



# Monthly Report

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### Abbreviations and symbols

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 Data unknown, not to be published or not meaningful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

Discrepancies in the totals are due to rounding.

## ■ Commentaries

### ■ Economic conditions

#### Economic output probably rose again in first quarter

*German economy performed better than expected in Q1 2023 and probably increased its activity again somewhat*

The German economy beat last month's expectations in the first quarter of 2023, probably increasing its activity again somewhat.<sup>1</sup> While persistently high inflation weighed on private consumption and consumer-related service providers, industry saw a stronger recovery than expected. The return to lower energy prices provided direct support for energy-intensive production, bottlenecks in the supply of intermediate goods continued to ease and demand picked up again markedly. Output also rose sharply in the main construction sector, although higher construction prices and financing costs continued to dampen demand for construction work considerably. Unlike in industry, it was mainly temporary factors that are likely to have contributed to this increase, especially the mild weather in January and February by normal standards, following December weather that had been unfavourable for construction activity.

#### Inflation weighing on consumption

*High inflation and lower subsidies for electric vehicles weighed on private consumption*

Private consumption and consumer-related service providers suffered in the first quarter from high inflation and the resulting reluctance to buy. This was especially evident in the retail sector, where seasonally and price-adjusted sales fell perceptibly on average in January and February compared with the previous quarter.<sup>2</sup> Revenues were down somewhat in the hotel and restaurant sector as well. Moreover, there is still a great deal of catching up to do to get back to pre-pandemic levels. Consumers also purchased considerably fewer cars in the first quarter than in the previous quarter. The number of new private car registrations went down

steeply according to the German Association of the Automotive Industry (VDA). However, this was also due to a one-off effect. Anticipatory effects were at play in car purchases at the end of 2022, as government subsidies were scrapped for plug-in hybrids and lowered for electric vehicles. These anticipatory purchases were then absent from the statistics at the beginning of 2023. The resulting rise and fall of domestic car purchases had very little impact on vehicle production, although motor vehicle sales in January were well below the high level of the fourth quarter of 2022 after price adjustment. Service providers not involved in trade likewise remained lacklustre. According to the ifo Institute, their overall business situation in the first quarter was no better than in the previous quarter.

#### Industry surprisingly buoyant

Industry rebounded recently, with output up significantly in both January and February 2023 after seasonal adjustment. Averaged over both months, a sharp rise on the previous quarter was recorded. Producers of consumer goods were affected by the weak consumption dynamics but the energy-intensive economic sectors expanded their output markedly.<sup>3</sup> The production of capital goods was also up sharply, with more motor vehicles being manufactured in particular. In addition to lower energy prices,

*Industry rebounded*

<sup>1</sup> The Federal Statistical Office's initial flash estimate for real gross domestic product (GDP) in the first quarter of 2023 is scheduled for publication on 28 April 2023. Owing to the existing strains and the subdued start to the first quarter, a slight decline in economic output was expected just a month ago; see Deutsche Bundesbank (2023).

<sup>2</sup> Seasonal adjustment here and in the remainder of this text also includes adjustment for calendar variations, provided they can be verified and quantified.

<sup>3</sup> Aggregate energy-intensive sectors include the manufacture of chemicals and chemical products, the manufacture of basic metals, the manufacture of coke and refined petroleum products, the manufacture of other 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 construction
	Total	of which:		
Domestic		Foreign		
2022 Q2	105.4	101.0	108.7	110.7
Q3	104.9	97.4	110.5	107.8
Q4	101.4	97.2	104.7	106.8
Dec.	101.8	100.0	103.1	105.8
2023 Jan.	102.3	94.6	108.2	99.7
Feb.	107.2	99.9	112.7	...
Output; 2015 = 100				
Industry				
Period	Total	of which:		Construction
		Intermediate goods	Capital goods	
2022 Q2	95.7	101.1	89.7	113.2
Q3	96.2	99.0	92.5	111.2
Q4	96.4	95.0	96.4	109.2
Dec.	95.6	91.5	97.3	102.9
2023 Jan.	97.5	97.0	97.4	116.9
Feb.	99.8	98.7	100.7	118.6
Foreign trade; € billion				Memo item: Current account balance in € billion
Exports	Imports	Balance		
2022 Q2	393.69	378.27	15.41	39.17
Q3	401.72	394.27	7.45	22.99
Q4	400.35	371.28	29.06	48.20
Dec.	128.14	117.07	11.07	17.02
2023 Jan.	131.38	115.42	15.97	20.58
Feb.	136.84	120.77	16.07	21.09
Labour market				
Period	Employment	Vacancies <sup>1</sup>	Un-employment	Un-employment rate %
	Number in thousands			
2022 Q3	45,595	848	2,487	5.4
Q4	45,709	815	2,522	5.5
2023 Q1	...	803	2,523	5.5
Jan.	45,806	809	2,514	5.5
Feb.	45,837	804	2,520	5.5
Mar.	...	794	2,536	5.6
Prices; 2015 = 100				
Period	Import prices	Producer prices of industrial products	Construction prices <sup>2</sup>	Harmonised consumer prices
2022 Q3	146.8	165.7	151.7	120.0
Q4	141.1	160.9	155.4	123.1
2023 Q1	...	154.6	159.7	124.3
Jan.	135.4	156.3	.	123.5
Feb.	132.1	155.8	.	124.3
Mar.	...	151.7	.	125.1

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

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industrial output benefited from a continuing high order backlog. According to surveys conducted by the ifo Institute and S&P Global, supply bottlenecks eased further, with more orders likely to have been processed as a result. Fresh demand stimulus was reflected in the recent steep rise in industrial new orders. The increase in January was still heavily concentrated on orders of other transport equipment and of motor vehicles and motor vehicle parts from abroad, after which the recovery in February became more broad-based both in regional terms and across sectors. This may be an indication that demand for industrial goods has emerged from its cyclical low, which is also consistent with the renewed substantial rise in German exports. On an average of January and February, price-adjusted exports of goods were significantly higher than in the previous quarter.

## Labour market developments still slightly positive

The improved economic developments in the first quarter were also reflected in the continued slightly positive developments on the labour market, with the number of persons in employment up marginally in February by around 31,000 on the month after seasonal adjustment. According to the disaggregated data available only for January, the favourable employment trend was driven mainly by employment subject to social security contributions, but also by exclusively low-paid part-time employment. Employment rose, in particular, in business-related services excluding temporary employment and in the hotel and restaurant sector. By contrast, the number of persons employed in the wholesale and retail trade, which is heavily impacted by high inflation, went down slightly. Hardly any change was noted for employment in the manufacturing sector. Initial estimates show a slight decline in short-time work for economic reasons in January, with the lion's share of these arrangements in manufacturing at the end of 2022 – disaggregated data

*Employment up slightly in February; outlook still slightly positive*

are not yet available for January. However, in line with the rebound in industrial activity, this sector is likewise currently reporting a marked fall in the number of registrations for short-time work compared with last autumn. The leading indicators of employment growth remained largely stable in mildly expansionary territory in March. This quite positive development in employment could therefore continue in the coming months.

*Unemployment slightly higher in March as well*

Despite the slight increase in employment, registered unemployment rose by 16,000 to 2.54 million persons in March after seasonal adjustment. The unemployment rate climbed to 5.6%. This growth related to the cyclical statutory unemployment insurance scheme and the basic welfare allowance scheme in equal measure. The number of persons registered as unemployed went up by 232,000 on the year. This is largely on account of Ukrainian nationals (+180,000), who were not yet included in the German social security system a year ago. According to the unemployment barometer of the Institute for Employment Research (IAB), local employment agencies expect the development of registered unemployment to be predominantly positive over the next three months. Unemployment could therefore fall slightly in the coming months.

## Inflation rate down significantly in March

*No further decline in energy prices recently*

Energy prices did not continue their downward slide in the international commodity markets recently. Prices had come under further pressure in March given emerging demand concerns in the wake of turbulence in the banking sector. Since then, the price of crude oil (Brent), in particular, has picked up again markedly, recently trading at US\$84 per barrel. One key factor behind the latest price increase was the surprising decision by OPEC and its partners to significantly reduce output for the remainder of the year from May onward. The price of crude oil is currently still around one-fifth lower than

one year previously, however. Forward quotations also suggest slight price reductions for the future. The declining trend in European gas and electricity prices over the past few months halted of late. European gas (TTF) recently cost €42/MWh, which is roughly half the price recorded one year previously.

Prices at the upstream stages of the economy tended to decline recently. Prices for both imports and domestic products fell on the month, which was mainly due to easing in global energy markets.<sup>4</sup> The year-on-year figures also indicate lower price pressures. Inflation in import prices, for example, decreased steeply to 2.8% in February, the last month for which data are available. For domestic products, the year-on-year rate halved to 7.5% in March. Excluding the price-dampening effect of the energy component, prices at the upstream stages remained constant recently in seasonally adjusted terms.

*Easing of price dynamics at upstream stages of economy*

Consumer price dynamics remained strong in March. The Harmonised Index of Consumer Prices (HICP) was up by 0.6% on the month in seasonally adjusted terms, the same as in February, driven mainly by unprocessed food. All other goods and services continued to become markedly more expensive as well. Only the rise in energy prices stalled. In annual terms, however, the inflation rate fell significantly overall to 7.8%,<sup>5</sup> which was 1.5 percentage points lower than in the previous month. The marked decline is due to a base effect. Energy prices had surged in March of last year in the wake of the Russian invasion of Ukraine. Since March 2023, the resulting higher price level compared with the same month of the previous year has been the basis for calculating the inflation rate. This is why the inflation rate fell, even though inflationary pressures remained strong at the current end. By contrast, the core inflation rate, which excludes volatile energy and food prices,

*Inflation rate fell significantly in March due to base effect*

<sup>4</sup> The electricity and gas price brakes also play a role in the decline in energy prices at the industrial producer level. These apply not only to households but also to industry.

<sup>5</sup> The consumer price index (CPI), calculated for national purposes, dropped to 7.4%.

rose markedly by 0.5 percentage point to 5.9%. It thus reached a new all-time high.

*Underlying price pressures to remain high in next few months*

In the coming months, the rate of inflation in Germany is likely to continue on a slight downward trajectory. This is mainly due to the likely decline in consumer energy prices compared with the previous year. The current exceptionally high inflation rate for food and other goods as well as for services should also ease slowly. However, a turnaround in the dynamics has yet to be seen. Overall, underlying price pressures are likely to remain high over the next few months.

## Public finances

### Local government finances

*Surplus for local governments in 2022, too*

Local governments (core budgets and off-budget entities) closed 2022 with a surplus. At €2½ billion, it was €2 billion lower than it had been a year earlier. Revenue rose steeply, by 6½% (+€20 billion). Tax revenue went up by 7% (+€8 billion), while local business tax grew by as much as 14% (+€7 billion, after deducting shares accruing to other government levels). Local government revenue from fees increased very sharply (10%), and transfers from state government rose by 7% (+€8 billion).

*Sharp increase in spending, particularly personnel expenditure and other operating expenditure*

At 7½% (+€22 billion), however, the rise in local government expenditure was even stronger than that in revenue. Personnel expenditure – a major expenditure item – increased by 8%, with a statistical change in Baden-Württemberg accounting for around one-quarter of this growth. Spending on social benefits rose by 5%. Within this category, accommodation costs for those receiving unemployment benefit II climbed moderately (+1%). Refugees from Ukraine have been able to claim these benefits since June 2022, but the favourable labour market situation is likely to have dampened government expenditure on this item overall. Furthermore, heating costs tend to increase with a lag, meaning that only

part of the impact of the high energy prices is likely to have been felt thus far. Benefits for asylum seekers probably included benefits for Ukrainian refugees for only a few months. From the middle of the year onwards, refugees from Ukraine were eligible to claim unemployment benefit II. Nevertheless, spending on benefits for asylum seekers increased very sharply (by 61%, or +€1½ billion). Other operating expenditure rose by 8%. Fixed asset formation grew by 7%, driven by construction investment. Additional outlays for investment and for other operating expenditure are likely to reflect, not least, the very large increase in prices.

Local government debt increased by €7 billion last year.<sup>6</sup> At the end of 2022, it amounted to €144 billion (including liabilities to the public sector). Investment-related credit market debt rose sharply, up by €8½ billion to €112 billion. Cash advances decreased by a further €1½ billion to €30 billion. Three-quarters of this reduction was attributable to local governments in North Rhine-Westphalia, Saarland and Rhineland-Palatinate. Nevertheless, per capita cash advances remained very high in these states compared with the average level in the other non-city states (€90): local governments in North Rhine-Westphalia and Rhineland-Palatinate even recorded values of over €1,000 per capita across their respective states. Despite a partial debt relief programme implemented by the state government, local governments in Saarland had cash advances amounting to €930 per capita.

*Higher credit market debt, but lower cash advances*

Rhineland-Palatinate, too, has now launched a partial debt relief programme for local governments with high volumes of cash advances. Following last year's constitutional amendment, the implementing act to assume debt of €3 billion (€720 per capita across the state) entered into force in February 2023. Local gov-

*Partial debt relief in Rhineland-Palatinate now, too*

<sup>6</sup> Based on the figures, the fiscal surplus would have made repayments an option. Local governments thus closed last year with larger cash reserves on balance. Local governments can use these reserves to finance their budgets, thus helping them avoid taking out further cash advances.



ernments have until the end of September to apply for partial debt relief. In return, they are expected to repay any outstanding cash advances by the end of 2053. Otherwise, the state will be entitled to withdraw debt relief payments. The onus will thus remain on the respective local governments to pursue prudent fiscal policy.

*Further burdens this year*

This year, burdens on local government budgets will intensify. For example, prices in the areas of other operating expenditure and construction investment are likely to rise further. In addition, the upcoming public sector pay agreement will have an impact. Tax revenue, meanwhile, is likely to grow at a much slower pace.

## ■ Securities markets

### Bond market

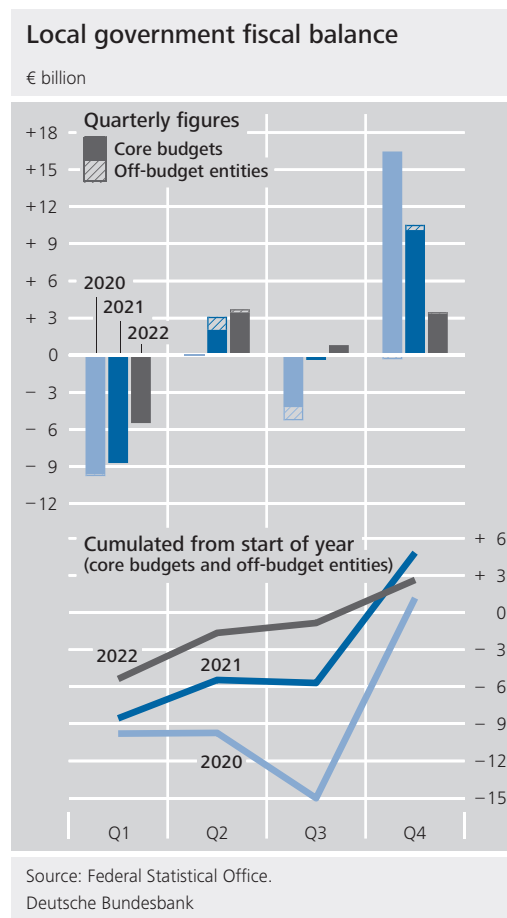
*Moderate net issuance of debt securities in February 2023*

At €153.7 billion, gross issuance in the German bond market in February 2023 was up on the previous month's figure (€131.4 billion). After deducting redemptions and taking account of changes in issuers' holdings of their own debt securities, the outstanding volume of domestic bonds rose by €11.5 billion. Foreign debt securities worth €11.7 billion net were placed in the German market. The outstanding volume of debt securities in Germany therefore rose by €23.3 billion on balance.

*Net public sector issuance*

In the month under review, the public sector increased its bond market liabilities by €7.9 billion net, compared with €3.3 billion in January. Central government predominantly issued two-year Federal Treasury notes (Schätze; €6.6 billion) and five-year Federal notes (Bobls; €5.5 billion). This contrasted with net redemptions of Treasury discount paper (Bubills; €10.4 billion) and ten-year Federal securities (Bunds; €4.9 billion). State and local governments issued securities with a net value of €6.4 billion.

In February, credit institutions issued debt securities worth €5.3 billion net, compared



with €19.2 billion one month earlier. On balance, this principally involved other bank securities (€7.9 billion) but also, to a lesser extent, public Pfandbriefe (€1.5 billion). By contrast, debt securities issued by specialised credit institutions and mortgage Pfandbriefe were redeemed in net terms to the tune of €2.9 billion and €1.2 billion, respectively.

*Net issuance by credit institutions*

Domestic enterprises reduced their capital market debt by €1.7 billion in February, following net issuance of €4.3 billion in January. On balance, redemptions were almost exclusively attributable to other financial intermediaries and insurance companies (-€0.8 billion each).

*Fall in enterprises' capital market debt*

Domestic non-banks were the strongest group of buyers in February. They purchased bonds totalling €16.4 billion net, most of which were foreign securities. Domestic credit institutions added bonds worth €13.5 billion net to their holdings, with the vast majority of these being domestic assets. Holdings of bonds in the Bun-

*Purchases of debt securities*

## Sales and purchases of debt securities

€ billion

Item	2022	2023	
	Feb.	Jan.	Feb.
Sales	27.6	26.9	11.5
Domestic debt securities <sup>1</sup> of which:			
Bank debt securities	10.6	19.2	5.3
Public debt securities	13.9	3.3	7.9
Foreign debt securities <sup>2</sup>	12.1	31.5	11.7
Purchases			
Residents	33.3	41.3	24.9
Credit institutions <sup>3</sup>	8.1	10.5	13.5
Deutsche Bundesbank	14.8	7.8	-5.0
Other sectors <sup>4</sup> of which:	10.4	23.0	16.4
Domestic debt securities	8.9	7.0	6.1
Non-residents <sup>2</sup>	6.4	17.0	-1.7
Total sales/purchases	39.6	58.3	23.3

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

institutional investors were the primary beneficiaries (€8.4 billion). Among the various asset classes, funds of funds and mixed securities-based funds attracted the largest inflows (€3.9 billion and €3.8 billion, respectively), followed by bond funds (€1.9 billion) and equity funds (€0.8 billion). Foreign mutual funds active in the German market recorded inflows in the amount of €3.3 billion. Domestic non-banks proved to be the main buyers (€13.3 billion). In net terms, foreign investors acquired German mutual fund shares for €1.0 billion, while domestic credit institutions sold €0.4 billion worth of mutual fund shares.

## Balance of payments

The German current account recorded a surplus of €22.6 billion in February 2023, up €5.6 billion on the previous month's level. While the surplus in invisible current transactions, which comprise services as well as primary and secondary income, decreased, the surplus in the goods account expanded to a greater extent.

*Rise in current account surplus*

desbank's portfolio decreased by €5.0 billion net. Foreign investors offloaded German debt securities amounting to €1.7 billion net.

## Equity market

*Net issuance of German equities*

In the month under review, new shares worth €2.4 billion were issued in the German equity market. The outstanding volume of foreign shares in the German market increased by €2.5 billion. On balance, equities were purchased in February mainly by domestic credit institutions (€4.5 billion) and domestic non-banks (€1.6 billion). Non-resident investors trimmed their share portfolios by €1.2 billion.

In the reporting month, the surplus in the goods account increased by €7.3 billion to €19.0 billion because receipts rose and expenditure fell.

*Goods account surplus widened*

The surplus in invisible current transactions declined by €1.7 billion to €3.6 billion, largely because the deficit in the services account expanded by €1.1 billion to €2.6 billion. Expenditure decreased overall, driven primarily by lower expenditure on other business-related services. However, receipts declined more sharply, as, in addition to reduced receipts from these services, receipts from transport services, fees for the use of intellectual property and financial and manufacturing services also fell markedly. Moreover, the deficit in the secondary income account expanded by €0.5 billion to €6.0 billion. Higher non-government and government expenditure contributed to this increase. This was due, in particular, to increased general government payments to the EU

*Surplus in invisible current transactions down*

## Mutual funds

*Inflows to mutual funds*

Domestic mutual funds recorded net inflows of €10.5 billion in February (€8.0 billion in January). On balance, specialised funds reserved for

budget in connection with financing related to gross national income. The decline in expenditure on current transfers relating to international cooperation did not offset this. Net receipts in the primary income account remained broadly unchanged at €12.3 billion.

*Portfolio investment sees net capital exports*

In February 2023, financial markets were characterised by a brighter global economic outlook, while hopes of a rapid decline in inflation rates waned on both sides of the Atlantic. Germany's cross-border portfolio investment generated net capital exports of €19.3 billion (January: €26.6 billion). German investors increased their holdings of foreign securities by €17.4 billion, acquiring bonds (€12.2 billion), mutual fund shares (€3.3 billion) and shares (€2.3 billion). By contrast, they disposed of a small volume of money market paper (€0.4 billion). Conversely, foreign investors sold German securities on balance (€2.0 billion). They reduced their holdings of money market paper (€11.7 billion) and shares (€1.3 billion), while adding bonds (€10.1 billion) and mutual fund shares (€1.0 billion) to their portfolios.

In February, transactions in financial derivatives recorded outflows of €7.3 billion (January: outflows of €9.4 billion).

*Direct investment records capital outflows*

Direct investment recorded net capital exports of €18.1 billion in February (January: €4.2 billion). German enterprises increased their direct investment funds abroad by €27.5 billion. They granted additional intra-group loans (€15.0 billion), predominantly in the form of financial loans. Additionally, domestic companies injected their foreign affiliates with additional equity capital (€12.5 billion), with reinvested earnings playing an important role. In the opposite direction, foreign enterprises also increased their investment in Germany (€9.5 billion). They increased the volume of loans issued to German enterprises (€6.8 billion), doing so exclusively by granting more financial loans. They also stepped up their equity capital in German affiliates by €2.6 billion, almost exclusively by reinvesting earnings.

## Major items of the balance of payments

€ billion

Item	2022		2023	
	Feb.	Jan.	Jan.	Feb.P
I. Current account	+ 23.2	+ 17.0	+ 17.0	+ 22.6
1. Goods	+ 15.1	+ 11.7	+ 11.7	+ 19.0
Receipts	122.7	124.5	124.5	130.4
Expenditure	107.6	112.8	112.8	111.4
Memo item:				
Foreign trade <sup>1</sup>	+ 12.1	+ 10.0	+ 10.0	+ 16.9
Exports				132.3
Imports	112.4	116.0	116.0	115.4
2. Services	+ 2.1	- 1.5	- 1.5	- 2.6
Receipts	30.5	31.8	31.8	29.2
Expenditure	28.4	33.4	33.4	31.8
3. Primary income	+ 11.7	+ 12.4	+ 12.4	+ 12.3
Receipts	22.3	26.1	26.1	26.8
Expenditure	10.7	13.7	13.7	14.5
4. Secondary income	- 5.6	- 5.5	- 5.5	- 6.0
II. Capital account	- 1.6	- 4.7	- 4.7	- 0.4
III. Financial account				
(increase: +)	+ 48.0	+ 10.6	+ 10.6	+ 29.0
1. Direct investment	+ 15.3	+ 4.2	+ 4.2	+ 18.1
Domestic investment abroad	+ 21.5	- 13.8	- 13.8	+ 27.5
Foreign investment in the reporting country	+ 6.2	- 18.1	- 18.1	+ 9.5
2. Portfolio investment	+ 4.5	+ 26.6	+ 26.6	+ 19.3
Domestic investment in foreign securities	+ 9.6	+ 42.2	+ 42.2	+ 17.4
Shares <sup>2</sup>	- 3.3	+ 4.6	+ 4.6	+ 2.3
Investment fund shares <sup>3</sup>	+ 0.8	+ 6.1	+ 6.1	+ 3.3
Short-term debt securities <sup>4</sup>	+ 0.3	+ 7.9	+ 7.9	- 0.4
Long-term debt securities <sup>5</sup>	+ 11.7	+ 23.5	+ 23.5	+ 12.2
Foreign investment in domestic securities	+ 5.1	+ 15.6	+ 15.6	- 2.0
Shares <sup>2</sup>	- 0.9	- 1.6	- 1.6	- 1.3
Investment fund shares	- 0.4	+ 0.2	+ 0.2	+ 1.0
Short-term debt securities <sup>4</sup>	- 12.8	- 6.6	- 6.6	- 11.7
Long-term debt securities <sup>5</sup>	+ 19.2	+ 23.6	+ 23.6	+ 10.1
3. Financial derivatives <sup>6</sup>	+ 4.8	+ 9.4	+ 9.4	+ 7.3
4. Other investment <sup>7</sup>	+ 22.3	- 29.3	- 29.3	- 15.9
Monetary financial institutions <sup>8</sup>	- 26.3	- 68.4	- 68.4	- 5.6
of which:				
Short-term	- 29.8	- 61.7	- 61.7	- 6.8
Enterprises and households <sup>9</sup>	+ 22.2	+ 18.8	+ 18.8	- 13.9
General government	- 7.3	+ 9.1	+ 9.1	- 1.6
Bundesbank	+ 33.6	+ 11.2	+ 11.2	+ 5.3
5. Reserve assets	+ 1.2	- 0.3	- 0.3	+ 0.1
IV. Errors and omissions <sup>10</sup>	+ 26.4	- 1.7	- 1.7	+ 6.8

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

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*Net capital  
imports 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 inflows of capital amounting to €15.9 billion in February (following €29.3 billion in January). The net external claims of monetary financial institutions excluding the Bundesbank fell by €5.6 billion, while those of the Bundesbank increased by €5.3 billion. TARGET2 claims on the

ECB fell by €47.5 billion. At the same time, however, deposits – mainly from non-euro area residents – also decreased. By contrast, enterprises and households (€13.9 billion) and general government (€1.6 billion) recorded net capital imports.

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

*Reserve assets*

## ■ List of references

Deutsche Bundesbank (2023), Commentaries, Monthly Report, March 2023, p. 5.

## Money market conditions and remuneration of government deposits

*Traditionally, the public sector has held only small deposits on accounts with the Bundesbank, deterred mainly by the interest arrangements. The Bundesbank's zero interest rate policy for account balances meant that the public sector was usually better off holding liquid funds on interest-bearing accounts with commercial banks or investing them in other ways in the money market.*

*In June 2014, the interest rate on banks' account balances was lowered into negative territory. In line with Eurosystem regulations, remuneration of government deposits held with the Bundesbank was also generally negative – charged at the interest rate on the Eurosystem's deposit facility (deposit rate). However, interest rate conditions for these deposits only deteriorated in absolute terms, i.e. in terms of their level. Compared with market conditions, it became increasingly attractive for the public sector to hold liquid funds with the Bundesbank.*

*In the years thereafter, large-scale monetary policy asset purchases by the Eurosystem led to an unprecedented rise in excess liquidity held by banks. At the same time, general government deposits at the Bundesbank likewise went up sharply. As a result of the monetary and fiscal policy measures taken in response to the coronavirus pandemic, account balances increased again as the pandemic progressed – to more than twice their previous levels.*

*The deposit rate was raised back into positive territory in September 2022, thus prompting the question as to what this would mean for interest arrangements for public sector deposits going forward. Maintaining the previously applicable zero interest rate on these balances would have likely led to extensive liquidity flows into the money market in the short term. This could potentially have contributed to lower interest rates amid increased volatility in various money market segments. Against this background, the Eurosystem – taking market conditions into account – permitted national central banks to pay a positive interest rate on government deposits – initially for a limited period until April 2023. As of May 2023, the maximum permissible interest rate on account balances will then be reduced by 20 basis points (measured in terms of market conditions) until further notice.*

*The account balances that general government holds with the Bundesbank have now fallen significantly. To a certain extent, account holders again have attractive options to invest in the market. The public sector is therefore likely to continue shifting liquid funds from the Bundesbank to commercial banks in the second quarter as interest rate incentives improve. Reducing the Eurosystem balance sheet helps to limit the risk of this foreseeable and desirable development having an adverse impact on money market conditions.*

*The Bundesbank advocates reinstating the zero interest rate policy for government deposits further down the line. This policy gives due account to the fact that such deposits do not fulfil an autonomous monetary policy function. Account management for public sector players is just one of a range of services offered by the Bundesbank for private and public banks in addition to its mandate to support and safeguard the fulfilment of public sector activities.*

## ■ Introduction

*Public sector account balances increasingly shifted to Bundesbank*

Short-term account balances play an important role in the cash management of public administrations. They enable public authorities to offset fluctuations in revenue and expenditure and, if necessary, to make significant payments at short notice. In recent years, the public sector in Germany has increasingly shifted liquid funds from interest-bearing accounts at commercial banks or from other money market investments to accounts held at the Bundesbank.<sup>1</sup>

*Bundesbank's role as fiscal agent*

As part of its statutory mandate, the Bundesbank is the government's fiscal agent and offers various services to the public sector, including, in particular, account management and the settlement of payment transactions.<sup>2</sup> This means that not only commercial banks<sup>3</sup> but also public administrations, as well as both private-law and public-law entities<sup>4</sup> that perform duties of public administrations or process payments for public administrations, can hold an account at the Bundesbank. At the end of the day, public sector accounts with the central bank must always be at least balanced.<sup>5</sup>

*General government deposits with Eurosystem central banks have no monetary policy function*

In addition to monetary policy considerations and market economy principles, the prohibition on monetary financing (Article 123 TFEU) prevents central banks from remunerating government deposits at a higher rate than the comparable market conditions.<sup>6</sup> Comparable market interest rates are therefore an important point of reference for the maximum interest rate on public sector account balances with Eurosystem central banks. For the public sector, the possibility of holding balances on the central bank account is, in principle, only a supplement to services offered by commercial banks and other investments in the money market. General government deposits with the central bank have no monetary policy function: as a rule, the interest arrangements for public sector accounts are not part of money market management under the Eurosystem's monetary policy. From a monetary policy perspective,

short-term interest rates can be managed without having to pay a positive interest rate on government deposits.

At the same time, the national central banks' duties as fiscal agents should not impede the Eurosystem's performance of monetary policy tasks or the achievement of its price stability objective. Against this background, it has traditionally sought to counter excessive growth and unnecessary fluctuations in general government deposits.<sup>7</sup> This facilitates the Eurosystem's liquidity management and, with it, implementation of the single monetary policy. In light of this, the Eurosystem has tended to refrain from positively remunerating such balances with a view to setting incentives for deposits to be placed in the market. Thus, until negative key interest rates were introduced, public sector deposits with Eurosystem central banks reflected, in particular, the need for central bank account balances in public cash management including payment transactions.

*Central banks' duties as fiscal agents must take account of monetary policy requirements*

## ■ ECB decisions regarding remuneration of government deposits

Since February 2014, the ECB Guideline on domestic asset and liability management oper-

<sup>1</sup> Other euro area Member States have experienced comparable developments in many cases, but these are not the focus of this article.

<sup>2</sup> See Deutsche Bundesbank (2016), Section 10.3 "Services for the public sector".

<sup>3</sup> See also Deutsche Bundesbank (2022a).

<sup>4</sup> These include, for example, social security funds and other public-law entities.

<sup>5</sup> See the General Terms and Conditions of the Bundesbank, Section IV and the Bundesbank Act, Section 20.

<sup>6</sup> In principle, the risk aspect should also be taken into account here, as account balances with the central bank are entirely default-free. Deposits with commercial banks may be subject to risk in individual cases, especially as public sector deposits are not covered by the deposit guarantee scheme.

<sup>7</sup> As an "autonomous factor", general government deposits affect the level of central bank account balances held by banks: an increase in general government deposits with the Eurosystem usually results in a decrease in banks' account balances (and vice versa).

*ECB Guideline regulates remuneration of government deposits*

ations by the national central banks<sup>8</sup> has regulated the remuneration of government deposits. The ECB Governing Council initially set the market rate (for unsecured overnight deposits) as the absolute ceiling for the remuneration of (overnight) government deposits with Eurosystem central banks. As a general rule, each national central bank may apply the market rate only to relatively small account balances of up to 0.04% of the gross domestic product of the Member State in which that national central bank is domiciled (or up to €200 million, if this is higher). Beyond this threshold, a zero interest rate is generally applied if the deposit facility rate (deposit rate) is zero or higher. When the deposit rate was lowered into negative territory in June 2014, the ECB Governing Council specified that the deposit rate would likewise serve as the ceiling for remunerating government deposits (beyond the threshold) in the event of a negative deposit rate.<sup>9</sup>

*Temporary removal of 0% ceiling initially limited to end-April 2023 ...*

When the deposit rate was raised back into positive territory in September 2022, the ECB Governing Council initially allowed the positive remuneration of all public sector account balances with Eurosystem central banks, albeit only provisionally. In order to preserve the effectiveness of monetary policy transmission and safeguard orderly market functioning, it decided on 8 September 2022 to temporarily remove the 0% interest rate ceiling for remunerating government deposits. Instead, for the period up to 30 April 2023, the ceiling for the remuneration of government deposits remained at either the Eurosystem's deposit facility rate or the euro short-term rate (€STR), whichever was lower.<sup>10</sup>

*... to prevent abrupt outflow of deposits into the market*

The temporary removal of the interest rate ceiling in September 2022 was linked to concerns that an immediate transition to zero interest rates would lead to an abrupt outflow of deposits into the market. Such deposit outflows threatened to exacerbate the collateral scarcity that was emerging in some segments of the euro area repo market<sup>11</sup> and thus run counter to monetary policy.<sup>12</sup>

The ECB combined the transitional arrangement, initially limited until 30 April 2023, with a call urging public sector depositors to look for alternatives to central bank deposits, emphasising that the temporary change to remuneration does not alter the long-term desirability of encouraging market intermediation.<sup>13</sup>

*Greater market intermediation nevertheless desirable*

In February 2023, the ECB Governing Council decided to readjust the ceiling for remunerating certain deposits as of 1 May 2023.<sup>14</sup> The new ceiling for the remuneration of government deposits is to be set at the €STR minus 20 basis points, taking effect on 1 May 2023. According to the ECB, this change reflects the fact that, while conditions in the repo market have improved since September 2022, the market remains fragile. It believes that it is still important for these deposits to return to the market in a gradual manner and sees the changes to the remuneration regime as providing incentives for depositors to gradually run down their holdings with the Eurosystem. The ECB Governing Council announced that it stands ready to make further adjustments to the remuneration regime if necessary.<sup>15</sup>

*Aim: gradual reduction of deposits*

As a result, monetary policy and non-monetary policy counterparties with a central bank account have been, and still are, subject to divergent (interest) conditions which set different incentives for their respective money market activity and have also shaped the development of

<sup>8</sup> Guideline ECB/2014/9, last replaced by ECB/2019/7 (recast).

<sup>9</sup> Certain deposits related to adjustment programmes (of the European Stability Mechanism, the International Monetary Fund and EU institutions) are exempt from the negative interest rate.

<sup>10</sup> For information on the application of rates at the Bundesbank, see p. 22.

<sup>11</sup> The repo market is used to trade money market loans backed by securities. In repo transactions, the borrower sells securities for a – generally fixed – period of time and then repurchases them. This is known as a repurchase agreement or “repo”.

<sup>12</sup> See also Deutsche Bundesbank (2022b).

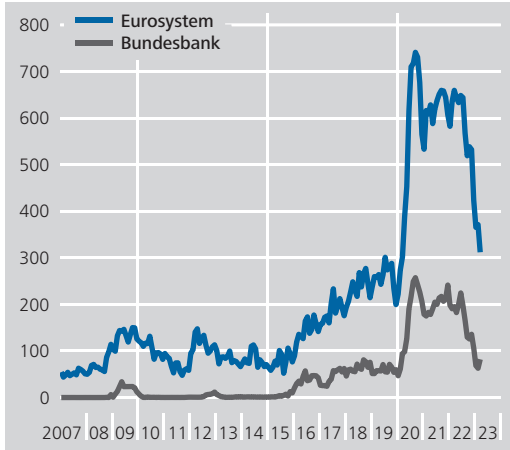
<sup>13</sup> See European Central Bank (2022).

<sup>14</sup> This decision also alters the remuneration of deposits held under the Eurosystem reserve management services (ERMS) framework.

<sup>15</sup> See European Central Bank (2023).

### General government deposits

€ billion, monthly averages of weekly data



Deutsche Bundesbank

public sector account balances at the central bank in recent years.

## Development of general government deposits: the Bundesbank and the Eurosystem as a whole

*Hardly any noteworthy general government balances on Bundesbank accounts until 2015*

In the early years of monetary union, general government held hardly any noteworthy balances on accounts with the Bundesbank. A temporary departure from this trend was the rise in balances in the wake of the 2008 financial crisis.<sup>16</sup> From the second half of 2015 onwards, there was a more lasting increase in general government balances on Bundesbank accounts (see the chart above).

*Changes in interest rate conditions increased comparative appeal of central bank deposits*

The main driver of this development was the increasingly attractive interest rate on balances with the central bank compared with alternative investments in the money market. In parallel with the ECB Governing Council's key interest rate decision of June 2014, deposits with the central bank were remunerated at the deposit facility rate, which entered negative territory at that point in time. From 2015 on, alternative investments in the secured money market were increasingly only possible at rates below the deposit facility rate (see the chart on

p. 17) given the sharp trend growth of excess liquidity in the banking system caused, amongst other factors, by the Eurosystem's monetary policy asset purchases. The deterioration of interest rate conditions in absolute terms in the negative interest rate environment was accompanied by a relative improvement due to changes in interest arrangements: compared with prevailing market conditions, it became increasingly attractive for general government to hold liquid funds on Bundesbank accounts.

Given the more attractive interest rate conditions, general government deposits with the Bundesbank grew from close to zero<sup>17</sup> in 2014 to an average of €57 billion in 2019. This development largely reflects the fact that individual entities shifted a significant volume of liquid funds to the central bank. In parallel, however, the general government sector in Germany continued to hold a significant volume of balances and time deposits with commercial banks. According to the consolidated financial statement of the Eurosystem, these increased from €196 billion to €247 billion over the same period.<sup>18</sup>

*General government shifted liquid funds to the Bundesbank*

In connection with the coronavirus pandemic, general government then continued to rapidly and extensively build up its deposits with the Bundesbank, temporarily reaching up to €279 billion over the course of 2020 (see also the box on pp. 18 ff.).

In 2009, 2010 and 2012, the average level of general government deposits with Eurosystem

<sup>16</sup> The 2008 and 2009 editions of the Bundesbank's Annual Report thus categorised deposits by the Financial Market Stabilisation Fund (SoFFin) as central government special funds. In May 2009, general government deposits briefly peaked at €36 billion.

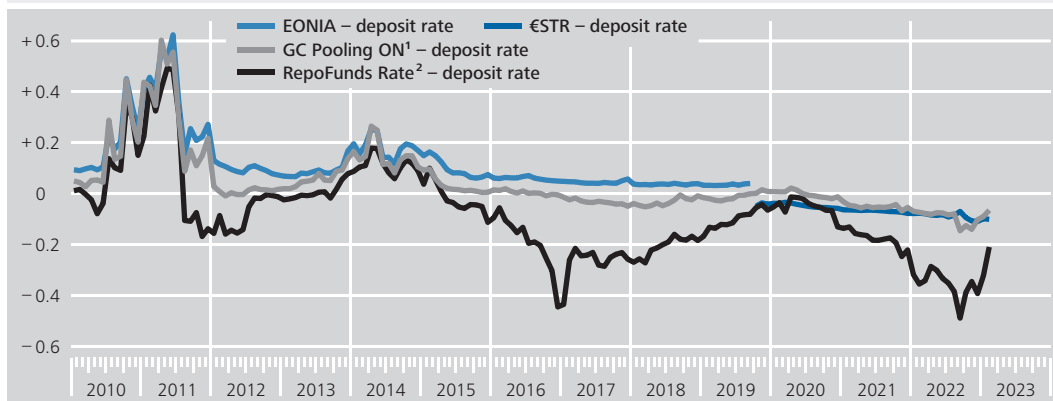
<sup>17</sup> General government balances held at the Bundesbank averaged €1 billion in 2014.

<sup>18</sup> According to the consolidated financial statement, deposits with European banks by entities in the general government sector increased from €196 billion to €247 billion between the fourth quarter of 2014 and the fourth quarter of 2019, then fell slightly from 2020 onwards before rising to more than €280 billion over the course of 2022 (see [https://sdw.ecb.europa.eu/quickview.do?SERIES\\_KEY=117.BSI.Q.U2.N.A.L20.A.1.DE.2100.Z01.E](https://sdw.ecb.europa.eu/quickview.do?SERIES_KEY=117.BSI.Q.U2.N.A.L20.A.1.DE.2100.Z01.E)).



### Interest rate spread of secured and unsecured money market rates over the deposit rate

Percentage points, monthly averages without quarter-end



Sources: Bloomberg and Bundesbank calculations. **1** Average interest rate of overnight transactions in the Eurex GC Pooling ECB Basket. **2** RepoFunds Rate Germany (repo trades using German government bonds as collateral executed on the BrokerTec or MTS platforms).

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*Central bank deposits more attractive throughout the euro area given negative interest rate environment*

central banks was already above €100 billion, reaching a temporary high of €174 billion in 2009. Due to changed interest arrangements with the transition to negative key interest rates and the trend increase in excess liquidity, general government deposits with the Eurosystem central banks rose from an average of €83 billion in 2014 to €258 billion in 2019. General government deposits with the Eurosystem central banks peaked at €810 billion in September 2020 during the coronavirus pandemic.<sup>19</sup>

*Deposits reduced from mid-2022 onwards given signs of normalisation in interest rate conditions*

Up to July 2022, general government balances with the Bundesbank and the Eurosystem central banks as a whole remained at an unprecedented historic high. With the prospect of the deposit facility rate returning to positive territory and interest rates then being less attractive in comparison, the general government sector began to rapidly withdraw or reduce its deposits. On balance, general government deposits with the Bundesbank had already receded to well below €100 billion in the first quarter of 2023. In parallel, general government balances fell to below €400 billion on aggregate across the Eurosystem.

## Investment conditions for general government in the money market

In mid-2022, general government deposits at the Bundesbank began to fall. The foreseeable transition to positive deposit facility rates caused a relative improvement in market conditions from the investors' perspective and an increase in the availability of alternative forms of investment for the general government sector. Such alternatives include secured and unsecured investments in the money market. The German money market statistics show that, before the pandemic, entities assigned to the general government sector,<sup>20</sup> such as central government, state government and local government, as well as other institutional units such as public health insurers, held over €50 billion of unsecured investments in the money market. These declined slightly over the course of the pandemic, then rose again up to the beginning of 2023, temporarily exceeding €100 billion.

*Additional money market investments made possible by better money market conditions*

According to recent figures, Germany's general government sector has invested overnight de-

<sup>19</sup> See Consolidated financial statement of the Eurosystem (25 September 2020).

<sup>20</sup> Sector code S.13 according to the European System of Accounts (ESA).

## The liquidity position of general government, taking the example of central government

From 2014 to 2019, central government did not need to take on any net new debt – borrowing was solely for the purpose of rolling over maturing Federal securities. Even in this environment, central government utilised short-term liquidity funding and made deposits<sup>1</sup> to balance its central bank account. According to the Federal Ministry of Finance, liquidity borrowing largely comprised secured borrowing, as this was subject to lower interest rates.<sup>2</sup>

At the end of the 2014-19 period, deposits of roughly €30 billion were offset by recourse to liquidity borrowing of around €20 billion. The balance of liquidity borrowing and deposits, which is also calculated at monthly intervals, thus fluctuated in the range of €10 billion (see the chart below), meaning that deposits exceeded recourse to liquidity borrowing. A positive balance means that central government's deposits are either invested in the money market at least to this extent or are held as account balances with commercial banks or the central bank. In cases where the balance is

positive, the size of the deposits is at least equal to the balance, but usually significantly higher. Outstanding liquidity borrowing reduces the balance but is not always utilised in full.<sup>3</sup>

It should be noted that, prior to 2015, central government held barely any deposits in the form of account balances with the Bundesbank. Instead, it placed liquid funds in the secured money market, amongst other things.<sup>4</sup> While large general government deposits were built up on the Bundes-

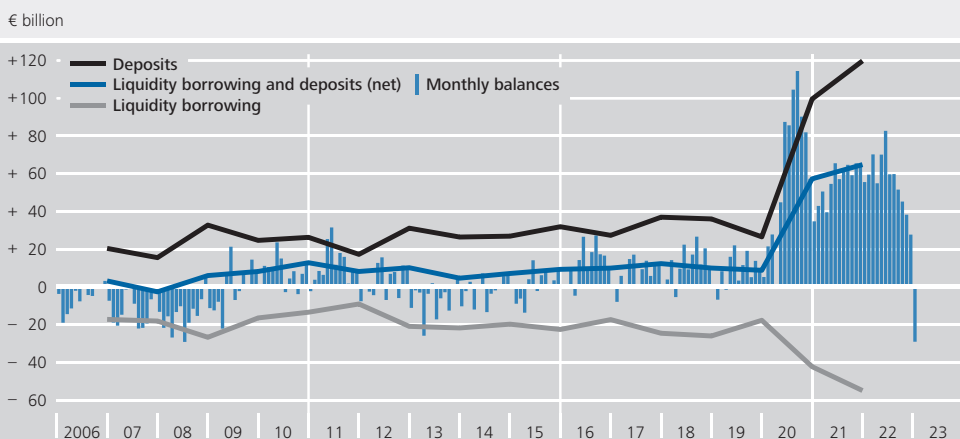
<sup>1</sup> Essentially, this item encompasses central government's total cash holdings in connection with debt management. These include capital raised in the market, account balances held with commercial banks and balances on the Bundesbank account.

<sup>2</sup> See, for example, Federal Ministry of Finance (2017), p. 45.

<sup>3</sup> Even negative year-end balances were associated with significant deposits in the years after the turn of the millennium.

<sup>4</sup> According to the Federal Ministry of Finance, short-term deposits predominantly take the form of repurchase agreements and are therefore secured (see [https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Oeffentliche\\_Finzen/Schuldenmanagement/schuldenmanagement-des-bundes.html](https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Oeffentliche_Finzen/Schuldenmanagement/schuldenmanagement-des-bundes.html)).

Central government liquidity borrowing and deposits

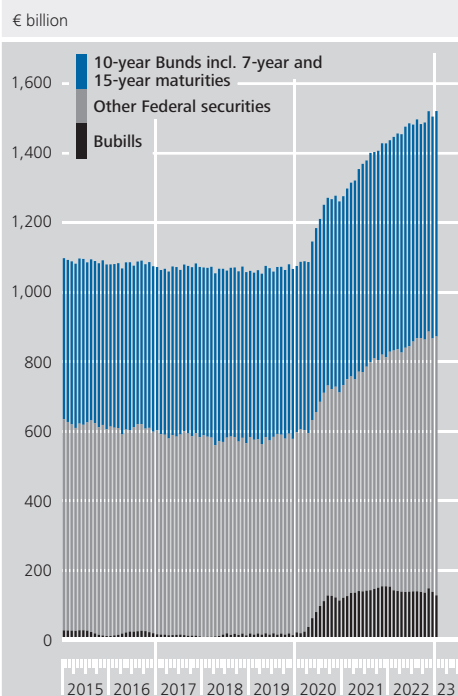


Sources: Federal Ministry of Finance and Federal Republic of Germany – Finance Agency.  
 Deutsche Bundesbank

bank's balance sheet between 2015 and 2019, the deposits reported by central government at the end of each year appear to be broadly constant compared with the period immediately prior to 2015. Against this background, it is reasonable to conclude that the increase in general government deposits between 2015 and 2019 is also attributable to transfers of account balances from the money market to the central bank balance sheet, as central government's liquidity position did not expand significantly during this period (see the chart on p. 18).

In order to counter the economic consequences of the coronavirus pandemic, general government provided extensive fiscal assistance starting in the spring of 2020. There was a high degree of uncertainty about the exact timing and the level of outflows. Against the backdrop of sharply increased but uncertain borrowing requirements, central government's holdings of liquid funds grew and the volume of liquidity borrowing permitted under the Budget Act was expanded.<sup>5</sup> In addition, the German Finance Agency – also covered by an adjustment in the Budget Act – increased its own holdings of Federal securities. These retained securities allow for more flexible market positioning on the part of the Finance Agency. The holdings are also available for securities repurchase agreements (repos) for financing purposes<sup>6</sup> or securities lending (with the aim of alleviating shortages in the securities markets). The Finance Agency's increased securities lending activity can be seen in the cash collateral accepted where the volume of both liquidity borrowing and short-term balances at the Finance Agency have gone up. However, a large part of the additional borrowing requirements was covered by a greater issuance of securities in all maturity segments. Central government's issuance of Federal

### Financing of central government budget (incl. special funds): Federal securities



Source: Federal Republic of Germany – Finance Agency.  
 Deutsche Bundesbank

securities with maturities of up to one year (Treasury discount paper, or Bubills; see the chart above) saw a particularly sharp increase.<sup>7</sup>

Through these measures, a significant short-term liquidity reserve was built up. This is reflected, first, in the deposits in the Federal Ministry of Finance's financial statements and, second, in the significantly higher general government account balances held with the Bundesbank. Whether it was an investment at market interest rates or a deposit at the central bank, holding this liquidity reserve generated interest income for central government. The higher the share of funds held on the central bank account, the greater this income, as money market

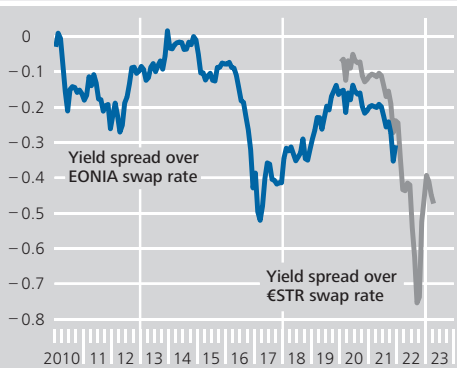
<sup>5</sup> See Federal Ministry of Finance (2021).

<sup>6</sup> Since 2020, it has also been possible to use repo transactions to finance the budget beyond the end of the year.

<sup>7</sup> See Federal Ministry of Finance (2022a).

