | + 1.9 | – 7.0 | + 8.9 | + 0.0 | Dec. |
| – 0.0 | – 0.6 | + 180.8 | +178.4 | + 2.4 | + 19.3 | – 16.9 | – | + 50.8 | + 34.9 | + 16.0 | + 13.1 | + 2.9 | – | 2022 Jan. |
| + 0.0 | – 0.0 | + 33.4 | + 5.7 | + 27.8 | + 28.3 | – 0.5 | – | + 21.2 | + 17.0 | + 4.2 | + 5.0 | – 0.8 | – | Feb. |
| – 0.1 | – 0.3 | – 18.3 | – 8.5 | – 9.8 | – 0.7 | – 9.1 | – | – 0.1 | + 5.3 | – 5.4 | – 5.3 | – 0.1 | – 0.0 | Mar. |
| + 0.0 | – 0.1 | – 13.2 | – 39.6 | + 26.4 | + 27.6 | – 1.1 | – | + 19.2 | – 0.6 | + 19.8 | + 19.1 | + 0.6 | – | Apr. |
| – 0.0 | + 0.0 | + 18.7 | + 42.5 | – 23.8 | – 28.6 | + 4.8 | – | – 1.1 | + 16.4 | – 17.5 | – 16.9 | – 0.5 | + 0.1 | May |
| – 0.1 | + 0.1 | – 21.2 | – 5.8 | – 15.4 | – 13.0 | – 2.4 | – | + 3.5 | + 4.7 | – 1.2 | – 3.4 | + 2.2 | + 0.0 | June |
| – 0.5 | – 0.1 | – 0.3 | – 20.0 | + 19.7 | + 16.2 | + 3.5 | + 0.0 | + 0.1 | – 2.2 | + 2.3 | + 4.0 | – 1.8 | – 0.0 | July |
| + 0.1 | + 0.0 | + 9.7 | + 0.3 | + 9.4 | + 0.3 | + 9.2 | – 0.0 | + 8.9 | + 9.1 | – 0.2 | – 0.7 | + 0.5 | – 0.0 | Aug. |
| + 0.0 | + 0.0 | + 42.5 | + 25.4 | + 17.2 | + 9.4 | + 7.7 | – | + 6.9 | – 0.7 | + 7.5 | + 7.5 | – 0.0 | + 0.0 | Sep. |
| – | + 0.0 | + 22.6 | + 20.5 | + 2.2 | + 0.2 | + 1.9 | – | – 5.9 | – 10.8 | + 5.0 | + 4.9 | + 0.1 | – 0.1 | Oct. |
| – 0.0 | – 0.0 | – 24.1 | – 41.3 | + 17.2 | + 17.4 | – 0.2 | – 0.0 | + 5.3 | + 13.1 | – 7.9 | – 7.4 | – 0.5 | – 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 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | to enterprises and households | | | to general government | | | | | to enter- |
| | 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 *** | | | | | | | | | | | | |
| 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 | 2,990.0 | 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 |
| 2020 | 3,647.0 | 3,245.3 | 243.3 | 221.6 | 221.2 | 0.4 | 21.6 | 18.0 | 3.6 | | 3,403.8 | 3,013.0 |
| 2021 | 3,798.1 | 3,392.7 | 249.7 | 232.2 | 231.9 | 0.3 | 17.5 | 15.2 | 2.3 | | 3,548.4 | 3,174.6 |
| 2021 June | 3,709.2 | 3,305.8 | 250.7 | 225.8 | 225.0 | 0.8 | 24.9 | 19.9 | 5.1 | | 3,458.5 | 3,082.5 |
| July | 3,725.3 | 3,323.0 | 248.2 | 221.0 | 220.2 | 0.8 | 27.2 | 21.9 | 5.3 | | 3,477.1 | 3,102.5 |
| Aug. | 3,736.4 | 3,332.9 | 245.0 | 221.1 | 220.4 | 0.7 | 23.9 | 18.9 | 4.9 | | 3,491.5 | 3,116.8 |
| Sep. | 3,749.8 | 3,342.1 | 247.8 | 224.5 | 223.8 | 0.7 | 23.4 | 19.6 | 3.7 | | 3,501.9 | 3,123.2 |
| Oct. | 3,770.2 | 3,367.1 | 256.5 | 232.5 | 231.9 | 0.6 | 24.0 | 19.5 | 4.4 | | 3,513.7 | 3,142.9 |
| Nov. | 3,794.0 | 3,386.5 | 255.6 | 232.9 | 232.3 | 0.6 | 22.7 | 17.7 | 5.0 | | 3,538.4 | 3,164.9 |
| Dec. | 3,798.1 | 3,392.7 | 249.7 | 232.2 | 231.9 | 0.3 | 17.5 | 15.2 | 2.3 | | 3,548.4 | 3,174.6 |
| 2022 Jan. | 3,812.8 | 3,409.2 | 262.6 | 242.3 | 241.7 | 0.6 | 20.3 | 17.8 | 2.5 | | 3,550.2 | 3,180.4 |
| Feb. | 3,826.5 | 3,426.2 | 267.4 | 246.9 | 246.1 | 0.8 | 20.5 | 16.3 | 4.2 | | 3,559.1 | 3,195.3 |
| Mar. | 3,853.8 | 3,449.2 | 273.6 | 254.8 | 254.0 | 0.8 | 18.9 | 16.3 | 2.5 | | 3,580.1 | 3,209.5 |
| Apr. | 3,866.6 | 3,470.2 | 277.5 | 257.9 | 257.0 | 0.9 | 19.6 | 17.1 | 2.5 | | 3,589.1 | 3,226.2 |
| May | 3,886.7 | 3,489.1 | 280.1 | 262.5 | 261.5 | 1.0 | 17.6 | 15.4 | 2.2 | | 3,606.6 | 3,242.6 |
| June | 3,906.6 | 3,513.5 | 290.8 | 271.4 | 270.5 | 0.9 | 19.5 | 16.6 | 2.8 | | 3,615.7 | 3,255.8 |
| July | 3,945.0 | 3,539.3 | 291.4 | 271.8 | 270.9 | 0.8 | 19.6 | 16.8 | 2.8 | | 3,653.7 | 3,293.5 |
| Aug. | 3,976.0 | 3,574.4 | 305.0 | 287.3 | 286.4 | 0.8 | 17.7 | 14.7 | 3.1 | | 3,671.0 | 3,314.3 |
| Sep. | 3,993.6 | 3,595.5 | 311.0 | 292.8 | 292.2 | 0.6 | 18.2 | 15.2 | 3.0 | | 3,682.6 | 3,329.1 |
| Oct. | 4,014.1 | 3,611.8 | 308.7 | 288.9 | 288.4 | 0.5 | 19.9 | 16.1 | 3.8 | | 3,705.3 | 3,347.5 |
| Nov. | 4,025.7 | 3,625.4 | 310.7 | 292.9 | 292.6 | 0.4 | 17.7 | 14.5 | 3.2 | | 3,715.0 | 3,359.0 |
| **Changes *** | | | | | | | | | | | | |
| 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 |
| 2020 | + 123.2 | + 123.6 | − 19.6 | − 19.8 | − 19.8 | − 0.0 | + 0.2 | − 0.5 | + 0.7 | | + 142.8 | + 145.6 |
| 2021 | + 152.2 | + 147.8 | + 8.8 | + 13.8 | + 13.8 | − 0.1 | − 4.9 | − 2.8 | − 2.1 | | + 143.4 | + 157.9 |
| 2021 June | − 0.4 | + 5.5 | + 2.0 | + 0.3 | + 0.4 | − 0.1 | + 1.7 | + 0.4 | + 1.3 | | − 2.4 | + 7.3 |
| July | + 16.1 | + 17.2 | − 2.0 | − 4.2 | − 4.3 | + 0.0 | + 2.3 | + 2.0 | + 0.3 | | + 18.1 | + 19.5 |
| Aug. | + 10.9 | + 9.7 | − 3.2 | + 0.1 | + 0.2 | − 0.1 | − 3.3 | − 2.9 | − 0.4 | | + 14.1 | + 14.2 |
| Sep. | + 13.5 | + 9.3 | + 3.3 | + 3.7 | + 3.8 | − 0.0 | − 0.5 | + 0.7 | − 1.2 | | + 10.2 | + 6.2 |
| Oct. | + 20.5 | + 25.1 | + 8.7 | + 8.1 | + 8.2 | − 0.1 | + 0.5 | − 0.2 | + 0.7 | | + 11.8 | + 19.8 |
| Nov. | + 25.5 | + 20.5 | + 1.2 | + 2.4 | + 2.4 | + 0.0 | − 1.2 | − 1.8 | + 0.6 | | + 24.4 | + 19.9 |
| Dec. | + 4.3 | + 6.3 | − 5.8 | − 0.6 | − 0.3 | − 0.3 | − 5.2 | − 2.5 | − 2.7 | | + 10.1 | + 9.8 |
| 2022 Jan. | + 14.7 | + 16.5 | + 12.9 | + 10.1 | + 9.8 | + 0.3 | + 2.8 | + 2.6 | + 0.2 | | + 1.8 | + 5.8 |
| Feb. | + 15.1 | + 18.4 | + 6.2 | + 6.0 | + 5.8 | + 0.2 | + 0.2 | − 1.5 | + 1.7 | | + 9.0 | + 14.9 |
| Mar. | + 27.3 | + 23.0 | + 6.2 | + 7.9 | + 7.9 | − 0.0 | − 1.6 | + 0.1 | − 1.7 | | + 21.0 | + 14.2 |
| Apr. | + 13.1 | + 21.4 | + 3.9 | + 3.1 | + 3.0 | + 0.1 | + 0.7 | + 0.7 | + 0.0 | | + 9.3 | + 17.0 |
| May | + 20.1 | + 18.8 | + 2.6 | + 4.6 | + 4.5 | + 0.0 | − 2.0 | − 1.7 | − 0.3 | | + 17.5 | + 16.4 |
| June | + 19.9 | + 24.5 | + 10.8 | + 8.9 | + 9.0 | − 0.1 | + 1.9 | + 1.3 | + 0.6 | | + 9.1 | + 13.2 |
| July | + 36.1 | + 23.5 | + 0.2 | + 0.1 | + 0.1 | − 0.1 | + 0.1 | + 0.2 | − 0.1 | | + 35.8 | + 35.6 |
| Aug. | + 30.9 | + 35.1 | + 13.7 | + 15.5 | + 15.5 | + 0.0 | − 1.9 | − 2.1 | + 0.3 | | + 17.2 | + 20.8 |
| Sep. | + 16.5 | + 20.0 | + 4.8 | + 4.4 | + 4.6 | − 0.2 | + 0.5 | + 0.6 | − 0.1 | | + 11.7 | + 14.8 |
| Oct. | + 20.7 | + 16.6 | − 2.0 | − 3.6 | − 3.5 | − 0.1 | + 1.6 | + 0.8 | + 0.8 | | + 22.7 | + 18.5 |
| Nov. | + 12.0 | + 13.9 | + 2.3 | + 4.4 | + 4.5 | − 0.1 | − 2.1 | − 1.5 | − 0.6 | | + 9.7 | + 11.8 |

**\*** See Table IV.2, footnote *; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **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 | | | | Memo item: Fiduciary loans | | Loans | | | Secur-ities 1 | Equal-isation claims 2 | Memo item: Fiduciary loans | Period |
| Total | Medium-term | Long-term | Securities | | Total | Total | Medium-term | Long-term | | | | |
| **End of year or month \*** | | | | | | | | | | | | |
| 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 |
| 2,771.8 | 310.5 | 2,461.4 | 241.1 | 22.4 | 390.8 | 234.3 | 15.7 | 218.6 | 156.6 | – | 1.1 | 2020 |
| 2,915.7 | 314.5 | 2,601.2 | 258.9 | 24.7 | 373.8 | 229.9 | 14.3 | 215.6 | 143.9 | – | 1.0 | 2021 |
| 2,831.8 | 310.0 | 2,521.8 | 250.7 | 23.9 | 376.0 | 229.2 | 14.7 | 214.5 | 146.8 | – | 1.1 | 2021 June |
| 2,851.4 | 310.7 | 2,540.8 | 251.0 | 24.0 | 374.6 | 229.5 | 14.9 | 214.6 | 145.1 | – | 1.1 | July |
| 2,864.5 | 311.5 | 2,553.1 | 252.2 | 24.2 | 374.7 | 229.1 | 14.7 | 214.4 | 145.6 | – | 1.1 | Aug. |
| 2,870.0 | 310.1 | 2,559.9 | 253.2 | 24.2 | 378.7 | 228.7 | 14.3 | 214.4 | 150.1 | – | 1.0 | Sep. |
| 2,885.5 | 313.5 | 2,572.0 | 257.4 | 24.1 | 370.9 | 230.2 | 14.6 | 215.6 | 140.7 | – | 1.0 | Oct. |
| 2,906.5 | 315.6 | 2,590.9 | 258.4 | 24.2 | 373.5 | 230.0 | 14.5 | 215.6 | 143.5 | – | 1.0 | Nov. |
| 2,915.7 | 314.5 | 2,601.2 | 258.9 | 24.7 | 373.8 | 229.9 | 14.3 | 215.6 | 143.9 | – | 1.0 | Dec. |
| 2,920.6 | 312.8 | 2,607.8 | 259.8 | 24.7 | 369.8 | 229.1 | 13.9 | 215.2 | 140.7 | – | 1.0 | 2022 Jan. |
| 2,935.4 | 313.8 | 2,621.6 | 259.9 | 24.6 | 363.8 | 228.5 | 13.9 | 214.5 | 135.4 | – | 1.1 | Feb. |
| 2,950.1 | 316.1 | 2,633.9 | 259.4 | 24.7 | 370.7 | 228.8 | 13.7 | 215.1 | 141.8 | – | 1.1 | Mar. |
| 2,966.8 | 317.3 | 2,649.5 | 259.4 | 24.9 | 362.9 | 229.5 | 13.7 | 215.8 | 133.5 | – | 1.0 | Apr. |
| 2,983.1 | 319.7 | 2,663.4 | 259.5 | 25.1 | 364.0 | 229.1 | 13.7 | 215.4 | 134.9 | – | 1.0 | May |
| 2,998.2 | 322.2 | 2,675.9 | 257.6 | 25.0 | 360.0 | 228.2 | 13.6 | 214.6 | 131.7 | – | 1.0 | June |
| 3,022.5 | 327.7 | 2,694.9 | 271.0 | 24.9 | 360.2 | 229.0 | 13.5 | 215.5 | 131.2 | – | 1.0 | July |
| 3,044.6 | 335.4 | 2,709.1 | 269.8 | 24.9 | 356.6 | 228.7 | 13.5 | 215.2 | 127.9 | – | 1.0 | Aug. |
| 3,058.8 | 339.5 | 2,719.3 | 270.2 | 24.8 | 353.5 | 229.3 | 13.8 | 215.4 | 124.3 | – | 1.0 | Sep. |
| 3,077.4 | 344.8 | 2,732.7 | 270.1 | 24.8 | 357.8 | 229.9 | 13.8 | 216.1 | 127.9 | – | 1.0 | Oct. |
| 3,086.6 | 344.9 | 2,741.7 | 272.4 | 24.8 | 356.0 | 231.7 | 13.9 | 217.8 | 124.3 | – | 1.0 | Nov. |
| **Changes \*** | | | | | | | | | | | | |
| + 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 |
| + 126.9 | + 18.9 | + 107.2 | + 6.8 | – 0.8 | – 17.8 | – 5.5 | – 2.6 | – 2.9 | – 12.3 | – | + 0.1 | 2019 |
| + 145.0 | + 9.4 | + 135.5 | + 0.6 | + 6.1 | – 2.8 | – 1.1 | – 1.5 | + 0.4 | – 1.7 | – | – 0.4 | 2020 |
| + 140.1 | + 5.6 | + 134.5 | + 17.8 | + 2.3 | – 14.6 | – 3.3 | – 1.3 | – 2.0 | – 11.3 | – | – 0.0 | 2021 |
| + 6.5 | – 1.7 | + 8.2 | + 0.8 | + 0.3 | – 9.7 | – 1.8 | – 0.2 | – 1.5 | – 7.9 | – | – 0.0 | 2021 June |
| + 19.2 | + 0.2 | + 19.0 | + 0.3 | + 0.1 | – 1.4 | + 0.3 | + 0.2 | + 0.1 | – 1.7 | – | – 0.0 | July |
| + 13.0 | + 0.8 | + 12.3 | + 1.2 | + 0.2 | – 0.1 | – 0.6 | – 0.1 | – 0.4 | + 0.5 | – | – 0.0 | Aug. |
| + 5.2 | – 1.4 | + 6.6 | + 1.0 | – 0.0 | + 4.0 | – 0.4 | – 0.5 | + 0.0 | + 4.4 | – | + 0.0 | Sep. |
| + 15.6 | + 3.5 | + 12.1 | + 4.1 | – 0.1 | – 7.9 | + 1.4 | + 0.3 | + 1.1 | – 9.4 | – | – 0.0 | Oct. |
| + 18.9 | + 4.4 | + 14.5 | + 1.0 | + 0.1 | + 4.4 | + 0.9 | – 0.1 | + 1.0 | + 3.5 | – | – 0.0 | Nov. |
| + 9.3 | – 1.1 | + 10.4 | + 0.5 | + 0.5 | + 0.2 | – 0.1 | – 0.1 | + 0.0 | + 0.4 | – | + 0.0 | Dec. |
| + 4.9 | – 1.7 | + 6.6 | + 0.8 | – 0.0 | – 4.0 | – 0.8 | – 0.4 | – 0.4 | – 3.2 | – | – 0.0 | 2022 Jan. |
| + 14.8 | + 1.0 | + 13.8 | + 0.1 | + 0.0 | – 6.0 | – 0.7 | – 0.0 | – 0.6 | – 5.3 | – | – 0.0 | Feb. |
| + 14.7 | + 2.3 | + 12.4 | – 0.5 | + 0.1 | + 6.8 | + 0.4 | – 0.2 | + 0.6 | + 6.5 | – | – 0.0 | Mar. |
| + 17.0 | + 1.5 | + 15.6 | – 0.0 | + 0.2 | – 7.7 | + 0.6 | + 0.0 | + 0.6 | – 8.4 | – | – 0.0 | Apr. |
| + 16.4 | + 2.5 | + 13.9 | + 0.1 | + 0.3 | + 1.1 | – 0.4 | – 0.0 | – 0.3 | + 1.4 | – | – 0.0 | May |
| + 15.1 | + 2.5 | + 12.6 | – 1.9 | – 0.1 | – 4.1 | – 0.9 | – 0.0 | – 0.8 | – 3.2 | – | – 0.0 | June |
| + 22.5 | + 4.4 | + 18.1 | + 13.1 | – 0.2 | + 0.2 | + 0.7 | – 0.1 | + 0.8 | – 0.5 | – | – 0.0 | July |
| + 22.0 | + 7.7 | + 14.3 | – 1.2 | – 0.0 | – 3.6 | – 0.2 | – 0.0 | – 0.2 | – 3.3 | – | + 0.0 | Aug. |
| + 14.3 | + 4.0 | + 10.4 | + 0.5 | – 0.1 | – 3.1 | + 0.5 | – 0.2 | + 0.7 | – 3.6 | – | + 0.0 | Sep. |
| + 18.6 | + 5.3 | + 13.4 | – 0.2 | – 0.0 | + 4.2 | + 0.6 | – 0.0 | + 0.6 | + 3.6 | – | – 0.0 | Oct. |
| + 9.4 | + 0.1 | + 9.3 | + 2.4 | + 0.0 | – 2.1 | + 1.6 | + 0.1 | + 1.4 | – 3.6 | – | + 0.0 | Nov. |

## IV. Banks

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

€ billion

| | Lending to domestic enterprises and households (excluding holdings of negotiable money market paper and excluding securities portfolios) **1** | | | | | | | | | | | | | |
| | | of which: | | | | | | | | | | | | |
| | | | Housing loans | | | Lending to enterprises and self-employed persons | | | | | | | | |
| Period | 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 \*** | |
| 2020 | 2,993.0 | 1,601.8 | 1,565.6 | 1,285.1 | 280.5 | 1,623.4 | 443.3 | 146.7 | 123.4 | 82.7 | 135.8 | 55.3 | 59.8 | 176.0 |
| 2021 Sep. | 3,093.7 | 1,653.1 | 1,648.9 | 1,337.4 | 311.4 | 1,666.9 | 467.9 | 143.9 | 122.2 | 87.7 | 136.7 | 56.2 | 56.3 | 182.6 |
| Dec. | 3,147.5 | 1,591.4 | 1,678.2 | 1,373.0 | 305.2 | 1,701.5 | 477.2 | 146.1 | 128.3 | 98.0 | 140.4 | 55.9 | 55.6 | 186.3 |
| 2022 Mar. | 3,204.0 | 1,613.7 | 1,701.0 | 1,391.9 | 309.0 | 1,742.4 | 485.1 | 150.9 | 134.3 | 101.3 | 145.3 | 56.3 | 54.9 | 193.2 |
| June | 3,268.7 | 1,636.4 | 1,731.4 | 1,412.8 | 318.5 | 1,784.8 | 494.5 | 160.2 | 132.6 | 104.4 | 153.4 | 57.0 | 56.4 | 200.2 |
| Sep. | 3,351.0 | 1,659.4 | 1,758.3 | 1,433.0 | 325.2 | 1,845.3 | 503.1 | 163.6 | 147.5 | 107.3 | 163.3 | 56.9 | 64.9 | 202.3 |
| **Short-term lending** | | | | | | | | | | | | | | |
| 2020 | 221.2 | – | 8.0 | – | 8.0 | 192.1 | 4.6 | 29.0 | 6.9 | 16.0 | 37.0 | 3.6 | 6.1 | 31.6 |
| 2021 Sep. | 223.8 | – | 7.8 | – | 7.8 | 193.7 | 4.4 | 30.4 | 5.1 | 17.1 | 35.6 | 4.0 | 4.1 | 34.1 |
| Dec. | 231.8 | – | 6.9 | – | 6.9 | 202.7 | 4.4 | 31.6 | 9.1 | 18.0 | 36.4 | 3.3 | 3.9 | 35.0 |
| 2022 Mar. | 254.0 | – | 7.0 | – | 7.0 | 224.1 | 4.5 | 36.5 | 14.0 | 19.5 | 39.3 | 3.6 | 4.1 | 38.0 |
| June | 270.5 | – | 7.0 | – | 7.0 | 239.5 | 4.6 | 44.7 | 11.6 | 20.1 | 42.2 | 3.9 | 4.3 | 42.2 |
| Sep. | 292.2 | – | 7.4 | – | 7.4 | 260.7 | 4.9 | 46.2 | 24.4 | 21.1 | 45.3 | 3.6 | 4.2 | 42.2 |
| **Medium-term lending** | | | | | | | | | | | | | | |
| 2020 | 310.5 | – | 38.5 | – | 38.5 | 230.4 | 18.5 | 30.2 | 5.4 | 14.8 | 19.3 | 4.8 | 15.0 | 51.4 |
| 2021 Sep. | 310.1 | – | 40.2 | – | 40.2 | 233.3 | 20.2 | 27.8 | 5.2 | 15.8 | 19.3 | 4.5 | 12.3 | 51.7 |
| Dec. | 314.5 | – | 40.5 | – | 40.5 | 239.5 | 20.6 | 28.3 | 5.4 | 19.3 | 20.8 | 4.3 | 12.3 | 52.0 |
| 2022 Mar. | 316.1 | – | 40.8 | – | 40.8 | 242.2 | 21.0 | 28.9 | 5.6 | 20.0 | 22.0 | 4.2 | 11.7 | 53.1 |
| June | 322.2 | – | 42.0 | – | 42.0 | 249.2 | 22.2 | 29.1 | 5.8 | 21.0 | 22.3 | 4.3 | 13.3 | 53.7 |
| Sep. | 339.5 | – | 43.2 | – | 43.2 | 265.9 | 23.1 | 30.5 | 6.0 | 21.6 | 23.4 | 4.3 | 22.2 | 54.4 |
| **Long-term lending** | | | | | | | | | | | | | | |
| 2020 | 2,461.4 | 1,601.8 | 1,519.1 | 1,285.1 | 234.0 | 1,201.0 | 420.2 | 87.5 | 111.2 | 51.8 | 79.4 | 47.0 | 38.7 | 93.0 |
| 2021 Sep. | 2,559.9 | 1,653.1 | 1,600.9 | 1,337.4 | 263.5 | 1,240.0 | 443.4 | 85.6 | 111.9 | 54.9 | 81.8 | 47.7 | 39.9 | 96.8 |
| Dec. | 2,601.2 | 1,591.4 | 1,630.9 | 1,373.0 | 257.8 | 1,259.3 | 452.2 | 86.2 | 113.8 | 60.8 | 83.2 | 48.3 | 39.4 | 99.3 |
| 2022 Mar. | 2,633.9 | 1,613.7 | 1,653.1 | 1,391.9 | 261.2 | 1,276.0 | 459.6 | 85.5 | 114.8 | 61.8 | 84.0 | 48.4 | 39.2 | 102.1 |
| June | 2,675.9 | 1,636.4 | 1,682.3 | 1,412.8 | 269.5 | 1,296.0 | 467.7 | 86.5 | 115.2 | 63.4 | 88.9 | 48.8 | 38.8 | 104.4 |
| Sep. | 2,719.3 | 1,659.4 | 1,707.6 | 1,433.0 | 274.6 | 1,318.6 | 475.1 | 86.8 | 117.1 | 64.7 | 94.6 | 49.0 | 38.6 | 105.6 |
| **Lending, total** | | | | | | | | | | | | | **Change during quarter \*** | |
| 2021 Q3 | + 37.1 | + 18.5 | + 29.1 | + 19.7 | + 9.4 | + 12.7 | + 6.3 | + 1.4 | + 0.1 | + 2.0 | + 0.5 | + 0.1 | – 1.7 | + 1.0 |
| Q4 | + 54.1 | + 18.0 | + 28.6 | + 18.9 | + 9.7 | + 34.9 | + 9.0 | + 2.2 | + 5.9 | + 1.5 | + 3.7 | – 0.2 | – 0.6 | + 3.7 |
| 2022 Q1 | + 57.9 | + 17.9 | + 22.0 | + 16.6 | + 5.3 | + 42.0 | + 7.0 | + 4.8 | + 6.3 | + 3.2 | + 4.7 | + 0.4 | – 1.1 | + 8.9 |
| Q2 | + 65.0 | + 22.2 | + 29.9 | + 20.5 | + 9.4 | + 42.7 | + 9.1 | + 9.4 | – 1.7 | + 3.2 | + 8.2 | + 0.7 | + 1.5 | + 7.1 |
| Q3 | + 79.0 | + 23.4 | + 26.9 | + 20.5 | + 6.4 | + 58.5 | + 8.6 | + 2.5 | + 14.9 | + 2.7 | + 9.6 | – 0.1 | + 8.5 | + 2.0 |
| **Short-term lending** | | | | | | | | | | | | | | |
| 2021 Q3 | – 0.3 | – | – 0.1 | | – 0.1 | – 1.3 | – 0.1 | + 1.7 | – 0.4 | + 0.4 | + 0.6 | – 0.2 | – 0.3 | – 0.3 |
| Q4 | + 10.3 | – | – 0.2 | | – 0.2 | + 10.5 | + 0.0 | + 1.1 | + 3.9 | + 1.0 | + 0.9 | – 0.6 | – 0.2 | + 1.0 |
| 2022 Q1 | + 23.5 | – | + 0.1 | | + 0.1 | + 22.7 | + 0.1 | + 4.9 | + 4.9 | + 1.6 | + 2.9 | + 0.3 | + 0.2 | + 4.4 |
| Q2 | + 16.6 | – | + 0.0 | | + 0.0 | + 15.4 | + 0.1 | + 8.2 | – 2.4 | + 0.6 | + 2.9 | + 0.3 | + 0.2 | + 4.2 |
| Q3 | + 20.2 | – | + 0.3 | | + 0.3 | + 19.8 | + 0.3 | + 0.7 | + 12.8 | + 0.9 | + 2.8 | – 0.3 | – 0.2 | + 0.1 |
| **Medium-term lending** | | | | | | | | | | | | | | |
| 2021 Q3 | – 0.4 | – | + 0.6 | | + 0.6 | – 0.1 | + 0.4 | + 0.1 | + 0.2 | + 0.5 | – 0.6 | + 0.0 | – 1.8 | + 0.7 |
| Q4 | + 6.8 | – | + 0.4 | | + 0.4 | + 8.0 | + 0.5 | + 0.5 | + 0.2 | + 3.5 | + 1.6 | – 0.1 | + 0.0 | + 0.5 |
| 2022 Q1 | + 1.7 | – | + 0.3 | | + 0.3 | + 2.7 | + 0.4 | + 0.5 | + 0.3 | + 0.7 | + 1.2 | – 0.0 | – 0.7 | + 1.2 |
| Q2 | + 6.4 | – | + 1.2 | | + 1.2 | + 7.3 | + 1.2 | + 0.2 | + 0.2 | + 1.0 | + 0.3 | + 0.1 | + 1.6 | + 0.9 |
| Q3 | + 16.1 | – | + 0.9 | | + 0.9 | + 16.1 | + 0.9 | + 1.5 | + 0.2 | + 0.5 | + 1.1 | – 0.0 | + 8.9 | + 0.8 |
| **Long-term lending** | | | | | | | | | | | | | | |
| 2021 Q3 | + 37.8 | + 18.5 | + 28.6 | + 19.7 | + 8.9 | + 14.1 | + 6.0 | – 0.4 | + 0.3 | + 1.1 | + 0.5 | + 0.2 | + 0.5 | + 0.6 |
| Q4 | + 37.0 | + 18.0 | + 28.4 | + 18.9 | + 9.5 | + 16.4 | + 8.4 | + 0.6 | + 1.8 | – 3.0 | + 1.2 | + 0.6 | – 0.5 | + 2.2 |
| 2022 Q1 | + 32.7 | + 17.9 | + 21.5 | + 16.6 | + 4.9 | + 16.5 | + 6.5 | – 0.7 | + 1.1 | + 0.9 | + 0.7 | + 0.1 | – 0.6 | + 3.4 |
| Q2 | + 42.0 | + 22.2 | + 28.7 | + 20.5 | + 8.1 | + 19.9 | + 7.9 | + 1.0 | + 0.4 | + 1.5 | + 4.9 | + 0.3 | – 0.3 | + 2.1 |
| Q3 | + 42.7 | + 23.4 | + 25.7 | + 20.5 | + 5.2 | + 22.6 | + 7.4 | + 0.3 | + 1.9 | + 1.3 | + 5.7 | + 0.3 | – 0.2 | + 1.2 |

\* Excluding lending by foreign branches. Breakdown of lending by building and loan associations by areas and sectors estimated. Statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional; subsequent alterations, which appear in the following Monthly Report, are

**IV. Banks**

| | Services sector (including the professions) | | | | Memo items: | | Lending to employees and other individuals | | | | | | Lending to non-profit institutions | | |
| | | of which: | | | | | | | Other lending | | | | | | |
| Total | Housing enterprises | Holding companies | Other real estate activities | Lending to self-employed persons **2** | Lending to craft enterprises | Total | Housing loans | Total | of which: Instalment loans **3** | Debit balances on wage, salary and pension accounts | | Total | of which: Housing loans | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **End of year or quarter** * | | | | | | | | | | | | | **Lending, total** | |
| 843.7 | 286.6 | 53.8 | 204.1 | 464.0 | 47.9 | 1,353.4 | 1,118.3 | 235.2 | 177.4 | 6.7 | | 16.2 | 4.0 | 2020 |
| 881.4 | 304.0 | 57.5 | 210.5 | 478.3 | 48.9 | 1,410.5 | 1,176.6 | 233.9 | 176.4 | 7.0 | | 16.3 | 4.3 | 2021 Sep. |
| 890.8 | 308.6 | 63.8 | 207.9 | 483.8 | 48.3 | 1,429.3 | 1,196.6 | 232.7 | 184.1 | 6.9 | | 16.7 | 4.4 | Dec. |
| 906.2 | 315.6 | 66.2 | 209.8 | 489.1 | 49.1 | 1,444.9 | 1,211.4 | 233.5 | 184.4 | 7.1 | | 16.8 | 4.4 | 2022 Mar. |
| 920.4 | 322.8 | 68.0 | 211.5 | 494.9 | 49.4 | 1,467.0 | 1,232.4 | 234.6 | 184.6 | 7.3 | | 16.9 | 4.5 | June |
| 939.6 | 329.1 | 71.2 | 215.5 | 500.0 | 54.1 | 1,488.6 | 1,250.6 | 238.0 | 187.3 | 7.5 | | 17.1 | 4.6 | Sep. |
| | | | | | | | | | | | | | **Short-term lending** | |
| 61.9 | 15.7 | 9.6 | 10.5 | 20.9 | 3.7 | 28.6 | 3.4 | 25.2 | 1.3 | 6.7 | | 0.6 | 0.0 | 2020 |
| 63.3 | 16.9 | 10.3 | 9.8 | 20.5 | 4.3 | 29.6 | 3.4 | 26.2 | 1.5 | 7.0 | | 0.5 | 0.0 | 2021 Sep. |
| 65.5 | 14.5 | 13.0 | 10.0 | 19.7 | 3.8 | 28.6 | 2.5 | 26.1 | 1.4 | 6.9 | | 0.5 | 0.0 | Dec. |
| 69.2 | 15.3 | 14.0 | 10.5 | 20.3 | 4.4 | 29.2 | 2.5 | 26.7 | 1.6 | 7.1 | | 0.7 | 0.0 | 2022 Mar. |
| 70.5 | 15.9 | 13.7 | 11.1 | 20.8 | 4.5 | 30.3 | 2.5 | 27.9 | 1.7 | 7.3 | | 0.7 | 0.0 | June |
| 73.8 | 15.8 | 14.9 | 11.2 | 20.9 | 5.3 | 30.8 | 2.5 | 28.3 | 1.7 | 7.5 | | 0.6 | 0.0 | Sep. |
| | | | | | | | | | | | | | **Medium-term lending** | |
| 89.6 | 20.4 | 11.8 | 24.5 | 32.0 | 3.5 | 79.6 | 20.0 | 59.6 | 56.1 | – | | 0.5 | 0.0 | 2020 |
| 96.7 | 23.2 | 13.8 | 27.4 | 31.1 | 3.4 | 76.3 | 20.0 | 56.3 | 52.4 | – | | 0.6 | 0.1 | 2021 Sep. |
| 97.0 | 23.1 | 15.2 | 27.1 | 30.0 | 3.3 | 74.4 | 19.8 | 54.6 | 50.6 | – | | 0.6 | 0.1 | Dec. |
| 96.8 | 22.8 | 15.5 | 27.2 | 30.0 | 3.2 | 73.4 | 19.7 | 53.7 | 49.6 | – | | 0.5 | 0.1 | 2022 Mar. |
| 99.8 | 24.1 | 17.1 | 26.6 | 29.9 | 3.2 | 72.5 | 19.8 | 52.7 | 48.6 | – | | 0.5 | 0.1 | June |
| 103.6 | 25.2 | 17.7 | 27.5 | 30.4 | 6.4 | 73.0 | 20.1 | 52.9 | 48.7 | – | | 0.5 | 0.1 | Sep. |
| | | | | | | | | | | | | | **Long-term lending** | |
| 692.3 | 250.5 | 32.4 | 169.1 | 411.1 | 40.7 | 1,245.3 | 1,094.9 | 150.4 | 120.0 | – | | 15.1 | 4.0 | 2020 |
| 721.3 | 263.9 | 33.3 | 173.3 | 426.7 | 41.2 | 1,304.7 | 1,153.3 | 151.4 | 122.6 | – | | 15.3 | 4.2 | 2021 Sep. |
| 728.4 | 271.1 | 35.6 | 170.8 | 434.1 | 41.3 | 1,326.3 | 1,174.3 | 152.0 | 132.1 | – | | 15.6 | 4.3 | Dec. |
| 740.2 | 277.5 | 36.8 | 172.1 | 438.8 | 41.4 | 1,342.3 | 1,189.2 | 153.1 | 133.2 | – | | 15.6 | 4.4 | 2022 Mar. |
| 750.0 | 282.8 | 37.3 | 173.8 | 444.2 | 41.7 | 1,364.2 | 1,210.1 | 154.1 | 134.4 | – | | 15.7 | 4.4 | June |
| 762.2 | 288.0 | 38.5 | 176.7 | 448.7 | 42.5 | 1,384.8 | 1,228.0 | 156.7 | 137.0 | – | | 15.9 | 4.5 | Sep. |
| **Change during quarter** * | | | | | | | | | | | | | **Lending, total** | |
| + 9.4 | + 6.5 | – 0.8 | + 1.7 | + 4.2 | + 0.2 | + 24.3 | + 22.7 | + 1.6 | + 1.1 | + 0.5 | + 0.1 | + 0.1 | | 2021 Q3 |
| + 18.8 | + 7.3 | + 4.2 | + 2.8 | + 5.2 | – 0.6 | + 18.8 | + 19.6 | – 0.7 | – 0.1 | – 0.2 | + 0.4 | + 0.1 | | Q4 |
| + 14.9 | + 6.7 | + 2.4 | + 1.7 | + 5.0 | + 0.7 | + 15.8 | + 14.9 | + 0.9 | + 0.5 | + 0.2 | + 0.1 | + 0.0 | | 2022 Q1 |
| + 14.4 | + 7.4 | + 1.6 | + 1.8 | + 5.8 | + 0.4 | + 22.2 | + 20.8 | + 1.4 | + 0.4 | + 0.3 | + 0.1 | + 0.0 | | Q2 |
| + 18.3 | + 6.2 | + 3.1 | + 3.9 | + 4.3 | + 0.2 | + 20.4 | + 18.2 | + 2.1 | + 1.5 | + 0.1 | + 0.2 | + 0.1 | | Q3 |
| | | | | | | | | | | | | | **Short-term lending** | |
| – 2.7 | + 0.9 | – 1.2 | – 0.6 | – 0.5 | + 0.2 | + 1.0 | + 0.0 | + 1.0 | + 0.1 | + 0.5 | – 0.0 | + 0.0 | | 2021 Q3 |
| + 3.4 | – 1.1 | + 2.5 | + 0.5 | – 0.6 | – 0.5 | – 0.3 | – 0.2 | – 0.1 | – 0.0 | – 0.2 | + 0.1 | + 0.0 | | Q4 |
| + 3.6 | + 0.8 | + 0.9 | + 0.5 | + 0.6 | + 0.7 | + 0.6 | + 0.0 | + 0.6 | + 0.2 | + 0.2 | + 0.1 | + 0.0 | | 2022 Q1 |
| + 1.4 | + 0.6 | – 0.3 | + 0.6 | + 0.4 | + 0.1 | + 1.1 | – 0.1 | + 1.2 | + 0.1 | + 0.3 | + 0.0 | – 0.0 | | Q2 |
| + 3.1 | – 0.0 | + 1.3 | + 0.1 | – 0.1 | – 0.1 | + 0.5 | + 0.0 | + 0.4 | + 0.0 | + 0.1 | – 0.1 | – | | Q3 |
| | | | | | | | | | | | | | **Medium-term lending** | |
| + 0.8 | + 0.8 | – 0.5 | + 0.9 | – 0.2 | – 0.1 | – 0.4 | + 0.2 | – 0.6 | – 0.7 | – | + 0.1 | + 0.0 | | 2021 Q3 |
| + 1.7 | + 1.3 | + 1.4 | – 0.4 | – 0.4 | – 0.1 | – 1.3 | – 0.1 | – 1.1 | – 1.3 | – | + 0.0 | + 0.0 | | Q4 |
| – 0.3 | – 0.3 | + 0.2 | + 0.1 | – 0.1 | – 0.1 | – 1.0 | – 0.1 | – 0.9 | – 0.9 | – | – 0.1 | – 0.0 | | 2022 Q1 |
| + 3.0 | + 1.3 | + 1.6 | – 0.6 | – 0.1 | – 0.0 | – 0.9 | + 0.1 | – 1.0 | – 1.1 | – | + 0.0 | – 0.0 | | Q2 |
| + 3.2 | + 1.0 | + 0.6 | + 0.9 | + 0.1 | + 0.0 | – 0.1 | – 0.0 | – 0.1 | – 0.2 | – | + 0.0 | – 0.0 | | Q3 |
| | | | | | | | | | | | | | **Long-term lending** | |
| + 11.3 | + 4.7 | + 1.0 | + 1.3 | + 4.9 | + 0.1 | + 23.6 | + 22.5 | + 1.2 | + 1.7 | – | + 0.1 | + 0.1 | | 2021 Q3 |
| + 13.6 | + 7.2 | + 0.4 | + 2.7 | + 6.2 | + 0.1 | + 20.4 | + 19.9 | + 0.5 | + 1.2 | – | + 0.3 | + 0.1 | | Q4 |
| + 11.5 | + 6.3 | + 1.2 | + 1.1 | + 4.5 | + 0.1 | + 16.2 | + 15.0 | + 1.2 | + 1.3 | – | + 0.0 | + 0.0 | | 2022 Q1 |
| + 10.0 | + 5.5 | + 0.3 | + 1.8 | + 5.4 | + 0.3 | + 22.0 | + 20.8 | + 1.3 | + 1.4 | – | + 0.1 | + 0.1 | | Q2 |
| + 12.0 | + 5.2 | + 1.2 | + 2.9 | + 4.3 | + 0.3 | + 20.0 | + 18.2 | + 1.7 | + 1.7 | – | + 0.2 | + 0.1 | | 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] Total | for up to and including 1 year | for more than 1 year [2] Total | for up to and including 2 years | for more than 2 years | Savings deposits [3] | Bank savings bonds [4] | Fiduciary loans | Memo item: Subordinated liabilities (excluding negotiable debt securities) | Liabilities arising from repos |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Domestic non-banks, total** | | | | | | | | | | | **End of year or month *** | |
| 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 |
| 2020 | 3,885.2 | 2,513.0 | 783.3 | 188.9 | 594.4 | 47.9 | 546.5 | 560.6 | 28.3 | 34.4 | 14.4 | 0.1 |
| 2021 | 3,976.3 | 2,654.6 | 736.0 | 161.0 | 574.9 | 49.7 | 525.2 | 561.2 | 24.5 | 34.2 | 17.1 | 1.3 |
| 2021 Dec. | 3,976.3 | 2,654.6 | 736.0 | 161.0 | 574.9 | 49.7 | 525.2 | 561.2 | 24.5 | 34.2 | 17.1 | 1.3 |
| 2022 Jan. | 4,025.9 | 2,690.9 | 750.0 | 175.9 | 574.1 | 49.5 | 524.6 | 560.8 | 24.2 | 33.9 | 17.1 | 1.1 |
| Feb. | 4,037.8 | 2,704.5 | 748.5 | 175.5 | 573.0 | 48.7 | 524.3 | 560.9 | 23.9 | 33.8 | 17.1 | 1.2 |
| Mar. | 4,033.7 | 2,695.6 | 755.2 | 183.4 | 571.7 | 49.2 | 522.5 | 559.0 | 23.9 | 33.8 | 17.2 | 1.6 |
| Apr. | 4,046.7 | 2,705.6 | 759.4 | 189.8 | 569.6 | 50.1 | 519.5 | 557.9 | 23.8 | 33.8 | 17.3 | 1.1 |
| May | 4,056.8 | 2,724.3 | 752.1 | 183.3 | 568.7 | 51.2 | 517.5 | 556.6 | 23.8 | 33.6 | 17.1 | 0.8 |
| June | 4,051.8 | 2,714.4 | 758.8 | 194.7 | 564.1 | 49.0 | 515.1 | 554.8 | 23.8 | 33.4 | 17.2 | 0.7 |
| July | 4,086.4 | 2,729.0 | 780.4 | 213.7 | 566.7 | 50.9 | 515.8 | 553.0 | 24.1 | 33.0 | 17.3 | 1.2 |
| Aug. | 4,134.3 | 2,766.8 | 792.0 | 226.8 | 565.1 | 50.4 | 514.7 | 550.6 | 25.0 | 33.0 | 17.5 | 1.4 |
| Sep. | 4,149.9 | 2,755.6 | 823.1 | 263.8 | 559.3 | 45.5 | 513.8 | 545.2 | 25.9 | 33.2 | 18.3 | 1.0 |
| Oct. | 4,168.4 | 2,748.7 | 849.3 | 290.1 | 559.3 | 45.6 | 513.7 | 542.2 | 28.1 | 33.6 | 18.3 | 1.6 |
| Nov. | 4,205.6 | 2,767.9 | 869.3 | 309.6 | 559.7 | 46.8 | 512.9 | 536.9 | 31.5 | 34.8 | 18.4 | 4.4 |
| | | | | | | | | | | | **Changes *** | |
| 2020 | + 221.6 | + 273.7 | − 32.7 | − 15.0 | − 17.7 | − 4.8 | − 12.9 | − 14.5 | − 4.9 | + 1.9 | − 0.3 | − 0.1 |
| 2021 | + 95.3 | + 144.3 | − 46.2 | − 27.3 | − 18.9 | + 1.5 | − 20.5 | + 0.7 | − 3.5 | − 0.2 | + 2.7 | + 1.2 |
| 2021 Dec. | − 25.9 | − 31.2 | + 4.1 | + 3.9 | + 0.2 | − 0.2 | + 0.4 | + 1.4 | − 0.2 | + 0.6 | + 1.8 | + 0.4 |
| 2022 Jan. | + 49.6 | + 36.3 | + 14.1 | + 15.0 | − 0.9 | − 0.2 | − 0.7 | − 0.4 | − 0.4 | − 0.3 | − 0.0 | − 0.2 |
| Feb. | + 11.9 | + 13.6 | − 1.6 | − 0.4 | − 1.2 | − 0.8 | − 0.3 | + 0.1 | − 0.2 | − 0.2 | + 0.1 | + 0.2 |
| Mar. | − 4.1 | − 9.0 | + 6.6 | + 7.9 | − 1.3 | + 0.5 | − 1.8 | − 1.8 | + 0.0 | − | + 0.0 | + 0.3 |
| Apr. | + 13.0 | + 9.5 | + 4.2 | + 6.4 | − 2.2 | + 0.8 | − 3.0 | − 0.6 | − 0.1 | + 0.0 | + 0.1 | − 0.5 |
| May | + 10.1 | + 18.8 | − 7.3 | − 6.5 | − 0.9 | + 1.1 | − 2.0 | − 1.3 | + 0.0 | − 0.2 | − 0.1 | − 0.2 |
| June | − 5.0 | − 9.9 | + 6.7 | + 11.3 | − 4.6 | − 2.2 | − 2.5 | − 1.8 | − 0.0 | − 0.1 | + 0.1 | − 0.1 |
| July | + 33.5 | + 14.3 | + 20.7 | + 18.5 | + 2.2 | + 1.6 | + 0.6 | − 1.8 | + 0.3 | − 0.5 | + 0.1 | + 0.5 |
| Aug. | + 48.1 | + 37.8 | + 11.8 | + 13.1 | − 1.3 | − 0.4 | − 0.9 | − 2.4 | + 0.9 | + 0.0 | + 0.2 | + 0.2 |
| Sep. | + 15.6 | − 11.4 | + 31.3 | + 37.0 | − 5.7 | − 4.9 | − 0.8 | − 5.3 | + 0.9 | + 0.2 | + 0.8 | − 0.4 |
| Oct. | + 17.4 | − 8.0 | + 26.2 | + 26.3 | − 0.1 | + 0.0 | − 0.1 | − 3.1 | + 2.2 | + 0.4 | + 0.0 | + 0.5 |
| Nov. | + 45.3 | + 20.1 | + 27.1 | + 18.7 | + 8.4 | + 1.3 | + 7.2 | − 5.3 | + 3.4 | + 1.3 | + 0.1 | + 2.9 |
| **Domestic government** | | | | | | | | | | | **End of year or month *** | |
| 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 |
| 2020 | 229.5 | 80.1 | 143.0 | 59.6 | 83.5 | 20.9 | 62.6 | 2.7 | 3.7 | 25.4 | 2.1 | − |
| 2021 | 210.1 | 82.4 | 121.9 | 42.0 | 79.9 | 23.8 | 56.1 | 2.5 | 3.3 | 25.8 | 2.0 | 1.0 |
| 2021 Dec. | 210.1 | 82.4 | 121.9 | 42.0 | 79.9 | 23.8 | 56.1 | 2.5 | 3.3 | 25.8 | 2.0 | 1.0 |
| 2022 Jan. | 233.5 | 88.5 | 139.2 | 59.2 | 80.0 | 24.0 | 56.0 | 2.5 | 3.3 | 25.5 | 2.0 | − |
| Feb. | 237.9 | 91.4 | 140.7 | 61.0 | 79.7 | 23.7 | 56.0 | 2.5 | 3.3 | 25.5 | 2.0 | − |
| Mar. | 241.0 | 85.2 | 150.0 | 69.7 | 80.3 | 24.4 | 56.0 | 2.4 | 3.4 | 25.5 | 2.0 | − |
| Apr. | 243.7 | 86.2 | 151.8 | 70.8 | 80.9 | 25.0 | 55.9 | 2.4 | 3.4 | 25.6 | 2.0 | − |
| May | 255.6 | 91.4 | 158.4 | 76.1 | 82.2 | 25.9 | 56.3 | 2.4 | 3.4 | 25.6 | 2.0 | − |
| June | 254.9 | 84.8 | 164.2 | 84.6 | 79.7 | 23.3 | 56.3 | 2.4 | 3.5 | 25.4 | 2.0 | − |
| July | 258.3 | 78.0 | 174.5 | 93.0 | 81.5 | 24.6 | 57.0 | 2.4 | 3.4 | 25.4 | 1.9 | − |
| Aug. | 272.6 | 89.1 | 177.8 | 96.2 | 81.5 | 24.8 | 56.7 | 2.4 | 3.4 | 25.5 | 1.9 | − |
| Sep. | 273.0 | 86.6 | 180.6 | 104.6 | 76.0 | 20.0 | 56.1 | 2.3 | 3.5 | 25.7 | 1.9 | − |
| Oct. | 271.2 | 86.8 | 178.6 | 101.2 | 77.4 | 19.6 | 57.8 | 2.3 | 3.5 | 25.7 | 1.9 | − |
| Nov. | 304.7 | 106.1 | 192.8 | 109.7 | 83.2 | 20.8 | 62.4 | 2.1 | 3.7 | 26.6 | 1.9 | 2.4 |
| | | | | | | | | | | | **Changes *** | |
| 2020 | − 6.9 | + 5.7 | − 11.6 | − 16.5 | + 4.8 | − 5.3 | + 10.1 | − 0.6 | − 0.4 | + 0.7 | − 0.1 | − 0.2 |
| 2021 | − 17.9 | + 3.4 | − 20.8 | − 17.7 | − 3.0 | + 2.9 | − 6.0 | − 0.2 | − 0.4 | + 0.4 | − 0.0 | + 1.0 |
| 2021 Dec. | − 3.6 | + 3.7 | + 0.0 | + 0.6 | − 0.6 | + 0.3 | − 0.8 | + 0.0 | − 0.0 | + 0.7 | + 0.0 | + 1.0 |
| 2022 Jan. | + 23.4 | + 6.1 | + 17.4 | + 17.3 | + 0.1 | + 0.1 | − 0.1 | − 0.1 | − | − 0.3 | + 0.0 | − 1.0 |
| Feb. | + 4.3 | + 2.9 | + 1.4 | + 1.7 | − 0.3 | − 0.2 | − 0.1 | − 0.0 | − 0.0 | + 0.0 | + 0.0 | − |
| Mar. | + 3.2 | − 6.2 | + 9.4 | + 8.7 | + 0.7 | + 0.6 | + 0.1 | − 0.0 | + 0.1 | − 0.0 | + 0.0 | − |
| Apr. | + 2.7 | + 1.0 | + 1.7 | + 1.1 | + 0.6 | + 0.6 | − 0.0 | − 0.0 | + 0.0 | + 0.1 | + 0.0 | − |
| May | + 11.5 | + 5.2 | + 6.2 | + 5.2 | + 1.0 | + 0.9 | + 0.1 | − 0.0 | + 0.1 | − 0.0 | + 0.0 | − |
| June | − 0.7 | − 6.6 | + 5.9 | + 8.5 | − 2.6 | − 2.6 | − 0.0 | − 0.0 | + 0.0 | − 0.2 | + 0.0 | − |
| July | + 3.5 | − 6.7 | + 10.3 | + 8.4 | + 1.9 | + 1.2 | + 0.6 | − 0.0 | − 0.1 | − 0.0 | − 0.1 | − |
| Aug. | + 14.3 | + 11.1 | + 3.2 | + 3.2 | − 0.0 | + 0.2 | − 0.3 | − 0.0 | + 0.0 | + 0.1 | + 0.0 | − |
| Sep. | + 0.4 | − 2.4 | + 2.8 | + 8.3 | − 5.5 | − 4.9 | − 0.6 | − 0.0 | + 0.1 | + 0.1 | + 0.0 | − |
| Oct. | − 1.9 | + 0.2 | − 2.1 | − 3.4 | + 1.3 | − 0.4 | + 1.7 | − 0.1 | + 0.1 | + 0.0 | + 0.0 | − |
| Nov. | + 33.2 | + 19.3 | + 14.0 | + 8.4 | + 5.6 | + 1.0 | + 4.6 | − 0.2 | + 0.1 | + 0.8 | − 0.0 | + 2.4 |

\* 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 Table IV.12). **3** Excluding deposits under savings and loan contracts (see also footnote 2).