### Two-year Bund asset swap spread\*

Percentage points, monthly averages

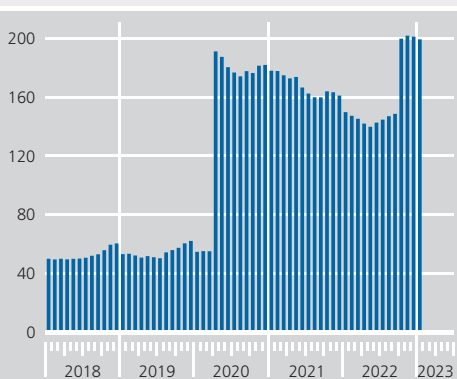


Sources: Bloomberg and Bundesbank calculations. \* Difference between the two-year EONIA/€STR swap rate and the yield on a matched maturity Bund.

Deutsche Bundesbank

### Central government's own securities holdings

€ billion



Source: Federal Republic of Germany – Finance Agency.

Deutsche Bundesbank

rates such as the €STR were lower than the deposit facility rate during this period.<sup>8</sup> Overnight borrowing backed by Bunds on the repo market was possible at rates well below the deposit rate applicable when placing the borrowed funds in the central bank account. The asset swap spread<sup>9</sup> of Bunds versus the €STR, i.e. the yield spread expected by the market between central government borrowing and daily investment of borrowed funds in the money market, was at times considerable for short-dated Bunds. Even at the start of 2023, the yield on two-year Bunds, for example, was significantly lower than the two-year €STR swap rate less 20 basis points. Under such circum-

stances, investing borrowed funds on the capital market at market conditions or depositing them in the central bank account would both be profitable transactions for the Finance Agency, all else being equal (see the upper adjacent chart).

As a result of the growing shortage of Bunds in the repo market, the Finance Agency has also considerably expanded its activities in this market (including securities lending) since 2020. The further increase in own holdings in October 2022 (see the lower adjacent chart) took place against the backdrop of “extraordinary financing needs [...] as part of the Federal government’s set of measures to address the energy crisis” and for use in repo market trading. The focus was on securities that were “particularly in demand in the current market environment”.<sup>10</sup> A portion of central government’s liquid funds is therefore likely to be attributable to repos – conducted to meet this demand and to avoid excessive fluctuations in repo rates – in which the Finance Agency borrows some funds in exchange for Federal securities.

<sup>8</sup> Until the Euro Overnight Index Average (EONIA) was discontinued on 3 January 2022, the deposit facility rate was the relevant rate for the remuneration of central bank balances held by general government in the negative interest rate policy period; see Guideline ECB/2019/7.

<sup>9</sup> The asset swap spread is the difference between the interest rate swap rate and the yield on a matched maturity bond. A Bund asset swap spread combines the purchase of a fixed interest Bund with an interest rate hedge using an interest rate swap and reflects not only demand for interest rate hedging but also the general liquidity situation. See also Deutsche Bundesbank (2022b).

<sup>10</sup> See Federal Republic of Germany – Finance Agency (2022).

*Some unsecured investments possible at rates above the €STR swap curve*

posits totalling just under €20 billion in the unsecured money market. The interest rates on the vast majority of overnight deposits are already higher than the €STR minus 20 basis points – i.e. they are above the ceiling on remuneration predominantly relevant for general government deposits as of May 2023. In most cases, outstanding investments with longer maturities were even concluded with an interest rate above the €STR swap curve on the respective trading day. Larger entities such as state governments tend to be able to make investments with significantly higher rates than smaller entities such as local governments. In the general government sector, there is often a preference for investments at associated institutions such as Landesbanken or promotional banks.

*Normalisation of conditions in secured money market segments*

In various secured money market segments, too, short-term investments at rates above the €STR minus 20 basis points have become possible again. In the GC Pooling segment,<sup>21</sup> for example, the total volume invested in the overnight money segment has recently grown significantly – and at rates that are well above the Eurosystem’s interest rate ceiling for remuneration of government deposits (excluding the year-end).<sup>22</sup> Furthermore, longer-term investments in this segment have proved possible again recently, which also points to increased market activity.<sup>23</sup> Since the beginning of the year, interest rates on investments backed by Federal securities have become comparatively attractive again, too. According to the German money market statistics, transactions concluded with rates above the €STR minus 20 basis points accounted for a significant share of the trading volume in this segment in February and March.

## Interest rates on general government deposits in the current market environment

The Governing Council justified the initially positive remuneration ceiling for general gov-

ernment deposits by expressing its concern that, in the event of zero remuneration, the majority of these deposits might suddenly be withdrawn and shifted primarily to the secured money market. An abrupt outflow of deposits might have exacerbated the incipient collateral scarcity in some segments of the repo market because, from the perspective of general government, investing liquid funds in the repo market is a comparatively safe alternative to central bank deposits. This might have contributed to a further marked decline in repo rates (compared with the key interest rate level). Furthermore, this could potentially have spread to other secured and unsecured money market segments to an extent that was undesirable from a monetary policy perspective.<sup>24</sup> If certain secured money market rates had systematically fallen behind the key interest rate path, this would initially have counteracted the monetary policy tightening planned in autumn 2022. The ECB Governing Council therefore considered it necessary to adjust the remuneration ceiling in September 2022 in order to ensure the effectiveness of monetary policy transmission. This adjustment ultimately contributed to a slight

*Transitional interest rates are intended to avoid an abrupt fall in secured rates*

<sup>21</sup> According to Eurex Clearing AG, individual entities in the general government sector also have access to the GC Pooling segment. A list of clearing participants with access to the GC Pooling segment can be found at <https://www.eurex.com/ex-en/markets/eurex-repo>

<sup>22</sup> In the reserve maintenance period ending on 7 February, overnight money volumes averaged €4.1 billion in the ECB Basket and €3.9 billion in the ECB EXTended Basket, although trading volumes recorded on public holidays and at year-end were significantly lower. See Deutsche Bundesbank (2023a), p. 28. Furthermore, there were also notable daily trading volumes in the GC Pooling Tomorrow Next and Spot Next segments.

<sup>23</sup> Recently, for example, the STOXX GC Pooling longer-term indices, which are based both on concluded transactions and on (binding) quotes, recorded enduringly positive index turnover (measured in € billion) for maturities of one week, one month or three months.

<sup>24</sup> Possible mechanisms include evasive movements to neighbouring (collateral) segments of the secured money market, and transactions in the secured money market potentially being taken into account in the calculation of certain reference interest rates. Furthermore, zero remuneration on general government deposits might have made it more difficult for the Finance Agency to provide securities against cash collateral in the context of securities lending, which would also have reduced the supply of certain securities in the repo market.

*National central banks decide on implementation of interest arrangements*

easing in the secured money market, which continued over the first quarter of 2023.<sup>25</sup>

Within the ceilings established by the ECB Governing Council, the respective national central banks or the ECB set the remuneration on general government deposits. First, the decisions of the national central banks must take into account the objectives of the relevant decisions of the Governing Council. Second, based on the considerations already mentioned at the beginning of this article (including compatibility with market economy principles and the prohibition of monetary financing) and in the interest of proportionality, remuneration should only be as high as is necessary to achieve the specific objectives being pursued. In the period between September 2022 and April 2023, the Bundesbank is therefore remunerating general government deposits at the deposit facility rate minus 20 basis points or the €STR, whichever is lower. The remuneration set by the Bundesbank was thus mostly around 10 basis points below the remuneration ceiling put in place by the ECB Governing Council. In view of current market conditions, the remuneration on deposits applicable at the Bundesbank from May 2023 onwards with the remuneration ceiling set by the Governing Council, i.e. the €STR minus 20 basis points,<sup>26</sup> is also likely to provide the incentives now needed for a gradual and orderly transfer of deposits to the money market.

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## ■ Conclusion

General government deposits with the Bundesbank have now fallen back significantly from the highs reached during the coronavirus pandemic. To a certain extent, account holders now have attractive investment options in the market again. The general government sector is therefore likely to continue shifting liquid funds to commercial banks in the second quarter of 2023 given the growing interest rate incentives. The reduction of monetary policy asset holdings as part of the normalisation of monetary policy is instrumental in limiting the risk of this foreseeable and desirable development having an adverse impact on money market conditions.

From the Bundesbank's perspective, it would make sense to reinstate the zero remuneration policy for general government deposits further down the line. This is appropriate given that these deposits do not fulfil a monetary policy function. Instead, carrying accounts for general government entities is a service offered by the Bundesbank which, in tandem with the services offered by private and public banks, supports and safeguards the fulfilment of general government tasks.

*Money market conditions enabling balance sheet normalisation*

*Consider return to zero interest rates going forward*

<sup>25</sup> For example, the scarcity premium in the repo market declined and there was a slight fall in asset swap spreads; see also Deutsche Bundesbank (2022b).

<sup>26</sup> See Deutsche Bundesbank (2023b).

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## Household wealth and finances in Germany: Results of the 2021 household wealth survey

*For ten years now, the Bundesbank has been surveying households in Germany about their wealth, debt, and income. The “Panel on Household Finances” (PHF) survey, which is conducted at intervals of around three years, provides valuable insight and data for the Bundesbank’s research and policy work. The survey continued during the coronavirus pandemic, although the fourth survey, which was originally planned for 2020, was postponed until 2021. Around four-fifths of the 4,119 respondents in the fourth wave had already participated in at least one of the previous surveys.*

*Between 2017 and 2021, asset holdings increased on a broad basis once again. In particular, households with low wealth saw strong growth in proportion to their existing holdings. This is one of the reasons for the slight reduction in net wealth inequality from 2017 to 2021. There had already been signs of this decline in inequality between 2014 and 2017. By European standards, however, the distribution of net wealth remains unequal.*

*The structure of wealth and debt has hardly changed across the wealth distribution. Ownership of real estate and businesses continues to be strongly correlated with high levels of wealth. By contrast, the wealth of less wealthy households consists primarily of balances on savings accounts and other low-risk forms of investment.*

*Both the share of households with debt and the share of households with negative net wealth, where outstanding debts exceed gross wealth, declined in 2021 compared with 2017. The share of income spent on interest and repayments for loans fell for a large number of indebted households over the same period.*

*The results presented here end in 2021. Since that time, there have been some developments relevant to household wealth and debt, such as rising interest rates in the course of monetary policy normalisation. The impact of these changes on household saving, investment, and debt behaviour is to be captured by the next wave of the survey in 2023.*

## ■ Introduction

This article presents selected results from the Bundesbank's 2021 Panel on Household Finances survey of German households and compares them with the results from previous years (2010-11, 2014, 2017). In this context, the development of wealth distribution, saving and investment behaviour, and the debt situation among households in Germany are at the centre of interest. The analyses largely focus on describing the distribution and composition of wealth, and therefore, when taken in isolation, do not allow for any conclusions regarding causal relationships to be drawn.

The survey, which was postponed to 2021 due to the coronavirus pandemic, was conducted mostly by telephone; previous surveys had been conducted as face-to-face interviews on location. In addition, the number of households participating in this wave that had already taken part in previous surveys was larger in relative terms.<sup>1</sup> The results from 2021 should nevertheless be broadly comparable with those from previous years.

## Wealth distribution in 2021 compared with previous years

The years 2020 and 2021 were characterised by the coronavirus pandemic and the measures taken to contain it – such as lockdowns, restaurant closures, and travel restrictions – which limited households' opportunities for consumption and led to additional saving. The pandemic was also accompanied by a sharp rise in short-time work, high volatility in the financial markets, and other developments that were potentially relevant to the economic and financial situations of households. Through a variety of measures, the German Federal Government attempted to mitigate the impact of the pandemic and, for example, stabilise household incomes. Some developments relevant to wealth and debt continued despite the crisis. For example, real estate prices appreciated sharply

between 2017 and 2021, and key interest rates remained at low levels. Share prices also rose significantly overall between 2017 and 2021.

At €316,500 in nominal terms,<sup>2</sup> average net wealth reached a new record high since the launch of the survey ten years ago. Between 2017 and 2021 alone, average wealth grew by around €83,600 (+36%).<sup>3</sup> Since 2010-11, household wealth has increased by just over €121,300 (+62%) on average. Median net wealth, which marks the middle of the wealth distribution and divides households into a richer half and a poorer half,<sup>4</sup> also swelled considerably once again, rising from €70,800 in 2017 to €106,600 in 2021. Viewed over the long term here, too, this represents an increase

*Household net wealth (mean and median) increased sharply*

<sup>1</sup> A higher participation rate among households that had already taken part in previous waves could potentially overstate the stability of any highlighted structures. However, there is no clear indication that this is the case. The weighting of the data takes account of the difference in the willingness to participate among households that have been surveyed multiple times and households that are being surveyed for the first time. In addition, the sample does not consist solely of households that have been surveyed multiple times: 685 of the 4,119 households that participated in this survey were first-time respondents. For more details on the methodology, see the box on pp. 30 f.

<sup>2</sup> Unless stated otherwise, these and all other values in this article are expressed in nominal terms, i.e. they have not been adjusted for inflation. For a discussion on the inflation adjustment of wealth, see the box on p. 33.

<sup>3</sup> This is a reflection of developments in the aggregate statistics of wealth in the household sector including non-profit institutions serving households between 2017 and 2021. According to this calculation method, total net worth, which is defined slightly differently, grew from €12.397 trillion to €16.605 trillion (+34%) between 2017 and 2021. See Deutsche Bundesbank (2022a) and Deutsche Bundesbank and Federal Statistical Office (2022).

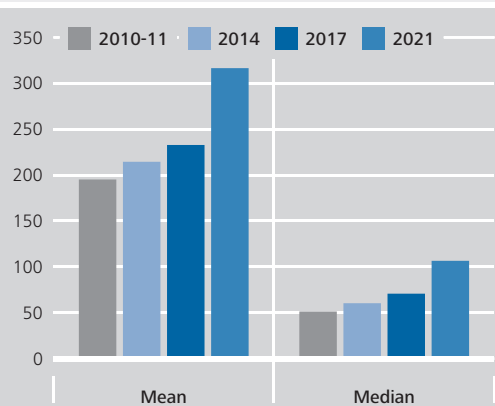
<sup>4</sup> In order to ascertain the median, households are first sorted by wealth in ascending order. The household wealth figure in the middle of this range constitutes the median. Based on the order of households sorted according to wealth, further parameters can be obtained (known as quantiles). A breakdown into five equal parts at 20%, 40%, 60% and 80% yields the quintiles, and a breakdown into ten equal parts yields the deciles.

of more than 100% compared with 2010-11 (€51,400).<sup>5</sup>

The rises in both the median and the mean were particularly sharp in the period between 2017 and 2021. Here, it should be taken into consideration that, in this instance, the interval between the waves was not three years, but four.<sup>6</sup> Furthermore, in the 2021 sample, the share of households that had been surveyed multiple times (panel households) was significantly higher than in previous waves (see also the box on pp. 30 f.). As the panel households had higher median wealth than the first-time respondents, it is possible that wealth in 2021 has been overestimated and this overestimation may not have been fully offset by weighting the data.

### Mean and median values of German households' net wealth distribution

€ thousand, as at March 2023



Sources: PHF 2010-11, PHF 2014, PHF 2017, PHF 2021.

Deutsche Bundesbank

households.<sup>10</sup> The share of net wealth held by the wealthiest 10% of households has changed only marginally over the past four years. The wealthiest 10% of households continue to hold

*Wealth distribution somewhat more equal than in the past*

The fact that the mean exceeds the median is a typical characteristic of wealth distributions, and the ratio of the mean to the median provides an initial indication of how unequally wealth is distributed.<sup>7</sup> Between 2017 and 2021, this ratio fell slightly from 3.3 to 3.0. Other ratios between different parts of the wealth distribution also indicate a slight decline in inequality.<sup>8</sup> For instance, the ratio of the cut-off value above which a household belongs to the wealthiest 10% of households in Germany (90th percentile, 2021: €725,900) to the median (2021: €106,600) declined from 7.8 to 6.8 in the latest survey. The higher the value, the more steeply the net wealth of households in the middle of the distribution would have to rise in order for them to rank among the wealthiest 10% of households. Similarly, the Gini coefficient<sup>9</sup> for net wealth – a traditional measure of inequality – also suggests that the inequality of wealth distribution is in slight decline, standing at 73% in 2021. By comparison, the Gini coefficient was 74% in 2017 and 76% in 2010-11.

*Wealthiest 10% possess 56% of net wealth*

In discussions about the long-term development of wealth distributions, the academic literature has also increasingly looked at the share of total net wealth held by very wealthy

<sup>5</sup> International comparisons are only possible with a few countries. Thus far, figures on net wealth are only available for Spain, Italy and Portugal for 2020. As in previous years, the mean values across Spain, Italy and Germany differ less significantly than the medians. In 2020, Italy had a mean of €341,000 and a median of €150,800; Spain had a mean of €269,900 and a median of €122,000. With a median of €101,200 in 2020, Portugal attained roughly the same level as Germany, although its mean of €200,400 was significantly lower than its German counterpart. For Spain, see Banco de España (2022); for Italy, see Banca d'Italia (2022); for Portugal, see Banco de Portugal (2022). When comparing different countries, it must be noted that the definitions of wealth do not include entitlements to statutory pensions (see also the box on p. 28).

<sup>6</sup> For the period from 2017 to 2021, average annual growth was around 8% for the mean and 11% for the median. By comparison, between 2014 and 2017, the mean rose by an average of 3% per year, while the median rose by 5% per year.

<sup>7</sup> Mean net wealth is strongly influenced by extreme values. A high ratio of the mean to the median therefore suggests that wealth in the upper part of the distribution is considerably greater than in the middle.

<sup>8</sup> Also according to the Distributional Wealth Accounts, which combine data from the PHF survey with the national accounts statistics, wealth inequality has fallen marginally since 2014. Overall, however, they still indicate that wealth inequality is high. See Deutsche Bundesbank (2022a).

<sup>9</sup> The Gini coefficient generally takes a value between 0% and 100%, where 0% represents perfect equality – all households have equally high net wealth – and 100% represents maximum inequality – all wealth belongs to one household. The closer the figure is to 100%, the more unequal the distribution. If negative values are also included in the calculation, it is also possible for the Gini coefficient to take a value greater than 100%.

<sup>10</sup> See Piketty (2014) and Saez and Zucman (2016).

## The PHF's definition of wealth

The objective of the PHF study is to compile and present detailed information on the wealth of German households.<sup>1</sup> The PHF study's definition of wealth is therefore designed to capture both the assets and the liabilities on households' balance sheets. The assets side ("gross wealth") consists of real assets and financial assets. The other side of the balance sheet lists liabilities, i.e. loans secured by real estate and unsecured loans. Net wealth is calculated as the difference between gross wealth and debt.

The data on asset types captured in the PHF is more granular than those in other wealth-related studies. Real assets, for example, include not only real estate and business ownership but also the value of vehicles, collections and jewellery. There is comprehensive coverage of financial assets as well. These consist of balances with banks, sav-

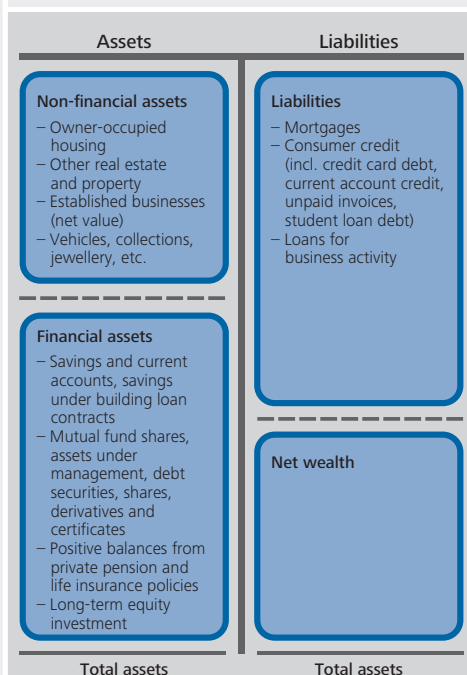
ings banks, and building and loan associations, securities, long-term equity investment and assets under management. The positive balances from private pension and life insurance policies are also included.<sup>2</sup>

Any future claims to a statutory pension are not included. As Germany has a pay-as-you-go pension system, these only constitute claims, not accumulated wealth. However, with a variety of assumptions on life expectancy, interest rate developments and the retirement age, it would be possible to convert future entitlements for individual types of statutory pension provision into assets (to capitalise them). Such simulations show that wealth inequality is smaller when looking at wealth including statutory pension provision than it is when statutory pension provision is not included.<sup>3</sup>

Households evaluate their assets themselves. This is mainly relevant for real estate and business ownership. In both cases, households are asked what price they think they could achieve for their property or business if they were to sell it.

Assets held abroad are also included in the calculation of a household's total assets if the respondents report this information.

**Balance sheet of a household – a schematic overview**



<sup>1</sup> The PHF defines households as groups of persons who live at the same address and share daily expenses. Persons who temporarily do not live at that address but regularly return there are also considered part of the household. Persons or groups of persons who live in a shared residence without having a family or partnership relationship, or domestic staff residing at that address, constitute households in their own right.

<sup>2</sup> Households' wealth includes private pension and life insurance policies in the accumulation phase or where contributions have been suspended. They are removed from households' balance sheets once payouts from the policies commence, and the relevant flows of income are then taken into account when calculating income.

<sup>3</sup> See, for instance, Kuhn (2020).

## Indicators of net wealth distribution

Item	2010-11	2014	2017	2021
Mean/median	3.8	3.6	3.3	3.0
P90 <sup>1</sup> /median	8.6	7.8	7.8	6.8
Gini coefficient	76%	76%	74%	73%
Share of total net wealth held by wealthiest 10%	59%	60%	55%	56%
Interquartile range <sup>2</sup>	€203,000	€221,000	€262,000	€338,000
Difference between P90 and P10 <sup>3</sup>	€442,000	€468,000	€555,000	€725,000
Share of households with net wealth ≤ €0	9%	10%	9%	6%
Share of households with net wealth < mean net wealth	74%	74%	72%	72%

**1** "P90" represents the cut-off value above which households belong to the wealthiest 10% of households. **2** The "interquartile range" is a measure of data dispersion. When interpreting the data, it should be noted that the interquartile range would also widen if the wealth of all households grew by the same factor. **3** "P10" represents the cut-off value that separates the wealthiest 90% of households from the 10% with the least wealth.

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56% of total net wealth.<sup>11</sup> However, compared with ten years ago, the levels of these indicators have also fallen: in 2010-11, the wealthiest 10% of the distribution still held 59% of total net wealth.

Even after the decline in the aforementioned indicators of inequality, inequality in Germany remains high by European standards. The ratio of the mean to the median was just over 2 in Italy, Spain, and Portugal in 2020, whereas in Germany in 2021, it was 3. The ratio of the median to the cut-off value for the wealthiest 10% of the distribution was 4.5 in Italy, 4.1 in

Portugal, but 6.8 in Germany. Furthermore, the Gini coefficients in Italy (68%) and Portugal (66%) were lower than in Germany (73%).<sup>12</sup> The most recent figures on wealth distribution in the United States are from 2019.<sup>13</sup> Including these figures for comparison reveals that net wealth distribution in the United States is significantly more unequal than in Germany (share of net wealth held by the wealthiest 10%: 76%; mean/median: 6).

The absolute spreads between certain parts of the distribution have continued to widen. For example, the spread between the least wealthy

*Inequality remains high by European standards*

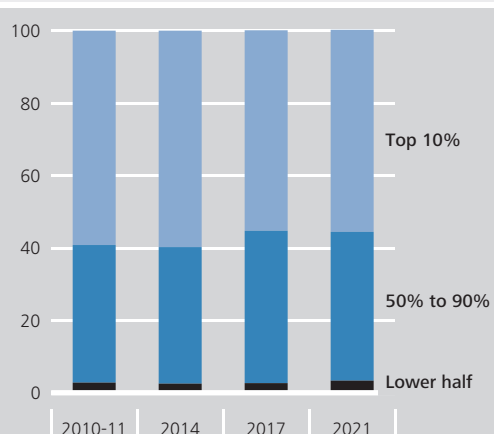
**11** Here, the share of wealth attributable to the wealthiest 10% of the distribution is underestimated (see Vermeulen (2018), Deutsche Bundesbank (2013, 2022b), Schröder et al. (2020), and Chakraborty and Waltl (2018)). Assuming that the degree of underreporting is similarly pronounced in each of the individual reporting years, the results are comparable across years. The approach behind the Panel on Household Finances (PHF) study is to overrepresent wealthy households in the unweighted sample (see the box on pp. 30 f.). This goal has generally been achieved. However, as in most other comparable surveys, very wealthy households are missing from the PHF, too. None of the households surveyed in the PHF possess wealth amounting to €100 million or more. This underreporting is also not offset through the weighting of the data. Very wealthy households are taken into account when calculating the Distributional Wealth Accounts. Here, too, the share of total net wealth held by the wealthiest 10% of households is largely stable, but is somewhat higher at around 60%.

**12** For Spain, see Banco de España (2022); for Italy, see Banca d'Italia (2022); for Portugal, see Banco de Portugal (2022).

**13** See Federal Reserve Board (2020).

### Households' share of total net wealth

%, as at March 2023



Sources: PHF 2010-11, PHF 2014, PHF 2017, PHF 2021.  
 Deutsche Bundesbank

## PHF study 2021: Methodology of the fourth survey

The fourth PHF survey was originally scheduled for the spring and summer of 2020 but was postponed to 2021 due to the coronavirus pandemic. Given that the social distancing requirements associated with the pandemic were largely still in effect in 2021, the methodology used in the PHF study was adjusted. Whereas in the three previous waves of the survey (2010-11, 2014, and 2017) household interviews could only be conducted face to face with respondents on location, telephone interviews were also an option in the 2021 survey. In fact, the majority of the total 4,119 interviews were conducted by telephone (3,783). The telephone version of the survey questionnaire differed only slightly from the face-to-face questionnaire. In particular, it was not possible to make use of printed lists with specific response options that would be shown

to interviewees in face-to-face interviews. The interviewers instead had to read the lists out aloud over the telephone. There were hardly any changes to the content of the questionnaire compared with the previous waves, ensuring that the questions and concepts are comparable with those from previous waves. For the 2021 survey, questions regarding the impact of the coronavirus pandemic on respondents' financial situations were added to the usual questionnaire (see the box on p. 35).

The period for conducting interviews was extended in order for a sufficient number of interviews to be completed. The survey, which was originally scheduled for March to October 2020, was ultimately carried out between April 2021 and early January 2022.

Despite offering to conduct the survey by telephone, only limited success was had in getting new households that had never been interviewed before to take part in the survey. As a result, households that had already participated in at least one of the previous surveys (2010-2011, 2014, or 2017) make up around 83% of the completed interviews. This figure is unusually high and is attributable to the fact that only a small number of households could be motivated to participate for the first time during the coronavirus pandemic. In the previous wave, the share of households that had been surveyed repeatedly was around two-thirds. The adjacent table provides an overview of the composition of the completed interviews in the individual years as well as the participation rates of individual groups.

**Composition of completed interviews by survey wave**

Respondents	2010-11	2014	2017	2021
Households (total)	3,565	4,461	4,942	4,119
Individuals aged 16 and over (total) <sup>1</sup>	6,661	8,349	9,165	6,852
Households surveyed repeatedly ("panel" and "split")	–	2,191	3,335	3,434
Households surveyed for the first time ("refresher")	–	2,270	1,607	685
Participation rate <sup>2</sup> (total)	17%	28%	31%	26%
"Panel" and "split"	–	68%	67%	57%
"Refresher"	–	18%	15%	7%

<sup>1</sup> These figures correspond to the number of completed personal interviews. The actual number of household members is higher as not all individuals in every household were available for interview. <sup>2</sup> Share of completed and usable interviews in the gross sample.

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Despite the adjustments to the methodology brought about by the coronavirus pandemic, the results of the 2021 survey

appear to be comparable with those of the previous waves.<sup>1</sup>

Irrespective of the above-mentioned adjustments, a slight change to the sampling concept for newly selected households had already been planned for 2020 in order to ensure better coverage of Germany's eastern federal states. This was achieved through oversampling, meaning that households resident in the eastern federal states were overrepresented in the gross sample. As a result, wealthy households were oversampled to a lesser extent than in the previous waves.<sup>2</sup> However, this does not mean that only a small number of wealthy households was included among the completed interviews. In the group of households that have been surveyed repeatedly, the share of wealthy households in all households had been rising steadily over time, so it seemed unnecessary to significantly oversample these households again for the fourth wave.

The higher probabilities of selection for wealthy households and households in eastern Germany were taken into account in the weighting, so that the results shown can be regarded as representative of households in Germany.

No adjustments were made to any other aspects of the methodology.

In 2021, as in previous years, the target population again included households with at least one person over the age of 18, but did not include people living in collective households (e.g. retirement homes or refugee homes) or institutions (e.g. monasteries or prisons).

The addresses of households approached for the first time were once again selected randomly from lists held by residence regis-

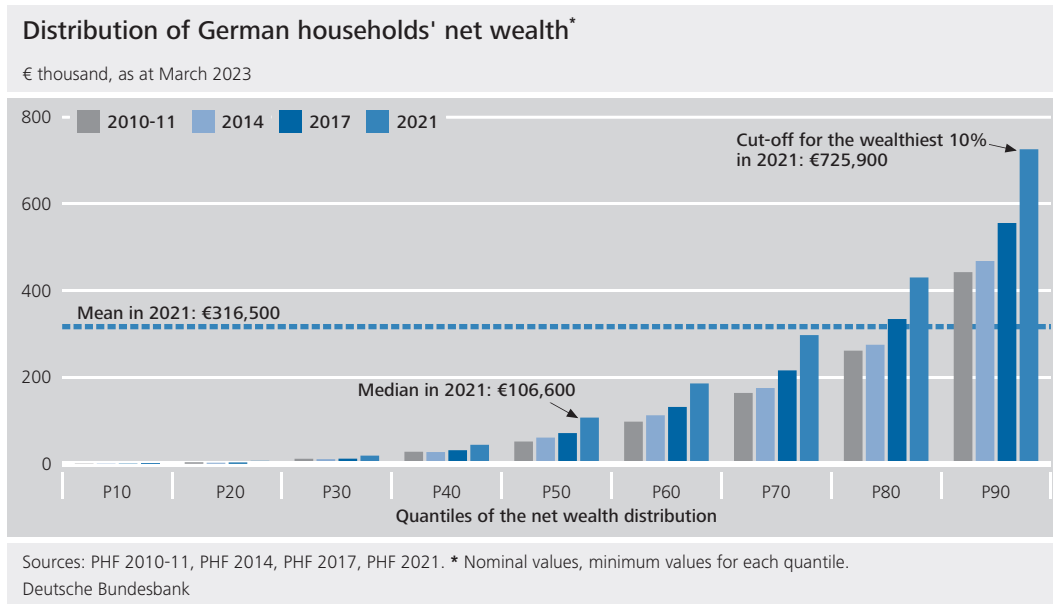
tration offices. The data were collected using electronic questionnaires. The just under 250 trained interviewers required a little over an hour on average to complete an interview.

Further information on the methodology and background of the PHF survey can be found at <https://www.bundesbank.de/en/bundesbank/research/panel-on-household-finances>.

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**1** It is difficult to carry out a formal review of the effects of the methodological changes using the available data. Not least, a comparison between the households surveyed in person and those surveyed by telephone is not possible due to the low number of respondents in the first group.

**2** When drawing the sample, income tax statistics are used to divide smaller municipalities with fewer than 100,000 residents into "rich municipalities" and "other municipalities". In cities with 100,000 residents or more, wealthy street sections are identified using micro-geographic information on location and purchasing power. Finally, the proportion of households in the sample is selected such that households in wealthy municipalities and wealthy street sections are oversampled in relation to their numbers in the population.



25% of the net wealth distribution and the wealthiest 25% widened to €337,700, representing an increase of almost 30% compared with 2017. This gap had already widened significantly between 2014 and 2017. Even if the wealth of all households were to rise by the same factor or percentage, this spread would increase, while the relative measures of inequality discussed above (such as the Gini coefficient, etc.) would remain unchanged.

In 2017, a household was already among the wealthiest 80% of households with net wealth of just over €3,000; in 2021, €6,900 was required to belong to this group. Average net wealth within the bottom 20% of the net wealth distribution also rose, although it remained in negative territory at -€3,100 (2017: -€6,800). In addition, the share of households with no or negative net wealth decreased by 2.4 percentage points from 8.9% to 6.5% between 2017 and 2021. Back in 2014, this figure was still 10%.

*Net wealth rising in broad terms ...*

The data from the PHF study also allow individual parts of the wealth distribution to be analysed.<sup>14</sup> As the above chart shows, asset holdings rose significantly in almost all parts of the distribution.

The inflow of funds onto current and savings accounts is an important factor behind the increase in the wealth of less wealthy households, which predominantly hold liquid investment forms. As shown in the table on p. 34, although the percentage of households holding certain types of financial assets (“prevalence”) has not changed in this group, the average holdings on current and savings accounts of households in the less wealthy 20% of the distribution have increased significantly. House-

*... especially for less wealthy households*

In absolute terms, the largest increases were observed among the wealthier households, but less wealthy households also recorded growth between 2017 and 2021. In nominal terms, this growth was weaker than in the upper portion of the distribution; in percentage terms, however, it was actually greater than that among the wealthy households. In order to be counted among the wealthiest 10% of households in Germany in 2021, a household required a net wealth of around €725,900 (+31%). In 2017, this cut-off value was still only €555,700.

<sup>14</sup> Looking at individual parts of the wealth distribution does not provide any indication of the extent to which the positions of individual households in the distribution have changed over time. The composition of the households in the individual segments of the distribution may change from year to year. Nevertheless, a rise in the percentile cut-off values suggests that net asset holdings have grown for a large number of households.



## Inflation and wealth

The results presented in this article in euro amounts are expressed in current prices in each case, i.e. they are nominal. This approach was likewise chosen in the previous reports on the PHF study. From mid-2021 onwards, consumer price inflation rose well above the 2% mark again for the first time in a long period. While the cumulative inflation rate, as measured by the annual average of the Harmonised Index of Consumer Prices (HICP), stood at 6.7% between 2010 and 2014 and at 2.7% between 2014 and 2017, it amounted to 7.2% for the period 2017 to 2021.

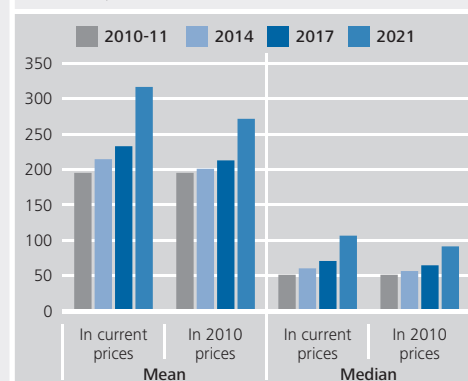
Nevertheless, the main section of this article provides no inflation-adjusted results. Calculating inflation-adjusted wealth measures is not without its problems as there is no generally accepted price index for wealth. It is also questionable whether it makes sense to adjust all data using only one price index or whether different (yield) indices should be used for different types of assets and debt. As an expedient, assets are therefore usually adjusted for inflation using the HICP. If the PHF figures were also adjusted in this way, the mean and median values for net wealth would be as shown in the chart below.

Inflation adjustment is not of central importance when analysing developments in inequality. This is especially true where relative measures of inequality are considered, such as the Gini coefficient, the ratio between the mean and median, or the P90/P50 ratio. As long as all wealth components are adjusted using the same factor, there is no change in the relative measures of inequality.

In addition to these aspects that are more relevant when comparing statistical results across the individual waves, inflation developments in general may play a role in households' wealth. If rising inflation is accompanied by rising interest rates or wages, this can affect not only households' consumption and saving behaviour, it also impacts debtors and savers in different ways. For instance, inflation leads to a redistribution of the real value of nominal financial assets and liabilities within the household sector. Adam and Zhu (2016)<sup>1</sup> show, for example, that in Germany, the poorest households, defined on the basis of their income and wealth, risk the greatest losses in the event of surprise inflation. In the euro area as a whole, inflation causes wealthy older households the greatest losses, as they hold comparatively more nominal assets (cash and liquid assets) and have less debt. The main benefits in the euro area accrue to younger middle-class households, since they have higher levels of net debt (mostly mortgage debt).

**Mean and median values of German households' net wealth distribution**

€ thousand, as at March 2023



Sources: PHF 2010-11, PHF 2014, PHF 2017, PHF 2021.  
 Deutsche Bundesbank

<sup>1</sup> See Adam and Zhu (2016).

### Asset structure of the less wealthy 20% of net wealth distribution\*

Item	2017		2021	
	Prevalence in %	Mean (conditional) in €	Prevalence in %	Mean (conditional) in €
Financial assets	98	2,500	99	3,400
Savings and current accounts	98	1,300	98	2,100
Real assets	45	15,700	49	17,700
Debt	54	30,000	54	28,000
Unsecured loans	53	11,300	52	10,400

\* The table on p. 45 provides details on overall asset structure.  
 Deutsche Bundesbank

hold debt among this group also fell slightly on average, although the percentage of indebted households remained unchanged.<sup>15</sup> These developments are consistent with an elevated saving ratio due to the limited spending opportunities during the coronavirus pandemic.

*Only one-fifth of households reported loss of wages and income due to coronavirus pandemic*

It remains to be seen how the coronavirus pandemic will continue to affect the situation of households in the medium to long term. In the short term, the pandemic appears to have impacted mainly the level of wealth, rather than its distribution and basic structures. Given that, as early as 2021, only around one-fifth of households reported that they had suffered losses of wages and income during the coronavirus pandemic and only 3% reported other financial losses (see the box on pp. 35 f.), more fundamental changes were not to be expected.

## Wealth situation of certain groups of households<sup>16</sup>

*Ownership of real estate and businesses indicative of high wealth*

Ownership of real estate and businesses is a good indicator for a household's level of wealth. In 2021, the median net wealth of households living in their own property reached a new record high of €364,800 since the launch of the surveys. The median value for tenant households also increased compared

with 2017, although, at €16,200, it remains well below the figure for property owners. The rise in real estate prices between 2017 and 2021 no doubt had an important impact on developments in the wealth of property-owning households. However, the difference between the net wealth of tenants and owners is also partly due to the fact that the two differ in terms of certain characteristics that are correlated with wealth, such as age, household size, income, or marital status. Households living in owner-occupied properties generally comprise older persons than tenant households. Homeowner households are also somewhat larger owing to the higher share of households with couples and households with children amongst owners. Furthermore, they usually have a higher household income than tenants.

Significantly above-average wealth is also found amongst owners of businesses.<sup>17</sup> The average net wealth of these households exceeds €1 million, with the median amounting to €503,600. Around half of the wealth of these households, many of which are found in the south of Germany, is directly attributable to their business ownership. The businesses of these households are worth around €502,800 on average.<sup>18</sup>

Even decades after reunification, there are still marked differences in wealth between eastern and western Germany. The median household in eastern Germany had net wealth of €43,400 in 2021 compared with €127,900 in western

*Net wealth in eastern Germany still significantly lower*

<sup>15</sup> These developments are also reflected in the Distributional Wealth Accounts. See Deutsche Bundesbank (2022a).

<sup>16</sup> Only a few options for breaking down households into different groups can be outlined here. Further breakdowns can be found in the table appendix on pp. 44 ff.

<sup>17</sup> In this case, business owners constitute only households with at least one member who is self-employed or occupies an active position in management, but not households with only (silent) participating interests or the like in enterprises.

<sup>18</sup> When interpreting these corporate values, it should be taken into consideration that few other assets are more unequally distributed than business ownership, and that there are many firms that are of little value and some that are worth a great deal.

## The impact of the coronavirus pandemic on the financial situation of households in Germany

Using the data from the 2021 PHF survey, it is not yet possible to gauge the longer-term impact of the coronavirus pandemic on households' financial situation or – for that matter – the distribution of wealth. However, the 2021 PHF data and an interim postal survey carried out in 2020 do contain information on the short-term impact of the pandemic on household finances.

Originally scheduled for 2020, the fourth main PHF wave had to be postponed until 2021 due to the pandemic. The Bundesbank's Research Centre, in collaboration with infas, carried out a postal interim survey in 2020 to bridge the gap between the last time households in Germany had been surveyed on their wealth in 2017 and the 2021 survey.

This interim survey contains a number of specific questions on the impact of the coronavirus pandemic on households.<sup>1</sup>

In the 2020 interim survey, only a few households reported having major problems with the coronavirus pandemic. Only around 8% reported that they had generally coped "poorly" or "very poorly" with the coronavirus pandemic up to that point.

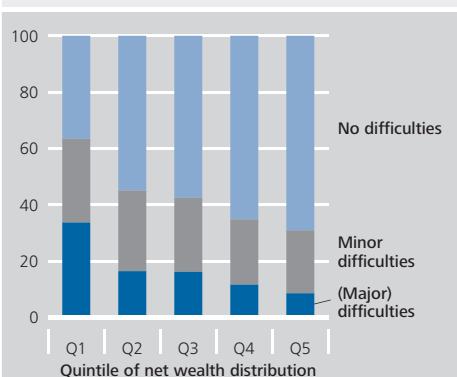
<sup>1</sup> The interim survey also collected information on the structure of household wealth, though did not cover it in as much detail as the main survey usually does. The different survey method employed for the interim survey (postal rather than face-to-face interviews) and the differences in the design of the questions about wealth further limit the comparability of the interim survey with the main waves. In particular, it is not possible to compare absolute assets over time consistently. However, the survey results from 2020 provide an impression of how the coronavirus pandemic has affected household finances, including across the wealth distribution. A total of 4,550 households participated in the interim survey, most of which had already participated in previous survey rounds.

That said, around 17% reported (major) difficulties in making ends meet during the coronavirus pandemic, with significant differences along the wealth distribution (see the chart below). While 34% of households in the bottom quintile of the wealth distribution reported difficulties, the corresponding share in the middle of the distribution is just 16% and in the upper part of the distribution the share is actually below 10%.

According to the survey, just over one-third of households had to deal with loss of income or financial losses in connection with the coronavirus pandemic in 2020, the majority of which were wage losses (see the chart on p. 36). The proportion of households experiencing financial losses or lost wages and salaries has declined over time – in the main PHF survey in 2021, only 22% of respondents reported having suffered such losses. In the 2020 interim survey, it was 34%. In particular, the share of households with financial losses other than loss of

### Financial difficulties during the coronavirus pandemic

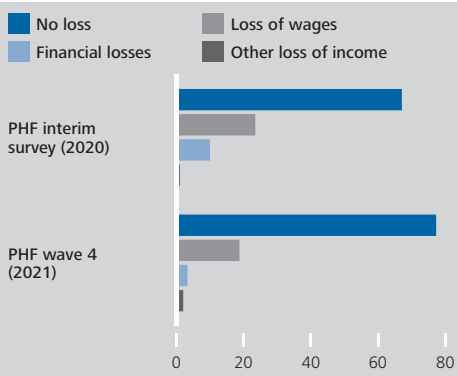
Percentage of households, as at March 2023



Source: PHF interim survey 2020.  
 Deutsche Bundesbank

### Financial losses owing to the coronavirus pandemic

Percentage of households, as at March 2023



Sources: PHF interim survey 2020 and PHF 2021.  
 Deutsche Bundesbank

wages or other income fell from 10% in 2020 to just 3% in 2021.<sup>2</sup>

Lastly, the interim survey also contained a question on saving behaviour during the crisis. Here, too, there are differences along

the wealth distribution. As expected, the share of households that were able to save increases along the wealth distribution. Nevertheless, 27% of households in the bottom 20% of the wealth distribution reported that they were able to save during the coronavirus pandemic.

<sup>2</sup> Similar patterns also emerged in the Bundesbank's survey on household expectations in Germany (Bundesbank Online Panel Households, or BOP-HH), which has been conducted at regular intervals since April 2020. See Afunts et al. (2022).

Germany. This means that the gap in terms of the median for eastern and western Germany has increased in absolute terms, from €69,100 to €84,500, although the ratio of median wealth in the west to the east has decreased from four to three. There has thus been a relatively stronger rise from a low level in median wealth in eastern Germany (+85%) than in median wealth in western Germany (+38%). This is consistent with the Federal Government's finding that standards of living in eastern and western Germany have continued to converge over time.<sup>19</sup>

*Household size and composition important for wealth levels*

In the PHF surveys, wealth is recorded at the household level, not at the individual level. The size and composition of the household therefore generally play an important role in its level of wealth. Not surprisingly, asset holdings increase with the number of household members. However, this correlation no longer applies to households with five or more persons. These are often households with a large num-

ber of children, who generally do not have any significant wealth holdings.<sup>20</sup> Looking at the household types in slightly more detail, it can be seen that, on average, couples without children and couples with children have similar wealth (roughly €435,000), but that the median for couples without children in the household is significantly higher at €237,200 (couples with children: €155,800). Wealth is thus more unequally distributed in the group of households comprising couples with children than in the group of households comprising couples without children. Two-person households also include many single-parent households. Their net wealth, at €109,400 on average, is not only lower than that of couple households, but

<sup>19</sup> See German Federal Government (2021).

<sup>20</sup> If a household's wealth is distributed evenly among its members, mean per capita net wealth is very similar for households with one and two persons, while households with five or more persons have the lowest figures. The average net wealth for households with three and four persons lies in between.

also lower than that of single persons without children (€200,300).

*Life cycle pattern for wealth*

Typically, the wealth of a household or an individual grows up to a certain age and then decreases again.<sup>21</sup> Income, too, generally increases as a person grows older and declines again from the end of their working life. In addition, the composition of households and the employment of household members change with increasing age, for example. The chart on p. 38 shows this life cycle pattern in 2021. While households with reference persons<sup>22</sup> under the age of 25 have a median wealth of around €11,400, median wealth in the 45-74 age group is between €154,700 and €231,000. Median wealth then starts to diminish, partly because older households tend to “dissave” and give away more assets.

*Characteristics of households in various parts of distribution constant over time*

Another way of characterising the structure of households along the wealth distribution is to look at the different parts of the distribution and describe the typical characteristics of households in each case. The table on p. 39 shows the percentage of households that are homeowners or hold business assets as well as the age and gender of the reference person for the four PHF waves conducted thus far. It is evident here that the structure of households in the individual parts of the wealth distribution has not changed fundamentally over the past decade. However, this does not mean that there is no variation in individual households’ positions in the distribution of wealth. Rather, it suggests that the characteristics associated with high and low wealth respectively have not altered significantly over time.

## Structure of household wealth and debt

In addition to looking at aggregate net wealth, its composition is also important. For monetary policy transmission, it is interesting, for example, to consider how wealth is distributed among savings, securities, and other forms of

### Mean and median values of net wealth by household size

€		
Number of household members	Mean	Median
1	200,400	40,800
2	378,300	169,200
3	413,600	164,000
4	456,400	203,000
5 or more	423,000	110,500

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investment; for financial stability issues, the structure of debt plays a role. For instance, the effectiveness of monetary policy measures depends, amongst other things, on the distribution and structure of wealth. Balance sheet constraints may also affect the impact of monetary policy measures.<sup>23</sup> In addition, different types of investment generate different returns, which can have an impact on asset holdings.

There were no major changes in the share of households possessing certain types of financial and real assets between 2017 and 2021. Only the increase in households investing directly in shares or that possess funds is striking. The share of households owning shares rose from 11% to 15%, while the percentage of households holding funds swelled from 16% to 21%. Younger households also invested more in funds and shares. The increase in stock mar-

*Rise in percentage of share and fund owners*

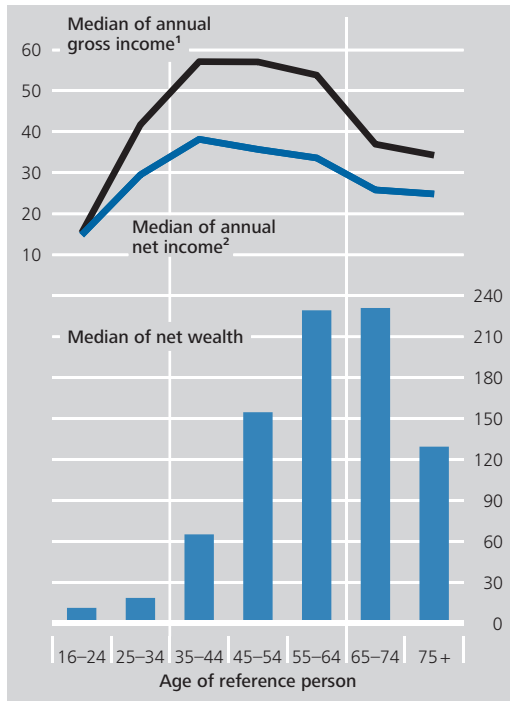
<sup>21</sup> For the breakdown by “personal characteristics” shown below, households are grouped by reference person and the total household wealth is allocated to this person. The reference person is generally the person with the highest income in the household. If two or more members of a household have equally high incomes, one person is selected at random.

<sup>22</sup> In this context, the reference person is usually the person with the highest income in the household. If two or more members of a household have equally high incomes, one person is selected at random.

<sup>23</sup> See, inter alia, Deutsche Bundesbank (2021), Dobrew et al. (2021), Matusche and Wacks (2022), and Weidner et al. (2014).

### Net wealth and income of households broken down by age of reference person

€ thousand, as at March 2023



Source: PHF 2021. **1** Calculated using components. **2** Self-assessment.  
 Deutsche Bundesbank

ket participation, in particular in 2020, is consistent with results from other studies.<sup>24</sup> The high stock returns between 2017 and 2021 and additional savings during the coronavirus pandemic could be one reason for the heightened interest in stock market investment.

However, households in Germany still appear to have a broad preference for liquid and lower-risk forms of investment. This is evident in the barely changed share of households with savings accounts, which, despite the long period of low interest rates that lasted until mid-2022, are still held by 71% of households in Germany. Viewed over the longer term, it is noticeable that both the share of households with savings accounts and of those with private pension plans has fallen by 7 percentage points and 5 percentage points respectively since 2010-11. However, most of this development took place between 2010 and 2017.

*Overall, still broad preference for liquid and low-risk forms of investment*

As regards the debt situation, there was a decline in the share of households with mortgage loans and/or unsecured loans. The rise in real estate prices made it more difficult for certain households to purchase and finance property. If fully repaid loans are not replaced by new ones, this share would likewise fall. Heightened uncertainty during the coronavirus pandemic may have also left its mark on both the demand and supply of mortgage loans.

*Decline in share of indebted households*

The fact that the average amounts for outstanding mortgage loans rose from €125,100 to €148,400<sup>25</sup> is in line with higher real estate prices. Higher prices meant that households purchasing real estate had to take out larger loans.

The overall sharp increase in financial assets<sup>26</sup> and, in particular, the inflows to liquid investment forms, such as savings and current accounts, are also confirmed in the PHF study.