## 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] Total | for up to and including 1 year | for more than 1 year [2] Total | for up to and including 2 years | for more than 2 years | Savings deposits [3] | Bank savings bonds [4] | Fiduciary loans | Memo item: Subordinated liabilities (excluding negotiable debt securities) | Liabilities arising from repos |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Domestic enterprises and households** | | | | | | | | | | | **End of year or month *** | |
| 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 |
| 2020 | 3,655.7 | 2,432.9 | 640.3 | 129.3 | 511.0 | 27.0 | 483.9 | 557.9 | 24.6 | 9.0 | 12.3 | 0.1 |
| 2021 | 3,766.2 | 2,572.2 | 614.1 | 119.0 | 495.0 | 25.9 | 469.2 | 558.7 | 21.2 | 8.4 | 15.1 | 0.3 |
| 2021 Dec. | 3,766.2 | 2,572.2 | 614.1 | 119.0 | 495.0 | 25.9 | 469.2 | 558.7 | 21.2 | 8.4 | 15.1 | 0.3 |
| 2022 Jan. | 3,792.4 | 2,602.4 | 610.8 | 116.6 | 494.1 | 25.5 | 468.6 | 558.3 | 20.8 | 8.4 | 15.0 | 1.1 |
| Feb. | 3,799.9 | 2,613.1 | 607.8 | 114.5 | 493.3 | 24.9 | 468.3 | 558.4 | 20.6 | 8.2 | 15.1 | 1.2 |
| Mar. | 3,792.7 | 2,610.4 | 605.1 | 113.7 | 491.4 | 24.8 | 466.6 | 556.6 | 20.5 | 8.2 | 15.2 | 1.6 |
| Apr. | 3,802.9 | 2,619.4 | 607.6 | 119.0 | 488.6 | 25.1 | 463.6 | 555.5 | 20.4 | 8.2 | 15.2 | 1.1 |
| May | 3,801.2 | 2,632.9 | 593.7 | 107.2 | 486.5 | 25.3 | 461.2 | 554.2 | 20.4 | 8.0 | 15.1 | 0.8 |
| June | 3,796.9 | 2,629.7 | 594.5 | 110.1 | 484.4 | 25.6 | 458.8 | 552.4 | 20.3 | 8.0 | 15.2 | 0.7 |
| July | 3,828.1 | 2,650.6 | 605.9 | 120.7 | 485.2 | 26.3 | 458.9 | 550.6 | 20.7 | 7.6 | 15.4 | 1.2 |
| Aug. | 3,861.7 | 2,677.7 | 614.2 | 130.6 | 483.6 | 25.6 | 458.0 | 548.2 | 21.6 | 7.5 | 15.6 | 1.4 |
| Sep. | 3,876.9 | 2,669.0 | 642.5 | 159.2 | 483.3 | 25.5 | 457.7 | 542.9 | 22.5 | 7.5 | 16.3 | 1.0 |
| Oct. | 3,897.2 | 2,661.9 | 670.8 | 188.9 | 481.9 | 25.9 | 455.9 | 539.9 | 24.6 | 7.9 | 16.4 | 1.6 |
| Nov. | 3,900.9 | 2,661.8 | 676.5 | 199.9 | 476.5 | 26.0 | 450.5 | 534.8 | 27.8 | 8.3 | 16.4 | 2.1 |
| | | | | | | | | | | | **Changes *** | |
| 2020 | + 228.5 | + 268.0 | – 21.1 | + 1.5 | – 22.6 | + 0.5 | – 23.0 | – 13.9 | – 4.6 | + 1.2 | – 0.2 | + 0.1 |
| 2021 | + 113.2 | + 140.9 | – 25.5 | – 9.6 | – 15.9 | – 1.4 | – 14.5 | + 0.9 | – 3.1 | – 0.6 | + 2.8 | + 0.2 |
| 2021 Dec. | – 22.3 | + 27.5 | + 4.1 | + 3.3 | + 0.8 | – 0.5 | + 1.2 | + 1.3 | – 0.2 | – 0.1 | + 1.8 | – 0.6 |
| 2022 Jan. | + 26.2 | + 30.2 | – 3.3 | – 2.3 | – 1.0 | – 0.4 | – 0.6 | – 0.4 | – 0.4 | + 0.0 | – 0.0 | + 0.8 |
| Feb. | + 7.5 | + 10.7 | – 3.0 | – 2.1 | – 0.9 | – 0.6 | – 0.3 | + 0.1 | – 0.2 | – 0.2 | + 0.0 | + 0.2 |
| Mar. | – 7.4 | – 2.7 | – 2.8 | – 0.8 | – 2.0 | – 0.1 | – 1.9 | – 1.8 | – 0.1 | + 0.0 | + 0.0 | + 0.3 |
| Apr. | + 10.3 | + 8.5 | + 2.5 | + 5.3 | – 2.8 | + 0.2 | – 3.0 | – 0.6 | – 0.1 | – 0.1 | + 0.1 | – 0.5 |
| May | – 1.4 | + 13.5 | – 13.6 | – 11.7 | – 1.9 | + 0.2 | – 2.1 | – 1.3 | – 0.0 | – 0.2 | – 0.1 | – 0.2 |
| June | – 4.2 | – 3.2 | + 0.8 | + 2.9 | – 2.1 | + 0.4 | – 2.4 | – 1.8 | – 0.0 | + 0.0 | + 0.1 | – 0.1 |
| July | + 30.0 | + 21.0 | + 10.4 | + 10.1 | + 0.3 | + 0.4 | – 0.1 | – 1.8 | + 0.4 | – 0.5 | + 0.2 | + 0.5 |
| Aug. | + 33.8 | + 26.7 | + 8.6 | + 9.8 | – 1.2 | – 0.6 | – 0.6 | – 2.4 | + 0.9 | – 0.1 | + 0.2 | + 0.2 |
| Sep. | + 15.1 | – 8.9 | + 28.5 | + 28.7 | – 0.2 | – 0.0 | – 0.2 | – 5.3 | + 0.9 | + 0.0 | + 0.8 | – 0.4 |
| Oct. | + 19.2 | – 8.2 | + 28.3 | + 29.7 | – 1.4 | + 0.4 | – 1.8 | – 3.0 | + 2.1 | + 0.4 | + 0.0 | + 0.5 |
| Nov. | + 12.1 | + 0.9 | + 13.1 | + 10.3 | + 2.8 | + 0.3 | + 2.5 | – 5.1 | + 3.3 | + 0.4 | + 0.1 | + 0.5 |
| **of which: Domestic enterprises** | | | | | | | | | | | **End of year or month *** | |
| 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 |
| 2020 | 1,116.1 | 719.1 | 381.7 | 89.2 | 292.5 | 15.0 | 277.5 | 5.8 | 9.4 | 2.3 | 9.7 | 0.1 |
| 2021 | 1,142.7 | 765.1 | 364.3 | 87.4 | 276.9 | 15.8 | 261.1 | 5.3 | 8.0 | 2.3 | 12.2 | 0.3 |
| 2021 Dec. | 1,142.7 | 765.1 | 364.3 | 87.4 | 276.9 | 15.8 | 261.1 | 5.3 | 8.0 | 2.3 | 12.2 | 0.3 |
| 2022 Jan. | 1,170.4 | 795.8 | 361.6 | 85.3 | 276.4 | 15.9 | 260.4 | 5.1 | 7.8 | 2.4 | 12.2 | 1.1 |
| Feb. | 1,165.1 | 793.2 | 359.0 | 83.4 | 275.6 | 15.4 | 260.2 | 5.2 | 7.8 | 2.2 | 12.2 | 1.2 |
| Mar. | 1,171.9 | 802.1 | 356.9 | 82.7 | 274.2 | 15.5 | 258.7 | 5.2 | 7.8 | 2.3 | 12.3 | 1.6 |
| Apr. | 1,165.3 | 792.4 | 360.0 | 88.0 | 272.0 | 16.0 | 256.1 | 5.2 | 7.7 | 2.3 | 12.4 | 1.1 |
| May | 1,165.6 | 806.0 | 346.7 | 76.4 | 270.4 | 16.3 | 254.1 | 5.1 | 7.7 | 2.3 | 12.3 | 0.8 |
| June | 1,158.9 | 798.2 | 347.9 | 78.6 | 269.3 | 16.9 | 252.3 | 5.1 | 7.7 | 2.3 | 12.4 | 0.7 |
| July | 1,168.8 | 797.0 | 358.8 | 88.5 | 270.3 | 17.5 | 252.8 | 5.1 | 7.9 | 1.9 | 12.5 | 1.2 |
| Aug. | 1,205.4 | 826.9 | 365.4 | 96.1 | 269.3 | 16.8 | 252.4 | 5.1 | 8.0 | 1.9 | 12.6 | 1.4 |
| Sep. | 1,215.7 | 815.8 | 386.8 | 117.9 | 268.9 | 16.6 | 252.3 | 5.0 | 8.1 | 1.9 | 13.4 | 1.0 |
| Oct. | 1,232.8 | 809.3 | 410.4 | 143.0 | 267.4 | 16.7 | 250.7 | 4.9 | 8.2 | 1.9 | 13.3 | 1.6 |
| Nov. | 1,223.8 | 805.2 | 405.4 | 144.0 | 261.4 | 16.2 | 245.1 | 4.7 | 8.4 | 1.9 | 13.3 | 2.1 |
| | | | | | | | | | | | **Changes *** | |
| 2020 | + 81.0 | + 101.2 | – 18.0 | + 7.0 | – 25.0 | – 0.4 | – 24.6 | – 0.8 | – 1.3 | – 0.0 | – 0.5 | + 0.1 |
| 2021 | + 28.5 | + 47.1 | – 16.8 | – 1.2 | – 15.7 | + 0.5 | – 16.2 | – 0.5 | – 1.3 | + 0.0 | + 2.6 | + 0.2 |
| 2021 Dec. | – 23.4 | – 26.5 | + 3.3 | + 3.1 | + 0.2 | + 0.3 | – 0.1 | – 0.2 | – 0.0 | + 0.0 | + 1.8 | – 0.6 |
| 2022 Jan. | + 27.8 | + 30.8 | – 2.6 | – 2.1 | – 0.5 | + 0.1 | – 0.7 | – 0.2 | – 0.2 | + 0.0 | – 0.1 | + 0.8 |
| Feb. | – 5.3 | – 2.6 | – 2.7 | – 1.9 | – 0.7 | – 0.5 | – 0.3 | + 0.0 | – 0.0 | – 0.1 | + 0.0 | + 0.2 |
| Mar. | + 6.6 | + 8.8 | – 2.2 | – 0.7 | – 1.5 | + 0.0 | – 1.6 | + 0.0 | + 0.0 | + 0.0 | + 0.0 | + 0.3 |
| Apr. | – 6.6 | – 9.6 | + 3.2 | + 5.4 | – 2.2 | + 0.4 | – 2.6 | – 0.0 | – 0.1 | + 0.0 | + 0.1 | – 0.5 |
| May | + 0.5 | + 12.6 | – 13.0 | – 11.7 | – 1.4 | + 0.3 | – 1.7 | – 0.0 | – 0.0 | + 0.0 | – 0.0 | – 0.2 |
| June | – 6.7 | – 7.8 | + 1.2 | + 2.2 | – 1.1 | + 0.6 | – 1.7 | – 0.0 | – 0.0 | + 0.1 | + 0.1 | – 0.1 |
| July | + 8.8 | – 1.4 | + 10.0 | + 9.3 | + 0.7 | + 0.4 | + 0.3 | + 0.0 | + 0.2 | – 0.4 | + 0.2 | + 0.5 |
| Aug. | + 36.6 | + 29.9 | + 6.6 | + 7.6 | – 1.0 | – 0.7 | – 0.4 | + 0.0 | + 0.2 | – 0.0 | + 0.1 | + 0.2 |
| Sep. | + 10.2 | – 11.4 | + 21.6 | + 21.8 | – 0.2 | – 0.2 | – 0.0 | – 0.1 | + 0.1 | + 0.0 | + 0.7 | – 0.4 |
| Oct. | + 16.0 | – 7.6 | + 23.6 | + 25.1 | – 1.5 | + 0.1 | – 1.5 | – 0.1 | + 0.1 | + 0.0 | – 0.0 | + 0.5 |
| Nov. | – 0.7 | – 3.2 | + 2.4 | + 0.3 | + 2.1 | – 0.3 | + 2.4 | – 0.1 | + 0.2 | + 0.0 | – 0.0 | + 0.5 |

4 Including liabilities arising from non-negotiable bearer debt securities.

## IV. Banks

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

€ billion

| Period | Deposits of domestic households and non-profit institutions, total | Sight deposits | | | | | | Time deposits [1,2] | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | by creditor group | | | | Domestic non-profit institutions | Total | by creditor group | | | |
| | | | Domestic households | | | | | | Domestic households | | | |
| | | | Total | Self-employed persons | Employees | Other individuals | | | Total | Self-employed persons | Employees | Other individuals |
| | | | | | | | **End of year or month *** | | | | | |
| 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 | 2,539.5 | 1,713.8 | 1,672.7 | 291.1 | 1,215.4 | 166.2 | 41.1 | 258.6 | 245.1 | 19.3 | 190.5 | 35.2 |
| 2021 | 2,623.6 | 1,807.1 | 1,762.4 | 308.6 | 1,288.4 | 165.4 | 44.7 | 249.8 | 237.8 | 18.2 | 185.6 | 33.9 |
| 2022 June | 2,638.0 | 1,831.5 | 1,784.9 | 308.1 | 1,316.2 | 160.7 | 46.6 | 246.6 | 234.4 | 19.0 | 181.0 | 34.4 |
| July | 2,659.3 | 1,853.9 | 1,807.6 | 317.0 | 1,328.2 | 162.4 | 46.3 | 247.1 | 234.8 | 19.3 | 181.0 | 34.4 |
| Aug. | 2,656.3 | 1,850.8 | 1,803.8 | 320.0 | 1,323.2 | 160.5 | 47.0 | 248.8 | 235.7 | 19.8 | 181.7 | 34.1 |
| Sep. | 2,661.2 | 1,853.3 | 1,805.7 | 314.2 | 1,329.9 | 161.5 | 47.6 | 255.7 | 242.0 | 21.8 | 185.8 | 34.4 |
| Oct. | 2,664.4 | 1,852.6 | 1,807.1 | 317.1 | 1,329.7 | 160.3 | 45.5 | 260.4 | 246.5 | 23.1 | 188.8 | 34.6 |
| Nov. | 2,677.2 | 1,856.7 | 1,812.3 | 312.1 | 1,340.3 | 159.9 | 44.4 | 271.0 | 256.9 | 27.4 | 194.4 | 35.1 |
| | | | | | | | **Changes *** | | | | | |
| 2020 | + 147.5 | + 166.9 | + 165.0 | + 26.0 | + 131.5 | + 7.5 | + 1.8 | − 3.1 | − 3.2 | − 1.5 | − 1.6 | − 0.2 |
| 2021 | + 84.7 | + 93.8 | + 90.3 | + 17.3 | + 73.7 | − 0.6 | + 3.5 | − 8.6 | − 7.2 | − 1.1 | − 4.7 | − 1.3 |
| 2022 June | + 2.4 | + 4.5 | + 4.6 | − 3.5 | + 8.2 | − 0.1 | − 0.1 | − 0.3 | − 0.6 | + 0.4 | − 0.9 | − 0.1 |
| July | + 21.3 | + 22.4 | + 22.7 | + 8.9 | + 12.5 | + 1.2 | − 0.3 | + 0.4 | + 0.3 | + 0.3 | + 0.1 | − 0.1 |
| Aug. | − 2.8 | − 3.2 | − 3.9 | + 3.0 | − 5.1 | − 1.9 | + 0.7 | + 2.0 | + 1.2 | + 0.5 | + 0.8 | − 0.1 |
| Sep. | + 4.9 | + 2.5 | + 1.9 | − 5.8 | + 6.7 | + 1.0 | + 0.5 | + 6.9 | + 6.3 | + 2.0 | + 4.0 | + 0.3 |
| Oct. | + 3.2 | − 0.6 | + 1.5 | + 2.9 | − 0.3 | − 1.2 | − 2.1 | + 4.7 | + 4.5 | + 1.3 | + 3.0 | + 0.2 |
| Nov. | + 12.8 | + 4.0 | + 5.2 | − 5.0 | + 10.6 | − 0.4 | − 1.1 | + 10.6 | + 10.5 | + 4.3 | + 5.7 | + 0.5 |

**\*** 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** 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 *** | | | | | | |
| 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 | 229.5 | 48.6 | 4.8 | 7.2 | 36.5 | 0.0 | 11.3 | 46.5 | 21.2 | 11.4 | 13.2 | 0.7 | 14.1 |
| 2021 | 210.1 | 43.5 | 4.2 | 3.2 | 36.0 | 0.1 | 11.7 | 47.4 | 21.7 | 13.8 | 11.3 | 0.6 | 14.1 |
| 2022 June | 254.9 | 43.0 | 5.5 | 4.4 | 33.1 | 0.1 | 11.6 | 62.8 | 18.0 | 33.0 | 11.3 | 0.5 | 13.8 |
| July | 258.3 | 44.0 | 5.7 | 4.2 | 34.0 | 0.1 | 11.5 | 65.7 | 17.2 | 36.8 | 11.2 | 0.5 | 13.9 |
| Aug. | 272.6 | 44.0 | 5.6 | 4.3 | 34.0 | 0.1 | 11.5 | 65.7 | 16.0 | 38.1 | 11.1 | 0.5 | 14.0 |
| Sep. | 273.0 | 43.3 | 6.7 | 8.3 | 28.2 | 0.1 | 11.6 | 71.2 | 19.4 | 40.5 | 10.8 | 0.5 | 14.1 |
| Oct. | 271.2 | 44.9 | 6.2 | 8.5 | 30.2 | 0.1 | 11.5 | 67.2 | 19.4 | 36.8 | 10.5 | 0.5 | 14.2 |
| Nov. | 304.7 | 71.1 | 14.6 | 21.3 | 35.1 | 0.1 | 11.5 | 63.3 | 24.0 | 28.5 | 10.4 | 0.5 | 15.0 |
| | | | | | | | **Changes *** | | | | | | |
| 2020 | − 6.9 | + 37.3 | − 0.6 | + 5.7 | + 32.2 | − 0.0 | − 0.3 | − 7.0 | + 0.2 | − 5.7 | − 1.3 | − 0.2 | + 1.0 |
| 2021 | − 17.9 | − 5.0 | − 0.5 | − 4.1 | − 0.4 | + 0.0 | + 0.3 | + 1.0 | + 0.6 | + 2.3 | − 1.8 | − 0.1 | + 0.0 |
| 2022 June | − 0.7 | + 0.2 | − 0.2 | + 3.3 | − 2.9 | + 0.0 | − 0.1 | + 0.8 | − 3.1 | + 4.0 | − 0.1 | − 0.0 | − 0.0 |
| July | + 3.5 | + 1.1 | + 0.2 | − 0.1 | + 1.0 | – | − 0.1 | + 2.8 | − 0.8 | + 3.8 | − 0.1 | − 0.0 | + 0.1 |
| Aug. | + 14.3 | + 0.0 | − 0.1 | + 0.1 | + 0.0 | + 0.0 | + 0.0 | + 0.0 | − 1.2 | + 1.4 | − 0.2 | − 0.0 | + 0.1 |
| Sep. | + 0.4 | − 0.7 | + 1.1 | + 4.0 | − 5.8 | − 0.0 | + 0.0 | + 5.5 | + 3.4 | + 2.4 | − 0.3 | + 0.0 | + 0.2 |
| Oct. | − 1.9 | + 1.6 | − 0.6 | + 0.2 | + 2.0 | − 0.0 | − 0.0 | − 4.0 | − 0.0 | − 3.7 | − 0.2 | − 0.0 | + 0.1 |
| Nov. | + 33.2 | + 25.8 | + 8.2 | + 12.7 | + 4.9 | – | − 0.0 | − 3.8 | + 4.6 | − 8.3 | − 0.1 | + 0.0 | + 0.8 |

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

## IV. Banks

| Domestic non-profit institu-tions | up to and including 1 year | by maturity | | | Savings deposits [3] | | | Bank savings bonds [4] | Memo item: | | Liabilities arising from repos | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | more than 1 year [2] | | | | | | | Fiduciary loans | Subordinated liabilities (excluding negotiable debt securities) [5] | | |
| | | | of which: | | | | | | | | | |
| | | Total | up to and including 2 years | more than 2 years | Total | Domestic households | Domestic non-profit institu-tions | | | | | |

**End of year or month ***

| 13.3 | 45.6 | 216.1 | 11.2 | 204.9 | 565.1 | 558.1 | 7.0 | 18.4 | 5.4 | 2.4 | – | 2019 |
| 13.5 | 40.1 | 218.5 | 12.0 | 206.5 | 552.0 | 545.7 | 6.3 | 15.1 | 6.7 | 2.7 | – | 2020 |
| 12.0 | 31.7 | 218.1 | 10.1 | 208.0 | 553.4 | 547.2 | 6.2 | 13.2 | 6.1 | 2.8 | – | 2021 |
| 12.2 | 31.5 | 215.1 | 8.7 | 206.4 | 547.3 | 541.4 | 5.9 | 12.6 | 5.7 | 2.9 | – | 2022 June |
| 12.3 | 32.3 | 214.8 | 8.8 | 206.1 | 545.5 | 539.7 | 5.7 | 12.8 | 5.6 | 2.9 | – | July |
| 13.2 | 34.5 | 214.4 | 8.8 | 205.6 | 543.1 | 537.4 | 5.7 | 13.5 | 5.6 | 2.9 | – | Aug. |
| 13.7 | 41.3 | 214.4 | 8.9 | 205.5 | 537.9 | 532.3 | 5.6 | 14.3 | 5.6 | 3.0 | – | Sep. |
| 13.9 | 45.9 | 214.5 | 9.3 | 205.2 | 535.1 | 529.5 | 5.5 | 16.3 | 5.9 | 3.0 | – | Oct. |
| 14.1 | 55.9 | 215.1 | 9.8 | 205.3 | 530.1 | 524.8 | 5.3 | 19.4 | 6.4 | 3.1 | – | Nov. |

**Changes ***

| + 0.2 | – 5.5 | + 2.4 | + 0.9 | + 1.6 | – 13.0 | – 12.3 | – 0.7 | – 3.3 | + 1.3 | + 0.2 | – | 2020 |
| – 1.4 | – 8.4 | – 0.2 | – 1.9 | + 1.6 | + 1.4 | + 1.5 | – 0.1 | – 1.9 | – 0.6 | + 0.2 | – | 2021 |
| + 0.2 | + 0.6 | – 1.0 | – 0.3 | – 0.7 | – 1.8 | – 1.7 | – 0.1 | – 0.0 | – 0.0 | + 0.0 | – | 2022 June |
| + 0.1 | + 0.8 | – 0.3 | + 0.0 | – 0.4 | – 1.8 | – 1.7 | – 0.1 | + 0.2 | – 0.1 | + 0.0 | – | July |
| + 0.8 | + 2.2 | – 0.2 | + 0.1 | – 0.3 | – 2.3 | – 2.3 | – 0.1 | + 0.7 | – 0.1 | + 0.0 | – | Aug. |
| + 0.6 | + 6.8 | + 0.0 | + 0.2 | – 0.1 | – 5.2 | – 5.1 | – 0.1 | + 0.8 | + 0.0 | + 0.0 | – | Sep. |
| + 0.2 | + 4.6 | + 0.1 | + 0.3 | – 0.3 | – 2.9 | – 2.8 | – 0.1 | + 2.0 | + 0.3 | + 0.0 | – | Oct. |
| + 0.2 | + 10.0 | + 0.7 | + 0.5 | + 0.1 | – 5.0 | – 4.7 | – 0.3 | + 3.1 | + 0.4 | + 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) | | | | | | Social security funds | | | | | | Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | Sight deposits | Time deposits [3] | | Savings deposits and bank savings bonds [2,4] | Memo item: Fiduciary loans | Total | Sight deposits | Time deposits | | Savings deposits and bank savings bonds [2] | Memo item: Fiduciary loans | |
| | | for up to and including 1 year | for more than 1 year | | | | | for up to and including 1 year | for more than 1 year | | | |

**End of year or month ***

| 65.3 | 37.4 | 8.6 | 14.0 | 5.4 | 0.0 | 106.8 | 10.8 | 48.8 | 46.2 | 1.1 | – | 2019 |
| 68.5 | 43.2 | 8.0 | 12.4 | 4.9 | 0.0 | 66.0 | 10.9 | 32.9 | 21.4 | 0.8 | – | 2020 |
| 70.9 | 48.5 | 6.0 | 12.0 | 4.4 | 0.0 | 48.3 | 8.0 | 19.0 | 20.5 | 0.8 | – | 2021 |
| 70.1 | 45.2 | 7.2 | 13.2 | 4.4 | 0.0 | 78.9 | 16.0 | 40.0 | 22.0 | 0.9 | – | 2022 June |
| 67.0 | 41.2 | 7.7 | 13.7 | 4.4 | 0.0 | 81.6 | 13.9 | 44.3 | 22.6 | 0.7 | – | July |
| 76.2 | 48.9 | 9.1 | 13.8 | 4.4 | 0.0 | 86.7 | 18.6 | 44.7 | 22.6 | 0.7 | – | Aug. |
| 72.1 | 45.0 | 9.5 | 13.2 | 4.4 | 0.0 | 86.5 | 15.5 | 46.3 | 23.9 | 0.7 | – | Sep. |
| 70.1 | 42.7 | 9.6 | 13.3 | 4.5 | 0.0 | 89.0 | 18.6 | 46.3 | 23.4 | 0.7 | – | Oct. |
| 75.6 | 46.2 | 11.3 | 13.6 | 4.5 | 0.0 | 94.6 | 21.4 | 48.6 | 24.0 | 0.6 | – | Nov. |

**Changes ***

| + 3.5 | + 5.9 | – 0.6 | – 1.3 | – 0.5 | – 0.0 | – 40.8 | + 0.2 | – 15.9 | – 24.8 | – 0.3 | – | 2020 |
| + 2.8 | + 5.6 | – 2.0 | – 0.2 | – 0.5 | – | – 16.8 | – 2.2 | – 13.9 | – 0.6 | + 0.1 | – | 2021 |
| – 2.3 | – 2.6 | + 0.2 | + 0.1 | + 0.0 | – | + 0.6 | – 0.7 | + 1.0 | + 0.3 | – 0.0 | – | 2022 June |
| – 3.1 | – 4.0 | + 0.5 | + 0.5 | – | – | + 2.7 | – 2.1 | + 4.3 | + 0.6 | – 0.1 | – | July |
| + 9.1 | + 7.6 | + 1.4 | + 0.1 | + 0.0 | – | + 5.1 | + 4.7 | + 0.4 | + 0.0 | + 0.0 | – | Aug. |
| – 4.1 | – 3.9 | + 0.4 | – 0.6 | + 0.0 | – | + 0.2 | – 3.1 | + 1.6 | + 1.3 | – | – | Sep. |
| – 2.0 | – 2.3 | + 0.1 | + 0.2 | + 0.0 | – | + 2.5 | + 3.1 | + 0.0 | – 0.6 | – 0.0 | – | Oct. |
| + 5.6 | + 3.6 | + 1.7 | + 0.1 | + 0.0 | – | + 5.6 | + 2.8 | + 2.3 | + 0.7 | – 0.1 | – | 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).

## IV. Banks

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

€ billion

| | Savings deposits 1 | | | | | | | | Memo item: Interest credited on savings deposits | Bank savings bonds, 3 sold to | | | |
| | Total | of residents | | | | | of non-residents | | | non-banks, total | domestic non-banks | | foreign non-banks |
| | | Total | at 3 months' notice | | at more than 3 months' notice | | Total | of which: At 3 months' notice | | | Total | of which: With maturities of more than 2 years | |
| Period | | | Total | of which: Special savings facilities 2 | Total | of which: Special savings facilities 2 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **End of year or month *** | | | | | | | | | | | | | |
| 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 | 566.8 | 560.6 | 533.3 | 288.0 | 27.3 | 18.0 | 6.3 | 5.7 | 1.8 | 30.2 | 28.3 | 22.1 | 1.9 |
| 2021 | 567.1 | 561.2 | 537.1 | 269.0 | 24.1 | 14.8 | 5.9 | 5.4 | 1.5 | 24.7 | 24.5 | 19.5 | 0.2 |
| 2022 July | 558.6 | 553.0 | 530.7 | 259.5 | 22.2 | 13.3 | 5.6 | 5.2 | 0.1 | 24.2 | 24.1 | 18.9 | 0.1 |
| Aug. | 556.1 | 550.6 | 528.4 | 257.1 | 22.2 | 13.3 | 5.6 | 5.1 | 0.1 | 25.1 | 25.0 | 19.2 | 0.2 |
| Sep. | 550.7 | 545.2 | 523.1 | 252.7 | 22.1 | 13.3 | 5.5 | 5.0 | 0.1 | 26.1 | 25.9 | 19.4 | 0.2 |
| Oct. | 547.6 | 542.2 | 519.8 | 252.4 | 22.3 | 13.6 | 5.4 | 5.0 | 0.1 | 28.3 | 28.1 | 19.8 | 0.2 |
| Nov. | 542.2 | 536.9 | 514.4 | 250.4 | 22.5 | 13.8 | 5.3 | 4.9 | 0.1 | 31.7 | 31.5 | 20.4 | 0.2 |
| **Changes *** | | | | | | | | | | | | | |
| 2020 | − 14.8 | − 14.5 | − 7.2 | − 24.6 | − 7.3 | − 6.7 | − 0.3 | − 0.2 | . | − 5.7 | − 4.9 | − 3.0 | − 0.7 |
| 2021 | + 0.3 | + 0.7 | + 3.9 | − 18.5 | − 3.2 | − 3.2 | − 0.4 | − 0.3 | . | − 5.2 | − 3.5 | − 2.3 | − 1.7 |
| 2022 July | − 1.9 | − 1.8 | − 1.7 | + 0.2 | − 0.2 | − 0.0 | − 0.0 | − 0.0 | . | + 0.3 | + 0.3 | + 0.1 | − |
| Aug. | − 2.5 | − 2.4 | − 2.3 | − 2.3 | − 0.1 | − 0.0 | − 0.1 | − 0.1 | . | + 0.9 | + 0.9 | + 0.3 | + 0.0 |
| Sep. | − 5.4 | − 5.3 | − 5.3 | − 4.3 | − 0.0 | − 0.0 | − 0.1 | − 0.1 | . | + 1.0 | + 0.9 | + 0.2 | + 0.0 |
| Oct. | − 3.1 | − 3.1 | − 3.3 | − 0.4 | + 0.2 | + 0.3 | − 0.1 | − 0.1 | . | + 2.2 | + 2.2 | + 0.4 | + 0.0 |
| Nov. | − 5.4 | − 5.3 | − 5.4 | − 2.0 | + 0.2 | + 0.2 | − 0.1 | − 0.1 | . | + 3.4 | + 3.4 | + 0.6 | + 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

| | Negotiable bearer debt securities and money market paper | | | | | | | | | | Non-negotiable bearer debt securities and money market paper 6 | | Subordinated | |
| | Total | of which: | | | | with maturities of | | | | | Total | of which: with maturities of more than 2 years | negotiable debt securities | non-negotiable debt securities |
| | | Floating rate bonds 1 | Zero coupon bonds 1,2 | Foreign currency bonds 3,4 | Certificates of deposit | up to and including 1 year | | more than 1 year up to and including 2 years | | more than 2 years | | | | |
| Period | | | | | | Total | of which: without a nominal guarantee 5 | Total | of which: without a nominal guarantee 5 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **End of year or month *** | | | | | | | | | | | | | | |
| 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 | 1,119.0 | 117.1 | 12.7 | 313.6 | 89.4 | 94.3 | 1.5 | 23.8 | 3.1 | 1,000.9 | 1.1 | 0.9 | 34.8 | 0.4 |
| 2021 | 1,173.6 | 106.8 | 13.5 | 331.4 | 98.7 | 106.8 | 1.9 | 18.0 | 4.5 | 1,048.8 | 0.9 | 0.7 | 34.6 | 0.1 |
| 2022 July | 1,237.8 | 98.0 | 16.2 | 344.8 | 105.0 | 115.4 | 2.1 | 17.7 | 4.1 | 1,104.7 | 1.0 | 0.9 | 36.5 | 0.1 |
| Aug. | 1,239.1 | 96.8 | 16.7 | 336.8 | 98.9 | 109.9 | 2.1 | 21.6 | 4.1 | 1,107.7 | 0.9 | 0.8 | 37.4 | 0.1 |
| Sep. | 1,271.1 | 96.1 | 16.9 | 353.1 | 117.9 | 128.8 | 1.9 | 23.1 | 3.9 | 1,119.3 | 0.8 | 0.8 | 38.2 | 0.1 |
| Oct. | 1,261.8 | 95.5 | 15.6 | 335.7 | 102.2 | 111.5 | 1.8 | 25.1 | 3.9 | 1,125.1 | 0.9 | 0.8 | 38.1 | 0.1 |
| Nov. | 1,253.8 | 93.6 | 14.8 | 323.5 | 95.9 | 105.3 | 1.7 | 26.4 | 3.7 | 1,122.0 | 0.9 | 0.8 | 38.1 | 0.1 |
| **Changes *** | | | | | | | | | | | | | | |
| 2020 | − 20.5 | − 5.2 | − 0.8 | − 54.1 | − 22.3 | − 22.2 | − 1.1 | + 0.2 | − 1.1 | + 1.5 | + 0.3 | + 0.2 | + 2.1 | − 0.0 |
| 2021 | + 54.0 | − 10.3 | + 0.8 | + 17.6 | + 9.4 | + 12.6 | + 0.4 | − 5.9 | + 1.3 | + 47.3 | + 0.4 | + 0.3 | − 0.2 | − 0.3 |
| 2022 July | + 1.8 | + 0.3 | − 0.0 | − 8.5 | − 8.3 | − 9.0 | + 0.2 | + 0.9 | − 0.0 | + 9.8 | + 0.1 | + 0.1 | + 0.1 | − |
| Aug. | + 1.3 | − 1.2 | + 0.5 | − 8.0 | − 6.1 | − 5.5 | + 0.0 | + 3.8 | − 0.1 | + 3.0 | − 0.0 | − 0.0 | + 0.9 | − |
| Sep. | + 32.0 | − 0.7 | + 0.2 | + 16.3 | + 19.0 | + 18.9 | − 0.2 | + 1.5 | − 0.2 | + 11.6 | − 0.1 | − 0.1 | + 0.8 | − |
| Oct. | − 9.4 | − 0.6 | − 1.4 | − 17.4 | − 15.5 | − 17.2 | − 0.1 | + 2.0 | + 0.0 | + 5.8 | + 0.0 | + 0.0 | − 0.1 | − |
| Nov. | − 8.0 | − 1.9 | − 0.7 | − 12.3 | − 6.3 | − 6.2 | − 0.1 | + 1.3 | − 0.2 | − 3.1 | + 0.0 | − 0.0 | + 0.0 | − |

* See Table IV.2, footnote *; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** Including 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 1 | Lending to banks (MFIs) Credit balances and loans (excluding building loans) 2 | Building loans 3 | Bank debt securities 4 | Lending to non-banks (non-MFIs) Building loans Loans under savings and loan contracts | Interim and bridging loans | Other building loans | Securities (including Treasury bills and Treasury discount paper) 5 | Deposits of banks (MFIs) 6 Deposits under savings and loan contracts | Sight and time deposits | Deposits of non-banks (non-MFIs) Deposits under savings and loan contracts | Sight and time deposits 7 | Bearer debt securities outstanding | Capital (including published reserves) 8 | Memo item: New contracts entered into in year or month 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All building and loan associations** | | | | | | | | | | | | | | | | |
| 2021 | 18 | 253.2 | 30.0 | 0.0 | 15.7 | 10.1 | 130.5 | 36.7 | 26.5 | 3.0 | 30.1 | 184.4 | 9.2 | 4.2 | 12.4 | 71.4 |
| 2022 Sep. | 18 | 259.0 | 31.6 | 0.0 | 15.1 | 10.5 | 134.3 | 40.0 | 23.4 | 2.9 | 35.7 | 184.0 | 9.2 | 5.1 | 12.1 | 8.2 |
| Oct. | 18 | 259.6 | 31.6 | 0.0 | 15.3 | 10.7 | 134.3 | 40.2 | 23.4 | 2.8 | 36.3 | 183.9 | 9.2 | 5.1 | 12.1 | 8.4 |
| Nov. | 18 | 259.6 | 31.0 | 0.0 | 15.4 | 10.9 | 134.5 | 40.4 | 23.2 | 2.6 | 36.7 | 183.8 | 9.2 | 5.1 | 12.1 | 8.8 |
| **Private building and loan associations** | | | | | | | | | | | | | | | | |
| 2022 Sep. | 10 | 182.4 | 16.9 | – | 7.0 | 7.6 | 104.6 | 34.0 | 9.7 | 1.6 | 32.8 | 119.2 | 8.8 | 5.1 | 8.2 | 5.4 |
| Oct. | 10 | 183.2 | 16.9 | – | 7.3 | 7.8 | 104.5 | 34.2 | 9.8 | 1.6 | 33.6 | 119.1 | 8.9 | 5.1 | 8.2 | 5.7 |
| Nov. | 10 | 183.1 | 16.3 | – | 7.6 | 7.9 | 104.6 | 34.3 | 9.6 | 1.5 | 33.8 | 119.1 | 8.8 | 5.1 | 8.2 | 5.8 |
| **Public building and loan associations** | | | | | | | | | | | | | | | | |
| 2022 Sep. | 8 | 76.6 | 14.8 | 0.0 | 8.1 | 2.9 | 29.8 | 6.0 | 13.6 | 1.2 | 2.9 | 64.8 | 0.5 | – | 3.9 | 2.8 |
| Oct. | 8 | 76.4 | 14.7 | 0.0 | 8.0 | 3.0 | 29.8 | 6.0 | 13.6 | 1.2 | 2.8 | 64.8 | 0.3 | – | 3.9 | 2.7 |
| Nov. | 8 | 76.5 | 14.7 | 0.0 | 7.8 | 3.0 | 29.9 | 6.1 | 13.6 | 1.1 | 2.9 | 64.8 | 0.4 | – | 3.9 | 3.0 |

### Trends in building and loan association business

€ billion

| Period | Changes in deposits under savings and loan contracts Amounts paid into savings and loan accounts 10 | Interest credited on deposits under savings and loan contracts | Repayments of deposits under cancelled savings and loan contracts | Capital promised Total | of which: Net allocations 12 | Capital disbursed Total | Allocations Deposits under savings and loan contracts Total | of which: Applied to settlement of interim and bridging loans | Loans under savings and loan contracts 10 Total | of which: Applied to settlement of interim and bridging loans | Newly granted interim and bridging loans and other building loans | Disbursement commitments outstanding at end of period Total | of which: Under allocated contracts | Interest and repayments received on building loans 11 Total | of which: Repayments during quarter | Memo item: Housing bonuses received 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All building and loan associations** | | | | | | | | | | | | | | | | |
| 2021 | 27.7 | 2.0 | 9.1 | 52.3 | 27.7 | 47.1 | 18.3 | 4.0 | 4.2 | 3.4 | 24.7 | 18.6 | 6.3 | 6.1 | 4.9 | 0.1 |
| 2022 Sep. | 2.2 | 0.1 | 0.8 | 3.7 | 2.4 | 3.9 | 1.6 | 0.4 | 0.5 | 0.3 | 1.8 | 18.3 | 6.5 | 0.4 | 1.0 | 0.0 |
| Oct. | 2.2 | 0.1 | 0.7 | 3.9 | 2.7 | 3.8 | 1.7 | 0.4 | 0.5 | 0.4 | 1.6 | 18.0 | 6.6 | 0.4 | . | 0.0 |
| Nov. | 2.3 | 0.1 | 0.6 | 4.0 | 3.0 | 4.1 | 2.0 | 0.3 | 0.5 | 0.3 | 1.6 | 17.2 | 6.7 | 0.4 | . | 0.0 |
| **Private building and loan associations** | | | | | | | | | | | | | | | | |
| 2022 Sep. | 1.4 | 0.1 | 0.4 | 2.7 | 1.7 | 2.9 | 1.2 | 0.3 | 0.3 | 0.2 | 1.4 | 13.2 | 3.5 | 0.3 | 0.8 | 0.0 |
| Oct. | 1.4 | 0.0 | 0.4 | 2.8 | 1.9 | 2.9 | 1.3 | 0.3 | 0.4 | 0.3 | 1.2 | 12.8 | 3.6 | 0.3 | . | 0.0 |
| Nov. | 1.5 | 0.0 | 0.3 | 2.7 | 2.0 | 2.9 | 1.3 | 0.3 | 0.4 | 0.3 | 1.3 | 12.2 | 3.6 | 0.3 | . | 0.0 |
| **Public building and loan associations** | | | | | | | | | | | | | | | | |
| 2022 Sep. | 0.8 | 0.0 | 0.3 | 1.0 | 0.7 | 1.0 | 0.4 | 0.1 | 0.2 | 0.1 | 0.4 | 5.2 | 3.0 | 0.1 | 0.3 | 0.0 |
| Oct. | 0.8 | 0.0 | 0.3 | 1.1 | 0.8 | 0.9 | 0.4 | 0.1 | 0.2 | 0.1 | 0.3 | 5.2 | 3.1 | 0.1 | . | 0.0 |
| Nov. | 0.8 | 0.0 | 0.3 | 1.3 | 1.0 | 1.2 | 0.6 | 0.1 | 0.2 | 0.1 | 0.4 | 5.0 | 3.1 | 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** See Table IV.2, footnote 1. **2** Including claims on building and loan associations, claims arising from registered debt securities and central bank credit balances. **3** Loans under savings and loan contracts and interim and bridging loans. **4** Including money market paper and small amounts of other securities issued by banks. **5** Including equalisation claims. **6** Including liabilities to building and loan associations. **7** Including small amounts of savings deposits. **8** Including participation rights capital and fund for general banking risks. **9** 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. **10** For disbursements of deposits under savings and loan contracts arising from the allocation of contracts see "Capital disbursed". **11** Including housing bonuses credited. **12** Only allocations accepted by the beneficiaries; including allocations applied to settlement of interim and bridging loans. **13** 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".

## IV. Banks

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

€ billion

| | Number of | | | Lending to banks (MFIs) | | | | | Lending to non-banks (non-MFIs) | | | | | Other assets [7] | |
| | German banks (MFIs) with foreign branches and/or foreign subsidiaries | foreign branches [1] and/or foreign subsidiaries | Balance sheet total [7] | Total | Credit balances and loans | | | Money market paper, securities [2,3] | Total | Loans | | | Money market paper, securities [2] | Total | of which: Derivative financial instruments in the trading portfolio |
| Period | | | | | Total | German banks | Foreign banks | | | Total | to German non-banks | to foreign non-banks | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Foreign branches** | | | | | | | | | | | | | | **End of year or month *** | |
| 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 | 50 | 206 | 1,552.2 | 376.7 | 364.0 | 213.2 | 150.8 | 12.7 | 504.8 | 409.6 | 14.3 | 395.3 | 95.2 | 670.7 | 523.6 |
| 2021 | 51 | 207 | 1,504.5 | 471.2 | 457.8 | 297.9 | 159.9 | 13.4 | 497.2 | 418.8 | 12.9 | 405.9 | 78.4 | 536.1 | 404.5 |
| 2022 Jan. | 50 | 209 | 1,618.8 | 563.0 | 548.5 | 366.5 | 181.9 | 14.6 | 537.7 | 460.1 | 13.1 | 447.0 | 77.6 | 518.1 | 378.0 |
| Feb. | 50 | 209 | 1,634.4 | 566.4 | 551.9 | 379.5 | 172.4 | 14.5 | 539.7 | 464.4 | 13.2 | 451.1 | 75.3 | 528.3 | 384.8 |
| Mar. | 50 | 208 | 1,674.9 | 564.7 | 550.5 | 369.7 | 180.8 | 14.2 | 540.1 | 461.4 | 13.5 | 447.9 | 78.7 | 570.1 | 421.1 |
| Apr. | 50 | 208 | 1,784.0 | 556.5 | 542.2 | 370.7 | 171.5 | 14.3 | 552.8 | 474.5 | 13.3 | 461.2 | 78.3 | 674.7 | 529.5 |
| May | 50 | 208 | 1,759.2 | 551.2 | 537.3 | 369.0 | 168.3 | 13.9 | 554.0 | 477.6 | 13.1 | 464.5 | 76.4 | 653.9 | 514.9 |
| June | 51 | 211 | 1,741.0 | 516.8 | 502.8 | 338.8 | 164.0 | 13.9 | 553.5 | 480.7 | 12.1 | 468.6 | 72.8 | 670.7 | 524.4 |
| July | 52 | 211 | 1,688.6 | 503.1 | 488.6 | 327.5 | 161.1 | 14.5 | 555.8 | 484.9 | 11.0 | 474.0 | 70.8 | 629.7 | 454.0 |
| Aug. | 50 | 208 | 1,735.3 | 497.8 | 483.0 | 328.4 | 154.6 | 14.8 | 569.2 | 497.0 | 11.1 | 485.9 | 72.2 | 668.3 | 503.1 |
| Sep. | 50 | 208 | 1,889.5 | 536.3 | 522.4 | 354.4 | 168.0 | 13.9 | 563.5 | 488.9 | 10.6 | 478.3 | 74.6 | 789.8 | 632.4 |
| Oct. | 50 | 211 | 1,873.5 | 533.0 | 519.9 | 359.7 | 160.2 | 13.1 | 562.1 | 487.8 | 11.2 | 476.5 | 74.4 | 778.4 | 625.8 |
| | | | | | | | | | | | | | | **Changes *** | |
| 2020 | − 2 | + 9 | +104.2 | − 20.3 | − 15.5 | − 2.8 | − 12.7 | − 4.8 | + 0.2 | − 1.0 | − 5.4 | + 4.4 | + 1.2 | + 164.2 | + 179.6 |
| 2021 | + 1 | + 1 | − 48.4 | + 87.3 | + 87.1 | + 84.9 | + 2.2 | + 0.3 | −26.2 | − 6.5 | − 1.3 | − 5.1 | − 19.7 | − 136.9 | − 128.1 |
| 2022 Feb. | − | − | + 15.8 | + 3.8 | + 3.9 | + 13.0 | − 9.0 | − 0.1 | + 3.3 | + 5.4 | + 0.1 | + 5.3 | − 2.1 | + 10.4 | + 7.1 |
| Mar. | − | − 1 | + 40.1 | − 2.0 | − 1.7 | − 9.9 | + 8.1 | − 0.3 | − 1.0 | − 4.3 | + 0.2 | − 4.6 | + 3.3 | + 41.5 | + 35.7 |
| Apr. | − | − | +106.5 | − 13.1 | − 13.1 | + 1.0 | − 14.2 | + 0.1 | − 1.3 | + 0.7 | − 0.1 | + 0.8 | − 2.0 | + 102.0 | + 104.5 |
| May | − | − | − 24.0 | − 3.4 | − 3.0 | − 1.6 | − 1.5 | − 0.4 | + 6.5 | + 7.8 | − 0.3 | + 8.1 | − 1.3 | − 19.9 | − 13.4 |
| June | + 1 | + 3 | − 19.9 | − 36.9 | − 36.9 | − 30.2 | − 6.6 | + 0.0 | − 8.4 | − 4.0 | − 1.0 | − 3.1 | − 4.4 | + 15.1 | + 7.4 |
| July | + 1 | − | − 53.4 | − 15.9 | − 16.5 | − 11.3 | − 5.2 | + 0.5 | − 4.8 | − 2.0 | − 1.2 | − 0.8 | − 2.7 | + 42.0 | − 71.9 |
| Aug. | − 2 | − 3 | + 51.8 | − 6.6 | − 6.9 | + 0.9 | − 7.8 | + 0.3 | + 9.0 | + 8.0 | + 0.1 | + 7.9 | + 1.0 | + 37.8 | + 47.9 |
| Sep. | ± 0 | − | +153.1 | + 36.7 | + 37.6 | + 26.0 | + 11.6 | − 0.9 | −11.9 | − 13.7 | − 0.5 | − 13.2 | + 1.8 | + 120.3 | + 128.5 |
| Oct. | ± 0 | + 3 | − 15.2 | − 1.6 | − 0.8 | + 5.3 | − 6.1 | − 0.8 | + 3.0 | + 2.7 | + 0.6 | + 2.1 | + 0.3 | − 10.6 | − 6.0 |
| **Foreign subsidiaries** | | | | | | | | | | | | | | **End of year or month *** | |
| 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 | 12 | 36 | 229.5 | 44.8 | 39.9 | 17.4 | 22.5 | 4.9 | 139.7 | 114.4 | 13.1 | 101.4 | 25.3 | 44.9 | 0.0 |
| 2021 | 12 | 35 | 246.0 | 50.8 | 44.4 | 20.7 | 23.7 | 6.3 | 139.5 | 116.3 | 12.6 | 103.7 | 23.2 | 55.7 | 0.0 |
| 2022 Jan. | 12 | 35 | 245.1 | 45.9 | 40.9 | 20.1 | 20.8 | 5.0 | 140.6 | 117.5 | 12.7 | 104.8 | 23.1 | 58.5 | 0.0 |
| Feb. | 12 | 35 | 245.7 | 46.2 | 41.4 | 21.1 | 20.3 | 4.8 | 140.6 | 117.7 | 12.7 | 105.0 | 22.9 | 58.9 | 0.0 |
| Mar. | 12 | 35 | 249.3 | 45.9 | 40.9 | 20.6 | 20.3 | 5.0 | 143.4 | 119.7 | 12.9 | 106.8 | 23.7 | 60.0 | 0.0 |
| Apr. | 12 | 35 | 253.6 | 49.4 | 44.1 | 21.5 | 22.6 | 5.3 | 145.3 | 121.6 | 12.8 | 108.8 | 23.7 | 58.8 | 0.0 |
| May | 12 | 35 | 256.5 | 48.5 | 43.6 | 19.6 | 24.1 | 4.9 | 147.7 | 123.9 | 13.2 | 110.8 | 23.8 | 60.2 | 0.0 |
| June | 12 | 35 | 258.0 | 50.3 | 44.6 | 21.5 | 23.1 | 5.7 | 148.9 | 125.1 | 13.1 | 112.0 | 23.8 | 58.8 | 0.0 |
| July | 11 | 34 | 256.6 | 47.8 | 42.1 | 19.7 | 22.4 | 5.7 | 150.6 | 126.0 | 13.0 | 113.0 | 24.7 | 58.2 | 0.0 |
| Aug. | 11 | 34 | 263.5 | 48.4 | 42.8 | 19.7 | 23.0 | 5.6 | 150.1 | 125.5 | 13.2 | 112.3 | 24.6 | 64.9 | 0.0 |
| Sep. | 11 | 33 | 260.5 | 53.0 | 47.9 | 20.8 | 27.1 | 5.2 | 149.3 | 126.0 | 13.1 | 112.9 | 23.3 | 58.2 | 0.0 |
| Oct. | 11 | 33 | 258.2 | 53.0 | 47.0 | 19.3 | 27.7 | 6.0 | 149.1 | 127.0 | 13.3 | 113.7 | 22.0 | 56.1 | 0.0 |
| | | | | | | | | | | | | | | **Changes *** | |
| 2020 | − 3 | − 5 | − 0.8 | − 5.3 | − 5.0 | − 1.0 | − 4.0 | − 0.3 | + 3.3 | + 0.8 | − 1.3 | + 2.1 | + 2.4 | + 1.2 | ± 0.0 |
| 2021 | ± 0 | − 1 | + 12.0 | + 3.8 | + 2.8 | + 3.4 | − 0.5 | + 1.0 | − 2.5 | − 0.5 | − 0.5 | − 0.0 | − 2.1 | + 10.8 | ± 0.0 |
| 2022 Feb. | − | − | + 0.8 | + 0.4 | + 0.6 | + 1.0 | − 0.4 | − 0.2 | + 0.1 | + 0.3 | + 0.0 | + 0.3 | − 0.2 | + 0.3 | ± 0.0 |
| Mar. | − | − | + 3.2 | − 0.5 | − 0.7 | − 0.5 | − 0.2 | + 0.2 | + 2.6 | + 1.8 | + 0.2 | + 1.6 | + 0.8 | + 1.1 | ± 0.0 |
| Apr. | − | − | + 1.4 | + 2.0 | + 2.1 | + 1.0 | + 1.1 | − 0.1 | + 0.5 | + 0.6 | − 0.1 | + 0.6 | − 0.0 | + 1.1 | ± 0.0 |
| May | − | − | + 4.0 | − 0.3 | − 0.1 | − 1.9 | + 1.9 | − 0.3 | + 2.9 | + 2.8 | + 0.3 | + 2.5 | + 0.1 | + 1.4 | ± 0.0 |
| June | − | − | − 0.3 | + 0.8 | + 0.2 | + 2.0 | − 1.8 | + 0.6 | + 0.3 | + 0.3 | − 0.0 | + 0.0 | + 0.0 | + 1.4 | ± 0.0 |
| July | − 1 | − 1 | − 2.8 | − 3.2 | − 3.1 | − 1.9 | − 1.2 | − 0.1 | + 1.0 | + 0.2 | − 0.2 | + 0.3 | + 0.8 | + 0.6 | ± 0.0 |
| Aug. | − | − | + 5.9 | + 0.2 | + 0.3 | + 0.1 | + 0.2 | − 0.1 | − 0.9 | − 0.9 | + 0.3 | − 1.1 | − 0.1 | + 6.7 | ± 0.0 |
| Sep. | − | − 1 | − 4.4 | + 3.9 | + 4.5 | + 1.0 | + 3.5 | − 0.6 | − 1.5 | − 0.2 | − 0.1 | − 0.1 | − 1.3 | + 6.7 | ± 0.0 |
| Oct. | − | − | − 1.2 | + 0.6 | − 0.4 | − 1.5 | + 1.1 | + 1.0 | + 0.3 | + 1.5 | + 0.2 | + 1.4 | − 1.2 | − 2.1 | ± 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 outstand-ing [5] | Working capital and own funds | Other liabilities [6,7] | | Period |
| | of banks (MFIs) | | | of non-banks (non-MFIs) | | | | | | | | of which: Derivative financial instruments in the trading portfolio | |
| | | | | | German non-banks [4] | | | | | | | | |
| Total | Total | German banks | Foreign banks | Total | Total | Shortterm | Medium and longterm | Foreign non-banks | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **End of year or month *** | | | | | | | | | | | | **Foreign branches** | |
| 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 |
| 872.2 | 588.5 | 431.8 | 156.7 | 283.7 | 11.7 | 10.2 | 1.5 | 272.0 | 61.5 | 49.9 | 568.6 | 523.1 | 2020 |
| 950.2 | 638.5 | 461.2 | 177.3 | 311.7 | 8.1 | 6.3 | 1.8 | 303.6 | 65.2 | 51.3 | 437.9 | 403.4 | 2021 |
| 1,066.8 | 659.1 | 457.3 | 201.8 | 407.7 | 9.5 | 7.7 | 1.8 | 398.2 | 86.1 | 51.8 | 414.1 | 377.6 | 2022 Jan. |
| 1,079.5 | 664.5 | 466.8 | 197.6 | 415.0 | 9.8 | 8.1 | 1.7 | 405.2 | 82.7 | 51.8 | 420.4 | 383.8 | Feb. |
| 1,087.0 | 663.1 | 462.8 | 200.3 | 423.9 | 10.7 | 9.0 | 1.7 | 413.2 | 80.7 | 52.3 | 454.9 | 418.8 | Mar. |
| 1,075.8 | 655.6 | 453.6 | 202.0 | 420.1 | 10.5 | 8.7 | 1.8 | 409.7 | 88.6 | 53.3 | 566.4 | 526.8 | Apr. |
| 1,059.1 | 633.0 | 437.3 | 195.7 | 426.1 | 10.5 | 8.7 | 1.7 | 415.6 | 90.4 | 52.9 | 556.8 | 512.4 | May |
| 1,035.8 | 630.0 | 447.9 | 182.1 | 405.8 | 10.7 | 8.9 | 1.8 | 395.1 | 84.1 | 53.4 | 567.7 | 521.9 | June |
| 1,045.4 | 634.6 | 458.7 | 175.9 | 410.8 | 10.6 | 8.8 | 1.8 | 400.2 | 81.3 | 53.9 | 507.9 | 452.6 | July |
| 1,050.7 | 639.8 | 470.6 | 169.1 | 411.0 | 11.3 | 9.5 | 1.8 | 399.6 | 88.1 | 54.6 | 541.9 | 500.5 | Aug. |
| 1,072.5 | 661.9 | 480.1 | 181.8 | 410.6 | 11.3 | 9.5 | 1.9 | 399.3 | 89.6 | 55.4 | 672.1 | 629.1 | Sep. |
| 1,054.2 | 645.1 | 466.6 | 178.5 | 409.1 | 10.7 | 8.9 | 1.8 | 398.4 | 85.7 | 66.2 | 667.4 | 622.7 | Oct. |
| **Changes *** | | | | | | | | | | | | | |
| − 9.2 | − 13.3 | − 21.4 | + 8.1 | + 4.1 | − 1.0 | + 0.3 | − 1.4 | + 5.1 | − 28.1 | − 3.5 | + 157.6 | + 162.0 | 2020 |
| + 71.1 | + 43.1 | + 31.0 | + 12.0 | + 28.1 | − 3.6 | − 3.9 | + 0.3 | + 31.7 | + 0.1 | + 1.4 | − 130.8 | − 119.7 | 2021 |
| + 13.3 | + 6.0 | + 9.6 | − 3.6 | + 7.3 | + 0.3 | + 0.4 | − 0.1 | + 7.0 | − 3.2 | + 0.0 | + 6.3 | + 6.3 | 2022 Feb. |
| + 7.0 | − 1.8 | − 4.0 | + 2.2 | + 8.8 | + 0.9 | + 0.9 | + 0.0 | + 7.9 | − 2.4 | + 0.5 | + 34.5 | + 35.0 | Mar. |
| − 15.2 | − 11.0 | − 9.2 | − 1.8 | − 4.2 | − 0.2 | − 0.3 | + 0.1 | − 4.0 | + 5.3 | + 0.9 | + 108.8 | + 108.0 | Apr. |
| − 10.4 | − 16.5 | − 12.5 | − 4.1 | + 6.2 | − 0.0 | + 0.0 | − 0.0 | + 6.2 | + 2.7 | − 0.4 | − 13.3 | − 14.4 | May |
| − 26.9 | − 6.4 | + 10.6 | − 17.0 | − 20.5 | + 0.3 | + 0.2 | + 0.1 | − 20.7 | − 8.0 | + 0.5 | + 10.9 | + 9.5 | June |
| + 6.6 | + 1.9 | + 10.8 | − 8.9 | + 4.7 | − 0.2 | − 0.2 | − 0.0 | + 4.8 | − 3.9 | + 0.5 | − 59.8 | − 69.3 | July |
| + 3.4 | + 3.4 | + 11.9 | − 8.6 | + 0.1 | + 0.7 | + 0.7 | + 0.0 | − 0.7 | + 6.0 | + 0.6 | + 39.9 | + 48.0 | Aug. |
| + 19.3 | + 19.8 | + 9.4 | + 10.4 | − 0.5 | − 0.0 | − 0.0 | + 0.0 | − 0.5 | + 0.3 | + 0.8 | + 130.2 | + 128.5 | Sep. |
| − 15.9 | − 14.5 | − 13.4 | − 1.1 | − 1.4 | − 0.6 | − 0.6 | − 0.1 | − 0.8 | − 3.0 | + 10.9 | − 4.7 | − 6.4 | Oct. |
| **End of year or month *** | | | | | | | | | | | | **Foreign subsidiaries** | |
| 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 |
| 163.4 | 59.6 | 34.1 | 25.5 | 103.8 | 6.7 | 4.2 | 2.5 | 97.1 | 16.6 | 20.3 | 29.2 | 0.0 | 2020 |
| 178.6 | 64.2 | 33.0 | 31.2 | 114.4 | 7.3 | 4.9 | 2.4 | 107.1 | 16.4 | 20.3 | 30.7 | 0.0 | 2021 |
| 179.6 | 64.8 | 33.2 | 31.7 | 114.7 | 7.2 | 4.8 | 2.4 | 107.5 | 15.9 | 19.9 | 29.8 | 0.0 | 2022 Jan. |
| 180.9 | 66.3 | 33.7 | 32.7 | 114.5 | 7.4 | 5.0 | 2.4 | 107.1 | 15.8 | 19.8 | 29.3 | 0.0 | Feb. |
| 184.0 | 66.5 | 34.2 | 32.3 | 117.5 | 7.5 | 5.1 | 2.4 | 110.0 | 15.7 | 19.8 | 29.8 | 0.0 | Mar. |
| 187.8 | 70.6 | 36.1 | 34.4 | 117.2 | 7.2 | 4.8 | 2.4 | 110.0 | 15.5 | 19.9 | 30.3 | 0.0 | Apr. |
| 190.9 | 70.3 | 36.3 | 34.1 | 120.5 | 7.2 | 4.8 | 2.4 | 113.3 | 15.3 | 20.1 | 30.2 | 0.0 | May |
| 190.7 | 68.9 | 35.9 | 33.0 | 121.7 | 7.4 | 5.1 | 2.3 | 114.3 | 16.0 | 20.3 | 31.0 | 0.0 | June |
| 189.6 | 66.3 | 35.0 | 31.4 | 123.3 | 7.7 | 5.4 | 2.4 | 115.5 | 15.6 | 20.2 | 31.2 | 0.0 | July |
| 194.4 | 67.0 | 36.3 | 30.7 | 127.5 | 8.1 | 5.7 | 2.3 | 119.4 | 15.3 | 20.4 | 33.3 | 0.0 | Aug. |
| 191.4 | 68.3 | 37.1 | 31.2 | 123.0 | 7.7 | 5.3 | 2.3 | 115.4 | 14.8 | 20.0 | 34.4 | 0.0 | Sep. |
| 188.7 | 68.1 | 37.5 | 30.6 | 120.6 | 7.4 | 5.1 | 2.3 | 113.2 | 13.8 | 20.3 | 35.4 | 0.0 | Oct. |
| **Changes *** | | | | | | | | | | | | | |
| + 1.4 | − 7.3 | − 2.5 | − 4.8 | + 8.7 | + 0.0 | + 0.3 | − 0.3 | + 8.7 | + 0.6 | − 1.8 | − 1.0 | ± 0.0 | 2020 |
| + 12.1 | + 3.2 | − 1.1 | + 4.3 | + 8.9 | + 0.6 | + 0.6 | − 0.1 | + 8.3 | − 0.3 | + 0.1 | + 0.2 | ± 0.0 | 2021 |
| + 1.5 | + 1.6 | + 0.5 | + 1.1 | − 0.1 | + 0.2 | + 0.2 | − 0.0 | − 0.4 | − 0.1 | − 0.1 | − 0.5 | ± 0.0 | 2022 Feb. |
| + 2.8 | + 0.1 | + 0.5 | − 0.5 | + 2.7 | + 0.0 | + 0.1 | − 0.0 | + 2.7 | − 0.1 | + 0.1 | + 0.4 | ± 0.0 | Mar. |
| + 1.6 | + 3.1 | + 1.9 | + 1.2 | − 1.5 | − 0.2 | − 0.2 | − 0.0 | − 1.2 | − 0.2 | + 0.1 | − 0.1 | ± 0.0 | Apr. |
| + 3.8 | + 0.1 | + 0.1 | − 0.0 | + 3.7 | − 0.0 | − 0.0 | + 0.0 | + 3.8 | − 0.2 | + 0.2 | + 0.1 | ± 0.0 | May |
| + 1.5 | − 2.0 | − 0.4 | − 1.6 | + 4.0 | + 0.2 | + 0.3 | − 0.1 | + 0.2 | + 0.7 | + 0.2 | + 0.4 | ± 0.0 | June |
| − 2.0 | − 3.0 | − 1.0 | − 2.0 | + 1.0 | + 0.3 | + 0.3 | + 0.0 | + 0.7 | − 0.4 | − 0.1 | − 0.3 | ± 0.0 | July |
| + 4.1 | + 0.4 | + 1.3 | − 0.9 | + 3.7 | + 0.3 | + 0.3 | − 0.0 | + 3.4 | − 0.3 | + 0.2 | + 1.9 | ± 0.0 | Aug. |
| − 4.1 | + 1.0 | + 0.8 | + 0.1 | − 5.1 | − 0.4 | − 0.4 | − 0.0 | − 4.7 | − 0.5 | − 0.4 | + 0.7 | ± 0.0 | Sep. |
| − 2.0 | + 0.0 | + 0.4 | − 0.4 | − 2.0 | − 0.3 | − 0.2 | − 0.0 | − 1.7 | − 1.0 | + 0.3 | + 1.4 | ± 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 (without deposit facility) [6] | Deficiencies [7] |
|---|---|---|---|---|---|---|
| 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 | 14,590.4 | 145.9 | 145.5 | 3,029.4 | 2,883.9 | 0.0 |
| 2021 | 15,576.6 | 155.8 | 155.4 | 3,812.3 | 3,656.9 | 0.1 |
| 2022 Oct. | . | . | . | . | . | . |
| Nov. | 16,699.5 | 167.0 | 166.7 | 213.8 | 47.1 | 0.0 |
| Dec. p | 16,788.9 | 167.9 | … | … | … | … |

### 2. Reserve maintenance in Germany

€ billion

| 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 (without deposit facility) [6] | Deficiencies [7] |
|---|---|---|---|---|---|---|---|
| 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 | 4,020,792 | 27.6 | 40,208 | 40,062 | 878,013 | 837,951 | 1 |
| 2021 | 4,260,398 | 27.4 | 42,604 | 42,464 | 1,048,819 | 1,006,355 | 0 |
| 2022 Oct. | . | | . | . | . | . | . |
| Nov. | 4,626,252 | 27.7 | 46,263 | 46,128 | 60,464 | 14,336 | 5 |
| Dec. p | 4,664,630 | 27.8 | 46,646 | 46,512 | … | … | … |

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

€ billion

| 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 |
|---|---|---|---|---|---|---|---|
| 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 | 8,151 | 6,371 | 3,019 | 12,912 | 7,547 | 111 | 2,028 |
| 2021 | 9,113 | 6,713 | 2,943 | 13,682 | 8,028 | 109 | 1,876 |
| 2022 Oct. | . | . | . | . | . | . | . |
| Nov. | 9,860 | 7,463 | 3,017 | 14,396 | 8,279 | 118 | 2,634 |
| Dec. | 9,814 | 7,396 | 3,216 | 14,465 | 8,295 | 117 | 2,471 |

### b) Reserve base by subcategories of liabilities

€ billion

| 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 |
|---|---|---|---|---|---|
| 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 | 2,923,462 | 1,607 | 436,696 | 560,770 | 105,880 |
| 2021 | 3,079,722 | 9,030 | 508,139 | 561,608 | 101,907 |
| 2022 Oct. | . | . | . | . | . |
| Nov. | 3,338,047 | 14,874 | 561,376 | 546,860 | 128,993 |
| Dec. | 3,352,177 | 12,609 | 566,227 | 543,694 | 116,094 |

**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 5 of the Regulation (EU) 2021/378 of the European Central Bank on the application of minimum reserve requirements (excluding liabilities to which a reserve ratio of 0% applies, pursuant to Article 6(1)(a)). **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 6(2) of the Regulation (EU) 2021/378 of the European Central Bank on the application of minimum reserve requirements. **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 / basic rates of interest

% per annum

| ECB interest rates | | | | | | | | | | Basic rates of interest | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Main refinancing operations | | Mar-ginal lending facility | | | Main refinancing operations | | Mar-ginal lending facility | | | | |
| Applicable from | Deposit facility | Fixed rate | Minimum bid rate | | Applicable from | Deposit facility | Fixed rate | Minimum bid rate | | Applicable from | Basic rate of interest as per Civil Code 1 | Applicable from | Basic rate of interest as per Civil Code 1 |
| 2005 Dec. 6 | 1.25 | – | 2.25 | 3.25 | 2012 July 11 | 0.00 | 0.75 | – | 1.50 | 2002 Jan. 1 | 2.57 | 2009 Jan. 1 | 1.62 |
| 2006 Mar. 8 | 1.50 | – | 2.50 | 3.50 | | | | | | July 1 | 2.47 | July 1 | 0.12 |
| June 15 | 1.75 | – | 2.75 | 3.75 | 2013 May 8 | 0.00 | 0.50 | – | 1.00 | 2003 Jan. 1 | 1.97 | 2011 July 1 | 0.37 |
| Aug. 9 | 2.00 | – | 3.00 | 4.00 | Nov. 13 | 0.00 | 0.25 | – | 0.75 | July 1 | 1.22 | | |
| Oct. 11 | 2.25 | – | 3.25 | 4.25 | | | | | | | | 2012 Jan. 1 | 0.12 |
| Dec. 13 | 2.50 | – | 3.50 | 4.50 | 2014 June 11 | -0.10 | 0.15 | – | 0.40 | 2004 Jan. 1 | 1.14 | | |
| 2007 Mar. 14 | 2.75 | – | 3.75 | 4.75 | Sep. 10 | -0.20 | 0.05 | – | 0.30 | July 1 | 1.13 | 2013 Jan. 1 | – 0.13 |
| June 13 | 3.00 | – | 4.00 | 5.00 | 2015 Dec. 9 | -0.30 | 0.05 | – | 0.30 | | | July 1 | – 0.38 |
| 2008 July 9 | 3.25 | – | 4.25 | 5.25 | | | | | | 2005 Jan. 1 | 1.21 | | |
| Oct. 8 | 2.75 | – | 3.75 | 4.75 | 2016 Mar. 16 | -0.40 | 0.00 | – | 0.25 | July 1 | 1.17 | 2014 Jan. 1 | – 0.63 |
| Oct. 9 | 3.25 | 3.75 | – | 4.25 | | | | | | | | July 1 | – 0.73 |
| Nov. 12 | 2.75 | 3.25 | – | 3.75 | 2019 Sep. 18 | -0.50 | 0.00 | – | 0.25 | 2006 Jan. 1 | 1.37 | | |
| Dec. 10 | 2.00 | 2.50 | – | 3.00 | | | | | | July 1 | 1.95 | 2015 Jan. 1 | – 0.83 |
| 2009 Jan. 21 | 1.00 | 2.00 | – | 3.00 | 2022 Jul. 27 | 0.00 | 0.50 | – | 0.75 | 2007 Jan. 1 | 2.70 | 2016 July 1 | – 0.88 |
| Mar. 11 | 0.50 | 1.50 | – | 2.50 | Sep. 14 | 0.75 | 1.25 | – | 1.50 | July 1 | 3.19 | | |
| Apr. 8 | 0.25 | 1.25 | – | 2.25 | Nov. 2 | 1,50 | 2,00 | – | 2,25 | | | 2023 Jan. 1 | 1.62 |
| May 13 | 0.25 | 1.00 | – | 1.75 | Dec. 21 | 2,00 | 2,50 | – | 2,75 | 2008 Jan. 1 | 3.32 | | |
| 2011 Apr. 13 | 0.50 | 1.25 | – | 2.00 | | | | | | July 1 | 3.19 | | |
| July 13 | 0.75 | 1.50 | – | 2.25 | | | | | | | | | |
| Nov. 9 | 0.50 | 1.25 | – | 2.00 | | | | | | | | | |
| Dec. 14 | 0.25 | 1.00 | – | 1.75 | | | | | | | | | |

### 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** | | | | | | | |
| 2022 Dec. 7 | 1 381 | 1 381 | 2,00 | - | - | - | 7 |
| Dec. 14 | 1 458 | 1 458 | 2,00 | - | - | - | 7 |
| Dec. 21 | 1 278 | 1 278 | 2,50 | - | - | - | 7 |
| Dec. 28 | 2 406 | 2 406 | 2,50 | - | - | - | 7 |
| 2023 Jan. 4 | 1 122 | 1 122 | 2,50 | - | - | - | 7 |
| Jan. 11 | 955 | 955 | 2,50 | - | - | - | 7 |
| **Long-term refinancing operations** | | | | | | | |
| 2022 Dec. 1 | 997 | 997 | 2 ... | - | - | - | 84 |
| Dec. 22 | 1 288 | 1 288 | 2 ... | - | - | - | 98 |

**\*** 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 |
| 2022 June | − 0.582 | . | − 0.57 | − 0.53 | − 0.24 | 0.16 | 0.85 |
| July | − 0.511 | . | − 0.46 | − 0.31 | 0.04 | 0.47 | 0.99 |
| Aug. | − 0.085 | . | − 0.07 | 0.02 | 0.40 | 0.84 | 1.25 |
| Sep. | 0.355 | . | 0.42 | 0.57 | 1.01 | 1.60 | 2.23 |
| Oct. | 0.656 | . | 0.70 | 0.92 | 1.43 | 2.00 | 2.63 |
| Nov. | 1.368 | . | 1.38 | 1.42 | 1.83 | 2.32 | 2.83 |
| Dec. | 1.568 | . | 1.60 | 1.72 | 2.06 | 2.56 | 3.02 |

**\*** 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. Administrator for EONIA and EURIBOR: European Money Markets Institute (EMMI)

## VI. Interest rates

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

| End of month | Households' deposits | | | | Non-financial corporations' deposits | | | |
|---|---|---|---|---|---|---|---|---|
| | with an agreed maturity of | | | | 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 |
| 2021 Nov. | 0.22 | 42,503 | 0.91 | 219,058 | − 0.30 | 70,830 | 0.76 | 22,793 |
| Dec. | 0.18 | 41,979 | 0.91 | 220,289 | − 0.37 | 75,038 | 0.74 | 22,966 |
| 2022 Jan. | 0.18 | 41,157 | 0.90 | 220,225 | − 0.31 | 72,404 | 0.73 | 23,078 |
| Feb. | 0.18 | 40,586 | 0.90 | 220,056 | − 0.30 | 71,560 | 0.71 | 23,680 |
| Mar. | 0.17 | 40,201 | 0.89 | 219,655 | − 0.28 | 68,341 | 0.74 | 24,011 |
| Apr. | 0.18 | 39,503 | 0.88 | 219,264 | − 0.27 | 73,001 | 0.73 | 23,471 |
| May | 0.19 | 39,659 | 0.87 | 218,855 | − 0.20 | 65,198 | 0.73 | 23,335 |
| June | 0.19 | 39,682 | 0.87 | 218,128 | − 0.10 | 66,308 | 0.78 | 23,397 |
| July | 0.24 | 40,392 | 0.86 | 217,843 | 0.04 | 72,141 | 0.86 | 24,213 |
| Aug. | 0.30 | 42,949 | 0.86 | 217,606 | 0.17 | 79,349 | 0.92 | 24,813 |
| Sep. | 0.46 | 50,096 | 0.86 | 217,608 | 0.52 | 95,994 | 0.97 | 24,605 |
| Oct. | 0.67 | 56,389 | 0.85 | 217,771 | 0.76 | 116,977 | 1.00 | 24,179 |
| Nov. | 0.94 | 69,368 | 0.85 | 218,428 | 1.12 | 121,526 | 1.00 | 23,572 |

| End of month | Housing loans to households [3] | | | | | | Loans to households for consumption and other purposes [4,5] | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | with a maturity of | | | | | | 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 |
| 2021 Nov. | 2.08 | 3,680 | 1.52 | 26,929 | 1.77 | 1,446,574 | 6.53 | 44,871 | 3.32 | 79,066 | 3.30 | 328,130 |
| Dec. | 2.02 | 3,547 | 1.52 | 26,755 | 1.75 | 1,454,553 | 6.60 | 44,914 | 3.32 | 78,679 | 3.28 | 327,421 |
| 2022 Jan. | 2.02 | 3,690 | 1.52 | 26,583 | 1.74 | 1,457,059 | 6.69 | 44,473 | 3.32 | 78,019 | 3.27 | 328,346 |
| Feb. | 2.02 | 3,559 | 1.52 | 26,620 | 1.73 | 1,464,103 | 6.61 | 44,903 | 3.32 | 77,521 | 3.26 | 328,991 |
| Mar. | 2.10 | 3,620 | 1.53 | 26,670 | 1.71 | 1,473,852 | 6.59 | 46,226 | 3.33 | 77,518 | 3.25 | 328,996 |
| Apr. | 2.08 | 3,636 | 1.54 | 26,766 | 1.71 | 1,483,015 | 6.52 | 45,715 | 3.33 | 77,073 | 3.25 | 329,959 |
| May | 2.15 | 3,584 | 1.55 | 26,874 | 1.70 | 1,492,093 | 6.51 | 46,567 | 3.33 | 76,658 | 3.25 | 330,295 |
| June | 2.19 | 3,573 | 1.58 | 26,899 | 1.70 | 1,500,141 | 6.59 | 47,810 | 3.36 | 76,324 | 3.27 | 330,379 |
| July | 2.28 | 3,687 | 1.70 | 27,244 | 1.70 | 1,508,724 | 6.58 | 46,813 | 3.39 | 77,074 | 3.27 | 333,017 |
| Aug. | 2.43 | 3,713 | 1.76 | 27,275 | 1.70 | 1,515,561 | 6.75 | 47,402 | 3.41 | 76,990 | 3.29 | 334,182 |
| Sep. | 2.61 | 3,627 | 1.86 | 27,290 | 1.70 | 1,522,592 | 6.95 | 48,339 | 3.46 | 77,011 | 3.32 | 333,384 |
| Oct. | 3.06 | 3,689 | 2.06 | 27,325 | 1.72 | 1,528,186 | 7.39 | 47,749 | 3.53 | 76,686 | 3.42 | 333,308 |
| Nov. | 3.35 | 3,604 | 2.21 | 27,320 | 1.73 | 1,533,122 | 7.49 | 47,011 | 3.60 | 75,903 | 3.46 | 333,357 |

| 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 |
| 2021 Nov. | 1.91 | 156,340 | 1.58 | 203,103 | 1.61 | 819,855 |
| Dec. | 1.82 | 161,611 | 1.56 | 202,457 | 1.59 | 822,730 |
| 2022 Jan. | 1.81 | 166,574 | 1.57 | 202,813 | 1.58 | 824,650 |
| Feb. | 1.80 | 172,663 | 1.56 | 202,563 | 1.58 | 830,564 |
| Mar. | 1.90 | 179,074 | 1.58 | 204,001 | 1.57 | 832,210 |
| Apr. | 1.91 | 180,007 | 1.58 | 206,200 | 1.57 | 838,405 |
| May | 1.87 | 184,783 | 1.62 | 208,824 | 1.58 | 842,912 |
| June | 1.94 | 189,986 | 1.65 | 213,733 | 1.64 | 846,768 |
| July | 2.07 | 194,397 | 1.69 | 218,875 | 1.66 | 854,793 |
| Aug. | 2.24 | 209,826 | 1.74 | 226,447 | 1.68 | 861,022 |
| Sep. | 2.63 | 211,369 | 2.00 | 230,393 | 1.80 | 865,922 |
| Oct. | 3.05 | 209,961 | 2.26 | 237,078 | 1.92 | 874,758 |
| Nov. | 3.48 | 213,420 | 2.49 | 236,253 | 1.96 | 879,158 |

* 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 +

**Households' deposits**

| | Overnight | | with an agreed maturity of | | | | | | redeemable at notice [8] of | | | |
| | | | up to 1 year | | over 1 year and up to 2 years | | over 2 years | | up to 3 months | | over 3 months | |
| Reporting period | Effective interest rate [1] % p.a. | Volume [2] € million | Effective interest rate [1] % p.a. | Volume [7] € million | Effective interest rate [1] % p.a. | Volume [7] € million | Effective interest rate [1] % p.a. | Volume [7] € million | Effective interest rate [1] % p.a. | Volume [2] € million | Effective interest rate [1] % p.a. | Volume [2] € million |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2021 Nov. | − 0.01 | 1,808,547 | 0.09 | 1,879 | 0.21 | 266 | 0.48 | 650 | 0.08 | 535,140 | 0.15 | 24,329 |
| Dec. | − 0.01 | 1,806,993 | − 0.07 | 2,327 | 0.20 | 204 | 0.51 | 721 | 0.08 | 536,715 | 0.14 | 24,116 |
| 2022 Jan. | − 0.01 | 1,806,352 | 0.11 | 2,132 | 0.22 | 363 | 0.36 | 642 | 0.08 | 537,038 | 0.14 | 23,363 |
| Feb. | − 0.02 | 1,819,881 | 0.06 | 2,167 | 0.25 | 226 | 0.33 | 564 | 0.07 | 537,327 | 0.13 | 23,136 |
| Mar. | − 0.02 | 1,808,690 | 0.12 | 2,044 | 0.28 | 258 | 0.38 | 824 | 0.07 | 535,696 | 0.13 | 22,897 |
| Apr. | − 0.02 | 1,826,796 | 0.14 | 1,974 | 0.39 | 292 | 0.46 | 694 | 0.07 | 534,800 | 0.13 | 22,686 |
| May | − 0.02 | 1,827,315 | 0.14 | 2,052 | 0.52 | 574 | 0.66 | 1,023 | 0.07 | 533,590 | 0.14 | 22,562 |
| June | − 0.02 | 1,831,910 | 0.17 | 2,490 | 0.71 | 357 | 0.80 | 891 | 0.08 | 531,943 | 0.14 | 22,408 |
| July | − 0.00 | 1,854,420 | 0.31 | 3,227 | 0.83 | 776 | 0.75 | 1,128 | 0.07 | 530,302 | 0.15 | 22,255 |
| Aug. | 0.00 | 1,852,118 | 0.49 | 4,742 | 1.04 | 925 | 0.95 | 1,582 | 0.08 | 527,959 | 0.16 | 22,201 |
| Sep. | 0.01 | 1,854,045 | 0.84 | 7,457 | 1.49 | 915 | 1.29 | 1,289 | 0.09 | 522,685 | 0.19 | 22,155 |
| Oct. | 0.01 | 1,853,933 | 1.06 | 10,188 | 1.89 | 1,332 | 1.49 | 1,549 | 0.11 | 519,453 | 0.27 | 22,383 |
| Nov. | 0.02 | 1,858,781 | 1.34 | 17,255 | 1.99 | 1,783 | 1.70 | 1,958 | 0.13 | 514,161 | 0.33 | 22,556 |

**Non-financial corporations' deposits**

| | Overnight | | with an agreed maturity of | | | | | |
| | | | up to 1 year | | over 1 year and up to 2 years | | over 2 years | |
| Reporting period | Effective interest rate [1] % p.a. | Volume [2] € million | Effective interest rate [1] % p.a. | Volume [7] € million | Effective interest rate [1] % p.a. | Volume [7] € million | Effective interest rate [1] % p.a. | Volume [7] € million |
|---|---|---|---|---|---|---|---|---|
| 2021 Nov. | − 0.13 | 604,607 | − 0.52 | 47,155 | − 0.16 | 619 | 0.25 | 732 |
| Dec. | − 0.14 | 585,718 | − 0.58 | 43,578 | − 0.07 | 836 | 0.19 | 1,004 |
| 2022 Jan. | − 0.14 | 596,648 | − 0.50 | 38,323 | − 0.18 | 311 | 0.28 | 1,033 |
| Feb. | − 0.14 | 594,874 | − 0.48 | 30,745 | 0.03 | 234 | 0.63 | 1,123 |
| Mar. | − 0.15 | 607,552 | − 0.50 | 42,187 | 0.09 | 417 | 1.09 | 1,069 |
| Apr. | − 0.15 | 600,726 | − 0.49 | 42,722 | 0.37 | 633 | 1.12 | 182 |
| May | − 0.15 | 609,181 | − 0.44 | 41,476 | 0.44 | 1,240 | 1.35 | 513 |
| June | − 0.15 | 600,646 | − 0.36 | 43,089 | 0.91 | 687 | 2.27 | 742 |
| July | − 0.07 | 604,802 | − 0.11 | 26,039 | 1.15 | 678 | 1.90 | 1,466 |
| Aug. | − 0.01 | 636,259 | 0.07 | 51,099 | 0.92 | 467 | . | . |
| Sep. | 0.03 | 615,838 | 0.62 | 73,349 | 1.93 | 494 | 2.75 | 1,111 |
| Oct. | 0.04 | 617,742 | 0.81 | 99,703 | 1.34 | 707 | 1.89 | 146 |
| Nov. | 0.10 | 612,650 | 1.43 | 90,354 | 2.66 | 631 | 1.94 | 189 |

**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 | |
| Reporting period | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2021 Nov. | 5.46 | 5.43 | 8,076 | 6.17 | 1,524 | 7.24 | 408 | 4.34 | 2,691 | 5.88 | 4,976 |
| Dec. | 5.35 | 5.36 | 6,927 | 6.04 | 1,221 | 6.75 | 465 | 4.31 | 2,445 | 5.84 | 4,017 |
| 2022 Jan. | 5.53 | 5.54 | 8,604 | 6.19 | 1,862 | 7.29 | 383 | 4.29 | 2,643 | 6.01 | 5,578 |
| Feb. | 5.41 | 5.45 | 8,372 | 6.14 | 1,641 | 7.31 | 378 | 4.28 | 2,652 | 5.90 | 5,343 |
| Mar. | 5.34 | 5.38 | 10,208 | 6.24 | 1,935 | 7.28 | 397 | 4.08 | 3,481 | 5.97 | 6,330 |
| Apr. | 5.70 | 5.64 | 8,523 | 6.35 | 1,682 | 7.93 | 316 | 4.46 | 2,654 | 6.08 | 5,553 |
| May | 5.81 | 5.77 | 9,788 | 6.51 | 1,924 | 8.04 | 332 | 4.56 | 3,067 | 6.24 | 6,390 |
| June | 5.99 | 5.95 | 9,509 | 6.79 | 1,926 | 8.50 | 307 | 4.66 | 3,054 | 6.46 | 6,149 |
| July | 6.15 | 6.12 | 9,064 | 6.97 | 1,771 | 8.76 | 314 | 4.80 | 2,968 | 6.65 | 5,782 |
| Aug. | 6.33 | 6.31 | 8,927 | 7.25 | 1,765 | 8.79 | 349 | 4.92 | 2,931 | 6.88 | 5,647 |
| Sep. | 6.43 | 6.43 | 8,562 | 7.37 | 1,613 | 8.64 | 346 | 4.96 | 2,922 | 7.09 | 5,294 |
| Oct. | 6.74 | 6.75 | 7,362 | 7.57 | 1,339 | 8.79 | 366 | 5.28 | 2,546 | 7.43 | 4,450 |
| Nov. | 6.81 | 6.87 | 7,913 | 7.92 | 1,330 | 7.51 | 385 | 5.37 | 2,868 | 7.74 | 4,659 |

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 +

**Loans to households (cont'd)**

**Loans to households for other purposes 5 with an initial rate fixation of**

| Reporting period | Total – Effective interest rate 1 % p.a. | Total – Volume 7 € million | of which: Renegotiated loans 9 – Effective interest rate 1 % p.a. | of which: Renegotiated loans 9 – Volume 7 € million | floating rate or up to 1 year 9 – Effective interest rate 1 % p.a. | floating rate or up to 1 year 9 – Volume 7 € million | over 1 year and up to 5 years – Effective interest rate 1 % p.a. | over 1 year and up to 5 years – Volume 7 € million | over 5 years – Effective interest rate 1 % p.a. | over 5 years – Volume 7 € million |
|---|---|---|---|---|---|---|---|---|---|---|
| **Loans to households** | | | | | | | | | | |
| 2021 Nov. | 1.68 | 4,433 | 1.39 | 847 | 1.65 | 1,759 | 2.42 | 704 | 1.44 | 1,970 |
| Dec. | 1.64 | 5,757 | 1.48 | 1,144 | 1.58 | 2,326 | 2.45 | 860 | 1.44 | 2,571 |
| 2022 Jan. | 1.62 | 4,552 | 1.48 | 1,288 | 1.54 | 1,914 | 2.32 | 622 | 1.49 | 2,016 |
| Feb. | 1.76 | 4,173 | 1.60 | 859 | 1.69 | 1,560 | 2.55 | 514 | 1.62 | 2,099 |
| Mar. | 1.87 | 5,992 | 1.61 | 1,247 | 1.70 | 2,149 | 2.43 | 724 | 1.85 | 3,119 |
| Apr. | 2.03 | 4,980 | 1.70 | 1,170 | 1.82 | 1,829 | 2.33 | 760 | 2.10 | 2,391 |
| May | 2.32 | 4,277 | 2.03 | 913 | 1.84 | 1,387 | 2.89 | 628 | 2.46 | 2,262 |
| June | 2.39 | 5,035 | 1.96 | 1,196 | 1.81 | 1,990 | 3.04 | 717 | 2.68 | 2,328 |
| July | 2.62 | 4,606 | 1.97 | 1,195 | 2.06 | 1,980 | 3.24 | 629 | 2.97 | 1,997 |
| Aug. | 2.94 | 4,474 | 2.33 | 777 | 2.24 | 1,627 | 3.48 | 730 | 3.30 | 2,117 |
| Sep. | 2.95 | 4,255 | 2.51 | 1,090 | 2.60 | 2,250 | 3.39 | 610 | 3.33 | 1,395 |
| Oct. | 3.40 | 3,728 | 2.68 | 1,190 | 3.06 | 1,805 | 4.00 | 541 | 3.61 | 1,382 |
| Nov. | 3.78 | 3,938 | 3.28 | 947 | 3.52 | 1,808 | 4.18 | 746 | 3.90 | 1,384 |
| **of which: Loans to sole proprietors** | | | | | | | | | | |
| 2021 Nov. | 1.83 | 2,674 | . | . | 1.83 | 1,076 | 2.47 | 461 | 1.56 | 1,137 |
| Dec. | 1.73 | 3,787 | . | . | 1.76 | 1,495 | 2.48 | 564 | 1.47 | 1,728 |
| 2022 Jan. | 1.71 | 2,950 | . | . | 1.64 | 1,227 | 2.38 | 455 | 1.54 | 1,268 |
| Feb. | 1.88 | 2,728 | . | . | 1.92 | 970 | 2.68 | 380 | 1.64 | 1,378 |
| Mar. | 1.96 | 3,879 | . | . | 1.84 | 1,414 | 2.58 | 512 | 1.88 | 1,953 |
| Apr. | 2.13 | 3,210 | . | . | 1.92 | 1,079 | 2.42 | 577 | 2.16 | 1,554 |
| May | 2.40 | 2,886 | . | . | 2.00 | 928 | 2.95 | 493 | 2.48 | 1,465 |
| June | 2.50 | 3,461 | . | . | 2.06 | 1,239 | 3.13 | 538 | 2.62 | 1,684 |
| July | 2.76 | 2,994 | . | . | 2.21 | 1,252 | 3.36 | 474 | 3.08 | 1,268 |
| Aug. | 2.94 | 2,573 | . | . | 2.38 | 1,063 | 3.68 | 435 | 3.19 | 1,075 |
| Sep. | 3.09 | 2,843 | . | . | 2.76 | 1,446 | 3.53 | 465 | 3.37 | 932 |
| Oct. | 3.44 | 2,570 | . | . | 3.05 | 1,244 | 4.19 | 405 | 3.63 | 921 |
| Nov. | 3.91 | 2,684 | . | . | 3.69 | 1,175 | 4.32 | 563 | 3.94 | 946 |

**Loans to households (cont'd)**

**Housing loans 3 with an initial rate fixation of**

| Erhebungszeitraum | Total (including charges) – Annual percentage rate of charge 10 % p.a. | Total – Effective interest rate 1 % p.a. | Total – Volume 7 € million | of which: Renegotiated loans 9 – Effective interest rate 1 % p.a. | of which: Renegotiated loans 9 – Volume 7 € million | floating rate or up to 1 year 9 – Effective interest rate 1 % p.a. | floating rate or up to 1 year 9 – Volume 7 € million | over 1 year and up to 5 years – Effective interest rate 1 % p.a. | over 1 year and up to 5 years – Volume 7 € million | over 5 year and up to 10 years – Effective interest rate 1 % p.a. | over 5 year and up to 10 years – Volume 7 € million | over 10 years – Effective interest rate 1 % p.a. | over 10 years – Volume 7 € million |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total loans** | | | | | | | | | | | | | |
| 2021 Nov. | 1.36 | 1.32 | 22,516 | 1.31 | 3,079 | 1.83 | 2,022 | 1.43 | 1,564 | 1.15 | 8,171 | 1.33 | 10,759 |
| Dec. | 1.37 | 1.32 | 23,851 | 1.27 | 3,446 | 1.80 | 2,383 | 1.39 | 1,661 | 1.16 | 8,614 | 1.34 | 11,194 |
| 2022 Jan. | 1.39 | 1.35 | 25,085 | 1.33 | 4,969 | 1.83 | 2,527 | 1.35 | 1,706 | 1.19 | 8,661 | 1.37 | 12,191 |
| Feb. | 1.49 | 1.45 | 26,299 | 1.43 | 4,706 | 1.86 | 2,270 | 1.45 | 1,606 | 1.29 | 9,322 | 1.48 | 13,100 |
| Mar. | 1.69 | 1.65 | 32,270 | 1.63 | 6,216 | 1.93 | 2,704 | 1.65 | 1,987 | 1.50 | 11,809 | 1.71 | 15,770 |
| Apr. | 1.98 | 1.94 | 25,813 | 1.90 | 4,946 | 2.01 | 2,323 | 1.88 | 1,703 | 1.81 | 10,024 | 2.04 | 11,763 |
| May | 2.29 | 2.25 | 27,272 | 2.20 | 4,758 | 2.10 | 2,491 | 2.10 | 1,834 | 2.12 | 10,907 | 2.42 | 12,041 |
| June | 2.62 | 2.57 | 22,990 | 2.46 | 3,897 | 2.19 | 2,461 | 2.45 | 1,663 | 2.46 | 8,659 | 2.77 | 10,208 |
| July | 2.85 | 2.80 | 21,054 | 2.48 | 3,828 | 2.33 | 2,814 | 2.64 | 1,592 | 2.73 | 8,023 | 3.04 | 8,626 |
| Aug. | 2.89 | 2.84 | 18,491 | 2.57 | 3,215 | 2.55 | 2,488 | 2.78 | 1,512 | 2.74 | 6,880 | 3.04 | 7,610 |
| Sep. | 3.08 | 3.01 | 16,113 | 2.81 | 2,719 | 2.73 | 2,186 | 2.93 | 1,366 | 2.96 | 5,969 | 3.18 | 6,593 |
| Oct. | 3.31 | 3.25 | 14,926 | 2.79 | 3,204 | 2.90 | 2,522 | 3.23 | 1,363 | 3.19 | 5,433 | 3.48 | 5,607 |
| Nov. | 3.67 | 3.60 | 13,564 | 3.32 | 2,689 | 3.40 | 2,330 | 3.75 | 1,217 | 3.51 | 4,846 | 3.75 | 5,171 |
| **of which: Collateralised loans 11** | | | | | | | | | | | | | |
| 2021 Nov. | . | 1.23 | 9,668 | . | . | 1.72 | 708 | 1.22 | 685 | 1.08 | 3,670 | 1.29 | 4,605 |
| Dec. | . | 1.25 | 10,265 | . | . | 1.70 | 783 | 1.22 | 727 | 1.09 | 3,784 | 1.31 | 4,971 |
| 2022 Jan. | . | 1.28 | 11,005 | . | . | 1.75 | 942 | 1.18 | 861 | 1.13 | 4,087 | 1.33 | 5,115 |
| Feb. | . | 1.37 | 11,593 | . | . | 1.74 | 749 | 1.28 | 826 | 1.24 | 4,366 | 1.43 | 5,652 |
| Mar. | . | 1.57 | 14,566 | . | . | 1.80 | 936 | 1.54 | 974 | 1.46 | 5,637 | 1.64 | 7,019 |
| Apr. | . | 1.86 | 11,672 | . | . | 1.88 | 804 | 1.71 | 831 | 1.77 | 4,658 | 1.96 | 5,379 |
| May | . | 2.20 | 12,086 | . | . | 1.96 | 839 | 2.08 | 856 | 2.11 | 5,030 | 2.34 | 5,361 |
| June | . | 2.49 | 10,285 | . | . | 2.08 | 865 | 2.37 | 774 | 2.41 | 4,073 | 2.67 | 4,573 |
| July | . | 2.69 | 9,711 | . | . | 2.19 | 1,031 | 2.51 | 802 | 2.63 | 3,794 | 2.91 | 4,084 |
| Aug. | . | 2.74 | 8,203 | . | . | 2.36 | 820 | 2.63 | 711 | 2.68 | 3,215 | 2.92 | 3,457 |
| Sep. | . | 2.90 | 7,168 | . | . | 2.54 | 746 | 2.80 | 638 | 2.84 | 2,725 | 3.05 | 3,059 |
| Oct. | . | 3.15 | 6,622 | . | . | 2.78 | 916 | 3.20 | 661 | 3.10 | 2,482 | 3.31 | 2,563 |
| Nov. | . | 3.47 | 6,091 | . | . | 3.22 | 806 | 3.63 | 571 | 3.42 | 2,402 | 3.57 | 2,312 |

## VI. Interest rates

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

| | Loans to households (cont'd) | | | | | | Loans to non-financial corporations | | | |
| | Revolving loans 12 and overdrafts 13 Credit card debt 14 | | of which: | | | | Revolving loans 12 and overdrafts 13 Credit card debt 14 | | of which: | |
| | | | Revolving loans 12 and overdrafts 13 | | Extended credit card debt | | | | Revolving loans 12 and overdrafts 13 | |
| Reporting period | 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| **2021** Nov. | 7.01 | 36,013 | 6.90 | 27,565 | 15.01 | 4,153 | 2.77 | 76,312 | 2.79 | 75,909 |
| Dec. | 7.11 | 36,163 | 6.93 | 28,124 | 14.94 | 4,165 | 2.73 | 76,261 | 2.75 | 75,914 |
| **2022** Jan. | 7.20 | 36,030 | 6.97 | 28,433 | 14.97 | 4,110 | 2.61 | 81,598 | 2.62 | 81,290 |
| Feb. | 7.08 | 36,335 | 6.95 | 28,225 | 14.96 | 4,103 | 2.62 | 85,173 | 2.63 | 84,843 |
| Mar. | 7.14 | 37,360 | 7.02 | 29,314 | 14.94 | 4,076 | 2.71 | 87,104 | 2.72 | 86,709 |
| Apr. | 7.00 | 36,819 | 6.91 | 28,444 | 14.96 | 4,100 | 2.65 | 88,202 | 2.66 | 87,834 |
| May | 6.96 | 37,636 | 6.98 | 28,730 | 14.89 | 4,143 | 2.63 | 89,402 | 2.65 | 88,972 |
| June | 7.01 | 38,876 | 7.02 | 30,004 | 14.84 | 4,192 | 2.66 | 93,301 | 2.67 | 92,870 |
| July | 7.04 | 37,549 | 6.98 | 28,881 | 14.80 | 4,246 | 2.68 | 93,897 | 2.69 | 93,495 |
| Aug. | 7.17 | 38,113 | 7.17 | 29,170 | 14.94 | 4,305 | 2.73 | 96,714 | 2.74 | 96,288 |
| Sep. | 7.31 | 39,138 | 7.36 | 30,018 | 14.97 | 4,359 | 3.04 | 97,298 | 3.05 | 96,819 |
| Oct. | 7.78 | 38,898 | 7.74 | 30,031 | 15.66 | 4,479 | 3.39 | 97,186 | 3.40 | 96,732 |
| Nov. | 8.41 | 38,580 | 8.16 | 27,368 | 15.61 | 6,475 | 3.73 | 97,850 | 3.75 | 97,371 |

| | 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 | | | | | | 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 | | floating rate or up to 1 year 9 | | over 1 year and up to 5 years | | over 5 years | |
| Reporting period | 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** | | | | | | | | | | | | | | | | |
| **2021** Nov. | 1.18 | 75,363 | 1.34 | 18,828 | 1.85 | 9,681 | 2.35 | 1,402 | 1.44 | 1,474 | 1.03 | 48,548 | 0.95 | 4,444 | 1.16 | 9,814 |
| Dec. | 1.20 | 105,525 | 1.32 | 29,572 | 1.94 | 10,348 | 2.28 | 1,529 | 1.45 | 1,817 | 1.05 | 71,028 | 1.40 | 5,515 | 1.18 | 15,288 |
| **2022** Jan. | 1.29 | 64,813 | 1.26 | 21,030 | 1.80 | 8,812 | 2.39 | 1,280 | 1.53 | 1,443 | 1.14 | 44,620 | 1.49 | 1,821 | 1.27 | 6,837 |
| Feb. | 1.32 | 66,898 | 1.22 | 18,910 | 1.78 | 9,056 | 2.55 | 1,205 | 1.63 | 1,445 | 1.13 | 42,295 | 1.71 | 3,088 | 1.42 | 9,809 |
| Mar. | 1.50 | 99,725 | 1.39 | 29,044 | 1.78 | 10,692 | 2.54 | 1,571 | 1.83 | 1,981 | 1.38 | 68,399 | 1.77 | 5,314 | 1.65 | 11,768 |
| Apr. | 1.53 | 74,483 | 1.51 | 19,771 | 1.82 | 9,033 | 2.63 | 1,388 | 2.19 | 1,883 | 1.31 | 47,761 | 1.79 | 3,673 | 1.91 | 10,745 |
| May | 1.49 | 78,588 | 1.73 | 18,948 | 1.82 | 9,416 | 2.82 | 1,358 | 2.31 | 1,703 | 1.17 | 53,228 | 2.65 | 3,419 | 2.16 | 9,464 |
| June | 2.19 | 123,645 | 1.58 | 28,803 | 1.88 | 10,561 | 2.97 | 1,465 | 2.59 | 1,483 | 2.16 | 94,434 | 2.35 | 4,558 | 2.43 | 11,144 |
| July | 1.89 | 80,810 | 1.76 | 22,550 | 1.95 | 10,057 | 3.12 | 1,435 | 2.91 | 1,400 | 1.66 | 53,206 | 2.43 | 3,997 | 2.50 | 10,715 |
| Aug. | 1.97 | 87,373 | 1.54 | 20,380 | 2.17 | 9,306 | 3.36 | 1,327 | 2.96 | 1,241 | 1.80 | 64,748 | 2.47 | 2,987 | 2.56 | 7,764 |
| Sep. | 2.67 | 99,740 | 2.23 | 28,861 | 2.60 | 10,891 | 3.85 | 1,435 | 3.19 | 1,075 | 2.61 | 75,992 | 2.99 | 3,670 | 2.96 | 6,677 |
| Oct. | 2.86 | 88,486 | 2.60 | 25,332 | 3.12 | 10,741 | 4.26 | 1,591 | 3.55 | 989 | 2.67 | 64,795 | 3.83 | 3,917 | 3.34 | 6,453 |
| Nov. | 3.14 | 76,425 | 3.14 | 20,223 | 3.53 | 10,545 | 4.71 | 1,587 | 3.80 | 1,046 | 2.94 | 51,493 | 3.51 | 3,915 | 3.33 | 7,839 |
| **of which: Collateralised loans 11** | | | | | | | | | | | | | | | | |
| **2021** Nov. | 1.34 | 8,064 | . | . | 1.76 | 359 | 1.60 | 96 | 1.19 | 382 | 1.43 | 4,537 | 1.36 | 704 | 1.08 | 1,986 |
| Dec. | 1.27 | 18,534 | . | . | 1.69 | 438 | 1.93 | 113 | 1.23 | 430 | 1.20 | 11,302 | 1.73 | 1,948 | 1.18 | 4,303 |
| **2022** Jan. | 1.25 | 10,159 | . | . | 1.66 | 371 | 1.54 | 102 | 1.35 | 406 | 1.19 | 7,044 | 1.20 | 386 | 1.37 | 1,850 |
| Feb. | 1.60 | 9,498 | . | . | 1.66 | 296 | 1.98 | 87 | 1.37 | 318 | 1.63 | 4,798 | 1.85 | 1,166 | 1.46 | 2,833 |
| Mar. | 1.40 | 14,380 | . | . | 1.71 | 503 | 2.07 | 120 | 1.63 | 444 | 1.15 | 9,349 | 2.56 | 1,117 | 1.63 | 2,847 |
| Apr. | 1.72 | 9,355 | . | . | 1.92 | 325 | 2.15 | 113 | 1.93 | 481 | 1.53 | 5,242 | 1.68 | 817 | 2.07 | 2,377 |
| May | 2.02 | 9,121 | . | . | 1.95 | 385 | 2.43 | 114 | 2.20 | 461 | 1.81 | 5,246 | 3.02 | 726 | 2.14 | 2,189 |
| June | 1.90 | 13,721 | . | . | 1.89 | 490 | 2.69 | 127 | 2.43 | 458 | 1.49 | 8,720 | 2.72 | 1,076 | 2.72 | 2,850 |
| July | 2.00 | 11,739 | . | . | 2.03 | 487 | 2.84 | 102 | 2.67 | 398 | 1.64 | 7,081 | 2.99 | 1,130 | 2.41 | 2,541 |
| Aug. | 2.20 | 7,929 | . | . | 2.25 | 501 | 2.97 | 91 | 2.74 | 319 | 2.02 | 4,945 | 2.99 | 603 | 2.30 | 1,470 |
| Sep. | . | . | . | . | 2.86 | 608 | 3.37 | 78 | 3.01 | 299 | . | . | 3.16 | 1,131 | 2.99 | 1,712 |
| Oct. | 2.82 | 10,559 | . | . | 3.01 | 572 | 3.48 | 95 | 3.32 | 261 | 2.71 | 7,209 | 3.43 | 750 | 2.82 | 1,672 |
| Nov. | 3.50 | 9,537 | . | . | 3.45 | 465 | 3.93 | 93 | 3.49 | 269 | 3.56 | 6,290 | 3.80 | 731 | 3.12 | 1,689 |

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 | Technical reserves 3 | Non-financial assets | Remaining assets |
|---|---|---|---|---|---|---|---|---|---|---|
| **Insurance corporations 4** | | | | | | | | | | |
| 2020 Q1 | 2,426.8 | 318.2 | 452.0 | 364.1 | 383.1 | 738.2 | 4.5 | 68.5 | 38.6 | 59.6 |
| Q2 | 2,517.5 | 317.0 | 460.5 | 371.9 | 409.4 | 788.7 | 4.3 | 68.5 | 38.7 | 58.5 |
| Q3 | 2,547.1 | 311.1 | 472.9 | 373.8 | 411.3 | 809.5 | 4.4 | 67.1 | 39.0 | 58.0 |
| Q4 | 2,587.4 | 301.7 | 478.9 | 370.6 | 425.4 | 841.0 | 4.7 | 68.1 | 38.2 | 58.7 |
| 2021 Q1 | 2,575.3 | 292.4 | 466.8 | 361.7 | 437.8 | 844.7 | 3.9 | 72.0 | 38.9 | 57.2 |
| Q2 | 2,591.4 | 280.5 | 466.5 | 361.3 | 449.6 | 864.5 | 3.4 | 72.6 | 39.0 | 54.1 |
| Q3 | 2,633.2 | 271.8 | 471.3 | 358.3 | 464.4 | 882.1 | 3.3 | 87.9 | 38.4 | 55.8 |
| Q4 | 2,649.9 | 261.4 | 468.7 | 355.1 | 472.9 | 903.3 | 3.2 | 85.1 | 40.8 | 59.4 |
| 2022 Q1 | 2,541.0 | 244.9 | 441.0 | 333.9 | 469.7 | 860.3 | 2.7 | 87.8 | 41.1 | 59.6 |
| Q2 | 2,367.9 | 217.7 | 394.2 | 306.5 | 464.2 | 793.6 | 3.0 | 85.7 | 41.3 | 61.6 |
| Q3 | 2,300.6 | 205.1 | 377.2 | 290.6 | 463.7 | 767.8 | 4.0 | 84.5 | 41.6 | 66.2 |
| **Life insurance** | | | | | | | | | | |
| 2020 Q1 | 1,295.7 | 191.4 | 231.0 | 220.6 | 62.0 | 538.1 | 2.2 | 13.9 | 20.3 | 16.3 |
| Q2 | 1,347.1 | 192.3 | 234.4 | 223.6 | 64.4 | 577.0 | 2.8 | 13.7 | 20.3 | 18.5 |
| Q3 | 1,369.2 | 188.4 | 241.6 | 225.7 | 66.1 | 592.6 | 3.0 | 13.6 | 20.6 | 17.6 |
| Q4 | 1,395.8 | 183.5 | 242.7 | 229.9 | 70.2 | 616.5 | 3.3 | 14.3 | 20.8 | 14.5 |
| 2021 Q1 | 1,361.2 | 170.4 | 231.5 | 219.6 | 74.3 | 614.3 | 2.1 | 14.2 | 21.5 | 13.2 |
| Q2 | 1,371.7 | 164.4 | 231.3 | 219.4 | 78.0 | 627.2 | 2.0 | 14.1 | 21.5 | 13.8 |
| Q3 | 1,386.6 | 159.1 | 232.2 | 214.8 | 87.7 | 642.8 | 1.9 | 13.4 | 20.8 | 13.8 |
| Q4 | 1,400.8 | 152.4 | 232.7 | 211.8 | 93.5 | 658.0 | 1.7 | 14.6 | 21.9 | 14.3 |
| 2022 Q1 | 1,312.9 | 137.6 | 211.8 | 193.6 | 99.9 | 619.4 | 0.9 | 13.9 | 22.1 | 13.8 |
| Q2 | 1,200.2 | 121.8 | 182.3 | 174.0 | 104.4 | 563.2 | 0.9 | 13.5 | 22.2 | 18.0 |
| Q3 | 1,151.2 | 111.9 | 170.5 | 163.3 | 107.1 | 540.9 | 1.1 | 12.2 | 22.4 | 21.7 |
| **Non-life insurance** | | | | | | | | | | |
| 2020 Q1 | 669.3 | 111.1 | 131.3 | 79.8 | 80.0 | 186.9 | 0.3 | 38.7 | 12.0 | 29.3 |
| Q2 | 685.4 | 111.8 | 134.4 | 82.4 | 81.1 | 197.0 | 0.4 | 39.5 | 12.1 | 26.7 |
| Q3 | 693.0 | 109.3 | 137.6 | 83.3 | 82.7 | 203.1 | 0.4 | 38.5 | 12.1 | 26.3 |
| Q4 | 703.1 | 105.9 | 139.5 | 84.5 | 85.1 | 210.2 | 0.5 | 37.6 | 12.7 | 27.3 |
| 2021 Q1 | 716.8 | 108.1 | 139.5 | 83.6 | 88.7 | 215.1 | 0.4 | 40.0 | 12.8 | 28.6 |
| Q2 | 720.3 | 103.3 | 140.4 | 83.5 | 90.6 | 221.6 | 0.4 | 40.4 | 12.8 | 27.3 |
| Q3 | 727.5 | 98.8 | 140.2 | 83.8 | 93.9 | 223.3 | 0.4 | 46.6 | 12.9 | 27.8 |
| Q4 | 732.4 | 94.7 | 139.9 | 84.8 | 97.8 | 227.8 | 0.3 | 44.7 | 14.0 | 28.4 |
| 2022 Q1 | 721.4 | 91.9 | 134.1 | 81.0 | 98.9 | 224.6 | 0.2 | 46.0 | 14.0 | 30.7 |
| Q2 | 681.9 | 82.6 | 124.1 | 75.1 | 99.0 | 213.2 | 0.1 | 44.3 | 14.1 | 29.5 |
| Q3 | 663.9 | 77.4 | 119.5 | 70.7 | 99.9 | 209.1 | 0.1 | 43.4 | 14.1 | 29.6 |
| **Reinsurance 5** | | | | | | | | | | |
| 2020 Q1 | 461.7 | 15.7 | 89.8 | 63.7 | 241.0 | 13.3 | 1.9 | 15.9 | 6.3 | 14.1 |
| Q2 | 485.0 | 12.9 | 91.7 | 65.9 | 264.0 | 14.6 | 1.1 | 15.2 | 6.3 | 13.3 |
| Q3 | 485.0 | 13.5 | 93.7 | 64.9 | 262.6 | 13.7 | 1.0 | 15.0 | 6.3 | 14.2 |
| Q4 | 488.5 | 12.3 | 96.7 | 56.3 | 270.2 | 14.3 | 1.0 | 16.3 | 4.7 | 16.9 |
| 2021 Q1 | 497.3 | 13.9 | 95.8 | 58.5 | 274.7 | 15.4 | 1.4 | 17.7 | 4.7 | 15.3 |
| Q2 | 499.4 | 12.8 | 94.8 | 58.4 | 280.9 | 15.6 | 1.0 | 18.1 | 4.6 | 13.1 |
| Q3 | 519.0 | 13.9 | 98.9 | 59.6 | 282.7 | 16.1 | 1.0 | 28.0 | 4.7 | 14.2 |
| Q4 | 516.7 | 14.3 | 96.1 | 58.6 | 281.6 | 17.5 | 1.1 | 25.9 | 4.9 | 16.6 |
| 2022 Q1 | 506.6 | 15.5 | 95.1 | 59.3 | 271.0 | 16.3 | 1.6 | 27.9 | 5.0 | 15.0 |
| Q2 | 485.7 | 13.2 | 87.8 | 57.5 | 260.8 | 17.3 | 1.9 | 27.9 | 5.1 | 14.2 |
| Q3 | 485.5 | 15.7 | 87.2 | 56.6 | 256.6 | 17.7 | 2.7 | 28.9 | 5.1 | 14.9 |
| **Pension funds 6** | | | | | | | | | | |
| 2020 Q1 | 601.0 | 92.2 | 56.8 | 48.9 | 9.4 | 362.0 | 0.1 | 11.3 | 17.6 | 2.7 |
| Q2 | 626.0 | 91.8 | 58.8 | 49.8 | 9.8 | 383.4 | 0.1 | 11.3 | 18.3 | 2.8 |
| Q3 | 638.5 | 91.1 | 59.6 | 50.2 | 10.1 | 394.7 | 0.2 | 11.6 | 18.5 | 2.5 |
| Q4 | 662.9 | 88.9 | 60.6 | 49.5 | 10.3 | 419.5 | 0.2 | 11.9 | 18.8 | 3.1 |
| 2021 Q1 | 664.3 | 86.2 | 58.7 | 48.6 | 10.8 | 427.9 | 0.2 | 12.1 | 17.6 | 2.3 |
| Q2 | 683.2 | 85.0 | 60.2 | 49.3 | 11.3 | 445.1 | 0.1 | 12.1 | 17.8 | 2.3 |
| Q3 | 689.8 | 82.9 | 60.4 | 48.8 | 11.8 | 453.6 | 0.1 | 12.2 | 17.8 | 2.2 |
| Q4 | 709.8 | 82.1 | 60.0 | 48.7 | 11.3 | 473.5 | 0.1 | 12.4 | 18.4 | 3.2 |
| 2022 Q1 | 687.7 | 76.4 | 56.9 | 46.3 | 12.1 | 462.6 | 0.0 | 12.9 | 18.4 | 2.1 |
| Q2 | 661.3 | 71.3 | 53.3 | 43.3 | 12.5 | 447.6 | 0.0 | 12.5 | 18.5 | 2.3 |
| Q3 | 645.4 | 68.6 | 52.3 | 41.0 | 12.9 | 436.5 | 0.0 | 13.1 | 18.6 | 2.4 |

Sources: The calculations for the insurance sectors are based on supervisory data according to Solvency I and II and for pension funds on IORP supervisory data and own data collections. **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** Including reinsurance recoverables and claims of pension funds on pension managers. **4** Valuation of listed securities at the corresponding consistent price from the ESCB's securities database. **5** Not including the reinsurance business conducted by primary insurers, which is included there. **6** The term "pension funds" refers to the institutional sector "pension funds" of the European System of Accounts. Pension funds thus comprise company pension schemes and occupational pension schemes for the self-employed. Social security funds are not included.

## VII. Insurance corporations and pension funds

### 2. Liabilities

€ billion

| End of year/quarter | Total | Debt securities issued | Loans [1] | Shares and other equity | Technical reserves Total [2] | Life/ pension entitlements [3] | Non-life | Financial derivatives | Remaining liabilities | Net worth [4] |
|---|---|---|---|---|---|---|---|---|---|---|
| **Insurance corporations** | | | | | | | | | | |
| 2020 Q1 | 2,426.8 | 31.8 | 82.4 | 464.3 | 1,721.8 | 1,483.2 | 238.6 | 2.4 | 124.1 | – |
| Q2 | 2,517.5 | 33.1 | 82.2 | 505.3 | 1,767.6 | 1,527.7 | 239.9 | 1.9 | 127.3 | – |
| Q3 | 2,547.1 | 34.3 | 80.0 | 515.7 | 1,785.5 | 1,549.1 | 236.4 | 1.7 | 129.9 | – |
| Q4 | 2,587.4 | 36.6 | 79.7 | 540.4 | 1,799.0 | 1,579.2 | 219.8 | 1.6 | 130.2 | – |
| 2021 Q1 | 2,575.3 | 34.8 | 81.4 | 551.7 | 1,778.7 | 1,541.3 | 237.4 | 2.5 | 126.2 | – |
| Q2 | 2,591.4 | 33.0 | 81.3 | 558.9 | 1,793.7 | 1,556.4 | 237.3 | 2.2 | 122.2 | – |
| Q3 | 2,633.2 | 35.4 | 82.8 | 567.3 | 1,818.0 | 1,569.1 | 248.9 | 2.5 | 127.0 | – |
| Q4 | 2,649.9 | 36.1 | 82.0 | 579.7 | 1,821.1 | 1,578.4 | 242.7 | 2.5 | 128.6 | – |
| 2022 Q1 | 2,541.0 | 34.4 | 82.2 | 563.8 | 1,728.4 | 1,474.6 | 253.8 | 4.0 | 128.3 | – |
| Q2 | 2,367.9 | 33.7 | 78.8 | 542.5 | 1,578.9 | 1,331.1 | 247.8 | 5.9 | 128.1 | – |
| Q3 | 2,300.6 | 33.9 | 73.7 | 539.1 | 1,513.1 | 1,268.8 | 244.3 | 7.2 | 133.5 | – |
| **Life insurance** | | | | | | | | | | |
| 2020 Q1 | 1,295.7 | 3.6 | 19.3 | 114.2 | 1,117.8 | 1,117.8 | – | 0.6 | 40.3 | – |
| Q2 | 1,347.1 | 3.8 | 19.2 | 129.8 | 1,150.3 | 1,150.3 | – | 0.5 | 43.4 | – |
| Q3 | 1,369.2 | 3.9 | 19.5 | 136.8 | 1,164.7 | 1,164.7 | – | 0.5 | 43.7 | – |
| Q4 | 1,395.8 | 3.9 | 20.7 | 142.8 | 1,185.6 | 1,185.6 | – | 0.5 | 42.2 | – |
| 2021 Q1 | 1,361.2 | 3.3 | 19.9 | 143.1 | 1,154.3 | 1,154.3 | – | 1.0 | 39.6 | – |
| Q2 | 1,371.7 | 3.3 | 20.4 | 144.2 | 1,164.9 | 1,164.9 | – | 1.0 | 37.9 | – |
| Q3 | 1,386.6 | 3.3 | 19.3 | 148.1 | 1,176.4 | 1,176.4 | – | 1.1 | 38.4 | – |
| Q4 | 1,400.8 | 3.3 | 20.7 | 148.2 | 1,185.5 | 1,185.5 | – | 0.9 | 42.2 | – |
| 2022 Q1 | 1,312.9 | 3.2 | 19.9 | 142.8 | 1,103.6 | 1,103.6 | – | 1.4 | 42.1 | – |
| Q2 | 1,200.2 | 3.1 | 19.1 | 141.5 | 988.5 | 988.5 | – | 2.6 | 45.4 | – |
| Q3 | 1,151.2 | 3.0 | 17.0 | 138.3 | 942.8 | 942.8 | – | 2.9 | 47.2 | – |
| **Non-life insurance** | | | | | | | | | | |
| 2020 Q1 | 669.3 | 1.3 | 9.8 | 141.9 | 468.2 | 344.4 | 123.8 | 0.1 | 48.0 | – |
| Q2 | 685.4 | 1.3 | 9.5 | 149.3 | 478.1 | 355.6 | 122.5 | 0.1 | 47.1 | – |
| Q3 | 693.0 | 1.2 | 9.6 | 151.9 | 482.1 | 362.3 | 119.8 | 0.1 | 48.1 | – |
| Q4 | 703.1 | 1.3 | 9.7 | 157.9 | 482.9 | 368.7 | 114.2 | 0.0 | 51.2 | – |
| 2021 Q1 | 716.8 | 1.2 | 10.6 | 162.8 | 491.6 | 362.6 | 129.0 | 0.1 | 50.5 | – |
| Q2 | 720.3 | 1.2 | 10.5 | 166.4 | 493.6 | 366.3 | 127.3 | 0.1 | 48.4 | – |
| Q3 | 727.5 | 1.2 | 10.5 | 169.2 | 499.0 | 367.9 | 131.2 | 0.2 | 47.5 | – |
| Q4 | 732.4 | 1.4 | 10.8 | 176.2 | 493.0 | 367.6 | 125.4 | 0.2 | 50.9 | – |
| 2022 Q1 | 721.4 | 1.3 | 11.8 | 174.1 | 483.8 | 347.2 | 136.6 | 0.3 | 50.1 | – |
| Q2 | 681.9 | 1.2 | 11.1 | 168.8 | 452.7 | 323.1 | 129.7 | 0.5 | 47.6 | – |
| Q3 | 663.9 | 1.2 | 10.6 | 169.7 | 431.8 | 308.1 | 123.8 | 0.5 | 50.0 | – |
| **Reinsurance [5]** | | | | | | | | | | |
| 2020 Q1 | 461.7 | 26.9 | 53.3 | 208.1 | 135.9 | 21.0 | 114.9 | 1.7 | 35.8 | – |
| Q2 | 485.0 | 28.1 | 53.5 | 226.2 | 139.1 | 21.8 | 117.4 | 1.3 | 36.8 | – |
| Q3 | 485.0 | 29.2 | 50.9 | 227.0 | 138.7 | 22.1 | 116.6 | 1.0 | 38.1 | – |
| Q4 | 488.5 | 31.4 | 49.3 | 239.6 | 130.4 | 24.8 | 105.6 | 1.0 | 36.7 | – |
| 2021 Q1 | 497.3 | 30.2 | 50.9 | 245.8 | 132.8 | 24.4 | 108.4 | 1.4 | 36.2 | – |
| Q2 | 499.4 | 28.5 | 50.4 | 248.3 | 135.2 | 25.2 | 110.0 | 1.1 | 35.9 | – |
| Q3 | 519.0 | 30.9 | 53.0 | 250.1 | 142.7 | 24.9 | 117.8 | 1.3 | 41.1 | – |
| Q4 | 516.7 | 31.4 | 50.5 | 255.3 | 142.6 | 25.3 | 117.3 | 1.4 | 35.5 | – |
| 2022 Q1 | 506.6 | 30.0 | 50.4 | 246.8 | 140.9 | 23.8 | 117.2 | 2.3 | 36.1 | – |
| Q2 | 485.7 | 29.3 | 48.6 | 232.2 | 137.7 | 19.5 | 118.2 | 2.8 | 35.1 | – |
| Q3 | 485.5 | 29.7 | 46.2 | 231.1 | 138.5 | 18.0 | 120.5 | 3.8 | 36.3 | – |
| **Pension funds [6]** | | | | | | | | | | |
| 2020 Q1 | 601.0 | – | 1.6 | 22.6 | 497.5 | 496.9 | – | 0.3 | 8.8 | 70.3 |
| Q2 | 626.0 | – | 1.6 | 25.6 | 507.3 | 506.7 | – | 0.3 | 8.9 | 82.4 |
| Q3 | 638.5 | – | 1.6 | 27.3 | 511.4 | 510.8 | – | 0.3 | 8.9 | 88.9 |
| Q4 | 662.9 | – | 1.6 | 28.4 | 528.5 | 527.9 | – | 0.3 | 9.0 | 95.1 |
| 2021 Q1 | 664.3 | – | 1.6 | 28.8 | 529.3 | 528.1 | – | 0.3 | 8.6 | 95.8 |
| Q2 | 683.2 | – | 1.8 | 31.1 | 536.5 | 534.8 | – | 0.2 | 9.3 | 104.3 |
| Q3 | 689.8 | – | 1.8 | 31.5 | 541.1 | 538.9 | – | 0.2 | 9.3 | 106.0 |
| Q4 | 709.8 | – | 1.9 | 31.8 | 560.5 | 557.6 | – | 0.1 | 9.2 | 106.4 |
| 2022 Q1 | 687.7 | – | 2.0 | 32.3 | 555.0 | 552.2 | – | 0.1 | 9.6 | 88.7 |
| Q2 | 661.3 | – | 1.9 | 32.4 | 553.4 | 550.6 | – | 0.1 | 9.3 | 64.0 |
| Q3 | 645.4 | – | 2.0 | 32.3 | 548.3 | 545.4 | – | 0.1 | 10.0 | 52.6 |

Sources: The calculations for the insurance sectors are based on supervisory data according to Solvency I and II and for pension funds on IORP supervisory data and own data collections. **1** Including deposits retained on ceded business as well as registered bonds, borrowers' note loans and registered Pfandbriefe. **2** Including claims of pension funds on pension managers and entitlements to non-pension benefits. **3** Technical reserves "life" taking account of transitional measures. Health insurance is also included in the "non-life insurance" sector. **4** Own funds correspond to the sum of "Net worth" and "Shares and other equity". **5** Not including the reinsurance business conducted by primary insurers, which is included there. **6** Valuation at book values. 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.