*Significant increase in financial assets*

Households' financial assets, defined as the sum of savings and current account balances, the value of funds and shares, private pension products (including cash value life insurance) and other financial assets, went up from an average of €56,800 to €77,900 (+37%) between 2017 and 2021. For the same period, the financial accounts show an increase of €1.595 trillion in financial assets for the household sector (+27%).<sup>27</sup>

<sup>24</sup> According to Deutsches Aktieninstitut, there were just over 10 million owners of shares or equity funds in Germany in 2017 (15.7% of the population aged 14 and over). By 2021, the figure had increased to 12.1 million (17.1% of the population aged 14 and over). The differences can be explained by the fact that individuals, not households, and only equity funds, not other types of fund, are considered. See Deutsches Aktieninstitut (2018, 2022).

<sup>25</sup> See p. 41 for a more detailed analysis of the debt situation.

<sup>26</sup> See, for example, <https://www.bundesbank.de/en/press/press-releases/acquisition-of-financial-assets-and-external-financing-in-germany-in-the-fourth-quarter-of-2021-889346>

<sup>27</sup> Source: Deutsche Bundesbank time series database, code (BBK01.CEF00J), figures for the third quarter of 2017 and the third quarter of 2021.

### Selected characteristics of households in various parts of the net wealth distribution

Characteristics	Household position in net wealth distribution			
	Bottom 20%	Middle 60%	Top 20%	Total
Share of homeowners in %				
2010	4	42	92	44
2014	6	42	88	44
2017	4	42	90	44
2021	2	42	93	45
Share of households with business assets in %				
2010	1	7	23	10
2014	2	7	24	10
2017	2	7	22	10
2021	1	6	22	8
Age of reference person (mean value in years)				
2010	45	53	59	53
2014	48	53	59	53
2017	47	53	59	53
2021	49	53	60	54
Share of female reference persons in %				
2010	46	33	23	34
2014	46	35	28	36
2017	47	34	24	35
2021	47	37	27	37

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*New highs for balances on current and savings accounts*

Half of households in Germany had €3,000 or more on their current account in 2021. According to the PHF study, the average current account balance amounted to around €12,700, an increase of almost 80% compared with 2017. The increase for savings accounts was somewhat weaker, but here, too, both the median (€11,800) and the mean (€30,900) have risen significantly since the start of the surveys in 2010. One question that this raises is the extent to which the higher level of saving was “involuntary” in the sense of being unplanned,<sup>28</sup> as opportunities for consumption were limited during the coronavirus pandemic. These figures do not directly answer this question, but the huge growth in credit balances is remarkable nonetheless.

The mean and median values of equity and fund ownership also increased significantly. This is likely to be due to the sharp rise in the stock market index between 2017 and 2021. At 49%, the rise in the mean value of equity port-

folios is roughly as high as the rise in the median (45%).

The importance of real estate ownership and business assets for a household’s position in the distribution of wealth has already been mentioned above. As evident from the chart on p. 41, real estate and business assets are therefore also relevant to the composition of wealth along the distribution of wealth. Increases or decreases in value associated with ownership of a property or a business therefore also have a major impact on the development of individual parts of the distribution of wealth and on dynamics at the household level.<sup>29</sup> Between 2017 and 2021, the mean real estate wealth of households in possession of real estate grew by

*Real estate and business ownership remain relevant for the upper parts of the distribution in particular*

<sup>28</sup> See Deutsche Bundesbank (2022c).

<sup>29</sup> See Deutsche Bundesbank (2022a).

## German households' portfolio structure

Item	Prevalence in %				Mean (conditional) in €				Median (conditional) in €			
	2010	2014	2017	2021	2010	2014	2017	2021	2010	2014	2017	2021
Real assets	80	81	83	83	218,600	229,500	249,100	323,400	89,200	90,900	106,900	135,300
Ownership of main residence	44	44	44	45	205,800	231,400	258,800	343,200	168,000	162,000	199,200	278,800
Vehicles and valuables	73	75	78	78	13,000	13,300	13,600	15,300	7,780	7,000	8,000	8,900
Business assets	10	10	10	8	333,600	338,800	309,900	502,800	20,000	21,600	26,600	48,700
Financial assets	99	99	99	100	47,400	54,200	56,800	77,900	17,106	16,500	16,900	25,900
Current accounts	99	99	99	99	3,400	4,300	7,100	12,700	1,200	1,100	1,800	3,000
Savings accounts (excl. private retirement provision)	78	72	70	71	22,500	29,400	27,600	30,900	9,700	8,900	9,900	11,800
Private retirement provision (incl. life insurance policies)	47	46	43	42	27,200	28,300	33,200	42,100	11,400	13,500	15,400	20,000
Mutual fund shares (excl. private retirement provision)	17	13	16	21	29,000	39,800	37,500	44,600	10,000	14,800	12,900	15,900
Shares	11	10	11	15	29,100	38,700	43,700	65,100	8,600	9,800	9,900	14,400
Debt	47	45	45	41	56,900	57,000	65,200	72,400	12,620	15,200	19,800	17,800
Mortgage debt	21	20	21	18	110,200	111,100	125,100	148,400	80,000	76,400	81,000	84,500
Unsecured loans	35	33	33	29	9,600	9,500	10,800	11,300	3,170	3,500	4,900	5,500

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almost €85,000, or one-third.<sup>30</sup> The median rose by two-fifths in the same period from €199,200 to €278,800. The rise in the PHF study is thus somewhat higher than, for example, the increase in the Owner-Occupied Housing Price Index. While this index only reflects price increases, the PHF shows the appreciation in value.

Between 2017 and 2021, the median value of business assets<sup>31</sup> increased from €26,600 to €48,700.<sup>32</sup> However, the share of households owning an enterprise also fell. Part of the increase in the median could therefore be attributed to smaller or less successful firms being closed down more often than larger ones.<sup>33</sup>

## ■ Saving and wealth

As indicated in the previous sections, asset holdings change as a result of increases in

value. Of course, saving behaviour, i.e. the size of amounts invested over time, is also a factor.

**30** In the survey, the current hypothetical (resale) value of a property is estimated by the households themselves. In addition to the current value according to this self-assessment, households also state the price they originally paid, often quite a long time ago. The difference between the two prices is checked for plausibility.

**31** The exact wording of the question on business assets is: "How much is the business or the company worth after the deduction of liabilities? Here I mean: for what amount could you sell your stake if you take into account the company's assets and deduct the liabilities?" The question has remained the same in all waves of the PHF survey.

**32** The sharp increase in the mean value of business assets as shown in the table points to a problem in collecting data on households with very large business assets. Business assets are concentrated among wealthy households in the upper part of the distribution and are one of the most unevenly distributed types of asset (see also Deutsche Bundesbank (2022a), p. 26). Individual extremely high values can therefore have a major impact on measured averages and inequality, not only for this asset type but also for net wealth as a whole.

**33** There was a sharp rise in insolvencies in Germany, especially in 2021 (see *Insolvenzen nach Jahren* – Federal Statistical Office (destatis.de)). In this wave of the survey in particular, the PHF data show fewer households reporting that the enterprises they own would hypothetically sell for €0. These are freelancers and self-employed persons with no further employees.



*More households are saving than in 2017 ...*

In 2017, 43% of households reported regularly saving a fixed amount. By 2021, this share had increased slightly to 46%. The share of households reporting that they cannot save because they lack the financial resources to do so has declined, which is consistent with inflows to liquid savings and the somewhat lower level of debt in the less wealthy part of the distribution.

*... and fewer state that they are unable to save due to a lack of funds*

Overall, the share of households reporting that they were unable to save fell from 15% in 2017 to 11%. In 2014, the share was almost twice as high at 20%. The decline among the less wealthy 20% of the wealth distribution is particularly marked. While in 2014 48% and in 2017 41% of households in this part of the distribution had reported that they were unable to save, in 2021 the figure was only 33%. Whether this is an effect of the pandemic or a more sustained development remains to be seen.

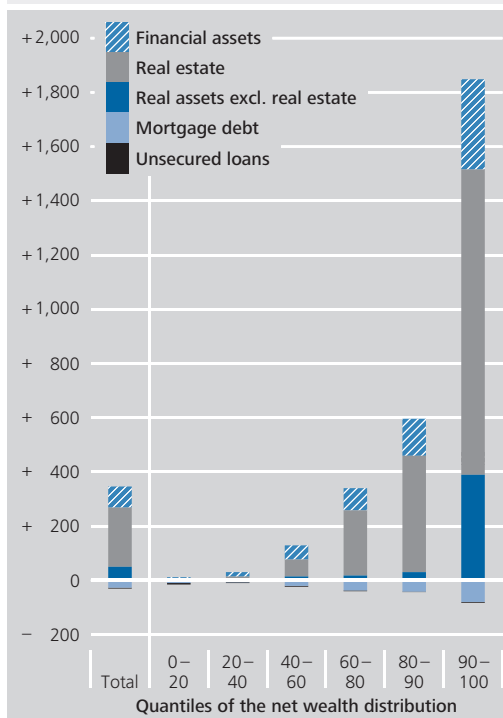
*Retirement provision and emergency safety net most important motives for saving*

There were only minor shifts in the most important motives for saving, with “retirement provision” and “safety net for emergencies” continuing to dominate (see the chart on p. 42). Both reasons were cited more often as the most important motive in 2021 than in 2017. Around 32% of households cited creating a safety net for emergencies, as many as in 2014. In 2017, the corresponding share was 29%. This development consequently does not indicate that households see an increased need to create a safety net for emergencies in response to their experiences during the coronavirus pandemic in 2020 and 2021. As shown in the box on pp. 35f., many households did, in fact, get through the pandemic without major financial problems in 2020 and 2021.

A decline in the share of households saving to purchase residential property would be consistent with the hypothesis that certain households have abandoned their plans to purchase property. However, the decline is very small, at -1.5 percentage points. The increased share of households saving for larger purchases, which could point to catching-up effects after the pandemic, should also not be overinterpreted.

### Breakdown of households' wealth by size\*

Assets and/or debt in € thousand, as at March 2023



Source: PHF 2021. \* Mean values (unconditional).  
 Deutsche Bundesbank

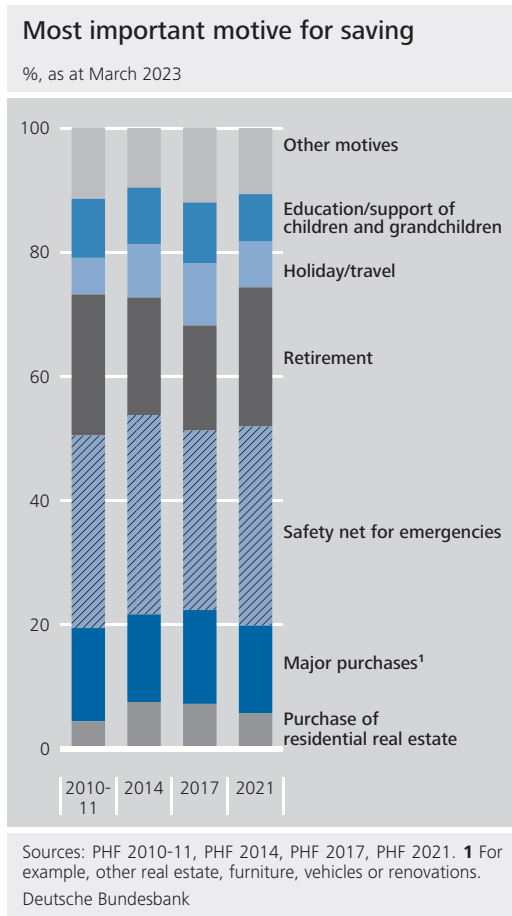
It is not yet possible to gauge whether and how quickly households will reduce the additional savings balances they built up during the pandemic.<sup>34</sup> However, this is an important question for forthcoming surveys and could influence the development of the wealth distribution.

*Too early to gauge further development of savings balances*

## ■ Households' debt situation

Looking at the debt situation of households is just as relevant for central banks as analysing asset holdings. Household debt plays a role in assessing financial stability, in particular. In addition, the debt situation also has an impact on

<sup>34</sup> In the Bundesbank's online survey (Bundesbank Online Panel Households (BOP-HH)), around two-fifths of respondents stated in March 2022 that they would hold on to the additional liquid funds they had saved over the next 12 months, but also spend one-quarter on consumption. See Deutsche Bundesbank (2022d).



monetary policy transmission,<sup>35</sup> for example, if indebted households severely restrict their consumption as a result of rising interest rates or financial restrictions.

Several indicators can be used to describe the debt situation, including the percentage of households in debt, the amount of outstanding debt and households' debt sustainability.

Between 2017 and 2021, the percentage of indebted households<sup>36</sup> fell by around 4 percentage points to 41%. This is due to a decrease in both the share of households with secured mortgage loans (-3 percentage points) and the share of households with unsecured loans (-4 percentage points). Thus, the basic structure of fewer households having secured loans (18%) than unsecured loans (29%) has not changed. The median outstanding amount for mortgage loans of €84,500 is still significantly higher than the outstanding amounts for other

loans (median: €5,500). Both figures have risen only marginally since 2017.

Both the share of households with any kind of debt and the size of the amount these households owe increase with gross household income. Of the households in the lower fifth of the income distribution, around 29% have outstanding debt (median: €2,000). By contrast, 55% of households in the upper tenth of the income distribution have outstanding debt (median €82,900).

*Households with higher incomes more likely to have outstanding debt*

The composition of loans also changes along the income distribution. Households with higher incomes hold mortgage loans much more frequently than other households, while households with low incomes mainly have outstanding unsecured loans.

The differences between households with outstanding debt are less pronounced along the net wealth distribution. However, it is particularly common for households with less wealth to be indebted (54%). As wealth increases, the share of households with mortgage loans in particular grows, which in total leads to a share of households with outstanding loans of around 40% among the 10% wealthiest households.

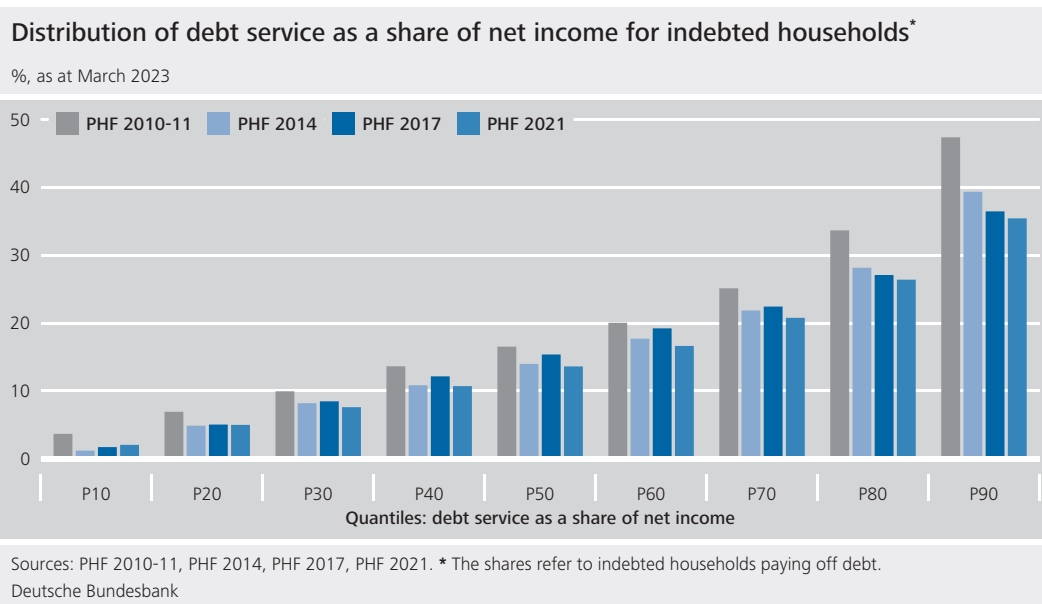
These structures suggest that households with large outstanding loans generally also have sufficient current financial resources to make interest and principal payments. In addition, the large loan amounts often appear to be matched by corresponding assets, which can serve as collateral for the lender in the event of a loan default.

Since 2010-11, the share of payments of interest and principal in net household income has averaged between 19% and 23% for house-

*Share of indebted households down*

<sup>35</sup> See Deutsche Bundesbank (2021) and Tzamourani (2021).

<sup>36</sup> In the context of the PHF study, "debt" covers mortgage loans as well as unsecured loans including overdrawn current accounts and money owed to other households.



*Debt service as a share of net income down for many indebted households*

holds with credit liabilities. In 2021, this share was 17%. As the chart above shows, the percentile cut-off values have largely fallen. This suggests that the financial burden of servicing debt has come down for the bulk of indebted households, although just over 15% of all indebted households still have to spend more than 30% of their household income on interest payments and the repayment of loans. Such households with a relatively high level of debt service are found along the entire net income distribution and not only among lower-income households.

The fact that nominal wages increased further between 2017 and 2021 despite slumping in 2020 is likely to have been a factor in the decline in debt service as a share of net income, alongside less pronounced growth in outstanding loan amounts.<sup>37</sup> Lending rates for new loans were relatively stable and should therefore have contributed little to these developments. It was not until September 2022 that key interest rates rose in several steps and interest rates on savings deposits and loans also increased. How this impacts debt sustainability remains to be seen and can only be examined in the next wave of the PHF. This wave will be conducted in 2023 and its results are to be published in early 2025.

## Conclusion and outlook

Overall, there appear to be no far-reaching changes in the structure of household wealth in Germany in 2021. Asset holdings have risen significantly across the board since 2017. Wealth inequality fell slightly as measured by indicators of relative inequality, in part as a result of the additional savings accumulated during the pandemic. It remains to be seen how sustainable this development is.

The PHF study, which has been conducted for ten years now, also makes it possible to take a closer look at longer-term dynamics. This does not reveal any fundamental changes in household investment behaviour, and inequality measures fell only slightly over the long term, too. This testifies to the fact that the wealth distribution and the underlying portfolio structures in Germany are changing only slowly. Shocks such as the coronavirus pandemic also do not appear to have induced fundamental changes in the short term. However, an analysis of longer-term (behavioural) adjustments is still pending.

<sup>37</sup> The impact of the decline in the share of households with outstanding loans cannot be directly inferred from the results. The chart above analyses only those households with outstanding loans in each respective year.

In terms of the debt situation, households in Germany seem to have entered the phase of rising interest rates that began in 2022 from a good position in a longer-term comparison.

The PHF survey presented here ended in 2021. Since that time, there have been some developments relevant to household wealth and debt, such as the rising interest rates. The impact of these changes on household saving, investment and debt behaviour is to be captured by the next wave of the survey in 2023, the results of which are scheduled for publication at the beginning of 2025. It will then potentially also be possible to analyse whether the coronavirus pandemic had a medium to longer-term impact on households' finances.

Finally, it should be noted that this article is confined to describing the composition and distribution of household wealth and debt in Germany. Other factors such as disposable income, public finances, the social security system and access to education, to name but a few, also play a role when it comes to forming a more comprehensive assessment of the financial situation or indeed the welfare of households.

## ■ Table appendix

Only a small selection of the indicators for German household finances could be presented in this article on the PHF survey findings. The following appendix contains further tables. Each table shows the percentage of households who own a particular asset or are in debt (prevalence), the conditional mean and the conditional median. "Conditional" in this context means that the means and medians are all computed only for those households who possess a given asset or have a particular type of debt. Where no prevalence is stated, it is 100% and the means and medians refer to all households. These three statistics are shown in total as well as broken down by the age, nationality, labour market status, school and professional education of the reference person,<sup>38</sup> the type of household, the region in which a household lives and its homeowner status. In addition, the households are also differentiated according to their position in the distributions of net wealth and gross income.

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<sup>38</sup> In this context, the reference person is always the person with the highest income in the household. If two or more members of a household have an equally high income, one person is selected at random.

**Prevalence, mean value and conditional distribution of gross and net wealth, financial and real assets, debt and annual gross and net income**

Figures in €

Item	Gross wealth	Net wealth	Debt	Real assets (gross)	Financial assets (gross)	Gross income (annual)	Net income (annual, self-assessment)
<b>Prevalence in %</b>	100	100	41	83	100	100	100
<b>Mean value (conditional)</b>	346,500	316,500	72,400	323,400	77,900	61,100	37,300
<b>Conditional distribution</b>							
5th percentile	700	- 700	200	900	100	9,900	10,100
10th percentile	3,000	900	800	1,900	900	15,000	12,800
20th percentile	10,900	6,900	2,000	5,000	3,800	22,900	18,200
30th percentile	22,900	18,800	4,900	13,600	8,800	30,300	22,800
40th percentile	52,300	43,800	9,900	37,700	15,900	38,000	25,800
50th percentile	121,900	106,600	17,800	135,300	25,900	44,700	29,800
60th percentile	221,300	185,400	30,800	220,400	42,200	54,200	35,400
70th percentile	333,700	297,000	57,900	306,000	67,200	67,200	41,600
80th percentile	479,800	430,700	99,900	424,500	111,200	84,000	49,500
90th percentile	803,000	725,900	209,300	726,300	194,300	115,300	61,900
95th percentile	1,218,400	1,107,000	319,000	1,098,000	290,200	155,700	78,000

Deutsche Bundesbank

## Gross and net wealth and debt, in total and by household characteristics

Figures in €

Item	Gross wealth		Net wealth		Debt		
	Mean	Median	Mean	Median	Prevalence in %	Condi-tional mean	Condi-tional median
<b>All households</b>	346,500	121,900	316,500	106,600	41	72,400	17,800
<b>Region</b>							
East <sup>1</sup>	170,400	49,200	150,900	43,400	39	49,500	9,500
West	392,600	160,800	359,800	127,900	42	78,100	20,300
of which: Region 1 <sup>2</sup>	368,900	144,400	331,500	120,300	46	80,900	19,900
Region 2 <sup>3</sup>	475,700	212,600	439,400	184,900	41	87,500	18,900
Region 3 <sup>4</sup>	297,700	102,300	272,300	77,400	40	63,300	22,100
<b>Homeowner status</b>							
Owner without mortgage	680,400	401,500	670,000	396,100	18	56,400	9,300
Owner with mortgage	659,700	444,600	514,800	326,100	100	144,800	86,300
Tenant	84,600	19,800	76,700	16,200	37	21,200	5,800
<b>Type of household</b>							
Single household	214,300	44,200	200,300	40,800	30	46,800	9,700
Single-parent household	128,300	17,800	109,400	14,600	43	43,700	12,000
Couple without children	462,500	266,200	434,200	237,200	40	70,800	16,200
Couple with children	514,500	234,900	435,300	155,800	73	108,000	46,000
Other	224,900	96,200	204,600	63,500	43	47,500	12,700
<b>Age of reference person</b>							
16-24	34,600	12,900	32,000	11,400	34	7,600	2,000
25-34	148,600	25,500	112,900	18,700	58	61,300	8,100
35-44	268,200	97,000	213,300	65,200	60	91,800	23,000
45-54	484,900	187,200	441,200	154,700	54	81,100	31,700
55-64	454,900	236,700	424,500	229,300	44	68,900	19,900
65-74	387,000	239,300	372,000	231,000	25	60,900	14,500
75+	347,300	129,700	343,600	129,500	7	53,600	7,200
<b>Labour market status of reference person</b>							
Self-employed	882,500	241,400	821,300	225,400	48	127,900	29,900
Civil servant	490,100	355,900	424,000	295,300	49	133,800	53,700
Employee	338,100	124,100	293,600	105,000	53	84,100	24,700
Worker <sup>5</sup>	214,300	66,200	193,300	55,600	63	33,400	10,100
Unemployed	76,400	5,200	67,000	3,000	46	20,500	5,500
Non-labour force member <sup>6</sup>	305,400	123,700	296,800	114,400	21	41,200	9,800
Pensioner	317,000	138,800	309,000	130,500	16	49,700	9,900
Retired civil servant	551,000	445,500	539,900	411,300	24	46,400	33,500
<b>School education of reference person</b>							
No school qualifications	37,100	1,700	36,100	1,700	36	3,000	800
Secondary general school	249,800	68,600	236,000	63,600	31	43,600	8,800
Intermediate secondary school <sup>7</sup>	342,500	133,700	315,800	115,400	48	56,000	19,900
Higher education entrance qualification	449,500	179,400	401,300	137,300	45	106,200	30,200
<b>Professional education of reference person</b>							
No vocational qualifications	104,600	10,000	95,000	8,200	35	27,200	3,200
Apprenticeship <sup>8</sup>	293,400	115,100	270,100	102,100	42	55,000	14,300
Technical college degree	472,800	272,900	431,400	220,500	39	105,900	29,100
University of applied sciences degree	452,800	111,900	415,600	105,600	46	80,500	24,400
University degree <sup>9</sup>	559,600	272,300	505,500	246,300	42	128,000	49,600
<b>Nationality of reference person</b>							
German	379,900	163,600	350,200	144,700	40	74,800	19,700
Other nationality	214,600	31,600	186,800	20,000	53	52,000	17,100
<b>Net wealth (quantile)</b>							
0- 20%	12,000	3,000	- 3,100	900	54	28,000	5,100
20- 40%	30,800	20,500	21,100	18,800	33	29,400	5,500
40- 60%	129,400	116,400	106,200	106,700	37	63,000	24,700
60- 80%	340,300	324,500	300,600	297,700	44	90,800	48,000
80- 90%	596,400	582,800	553,500	536,200	39	111,400	65,500
90-100%	1,848,600	1,216,500	1,766,300	1,107,600	41	198,600	86,000
<b>Gross income (quantile)</b>							
0- 20%	108,400	11,800	103,500	10,500	29	17,300	2,000
20- 40%	159,400	32,700	151,800	31,000	34	22,600	8,600
40- 60%	231,700	93,300	213,500	70,500	43	42,200	12,900
60- 80%	388,100	242,100	351,600	188,800	46	78,700	23,500
80- 90%	534,200	393,400	468,100	306,500	55	120,000	78,100
90-100%	1,160,100	635,800	1,060,200	529,800	55	180,200	82,900

1 Mecklenburg-West Pomerania, Saxony-Anhalt, Brandenburg, Berlin, Thuringia, Saxony. 2 Lower Saxony, Schleswig-Holstein, Hamburg, Bremen. 3 Bavaria, Baden-Württemberg, Hesse. 4 North Rhine-Westphalia, Rhineland-Palatinate, Saarland. 5 Including agriculture. 6 Including (early) pensioners/retired civil servants, school pupils, persons on national service, homemakers, others. 7 Or equivalent qualifications/completed GDR standard school up to tenth grade. 8 Dual training programme. 9 Or doctorate.

## Real assets (gross) and financial assets (gross), in total and by household characteristics

Figures in €

Item	Real assets (gross)			Financial assets (gross)		
	Prevalence in %	Conditional mean	Conditional median	Prevalence in %	Conditional mean	Conditional median
<b>All households</b>	83	323,400	135,300	100	77,900	25,900
<b>Region</b>						
East <sup>1</sup>	76	171,000	49,800	100	41,100	14,500
West	85	358,900	168,700	100	87,600	31,500
of which: Region 1 <sup>2</sup>	82	358,200	181,900	100	74,500	26,400
Region 2 <sup>3</sup>	88	413,500	200,000	100	110,800	45,400
Region 3 <sup>4</sup>	83	282,400	122,700	100	65,000	22,600
<b>Homeowner status</b>						
Owner without mortgage	100	542,500	303,000	100	138,200	70,800
Owner with mortgage	100	568,700	373,900	100	91,000	45,300
Tenant	70	60,200	7,000	100	42,900	11,800
<b>Type of household</b>						
Single household	70	217,700	47,700	99	62,700	17,300
Single-parent household	60	148,400	8,400	100	39,200	9,100
Couple without children	94	387,900	209,500	100	96,300	44,500
Couple with children	96	441,400	194,900	100	91,200	25,300
Other	94	180,800	28,900	99	55,700	19,000
<b>Age of reference person</b>						
16-24	63	18,700	5,600	97	23,500	6,300
25-34	73	154,900	14,100	100	35,100	11,500
35-44	85	251,200	58,000	100	54,600	21,900
45-54	88	442,900	174,700	100	95,900	35,600
55-64	92	383,400	205,900	100	102,600	41,800
65-74	87	344,800	237,900	100	87,900	35,200
75+	76	337,700	181,700	100	92,200	29,000
<b>Labour market status of reference person</b>						
Self-employed	94	801,000	207,300	100	127,300	34,600
Civil servant	95	387,200	258,100	100	122,000	78,100
Employee	86	300,000	101,600	100	79,300	32,500
Worker <sup>5</sup>	88	196,600	59,500	100	41,900	14,700
Unemployed	54	113,600	6,800	99	15,400	900
Non-labour force member <sup>6</sup>	78	294,000	167,400	100	77,500	22,600
Pensioner	78	299,300	181,800	100	83,000	26,100
Retired civil servant	95	453,400	314,600	100	120,600	67,300
<b>School education of reference person</b>						
No school qualifications	47	52,700	5,000	100	12,500	200
Secondary general school	78	255,800	116,600	100	50,100	16,400
Intermediate secondary school <sup>7</sup>	90	298,600	142,400	100	72,900	26,000
Higher education entrance qualification	84	406,200	178,900	100	109,500	42,200
<b>Professional education of reference person</b>						
No vocational qualifications	59	136,700	7,400	99	23,800	5,100
Apprenticeship <sup>8</sup>	87	262,700	113,200	100	66,100	22,700
Technical college degree	91	429,600	250,900	100	83,900	40,900
University of applied sciences degree	77	473,700	202,700	100	86,600	40,300
University degree <sup>9</sup>	88	472,500	258,200	100	143,800	70,800
<b>Nationality of reference person</b>						
German	85	345,100	167,700	100	86,800	32,500
Other nationality	75	228,200	30,400	100	43,900	8,600
<b>Net wealth (quantile)</b>						
0- 20%	49	17,700	2,800	99	3,400	1,500
20- 40%	77	18,400	7,000	100	16,600	13,800
40- 60%	92	84,200	57,900	100	52,300	45,500
60- 80%	99	261,100	261,700	100	82,000	55,700
80- 90%	100	460,800	451,200	100	136,700	111,000
90-100%	100	1,520,800	927,800	100	332,800	219,600
<b>Gross income (quantile)</b>						
0- 20%	56	142,000	13,900	99	28,800	5,700
20- 40%	80	155,400	17,100	100	35,900	13,600
40- 60%	89	198,400	58,500	100	55,900	24,600
60- 80%	95	324,700	197,000	100	79,900	42,800
80- 90%	96	424,700	322,000	100	125,000	82,000
90-100%	97	938,400	505,600	100	253,000	136,600

<sup>1</sup> Mecklenburg-West Pomerania, Saxony-Anhalt, Brandenburg, Berlin, Thuringia, Saxony. <sup>2</sup> Lower Saxony, Schleswig-Holstein, Hamburg, Bremen. <sup>3</sup> Bavaria, Baden-Württemberg, Hesse. <sup>4</sup> North Rhine-Westphalia, Rhineland-Palatinate, Saarland. <sup>5</sup> Including agriculture. <sup>6</sup> Including (early) pensioners/retired civil servants, school pupils, persons on national service, homemakers, others. <sup>7</sup> Or equivalent qualifications/completed GDR standard school up to tenth grade. <sup>8</sup> Dual training programme. <sup>9</sup> Or doctorate.

## Owner-occupied housing and other properties, in total and by household characteristics

Figures in €

Item	Owner-occupied housing			Other properties		
	Prevalence in %	Conditional mean	Conditional median	Prevalence in %	Conditional mean	Conditional median
<b>All households</b>	45	343,200	278,800	17	390,700	179,000
<b>Region</b>						
East <sup>1</sup>	35	228,800	166,900	13	266,900	116,200
West	47	365,600	293,600	18	415,100	198,200
of which: Region 1 <sup>2</sup>	47	351,500	279,200	13	444,100	291,100
Region 2 <sup>3</sup>	50	424,900	343,900	21	437,800	178,900
Region 3 <sup>4</sup>	43	285,500	243,400	16	361,900	177,900
<b>Homeowner status</b>						
Owner without mortgage	100	331,000	255,400	30	446,800	199,000
Owner with mortgage	100	365,500	297,600	24	472,800	229,800
Tenant	–	–	–	8	213,100	130,300
<b>Type of household</b>						
Single household	32	282,600	238,400	12	287,500	147,200
Single-parent household	20	318,700	285,900	9	235,300	150,500
Couple without children	59	343,000	290,100	23	453,200	181,100
Couple with children	53	453,400	373,600	18	402,400	217,700
Other	40	258,200	192,400	12	461,800	102,300
<b>Age of reference person</b>						
16-24	–	–	–	–	–	–
25-34	15	432,500	309,800	6	208,400	116,900
35-44	36	320,900	271,300	15	287,400	141,100
45-54	53	370,800	283,900	21	422,900	193,600
55-64	58	344,300	284,400	22	432,200	199,400
65-74	60	319,000	258,700	22	350,800	171,400
75+	49	325,000	273,100	16	485,600	191,400
<b>Labour market status of reference person</b>						
Self-employed	47	443,000	383,000	35	690,700	286,700
Civil servant	63	402,900	298,800	20	371,500	191,300
Employee	42	364,600	296,500	16	350,800	171,400
Worker <sup>5</sup>	44	226,200	185,500	12	299,600	158,200
Unemployed	13	341,500	338,100	8	166,700	46,100
Non-labour force member <sup>6</sup>	48	321,300	249,500	16	348,800	158,800
Pensioner	51	313,900	251,300	17	350,900	148,000
Retired civil servant	79	401,700	289,000	28	339,800	217,600
<b>School education of reference person</b>						
No school qualifications	–	–	–	–	–	–
Secondary general school	44	293,500	205,800	14	377,800	136,400
Intermediate secondary school <sup>7</sup>	49	312,300	273,300	16	361,900	161,300
Higher education entrance qualification	43	415,700	342,300	21	419,300	199,900
<b>Professional education of reference person</b>						
No vocational qualifications	18	269,900	225,300	7	217,900	119,100
Apprenticeship <sup>8</sup>	47	294,600	246,400	14	373,700	146,800
Technical college degree	58	382,000	297,000	25	410,900	199,800
University of applied sciences degree	40	480,900	347,700	20	321,700	190,400
University degree <sup>9</sup>	51	423,200	344,900	26	462,200	219,700
<b>Nationality of reference person</b>						
German	50	338,900	279,200	18	417,700	179,300
Other nationality	25	318,800	261,100	16	194,500	128,700
<b>Net wealth (quantile)</b>						
0- 20%	2	110,200	49,000	2	239,200	68,900
20- 40%	4	151,000	91,100	2	38,500	6,000
40- 60%	40	138,700	116,600	10	71,300	57,600
60- 80%	83	258,200	245,500	20	129,100	117,300
80- 90%	93	381,700	370,900	35	204,900	191,100
90-100%	93	662,400	541,100	66	771,900	449,100
<b>Gross income (quantile)</b>						
0- 20%	23	228,800	197,100	7	138,100	64,500
20- 40%	34	255,300	194,300	12	202,100	115,100
40- 60%	42	286,600	241,200	15	273,000	141,300
60- 80%	57	323,900	284,100	15	389,800	145,600
80- 90%	66	375,900	313,200	29	336,800	199,400
90-100%	69	576,500	452,600	41	709,600	378,800

1 Mecklenburg-West Pomerania, Saxony-Anhalt, Brandenburg, Berlin, Thuringia, Saxony. 2 Lower Saxony, Schleswig-Holstein, Hamburg, Bremen. 3 Bavaria, Baden-Württemberg, Hesse. 4 North Rhine-Westphalia, Rhineland-Palatinate, Saarland. 5 Including agriculture. 6 Including (early) pensioners/retired civil servants, school pupils, persons on national service, homemakers, others. 7 Or equivalent qualifications/completed GDR standard school up to tenth grade. 8 Dual training programme. 9 Or doctorate.



## Business assets as well as vehicles and valuables, in total and by household characteristics

Figures in €

Item	Business assets			Vehicles and valuables		
	Prevalence in %	Conditional mean	Conditional median	Prevalence in %	Conditional mean	Conditional median
<b>All households</b>	8	502,800	48,700	78	15,300	8,900
<b>Region</b>						
East <sup>1</sup>	6	106,900	30,500	69	10,400	6,500
West	9	575,400	55,600	81	16,400	9,800
of which: Region 1 <sup>2</sup>	9	623,900	69,200	79	16,900	8,600
Region 2 <sup>3</sup>	10	525,500	48,900	83	16,800	9,900
Region 3 <sup>4</sup>	7	629,700	29,800	78	15,500	9,300
<b>Homeowner status</b>						
Owner without mortgage	10	675,800	81,300	90	20,200	12,600
Owner with mortgage	14	582,700	77,400	92	18,000	11,900
Tenant	6	299,400	36,400	68	10,900	5,900
<b>Type of household</b>						
Single household	5	433,900	48,300	63	12,100	5,000
Single-parent household	–	–	–	51	9,900	4,500
Couple without children	11	459,700	50,000	91	18,000	11,000
Couple with children	14	712,500	64,600	94	16,200	11,800
Other	8	31,700	15,400	89	13,800	6,800
<b>Age of reference person</b>						
16-24	–	–	–	63	7,900	5,900
25-34	7	387,200	37,000	72	11,500	7,700
35-44	10	421,400	27,100	82	13,700	9,700
45-54	15	647,800	59,300	81	17,000	11,200
55-64	11	469,800	75,900	88	18,400	10,000
65-74	5	374,700	60,900	84	15,700	9,000
75+	2	528,700	42,800	65	14,700	4,900
<b>Labour market status of reference person</b>						
Self-employed	67	459,700	46,900	81	20,700	8,800
Civil servant	3	663,500	1,100	92	24,000	18,200
Employee	7	567,400	74,300	83	15,400	10,400
Worker <sup>5</sup>	–	–	–	85	11,800	8,300
Unemployed	–	–	–	52	9,300	4,900
Non-labour force member <sup>6</sup>	2	328,800	45,400	71	14,300	6,900
Pensioner	2	161,600	44,700	71	14,400	7,000
Retired civil servant	–	–	–	84	18,700	10,400
<b>School education of reference person</b>						
No school qualifications	–	–	–	40	4,900	2,000
Secondary general school	3	363,800	40,400	73	12,800	6,600
Intermediate secondary school <sup>7</sup>	10	527,000	49,100	86	15,500	9,800
Higher education entrance qualification	12	512,500	45,200	79	17,300	9,900
<b>Professional education of reference person</b>						
No vocational qualifications	2	602,800	22,800	57	9,700	5,200
Apprenticeship <sup>8</sup>	7	415,100	47,100	82	14,400	8,400
Technical college degree	13	449,100	52,300	88	17,700	12,700
University of applied sciences degree	9	1,187,300	59,300	72	15,500	10,500
University degree <sup>9</sup>	14	483,100	72,300	80	18,600	10,000
<b>Nationality of reference person</b>						
German	8	465,500	49,900	80	16,200	9,800
Other nationality	10	536,800	24,400	65	12,200	5,600
<b>Net wealth (quantile)</b>						
0- 20%	–	–	–	48	4,900	2,800
20- 40%	3	3,000	300	75	8,900	6,200
40- 60%	7	53,200	39,000	84	13,000	7,900
60- 80%	8	66,600	19,000	90	15,200	11,900
80- 90%	13	90,800	47,400	94	21,300	16,200
90-100%	32	1,234,700	329,700	94	34,200	17,800
<b>Gross income (quantile)</b>						
0- 20%	3	416,300	96,300	51	8,900	3,800
20- 40%	4	223,000	42,000	74	8,500	4,600
40- 60%	6	56,900	16,200	83	13,600	8,900
60- 80%	10	517,500	81,400	90	15,500	10,600
80- 90%	12	415,000	25,300	91	23,300	15,600
90-100%	24	900,700	142,500	93	28,100	17,100

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## Current accounts, savings accounts (excluding private retirement provision) and building loan contracts, in total and by household characteristics

Figures in €

Item	Current accounts			Savings accounts (incl. savings under building loan accounts, excl. private retirement provisions)			of which: Building loan contracts		
	Prevalence in %	Conditional mean	Conditional median	Prevalence in %	Conditional mean	Conditional median	Prevalence in %	Conditional mean	Conditional median
<b>All households</b>	99	12,700	3,000	71	30,900	11,800	28	13,300	6,300
<b>Region</b>									
East <sup>1</sup>	99	9,500	2,900	64	20,500	8,200	21	8,000	4,400
West	99	13,600	3,000	72	33,300	12,800	30	14,300	6,600
of which: Region 1 <sup>2</sup>	100	12,900	2,500	70	29,900	10,100	30	8,600	4,900
Region 2 <sup>3</sup>	99	16,000	4,100	75	39,100	16,800	33	16,800	8,100
Region 3 <sup>4</sup>	99	10,900	2,900	71	27,500	11,400	25	14,200	5,300
<b>Homeowner status</b>									
Owner without mortgage	100	20,000	6,900	81	52,600	24,500	36	15,200	8,300
Owner with mortgage	100	14,000	3,800	86	25,700	13,500	50	16,000	6,500
Tenant	99	8,600	1,900	61	18,100	5,900	18	9,300	4,400
<b>Type of household</b>									
Single household	99	10,200	2,500	66	26,800	9,500	24	12,400	5,700
Single-parent household	100	7,800	1,600	53	20,000	5,800	7	13,300	6,200
Couple without children	100	17,100	4,800	77	36,700	17,700	30	11,800	7,400
Couple with children	100	12,000	2,300	75	31,200	8,900	37	17,700	5,900
Other	99	8,900	2,400	67	20,900	12,600	31	12,500	6,700
<b>Age of reference person</b>									
16-24	97	5,200	1,400	67	6,900	2,000	16	4,200	2,300
25-34	100	9,500	2,200	65	11,100	4,600	28	8,000	4,000
35-44	99	10,400	2,600	69	22,500	8,600	31	12,000	5,500
45-54	100	14,100	3,300	76	29,100	9,400	34	16,000	7,400
55-64	99	15,200	3,100	69	40,200	16,700	32	18,500	7,700
65-74	100	14,800	3,900	72	48,700	24,300	27	11,500	7,200
75+	99	13,400	4,200	73	36,900	19,100	17	9,800	6,100
<b>Labour market status of reference person</b>									
Self-employed	98	26,900	5,000	57	44,200	9,700	17	23,300	8,600
Civil servant	100	14,700	4,900	79	54,900	23,500	39	15,700	7,500
Employee	100	13,700	3,400	75	25,900	10,900	35	15,200	6,200
Worker <sup>5</sup>	100	4,700	1,700	66	14,600	8,600	40	7,900	4,900
Unemployed	98	2,600	100	28	13,100	1,900	9	5,200	3,900
Non-labour force member <sup>6</sup>	99	11,800	3,000	71	37,300	14,800	20	10,300	6,700
Pensioner	100	12,700	3,800	71	39,500	17,500	21	10,800	6,700
Retired civil servant	100	16,300	4,800	85	52,800	36,900	25	13,200	11,300
<b>School education of reference person</b>									
No school qualifications	100	1,500	100	35	3,300	1,200	–	–	–
Secondary general school	99	8,700	1,900	67	28,800	9,900	24	14,600	5,800
Intermediate secondary school <sup>7</sup>	100	10,900	3,000	70	27,100	10,100	31	9,100	5,900
Higher education entrance qualification	99	18,300	5,000	76	36,100	14,700	31	16,100	7,200
<b>Professional education of reference person</b>									
No vocational qualifications	98	4,900	700	54	11,500	3,600	14	6,600	3,000
Apprenticeship <sup>8</sup>	100	10,000	2,400	72	30,200	10,000	30	12,700	6,000
Technical college degree	99	15,000	4,600	70	33,400	16,600	34	10,100	6,600
University of applied sciences degree	100	13,000	4,900	81	27,800	11,900	36	12,300	6,700
University degree <sup>9</sup>	100	24,800	7,600	75	43,200	19,900	26	20,700	9,200
<b>Nationality of reference person</b>									
German	100	13,500	3,500	73	33,700	14,800	30	14,200	6,900
Other nationality	100	10,100	1,400	52	22,200	5,000	15	12,400	3,800
<b>Net wealth (quantile)</b>									
0- 20%	98	1,200	500	41	2,300	1,100	7	3,900	1,500
20- 40%	99	5,100	2,400	70	8,200	5,100	19	4,400	3,300
40- 60%	100	11,000	4,400	79	23,400	14,900	34	9,700	5,700
60- 80%	100	13,700	4,900	82	34,200	19,100	41	15,500	6,800
80- 90%	100	20,500	7,100	84	48,500	33,600	44	13,500	8,100
90-100%	100	44,500	14,900	79	90,300	49,200	35	28,700	13,200
<b>Gross income (quantile)</b>									
0- 20%	98	6,700	1,000	53	14,300	3,600	12	6,300	3,000
20- 40%	100	6,000	1,900	64	19,600	8,100	23	10,300	4,900
40- 60%	100	10,800	2,900	75	27,800	11,400	29	11,800	6,300
60- 80%	100	12,800	3,800	80	31,700	14,700	35	11,200	6,200
80- 90%	100	18,500	6,200	85	43,400	20,600	47	18,100	9,600
90-100%	100	36,300	10,100	80	62,100	27,500	37	21,800	8,900

1 Mecklenburg-West Pomerania, Saxony-Anhalt, Brandenburg, Berlin, Thuringia, Saxony. 2 Lower Saxony, Schleswig-Holstein, Hamburg, Bremen. 3 Bavaria, Baden-Württemberg, Hesse. 4 North Rhine-Westphalia, Rhineland-Palatinate, Saarland. 5 Including agriculture. 6 Including (early) pensioners/retired civil servants, school pupils, persons on national service, homemakers, others. 7 Or equivalent qualifications/completed GDR standard school up to tenth grade. 8 Dual training programme. 9 Or doctorate.

## Mutual fund shares (excluding private retirement provision), shares and bonds, in total and by household characteristics

Figures in €

Item	Mutual fund shares (excl. private retirement provision)			Shares			Bonds		
	Prevalence in %	Condi- tional mean	Condi- tional median	Prevalence in %	Condi- tional mean	Condi- tional median	Prevalence in %	Condi- tional mean	Condi- tional median
<b>All households</b>	21	44,600	15,900	15	65,100	14,400	3	56,100	8,000
<b>Region</b>									
East <sup>1</sup>	14	38,500	9,900	9	28,800	9,700	1	44,400	6,800
West	22	45,600	17,300	17	69,800	14,700	3	57,300	8,100
of which: Region 1 <sup>2</sup>	19	45,300	15,300	15	56,300	16,300	3	33,900	7,500
Region 2 <sup>3</sup>	27	44,500	19,300	22	83,800	19,100	4	87,000	15,200
Region 3 <sup>4</sup>	18	47,900	14,500	13	48,000	9,800	4	25,400	5,900
<b>Homeowner status</b>									
Owner without mortgage	30	60,700	23,500	24	97,500	20,400	6	84,500	12,000
Owner with mortgage	26	26,600	9,700	18	41,700	10,200	3	15,000	4,600
Tenant	14	36,700	12,000	10	37,700	8,600	1	16,300	3,300
<b>Type of household</b>									
Single household	20	41,600	11,400	13	75,400	17,500	2	119,900	11,600
Single-parent household	–	–	–	–	–	–	–	–	–
Couple without children	23	56,400	20,000	19	53,500	14,200	4	37,700	9,000
Couple with children	21	27,700	12,200	17	78,700	9,800	4	17,400	4,400
Other	14	29,300	14,600	9	25,600	21,800	–	–	–
<b>Age of reference person</b>									
16-24	13	26,100	1,700	16	42,200	2,500	–	–	–
25-34	18	19,300	7,200	14	18,800	4,900	2	8,200	2,400
35-44	23	22,500	9,900	16	20,300	9,800	3	8,700	3,100
45-54	21	38,800	15,500	18	72,900	12,400	3	27,000	16,000
55-64	22	52,400	24,300	14	60,300	22,600	3	34,500	6,900
65-74	23	65,300	31,800	15	62,500	21,300	4	51,700	25,400
75+	18	73,600	26,900	14	153,000	28,500	4	159,700	14,400
<b>Labour market status of reference person</b>									
Self-employed	25	63,200	12,900	19	97,100	29,400	1	81,000	5,600
Civil servant	32	45,800	19,400	29	19,400	6,900	12	10,900	3,300
Employee	25	32,600	13,300	19	44,600	12,000	3	25,000	7,400
Worker <sup>5</sup>	15	16,600	10,600	4	23,200	7,300	–	–	–
Unemployed	–	–	–	3	17,600	2,800	–	–	–
Non-labour force member <sup>6</sup>	17	65,500	24,900	13	105,200	19,800	3	109,700	15,500
Pensioner	17	73,000	29,900	12	121,000	22,300	3	128,200	13,600
Retired civil servant	24	61,900	31,000	29	98,700	16,100	4	82,100	21,700
<b>School education of reference person</b>									
No school qualifications	–	–	–	–	–	–	–	–	–
Secondary general school	13	47,900	19,500	7	46,800	21,000	2	27,500	20,600
Intermediate secondary school <sup>7</sup>	18	28,900	10,000	14	78,500	11,200	3	96,800	5,300
Higher education entrance qualification	30	51,300	19,300	25	63,000	13,500	4	38,100	10,800
<b>Professional education of reference person</b>									
No vocational qualifications	6	54,800	29,600	5	65,700	27,600	–	–	–
Apprenticeship <sup>8</sup>	17	32,200	11,600	12	61,100	11,700	3	72,500	6,000
Technical college degree	25	40,300	14,000	15	57,100	19,800	3	16,000	2,500
University of applied sciences degree	32	40,800	17,200	24	39,700	9,700	3	76,600	9,600
University degree <sup>9</sup>	36	63,600	24,200	31	80,000	14,800	6	44,000	12,500
<b>Nationality of reference person</b>									
German	22	45,800	18,900	17	66,300	14,400	3	62,400	10,800
Other nationality	12	40,500	9,100	9	73,000	13,900	–	–	–
<b>Net wealth (quantile)</b>									
0- 20%	2	5,300	1,800	2	2,600	1,000	–	–	–
20- 40%	10	4,600	2,600	7	6,000	2,900	1	4,300	1,900
40- 60%	24	19,700	10,000	12	19,400	6,700	2	15,800	13,600
60- 80%	26	36,600	18,500	18	29,300	14,900	3	9,600	3,700
80- 90%	37	49,500	23,300	31	47,400	20,500	6	28,200	10,800
90-100%	45	98,100	49,200	45	154,700	29,300	12	117,300	25,100
<b>Gross income (quantile)</b>									
0- 20%	9	29,200	4,800	8	39,300	18,700	–	–	–
20- 40%	11	53,200	19,800	4	53,300	21,000	1	19,600	3,100
40- 60%	22	31,200	10,600	13	30,000	7,800	2	32,900	8,400
60- 80%	25	39,700	14,800	17	36,200	11,600	3	18,900	4,800
80- 90%	34	51,900	18,500	30	42,700	13,700	8	35,700	11,500
90-100%	38	62,100	24,800	39	144,200	15,900	9	130,100	15,200

<sup>1</sup> Mecklenburg-West Pomerania, Saxony-Anhalt, Brandenburg, Berlin, Thuringia, Saxony. <sup>2</sup> Lower Saxony, Schleswig-Holstein, Hamburg, Bremen. <sup>3</sup> Bavaria, Baden-Württemberg, Hesse. <sup>4</sup> North Rhine-Westphalia, Rhineland-Palatinate, Saarland. <sup>5</sup> Including agriculture. <sup>6</sup> Including (early) pensioners/retired civil servants, school pupils, persons on national service, homemakers, others. <sup>7</sup> Or equivalent qualifications/completed GDR standard school up to tenth grade. <sup>8</sup> Dual training programme. <sup>9</sup> Or doctorate.