## VIII. Capital market

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

€ million

**Debt securities**

| | | Sales | | | | | Purchases | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Domestic debt securities [1] | | | | | Residents | | | | |
| Period | 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] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 54,840 | 11,563 | 1,096 | 7,112 | 3,356 | 43,277 | 137,907 | − 71,454 | 161,012 | 48,349 | − 83,067 |
| 2018 | 64,682 | 16,630 | 33,251 | 12,433 | − 29,055 | 48,052 | 93,103 | − 24,417 | 67,328 | 50,192 | − 28,421 |
| 2019 | 136,117 | 68,536 | 29,254 | 32,505 | 6,778 | 67,581 | 59,013 | 8,059 | 2,408 | 48,546 | 77,104 |
| 2020 | 437,976 | 374,034 | 14,462 | 88,703 | 270,870 | 63,941 | 274,979 | 18,955 | 226,887 | 29,138 | 162,996 |
| 2021 | 283,684 | 221,648 | 31,941 | 19,754 | 169,953 | 62,036 | 310,838 | − 41,852 | 245,198 | 107,492 | − 27,154 |
| 2021 Dec. | − 39,780 | − 23,893 | − 17,511 | − 8,944 | 2,561 | − 15,886 | − 1,271 | − 9,420 | 14,137 | − 5,988 | 38,509 |
| 2022 Jan. | 49,962 | 25,410 | 9,976 | 6,559 | 8,876 | 24,552 | 40,530 | − 2,870 | 14,990 | 28,409 | 9,432 |
| Feb. | 32,181 | 27,557 | 10,598 | 3,056 | 13,902 | 4,624 | 25,329 | 8,057 | 14,793 | 2,478 | 6,852 |
| Mar. | 62,964 | 43,608 | 23,278 | 7,972 | 12,358 | 19,356 | 46,555 | 6,811 | 10,709 | 29,035 | 16,409 |
| Apr. | − 17,423 | − 2,212 | − 3,140 | 707 | 222 | − 15,211 | − 2,285 | 16,927 | 13,068 | 1,574 | − 15,138 |
| May | 23,669 | 23,911 | 4,066 | 4,901 | 14,944 | − 242 | 25,954 | 5,485 | 14,400 | 6,069 | − 2,285 |
| June | 23,509 | 12,731 | 5,517 | − 1,563 | 8,777 | 10,778 | 17,236 | 8,471 | − 2,289 | 11,054 | 6,273 |
| July | − 17,762 | − 12,924 | − 6,955 | 11,041 | − 17,011 | − 4,838 | − 6,668 | 10,710 | − 13,670 | − 3,708 | − 11,094 |
| Aug. | 17,950 | 25,220 | 2,770 | 2,198 | 20,251 | − 7,270 | − 334 | − 10,189 | − 726 | 10,581 | 18,284 |
| Sep. | 9,924 | 15,094 | 32,114 | 3,897 | − 20,918 | − 5,170 | 20,928 | 7,491 | − 3,147 | 16,583 | − 11,004 |
| Oct. | 45,033 | 52,723 | − 6,141 | 6,824 | 52,040 | − 7,690 | 64,757 | 4,260 | 3,619 | 56,878 | − 19,724 |
| Nov. | 36,768 | 35,563 | − 515 | 5,151 | 30,927 | 1,205 | 5,207 | 193 | 4,041 | 973 | 31,561 |

€ million

**Shares**

| | | Sales | | Purchases | | | |
|---|---|---|---|---|---|---|---|
| | | | | Residents | | | |
| Period | Sales = total purchases | Domestic shares [8] | Foreign shares [9] | Total [10] | Credit institutions [5] | Other sectors [11] | Non-residents [12] |
|---|---|---|---|---|---|---|---|
| 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 | 51,571 | 15,570 | 36,001 | 49,913 | 7,031 | 42,882 | 1,658 |
| 2018 | 54,883 | 16,188 | 38,695 | 83,107 | − 11,184 | 94,291 | − 28,224 |
| 2019 | 46,021 | 9,076 | 36,945 | 33,675 | − 1,119 | 34,794 | 12,346 |
| 2020 | 83,859 | 17,771 | 66,088 | 115,960 | 27 | 115,933 | − 32,101 |
| 2021 | 125,541 | 49,066 | 76,475 | 124,105 | 10,869 | 113,236 | 1,436 |
| 2021 Dec. | 13,692 | 10,698 | 2,995 | 6,987 | − 1,848 | 8,835 | 6,705 |
| 2022 Jan. | 6,155 | 396 | 5,760 | 9,711 | 2,076 | 7,635 | − 3,556 |
| Feb. | − 5,455 | 628 | − 6,084 | − 4,539 | − 1,599 | − 2,940 | − 916 |
| Mar. | 9,478 | 359 | 9,119 | 14,188 | − 1,736 | 15,924 | − 4,710 |
| Apr. | 6,207 | 150 | 6,056 | 9,419 | 477 | 8,942 | − 3,212 |
| May | 3,197 | 1,411 | 1,786 | 3,880 | 1,600 | 2,280 | − 684 |
| June | − 25,843 | 894 | − 26,737 | − 24,422 | − 3,308 | − 21,114 | − 1,421 |
| July | − 2,467 | 1,374 | − 3,841 | − 704 | − 2,145 | 1,441 | 1,763 |
| Aug. | − 917 | 87 | − 1,003 | 1,736 | 165 | 1,571 | − 2,653 |
| Sep. | 37,243 | 38,800 | − 1,557 | 26,230 | − 529 | 26,759 | 11,013 |
| Oct. | − 2,899 | 609 | − 3,508 | 5,121 | − 1,588 | 3,533 | − 2,222 |
| Nov. | − 5,008 | 247 | − 5,256 | − 6,897 | − 1,414 | − 8,311 | 1,889 |

**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] Total | Mortgage Pfandbriefe | Public Pfandbriefe | Debt securities issued by special-purpose credit institutions | Other bank debt securities | Corporate bonds (non-MFIs) [2] | Public debt securities |
|---|---|---|---|---|---|---|---|---|
| **Gross sales** | | | | | | | | |
| 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 [6] | 1,870,084 | 778,411 | 39,548 | 18,327 | 643,380 | 77,156 | 184,206 | 907,466 |
| 2021 | 1,658,004 | 795,271 | 41,866 | 17,293 | 648,996 | 87,116 | 139,775 | 722,958 |
| 2022 Mar. | 168,436 | 85,551 | 5,602 | 875 | 72,212 | 6,862 | 16,473 | 66,412 |
| Apr. | 129,238 | 68,828 | 3,091 | 140 | 59,957 | 5,640 | 8,317 | 52,093 |
| May | 139,081 | 71,010 | 3,777 | 1,809 | 60,594 | 4,830 | 15,238 | 52,833 |
| June | 141,105 | 74,361 | 5,924 | 770 | 62,377 | 5,290 | 12,335 | 54,408 |
| July | 148,625 | 72,487 | 5,291 | 348 | 59,203 | 7,645 | 21,763 | 54,375 |
| Aug. | 130,730 | 77,533 | 5,282 | 110 | 66,372 | 5,769 | 10,735 | 42,462 |
| Sep. | 160,276 | 96,892 | 10,333 | 2,847 | 73,908 | 9,804 | 18,913 | 44,471 |
| Oct. | 172,467 | 59,447 | 5,875 | 1,086 | 45,698 | 6,788 | 11,037 | 101,982 |
| Nov. | 149,600 | 67,263 | 1,969 | 91 | 55,905 | 9,297 | 20,632 | 61,705 |
| **of which: Debt securities with maturities of more than four years [4]** | | | | | | | | |
| 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 [6] | 658,521 | 165,097 | 28,500 | 7,427 | 90,839 | 38,330 | 77,439 | 415,985 |
| 2021 | 486,335 | 171,799 | 30,767 | 6,336 | 97,816 | 36,880 | 64,234 | 250,303 |
| 2022 Mar. | 44,448 | 17,785 | 3,236 | 300 | 11,718 | 2,532 | 6,408 | 20,255 |
| Apr. | 28,734 | 13,879 | 1,926 | 50 | 10,089 | 1,814 | 1,050 | 13,805 |
| May | 33,822 | 12,448 | 3,173 | 1,264 | 6,238 | 1,774 | 4,423 | 16,950 |
| June | 37,845 | 7,517 | 2,676 | 500 | 2,342 | 1,999 | 4,128 | 26,200 |
| July | 47,135 | 12,838 | 2,626 | 250 | 8,760 | 1,201 | 13,373 | 20,925 |
| Aug. | 26,527 | 13,524 | 2,158 | – | 9,811 | 1,555 | 1,178 | 11,825 |
| Sep. | 48,303 | 19,352 | 7,086 | 1,821 | 7,179 | 3,267 | 8,100 | 20,850 |
| Oct. | 85,086 | 9,230 | 3,570 | 77 | 4,885 | 697 | 2,507 | 73,350 |
| Nov. | 31,416 | 4,326 | 895 | – | 2,006 | 1,424 | 9,394 | 17,696 |
| **Net sales [5]** | | | | | | | | |
| 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 [6] | 473,795 | 28,147 | 8,661 | 8,816 | 22,067 | – 11,398 | 49,536 | 396,113 |
| 2021 | 210,231 | 52,578 | 17,821 | 7,471 | 22,973 | – 4,314 | 35,531 | 122,123 |
| 2022 Mar. | 41,894 | 23,733 | 2,097 | 250 | 20,258 | 1,128 | 7,541 | 10,620 |
| Apr. | – 16,610 | – 4,444 | 720 | – 310 | 4,339 | – 515 | – 1,343 | – 10,823 |
| May | 24,352 | 3,706 | 685 | 1,774 | 1,967 | – 721 | 3,607 | 17,039 |
| June | 8,820 | 3,351 | 1,834 | 150 | 1,840 | – 474 | – 411 | 5,880 |
| July | – 9,336 | – 9,581 | 1,183 | – 4,070 | 7,083 | 390 | 11,189 | – 10,945 |
| Aug. | 14,448 | 1,731 | 4,546 | – 1,290 | 778 | – 747 | – 119 | 12,836 |
| Sep. | 4,464 | 29,793 | 5,512 | 30 | 19,958 | 4,293 | 3,795 | – 29,123 |
| Oct. | 44,012 | – 8,994 | 3,797 | – 1,764 | 9,843 | – 1,184 | 4,111 | 57,117 |
| Nov. | 34,330 | – 5,443 | – 3,165 | – 944 | 2,680 | 1,346 | 6,028 | 33,744 |

* 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 year 2020 have been revised. 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 | | |
| 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 **1** | 145,007 | 147,070 | 574,163 | 548,109 **1** | 220,456 **1** | 1,650,617 **1** |
| 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 | 311,572 **1** | 313,527 **1 2** | 1,583,616 |
| 2019 **2** | 3,149,373 | 1,222,911 | 174,188 | 47,712 | 696,325 | 304,686 **2** | 342,325 **2** | 1,584,136 |
| 2020 **4** | 3,545,200 **2** | 1,174,817 **2** | 183,980 | 55,959 | 687,710 **2** | 247,169 **2** | 379,342 **2** | 1,991,040 |
| 2021 | 3,781,975 | 1,250,777 | 202,385 | 63,496 | 731,068 | 253,828 | 414,791 | 2,116,406 |
| 2022 Mar. | 3,851,741 | 1,302,963 | 213,413 | 64,234 | 769,133 | 256,183 | 424,622 | 2,124,156 |
| Apr. | 3,852,799 | 1,311,863 | 214,466 | 63,960 | 776,664 | 256,773 | 424,076 | 2,116,860 |
| May | 3,870,240 | 1,309,630 | 214,981 | 65,720 | 773,798 | 255,131 | 427,180 | 2,133,430 |
| June | 3,888,933 | 1,319,854 | 216,989 | 65,910 | 781,469 | 255,486 | 427,460 | 2,141,620 |
| July | 3,884,305 | 1,318,280 | 218,402 | 61,866 | 781,239 | 256,772 | 439,070 | 2,126,954 |
| Aug. | 3,901,993 | 1,323,161 | 222,515 | 60,584 | 784,706 | 255,355 | 439,459 | 2,139,374 |
| Sep. | 3,913,102 | 1,357,635 | 228,228 | 60,630 | 808,522 | 260,255 | 443,514 | 2,111,952 |
| Oct. | 3,954,339 | 1,345,724 | 231,901 | 58,853 | 796,028 | 258,942 | 438,744 | 2,169,871 |
| Nov. | 3,978,130 | 1,330,274 | 228,585 | 57,910 | 784,494 | 259,285 | 444,024 | 2,203,832 |

### Breakdown by remaining period to maturity [3]
### Position at end-July 2022

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| bis unter 2 | 1 217 066 | 475 762 | 58 767 | 21 960 | 322 836 | 72 198 | 77 755 | 663 549 |
| 2 bis unter 4 | 744 136 | 313 738 | 61 718 | 13 510 | 174 289 | 64 221 | 80 581 | 349 817 |
| 4 bis unter 6 | 631 019 | 229 633 | 52 046 | 10 312 | 119 200 | 48 076 | 71 745 | 329 640 |
| 6 bis unter 8 | 380 452 | 123 310 | 28 765 | 5 159 | 67 112 | 22 274 | 42 207 | 214 934 |
| 8 bis unter 10 | 288 558 | 82 025 | 13 754 | 2 462 | 45 599 | 20 210 | 32 525 | 174 007 |
| 10 bis unter 15 | 238 841 | 62 263 | 9 111 | 4 061 | 38 728 | 10 363 | 33 256 | 143 322 |
| 15 bis unter 20 | 126 053 | 14 240 | 3 558 | 358 | 8 236 | 2 088 | 13 534 | 98 279 |
| 20 und darüber | 352 007 | 29 303 | 865 | 88 | 8 495 | 19 855 | 92 420 | 230 284 |

**\*** 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 year 2020 have been revised. 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 ex-change 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 | |
| 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 | 1,673 | 2,411 | 2,419 | 542 | – 858 | – 65 | – 2,775 | 1,950,224 |
| 2020 **4** | 181,881 | – 2,872 | 1,877 | 219 | 178 | – 2,051 | – 460 | – 2,635 | 1,963,588 |
| 2021 | 186,580 | 4,152 | 9,561 | 672 | 35 | – 326 | – 212 | – 5,578 | 2,301,942 |
| 2022 Mar. | 186,993 | 256 | 260 | 91 | – | – 0 | – 25 | – 70 | 2,076,514 |
| Apr. | 186,971 | 25 | 47 | 1 | – | – 0 | – 4 | – 19 | 2,007,353 |
| May | 187,056 | 84 | 215 | 42 | 0 | – 0 | – 0 | – 172 | 2,004,018 |
| June | 187,396 | 340 | 138 | 29 | 328 | – | – 108 | – 47 | 1,744,789 |
| July | 186,233 | – 1,194 | 120 | 39 | – | – 1 | – 25 | – 1,326 | 1,847,025 |
| Aug. | 185,545 | – 688 | 42 | – | – | – 0 | – 32 | – 698 | 1,769,546 |
| Sep. | 185,966 | 419 | 488 | – | – | – 7 | – | – 62 | 1,635,277 |
| Oct. | 186,402 | 420 | 532 | 1 | – | – 0 | – | – 112 | 1,777,136 |
| Nov. | 186,351 | – 57 | 31 | 13 | 0 | 0 | – 0 | – 102 | 1,918,565 |

**\*** 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

| | 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 | | | | | | | | | |
| | | | | With a residual maturity of 9 to 10 years [4] | | 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) |
| | Total | Total | Total | | Total | | | Average daily rate | End-1998 = 100 | End-1987 = 100 | End-1987 = 1,000 |
| Period | % per annum | | | | | | | | | | |
| 2010 | 2.5 | 2.4 | 2.4 | 2.7 | 2.7 | 3.3 | 4.0 | 124.96 | 102.95 | 368.72 | 6,914.19 |
| 2011 | 2.6 | 2.4 | 2.4 | 2.6 | 2.9 | 3.5 | 4.3 | 131.48 | 109.53 | 304.60 | 5,898.35 |
| 2012 | 1.4 | 1.3 | 1.3 | 1.5 | 1.6 | 2.1 | 3.7 | 135.11 | 111.18 | 380.03 | 7,612.39 |
| 2013 | 1.4 | 1.3 | 1.3 | 1.6 | 1.3 | 2.1 | 3.4 | 132.11 | 105.92 | 466.53 | 9,552.16 |
| 2014 | 1.0 | 1.0 | 1.0 | 1.2 | 0.9 | 1.7 | 3.0 | 139.68 | 114.37 | 468.39 | 9,805.55 |
| 2015 | 0.5 | 0.4 | 0.4 | 0.5 | 0.5 | 1.2 | 2.4 | 139.52 | 112.42 | 508.80 | 10,743.01 |
| 2016 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 1.0 | 2.1 | 142.50 | 112.72 | 526.55 | 11,481.06 |
| 2017 | 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 |
| 2021 | − 0.1 | − 0.3 | − 0.4 | − 0.4 | − 0.1 | 0.2 | 0.9 | 144.23 | 108.88 | 654.20 | 15,884.86 |
| 2022 June | 1.9 | 1.5 | 1.4 | 1.4 | 2.1 | 2.3 | 3.8 | 133.21 | 96.13 | 494.98 | 12,783.77 |
| July | 1.5 | 1.2 | 1.0 | 1.1 | 1.9 | 2.0 | 3.7 | 137.14 | 100.13 | 519.98 | 13,484.05 |
| Aug. | 1.5 | 1.1 | 1.0 | 1.0 | 1.9 | 1.9 | 3.3 | 131.87 | 94.89 | 493.47 | 12,834.96 |
| Sep. | 2.3 | 1.9 | 1.7 | 1.8 | 2.7 | 2.6 | 4.3 | 127.98 | 91.15 | 458.93 | 12,114.36 |
| Oct. | 2.7 | 2.3 | 2.1 | 2.2 | 3.2 | 3.1 | 4.9 | 127.58 | 90.65 | 498.00 | 13,253.74 |
| Nov. | 2.6 | 2.2 | 2.1 | 2.1 | 3.0 | 2.9 | 4.4 | 127.52 | 92.43 | 544.52 | 14,397.04 |

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

| | | 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: | | | | | | | | of which: Foreign mutual fund shares | | of which: Foreign mutual fund shares | |
| Period | Sales = total purchases | Total | Total | Money market funds | Securities-based funds | Real estate funds | Specialised funds | Foreign funds [4] | Total | Total | | Total | | Non-residents [5] |
| 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 | 153,756 | 94,921 | 29,560 | − 235 | 21,970 | 4,406 | 65,361 | 58,834 | 156,282 | 4,938 | 1,048 | 151,344 | 57,786 | − 2,526 |
| 2018 | 132,033 | 103,694 | 15,279 | 377 | 4,166 | 6,168 | 88,415 | 28,339 | 138,713 | 2,979 | − 2,306 | 135,734 | 30,645 | − 6,680 |
| 2019 | 176,254 | 122,546 | 17,032 | − 447 | 5,097 | 10,580 | 105,514 | 53,708 | 180,772 | 2,719 | − 812 | 178,053 | 54,520 | − 4,519 |
| 2020 | 178,613 | 116,028 | 19,193 | − 42 | 11,343 | 8,795 | 96,835 | 62,585 | 176,751 | 336 | − 1,656 | 176,415 | 64,241 | 1,862 |
| 2021 | 261,295 | 157,861 | 41,016 | 482 | 31,023 | 7,841 | 116,845 | 103,434 | 264,055 | 13,154 | 254 | 250,901 | 103,180 | − 2,760 |
| 2022 May | 5,606 | 5,058 | 1,045 | 251 | 380 | 381 | 4,013 | 548 | 4,981 | − 132 | − 434 | 5,113 | 982 | 625 |
| June | 3,171 | 4,539 | − 191 | − 8 | − 428 | 389 | 4,730 | − 1,368 | 2,907 | − 1,186 | − 72 | 4,093 | − 1,296 | 264 |
| July | 3,330 | 2,810 | − 965 | 76 | − 1,427 | 386 | 3,775 | 520 | 5,076 | 1,176 | 74 | 3,900 | 446 | − 1,746 |
| Aug. | 7,540 | 6,943 | − 206 | − 103 | − 252 | 116 | 7,152 | 597 | 7,570 | − 498 | − 77 | 8,068 | 674 | − 31 |
| Sep. | 177 | 1,349 | − 1,343 | 64 | − 1,577 | 288 | 2,712 | − 1,172 | 25 | − 320 | − 294 | 345 | − 878 | 152 |
| Oct. | 4,922 | 3,974 | 342 | 119 | 35 | 267 | 3,631 | 948 | 5,676 | 20 | − 306 | 5,656 | 1,254 | − 754 |
| Nov. | 1,100 | − 2,635 | 612 | − 2 | 400 | 190 | − 3,247 | 3,735 | 1,527 | 499 | 22 | 1,028 | 3,713 | − 427 |

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 | 2019 | 2020 | 2021 | 2021 Q2 | Q3 | Q4 | 2022 Q1 | Q2 | Q3 |
|---|---|---|---|---|---|---|---|---|---|
| **Acquisition of financial assets** | | | | | | | | | |
| Currency and deposits | 17.93 | 96.81 | 40.12 | − 25.36 | 19.57 | 24.11 | 14.83 | − 27.36 | 50.83 |
| Debt securities | − 2.37 | 2.99 | 3.11 | 1.90 | 1.58 | 1.16 | 0.64 | − 0.10 | 3.52 |
| Short-term debt securities | − 1.29 | 1.27 | 2.27 | 0.77 | 0.26 | 1.12 | 0.39 | − 1.94 | 3.00 |
| Long-term debt securities | − 1.08 | 1.72 | 0.85 | 1.13 | 1.32 | 0.05 | 0.25 | 1.84 | 0.53 |
| Memo item: | | | | | | | | | |
| Debt securities of domestic sectors | − 0.58 | 1.38 | 1.34 | 0.87 | 1.75 | − 0.64 | 0.34 | 0.98 | 1.65 |
| Non-financial corporations | 0.49 | − 0.17 | 0.74 | 0.62 | 0.59 | − 0.57 | 0.17 | − 0.17 | 0.74 |
| Financial corporations | 0.64 | 0.12 | 1.08 | 0.48 | 0.58 | 0.56 | 0.44 | 0.73 | 0.66 |
| General government | − 0.43 | 1.44 | − 0.48 | − 0.24 | 0.58 | − 0.63 | − 0.27 | 0.43 | 0.25 |
| Debt securities of the rest of the world | − 1.79 | 1.61 | 1.78 | 1.03 | − 0.17 | 1.80 | 0.31 | − 1.08 | 1.88 |
| Loans | − 1.48 | − 9.64 | 50.74 | 6.50 | 13.71 | 30.75 | 5.46 | 17.93 | 31.93 |
| Short-term loans | 12.60 | − 7.30 | 38.13 | 7.92 | 11.64 | 22.52 | − 2.62 | 13.03 | 28.08 |
| Long-term loans | − 14.08 | − 2.34 | 12.61 | − 1.42 | 2.07 | 8.23 | 8.08 | 4.90 | 3.85 |
| Memo item: | | | | | | | | | |
| Loans to domestic sectors | − 26.03 | − 1.13 | 10.10 | 0.01 | 0.18 | 16.16 | 7.85 | 2.51 | 14.13 |
| Non-financial corporations | − 28.14 | − 12.27 | 7.11 | − 3.40 | − 1.21 | 13.38 | 2.44 | 5.52 | 8.47 |
| Financial corporations | 1.86 | 10.57 | 2.38 | 3.26 | 1.24 | 2.63 | 5.41 | − 3.01 | 5.66 |
| General government | 0.25 | 0.57 | 0.61 | 0.15 | 0.15 | 0.15 | 0.00 | 0.00 | 0.00 |
| Loans to the rest of the world | 24.55 | − 8.51 | 40.64 | 6.49 | 13.53 | 14.59 | − 2.39 | 15.42 | 17.80 |
| Equity and investment fund shares | 123.65 | 114.98 | 162.28 | 38.42 | 29.52 | 46.58 | 48.66 | 39.95 | 2.27 |
| Equity | 114.64 | 102.20 | 140.50 | 31.49 | 26.79 | 38.29 | 46.49 | 41.80 | 4.57 |
| Listed shares of domestic sectors | 6.18 | − 77.97 | 15.33 | 4.92 | − 18.27 | 16.59 | 6.03 | 7.40 | 34.33 |
| Non-financial corporations | 4.62 | − 78.06 | 16.89 | 5.32 | − 18.80 | 18.30 | 5.58 | 7.12 | 34.91 |
| Financial corporations | 1.55 | 0.09 | − 1.56 | − 0.41 | 0.54 | − 1.70 | 0.46 | 0.28 | − 0.58 |
| Listed shares of the rest of the world | 7.40 | 5.01 | 5.09 | − 0.87 | 4.64 | 0.68 | − 0.75 | 3.22 | 0.09 |
| Other equity [1] | 101.07 | 175.16 | 120.08 | 27.45 | 40.42 | 21.02 | 41.21 | 31.18 | − 29.85 |
| Investment fund shares | 9.00 | 12.77 | 21.78 | 6.92 | 2.74 | 8.29 | 2.17 | − 1.85 | − 2.30 |
| Money market fund shares | 1.78 | 3.79 | 0.66 | − 0.19 | − 0.41 | 1.73 | − 1.22 | − 0.42 | − 1.12 |
| Non-MMF investment fund shares | 7.22 | 8.99 | 21.12 | 7.11 | 3.15 | 6.56 | 3.39 | − 1.43 | − 1.18 |
| Insurance technical reserves | 1.81 | 2.76 | 2.87 | 0.80 | 0.61 | 0.69 | − 0.11 | 7.84 | 5.00 |
| Financial derivatives | − 0.62 | − 27.52 | 15.55 | 2.29 | 0.44 | − 1.09 | 20.91 | 27.96 | 11.65 |
| Other accounts receivable | − 67.63 | 44.69 | 67.85 | − 13.71 | 15.40 | 56.79 | 7.27 | − 32.89 | − 37.65 |
| Total | 71.28 | 225.07 | 342.52 | 10.82 | 80.83 | 158.99 | 97.66 | 33.32 | 67.56 |
| **External financing** | | | | | | | | | |
| Debt securities | 20.52 | 36.89 | 20.86 | 8.92 | 10.29 | − 1.12 | 10.95 | 3.77 | 1.37 |
| Short-term securities | 4.88 | − 4.40 | 2.51 | 1.23 | 3.50 | − 1.02 | 3.85 | 1.21 | − 2.70 |
| Long-term securities | 15.64 | 41.29 | 18.35 | 7.69 | 6.79 | − 0.10 | 7.10 | 2.56 | 4.07 |
| Memo item: | | | | | | | | | |
| Debt securities of domestic sectors | 6.61 | 18.12 | 9.16 | 3.29 | 2.14 | 1.78 | 5.64 | 1.64 | 0.20 |
| Non-financial corporations | 0.49 | − 0.17 | 0.74 | 0.62 | 0.59 | − 0.57 | 0.17 | − 0.17 | 0.74 |
| Financial corporations | 5.31 | 19.86 | 9.11 | 2.75 | 1.78 | 2.61 | 5.34 | 1.87 | − 0.74 |
| General government | 0.47 | − 0.22 | 0.09 | 0.03 | 0.02 | − 0.10 | − 0.01 | − 0.08 | 0.01 |
| Households | 0.34 | − 1.35 | − 0.79 | − 0.12 | − 0.26 | − 0.15 | 0.14 | 0.01 | 0.19 |
| Debt securities of the rest of the world | 13.91 | 18.77 | 11.71 | 5.63 | 8.15 | − 2.89 | 5.31 | 2.13 | 1.17 |
| Loans | 89.83 | 84.69 | 93.90 | − 10.96 | 22.96 | 53.41 | 33.48 | 38.50 | 83.21 |
| Short-term loans | 33.43 | − 7.17 | 50.98 | − 8.60 | 14.96 | 21.18 | 25.21 | 15.73 | 46.66 |
| Long-term loans | 56.40 | 91.85 | 42.92 | − 2.37 | 8.00 | 32.23 | 8.26 | 22.77 | 36.56 |
| Memo item: | | | | | | | | | |
| Loans from domestic sectors | 36.58 | 36.77 | 67.64 | − 14.40 | 9.35 | 40.87 | 33.49 | 31.42 | 70.06 |
| Non-financial corporations | − 28.14 | − 12.27 | 7.11 | − 3.40 | − 1.21 | 13.38 | 2.44 | 5.52 | 8.47 |
| Financial corporations | 64.38 | 13.37 | 46.48 | − 15.99 | 7.96 | 23.52 | 28.83 | 21.64 | 34.79 |
| General government | 0.35 | 35.66 | 14.05 | 5.00 | 2.60 | 3.97 | 2.22 | 4.26 | 26.79 |
| Loans from the rest of the world | 53.25 | 47.92 | 26.26 | 3.43 | 13.61 | 12.55 | − 0.01 | 7.08 | 13.16 |
| Equity | 11.69 | 60.37 | 61.44 | 8.50 | 17.93 | 20.38 | 3.11 | 7.97 | 1.38 |
| Listed shares of domestic sectors | − 24.77 | − 62.25 | 26.38 | 8.02 | − 21.41 | 24.50 | 12.93 | 10.15 | 33.33 |
| Non-financial corporations | 4.62 | − 78.06 | 16.89 | 5.32 | − 18.80 | 18.30 | 5.58 | 7.12 | 34.91 |
| Financial corporations | − 33.41 | 3.47 | − 2.37 | 1.52 | − 3.23 | − 0.68 | 5.19 | − 1.41 | − 4.46 |
| General government | − 0.01 | 0.26 | − 0.09 | − 0.07 | − 0.00 | 0.04 | 0.18 | 0.24 | 0.25 |
| Households | 4.03 | 12.08 | 11.96 | 1.25 | 0.63 | 6.84 | 1.98 | 4.20 | 2.63 |
| Listed shares of the rest of the world | − 1.16 | 10.09 | 18.94 | − 1.16 | 31.69 | − 6.62 | − 12.77 | − 3.13 | 5.93 |
| Other equity [1] | 37.61 | 112.54 | 16.11 | 1.64 | 7.65 | 2.50 | 2.95 | 0.95 | − 37.89 |
| Insurance technical reserves | 7.55 | 5.83 | 4.25 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 |
| Financial derivatives and employee stock options | − 1.38 | 0.54 | 14.32 | 8.20 | 3.93 | 0.93 | − 2.28 | − 0.27 | 3.37 |
| Other accounts payable | 8.87 | 14.40 | 147.36 | 8.52 | 29.78 | 60.40 | 27.03 | 27.52 | 24.98 |
| Total | 137.08 | 202.72 | 342.14 | 24.25 | 85.94 | 135.07 | 73.35 | 78.55 | 115.37 |

**1** Including unlisted shares.

## IX. Financial accounts

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

End of year/quarter; € billion

| Item | 2019 | 2020 | 2021 | 2021 Q2 | Q3 | Q4 | 2022 Q1 | Q2 | Q3 |
|---|---|---|---|---|---|---|---|---|---|
| **Financial assets** | | | | | | | | | |
| Currency and deposits | 578.6 | 717.6 | 721.9 | 693.5 | 706.4 | 721.9 | 726.8 | 692.7 | 760.2 |
| Debt securities | 49.6 | 51.5 | 54.3 | 51.7 | 53.3 | 54.3 | 53.4 | 51.3 | 53.7 |
| Short-term debt securities | 3.7 | 4.8 | 7.1 | 5.7 | 6.0 | 7.1 | 7.5 | 5.6 | 8.6 |
| Long-term debt securities | 45.9 | 46.7 | 47.2 | 46.0 | 47.3 | 47.2 | 45.9 | 45.6 | 45.0 |
| Memo item: | | | | | | | | | |
| Debt securities of domestic sectors | 21.1 | 22.1 | 23.3 | 22.3 | 24.0 | 23.3 | 23.0 | 23.0 | 24.1 |
| Non-financial corporations | 5.0 | 4.7 | 5.3 | 5.3 | 5.9 | 5.3 | 5.2 | 4.9 | 5.5 |
| Financial corporations | 13.6 | 13.4 | 14.5 | 13.4 | 14.0 | 14.5 | 14.6 | 14.7 | 14.9 |
| General government | 2.6 | 4.0 | 3.5 | 3.6 | 4.1 | 3.5 | 3.2 | 3.5 | 3.6 |
| Debt securities of the rest of the world | 28.4 | 29.4 | 31.0 | 29.4 | 29.3 | 31.0 | 30.4 | 28.2 | 29.6 |
| Loans | 731.9 | 725.0 | 778.8 | 732.8 | 747.6 | 778.8 | 785.7 | 807.9 | 841.7 |
| Short-term loans | 568.5 | 566.1 | 605.2 | 570.5 | 582.8 | 605.2 | 603.8 | 619.4 | 649.7 |
| Long-term loans | 163.5 | 158.9 | 173.5 | 162.2 | 164.7 | 173.5 | 181.9 | 188.5 | 192.1 |
| Memo item: | | | | | | | | | |
| Loans to domestic sectors | 414.5 | 413.4 | 423.5 | 407.1 | 407.3 | 423.5 | 431.3 | 433.8 | 448.0 |
| Non-financial corporations | 339.9 | 327.6 | 334.7 | 322.5 | 321.3 | 334.7 | 337.2 | 342.7 | 351.1 |
| Financial corporations | 67.3 | 77.8 | 80.2 | 76.3 | 77.6 | 80.2 | 85.6 | 82.6 | 88.3 |
| General government | 7.4 | 7.9 | 8.5 | 8.2 | 8.4 | 8.5 | 8.5 | 8.5 | 8.5 |
| Loans to the rest of the world | 317.4 | 311.7 | 355.3 | 325.6 | 340.2 | 355.3 | 354.4 | 374.0 | 393.8 |
| Equity and investment fund shares | 2,448.8 | 2,559.7 | 2,913.1 | 2,813.6 | 2,871.5 | 2,913.1 | 2,838.7 | 2,765.4 | 2,729.0 |
| Equity | 2,258.8 | 2,354.9 | 2,672.9 | 2,589.5 | 2,644.1 | 2,672.9 | 2,606.4 | 2,547.9 | 2,517.2 |
| Listed shares of domestic sectors | 342.0 | 307.0 | 393.0 | 383.5 | 371.5 | 393.0 | 350.1 | 305.0 | 307.5 |
| Non-financial corporations | 332.9 | 298.9 | 384.9 | 375.0 | 361.7 | 384.9 | 342.4 | 298.2 | 301.7 |
| Financial corporations | 9.0 | 8.1 | 8.0 | 8.5 | 9.8 | 8.0 | 7.7 | 6.8 | 5.7 |
| Listed shares of the rest of the world | 52.3 | 66.6 | 71.5 | 69.4 | 71.0 | 71.5 | 66.5 | 66.3 | 64.9 |
| Other equity [1] | 1,864.5 | 1,981.3 | 2,208.5 | 2,136.6 | 2,201.5 | 2,208.5 | 2,189.8 | 2,176.6 | 2,144.8 |
| Investment fund shares | 190.0 | 204.7 | 240.2 | 224.1 | 227.5 | 240.2 | 232.3 | 217.5 | 211.8 |
| Money market fund shares | 3.2 | 7.0 | 7.6 | 6.3 | 5.9 | 7.6 | 6.4 | 6.0 | 4.9 |
| Non-MMF investment fund shares | 186.8 | 197.7 | 232.6 | 217.8 | 221.6 | 232.6 | 225.9 | 211.5 | 207.0 |
| Insurance technical reserves | 59.2 | 62.1 | 64.8 | 63.6 | 64.1 | 64.8 | 64.8 | 72.8 | 71.0 |
| Financial derivatives | 31.6 | 31.1 | 106.0 | 52.0 | 106.6 | 106.0 | 147.9 | 164.5 | 199.0 |
| Other accounts receivable | 1,251.0 | 1,237.4 | 1,458.4 | 1,340.7 | 1,392.2 | 1,458.4 | 1,506.4 | 1,542.2 | 1,566.1 |
| Total | 5,150.5 | 5,384.3 | 6,097.2 | 5,747.9 | 5,941.7 | 6,097.2 | 6,123.8 | 6,096.8 | 6,220.8 |
| **Liabilities** | | | | | | | | | |
| Debt securities | 204.7 | 238.3 | 252.3 | 249.3 | 256.1 | 252.3 | 245.3 | 229.7 | 226.7 |
| Short-term securities | 11.9 | 7.1 | 9.6 | 7.2 | 10.6 | 9.6 | 13.4 | 14.7 | 12.0 |
| Long-term securities | 192.9 | 231.2 | 242.7 | 242.1 | 245.5 | 242.7 | 231.8 | 215.1 | 214.7 |
| Memo item: | | | | | | | | | |
| Debt securities of domestic sectors | 77.7 | 96.0 | 100.6 | 99.5 | 99.7 | 100.6 | 98.6 | 92.6 | 90.4 |
| Non-financial corporations | 5.0 | 4.7 | 5.3 | 5.3 | 5.9 | 5.3 | 5.2 | 4.9 | 5.5 |
| Financial corporations | 57.8 | 78.1 | 83.2 | 81.2 | 81.2 | 83.2 | 81.8 | 76.8 | 73.9 |
| General government | 0.6 | 0.4 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 0.3 | 0.3 |
| Households | 14.4 | 12.8 | 11.8 | 12.5 | 12.1 | 11.8 | 11.2 | 10.6 | 10.7 |
| Debt securities of the rest of the world | 127.0 | 142.3 | 151.7 | 149.8 | 156.4 | 151.7 | 146.7 | 137.1 | 136.3 |
| Loans | 2,201.8 | 2,280.1 | 2,384.5 | 2,303.0 | 2,329.1 | 2,384.5 | 2,424.0 | 2,471.3 | 2,560.1 |
| Short-term loans | 838.3 | 825.0 | 879.6 | 842.2 | 857.6 | 879.6 | 906.5 | 927.4 | 978.6 |
| Long-term loans | 1,363.5 | 1,455.2 | 1,504.9 | 1,460.8 | 1,471.5 | 1,504.9 | 1,517.5 | 1,543.9 | 1,581.5 |
| Memo item: | | | | | | | | | |
| Loans from domestic sectors | 1,381.2 | 1,414.4 | 1,483.6 | 1,433.4 | 1,443.6 | 1,483.6 | 1,521.6 | 1,553.1 | 1,624.6 |
| Non-financial corporations | 339.9 | 327.6 | 334.7 | 322.5 | 321.3 | 334.7 | 337.2 | 342.7 | 351.1 |
| Financial corporations | 974.9 | 983.8 | 1,032.1 | 1,000.7 | 1,009.5 | 1,032.1 | 1,065.5 | 1,087.3 | 1,123.6 |
| General government | 66.4 | 103.0 | 116.8 | 110.2 | 112.7 | 116.8 | 119.0 | 123.2 | 149.9 |
| Loans from the rest of the world | 820.6 | 865.7 | 900.9 | 869.6 | 885.5 | 900.9 | 902.4 | 918.2 | 935.5 |
| Equity | 3,096.8 | 3,260.9 | 3,689.0 | 3,640.3 | 3,645.9 | 3,689.0 | 3,391.9 | 2,994.2 | 2,840.2 |
| Listed shares of domestic sectors | 734.1 | 739.9 | 924.8 | 896.0 | 882.4 | 924.8 | 840.1 | 734.0 | 713.8 |
| Non-financial corporations | 332.9 | 298.9 | 384.9 | 375.0 | 361.7 | 384.9 | 342.4 | 298.2 | 301.7 |
| Financial corporations | 158.0 | 171.9 | 210.2 | 202.9 | 196.9 | 210.2 | 194.3 | 161.9 | 160.5 |
| General government | 51.8 | 56.3 | 69.9 | 71.8 | 70.6 | 69.9 | 70.0 | 70.7 | 61.4 |
| Households | 191.3 | 212.8 | 259.7 | 246.3 | 253.2 | 259.7 | 233.3 | 203.2 | 190.2 |
| Listed shares of the rest of the world | 958.6 | 995.6 | 1,126.3 | 1,125.8 | 1,119.2 | 1,126.3 | 984.0 | 795.2 | 709.6 |
| Other equity [1] | 1,404.2 | 1,525.5 | 1,637.9 | 1,618.4 | 1,644.2 | 1,637.9 | 1,567.9 | 1,465.0 | 1,416.8 |
| Insurance technical reserves | 277.3 | 283.1 | 287.4 | 285.3 | 286.3 | 287.4 | 288.4 | 289.5 | 290.6 |
| Financial derivatives and employee stock options | 68.8 | 83.3 | 137.7 | 80.3 | 134.4 | 137.7 | 144.3 | 138.6 | 163.1 |
| Other accounts payable | 1,301.4 | 1,286.7 | 1,551.0 | 1,382.8 | 1,454.2 | 1,551.0 | 1,581.7 | 1,612.6 | 1,699.6 |
| Total | 7,150.8 | 7,432.5 | 8,301.9 | 7,940.9 | 8,106.0 | 8,301.9 | 8,075.7 | 7,736.0 | 7,780.2 |

**1** Including unlisted shares.

## IX. Financial accounts

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

€ billion

| Item | 2019 | 2020 | 2021 | 2021 Q2 | 2021 Q3 | 2021 Q4 | 2022 Q1 | 2022 Q2 | 2022 Q3 |
|---|---|---|---|---|---|---|---|---|---|
| **Acquisition of financial assets** | | | | | | | | | |
| Currency and deposits | 146.74 | 213.31 | 145.45 | 53.10 | 11.94 | 32.10 | 11.62 | 31.99 | 35.76 |
| Currency | 35.26 | 61.94 | 59.84 | 16.47 | 14.98 | 15.72 | 13.47 | 12.35 | 13.42 |
| Deposits | 111.49 | 151.36 | 85.61 | 36.63 | − 3.04 | 16.38 | − 1.85 | 19.65 | 22.34 |
| Transferable deposits | 111.01 | 165.34 | 90.84 | 37.70 | 2.69 | 16.35 | − 0.99 | 23.73 | 20.48 |
| Time deposits | 5.95 | 1.29 | − 5.09 | − 1.06 | − 3.92 | − 0.17 | 1.21 | − 0.48 | 9.18 |
| Savings deposits (including savings certificates) | − 5.47 | − 15.26 | − 0.13 | − 0.01 | − 1.81 | 0.20 | − 2.07 | − 3.61 | − 7.32 |
| Debt securities | − 1.86 | − 5.94 | − 5.89 | − 1.30 | − 1.32 | − 0.62 | 2.81 | 4.85 | 5.35 |
| Short-term debt securities | − 0.53 | 0.08 | 0.31 | 0.22 | − 0.10 | 0.03 | − 0.02 | 0.05 | 0.18 |
| Long-term debt securities | − 1.33 | − 6.02 | − 6.20 | − 1.52 | − 1.22 | − 0.64 | 2.83 | 4.79 | 5.18 |
| Memo item: | | | | | | | | | |
| Debt securities of domestic sectors | − 2.93 | − 2.56 | − 3.70 | − 1.26 | − 0.99 | − 0.39 | 2.26 | 3.77 | 3.76 |
| Non-financial corporations | 0.21 | − 1.32 | − 0.83 | − 0.13 | − 0.25 | − 0.16 | 0.08 | − 0.02 | 0.21 |
| Financial corporations | − 2.23 | − 1.26 | − 2.57 | − 1.02 | − 0.66 | − 0.23 | 2.34 | 3.18 | 2.94 |
| General government | − 0.92 | 0.02 | − 0.30 | − 0.11 | − 0.08 | 0.00 | − 0.16 | 0.61 | 0.61 |
| Debt securities of the rest of the world | 1.07 | − 3.38 | − 2.19 | − 0.04 | − 0.32 | − 0.23 | 0.55 | 1.08 | 1.60 |
| Equity and investment fund shares | 49.20 | 90.18 | 136.55 | 31.66 | 34.68 | 42.10 | 30.54 | 22.10 | 9.13 |
| Equity | 18.92 | 48.53 | 31.76 | 7.28 | 7.57 | 14.30 | 7.82 | 9.85 | 3.99 |
| Listed shares of domestic sectors | 6.61 | 16.05 | 14.21 | 2.20 | 2.34 | 6.29 | 2.70 | 5.54 | 3.36 |
| Non-financial corporations | 3.52 | 11.92 | 12.64 | 1.58 | 1.82 | 6.12 | 1.97 | 3.90 | 2.68 |
| Financial corporations | 3.09 | 4.14 | 1.58 | 0.62 | 0.52 | 0.17 | 0.74 | 1.64 | 0.67 |
| Listed shares of the rest of the world | 7.45 | 23.29 | 10.87 | 3.55 | 3.78 | 5.26 | 3.48 | 2.33 | − 0.44 |
| Other equity 1 | 4.86 | 9.19 | 6.68 | 1.54 | 1.46 | 2.76 | 1.64 | 1.98 | 1.07 |
| Investment fund shares | 30.28 | 41.65 | 104.79 | 24.38 | 27.11 | 27.80 | 22.72 | 12.25 | 5.14 |
| Money market fund shares | − 0.32 | 0.09 | 0.18 | − 0.07 | − 0.01 | 0.18 | − 0.02 | 0.28 | 0.11 |
| Non-MMF investment fund shares | 30.60 | 41.56 | 104.61 | 24.46 | 27.12 | 27.62 | 22.74 | 11.97 | 5.03 |
| Non-life insurance technical reserves and provision for calls under standardised guarantees | 17.95 | 18.34 | 20.31 | 5.58 | 3.73 | 5.60 | 5.67 | 5.74 | 5.77 |
| Life insurance and annuity entitlements | 37.76 | 47.65 | 51.92 | 11.14 | 13.30 | 11.07 | 10.16 | 8.32 | 7.29 |
| Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits | 37.31 | 33.71 | 27.36 | 3.79 | 7.54 | 10.57 | 11.25 | 7.95 | 9.27 |
| 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 | − 14.28 | − 10.43 | − 0.43 | − 2.74 | 5.08 | − 24.42 | 12.94 | − 10.38 | − 7.56 |
| Total | 272.82 | 386.82 | 375.26 | 101.23 | 74.96 | 76.41 | 84.98 | 70.57 | 65.01 |
| **External financing** | | | | | | | | | |
| Loans | 82.57 | 83.92 | 98.63 | 27.53 | 30.68 | 23.70 | 20.34 | 28.10 | 25.75 |
| Short-term loans | 1.02 | − 5.61 | 0.86 | 0.79 | 1.21 | − 1.61 | 0.66 | 1.09 | 0.74 |
| Long-term loans | 81.55 | 89.52 | 97.77 | 26.74 | 29.46 | 25.31 | 19.68 | 27.01 | 25.01 |
| Memo item: | | | | | | | | | |
| Mortgage loans | 68.58 | 85.69 | 100.35 | 26.54 | 29.34 | 25.77 | 19.20 | 26.81 | 23.17 |
| Consumer loans | 14.42 | − 4.29 | − 0.89 | − 0.09 | 2.38 | − 2.04 | 0.23 | 0.91 | 2.59 |
| Entrepreneurial loans | − 0.43 | 2.51 | − 0.82 | 1.08 | − 1.04 | − 0.04 | 0.91 | 0.38 | − 0.01 |
| Memo item: | | | | | | | | | |
| Loans from monetary financial institutions | 73.41 | 83.17 | 94.32 | 27.19 | 28.38 | 23.91 | 20.70 | 27.94 | 24.46 |
| Loans from financial corporations other than MFIs | 9.16 | 0.75 | 4.31 | 0.34 | 2.30 | − 0.21 | − 0.37 | 0.16 | 1.29 |
| Loans from general government and rest of the world | − 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | − 0.01 | − 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 | 0.73 | 0.01 | 0.90 | 0.01 | 0.25 | 0.63 | − 0.94 | 0.68 | 1.10 |
| Total | 83.30 | 83.93 | 99.53 | 27.54 | 30.93 | 24.33 | 19.40 | 28.78 | 26.85 |

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 | 2019 | 2020 | 2021 | 2021 Q2 | Q3 | Q4 | 2022 Q1 | Q2 | Q3 |
|---|---|---|---|---|---|---|---|---|---|
| **Financial assets** | | | | | | | | | |
| Currency and deposits | 2,647.4 | 2,860.4 | 3,005.1 | 2,961.9 | 2,973.0 | 3,005.1 | 3,016.4 | 3,047.4 | 3,083.0 |
| Currency | 262.6 | 324.5 | 384.4 | 353.7 | 368.6 | 384.4 | 397.8 | 410.2 | 423.6 |
| Deposits | 2,384.8 | 2,535.8 | 2,620.8 | 2,608.3 | 2,604.4 | 2,620.8 | 2,618.6 | 2,637.2 | 2,659.4 |
| Transferable deposits | 1,509.1 | 1,674.1 | 1,764.4 | 1,746.0 | 1,748.1 | 1,764.4 | 1,763.5 | 1,786.7 | 1,807.3 |
| Time deposits | 301.6 | 302.8 | 297.6 | 301.9 | 297.8 | 297.6 | 298.5 | 298.0 | 306.9 |
| Savings deposits (including savings certificates) | 574.2 | 558.9 | 558.8 | 560.4 | 558.6 | 558.8 | 556.7 | 552.6 | 545.3 |
| Debt securities | 121.4 | 113.3 | 109.6 | 111.6 | 110.1 | 109.6 | 109.5 | 107.8 | 110.4 |
| Short-term debt securities | 1.6 | 1.6 | 1.8 | 1.9 | 1.8 | 1.8 | 1.7 | 1.7 | 1.9 |
| Long-term debt securities | 119.8 | 111.7 | 107.8 | 109.7 | 108.3 | 107.8 | 107.7 | 106.1 | 108.4 |
| Memo item: | | | | | | | | | |
| Debt securities of domestic sectors | 81.5 | 76.7 | 75.3 | 76.5 | 75.3 | 75.3 | 75.2 | 74.7 | 76.1 |
| Non-financial corporations | 12.4 | 10.9 | 9.8 | 10.5 | 10.2 | 9.8 | 9.4 | 8.9 | 8.9 |
| Financial corporations | 66.6 | 63.3 | 63.2 | 63.7 | 62.9 | 63.2 | 63.8 | 63.3 | 64.2 |
| General government | 2.5 | 2.6 | 2.2 | 2.3 | 2.2 | 2.2 | 2.0 | 2.5 | 3.0 |
| Debt securities of the rest of the world | 40.0 | 36.6 | 34.3 | 35.1 | 34.8 | 34.3 | 34.3 | 33.1 | 34.3 |
| Equity and investment fund shares | 1,388.2 | 1,541.0 | 1,901.6 | 1,746.3 | 1,794.3 | 1,901.6 | 1,840.4 | 1,696.6 | 1,656.6 |
| Equity | 708.0 | 806.5 | 969.1 | 904.8 | 923.8 | 969.1 | 926.8 | 847.5 | 823.7 |
| Listed shares of domestic sectors | 223.9 | 243.3 | 296.0 | 280.0 | 287.1 | 296.0 | 271.0 | 236.7 | 223.2 |
| Non-financial corporations | 182.3 | 204.0 | 250.4 | 236.9 | 244.3 | 250.4 | 224.7 | 195.7 | 183.3 |
| Financial corporations | 41.6 | 39.2 | 45.6 | 43.1 | 42.7 | 45.6 | 46.3 | 41.1 | 39.9 |
| Listed shares of the rest of the world | 136.3 | 180.6 | 249.3 | 216.5 | 223.3 | 249.3 | 241.1 | 214.1 | 210.2 |
| Other equity 1 | 347.8 | 382.6 | 423.8 | 408.3 | 413.4 | 423.8 | 414.7 | 396.7 | 390.2 |
| Investment fund shares | 680.3 | 734.6 | 932.5 | 841.5 | 870.5 | 932.5 | 913.6 | 849.1 | 833.0 |
| Money market fund shares | 2.3 | 2.3 | 2.5 | 2.3 | 2.3 | 2.5 | 2.5 | 2.8 | 2.9 |
| Non-MMF investment fund shares | 678.0 | 732.2 | 930.0 | 839.2 | 868.2 | 930.0 | 911.1 | 846.3 | 830.1 |
| Non-life insurance technical reserves and provision for calls under standardised guarantees | 393.8 | 412.2 | 432.5 | 423.2 | 426.9 | 432.5 | 438.2 | 443.9 | 435.5 |
| Life insurance and annuity entitlements | 1,069.1 | 1,112.1 | 1,162.2 | 1,138.7 | 1,151.6 | 1,162.2 | 1,172.5 | 1,180.0 | 1,166.0 |
| Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits | 924.5 | 956.8 | 986.2 | 966.1 | 973.6 | 986.2 | 993.4 | 995.4 | 996.6 |
| Financial derivatives and employee stock options | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Other accounts receivable 2 | 29.6 | 27.9 | 27.5 | 28.2 | 28.5 | 27.5 | 25.8 | 27.5 | 27.3 |
| Total | 6,574.2 | 7,023.7 | 7,624.7 | 7,376.0 | 7,458.0 | 7,624.7 | 7,596.2 | 7,498.5 | 7,475.5 |
| **Liabilities** | | | | | | | | | |
| Loans | 1,837.9 | 1,924.6 | 2,023.5 | 1,969.5 | 2,000.5 | 2,023.5 | 2,041.2 | 2,069.0 | 2,097.0 |
| Short-term loans | 59.0 | 53.2 | 53.0 | 54.4 | 55.6 | 53.0 | 53.7 | 54.8 | 55.8 |
| Long-term loans | 1,778.9 | 1,871.3 | 1,970.5 | 1,915.1 | 1,944.9 | 1,970.5 | 1,987.5 | 2,014.2 | 2,041.2 |
| Memo item: | | | | | | | | | |
| Mortgage loans | 1,358.7 | 1,448.2 | 1,548.5 | 1,493.8 | 1,523.0 | 1,548.5 | 1,565.3 | 1,592.2 | 1,615.5 |
| Consumer loans | 231.4 | 226.1 | 224.5 | 224.4 | 226.7 | 224.5 | 224.9 | 225.5 | 228.1 |
| Entrepreneurial loans | 247.7 | 250.2 | 250.5 | 251.2 | 250.8 | 250.5 | 251.1 | 251.4 | 253.4 |
| Memo item: | | | | | | | | | |
| Loans from monetary financial institutions | 1,741.6 | 1,824.6 | 1,920.3 | 1,867.3 | 1,896.1 | 1,920.3 | 1,941.0 | 1,968.8 | 1,995.3 |
| Loans from financial corporations other than MFIs | 96.3 | 99.9 | 103.2 | 102.2 | 104.4 | 103.2 | 100.2 | 100.2 | 101.7 |
| 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 | 19.4 | 19.5 | 20.3 | 19.5 | 19.7 | 20.3 | 19.4 | 20.1 | 21.2 |
| Total | 1,857.2 | 1,944.0 | 2,043.8 | 1,988.9 | 2,020.2 | 2,043.8 | 2,060.6 | 2,089.1 | 2,118.2 |

**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]** | | | | | | | | | | |
| 2016 | + 36.4 | + 13.7 | + 7.7 | + 6.3 | + 8.7 | + 1.2 | + 0.4 | + 0.2 | + 0.2 | + 0.3 |
| 2017 | + 43.7 | + 7.9 | + 13.9 | + 10.7 | + 11.1 | + 1.3 | + 0.2 | + 0.4 | + 0.3 | + 0.3 |
| 2018 | + 65.6 | + 21.0 | + 12.0 | + 16.7 | + 16.0 | + 1.9 | + 0.6 | + 0.4 | + 0.5 | + 0.5 |
| 2019 p | + 53.2 | + 21.4 | + 14.0 | + 8.6 | + 9.2 | + 1.5 | + 0.6 | + 0.4 | + 0.2 | + 0.3 |
| 2020 p | − 147.6 | − 87.4 | − 30.9 | + 5.5 | − 34.8 | − 4.3 | − 2.6 | − 0.9 | + 0.2 | − 1.0 |
| 2021 p | − 134.3 | − 145.9 | + 2.8 | + 4.6 | + 4.3 | − 3.7 | − 4.1 | + 0.1 | + 0.1 | + 0.1 |
| 2022 pe | − 101.6 | − 117.6 | + 3.8 | + 7.5 | + 4.7 | − 2.6 | − 3.0 | + 0.1 | + 0.2 | + 0.1 |
| 2020 H1 p | − 48.6 | − 27.3 | − 9.4 | + 0.5 | − 12.4 | − 2.9 | − 1.6 | − 0.6 | + 0.0 | − 0.8 |
| H2 p | − 98.9 | − 60.1 | − 21.4 | + 5.1 | − 22.4 | − 5.6 | − 3.4 | − 1.2 | + 0.3 | − 1.3 |
| 2021 H1 p | − 75.6 | − 60.7 | − 4.0 | + 1.5 | − 12.4 | − 4.3 | − 3.5 | − 0.2 | + 0.1 | − 0.7 |
| H2 p | − 58.6 | − 85.2 | + 6.8 | + 3.1 | + 16.7 | − 3.1 | − 4.6 | + 0.4 | + 0.2 | + 0.9 |
| 2022 H1 pe | − 6.5 | − 36.3 | + 17.8 | + 4.5 | + 7.5 | − 0.3 | − 1.9 | + 0.9 | + 0.2 | + 0.4 |
| **Debt level[2]** | | | | | | | | End of year or quarter | | |
| 2016 | 2,161.6 | 1,365.6 | 642.3 | 166.2 | 1.2 | 69.0 | 43.6 | 20.5 | 5.3 | 0.0 |
| 2017 | 2,111.8 | 1,349.9 | 614.9 | 163.1 | 0.8 | 64.6 | 41.3 | 18.8 | 5.0 | 0.0 |
| 2018 | 2,063.6 | 1,322.9 | 600.9 | 155.9 | 0.7 | 61.3 | 39.3 | 17.9 | 4.6 | 0.0 |
| 2019 p | 2,046.6 | 1,299.7 | 610.0 | 153.6 | 0.7 | 58.9 | 37.4 | 17.6 | 4.4 | 0.0 |
| 2020 p | 2,315.2 | 1,512.9 | 660.9 | 154.8 | 7.5 | 68.0 | 44.4 | 19.4 | 4.5 | 0.2 |
| 2021 p | 2,471.6 | 1,667.2 | 662.7 | 156.2 | 0.4 | 68.6 | 46.3 | 18.4 | 4.3 | 0.0 |
| 2021 Q1 p | 2,345.6 | 1,538.7 | 665.4 | 154.7 | 16.2 | 69.0 | 45.2 | 19.6 | 4.5 | 0.5 |
| Q2 p | 2,397.7 | 1,589.1 | 667.8 | 155.6 | 21.2 | 68.7 | 45.5 | 19.1 | 4.5 | 0.6 |
| Q3 p | 2,430.8 | 1,617.3 | 672.4 | 154.9 | 24.3 | 68.6 | 45.6 | 19.0 | 4.4 | 0.7 |
| Q4 p | 2,471.6 | 1,667.2 | 662.7 | 156.2 | 0.4 | 68.6 | 46.3 | 18.4 | 4.3 | 0.0 |
| 2022 Q1 p | 2,475.7 | 1,671.9 | 662.0 | 155.7 | 3.1 | 67.4 | 45.5 | 18.0 | 4.2 | 0.1 |
| Q2 p | 2,514.9 | 1,710.9 | 659.8 | 157.6 | 3.3 | 67.2 | 45.7 | 17.6 | 4.2 | 0.1 |
| Q3 p | 2,527.3 | 1,744.3 | 641.4 | 158.4 | 3.7 | 66.6 | 45.9 | 16.9 | 4.2 | 0.1 |

Sources: Federal Statistical Office and Bundesbank calculations. **1** The deficit/surplus in accordance with ESA 2010 corresponds to the Maastricht definition. In connection with the publication of the 2022 annual figures, no revised figures were released for the first half of the year. Therefore, the 2022 half-year figures are not directly compatible with the annual figures. **2** Quarterly GDP ratios are based on the national output of the four preceding quarters.

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

| Period | Revenue Total | Taxes | Social contributions | Other | Expenditure Total | Social benefits | Compensation of employees | Intermediate consumption | Gross capital formation | Interest | Other | Deficit/surplus | Memo item: Total tax burden [1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **€ billion** | | | | | | | | | | | | | |
| 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 | 1,486.9 | 773.3 | 549.5 | 164.2 | 1,443.3 | 784.8 | 250.6 | 169.5 | 71.6 | 33.8 | 132.9 | + 43.7 | 1,329.5 |
| 2018 | 1,557.2 | 808.1 | 572.6 | 176.6 | 1,491.6 | 805.6 | 260.3 | 176.4 | 78.5 | 31.2 | 139.7 | + 65.6 | 1,387.7 |
| 2019 p | 1,615.8 | 834.3 | 598.2 | 183.4 | 1,562.6 | 845.6 | 273.2 | 187.2 | 84.4 | 27.4 | 144.8 | + 53.2 | 1,439.6 |
| 2020 p | 1,569.1 | 783.1 | 608.1 | 177.8 | 1,716.6 | 904.8 | 284.3 | 209.4 | 93.2 | 21.5 | 203.4 | − 147.6 | 1,398.2 |
| 2021 p | 1,711.7 | 887.6 | 633.7 | 190.5 | 1,846.0 | 940.9 | 294.4 | 227.2 | 93.4 | 20.8 | 269.3 | − 134.3 | 1,528.8 |
| 2022 pe | 1,817.0 | 955.5 | 665.7 | 195.8 | 1,918.6 | 974.5 | 306.8 | 237.5 | 102.2 | 25.6 | 272.1 | − 101.6 | 1,630.9 |
| **As a percentage of GDP** | | | | | | | | | | | | | |
| 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 | 45.5 | 23.7 | 16.8 | 5.0 | 44.2 | 24.0 | 7.7 | 5.2 | 2.2 | 1.0 | 4.1 | + 1.3 | 40.7 |
| 2018 | 46.3 | 24.0 | 17.0 | 5.2 | 44.3 | 23.9 | 7.7 | 5.2 | 2.3 | 0.9 | 4.1 | + 1.9 | 41.2 |
| 2019 p | 46.5 | 24.0 | 17.2 | 5.3 | 45.0 | 24.3 | 7.9 | 5.4 | 2.4 | 0.8 | 4.2 | + 1.5 | 41.4 |
| 2020 p | 46.1 | 23.0 | 17.9 | 5.2 | 50.4 | 26.6 | 8.3 | 6.1 | 2.7 | 0.6 | 6.0 | − 4.3 | 41.1 |
| 2021 p | 47.5 | 24.6 | 17.6 | 5.3 | 51.3 | 26.1 | 8.2 | 6.3 | 2.6 | 0.6 | 7.5 | − 3.7 | 42.4 |
| 2022 pe | 47.1 | 24.8 | 17.3 | 5.1 | 49.7 | 25.3 | 8.0 | 6.2 | 2.6 | 0.7 | 7.1 | − 2.6 | 42.3 |
| **Percentage growth rates** | | | | | | | | | | | | | |
| 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 | + 4.2 | + 4.6 | + 4.8 | + 0.5 | + 3.8 | + 4.0 | + 4.1 | + 4.3 | + 5.1 | − 9.3 | + 4.5 | . | + 4.7 |
| 2018 | + 4.7 | + 4.5 | + 4.2 | + 7.6 | + 3.3 | + 2.6 | + 3.9 | + 4.1 | + 9.7 | − 7.8 | + 5.1 | . | + 4.4 |
| 2019 p | + 3.8 | + 3.2 | + 4.5 | + 3.8 | + 4.8 | + 5.0 | + 5.0 | + 6.1 | + 7.5 | − 12.2 | + 3.7 | . | + 3.7 |
| 2020 p | − 2.9 | − 6.1 | + 1.7 | − 3.0 | + 9.9 | + 7.0 | + 4.0 | + 11.8 | + 10.4 | − 21.5 | + 40.5 | . | − 2.9 |
| 2021 p | + 9.1 | + 13.3 | + 4.2 | + 7.1 | + 7.5 | + 4.0 | + 3.6 | + 8.5 | + 0.2 | − 3.4 | + 32.4 | . | + 9.3 |
| 2022 pe | + 6.1 | + 7.7 | + 5.1 | + 2.8 | + 3.9 | + 3.6 | + 4.2 | + 4.6 | + 9.4 | + 23.0 | + 1.0 | . | + 6.7 |

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

| Period | Central, state and local government 1 | | | | | | | | | | Social security funds 2 | | | General government, total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Revenue | | | Expenditure | | | | | | Deficit/ surplus | Revenue 6 | Expenditure | Deficit/ surplus | Revenue | Expenditure | Deficit/ surplus |
| | | | of which: | | | of which: 3 | | | | | | | | | | |
| | Total 4 | Taxes | Financial transactions 5 | Total 4 | Personnel expenditure | Current grants | Interest | Fixed asset formation | Financial transactions 5 | | | | | | | |
| 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 | 1,010.3 | 799.4 | 11.2 | 975.5 | 285.9 | 349.7 | 33.6 | 62.9 | 16.8 | + 34.8 | 685.0 | 676.7 | + 8.3 | 1,573.8 | 1,530.8 | + 43.0 |
| 2020 P | 946.9 | 739.9 | 13.9 | 1,111.3 | 299.5 | 422.8 | 25.9 | 69.2 | 59.9 | − 164.4 | 719.5 | 747.8 | − 28.3 | 1,518.8 | 1,711.5 | − 192.7 |
| 2021 P | 1,108.0 | 833.3 | 25.5 | 1,241.5 | 310.7 | 531.5 | 21.1 | 69.9 | 26.2 | − 133.5 | 769.7 | 776.2 | − 6.5 | 1,704.7 | 1,844.7 | − 140.0 |
| 2020 Q1 P | 244.8 | 197.5 | 2.5 | 236.4 | 72.9 | 90.5 | 11.9 | 12.0 | 2.6 | + 8.4 | 168.3 | 175.7 | − 7.4 | 380.0 | 379.1 | + 0.9 |
| Q2 P | 212.2 | 158.1 | 2.7 | 272.0 | 72.2 | 119.1 | 8.6 | 15.4 | 3.4 | − 59.8 | 175.9 | 187.0 | − 11.1 | 354.8 | 425.7 | − 70.9 |
| Q3 P | 227.5 | 181.4 | 4.0 | 282.1 | 72.4 | 102.0 | 1.4 | 18.3 | 34.3 | − 54.5 | 181.1 | 195.0 | − 13.9 | 369.9 | 438.3 | − 68.4 |
| Q4 P | 259.3 | 201.9 | 4.5 | 315.4 | 81.4 | 109.1 | 5.9 | 22.8 | 19.6 | − 56.1 | 186.0 | 189.6 | − 3.5 | 410.6 | 470.2 | − 59.6 |
| 2021 Q1 P | 237.1 | 185.3 | 4.3 | 297.0 | 75.5 | 130.8 | 7.3 | 11.1 | 14.6 | − 59.9 | 182.4 | 196.3 | − 13.9 | 381.5 | 455.3 | − 73.8 |
| Q2 P | 270.6 | 195.8 | 7.5 | 300.8 | 74.8 | 126.8 | 10.7 | 15.2 | 10.5 | − 30.2 | 185.9 | 197.0 | − 11.1 | 417.7 | 459.0 | − 41.2 |
| Q3 P | 270.9 | 210.7 | 7.4 | 290.2 | 75.8 | 117.5 | − 0.4 | 16.5 | 10.4 | − 19.3 | 183.4 | 191.9 | − 8.6 | 413.5 | 441.4 | − 27.8 |
| Q4 P | 328.0 | 237.7 | 6.1 | 342.9 | 84.1 | 148.1 | 3.1 | 26.4 | − 9.4 | − 14.9 | 197.3 | 190.4 | + 6.9 | 487.7 | 495.7 | − 8.0 |
| 2022 Q1 P | 277.4 | 224.0 | 5.0 | 278.4 | 79.6 | 116.3 | 5.5 | 11.9 | 7.0 | − 1.0 | 193.8 | 199.8 | − 6.0 | 429.4 | 436.5 | − 7.1 |
| Q2 P | 288.4 | 224.6 | 5.1 | 294.7 | 77.8 | 126.5 | 10.6 | 15.3 | 5.9 | − 6.2 | 199.9 | 196.7 | + 3.2 | 445.1 | 448.2 | − 3.1 |

Source: Bundesbank calculations based on Federal Statistical Office data. **1** Annual figures based on the calculations of the Federal Statistical Office. Bundesbank supplementary estimations for the reporting years after 2011 that are not yet available. The quarterly figures contain numerous off-budget entities which are assigned to the general government sector as defined in the national accounts but are not yet included in the annual calculations. From 2012 also including the bad bank FMSW. **2** The annual figures do not tally with the sum of the quarterly figures, as the latter are all provisional. The quarterly figures for some insurance sectors are estimated. **3** The development of the types of expenditure recorded here is influenced in part by statistical changeovers. **4** Including discrepancies in clearing transactions between central, state and local government. **5** On the revenue side, this contains proceeds booked as disposals of equity interests and as loan repayments. On the expenditure side, this contains the acquisition of equity interests and loans granted. **6** Including central government liquidity assistance to the Federal Employment Agency.

### 4. Central, state and local government: budgetary development (as per the government finance statistics)

€ billion

| Period | Central government | | | State government 2,3 | | | Local government 3 | | |
|---|---|---|---|---|---|---|---|---|---|
| | Revenue 1 | Expenditure | Deficit/surplus | Revenue | Expenditure | Deficit/surplus | Revenue | Expenditure | Deficit/surplus |
| 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 | 437.2 | 419.6 | + 17.6 | 284.2 | 278.1 | + 6.1 |
| 2020 P | 341.4 | 472.1 | − 130.7 | 456.4 | 489.4 | − 33.0 | 297.0 | 294.6 | + 2.4 |
| 2021 P | 370.3 | 585.9 | − 215.6 | 510.2 | 509.1 | + 1.1 | 309.9 | 304.8 | + 5.1 |
| 2020 Q1 P | 92.3 | 90.4 | + 1.9 | 105.6 | 99.7 | + 5.9 | 57.9 | 67.7 | − 9.8 |
| Q2 P | 70.8 | 114.8 | − 44.0 | 108.2 | 128.0 | − 19.8 | 69.4 | 69.4 | + 0.1 |
| Q3 P | 83.7 | 105.4 | − 21.7 | 112.9 | 113.7 | − 0.8 | 67.5 | 72.6 | − 5.1 |
| Q4 P | 94.5 | 161.5 | − 67.0 | 127.4 | 146.3 | − 18.9 | 100.3 | 83.5 | + 16.8 |
| 2021 Q1 P | 75.0 | 127.5 | − 52.5 | 113.7 | 120.7 | − 7.1 | 61.1 | 69.7 | − 8.6 |
| Q2 P | 86.4 | 123.5 | − 37.1 | 122.8 | 122.0 | + 0.8 | 74.6 | 71.7 | + 2.9 |
| Q3 P | 93.9 | 128.7 | − 34.7 | 125.9 | 120.2 | + 5.7 | 74.6 | 74.9 | − 0.3 |
| Q4 P | 115.1 | 206.3 | − 91.2 | 145.6 | 144.5 | + 1.2 | 97.6 | 87.0 | + 10.6 |
| 2022 Q1 P | 94.7 | 114.0 | − 19.3 | 134.6 | 122.7 | + 11.9 | 68.4 | 73.8 | − 5.4 |
| Q2 P | 99.7 | 123.5 | − 23.7 | 133.2 | 123.6 | + 9.6 | 81.0 | 77.3 | + 3.7 |
| Q3 P | 89.0 | 127.8 | − 38.7 | 126.1 | 121.4 | + 4.7 | 81.1 | 80.3 | + 0.8 |

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.

## 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 | | | |
| 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 |
| 2020 | 739,911 | 632,268 | 313,381 | 286,065 | 32,822 | 107,916 | − 274 | 30,266 |
| 2021 | 833,337 | 706,978 | 342,988 | 325,768 | 38,222 | 125,000 | + 1,359 | 29,321 |
| 2020 Q1 | 198,375 | 168,123 | 83,086 | 75,420 | 9,617 | 18,875 | + 11,377 | 6,855 |
| Q2 | 158,161 | 135,185 | 68,653 | 59,557 | 6,974 | 25,107 | − 2,131 | 6,997 |
| Q3 | 182,202 | 156,397 | 78,502 | 72,613 | 5,282 | 25,234 | + 571 | 9,705 |
| Q4 | 201,173 | 172,564 | 83,140 | 78,475 | 10,949 | 38,700 | − 10,090 | 6,709 |
| 2021 Q1 | 189,316 | 159,271 | 72,814 | 73,137 | 13,320 | 19,882 | + 10,163 | 6,887 |
| Q2 | 191,931 | 163,158 | 81,129 | 74,024 | 8,005 | 29,609 | − 835 | 7,438 |
| Q3 | 211,364 | 180,378 | 87,603 | 84,312 | 8,464 | 29,726 | + 1,260 | 7,823 |
| Q4 | 240,726 | 204,171 | 101,442 | 94,295 | 8,433 | 45,784 | − 9,229 | 7,173 |
| 2022 Q1 | 224,006 | 189,158 | 92,112 | 87,240 | 9,806 | 24,772 | + 10,077 | 7,261 |
| Q2 | 224,538 | 190,982 | 94,153 | 86,852 | 9,977 | 34,149 | − 594 | 11,576 |
| Q3 | ... | 174,232 | 84,078 | 80,020 | 10,133 | ... | ... | 7,953 |
| 2021 Oct. | . | 49,736 | 22,502 | 23,413 | 3,821 | . | . | 2,328 |
| Nov. | . | 51,161 | 23,480 | 24,264 | 3,417 | . | . | 2,328 |
| 2022 Oct. | . | 52,876 | 25,996 | 24,125 | 2,756 | . | . | 2,374 |
| Nov. | . | 52,386 | 25,405 | 23,599 | 3,382 | . | . | 2,374 |

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 | | | | | | | | Local business tax transfers 8 | Central government taxes 9 | State government taxes 9 | EU customs duties | Memo item: Local government share in joint taxes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Income taxes 2 | | | | | Value added taxes (VAT) 7 | | | | | | | |
| | | Total | Wage tax 3 | Assessed income tax 4 | Corporation tax 5 | Investment income tax 6 | Total | Domestic VAT | Import VAT | | | | | |
| 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 | 59,248 | 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 |
| 2020 | 682,376 | 320,798 | 209,286 | 58,982 | 24,268 | 28,261 | 219,484 | 168,700 | 50,784 | 3,954 | 105,632 | 27,775 | 4,734 | 50,107 |
| 2021 | 760,953 | 370,296 | 218,407 | 72,342 | 42,124 | 37,423 | 250,800 | 187,631 | 63,169 | 4,951 | 98,171 | 31,613 | 5,122 | 53,976 |
| 2020 Q1 | 181,374 | 88,009 | 53,389 | 18,711 | 8,495 | 7,415 | 60,060 | 46,038 | 14,022 | 244 | 24,517 | 7,406 | 1,139 | 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 |
| Q4 | 186,334 | 89,094 | 57,667 | 16,146 | 8,014 | 7,268 | 55,343 | 43,105 | 12,238 | 1,744 | 31,660 | 7,259 | 1,234 | 13,770 |
| 2021 Q1 | 171,974 | 86,381 | 50,854 | 17,826 | 10,203 | 7,498 | 54,795 | 45,403 | 9,392 | 252 | 21,712 | 7,757 | 1,076 | 12,703 |
| Q2 | 175,242 | 84,505 | 50,783 | 14,347 | 8,860 | 10,515 | 57,634 | 43,399 | 14,235 | 1,215 | 23,210 | 7,398 | 1,281 | 12,085 |
| Q3 | 193,910 | 90,619 | 53,857 | 17,973 | 9,853 | 8,936 | 69,528 | 49,052 | 20,476 | 1,189 | 23,469 | 7,813 | 1,292 | 13,532 |
| Q4 | 219,827 | 108,791 | 62,913 | 22,196 | 13,208 | 10,474 | 68,843 | 49,777 | 19,066 | 2,295 | 29,780 | 8,645 | 1,473 | 15,656 |
| 2022 Q1 | 203,130 | 96,245 | 56,206 | 20,915 | 11,178 | 7,946 | 73,584 | 54,234 | 19,350 | 615 | 22,252 | 8,975 | 1,459 | 13,972 |
| Q2 | 204,740 | 101,822 | 60,363 | 17,194 | 11,246 | 13,019 | 67,763 | 46,755 | 21,008 | 1,521 | 24,441 | 7,564 | 1,630 | 13,758 |
| Q3 | 185,552 | 82,392 | 43,431 | 17,598 | 10,724 | 10,639 | 71,164 | 49,323 | 21,841 | 1,471 | 21,657 | 7,115 | 1,753 | 11,320 |
| 2021 Oct. | 53,425 | 20,523 | 17,149 | 1,308 | − 161 | 2,227 | 21,421 | 15,389 | 6,032 | 993 | 7,466 | 2,521 | 501 | 3,689 |
| Nov. | 54,867 | 22,718 | 17,646 | 1,129 | 1,965 | 1,978 | 20,406 | 17,412 | 2,994 | 267 | 7,834 | 3,215 | 427 | 3,706 |
| 2022 Oct. | 56,673 | 22,786 | 19,375 | 1,204 | 593 | 1,614 | 23,210 | 15,358 | 7,852 | 1,175 | 6,866 | 1,986 | 651 | 3,797 |
| Nov. | 55,945 | 20,426 | 18,275 | 571 | 125 | 1,455 | 25,057 | 16,743 | 8,313 | 310 | 7,267 | 2,221 | 665 | 3,559 |

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 benefits and subsidies for supplementary private pension plans. **4** After deducting employee refunds and research grants. **5** After deducting research grants. **6** Final withholding tax on interest income and capital gains, non-assessed taxes on earnings. **7** 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 2021: 45.1:51.2:3.7. The EU share is deducted from central government's share. **8** Respective percentage share of central and state government for 2021: 41.4:58.6. **9** For the breakdown, see Table X. 7.

## X. Public finances in Germany

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

€ million

| | Central government taxes [1] | | | | | | | | State government taxes [1] | | | | Local government taxes | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | of which: | |
| Period | Energy tax | Soli-darity surcharge | Tobacco tax | Insurance tax | Motor vehicle tax | Electri-city tax | Alcohol tax | Other | Tax on the acqui-sition of land and buildings | Inherit-ance tax | Betting and lottery tax | Other | Total | Local business tax [2] | Real property taxes |
| 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 |
| 2020 | 37,635 | 18,676 | 14,651 | 14,553 | 9,526 | 6,561 | 2,238 | 1,792 | 16,055 | 8,600 | 2,044 | 1,076 | 61,489 | 45,471 | 14,676 |
| 2021 | 37,120 | 11,028 | 14,733 | 14,980 | 9,546 | 6,691 | 2,089 | 1,984 | 18,335 | 9,824 | 2,333 | 1,121 | 77,335 | 61,251 | 14,985 |
| 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 | 14,690 | 10,242 | 4,095 |
| Q4 | 14,566 | 5,145 | 4,487 | 2,365 | 2,101 | 1,768 | 715 | 513 | 4,234 | 2,203 | 567 | 254 | 16,584 | 12,997 | 3,283 |
| 2021 Q1 | 4,126 | 3,171 | 2,585 | 6,776 | 2,567 | 1,692 | 395 | 400 | 4,716 | 2,110 | 578 | 353 | 17,594 | 13,798 | 3,503 |
| Q2 | 8,717 | 2,546 | 4,053 | 2,843 | 2,469 | 1,640 | 528 | 413 | 4,231 | 2,374 | 538 | 255 | 17,904 | 13,692 | 4,034 |
| Q3 | 9,532 | 2,338 | 3,636 | 2,911 | 2,381 | 1,618 | 514 | 538 | 4,571 | 2,457 | 516 | 269 | 18,643 | 14,215 | 4,133 |
| Q4 | 14,745 | 2,972 | 4,458 | 2,449 | 2,130 | 1,741 | 651 | 633 | 4,816 | 2,884 | 700 | 244 | 23,194 | 19,546 | 3,316 |
| 2022 Q1 | 4,452 | 2,840 | 2,372 | 7,175 | 2,594 | 1,785 | 531 | 503 | 5,061 | 2,827 | 701 | 385 | 21,492 | 17,454 | 3,577 |
| Q2 | 9,092 | 3,518 | 3,648 | 2,872 | 2,433 | 1,722 | 505 | 651 | 4,406 | 2,238 | 661 | 259 | 21,318 | 16,839 | 4,077 |
| Q3 | 7,103 | 2,571 | 3,742 | 3,059 | 2,325 | 1,598 | 549 | 710 | 4,100 | 2,138 | 596 | 281 | ... | ... | ... |
| 2021 Oct. | 3,371 | 402 | 1,337 | 716 | 706 | 564 | 178 | 190 | 1,471 | 712 | 257 | 81 | . | . | . |
| Nov. | 3,391 | 511 | 1,185 | 1,002 | 778 | 565 | 184 | 218 | 1,665 | 1,266 | 210 | 74 | . | . | . |
| 2022 Oct. | 2,465 | 462 | 1,436 | 758 | 756 | 567 | 172 | 250 | 1,089 | 608 | 202 | 87 | . | . | . |
| Nov. | 3,013 | 436 | 1,014 | 1,049 | 753 | 576 | 178 | 248 | 1,207 | 733 | 207 | 73 | . | . | . |

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

| | Revenue [1,2] | | | Expenditure [1,2] | | | | Assets [1,4] | | | | | Memo item: Adminis-trative assets |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | of which: | | | of which: | | | | | | | | |
| Period | Total | Contri-butions [3] | Payments from central govern-ment | Total | Pension payments | Pen-sioners' health insurance | Deficit/ surplus | Total | Deposits [5] | Securities | Equity interests, mort-gages and other loans [6] | Real estate | |
| 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 |
| 2020 | 335,185 | 235,988 | 98,447 | 339,072 | 289,284 | 21,865 | − 3,887 | 39,880 | 38,196 | 1,286 | 344 | 55 | 3,901 |
| 2021 | 348,679 | 245,185 | 102,772 | 347,486 | 296,343 | 22,734 | + 1,192 | 42,014 | 40,320 | 1,241 | 400 | 52 | 3,807 |
| 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 |
| Q4 | 88,978 | 64,375 | 24,412 | 86,605 | 73,879 | 5,576 | + 2,373 | 39,847 | 38,186 | 1,286 | 321 | 55 | 3,916 |
| 2021 Q1 | 83,066 | 57,351 | 25,542 | 86,048 | 73,799 | 5,600 | − 2,982 | 36,888 | 35,326 | 1,166 | 342 | 54 | 3,887 |
| Q2 | 86,386 | 60,666 | 25,545 | 86,486 | 73,905 | 5,679 | − 100 | 36,941 | 35,554 | 988 | 345 | 53 | 3,871 |
| Q3 | 85,535 | 59,941 | 25,468 | 87,123 | 74,453 | 5,718 | − 1,588 | 36,041 | 34,670 | 973 | 345 | 53 | 3,840 |
| Q4 | 92,818 | 67,211 | 25,415 | 87,385 | 74,556 | 5,730 | + 5,432 | 41,974 | 40,310 | 1,241 | 370 | 52 | 3,835 |
| 2022 Q1 | 86,684 | 60,599 | 25,937 | 86,841 | 74,568 | 5,734 | − 157 | 41,784 | 39,952 | 1,367 | 399 | 65 | 3,783 |
| Q2 | 90,040 | 63,978 | 25,879 | 87,138 | 74,644 | 5,756 | + 2,903 | 44,425 | 42,441 | 1,513 | 406 | 65 | 3,761 |
| Q3 | 89,284 | 62,891 | 26,218 | 92,606 | 79,400 | 6,127 | − 3,322 | 41,548 | 39,767 | 1,315 | 415 | 51 | 3,775 |

Sources: Federal Ministry of Labour and Social Affairs and German pension insurance scheme. **\*** Excluding the German pension insurance scheme for the mining, railway and maritime industries. **1** The final annual figures generally differ from the total of the reported provisional quarterly figures as the latter are not revised sub-sequently. **2** Including financial compensation payments. Excluding investment spending and proceeds. **3** Including contributions for recipients of government cash bene-fits. **4** Largely corresponds to the sustainability reserves. End of year or quarter. **5** In-cluding cash. **6** Excluding loans to other social security funds.

## X. Public finances in Germany

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

€ million

| | Revenue | | | | Expenditure | | | | | | | | Deficit/ surplus | Deficit-offsetting grant or loan from central government |
| | | of which: | | | | of which: | | | | | | | | |
| Period | Total 1 | Contri- butions | Insolvency compen- sation levy | Government funds | Total | Unemploy- ment benefit 2 | Short-time working benefits 3 | Job promotion 4 | Re- integration payment | Insolvency benefit payment | Adminis- trative expend- iture 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | – |
| 2020 | 33,678 | 28,236 | 630 | – | 61,013 | 20,617 | 22,719 | 7,384 | . | 1,214 | 6,076 | | − 27,335 | 6,913 |
| 2021 | 35,830 | 29,571 | 1,302 | – | 57,570 | 19,460 | 21,003 | 7,475 | . | 493 | 6,080 | | − 21,739 | 16,935 |
| 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 | – |
| Q4 | 9,299 | 7,760 | 174 | – | 16,088 | 5,543 | 5,712 | 1,957 | . | 251 | 1,785 | | − 6,789 | 6,913 |
| 2021 Q1 | 8,228 | 6,747 | 289 | – | 18,260 | 5,956 | 8,006 | 1,935 | . | 184 | 1,391 | | − 10,033 | – |
| Q2 | 8,830 | 7,301 | 324 | – | 16,720 | 5,029 | 7,495 | 1,912 | . | 108 | 1,452 | | − 7,890 | – |
| Q3 | 8,791 | 7,290 | 330 | – | 12,042 | 4,447 | 3,631 | 1,744 | . | 91 | 1,452 | | − 3,251 | – |
| Q4 | 9,982 | 8,234 | 359 | – | 10,547 | 4,028 | 1,871 | 1,884 | . | 110 | 1,785 | | − 565 | 16,935 |
| 2022 Q1 | 8,827 | 7,374 | 251 | – | 10,685 | 4,424 | 2,087 | 1,821 | . | 135 | 1,412 | | − 1,858 | – |
| Q2 | 9,327 | 7,857 | 262 | – | 9,457 | 4,091 | 1,215 | 1,794 | . | 147 | 1,450 | | − 130 | – |
| Q3 | 9,278 | 7,740 | 261 | – | 8,401 | 4,056 | 408 | 1,621 | . | 107 | 1,506 | | + 877 | – |

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 contributions. **4** Vocational training, measures to encourage job take-up, rehabilitation, compensation top-up payments and promotion of business start-ups. **5** 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

| | Revenue 1 | | | Expenditure 1 | | | | | | | | Deficit/ surplus |
| | | of which: | | | | of which: | | | | | | |
| Period | Total | Contri- butions 2 | Central govern- ment funds 3 | Total | Hospital treatment | Pharma- ceuticals | Medical treatment | Dental treatment 4 | Remedies and therapeutic appliances | Sickness benefits | Adminis- trative expend- iture 5 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 2020 | 269,158 | 237,588 | 27,940 | 275,268 | 78,531 | 42,906 | 44,131 | 14,967 | 18,133 | 15,956 | 11,864 | − 6,110 |
| 2021 | 289,270 | 249,734 | 36,977 | 294,602 | 82,748 | 46,199 | 45,075 | 16,335 | 20,163 | 16,612 | 11,735 | − 5,332 |
| 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 |
| Q4 | 68,645 | 62,672 | 4,805 | 67,987 | 19,887 | 10,729 | 11,019 | 3,891 | 4,725 | 3,920 | 3,039 | + 658 |
| 2021 Q1 | 72,970 | 59,338 | 13,303 | 72,660 | 19,631 | 11,175 | 11,564 | 4,069 | 4,564 | 4,287 | 2,967 | + 310 |
| Q2 | 71,964 | 61,819 | 9,965 | 74,492 | 20,287 | 11,275 | 11,536 | 4,219 | 5,085 | 4,120 | 2,850 | − 2,529 |
| Q3 | 70,592 | 61,899 | 7,942 | 73,569 | 20,748 | 11,756 | 10,730 | 4,060 | 5,085 | 4,004 | 2,849 | − 2,977 |
| Q4 | 74,020 | 66,678 | 5,767 | 73,209 | 21,340 | 12,043 | 11,252 | 4,062 | 5,290 | 4,200 | 3,109 | + 810 |
| 2022 Q1 | 79,253 | 62,142 | 17,049 | 81,493 | 20,550 | 11,891 | 11,847 | 4,286 | 5,216 | 4,574 | 3,510 | − 2,240 |
| Q2 | 79,112 | 64,611 | 14,280 | 79,269 | 21,080 | 12,053 | 12,085 | 4,249 | 5,335 | 4,457 | 2,958 | − 158 |
| Q3 | 75,516 | 65,242 | 9,804 | 75,011 | 21,164 | 12,221 | 11,545 | 3,956 | 5,352 | 4,441 | 2,996 | + 505 |

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.

## X. Public finances in Germany

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

€ million

| Period | Revenue Total | Revenue of which: Contributions **2** | Expenditure **1** Total | of which: Non-cash care benefits **3** | Inpatient care total **4** | Nursing benefit | Contributions to pension insurance scheme **5** | Administrative expenditure | Deficit/ surplus |
|---|---|---|---|---|---|---|---|---|---|
| 2015 | 30,825 | 30,751 | 29,101 | 4,626 | 13,003 | 6,410 | 960 | 1,273 | + 1,723 |
| 2016 | 32,171 | 32,100 | 30,936 | 4,904 | 13,539 | 6,673 | 983 | 1,422 | + 1,235 |
| 2017 | 36,305 | 36,248 | 38,862 | 6,923 | 16,034 | 10,010 | 1,611 | 1,606 | − 2,557 |
| 2018 | 37,949 | 37,886 | 41,265 | 7,703 | 16,216 | 10,809 | 2,093 | 1,586 | − 3,315 |
| 2019 | 47,228 | 46,508 | 44,008 | 8,257 | 16,717 | 11,689 | 2,392 | 1,781 | + 3,220 |
| 2020 | 50,622 | 48,003 | 49,284 | 8,794 | 16,459 | 12,786 | 2,714 | 1,946 | + 1,338 |
| 2021 | 52,573 | 49,764 | 53,903 | 9,573 | 16,511 | 13,865 | 3,070 | 2,024 | − 1,330 |
| 2020 Q1 | 11,693 | 11,473 | 11,444 | 2,186 | 4,214 | 3,067 | 633 | 489 | + 249 |
| Q2 | 11,921 | 11,732 | 11,816 | 2,051 | 4,015 | 3,173 | 664 | 468 | + 105 |
| Q3 | 13,924 | 11,938 | 12,890 | 2,263 | 4,087 | 3,249 | 682 | 500 | + 1,033 |
| Q4 | 13,079 | 12,746 | 12,927 | 2,306 | 4,177 | 3,403 | 716 | 481 | + 152 |
| 2021 Q1 | 12,093 | 11,831 | 13,344 | 2,355 | 3,971 | 3,387 | 725 | 512 | − 1,251 |
| Q2 | 12,933 | 12,329 | 13,521 | 2,287 | 4,030 | 3,421 | 745 | 510 | − 587 |
| Q3 | 12,624 | 12,294 | 13,390 | 2,393 | 4,182 | 3,466 | 783 | 509 | − 767 |
| Q4 | 14,853 | 13,242 | 13,595 | 2,475 | 4,270 | 3,646 | 788 | 503 | + 1,258 |
| 2022 Q1 | 12,912 | 12,412 | 14,739 | 2,564 | 4,974 | 3,572 | 775 | 529 | − 1,827 |
| Q2 | 15,350 | 12,951 | 14,827 | 2,464 | 5,026 | 3,698 | 795 | 548 | + 523 |
| Q3 | 13,708 | 13,021 | 15,387 | 2,638 | 5,197 | 3,755 | 802 | 542 | − 1,679 |

Source: Federal Ministry of Health. **\*** The final annual figures generally differ from the total of the reported provisional quarterly figures as the latter are not revised subsequently. **1** Including transfers to the long-term care provident fund. **2** Since 2005, including special contributions for childless persons (0.25% of income subject to insurance contributions). **3** Data revision in 2014. **4** From 2014, also including benefits for short-term care and daytime/night-time nursing care, inter alia. **5** For non-professional carers.

### 12. Central government: borrowing in the market

€ million

| Period | Total new borrowing **1** Gross **2** | Total new borrowing **1** Net | of which: Change in money market loans | Change in money market deposits **3** |
|---|---|---|---|---|
| 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 |
| 2020 | + 456,828 | + 217,904 | + 24,181 | − 3,399 |
| 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 |
| Q4 | + 46,545 | − 20,760 | − 10,187 | + 1,629 |
| 2021 Q1 | + 109,953 | + 42,045 | − 11,737 | − 4,708 |
| Q2 | + 146,852 | + 57,601 | + 3,463 | + 1,576 |

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 Bundesbank | Banking system Domestic MFIs **pe** | Domestic non-banks Other domestic financial corporations **pe** | Domestic non-banks Other domestic creditors **1** | Foreign creditors **pe** |
|---|---|---|---|---|---|---|
| 2015 | 2,177,231 | 85,952 | 607,446 | 217,332 | 52,430 | 1,214,071 |
| 2016 | 2,161,570 | 205,391 | 585,456 | 211,514 | 48,630 | 1,110,578 |
| 2017 | 2,111,751 | 319,159 | 539,181 | 180,105 | 45,106 | 1,028,201 |
| 2018 | 2,063,571 | 364,731 | 496,314 | 186,345 | 44,124 | 972,057 |
| 2019 | 2,046,638 | 366,562 | 458,336 | 183,669 | 48,735 | 989,336 |
| 2020 | 2,315,216 | 522,392 | 493,679 | 191,079 | 40,605 | 1,067,461 |
| 2021 | 2,471,628 | 716,004 | 485,156 | 191,656 | 40,621 | 1,038,191 |
| 2020 Q1 | 2,091,520 | 371,076 | 469,822 | 185,852 | 49,812 | 1,014,958 |
| Q2 | 2,261,026 | 424,141 | 535,844 | 186,264 | 49,928 | 1,064,848 |
| Q3 | 2,334,627 | 468,723 | 508,090 | 189,464 | 51,771 | 1,116,577 |
| Q4 | 2,315,216 | 522,392 | 493,679 | 191,079 | 40,605 | 1,067,461 |
| 2021 Q1 | 2,345,586 | 561,443 | 468,094 | 190,044 | 51,828 | 1,074,177 |
| Q2 | 2,397,710 | 620,472 | 470,564 | 189,839 | 43,263 | 1,073,571 |
| Q3 | 2,430,788 | 669,659 | 472,510 | 191,531 | 44,537 | 1,052,552 |
| Q4 | 2,471,628 | 716,004 | 485,156 | 191,656 | 40,621 | 1,038,191 |
| 2022 Q1 **p** | 2,475,736 | 737,978 | 469,107 | 193,909 | 39,384 | 1,035,357 |
| Q2 **p** | 2,514,916 | 759,385 | 472,697 | 202,461 | 43,043 | 1,037,329 |
| Q3 **p** | 2,527,294 | 741,360 | 502,894 | 202,421 | 41,063 | 1,039,556 |

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

## X. Public finances in Germany

### 14. Maastricht debt by instrument

€ million

| Period (end of year or quarter) | Total | Currency and deposits 1 | Debt securities by original maturity | | Loans by original maturity | | Memo item: 2 | |
| | | | Short-term debt securities (up to one year) | Long-term debt securities (more than one year) | Short-term loans (up to one year) | Long-term loans (more than one year) | Debt vis-à-vis other government subsectors | Claims vis-à-vis other government subsectors |
|---|---|---|---|---|---|---|---|---|
| **General government** | | | | | | | | |
| 2015 | 2,177,231 | 13,949 | 65,676 | 1,499,010 | 90,350 | 508,246 | . | . |
| 2016 | 2,161,570 | 15,491 | 69,715 | 1,483,871 | 96,254 | 496,239 | . | . |
| 2017 | 2,111,751 | 14,298 | 48,789 | 1,484,462 | 87,799 | 476,403 | . | . |
| 2018 | 2,063,571 | 14,680 | 52,572 | 1,456,160 | 77,410 | 462,748 | . | . |
| 2019 | 2,046,638 | 14,449 | 56,350 | 1,458,540 | 62,288 | 455,011 | . | . |
| 2020 Q1 | 2,091,520 | 11,410 | 84,162 | 1,472,222 | 72,560 | 451,167 | . | . |
| Q2 | 2,261,026 | 13,120 | 134,275 | 1,533,857 | 131,335 | 448,438 | . | . |
| Q3 | 2,334,627 | 11,886 | 190,945 | 1,582,574 | 101,669 | 447,553 | . | . |
| Q4 | 2,315,216 | 14,486 | 173,851 | 1,596,141 | 82,437 | 448,301 | . | . |
| 2021 Q1 | 2,345,586 | 12,200 | 190,021 | 1,637,515 | 61,278 | 444,571 | . | . |
| Q2 | 2,397,710 | 12,901 | 182,659 | 1,689,922 | 69,010 | 443,218 | . | . |
| Q3 | 2,430,788 | 13,319 | 192,480 | 1,711,739 | 69,831 | 443,420 | . | . |
| Q4 | 2,471,628 | 17,743 | 195,420 | 1,729,881 | 86,437 | 442,146 | . | . |
| 2022 Q1 P | 2,475,736 | 15,655 | 172,881 | 1,775,452 | 69,481 | 442,267 | . | . |
| Q2 P | 2,514,916 | 17,750 | 161,918 | 1,811,320 | 76,663 | 447,265 | . | . |
| Q3 P | 2,527,294 | 22,567 | 150,009 | 1,797,476 | 81,934 | 475,308 | . | . |
| **Central government** | | | | | | | | |
| 2015 | 1,371,933 | 13,949 | 49,512 | 1,138,951 | 45,256 | 124,265 | 1,062 | 13,667 |
| 2016 | 1,365,579 | 15,491 | 55,208 | 1,123,853 | 50,004 | 121,022 | 556 | 8,567 |
| 2017 | 1,349,948 | 14,298 | 36,297 | 1,131,896 | 47,761 | 119,696 | 1,131 | 10,618 |
| 2018 | 1,322,907 | 14,680 | 42,246 | 1,107,140 | 42,057 | 116,784 | 933 | 9,975 |
| 2019 | 1,299,727 | 14,449 | 38,480 | 1,101,866 | 28,617 | 116,315 | 605 | 10,301 |
| 2020 Q1 | 1,327,538 | 11,410 | 56,680 | 1,103,934 | 38,714 | 116,799 | 605 | 8,125 |
| Q2 | 1,473,699 | 13,120 | 109,221 | 1,139,510 | 95,489 | 116,360 | 585 | 7,037 |
| Q3 | 1,536,634 | 11,886 | 166,564 | 1,178,687 | 62,933 | 116,564 | 605 | 11,731 |
| Q4 | 1,512,875 | 14,486 | 154,498 | 1,180,683 | 46,811 | 116,396 | 609 | 14,545 |
| 2021 Q1 | 1,538,718 | 12,200 | 167,484 | 1,212,495 | 29,817 | 116,722 | 602 | 22,947 |
| Q2 | 1,589,070 | 12,901 | 165,373 | 1,259,206 | 34,965 | 116,626 | 643 | 29,461 |
| Q3 | 1,617,263 | 13,319 | 170,961 | 1,280,586 | 35,919 | 116,478 | 687 | 31,390 |
| Q4 | 1,667,150 | 17,743 | 176,428 | 1,300,416 | 56,744 | 115,818 | 640 | 8,083 |
| 2022 Q1 P | 1,671,870 | 15,655 | 155,119 | 1,340,340 | 40,701 | 120,055 | 531 | 10,453 |
| Q2 P | 1,710,931 | 17,750 | 147,674 | 1,373,617 | 46,312 | 125,578 | 604 | 10,554 |
| Q3 P | 1,744,254 | 22,567 | 144,987 | 1,369,630 | 54,775 | 152,296 | 768 | 13,205 |
| **State government** | | | | | | | | |
| 2015 | 659,521 | – | 16,169 | 362,376 | 23,349 | 257,627 | 15,867 | 2,348 |
| 2016 | 642,291 | – | 14,515 | 361,996 | 20,482 | 245,298 | 11,273 | 1,694 |
| 2017 | 614,936 | – | 12,543 | 354,688 | 19,628 | 228,076 | 14,038 | 2,046 |
| 2018 | 600,899 | – | 10,332 | 351,994 | 18,977 | 219,596 | 14,035 | 1,891 |
| 2019 | 609,950 | – | 17,873 | 360,495 | 18,767 | 212,816 | 14,934 | 1,826 |
| 2020 Q1 | 623,720 | – | 27,484 | 372,021 | 16,000 | 208,216 | 12,297 | 1,783 |
| Q2 | 645,700 | – | 25,056 | 398,404 | 16,916 | 205,324 | 11,070 | 2,085 |
| Q3 | 656,207 | – | 24,382 | 408,310 | 19,836 | 203,679 | 11,717 | 2,090 |
| Q4 | 660,917 | – | 19,354 | 419,862 | 18,624 | 203,078 | 11,946 | 1,410 |
| 2021 Q1 | 665,415 | – | 22,538 | 429,641 | 14,933 | 198,303 | 10,959 | 1,998 |
| Q2 | 667,802 | – | 17,287 | 435,726 | 17,844 | 196,945 | 12,466 | 2,047 |
| Q3 | 672,433 | – | 21,521 | 436,506 | 17,374 | 197,033 | 11,421 | 2,119 |
| Q4 | 662,728 | – | 18,994 | 434,930 | 13,851 | 194,953 | 12,443 | 1,766 |
| 2022 Q1 P | 661,971 | – | 17,765 | 440,766 | 13,534 | 189,906 | 11,700 | 1,935 |
| Q2 P | 659,846 | – | 14,247 | 443,413 | 14,876 | 187,310 | 11,451 | 1,777 |
| Q3 P | 641,437 | – | 5,024 | 433,509 | 15,043 | 187,861 | 14,102 | 2,207 |
| **Local government** | | | | | | | | |
| 2015 | 163,439 | – | – | 2,047 | 27,474 | 133,918 | 2,143 | 463 |
| 2016 | 166,205 | – | – | 2,404 | 27,002 | 136,798 | 1,819 | 431 |
| 2017 | 163,124 | – | – | 3,082 | 24,572 | 135,471 | 1,881 | 466 |
| 2018 | 155,930 | – | 1 | 3,046 | 20,425 | 132,458 | 1,884 | 497 |
| 2019 | 153,634 | – | – | 2,996 | 19,079 | 131,559 | 1,856 | 532 |
| 2020 Q1 | 154,200 | – | – | 3,128 | 19,739 | 131,333 | 1,825 | 508 |
| Q2 | 154,368 | – | – | 3,094 | 19,728 | 131,546 | 2,085 | 350 |
| Q3 | 155,532 | – | – | 2,961 | 20,610 | 131,960 | 2,107 | 339 |
| Q4 | 154,834 | – | – | 3,366 | 18,033 | 133,435 | 1,404 | 330 |
| 2021 Q1 | 154,659 | – | – | 3,121 | 17,480 | 134,058 | 2,010 | 320 |
| Q2 | 155,643 | – | – | 3,121 | 18,475 | 134,048 | 2,071 | 313 |
| Q3 | 154,910 | – | – | 3,000 | 17,649 | 134,261 | 2,127 | 306 |
| Q4 | 156,230 | – | – | 3,241 | 17,255 | 135,734 | 1,768 | 293 |
| 2022 Q1 P | 155,675 | – | – | 3,052 | 16,075 | 136,548 | 1,933 | 315 |
| Q2 P | 157,636 | – | – | 2,902 | 16,190 | 138,544 | 1,823 | 361 |
| Q3 P | 158,350 | – | – | 2,856 | 16,181 | 139,313 | 2,253 | 358 |

For footnotes see end of table.