## Other financial assets\* and money owed to the household, in total and by household characteristics

Figures in €

Item	Other financial assets			Money owed to the household		
	Prevalence in %	Conditional mean	Conditional median	Prevalence in %	Conditional mean	Conditional median
<b>All households</b>	17	10,400	1,900	11	13,700	1,900
<b>Region</b>						
East <sup>1</sup>	13	7,400	1,700	11	3,600	1,400
West	18	10,900	2,000	10	16,600	2,300
of which: Region 1 <sup>2</sup>	17	14,900	3,400	14	7,600	1,000
Region 2 <sup>3</sup>	21	9,300	1,900	9	27,200	2,400
Region 3 <sup>4</sup>	14	11,100	1,800	9	10,600	5,100
<b>Homeowner status</b>						
Owner without mortgage	19	16,100	4,200	6	14,300	3,100
Owner with mortgage	16	9,500	1,500	10	8,600	3,900
Tenant	16	7,100	1,700	13	14,600	1,500
<b>Type of household</b>						
Single household	18	11,500	1,700	12	17,500	1,700
Single-parent household	11	9,900	3,400	14	5,700	600
Couple without children	15	10,800	3,900	8	11,500	3,000
Couple with children	16	7,100	1,500	10	4,400	1,500
Other	24	8,300	1,300	15	25,200	500
<b>Age of reference person</b>						
16-24	25	1,800	500	–	–	–
25-34	23	2,900	1,700	15	2,000	1,000
35-44	15	5,300	1,700	17	5,700	1,900
45-54	14	7,900	2,400	7	6,300	2,200
55-64	15	17,600	4,600	11	15,300	4,000
65-74	21	13,100	2,000	8	15,800	3,300
75+	12	21,300	2,900	5	85,700	7,800
<b>Labour market status of reference person</b>						
Self-employed	21	12,700	2,100	14	24,200	8,600
Civil servant	14	12,100	9,300	4	7,600	5,400
Employee	18	7,600	1,900	12	5,600	1,600
Worker <sup>5</sup>	10	4,900	1,200	14	4,300	1,500
Unemployed	3	35,200	800	13	1,600	1,000
Non-labour force member <sup>6</sup>	17	13,800	1,900	8	30,900	2,800
Pensioner	16	15,800	2,500	6	49,200	3,300
Retired civil servant	17	33,100	12,100	7	11,700	4,800
<b>School education of reference person</b>						
No school qualifications	–	–	–	–	–	–
Secondary general school	12	6,900	1,400	9	7,900	1,500
Intermediate secondary school <sup>7</sup>	17	12,100	2,400	11	8,500	2,900
Higher education entrance qualification	21	11,100	2,500	12	21,100	1,500
<b>Professional education of reference person</b>						
No vocational qualifications	13	5,800	1,300	11	5,000	900
Apprenticeship <sup>8</sup>	15	10,300	1,700	10	9,300	1,900
Technical college degree	20	9,400	4,000	11	10,700	3,000
University of applied sciences degree	24	6,800	1,600	11	7,600	2,600
University degree <sup>9</sup>	19	14,600	3,500	11	37,200	2,000
<b>Nationality of reference person</b>						
German	17	11,700	2,400	9	16,300	2,900
Other nationality	12	6,400	1,300	20	10,800	1,300
<b>Net wealth (quantile)</b>						
0- 20%	9	2,100	1,100	11	2,100	1,000
20- 40%	17	2,200	1,400	14	3,600	1,000
40- 60%	16	4,800	1,700	10	10,700	4,100
60- 80%	19	14,700	3,000	10	14,200	2,500
80- 90%	21	12,300	4,400	6	13,200	9,000
90-100%	25	25,900	7,600	8	88,300	15,500
<b>Gross income (quantile)</b>						
0- 20%	16	6,300	1,000	11	27,200	900
20- 40%	13	9,600	2,000	8	5,700	1,400
40- 60%	17	11,300	1,700	14	7,600	2,100
60- 80%	16	7,600	2,000	10	8,800	2,200
80- 90%	19	10,800	3,100	10	8,200	4,800
90-100%	23	19,200	6,600	10	28,200	10,800

\* Including gold, derivatives, shares in cooperatives. **1** Mecklenburg-West Pomerania, Saxony-Anhalt, Brandenburg, Berlin, Thuringia, Saxony. **2** Lower Saxony, Schleswig-Holstein, Hamburg, Bremen. **3** Bavaria, Baden-Württemberg, Hesse. **4** North Rhine-Westphalia, Rhineland-Palatinate, Saarland. **5** Including agriculture. **6** Including (early) pensioners/retired civil servants, school pupils, persons on national service, homemakers, others. **7** Or equivalent qualifications/completed GDR standard school up to tenth grade. **8** Dual training programme. **9** Or doctorate.

## Private retirement provision and whole life insurance policies as well as Riester/Rürup retirement provision products, in total and by household characteristics

Figures in €

Item	Private retirement provision (incl. whole life insurance policies)			of which: Riester/Rürup retirement provision products		
	Prevalence in %	Conditional mean	Conditional median	Prevalence in %	Conditional mean	Conditional median
<b>All households</b>	42	42,100	20,000	18	20,700	10,600
<b>Region</b>						
East <sup>1</sup>	32	26,200	15,100	14	14,300	8,100
West	45	45,100	21,900	19	21,900	11,400
of which: Region 1 <sup>2</sup>	40	38,600	16,400	18	22,000	10,500
Region 2 <sup>3</sup>	49	53,300	29,100	21	23,800	13,800
Region 3 <sup>4</sup>	42	36,100	17,200	16	18,700	8,500
<b>Homeowner status</b>						
Owner without mortgage	41	58,800	36,300	17	27,500	17,500
Owner with mortgage	69	51,000	27,600	30	24,400	12,600
Tenant	35	27,100	11,600	15	14,300	7,200
<b>Type of household</b>						
Single household	30	30,300	15,600	9	13,300	6,800
Single-parent household	44	25,700	10,200	23	13,400	6,000
Couple without children	45	50,600	26,500	20	25,900	15,500
Couple with children	62	47,300	20,800	34	20,200	10,300
Other	56	36,000	16,200	23	21,400	11,100
<b>Age of reference person</b>						
16-24	23	10,200	1,600	–	–	–
25-34	38	19,100	8,900	13	9,200	4,000
35-44	61	29,200	14,000	31	13,900	7,600
45-54	61	55,000	33,400	29	26,900	14,800
55-64	59	55,200	28,400	25	25,900	14,800
65-74	15	44,100	25,500	3	24,000	11,200
75+	11	28,000	9,000	1	13,000	6,000
<b>Labour market status of reference person</b>						
Self-employed	61	53,300	20,700	17	37,400	11,700
Civil servant	73	50,100	28,500	31	24,800	21,300
Employee	57	42,700	20,800	27	20,600	10,200
Worker <sup>5</sup>	54	38,300	20,900	28	17,300	9,000
Unemployed	32	20,200	11,300	18	13,900	12,100
Non-labour force member <sup>6</sup>	16	36,100	16,500	4	15,100	8,400
Pensioner	14	32,600	15,600	2	17,500	6,600
Retired civil servant	14	42,000	20,000	4	12,800	4,600
<b>School education of reference person</b>						
No school qualifications	–	–	–	–	–	–
Secondary general school	28	36,400	18,300	11	17,400	9,900
Intermediate secondary school <sup>7</sup>	51	38,900	18,400	21	17,500	8,300
Higher education entrance qualification	48	47,100	23,900	21	23,800	13,600
<b>Professional education of reference person</b>						
No vocational qualifications	17	24,000	7,400	5	13,000	3,300
Apprenticeship <sup>8</sup>	43	37,900	18,600	19	18,100	8,900
Technical college degree	45	41,700	26,200	16	19,700	13,700
University of applied sciences degree	51	40,800	21,700	25	17,800	12,700
University degree <sup>9</sup>	51	57,000	28,700	22	29,600	16,300
<b>Nationality of reference person</b>						
German	44	45,700	24,000	20	21,800	11,600
Other nationality	29	24,000	7,500	5	18,800	9,200
<b>Net wealth (quantile)</b>						
0- 20%	16	3,800	1,600	7	3,800	1,300
20- 40%	37	10,700	7,700	16	8,000	5,300
40- 60%	46	28,800	19,100	19	15,000	9,000
60- 80%	50	41,400	28,200	18	22,100	14,600
80- 90%	57	62,400	48,800	25	29,400	18,700
90-100%	64	100,100	64,600	32	39,400	24,500
<b>Gross income (quantile)</b>						
0- 20%	19	23,500	10,700	6	13,100	3,700
20- 40%	30	22,900	8,600	11	8,300	4,100
40- 60%	39	24,300	13,800	16	14,700	8,200
60- 80%	52	42,100	21,600	25	19,000	12,200
80- 90%	64	48,600	32,300	29	25,000	17,600
90-100%	77	78,800	52,200	34	35,600	18,900

<sup>1</sup> Mecklenburg-West Pomerania, Saxony-Anhalt, Brandenburg, Berlin, Thuringia, Saxony. <sup>2</sup> Lower Saxony, Schleswig-Holstein, Hamburg, Bremen. <sup>3</sup> Bavaria, Baden-Württemberg, Hesse. <sup>4</sup> North Rhine-Westphalia, Rhineland-Palatinate, Saarland. <sup>5</sup> Including agriculture. <sup>6</sup> Including (early) pensioners/retired civil servants, school pupils, persons on national service, homemakers, others. <sup>7</sup> Or equivalent qualifications/completed GDR standard school up to tenth grade. <sup>8</sup> Dual training programme. <sup>9</sup> Or doctorate.

## Mortgage loans for owner-occupied and other properties and unsecured loans,\* in total and by household characteristics

Figures in €

Item	Mortgage loans for owner-occupied properties			Mortgage loans for other properties			Unsecured loans		
	Prevalence in %	Conditional mean	Conditional median	Prevalence in %	Conditional mean	Conditional median	Prevalence in %	Conditional mean	Conditional median
<b>All households</b>	16	117,200	79,800	4	222,200	101,400	29	11,300	5,500
<b>Region</b>									
East <sup>1</sup>	10	107,900	79,000	3	187,700	95,900	32	9,700	5,900
West	17	118,700	79,800	4	228,700	99,700	28	11,700	5,000
of which: Region 1 <sup>2</sup>	21	98,200	71,800	4	346,800	78,500	32	11,800	5,300
Region 2 <sup>3</sup>	15	155,200	115,300	4	214,700	120,500	28	12,000	4,700
Region 3 <sup>4</sup>	17	90,700	56,200	4	176,400	117,300	26	11,300	6,500
<b>Homeowner status</b>									
Owner without mortgage	–	–	–	3	277,100	119,300	16	14,300	4,000
Owner with mortgage	100	117,200	79,800	9	257,100	116,500	31	14,000	7,900
Tenant	–	–	–	3	158,800	58,900	35	9,900	4,900
<b>Type of household</b>									
Single household	8	76,300	49,300	2	257,500	123,700	23	9,900	4,800
Single-parent household	14	82,500	80,100	–	–	–	29	6,500	2,900
Couple without children	15	98,800	71,900	5	230,900	89,700	26	10,200	4,900
Couple with children	38	155,600	99,700	5	230,500	119,000	49	14,500	7,000
Other	11	125,200	70,100	–	–	–	35	12,200	8,100
<b>Age of reference person</b>									
16-24	–	–	–	–	–	–	34	7,600	2,000
25-34	11	228,000	210,300	3	184,300	121,700	50	11,000	4,800
35-44	24	158,900	108,200	6	190,900	58,200	41	13,000	5,400
45-54	28	98,800	70,600	5	239,800	131,400	34	13,200	6,100
55-64	19	77,100	58,600	4	289,300	86,500	28	10,200	7,300
65-74	10	55,000	25,300	4	216,800	39,700	15	7,500	4,700
75+	2	100,900	57,900	2	111,000	36,400	5	7,300	2,400
<b>Labour market status of reference person</b>									
Self-employed	18	103,800	73,100	12	307,600	57,700	33	14,100	9,500
Civil servant	25	181,200	123,200	6	233,400	87,600	28	22,100	7,000
Employee	23	135,400	96,400	4	222,400	129,900	35	12,600	5,900
Worker <sup>5</sup>	23	64,000	45,900	–	–	–	49	10,400	4,900
Unemployed	–	–	–	–	–	–	43	7,500	5,100
Non-labour force member <sup>6</sup>	6	68,200	38,100	2	160,900	30,400	16	6,600	2,900
Pensioner	5	69,200	30,200	2	229,800	91,800	11	6,900	2,700
Retired civil servant	13	52,600	48,900	10	40,600	26,400	8	4,500	3,100
<b>School education of reference person</b>									
No school qualifications	–	–	–	–	–	–	–	–	–
Secondary general school	9	70,300	53,600	1	492,900	29,900	25	8,500	3,500
Intermediate secondary school <sup>7</sup>	18	101,500	69,100	4	116,400	45,500	35	12,200	6,400
Higher education entrance qualification	20	149,000	99,800	6	234,100	132,900	28	12,900	5,800
<b>Professional education of reference person</b>									
No vocational qualifications	8	96,300	75,000	–	–	–	32	5,600	2,000
Apprenticeship <sup>8</sup>	14	97,600	56,700	2	219,000	45,600	32	12,200	6,000
Technical college degree	19	135,400	122,500	5	240,100	120,700	24	12,700	6,900
University of applied sciences degree	17	140,400	95,000	5	157,800	99,700	29	15,200	9,800
University degree <sup>9</sup>	22	141,900	89,000	9	232,500	128,400	21	10,000	5,900
<b>Nationality of reference person</b>									
German	16	107,200	72,700	4	241,800	100,900	27	11,300	6,000
Other nationality	12	156,900	111,800	–	–	–	41	13,500	4,400
<b>Net wealth (quantile)</b>									
0- 20%	–	–	–	–	–	–	52	10,400	4,800
20- 40%	3	222,800	175,200	–	–	–	30	9,600	4,600
40- 60%	18	99,800	57,000	2	70,200	27,700	25	12,200	7,500
60- 80%	29	112,000	73,400	4	115,000	93,200	21	12,900	5,400
80- 90%	31	101,100	70,600	6	160,400	100,100	15	10,600	4,700
90-100%	24	151,400	98,800	15	296,600	127,000	18	15,700	4,900
<b>Gross income (quantile)</b>									
0- 20%	3	58,100	40,200	–	–	–	26	5,400	1,800
20- 40%	7	58,700	37,700	1	80,600	51,700	29	9,600	5,100
40- 60%	14	85,200	42,400	4	64,700	26,300	32	12,600	6,100
60- 80%	21	126,500	77,100	3	234,500	55,900	32	13,000	7,700
80- 90%	35	123,200	93,800	9	211,800	130,500	24	15,500	7,200
90-100%	33	163,100	110,400	13	320,600	156,300	28	15,100	4,900

\* Including consumer loans, student loan debt, revolving credit card debt. 1 Mecklenburg-West Pomerania, Saxony-Anhalt, Brandenburg, Berlin, Thuringia, Saxony. 2 Lower Saxony, Schleswig-Holstein, Hamburg, Bremen. 3 Bavaria, Baden-Württemberg, Hesse. 4 North Rhine-Westphalia, Rhineland-Palatinate, Saarland. 5 Including agriculture. 6 Including (early) pensioners/retired civil servants, school pupils, persons on national service, homemakers, others. 7 Or equivalent qualifications/completed GDR standard school up to tenth grade. 8 Dual training programme. 9 Or doctorate.

## Gross and net income,\* in total and by household characteristics

Figures in €

Item	Gross income (annual, calculated from components)		Net income (annual, self-assessment)	
	Mean	Median	Mean	Median
<b>All households</b>	61,100	44,700	37,300	29,800
<b>Region</b>				
East <sup>1</sup>	47,600	39,400	31,500	27,600
West	64,700	47,400	38,900	31,200
of which: Region 1 <sup>2</sup>	57,000	45,100	34,600	29,300
Region 2 <sup>3</sup>	73,700	51,800	42,700	32,700
Region 3 <sup>4</sup>	57,500	44,000	36,400	31,900
<b>Homeowner status</b>				
Owner without mortgage	69,800	52,700	40,900	35,000
Owner with mortgage	93,100	74,100	55,300	46,900
Tenant	47,600	37,300	30,400	25,400
<b>Type of household</b>				
Single household	35,900	29,900	24,600	21,200
Single-parent household	56,600	37,000	29,500	26,400
Couple without children	76,400	58,000	45,200	38,600
Couple with children	91,000	72,400	55,400	44,700
Other	77,900	51,800	35,900	33,700
<b>Age of reference person</b>				
16-24	24,100	15,400	19,300	14,800
25-34	52,800	41,800	34,400	29,500
35-44	68,100	57,200	40,800	38,200
45-54	82,100	57,100	49,400	35,700
55-64	72,100	53,900	39,500	33,700
65-74	46,600	37,000	31,500	25,800
75+	45,100	34,300	29,200	24,900
<b>Labour market status of reference person</b>				
Self-employed	85,800	51,300	47,200	35,400
Civil servant	110,800	79,900	67,900	54,300
Employee	73,500	58,400	44,000	36,500
Worker <sup>5</sup>	54,600	41,100	32,400	29,200
Unemployed	34,800	25,900	20,700	13,800
Non-labour force member <sup>6</sup>	41,900	32,500	27,700	23,500
Pensioner	41,500	33,000	27,800	23,700
Retired civil servant	80,200	67,100	42,500	38,800
<b>School education of reference person</b>				
No school qualifications	25,600	24,000	19,500	16,800
Secondary general school	44,200	34,900	27,800	23,700
Intermediate secondary school <sup>7</sup>	61,400	48,700	37,100	33,600
Higher education entrance qualification	77,200	57,900	46,600	37,500
<b>Professional education of reference person</b>				
No vocational qualifications	28,600	21,300	21,300	18,200
Apprenticeship <sup>8</sup>	56,200	41,900	33,300	28,800
Technical college degree	66,300	52,000	40,600	35,400
University of applied sciences degree	68,100	56,200	39,600	35,200
University degree <sup>9</sup>	93,400	71,200	58,100	46,900
<b>Nationality of reference person</b>				
German	62,900	46,600	38,200	30,600
Other nationality	62,500	45,800	34,100	31,200
<b>Net wealth (quantile)</b>				
0- 20%	32,400	26,100	22,200	19,800
20- 40%	42,700	37,000	28,900	25,800
40- 60%	56,100	47,300	35,900	32,900
60- 80%	69,800	58,600	39,800	35,300
80- 90%	86,100	66,900	50,900	43,400
90-100%	123,700	97,000	69,100	53,400
<b>Gross income (quantile)</b>				
0- 20%	14,100	15,000	16,900	14,100
20- 40%	30,800	30,600	24,000	22,400
40- 60%	45,200	44,800	32,400	29,800
60- 80%	68,000	67,300	43,500	41,400
80- 90%	97,700	96,900	55,300	54,200
90-100%	198,500	155,800	84,800	71,100

\* Gross income is the sum of the income components included in the survey. By contrast, net income is the respondent's self-assessment of the total. When respondents are asked to give net income as an aggregate, aggregation bias may arise; this means that incomes are understated as certain income components are more likely to be forgotten than when they are specifically asked about. **1** Mecklenburg-West Pomerania, Saxony-Anhalt, Brandenburg, Berlin, Thuringia, Saxony. **2** Lower Saxony, Schleswig-Holstein, Hamburg, Bremen. **3** Bavaria, Baden-Württemberg, Hesse. **4** North Rhine-Westphalia, Rhineland-Palatinate, Saarland. **5** Including agriculture. **6** Including (early) pensioners/retired civil servants, school pupils, persons on national service, homemakers, others. **7** Or equivalent qualifications/completed GDR standard school up to tenth grade. **8** Dual training programme. **9** Or doctorate.

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## ■ Turning point in payments

*Global payments is an area which has seen considerable growth in recent decades and is pursuing a trend towards ever greater integration. Along the way, efficiency has been enhanced and risks reduced. But developments that could significantly change the global payments landscape have been under way for some years now. These include the emergence of new forms of money, the advent of new technologies, the entry of new competitors into the market and a heightening of cyber risks. While these developments are capable, on the one hand, of spurring innovation and new additions to the existing market offering, they also have a flip side in that they make the payments landscape more complex and generate frictions and fragmentation.*

*Russia's war of aggression against Ukraine and the sanctions associated with it have now brought a geopolitical dynamic into play, too. Some sanctions are having a significant impact on payments. The ban on the use of specialised messaging services (such as SWIFT) imposed on selected banks is directly interfering with payments to and from Russia as well as payment traffic within the country itself. Its main aim is particularly to cut affected financial market participants off from international payments. In addition, some participants are subject to full asset freezes, restricting disposals and prohibiting others from making funds and economic resources available to them.*

*All the same, moves to evade the restrictions have taken hold, including the use of alternative messaging services outside the reach of the sanctions. On top of this, countries that are not participating in the sanctions are drawing payment and trade flows their way, which is further softening the impact of the sanctions. Overall, it appears that while the sanctions have led to a decline in Russia's cross-border payments, the latter have remained largely intact. A substantial portion of the decline in traffic is therefore likely attributable to the indirect effects of the measures imposed on trade in goods, services and financial products.*

*Taken together, the various factors driving developments, combined with the direct and indirect repercussions of the sanctions as reflected in the ongoing policy debates, could mark the start of a turning point in payments in three respects. First, new forms of money, technology and competitors as well as cyber risks have the capacity to fundamentally transform both national and cross-border payments. Second, the geopolitical situation is likely to lead to fragmentation in cross-border payments. Third, national interests look set to play a greater role when it comes to payments. Regardless of that, policymakers should keep endeavouring to ensure that new technologies in the payments space do not lead to structural fragmentation. In addition, they should continue to do their bit in dismantling barriers hampering the settlement of cross-border payments and, for example, redouble efforts to establish globally harmonised standards and interoperable interfaces going forward. Lastly, regulators need to carry on working together and liaise even more closely, especially with regard to future innovative developments. Irrespective of the individual states' desire for sovereignty in payments, all states should have an interest in preventing risk-enhancing regulatory arbitrage.*

## Integration and dynamics in payments

*Cashless payments are gaining in importance and becoming more integrated, ...*

Payments is a field of increasing significance and an area that has been following a trend towards ever greater integration for decades. Along the way, efficiency has been enhanced and risks reduced. Another sign of that evolution is the more prominent role being played by international service providers, payment service providers and internet platforms. In the early 1990s, the fall of the Iron Curtain ushered in a new wave of globalisation, leading to a significant increase in cross-border investment, migration, tourism and global trade in goods and services. This also brought with it a greater need for international payment solutions.

*... even though the global payments landscape is still highly multi-faceted*

That said, the global payments landscape is still highly multi-faceted, being made up of various national payment systems which have developed over the course of time and exhibit their own technical, economic and legal idiosyncrasies. Cross-border payments going from one system to another are usually settled via bilateral relationships between correspondent banks or through money transfer services (such as Western Union and MoneyGram). This still makes for a considerable degree of friction.<sup>1</sup> Those frictions are being steadily – albeit slowly – reduced, however: the harmonisation of messaging standards (e.g. ISO 20022), higher-performance national systems, the use of shared communication networks (e.g. the Society for Worldwide Interbank Financial Telecommunication<sup>2</sup> (SWIFT)) and, in some cases, also of collectively used systems some of which even boast multi-currency capability (e.g. Continuous Linked Settlement (CLS)) are all smoothing the way for payments.

*Policymakers as important drivers of efficiency and integration*

Impetus and support for these developments is also coming from policymaking quarters. The creation of CLS in 2002, for example, was the banking industry's response to the G10 member countries' strategy for reducing risks in the settlement of foreign exchange transactions, in particular "Herstatt risk".<sup>3</sup> The falling costs of

credit transfers made by migrants to family members back in their home countries (remittances) are testament to steady advances in terms of efficiency and security in international payments.<sup>4</sup> Even so, the potential for improvement has yet to be fully tapped in the global payments landscape.<sup>5</sup> This is why the G20 Roadmap for Enhancing Cross-border Payments, endorsed in 2020, establishes targets with a view to harmonising regulatory requirements and increasing data quality where cross-border payments are concerned. There are also plans to expand existing payment infrastructures and develop new ones.<sup>6</sup>

However, radical external impulses have been at work on the payments space in recent years. These factors have been driving the debate about the road ahead for both national and cross-border payments. They are a source of uncertainty because the structure of the market may undergo fundamental change, meaning that it is no longer possible to extrapolate on the basis of how things have developed so far. On top of that, new risks may emerge which existing risk management approaches might not be able to fully hem in. If the existing success factors and value chain elements of a product get replaced by different factors and elements, disruptive effects can ensue. At the same time, there is a risk that these sorts of impulses will provoke substantial fragmentation

*External impulses can cause frictions and fragmentation*

<sup>1</sup> See Deutsche Bundesbank (2022).

<sup>2</sup> SWIFT is an organisation which, in addition to operating a telecommunications network (SWIFTNet) for the fast and secure exchange of financial industry messages, also works to further enhance and define messaging standards, including in the payments domain.

<sup>3</sup> This is a reference to Herstatt Bank, which closed down in 1974. The term "Herstatt risk" describes what happens when the two payment legs making up a foreign exchange transaction are decoupled on account of time zone differences: parties are exposed to delivery or settlement risk stemming from the danger that one of them could go bankrupt in the time gap between both transactions being settled. According to a survey conducted by the Bank for International Settlements (BIS), however, around one-third of all foreign exchange transactions still involve settlement risk. See Bank for International Settlements (2022).

<sup>4</sup> See World Bank (2022).

<sup>5</sup> See Deutsche Bundesbank (2022).

<sup>6</sup> See Financial Stability Board (2020a).

## Functioning of international payments

A number of payment instruments, such as cash, payment cards, credit transfers, e-money and crypto tokens, can be used for cross-border payments. Which instrument is selected depends on the payment service providers available, the currency area in question and user preferences.

The cross-border payment process can be broken down into several phases. The domestic leg of a payment flow is usually based on national payment systems. The cross-border leg can be carried out via correspondent banks, platforms belonging to specialised international providers (e.g. PayPal or Wise) or interlinked national systems. The idea of making cross-border payments via peer-to-peer systems (e.g. public blockchain infrastructures) – even without involving a payment service provider in some cases – emerged around ten years ago and is therefore still relatively new.

Payments from one currency area to another are mostly settled via correspondent banks. Processing is based on accounts that domestic institutions hold with foreign correspondent banks in order to settle payments in foreign currency. Payment orders must be submitted before settlement can take place. From a technical perspective, different communication networks can be used for this purpose, including telephone, fax or email. For reasons of efficiency, specialised messaging services, such as SWIFT (Society for Worldwide Interbank Financial Telecommunication), are used in most cases. The cooperative SWIFT, which was established in 1973, has around 11,000 participants in more than 200 countries. In 2022, it processed an average of around 20 million payment messages per day.<sup>1</sup> Since SWIFT is domiciled in Belgium, it is subject

to Belgian law and therefore also to EU regulations. Given its important role in the financial system and the potential adverse impact of a breakdown in global communication channels between financial market participants, SWIFT is jointly overseen by the G10 central banks and the ECB. Many national or regional payment providers also use SWIFT as their communication channel.

In economically highly integrated regions, the idea of using cross-border platforms is also being considered. In the euro area, for example, euro payments can already be processed across borders using TARGET services. Work is underway to expand TARGET services to become a multi-currency system. Such multi-currency platforms are already in operation in South Africa (SADC-RTGS) and in the Arab region (Buna).<sup>2</sup>

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<sup>1</sup> See Society for Worldwide Interbank Financial Telecommunication (2023).

<sup>2</sup> See Bank for International Settlements (2023).

*Disruptive forces in the shape of new forms of money like crypto tokens and stablecoins, ...*

in the existing payments landscape.<sup>7</sup> Such external impulses include, for example, new forms of money, new technologies, new competitors and increased cyber risks.

One example of a new form of money might be crypto tokens.<sup>8</sup> These are digital units of value created by private providers that can be transferred directly between participants over virtual networks. However, their value is usually so unstable that they are ill-suited for use in payment transactions or as a store of value. Rather, they are used predominantly as a speculative instrument and form part of an increasingly complex system of decentralised financial services.<sup>9</sup> Stablecoins take crypto tokens one step further; their value is mostly kept stable by pegs to government currencies and asset backing.<sup>10</sup> However, recent developments have shown that, without a comprehensive regulatory set-up which efficiently curbs the risks to both holders and the ecosystem as a whole, stablecoins' prospects for success are likely to be limited.

Payment service providers are faced with multiple challenges all at once. These alternative forms of money are paving the way for new business cases, and customers open to innovation are keen to make use of those. Yet there is a high degree of risk involved, the margin has to be shared with the new providers, and regulation is still in its infancy.<sup>11</sup> Furthermore, there is the chance that such tokens could crowd out the commercial bank money that has hitherto dominated payments. Only a few institutions are likely to be able to create their own token and bring it to market with a realistic chance of success.<sup>12</sup> The alternative – implementing some kind of digital (tokenised) commercial bank money that would be shared by institutions – does not seem easily feasible in the short or medium term.<sup>13</sup>

*... CBDC, ...*

Another innovative form of money is central bank digital currency (CBDC), which is being pursued, at least as a concept, in virtually all major advanced and emerging economies.<sup>14</sup>

The introduction of CBDC may have far-reaching ramifications. The implications of introducing a retail CBDC, available for all to use, are likely to be more wide-ranging than those associated with the wholesale CBDC variant for use only by a limited set of financial institutions. European sovereignty in payments is one argument for introducing the digital euro, the Eurosystem's potential retail CBDC. Certain changes to the market structure as it stands are a natural consequence of this and certainly intentional on the policymaking side, but without a wish to challenge the delicately balanced role distribution between sovereign and private services in the world of payments. CBDC systems could be a boon for cross-border payments if different countries design their solutions to be interoperable.<sup>15</sup>

The need for tokenised money is born of innovations in the field of IT infrastructures.<sup>16</sup> As a driver of innovation in payments – not just in the domestic arena but in international payments, too – distributed ledger technology (DLT) promises two decisive benefits. First, it allows transactions to be settled by independent partners on a shared database. That effectively does away with reconciliation processes. Second, it facilitates the automated settlement of transactions by means of smart contracts.<sup>17</sup> Complex processes, which once required a

*... new technology such as DLT, ...*

<sup>7</sup> See International Monetary Fund (2023).

<sup>8</sup> See Deutsche Bundesbank (2019).

<sup>9</sup> See Deutsche Bundesbank (2021b).

<sup>10</sup> Alongside pegs to government currencies (for the most part US dollars) and backing with corresponding reserve assets, some stablecoins seek to limit volatility by being backed with crypto tokens or by relying on algorithmic stabilisation methods; these have yet to garner broad trust in the market.

<sup>11</sup> See Financial Stability Board (2022).

<sup>12</sup> See Oliver Wyman and JP Morgan Chase & Co. (2022).

<sup>13</sup> See German Banking Industry Committee (2022).

<sup>14</sup> For an overview, see Richards and Furche (2022).

<sup>15</sup> See Deutsche Bundesbank (2022).

<sup>16</sup> See Deutsche Bundesbank (2017).

<sup>17</sup> Smart contracts are software scripts that automatically execute closed contracts depending on the occurrence of predefined events. They make it possible to simplify fulfilment of complex, recurring contract processes between several partners. As such, they are regarded as a key technology for reducing transaction costs in an economic system based on the division of labour. See Deutsche Bundesbank (2020).

multitude of manual interventions, can thus be handled automatically, potentially saving time and transaction costs. At the same time, the technology carries potential for reducing risks. Ideally, there should be as much flexibility and automation in the flow of money as there is in flows of goods and services as well as information.<sup>18</sup>

Financial institutions are seeking solutions to support the opportunities that DLT has to offer when it comes to money. But uncertainty abounds: the world has yet to see a single major financial market infrastructure operating on the basis of DLT. It would call for adjustments that would need to be implemented throughout the industry and on a global basis; they are complex and come with a hefty price tag in terms of development costs. The existing global networks are private, proprietary solutions that are often difficult to regulate owing to a lack of clear governance. Numerous central banks are currently working on DLT pilots with a view, for instance, to simplifying the process chains involved in the complex business of securities settlement or in international payments, especially banks' multi-currency liquidity management.

*... new competitors such as bigtech players and fintech firms ...*

In addition to new forms of money and new technology, new competitors are also joining the mix, in the form of bigtech and fintech companies. Fintech firms are often swifter and more agile than established financial service providers and are unencumbered by existing business operations and legacy systems. They optimise sub-processes along the value chain and also want to participate as economic players in the payments business. Bigtech firms are amassing considerable market power, allowing them to amortise fixed costs for development much faster than incumbent financial service providers. Moreover, by leveraging their global user base they can roll out many of their offerings in parallel in different markets, even though national specificities generally call for a degree of differentiation. The payments business is thus advancing to become a highly

competitive field, in which radical structural changes of the like not seen in decades seem possible.

Cyber risks are also making waves, representing a threat the dimension of which – both in terms of nature and scope – warrants particular forethought and defensive measures. Cyberattacks targeting payments could also be used as a political weapon, for example. All stakeholders in the payments space must therefore stand ready to face potential aggressors who are state-organised or state-sponsored,<sup>19</sup> have undergone professional training and have substantial resources at their disposal. Adequate safeguards against cyberattacks should no longer be a mere add-on to existing systems. Instead, there needs to be systematic planning and ongoing monitoring of cyber resilience across all product areas and processes, including those of suppliers.<sup>20</sup> When it comes to payments, where the greatest risk lies in the disruption to operational processes, this should see cyber resilience being accorded top priority, even ranking ahead of new product development.

*... and cyberattacks, which have now become a political weapon*

Overall, payments are going through a period of structural adjustment. This applies in particular to international payments. While payments have experienced convergence around the globe in recent years, with a greater willingness to cooperate at the international level, strong external impulses could trigger structural changes that will not necessarily follow the same trajectory.

*Structural orientation phase in payments*

## ■ Sanctions in payments

A strong geopolitical driver has entered the fray in the shape of Russia's war of aggression

<sup>18</sup> See Deutsche Bundesbank (2020).

<sup>19</sup> The term "state-sponsored" is used to describe situations where there is a loose cooperation between cyber-crime groups and governments. Such groups are, to varying degrees, fostered or at least tolerated by state structures; see Federal Criminal Police Office (2022).

<sup>20</sup> See Financial Stability Board (2020b).

*Invasion of Ukraine met with far-reaching sanctions against Russia*

against Ukraine. Extensive sanctions against the aggressor have been enacted by the West with backing from many other countries. Some of these sanctions are having a significant impact on payments. Their direct and indirect repercussions could cause upheaval in efforts to integrate the global payments landscape, which can be held up as a mirror to developments in the geopolitical space. An increase in bilateral and multilateral political and economic cooperation from the mid-20th century deepened international cooperation in the world of payments as well. The responses to Russia's war of aggression against Ukraine and the sanctions imposed in payments mark an important turning point and could severely hamper this development.

Involving central infrastructures and messaging service providers such as SWIFT as a sanction instrument is not a new concept per se. Even though SWIFT did not actively participate in policy responses in the past, citing its neutral position,<sup>21,22</sup> in 2012, its own network's international data traffic with selected Iranian banks was blocked for the first time to implement corresponding sanctions under Belgian and European law.<sup>23,24</sup>

*Aim is for sanctions to drive up Russia's economic costs*

The payment sanctions adopted since February 2022 in response to Russia's war of aggression against Ukraine introduce a new dimension, however. The G7 countries and the European Union agreed on a series of measures comprising not just diplomatic and economic sanctions but also restrictions in payments and financial markets. The aim of these measures is to significantly increase the economic costs of the war for Russia to "effectively thwart Russian abilities to continue the aggression".<sup>25</sup> The ban preventing certain Russian and Belarusian banks from using specialised messaging services for payment transactions was met with a very large public response.<sup>26</sup> This ban intended to cut off important financial market participants in an industrial country or emerging market economy from international payments for the first time. As at 31 December 2022, ten

Russian banks were prohibited from using these messaging services.

## Selected sanctions imposed on Russia since the outbreak of the war

The predominant status enjoyed by one particular provider in the messaging services market means that people often talk about "SWIFT sanctions" when in fact, by law, the sanctions affect all messaging service providers in the payments space. Political and public circles have placed high hopes in disconnecting Russian banks because at the time the sanctions were imposed, the communication side of almost all international transactions involving Russia was routed via SWIFT. Thus, the impact of these sanctions would not initially depend on implementation by other countries. Furthermore, SWIFT had been heavily used to settle interbank payments within Russia.

Given that, in such cases, only the transmission or receipt of transaction details using a specialised messaging service provider is made impossible for sanctioned banks, these measures can be evaded<sup>27</sup> at relatively low cost. For example, transaction details can be transmitted via alternative communication channels (e.g. by telephone, fax or email) or by means of non-sanctioned domestic (correspondent) banks that are still linked up to SWIFT.

Another option that is being used is to fall back on alternative messaging service providers, including those in jurisdictions that are not im-

*Sanctioned banks no longer able to transmit transaction details via SWIFT*

*Alternative messaging channels already exist ...*

*... or are being created*

<sup>21</sup> For instance, despite a (non-binding) EU resolution, SWIFT did not participate in sanctions following the Russian annexation of Crimea in 2014.

<sup>22</sup> See Cipriani et al. (2023).

<sup>23</sup> See Giumelli and Ivan (2013).

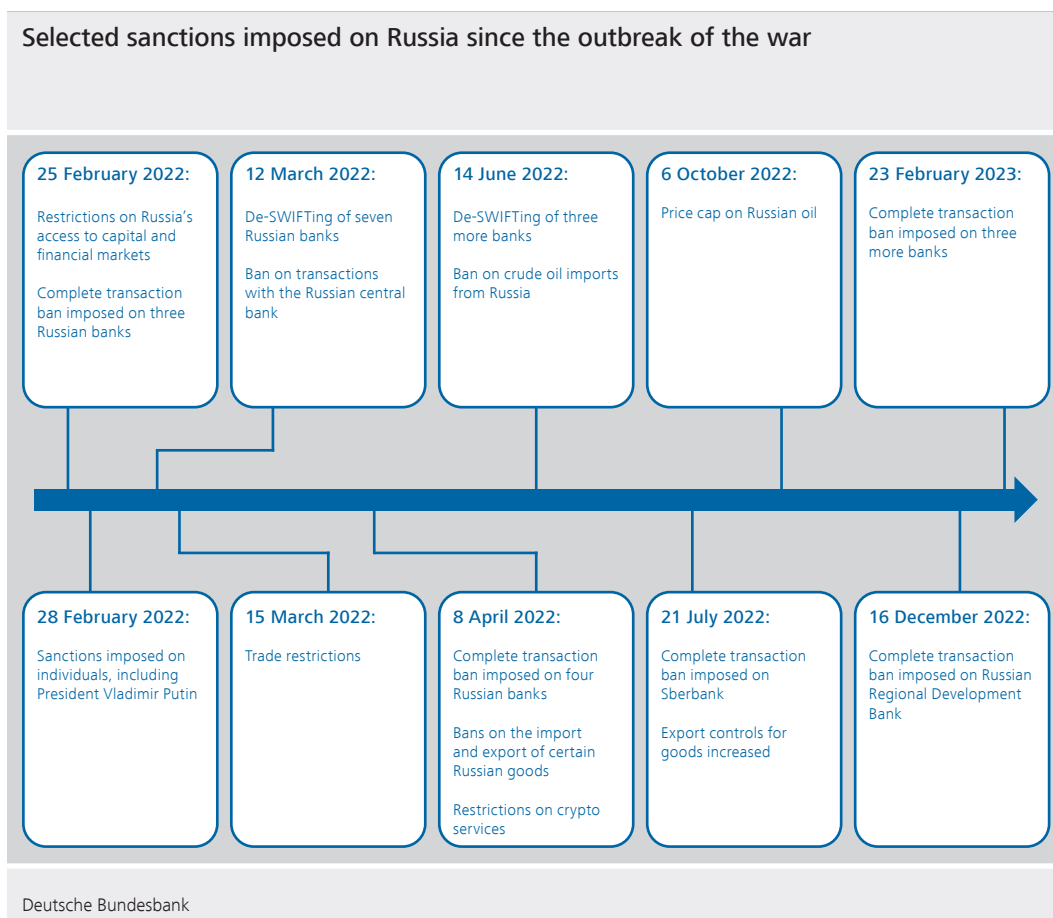
<sup>24</sup> See International Monetary Fund (2023).

<sup>25</sup> See Council Regulation (EU) 2022/345 of 1 March 2022, Regulation, EUR-Lex - 2022R 0345 - EN - EUR-Lex (europa.eu).

<sup>26</sup> See Council Regulation (EU) 2022/345 of 1 March 2022, Regulation, EUR-Lex - 32022R 0345 - EN - EUR-Lex (europa.eu).

<sup>27</sup> The term "evasion" describes legal behaviour by market participants and, taken in isolation, does not constitute a breach of sanctions.





plementing the sanctions imposed. The Russian central bank has been threatened with expulsion from SWIFT once before – following Russia's annexation of Crimea in 2014 – when it responded by developing a national messaging service provider of its own, Sistema Peredachi Finansovyykh Soobscheniy (SPFS).<sup>28</sup> Plus, there are other third countries that operate their own messaging systems,<sup>29</sup> which are partly multi-currency compatible and are used as an alternative to SWIFT.<sup>30</sup> Although the use of such systems by EU banks would not formally constitute an infringement of the law, it would run counter to the objectives of the sanctions.

banks' assets in the sanctioning countries are frozen and that there is a blanket ban on providing them with funds directly or indirectly – i.e. to make payment transactions in favour of these banks. These sanctions will only be effective in those countries where the sanctions apply, while SWIFT sanctions will apply to all countries as they are implemented directly by SWIFT.

*Transaction bans hit banks harder*

Measures that not only prohibit the use of specialised messaging service providers but also impose a broad transaction ban on the respective banks have a much more severe impact. In practice, this means that restrictions on dispositions and prohibitions on making funds and economic resources available are imposed on sanctioned banks. That is to say that these

<sup>28</sup> See Bank of Russia (2021a).

<sup>29</sup> The People's Bank of China operates the Cross-Border Interbank Payment System (CIPS), which is based on SWIFT standards but does not necessarily use the SWIFT network. The same applies to the Structured Financial Messaging System (SFMS) operated by a subsidiary of the Reserve Bank of India.

<sup>30</sup> See Eichengreen (2022) and Reserve Bank of India (2021).

## Sanctions on the use of messaging services in payments

*Message transmission via alternative systems, especially at national level*

On balance, SPFS – Russia’s counterpart to SWIFT – has presumably seen significant and growing use for a large proportion of payment transaction messages within Russia since spring 2022. For cross-border payments, however, it is more difficult to switch to alternatives to incumbent providers. Network effects play a key role here, as international partners would also need to be willing to link up to the alternative messaging system and have to make a conscious decision not to comply with the sanctions.

*Russia’s domestic and international payments largely intact*

Russia’s domestic and international payments still appear to be largely intact overall. Even so, there has evidently been a decline in Russia’s cross-border payments as a result of the sanctions.<sup>31</sup> It is impossible to attribute that decline solely to the sanctions on payments, though, especially since the effectiveness of sanctions in this area depends in part on the number of sanctioned banks. Much of the decline, then, can be put down to the indirect effects that the measures are having on trade in goods, services and financial products. Moreover, evasive action has become commonplace, with signs emerging in recent months that not just the traded goods but also the payment flows with Russia for those goods are apparently being re-routed via third countries that are not actively involved in sanctions against Russia. As a result, evasive transaction flows are still getting through despite the sanctions, and the payment sanctions are losing more and more of their bite as time progresses.<sup>32</sup>

If goods traffic or financial transactions are to continue to be executed with parties sanctioned by other countries, stakeholders will presumably switch to using alternative payment channels and systems. This can be done, for example, by making greater use of payment systems in the importer’s or exporter’s country or by linking together national payment systems.<sup>33</sup> The avenues being explored also in-

clude, for instance, work conducted by the Russian central bank on CBDC.<sup>34</sup>

## Implications for policy and payments

External impulses and geopolitical developments, as well as the responses they provoke, can be a catalyst for far-reaching change in international payments. For instance, new DLT-based settlement infrastructures, coupled with innovative digital forms of money, could rapidly change the face of both domestic and cross-border payments. At the same time, geopolitical tensions could lead to a shift of emphasis in cross-border payments in particular, which, in keeping with the general political debate, could be described for illustrative purposes as a turning point in payments. A tendency to fragment and a greater focus on national interests in payments are plausible consequences. Given the crucial importance of payments for a national economy, this is likely to concern all countries – albeit to varying degrees – irrespective of whether, in the current war, they are the sanctioned aggressor, part of the community imposing sanctions, parties backing or sympathising with one side, or merely bystanders.

Hence, Russia, too, is responding to the sanctions with efforts to expand its national payment system and intensify its bilateral and regional contacts. It is also looking to open up additional transaction channels by embracing digital money and new technologies. The

*Fragmentation and greater national focus as a result of sanctions*

*Mistrust could lead to a build-up of alternatives in payments*

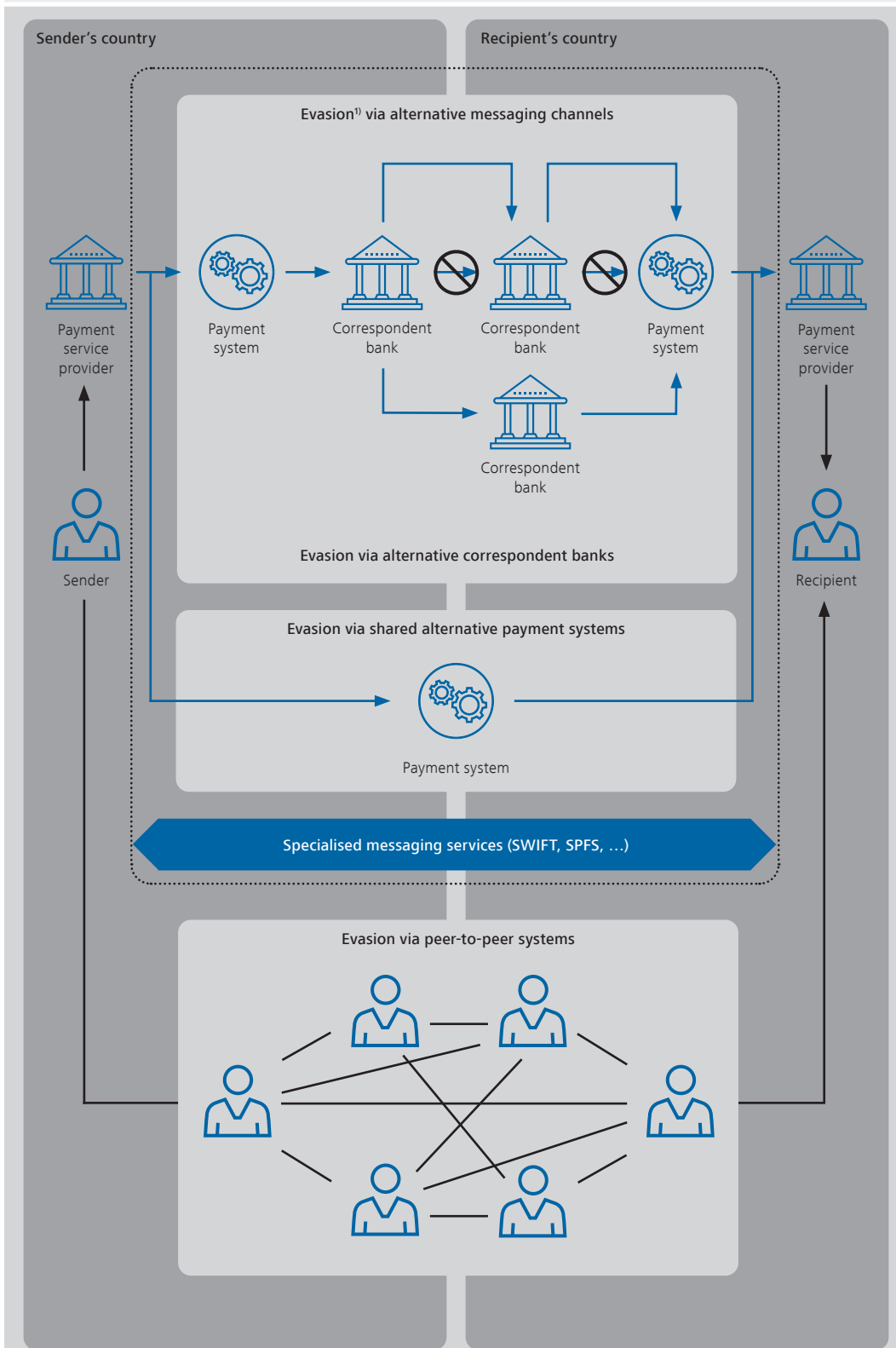
<sup>31</sup> See Drott et al. (2022).

<sup>32</sup> See Cipriani et al. (2023).

<sup>33</sup> See International Monetary Fund (2023).

<sup>34</sup> Since 2020, the Bank of Russia has been exploring the possibility of introducing a retail CBDC (see Bank of Russia (2021b)). Work on the “digital rouble” has been stepped up as a result of the sanctions imposed. A pilot project was launched on 1 April 2023 and a nationwide roll-out is scheduled for 2024. A digital rouble would reportedly make payments in Russia faster, simpler and safer, reduce transaction costs, improve financial inclusion and strengthen the competitiveness of the Russian currency. There are also plans to explore cross-border functionalities, such as bilateral links to foreign CBDCs.

## Sanctions on the use of messaging services in payments



Source: Bundesbank chart based on Financial Stability Board (2020a). 1 The term "evasion" describes legal behaviour by market participants and, taken in isolation, does not constitute a breach of sanctions.

example of Russia could serve as a blueprint for many countries striving for greater independence and sovereignty.

In general, countries could take the precautionary measure of setting up alternatives in payments to give themselves more options to settle the financial leg of trades and financial transactions. Even if they did so, international standards could continue to be applied in proprietary national systems, too. A switch to or the complementary use of other currencies in foreign trade, or even of other forms of money, as well as the use of alternative payment service providers and messaging services are viable options. New technologies such as DLT open up transaction channels that are independent of existing ones. In theory, new providers such as fintech and bigtech firms are also creating additional transaction channels for payments with their platforms. However, these will probably only ever be an alternative if they are located in what the country in question considers to be politically acceptable jurisdictions.

*Impact possible on currencies used*

These developments could also end up changing the currencies used for invoicing in international payments. At present, US dollar and euro are very heavily used as payment currencies in cross-border transactions, which is why settlement normally also takes place through the corresponding infrastructures in the United States and the euro area. Hence, cross-currency transactions between participants in the European Economic Area (EEA) and non-EEA participants accounted for almost 40% of all payments in TARGET2 in 2021.<sup>35</sup> As alternative payment channels open up, this could usher in a situation where, at the global aggregate level, greater use is made of other countries' currencies and payments worldwide become increasingly fragmented.<sup>36</sup>

*Efficiency in payments could decrease, risks could increase*

That kind of fragmentation in international payments would be expected to add to transaction costs and settlement times.<sup>37</sup> The economic upside offered by economies of scale

and network effects would be left untapped for the most part if, for example, other providers were used to a greater extent alongside SWIFT in international payments in future. In addition, challenges could arise for global liquidity management, with corresponding costs going forward. Overall, fragmentation could make payments more expensive for the economy, and, owing to the added operational complexity, riskier as well. That may well blunt the impact of sanctions in the financial sector.

In light of these tendencies, it is important to ensure that geopolitical tensions do not adversely affect the efforts initiated in 2020 by the G20 to improve efficiency in international payments. This is particularly true of the debate surrounding future settlement infrastructures in cross-border payments. Various models are under discussion, including payment systems developed and operated jointly by several different countries. Recent developments have shown that these present two key challenges in the event of a geopolitical conflict. First, countries could experience disadvantages due to sanctioning or being excluded by the majority of other countries. Those seeing themselves in what might be a minority position would no longer entrust their payments to that kind of system dominated by other countries. Second, the system could be sabotaged by cyberattacks. The more a potential attacker knows about how a system is structured and what protective measures are in place, the more lethal such attacks will be. Governance arrangements alone are unlikely to be able to alleviate any mistrust this might cause. Rather, there needs to be an innate sense of trust, which presupposes an overlapping consensus of political values.

*Global jointly operated payment systems becoming less likely*

This backdrop makes it all the more important to ensure that globally harmonised standards and interoperable interfaces are in place. For

<sup>35</sup> See European Central Bank (2022).

<sup>36</sup> This does not necessarily imply that the currencies used will also increasingly serve as a reserve currency.

<sup>37</sup> See International Monetary Fund (2023).

*International standards and interoperability could mitigate negative consequences*

instance, national or international systems can be operated separately but remain technically connected by efficient bridge solutions, thus ensuring that liquidity flows as smoothly as possible. Most countries will probably have little interest, as hitherto, in cutting off their own payments and will probably continue looking for ways to settle cross-border payments as efficiently as possible. After all, this is likely to remain an important prerequisite for participating in world trade.

*Sovereignty in payments is part of a state's strategic autonomy*

The objective of achieving national sovereignty in economic, infrastructural and security policy matters is now increasingly extending into the realm of payments. In this context, sovereignty refers to a sufficiently strong degree of self-determination or the ability to act independently. Payment transactions may constitute part of the strategic autonomy of a nation state or currency area.<sup>38</sup> On the whole, the notion of sovereignty and an acknowledgement of payment transactions as a critical infrastructure is becoming ever more evident in political communication. Over the past few years, observers have noted an increase in protectionist policy approaches as well as sanctions and exclusions from payment systems, resulting in risks to the availability of payment settlement services (particularly in countries that are highly dependent on a small number of and/or dominant system providers).<sup>39</sup> For example, Russia has been lessening its strong reliance on the international card companies Mastercard and Visa since 2014 by shifting its entire payment processing operations to Russia, and, at the same time, establishing its own national debit card system (Mir).

*Accelerating digitalisation driving up importance of sovereignty in payments*

The objective of sovereignty in payments is becoming increasingly important as digitalisation accelerates.<sup>40</sup> Digital processes in payments are characterised by strong economies of scale and network effects, which can quickly work in favour of global payment service providers and platform operators. The outcome of this could be dominant market positions, limited competitive intensity as well as lock-in effects due

to close ties to the platforms or products on offer. That is why national sovereignty also extends to the independence of private sector providers. If digital money is also tokenised and can be used in integrated digital processes such as DLT, any disruption (e.g. sabotage or sanctions) in the settlement of the cash leg could simultaneously directly impair real economic processes.

This has spurred the EU, for example, to implement various legislative initiatives aimed at making Europe less dependent on non-European technologies and technology companies.<sup>41</sup> The European Commission's 2030 Digital Compass initiative also calls for the protection of digital sovereignty and for the EU to lead the way in value chains identified as strategically important.<sup>42</sup>

The Eurosystem's responsibility to ensure stable and efficient payment transactions in the euro area is based on its statutory mandate<sup>43</sup> and makes an important contribution to the stability and integrity of the financial and economic system. However, discharging this mandate means that the ultimate regulatory sovereignty over payments in the euro area has to remain with the competent bodies of the EU, and that the enforceability of these regulations is guaranteed. In the event of a crisis or an attempt to influence operations (e.g. sanctions, sabotage, cyberattacks), being dependent on a third party could compromise the settlement of payments. In the interests of European payments, it is important to reduce such dependence on non-

*European Commission's 2030 Digital Compass initiative*

*More sovereignty needed in European payments*

<sup>38</sup> See Deutsche Bundesbank (2021a).

<sup>39</sup> See Lagarde (2020).

<sup>40</sup> See Balz (2021).

<sup>41</sup> These include the Data Governance Act, the Regulation on a Single Market for Digital Services and the Digital Markets Act.

<sup>42</sup> See European Commission (2021).

<sup>43</sup> At the European level, the Eurosystem has the mandate to promote the smooth operation of payment systems (Article 127(2) of the Treaty on the Functioning of the European Union) and to ensure efficient and sound clearing and payment systems (Article 22 of the Statute of the ESCB). The Bundesbank Act (Section 3) states that the Bundesbank shall arrange for the execution of domestic and cross-border payments and shall contribute to the stability of payment and clearing systems.

*Private and public sector solutions are the cornerstone of European sovereignty in payments*

European infrastructure providers. In principle, the Eurosystem needs to define which functions in payment and settlement systems must be fulfilled in a sovereign manner.

Yet sovereignty does not necessarily refer only to provision by the public sector. That said, a European payment infrastructure solution operated by the private sector would require the willingness of the European banking sector to cooperate, as well as high initial investment and the use of uniform standards. Efforts to date (such as the European Payments Initiative (EPI)) have not yet been able to achieve product-ready results, but would be a good starting point for a European platform of this kind. In the public sector space, meanwhile, the introduction of a digital euro could lay the groundwork for European payment solutions. This would require a digital euro to be issued on a dedicated and independently controllable infrastructure. Uniform technical standards would enable the market to build pan-European payment solutions on this infrastructure that could have a long-term future as an alternative to non-European CBDCs, stablecoins or other crypto tokens.

On the one hand, CBDC is seen as a way to ensure accessibility for broad segments of the population at the international level, too, through simple, inclusive access based on completely new infrastructures. On the other hand, concerns have also been raised in some quarters about possible macroeconomic conse-

quences, including the possibility of currency substitution in other economies.<sup>44</sup> This may be the case if, first and foremost, countries were specifically to pursue hegemonial strategies. This backdrop suggests that it would be of utmost importance for the CBDC projects of the various countries to be closely coordinated, for mutually agreed principles to be observed and for interoperability solutions to allow for cross-border use without undermining the sovereignty of individual countries. However, the current geopolitical situation is not making these challenges any smaller.

Payment regulators especially must be prepared to face possible fragmentation and other changes. New technologies, new forms of money and new providers, irrespective of whether they operate nationally or internationally, must be regulated in as technology-neutral a manner as possible and with a focus on risks. Moreover, these developments call for more intensive interaction between regulators, given how they could potentially work across national borders. Regardless of any desire on the part of individual countries for sovereignty in payments, all states should have an interest in preventing risk-enhancing regulatory arbitrage. However, the current geopolitical situation makes it more difficult for the necessary technical interaction between the regulatory authorities to take place.

*Regulation is becoming more complex*

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<sup>44</sup> See Bank for International Settlements (2021).

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## ■ Sustainability risks in banking supervision

*Climate change and the transition to a low-emission economy are posing major challenges for banks. Whilst extreme weather events such as the 2021 floods in the Ahrtal region of Germany can have a direct impact on the real estate affected and thus on banks' loan collateral, the consequences of a gradual increase in average temperatures are transmitted to banks and their risks over a significantly longer time horizon. The transmission channels are multi-layered and complex. Added to this are policy measures to mitigate climate change, which may affect banks' corporate customers, in particular, via factors such as higher costs for greenhouse gas emissions. That said, climate action measures are just a subset of the European Union's (EU) measures to achieve the United Nations' sustainable development goals. In addition to climate objectives, they also include other environmental objectives, social objectives and the promotion of good governance. The acronym "ESG" (environmental, social, governance) is used to summarise these sustainability categories.*

*The risks to banks stemming from ESG measures, or even from delays in their implementation, are relevant for risk-oriented banking supervision. ESG risks are not entirely new types of risk for banking supervisors. Rather, they can be understood as drivers of known risk categories such as credit or market risk. However, when it comes to capturing and – in the case of climate-related risks in particular – quantifying them, conventional methods quickly reach their limits. Regulatory requirements and established risk analysis methods are largely based on historical data. These are only of very limited use in predicting how ESG risks could manifest in the future and translate into financial risks.*

*This means that banks need to develop new approaches in order to adequately manage ESG risks and become more resilient to them. Supervisory authorities and standard setters have published guidance on this at the national, European and global level. Various studies show that most banks have so far fallen short of the supervisory expectations of the ECB and the Federal Financial Supervisory Authority (BaFin). Supervisors will therefore focus on the progress made by banks in implementing the existing requirements over the next few years. Findings from ESG reporting and the Bundesbank's climate risk stress test will support the ongoing work.*

## ■ Introduction

Climate change and the transition to a sustainable and, in particular, climate-neutral economy are both posing major challenges to the German banking system. This article considers sustainability risks – often referred to as ESG risks – from a supervisory and regulatory perspective. ESG stands for environmental, social and governance, with climate-related risks forming a separate sub-category of environmental risks. ESG risks as understood in this article subsume both risks arising from “too little” sustainability – such as risks stemming from environmental degradation and climate change – and risks arising from a transition to greater sustainability, although this also entails economic opportunities. Given their urgency, climate-related risks are the focus of current supervisory and regulatory work and debate, particularly at the global level, and are also the focal point of this article.

The article begins by outlining the possible transmission channels through which climate-related risks can affect banks. Next, it sets out the regulatory treatment of ESG risks, before turning to current supervisory practice at the national and European level and the challenges facing banks. The Bundesbank’s climate risk stress test is used to shed more light on possible approaches and challenges in analysing financial risks stemming from climate change.

### Possible transmission channels: how ESG risks give rise to bank risks as illustrated by climate-related risks

For the supervisory treatment of climate-related risks, it helps to distinguish between “transition risks” and “physical risks”.

“Transition risks” are risks arising from the transition to a low-emission economy. These risks can be triggered, for example, by policy measures such as an increase in carbon taxation, by

technological developments such as the expansion of electric mobility or by changes in consumer preferences. Because transition risks can alter the behaviour and planning of banks’ customers and counterparties, they have an impact on bank risks. For example, stricter climate-related rules, such as a scarcer supply of emissions trading allowances, could lead to an increase in a firm’s operating costs and render certain production methods and products unprofitable in the medium or long term. If firms do not adapt, this could, among other things, impair their creditworthiness or reduce the recoverability of the loan collateral that these firms can provide to a bank; this would lead to an increase in the bank’s credit risk.<sup>1</sup>

Physical risks, on the other hand, comprise damage resulting from extreme weather events or the gradual change in climate. Extreme precipitation followed by flooding can damage infrastructure, disrupt supply chains and lead to financial losses for the enterprises affected. This, in turn, could have a negative impact on the solvency of those enterprises and thus increase the credit risk of the bank concerned. Increasing drought can make agriculture more expensive or unprofitable in certain regions, have a detrimental impact on forestry, or constrain inland shipping and the industries that depend on it.<sup>2</sup> The chart on p. 77 gives an overview of the possible transmission channels via which climate change can give rise to bank risks.

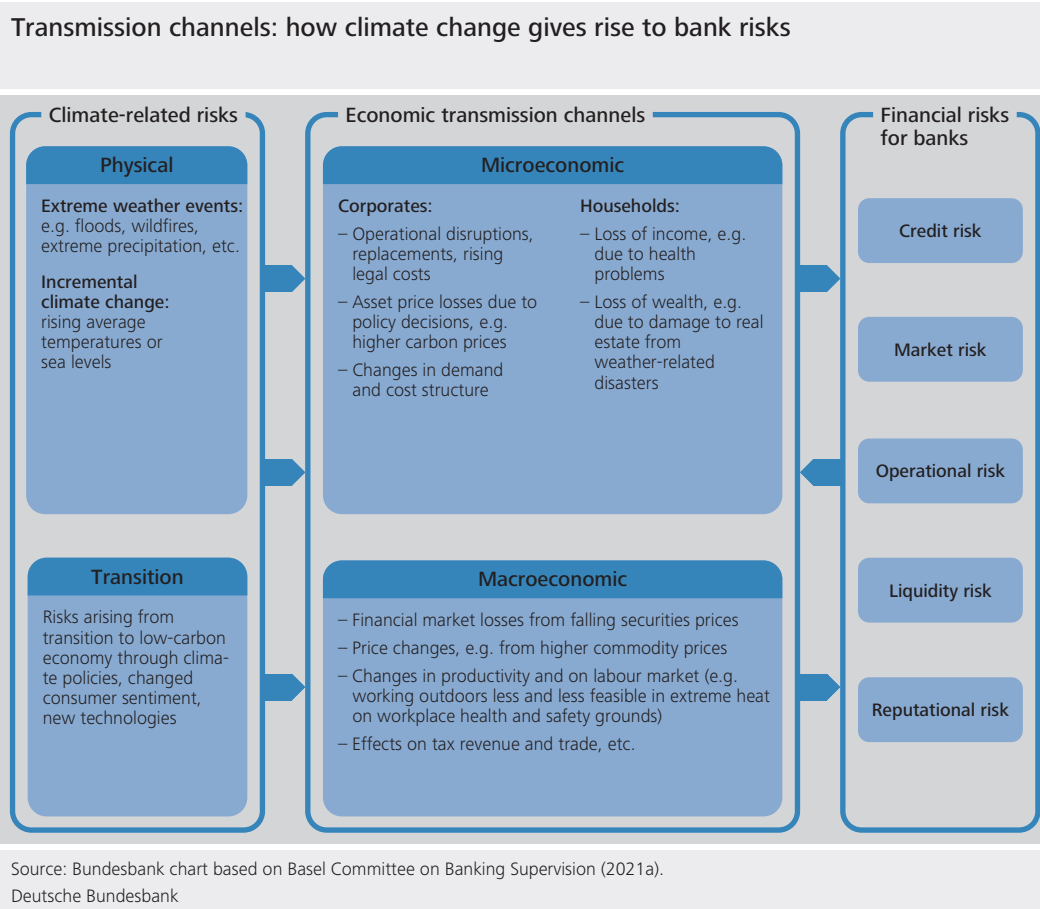
Given Germany’s moderate climate, the banks themselves state that transition risks tend to be more significant for the German banking sector than physical risks in the short term. The relevant physical risks for German banks in the foreseeable future, according to the banks themselves, are primarily floods, as they can cause great damage – potentially even posing

*Transition risks influence the behaviour of economic agents and thus bank risks*

*Physical risks stem from extreme weather events or gradual climate change*

<sup>1</sup> See Network for Greening the Financial System (2019) and Basel Committee on Banking Supervision (2021a).

<sup>2</sup> For more information on analytical needs and options from a central bank perspective, see also Deutsche Bundesbank (2022).



an existential threat – to debtor firms’ physical assets. To make matters worse, such events generally affect larger, contiguous areas, rendering smaller banks with a highly regional business model especially vulnerable. Moreover, the German banking system may also be exposed to indirect physical risks in the wake of global and regional changes in climate. For example, rising average temperatures may cause labour productivity to decrease or lead to worsening living and working conditions in some parts of the world or declining agricultural yields. That might affect German firms’ suppliers and (sub)products and put existing value chains and processes at risk, while at the same time restricting German firms’ sales markets. The changed growth outlook may then increase credit risk for German banks.

## Refining banking supervision to cover ESG risks

ESG risks are multi-layered and complex, meaning that they can affect the economy and the financial system through many different channels. However, ESG risks are not an entirely new type of risk to banking supervisors. As shown in the above chart, which uses climate-related risks as an example, ESG risks can in fact be understood as drivers of known risk categories such as credit or market risk. As a result, banks need to take them into account in their business organisation, when implementing their business strategy and in their frameworks for risk management and good governance.<sup>3</sup>

*ESG risks are drivers of risk categories such as credit or market risk*

<sup>3</sup> See Federal Financial Supervisory Authority (2019) in conjunction with Federal Financial Supervisory Authority (2021) and European Central Bank (2020).

At the same time, though, it is very difficult to capture and quantify ESG risks using conventional methods. The specific causal chains stemming from an increase in average temperatures are manifold. If tipping points are reached in the near future, the consequences are likely to be far more substantial. While some effects are already discernible, others may not materialise for several years or even decades, significantly exceeding the usual horizon of two to five years used in macroeconomic scenarios for bank stress tests. What is more, regulatory requirements and established risk analysis methods are largely based on historical data. However, these are only of very limited use in predicting how climate-related and environmental risks could manifest in the future and translate into financial risks.

*New approaches needed to manage ESG risks*

Banks therefore need to develop new, forward-looking approaches in order to adequately manage climate-related risks and become more resilient to them. Supervisory authorities and standard setters have published guidance on this, and in some cases on ESG risks as a whole, at the national, European and global level in the form of guides on supervisory practice and banks' risk management. These are intended to raise banks' awareness of climate-related and ESG risks and help them implement supervisory expectations. The guides describe the possible transmission channels through which ESG risks could affect banks and present various measurement methods and good practices for assessing ESG risks. They are also designed to help banks integrate ESG risks into their risk management, business processes and business strategy.

Climate-related risks are currently the primary focus at the global level. The Network for Greening the Financial System (NGFS), which was established within the framework of the Paris Agreement, has done pioneering work on this issue.<sup>4</sup> In addition, the Basel Committee on Banking Supervision (BCBS) has declared climate-related risks a strategic priority for its work in the coming years.<sup>5</sup>

For EU regulation, on the other hand, the entire ESG spectrum is relevant.<sup>6</sup> Thus, as part of the EU action plan on financing sustainable growth,<sup>7</sup> the European Banking Authority (EBA) was given multiple mandates for the future inclusion of ESG risks in the European banking sector. In December 2019, the EBA published its action plan including the relevant milestones.<sup>8</sup> The EBA initially focused on the areas of strategy and risk management as well as disclosure of ESG risks. In compliance with its mandate under Article 98(8) of the Capital Requirements Directive (CRD),<sup>9</sup> it published a report in June 2021 describing how banks should manage their ESG risks internally and how supervisors will review and evaluate this.<sup>10</sup> The report defines relevant terms and presents criteria and methods for identifying and measuring ESG risks. The EBA also proposes three

*EBA has multiple mandates for inclusion of ESG risks in European banking sector*

<sup>4</sup> The NGFS is a global network of 121 central banks and supervisory authorities, including the Bundesbank and BaFin. Sabine Mauderer, Member of the Executive Board of the Deutsche Bundesbank, is currently serving as Vice-Chair of the NGFS. The network's goal is to analyse the implications of climate change for the financial system and to steer global financial flows in a way that enables low-carbon economic growth. In April 2019, the NGFS presented a first comprehensive report, "A call for action – Climate change as a source of financial risk". At its core are six recommendations for action chiefly aimed at central banks, supervisors and legislators. See <https://www.bundesbank.de/en/bundesbank/green-finance/-/network-for-greening-the-financial-system-808978>

<sup>5</sup> The BCBS, whose task is to set uniform standards for internationally active banks, has published papers on transmission channels and possible methods of measuring climate-related risks to the banking sector based on analytical work and a stock-taking exercise in its members' jurisdictions. In June 2022, the BCBS also formulated principles for the effective management and supervision of climate-related financial risks, in an effort to help harmonise supervisory expectations about how large banks deal with these risks across different jurisdictions. See Basel Committee on Banking Supervision (2021b).

<sup>6</sup> The EU has a holistic approach to sustainability that translates the UN's sustainable development goals (SDGs) into concrete actions. The 17 SDGs can be roughly aligned with the "E", "S" and "G" of the acronym, although there are many interactions. For example, climate change (E) has implications for living and working conditions (S) in countries with an already high annual average temperature.

<sup>7</sup> See European Commission (2018).

<sup>8</sup> See European Banking Authority (2019).

<sup>9</sup> Directive 2013/36/EU of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC (OJ L 176, 27 June 2013, p. 338) as last amended by Directive (EU) 2021/338 of 16 February 2021 (OJ L 68, 26 February 2021, p. 14).

<sup>10</sup> See European Banking Authority (2021).

methods which banks can use to assess ESG risks depending on their business and risk strategy and their risk profile.<sup>11</sup> In its report, the EBA expresses the expectation that banks will also address their strategic objectives from an ESG risk perspective. It also recommends that banks incorporate ESG risks, inter alia, when defining their risk appetite, risk policies and risk metrics and indicators, and that they develop internal climate stress tests.

At the time of publication, many of the recommendations and expectations set out in the EBA report were already included in BaFin's 2019 Guidance Notice on Dealing with Sustainability Risks and in the ECB Guide on climate-related and environmental risks, published in 2020.<sup>12</sup> Their content and implementation by banks will be discussed in more detail later on.

## Discussion of possible adjustment of capital requirements

*Question of adjusting capital requirements still in exploratory stage*

A great deal of progress has already been made in integrating ESG risks into the qualitative regulatory requirements regarding business strategy, risk management and business organisation (Pillar 2 risks of the Basel regulatory framework).<sup>13</sup> By contrast, work on integrating ESG risks into the calculation of quantitative regulatory requirements (Pillar 1) is still at an exploratory stage.<sup>14</sup>

In the EU, Article 501c of the Capital Requirements Regulation (CRR)<sup>15</sup> mandates the EBA with assessing "whether a dedicated prudential treatment of exposures related to assets or activities associated substantially with environmental and/or social objectives would be justified".<sup>16</sup> To this end, the EBA presented a discussion paper in May 2022, which explores whether environmental risks are already sufficiently taken into account in the Pillar 1 framework or where changes might be possible.<sup>17</sup> The EBA found that the Pillar 1 framework already includes certain mechanisms that allow the inclusion of new types of risk drivers, such

as climate-related risks. These include the use of internal models, external credit ratings and the valuation of collateral and financial instruments. However, the EBA paper also discusses targeted enhancements or additional clarifications within the framework which could help to explicitly address environmental risks. Since historical data are of little use in deriving climate-related risks, the EBA has put up the use of forward-looking methodologies for public discussion.

As an alternative to recognising environmental risks within the existing framework, the EBA paper considers the advantages and disadvantages of introducing specific risk-weighted adjustment factors. The part on credit risk contains a section on the highly politically charged issue of the possible introduction of capital relief for financing environmental projects. While such a "green supporting factor" may be polit-

*From a supervisory perspective, green supporting factor not a suitable instrument for transformation, as not risk-sensitive*

<sup>11</sup> The three methods are (i) the portfolio alignment method (i.e. aligning portfolios with policy objectives such as the emissions reduction target), (ii) the risk framework method (quantifying ESG risks at the portfolio level using stress tests and scenario analyses in particular) and (iii) the exposure method (analysing the ESG risks of individual exposures, e.g. for lending).

<sup>12</sup> See Federal Financial Supervisory Authority (2019) and European Central Bank (2020).

<sup>13</sup> See <https://www.bundesbank.de/en/tasks/banking-supervision/legal-basis/basel-framework/basel-framework-622964> for more on the three pillars of the Basel framework.

<sup>14</sup> In December 2022, the BCBS published a preliminary catalogue of frequently asked questions with answers clarifying how climate-related financial risks could be incorporated into the calculation of risk-weighted assets for credit, market and operational risk and the liquidity ratio in the existing Pillar 1 framework. In itself, this does not yet constitute an adjustment of the Basel framework, but the adjustment could be made at a later date, subject to the outcomes of further work. See Basel Committee on Banking Supervision (2021).

<sup>15</sup> Regulation (EU) No 575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 646/2012 Text with EEA relevance (OJ L 176, 27 June 2013, p. 1) as last amended by Regulation (EU) 2022/2036 of 19 October 2022 (OJ L 275, 25 October 2022, p. 1).

<sup>16</sup> The EBA plans to publish its final report on the possible integration of ESG risks into Pillar 1 by the end of 2023.

<sup>17</sup> For methodological reasons, the EBA discussion paper focuses on the analysis of environmental aspects, which also include climate aspects. In the discussion paper, the EBA solicits input from stakeholders on the potential inclusion of financial risks, which are also linked to social changes, amongst other things. See European Banking Authority (2022).

ically desirable, it is problematic from a risk-oriented supervisory perspective for several reasons. An initial study conducted by the NGFS in 2020 on the risk profiles of “green” and “brown” assets at banks failed to come to a clear conclusion as to whether there is a clear difference between them.<sup>18</sup> A more recent NGFS study also found no statistically verifiable differences between “green” and “brown” assets.<sup>19</sup> A green supporting factor would therefore reduce the capital requirements for “green” assets, while credit risk would continue to exist unchanged and would not differ systematically from that of “brown” loans. However, lower capital requirements for otherwise equal risks could reduce banks’ ability to absorb losses. This could jeopardise the stability of the financial system and thus undermine the precondition to reliably financing the transformation of the economy.

Overall, banking regulation is not a viable substitute for policy measures. Other financial and non-financial instruments are better suited to financing the decarbonisation of the economy and mitigating climate-related risks. For example, an effective price for greenhouse gas emissions would internalise external climate costs and thus negatively affect the profitability of enterprises with environmentally harmful business models. This, in turn, would be taken into account in the regulatory framework via poorer credit ratings, but this time in a risk-oriented way.<sup>20</sup>

## Introduction of supervisory disclosure requirements to strengthen market discipline

*EU taxonomy defines “green” economic activities and creates transparency for market participants*

In view of the lack of data or information on sustainability risks, regulation at the European level has given transparency a high priority from the outset. The 2020 Taxonomy Regulation formulated common definitions of “green” economic activities at the EU level. The taxonomy thus initially serves as a reference point for EU labels on sustainable financial products

and sustainability benchmarks.<sup>21</sup> These definitions and the transparency requirements based on them are, however, also relevant for banks for another reason: large, publicly listed corporates and banks with more than 500 employees must disclose the extent to which their business activities are aligned with the climate objectives of the Taxonomy Regulation. The basis for this is the Non-financial Reporting Directive (NFRD).<sup>22</sup> When the NFRD was replaced by the Corporate Sustainability Reporting Directive (CSRD) in January 2023, the sustainability reporting requirement was expanded to cover a larger number of enterprises and the level of detail of the requested information was increased.<sup>23</sup> This means that suppliers and customers of small and medium-sized enterprises (SMEs) in the extended user group will in future also have to provide additional information in a standardised form to ensure a consistent flow

<sup>18</sup> See Network for Greening the Financial System (2020a).

<sup>19</sup> See Network for Greening the Financial System (2020b).

<sup>20</sup> For more information on the possible advantages and disadvantages of using a green supporting factor or a brown penalising factor, see European Banking Authority (2022).

<sup>21</sup> The EU taxonomy is an EU-wide classification system for sustainable economic activities and is at the heart of the European Commission’s Action plan on financing sustainable growth, a ten-point action plan to promote sustainable growth in the EU published in March 2018. A regulation and associated delegated acts set out what is meant by “green” economic activities. The creation of uniform definitions is crucial, particularly for mobilising and channelling private investment into environmentally sustainable sectors, without which it will not be possible to achieve the Paris climate goals or climate neutrality by 2050 as enshrined in the European Green Deal. See European Commission (2018).

<sup>22</sup> Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups (OJ L 330, 15 November 2014, p. 1).

<sup>23</sup> Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting (OJ L 322, 16 December 2022, p. 15). The CSRD extends the NFRD user group from large listed enterprises to all large enterprises and all listed enterprises, including listed SMEs, with proportional rules. It captures around 49,000 enterprises in total, instead of the previous figure of 11,000. The information to be provided covers the full ESG spectrum, taking double materiality into account, i.e. the impact of external influences on the enterprise, on the one hand, and the impact of the enterprise on the environment and society, on the other. The reported information is to be checked by auditors and digitally tagged for feeding into the planned European single access point.



of sustainability information along the financial value chain. This, in turn, will allow banks to collect additional ESG-related data and borrower information. Nevertheless, most SMEs will remain exempt from the obligation to provide information. As they also make up a significant part of German banks' credit exposure, there will continue to be a data gap in this area for the foreseeable future.

information can only be obtained bilaterally and on a best effort basis and therefore entails additional costs, it gives banks the opportunity to disclose additional credit exposures to sustainably operating SMEs. In comparison with the GAR, the additional reporting of the BTAR thus provides a better picture of a bank's taxonomy-eligible credit exposures, as such exposures for which no data are otherwise disclosed can also feed into the calculation.

*Large banks must report on the extent to which their business activities are aligned with the taxonomy's climate objectives*

Pursuant to Article 449a of the CRR, large banks which have issued securities that are admitted to trading on a regulated market of any Member State have since mid-2022 additionally been required to disclose ESG risks as part of regulatory disclosure requirements (Pillar 3) at year-end on an annual basis. The EBA has developed Implementing Technical Standards (ITS) for this purpose. The quantitative data collection initially encompasses climate-related and environmental risks, as they are already aligned with the aforementioned taxonomy. Furthermore, the methods and instruments for capturing these risks are more advanced than is the case for risks related to social or governance aspects. By contrast, the qualitative questions on business strategy, governance and risk management cover the entire ESG spectrum.

Various key performance indicators, in particular the green asset ratio (GAR), are requested for climate-related and environmental risks. The GAR is intended to help third parties understand the extent to which banks' business activities are aligned with the climate objectives of the Taxonomy Regulation. The formula for calculating GAR excludes exposures to companies which are not subject to NFRD reporting obligations. As mentioned above, this typically concerns SMEs. Since this distorts the informative value of the GAR, the EBA proposed the additional introduction of a banking book taxonomy alignment ratio (BTAR) for its ITS. The BTAR is a voluntary ratio that allows banks to demonstrate sustainable exposures within the meaning of the Taxonomy Regulation, even if the enterprises concerned are not themselves subject to reporting obligations. Although such

## Supervisory requirements in the Single Supervisory Mechanism

In November 2020 the ECB outlined its supervisory expectations relating to risk management and disclosures in its Guide on climate-related and environmental risks.<sup>24</sup> Amongst other things, it expects the impact of climate-related and environmental risks to be considered in the framework of their business environment, business strategy, governance and risk appetite, risk management and credit risk. The guide was developed jointly by the ECB and the national supervisory authorities and is aimed at the significant institutions (SIs) directly supervised by the ECB under the Single Supervisory Mechanism (SSM).<sup>25</sup>

In 2021, on the basis of its guide, the ECB conducted a detailed assessment of how SIs were managing and integrating climate-related and environmental risks. To this end, the SIs first had to provide a self-assessment of the extent to which they already met the expectations of the guide. They also had to outline their plans for further measures, including relevant milestones. On this basis, the ECB examined not only the ability of SIs to identify climate-related and environmental risks in a timely manner and to assess and adequately manage these, but

*To what extent are climate-related and environmental risks integrated into the relevant practices and processes?*

<sup>24</sup> See European Central Bank (2020).

<sup>25</sup> For more information on cooperation in the SSM, see: <https://www.bundesbank.de/en/tasks/banking-supervision/bundesbank/ssm/cooperation-in-the-single-supervisory-mechanism-622966>

also whether SIs have properly integrated these risks into their practices and processes. On balance, the ECB found that banks were lagging behind its expectations considerably. For example, around one-fifth of SIs had not yet integrated climate-related and environmental risks into their business practices at all or had done so only to a very limited extent. At the same time, however, many banks had formulated adequate implementation plans to address the identified gaps, which meant that positive developments were evident.<sup>26</sup>

*Supervisory assessments of SIs by the ECB with clear implementation deadlines*

Supervisors expect banks to integrate climate-related and environmental risks into their business practices and risk management procedures incrementally over the next few years. To this end, banks were set deadlines, amongst other things, for the binding implementation of the expectations set out in the ECB's Guide on climate-related and environmental risks. The deadline for banks to implement the assessment of materiality of climate-related and environmental risks in the risk inventory already elapsed in March 2023. The deadline for integrating climate-related and environmental risks into risk management is end-2023. By the end of 2024 banks are expected to have met all the remaining supervisory expectations in the ECB's Guide.

## Supervisory requirements at the national level

For German banks that are supervised at the national level (less significant institutions – LSIs), BaFin already provided non-binding guidance in 2019 in the form of its “Guidance notice on dealing with sustainability risks”.<sup>27</sup> BaFin expects supervised entities to ensure that sustainability risks are considered and that this process is documented. In order to support the supervised entities in this regard, the guidance notice lists numerous examples of ESG risks to the financial sector and presents good practice approaches for their consideration, particularly

in the areas of risk management and business organisation.

The seventh amendment to the Minimum Requirements for Risk Management (MaRisk), which is expected to be published in the first half of 2023, will transpose the non-binding guidelines from the BaFin guidance notice into mandatory rules. In doing so, supervisors are clarifying the requirements for integrating ESG risks into banks' risk management and governance, and in some cases are adding even more extensive requirements, taking the principles of proportionality, materiality and methodological freedom into account in the process. Banks will be required to assess the impact of ESG risks – starting with climate-related risks – not only at present but also in a forward-looking manner. To this end, they are to use scenarios based on scientific findings with an appropriately long time horizon. The inherent uncertainty about the future effects of climate change, also known as the “green swan” problem,<sup>28</sup> can be addressed using various scenarios. Based on the risk inventory, the MaRisk amendment explicitly stipulates that, with regard to their internal capital adequacy, business and risk strategies, organisational guidelines, internal stress tests and reporting, banks must incorporate ESG risks explicitly, adequately and, where meaningful and possible, also quantitatively. This is intended to enable banks, consistent with their risk profile, to perform their management functions such that ESG-specific targets and risk limits are also taken into account. For credit processes, institutions will be required to include the impact of ESG risks in the assessment of credit quality and the valuation of collateral.

*MaRisk amendment clarifies and extends the requirements for integrating ESG risks*

<sup>26</sup> See European Central Bank (2021).

<sup>27</sup> See Federal Financial Supervisory Authority (2019).

<sup>28</sup> In economic theory, the black swan is an extremely rare and unexpected event that can only be explained ex post due to the lack of empirical data. The green swan differs from the black swan in that, according to climate research findings, extreme climate-related risks (physical and/or transition) are almost certain to materialise in the future. These risks can be far more systemic and complex than past financial crises. See Basel Committee on Banking Supervision (2020).

## Thematic review

On the basis of the first assessment of significant institutions (SIs) supervised by the ECB performed in 2021, the ECB and the national supervisory authorities conducted a thematic review in 2022 that covered a total of 107 SIs and 79 less significant institutions (LSIs), which are under the direct supervision of the national authorities. As part of the review, they conducted deep dives into SIs' relevant risk management practices and analysed the progress made by the SIs since the first assessment.

BaFin and the Bundesbank, together with national supervisory authorities from seven other countries in the Single Supervisory Mechanism (SSM), participated in the thematic review with selected large LSIs. A total of 17 German LSIs were subject to the review.

In early November 2022, the ECB published a comprehensive report<sup>1</sup> on the results of the thematic review as well as a compendium of good practices observed at the SIs.<sup>2</sup>

Compared with other institutions, German SIs were within the average in both the 2021 assessment and the 2022 thematic review. The first assessment in 2021 revealed that the practices of German SIs, like most other banks in the SSM, were still far from being aligned with supervisory expectations. The thematic review in 2022 showed that almost all SIs had developed at least basic practices for the majority of supervisory expectations. However, even though most SIs anticipate that climate-related and environmental risks could have a considerable impact on their business activities in the short to medium term, the majority of banks still fall short – significantly so in some cases – of adequately managing

climate-related and environmental risks in certain areas. The methodologies behind banks' practices are not mature, and there is also a lack of granular data. Overall, only around half of the SIs are fully and effectively implementing the practices that they have developed. As for the LSIs, German banks are, on average, performing better than LSIs from other countries in some areas, but they, too, are still in the early stages of adequately dealing with climate-related and environmental risks. The majority of German LSIs have implemented only "basic practices" that will not meet future supervisory expectations. It is particularly notable that most German LSIs exhibit shortcomings with respect to the quantitative analysis of climate-related and environmental risks. There are no specific key performance indicators for effective risk management and mitigation. Only a few German LSIs had advanced practices, particularly in the area of credit risk management.

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<sup>1</sup> For detailed results on the individual components of the assessment and the underlying methodology, see European Central Bank (2022b).

<sup>2</sup> See European Central Bank (2022c).

All in all, it is very challenging to identify, assess and manage ESG risks. Not only is there a lack of data, but also often a lack of knowledge or experience with regard to integrating ESG risks into existing methods or developing new ones. It is also difficult to take potential longer-term ESG risks into account in the risk inventory and stress tests. The attendant necessity of using approximative and qualitative approaches at first may suffice for now. However, it is crucial that banks develop realistic plans to gradually close data and methodology gaps.

## Analyses of financial risks stemming from climate change

*Modelling the effects of climate change is challenging*

New and improved analytical methods are needed to assess the impact on the financial sector of risks stemming from climate change. Although major progress has been made in this area over the past few years, the quantification of climate-related financial risks remains a major challenge for both supervisors and the financial industry. Climate-related data, such as enterprises' direct and indirect greenhouse gas emissions, are only available to a limited extent, as they are difficult to collect, especially from smaller enterprises. A survey of small and medium-sized German banks as part of the 2022 LSI stress test showed that data gaps are the key reason why the majority of banks currently only consider climate-related risks indirectly in their risk management.

*Heterogeneous transmission of climate-related risks places new demands on stress tests*

The challenges outlined above apply in particular to the modelling of risks in the context of scenario analyses and stress tests,<sup>29</sup> which are already being used by various supervisory authorities to quantify climate-related risks in the financial system.<sup>30</sup> The effects of climate-related risks on the real economy and the financial system vary considerably. For example, some sectors cause high emissions of climate-damaging greenhouse gases and are therefore exposed to higher transition risks than other sectors of the economy.<sup>31</sup> The heterogeneous

transmission of climate-related risks places new demands on the design of stress tests. Climate risk stress tests therefore differ from conventional stress tests not only in that they have a much more specific – but also more granular – reference dataset, but also in their modelling approach, which maps the effects of climate-related risk to individual borrowers as precisely as possible.

Most climate risk stress tests are based on the scenarios developed by the NGFS.<sup>32</sup> These scenarios use integrated assessment models (IAMs) to model the global macroeconomic impact of various climate pathways up to 2100. They are developed by an international consortium of climate research institutions and central banks that also ensures they are consistent with the forecasts of the Intergovernmental Panel on Climate Change. In an “orderly” transition<sup>33</sup> to global net zero greenhouse gas emissions by 2050, prompt policy measures limit global warming to below 1.4°C by 2100. A “disorderly” transition<sup>34</sup> achieves the same objective, albeit at a higher cost owing to diverging or delayed measures. In the “hot house

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<sup>29</sup> Scenario analyses and stress tests are established supervisory analytical tools to identify potential vulnerabilities in the financial sector. The aim of the regular supervisory stress tests is to analyse the resilience of banks in a very adverse yet realistic economic environment. At the consolidated level, the results are used to identify potential systematic risks. At the single entity level, they serve as an early warning indicator and – in the case of solvency stress tests – as a basis for setting the supervisory guidance on additional own funds.

<sup>30</sup> Owing to these uncertainties, the main objective of climate risk stress tests and scenario analyses is not to provide a precise point estimate for the current risk at a bank, but rather to estimate its magnitude and importance for various sets of circumstances and development paths.

<sup>31</sup> For more information on analytical requirements and options from a central bank perspective, see also Deutsche Bundesbank (2022).

<sup>32</sup> See Network for Greening the Financial System (2022).

<sup>33</sup> The NGFS models two orderly transitions with varying degrees of ambition. The statements refer to the “Net Zero 2050” scenario. Besides this, the “Below 2°C” scenario is also seen as an orderly, albeit less ambitious transition.

<sup>34</sup> Two disorderly transition scenarios are also modelled: “Divergent Net Zero” and “Delayed Transition”. The climate risk stress test presented here uses a scenario based on a “Delayed Transition”.

## Structured survey of sustainability risks in supervisory meetings

In the first quarter of 2022, the Bundesbank, in consultation with BaFin, began collecting data on the way in which banks supervised at the national level deal with sustainability risks during the institutions' annual supervisory meetings. The aim of this structured survey was to gain an idea of the state of play with respect to banks' implementation of previously non-binding supervisory standards in the areas of strategy, responsible governance, business organisation and the management of environmental, social and governance (ESG) risks. At the same time, it made banks aware of supervisory expectations contained in the seventh amendment to the Minimum Requirements for Risk Management (MaRisk). A total of 810 banks participated in the structured survey, including 443 cooperative banks, 229 savings banks, 86 commercial banks, 10 building and loan associations and 11 promotional banks.

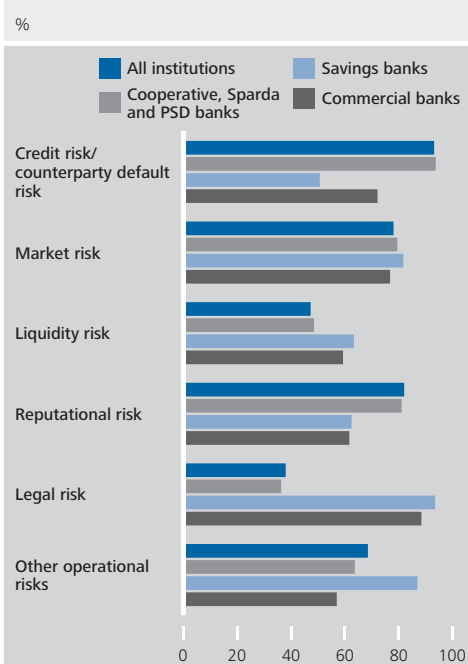
Just over half of the banks surveyed reported that they were in the planning phase or the early stages of the implementation phase with regard to integrating ESG risks into their business practices. They perceive ESG risks as primarily affecting credit and reputational risk. However, perceptions vary depending on the category of banks (see the adjacent chart). For example, savings banks cited ESG factors as primarily having an impact on legal risk and other operational risks, whereas cooperative banks see ESG risks as translating first and foremost into credit risk/counterparty default risk. Nevertheless, their impact on the overall risk profile and the overall risk situation across all banks is limited. All in all, only 215 banks (27%) identified ESG factors as contributing to the materiality of one or more types of risk.

In its guidance notice, BaFin recommends that the entities and banks it supervises anchor ESG risks in their business strategy and critically review their business lines for interdependencies with ESG risks. According to the survey, 70% of the participating banks have already done this, with 173 banks (21%) having developed their own sustainability strat-

egy. The primary methods for managing and/or mitigating ESG risks within the scope of business strategy are formulating sustainability objectives and other commitments, such as engaging in dialogue with counterparties that present a significant sustainability risk. Far-reaching measures, such as discontinuing lines of business or managing risks through the exercise of voting rights, have so far rarely been undertaken in practice (see the left-hand chart on p. 86). Risk strategy methods are implemented less frequently on average than business strategy methods. The majority of the banks surveyed have set ESG-specific limits or made sector-specific exclusions. In addition, around one-fifth of the commercial banks surveyed report devising other methods, such as investment strategies (see the right-hand chart on p. 86).

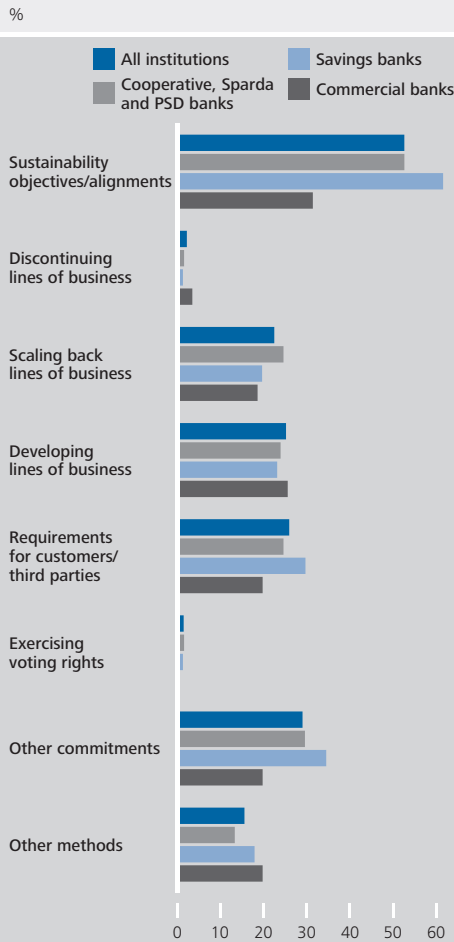
The majority of the banks surveyed (59%) already include ESG risks in their regular risk in-

**Risk types affected by sustainability risks at institutions\* (by category of banks)**



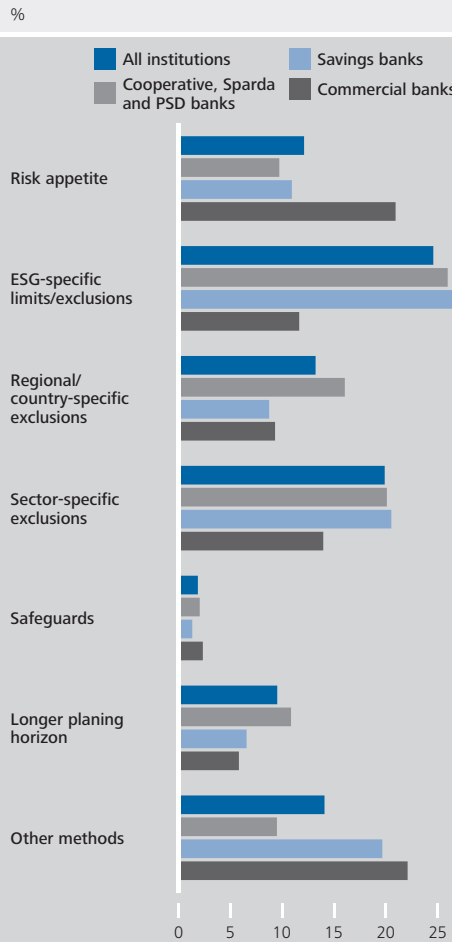
\* Structured survey of LSIs, respondents selected all answers that applied. Question: Which risk types are affected by sustainability risks at your institution?  
 Deutsche Bundesbank

### Integration of ESG risks into the business strategy\* (by category of banks)



\* Structured survey of LSIs, respondents selected all answers that applied. Question: How have sustainability risks been integrated into your institution's business strategy?  
 Deutsche Bundesbank

### Integration of ESG risks into the risk strategy\* (by category of banks)



\* Structured survey of LSIs, respondents selected all answers that applied. Question: How have sustainability risks been integrated into your institution's risk strategy?  
 Deutsche Bundesbank

ventory, and one-third of the banks (36%) have incorporated ESG risks into their written risk management guidelines.<sup>1</sup> With regard to conducting ESG-related stress tests and scenario analyses, 26% of respondents stated that they had conducted these tests or planned to do so in 2022. A large percentage of commercial banks (35%) reported that they did not intend to conduct scenario analyses or stress tests in the future.

Overall, the survey shows that there is still a lot of work to be done by the banks if they are to fully satisfy the future supervisory requirements set out in the seventh amendment to MaRisk. First and foremost, it needs to be ensured that there are fundamental methods and processes in place to determine the ma-

teriality of ESG risks. This, together with the parallel establishment by banks of a quantitative database, will be the focus of supervision over the next few years. In this context, the way in which institutional associations set the pace in the German banking sector should not be underestimated. This is because 77% of all banks in Germany belong to the German Savings Banks and Giro Association (*Deutscher Sparkassen- und Giroverband*) or the Association of Cooperatives (*Genossenschaftsverband*).

<sup>1</sup> Multiple responses were possible to some questions.

world" scenario,<sup>35</sup> by contrast, global warming rises to 3°C as the current level of policy ambition is not exceeded.<sup>36</sup>

The NGFS scenarios are not generally designed to be stress scenarios. Unlike conventional stress tests, climate risk stress tests do not have a clear baseline scenario. Instead, the different scenarios are intended to model the most realistic pathways possible for the environment and the economy, depending on current and future climate policy measures. The individual scenarios therefore differ greatly in their degree of transition and physical risks, and thus also their potential stress effect.<sup>37</sup> The very long horizon over which the NGFS scenarios take place presents another challenge, as established frameworks for bank stress testing usually work with fairly short forecast horizons.<sup>38</sup>

## Results of previous climate-related scenario analyses and stress tests

Irrespective of the challenges outlined above, supervisors and central banks have already conducted a number of climate risk stress tests and scenario analyses. For example, in its 2021 Financial Stability Review, the Bundesbank presented a climate-related scenario analysis that examined how transition risks could affect portfolios in the German financial sector.<sup>39</sup> The impact on the financial sector was fairly moderate owing to the relatively low losses in macroeconomic value added in the NGFS scenarios used. Compared to insurers and funds, the banking sector showed the lowest level of vulnerability here.