## X. Public finances in Germany

### 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** | | | | | | | | |
| 2015 | 1,502 | – | – | – | 537 | 965 | 91 | 2,685 |
| 2016 | 1,232 | – | – | – | 562 | 670 | 89 | 3,044 |
| 2017 | 807 | – | – | – | 262 | 545 | 15 | 3,934 |
| 2018 | 704 | – | – | – | 388 | 316 | 16 | 4,506 |
| 2019 | 738 | – | – | – | 375 | 363 | 16 | 4,753 |
| 2020 Q1 | 806 | – | – | – | 287 | 519 | 16 | 4,328 |
| Q2 | 1,015 | – | – | – | 581 | 433 | 16 | 4,284 |
| Q3 | 4,640 | – | – | – | 4,210 | 430 | 3,956 | 4,226 |
| Q4 | 7,480 | – | – | – | 7,128 | 352 | 6,931 | 4,606 |
| 2021 Q1 | 16,220 | – | – | – | 15,985 | 235 | 15,853 | 4,160 |
| Q2 | 21,234 | – | – | – | 20,995 | 239 | 20,860 | 4,220 |
| Q3 | 24,288 | – | – | – | 24,053 | 235 | 23,872 | 4,292 |
| Q4 | 392 | – | – | – | 131 | 261 | 19 | 4,729 |
| 2022 Q1 P | 3,104 | – | – | – | 2,863 | 240 | 2,720 | 4,181 |
| Q2 P | 3,321 | – | – | – | 3,078 | 242 | 2,939 | 4,124 |
| Q3 P | 3,687 | – | – | – | 3,439 | 247 | 3,311 | 4,665 |

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 | 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 | 987,909 | 6,675 | . | 917,584 | 564,137 | 173,949 | 10,019 | 3,444 | 506 | 102,083 | 37,385 | 10,287 | 63,650 |
| 2008 | 1,019,905 | 12,466 | 3,174 | 928,754 | 571,913 | 164,514 | 12,017 | 7,522 | 1,336 | 105,684 | 40,795 | 9,649 | 78,685 |
| 2009 | 1,086,173 | 9,981 | 2,495 | 1,013,072 | 577,798 | 166,471 | 16,982 | 7,748 | 1,369 | 113,637 | 104,409 | 9,471 | 63,121 |
| 2010 | 1,337,160 | 10,890 | 1,975 | 1,084,019 | 602,624 | 185,586 | 25,958 | 9,948 | 2,396 | 126,220 | 85,867 | 8,704 | 242,251 |
| 2011 | 1,346,869 | 10,429 | 2,154 | 1,121,331 | 615,200 | 199,284 | 29,313 | 14,927 | 3,961 | 130,648 | 58,297 | 8,208 | 215,109 |
| 2012 | 1,390,377 | 9,742 | 1,725 | 1,177,168 | 631,425 | 217,586 | 35,350 | 16,769 | 5,374 | 117,719 | 56,222 | 6,818 | 203,467 |
| 2013 | 1,392,735 | 10,582 | 1,397 | 1,192,025 | 643,200 | 234,759 | 41,105 | 10,613 | 4,730 | 110,029 | 50,004 | 4,488 | 190,127 |
| 2014 | 1,398,472 | 12,146 | 1,187 | 1,206,203 | 653,823 | 244,633 | 48,692 | 14,553 | 5,368 | 103,445 | 27,951 | 2,375 | 180,123 |
| 2015 | 1,371,933 | 13,949 | 1,070 | 1,188,463 | 663,296 | 232,387 | 59,942 | 14,553 | 5,607 | 96,389 | 18,536 | 1,305 | 169,521 |
| 2016 | 1,365,579 | 15,491 | 1,010 | 1,179,062 | 670,245 | 221,551 | 51,879 | 14,585 | 3,602 | 95,727 | 23,609 | 737 | 171,026 |
| 2017 | 1,349,948 | 14,298 | 966 | 1,168,193 | 693,687 | 203,899 | 58,365 | 14,490 | 4,720 | 91,013 | 10,037 | 289 | 167,457 |
| 2018 | 1,322,907 | 14,680 | 921 | 1,149,386 | 710,513 | 182,847 | 64,647 | – | 5,139 | 86,009 | 12,949 | 48 | 158,841 |
| 2019 | 1,299,727 | 14,449 | – | 1,140,346 | 719,747 | 174,719 | 69,805 | – | 6,021 | 89,230 | 13,487 | . | 144,932 |
| 2020 | 1,512,875 | 14,486 | . | 1,335,181 | 808,300 | 183,046 | 58,279 | – | 3,692 | 98,543 | 113,141 | . | 163,208 |
| 2021 | 1,667,150 | 17,743 | . | 1,476,844 | 909,276 | 195,654 | 65,390 | – | 6,722 | 103,936 | 153,978 | . | 172,562 |
| 2020 Q1 | 1,327,538 | 11,410 | . | 1,160,614 | 721,343 | 182,095 | 71,028 | – | 5,310 | 91,084 | 23,572 | . | 155,514 |
| Q2 | 1,473,699 | 13,120 | . | 1,248,731 | 774,587 | 178,329 | 56,061 | – | 3,752 | 95,622 | 79,987 | . | 211,849 |
| Q3 | 1,536,634 | 11,886 | . | 1,345,251 | 796,338 | 191,388 | 57,144 | – | 3,737 | 99,276 | 127,478 | . | 179,497 |
| Q4 | 1,512,875 | 14,486 | . | 1,335,181 | 808,300 | 183,046 | 58,279 | – | 3,692 | 98,543 | 113,141 | . | 163,208 |
| 2021 Q1 | 1,538,718 | 12,200 | . | 1,379,979 | 821,254 | 194,571 | 60,687 | – | 3,857 | 103,910 | 134,800 | . | 146,538 |
| Q2 | 1,589,070 | 12,901 | . | 1,424,579 | 873,345 | 189,048 | 62,569 | – | 5,056 | 104,997 | 139,451 | . | 151,591 |
| Q3 | 1,617,263 | 13,319 | . | 1,451,547 | 884,358 | 203,353 | 63,851 | – | 5,456 | 105,398 | 146,533 | . | 152,397 |
| Q4 | 1,667,150 | 17,743 | . | 1,476,844 | 909,276 | 195,654 | 65,390 | – | 6,722 | 103,936 | 153,978 | . | 172,562 |
| 2022 Q1 P | 1,671,870 | 15,655 | . | 1,495,459 | 930,351 | 209,424 | 67,776 | – | 7,809 | 108,702 | 140,427 | . | 160,756 |
| Q2 P | 1,710,931 | 17,750 | . | 1,521,291 | 962,484 | 203,362 | 70,217 | – | 11,209 | 111,343 | 138,495 | . | 171,890 |
| Q3 P | 1,744,254 | 22,567 | . | 1,514,617 | 944,655 | 218,219 | 71,498 | – | 12,879 | 111,675 | 137,740 | . | 207,070 |

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

| | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 | 2021 1.Vj. | 2.Vj. | 3.Vj. | 4.Vj. | 2022 1.Vj. | 2.Vj. | 3.Vj. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Item | Index 2015=100 | | | Annual percentage change | | | | | | | | | |
| **At constant prices, chained** | | | | | | | | | | | | | |
| I. Origin of domestic product | | | | | | | | | | | | | |
| Production sector (excluding construction) | 100.4 | 104.9 | 105.0 | − 7.2 | 4.5 | 0.0 | − 0.9 | 20.2 | 2.6 | − 1.1 | 1.0 | − 0.2 | 0.8 |
| Construction | 102.1 | 100.7 | 98.3 | 2.0 | − 1.4 | − 2.3 | − 5.5 | 4.1 | 2.3 | − 6.1 | 4.0 | − 3.9 | − 5.4 |
| Wholesale/retail trade, transport and storage, hotel and restaurant services | 101.0 | 103.9 | 108.0 | − 7.5 | 2.8 | 4.0 | − 6.8 | 11.5 | 3.2 | 4.1 | 9.0 | 5.7 | 2.7 |
| Information and communication | 120.8 | 125.2 | 129.6 | 0.1 | 3.6 | 3.6 | 0.9 | 7.0 | 3.9 | 2.9 | 3.3 | 2.5 | 2.3 |
| Financial and insurance activities | 98.9 | 99.1 | 101.6 | 3.6 | 0.3 | 2.4 | 0.8 | − 0.2 | − 0.1 | 0.6 | 4.1 | 4.1 | 5.0 |
| Real estate activities | 102.2 | 103.1 | 104.2 | 0.4 | 0.9 | 1.0 | − 0.2 | 3.1 | 0.2 | 0.7 | 1.6 | 1.1 | 0.5 |
| Business services [1] | 105.1 | 109.8 | 112.6 | − 5.0 | 4.4 | 2.6 | − 4.7 | 13.0 | 6.5 | 4.4 | 6.2 | 2.1 | 0.6 |
| Public services, education and health | 105.4 | 107.6 | 110.2 | − 1.1 | 2.0 | 2.5 | − 1.1 | 8.6 | − 0.2 | 1.6 | 2.5 | 0.9 | 3.0 |
| Other services | 91.2 | 91.5 | 97.3 | −11.6 | 0.4 | 6.3 | −11.0 | 9.0 | 1.5 | 4.3 | 8.2 | 8.3 | 1.5 |
| Gross value added | 102.8 | 105.6 | 107.5 | − 3.9 | 2.7 | 1.8 | − 2.7 | 10.7 | 2.2 | 1.2 | 3.6 | 1.7 | 1.4 |
| Gross domestic product [2] | 103.2 | 105.9 | 107.9 | − 3.7 | 2.6 | 1.9 | − 2.3 | 10.6 | 1.8 | 1.2 | 3.9 | 1.7 | 1.2 |
| II. Use of domestic product | | | | | | | | | | | | | |
| Private consumption [3] | 101.1 | 101.5 | 106.3 | − 5.7 | 0.4 | 4.6 | − 8.7 | 6.5 | 1.4 | 3.1 | 8.4 | 6.8 | 2.0 |
| Government consumption | 113.8 | 118.1 | 119.4 | 4.0 | 3.8 | 1.1 | 3.4 | 8.5 | 2.1 | 1.4 | 4.3 | − 0.1 | 1.4 |
| Machinery and equipment | 100.8 | 104.3 | 106.9 | −11.0 | 3.5 | 2.5 | 1.1 | 20.8 | − 2.1 | − 2.6 | 0.8 | 0.8 | 6.3 |
| Premises | 112.9 | 112.9 | 111.0 | 3.9 | 0.0 | − 1.6 | − 2.0 | 4.4 | 0.6 | − 3.2 | 3.0 | − 3.8 | − 2.6 |
| Other investment [4] | 116.3 | 117.6 | 120.0 | − 3.3 | 1.0 | 2.1 | − 2.0 | 4.1 | 1.6 | 0.7 | 1.7 | 1.8 | 2.4 |
| Changes in inventories [5,6] | . | . | . | − 0.3 | 0.5 | 0.6 | 0.5 | − 0.4 | 1.0 | 0.9 | − 0.7 | 0.7 | 0.9 |
| Domestic demand | 106.1 | 108.1 | 111.8 | − 3.0 | 1.9 | 3.4 | − 3.6 | 7.1 | 2.3 | 2.4 | 5.1 | 3.9 | 2.5 |
| Net exports [6] | . | . | . | − 0.8 | 0.8 | − 1.3 | 1.1 | 3.8 | − 0.3 | − 1.0 | − 0.9 | − 2.0 | − 1.2 |
| Exports | 101.0 | 110.8 | 114.3 | − 9.3 | 9.7 | 3.2 | − 0.2 | 28.2 | 7.4 | 7.2 | 3.5 | 2.1 | 4.9 |
| Imports | 107.6 | 117.3 | 125.1 | − 8.5 | 9.0 | 6.7 | − 2.9 | 20.6 | 9.3 | 11.1 | 6.3 | 7.2 | 8.3 |
| Gross domestic product [2] | 103.2 | 105.9 | 107.9 | − 3.7 | 2.6 | 1.9 | − 2.3 | 10.6 | 1.8 | 1.2 | 3.9 | 1.7 | 1.2 |
| **At current prices (€ billion)** | | | | | | | | | | | | | |
| III. Use of domestic product | | | | | | | | | | | | | |
| Private consumption [3] | 1,713.5 | 1,773.8 | 1,985.0 | − 5.1 | 3.5 | 11.9 | − 7.0 | 8.3 | 5.3 | 7.9 | 13.8 | 13.8 | 9.4 |
| Government consumption | 748.0 | 797.5 | 848.5 | 6.4 | 6.6 | 6.4 | 6.3 | 7.9 | 6.2 | 6.1 | 9.1 | 5.8 | 6.2 |
| Machinery and equipment | 217.5 | 229.4 | 251.8 | − 9.8 | 5.5 | 9.8 | 2.5 | 22.6 | − 0.3 | 0.2 | 6.2 | 7.7 | 14.7 |
| Premises | 384.8 | 416.7 | 476.0 | 5.9 | 8.3 | 14.2 | − 0.1 | 9.5 | 12.8 | 10.3 | 18.2 | 14.2 | 12.5 |
| Other investment [4] | 133.8 | 137.7 | 144.0 | − 2.8 | 2.9 | 4.6 | − 0.6 | 5.8 | 3.4 | 2.9 | 5.6 | 5.0 | 4.9 |
| Changes in inventories [5] | 16.1 | 55.1 | 77.6 | . | . | . | . | . | . | . | . | . | . |
| Domestic use | 3,213.8 | 3,410.2 | 3,782.9 | − 1.9 | 6.1 | 10.9 | − 1.9 | 9.3 | 7.8 | 9.4 | 12.5 | 12.7 | 10.6 |
| Net exports | 191.7 | 191.6 | 75.4 | . | . | . | . | . | . | . | . | . | . |
| Exports | 1,464.8 | 1,693.9 | 1,953.7 | − 9.6 | 15.6 | 15.3 | 0.8 | 33.3 | 15.1 | 17.1 | 15.3 | 16.1 | 18.5 |
| Imports | 1,273.1 | 1,502.4 | 1,878.3 | −10.6 | 18.0 | 25.0 | − 2.1 | 30.0 | 20.3 | 26.7 | 25.6 | 28.7 | 30.9 |
| Gross domestic product [2] | 3,405.4 | 3,601.8 | 3,858.3 | − 2.0 | 5.8 | 7.1 | − 0.6 | 11.5 | 6.3 | 6.3 | 8.6 | 7.7 | 5.8 |
| IV. Prices (2015=100) | | | | | | | | | | | | | |
| Private consumption | 105.7 | 109.0 | 116.6 | 0.6 | 3.1 | 6.9 | 1.8 | 1.7 | 3.8 | 4.7 | 5.0 | 6.6 | 7.3 |
| Gross domestic product | 109.1 | 112.4 | 118.2 | 1.8 | 3.1 | 5.1 | 1.7 | 0.9 | 4.4 | 5.0 | 4.6 | 5.9 | 4.6 |
| Terms of trade | 102.8 | 100.1 | 95.5 | 2.0 | − 2.6 | − 4.6 | 0.2 | − 3.5 | − 2.7 | − 4.2 | − 5.7 | − 5.3 | − 6.5 |
| V. Distribution of national income | | | | | | | | | | | | | |
| Compensation of employees | 1,853.9 | 1,918.0 | 2,023.4 | − 0.1 | 3.5 | 5.5 | − 0.7 | 5.1 | 4.7 | 4.6 | 6.6 | 5.6 | 4.6 |
| Entrepreneurial and property income | 717.7 | 825.4 | 820.2 | − 4.6 | 15.0 | − 0.6 | 7.3 | 39.9 | 9.7 | 10.5 | 2.4 | − 4.0 | 2.4 |
| National income | 2,571.6 | 2,743.4 | 2,843.5 | − 1.4 | 6.7 | 3.6 | 1.8 | 13.4 | 6.2 | 6.1 | 5.2 | 2.8 | 4.0 |
| Memo item: Gross national income | 3,505.7 | 3,729.5 | 3,987.3 | − 2.4 | 6.4 | 6.9 | − 0.1 | 11.9 | 7.3 | 6.9 | 8.9 | 7.2 | 5.8 |

Source: Federal Statistical Office; figures computed in November 2022. Initial annual results for 2022: figures computed in January 2023. **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 soft ware 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

| | | of which: | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Industry | | | | | | | | |
| | | | | | of which: by main industrial grouping | | | | of which: by economic sector | | | |
| | Production sector, total | Construc-tion | Energy | Total | Inter-mediate goods | Capital goods | Durable goods | Non-durable goods | Manu-facture of basic metals and fabricated metal products | Manu-facture of computers, electronic and optical products and electrical equipment | 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 | | | | | | | | | | | | |
| 2018 | 105.3 | 109.0 | 97.4 | 105.3 | 105.5 | 104.6 | 106.2 | 106.9 | 107.4 | 109.0 | 106.5 | 99.9 |
| 2019 | 102.9 | 112.7 | 90.4 | 102.2 | 101.8 | 102.6 | 106.2 | 101.0 | 102.8 | 106.5 | 103.4 | 94.9 |
| 2020 | 95.0 | 116.1 | 84.4 | 92.2 | 94.9 | 88.2 | 97.6 | 97.2 | 90.6 | 98.5 | 89.5 | 75.9 |
| 2021 | 98.4 | 114.3 | 87.1 | 96.6 | 102.7 | 90.5 | 103.6 | 99.1 | 98.9 | 108.7 | 95.9 | 73.9 |
| 2021 Q3 | 96.9 | 119.4 | 80.6 | 94.2 | 102.3 | 85.1 | 101.9 | 101.6 | 97.9 | 109.0 | 94.7 | 61.7 |
| Q4 | 101.5 | 124.8 | 93.5 | 97.9 | 98.9 | 95.1 | 108.7 | 102.8 | 95.9 | 109.5 | 102.2 | 74.3 |
| 2022 Q1 | 96.0 | 98.7 | 95.2 | 95.6 | 103.2 | 87.4 | 104.0 | 100.9 | 98.7 | 109.9 | 90.5 | 73.2 |
| Q2 | 97.5 | 114.9 | 82.5 | 95.6 | 102.0 | 89.5 | 106.0 | 97.1 | 98.1 | 111.3 | 94.2 | 74.5 |
| Q3 x | 98.1 | 118.1 | 79.2 | 96.1 | 99.8 | 91.5 | 106.1 | 99.8 | 96.1 | 118.0 | 96.6 | 75.0 |
| 2021 Nov. | 105.8 | 127.4 | 93.1 | 103.0 | 104.5 | 99.7 | 114.5 | 107.8 | 103.4 | 113.1 | 101.8 | 83.9 |
| Dec. | 96.5 | 123.2 | 95.2 | 91.8 | 87.8 | 93.9 | 98.8 | 94.3 | 82.7 | 104.9 | 108.4 | 65.5 |
| 2022 Jan. | 90.1 | 82.4 | 98.5 | 90.7 | 100.0 | 81.4 | 96.5 | 95.8 | 94.1 | 103.2 | 81.9 | 70.4 |
| Feb. | 94.9 | 97.1 | 94.5 | 94.5 | 101.2 | 87.9 | 105.0 | 96.7 | 97.5 | 107.8 | 89.0 | 78.5 |
| Mar. | 103.0 | 116.7 | 92.6 | 101.5 | 108.4 | 92.9 | 110.6 | 110.2 | 104.4 | 118.6 | 100.7 | 70.6 |
| Apr. | 96.1 | 112.3 | 89.2 | 93.7 | 101.7 | 85.8 | 106.4 | 95.9 | 97.5 | 108.4 | 89.5 | 70.7 |
| May | 96.1 | 113.9 | 80.8 | 94.2 | 101.3 | 87.4 | 103.8 | 95.9 | 97.5 | 109.4 | 91.5 | 73.1 |
| June | 100.4 | 118.6 | 77.4 | 99.0 | 102.9 | 95.3 | 107.7 | 99.5 | 99.4 | 116.0 | 101.5 | 79.6 |
| July 2,x | 99.6 | 123.8 | 81.9 | 96.8 | 102.5 | 91.7 | 102.6 | 97.3 | 97.8 | 116.4 | 95.7 | 75.5 |
| Aug. 2,x | 91.5 | 111.4 | 77.6 | 89.2 | 95.5 | 81.5 | 98.5 | 96.4 | 90.2 | 113.2 | 89.4 | 60.2 |
| Sep. x | 103.2 | 119.2 | 78.0 | 102.4 | 101.4 | 101.3 | 117.2 | 105.7 | 100.4 | 124.5 | 104.8 | 89.3 |
| Oct. x | 101.9 | 124.5 | 80.4 | 99.6 | 100.5 | 96.8 | 112.8 | 103.8 | 100.8 | 118.9 | 98.8 | 83.8 |
| Nov. x,p | 105.4 | 125.9 | 84.1 | 103.5 | 100.8 | 105.4 | 113.6 | 102.2 | 100.1 | 124.2 | 105.9 | 95.3 |

**Annual percentage change**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 | + 0.9 | + 0.3 | − 1.5 | + 1.2 | + 0.6 | + 1.0 | − 0.7 | + 3.8 | + 1.1 | + 1.9 | + 2.3 | − 1.6 |
| 2019 | − 2.3 | + 3.4 | − 7.2 | − 2.9 | − 3.5 | − 1.9 | ± 0.0 | − 5.5 | − 4.3 | − 2.3 | − 2.9 | − 5.0 |
| 2020 | − 7.7 | + 3.0 | − 6.6 | − 9.8 | − 6.8 | − 14.0 | − 8.1 | − 3.8 | − 11.9 | − 7.5 | − 13.4 | − 20.0 |
| 2021 | + 3.6 | − 1.6 | + 3.2 | + 4.8 | + 8.2 | + 2.6 | + 6.1 | + 2.0 | + 9.2 | + 10.4 | + 7.2 | − 2.6 |
| 2021 Q3 | + 2.3 | + 0.8 | + 2.2 | + 2.6 | + 8.4 | − 2.9 | + 4.0 | + 3.7 | + 9.2 | + 12.3 | + 9.3 | − 21.9 |
| Q4 | − 1.8 | − 4.6 | + 1.9 | − 1.5 | + 0.7 | − 4.9 | + 2.1 | + 3.8 | + 0.4 | + 4.0 | + 3.7 | − 19.4 |
| 2022 Q1 | − 0.4 | + 4.2 | + 3.1 | − 1.5 | − 0.8 | − 4.6 | + 3.2 | + 5.5 | − 1.5 | + 2.4 | − 0.8 | − 13.7 |
| Q2 | − 1.5 | − 2.7 | + 0.8 | − 1.4 | − 3.2 | − 0.8 | + 2.9 | + 0.6 | − 3.4 | + 2.3 | − 1.3 | − 0.4 |
| Q3 x | + 1.3 | − 1.1 | − 1.7 | + 2.1 | − 2.5 | + 7.6 | + 4.2 | − 1.8 | − 1.8 | + 8.3 | + 2.1 | + 21.5 |
| 2021 Nov. | − 1.9 | − 2.3 | + 1.4 | − 2.1 | + 0.3 | − 6.3 | + 0.1 | + 6.1 | + 0.3 | + 1.8 | + 3.0 | − 20.5 |
| Dec. | − 2.4 | − 10.3 | + 3.4 | − 0.9 | − 0.1 | − 2.4 | + 2.4 | + 1.8 | − 1.9 | + 4.7 | + 1.7 | − 12.3 |
| 2022 Jan. | + 1.2 | + 9.4 | + 0.8 | ± 0.0 | − 0.3 | − 1.3 | + 1.2 | + 4.6 | − 0.4 | + 2.8 | + 1.2 | − 8.0 |
| Feb. | + 2.7 | + 9.7 | + 8.9 | + 1.1 | + 1.8 | − 2.0 | + 6.3 | + 8.4 | + 0.9 | + 3.3 | + 0.7 | − 6.9 |
| Mar. | − 4.5 | − 3.1 | + 0.1 | − 5.1 | − 3.6 | − 9.5 | + 2.3 | + 3.9 | − 4.5 | + 1.2 | − 3.5 | − 24.4 |
| Apr. | − 2.7 | − 3.3 | + 2.6 | − 3.1 | − 2.7 | − 6.5 | + 4.5 | + 5.0 | − 3.6 | + 1.1 | − 5.2 | − 13.1 |
| May | − 1.7 | − 2.8 | + 0.7 | − 1.6 | − 3.8 | ± 0.0 | + 3.5 | − 0.8 | − 2.9 | + 2.1 | − 1.4 | + 2.4 |
| June | − 0.1 | − 2.0 | + 0.3 | + 0.3 | − 3.0 | + 4.3 | + 0.8 | − 2.0 | − 3.9 | + 3.7 | + 2.6 | + 11.2 |
| July 2,x | − 0.8 | + 0.1 | + 5.3 | − 1.3 | − 2.9 | + 0.8 | + 0.3 | − 3.7 | − 3.5 | + 6.1 | − 2.2 | + 2.6 |
| Aug. 2,x | + 1.6 | − 1.2 | − 3.2 | + 2.6 | − 2.4 | + 9.4 | + 7.7 | − 1.9 | − 1.1 | + 8.2 | + 3.4 | + 30.9 |
| Sep. x | + 3.1 | − 2.1 | − 6.8 | + 4.9 | − 2.1 | + 12.9 | + 4.8 | + 0.2 | − 0.8 | + 10.4 | + 5.2 | + 36.1 |
| Oct. x | − 0.2 | + 0.6 | − 12.7 | + 0.6 | − 3.8 | + 5.6 | − 0.1 | − 2.3 | − 0.7 | + 7.6 | + 2.6 | + 14.2 |
| Nov. x,p | − 0.4 | − 1.2 | − 9.7 | + 0.5 | − 3.5 | + 5.7 | − 0.8 | − 5.2 | − 3.2 | + 9.8 | + 4.0 | + 13.6 |

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** Influenced by a change in holiday dates. **x** Provisional; estimated and adjusted in advance by the Federal Statistical Office to the results of the Quarterly Production Survey and the Quarterly Survey in the specialised construction industry, respectively.

## XI. Economic conditions in Germany

### 3. Orders received by industry *

Adjusted for working-day variations o

| Period | Industry 2015 = 100 | Annual percentage change | Intermediate goods 2015 = 100 | Annual percentage change | Capital goods 2015 = 100 | Annual percentage change | Consumer goods 2015 = 100 | Annual percentage change | Durable goods 2015 = 100 | Annual percentage change | Non-durable goods 2015 = 100 | Annual percentage change |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | | | | | | | | | | | |
| 2018 | 110.5 | + 1.7 | 111.5 | + 1.9 | 110.0 | + 1.4 | 110.1 | + 4.2 | 118.9 | + 2.1 | 107.1 | + 4.8 |
| 2019 | 104.9 | − 5.1 | 103.5 | − 7.2 | 105.4 | − 4.2 | 107.0 | − 2.8 | 123.3 | + 3.7 | 101.7 | − 5.0 |
| 2020 | 97.2 | − 7.3 | 97.9 | − 5.4 | 95.6 | − 9.3 | 105.8 | − 1.1 | 124.4 | + 0.9 | 99.6 | − 2.1 |
| 2021 | 119.3 | + 22.7 | 124.6 | + 27.3 | 116.3 | + 21.7 | 117.5 | + 11.1 | 146.5 | + 17.8 | 107.9 | + 8.3 |
| 2021 Nov. | 125.3 | + 10.2 | 132.9 | + 16.6 | 120.8 | + 6.1 | 124.5 | + 13.0 | 149.6 | + 8.2 | 116.2 | + 15.0 |
| Dec. | 123.7 | + 13.9 | 120.2 | + 18.2 | 127.0 | + 11.8 | 114.5 | + 11.6 | 148.9 | + 13.4 | 103.2 | + 10.7 |
| 2022 Jan. | 131.2 | + 19.7 | 143.7 | + 19.2 | 124.1 | + 20.8 | 127.5 | + 16.1 | 152.9 | + 8.1 | 119.2 | + 19.9 |
| Feb. | 128.3 | + 15.4 | 136.7 | + 16.3 | 122.6 | + 14.0 | 132.6 | + 21.1 | 149.8 | + 14.3 | 126.9 | + 23.8 |
| Mar. | 140.1 | + 8.2 | 152.7 | + 13.3 | 131.4 | + 3.4 | 146.5 | + 19.4 | 182.6 | + 23.3 | 134.7 | + 17.8 |
| Apr. | 125.1 | + 6.5 | 143.5 | + 13.5 | 111.9 | − 0.9 | 139.0 | + 26.2 | 185.7 | + 14.2 | 123.6 | + 33.2 |
| May | 123.9 | + 8.8 | 139.3 | + 13.2 | 113.5 | + 4.8 | 131.0 | + 15.0 | 178.2 | + 13.4 | 115.5 | + 16.0 |
| June | 129.5 | + 2.3 | 143.2 | + 12.2 | 120.1 | − 4.2 | 137.6 | + 4.2 | 171.3 | + 13.2 | 126.5 | + 0.6 |
| July | 127.6 | − 0.4 | 144.2 | + 12.7 | 118.2 | − 8.0 | 121.6 | − 4.5 | 150.3 | − 0.5 | 112.0 | − 6.3 |
| Aug. | 114.4 | + 7.5 | 127.6 | + 10.4 | 105.4 | + 5.3 | 121.7 | + 9.4 | 157.8 | + 16.5 | 109.7 | + 6.2 |
| Sep. | 123.2 | + 0.5 | 131.7 | + 6.0 | 116.5 | − 5.0 | 135.1 | + 18.5 | 166.0 | + 19.3 | 124.9 | + 18.2 |
| Oct. | 125.5 | + 7.1 | 133.5 | + 6.9 | 119.9 | + 6.9 | 130.1 | + 8.6 | 175.2 | + 23.5 | 115.2 | + 2.5 |
| Nov. p | 122.3 | − 2.4 | 134.3 | + 1.1 | 114.0 | − 5.6 | 128.9 | + 3.5 | 147.2 | − 1.6 | 122.9 | + 5.8 |
| **From the domestic market** | | | | | | | | | | | | |
| 2018 | 107.2 | + 0.2 | 108.6 | + 1.4 | 106.6 | − 1.1 | 103.0 | + 1.4 | 114.7 | + 5.5 | 98.9 | − 0.4 |
| 2019 | 101.2 | − 5.6 | 99.1 | − 8.7 | 103.0 | − 3.4 | 101.2 | − 1.7 | 116.2 | + 1.3 | 96.2 | − 2.7 |
| 2020 | 94.9 | − 6.2 | 94.1 | − 5.0 | 95.2 | − 7.6 | 98.0 | − 3.2 | 105.5 | − 9.2 | 95.4 | − 0.8 |
| 2021 | 115.5 | + 21.7 | 119.6 | + 27.1 | 113.1 | + 18.8 | 108.0 | + 10.2 | 114.8 | + 8.8 | 105.6 | + 10.7 |
| 2021 Nov. | 119.4 | + 9.3 | 126.7 | + 11.8 | 113.8 | + 7.1 | 115.4 | + 10.3 | 117.6 | − 5.4 | 114.6 | + 17.1 |
| Dec. | 119.1 | + 21.3 | 111.4 | + 17.3 | 127.7 | + 25.1 | 105.5 | + 16.1 | 101.9 | − 2.0 | 106.7 | + 23.4 |
| 2022 Jan. | 122.2 | + 18.4 | 137.7 | + 21.0 | 109.9 | + 15.7 | 116.5 | + 20.1 | 106.0 | − 4.5 | 120.1 | + 30.1 |
| Feb. | 123.4 | + 14.4 | 132.1 | + 17.2 | 116.0 | + 10.6 | 122.9 | + 22.5 | 115.6 | + 5.2 | 125.4 | + 29.1 |
| Mar. | 137.4 | + 8.6 | 148.2 | + 13.7 | 128.9 | + 2.5 | 132.0 | + 20.7 | 135.9 | + 3.6 | 130.7 | + 28.1 |
| Apr. | 124.8 | + 12.6 | 139.8 | + 19.3 | 110.5 | + 3.7 | 135.2 | + 32.2 | 134.0 | + 4.5 | 135.6 | + 45.0 |
| May | 123.2 | + 9.7 | 136.5 | + 15.0 | 112.6 | + 3.7 | 118.5 | + 17.6 | 141.8 | + 16.7 | 110.6 | + 17.9 |
| June | 126.8 | − 0.7 | 138.1 | + 10.4 | 117.1 | − 10.3 | 127.3 | + 2.7 | 135.2 | + 15.5 | 124.6 | − 1.3 |
| July | 124.5 | − 3.3 | 144.5 | + 14.6 | 109.6 | − 17.0 | 110.6 | − 8.8 | 123.7 | + 6.6 | 106.1 | − 13.8 |
| Aug. | 109.8 | + 5.1 | 124.1 | + 11.3 | 97.8 | − 0.6 | 108.3 | + 2.2 | 121.1 | + 9.2 | 104.0 | − 0.4 |
| Sep. | 120.2 | + 9.3 | 128.7 | + 9.2 | 111.8 | + 7.2 | 127.6 | + 23.9 | 123.7 | + 16.6 | 128.9 | + 26.4 |
| Oct. | 119.9 | + 3.7 | 131.4 | + 6.7 | 109.7 | − 0.3 | 122.4 | + 10.9 | 123.6 | + 15.8 | 122.0 | + 9.2 |
| Nov. p | 121.8 | + 2.0 | 133.0 | + 5.0 | 111.9 | − 1.7 | 123.5 | + 7.0 | 120.8 | + 2.7 | 124.4 | + 8.6 |
| **From abroad** | | | | | | | | | | | | |
| 2018 | 113.0 | + 2.9 | 114.6 | + 2.4 | 112.0 | + 2.8 | 115.5 | + 6.1 | 122.2 | − 0.5 | 113.4 | + 8.5 |
| 2019 | 107.6 | − 4.8 | 108.3 | − 5.5 | 106.9 | − 4.6 | 111.5 | − 3.5 | 129.1 | + 5.6 | 105.9 | − 6.6 |
| 2020 | 98.9 | − 8.1 | 102.0 | − 5.8 | 95.9 | − 10.3 | 111.8 | + 0.3 | 139.5 | + 8.1 | 102.8 | − 2.9 |
| 2021 | 122.2 | + 23.6 | 130.1 | + 27.5 | 118.1 | + 23.1 | 124.8 | + 11.6 | 171.9 | + 23.2 | 109.6 | + 6.6 |
| 2021 Nov. | 129.8 | + 10.8 | 139.5 | + 21.5 | 125.0 | + 5.5 | 131.5 | + 14.8 | 175.4 | + 17.4 | 117.4 | + 13.6 |
| Dec. | 127.1 | + 9.1 | 129.7 | + 19.1 | 126.5 | + 4.9 | 121.5 | + 8.8 | 186.8 | + 21.9 | 100.5 | + 2.1 |
| 2022 Jan. | 138.1 | + 20.7 | 150.1 | + 17.4 | 132.6 | + 23.6 | 136.1 | + 13.6 | 190.6 | + 14.9 | 118.5 | + 13.0 |
| Feb. | 132.0 | + 16.1 | 141.6 | + 15.4 | 126.5 | + 15.9 | 140.1 | + 20.2 | 177.4 | + 19.8 | 128.0 | + 20.1 |
| Mar. | 142.1 | + 7.8 | 157.6 | + 13.0 | 132.9 | + 3.9 | 157.8 | + 18.6 | 220.2 | + 36.2 | 137.7 | + 11.2 |
| Apr. | 125.3 | + 2.3 | 147.5 | + 8.1 | 112.8 | − 3.3 | 142.0 | + 22.2 | 227.3 | + 19.5 | 114.5 | + 24.1 |
| May | 124.5 | + 8.1 | 142.4 | + 11.3 | 114.1 | + 5.6 | 140.7 | + 13.5 | 207.5 | + 11.6 | 119.2 | + 14.6 |
| June | 131.6 | + 4.6 | 148.7 | + 14.2 | 121.9 | − 0.4 | 145.6 | + 5.3 | 200.3 | + 12.0 | 127.9 | + 2.2 |
| July | 130.0 | + 1.8 | 143.9 | + 10.8 | 123.4 | − 2.3 | 130.1 | − 1.4 | 171.7 | − 4.1 | 116.6 | − 0.1 |
| Aug. | 117.9 | + 9.3 | 131.4 | + 9.4 | 109.9 | + 8.7 | 132.0 | + 14.6 | 187.4 | + 20.7 | 114.1 | + 11.4 |
| Sep. | 125.5 | − 5.0 | 134.9 | + 2.9 | 119.3 | − 10.8 | 140.9 | + 15.0 | 200.1 | + 20.8 | 121.8 | + 12.2 |
| Oct. | 129.7 | + 9.5 | 135.8 | + 7.1 | 126.1 | + 11.1 | 136.0 | + 7.1 | 216.7 | + 27.3 | 110.0 | − 2.7 |
| Nov. p | 122.6 | − 5.5 | 135.7 | − 2.7 | 115.2 | − 7.8 | 133.1 | + 1.2 | 168.4 | − 4.0 | 121.8 | + 3.7 |

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

| | | Breakdown by type of construction | | | | | | | | | | | Breakdown by client [1] | | | |
| | | Structural engineering | | | | | | | | | | | | | | |
| | Total | Total | | Residential construction | | Industrial construction | | Public sector construction | | Civil engineering | | Industrial clients | | Public sector [2] | |
| Zeit | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 | 135.0 | + 10.3 | 131.7 | + 7.0 | 137.1 | + 11.4 | 128.7 | + 4.2 | 125.2 | + 2.7 | 138.9 | + 14.2 | 136.1 | + 13.6 | 132.6 | + 6.1 |
| 2019 | 146.2 | + 8.3 | 145.3 | + 10.3 | 150.4 | + 9.7 | 142.5 | + 10.7 | 138.8 | + 10.9 | 147.2 | + 6.0 | 148.1 | + 8.8 | 141.3 | + 6.6 |
| 2020 | 145.6 | − 0.4 | 144.2 | − 0.8 | 160.8 | + 6.9 | 130.3 | − 8.6 | 141.5 | + 1.9 | 147.3 | + 0.1 | 139.6 | − 5.7 | 143.3 | + 1.4 |
| 2021 | 159.0 | + 9.2 | 164.1 | + 13.8 | 174.3 | + 8.4 | 156.6 | + 20.2 | 158.7 | + 12.2 | 153.0 | + 3.9 | 161.6 | + 15.8 | 146.7 | + 2.4 |
| 2021 Oct. | 158.7 | + 11.4 | 168.8 | + 11.7 | 169.1 | − 7.2 | 171.7 | + 35.1 | 157.2 | + 13.9 | 146.8 | + 10.7 | 171.6 | + 21.3 | 137.5 | + 15.0 |
| Nov. | 145.3 | + 4.1 | 143.0 | − 2.7 | 159.5 | − 5.0 | 132.6 | + 0.3 | 127.3 | − 4.6 | 148.0 | + 13.0 | 159.5 | + 10.9 | 120.4 | + 2.4 |
| Dec. | 185.3 | + 24.3 | 205.7 | + 41.1 | 196.2 | + 3.5 | 173.7 | + 50.3 | 356.7 | + 213.4 | 161.5 | + 5.6 | 186.9 | + 38.2 | 176.7 | + 25.9 |
| 2022 Jan. | 142.8 | + 6.9 | 145.4 | + 4.1 | 165.7 | + 13.7 | 134.0 | − 8.1 | 121.0 | + 24.2 | 139.9 | + 10.6 | 149.1 | − 1.0 | 121.7 | + 14.1 |
| Feb. | 155.7 | + 8.7 | 161.0 | + 8.1 | 176.0 | + 9.1 | 158.3 | + 7.5 | 121.8 | + 6.7 | 149.5 | + 9.4 | 165.3 | + 15.3 | 132.4 | + 0.2 |
| Mar. | 209.5 | + 32.6 | 208.8 | + 32.9 | 219.4 | + 25.1 | 201.7 | + 42.4 | 200.5 | + 29.6 | 210.4 | + 32.3 | 217.4 | + 44.0 | 194.5 | + 25.2 |
| Apr. | 164.2 | + 2.5 | 157.6 | − 0.4 | 178.1 | − 3.8 | 142.5 | + 2.2 | 146.2 | + 4.5 | 171.9 | + 5.9 | 153.9 | + 3.9 | 167.6 | + 5.5 |
| May | 175.9 | + 10.6 | 172.4 | + 5.8 | 182.1 | − 1.1 | 163.4 | + 11.4 | 173.9 | + 12.8 | 180.0 | + 16.7 | 170.8 | + 13.3 | 178.0 | + 16.3 |
| June | 175.2 | + 6.4 | 166.3 | + 0.7 | 177.9 | + 0.2 | 153.3 | − 4.4 | 176.5 | + 23.8 | 185.6 | + 13.2 | 177.5 | + 6.4 | 171.0 | + 10.8 |
| July | 180.6 | + 12.9 | 179.1 | + 6.4 | 171.1 | − 4.5 | 177.7 | + 8.6 | 211.0 | + 40.2 | 182.3 | + 21.4 | 190.1 | + 19.9 | 175.5 | + 17.1 |
| Aug. | 157.2 | − 1.1 | 148.3 | − 8.7 | 145.1 | − 13.2 | 143.2 | − 12.3 | 178.2 | + 23.7 | 167.5 | + 8.2 | 156.0 | − 1.6 | 165.9 | + 7.4 |
| Sep. | 164.2 | − 9.3 | 159.4 | − 15.7 | 162.5 | − 15.1 | 154.0 | − 20.3 | 169.7 | + 2.6 | 169.8 | − 1.1 | 166.1 | − 13.9 | 163.2 | + 1.3 |
| Oct. | 161.8 | + 2.0 | 144.9 | − 14.2 | 148.3 | − 12.3 | 139.8 | − 18.6 | 152.6 | − 2.9 | 181.4 | + 23.6 | 172.4 | + 0.5 | 157.9 | + 14.8 |

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

| | | | | | of which: | | | | | | | | | | | |
| | | | | | In stores by enterprises main product range | | | | | | | | | | | |
| | Total | | | | 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 | | Retail sale via mail order houses or via internet as well as other retail sale [2] | |
| | At current prices | | At 2015 prices | | At current prices | | | | | | | | | | | |
| Zeit | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 | 110.7 | + 3.0 | 107.5 | + 1.6 | 109.6 | + 3.6 | 105.6 | − 2.3 | 107.1 | + 0.8 | 103.0 | ± 0.0 | 112.4 | + 4.4 | 127.7 | + 6.0 |
| 2019 | 115.0 | + 3.9 | 111.0 | + 3.3 | 112.2 | + 2.4 | 106.7 | + 1.0 | 108.9 | + 1.7 | 107.1 | + 4.0 | 118.8 | + 5.7 | 138.4 | + 8.4 |
| 2020 | 121.4 | + 5.6 | 115.9 | + 4.4 | 121.4 | + 8.2 | 81.9 | − 23.2 | 106.9 | − 1.8 | 117.1 | + 9.3 | 125.4 | + 5.6 | 169.0 | + 22.1 |
| 2021 [3] | 124.9 | + 2.9 | 116.9 | + 0.9 | 121.7 | + 0.2 | 78.1 | − 4.6 | 95.4 | − 10.8 | 110.5 | − 5.6 | 135.2 | + 7.8 | 191.1 | + 13.1 |
| 2021 Nov. | 140.4 | + 2.6 | 130.1 | − 0.3 | 121.5 | − 1.6 | 105.1 | + 16.1 | 135.2 | − 12.8 | 129.8 | − 7.7 | 147.0 | + 9.2 | 236.4 | + 3.4 |
| Dec. | 145.6 | + 4.7 | 134.5 | + 1.5 | 137.5 | − 3.1 | 97.6 | + 40.2 | 147.8 | + 9.2 | 122.0 | + 1.6 | 155.8 | + 9.5 | 220.9 | + 0.6 |
| 2022 Jan. | 121.9 | + 18.5 | 112.0 | + 14.5 | 116.5 | + 1.0 | 73.3 | + 264.7 | 111.8 | + 84.2 | 112.8 | + 94.1 | 139.9 | + 13.0 | 183.9 | − 1.0 |
| Feb. | 119.6 | + 14.9 | 108.9 | + 10.8 | 115.1 | + 0.6 | 73.4 | + 223.3 | 97.5 | + 56.0 | 114.0 | + 68.9 | 132.0 | + 6.1 | 173.4 | − 2.7 |
| Mar. | 138.6 | + 6.8 | 123.2 | + 0.6 | 132.2 | + 0.1 | 94.2 | + 62.1 | 101.5 | + 20.0 | 137.8 | + 12.4 | 147.1 | + 8.6 | 194.5 | − 5.4 |
| Apr. | 133.3 | + 10.4 | 117.2 | + 3.4 | 127.1 | + 2.4 | 102.3 | + 158.3 | 94.8 | + 34.1 | 132.9 | + 24.9 | 140.4 | + 6.8 | 183.9 | − 4.4 |
| May | 134.3 | + 7.1 | 116.3 | − 0.9 | 127.6 | + 0.7 | 109.5 | + 75.8 | 89.5 | + 21.8 | 129.8 | + 14.8 | 141.1 | + 8.7 | 183.5 | − 7.6 |
| June | 130.8 | + 0.5 | 112.7 | − 7.7 | 127.0 | + 4.4 | 105.2 | − 7.1 | 92.7 | − 3.8 | 119.4 | − 5.3 | 142.2 | + 7.6 | 175.6 | − 4.8 |
| July | 135.7 | + 8.0 | 116.2 | − 1.4 | 131.0 | + 8.6 | 105.4 | − 2.5 | 100.2 | − 0.9 | 121.9 | ± 0.0 | 149.6 | + 9.8 | 182.9 | + 13.7 |
| Aug. | 130.3 | + 6.0 | 110.7 | − 3.9 | 126.2 | + 10.0 | 98.0 | − 2.5 | 98.4 | − 2.5 | 114.2 | − 3.7 | 143.6 | + 7.2 | 173.9 | + 4.0 |
| Sep. | 133.5 | + 10.6 | 112.1 | − 0.3 | 125.3 | + 11.9 | 116.3 | + 16.2 | 108.6 | + 6.1 | 118.9 | + 4.9 | 145.4 | + 11.0 | 187.8 | + 9.2 |
| Oct. | 138.7 | + 6.3 | 115.1 | − 4.7 | 132.7 | + 11.0 | 116.0 | + 0.9 | 111.6 | + 2.2 | 125.6 | − 0.2 | 146.4 | + 3.8 | 194.0 | + 1.3 |
| Nov. | 148.2 | + 5.6 | 123.4 | − 5.1 | 133.7 | + 10.0 | 118.1 | + 12.4 | 136.2 | + 0.7 | 129.7 | − 0.1 | 155.6 | + 5.9 | 236.1 | − 0.1 |

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 2021 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] Thousands | Employment [1] Annual percentage change | Employment subject to social contributions [2] — Total Thousands | Employment subject to social contributions [2] — Total Annual percentage change | Production sector (Thousands) | Services excluding temporary employment (Thousands) | Temporary employment (Thousands) | Solely jobs exempt from social contributions [2] | Short-time workers [3] Total | Short-time workers [3] Cyclically induced | Unemployment [4] Total | Unemployment [4] Assigned to the legal category of the Third Book of the Social Security Code (SGB III) | Unemployment rate in % [4,5] | Vacancies, thousands [4,6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2018 | 44,866 | + 1.4 | 32,964 | + 2.3 | 9,349 | 22,532 | 840 | 4,671 | 118 | 25 | 2,340 | 802 | 5.2 | 796 |
| 2019 | 45,276 | + 0.9 | 33,518 | + 1.7 | 9,479 | 23,043 | 751 | 4,579 | 145 | 60 | 7 2,267 | 827 | 7 5.0 | 774 |
| 2020 | 44,914 | − 0.8 | 33,579 | + 0.2 | 9,395 | 23,277 | 660 | 4,290 | 2,939 | 2,847 | 2,695 | 1,137 | 5.9 | 613 |
| 2021 | 44,980 | + 0.1 | 33,897 | + 0.9 | 9,344 | 23,602 | 702 | 4,101 | 1,852 | 1,744 | 2,613 | 999 | 5.7 | 706 |
| 2022 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2,418 | 808 | 5.3 | 845 |
| 2019 Q4 | 45,565 | + 0.7 | 33,924 | + 1.4 | 9,551 | 23,388 | 738 | 4,522 | 161 | 105 | 2,204 | 811 | 4.8 | 729 |
| 2020 Q1 | 45,133 | + 0.5 | 33,642 | + 1.3 | 9,439 | 23,284 | 686 | 4,458 | 1,219 | 949 | 2,385 | 960 | 5.2 | 683 |
| Q2 | 44,723 | − 1.1 | 33,415 | + 0.1 | 9,387 | 23,137 | 640 | 4,235 | 5,399 | 5,388 | 2,770 | 1,154 | 6.0 | 593 |
| Q3 | 44,809 | − 1.3 | 33,424 | − 0.4 | 9,359 | 23,171 | 640 | 4,273 | 2,705 | 2,691 | 2,904 | 1,266 | 6.3 | 583 |
| Q4 | 44,993 | − 1.3 | 33,836 | − 0.3 | 9,395 | 23,518 | 676 | 4,194 | 2,433 | 2,361 | 2,722 | 1,167 | 5.9 | 595 |
| 2021 Q1 | 44,514 | − 1.4 | 33,568 | − 0.2 | 9,294 | 23,376 | 665 | 4,051 | 3,473 | 3,157 | 2,878 | 1,248 | 6.3 | 586 |
| Q2 | 44,812 | + 0.2 | 33,718 | + 0.9 | 9,322 | 23,446 | 697 | 4,066 | 2,164 | 2,143 | 2,691 | 1,024 | 5.9 | 658 |
| Q3 | 45,157 | + 0.8 | 33,929 | + 1.5 | 9,347 | 23,606 | 719 | 4,161 | 935 | 915 | 2,545 | 920 | 5.5 | 774 |
| Q4 | 45,437 | + 1.0 | 34,374 | + 1.6 | 9,415 | 23,982 | 727 | 4,125 | 835 | 762 | 2,341 | 802 | 5.1 | 804 |
| 2022 Q1 | r 45,182 | r + 1.5 | r 34,242 | + 2.0 | 9,348 | 23,943 | 715 | 4,061 | 1,033 | 792 | 2,417 | 874 | 5.3 | 818 |
| Q2 | r 45,492 | r + 1.5 | r 34,401 | + 2.0 | 9,372 | 24,056 | 718 | 4,112 | 337 | 324 | 2,311 | 777 | 8 5.0 | 864 |
| Q3 | r 45,673 | r + 1.1 | 9 34,519 | 9 + 1.7 | 9 9,405 | 9 24,132 | 9 724 | 9 4,155 | ... | 9 92 | 2,501 | 804 | 5.5 | 880 |
| Q4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2,443 | 778 | 5.3 | 817 |
| 2019 Aug. | 45,314 | + 0.7 | 33,610 | + 1.4 | 9,505 | 23,101 | 750 | 4,568 | 60 | 51 | 2,319 | 848 | 5.1 | 795 |
| Sep. | 45,523 | + 0.8 | 33,938 | + 1.5 | 9,583 | 23,341 | 754 | 4,517 | 84 | 75 | 2,234 | 808 | 4.9 | 787 |
| Oct. | 45,598 | + 0.8 | 33,966 | + 1.4 | 9,567 | 23,398 | 748 | 4,510 | 111 | 102 | 2,204 | 795 | 4.8 | 764 |
| Nov. | 45,627 | + 0.7 | 33,968 | + 1.4 | 9,559 | 23,423 | 742 | 4,532 | 124 | 115 | 2,180 | 800 | 4.8 | 736 |
| Dec. | 45,469 | + 0.6 | 33,740 | + 1.4 | 9,474 | 23,344 | 694 | 4,531 | 247 | 97 | 2,227 | 838 | 4.9 | 687 |
| 2020 Jan. | 45,154 | + 0.6 | 33,608 | + 1.4 | 9,432 | 23,255 | 689 | 4,471 | 382 | 133 | 2,426 | 985 | 5.3 | 668 |
| Feb. | 45,169 | + 0.6 | 33,624 | + 1.3 | 9,427 | 23,278 | 683 | 4,461 | 439 | 134 | 2,396 | 971 | 5.3 | 690 |
| Mar. | 45,077 | + 0.2 | 33,648 | + 1.1 | 9,440 | 23,290 | 675 | 4,350 | 2,834 | 2,580 | 2,335 | 925 | 5.1 | 691 |
| Apr. | 44,808 | − 0.7 | 33,430 | + 0.1 | 9,396 | 23,141 | 643 | 4,194 | 6,007 | 5,995 | 2,644 | 1,093 | 5.8 | 626 |
| May | 44,672 | − 1.3 | 33,328 | − 0.3 | 9,367 | 23,083 | 624 | 4,206 | 5,726 | 5,715 | 2,813 | 1,172 | 6.1 | 584 |
| June | 44,688 | − 1.4 | 33,323 | − 0.3 | 9,355 | 23,084 | 629 | 4,260 | 4,464 | 4,452 | 2,853 | 1,197 | 6.2 | 570 |
| July | 44,699 | − 1.4 | 33,233 | − 0.4 | 9,322 | 23,024 | 635 | 4,302 | 3,319 | 3,306 | 2,910 | 1,258 | 6.3 | 573 |
| Aug. | 44,737 | − 1.3 | 33,482 | − 0.4 | 9,367 | 23,218 | 642 | 4,266 | 2,551 | 2,537 | 2,955 | 1,302 | 6.4 | 584 |
| Sep. | 44,990 | − 1.2 | 33,792 | − 0.4 | 9,421 | 23,454 | 656 | 4,240 | 2,244 | 2,229 | 2,847 | 1,238 | 6.2 | 591 |
| Oct. | 45,076 | − 1.1 | 33,862 | − 0.3 | 9,410 | 23,530 | 671 | 4,229 | 2,037 | 2,021 | 2,760 | 1,183 | 6.0 | 602 |
| Nov. | 45,030 | − 1.3 | 33,899 | − 0.2 | 9,400 | 23,559 | 696 | 4,166 | 2,405 | 2,386 | 2,699 | 1,152 | 5.9 | 601 |
| Dec. | 44,873 | − 1.3 | 33,700 | − 0.1 | 9,327 | 23,478 | 666 | 4,134 | 2,856 | 2,676 | 2,707 | 1,166 | 5.9 | 581 |
| 2021 Jan. | 44,489 | − 1.5 | 33,515 | − 0.3 | 9,282 | 23,347 | 657 | 4,045 | 3,638 | 3,294 | 2,901 | 1,298 | 6.3 | 566 |
| Feb. | 44,486 | − 1.5 | 33,521 | − 0.3 | 9,281 | 23,343 | 662 | 4,026 | 3,766 | 3,358 | 2,904 | 1,270 | 6.3 | 583 |
| Mar. | 44,567 | − 1.1 | 33,636 | − 0.0 | 9,309 | 23,397 | 685 | 4,032 | 3,016 | 2,818 | 2,827 | 1,177 | 6.2 | 609 |
| Apr. | 44,676 | − 0.3 | 33,689 | + 0.8 | 9,324 | 23,427 | 687 | 4,039 | 2,583 | 2,560 | 2,771 | 1,091 | 6.0 | 629 |
| May | 44,796 | + 0.3 | 33,747 | + 1.3 | 9,326 | 23,461 | 703 | 4,067 | 2,342 | 2,320 | 2,687 | 1,020 | 5.9 | 654 |
| June | 44,963 | + 0.6 | 33,802 | + 1.4 | 9,324 | 23,504 | 716 | 4,151 | 1,568 | 1,548 | 2,614 | 961 | 5.7 | 693 |
| July | 45,027 | + 0.7 | 33,731 | + 1.5 | 9,304 | 23,458 | 715 | 4,194 | 1,088 | 1,068 | 2,590 | 956 | 5.6 | 744 |
| Aug. | 45,096 | + 0.8 | 33,994 | + 1.5 | 9,358 | 23,658 | 722 | 4,153 | 857 | 838 | 2,578 | 940 | 5.6 | 779 |
| Sep. | 45,347 | + 0.8 | 34,323 | + 1.6 | 9,432 | 23,903 | 726 | 4,123 | 859 | 839 | 2,465 | 864 | 5.4 | 799 |
| Oct. | 45,434 | + 0.8 | 34,369 | + 1.5 | 9,425 | 23,965 | 724 | 4,123 | 780 | 762 | 2,377 | 814 | 5.2 | 809 |
| Nov. | 45,490 | + 1.0 | 34,449 | + 1.6 | 9,423 | 24,039 | 739 | 4,133 | 767 | 750 | 2,317 | 789 | 5.1 | 808 |
| Dec. | 45,386 | + 1.1 | 34,284 | + 1.7 | 9,364 | 23,980 | 708 | 4,112 | 957 | 772 | 2,330 | 803 | 5.1 | 794 |
| 2022 Jan. | r 45,111 | r + 1.4 | 34,176 | + 2.0 | 9,332 | 23,900 | 711 | 4,048 | 1,123 | 847 | 2,462 | 903 | 5.4 | 792 |
| Feb. | r 45,171 | r + 1.5 | 34,243 | + 2.2 | 9,346 | 23,939 | 719 | 4,049 | 1,087 | 803 | 2,428 | 884 | 5.3 | 822 |
| Mar. | r 45,265 | r + 1.6 | 34,334 | + 2.1 | 9,369 | 23,999 | 719 | 4,061 | 888 | 727 | 2,362 | 835 | 5.1 | 839 |
| Apr. | r 45,377 | r + 1.6 | 34,368 | + 2.0 | 9,366 | 24,037 | 713 | 4,091 | 453 | 439 | 2,309 | 800 | 5.0 | 852 |
| May | r 45,511 | r + 1.6 | 34,445 | + 2.1 | 9,376 | 24,089 | 719 | 4,131 | 318 | 305 | 2,260 | 771 | 8 4.9 | 865 |
| June | r 45,588 | r + 1.4 | 34,445 | + 1.9 | 9,376 | 24,084 | 724 | 4,164 | 241 | 228 | 2,363 | 761 | 5.2 | 877 |
| July | r 45,567 | r + 1.2 | 9 34,318 | 9 + 1.7 | 9 9,360 | 9 23,986 | 9 718 | 9 4,167 | ... | 9 99 | 2,470 | 801 | 5.4 | 881 |
| Aug. | r 45,602 | r + 1.1 | 9 34,570 | 9 + 1.7 | 9 9,418 | 9 24,167 | 9 726 | 9 4,148 | ... | 9 77 | 2,547 | 827 | 5.6 | 887 |
| Sep. | r 45,849 | r + 1.1 | 9 34,897 | 9 + 1.7 | 9 9,499 | 9 24,399 | 9 733 | 9 4,133 | ... | 9 101 | 2,486 | 782 | 5.4 | 873 |
| Oct. | r 45,937 | r + 1.1 | 9 34,900 | 9 + 1.5 | 9 9,490 | 9 24,420 | 9 734 | 9 4,159 | ... | 9 163 | 2,442 | 764 | 5.3 | 846 |
| Nov. | 10 45,988 | 10 + 1.1 | ... | ... | ... | ... | ... | ... | ... | ... | 2,434 | 770 | 5.3 | 823 |
| Dec. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2,454 | 799 | 5.4 | 781 |

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** Statistical break due to late recording of unemployed persons in the legal category of the Second Book of the Social Security Code (SGB II).

**8** From May 2022, calculated on the basis of new labour force figures. **9** Unadjusted figures estimated by the Federal Employment Agency. In 2020 and 2021, 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 0.9% for persons solely in jobs exempt from social contributions, and by a maximum of 28,1% for cyclically induced short-time work. **10** Initial preliminary estimate by the Federal Statistical Office.