In 2022, the ECB conducted a climate risk stress test for around 100 SIs.<sup>40</sup> This exercise analysed one short-term and three long-term transition risk scenarios and two acute physical risk scenarios (flood risk and drought and heat risk).<sup>41</sup> The losses projected in the short-term scenario were fairly moderate overall.<sup>42</sup> The long-term projections show that so far, banks are having

trouble adapting their strategies effectively to the various scenarios.

These results are largely consistent with those of climate risk stress tests conducted by other supervisory authorities (including De Nederlandsche Bank and Banque de France; see the table on p. 91), which show that the estimated losses tend to be lower for banks than for insurers and funds, that their extent depends on how carbon-intensive the borrowing economic sector is, and that they are lower in the long term in an orderly transition than on other climate policy pathways.

<sup>35</sup> Alongside the "Current Policies" scenario, the NGFS has established the "Nationally Determined Contributions" scenario, which also belongs to the "Hot House World" category. The latter scenario takes into account heterogeneity and different levels of ambition in policy measures to prevent climate change.

<sup>36</sup> Amongst other things, the plan under the European Commission's European Green Deal is to ensure there are no net emissions of greenhouse gases within the EU from 2050 onwards. However, this policy objective cannot be directly assigned to one of the NGFS scenarios.

<sup>37</sup> An orderly transition towards a climate-neutral economy is the most desirable option from a long-term macroeconomic and climate policy perspective. Compared to other scenarios, an orderly transition minimises economic downturns and long-term physical damage resulting from rising global temperatures. However, more transition risks materialise in an orderly transition than in a "hot house world" scenario in which no or hardly any measures are taken to contain global warming and its consequences. In turn, the "hot house world" scenario is dominated by the physical damage caused by climate change and its negative long-run impact on the economy.

<sup>38</sup> On the one hand, the forecast horizon for stress tests is usually three to five years and balance sheets are assumed to be static. However, this is becoming increasingly unrealistic due to the lack of adjustment responses over a longer period of time. On the other hand, forecasts over such a long period of time are naturally subject to a high degree of uncertainty. Banks' planning horizon does not generally exceed three to five years, for instance. Therefore, the climate risk stress tests carried out so far have either focused (exclusively) on the shorter term, in which transition risks generally predominate, or have tried to make the most realistic assumptions possible as to how business will develop over the next few decades for longer-term analyses.

<sup>39</sup> See Deutsche Bundesbank (2021).

<sup>40</sup> See European Central Bank (2022a).

<sup>41</sup> The baseline scenario was provided by the Eurosystem staff macroeconomic projections for the euro area published in December 2021.

<sup>42</sup> Taken together, under both the short-term, disorderly transition risk scenario and the two physical risk scenarios, the combined credit and market risk losses for the 41 banks that provided projections would amount to around €70 billion. See European Central Bank (2022a).

*Losses projected in the short-term ECB scenarios were moderate overall*

## The Bundesbank's climate risk stress test

The climate risk analyses conducted by the Bundesbank so far have taken a predominantly macroprudential view. But what matters in particular for banking supervisors is the microprudential perspective – that is, the view at the level of individual institutions. That is why the Bundesbank has also developed a climate risk stress test specially for banks. This stress test is conducted as a top-down exercise – i.e. without any involvement on the part of the banks – and the plan is to give supervisors scope to flexibly analyse banks' robustness to various climate scenarios going forward. Two adverse scenarios and one baseline scenario are analysed as part of this stress test. The latter is based on the NGFS's Current Policies scenario, while one adverse scenario expands upon the NGFS's Net Zero 2050 scenario and the other is an explicit short-term stress scenario based on a DSGE approach that simulates an abrupt increase in the price of carbon to €200 per tonne.

The methodology is being developed primarily to estimate the impact of transition risks in the near term, which offers two benefits. First, it improves comparability with existing stress tests and second, it mitigates the problem that model uncertainty increases disproportionately for longer time horizons. One notable reason why uncertainty increases disproportionately over long time horizons is that dynamic balance sheets – that is, adjustments not just by the bank but also by non-financial corporations (the borrowers) to the environment under observation – have to be simulated.<sup>1</sup> To address this issue, the Bundesbank uses climate scenarios that differ from one another mainly in terms of the size of the carbon price<sup>2</sup> increases they simulate. These scenarios are then converted into stressed financial metrics, such as banks' profitability.<sup>3</sup>

This is done using granular annual financial statement information and data on greenhouse gas emissions at the firm level, on the basis of which stressed probabilities of default (PDs) and loss given default ratios (LGDs) are computed for borrowers. In parallel, a macroeconomic model is deployed to quantify how the scenarios impact on average PDs and LGDs in individual economic sectors. Owing to the complete lack of historical comparative data that could be used for validation purposes, credit risk parameters are estimated using various modelling approaches to allow an assessment of the quality and robustness of the results. As a final step, the stressed firm and sector metrics are used to calculate provisions at the individual bank level.

The first results from the climate risk stress test are consistent with findings from analyses conducted by other supervisory authorities. The potential risks that the transition to a climate-neutral economy presents for the German banking sector appear to be fairly moderate overall, based on the current NGFS scenarios, with the modelled aggregate loss for all German banks amounting to around €16 billion. Express-

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<sup>1</sup> A static balance sheet would mean that banks and firms, too, do not adjust their business models and carry out every single transaction just as they would have done prior to the simulated shock, i.e. without taking the incoming data from the scenario into account. This is a very hard assumption that is reasonable only for fairly short time horizons.

<sup>2</sup> Though the term "carbon price" might suggest otherwise at first glance, this variable encompasses more than just the market price for carbon. Rather, it serves as a collective variable that comprises all the policy measures that are designed to have an impact on emissions activity.

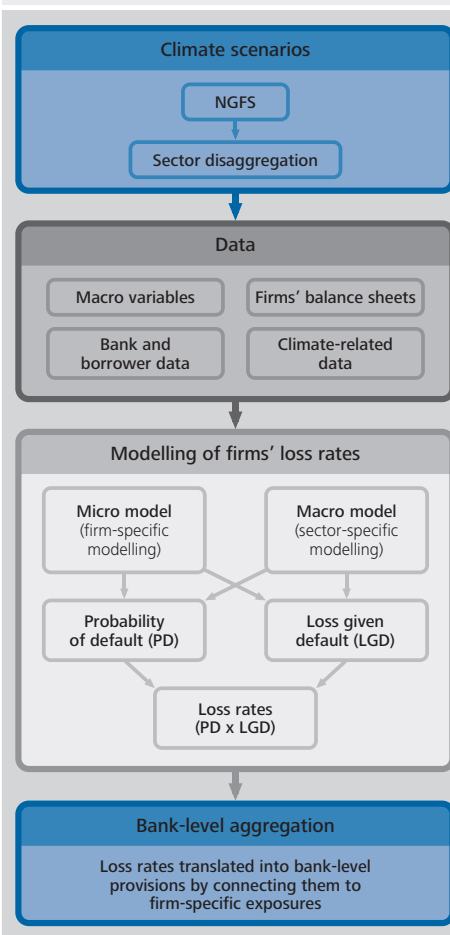
<sup>3</sup> The first iteration of the climate risk stress test used the NGFS's Net Zero 2050 and Current Policies scenarios. The Net Zero 2050 scenario represents an orderly transition with an increase in the price of carbon, while the Current Policies scenario assumes that currently implemented policies are preserved and thus serves as a reference scenario.



ing that figure as a percentage of the stressed corporate loan portfolio of roughly €2,100 billion produces a relative loss of around 0.76%. The loss rate is unlikely to be any higher than this because other model specifications lead to lower losses. Needless to say, certain banks may be impacted more heavily if a large share of their borrowers are particularly exposed to transition risks. Another insight produced by the Bundesbank's climate risk stress test is that transition risks can be spread very heterogeneously across regions. Especially for banks with a strong regional focus, this could mean taking a more active approach to managing the loan portfolio as a way of evading such risks. That said, a comparison with conventional stress tests reveals that the results they produce say very little indeed about how a bank will fare in a climate risk stress test. That is why climate-related risks need to be explicitly modelled and analysed. Climate risk stress testing and scenario analyses complement prudential risk analyses and are a useful tool for analysing how climate-specific risk scenarios impact on banks. By enhancing and refining the scenarios and models used and improving the underlying dataset, the quantification of climate-related risks can be made more robust going forward. With this aim in mind, the Bundesbank will regularly update and review its risk assessment.

A schematic diagram presenting the methodology behind the Bundesbank's climate risk stress test can be found in the adjacent chart. As with a variety of other exercises, the NGFS's climate scenarios provide the groundwork for this stress test. In the economic model underpinning these scenarios, it is not possible to disaggregate the effects by country and economic sector at the same time. However, a sectoral disaggregation of the German economy is crucially important if the climate risk stress test is to work properly, which is why disaggregated

### Climate risk stress testing methodology – schematic diagram\*



\* Stress test analyses how transition risks impact on German banks' corporate exposures.  
 Deutsche Bundesbank

scenario variables calculated by means of a production network model are used.<sup>4</sup> The macroeconomic scenario variables form part of the underlying dataset alongside credit relationships and other loan, balance sheet and profit and loss data from firms as well as data on firms' direct and indirect greenhouse gas emissions.

The methodology is built around the modelling of firm-level PDs and LGDs, based on a micro and a macro approach. Drawing on established methods for modelling PDs as part of stress tests, the micro approach con-

<sup>4</sup> See Frankovic (2021).

sists of three steps. First, an empirical model is used to derive historical dynamics between firm PDs and a series of explanatory corporate metrics (including profitability and leverage ratio). Second, the relevant key financial metrics are projected across the entire scenario horizon based on the scenarios and using balance sheet assumptions. Third, the extrapolated values of these metrics are fed into the model and then converted into stressed PDs.<sup>5</sup> LGDs are modelled based on how borrowers' capital ratios evolve in conjunction with the loan collateral provided. This approach allows the transmission of climate scenarios into stressed firm-level parameters to be modelled in a granular fashion. In parallel to the micro approach, a macro approach is also employed to allow users to assess the quality and robustness of results with the aid of independent modelling approaches. This macro approach centres around an established credit risk model that identifies historical dynamics between credit risk parameters (PDs and LGDs) and macroeconomic scenario variables and converts them into stressed credit risk parameters in a consistent manner. This model has been enhanced and refined to also allow sector-specific paths to be estimated for credit risk parameters. Furthermore, various specifications and restrictions have been adapted to allow for the novel nature of climate risk modelling. The firm and sector-specific output from both approaches are then blended with a view to mapping the credit risk parameters of borrowers of German banks as comprehensively as possible. Firm-specific loss rates are calculated as a product of PDs and LGDs. As a final step, the modelled firm-level loss rates are connected to bank data based on existing credit relationships. By multiplying firm-specific lending volumes and loss rates, it is possible to compute provisions for each bank that reflect the stress effect produced in each scenario. For now, only loan exposures to firms are being ana-

lysed; going forward, the model will be gradually expanded to incorporate other exposure classes (e.g. real estate-secured exposures and retail exposures) and also physical risks.

The methodology behind the Bundesbank's climate risk stress test is comparable to the exercises conducted by other European supervisory authorities (summarised in the table on p. 91). The risk assessment in other climate risk stress tests was carried out at least at the sector level; wherever possible, it was modelled at the firm level as well. Both the supervisory authorities that conducted calculations of their own using a top-down approach and the banks that had to provide data in the bottom-up approach reported facing a similar set of challenges. The limited availability of granular (climate-related) data was an issue, and new stress test models had to be developed, or existing ones expanded, to be able to map climate risks as adequately as is possible at the present time. Because separate data sources and methodologies need to be used when quantifying transition risks and physical risks, and since transition risks predominate in the short term (which is common for stress tests), some exercises focused on this aspect only. Compared with traditional stress tests, the climate risk stress tests looked only at the credit risk and market risk channels for the most part.<sup>6</sup> Thanks to these exercises, both supervisory authorities and banks have already made significant progress in quantifying climate-related risks, but there is still room for development.

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<sup>5</sup> This approach is based on the assumption that the relationship between PDs and financial metrics will not change significantly in future.

<sup>6</sup> Other channels, such as interest rate risk and operational risk, were usually omitted because they were (presumed to be) less material for analysing climate-related risks.

### Climate risk stress tests run by European supervisory authorities

Supervisory authority	Methodology	Scenarios	Key results
De Nederlandsche Bank <sup>1,2</sup> (2019)	<ul style="list-style-type: none"> <li>– Transition risks</li> <li>– Top-down</li> <li>– Banks, insurers and pension funds</li> <li>– Five years</li> <li>– Credit risk and market risk</li> <li>– Sector level</li> </ul>	Four scenarios: policy shock, technology shock, double shock and expectation shock	<ul style="list-style-type: none"> <li>– A disruptive energy transition scenario could cause sizeable but manageable losses for financial institutions</li> </ul>
Bank of England <sup>3,4</sup> (2020)	<ul style="list-style-type: none"> <li>– Transition and physical risks</li> <li>– Bottom-up</li> <li>– Insurers</li> <li>– Instantaneous shock</li> <li>– Market risk</li> <li>– Sector level</li> </ul>	Four natural catastrophe scenarios and a separate claims inflation scenario	<ul style="list-style-type: none"> <li>– Significant losses but none of the participating insurers was expected to become insolvent</li> <li>– Considerable gaps in the ability to measure climate-related scenarios within the financial industry</li> </ul>
ECB <sup>5</sup> (2021, macroprudential)	<ul style="list-style-type: none"> <li>– Transition and physical risks</li> <li>– Top-down</li> <li>– Banks</li> <li>– 30 years</li> <li>– Credit risk and market risk</li> <li>– Firm level</li> </ul>	One baseline scenario: orderly transition; two adverse scenarios: delayed transition and hot house world	<ul style="list-style-type: none"> <li>– Only a brief increase in loss rates in the orderly transition scenario over 30 years; some stronger increases over the medium and long term in the delayed transition and hot house world scenarios</li> <li>– Costs lowest over the long term for firms in the orderly transition scenario; costs highest in the hot house world scenario mainly due to huge physical costs</li> </ul>
Banque de France/ACPR <sup>6,7</sup> (2021)	<ul style="list-style-type: none"> <li>– Transition and physical risks</li> <li>– Bottom-up</li> <li>– Banks and insurers</li> <li>– 30 years</li> <li>– Credit risk and market risk</li> <li>– Sector and firm level</li> </ul>	One baseline scenario: orderly transition; two adverse scenarios: delayed and sudden transition	<ul style="list-style-type: none"> <li>– Firms impacted to different degrees within sectors, some very heavily</li> <li>– French banks moderately exposed to heavily impacted sectors</li> <li>– Financial stability risks possible owing to heterogeneity across and within sectors; magnitude possibly stronger than expected from aggregate perspective</li> </ul>
Oesterreichische Nationalbank <sup>8</sup> (2021)	<ul style="list-style-type: none"> <li>– Transition risks</li> <li>– Top-down</li> <li>– Banks</li> <li>– Five years</li> <li>– Credit risk and market risk</li> <li>– Sector and firm level</li> </ul>	One baseline scenario based on EBA stress test; orderly and disruptive transition scenario	<ul style="list-style-type: none"> <li>– Banking system well equipped for potential increases in carbon prices</li> <li>– Agriculture and transport sector impacted most in disruptive scenario</li> </ul>
Deutsche Bundesbank <sup>9</sup> (2021, macroprudential)	<ul style="list-style-type: none"> <li>– Transition risks</li> <li>– Top-down</li> <li>– Banks, insurers and funds</li> <li>– Ten years</li> <li>– Credit risk and market risk</li> <li>– Sector level</li> </ul>	Two orderly transition scenarios and one hot house world scenario, each used interchangeably as increase and reference scenarios	<ul style="list-style-type: none"> <li>– Impact appears moderate overall; some financial intermediaries could be affected more, though</li> <li>– Of the financial intermediaries tested, banks were least vulnerable</li> </ul>
Bank of England <sup>10</sup> (2021)	<ul style="list-style-type: none"> <li>– Transition and physical risks</li> <li>– Bottom-up</li> <li>– Banks and insurers</li> <li>– 30 years</li> <li>– Credit risk and market risk</li> <li>– Sector level</li> </ul>	Three scenarios: “Early Action”, “Late Action” and “No Additional Action”	<ul style="list-style-type: none"> <li>– Signs of progress in considering climate-related risks in the banking sector; availability of debtors’ climate-related data still an issue</li> <li>– While costs potentially resulting from climate-related risks are substantial for UK banks and insurers, solvency is ultimately not at risk</li> <li>– Possible to reduce follow-on costs if timely policy action is taken</li> </ul>
ECB <sup>11</sup> (2022, microprudential)	<ul style="list-style-type: none"> <li>– Transition and physical risks</li> <li>– Bottom-up</li> <li>– Banks</li> <li>– Instantaneous shock and three/30 years</li> <li>– Credit risk and market risk</li> <li>– Sector and firm level</li> </ul>	Transition risks: two short-term and three long-term scenarios; physical risks: two short-term scenarios (flood and heatwave/drought)	<ul style="list-style-type: none"> <li>– Climate-related risks not yet incorporated into internal stress tests or risk management at 60% of banks</li> <li>– Availability of climate-related data e.g. emissions data and energy performance certificate (EPC) ratings still patchy; reliance on approximation techniques</li> <li>– Financial losses low for the most part, though adverse scenarios are not too severe</li> </ul>
Deutsche Bundesbank (2023, microprudential)	<ul style="list-style-type: none"> <li>– Transition risks</li> <li>– Top-down</li> <li>– Banks</li> <li>– Three/ten years</li> <li>– Credit risk</li> <li>– Sector and firm level</li> </ul>	One orderly transition scenario and one current policies scenario	<ul style="list-style-type: none"> <li>– Losses resulting from provisions in German banks’ corporate loan portfolio moderate, for the most part</li> </ul>

1 See Vermeulen et al. (2018). 2 See Vermeulen et al. (2019). 3 See Bank of England (2019a). 4 See Bank of England (2019b). 5 See Alogoskoufis et al. (2021). 6 See Allen et al. (2020). 7 See Clerc et al. (2021). 8 See Oesterreichische Nationalbank (2021). 9 See Deutsche Bundesbank (2021). 10 See <https://www.bankofengland.co.uk/stress-testing/2022/results-of-the-2021-climate-biennial-exploratory-scenario> 11 See European Central Bank (2022a).

## ■ Outlook

Climate change presents a major challenge to banks and the financial system as a whole. Banking supervision and banking regulation must ensure that the risks in the banking sector are taken into account adequately, i.e. in a risk-oriented manner. Risk-oriented regulation and supervisory practice are not suitable as primary management tools for climate objectives. Instead, these objectives should be tackled through the economic and fiscal policy measures taken since the Paris Agreement in order to pursue the 1.5°C target. They include instruments such as carbon taxation and caps on emissions.

Over the past few years, significant progress has been made in advancing supervisory practices and raising the standards for banks to meet in integrating climate-related risks into their risk assessment. However, the work is far from complete. From a regulatory perspective, the Basel framework is currently being reviewed with regard to climate-related risks. The ongoing revision to the CRR and the CRD, referred to as the “European banking package”, currently envisages several ESG-related mandates for the EBA. For instance, it will be responsible for developing guidelines for climate-related scenario analyses and stress tests. As the capturing of climate-related factors becomes increasingly common, the data needed to assess risks are gradually becoming available through reporting.

In addition, the topic of biodiversity, another sub-category of environmental risk, is gaining more attention within Europe and globally. The coronavirus pandemic has further heightened awareness of the link between infectious diseases and unsustainable developments in agriculture or, for example, the loss of forest areas. Numerous initiatives to prevent and reverse biodiversity loss have been launched at the G7 and G20 level, as well as by the United Nations, amongst others.

At the European level, work on the European Union’s social taxonomy is also being continued. This is intended to create a classification system for economic activities with regard to social and human rights criteria and will supplement the existing “green” taxonomy.<sup>43</sup> Overall, the success of ESG regulation will rely heavily on a clear and consistent definition of social and governance factors. These developments will also require banking supervisors to build up additional knowledge in order to better analyse and assess the risks associated with biodiversity and social aspects in and for the banking sector.

Supervisors will focus on the progress made by banks in implementing the existing requirements over the next few years. The ECB has made climate-related risks a strategic priority for its supervisory activities in the period 2022-2024.<sup>44</sup> In the years thereafter, the ECB is planning to monitor remedial actions, review banks’ implementation plans, conduct targeted deep-dive reviews in relation to selected aspects and focus on climate-related and environmental risks when carrying out on-site inspections. Furthermore, climate-related and environmental risk management is to be gradually integrated into the methodology of the Supervisory Review and Evaluation Process (SREP) via qualitative and quantitative requirements.

BaFin and the Bundesbank have also defined ESG risks as a medium-term issue to focus on in the period up to 2025. In supervisory practice, the intention is to regularly address ESG risks in supervisory discussions and to intensify dialogue with the banking associations. Going forward, on-site inspections will focus on ESG aspects and assessments regarding the management of ESG risks will be integrated into the SREP process. The findings from ESG reporting

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<sup>43</sup> On 28 February 2022, the Platform on Sustainable Finance presented its final report, including proposals for the design of a social taxonomy. See Platform on Sustainable Finance.

<sup>44</sup> See [https://www.bankingsupervision.europa.eu/banking/priorities/html/ssm.supervisory\\_priorities2022--0f890c6b70.en.html](https://www.bankingsupervision.europa.eu/banking/priorities/html/ssm.supervisory_priorities2022--0f890c6b70.en.html)

and the Bundesbank's climate risk stress test will support the ongoing work.

The development of transition plans will be key to the successful continuation of work, particularly in the area of climate-related risks. A transition plan is a detailed, multi-year presentation of the objectives and measures established by an enterprise to align its business model and strategy with specific environmental objectives.

The NGFS and the BCBS are currently working intensively on how banks' transition plans – or, more precisely, transition planning processes – can be used effectively. Assessing banks' transition planning processes will require very close cooperation with the real economy. Ultimately, it is the transition plans of banks' corporate customers that will play a key role in banks' transition planning processes.

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## I. Key economic data for the euro area

### 1. Monetary developments and interest rates

Period	Money stock in various definitions 1,2				Determinants of the money stock 1				Interest rates		
	M1	M2	M3 3		MFI lending, total	MFI lending to enterprises and households	Monetary capital formation 4	€STR 5,6	Yield on European government bonds outstanding 7		
				3-month moving average (centred)							
	Annual percentage change								% p.a. as a monthly average		
2021 July	11.0	7.6	7.8	8.1	5.8	3.1	-0.5	-0.57	0.0		
Aug.	11.1	7.8	8.0	7.8	5.5	2.8	-0.8	-0.57	-0.1		
Sep.	11.1	7.6	7.6	7.8	5.6	3.3	-0.7	-0.57	0.1		
Oct.	10.7	7.5	7.7	7.6	5.6	3.6	-0.3	-0.57	0.2		
Nov.	10.1	7.1	7.4	7.3	5.8	3.7	-0.5	-0.57	0.2		
Dec.	9.8	6.9	6.9	6.9	6.1	3.9	-0.5	-0.58	0.1		
2022 Jan.	9.2	6.8	6.5	6.6	6.2	4.4	-0.3	-0.58	0.4		
Feb.	9.1	6.8	6.4	6.4	6.3	4.4	-0.6	-0.58	0.8		
Mar.	8.8	6.6	6.3	6.3	6.1	4.4	-0.7	-0.58	0.9		
Apr.	8.2	6.3	6.1	6.1	6.4	5.0	-0.1	-0.58	1.4		
May	7.9	6.0	5.8	5.9	6.2	5.1	0.0	-0.59	1.7		
June	7.2	6.0	5.8	5.8	6.3	5.4	-0.0	-0.58	2.2		
July	6.8	5.9	5.7	5.9	5.9	5.4	-0.1	-0.51	1.9		
Aug.	6.8	6.3	6.1	6.0	5.7	5.7	-0.1	-0.09	1.8		
Sep.	5.6	6.2	6.3	5.8	5.5	5.7	-0.1	0.36	2.6		
Oct.	3.8	5.2	5.1	5.4	5.1	5.3	-0.5	0.66	3.0		
Nov.	2.4	4.6	4.8	4.7	4.8	5.2	0.2	1.37	2.7		
Dec.	0.6	3.7	4.1	4.1	3.9	4.4	0.7	1.57	2.8		
2023 Jan.	-0.8	3.0	3.5	3.5	3.0	3.7	1.5	1.90	2.9		
Feb.	-2.7	2.0	2.9	...	2.5	3.3	2.0	2.28	3.0		
Mar.	...	...	...	...	...	...	...	2.57	3.1		

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

Short-Term Rate. 6 See also footnotes to Table VI.3, p. 43\*. 7 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 \*

Period	Selected items of the euro area balance of payments r								Euro exchange rates 1		
	Current account		Financial account						Reference rate vis-à-vis the US dollar	Effective exchange rate 3	
	Balance	of which: Goods	Balance	Direct investment	Portfolio investment	Financial derivatives 2	Other investment	Reserve assets		Nominal	Real 4
	€ million								EUR = USD ...	Q1 1999 = 100	
2021 July	+ 36,684	+ 33,170	+ 28,123	+ 46,693	- 8,818	+ 18,408	- 27,823	- 336	1.1822	99.7	93.5
Aug.	+ 21,405	+ 16,159	+ 30,406	+ 61,944	+ 12,674	+ 2,197	- 168,492	+ 122,083	1.1772	99.4	93.2
Sep.	+ 33,502	+ 21,257	+ 14,579	+ 13,397	+ 14,567	+ 2,644	- 17,434	+ 1,405	1.1770	99.5	93.3
Oct.	+ 5,924	+ 12,022	+ 16,478	+ 28,482	+ 21,398	+ 13,325	- 49,898	+ 3,172	1.1601	98.5	92.4
Nov.	+ 13,292	+ 14,033	- 2,931	+ 4,913	+ 58,318	+ 25,655	- 92,360	+ 542	1.1414	97.6	91.8
Dec.	+ 21,466	+ 9,146	+ 9,400	+ 25,447	+ 2,529	+ 1,197	- 18,954	- 820	1.1304	97.1	91.2
2022 Jan.	- 10,524	- 10,969	+ 9,866	- 17,278	+ 88,810	+ 3,695	- 63,040	- 2,321	1.1314	96.6	91.1
Feb.	- 1,895	+ 2,208	+ 4,432	+ 26,209	- 24,175	- 2,799	+ 3,670	+ 1,527	1.1342	96.9	91.7
Mar.	+ 4,023	+ 2,522	- 24,004	+ 4,056	- 111,299	- 2,509	+ 85,843	- 95	1.1019	95.9	91.4
Apr.	- 17,723	- 13,042	- 43,807	+ 3,212	+ 16,713	+ 27,480	- 90,504	- 708	1.0819	95.2	89.9
May	- 30,935	- 6,631	+ 41,344	+ 113,831	+ 7,367	+ 1,488	- 82,552	+ 1,210	1.0579	95.6	90.3
June	- 4,923	- 7,439	+ 31,503	- 5,794	- 64,436	- 170	+ 100,089	+ 1,814	1.0566	95.9	90.6
July	- 19,890	- 14,744	+ 6,588	- 13,230	+ 37,107	+ 11,567	- 30,491	+ 1,636	1.0179	94.1	89.1
Aug.	- 31,059	- 29,371	- 8,893	- 30,114	- 60,204	+ 14,805	+ 64,456	+ 2,163	1.0128	93.6	88.8
Sep.	- 21,530	- 11,723	- 50,455	+ 24,589	- 152,621	+ 17,547	+ 56,440	+ 3,591	0.9904	94.2	P 89.8
Oct.	- 19,893	- 9,007	+ 16,800	- 1,551	- 19,801	+ 797	+ 33,424	+ 3,930	0.9826	94.8	P 91.1
Nov.	+ 1,049	+ 6,630	- 29,780	+ 2,902	- 54,229	+ 10	+ 21,024	+ 513	1.0201	96.0	P 92.0
Dec.	+ 16,772	+ 6,782	+ 60,308	+ 19,479	+ 59,168	- 9,147	- 13,803	+ 4,612	1.0589	97.0	P 92.3
2023 Jan.	- 1,915	- 6,688	+ 17,639	- 7,693	+ 6,824	+ 9,317	+ 17,815	- 8,622	1.0769	97.3	P 92.5
Feb.	...	...	...	...	...	...	...	...	1.0715	97.3	P 92.7
Mar.	...	...	...	...	...	...	...	...	1.0706	97.5	P 93.0

\* 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. 9 and 11, pp. 82\*/ 83\*. 2 Including employee stock options. 3 Bundesbank cal-

culaton. Vis-à-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	Croatia	Latvia
<b>Real gross domestic product <sup>1</sup></b>											
Annual percentage change											
2020	- 6.1	- 5.4	- 3.7	- 0.6	- 2.4	- 7.8	- 9.0	6.2	- 9.0	- 8.6	- 2.2
2021	5.4	6.1	2.6	8.0	3.0	6.8	8.4	13.6	7.0	13.1	4.1
2022	3.5	3.1	1.8	- 1.3	2.1	2.6	5.9	12.0	3.7	6.3	2.0
2021 Q3	4.0	4.8	1.8	8.4	3.1	3.7	12.4	10.4	5.0	16.7	4.4
Q4	4.9	6.1	1.2	7.4	3.1	4.8	8.2	13.8	6.3	12.2	2.5
2022 Q1	5.5	5.2	3.9	2.9	4.2	4.9	8.5	11.7	6.4	7.8	5.5
Q2	4.4	4.0	1.7	- 0.3	3.2	4.4	7.4	12.6	5.1	8.7	2.5
Q3	2.5	1.9	1.3	- 2.9	1.6	1.0	3.9	11.6	2.4	5.2	0.2
Q4	1.8	1.5	0.3	- 4.1	- 0.4	0.2	4.5	12.0	1.0	4.0	0.3
<b>Industrial production <sup>2</sup></b>											
Annual percentage change											
2020	- 7.6	- 3.8	- 9.6	- 2.8	- 3.2	- 10.9	- 2.1	14.5	- 11.4	- 3.4	- 1.8
2021	8.9	16.8	4.7	12.8	4.2	5.9	10.4	28.3	12.2	6.4	6.5
2022	2.2	- 0.7	p - 0.5	- 2.3	4.0	- 0.1	2.4	18.9	0.4	1.6	0.8
2021 Q3	6.9	19.4	2.5	12.7	4.6	2.5	9.9	41.6	4.9	3.1	6.3
Q4	2.5	11.2	- 1.2	11.8	7.4	- 0.5	11.9	7.4	4.6	4.0	3.6
2022 Q1	1.6	6.4	- 1.2	4.3	5.5	- 0.3	4.9	7.6	1.5	3.0	4.0
Q2	2.0	- 5.1	- 1.3	2.5	8.1	- 0.2	3.1	14.9	2.1	2.5	3.6
Q3	3.3	- 3.6	1.6	- 5.0	3.6	0.3	3.6	21.0	0.0	2.4	- 2.7
Q4	2.1	- 0.2	p - 0.9	- 10.4	- 0.6	- 0.3	- 1.8	29.8	- 2.2	- 1.5	- 1.2
<b>Capacity utilisation in industry <sup>3</sup></b>											
As a percentage of full capacity											
2020	74.5	75.5	77.3	67.7	76.9	73.8	71.0	69.1	53.4	67.8	72.1
2021	81.4	80.1	84.9	78.1	81.2	81.1	75.6	78.0	76.5	75.0	75.3
2022	82.2	79.1	85.2	71.7	81.0	81.8	75.9	79.8	78.4	77.0	75.0
2021 Q4	82.7	81.1	85.4	85.2	82.6	82.0	77.3	81.0	77.8	76.3	76.7
2022 Q1	82.4	80.0	86.0	71.7	82.0	82.7	76.8	79.1	78.6	77.9	75.5
Q2	82.5	80.1	84.9	69.7	80.3	82.2	76.7	81.2	78.5	79.9	75.6
Q3	82.3	78.9	85.0	73.8	80.7	81.7	74.6	79.2	78.5	75.9	75.7
Q4	81.4	77.2	84.9	71.5	80.8	80.6	75.5	79.8	77.9	74.3	73.3
2023 Q1	80.9	76.7	84.6	71.5	79.1	80.2	74.8	79.2	77.8	77.6	72.6
<b>Standardised unemployment rate <sup>4</sup></b>											
As a percentage of civilian labour force											
2020	7.9	5.6	3.6	7.0	7.8	7.8	16.3	5.6	9.2	7.6	8.1
2021	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 7.7	e 7.6
2022	6.7	e 5.5	p 3.1	e 5.6	e 6.8	e 7.3	e 12.5	e 4.5	e 8.1	e 6.8	e 6.9
2022 Oct.	6.7	5.6	3.1	5.4	6.4	7.2	11.7	4.5	7.9	6.8	6.9
Nov.	6.7	5.7	3.0	5.4	6.7	7.2	11.8	4.5	7.9	6.7	6.9
Dec.	6.7	5.8	3.0	5.3	7.2	7.2	11.8	4.4	7.9	6.6	6.8
2023 Jan.	6.6	5.8	2.9	5.2	7.1	7.1	10.3	4.4	8.0	6.5	6.8
Feb.	6.6	5.8	2.9	5.1	6.6	7.0	11.4	4.3	8.0	6.3	6.7
Mar.	...	...	...	...	...	...	...	4.3	...	...	...
<b>Harmonised Index of Consumer Prices</b>											
Annual percentage change											
2020	0.3	0.4	5 0.4	- 0.6	0.4	0.5	- 1.3	- 0.5	- 0.1	0.0	0.1
2021	2.6	3.2	5 3.2	4.5	2.1	2.1	0.6	2.4	1.9	2.7	3.2
2022	8.4	10.3	8.7	19.4	7.2	5.9	9.3	8.1	8.7	10.7	17.2
2022 Oct.	10.6	13.1	11.6	22.5	8.4	7.1	9.5	9.4	12.6	12.7	21.7
Nov.	10.1	10.5	11.3	21.4	9.1	7.1	8.8	9.0	12.6	13.0	21.7
Dec.	9.2	10.2	9.6	17.5	8.8	6.7	7.6	8.2	12.3	12.7	20.7
2023 Jan.	6 8.6	7.4	9.2	18.6	7.9	7.0	7.3	7.5	10.7	12.5	21.4
Feb.	8.5	5.4	9.3	17.8	8.0	7.3	6.5	8.1	9.8	11.7	20.1
Mar.	6.9	4.9	7.8	15.6	6.7	6.7	5.4	7.0	8.1	10.5	17.2
<b>General government financial balance <sup>7</sup></b>											
As a percentage of GDP											
2020	- 7.0	- 9.0	- 4.3	- 5.5	- 5.5	- 9.0	- 9.9	- 5.0	- 9.5	- 7.3	- 4.3
2021	- 5.1	- 5.6	- 3.7	- 2.4	- 2.7	- 6.5	- 7.5	- 1.7	- 7.2	- 2.6	- 7.0
2022	...	...	- 2.6	...	...	...	...	...	...	...	...
<b>General government debt <sup>7</sup></b>											
As a percentage of GDP											
2020	97.0	112.0	68.7	18.5	74.8	115.0	206.3	58.4	154.9	87.0	42.0
2021	95.4	109.2	69.3	17.6	72.4	112.8	194.5	55.4	150.3	78.4	43.6
2022	...	...	66.3	...	...	...	...	...	...	...	...

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
<b>Real gross domestic product <sup>1</sup></b>										
Annual percentage change										
- 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	11.8	4.9	4.6	5.5	3.0	8.2	5.5	6.6	2021
1.9	1.5	6.9	4.5	5.0	6.7	1.7	5.4	5.5	5.6	2022
5.6	2.0	15.9	5.4	5.4	5.3	1.4	5.1	4.2	8.2	2021 Q3
6.5	4.0	13.4	6.2	6.0	6.7	1.3	10.5	6.6	6.9	Q4
4.8	2.9	8.2	6.3	9.4	11.4	2.9	10.2	6.8	6.7	2022 Q1
1.7	2.2	9.4	5.2	6.4	8.0	1.3	8.6	6.9	5.9	Q2
1.8	3.7	5.3	3.4	2.1	5.0	1.4	3.3	5.1	5.5	Q3
- 0.3	- 2.3	4.7	3.2	2.6	2.9	1.2	0.2	3.3	4.6	Q4
<b>Industrial production <sup>2</sup></b>										
Annual percentage change										
- 1.9	- 10.8	- 0.3	- 3.9	- 5.9	- 7.3	- 8.1	- 5.2	- 9.8	- 7.3	2020
20.2	8.4	- 0.2	5.0	11.4	3.5	10.3	10.2	7.5	6.4	2021
9.4	- 1.2	3.1	2.5	7.3	- 0.0	- 3.6	1.3	3.0	1.3	2022
17.6	3.7	- 0.0	6.8	9.2	- 3.8	0.9	6.2	1.9	4.6	2021 Q3
24.2	2.9	- 5.4	4.4	10.5	- 1.7	3.4	7.9	1.8	1.2	Q4
23.5	0.0	- 2.4	2.1	11.2	- 2.9	- 2.6	6.3	1.7	3.3	2022 Q1
9.2	- 1.6	- 5.9	4.5	9.8	2.0	- 3.0	2.9	5.0	3.5	Q2
10.0	- 0.1	9.7	2.2	6.5	1.3	- 1.7	2.1	4.6	- 1.0	Q3
- 2.5	- 3.2	11.6	1.1	2.4	- 0.3	- 7.0	- 5.7	0.7	- 0.5	Q4
<b>Capacity utilisation in industry <sup>3</sup></b>										
As a percentage of full capacity										
73.0	72.5	70.7	78.3	79.5	74.9	79.5	78.4	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
77.3	80.8	64.7	83.7	87.7	81.9	83.3	84.9	78.7	58.2	2022
78.6	81.8	75.2	83.7	88.7	80.2	82.1	85.3	79.2	55.0	2021 Q4
78.3	81.9	62.9	84.0	88.4	81.8	82.8	86.5	78.8	55.5	2022 Q1
78.2	79.9	64.6	84.2	88.9	82.5	83.9	85.2	80.0	58.5	Q2
76.7	81.4	67.6	83.9	87.9	81.5	83.5	84.0	78.9	58.5	Q3
76.0	79.8	63.6	82.6	85.6	81.6	83.0	84.0	77.2	60.4	Q4
69.9	74.3	65.7	83.0	87.1	81.5	80.2	83.1	77.1	59.9	2023 Q1
<b>Standardised unemployment rate <sup>4</sup></b>										
As a percentage of civilian labour force										
e 8.6	e 6.8	e 4.4	e 3.9	e 5.4	e 6.9	e 6.7	e 5.0	e 15.5	e 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 5.9	e 4.5	e 2.9	e 3.6	e 4.8	e 6.1	e 6.2	e 4.0	e 13.0	e 6.8	2022
6.1	4.7	2.9	3.7	4.6	6.1	6.0	3.7	12.9	6.9	2022 Oct.
6.1	4.7	2.9	3.6	5.5	6.5	6.1	3.6	13.0	7.3	Nov.
6.1	4.7	2.9	3.5	4.9	6.7	6.1	3.4	13.0	7.4	Dec.
6.4	4.8	3.0	3.6	5.1	7.0	6.1	3.3	13.0	7.4	2023 Jan.
6.5	4.8	3.0	3.5	5.0	6.8	6.0	3.2	12.8	7.3	Feb.
...	...	...	...	...	...	...	...	...	...	Mar.
<b>Harmonised Index of Consumer Prices</b>										
Annual percentage change										
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
22.1	8.8	7.4	16.8	11.6	10.6	14.5	10.3	7.3	8.6	2022 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.
18.5	5.8	6.8	8.4	11.6	8.6	15.1	9.9	5.9	6.8	2023 Jan.
17.2	4.8	7.0	8.9	11.0	8.6	15.4	9.4	6.0	6.7	Feb.
15.2	2.9	7.1	4.5	9.2	8.0	14.8	10.4	3.1	6.1	Mar.
<b>General government financial balance <sup>7</sup></b>										
As a percentage of GDP										
- 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
<b>General government debt <sup>7</sup></b>										
As a percentage of GDP										
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
...	...	...	...	...	...	...	...	...	...	2022

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** Including Croatia from 2023 onwards.  
**7** According to Maastricht Treaty definition. Euro area aggregate excluding Croatia.

## II. Overall monetary survey in the euro area

### 1. The money stock and its counterparts \*

#### a) Euro area <sup>1</sup>

€ billion

Period	I. Lending to non-banks (non-MFIs) in the euro area					II. Net claims on non-euro area residents			III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
	Total	Enterprises and households		General government		Total	Claims on non-euro area residents	Liabilities to non-euro area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) <sup>2</sup>	Capital and reserves <sup>3</sup>
		Total	of which: Securities	Total	of which: Securities								
2021 July	112.8	56.0	8.0	56.8	50.3	- 3.1	76.0	79.1	2.1	- 4.7	- 0.6	8.2	- 0.8
Aug.	35.3	- 16.4	- 7.5	51.7	60.9	- 4.8	141.0	145.8	- 5.9	- 7.3	- 0.4	- 7.0	8.9
Sep.	107.1	72.5	3.7	34.6	43.3	- 39.2	- 59.0	- 19.8	16.6	- 4.5	- 0.4	8.3	13.2
Oct.	81.0	68.7	21.3	12.3	18.4	- 5.1	195.0	200.1	11.5	- 10.7	- 0.7	16.8	6.0
Nov.	156.4	89.5	- 3.5	66.9	67.5	- 30.4	15.1	45.5	- 7.0	- 10.6	- 0.7	1.8	2.5
Dec.	52.7	27.6	20.1	25.1	22.6	- 56.9	- 205.6	- 148.7	4.3	18.0	- 0.8	- 25.1	12.1
2022 Jan.	173.3	98.0	- 10.2	75.3	64.8	- 1.3	140.2	141.5	- 19.0	- 14.8	- 0.1	9.3	- 13.4
Feb.	110.9	44.4	2.0	66.5	73.8	- 13.5	82.3	95.8	- 21.4	- 12.6	- 0.4	- 3.5	- 5.0
Mar.	149.8	104.5	26.4	45.3	36.0	2.9	- 23.8	- 26.7	0.3	2.8	- 0.7	- 21.8	19.9
Apr.	111.9	96.8	20.2	15.2	5.2	- 99.1	- 79.1	20.0	8.7	- 10.5	- 0.2	1.4	17.9
May	107.2	65.1	- 18.8	42.1	49.5	- 58.3	40.3	98.6	- 16.1	3.1	- 3.2	- 21.2	5.3
June	116.2	83.6	- 8.9	32.6	33.5	102.8	- 25.8	- 128.6	23.0	- 4.8	- 0.4	1.0	27.1
July	29.8	58.6	- 3.0	- 28.8	- 28.8	- 11.6	63.7	75.4	0.5	- 11.7	- 0.4	- 3.6	16.1
Aug.	- 10.7	26.1	- 18.8	- 36.8	- 31.2	- 46.9	69.4	22.5	- 10.5	- 22.1	0.8	1.9	8.9
Sep.	86.6	83.1	- 0.0	3.4	2.2	- 53.0	- 199.9	- 146.8	17.6	- 16.4	- 0.4	3.6	30.8
Oct.	- 12.1	0.1	- 6.1	- 12.1	- 9.2	- 0.6	169.5	170.2	- 11.3	- 14.7	0.0	11.5	- 8.1
Nov.	93.0	83.9	31.0	9.0	14.3	14.4	- 40.6	- 54.9	33.5	1.7	- 0.1	34.6	- 2.6
Dec.	- 122.2	- 89.0	- 0.9	- 33.1	- 41.2	0.3	- 256.9	- 257.2	43.6	10.0	- 0.1	0.6	33.1
2023 Jan.	- 10.4	- 1.2	- 14.6	- 9.2	- 3.9	12.8	125.7	112.9	32.8	- 6.1	1.8	56.8	- 19.7
Feb.	7.5	- 13.3	3.9	20.8	29.7	6.8	- 0.5	- 7.3	12.1	- 1.8	1.3	9.5	3.1

#### b) German contribution

Period	I. Lending to non-banks (non-MFIs) in the euro area					II. Net claims on non-euro area residents			III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
	Total	Enterprises and households		General government		Total	Claims on non-euro area residents	Liabilities to non-euro area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) <sup>2</sup>	Capital and reserves <sup>3</sup>
		Total	of which: Securities	Total	of which: Securities								
2021 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	- 0.1	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.	25.4	26.2	1.4	- 0.9	0.8	38.0	8.9	- 29.1	9.8	1.9	0.2	7.1	0.6
Dec.	- 28.8	- 19.6	- 2.4	- 9.3	- 8.2	- 37.1	- 71.9	- 34.8	- 0.5	- 3.7	0.4	- 1.9	4.8
2023 Jan.	27.5	16.9	- 0.2	10.7	8.9	63.0	29.8	- 33.3	- 14.3	2.7	1.0	3.1	- 21.0
Feb.	9.6	8.7	- 0.1	0.9	1.8	58.7	- 2.0	- 60.8	3.2	0.6	1.2	- 2.2	3.6

\* 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). <sup>1</sup> Source: ECB. <sup>2</sup> Excluding MFIs' portfolios. <sup>3</sup> After

deduction of inter-MFI participations. <sup>4</sup> Including the counterparts of monetary liabilities of central governments. <sup>5</sup> Including the monetary liabilities of central governments (Post Office, Treasury). <sup>6</sup> In Germany, only savings deposits. <sup>7</sup> Paper held by residents outside the euro area has been eliminated. <sup>8</sup> Less German MFIs' holdings



## II. Overall monetary survey in the euro area

### a) Euro area <sup>1</sup>

IV. De- posits of central gov- ernments	V. Other factors			VI. Money stock M3 (balance I plus II less III less IV less V)										Period
	Total <sup>4</sup>	of which: Intra- Eurosysteem liability/ claim related to banknote issue	Total	Money stock M2							Repo transac- tions	Money market fund shares (net) <sup>2,7,8</sup>	Debt secur- ities with maturities of up to 2 years (incl. money market paper) (net) <sup>2,7</sup>	
				Money stock M1			Deposits with an agreed maturity of up to 2 years <sup>5</sup>	Deposits at agreed notice of up to 3 months <sup>5,6</sup>						
				Total	Currency in circula- tion	Overnight deposits <sup>5</sup>								
0.4	- 55.8	0.0	162.0	122.2	111.7	14.6	97.1	10.7	- 0.3	8.7	22.1	10.0	2021 July	
26.6	- 10.5	0.0	27.7	32.7	32.2	1.7	30.5	- 3.1	3.6	- 11.6	5.4	- 6.2	Aug.	
6.5	- 1.7	0.0	30.6	58.2	73.7	5.3	68.4	- 16.3	0.8	14.8	- 31.1	4.5	Sep.	
- 2.4	- 72.0	0.0	139.4	86.4	73.0	6.8	66.2	18.3	- 5.0	11.5	33.3	7.4	Oct.	
- 48.5	84.7	0.0	92.9	84.3	102.0	6.0	95.9	- 18.3	0.7	- 5.0	24.5	- 6.9	Nov.	
- 44.5	- 21.9	0.0	75.5	106.0	104.7	20.6	84.1	- 2.3	3.6	- 33.4	- 7.4	- 7.1	Dec.	
68.1	91.6	0.0	- 10.2	- 10.2	- 46.1	1.0	- 47.0	23.3	12.6	57.2	- 26.2	9.1	2022 Jan.	
44.6	32.3	0.0	41.4	70.1	75.9	9.1	66.7	- 13.8	8.0	9.4	- 37.1	- 0.4	Feb.	
13.7	51.7	0.0	90.5	101.7	81.5	22.5	59.0	16.3	4.0	- 17.6	- 0.2	- 2.2	Mar.	
- 22.1	- 95.9	0.0	99.6	61.7	60.5	11.2	49.3	- 1.1	2.3	25.1	20.2	16.5	Apr.	
- 28.9	48.1	0.0	52.6	62.4	66.3	7.8	58.6	- 15.9	11.9	4.7	- 10.1	- 5.2	May	
69.6	72.6	0.0	69.1	75.4	48.2	6.6	41.6	24.1	3.1	- 32.5	- 1.0	11.1	June	
- 31.2	-112.9	0.0	155.1	122.2	70.4	8.6	61.8	46.7	5.1	23.7	- 2.0	18.0	July	
- 80.3	56.5	0.0	86.3	78.8	27.5	- 4.6	32.1	41.3	10.0	- 22.6	6.8	7.4	Aug.	
7.3	- 41.4	0.0	59.7	56.4	- 42.8	- 1.4	- 41.3	99.8	- 0.6	- 19.5	- 8.4	21.7	Sep.	
- 5.4	65.2	0.0	- 57.7	- 77.1	- 157.5	- 0.4	- 157.1	85.3	- 5.0	4.4	36.7	- 25.3	Oct.	
- 10.4	- 3.3	0.0	71.2	21.8	- 29.0	- 3.5	- 25.5	59.1	- 8.3	27.4	22.3	16.6	Nov.	
- 84.4	- 61.6	0.0	4.1	13.5	- 61.1	11.6	- 72.7	59.8	14.8	- 46.5	2.8	10.9	Dec.	
- 38.7	118.3	0.0	- 127.8	- 146.0	- 227.8	- 13.2	- 214.6	75.6	- 6.2	35.1	8.6	- 7.9	2023 Jan.	
20.6	26.7	0.0	- 45.7	- 66.8	- 137.3	- 3.6	- 133.8	70.6	- 0.0	- 1.3	- 6.1	29.1	Feb.	