## XI. Economic conditions in Germany

### 7. Prices

| | Harmonised Index of Consumer Prices | | | | | | Memo item: Consumer price index (national concept) | Con-struction price index | Index of producer prices of industrial products sold on the domestic market 3 | Index of producer prices of agri-cultural products 3 | Indices of foreign trade prices | | HWWI Index of World Market Prices of Raw Materials 4 | |
| | | of which: | | | | of which: | | | | | | | | |
| | Total | Food 1,2 | Non-energy industrial goods 1 | Energy 1 | Services 1 | Actual rents for housing | | | | | Exports | Imports | Energy 5 | Other raw materials 6 |
| Period | 2015 = 100 | | | | | | | | | | | | 2020 = 100 | |
| **Index level** | | | | | | | | | | | | | | |
| 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 | 150.2 | 98.7 |
| 2020 | 7 105.8 | 7 110.9 | 7 104.1 | 7 99.0 | 7 106.9 | 107.6 | 7 105.8 | 7 117.0 | 103.8 | 108.0 | 101.7 | 97.3 | 100.0 | 100.0 |
| 2021 | 7 109.2 | 7 114.1 | 7 106.7 | 7 109.0 | 7 109.0 | 109.0 | 7 109.1 | 7 127.0 | 114.7 | 117.5 | 107.4 | 110.4 | 220.7 | 137.6 |
| 2022 | 118.7 | 126.2 | 112.7 | 146.8 | 112.2 | 110.8 | 117.7 | 148.3 | ... | ... | ... | ... | 430.8 | 164.0 |
| 2021 Feb. | 107.4 | 113.0 | 105.5 | 104.1 | 107.3 | 108.5 | 107.0 | 121.2 | 106.9 | 108.9 | 103.3 | 101.8 | 146.0 | 124.7 |
| Mar. | 107.9 | 113.1 | 105.7 | 106.2 | 107.6 | 108.6 | 107.5 | | 107.9 | 114.0 | 104.1 | 103.6 | 150.3 | 130.4 |
| Apr. | 108.4 | 114.5 | 105.8 | 106.1 | 108.3 | 108.7 | 108.2 | 125.1 | 108.8 | 115.9 | 104.9 | 105.0 | 154.1 | 134.3 |
| May | 108.7 | 114.2 | 106.3 | 106.7 | 108.7 | 108.9 | 108.7 | | 110.4 | 118.5 | 105.6 | 106.8 | 168.3 | 144.9 |
| June | 109.1 | 114.1 | 106.5 | 107.6 | 109.1 | 108.9 | 109.1 | | 111.8 | 117.7 | 106.4 | 108.5 | 183.0 | 142.3 |
| July | 7 109.7 | 7 114.4 | 7 106.4 | 7 109.0 | 7 110.2 | 109.1 | 7 110.1 | | 113.9 | 117.2 | 107.7 | 110.9 | 204.8 | 141.9 |
| Aug. | 7 109.8 | 7 114.4 | 7 106.5 | 7 109.4 | 7 110.3 | 109.2 | 7 110.1 | 7 129.4 | 115.6 | 118.7 | 108.5 | 112.4 | 217.6 | 138.9 |
| Sep. | 7 110.1 | 7 114.4 | 7 107.6 | 7 110.1 | 7 109.9 | 109.3 | 7 110.1 | | 118.3 | 117.4 | 109.5 | 113.9 | 256.1 | 136.3 |
| Oct. | 7 110.7 | 7 114.5 | 7 108.0 | 7 114.6 | 7 110.0 | 109.5 | 7 110.7 | | 122.8 | 120.7 | 111.0 | 118.2 | 352.7 | 143.0 |
| Nov. | 7 111.0 | 7 114.9 | 7 108.4 | 7 116.7 | 7 109.5 | 109.5 | 7 110.5 | 7 132.2 | 123.8 | 125.6 | 111.9 | 121.7 | 304.4 | 143.0 |
| Dec. | 7 111.3 | 7 115.7 | 7 108.6 | 7 115.0 | 7 110.3 | 109.6 | 7 111.1 | | 130.0 | 127.2 | 113.0 | 121.8 | 352.9 | 148.3 |
| 2022 Jan. | 112.3 | 117.2 | 108.4 | 123.7 | 109.8 | 109.9 | 111.5 | | 132.8 | 8 129.2 | 115.0 | 127.0 | 327.8 | 157.0 |
| Feb. | 113.3 | 118.2 | 109.1 | 127.4 | 110.2 | 110.0 | 112.5 | 138.1 | 134.6 | 133.4 | 116.1 | 128.6 | 336.0 | 166.5 |
| Mar. | 116.1 | 119.1 | 110.4 | 146.1 | 110.6 | 110.2 | 115.3 | | 141.2 | 153.6 | 120.7 | 135.9 | 504.2 | 185.4 |
| Apr. | 116.9 | 122.2 | 111.3 | 142.7 | 111.7 | 110.4 | 116.2 | | 145.2 | 162.3 | 121.7 | 138.3 | 407.8 | 184.8 |
| May | 118.2 | 124.2 | 112.3 | 146.7 | 112.0 | 110.6 | 117.3 | 147.9 | 147.5 | 160.7 | 122.4 | 139.5 | 366.8 | 178.9 |
| June | 118.1 | 125.4 | 112.5 | 147.8 | 111.0 | 110.8 | 117.4 | | 148.4 | 157.5 | 123.5 | 140.9 | 389.3 | 169.6 |
| July | 119.0 | 127.6 | 112.6 | 147.8 | 112.1 | 110.9 | 118.4 | | 156.3 | 156.5 | 126.0 | 142.9 | 449.8 | 158.0 |
| Aug. | 119.5 | 129.1 | 113.0 | 148.6 | 112.2 | 111.1 | 118.8 | 151.7 | 168.6 | 159.8 | 128.7 | 149.1 | 534.2 | 159.4 |
| Sep. | 122.1 | 130.9 | 114.5 | 158.8 | 113.9 | 111.2 | 121.1 | | 172.5 | 164.7 | 127.9 | 147.8 | 528.5 | 157.4 |
| Oct. | 123.5 | 132.2 | 115.8 | 164.5 | 114.3 | 111.4 | 122.2 | | 165.2 | 166.5 | 125.5 | 146.0 | 442.1 | 154.4 |
| Nov. | 123.5 | 133.6 | 116.3 | 163.5 | 113.7 | 111.6 | 121.6 | 155.4 | 158.7 | 165.7 | 124.9 | 139.4 | 425.7 | 149.5 |
| Dec. | 122.0 | 134.6 | 116.6 | 143.9 | 114.8 | 111.7 | 120.6 | | ... | ... | ... | ... | 435.7 | 147.0 |
| **Annual percentage change** | | | | | | | | | | | | | | |
| 2019 | + 1.4 | + 1.6 | + 1.1 | + 1.4 | + 1.5 | + 1.5 | + 1.4 | + 4.7 | + 1.1 | + 2.3 | + 0.5 | − 1.0 | − 13.7 | − 1.2 |
| 2020 | 7 + 0.4 | 7 + 2.3 | 7 − 0.1 | 7 − 4.5 | 7 + 1.2 | + 1.4 | 7 + 0.5 | 7 + 1.4 | − 1.0 | − 3.1 | − 0.7 | − 4.3 | − 33.4 | + 1.3 |
| 2021 | 7 + 3.2 | 7 + 2.9 | 7 + 2.5 | 7 +10.1 | 7 + 2.0 | + 1.3 | 7 + 3.1 | 7 + 8.6 | +10.5 | + 8.8 | + 5.6 | +13.5 | +120.7 | +37.6 |
| 2022 | + 8.7 | +10.6 | + 5.6 | +34.7 | + 2.9 | + 1.7 | + 7.9 | +16.8 | ... | ... | ... | ... | + 95.2 | +19.2 |
| 2021 Feb. | + 1.6 | + 1.6 | + 1.2 | + 0.2 | + 2.0 | + 1.3 | + 1.3 | + 2.9 | + 1.9 | − 4.6 | + 0.7 | + 1.4 | + 15.9 | + 24.6 |
| Mar. | + 2.0 | + 1.9 | + 0.5 | + 4.5 | + 2.0 | + 1.2 | + 1.7 | | + 3.7 | + 0.3 | + 2.2 | + 6.9 | + 79.1 | + 36.1 |
| Apr. | + 2.1 | + 2.0 | + 0.4 | + 7.6 | + 1.5 | + 1.2 | + 2.0 | | + 5.2 | + 2.8 | + 3.3 | + 10.3 | +128.3 | + 45.0 |
| May | + 2.4 | + 1.5 | + 0.9 | + 9.5 | + 1.9 | + 1.3 | + 2.5 | + 5.7 | + 7.2 | + 8.6 | + 4.2 | + 11.8 | +127.4 | + 56.0 |
| June | + 2.1 | + 1.2 | + 1.6 | + 9.0 | + 0.9 | + 1.2 | + 2.3 | | + 8.5 | + 7.0 | + 5.0 | + 12.9 | +113.0 | + 51.2 |
| July | 7 + 3.1 | 7 + 3.8 | 7 + 3.8 | 7 +11.2 | 7 + 0.7 | + 1.3 | 7 + 3.8 | | + 10.4 | + 9.0 | + 6.3 | + 15.0 | +126.0 | + 48.1 |
| Aug. | 7 + 3.4 | 7 + 3.9 | 7 + 3.8 | 7 +12.1 | 7 + 1.2 | + 1.3 | 7 + 3.9 | 7 + 11.8 | + 12.0 | + 13.3 | + 7.2 | + 16.5 | +127.1 | + 41.2 |
| Sep. | 7 + 4.1 | 7 + 4.1 | 7 + 3.9 | 7 +13.6 | 7 + 1.8 | + 1.4 | 7 + 4.1 | | + 14.2 | + 13.4 | + 8.1 | + 17.7 | +163.7 | + 31.7 |
| Oct. | 7 + 4.6 | 7 + 3.9 | 7 + 3.9 | 7 +18.1 | 7 + 2.2 | + 1.4 | 7 + 4.5 | | + 18.4 | + 16.3 | + 9.5 | + 21.7 | +241.4 | + 36.3 |
| Nov. | 7 + 6.0 | 7 + 4.2 | 7 + 4.2 | 7 +21.6 | 7 + 3.8 | + 1.3 | 7 + 5.2 | 7 + 14.0 | + 19.2 | + 20.9 | + 9.9 | + 24.7 | +178.0 | + 33.5 |
| Dec. | 7 + 5.7 | 7 + 5.3 | 7 + 5.0 | 7 +18.1 | 7 + 3.2 | + 1.3 | 7 + 5.3 | | + 24.2 | + 22.1 | + 10.9 | + 24.0 | +189.7 | + 32.1 |
| 2022 Jan. | + 5.1 | + 4.4 | + 3.1 | +20.6 | + 2.7 | + 1.4 | + 4.9 | | + 25.0 | 8 + 21.0 | + 11.9 | + 26.9 | +131.5 | + 30.2 |
| Feb. | + 5.5 | + 4.6 | + 3.4 | +22.4 | + 2.7 | + 1.4 | + 5.1 | + 13.9 | + 25.9 | + 22.5 | + 12.4 | + 26.3 | +130.1 | + 33.5 |
| Mar. | + 7.6 | + 5.3 | + 4.4 | +37.6 | + 2.8 | + 1.5 | + 7.3 | | + 30.9 | + 34.7 | + 15.9 | + 31.2 | +235.5 | + 42.2 |
| Apr. | + 7.8 | + 6.7 | + 5.2 | +34.5 | + 3.1 | + 1.6 | + 7.4 | | + 33.5 | + 40.0 | + 16.0 | + 31.7 | +164.6 | + 37.6 |
| May | + 8.7 | + 8.8 | + 5.6 | +37.5 | + 3.0 | + 1.6 | + 7.9 | + 18.2 | + 33.6 | + 35.6 | + 15.9 | + 30.6 | +117.9 | + 23.5 |
| June | + 8.2 | + 9.9 | + 5.6 | +37.4 | + 1.7 | + 1.7 | + 7.6 | | + 32.7 | + 33.8 | + 16.1 | + 29.9 | +112.7 | + 19.2 |
| July | + 8.5 | +11.5 | + 5.8 | +35.6 | + 1.7 | + 1.6 | + 7.5 | | + 37.2 | + 33.5 | + 17.0 | + 28.9 | +119.6 | + 11.3 |
| Aug. | + 8.8 | +12.8 | + 6.1 | +35.8 | + 1.7 | + 1.7 | + 7.9 | + 17.2 | + 45.8 | + 34.6 | + 18.6 | + 32.7 | +145.5 | + 14.8 |
| Sep. | + 10.9 | +14.4 | + 6.4 | +44.2 | + 3.6 | + 1.7 | + 10.0 | | + 45.8 | + 40.3 | + 16.8 | + 29.8 | +106.4 | + 15.5 |
| Oct. | + 11.6 | +15.5 | + 7.2 | +43.5 | + 3.9 | + 1.7 | + 10.4 | | + 34.5 | + 37.9 | + 13.1 | + 23.5 | + 25.3 | + 8.0 |
| Nov. | + 11.3 | +16.3 | + 7.3 | +40.1 | + 3.8 | + 1.9 | + 10.0 | + 17.5 | + 28.2 | + 31.9 | + 11.6 | + 14.5 | + 39.8 | + 4.5 |
| Dec. | + 9.6 | +16.3 | + 7.4 | +25.1 | + 4.1 | + 1.9 | + 8.6 | | ... | ... | ... | ... | + 23.5 | − 0.9 |

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** The last data point is at times based on the Bundesbank's own estimates. **2** Including alcoholic beverages and tobacco. **3** Excluding value added tax. **4** For the euro area, in euro. **5** Coal, crude oil (Brent) and natural gas. **6** Food, beverages and tobacco as well as industrial raw materials. **7** Influenced by a temporary reduction of value added tax between July and December 2020. **8** From January 2022 onwards provisional figures.

## XI. Economic conditions in Germany

### 8. Households' income *

| Period | Gross wages and salaries [1] € billion | Annual percentage change | Net wages and salaries [2] € billion | Annual percentage change | Monetary social benefits received [3] € billion | Annual percentage change | Mass income [4] € billion | Annual percentage change | Disposable income [5] € billion | Annual percentage change | Saving [6] € billion | Annual percentage change | Saving ratio [7] As percentage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 1,395.4 | 4.3 | 932.5 | 4.0 | 441.8 | 3.6 | 1,374.3 | 3.9 | 1,905.2 | 3.5 | 202.8 | 8.0 | 10.6 |
| 2018 | 1,462.7 | 4.8 | 976.1 | 4.7 | 455.2 | 3.0 | 1,431.3 | 4.1 | 1,976.6 | 3.7 | 223.2 | 10.1 | 11.3 |
| 2019 | 1,524.4 | 4.2 | 1,022.0 | 4.7 | 476.7 | 4.7 | 1,498.7 | 4.7 | 2,023.6 | 2.4 | 218.2 | − 2.3 | 10.8 |
| 2020 | 1,514.9 | − 0.6 | 1,020.0 | − 0.2 | 524.6 | 10.0 | 1,544.6 | 3.1 | 2,050.1 | 1.3 | 336.6 | 54.3 | 16.4 |
| 2021 | 1,570.6 | 3.7 | 1,062.6 | 4.2 | 532.8 | 1.6 | 1,595.4 | 3.3 | 2,089.9 | 1.9 | 316.0 | − 6.1 | 15.1 |
| 2021 Q2 | 377.1 | 5.8 | 250.7 | 6.8 | 134.9 | 2.2 | 385.6 | 5.2 | 514.9 | 3.5 | 84.8 | − 15.3 | 16.5 |
| Q3 | 393.0 | 5.1 | 271.6 | 5.5 | 131.2 | − 1.8 | 402.8 | 3.0 | 520.4 | 1.7 | 54.4 | − 21.2 | 10.4 |
| Q4 | 438.5 | 4.9 | 295.8 | 5.0 | 129.0 | − 2.6 | 424.8 | 2.6 | 532.5 | 2.7 | 61.2 | − 25.0 | 11.5 |
| 2022 Q1 | 388.5 | 7.3 | 261.3 | 6.9 | 134.2 | − 2.6 | 395.5 | 3.5 | 539.8 | 3.4 | 77.3 | − 33.2 | 14.3 |
| Q2 | 400.3 | 6.2 | 263.9 | 5.3 | 131.1 | − 2.8 | 395.1 | 2.5 | 546.0 | 6.0 | 56.4 | − 33.5 | 10.3 |
| Q3 | 412.5 | 5.0 | 285.8 | 5.2 | 138.7 | 5.8 | 424.5 | 5.4 | 564.1 | 8.4 | 54.0 | − 0.6 | 9.6 |

Source: Federal Statistical Office; figures computed in November 2022. * 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] On an hourly basis 2015=100 | Annual percentage change | On a monthly basis Total 2015=100 | Annual percentage change | Total excluding one-off payments 2015=100 | Annual percentage change | Basic pay rates [2] 2015=100 | Annual percentage change | Memo item: Wages and salaries per employee [3] 2015=100 | Annual percentage change |
|---|---|---|---|---|---|---|---|---|---|---|
| 2015 | 100.0 | 2.4 | 100.0 | 2.3 | 100.0 | 2.4 | 100.0 | 2.4 | 100.0 | 2.9 |
| 2016 | 102.2 | 2.2 | 102.2 | 2.2 | 102.2 | 2.2 | 102.3 | 2.3 | 102.5 | 2.5 |
| 2017 | 104.5 | 2.2 | 104.4 | 2.2 | 104.5 | 2.3 | 104.7 | 2.4 | 105.1 | 2.6 |
| 2018 | 107.6 | 3.0 | 107.5 | 3.0 | 107.5 | 2.8 | 107.6 | 2.8 | 108.4 | 3.2 |
| 2019 | 110.7 | 2.9 | 110.6 | 2.8 | 110.1 | 2.4 | 110.2 | 2.4 | 111.7 | 3.0 |
| 2020 | 112.9 | 2.0 | 112.9 | 2.1 | 112.2 | 1.9 | 112.3 | 1.9 | 111.6 | − 0.1 |
| 2021 | 114.7 | 1.6 | 114.6 | 1.6 | 114.1 | 1.7 | 114.1 | 1.6 | 115.3 | 3.3 |
| 2021 Q2 | 107.6 | 2.3 | 107.6 | 2.3 | 106.8 | 1.4 | 113.9 | 1.5 | 111.2 | 5.4 |
| Q3 | 117.7 | 0.9 | 117.7 | 1.0 | 116.4 | 1.4 | 114.2 | 1.5 | 115.1 | 4.0 |
| Q4 | 127.3 | 1.6 | 127.3 | 1.6 | 127.3 | 2.5 | 114.8 | 1.8 | 127.2 | 3.7 |
| 2022 Q1 | 110.6 | 4.3 | 110.5 | 4.3 | 107.8 | 1.6 | 115.2 | 1.6 | 113.2 | 5.4 |
| Q2 | 109.8 | 2.0 | 109.7 | 1.9 | 109.0 | 2.1 | 116.3 | 2.1 | 116.0 | 4.3 |
| Q3 | 120.7 | 2.5 | 120.6 | 2.5 | 119.3 | 2.5 | 116.7 | 2.2 | 119.2 | 3.6 |
| 2022 May | 111.1 | 4.2 | 111.0 | 4.2 | 109.1 | 2.2 | 116.4 | 2.2 | . | . |
| June | 108.8 | − 0.3 | 108.7 | − 0.4 | 108.9 | 2.2 | 116.5 | 2.2 | . | . |
| July | 143.8 | 3.4 | 143.7 | 3.4 | 139.7 | 3.2 | 116.6 | 2.2 | . | . |
| Aug. | 109.3 | 1.9 | 109.2 | 1.9 | 109.1 | 2.2 | 116.7 | 2.2 | . | . |
| Sep. | 109.1 | 2.0 | 109.1 | 2.0 | 109.1 | 2.0 | 116.8 | 2.1 | . | . |
| Oct. | 109.8 | 0.9 | 109.7 | 0.8 | 109.6 | 0.7 | 117.3 | 2.3 | . | . |
| Nov. | 167.8 | 2.6 | 167.6 | 2.5 | 167.8 | 2.5 | 117.3 | 2.2 | . | . |

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 2022.

## XI. Economic conditions in Germany

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

End of year/half

| | | Assets | | | | | | | | | Equity and liabilities | | | | | | |
| | | | of which: | | | | of which: | | | | | Liabilities | | | | | |
| | | | | | | | | | | | | | Long-term | | Short-term | | |
| | | | | | | | | | | | | | | | | of which: | |
| Period | 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)** | | | | | | | | | | | | | | | | |
| 2018³ | 2,589.0 | 1,536.7 | 540.8 | 610.8 | 288.5 | 1,052.3 | 249.5 | 234.7 | 172.6 | 789.8 | 1,799.2 | 925.7 | 558.7 | 873.4 | 257.5 | 205.0 |
| 2019 | 2,800.6 | 1,769.7 | 586.3 | 737.1 | 333.4 | 1,030.9 | 257.5 | 237.6 | 168.4 | 821.0 | 1,979.6 | 1,091.2 | 676.3 | 888.4 | 289.8 | 207.6 |
| 2020 | 2,850.0 | 1,797.3 | 607.5 | 733.1 | 335.1 | 1,052.7 | 243.6 | 225.9 | 240.5 | 811.5 | 2,038.5 | 1,181.5 | 746.3 | 857.0 | 304.4 | 196.1 |
| 2021 | 3,292.0 | 1,971.6 | 680.1 | 773.8 | 368.7 | 1,320.4 | 272.1 | 262.8 | 261.5 | 994.4 | 2,297.6 | 1,206.9 | 772.1 | 1,090.7 | 391.8 | 238.0 |
| 2020 H2 | 2,850.0 | 1,797.3 | 607.5 | 733.1 | 335.1 | 1,052.7 | 243.6 | 225.9 | 240.5 | 811.5 | 2,038.5 | 1,181.5 | 746.3 | 857.0 | 304.4 | 196.1 |
| 2021 H1 | 3,017.6 | 1,877.0 | 649.3 | 745.0 | 343.8 | 1,140.6 | 256.2 | 242.3 | 238.5 | 906.9 | 2,110.7 | 1,178.6 | 763.1 | 932.1 | 330.3 | 206.9 |
| H2 | 3,292.0 | 1,971.6 | 680.1 | 773.8 | 368.7 | 1,320.4 | 272.1 | 262.8 | 261.5 | 994.4 | 2,297.6 | 1,206.9 | 772.1 | 1,090.7 | 391.8 | 238.0 |
| 2022 H1 p | 3,593.6 | 2,108.1 | 719.1 | 796.3 | 387.5 | 1,485.5 | 322.4 | 286.4 | 225.4 | 1,075.4 | 2,518.2 | 1,237.0 | 847.9 | 1,281.2 | 430.7 | 262.5 |
| **As a percentage of total assets** | | | | | | | | | | | | | | | | |
| 2018³ | 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 | 10.0 | 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 | 24.2 | 31.7 | 10.4 | 7.4 |
| 2020 | 100.0 | 63.1 | 21.3 | 25.7 | 11.8 | 36.9 | 8.6 | 7.9 | 8.4 | 28.5 | 71.5 | 41.5 | 26.2 | 30.1 | 10.7 | 6.9 |
| 2021 | 100.0 | 59.9 | 20.7 | 23.5 | 11.2 | 40.1 | 8.3 | 8.0 | 7.9 | 30.2 | 69.8 | 36.7 | 23.5 | 33.1 | 11.9 | 7.2 |
| 2020 H2 | 100.0 | 63.1 | 21.3 | 25.7 | 11.8 | 36.9 | 8.6 | 7.9 | 8.4 | 28.5 | 71.5 | 41.5 | 26.2 | 30.1 | 10.7 | 6.9 |
| 2021 H1 | 100.0 | 62.2 | 21.5 | 24.7 | 11.4 | 37.8 | 8.5 | 8.0 | 7.9 | 30.1 | 70.0 | 39.1 | 25.3 | 30.9 | 10.9 | 6.9 |
| H2 | 100.0 | 59.9 | 20.7 | 23.5 | 11.2 | 40.1 | 8.3 | 8.0 | 7.9 | 30.2 | 69.8 | 36.7 | 23.5 | 33.1 | 11.9 | 7.2 |
| 2022 H1 p | 100.0 | 58.7 | 20.0 | 22.2 | 10.8 | 41.3 | 9.0 | 8.0 | 6.3 | 29.9 | 70.1 | 34.4 | 23.6 | 35.7 | 12.0 | 7.3 |
| **Groups with a focus on the production sector (€ billion) 2** | | | | | | | | | | | | | | | | |
| 2018³ | 2,149.3 | 1,215.4 | 388.1 | 472.9 | 277.5 | 933.9 | 234.5 | 188.6 | 139.2 | 636.7 | 1,512.6 | 760.2 | 442.4 | 752.3 | 236.2 | 152.5 |
| 2019 | 2,302.9 | 1,396.4 | 419.6 | 565.4 | 319.7 | 906.5 | 243.8 | 188.5 | 136.8 | 662.2 | 1,640.7 | 887.5 | 523.8 | 753.2 | 257.5 | 158.0 |
| 2020 | 2,265.0 | 1,354.9 | 399.0 | 543.5 | 320.0 | 910.1 | 228.7 | 179.5 | 187.9 | 636.2 | 1,628.7 | 904.7 | 536.9 | 724.0 | 267.3 | 149.8 |
| 2021 | 2,626.3 | 1,479.3 | 441.7 | 573.9 | 347.4 | 1,147.0 | 254.4 | 206.3 | 204.2 | 764.7 | 1,861.6 | 918.5 | 548.5 | 943.1 | 356.4 | 184.0 |
| 2020 H2 | 2,265.0 | 1,354.9 | 399.0 | 543.5 | 320.0 | 910.1 | 228.7 | 179.5 | 187.9 | 636.2 | 1,628.7 | 904.7 | 536.9 | 724.0 | 267.3 | 149.8 |
| 2021 H1 | 2,392.8 | 1,398.3 | 416.6 | 551.0 | 322.5 | 994.6 | 240.6 | 190.9 | 190.1 | 703.5 | 1,689.4 | 892.3 | 543.2 | 797.1 | 294.2 | 162.1 |
| H2 | 2,626.3 | 1,479.3 | 441.7 | 573.9 | 347.4 | 1,147.0 | 254.4 | 206.3 | 204.2 | 764.7 | 1,861.6 | 918.5 | 548.5 | 943.1 | 356.4 | 184.0 |
| 2022 H1 p | 2,898.3 | 1,582.5 | 462.4 | 583.8 | 362.8 | 1,315.9 | 303.6 | 222.5 | 177.2 | 830.9 | 2,067.4 | 945.2 | 616.6 | 1,122.2 | 389.8 | 207.6 |
| **As a percentage of total assets** | | | | | | | | | | | | | | | | |
| 2018³ | 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 | 71.3 | 38.5 | 22.7 | 32.7 | 11.2 | 6.9 |
| 2020 | 100.0 | 59.8 | 17.6 | 24.0 | 14.1 | 40.2 | 10.1 | 7.9 | 8.3 | 28.1 | 71.9 | 39.9 | 23.7 | 32.0 | 11.8 | 6.6 |
| 2021 | 100.0 | 56.3 | 16.8 | 21.9 | 13.2 | 43.7 | 9.7 | 7.9 | 7.8 | 29.1 | 70.9 | 35.0 | 20.9 | 35.9 | 13.6 | 7.0 |
| 2020 H2 | 100.0 | 59.8 | 17.6 | 24.0 | 14.1 | 40.2 | 10.1 | 7.9 | 8.3 | 28.1 | 71.9 | 39.9 | 23.7 | 32.0 | 11.8 | 6.6 |
| 2021 H1 | 100.0 | 58.4 | 17.4 | 23.0 | 13.5 | 41.6 | 10.1 | 8.0 | 7.9 | 29.4 | 70.6 | 37.3 | 22.7 | 33.3 | 12.3 | 6.8 |
| H2 | 100.0 | 56.3 | 16.8 | 21.9 | 13.2 | 43.7 | 9.7 | 7.9 | 7.8 | 29.1 | 70.9 | 35.0 | 20.9 | 35.9 | 13.6 | 7.0 |
| 2022 H1 p | 100.0 | 54.6 | 16.0 | 20.1 | 12.5 | 45.4 | 10.5 | 7.7 | 6.1 | 28.7 | 71.3 | 32.6 | 21.3 | 38.7 | 13.5 | 7.2 |
| **Groups with a focus on the services sector (€ billion)** | | | | | | | | | | | | | | | | |
| 2018³ | 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 |
| 2020 | 585.0 | 442.4 | 208.5 | 189.6 | 15.1 | 142.6 | 14.9 | 46.4 | 52.6 | 175.3 | 409.7 | 276.7 | 209.4 | 133.0 | 37.1 | 46.3 |
| 2021 | 665.7 | 492.2 | 238.5 | 200.0 | 21.3 | 173.5 | 17.7 | 56.5 | 57.3 | 229.7 | 436.0 | 288.4 | 223.6 | 147.6 | 35.5 | 53.9 |
| 2020 H2 | 585.0 | 442.4 | 208.5 | 189.6 | 15.1 | 142.6 | 14.9 | 46.4 | 52.6 | 175.3 | 409.7 | 276.7 | 209.4 | 133.0 | 37.1 | 46.3 |
| 2021 H1 | 624.7 | 478.7 | 232.6 | 194.0 | 21.3 | 146.1 | 15.5 | 51.4 | 48.4 | 203.4 | 421.3 | 286.4 | 219.9 | 135.0 | 36.1 | 44.8 |
| H2 | 665.7 | 492.2 | 238.5 | 200.0 | 21.3 | 173.5 | 17.7 | 56.5 | 57.3 | 229.7 | 436.0 | 288.4 | 223.6 | 147.6 | 35.5 | 53.9 |
| 2022 H1 p | 695.3 | 525.7 | 256.7 | 212.5 | 24.8 | 169.6 | 18.8 | 63.8 | 48.2 | 244.5 | 450.8 | 291.8 | 231.4 | 159.0 | 40.9 | 54.9 |
| **As a percentage of total assets** | | | | | | | | | | | | | | | | |
| 2018³ | 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 |
| 2020 | 100.0 | 75.6 | 35.6 | 32.4 | 2.6 | 24.4 | 2.6 | 7.9 | 9.0 | 30.0 | 70.0 | 47.3 | 35.8 | 22.7 | 6.3 | 7.9 |
| 2021 | 100.0 | 73.9 | 35.8 | 30.0 | 3.2 | 26.1 | 2.7 | 8.5 | 8.6 | 34.5 | 65.5 | 43.3 | 33.6 | 22.2 | 5.3 | 8.1 |
| 2020 H2 | 100.0 | 75.6 | 35.6 | 32.4 | 2.6 | 24.4 | 2.6 | 7.9 | 9.0 | 30.0 | 70.0 | 47.3 | 35.8 | 22.7 | 6.3 | 7.9 |
| 2021 H1 | 100.0 | 76.6 | 37.2 | 31.1 | 3.4 | 23.4 | 2.5 | 8.2 | 7.8 | 32.6 | 67.4 | 45.8 | 35.2 | 21.6 | 5.8 | 7.2 |
| H2 | 100.0 | 73.9 | 35.8 | 30.0 | 3.2 | 26.1 | 2.7 | 8.5 | 8.6 | 34.5 | 65.5 | 43.3 | 33.6 | 22.2 | 5.3 | 8.1 |
| 2022 H1 p | 100.0 | 75.6 | 36.9 | 30.6 | 3.6 | 24.4 | 2.7 | 9.2 | 6.9 | 35.2 | 64.8 | 42.0 | 33.3 | 22.9 | 5.9 | 7.9 |

* 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. Ex-cluding 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 € billion [3] | Revenues Annual per-centage change [4] | EBITDA [1] € billion [3] | EBITDA Annual per-centage change [4] | EBITDA % of revenues Weighted average % | EBITDA % of revenues Annual change in percentage points [4] | Distribution [2] First quartile % | Distribution [2] Median % | Distribution [2] Third quartile % | Operating income (EBIT) € billion [3] | EBIT Annual per-centage change [4] | EBIT % of revenues Weighted average % | EBIT % of revenues Annual change in percentage points [4] | Distribution [2] First quartile % | Distribution [2] Median % | Distribution [2] Third quartile % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | | | | | | | | | | | | | | | | |
| 2014 | 1,564.3 | 1.0 | 198.7 | 5.0 | 12.7 | 0.5 | 5.9 | 10.3 | 17.4 | 109.3 | 8.6 | 7.0 | 0.5 | 1.9 | 6.2 | 11.1 |
| 2015 | 1,633.9 | 6.9 | 195.9 | − 1.1 | 12.0 | − 1.0 | 6.3 | 10.6 | 17.8 | 91.5 | − 16.4 | 5.6 | − 1.5 | 1.8 | 6.7 | 11.3 |
| 2016 | 1,624.3 | − 0.4 | 214.4 | 7.8 | 13.2 | 1.0 | 6.7 | 11.4 | 17.9 | 111.7 | 9.0 | 6.9 | 0.5 | 2.6 | 6.7 | 12.0 |
| 2017 | 1,719.3 | 5.1 | 243.4 | 14.6 | 14.2 | 1.2 | 7.0 | 11.0 | 18.0 | 141.9 | 33.3 | 8.3 | 1.8 | 2.5 | 6.8 | 12.1 |
| 2018[6] | 1,706.8 | 0.7 | 232.8 | − 0.9 | 13.6 | − 0.2 | 6.1 | 10.6 | 17.8 | 129.2 | − 6.3 | 7.6 | − 0.6 | 2.1 | 6.5 | 11.9 |
| 2019 | 1,764.6 | 2.6 | 233.6 | 0.4 | 13.2 | − 0.3 | 6.9 | 12.2 | 19.2 | 105.5 | − 17.9 | 6.0 | − 1.5 | 1.6 | 5.8 | 11.8 |
| 2020 | 1,632.8 | − 8.8 | 213.6 | − 7.7 | 13.1 | 0.2 | 6.5 | 11.5 | 17.9 | 52.1 | − 41.0 | 3.2 | − 2.1 | − 0.8 | 4.9 | 10.5 |
| 2021 | 1,994.7 | 20.4 | 297.7 | 37.7 | 14.9 | 1.9 | 7.8 | 13.4 | 19.9 | 161.5 | 212.5 | 8.1 | 5.0 | 2.9 | 8.2 | 12.2 |
| 2017 H2 | 878.5 | 3.5 | 117.4 | 14.6 | 13.4 | 1.3 | 6.9 | 12.0 | 19.2 | 63.0 | 38.2 | 7.2 | 1.8 | 3.2 | 7.4 | 12.4 |
| 2018 H1[6] | 848.2 | − 0.1 | 120.8 | − 2.1 | 14.2 | − 0.3 | 5.1 | 10.6 | 18.2 | 72.7 | − 5.3 | 8.6 | − 0.5 | 1.7 | 6.4 | 12.5 |
| H2 | 869.4 | 1.4 | 114.4 | 0.5 | 13.2 | − 0.1 | 6.3 | 11.2 | 18.0 | 58.0 | − 7.6 | 6.7 | − 0.6 | 2.1 | 6.8 | 12.5 |
| 2019 H1 | 861.3 | 2.7 | 112.3 | − 4.0 | 13.0 | − 0.9 | 6.5 | 11.8 | 18.6 | 53.4 | − 23.3 | 6.2 | − 2.1 | 1.5 | 5.7 | 11.7 |
| H2 | 903.7 | 2.4 | 121.3 | 4.8 | 13.4 | 0.3 | 6.6 | 11.8 | 20.0 | 52.0 | − 11.4 | 5.8 | − 0.9 | 0.8 | 6.1 | 12.5 |
| 2020 H1 | 744.5 | − 14.4 | 78.2 | − 34.1 | 10.5 | − 3.0 | 4.8 | 9.9 | 16.7 | 7.9 | − 88.0 | 1.1 | − 5.3 | − 2.1 | 3.5 | 8.8 |
| H2 | 888.4 | − 3.3 | 135.4 | 17.1 | 15.2 | 2.8 | 7.6 | 13.2 | 19.8 | 44.2 | 8.7 | 5.0 | 0.7 | 1.7 | 6.5 | 11.6 |
| 2021 H1 | 920.0 | 20.3 | 151.5 | 87.2 | 16.5 | 5.9 | 7.4 | 12.6 | 19.5 | 84.5 | . | 9.2 | 8.3 | 2.3 | 7.8 | 12.2 |
| H2 | 1,075.6 | 20.4 | 146.4 | 8.1 | 13.6 | − 1.6 | 7.9 | 13.2 | 20.8 | 77.0 | 73.1 | 7.2 | 2.2 | 2.9 | 7.7 | 13.4 |
| 2022 H1[P] | 1,149.7 | 23.5 | 161.0 | 4.8 | 14.0 | − 2.5 | 6.1 | 11.5 | 18.4 | 84.9 | − 1.6 | 7.4 | − 1.9 | 1.6 | 6.4 | 11.8 |
| **Groups with a focus on the production sector [5]** | | | | | | | | | | | | | | | | |
| 2014 | 1,220.0 | 1.0 | 152.2 | 5.9 | 12.5 | 0.6 | 5.8 | 10.1 | 15.5 | 85.2 | 9.8 | 7.0 | 0.6 | 1.7 | 6.0 | 10.6 |
| 2015 | 1,309.7 | 7.0 | 149.0 | − 2.6 | 11.4 | − 1.1 | 6.3 | 10.5 | 16.3 | 69.1 | − 19.7 | 5.3 | − 1.8 | 2.2 | 6.6 | 10.4 |
| 2016 | 1,295.9 | − 0.8 | 161.9 | 6.3 | 12.5 | 0.8 | 6.5 | 10.6 | 16.0 | 84.8 | 4.2 | 6.5 | 0.3 | 2.8 | 6.3 | 10.5 |
| 2017 | 1,395.9 | 5.5 | 187.5 | 16.6 | 13.4 | 1.3 | 7.1 | 11.0 | 15.8 | 112.5 | 40.6 | 8.1 | 2.0 | 3.2 | 6.7 | 10.4 |
| 2018[6] | 1,367.7 | 1.0 | 175.7 | − 1.5 | 12.9 | − 0.3 | 6.9 | 10.7 | 16.0 | 100.7 | − 7.1 | 7.4 | − 0.6 | 2.8 | 6.9 | 11.4 |
| 2019 | 1,410.9 | 2.0 | 168.1 | − 4.4 | 11.9 | − 0.8 | 6.9 | 11.3 | 16.6 | 76.3 | − 23.8 | 5.4 | − 1.8 | 1.4 | 5.7 | 10.1 |
| 2020 | 1,285.2 | − 9.4 | 143.6 | − 8.6 | 11.2 | 0.1 | 5.7 | 10.6 | 16.5 | 29.1 | − 48.1 | 2.3 | − 2.3 | − 0.7 | 4.3 | 9.8 |
| 2021 | 1,585.8 | 22.4 | 208.9 | 45.9 | 13.2 | 2.1 | 7.9 | 12.8 | 17.9 | 118.6 | 325.6 | 7.5 | 5.4 | 2.8 | 7.8 | 11.1 |
| 2017 H2 | 701.4 | 3.7 | 86.0 | 14.2 | 12.3 | 1.1 | 7.0 | 11.7 | 16.9 | 46.2 | 45.5 | 6.6 | 1.9 | 3.6 | 7.2 | 10.8 |
| 2018 H1[6] | 681.9 | − 0.1 | 94.9 | − 3.4 | 13.9 | − 0.5 | 7.0 | 10.9 | 16.7 | 60.0 | − 5.9 | 8.8 | − 0.6 | 2.9 | 6.8 | 11.5 |
| H2 | 695.4 | 2.1 | 83.1 | 0.7 | 12.0 | − 0.2 | 6.2 | 11.1 | 16.2 | 42.1 | − 8.7 | 6.1 | − 0.7 | 2.0 | 6.4 | 11.4 |
| 2019 H1 | 689.9 | 2.4 | 83.3 | − 8.8 | 12.1 | − 1.5 | 7.1 | 10.9 | 16.1 | 41.9 | − 26.8 | 6.1 | − 2.4 | 1.8 | 6.0 | 9.5 |
| H2 | 721.0 | 1.7 | 84.8 | 0.3 | 11.8 | − 0.2 | 6.1 | 10.8 | 16.9 | 34.4 | − 19.7 | 4.8 | − 1.3 | 0.6 | 5.2 | 11.1 |
| 2020 H1 | 580.6 | − 16.0 | 49.0 | − 42.4 | 8.4 | − 3.8 | 4.4 | 8.8 | 14.9 | 0.2 | − 101.7 | 0.0 | − 6.2 | − 2.1 | 3.1 | 7.8 |
| H2 | 704.6 | − 3.0 | 94.6 | 25.4 | 13.4 | 3.4 | 7.0 | 12.1 | 18.6 | 28.9 | 19.7 | 4.1 | 1.1 | 0.3 | 6.0 | 10.5 |
| 2021 H1 | 731.9 | 24.0 | 111.2 | 126.9 | 15.2 | 6.9 | 8.2 | 12.6 | 18.6 | 66.7 | . | 9.1 | 9.3 | 2.9 | 7.9 | 12.1 |
| H2 | 854.2 | 21.1 | 97.7 | 3.8 | 11.4 | − 1.9 | 7.8 | 12.3 | 17.5 | 51.9 | 80.7 | 6.1 | 2.0 | 2.6 | 7.0 | 11.5 |
| 2022 H1[P] | 923.4 | 23.8 | 110.9 | − 2.5 | 12.0 | − 3.2 | 7.7 | 11.5 | 16.3 | 59.0 | − 14.2 | 6.4 | − 2.8 | 2.3 | 6.4 | 10.4 |
| **Groups with a focus on the services sector** | | | | | | | | | | | | | | | | |
| 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 |
| 2020 | 347.6 | − 6.1 | 70.0 | − 5.4 | 20.1 | 0.1 | 6.9 | 13.3 | 22.1 | 23.0 | − 22.1 | 6.6 | − 1.4 | − 1.2 | 6.5 | 12.2 |
| 2021 | 408.9 | 13.0 | 88.8 | 21.6 | 21.7 | 1.6 | 7.6 | 15.0 | 24.0 | 42.8 | 79.7 | 10.5 | 3.9 | 3.0 | 9.2 | 15.6 |
| 2017 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 | 163.9 | − 8.1 | 29.2 | − 9.4 | 17.8 | − 0.3 | 5.6 | 10.8 | 21.2 | 7.7 | − 36.4 | 4.7 | − 2.1 | − 2.2 | 4.3 | 10.9 |
| H2 | 183.8 | − 4.2 | 40.8 | − 2.2 | 22.2 | 0.4 | 8.9 | 14.7 | 23.3 | 15.3 | − 12.8 | 8.3 | − 0.9 | 2.7 | 7.5 | 13.3 |
| 2021 H1 | 188.1 | 7.7 | 40.3 | 26.1 | 21.5 | 3.1 | 6.9 | 12.6 | 24.5 | 17.8 | 119.9 | 9.5 | 4.8 | 0.9 | 6.9 | 13.6 |
| H2 | 221.4 | 17.9 | 48.7 | 18.2 | 22.0 | 0.1 | 9.4 | 16.5 | 24.7 | 25.1 | 59.1 | 11.3 | 3.0 | 3.8 | 9.5 | 17.7 |
| 2022 H1[P] | 226.3 | 22.0 | 50.1 | 25.3 | 22.2 | 0.6 | 4.6 | 11.6 | 20.9 | 25.9 | 46.4 | 11.5 | 1.9 | − 0.5 | 6.3 | 13.5 |

* 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 H1 2018 or 2018 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

| | | | | 2022 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Item | 2019 r | 2020 r | 2021 r | Q1 r | Q2 r | Q3 | August r | September | October p |
| I. Current Account | + 274,072 | + 188,715 | + 288,681 | − 4,710 | − 50,894 | − 74,430 | − 31,641 | − 22,025 | − 4,394 |
| 1. Goods | | | | | | | | | |
| Receipts | 2,391,225 | 2,186,895 | 2,508,334 | 678,774 | 726,378 | 745,649 | 238,359 | 266,615 | 260,717 |
| Expenditure | 2,082,442 | 1,844,858 | 2,218,075 | 680,827 | 748,938 | 796,449 | 265,779 | 276,911 | 263,331 |
| Balance | + 308,783 | + 342,038 | + 290,259 | − 2,054 | − 22,561 | − 50,800 | − 27,420 | − 10,296 | − 2,614 |
| 2. Services | | | | | | | | | |
| Receipts | 1,017,051 | 874,787 | 1,011,875 | 271,716 | 301,186 | 323,465 | 105,646 | 108,731 | 105,317 |
| Expenditure | 983,596 | 890,415 | 920,099 | 243,595 | 258,163 | 307,877 | 100,143 | 108,475 | 97,652 |
| Balance | + 33,456 | − 15,628 | + 91,776 | + 28,122 | + 43,023 | + 15,590 | + 5,504 | + 256 | + 7,665 |
| 3. Primary income | | | | | | | | | |
| Receipts | 878,662 | 719,224 | 825,878 | 203,759 | 223,007 | 212,738 | 67,593 | 76,393 | 67,843 |
| Expenditure | 799,268 | 699,098 | 760,042 | 191,480 | 257,798 | 209,714 | 62,558 | 75,273 | 66,135 |
| Balance | + 79,392 | + 20,127 | + 65,840 | + 12,279 | − 34,790 | + 3,025 | + 5,035 | + 1,121 | + 1,708 |
| 4. Secondary income | | | | | | | | | |
| Receipts | 123,566 | 127,112 | 150,864 | 35,686 | 42,172 | 36,170 | 11,247 | 12,758 | 12,919 |
| Expenditure | 271,125 | 284,932 | 310,055 | 78,744 | 78,739 | 78,413 | 26,007 | 25,863 | 24,071 |
| Balance | − 147,560 | − 157,820 | − 159,191 | − 43,058 | − 36,567 | − 42,243 | − 14,760 | − 13,105 | − 11,153 |
| II. Capital account | − 26,436 | + 3,415 | + 45,816 | + 7,773 | + 104,051 | + 3,222 | + 92 | + 1,339 | + 1,762 |
| III. Financial account 1 | + 199,077 | + 182,731 | + 313,941 | − 6,488 | + 24,709 | − 50,157 | − 7,980 | − 49,979 | + 21,946 |
| 1. Direct investment | + 64,432 | − 197,486 | + 294,689 | + 14,238 | + 112,324 | − 17,996 | − 30,019 | + 24,899 | + 8,649 |
| By resident units abroad the euro area | + 43,613 | − 116,606 | + 162,013 | + 56,614 | + 64,449 | + 68,707 | + 44,851 | + 1,540 | + 6,175 |
| By non-resident units of the euro area | − 20,818 | + 80,883 | − 132,674 | + 42,377 | − 47,875 | + 86,702 | + 74,870 | − 23,359 | − 2,474 |
| 2. Portfolio investment | − 138,253 | + 530,060 | + 317,164 | − 48,342 | − 41,279 | − 178,400 | − 60,878 | − 154,050 | − 41,133 |
| By resident units abroad the euro area | + 435,232 | + 686,301 | + 790,249 | − 17,960 | − 127,429 | − 184,430 | − 32,291 | − 118,247 | − 4,834 |
| Equity and investment fund shares | + 63,391 | + 319,816 | + 369,550 | − 16,552 | − 61,254 | − 107,744 | − 34,761 | − 56,795 | − 18,888 |
| Short-term debt securities | + 6,403 | + 120,830 | + 119,474 | − 61,204 | − 69,520 | − 51,570 | + 10,141 | − 59,653 | + 13,141 |
| Long-term debt securities | + 365,436 | + 245,652 | + 301,229 | + 59,795 | + 3,343 | − 25,116 | − 7,671 | − 1,799 | + 913 |
| By non-resident units of the euro area | + 573,487 | + 156,239 | + 473,083 | + 30,382 | − 86,151 | − 6,030 | + 28,587 | + 35,803 | + 36,300 |
| Equity and investment fund shares | + 330,676 | + 166,846 | + 667,112 | − 48,860 | − 11,141 | − 15,974 | + 5,470 | − 23,373 | + 70,293 |
| Short-term debt securities | − 27,515 | + 114,269 | + 32,178 | + 81,293 | − 81,013 | − 32,430 | − 16,411 | + 26,499 | + 37,802 |
| Long-term debt securities | + 270,324 | − 124,879 | − 226,204 | − 2,052 | + 6,002 | + 42,374 | + 39,528 | + 32,677 | + 3,808 |
| 3. Financial derivatives and employee stock options | + 7,219 | + 18,890 | + 68,591 | − 1,570 | + 28,901 | + 44,130 | + 14,903 | + 17,624 | + 7,176 |
| 4. Other investment | + 259,684 | − 181,927 | − 496,562 | + 30,076 | − 77,556 | + 94,714 | + 65,850 | + 57,955 | + 43,478 |
| Eurosystem | + 143,398 | − 206,704 | − 444,600 | + 186,548 | − 3,005 | + 66,052 | − 30,561 | + 67,418 | + 45,194 |
| General government | + 4,818 | − 15,761 | − 71,715 | − 152 | − 29,299 | − 22,437 | − 859 | − 9,020 | + 4,597 |
| MFIs 2 | + 189,827 | + 19,340 | − 126,784 | − 234,208 | − 93,345 | − 37,095 | + 83,856 | − 77,992 | + 4,195 |
| Enterprises and households | − 78,362 | + 21,193 | + 146,536 | + 77,888 | + 48,093 | + 88,195 | + 13,415 | + 77,550 | − 10,507 |
| 5. Reserve assets | + 5,999 | + 13,193 | + 130,061 | − 888 | + 2,319 | + 7,394 | + 2,164 | + 3,592 | + 3,776 |
| IV. Net errors and omissions | − 48,560 | − 9,400 | − 20,557 | − 9,549 | − 28,445 | + 21,051 | + 23,569 | − 29,293 | + 24,577 |

* Source: ECB, according to the international standards of the International Monetary Fund's Balance of Payments Manual (sixth edition). **1** Increase: + / decrease: -. **2** Excluding the Eurosystem.

## XII. External sector

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

€ million

| Zeit | Current Account Total | Goods Total | Goods of which: Supplementary trade items [1] | Services | Primary income | Secondary income | Balance of capital account [2] | Financial account [3] Total | Financial account of which: Reserve assets | Errors and omissions [4] |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 | + 255,814 | + 255,077 | − 13,613 | − 23,994 | + 76,404 | − 51,673 | − 2,936 | + 276,697 | + 1,269 | + 23,819 |
| 2018 | + 267,729 | + 221,983 | − 22,985 | − 15,806 | + 111,890 | − 50,338 | + 580 | + 246,928 | + 392 | + 21,381 |
| 2019 | + 262,903 | + 215,456 | − 30,887 | − 18,100 | + 115,359 | − 49,811 | − 887 | + 186,317 | − 544 | − 75,700 |
| 2020 | + 238,741 | + 189,963 | − 7,246 | + 2,725 | + 98,780 | − 52,727 | − 5,829 | + 216,515 | − 51 | − 16,397 |
| 2021 | + 264,954 | + 194,963 | + 3,091 | − 2,107 | + 127,142 | − 55,044 | − 588 | + 314,750 | + 31,892 | + 50,383 |
| 2019 Q4 | + 68,030 | + 49,432 | − 11,400 | − 3,126 | + 35,102 | − 13,378 | − 1,412 | + 83,477 | − 576 | + 16,860 |
| 2020 Q1 | + 62,570 | + 52,090 | − 2,656 | − 2,238 | + 27,396 | − 14,679 | − 608 | + 33,152 | + 133 | − 28,810 |
| Q2 | + 37,621 | + 28,076 | − 1,806 | + 5,190 | + 13,563 | − 9,209 | + 55 | + 25,747 | + 243 | − 11,929 |
| Q3 | + 62,788 | + 55,716 | − 695 | − 5,827 | + 23,501 | − 10,601 | − 1,493 | + 65,414 | − 1,276 | + 4,118 |
| Q4 | + 75,762 | + 54,082 | − 2,089 | + 5,599 | + 34,320 | − 18,238 | − 3,783 | + 92,203 | + 848 | + 20,223 |
| 2021 Q1 | + 76,516 | + 58,643 | + 1,200 | + 3,264 | + 31,911 | − 17,302 | − 322 | + 106,919 | + 385 | + 30,725 |
| Q2 | + 65,741 | + 48,853 | + 194 | + 6,415 | + 18,806 | − 8,332 | − 1,755 | + 84,594 | + 58 | + 20,608 |
| Q3 | + 61,739 | + 49,114 | − 34 | − 7,569 | + 34,408 | − 14,214 | + 1,890 | + 36,922 | + 31,199 | − 26,707 |
| Q4 | + 60,958 | + 38,353 | + 2,119 | − 4,217 | + 42,017 | − 15,196 | − 401 | + 86,314 | + 250 | + 25,757 |
| 2022 Q1 | + 54,430 | + 35,793 | + 3,132 | − 1,716 | + 37,191 | − 16,836 | − 1,459 | + 94,003 | + 2,200 | + 41,031 |
| Q2 | + 24,259 | + 26,711 | + 8,139 | − 7,258 | + 16,119 | − 11,313 | − 3,775 | + 55,875 | + 597 | + 35,390 |
| Q3 | + 18,970 | + 21,641 | − 473 | − 21,443 | + 35,140 | − 16,368 | − 4,672 | + 5,820 | + 784 | − 8,478 |
| 2020 June | + 20,700 | + 14,971 | − 1,791 | + 2,406 | + 4,538 | − 1,214 | − 47 | + 12,165 | − 740 | − 8,489 |
| July | + 20,883 | + 20,319 | − 330 | − 2,709 | + 7,024 | − 3,751 | − 1,005 | + 14,644 | − 611 | − 5,234 |
| Aug. | + 16,852 | + 13,976 | + 38 | − 2,543 | + 8,850 | − 3,432 | + 412 | + 30,512 | − 611 | + 13,248 |
| Sep. | + 25,053 | + 21,421 | − 404 | − 575 | + 7,627 | − 3,419 | − 900 | + 20,258 | − 53 | + 3,895 |
| Oct. | + 24,773 | + 20,389 | − 415 | + 782 | + 8,128 | − 4,527 | − 1,386 | + 25,983 | + 140 | + 2,596 |
| Nov. | + 22,799 | + 18,384 | + 164 | + 2,120 | + 9,835 | − 7,541 | − 2,266 | + 23,695 | + 89 | + 3,162 |
| Dec. | + 28,191 | + 15,308 | − 1,838 | + 2,697 | + 16,356 | − 6,171 | − 132 | + 42,524 | + 618 | + 14,466 |
| 2021 Jan. | + 20,841 | + 15,161 | + 301 | + 891 | + 11,043 | − 6,253 | − 461 | + 22,458 | + 743 | + 2,078 |
| Feb. | + 20,958 | + 18,375 | + 44 | + 1,152 | + 9,043 | − 7,612 | − 1,457 | + 52,644 | + 102 | + 33,143 |
| Mar. | + 34,716 | + 25,107 | + 855 | + 1,220 | + 11,825 | − 3,436 | + 1,596 | + 31,817 | − 460 | − 4,496 |
| Apr. | + 23,767 | + 16,589 | + 83 | + 3,049 | + 7,840 | − 3,711 | − 691 | + 35,418 | − 251 | + 12,342 |
| May | + 16,512 | + 15,224 | − 160 | + 2,349 | + 675 | − 1,735 | − 366 | + 14,146 | + 211 | − 2,000 |
| June | + 25,462 | + 17,040 | − 117 | + 1,017 | + 10,291 | − 2,887 | − 698 | + 35,029 | + 98 | + 10,266 |
| July | + 20,980 | + 18,951 | − 451 | − 2,445 | + 9,978 | − 5,504 | − 534 | + 5,325 | + 102 | − 15,122 |
| Aug. | + 16,712 | + 12,506 | + 645 | − 3,483 | + 11,952 | − 4,264 | + 506 | + 20,653 | + 31,254 | + 3,436 |
| Sep. | + 24,047 | + 17,657 | − 229 | − 1,641 | + 12,478 | − 4,446 | + 1,917 | + 10,944 | − 158 | − 15,021 |
| Oct. | + 16,282 | + 15,148 | + 1,117 | − 5,570 | + 11,830 | − 5,126 | + 424 | + 21,714 | + 261 | + 5,007 |
| Nov. | + 20,888 | + 14,647 | + 893 | − 137 | + 12,051 | − 5,673 | − 1,062 | + 48,411 | + 963 | + 28,585 |
| Dec. | + 23,788 | + 8,558 | + 109 | + 1,490 | + 18,135 | − 4,396 | + 237 | + 16,190 | − 974 | − 7,835 |
| 2022 Jan. | + 14,593 | + 7,876 | + 1,230 | − 338 | + 13,126 | − 6,072 | − 106 | + 55,703 | + 309 | + 41,216 |
| Feb. | + 21,989 | + 16,212 | + 1,885 | + 765 | + 10,445 | − 5,432 | − 1,295 | + 28,963 | + 1,161 | + 8,269 |
| Mar. | + 17,849 | + 11,705 | + 17 | − 2,144 | + 13,620 | − 5,332 | − 58 | + 9,337 | + 730 | − 8,454 |
| Apr. | + 9,914 | + 5,272 | + 2,759 | − 1,170 | + 10,496 | − 4,684 | − 1,272 | + 6,877 | + 83 | − 1,765 |
| May | + 750 | + 10,195 | + 4,324 | − 2,570 | − 5,858 | − 1,016 | − 2,772 | + 1,400 | + 161 | + 3,422 |
| June | + 13,595 | + 11,244 | + 1,056 | − 3,519 | + 11,481 | − 5,612 | + 269 | + 47,597 | + 353 | + 33,734 |
| July | + 6,395 | + 8,582 | + 323 | − 7,195 | + 11,595 | − 6,587 | − 2,149 | − 14,985 | − 484 | − 19,231 |
| Aug. | + 880 | + 2,904 | − 618 | − 8,939 | + 12,679 | − 5,763 | − 947 | + 28,020 | + 81 | + 28,086 |
| Sep. | + 11,695 | + 10,155 | − 177 | − 5,308 | + 10,866 | − 4,018 | − 1,576 | − 7,215 | + 1,187 | − 17,333 |
| Oct. | + 5,671 | + 6,290 | − 141 | − 6,878 | + 11,615 | − 5,356 | − 1,864 | + 23,649 | + 672 | + 19,843 |
| Nov. p | + 16,883 | + 13,083 | + 180 | − 2,004 | + 12,312 | − 6,508 | − 2,193 | − 6,531 | + 425 | − 21,221 |

1 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. 2 Including net acquisition/disposal of non-produced non-financial assets. 3 Net lending: + / net borrowing: -. 4 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 | | 2019 | 2020 | 2021 | 2022 June | July | Aug. | Sep. | Oct. | Nov. |
|---|---|---|---|---|---|---|---|---|---|---|
| All countries [1] | Exports | 1,328,152 | 1,206,928 | 1,379,346 | 136,136 | 127,647 | 128,779 | 142,223 | 135,257 | 143,643 |
| | Imports | 1,104,141 | 1,026,502 | 1,204,050 | 128,610 | 123,178 | 128,804 | 134,382 | 130,090 | 132,361 |
| | Balance | + 224,010 | + 180,427 | + 175,296 | + 7,526 | + 4,469 | − 24 | + 7,840 | + 5,168 | + 11,282 |
| I. European countries | Exports | 902,831 | 824,921 | 949,744 | 92,298 | 86,822 | 86,092 | 95,944 | 92,283 | 98,285 |
| | Imports | 747,692 | 682,477 | 803,687 | 82,957 | 81,146 | 83,269 | 87,203 | 82,655 | 83,754 |
| | Balance | + 155,140 | + 142,444 | + 146,057 | + 9,340 | + 5,676 | + 2,823 | + 8,741 | + 9,628 | + 14,531 |
| 1. EU Member States (27) | Exports | 698,257 | 635,741 | 751,322 | 74,559 | 70,060 | 68,704 | 76,889 | 74,210 | 77,486 |
| | Imports | 593,251 | 546,655 | 638,064 | 64,428 | 60,686 | 60,366 | 66,962 | 65,514 | 65,127 |
| | Balance | + 105,006 | + 89,087 | + 113,259 | + 10,131 | + 9,373 | + 8,338 | + 9,927 | + 8,696 | + 12,359 |
| Euro area (19) countries | Exports | 492,308 | 441,853 | 522,026 | 51,793 | 49,722 | 46,810 | 53,845 | 51,516 | 53,779 |
| | Imports | 409,863 | 371,211 | 438,294 | 44,464 | 42,057 | 41,191 | 46,530 | 44,740 | 43,704 |
| | Balance | + 82,445 | + 70,643 | + 83,732 | + 7,329 | + 7,665 | + 5,619 | + 7,315 | + 6,776 | + 10,075 |
| of which: | | | | | | | | | | |
| Austria | Exports | 66,076 | 60,118 | 72,385 | 7,703 | 7,577 | 7,864 | 8,235 | 7,632 | 7,928 |
| | Imports | 44,059 | 40,454 | 47,492 | 4,851 | 5,228 | 4,992 | 5,288 | 5,040 | 4,980 |
| | Balance | + 22,017 | + 19,663 | + 24,893 | + 2,852 | + 2,349 | + 2,872 | + 2,947 | + 2,592 | + 2,948 |
| Belgium and Luxembourg | Exports | 52,006 | 48,824 | 58,080 | 5,802 | 6,503 | 5,824 | 6,302 | 5,594 | 5,801 |
| | Imports | 46,322 | 39,584 | 55,726 | 5,738 | 5,717 | 5,155 | 7,536 | 5,663 | 5,298 |
| | Balance | + 5,683 | + 9,240 | + 2,354 | + 64 | + 786 | + 670 | − 1,233 | − 69 | + 503 |
| France | Exports | 106,564 | 90,910 | 102,741 | 10,136 | 9,456 | 8,880 | 10,418 | 10,130 | 10,525 |
| | Imports | 66,199 | 56,364 | 61,921 | 6,489 | 5,599 | 5,324 | 5,957 | 6,158 | 6,235 |
| | Balance | + 40,364 | + 34,546 | + 40,820 | + 3,647 | + 3,857 | + 3,556 | + 4,461 | + 3,972 | + 4,290 |
| Italy | Exports | 67,887 | 60,634 | 75,526 | 7,368 | 7,065 | 5,757 | 7,699 | 7,535 | 7,713 |
| | Imports | 57,100 | 53,906 | 65,389 | 6,476 | 6,162 | 5,343 | 5,971 | 6,593 | 6,453 |
| | Balance | + 10,786 | + 6,728 | + 10,137 | + 892 | + 903 | + 415 | + 1,727 | + 942 | + 1,260 |
| Netherlands | Exports | 91,528 | 84,579 | 101,050 | 9,320 | 9,129 | 8,701 | 9,209 | 9,585 | 10,142 |
| | Imports | 97,816 | 87,024 | 105,113 | 10,741 | 10,367 | 10,835 | 10,611 | 11,334 | 10,314 |
| | Balance | − 6,288 | − 2,445 | − 4,063 | − 1,421 | − 1,238 | − 2,134 | − 1,402 | − 1,748 | − 173 |
| Spain | Exports | 44,218 | 37,618 | 43,932 | 4,033 | 3,953 | 3,551 | 4,323 | 4,376 | 4,693 |
| | Imports | 33,126 | 31,281 | 34,180 | 3,148 | 2,894 | 2,382 | 3,288 | 3,134 | 3,731 |
| | Balance | + 11,092 | + 6,337 | + 9,752 | + 885 | + 1,058 | + 1,169 | + 1,035 | + 1,242 | + 962 |
| Other EU Member States | Exports | 205,949 | 193,888 | 229,296 | 22,766 | 20,337 | 21,894 | 23,045 | 22,694 | 23,707 |
| | Imports | 183,387 | 175,444 | 199,770 | 19,963 | 18,629 | 19,175 | 20,433 | 20,774 | 21,423 |
| | Balance | + 22,561 | + 18,444 | + 29,526 | + 2,803 | + 1,708 | + 2,718 | + 2,612 | + 1,920 | + 2,284 |
| 2. Other European countries | Exports | 204,575 | 189,180 | 198,421 | 17,739 | 16,762 | 17,389 | 19,055 | 18,073 | 20,799 |
| | Imports | 154,441 | 135,822 | 165,623 | 18,530 | 20,459 | 22,903 | 20,240 | 17,141 | 18,627 |
| | Balance | + 50,134 | + 53,358 | + 32,798 | − 791 | − 3,698 | − 5,514 | − 1,186 | + 932 | + 2,172 |
| of which: | | | | | | | | | | |
| Switzerland | Exports | 56,345 | 56,265 | 60,638 | 5,976 | 5,819 | 5,827 | 6,411 | 5,969 | 6,394 |
| | Imports | 45,824 | 45,556 | 49,247 | 4,546 | 4,539 | 4,653 | 4,398 | 4,458 | 4,904 |
| | Balance | + 10,521 | + 10,708 | + 11,391 | + 1,431 | + 1,280 | + 1,174 | + 2,013 | + 1,511 | + 1,490 |
| United Kingdom | Exports | 79,166 | 67,086 | 65,002 | 6,093 | 5,752 | 5,906 | 6,440 | 6,305 | 7,802 |
| | Imports | 38,397 | 35,018 | 32,245 | 2,850 | 3,226 | 3,106 | 3,616 | 2,974 | 3,280 |
| | Balance | + 40,770 | + 32,068 | + 32,757 | + 3,242 | + 2,526 | + 2,799 | + 2,824 | + 3,331 | + 4,522 |
| II. Non-European countries | Exports | 421,728 | 380,292 | 427,430 | 43,333 | 40,305 | 42,151 | 45,770 | 42,483 | 44,930 |
| | Imports | 355,390 | 343,270 | 399,604 | 45,554 | 41,929 | 45,435 | 47,053 | 47,258 | 48,431 |
| | Balance | + 66,338 | + 37,022 | + 27,827 | − 2,221 | − 1,624 | − 3,284 | − 1,283 | − 4,775 | − 3,501 |
| 1. Africa | Exports | 23,627 | 20,086 | 23,068 | 2,302 | 2,107 | 2,292 | 2,303 | 2,701 | 2,191 |
| | Imports | 24,475 | 18,758 | 26,241 | 3,159 | 2,715 | 2,663 | 2,836 | 2,661 | 3,096 |
| | Balance | − 848 | + 1,328 | − 3,173 | − 857 | − 608 | − 371 | − 533 | + 40 | − 905 |
| 2. America | Exports | 165,602 | 141,375 | 167,735 | 18,982 | 17,184 | 18,047 | 20,326 | 18,428 | 19,368 |
| | Imports | 100,007 | 94,005 | 101,525 | 12,056 | 10,735 | 12,015 | 11,857 | 11,752 | 11,896 |
| | Balance | + 65,595 | + 47,370 | + 66,210 | + 6,925 | + 6,448 | + 6,032 | + 8,469 | + 6,676 | + 7,472 |
| of which: | | | | | | | | | | |
| United States | Exports | 118,680 | 103,476 | 121,980 | 14,322 | 12,381 | 13,332 | 15,326 | 13,793 | 14,391 |
| | Imports | 71,334 | 67,694 | 72,316 | 8,511 | 7,758 | 8,350 | 8,268 | 8,121 | 8,522 |
| | Balance | + 47,346 | + 35,782 | + 49,664 | + 5,810 | + 4,622 | + 4,983 | + 7,058 | + 5,672 | + 5,869 |
| 3. Asia | Exports | 221,278 | 208,146 | 224,897 | 20,999 | 19,856 | 20,725 | 21,992 | 20,288 | 22,044 |
| | Imports | 227,036 | 226,646 | 267,604 | 29,531 | 27,628 | 30,257 | 31,812 | 32,154 | 32,881 |
| | Balance | − 5,759 | − 18,500 | − 42,707 | − 8,532 | − 7,772 | − 9,532 | − 9,820 | − 11,866 | − 10,838 |
| of which: | | | | | | | | | | |
| Middle East | Exports | 28,663 | 25,882 | 26,090 | 2,457 | 2,345 | 2,721 | 2,992 | 2,599 | 2,851 |
| | Imports | 7,460 | 6,721 | 7,509 | 1,061 | 1,095 | 895 | 1,248 | 1,097 | 1,896 |
| | Balance | + 21,202 | + 19,161 | + 18,582 | + 1,396 | + 1,250 | + 1,827 | + 1,744 | + 1,502 | + 956 |
| Japan | Exports | 20,662 | 17,396 | 18,245 | 1,644 | 1,579 | 1,684 | 1,806 | 1,797 | 1,758 |
| | Imports | 23,904 | 21,427 | 23,477 | 2,070 | 1,958 | 2,157 | 2,276 | 2,279 | 2,406 |
| | Balance | − 3,243 | − 4,032 | − 5,232 | − 426 | − 379 | − 473 | − 470 | − 482 | − 648 |
| People's Republic of China [2] | Exports | 95,984 | 95,840 | 103,564 | 9,095 | 8,878 | 8,910 | 9,014 | 8,500 | 9,287 |
| | Imports | 110,054 | 117,373 | 142,964 | 16,333 | 14,642 | 15,956 | 16,696 | 17,254 | 17,022 |
| | Balance | − 14,070 | − 21,533 | − 39,400 | − 7,238 | − 5,764 | − 7,046 | − 7,682 | − 8,754 | − 7,735 |
| New industrial countries and emerging markets of Asia [3] | Exports | 54,164 | 50,590 | 55,295 | 5,582 | 5,177 | 5,359 | 5,607 | 5,206 | 5,529 |
| | Imports | 51,748 | 48,222 | 55,441 | 5,716 | 5,304 | 5,827 | 6,411 | 6,594 | 6,596 |
| | Balance | + 2,416 | + 2,368 | − 146 | − 134 | − 127 | − 468 | − 805 | − 1,388 | − 1,067 |
| 4. Oceania and polar regions | Exports | 11,221 | 10,685 | 11,731 | 1,051 | 1,157 | 1,087 | 1,149 | 1,065 | 1,327 |
| | Imports | 3,872 | 3,861 | 4,233 | 808 | 851 | 499 | 548 | 691 | 558 |
| | Balance | + 7,349 | + 6,824 | + 7,497 | + 243 | + 306 | + 587 | + 601 | + 375 | + 770 |