### b) German contribution

IV. De- posits of central gov- ernments	V. Other factors			VI. Money stock M3 (balance I plus II less III less IV less V) <sup>10</sup>										Period
	Total	of which: Intra- Eurosysteem liability/ claim related to banknote issue <sup>9,11</sup>	Currency in circula- tion	Components of the money stock										
				Total	Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits at agreed notice of up to 3 months <sup>6</sup>	Repo transac- tions	Money market fund shares (net) <sup>7,8</sup>	maturities with maturities of up to 2 years (incl. money market paper)(net) <sup>7</sup>				
- 12.0	75.2	4.2	3.7	17.4	21.2	- 4.1	- 0.3	0.6	- 0.1	0.1	0.0	0.1	2021 July	
0.7	- 13.2	2.9	0.2	21.0	20.4	- 1.6	- 0.3	0.1	- 0.0	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	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	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	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	- 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	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	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	0.5	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	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	0.4	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	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	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	1.8	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	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	0.2	0.1	6.7	Oct.	
22.6	13.6	- 0.0	0.3	17.3	12.6	4.3	- 5.5	3.2	0.0	3.2	0.0	2.7	Nov.	
- 16.3	- 24.6	2.1	2.4	- 24.6	- 37.6	19.0	- 4.1	- 2.0	0.1	2.0	0.1	0.0	Dec.	
- 42.9	147.9	2.3	- 5.1	- 0.2	- 37.1	38.4	- 6.5	- 0.1	- 0.2	0.1	0.2	5.4	2023 Jan.	
12.9	51.3	1.1	- 0.7	0.9	- 33.1	32.6	- 8.0	1.3	- 0.1	- 1.3	0.1	8.2	Feb.	

of paper issued by euro area MFIs. <sup>9</sup> Including national banknotes still in circulation. <sup>10</sup> The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates and are therefore not comparable with the erstwhile German money stocks M1, M2 or M3. <sup>11</sup> 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	Assets											
	Lending to non-banks (non-MFIs) in the euro area										Claims on non-euro area residents	Other assets
	Total assets or liabilities	Total	Enterprises and households				General government					
Total			Loans	Debt securities 2	Shares and other equities	Total	Loans	Debt securities 3				
<b>Euro area (€ billion) <sup>1</sup></b>												
2021 Jan.	30,640.8	20,388.1	14,466.5	12,067.8	1,536.0	862.6	5,921.6	999.4	4,922.1	6,296.5	3,956.2	
Feb.	30,542.0	20,464.0	14,500.9	12,090.1	1,541.5	869.3	5,963.1	992.4	4,970.6	6,296.0	3,782.0	
Mar.	30,824.2	20,654.0	14,577.1	12,185.2	1,512.9	879.0	6,076.9	993.3	5,083.6	6,357.6	3,812.6	
Apr.	30,750.3	20,667.4	14,566.8	12,169.2	1,509.9	887.7	6,100.6	1,007.2	5,093.4	6,393.5	3,689.5	
May	30,888.3	20,788.3	14,612.9	12,198.6	1,521.7	892.6	6,175.5	1,006.2	5,169.2	6,432.0	3,668.1	
June	30,989.4	20,890.5	14,652.6	12,234.6	1,529.8	888.3	6,237.8	1,004.8	5,233.1	6,398.7	3,700.3	
July	31,313.9	21,028.4	14,708.1	12,278.0	1,543.4	886.7	6,320.4	1,011.3	5,309.1	6,504.5	3,781.0	
Aug.	31,438.2	21,047.9	14,684.9	12,261.1	1,533.4	890.4	6,363.1	1,002.3	5,360.8	6,653.6	3,736.6	
Sep.	31,472.9	21,133.7	14,757.3	12,330.9	1,535.1	891.4	6,376.4	993.6	5,382.8	6,619.9	3,719.3	
Oct.	31,778.8	21,201.7	14,817.8	12,379.4	1,548.1	890.3	6,384.0	987.7	5,396.3	6,825.2	3,751.9	
Nov.	32,193.4	21,381.5	14,911.5	12,478.0	1,542.5	891.0	6,470.1	985.8	5,484.2	6,917.4	3,894.5	
Dec.	31,777.4	21,384.4	14,917.2	12,462.9	1,567.3	887.0	6,467.2	988.5	5,478.8	6,738.7	3,654.2	
2022 Jan.	32,416.0	21,571.9	15,046.9	12,609.0	1,553.3	884.6	6,525.0	999.2	5,525.8	6,913.3	3,930.8	
Feb.	32,600.7	21,629.0	15,075.6	12,645.3	1,553.8	876.6	6,553.3	991.8	5,561.5	7,010.2	3,961.5	
Mar.	32,936.2	21,737.1	15,176.1	12,721.9	1,587.5	866.7	6,561.0	1,001.4	5,559.6	6,994.9	4,204.2	
Apr.	33,568.9	21,764.1	15,254.1	12,805.3	1,597.7	851.1	6,510.1	1,011.3	5,498.8	7,062.0	4,742.7	
May	33,481.3	21,816.2	15,304.5	12,878.2	1,568.2	858.1	6,511.7	1,003.9	5,507.7	7,012.0	4,653.1	
June	33,885.3	21,886.0	15,373.6	12,973.4	1,569.1	831.1	6,512.4	1,003.0	5,509.4	7,063.5	4,935.9	
July	33,878.3	21,984.6	15,451.6	13,043.7	1,578.6	829.2	6,533.1	1,003.0	5,530.1	7,216.9	4,676.7	
Aug.	34,343.4	21,872.4	15,459.5	13,080.1	1,553.8	825.7	6,412.9	996.9	5,416.1	7,301.6	5,169.4	
Sep.	34,619.6	21,901.4	15,558.1	13,191.4	1,545.0	821.7	6,343.3	998.1	5,345.2	7,241.7	5,476.5	
Oct.	34,552.1	21,891.6	15,553.2	13,190.6	1,533.0	829.6	6,338.5	995.2	5,343.3	7,336.9	5,323.6	
Nov.	34,232.3	22,012.5	15,628.2	13,228.7	1,559.1	840.4	6,384.2	990.2	5,394.0	7,207.8	5,012.1	
Dec.	33,872.6	21,792.9	15,515.8	13,124.7	1,555.4	835.7	6,277.2	998.9	5,278.3	6,873.3	5,206.3	
2023 Jan.	33,835.7	21,883.5	15,552.8	13,171.6	1,545.4	835.8	6,330.7	1,000.3	5,330.4	6,981.8	4,970.4	
Feb.	34,116.1	21,859.6	15,541.5	13,156.5	1,540.6	844.5	6,318.1	991.3	5,326.8	6,999.2	5,257.4	
<b>German contribution (€ billion)</b>												
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.	8,653.9	5,402.0	4,189.2	3,656.3	249.8	283.1	1,212.8	283.4	929.4	1,502.4	1,749.6	
Dec.	8,626.1	5,345.2	4,165.8	3,636.7	245.9	283.2	1,179.4	283.2	896.1	1,417.3	1,863.7	
2023 Jan.	8,561.4	5,377.1	4,178.3	3,652.7	245.9	279.7	1,198.8	285.0	913.9	1,443.8	1,740.5	
Feb.	8,712.0	5,371.8	4,186.7	3,662.2	243.6	280.9	1,185.1	284.0	901.1	1,443.8	1,896.4	

\* 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). <sup>1</sup> Source: ECB. <sup>2</sup> Including money market paper of

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

## II. Overall monetary survey in the euro area

Liabilities											End of month
Currency in circulation <sup>4</sup>	Deposits of non-banks (non-MFIs) in the euro area										
	Total	of which: in euro <sup>5</sup>	Enterprises and households						At agreed notice of <sup>6</sup>		
			Total	Overnight	With agreed maturities of			up to 3 months	over 3 months		
					up to 1 year	over 1 year and up to 2 years	over 2 years				
<b>Euro area (€ billion) <sup>1</sup></b>											
1,373.3	14,872.0	13,629.3	13,750.9	8,505.4	742.0	173.8	1,870.6	2,421.0	38.1	2021 Jan.	
1,380.6	14,956.2	13,676.9	13,806.2	8,569.5	732.1	169.2	1,865.1	2,432.5	37.7	Feb.	
1,391.1	15,069.4	13,750.1	13,906.8	8,650.5	751.0	164.3	1,858.8	2,444.8	37.4	Mar.	
1,399.6	15,059.6	13,774.0	13,934.7	8,726.8	730.6	159.5	1,827.5	2,453.0	37.3	Apr.	
1,412.8	15,146.7	13,870.1	14,017.4	8,810.9	724.0	155.5	1,826.2	2,463.6	37.1	May	
1,423.2	15,232.5	13,934.1	14,082.1	8,909.3	697.4	150.4	1,822.0	2,466.2	36.8	June	
1,437.6	15,334.8	14,016.7	14,185.1	9,006.8	705.3	153.6	1,817.0	2,466.2	36.3	July	
1,439.2	15,385.0	14,038.0	14,195.4	9,029.8	706.2	151.2	1,809.9	2,462.4	35.9	Aug.	
1,444.5	15,439.0	14,071.8	14,236.3	9,090.4	700.2	140.0	1,806.7	2,463.3	35.6	Sep.	
1,450.3	15,502.7	14,137.6	14,310.5	9,166.1	707.1	148.0	1,795.5	2,458.8	34.9	Oct.	
1,456.3	15,517.2	14,187.3	14,344.1	9,223.4	697.0	143.3	1,786.3	2,459.8	34.3	Nov.	
1,477.0	15,569.9	14,300.4	14,454.8	9,316.4	704.9	131.3	1,805.2	2,463.5	33.6	Dec.	
1,477.9	15,640.3	14,274.0	14,473.1	9,299.9	706.6	135.3	1,820.2	2,479.3	31.8	2022 Jan.	
1,487.0	15,735.3	14,321.9	14,509.9	9,360.6	688.4	134.3	1,807.7	2,487.3	31.6	Feb.	
1,509.6	15,832.7	14,407.9	14,592.2	9,432.1	703.7	123.5	1,809.6	2,492.1	31.2	Mar.	
1,520.7	15,872.4	14,460.5	14,650.2	9,493.9	705.4	123.5	1,802.0	2,494.3	31.0	Apr.	
1,528.5	15,887.5	14,506.5	14,677.9	9,535.0	684.9	120.2	1,803.2	2,506.6	27.9	May	
1,535.1	16,033.5	14,566.7	14,743.4	9,576.9	704.8	123.4	1,800.3	2,510.4	27.5	June	
1,543.7	16,115.9	14,669.9	14,869.0	9,667.1	740.9	127.1	1,791.0	2,515.8	27.1	July	
1,539.1	16,100.9	14,732.1	14,924.4	9,693.1	781.5	125.9	1,770.0	2,526.0	28.0	Aug.	
1,537.7	16,196.6	14,782.4	15,033.5	9,685.1	913.3	125.5	1,756.3	2,525.7	27.6	Sep.	
1,537.2	16,092.6	14,704.9	14,933.5	9,518.5	993.0	130.3	1,741.7	2,522.3	27.6	Oct.	
1,533.7	16,083.0	14,720.6	14,915.5	9,454.9	1,042.8	134.6	1,741.1	2,514.5	27.6	Nov.	
1,545.3	16,003.0	14,768.8	14,935.3	9,395.0	1,099.4	133.9	1,749.5	2,530.0	27.6	Dec.	
1,533.4	15,885.8	14,673.4	14,853.7	9,237.2	1,163.3	146.0	1,746.5	2,532.0	28.7	2023 Jan.	
1,529.8	15,850.8	14,629.3	14,780.4	9,093.5	1,221.9	157.1	1,746.1	2,531.8	30.1	Feb.	
<b>German contribution (€ billion)</b>											
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	4,578.7	4,283.7	4,146.3	2,806.0	240.1	32.1	531.0	514.4	22.6	Nov.	
374.0	4,534.2	4,260.8	4,119.2	2,764.3	260.2	34.1	527.1	510.4	23.0	Dec.	
368.9	4,489.3	4,257.7	4,126.0	2,749.9	286.6	36.9	529.6	499.1	24.0	2023 Jan.	
368.1	4,496.7	4,251.0	4,106.6	2,706.5	314.2	39.1	530.3	491.2	25.2	Feb.	

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

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

## II. Overall monetary survey in the euro area

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

Liabilities (cont'd)													
Deposits of non-banks (non-MFIs) in the euro area (cont'd)													
End of month	General government								Repo transactions with non-banks in the euro area		Money market fund shares (net) <sup>3</sup>	Debt securities	
	Other general government								Total	of which: Enterprises and households		Total	of which: Denominated in euro
	Central government	Total	Overnight	With agreed maturities of			At agreed notice of 2						
				up to 1 year	over 1 year and up to 2 years	over 2 years	up to 3 months	over 3 months					
<b>Euro area (€ billion) <sup>1</sup></b>													
2021 Jan.	683.2	437.8	294.4	58.9	17.4	44.1	19.2	3.8	253.5	253.5	644.7	1,987.9	1,369.7
Feb.	713.6	436.4	296.4	54.3	19.0	43.9	19.2	3.7	256.3	256.2	614.0	2,000.0	1,369.6
Mar.	733.1	429.6	295.4	52.1	16.4	43.2	18.9	3.7	243.5	243.4	609.3	2,002.8	1,358.7
Apr.	700.9	424.0	293.9	48.5	16.2	42.9	18.9	3.6	252.5	252.4	618.2	1,989.0	1,350.5
May	692.4	436.9	308.3	47.7	15.9	42.4	19.1	3.5	247.4	247.4	608.6	1,978.6	1,339.4
June	709.2	441.2	314.0	46.6	16.3	42.0	18.8	3.5	245.8	245.8	600.5	1,982.6	1,333.7
July	709.6	440.1	313.9	45.6	16.6	42.0	18.6	3.5	254.6	254.5	622.6	1,999.4	1,334.0
Aug.	736.1	453.5	329.1	43.9	17.0	42.0	18.0	3.4	243.0	243.0	628.1	1,988.5	1,334.0
Sep.	742.6	460.1	334.6	46.3	16.6	41.3	18.1	3.3	260.8	260.7	597.0	2,013.4	1,344.0
Oct.	740.3	451.9	323.3	48.1	18.0	41.6	17.7	3.3	272.2	272.2	630.3	2,040.1	1,356.4
Nov.	691.5	481.6	349.8	50.3	19.1	41.7	17.5	3.3	267.7	267.6	654.8	2,046.7	1,355.2
Dec.	646.7	468.4	337.4	49.7	19.4	41.1	17.6	3.2	234.3	233.1	647.5	2,019.7	1,346.7
2022 Jan.	711.0	456.2	306.6	67.4	19.6	41.2	17.6	3.8	291.8	291.6	621.2	2,049.2	1,351.3
Feb.	755.6	469.9	314.1	73.5	19.8	41.3	17.6	3.7	301.3	301.1	584.0	2,044.8	1,358.6
Mar.	769.7	470.9	304.7	82.5	20.5	42.4	17.3	3.4	283.8	283.6	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	310.1	309.9	604.0	2,073.8	1,362.7
May	718.8	490.8	316.7	88.4	22.3	43.3	16.8	3.3	313.0	312.9	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	281.2	281.1	592.9	2,069.3	1,360.9
July	757.2	489.8	302.8	100.4	24.2	42.9	16.2	3.3	306.0	305.9	590.8	2,090.9	1,361.0
Aug.	676.9	499.6	309.1	104.6	24.0	42.5	16.1	3.2	283.8	283.7	597.5	2,113.5	1,375.0
Sep.	684.3	478.8	281.7	111.2	24.5	42.3	16.0	3.2	264.8	264.7	589.1	2,153.6	1,415.1
Oct.	679.0	480.2	287.2	109.2	24.3	41.5	14.7	3.2	268.8	268.8	625.8	2,130.8	1,416.5
Nov.	668.9	498.6	306.2	109.2	25.1	40.8	14.2	3.2	295.4	295.4	648.0	2,159.2	1,441.3
Dec.	584.2	483.5	296.0	103.6	27.2	40.2	13.5	3.0	248.3	248.3	650.9	2,159.8	1,470.5
2023 Jan.	551.4	480.7	283.1	113.0	27.5	40.6	12.8	3.7	284.0	284.0	659.5	2,198.0	1,505.2
Feb.	572.0	498.4	297.4	115.1	28.7	40.3	13.2	3.7	283.1	283.1	653.4	2,248.3	1,527.7
<b>German contribution (€ billion)</b>													
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	256.9	114.7	88.9	21.5	29.8	1.9	0.1	8.3	8.3	2.5	634.2	402.6
Dec.	159.2	255.8	117.3	83.2	23.9	29.6	1.8	0.1	6.3	6.3	2.6	631.2	409.3
2023 Jan.	116.4	246.9	99.4	92.2	23.8	29.8	1.6	0.1	6.1	6.1	2.4	639.6	417.9
Feb.	129.3	260.8	110.3	94.6	24.6	29.7	1.5	0.1	7.5	7.5	2.3	651.8	427.0

\* 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

									Memo item:					
issued (net) <sup>3</sup>			Liabilities to non-euro area residents <sup>5</sup>	Capital and reserves <sup>6</sup>	Excess of inter-MFI liabilities	Other liability items		Monetary aggregates <sup>7</sup> (from 2002 German contribution excludes currency in circulation)			Monetary capital formation <sup>13</sup>	Monetary liabilities of central governments (Post Office, Treasury) <sup>14</sup>	End of month	
With maturities of						Total <sup>8</sup>	of which: Intra-Eurosystem-liability/claim related to banknote issue <sup>9</sup>	M1 <sup>10</sup>	M2 <sup>11</sup>	M3 <sup>12</sup>				
up to 1 year <sup>4</sup>	over 1 year and up to 2 years	over 2 years												
<b>Euro area (€ billion) <sup>1</sup></b>														
-0.0	15.7	1,972.2	4,821.2	2,998.4	-	10.2	3,700.0	0.0	10,326.2	13,783.0	14,547.6	6,927.2	177.5	2021 Jan.
10.7	16.4	1,973.0	4,872.6	2,953.0	-	10.8	3,520.1	0.0	10,398.6	13,849.5	14,599.8	6,876.3	176.8	Feb.
-3.4	16.9	1,989.3	4,944.1	2,967.6	-	15.9	3,580.6	0.0	10,485.9	13,957.5	14,689.6	6,899.9	173.1	Mar.
4.9	16.6	1,967.5	4,989.0	2,948.0	-	10.5	3,484.0	0.0	10,569.8	14,020.5	14,778.4	6,826.9	173.5	Apr.
13.2	15.9	1,949.5	4,995.8	2,968.5	-	53.4	3,476.5	0.0	10,684.1	14,133.9	14,884.9	6,827.3	176.1	May
8.1	16.1	1,958.5	4,963.9	2,979.9	-	57.4	3,503.6	0.0	10,802.7	14,222.4	14,959.9	6,842.7	180.3	June
17.0	17.1	1,965.3	5,051.0	3,024.8	-	38.9	3,550.3	0.0	10,915.0	14,344.9	15,122.1	6,888.8	180.9	July
12.0	16.3	1,960.3	5,201.0	3,024.5	-	29.9	3,499.0	0.0	10,956.4	14,379.2	15,151.9	6,876.0	182.3	Aug.
15.9	17.7	1,979.7	5,224.6	2,997.6	-	15.2	3,480.9	0.0	11,032.9	14,441.4	15,190.2	6,864.2	187.4	Sep.
23.0	17.6	1,999.5	5,422.6	2,999.7	-	22.8	3,483.7	0.0	11,103.9	14,525.7	15,327.0	6,874.5	188.2	Oct.
19.3	17.8	2,009.6	5,510.6	3,037.4	-	21.5	3,681.3	0.0	11,195.2	14,606.3	15,420.1	6,912.5	189.7	Nov.
12.3	18.0	1,989.3	5,376.2	3,024.2	-	54.3	3,374.4	0.0	11,299.6	14,712.2	15,495.8	6,896.5	195.0	Dec.
22.0	18.5	2,008.7	5,555.4	2,999.9	-	62.1	3,718.0	0.0	11,256.9	14,706.2	15,491.2	6,905.6	196.0	2022 Jan.
33.4	5.7	2,005.7	5,642.1	2,995.4	-	55.0	3,755.7	0.0	11,335.0	14,777.6	15,532.6	6,885.4	195.0	Feb.
30.7	6.2	1,989.8	5,624.2	3,006.9	-	81.4	3,987.0	0.0	11,417.9	14,881.1	15,625.0	6,883.3	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	14,963.6	15,748.3	6,883.9	197.2	Apr.
34.0	15.6	1,988.4	5,813.4	2,924.7	-	59.4	4,322.9	0.0	11,555.4	15,018.5	15,792.5	6,790.8	199.0	May
47.8	14.4	2,007.0	5,734.2	2,916.7	-	77.3	4,645.2	0.0	11,612.1	15,105.2	15,875.0	6,798.1	199.4	June
15.1	16.4	2,059.4	5,862.8	2,978.5	-	76.2	4,313.3	0.0	11,693.5	15,242.1	15,997.1	6,902.2	203.9	July
16.7	19.0	2,077.8	5,914.8	2,903.3	-	95.3	4,795.3	0.0	11,714.4	15,316.1	16,075.7	6,824.8	196.7	Aug.
35.0	19.5	2,099.1	5,898.6	2,862.6	-	19.0	5,097.7	0.0	11,678.2	15,416.4	16,176.8	6,791.1	195.9	Sep.
3.9	24.0	2,102.8	6,038.2	2,836.4	-	42.5	4,979.8	0.0	11,516.3	15,332.8	16,111.0	6,753.3	196.0	Oct.
23.9	22.9	2,112.5	5,881.0	2,872.2	-	68.8	4,690.9	0.0	11,472.5	15,334.9	16,163.8	6,797.3	199.7	Nov.
32.3	23.3	2,104.2	5,552.9	2,832.3	-	60.6	4,819.4	0.0	11,402.5	15,336.0	16,152.9	6,757.0	192.2	Dec.
18.1	28.0	2,151.9	5,634.1	2,878.2	-	83.2	4,679.4	0.0	11,223.7	15,239.5	16,073.5	6,849.6	191.1	2023 Jan.
43.5	30.9	2,173.9	5,668.4	2,827.6	-	78.2	4,976.5	0.0	11,091.5	15,180.3	16,035.1	6,821.6	191.8	Feb.
<b>German contribution (€ billion)</b>														
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	1,088.8	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	3,686.8	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	1,888.8	0.0	Oct.
20.8	11.2	602.2	1,310.2	714.6	-	1,191.2	2,596.7	516.8	2,920.8	3,819.7	3,862.5	1,900.3	0.0	Nov.
20.2	11.7	599.3	1,265.7	690.1	-	1,230.4	2,726.5	518.9	2,881.6	3,795.1	3,835.9	1,869.2	0.0	Dec.
24.0	13.1	602.4	1,226.5	689.1	-	1,117.5	2,625.9	521.2	2,849.3	3,789.5	3,835.2	1,874.9	0.0	2023 Jan.
29.3	16.2	606.3	1,171.3	668.4	-	1,073.2	2,787.2	522.2	2,816.8	3,782.0	3,837.3	1,860.0	0.0	Feb.

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

Reserve maintenance period ending in <sup>1</sup>	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current account balances (including minimum reserves) <sup>7</sup>	Base money <sup>8</sup>
	Net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations <sup>4</sup>	Banknotes in circulation <sup>5</sup>	Central government deposits	Other factors (net) <sup>6</sup>		
		Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations <sup>3</sup>							
<b>Eurosystem <sup>2</sup></b>												
2021 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	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
June	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
July	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
Aug.	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
Sep.	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
Oct.	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
Nov.	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
Dec.	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
2022 Jan.	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
Feb.	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
Mar.	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
Apr.	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
May	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
June	940.4	1.2	1,303.3	0.1	4,942.1	4,051.6	0.0	1,565.6	372.8	1,001.6	195.6	5,812.7
July	916.8	0.9	1,233.3	0.0	4,939.0	4,103.0	0.0	1,553.9	380.2	861.8	191.1	5,848.0
Aug.												
Sep.												
Oct.												
Nov.												
Dec.												
<b>Deutsche Bundesbank</b>												
2021 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	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
June	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
July	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
Aug.	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
Sep.	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
Oct.	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
Nov.	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
Dec.	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
2022 Jan.	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
Feb.	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
Mar.	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
Apr.	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
May	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
June	229.8	0.4	231.9	0.1	1,076.8	1,234.6	0.0	377.2	77.8	-205.4	54.8	1,666.7
July	228.9	0.4	212.8	0.0	1,077.0	1,263.7	0.0	374.5	69.2	-242.5	54.2	1,692.4

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. <sup>1</sup> 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. <sup>2</sup> Source: ECB. <sup>3</sup> Includes liquidity provided under the Eurosystem's asset purchase programmes. <sup>4</sup> From August 2009 includes liquidity absorbed as a result of the Eurosystem's foreign exchange swap operations. <sup>5</sup> 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) <sup>7</sup>	Base money <sup>8</sup>	Reserve maintenance period ending in <sup>1</sup>
Net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations <sup>4</sup>	Banknotes in circulation <sup>5</sup>	Central government deposits	Other factors (net) <sup>6</sup>			
	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations <sup>3</sup>								
<b>Eurosystem <sup>2</sup></b>												
- 13.7	+ 0.1	- 0.2	± 0.0	+ 112.2	+ 11.1	± 0.0	+ 4.0	+ 65.5	- 110.5	+ 128.3	+ 143.4	2021 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.
- 6.9	- 0.1	+ 52.4	± 0.0	+ 141.3	+ 30.1	± 0.0	+ 18.1	- 57.8	+ 25.7	+ 170.6	+ 218.7	May
+ 11.9	- 0.1	+ 89.0	± 0.0	+ 151.8	+ 30.1	± 0.0	+ 20.0	+ 65.6	+ 75.4	+ 61.4	+ 111.6	June
+ 5.0	+ 0.1	+ 17.2	± 0.0	+ 134.4	+ 30.0	± 0.0	+ 14.1	- 16.6	+ 55.9	+ 73.1	+ 117.3	July
+ 8.4	± 0.0	- 3.3	± 0.0	+ 133.4	- 28.1	± 0.0	+ 7.5	+ 35.6	+ 43.3	+ 80.3	+ 59.6	Aug.
+ 4.1	± 0.0	- 1.1	± 0.0	+ 143.3	+ 6.5	± 0.0	+ 14.0	- 43.0	+ 132.0	+ 36.8	+ 57.3	Sep.
+ 38.5	+ 0.1	- 7.3	± 0.0	+ 94.6	- 10.8	± 0.0	+ 19.2	- 46.3	+ 194.8	- 31.0	- 22.6	Oct.
+ 9.5	± 0.0	- 0.2	± 0.0	+ 91.8	+ 11.8	± 0.0	+ 10.0	+ 60.6	- 69.4	+ 88.5	+ 110.2	Nov.
+ 26.0	+ 0.1	- 1.5	± 0.0	+ 47.2	- 31.1	± 0.0	+ 25.3	+ 25.2	+ 25.6	+ 26.5	+ 20.8	Dec.
+ 21.0	+ 0.1	- 1.0	± 0.0	+ 49.9	- 33.6	± 0.0	+ 15.6	- 43.7	+ 12.4	+ 118.8	+ 100.9	2022 Jan.
+ 9.5	+ 0.5	- 49.4	± 0.0	+ 19.7	- 2.6	± 0.0	+ 12.5	+ 43.5	+ 28.9	- 102.8	- 93.0	Feb.
+ 6.4	+ 0.7	- 24.5	± 0.0	- 4.0	+ 28.3	± 0.0	- 18.7	- 113.7	+ 91.2	- 7.2	+ 2.5	Mar.
+ 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	Apr.
+ 4.6	- 2.1	- 171.7	± 0.0	- 2.2	+ 31.5	± 0.0	- 2.9	- 44.2	- 37.5	- 118.2	- 89.5	May
- 20.0	- 0.7	- 643.8	+ 0.1	- 4.0	- 469.9	± 0.0	+ 4.8	- 119.7	- 65.3	- 18.2	- 483.5	June
- 23.6	- 0.3	- 70.0	- 0.1	- 3.1	+ 51.4	± 0.0	- 11.7	+ 7.4	- 139.8	- 4.5	+ 35.3	July
<b>Deutsche Bundesbank</b>												
- 3.0	- 0.0	- 0.1	- 0.0	+ 25.6	- 1.4	± 0.0	+ 1.0	- 16.7	- 45.2	+ 84.8	+ 84.4	2021 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.
- 3.7	+ 0.0	+ 13.2	+ 0.0	+ 38.6	+ 5.5	± 0.0	+ 5.1	- 0.1	- 1.5	+ 37.9	+ 48.5	May
+ 3.1	- 0.0	+ 13.8	- 0.0	+ 34.2	- 4.3	± 0.0	+ 5.2	+ 19.4	+ 31.1	- 0.5	+ 0.4	June
+ 1.6	+ 0.1	+ 2.4	+ 0.0	+ 32.3	+ 6.5	± 0.0	+ 3.0	- 2.5	+ 29.9	- 0.9	+ 8.6	July
+ 1.3	+ 0.0	+ 2.4	- 0.0	+ 27.8	- 6.4	± 0.0	+ 2.4	+ 13.4	+ 5.7	+ 16.3	+ 12.3	Aug.
+ 1.0	- 0.1	+ 1.2	- 0.0	+ 37.3	+ 2.1	± 0.0	+ 3.5	+ 2.7	+ 15.7	+ 15.6	+ 21.1	Sep.
+ 11.1	+ 0.2	- 18.6	+ 0.0	+ 18.2	- 2.0	± 0.0	+ 3.7	- 14.7	+ 54.3	- 28.3	- 26.6	Oct.
+ 3.2	- 0.1	- 0.0	+ 0.0	+ 23.9	+ 7.4	± 0.0	+ 3.5	- 14.5	- 28.6	+ 59.2	+ 70.1	Nov.
+ 8.2	- 0.0	- 0.9	- 0.0	+ 10.8	- 14.2	± 0.0	+ 6.8	+ 5.6	+ 4.6	+ 15.2	+ 7.9	Dec.
+ 6.6	+ 0.1	- 0.6	- 0.0	+ 18.7	- 7.7	± 0.0	+ 3.0	+ 0.2	+ 6.0	+ 24.1	+ 19.4	2022 Jan.
+ 1.3	+ 0.2	- 11.1	- 0.0	- 3.1	- 4.1	± 0.0	+ 2.4	+ 18.0	+ 7.7	- 37.7	- 39.5	Feb.
+ 0.4	+ 0.0	- 5.5	- 0.0	- 7.5	+ 42.7	± 0.0	- 10.8	- 57.1	+ 13.5	- 0.9	+ 31.0	Mar.
- 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	Apr.
+ 0.7	- 0.4	- 48.0	+ 0.0	+ 7.7	+ 42.7	± 0.0	- 0.1	- 6.2	- 11.0	- 65.4	- 22.9	May
- 2.5	- 0.1	- 120.6	+ 0.1	- 2.4	- 112.0	± 0.0	- 1.6	- 43.2	+ 37.0	- 5.6	- 119.3	June
- 1.0	+ 0.0	- 19.1	- 0.0	+ 0.2	+ 29.1	± 0.0	- 2.7	- 8.6	- 37.1	- 0.7	+ 25.7	July

allocated to the ECB on a monthly basis. The counterpart of this adjustment is shown under "Other factors". The remaining 92% of the value of the euro banknotes in circulation is allocated, likewise on a monthly basis, to the NCBs, with each NCB showing in its balance sheet the share of the euro banknotes issued corresponding to its paid-up share in the ECB's capital. The difference between the value of the euro banknotes allocated to an NCB and the value of the euro banknotes which that NCB has put into circulation is likewise shown under "Other factors". From 2003 euro

banknotes only. **6** Remaining items in the consolidated financial statement of the Eurosystem and the financial statement of the Bundesbank. **7** Equal to the difference between the sum of liquidity-providing factors and the sum of liquidity-absorbing factors. **8** Calculated as the sum of the "Deposit facility", "Banknotes in circulation" and "Credit institutions' current account balances".

### III. Consolidated financial statement of the Eurosystem

#### 1. Assets \*

€ billion

As at reporting date	Total assets	Gold and gold receivables	Claims on non-euro area residents denominated in foreign currency			Claims on euro area residents denominated in foreign currency	Claims on non-euro area residents denominated in euro			
			Total	Receivables from the IMF	Balances with banks, security investments, external loans and other external assets		Total	Balances with banks, security investments and loans	Claims arising from the credit facility under ERM II	
<b>Eurosystem <sup>1</sup></b>										
2022 Sep. 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	–	–
13	7,972.1	593.0	525.6	229.7	295.9	20.9	12.5	12.5	–	–
20	7,959.2	593.0	523.3	230.0	293.3	19.4	12.4	12.4	–	–
27	7,894.0	593.0	519.5	229.9	289.6	18.5	12.1	12.1	–	–
Feb. 3	7,875.4	593.0	511.1	230.0	281.1	16.9	12.0	12.0	–	–
10	7,872.2	593.0	503.7	230.2	273.5	17.1	12.3	12.3	–	–
17	7,873.6	593.0	505.3	230.2	275.0	16.6	12.3	12.3	–	–
24	7,839.4	593.0	507.8	230.5	277.3	15.6	12.4	12.4	–	–
Mar. 3	7,830.8	593.0	507.6	230.5	277.1	15.1	12.1	12.1	–	–
10	7,829.4	593.0	506.6	230.5	276.1	15.4	12.5	12.5	–	–
17	7,831.9	593.0	507.7	230.5	277.2	14.8	13.0	13.0	–	–
24	7,835.9	593.0	508.7	230.5	278.2	14.0	14.0	14.0	–	–
31	7,729.6	632.9	501.7	229.1	272.6	15.2	13.6	13.6	–	–
Apr. 7	7,729.3	632.9	501.5	229.1	272.4	14.4	12.7	12.7	–	–
<b>Deutsche Bundesbank</b>										
2022 Sep. 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	–	–	–	–
13	2,817.4	184.0	92.2	58.1	34.2	0.0	0.1	0.1	–	–
20	2,787.2	184.0	92.4	58.1	34.4	0.0	–	–	–	–
27	2,765.8	184.0	92.2	58.0	34.2	0.0	0.1	0.1	–	–
Feb. 3	2,791.4	184.0	92.0	58.1	34.0	0.0	–	–	–	–
10	2,772.5	184.0	92.1	58.1	34.0	0.0	–	–	–	–
17	2,760.1	184.0	91.8	58.1	33.7	0.0	–	–	–	–
24	2,709.2	184.0	92.9	58.1	34.9	0.0	–	–	–	–
Mar. 3	2,736.1	184.0	92.3	58.1	34.2	0.0	–	–	–	–
10	2,725.7	184.0	92.0	58.1	33.9	0.0	–	–	–	–
17	2,738.8	184.0	92.3	58.1	34.3	0.0	–	–	–	–
24	2,713.8	184.0	92.5	58.1	34.4	0.0	0.3	0.3	–	–
31	2,775.1	196.4	91.7	57.4	34.3	0.0	0.3	0.3	–	–
Apr. 7	2,723.0	196.4	91.6	57.4	34.2	0.0	0.0	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. <sup>1</sup> 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 denomi- nated in euro	Securities of euro area residents in euro			General government debt deno- minated 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				
<b>Eurosystem <sup>1</sup></b>														
2,129.3	3.9	2,125.4	–	–	–	–	22.4	5,112.4	4,945.7	166.7	21.7	305.5	2022 Sep.	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
1,322.4	1.0	1,321.4	–	–	–	–	24.8	5,129.3	4,949.7	179.6	21.6	322.0		13
1,322.3	0.8	1,321.4	–	–	–	–	28.8	5,116.8	4,938.4	178.5	21.6	321.6		20
1,259.2	1.2	1,258.0	–	–	0.0	–	28.6	5,123.4	4,945.1	178.3	21.6	318.1		27
1,258.8	0.8	1,258.0	–	–	0.0	–	25.8	5,116.6	4,940.6	176.0	21.5	319.6	Feb.	3
1,259.0	1.0	1,258.0	–	–	0.1	–	27.6	5,121.5	4,945.2	176.3	21.5	316.5		10
1,258.8	0.8	1,258.0	–	–	0.0	–	35.4	5,119.0	4,942.6	176.5	21.5	311.6		17
1,222.2	1.2	1,220.9	–	–	0.0	–	36.2	5,121.0	4,942.9	178.2	21.5	309.7		24
1,221.8	0.8	1,220.9	–	–	0.0	–	29.5	5,116.0	4,937.6	178.3	21.5	314.1	Mar.	3
1,221.8	0.9	1,220.9	–	–	–	–	25.8	5,115.3	4,936.4	178.9	21.5	317.4		10
1,221.9	1.0	1,220.9	–	–	0.0	–	40.2	5,108.7	4,930.1	178.5	21.5	311.1		17
1,222.0	1.0	1,220.9	–	–	0.1	–	45.3	5,106.3	4,928.2	178.2	21.5	311.1		24
1,102.4	1.7	1,100.5	–	–	0.2	–	41.1	5,087.5	4,909.7	177.9	21.5	313.8		31
1,101.7	1.2	1,100.5	–	–	0.0	–	36.9	5,093.2	4,914.8	178.4	21.5	314.5	Apr.	7
<b>Deutsche Bundesbank</b>														
404.1	0.5	403.7	–	–	0.0	–	2.5	1,069.5	1,069.5	–	4.4	1,274.6	2022 Sep.	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
236.0	0.2	235.9	–	–	0.0	–	3.7	1,077.5	1,077.5	–	4.4	1,219.4		13
236.0	0.2	235.9	–	–	0.0	–	4.4	1,077.1	1,077.1	–	4.4	1,188.8		20
222.6	0.5	222.1	–	–	0.0	–	5.2	1,080.2	1,080.2	–	4.4	1,177.1		27
222.3	0.2	222.1	–	–	0.0	–	4.9	1,081.5	1,081.5	–	4.4	1,202.1	Feb.	3
222.5	0.4	222.1	–	–	0.1	–	7.7	1,084.1	1,084.1	–	4.4	1,177.6		10
222.4	0.3	222.1	–	–	0.0	–	7.8	1,078.1	1,078.1	–	4.4	1,171.5		17
208.9	0.7	208.2	–	–	0.0	–	7.8	1,075.4	1,075.4	–	4.4	1,135.7		24
208.6	0.4	208.2	–	–	0.0	–	9.2	1,077.8	1,077.8	–	4.4	1,159.8	Mar.	3
208.6	0.4	208.2	–	–	0.0	–	7.3	1,072.3	1,072.3	–	4.4	1,157.0		10
208.6	0.4	208.2	–	–	0.0	–	7.4	1,072.3	1,072.3	–	4.4	1,169.7		17
208.7	0.6	208.2	–	–	–	–	8.5	1,071.0	1,071.0	–	4.4	1,144.2		24
199.6	0.8	198.8	–	–	0.1	–	7.1	1,072.4	1,072.4	–	4.4	1,203.2		31
199.2	0.4	198.8	–	–	0.0	–	8.3	1,074.3	1,074.3	–	4.4	1,148.8	Apr.	7



### 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						
<b>Eurosystem 3</b>										
391.9	11.1	6.5	6.5	–	184.9	325.3	–	608.5	114.7	2022 Sep. 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
378.3	11.0	4.8	4.8	–	182.4	295.0	–	588.7	115.8	13
342.6	11.4	4.6	4.6	–	182.4	297.8	–	588.7	115.8	20
328.3	11.3	5.0	5.0	–	182.4	297.4	–	588.7	116.4	27
339.0	11.0	4.8	4.8	–	182.4	298.7	–	589.1	116.4	Feb. 3
311.5	10.9	5.1	5.1	–	182.4	293.7	–	589.1	116.4	10
289.6	10.9	5.0	5.0	–	182.4	293.0	–	589.1	116.4	17
278.8	10.8	6.1	6.1	–	182.4	290.9	–	589.1	116.4	24
280.7	10.3	5.6	5.6	–	182.4	284.6	–	589.1	120.7	Mar. 3
275.2	10.3	5.3	5.3	–	182.4	282.0	–	589.1	120.7	10
305.0	10.4	5.4	5.4	–	182.4	284.3	–	589.1	120.7	17
316.5	10.9	5.3	5.3	–	182.4	286.9	–	589.1	120.8	24
357.4	11.1	5.3	5.3	–	180.3	283.8	–	622.2	120.2	31
305.8	11.2	5.3	5.3	–	180.3	274.6	–	622.2	120.2	Apr. 7
<b>Deutsche Bundesbank</b>										
207.6	0.4	0.6	0.6	–	48.0	43.3	513.5	187.1	5.7	2022 Sep. 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
220.7	0.1	0.0	0.0	–	47.0	37.3	521.6	181.7	5.7	13
207.3	0.3	0.0	0.0	–	47.0	37.0	521.6	181.7	5.7	20
195.1	0.3	0.1	0.1	–	47.0	34.1	523.8	181.7	5.7	27
198.2	0.3	0.0	0.0	–	47.0	35.5	521.2	181.7	5.7	Feb. 3
177.2	0.2	0.1	0.1	–	47.0	35.3	521.2	181.7	5.7	10
160.3	0.2	–0.0	–0.0	–	47.0	35.3	521.2	181.7	5.7	17
141.3	0.2	0.9	0.9	–	47.0	34.7	521.2	181.7	5.7	24
141.9	0.0	0.5	0.5	–	47.0	36.4	522.2	181.7	5.5	Mar. 3
138.4	0.0	–0.0	–0.0	–	47.0	35.9	522.2	181.7	5.5	10
158.7	0.0	–0.0	–0.0	–	47.0	35.4	522.2	181.7	5.5	17
158.4	0.0	–0.0	–0.0	–	47.0	34.8	522.2	181.7	5.5	24
196.8	0.2	0.0	0.0	–	46.5	33.4	524.5	193.2	5.5	31
147.6	0.2	0.0	0.0	–	46.5	32.1	524.5	193.2	5.5	Apr. 7

euro banknote issue". 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 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

euro area										Claims on non-euro area residents			Period
to non-banks in other Member States										Total	of which: Loans	Other assets <sup>1</sup>	
Securities	General government			Total	Enterprises and households		General government						Total
	Total	Loans	Securities <sup>2</sup>		Total	Loans	Total	Loans	Securities				
<b>End of year or month</b>													
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
337.5	376.4	248.0	128.4	505.3	384.9	270.2	120.4	30.8	89.6	1,137.2	882.9	1,841.0	2022
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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	1,973.8	2022 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	2022 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	1,728.1	2022 Nov.
337.5	376.4	248.0	128.4	505.3	384.9	270.2	120.4	30.8	89.6	1,137.2	882.9	1,841.0	2022 Dec.
333.8	374.0	250.3	123.7	520.1	393.5	280.2	126.6	30.2	96.4	1,161.9	904.0	1,719.2	2023 Jan.
333.5	379.5	248.2	131.3	520.0	393.3	279.2	126.8	31.3	95.4	1,167.6	904.4	1,875.3	2023 Feb.
<b>Changes <sup>3</sup></b>													
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
16.9	- 14.4	1.9	- 16.3	19.3	20.7	24.4	- 1.4	2.6	- 3.9	15.0	- 0.8	793.3	2022
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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 Oct.
2.0	- 4.1	0.0	- 4.1	8.4	9.2	9.6	- 0.8	- 1.7	- 0.9	8.8	4.8	- 199.3	2022 Nov.
1.8	1.5	0.9	0.6	- 15.6	- 9.3	- 6.2	- 6.4	- 1.9	- 4.5	- 75.0	- 69.5	112.9	2022 Dec.
0.1	- 1.6	2.3	- 3.9	16.3	9.4	10.0	6.9	- 0.6	7.5	33.4	27.8	- 121.8	2023 Jan.
- 0.3	5.6	- 2.0	7.7	0.3	- 0.2	- 1.1	0.5	1.1	- 0.6	5.9	0.3	156.1	2023 Feb.

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



IV. Banks

in other Member States <sup>2</sup>				Deposits of central governments		Liabilities arising from repos with non-banks in the euro area	Money market fund shares issued <sup>3</sup>	Debt securities issued <sup>3</sup>		Liabilities to non-euro area residents	Capital and reserves	Other Liabilities <sup>1</sup>	Period
With agreed maturities		At agreed notice		Total	of which: domestic central governments			Total	of which: with maturities of up to 2 years <sup>3</sup>				
Total	of which: up to 2 years	Total	of which: up to 3 months										
<b>End of year or month</b>													
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
94.3	32.4	2.2	2.0	69.2	66.8	3.4	2.7	1,185.1	40.8	800.4	747.2	1,817.1	2022
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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 Oct.
93.5	31.3	2.2	2.0	75.4	71.1	4.7	2.6	1,202.3	42.2	939.7	747.3	1,691.1	2022 Nov.
94.3	32.4	2.2	2.0	69.2	66.8	3.4	2.7	1,185.1	40.8	800.4	747.2	1,817.1	2022 Dec.
92.3	30.4	2.2	2.0	79.1	73.8	3.9	2.5	1,205.2	47.4	890.6	728.9	1,719.6	2023 Jan.
91.8	30.0	2.2	1.9	87.0	82.5	5.0	2.4	1,222.0	56.0	901.8	724.5	1,880.3	2023 Feb.
<b>Changes <sup>4</sup></b>													
- 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
5.8	8.5	- 0.3	- 0.2	24.6	23.0	1.2	0.4	67.2	12.6	45.6	5.0	857.7	2022
- 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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2021 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 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	2022 Oct.
- 8.6	- 8.3	- 0.0	- 0.0	27.5	25.8	0.8	0.0	7.4	2.4	- 29.9	- 1.1	- 208.4	2022 Nov.
1.0	0.9	- 0.0	- 0.0	- 6.3	- 4.3	- 1.3	0.1	- 11.5	- 1.2	- 132.1	1.9	125.9	2022 Dec.
- 1.9	- 1.8	- 0.0	- 0.0	9.9	6.9	0.5	- 0.2	22.4	6.6	95.0	- 17.6	- 85.0	2023 Jan.
- 0.4	- 0.4	- 0.0	- 0.0	7.9	8.7	1.2	- 0.1	17.8	9.6	11.2	- 5.4	162.0	2023 Feb.