* 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

| Zeit | Services Total | of which: Transport | Travel 1 | Financial services | Charges for the use of intellectual property | Telecommunications-, computer and information services | Other business services | Gouvernment goods and services 2 | Primary income Compensation of employees | Investment income | Other primary income 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2017 | − 23,994 | − 3,679 | − 43,558 | + 9,613 | + 14,903 | − 8,188 | − 1,065 | + 2,177 | + 1,139 | + 76,669 | − 1,403 |
| 2018 | − 15,806 | − 2,044 | − 44,543 | + 10,060 | + 17,219 | − 7,060 | + 723 | + 3,322 | + 671 | + 112,223 | − 1,004 |
| 2019 | − 18,100 | − 72 | − 45,947 | + 10,999 | + 18,299 | − 9,697 | − 2,984 | + 3,489 | + 846 | + 115,462 | − 949 |
| 2020 | + 2,725 | − 9,392 | − 14,678 | + 10,239 | + 17,546 | − 7,107 | − 4,382 | + 3,363 | + 3,234 | + 97,017 | − 1,471 |
| 2021 | − 2,107 | − 12,067 | − 24,345 | + 8,737 | + 31,878 | − 7,515 | − 8,523 | + 3,513 | + 2,605 | + 126,518 | − 1,981 |
| 2021 Q1 | + 3,264 | − 3,183 | − 31 | + 2,251 | + 5,756 | − 2,478 | − 1,436 | + 884 | + 1,324 | + 31,567 | − 980 |
| Q2 | + 6,415 | − 2,075 | − 2,136 | + 2,589 | + 8,007 | − 1,329 | − 1,164 | + 914 | + 494 | + 21,185 | − 2,873 |
| Q3 | − 7,569 | − 2,259 | − 13,539 | + 1,221 | + 9,080 | − 2,169 | − 2,331 | + 946 | − 77 | + 35,676 | − 1,192 |
| Q4 | − 4,217 | − 4,551 | − 8,639 | + 2,676 | + 9,035 | − 1,539 | − 3,592 | + 769 | + 864 | + 38,089 | + 3,064 |
| 2022 Q1 | − 1,716 | − 5,053 | − 4,636 | + 2,257 | + 7,972 | − 3,304 | − 1,720 | + 949 | + 1,234 | + 37,216 | − 1,260 |
| Q2 | − 7,258 | − 1,607 | − 12,055 | + 2,874 | + 6,058 | − 1,919 | − 2,735 | + 948 | + 320 | + 19,595 | − 3,796 |
| Q3 | − 21,443 | − 4,758 | − 18,583 | + 1,729 | + 5,162 | − 3,180 | − 3,619 | + 986 | − 175 | + 36,868 | − 1,553 |
| 2022 Jan. | − 338 | − 1,741 | − 1,141 | + 894 | + 2,714 | − 1,340 | − 458 | + 311 | + 437 | + 13,094 | − 405 |
| Feb. | + 765 | − 1,490 | − 1,249 | + 714 | + 2,773 | − 875 | − 232 | + 322 | + 434 | + 10,426 | − 415 |
| Mar. | − 2,144 | − 1,822 | − 2,246 | + 649 | + 2,485 | − 1,089 | − 1,030 | + 316 | + 362 | + 13,697 | − 439 |
| Apr. | − 1,170 | − 805 | − 2,247 | + 912 | + 2,189 | − 1,203 | − 707 | + 288 | + 68 | + 11,054 | − 625 |
| May | − 2,570 | − 576 | − 3,777 | + 847 | + 1,854 | − 718 | − 1,028 | + 303 | + 102 | − 3,546 | − 2,414 |
| June | − 3,519 | − 226 | − 6,032 | + 1,115 | + 2,015 | + 1 | − 1,000 | + 357 | + 150 | + 12,087 | − 756 |
| July | − 7,195 | − 1,092 | − 5,781 | + 532 | + 1,414 | − 1,354 | − 1,335 | + 323 | − 79 | + 12,167 | − 493 |
| Aug. | − 8,939 | − 2,501 | − 7,049 | + 622 | + 1,388 | − 719 | − 1,281 | + 314 | − 48 | + 13,273 | − 547 |
| Sep. | − 5,308 | − 1,165 | − 5,753 | + 575 | + 2,360 | − 1,107 | − 1,004 | + 350 | − 48 | + 11,427 | − 513 |
| Oct. | − 6,878 | − 642 | − 8,511 | + 493 | + 1,989 | − 986 | − 11 | + 331 | + 237 | + 11,994 | − 616 |
| Nov. p | − 2,004 | − 1,192 | − 2,405 | + 751 | + 1,692 | − 441 | − 1,262 | + 349 | + 221 | + 12,666 | − 575 |

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

### 5. Secondary income and Capital account of the Federal Republic of Germany (balances)

€ million

| Zeit | Secondary income Total | General government Total | of which: Current international cooperation 1 | Current taxes on income, wealth, etc. | All sectors excluding general government 2 Total | of which: Personal transfers between resident and non-resident households 3 | of which: Workers' remittances | Capital account Total | Non-produced non-financial assets | Capital transfers |
|---|---|---|---|---|---|---|---|---|---|---|
| 2017 | − 51,673 | − 23,191 | − 9,851 | + 9,665 | − 28,482 | . | + 4,613 | − 2,936 | + 926 | − 3,863 |
| 2018 | − 50,338 | − 28,710 | − 10,186 | + 10,230 | − 21,627 | . | + 5,142 | + 580 | + 3,349 | − 2,769 |
| 2019 | − 49,811 | − 28,986 | − 10,728 | + 11,742 | − 20,825 | . | + 5,431 | − 887 | + 3,028 | − 3,915 |
| 2020 | − 52,727 | − 34,127 | − 12,239 | + 10,929 | − 18,600 | . | + 5,908 | − 5,829 | + 380 | − 6,209 |
| 2021 | − 55,044 | − 37,607 | − 8,072 | + 11,423 | − 17,437 | . | + 6,170 | − 588 | + 3,191 | − 3,779 |
| 2021 Q1 | − 17,302 | − 12,044 | + 281 | + 2,172 | − 5,257 | . | + 1,543 | − 322 | + 123 | − 445 |
| Q2 | − 8,332 | − 4,756 | − 1,240 | + 5,207 | − 3,577 | . | + 1,543 | − 1,755 | − 1,578 | − 177 |
| Q3 | − 14,214 | − 9,993 | − 3,036 | + 2,056 | − 4,221 | . | + 1,543 | + 1,890 | + 2,918 | − 1,028 |
| Q4 | − 15,196 | − 10,814 | − 4,077 | + 1,987 | − 4,382 | . | + 1,543 | − 401 | + 1,728 | − 2,129 |
| 2022 Q1 | − 16,836 | − 10,543 | − 2,803 | + 2,458 | − 6,293 | . | + 1,598 | − 1,459 | − 1,892 | + 433 |
| Q2 | − 11,313 | − 5,184 | − 2,465 | + 7,315 | − 6,129 | + 1,603 | + 1,598 | − 3,775 | − 3,027 | − 748 |
| Q3 | − 16,368 | − 10,996 | − 3,163 | + 2,112 | − 5,372 | + 1,603 | + 1,598 | − 4,672 | − 3,593 | − 1,080 |
| 2022 Jan. | − 6,072 | − 4,338 | − 1,399 | + 454 | − 1,734 | . | + 533 | − 106 | − 291 | + 186 |
| Feb. | − 5,432 | − 3,940 | − 836 | + 940 | − 1,492 | . | + 533 | − 1,295 | − 1,257 | − 38 |
| Mar. | − 5,332 | − 2,266 | − 568 | + 1,065 | − 3,067 | . | + 533 | − 58 | − 343 | + 285 |
| Apr. | − 4,684 | − 2,757 | − 420 | + 1,117 | − 1,928 | + 534 | + 533 | − 1,272 | − 790 | − 482 |
| May | − 1,016 | + 1,344 | − 458 | + 4,973 | − 2,361 | + 534 | + 533 | − 2,772 | − 2,363 | − 409 |
| June | − 5,612 | − 3,772 | − 1,587 | + 1,225 | − 1,840 | + 535 | + 533 | + 269 | + 126 | + 142 |
| July | − 6,587 | − 4,578 | − 1,697 | + 432 | − 2,008 | + 535 | + 533 | − 2,149 | − 1,653 | − 496 |
| Aug. | − 5,763 | − 4,094 | − 1,196 | + 418 | − 1,669 | + 534 | + 533 | − 947 | − 716 | − 231 |
| Sep. | − 4,018 | − 2,324 | − 270 | + 1,262 | − 1,694 | + 534 | + 533 | − 1,576 | − 1,223 | − 353 |
| Oct. | − 5,356 | − 3,603 | − 1,544 | + 515 | − 1,754 | + 534 | + 533 | − 1,864 | − 1,255 | − 609 |
| Nov. p | − 6,508 | − 4,730 | − 1,804 | + 383 | − 1,778 | . | + 533 | − 2,193 | − 1,520 | − 674 |

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

## XII. External sector

### 6. Financial account of the Federal Republic of Germany (net)

€ million

| | | | | 2022 | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Item | 2019 | 2020 | 2021 | Q1 | Q2 | Q3 | September | October | November P |
| I. Net domestic investment abroad (increase: +) | + 251,072 | + 739,081 | + 844,810 | + 204,882 | + 114,464 | + 147,678 | + 18,831 | − 12,430 | + 42,210 |
| 1. Direct investment | + 139,279 | + 119,458 | + 163,651 | + 44,793 | + 53,963 | + 52,192 | − 3,107 | + 20,627 | − 948 |
| Equity | + 116,157 | + 90,170 | + 113,012 | + 29,186 | + 24,419 | + 11,793 | − 3,172 | + 23,646 | + 6,289 |
| of which: Reinvestment of earnings [1] | + 40,785 | + 21,039 | + 55,475 | + 20,797 | + 13,306 | + 11,488 | + 2,410 | + 7,066 | + 4,779 |
| Debt instruments | + 23,122 | + 29,288 | + 50,638 | + 15,607 | + 29,545 | + 40,398 | + 65 | − 3,019 | − 7,237 |
| 2. Portfolio investment | + 134,961 | + 191,740 | + 221,477 | + 59,730 | + 1,603 | − 25,544 | − 7,551 | − 10,601 | + 1,493 |
| Shares [2] | + 13,672 | + 65,214 | + 56,007 | + 7,228 | + 4,986 | − 8,210 | − 1,209 | − 3,860 | − 3,447 |
| Investment fund shares [3] | + 53,708 | + 62,585 | + 103,434 | + 3,970 | + 1,293 | − 56 | − 1,172 | + 948 | + 3,735 |
| Short-term [4] debt securities | + 7,424 | + 3,852 | − 6,256 | + 1,329 | − 2,152 | − 1,546 | + 938 | − 2,216 | + 1,393 |
| Long-term [5] debt securities | + 60,157 | + 60,089 | + 68,292 | + 47,202 | − 2,523 | − 15,731 | − 6,108 | − 5,473 | − 187 |
| 3. Financial derivatives and employee stock options [6] | + 24,544 | + 96,276 | + 60,977 | + 10,566 | + 10,694 | + 15,231 | + 10,522 | + 5,885 | + 1,383 |
| 4. Other investment [7] | − 47,168 | + 331,659 | + 366,813 | + 87,593 | + 47,606 | + 105,014 | + 17,779 | − 29,012 | + 39,858 |
| MFIs [8] | + 9,256 | − 4,522 | + 112,866 | + 139,954 | − 19,411 | + 42,205 | + 15,562 | + 13,088 | + 1,784 |
| Short-term | − 8,901 | + 3,526 | + 99,548 | + 131,275 | − 7,349 | + 20,786 | + 13,005 | + 14,621 | − 7,284 |
| Long-term | + 18,157 | − 8,048 | + 13,318 | + 8,679 | − 12,061 | + 21,411 | + 2,552 | − 1,533 | + 9,060 |
| Enterprises and households [9] | + 14,348 | + 90,994 | + 138,858 | + 45,131 | + 30,105 | + 22,423 | − 12,758 | − 8,330 | + 33,034 |
| Short-term | + 793 | + 45,448 | + 124,088 | + 43,566 | + 24,008 | + 16,274 | − 14,416 | − 11,554 | + 30,342 |
| Long-term | + 13,555 | + 45,545 | + 14,770 | + 1,565 | + 6,097 | − 1,414 | − 801 | + 839 | + 234 |
| General government | + 144 | + 2,076 | − 8,305 | − 5,842 | − 10,764 | . | . | + 3,622 | + 825 |
| Short-term | + 3,357 | + 3,461 | − 7,502 | − 5,362 | − 10,180 | . | . | + 3,661 | + 1,111 |
| Long-term | − 3,213 | − 1,385 | − 803 | − 480 | − 584 | + 635 | − 115 | − 41 | − 283 |
| Bundesbank | − 70,915 | + 243,112 | + 123,394 | − 91,650 | + 47,675 | . | . | − 37,393 | + 4,215 |
| 5. Reserve assets | − 544 | − 51 | + 31,892 | + 2,200 | + 597 | + 784 | + 1,187 | + 672 | + 425 |
| II. Net foreign investment in the reporting country (increase: +) | + 64,756 | + 522,566 | + 530,060 | + 110,879 | + 58,590 | + 141,858 | + 26,045 | − 36,080 | + 48,741 |
| 1. Direct investment | + 63,683 | + 122,929 | + 61,833 | + 40,074 | + 13,168 | + 22,626 | − 5,593 | + 9,405 | + 14,261 |
| Equity | + 23,492 | + 43,862 | + 36,972 | + 4,684 | + 5,410 | + 954 | + 2,658 | + 1,327 | + 1,675 |
| of which: Reinvestment of earnings [1] | − 492 | + 1,880 | + 4,787 | + 3,284 | + 1,347 | − 2,134 | + 1,174 | + 1,287 | + 1,027 |
| Debt instruments | + 40,192 | + 79,068 | + 24,861 | + 35,390 | + 7,758 | + 21,673 | − 8,251 | + 8,078 | + 12,585 |
| 2. Portfolio investment | + 65,309 | + 148,877 | − 33,617 | + 21,283 | − 15,738 | + 999 | + 3 | − 18,046 | + 33,079 |
| Shares [2] | − 7,275 | − 15,982 | − 3,703 | − 9,199 | − 5,940 | + 6,438 | + 10,855 | + 2,431 | + 1,945 |
| Investment fund shares [3] | − 4,519 | + 1,862 | − 2,760 | − 2,211 | + 1,352 | − 1,625 | + 152 | − 754 | − 427 |
| Short-term [4] debt securities | + 14,400 | + 83,707 | + 25,027 | − 5,244 | − 7,004 | − 6,833 | + 3,720 | − 17,751 | + 9,811 |
| Long-term [5] debt securities | + 62,704 | + 79,290 | − 52,181 | + 37,937 | − 4,145 | + 3,017 | − 14,724 | − 1,973 | + 21,750 |
| 3. Other investment [7] | − 64,237 | + 250,760 | + 501,843 | + 49,522 | + 61,159 | + 118,233 | + 31,635 | − 27,438 | + 1,402 |
| MFIs [8] | − 10,214 | + 108,323 | + 159,384 | + 266,244 | + 6,112 | + 68,326 | + 50,155 | + 17,100 | − 18,764 |
| Short-term | − 20,978 | + 74,805 | + 115,401 | + 290,964 | + 2,551 | + 48,862 | + 42,052 | + 15,194 | − 18,052 |
| Long-term | + 10,764 | + 33,517 | + 43,984 | − 24,720 | + 3,561 | + 19,463 | + 8,102 | + 1,906 | − 712 |
| Enterprises and households [9] | + 43,978 | + 39,313 | + 120,200 | − 14,909 | + 39,341 | + 45,732 | − 6,570 | − 27,786 | + 19,611 |
| Short-term | + 11,681 | + 18,361 | + 115,536 | − 17,519 | + 37,724 | + 45,489 | − 7,357 | − 35,409 | + 19,160 |
| Long-term | + 32,297 | + 20,952 | + 4,663 | + 2,610 | + 1,618 | − 587 | + 529 | + 6,916 | + 352 |
| General government | + 1,620 | − 7,817 | − 4,537 | − 641 | − 641 | . | + 1,928 | + 680 | + 254 |
| Short-term | + 1,424 | − 7,664 | − 2,186 | + 2,078 | − 760 | + 2,649 | + 1,925 | + 837 | + 182 |
| Long-term | + 196 | − 153 | − 2,351 | − 2,719 | + 119 | . | + 3 | . | . |
| Bundesbank | − 99,621 | + 110,941 | + 226,796 | − 201,172 | + 16,347 | . | . | − 17,432 | + 301 |
| III. Net financial account (net lending: +/net borrowing: -) | + 186,317 | + 216,515 | + 314,750 | + 94,003 | + 55,875 | + 5,820 | − 7,215 | + 23,649 | − 6,531 |

**1** Estimated on the basis of the figures on the level of direct investment stocks abroad and in the Federal Republic of Germany (see Statistical series, direct investment statistics). **2** Including participation certificates. **3** Including reinvestment of earnings. **4** Short-term: original maturity up to one year. **5** Up to and including 2012 without accrued interest. 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, 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

### 7. External position of the Bundesbank *

€ million

| End of reporting period | External assets | Reserve assets | | | | | Other investment | | Portfolio investment 2 | External liabilities 3ä, 4 | Net external position 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | 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 | | | |
| 1999 Jan. 6 | 95,316 | 93,940 | 29,312 | 1,598 | 6,863 | 56,167 | 1,376 | – | – | 9,628 | 85,688 |
| 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 | 668,527 | 474,318 |
| 2018 | 1,209,982 | 173,138 | 121,445 | 14,378 | 5,518 | 31,796 | 980,560 | 966,190 | 56,284 | 770,519 | 439,462 |
| 2019 | 1,160,971 | 199,295 | 146,562 | 14,642 | 6,051 | 32,039 | 909,645 | 895,219 | 52,031 | 663,320 | 497,651 |
| 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 |
| 2021 | 1,592,822 | 261,387 | 173,821 | 46,491 | 8,426 | 32,649 | 1,276,150 | 1,260,673 | 55,285 | 1,009,488 | 583,334 |
| 2022 | 1,617,056 | 276,488 | 184,036 | 48,567 | 9,480 | 34,404 | 1,290,317 | 1,269,076 | 50,251 | 919,441 | 697,614 |
| 2020 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 |
| 2021 Jan. | 1,348,921 | 219,860 | 166,494 | 14,115 | 8,061 | 31,190 | 1,072,140 | 1,054,994 | 56,921 | 638,042 | 710,879 |
| Feb. | 1,328,303 | 210,619 | 157,313 | 14,119 | 8,047 | 31,140 | 1,060,378 | 1,043,746 | 57,306 | 616,473 | 711,830 |
| Mar. | 1,364,046 | 209,400 | 155,323 | 14,367 | 7,966 | 31,744 | 1,098,486 | 1,081,989 | 56,160 | 647,647 | 716,400 |
| Apr. | 1,307,161 | 210,799 | 158,143 | 14,085 | 7,836 | 30,735 | 1,041,472 | 1,024,734 | 54,890 | 604,863 | 702,299 |
| May | 1,370,231 | 221,201 | 168,678 | 14,037 | 7,809 | 30,677 | 1,093,721 | 1,076,918 | 55,309 | 621,827 | 748,404 |
| June | 1,384,834 | 213,600 | 159,995 | 14,326 | 8,094 | 31,184 | 1,115,447 | 1,101,897 | 55,787 | 670,632 | 714,202 |
| July | 1,319,694 | 219,775 | 165,984 | 14,345 | 8,104 | 31,343 | 1,042,015 | 1,024,970 | 57,903 | 657,905 | 661,789 |
| Aug. | 1,360,722 | 250,742 | 165,757 | 45,091 | 8,174 | 31,720 | 1,053,653 | 1,037,259 | 56,327 | 699,773 | 660,949 |
| Sep. | 1,431,909 | 246,908 | 160,943 | 45,606 | 8,267 | 32,092 | 1,130,558 | 1,115,126 | 54,443 | 746,128 | 685,781 |
| Oct. | 1,388,160 | 250,340 | 164,602 | 45,719 | 8,449 | 31,570 | 1,083,141 | 1,066,604 | 54,678 | 735,595 | 652,564 |
| Nov. | 1,456,861 | 258,815 | 170,460 | 46,375 | 8,405 | 33,575 | 1,142,719 | 1,127,545 | 55,327 | 773,217 | 683,644 |
| Dec. | 1,592,822 | 261,387 | 173,821 | 46,491 | 8,426 | 32,649 | 1,276,150 | 1,260,673 | 55,285 | 1,009,488 | 583,334 |
| 2022 Jan. | 1,479,694 | 261,965 | 173,362 | 46,931 | 8,504 | 33,168 | 1,163,561 | 1,149,868 | 54,168 | 807,889 | 671,805 |
| Feb. | 1,491,552 | 273,726 | 184,255 | 46,854 | 8,711 | 33,905 | 1,164,098 | 1,149,722 | 53,729 | 774,786 | 716,766 |
| Mar. | 1,516,744 | 277,782 | 187,779 | 47,375 | 8,663 | 33,965 | 1,184,501 | 1,169,952 | 54,462 | 808,690 | 708,055 |
| Apr. | 1,491,558 | 288,953 | 196,274 | 48,617 | 8,799 | 35,263 | 1,148,681 | 1,135,400 | 53,923 | 790,221 | 701,337 |
| May | 1,505,419 | 278,174 | 186,481 | 48,031 | 8,681 | 34,980 | 1,173,376 | 1,159,716 | 53,869 | 805,179 | 700,240 |
| June | 1,566,099 | 281,157 | 187,573 | 48,712 | 8,948 | 35,923 | 1,232,176 | 1,216,530 | 52,767 | 826,280 | 739,819 |
| July | 1,514,570 | 280,910 | 185,950 | 49,465 | 9,086 | 36,409 | 1,179,431 | 1,166,155 | 54,229 | 810,881 | 703,689 |
| Aug. | 1,590,572 | 280,160 | 184,794 | 49,614 | 9,300 | 36,451 | 1,258,187 | 1,245,014 | 52,225 | 842,576 | 747,996 |
| Sep. | 1,613,008 | 281,258 | 184,022 | 50,287 | 9,358 | 37,592 | 1,281,266 | 1,266,647 | 50,483 | 829,129 | 783,879 |
| Oct. | 1,569,272 | 274,421 | 178,101 | 49,675 | 9,527 | 37,119 | 1,243,873 | 1,230,005 | 50,977 | 811,035 | 758,237 |
| Nov. | 1,577,175 | 277,458 | 183,052 | 49,168 | 9,315 | 35,923 | 1,248,088 | 1,233,980 | 51,629 | 810,314 | 766,861 |
| Dec. | 1,617,056 | 276,488 | 184,036 | 48,567 | 9,480 | 34,404 | 1,290,317 | 1,269,076 | 50,251 | 919,441 | 697,614 |

* 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 (acc. 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 Difference between External assets and External liabilities. 6 Euro opening balance sheet of the Bundesbank as at 1 January 1999.

## XII. External sector

### 8. 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** | | | | | | | | | | | | | | |
| 2018 | 933,849 | 234,970 | 698,880 | 466,225 | 232,654 | 217,969 | 14,686 | 1,232,594 | 146,575 | 1,086,019 | 879,752 | 206,267 | 135,214 | 71,053 |
| 2019 | 963,967 | 227,688 | 736,279 | 502,594 | 233,685 | 217,370 | 16,314 | 1,305,705 | 167,656 | 1,138,048 | 927,650 | 210,399 | 134,768 | 75,630 |
| 2020 | 1,021,200 | 248,779 | 772,421 | 544,059 | 228,362 | 211,891 | 16,471 | 1,394,364 | 171,998 | 1,222,366 | 1,012,503 | 209,863 | 129,098 | 80,766 |
| 2021 | 1,152,509 | 260,321 | 892,188 | 604,424 | 287,764 | 270,847 | 16,917 | 1,548,984 | 218,886 | 1,330,098 | 1,066,016 | 264,082 | 175,351 | 88,730 |
| 2022 June | 1,271,963 | 256,426 | 1,015,537 | 669,832 | 345,705 | 315,398 | 30,307 | 1,641,340 | 192,674 | 1,448,666 | 1,134,510 | 314,156 | 210,108 | 104,048 |
| July | 1,278,059 | 263,838 | 1,014,221 | 670,948 | 343,273 | 313,123 | 30,151 | 1,651,392 | 211,988 | 1,439,404 | 1,126,247 | 313,157 | 207,607 | 105,549 |
| Aug. | 1,354,989 | 272,669 | 1,082,320 | 736,951 | 345,370 | 315,253 | 30,117 | 1,733,100 | 233,330 | 1,499,769 | 1,181,732 | 318,037 | 212,527 | 105,510 |
| Sep. | 1,342,815 | 262,308 | 1,080,508 | 711,722 | 368,786 | 338,666 | 30,120 | 1,719,489 | 213,694 | 1,505,795 | 1,166,409 | 339,387 | 234,067 | 105,320 |
| Oct. | 1,325,896 | 274,400 | 1,051,495 | 686,029 | 365,467 | 335,167 | 30,299 | 1,698,692 | 205,452 | 1,493,240 | 1,165,880 | 327,359 | 221,864 | 105,496 |
| Nov. p | 1,341,141 | 297,797 | 1,043,343 | 675,589 | 367,754 | 337,458 | 30,297 | 1,723,149 | 208,092 | 1,515,056 | 1,183,281 | 331,775 | 227,300 | 104,475 |
| **EU Member States (27 excl. GB)** | | | | | | | | | | | | | | |
| 2018 | 544,009 | 177,064 | 366,944 | 274,402 | 92,542 | 84,191 | 8,351 | 801,772 | 88,161 | 713,611 | 631,814 | 81,798 | 61,161 | 20,637 |
| 2019 | 572,324 | 176,847 | 395,476 | 304,605 | 90,871 | 82,120 | 8,752 | 836,863 | 91,122 | 745,740 | 660,385 | 85,355 | 62,692 | 22,664 |
| 2020 | 609,449 | 187,703 | 421,746 | 332,983 | 88,763 | 79,780 | 8,983 | 884,904 | 95,716 | 789,188 | 702,991 | 86,197 | 61,357 | 24,841 |
| 2021 | 660,768 | 198,911 | 461,857 | 350,591 | 111,266 | 102,689 | 8,578 | 978,060 | 153,424 | 824,636 | 713,878 | 110,758 | 84,237 | 26,521 |
| 2022 June | 721,354 | 201,319 | 520,035 | 377,912 | 142,123 | 128,838 | 13,285 | 1,008,127 | 131,237 | 876,890 | 742,665 | 134,224 | 102,643 | 31,581 |
| July | 731,384 | 212,349 | 519,035 | 376,509 | 142,526 | 129,216 | 13,310 | 1,022,914 | 147,814 | 875,100 | 741,511 | 133,588 | 101,399 | 32,190 |
| Aug. | 747,731 | 213,111 | 534,620 | 391,171 | 143,449 | 129,991 | 13,458 | 1,065,471 | 173,966 | 891,505 | 756,559 | 134,946 | 102,673 | 32,273 |
| Sep. | 734,791 | 196,791 | 538,000 | 387,336 | 150,665 | 137,106 | 13,559 | 1,060,660 | 157,933 | 902,727 | 757,924 | 144,804 | 112,571 | 32,233 |
| Oct. | 743,891 | 211,455 | 532,436 | 381,027 | 151,409 | 137,681 | 13,728 | 1,054,674 | 147,845 | 906,829 | 766,823 | 140,006 | 107,624 | 32,382 |
| Nov. p | 770,672 | 232,391 | 538,281 | 384,383 | 153,898 | 140,112 | 13,786 | 1,071,824 | 143,454 | 928,369 | 783,651 | 144,718 | 112,851 | 31,867 |
| **Extra-EU Member States (27 incl. GB)** | | | | | | | | | | | | | | |
| 2018 | 389,841 | 57,905 | 331,935 | 191,823 | 140,112 | 133,777 | 6,335 | 430,822 | 58,415 | 372,408 | 247,939 | 124,469 | 74,053 | 50,416 |
| 2019 | 391,643 | 50,841 | 340,803 | 197,989 | 142,814 | 135,251 | 7,563 | 468,842 | 76,534 | 392,308 | 267,265 | 125,043 | 72,077 | 52,967 |
| 2020 | 411,751 | 61,076 | 350,675 | 211,076 | 139,599 | 132,112 | 7,487 | 509,460 | 76,282 | 433,178 | 309,512 | 123,666 | 67,741 | 55,925 |
| 2021 | 491,741 | 61,410 | 430,331 | 253,833 | 176,498 | 168,158 | 8,340 | 570,924 | 65,462 | 505,463 | 352,138 | 153,324 | 91,115 | 62,210 |
| 2022 June | 550,609 | 55,106 | 495,502 | 291,920 | 203,582 | 186,560 | 17,022 | 633,213 | 61,437 | 571,776 | 391,845 | 179,931 | 107,465 | 72,466 |
| July | 546,675 | 51,488 | 495,186 | 294,439 | 200,748 | 183,907 | 16,841 | 628,478 | 64,174 | 564,304 | 384,736 | 179,568 | 106,208 | 73,360 |
| Aug. | 607,258 | 59,558 | 547,700 | 345,779 | 201,921 | 185,262 | 16,659 | 667,628 | 59,364 | 608,264 | 425,173 | 183,091 | 109,854 | 73,237 |
| Sep. | 608,025 | 65,517 | 542,508 | 324,387 | 218,121 | 201,560 | 16,561 | 658,829 | 55,761 | 603,068 | 408,485 | 194,583 | 121,496 | 73,087 |
| Oct. | 582,005 | 62,945 | 519,059 | 305,002 | 214,058 | 197,487 | 16,571 | 644,018 | 57,607 | 586,411 | 399,057 | 187,353 | 114,240 | 73,113 |
| Nov. p | 570,468 | 65,406 | 505,062 | 291,206 | 213,856 | 197,345 | 16,511 | 651,325 | 64,638 | 586,687 | 399,630 | 187,057 | 114,449 | 72,608 |
| **Euro area (19)** | | | | | | | | | | | | | | |
| 2018 | 467,428 | 156,887 | 310,542 | 238,963 | 71,579 | 64,295 | 7,283 | 735,094 | 68,959 | 666,136 | 601,205 | 64,931 | 49,138 | 15,792 |
| 2019 | 493,062 | 158,102 | 334,960 | 264,834 | 70,127 | 62,531 | 7,595 | 761,144 | 70,561 | 690,584 | 624,607 | 65,977 | 48,775 | 17,202 |
| 2020 | 522,933 | 166,846 | 356,087 | 287,662 | 68,425 | 60,750 | 7,674 | 799,046 | 74,101 | 724,945 | 658,931 | 66,014 | 47,100 | 18,914 |
| 2021 | 553,838 | 176,279 | 377,560 | 289,330 | 88,230 | 80,844 | 7,386 | 896,256 | 131,735 | 764,521 | 675,868 | 88,653 | 68,232 | 20,421 |
| 2022 June | 616,656 | 185,782 | 430,873 | 315,885 | 114,988 | 103,025 | 11,963 | 923,861 | 111,967 | 811,894 | 702,692 | 109,202 | 84,715 | 24,487 |
| July | 620,871 | 194,739 | 426,132 | 310,274 | 115,858 | 103,880 | 11,978 | 938,353 | 128,484 | 809,869 | 700,797 | 109,072 | 84,082 | 24,990 |
| Aug. | 632,469 | 197,783 | 434,687 | 317,577 | 117,110 | 104,948 | 12,162 | 979,675 | 154,215 | 825,461 | 715,036 | 110,424 | 85,330 | 25,094 |
| Sep. | 619,777 | 180,059 | 439,717 | 316,792 | 122,925 | 110,605 | 12,320 | 973,219 | 139,263 | 833,956 | 716,221 | 117,735 | 92,939 | 24,796 |
| Oct. | 630,395 | 191,218 | 439,177 | 316,837 | 122,339 | 109,887 | 12,453 | 968,402 | 128,472 | 839,929 | 726,504 | 113,425 | 88,437 | 24,988 |
| Nov. p | 658,759 | 212,559 | 446,200 | 321,891 | 124,309 | 111,850 | 12,458 | 980,850 | 123,465 | 857,385 | 740,909 | 116,476 | 91,699 | 24,778 |
| **Extra-Euro area (19)** | | | | | | | | | | | | | | |
| 2018 | 466,421 | 78,083 | 388,338 | 227,262 | 161,076 | 153,673 | 7,403 | 497,500 | 77,617 | 419,883 | 278,548 | 141,336 | 86,075 | 55,260 |
| 2019 | 470,905 | 69,586 | 401,319 | 237,761 | 163,558 | 154,839 | 8,719 | 544,560 | 97,096 | 447,465 | 303,043 | 144,422 | 85,993 | 58,428 |
| 2020 | 498,267 | 81,933 | 416,334 | 256,397 | 159,937 | 151,141 | 8,796 | 595,318 | 97,897 | 497,421 | 353,572 | 143,849 | 81,997 | 61,852 |
| 2021 | 598,671 | 84,042 | 514,629 | 315,094 | 199,535 | 190,003 | 9,532 | 652,728 | 87,151 | 565,577 | 390,148 | 175,429 | 107,119 | 68,309 |
| 2022 June | 655,307 | 70,643 | 584,664 | 353,947 | 230,717 | 212,373 | 18,344 | 717,479 | 80,707 | 636,772 | 431,818 | 204,954 | 125,393 | 79,561 |
| July | 657,188 | 69,098 | 588,090 | 360,674 | 227,415 | 209,243 | 18,173 | 713,039 | 83,504 | 629,535 | 425,450 | 204,085 | 123,525 | 80,560 |
| Aug. | 722,520 | 74,887 | 647,633 | 419,374 | 228,259 | 210,304 | 17,955 | 753,424 | 79,116 | 674,308 | 466,696 | 207,613 | 127,197 | 80,416 |
| Sep. | 723,039 | 82,248 | 640,791 | 394,930 | 245,860 | 228,061 | 17,800 | 746,270 | 74,431 | 671,839 | 450,188 | 221,651 | 141,128 | 80,524 |
| Oct. | 695,501 | 83,182 | 612,319 | 369,191 | 243,127 | 225,281 | 17,846 | 730,290 | 76,980 | 653,310 | 439,376 | 213,934 | 133,427 | 80,507 |
| Nov. p | 682,382 | 85,239 | 597,143 | 353,698 | 243,446 | 225,607 | 17,838 | 742,298 | 84,627 | 657,671 | 442,372 | 215,299 | 135,601 | 79,697 |

\* 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

### 9. 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 |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 2021 | 1.5749 | 1.4826 | 7.6282 | 7.4370 | 129.88 | 10.1633 | 10.1465 | 1.0811 | 0.85960 | 1.1827 |
| 2022 | 1.5167 | 1.3695 | 7.0788 | 7.4396 | 138.03 | 10.1026 | 10.6296 | 1.0047 | 0.85276 | 1.0530 |
| 2021 Aug. | 1.6118 | 1.4827 | 7.6237 | 7.4369 | 129.28 | 10.4195 | 10.2157 | 1.0762 | 0.85287 | 1.1772 |
| Sep. | 1.6087 | 1.4910 | 7.6007 | 7.4361 | 129.66 | 10.1861 | 10.1710 | 1.0857 | 0.85683 | 1.1770 |
| Oct. | 1.5669 | 1.4436 | 7.4500 | 7.4398 | 131.21 | 9.8143 | 10.0557 | 1.0708 | 0.84694 | 1.1601 |
| Nov. | 1.5615 | 1.4339 | 7.2927 | 7.4373 | 130.12 | 9.9661 | 10.0459 | 1.0522 | 0.84786 | 1.1414 |
| Dec. | 1.5781 | 1.4463 | 7.1993 | 7.4362 | 128.80 | 10.1308 | 10.2726 | 1.0408 | 0.84875 | 1.1304 |
| 2022 Jan. | 1.5770 | 1.4282 | 7.1922 | 7.4411 | 130.01 | 10.0070 | 10.3579 | 1.0401 | 0.83503 | 1.1314 |
| Feb. | 1.5825 | 1.4422 | 7.1957 | 7.4408 | 130.66 | 10.0544 | 10.5342 | 1.0461 | 0.83787 | 1.1342 |
| Mar. | 1.4946 | 1.3950 | 6.9916 | 7.4404 | 130.71 | 9.7367 | 10.5463 | 1.0245 | 0.83638 | 1.1019 |
| Apr. | 1.4663 | 1.3652 | 6.9605 | 7.4391 | 136.61 | 9.6191 | 10.3175 | 1.0211 | 0.83655 | 1.0819 |
| May | 1.4995 | 1.3588 | 7.0830 | 7.4405 | 136.24 | 10.1453 | 10.4956 | 1.0355 | 0.84969 | 1.0579 |
| June | 1.5044 | 1.3537 | 7.0734 | 7.4392 | 141.57 | 10.2972 | 10.6005 | 1.0245 | 0.85759 | 1.0566 |
| July | 1.4856 | 1.3180 | 6.8538 | 7.4426 | 139.17 | 10.1823 | 10.5752 | 0.9876 | 0.84955 | 1.0179 |
| Aug. | 1.4550 | 1.3078 | 6.8884 | 7.4393 | 136.85 | 9.8309 | 10.5021 | 0.9690 | 0.84499 | 1.0128 |
| Sep. | 1.4820 | 1.3187 | 6.9508 | 7.4366 | 141.57 | 10.1697 | 10.7840 | 0.9640 | 0.87463 | 0.9904 |
| Oct. | 1.5474 | 1.3477 | 7.0687 | 7.4389 | 144.73 | 10.3919 | 10.9503 | 0.9791 | 0.87058 | 0.9826 |
| Nov. | 1.5455 | 1.3708 | 7.3171 | 7.4387 | 145.12 | 10.3357 | 10.8798 | 0.9842 | 0.86892 | 1.0201 |
| Dec. | 1.5685 | 1.4379 | 7.3859 | 7.4377 | 142.82 | 10.4480 | 10.9859 | 0.9865 | 0.86950 | 1.0589 |

* 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.

### 10. 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 |
| 2023 January 1 | Croatia | Croatian kuna | HRK | 7.53450 |

## XII. External sector

## 11. Effective exchange rates of the euro and indicators of the German economy's price competitiveness *

Q1 1999 = 100

| | Effective exchange rates of the euro vis-à-vis the currencies of the | | | | | | Indicators of the German economy's price competitiveness | | | | | | |
| | extended EER group of trading partners 1 | | | | broad EER group of trading partners 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: | | | | | |
| Period | 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 | 96.2 | 96.1 | 95.9 | 96.2 | 96.6 | 95.9 | 97.9 | 99.6 | 95.9 | 97.7 | 98.3 | 98.1 | 97.8 |
| 2000 | 87.0 | 86.8 | 86.0 | 85.7 | 88.1 | 86.1 | 92.0 | 97.5 | 85.5 | 91.2 | 93.1 | 92.3 | 91.2 |
| 2001 | 87.5 | 87.1 | 86.6 | 84.5 | 90.2 | 86.9 | 91.8 | 96.6 | 86.1 | 90.5 | 93.0 | 91.7 | 91.0 |
| 2002 | 89.8 | 90.2 | 89.6 | 88.1 | 94.5 | 90.5 | 92.4 | 95.7 | 88.5 | 91.1 | 93.5 | 92.2 | 91.9 |
| 2003 | 100.4 | 101.4 | 100.8 | 99.2 | 106.4 | 101.6 | 95.9 | 94.8 | 97.6 | 95.3 | 97.0 | 96.7 | 96.8 |
| 2004 | 104.2 | 105.3 | 103.8 | 102.4 | 110.9 | 105.4 | 96.2 | 93.6 | 100.0 | 95.6 | 98.5 | 98.2 | 98.4 |
| 2005 | 102.8 | 104.0 | 101.8 | 100.6 | 109.1 | 103.0 | 94.8 | 92.0 | 98.8 | 93.3 | 98.4 | 97.1 | 96.7 |
| 2006 | 102.8 | 104.0 | 101.2 | 99.5 | 109.2 | 102.3 | 93.6 | 90.4 | 98.2 | 91.6 | 98.6 | 96.7 | 96.0 |
| 2007 | 106.3 | 107.0 | 103.5 | 101.2 | 112.8 | 104.5 | 94.5 | 89.7 | 102.0 | 92.0 | 100.9 | 98.3 | 97.3 |
| 2008 | 110.2 | 109.9 | 105.7 | 105.1 | 117.6 | 107.0 | 94.9 | 88.4 | 105.1 | 91.3 | 102.4 | 98.4 | 97.5 |
| 2009 | 111.7 | 110.8 | 106.8 | 108.7 | 120.7 | 108.1 | 95.2 | 89.2 | 104.6 | 92.0 | 101.9 | 98.6 | 97.9 |
| 2010 | 104.5 | 103.0 | 98.6 | 101.2 | 112.0 | 99.1 | 92.5 | 88.7 | 98.2 | 88.1 | 98.8 | 94.3 | 92.5 |
| 2011 | 104.2 | 102.1 | 96.7 | 99.4 | 112.8 | 98.6 | 92.1 | 88.5 | 97.6 | 87.3 | 98.2 | 93.5 | 91.9 |
| 2012 | 98.5 | 96.8 | 91.2 | 93.6 | 107.6 | 93.8 | 90.1 | 88.3 | 92.5 | 84.7 | 95.9 | 90.5 | 88.9 |
| 2013 | 102.1 | 99.9 | 94.2 | 96.5 | 112.3 | 96.8 | 92.3 | 88.8 | 97.4 | 86.6 | 98.1 | 92.3 | 90.9 |
| 2014 | 102.3 | 99.2 | 94.2 | 96.6 | 114.7 | 97.2 | 92.9 | 89.6 | 97.7 | 87.4 | 98.2 | 92.5 | 91.5 |
| 2015 | 92.5 | 89.5 | 85.6 | 86.0 | 106.2 | 88.6 | 89.8 | 90.3 | 88.9 | 83.6 | 94.4 | 87.8 | 87.0 |
| 2016 | 95.2 | 91.5 | p 87.9 | 87.3 | 110.2 | 90.6 | 90.7 | 90.7 | 90.4 | 84.9 | 95.0 | 88.8 | 88.1 |
| 2017 | 97.5 | 93.4 | p 89.1 | 88.0 | 112.6 | 91.8 | 91.9 | 90.8 | 93.3 | 85.7 | 96.3 | 89.9 | 88.9 |
| 2018 | 100.0 | 95.6 | p 90.6 | 89.6 | 117.4 | 95.0 | 93.2 | 91.0 | 96.4 | 86.7 | 97.7 | 91.2 | 90.8 |
| 2019 | 98.1 | 93.2 | p 88.9 | 87.1 | 115.6 | 92.4 | 92.2 | 91.2 | 93.5 | 85.8 | 96.4 | 89.9 | 89.4 |
| 2020 | 99.7 | 93.6 | p 89.5 | 87.7 | 119.5 | 93.9 | 92.3 | 91.5 | 93.5 | 86.4 | 96.4 | 90.1 | 90.2 |
| 2021 | 99.6 | 93.5 | p 88.7 | p 85.9 | 120.9 | 94.3 | 93.5 | 92.0 | 95.5 | 86.8 | 97.4 | 90.7 | 91.0 |
| 2022 | 95.5 | p 90.7 | ... | ... | 116.8 | p 90.9 | ... | ... | ... | ... | p 95.9 | p 89.2 | p 89.1 |
| 2020 July | 100.4 | 94.5 | | | 120.5 | 94.8 | | | | | 96.0 | 90.0 | 90.2 |
| Aug. | 101.5 | 94.9 | p 90.3 | 88.6 | 122.6 | 95.9 | 92.5 | 91.1 | 94.4 | 86.8 | 97.0 | 90.7 | 91.2 |
| Sep. | 101.6 | 94.9 | | | 122.6 | 95.8 | | | | | 96.8 | 90.7 | 91.1 |
| Oct. | 101.3 | 94.8 | | | 122.6 | 95.7 | | | | | 96.7 | 90.6 | 91.0 |
| Nov. | 100.6 | 94.3 | p 90.5 | 87.9 | 121.8 | 95.2 | 93.1 | 91.4 | 95.6 | 86.9 | 96.5 | 90.1 | 90.5 |
| Dec. | 101.8 | 95.3 | | | 123.1 | 96.0 | | | | | 97.0 | 90.5 | 90.9 |
| 2021 Jan. | 101.4 | 95.3 | | | 122.6 | 96.0 | | | | | 98.0 | 91.4 | 91.7 |
| Feb. | 100.7 | 94.6 | p 90.1 | 87.9 | 121.7 | 95.2 | 93.4 | 91.8 | 95.8 | 87.1 | 98.0 | 91.3 | 91.5 |
| Mar. | 100.3 | 94.2 | | | 121.4 | 94.9 | | | | | 97.7 | 91.1 | 91.4 |
| Apr. | 100.6 | 94.4 | | | 122.1 | 95.2 | | | | | 97.9 | 91.2 | 91.6 |
| May | 100.8 | 94.4 | p 89.4 | 86.4 | 122.4 | 95.3 | 93.2 | 91.4 | 95.8 | 86.6 | 98.0 | 91.3 | 91.8 |
| June | 100.3 | 93.8 | | | 121.7 | 94.6 | | | | | 97.9 | 91.1 | 91.5 |
| July | 99.7 | 93.5 | | | 121.0 | 94.2 | | | | | 97.7 | 91.0 | 91.2 |
| Aug. | 99.4 | 93.2 | p 88.7 | 85.5 | 120.6 | 93.8 | 93.7 | 92.3 | 95.8 | 87.1 | 97.3 | 90.6 | 90.9 |
| Sep. | 99.5 | 93.3 | | | 120.6 | 93.8 | | | | | 97.4 | 90.7 | 90.8 |
| Oct. | 98.5 | 92.4 | | | 119.6 | 93.1 | | | | | 96.7 | 90.0 | 90.2 |
| Nov. | 97.6 | 91.7 | p 86.7 | 83.9 | 119.0 | 92.6 | 93.5 | 92.6 | 94.6 | 86.5 | 96.2 | 89.5 | 89.8 |
| Dec. | 97.1 | 91.2 | | | 119.2 | 92.5 | | | | | 95.8 | 89.0 | 89.5 |
| 2022 Jan. | 96.6 | 91.2 | | | 118.7 p | 92.3 | | | | | 96.0 | 89.0 | p 89.5 |
| Feb. | 96.9 | 91.7 | p 84.8 | 82.4 | 119.1 p | 92.7 | 92.8 | 92.2 | 93.5 | 85.7 | 96.1 | 89.1 | p 89.5 |
| Mar. | 95.9 | 91.4 | | | 118.6 p | 92.7 | | | | | 96.3 | 89.5 | p 90.0 |
| Apr. | 95.2 | 90.0 | | | 116.6 p | 90.3 | | | | | 96.1 | 89.0 | p 88.9 |
| May | 95.6 | 90.4 | p 83.3 | 80.9 | 116.4 p | 90.1 | 92.0 | 91.6 | 92.5 | 84.9 | 96.5 | 89.6 | p 89.3 |
| June | 95.9 | 90.6 | | | 116.7 p | 90.2 | | | | | 95.7 | 88.8 | p 88.4 |
| July | 94.1 | 89.1 | | | 114.7 p | 88.9 | | | | | 94.8 | 88.0 | p 87.6 |
| Aug. | 93.6 | 88.8 | p 81.9 | 79.7 | 114.2 p | 88.6 | p 91.7 | 92.0 | p 91.1 | p 84.8 | 94.5 | 87.7 | p 87.3 |
| Sep. | 94.2 p | 89.8 | | | 114.6 p | 89.3 | | | | | 96.0 | 89.2 | p 88.7 |
| Oct. | 94.8 p | 91.0 | | | 115.5 p | 90.6 | | | | | 96.1 | p 89.8 | p 89.4 |
| Nov. | 96.0 p | 91.8 | ... | ... | 117.2 p | 91.7 | | | | | 97.1 | p 90.7 | p 90.4 |
| Dec. | 97.0 p | 92.7 | ... | ... | 119.2 p | 93.0 | ... | ... | ... | ... | p 96.1 | p 89.6 | p 89.6 |

* The effective exchange rate corresponds to the weighted external value of the currency concerned. The method of calculating the indicators of the German economy's price competitiveness is consistent with the procedure 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** The 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 18 countries: Australia, Bulgaria, Canada, China, 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** Includes countries belonging to the extended EER group of trading partners (fixed composition) and additionally the following 23 countries: Algeria, Argentina, Brazil, Chile, Colombia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zea-land, Peru, Philippines, the Russian Federation, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey, Ukraine and United Arab Emirates. The ECB has suspended the publication and calculation of the euro foreign exchange reference rate against Russian rouble with effect from March 2, 2022 until further notice. For the calculation of effective exchange rates, an indicative rate is used for the Russian Federation from that date. It is calculated from the daily RUB/USD rates determined by the Bank of Russia in conjunction with the respective ECB's euro foreign exchange reference rate to the US dollar. **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 extended EER group of trading partners (fixed comosition). **6** Euro area countries (current composition) and countries belonging to the broad EER group of trading partners (fixed composition).

# 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, as are also the Statistical Series, with a changed basic structure and advanced options for using data.

## ■ Annual Report

## ■ Financial Stability Review

## ■ Monthly Report

A list of the articles published in the period from 2010 to 2022 is available on the Bundesbank's website.

### Monthly Report articles

**May 2022**
– The current economic situation in Germany

**June 2022**
– Outlook for the German economy for 2022 to 2024
– Pension insurance scheme: long-term scenarios and reform options
– Inflation-induced bracket creep in the income tax scale
– Public finances in the euro area: current developments and challenges
– The Bundesbank's surveys of firms – applications for assessing the financial situation in the corporate sector

**July 2022**
– Distributional Wealth Accounts for households in Germany – results and use cases
– Factors influencing international portfolio flows
– Cross-border interoperability of central bank digital currency
– Government debt in the euro area: developments in creditor structure

**August 2022**
– The current economic situation in Germany

**September 2022**
– Negative interest rate policy period and pandemic as reflected in the Bank Lending Survey
– Productivity effects of reallocation in the corporate sector during the COVID-19 crisis
– The performance of German credit institutions in 2021
– The role of the International Monetary Fund in preventing and managing crises

**October 2022**
– State government finances in 2021: Surplus and additional reserves from emergency borrowing

– Member States' financial relationships with the EU budget and the Next Generation EU off-budget entity in 2021
– The validity of interest parity in times of crisis
– Market conditions for Bunds in the context of monetary policy purchases and heightened uncertainty

### November 2022
– The current economic situation in Germany

### December 2022
– Outlook for the German economy for 2023 to 2025
– Rise in energy prices, the exchange rate of the euro and Germany's price competitiveness
– Access to cash in Germany – results of a representative public survey

### January 2023
– From the monetary pillar to the monetary and financial analysis
– Term structures in economic analysis
– Mobile payment usage in Germany
– Access to cash in Germany: analyses of the spatial availability of cash withdrawal facilities

## ■ 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, January 2022[1,2]

2 Banking statistics, customer classification, January 2022[2]

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[o]

35/2022
Robust real-time estimates of the German output gap based on a multivariate trend-cycle decomposition

36/2022
The impact of natural disasters on banks' impairment flow – Evidence from Germany

37/2022
Basel III and SME bank finance in Germany

38/2022
The effects of sanctions on Russian banks in TARGET2 transactions data

39/2022
The Eurosystem's asset purchase programmes, securities lending and Bund specialness

40/2022
Determinants of TARGET2 transactions of European banks based on micro-data

41/2022
Who creates and who bears flow externalities in mutual funds?

42/2022
Robust real rate rules

43/2022
The global financial cycle and macroeconomic tail risks

44/2022
Chinese supply chain shocks

45/2022
A nonlinear generalization of the Country-Product-Dummy method

46/2022
What drives inflation? Disentangling demand and supply factors

47/2022
On the macroeconomic effects of reinvestments in asset purchase programmes

48/2022

Real interest rates, bank borrowing, and fragility

49/2022

Estimating the impact of quality adjustment on consumer price inflation

50/2022

Score-based calibration testing for multivariate forecast distributions

51/2022

The preferential treatment of green bonds

52/2022

Bayesian VARs and prior calibration in times of COVID-19

01/2023

Make-up strategies with incomplete markets and bounded rationality

■ 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.
ᴑ Discussion papers published from 2000 are available online.
1 Publication available in German only.
2 Available only as a download.