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

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

## IV. Banks

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

€ billion

End of month	Number of reporting institutions	Balance sheet total <sup>1</sup>	Cash in hand and credit balances with central banks	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)					Participating interests	Other assets <sup>1</sup>
				Total	of which:		Total	of which:			Securities issued by non-banks		
					Balances and loans	Securities issued by banks		Loans	Bills				
							for up to and including 1 year	for more than 1 year					
<b>All categories of banks</b>													
2022 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	10,826.0	108.4	3,798.1	3,314.4	479.3	4,964.5	494.3	3,762.5	0.2	691.3	96.2	1,858.8
Dec.	1,386	10,581.5	88.0	3,498.3	3,028.0	467.6	4,929.3	466.5	3,762.8	0.2	682.2	96.2	1,969.7
2023 Jan.	1,384	10,650.7	109.2	3,638.9	3,161.2	474.0	4,957.2	489.6	3,766.4	0.2	676.6	95.7	1,849.6
Feb.	1,385	10,825.7	74.7	3,673.1	3,187.5	481.7	4,976.6	485.3	3,779.5	0.2	693.0	96.2	2,005.1
<b>Commercial banks <sup>6</sup></b>													
2023 Jan.	241	4,848.5	65.2	1,675.4	1,593.9	80.9	1,587.2	325.0	1,023.6	0.1	222.8	30.8	1,489.9
Feb.	242	5,008.1	30.1	1,713.6	1,628.6	84.4	1,602.5	325.9	1,029.0	0.1	237.2	31.1	1,631.0
<b>Big banks <sup>7</sup></b>													
2023 Jan.	3	2,458.5	48.9	664.0	634.0	30.0	722.3	148.8	453.7	0.0	113.7	25.7	997.6
Feb.	3	2,568.1	13.6	700.2	668.7	31.6	729.0	149.3	456.6	0.0	117.6	25.9	1,099.2
<b>Regional banks and other commercial banks</b>													
2023 Jan.	133	1,903.2	12.3	681.7	631.7	49.6	724.8	128.3	485.0	0.1	102.7	4.5	479.9
Feb.	133	1,955.5	12.5	683.9	631.9	51.5	734.3	130.5	486.8	0.1	113.0	4.5	520.2
<b>Branches of foreign banks</b>													
2023 Jan.	105	486.8	4.0	329.6	328.2	1.3	140.1	47.9	84.9	–	6.4	0.7	12.5
Feb.	106	484.6	3.9	329.4	328.0	1.3	139.1	46.1	85.6	–	6.6	0.7	11.5
<b>Landesbanken</b>													
2023 Jan.	6	970.8	2.4	399.2	346.9	52.1	430.7	45.3	346.2	0.0	34.1	9.5	129.0
Feb.	6	991.1	1.4	408.6	355.8	52.5	432.9	44.1	347.4	0.0	36.4	9.5	138.7
<b>Savings banks</b>													
2023 Jan.	360	1,558.3	21.2	283.9	165.8	117.9	1,211.4	53.5	988.0	–	169.6	15.9	25.9
Feb.	360	1,556.2	22.8	277.1	157.6	119.4	1,214.0	53.7	990.0	–	170.0	16.2	26.1
<b>Credit cooperatives</b>													
2023 Jan.	733	1,164.4	14.0	222.6	111.6	110.3	878.5	33.3	722.7	0.0	122.5	19.7	29.6
Feb.	733	1,160.9	14.8	216.2	104.0	111.5	880.8	34.0	724.2	0.0	122.5	19.7	29.5
<b>Mortgage banks</b>													
2023 Jan.	8	224.9	0.1	21.0	14.5	6.4	198.2	2.9	180.7	–	14.5	0.1	5.4
Feb.	8	226.1	0.1	21.4	14.8	6.5	199.0	3.4	180.7	–	14.8	0.1	5.5
<b>Building and loan associations</b>													
2023 Jan.	18	260.0	0.5	46.0	30.7	15.3	209.6	1.4	185.3	–	22.8	0.3	3.6
Feb.	18	260.7	0.3	46.9	31.4	15.5	209.6	1.2	185.6	–	22.8	0.3	3.7
<b>Banks with special, development and other central support tasks</b>													
2023 Jan.	18	1,623.8	5.8	990.8	897.7	91.1	441.7	28.0	319.8	–	90.3	19.3	166.1
Feb.	18	1,622.5	5.3	989.4	895.3	91.9	438.0	23.0	322.5	–	89.4	19.3	170.6
<b>Memo item: Foreign banks <sup>8</sup></b>													
2023 Jan.	138	2,422.0	11.9	925.3	890.8	34.1	694.6	167.7	404.8	0.1	110.6	3.6	786.5
Feb.	139	2,506.7	11.3	926.4	890.6	35.3	697.0	165.0	406.4	0.1	120.0	3.6	868.4
<b>of which: Banks majority-owned by foreign banks <sup>9</sup></b>													
2023 Jan.	33	1,935.2	7.9	595.8	562.6	32.8	554.5	119.8	319.9	0.1	104.1	2.9	774.0
Feb.	33	2,022.1	7.4	597.0	562.6	34.0	557.8	118.9	320.8	0.1	113.4	2.9	856.9

\* 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 <sup>5</sup>	Bank savings bonds	Capital including published reserves, participation rights capital, funds for general banking risks	Other liabilities <sup>1</sup>	End of month	
Total	of which:		Total	of which:			Memo item: Liabilities arising from repos <sup>3</sup>	Savings deposits <sup>4</sup>						
	Sight deposits	Time deposits		Sight deposits	Time deposits <sup>2</sup>			Total						of which: At 3 months' notice
				for up to and including 1 year	for more than 1 year <sup>2</sup>									
<b>All categories of banks</b>														
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	2022 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	1,828.5	Nov.
2,230.1	616.9	1,613.1	4,532.2	2,916.6	394.4	647.9	48.6	538.5	515.1	34.9	1,269.4	591.1	1,958.7	Dec.
2,320.7	743.7	1,576.9	4,604.7	2,936.3	448.4	651.3	71.7	527.9	503.5	40.9	1,287.5	592.6	1,845.1	2023 Jan.
2,312.9	740.8	1,572.0	4,615.5	2,906.1	486.7	655.8	78.5	521.1	495.5	45.8	1,296.2	592.4	2,008.6	Feb.
<b>Commercial banks <sup>6</sup></b>														
1,210.5	557.2	653.3	1,816.2	1,228.4	250.6	235.2	70.7	88.6	84.6	13.4	197.5	203.8	1,420.5	2023 Jan.
1,220.7	571.9	648.7	1,817.4	1,212.6	266.9	235.6	77.2	87.7	83.0	14.6	200.2	203.8	1,566.0	Feb.
<b>Big banks <sup>7</sup></b>														
444.5	185.0	259.5	866.1	570.0	144.0	75.9	36.0	75.2	71.8	1.1	147.5	73.5	926.8	2023 Jan.
448.2	192.6	255.6	864.6	553.3	159.9	75.6	41.2	74.7	70.6	1.1	149.9	73.5	1,031.8	Feb.
<b>Regional banks and other commercial banks</b>														
486.2	225.7	260.4	771.3	533.1	76.5	136.3	34.7	13.1	12.5	12.3	49.5	114.9	481.4	2023 Jan.
491.6	220.3	271.3	777.4	536.4	78.2	136.6	36.0	12.7	12.1	13.5	49.9	114.9	521.6	Feb.
<b>Branches of foreign banks</b>														
279.8	146.4	133.4	178.8	125.4	30.1	23.0	–	0.3	0.3	0.1	0.5	15.4	12.3	2023 Jan.
280.8	159.0	121.8	175.4	122.9	28.8	23.4	–	0.3	0.3	0.1	0.4	15.4	12.7	Feb.
<b>Landesbanken</b>														
282.5	56.1	226.4	313.8	159.3	78.8	70.1	1.0	5.2	5.2	0.4	194.2	42.9	137.5	2023 Jan.
278.2	49.1	229.1	321.9	161.1	84.2	71.0	1.3	5.2	5.1	0.5	199.1	42.6	149.3	Feb.
<b>Savings banks</b>														
179.6	5.7	173.9	1,174.0	849.0	28.4	14.4	–	262.4	246.6	19.8	17.6	137.4	49.7	2023 Jan.
180.0	4.3	175.7	1,169.7	840.7	33.0	14.3	–	259.2	243.2	22.4	17.9	137.4	51.3	Feb.
<b>Credit cooperatives</b>														
165.4	3.0	162.4	855.2	615.1	41.3	20.8	–	171.2	166.7	7.0	8.6	101.7	33.5	2023 Jan.
165.3	3.5	161.7	851.1	607.1	46.2	21.5	–	168.6	163.8	7.8	8.6	101.8	34.1	Feb.
<b>Mortgage banks</b>														
49.9	3.6	46.2	53.8	2.2	5.3	46.3	0.0	–	–	–	105.5	8.9	6.9	2023 Jan.
49.7	3.8	45.9	55.2	3.4	5.4	46.4	–	–	–	–	105.3	8.8	7.1	Feb.
<b>Building and loan associations</b>														
38.0	3.2	34.8	195.2	3.8	1.6	189.2	–	0.5	0.5	0.1	5.6	12.4	8.7	2023 Jan.
38.0	3.5	34.5	195.3	3.8	1.7	189.2	–	0.5	0.5	0.1	6.1	12.4	8.9	Feb.
<b>Banks with special, development and other central support tasks</b>														
394.9	114.9	279.9	196.5	78.5	42.3	75.4	0.0	–	–	–	758.5	85.6	188.3	2023 Jan.
381.1	104.7	276.4	204.8	77.3	49.3	77.9	0.0	–	–	–	759.1	85.6	191.9	Feb.
<b>Memo item: Foreign banks <sup>8</sup></b>														
737.4	374.1	363.2	746.2	524.1	105.3	95.7	37.0	15.1	14.8	6.0	47.6	97.6	793.2	2023 Jan.
745.6	382.0	363.6	742.2	513.2	111.5	96.2	39.4	14.5	14.2	6.8	49.3	97.6	872.0	Feb.
<b>of which: Banks majority-owned by foreign banks <sup>9</sup></b>														
457.6	227.7	229.8	567.4	398.7	75.2	72.7	37.0	14.8	14.6	6.0	47.2	82.2	780.9	2023 Jan.
464.9	223.0	241.8	566.8	390.3	82.7	72.9	39.4	14.2	13.9	6.7	48.9	82.2	859.3	Feb.

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	
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	
2022	19.8	67.3	2,347.0	2,101.4	-	1.0	244.6	12.1	4,015.6	3,613.1	0.2	2.7	399.6	
2021 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	88.4	2,524.4	2,271.2	-	1.5	251.7	11.1	4,025.7	3,625.3	0.2	3.6	396.7	
Dec.	19.8	67.3	2,347.0	2,101.4	-	1.0	244.6	12.1	4,015.6	3,613.1	0.2	2.7	399.6	
2023 Jan.	18.0	89.5	2,443.6	2,198.1	-	1.0	244.5	12.7	4,016.2	3,622.4	0.1	4.3	389.4	
Feb.	17.8	52.5	2,471.6	2,221.9	-	1.0	248.8	12.8	4,030.2	3,629.4	0.1	2.9	397.9	
<b>Changes *</b>														
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	- 0.0	- 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	
2022	- 29.6	- 836.6	+ 938.0	+ 938.1	-	+ 0.2	- 0.3	+ 1.7	+ 216.7	+ 220.1	- 0.1	+ 0.1	- 3.3	
2021 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	+ 1.8	- 67.6	- 65.5	-	- 0.0	- 2.1	+ 1.1	+ 12.0	+ 13.9	- 0.0	- 0.7	- 1.3	
Dec.	+ 1.0	- 19.9	- 177.4	- 169.9	-	- 0.5	- 7.0	+ 1.0	- 9.6	- 11.7	+ 0.0	- 0.9	+ 2.9	
2023 Jan.	- 1.8	+ 22.2	+ 96.7	+ 96.7	-	+ 0.0	- 0.1	+ 0.6	+ 0.6	+ 9.2	- 0.1	+ 1.6	- 10.3	
Feb.	- 0.2	+ 37.1	+ 28.3	+ 24.0	-	+ 0.0	+ 4.3	+ 0.2	+ 13.3	+ 6.3	- 0.0	- 1.5	+ 8.5	

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

equalisation claims (see also footnote 2). 2 Including debt securities arising from the exchange of equalisation claims. 3 Including liabilities arising from registered debt securities, registered money market paper and non-negotiable bearer debt securities;

IV. Banks

Equalisation claims 2	Memo item: Fiduciary loans	Participating interests in domestic banks and enterprises	Deposits of domestic banks (MFIs) 3					Deposits of domestic non-banks (non-MFIs)					Period	
			Total	Sight deposits 4	Time deposits 4	Redis-counted bills 5	Memo item: Fiduciary loans	Total	Sight deposits 6	Time deposits 6	Savings deposits 7	Bank savings bonds 8		Memo item: Fiduciary loans
<b>End of year or month *</b>														
-	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
-	25.6	80.3	1,231.6	136.9	1,094.7	0.0	15.7	4,162.0	2,720.6	873.5	533.2	34.6	35.9	2022
-	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	2021 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.
-	25.6	80.3	1,231.6	136.9	1,094.7	0.0	15.7	4,162.0	2,720.6	873.5	533.2	34.6	35.9	Dec.
-	25.6	80.0	1,231.2	142.6	1,088.7	0.0	15.6	4,199.7	2,722.8	913.5	522.7	40.6	36.9	2023 Jan.
-	25.6	80.2	1,226.0	140.7	1,085.3	0.0	15.6	4,197.1	2,687.7	947.9	516.0	45.5	37.2	Feb.
<b>Changes *</b>														
-	- 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
-	- 0.1	+ 1.7	- 104.6	+ 8.8	- 113.4	- 0.0	- 0.6	+ 191.8	+ 65.8	+ 143.4	- 27.5	+ 10.1	+ 1.7	2022
-	+ 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	2021 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	+ 20.9	+ 26.3	- 5.3	+ 3.4	+ 1.3	Nov.
-	- 0.3	+ 0.1	- 113.2	- 8.5	- 104.7	- 0.0	- 0.4	- 43.4	+ 47.1	+ 4.2	- 3.7	+ 3.2	+ 1.1	Dec.
-	- 0.0	- 0.4	- 0.3	+ 5.8	- 6.1	+ 0.0	- 0.1	+ 37.6	- 2.9	+ 40.0	- 5.5	+ 6.0	+ 1.0	2023 Jan.
-	- 0.0	+ 0.3	- 5.2	- 1.9	- 3.4	-	- 0.0	- 2.5	- 35.0	+ 34.4	- 6.7	+ 4.8	+ 0.4	Feb.

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		
<b>End of year or month *</b>														
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
2022	0.2	1,151.3	926.6	656.2	270.4	1.7	223.0	3.7	913.7	616.2	173.0	443.2	14.9	282.6
2021 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
Dec.	0.2	1,151.3	926.6	656.2	270.4	1.7	223.0	3.7	913.7	616.2	173.0	443.2	14.9	282.6
2023 Jan.	0.2	1,195.3	963.1	700.1	263.0	2.7	229.5	4.0	941.0	633.6	190.9	442.7	20.1	287.3
Feb.	0.2	1,201.5	965.7	701.9	263.8	2.9	232.9	4.2	946.4	635.5	190.5	444.9	15.8	295.1
<b>Changes *</b>														
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
2022	- 0.1	+ 21.7	+ 20.4	+ 17.9	+ 2.6	+ 1.3	- 0.0	+ 0.2	+ 37.0	+ 37.0	+ 16.8	+ 20.2	+ 6.7	- 6.7
2021 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	+ 16.5	+ 9.7	+ 5.5	+ 4.2	- 0.0	+ 6.8
Dec.	- 0.0	- 112.4	- 106.8	- 104.0	- 2.8	- 1.2	- 4.4	+ 0.2	- 19.9	- 11.2	- 12.7	+ 1.5	+ 2.4	- 11.1
2023 Jan.	- 0.0	+ 48.2	+ 40.6	+ 46.3	- 5.7	+ 1.1	+ 6.5	+ 0.3	+ 30.0	+ 19.5	+ 18.6	+ 0.9	+ 5.3	+ 5.2
Feb.	+ 0.0	+ 0.6	- 2.8	- 1.2	- 1.6	+ 0.1	+ 3.3	+ 0.2	+ 1.6	- 1.2	- 1.3	+ 0.1	- 4.4	+ 7.2

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

revisions, which appear in the following Monthly Report, are not specially marked.

IV. Banks

Memo item: Fiduciary loans	Participating interests in foreign banks and enter- prises	Deposits of foreign banks (MFIs)						Deposits of foreign non-banks (non-MFIs)						Memo item: Fiduciary loans	Period
		Total	Sight deposits	Time deposits (including bank savings bonds)			Total	Sight deposits	Time deposits (including savings deposits and bank savings bonds)			Memo item: Fiduciary loans			
				Total	Short-term	Medium and long-term			Total	Short-term	Medium and long-term				
<b>End of year or month *</b>															
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	
10.4	15.7	998.4	480.0	518.4	376.4	141.9	–	370.3	196.0	174.3	84.4	89.8	0.1	2022	
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	2021 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.	
10.4	15.7	998.4	480.0	518.4	376.4	141.9	–	370.3	196.0	174.3	84.4	89.8	0.1	Dec.	
10.4	15.6	1,089.4	601.2	488.3	344.5	143.8	–	405.1	213.5	191.5	101.9	89.6	0.2	2023 Jan.	
10.4	15.8	1,086.8	600.1	486.7	345.1	141.6	–	418.4	218.4	200.0	109.9	90.1	0.2	Feb.	
<b>Changes *</b>															
+ 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	
– 0.7	– 1.0	+ 85.8	+ 29.1	+ 56.7	+ 69.6	– 13.0	– 0.0	+ 68.2	+ 49.0	+ 19.2	+ 13.9	+ 5.3	+ 0.0	2022	
– 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	2021 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.	
– 0.2	– 0.0	– 145.0	– 128.3	– 16.7	– 6.9	– 9.8	–	– 40.7	– 37.2	– 3.5	– 6.2	+ 2.7	– 0.0	Dec.	
– 0.0	– 0.1	+ 93.8	+ 122.3	– 28.4	– 30.8	+ 2.4	–	+ 35.9	+ 18.1	+ 17.8	+ 17.9	– 0.1	+ 0.0	2023 Jan.	
+ 0.0	+ 0.2	– 7.0	– 3.5	– 3.5	– 0.9	– 2.6	–	+ 11.6	+ 4.1	+ 7.5	+ 7.2	+ 0.3	+ 0.1	Feb.	

#### IV. Banks

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

€ billion

Period	Lending to domestic non-banks, total		Short-term lending						Medium- and long-term			
	including negotiable money market paper, securities, equalisation claims	excluding negotiable money market paper, securities, equalisation claims	Total	to enterprises and households			to general government			Total	to enter-	
				Total	Loans and bills	Negotiable money market paper	Total	Loans	Treasury bills			Total
<b>End of year or month *</b>												
2013	3,131.6	2,693.2	269.1	217.7	217.0	0.6	51.4	50.8	0.6	2,862.6	2,328.6	
2014	3,167.3	2,712.6	257.5	212.7	212.1	0.6	44.8	44.7	0.1	2,909.8	2,376.8	
2015	3,233.9	2,764.4	255.5	207.8	207.6	0.2	47.8	47.5	0.2	2,978.3	2,451.4	
2016	3,274.3	2,824.2	248.6	205.7	205.4	0.3	42.9	42.8	0.1	3,025.8	2,530.0	
2017	3,332.6	2,894.4	241.7	210.9	210.6	0.3	30.7	30.3	0.4	3,090.9	2,640.0	
2018	3,394.5	2,990.4	249.5	228.0	227.6	0.4	21.5	21.7	-0.2	3,145.0	2,732.8	
2019	3,521.5	3,119.5	260.4	238.8	238.4	0.4	21.6	18.7	2.9	3,261.1	2,866.9	
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	
2022	4,015.6	3,613.3	296.4	279.8	279.4	0.4	16.7	14.3	2.3	3,719.2	3,359.9	
2021 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	
Dec.	4,015.6	3,613.3	296.4	279.8	279.4	0.4	16.7	14.3	2.3	3,719.2	3,359.9	
2023 Jan.	4,016.2	3,622.5	303.2	282.5	281.9	0.5	20.7	17.0	3.8	3,713.1	3,360.2	
Feb.	4,030.2	3,629.5	297.8	279.9	279.2	0.7	18.0	15.8	2.2	3,732.4	3,371.2	
<b>Changes *</b>												
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	+ 1.1	- 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	
2022	+ 216.7	+ 220.0	+ 47.6	+ 48.5	+ 48.5	+ 0.0	- 0.9	- 0.9	+ 0.0	+ 169.1	+ 184.8	
2021 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	- 0.0	+ 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	+ 2.2	+ 4.4	+ 4.5	- 0.1	- 2.1	- 1.5	- 0.6	+ 9.7	+ 11.8	
Dec.	- 9.6	- 11.7	- 13.9	- 12.8	- 12.7	- 0.0	- 1.1	- 0.2	- 0.9	+ 4.2	+ 1.8	
2023 Jan.	+ 0.6	+ 9.2	+ 6.7	+ 2.6	+ 2.4	+ 0.2	+ 4.1	+ 2.6	+ 1.4	- 6.1	+ 0.3	
Feb.	+ 13.3	+ 6.3	- 6.0	- 3.2	- 3.3	+ 0.1	- 2.8	- 1.2	- 1.6	+ 19.3	+ 11.0	

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

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

IV. Banks

lending													Period
prises and households					to general government								
Loans			Securities	Memo item: Fiduciary loans	Loans			Securities 1	Equalisation claims 2	Memo item: Fiduciary loans			
Total	Medium-term	Long-term			Total	Medium-term	Long-term						
<b>End of year or month *</b>													
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	
3,085.9	348.7	2,737.1	274.0	24.6	359.3	233.7	14.1	219.6	125.6	–	1.0	2022	
2,870.0	310.1	2,559.9	253.2	24.2	378.7	228.7	14.3	214.4	150.1	–	1.0	2021 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.	
3,085.9	348.7	2,737.1	274.0	24.6	359.3	233.7	14.1	219.6	125.6	–	1.0	Dec.	
3,090.3	349.9	2,740.4	269.9	24.6	352.9	233.4	13.8	219.5	119.5	–	1.0	2023 Jan.	
3,102.0	355.3	2,746.8	269.2	24.5	361.2	232.5	13.7	218.8	128.7	–	1.1	Feb.	
<b>Changes *</b>													
+ 39.9	+ 5.6	+ 34.3	+ 12.5	– 1.8	– 4.1	– 8.5	– 5.1	– 3.4	+ 4.3	–	– 0.2	2014	
+ 59.0	+ 4.5	+ 54.6	+ 14.8	– 2.1	– 6.6	– 6.9	– 4.8	– 2.0	+ 0.2	–	+ 0.0	2015	
+ 75.1	+ 9.7	+ 65.4	+ 4.7	– 0.9	– 30.9	– 7.3	– 4.0	– 3.3	– 23.6	–	– 0.4	2016	
+ 87.6	+ 9.4	+ 78.2	+ 15.8	+ 0.1	– 39.9	– 10.6	– 1.3	– 9.3	– 29.4	–	– 0.1	2017	
+ 108.7	+ 19.3	+ 89.4	– 6.7	– 0.9	– 37.1	– 10.5	– 2.7	– 7.8	– 26.6	–	– 0.0	2018	
+ 126.0	+ 18.9	+ 107.2	+ 6.8	– 0.8	– 17.8	– 5.5	– 2.6	– 2.9	– 12.3	–	+ 0.1	2019	
+ 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	
+ 169.9	+ 33.5	+ 136.4	+ 14.9	– 0.1	– 15.7	+ 2.5	– 0.7	+ 3.3	– 18.2	–	– 0.0	2022	
+ 5.2	– 1.4	+ 6.6	+ 1.0	– 0.0	+ 4.0	– 0.4	– 0.5	+ 0.0	+ 4.4	–	+ 0.0	2021 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.	
+ 0.3	+ 4.0	– 3.7	+ 1.6	– 0.3	+ 2.4	+ 1.0	+ 0.2	+ 0.9	+ 1.4	–	– 0.0	Dec.	
+ 4.4	+ 1.2	+ 3.3	– 4.2	+ 0.0	– 6.4	– 0.3	– 0.3	– 0.0	– 6.1	–	– 0.0	2023 Jan.	
+ 11.7	+ 5.4	+ 6.4	– 0.7	– 0.1	+ 8.3	– 0.9	– 0.1	– 0.7	+ 9.2	–	+ 0.1	Feb.	

#### IV. Banks

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

billion €

Lending to domestic enterprises and households (excluding holdings of negotiable money market paper and excluding securities portfolios) <sup>1</sup>														
Period	Total	of which:			Lending to enterprises and self-employed persons									
		Mortgage loans, total	Housing loans			Total	of which: Housing loans	Manufacturing	Electricity, gas and water supply; refuse disposal, mining and quarrying	Construction	Wholesale and retail trade; repair of motor vehicles and motor-cycles	Agriculture, forestry, fishing and aquaculture	Transportation and storage; post and telecommunications	Financial intermediation (excluding MFIs) and insurance companies
			Total	Mortgage loans secured by residential real estate	Other housing loans									
<b>Lending, total</b>														
<b>End of year or quarter *</b>														
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 Q4	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 Q1	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
Q2	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
Q3	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
Q4	3,365.3	1,676.5	1,773.9	1,448.0	325.8	1,852.2	509.1	160.0	137.7	108.8	155.1	56.3	65.2	211.9
<b>Short-term lending</b>														
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 Q4	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 Q1	254.0	–	7.0	–	7.0	224.1	4.5	36.5	14.0	19.5	39.3	3.6	4.1	38.0
Q2	270.5	–	7.0	–	7.0	239.5	4.6	44.7	11.6	20.1	42.2	3.9	4.3	42.2
Q3	292.2	–	7.4	–	7.4	260.7	4.9	46.2	24.4	21.1	45.3	3.6	4.2	42.2
Q4	279.4	–	7.4	–	7.4	248.9	5.0	41.6	12.1	20.8	44.7	3.3	3.8	49.8
<b>Medium-term lending</b>														
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 Q4	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 Q1	316.1	–	40.8	–	40.8	242.2	21.0	28.9	5.6	20.0	22.0	4.2	11.7	53.1
Q2	322.2	–	42.0	–	42.0	249.2	22.2	29.1	5.8	21.0	22.3	4.3	13.3	53.7
Q3	339.5	–	43.2	–	43.2	265.9	23.1	30.5	6.0	21.6	23.4	4.3	22.2	54.4
Q4	348.7	–	43.4	–	43.4	275.8	23.5	31.2	6.5	22.2	24.3	4.1	23.0	56.2
<b>Long-term lending</b>														
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 Q4	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 Q1	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
Q2	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
Q3	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
Q4	2,737.1	1,676.5	1,723.1	1,448.0	275.1	1,327.5	480.6	87.2	119.0	65.8	86.1	48.9	38.4	105.9
<b>Lending, total</b>														
<b>Change during quarter *</b>														
2021 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
Q4	+ 16.5	+ 17.2	+ 15.4	+ 14.8	+ 0.6	+ 8.9	+ 5.9	– 3.2	– 9.9	+ 1.4	– 2.7	– 0.6	+ 0.3	+ 10.2
<b>Short-term lending</b>														
2021 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
Q4	– 11.8	–	– 0.0	–	– 0.0	– 10.8	+ 0.1	– 4.3	– 12.3	– 0.3	– 0.5	– 0.3	– 0.3	+ 7.8
<b>Medium-term lending</b>														
2021 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
Q4	+ 9.3	–	+ 0.1	–	+ 0.1	+ 10.0	+ 0.5	+ 0.7	+ 0.5	+ 0.7	+ 0.9	– 0.1	+ 0.8	+ 1.9
<b>Long-term lending</b>														
2021 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
Q4	+ 19.0	+ 17.2	+ 15.3	+ 14.8	+ 0.5	+ 9.7	+ 5.3	+ 0.3	+ 1.9	+ 1.1	– 3.1	– 0.1	– 0.2	+ 0.5

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

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



IV. Banks

						Lending to employees and other individuals					Lending to non-profit institutions				
Services sector (including the professions)				Memo items:				Other lending							
of which:				Lending to self-employed persons <sup>2</sup>	Lending to craft enterprises	Total	Housing loans	of which:			Total	of which: Housing loans	Period		
Total	Housing enterprises	Holding companies	Other real estate activities					Total	Instalment loans <sup>3</sup>	Debit balances on wage, salary and pension accounts					
<b>End of year or quarter *</b>													<b>Lending, total</b>		
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		
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	2021 Q4		
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 Q1		
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	Q2		
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	Q3		
957.4	334.0	79.9	218.2	501.7	54.1	1,495.8	1,260.1	235.7	185.9	7.1	17.3	4.6	Q4		
													<b>Short-term lending</b>		
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		
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	2021 Q4		
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 Q1		
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	Q2		
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	Q3		
73.0	16.1	15.6	10.8	20.4	5.0	29.9	2.4	27.5	1.7	7.1	0.6	-	Q4		
													<b>Medium-term lending</b>		
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		
97.0	23.1	15.2	27.1	30.0	3.3	74.4	19.8	54.6	50.6	-	0.6	0.1	2021 Q4		
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 Q1		
99.8	24.1	17.1	26.6	29.9	3.2	72.5	19.8	52.7	48.6	-	0.5	0.1	Q2		
103.6	25.2	17.7	27.5	30.4	6.4	73.0	20.1	52.9	48.7	-	0.5	0.1	Q3		
108.2	25.4	20.1	28.4	30.1	6.5	72.3	19.8	52.5	48.0	-	0.6	0.1	Q4		
													<b>Long-term lending</b>		
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		
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	2021 Q4		
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 Q1		
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	Q2		
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	Q3		
776.2	292.6	44.2	179.0	451.1	42.6	1,393.5	1,237.9	155.6	136.2	-	16.1	4.6	Q4		
<b>Change during quarter *</b>													<b>Lending, total</b>		
+ 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	2021 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		
+ 13.3	+ 4.9	+ 3.5	+ 2.4	+ 2.1	- 0.1	+ 7.5	+ 9.5	- 2.0	- 1.3	- 0.4	+ 0.2	+ 0.0	Q4		
													<b>Short-term lending</b>		
+ 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	2021 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		
- 0.6	+ 0.2	+ 0.7	- 0.3	- 0.1	- 0.2	- 0.9	- 0.1	- 0.8	- 0.0	- 0.4	- 0.1	- 0.0	Q4		
													<b>Medium-term lending</b>		
+ 1.7	+ 1.3	+ 1.4	- 0.4	- 0.4	- 0.1	- 1.3	- 0.1	- 1.1	- 1.3	-	+ 0.0	+ 0.0	2021 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		
+ 4.6	+ 0.1	+ 2.4	+ 0.8	+ 0.1	+ 0.1	- 0.7	- 0.3	- 0.4	- 0.6	-	+ 0.0	- 0.0	Q4		
													<b>Long-term lending</b>		
+ 13.6	+ 7.2	+ 0.4	+ 2.7	+ 6.2	+ 0.1	+ 20.4	+ 19.9	+ 0.5	+ 1.2	-	+ 0.3	+ 0.0	2021 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		
+ 9.3	+ 4.6	+ 0.5	+ 1.9	+ 2.1	+ 0.1	+ 9.1	+ 9.9	- 0.9	- 0.7	-	+ 0.2	+ 0.1	Q4		

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

#### IV. Banks

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

€ billion

Period	Deposits, total	Sight deposits	Time deposits 1,2					Savings deposits 3	Bank savings bonds 4	Memo item:				
			Total	for up to and including 1 year	for more than 1 year 2					Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities)	Liabilities arising from repos		
					Total	for up to and including 2 years	for more than 2 years							
<b>Domestic non-banks, total</b>													<b>End of year or month *</b>	
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		
2022	4,162.0	2,720.6	873.5	314.8	558.7	50.5	508.2	533.2	34.6	35.9	18.5	3.9		
2022 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		
Dec.	4,162.0	2,720.6	873.5	314.8	558.7	50.5	508.2	533.2	34.6	35.9	18.5	3.9		
2023 Jan.	4,199.7	2,722.8	913.5	351.2	562.3	52.1	510.2	522.7	40.6	36.9	18.6	2.1		
Feb.	4,197.1	2,687.7	947.9	381.5	566.4	54.2	512.3	516.0	45.5	37.2	18.7	2.9		
<b>Changes *</b>													<b>End of year or month *</b>	
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		
2022	+ 191.8	+ 65.8	+ 143.4	+ 152.5	- 9.1	+ 0.6	- 9.7	- 27.5	+ 10.1	+ 1.7	+ 1.2	+ 2.6		
2022 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	+ 20.9	+ 26.3	+ 18.7	+ 7.7	+ 1.3	+ 6.4	- 5.3	+ 3.4	+ 1.3	+ 0.1	+ 2.9		
Dec.	- 43.4	- 47.1	+ 4.2	+ 5.2	- 1.0	+ 3.7	- 4.7	- 3.7	+ 3.2	+ 1.1	+ 0.0	- 0.6		
2023 Jan.	+ 37.6	- 2.9	+ 40.0	+ 36.4	+ 3.6	+ 1.6	+ 2.0	- 5.5	+ 6.0	+ 1.0	+ 0.1	- 1.8		
Feb.	- 2.5	- 35.0	+ 34.4	+ 30.3	+ 4.1	+ 2.1	+ 2.0	- 6.7	+ 4.8	+ 0.4	+ 0.1	+ 0.8		
<b>Domestic government</b>													<b>End of year or month *</b>	
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		
2022	279.8	82.5	191.6	106.8	84.9	23.1	61.7	2.0	3.7	27.3	1.9	2.4		
2022 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.	304.5	106.0	192.8	109.6	83.2	20.8	62.4	2.1	3.7	26.6	1.9	2.4		
Dec.	279.8	82.5	191.6	106.8	84.9	23.1	61.7	2.0	3.7	27.3	1.9	2.4		
2023 Jan.	299.4	94.5	199.3	114.4	84.9	23.1	61.8	1.8	3.8	27.5	1.9	0.3		
Feb.	317.8	101.4	211.0	123.3	87.6	23.9	63.8	1.7	3.8	27.5	1.9	1.3		
<b>Changes *</b>													<b>End of year or month *</b>	
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		
2022	+ 69.1	+ 0.2	+ 69.2	+ 64.7	+ 4.5	- 0.9	+ 5.4	- 0.6	+ 0.3	+ 1.5	- 0.1	+ 1.4		
2022 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	+ 0.2	- 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.	+ 33.0	+ 19.2	+ 13.9	+ 8.3	+ 5.6	+ 1.0	+ 4.6	- 0.2	+ 0.1	+ 0.8	- 0.0	+ 2.4		
Dec.	- 24.7	- 23.5	- 1.1	- 2.8	+ 1.7	+ 2.4	- 0.7	- 0.1	- 0.0	+ 0.7	- 0.0	-		
2023 Jan.	+ 19.7	+ 11.9	+ 7.7	+ 7.6	+ 0.1	- 0.1	+ 0.1	- 0.1	+ 0.2	+ 0.2	- 0.0	- 2.1		
Feb.	+ 18.3	+ 6.8	+ 11.6	+ 8.9	+ 2.7	+ 0.8	+ 1.9	- 0.1	- 0.1	+ 0.0	- 0.0	+ 1.1		

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

1 Including subordinated liabilities and liabilities arising from registered debt 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					Savings deposits 3	Bank savings bonds 4	Memo item:				
			Total	for up to and including 1 year	for more than 1 year 2					Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities)	Liabilities arising from repos		
					Total	for up to and including 2 years	for more than 2 years							
<b>Domestic enterprises and households</b>													<b>End of year or month *</b>	
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		
2022	3,882.2	2,638.1	681.9	208.0	473.9	27.4	446.5	531.2	31.0	8.6	16.6	1.5		
2022 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	2,650.9	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.	3,901.1	2,661.9	676.5	200.0	476.5	26.0	450.5	534.8	27.8	8.3	16.4	2.1		
Dec.	3,882.2	2,638.1	681.9	208.0	473.9	27.4	446.5	531.2	31.0	8.6	16.6	1.5		
2023 Jan.	3,900.2	2,628.3	714.2	236.8	477.4	29.0	448.4	520.9	36.8	9.4	16.7	1.9		
Feb.	3,879.3	2,586.4	737.0	258.2	478.8	30.3	448.5	514.3	41.7	9.7	16.8	1.6		
<b>Changes *</b>														
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		
2022	+ 122.7	+ 65.6	+ 74.2	+ 87.8	- 13.6	+ 1.4	- 15.1	- 27.0	+ 9.8	+ 0.2	+ 1.3	+ 1.3		
2022 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.	+ 12.2	+ 1.7	+ 12.4	+ 10.3	+ 2.1	+ 0.3	+ 1.8	- 5.1	+ 3.3	+ 0.4	+ 0.1	+ 0.5		
Dec.	- 18.7	- 23.7	+ 5.4	+ 8.0	- 2.7	+ 1.4	- 4.0	- 3.6	+ 3.2	+ 0.3	+ 0.0	- 0.6		
2023 Jan.	+ 17.9	- 14.9	+ 32.3	+ 28.7	+ 3.6	+ 1.7	+ 1.9	- 5.3	+ 5.8	+ 0.8	+ 0.1	+ 0.3		
Feb.	- 20.8	- 41.9	+ 22.8	+ 21.4	+ 1.4	+ 1.3	+ 0.1	- 6.6	+ 4.9	+ 0.3	+ 0.2	- 0.3		
<b>of which: Domestic enterprises</b>													<b>End of year or month *</b>	
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		
2022	1,193.5	783.4	397.1	140.8	256.3	16.8	239.5	4.4	8.6	1.9	13.5	1.5		
2022 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.	1,223.9	805.3	405.5	144.1	261.4	16.2	245.1	4.7	8.4	1.9	13.3	2.1		
Dec.	1,193.5	783.4	397.1	140.8	256.3	16.8	239.5	4.4	8.6	1.9	13.5	1.5		
2023 Jan.	1,220.2	792.5	414.7	156.8	257.9	17.1	240.8	4.3	8.7	2.0	13.5	1.9		
Feb.	1,199.2	761.5	424.4	166.8	257.6	17.0	240.6	4.3	9.1	2.0	13.6	1.6		
<b>Changes *</b>														
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		
2022	+ 56.2	+ 17.7	+ 38.8	+ 52.1	- 13.3	+ 1.0	- 14.3	- 0.9	+ 0.6	- 0.5	+ 1.0	+ 1.3		
2022 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	- 0.1	- 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.	- 0.5	- 2.3	+ 1.7	+ 0.3	+ 1.4	- 0.3	+ 1.7	- 0.1	+ 0.2	+ 0.0	- 0.0	+ 0.5		
Dec.	- 30.3	- 21.7	- 8.5	- 3.3	- 5.2	+ 0.6	- 5.7	- 0.3	+ 0.2	- 0.1	- 0.0	- 0.6		
2023 Jan.	+ 26.5	+ 9.0	+ 17.4	+ 15.9	+ 1.5	+ 0.3	+ 1.3	- 0.1	+ 0.1	+ 0.1	+ 0.0	+ 0.3		
Feb.	- 21.0	- 31.0	+ 9.7	+ 10.0	- 0.4	- 0.1	- 0.3	- 0.0	+ 0.4	- 0.0	+ 0.1	- 0.3		

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

#### IV. Banks

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

€ billion

Period	Sight deposits							Time deposits 1,2					
	Deposits of domestic households and non-profit institutions, total	by creditor group						Total	by creditor group				
		Domestic households					Domestic non-profit institutions		Domestic households				
		Total	Self-employed persons	Employees	Other individuals	Total			Self-employed persons	Employees	Other individuals		
	<b>End of year or month *</b>												
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	2,688.7	1,854.7	1,809.9	307.3	1,342.5	160.1	44.8	284.8	268.7	31.2	200.5	37.1	
2022 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	
Dec.	2,688.7	1,854.7	1,809.9	307.3	1,342.5	160.1	44.8	284.8	268.7	31.2	200.5	37.1	
2023 Jan.	2,680.0	1,835.8	1,791.8	305.3	1,329.4	157.1	44.0	299.5	282.9	34.5	210.1	38.3	
Feb.	2,680.1	1,824.9	1,780.9	300.0	1,325.3	155.6	44.0	312.6	295.4	38.1	218.1	39.2	
	<b>Changes *</b>												
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	+ 66.5	+ 48.0	+ 47.8	- 1.5	+ 54.1	- 4.7	+ 0.1	+ 35.4	+ 31.4	+ 12.9	+ 17.2	+ 1.2	
2022 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	
Dec.	+ 11.6	- 2.0	- 2.4	- 4.9	+ 2.3	+ 0.3	+ 0.4	+ 13.8	+ 11.9	+ 3.8	+ 6.8	+ 1.3	
2023 Jan.	- 8.6	- 23.9	- 23.1	- 1.9	- 18.1	- 3.0	- 0.8	+ 14.9	+ 14.2	+ 3.4	+ 9.6	+ 1.2	
Feb.	+ 0.1	- 10.9	- 10.9	- 5.3	- 4.1	- 1.5	- 0.0	+ 13.1	+ 12.5	+ 3.6	+ 8.0	+ 0.9	

\* See Table IV.2, footnote \*: statistical breaks have been eliminated from the changes. 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		
	<b>End of year or month *</b>												
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	279.8	66.8	7.9	24.2	34.6	0.1	11.4	53.8	17.1	25.2	10.9	0.5	15.9
2022 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.	304.5	71.1	14.6	21.3	35.1	0.1	11.5	63.3	24.0	28.5	10.4	0.5	15.0
Dec.	279.8	66.8	7.9	24.2	34.6	0.1	11.4	53.8	17.1	25.2	10.9	0.5	15.9
2023 Jan.	299.4	73.8	15.5	23.7	34.6	0.0	11.4	65.6	22.2	31.3	11.6	0.5	16.1
Feb.	317.8	82.5	16.4	29.5	36.6	0.0	11.4	70.3	24.2	34.2	11.4	0.5	16.1
	<b>Changes *</b>												
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	+ 69.1	+ 23.0	+ 3.5	+ 20.9	- 1.4	- 0.0	- 0.3	+ 6.4	- 4.6	+ 11.3	- 0.3	- 0.1	+ 1.8
2022 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	+ 0.0
Nov.	+ 33.0	+ 25.8	+ 8.2	+ 12.7	+ 4.9	-	- 0.0	- 3.8	+ 4.6	- 8.3	- 0.1	+ 0.0	+ 0.8
Dec.	- 24.7	- 4.3	- 6.7	+ 2.9	- 0.5	- 0.0	- 0.2	- 9.6	- 6.8	- 3.3	+ 0.6	- 0.0	+ 0.9
2023 Jan.	+ 19.7	+ 6.9	+ 7.5	- 0.6	- 0.0	- 0.0	+ 0.0	+ 11.9	+ 5.1	+ 6.1	+ 0.7	+ 0.0	+ 0.1
Feb.	+ 18.3	+ 8.7	+ 0.9	+ 5.8	+ 2.0	- 0.0	+ 0.0	+ 4.7	+ 2.0	+ 2.9	- 0.2	- 0.0	+ 0.0

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

IV. Banks

					Savings deposits <sup>3</sup>			Memo item:				
by maturity					Total	Domestic households	Domestic non-profit institutions	Bank savings bonds <sup>4</sup>	Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities) <sup>5</sup>	Liabilities arising from repos	Period
Domestic non-profit institutions	up to and including 1 year	more than 1 year <sup>2</sup>										
		Total	of which:									
		up to and including 2 years	more than 2 years									
<b>End of year or month *</b>												
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
16.0	67.2	217.5	10.6	206.9	526.8	521.8	5.1	22.4	6.8	3.1	–	2022
13.7	41.3	214.4	8.9	205.5	537.9	532.3	5.6	14.3	5.6	3.0	–	2022 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.
16.0	67.2	217.5	10.6	206.9	526.8	521.8	5.1	22.4	6.8	3.1	–	Dec.
16.6	80.0	219.5	12.0	207.5	516.6	511.7	4.9	28.1	7.4	3.2	–	2023 Jan.
17.2	91.4	221.3	13.3	207.9	510.0	505.2	4.8	32.6	7.8	3.2	–	Feb.
<b>Changes *</b>												
– 1.4	– 8.4	– 0.2	– 1.9	+ 1.6	+ 1.4	+ 1.5	– 0.1	– 1.9	– 0.6	+ 0.2	–	2021
+ 4.0	+ 35.7	– 0.3	+ 0.5	– 0.8	– 26.1	– 25.0	– 1.1	+ 9.2	+ 0.7	+ 0.3	–	2022
+ 0.6	+ 6.8	+ 0.0	+ 0.2	– 0.1	– 5.2	– 5.1	– 0.1	+ 0.8	+ 0.0	+ 0.0	–	2022 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.
+ 1.9	+ 11.3	+ 2.5	+ 0.8	+ 1.7	– 3.2	– 3.1	– 0.2	+ 3.0	+ 0.4	+ 0.0	–	Dec.
+ 0.7	+ 12.8	+ 2.1	+ 1.4	+ 0.6	– 5.3	– 5.0	– 0.2	+ 5.7	+ 0.7	+ 0.1	–	2023 Jan.
+ 0.6	+ 11.3	+ 1.8	+ 1.4	+ 0.4	– 6.6	– 6.5	– 0.1	+ 4.5	+ 0.3	+ 0.0	–	Feb.

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

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

Local government and local government associations (including municipal special-purpose associations)						Social security funds						
Total	Sight deposits	Time deposits <sup>3</sup>		Savings deposits and bank savings bonds <sup>2,4</sup>	Memo item: Fiduciary loans	Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds <sup>2</sup>	Memo item: Fiduciary loans	Period
		for up to and including 1 year	for more than 1 year					for up to and including 1 year	for more than 1 year			
<b>End of year or month *</b>												
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
80.0	49.2	12.5	13.8	4.4	0.0	79.2	8.3	44.9	25.5	0.6	–	2022
72.1	45.0	9.5	13.2	4.4	0.0	86.5	15.5	46.3	23.9	0.7	–	2022 Sep.
70.1	42.7	9.6	13.3	4.5	0.0	89.0	18.6	46.3	23.4	0.7	–	Oct.
75.4	46.1	11.3	13.6	4.5	0.0	94.6	21.4	48.6	24.0	0.6	–	Nov.
80.0	49.2	12.5	13.8	4.4	0.0	79.2	8.3	44.9	25.5	0.6	–	Dec.
71.4	39.5	13.6	13.9	4.4	0.0	88.8	17.3	45.9	24.8	0.7	–	2023 Jan.
76.6	42.9	15.4	14.0	4.3	0.0	88.5	17.9	44.3	25.7	0.7	–	Feb.
<b>Changes *</b>												
+ 2.8	+ 5.6	– 2.0	– 0.2	– 0.5	–	– 16.8	– 2.2	– 13.9	– 0.6	+ 0.1	–	2021
+ 10.2	+ 0.9	+ 7.9	+ 1.3	+ 0.1	–	+ 29.6	+ 0.3	+ 24.5	+ 4.9	– 0.2	–	2022
– 4.1	– 3.9	+ 0.4	– 0.6	+ 0.0	–	– 0.2	– 3.1	+ 1.6	+ 1.3	–	–	2022 Sep.
– 2.0	– 2.3	+ 0.1	+ 0.2	+ 0.0	–	+ 2.5	+ 3.1	+ 0.0	– 0.6	– 0.0	–	Oct.
+ 5.4	+ 3.5	+ 1.7	+ 0.1	+ 0.0	–	+ 5.6	+ 2.8	+ 2.3	+ 0.7	– 0.1	–	Nov.
+ 4.5	+ 3.1	+ 1.3	+ 0.2	– 0.1	–	– 15.4	– 13.1	– 3.7	+ 1.5	– 0.0	–	Dec.
– 8.7	– 9.7	+ 1.1	+ 0.0	– 0.0	–	+ 9.5	+ 9.1	+ 1.1	– 0.6	+ 0.0	–	2023 Jan.
+ 5.2	+ 3.4	+ 1.8	+ 0.1	– 0.1	–	– 0.3	+ 0.5	– 1.6	+ 0.8	– 0.0	–	Feb.

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

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

#### IV. Banks

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

€ billion

Period	Savings deposits <sup>1</sup>								Memo item: Interest credited on savings deposits	Bank savings bonds, <sup>3</sup> sold to			
	of residents				of non-residents					non-banks, total	domestic non-banks		foreign non-banks
	Total	Total	at 3 months' notice		at more than 3 months' notice		Total	of which: At 3 months' notice			Total	of which: With maturities of more than 2 years	
			Total	of which: Special savings facilities <sup>2</sup>	Total	of which: Special savings facilities <sup>2</sup>							
<b>End of year or month *</b>													
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	538.5	533.2	510.3	254.2	22.9	14.2	5.3	4.8	1.4	34.9	34.6	20.8	0.2
2022 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
Dec.	538.5	533.2	510.3	254.2	22.9	14.2	5.3	4.8	0.7	34.9	34.6	20.8	0.2
2023 Jan.	527.9	522.7	498.8	237.1	23.9	15.5	5.2	4.7	0.1	40.9	40.6	21.5	0.3
Feb.	521.1	516.0	490.9	233.4	25.1	16.7	5.1	4.6	0.1	45.8	45.5	22.1	0.3
<b>Changes *</b>													
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	- 28.1	- 27.5	- 26.4	- 14.6	- 1.2	- 0.6	- 0.6	- 0.6	.	+ 10.2	+ 10.1	+ 1.3	+ 0.1
2022 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
Dec.	- 3.7	- 3.7	- 4.1	+ 3.9	+ 0.4	+ 0.4	- 0.1	- 0.1	.	+ 3.2	+ 3.2	+ 0.4	+ 0.0
2023 Jan.	- 5.6	- 5.5	- 6.5	- 12.6	+ 1.0	+ 1.2	- 0.1	- 0.1	.	+ 6.0	+ 6.0	+ 0.7	+ 0.0
Feb.	- 6.8	- 6.7	- 7.9	- 3.8	+ 1.2	+ 1.3	- 0.1	- 0.1	.	+ 4.9	+ 4.8	+ 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. <sup>1</sup> Excluding deposits under savings and loan contracts, which are classified as time

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

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

€ billion

Period	Negotiable bearer debt securities and money market paper										Non-negotiable bearer debt securities and money market paper <sup>6</sup>		Subordinated	
	Total	of which:				with maturities of				Total	of which: with maturities of more than 2 years	negotiable debt securities	non-negotiable debt securities	
		Floating rate bonds <sup>1</sup>	Zero coupon bonds <sup>1,2</sup>	Foreign currency bonds <sup>3,4</sup>	Certificates of deposit	up to and including 1 year		more than 1 year up to and including 2 years						more than 2 years
						Total	of which: without a nominal guarantee <sup>5</sup>	Total	of which: without a nominal guarantee <sup>5</sup>					
<b>End of year or month *</b>														
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	1,231.5	92.8	15.0	307.8	88.6	98.6	1.4	26.6	3.4	1,106.4	0.8	0.7	37.8	0.1
2022 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
Dec.	1,231.5	92.8	15.0	307.8	88.6	98.6	1.4	26.6	3.4	1,106.4	0.8	0.7	37.8	0.1
2023 Jan.	1,249.7	91.3	15.6	305.4	89.9	101.3	1.3	28.4	3.5	1,120.0	0.9	0.8	37.8	0.1
Feb.	1,258.2	94.2	14.2	300.3	84.7	98.4	1.4	31.9	3.6	1,127.9	0.9	0.8	38.0	0.1
<b>Changes *</b>														
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	+ 59.1	- 12.7	+ 1.1	- 23.6	- 9.9	- 8.3	- 0.5	+ 8.5	- 1.1	+ 58.9	- 0.1	+ 0.1	+ 3.5	-
2022 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	-
Dec.	- 22.2	- 0.7	+ 0.2	- 15.6	- 7.3	- 6.8	- 0.3	+ 0.2	- 0.3	- 15.6	- 0.1	- 0.1	- 0.3	-
2023 Jan.	+ 18.2	- 1.6	+ 0.6	- 2.4	+ 1.3	+ 2.8	- 0.1	+ 1.9	+ 0.1	+ 13.6	+ 0.0	+ 0.1	- 0.0	-
Feb.	+ 8.5	+ 3.0	- 0.2	- 5.1	- 6.5	- 2.9	+ 0.0	+ 3.4	+ 0.1	+ 7.9	+ 0.0	+ 0.0	+ 0.3	-

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

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

#### IV. Banks

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

€ billion

End of year/month	Number of associations	Balance sheet total <sup>1</sup>	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)				Deposits of banks (MFIs) <sup>6</sup>		Deposits of non-banks (non-MFIs)		Bearer debt securities outstanding	Capital (including published reserves) <sup>8</sup>	Memo item: New contracts entered into in year or month <sup>9</sup>
			Credit balances and loans (excluding building loans) <sup>2</sup>	Building loans <sup>3</sup>	Bank debt securities <sup>4</sup>	Building loans			Securities (including Treasury bills and Treasury discount paper) <sup>5</sup>	Deposits under savings and loan contracts	Sight and time deposits	Deposits under savings and loan contracts	Sight and time deposits <sup>7</sup>			
						Loans under savings and loan contracts	Interim and bridging loans	Other building loans								
<b>All building and loan associations</b>																
2022	18	259.7	30.6	0.0	15.4	11.1	135.0	40.5	22.9	2.5	36.1	185.3	9.3	5.2	12.3	91.3
2022 Dec.	18	259.7	30.6	0.0	15.4	11.1	135.0	40.5	22.9	2.5	36.1	185.3	9.3	5.2	12.3	10.3
2023 Jan.	18	260.0	31.2	0.0	15.3	11.4	134.8	40.5	22.8	2.4	35.6	185.6	9.6	5.6	12.4	9.1
Feb.	18	260.7	31.6	0.0	15.5	11.7	134.8	40.3	22.8	2.3	35.7	185.6	9.7	6.1	12.4	8.8
<b>Private building and loan associations</b>																
2022 Dec.	10	183.1	16.0	–	7.6	8.0	105.1	34.4	9.4	1.4	33.3	119.9	8.9	5.2	8.3	7.0
2023 Jan.	10	183.3	16.5	0.0	7.7	8.2	104.8	34.5	9.2	1.4	32.9	120.0	9.2	5.6	8.5	6.0
Feb.	10	184.0	17.0	0.0	7.8	8.3	104.8	34.3	9.2	1.2	33.1	119.9	9.3	6.1	8.5	6.1
<b>Public building and loan associations</b>																
2022 Dec.	8	76.6	14.6	0.0	7.8	3.1	30.0	6.0	13.5	1.1	2.8	65.4	0.4	–	3.9	3.3
2023 Jan.	8	76.6	14.7	0.0	7.7	3.2	30.0	6.1	13.6	1.0	2.7	65.6	0.3	–	3.9	3.1
Feb.	8	76.7	14.6	0.0	7.7	3.3	30.0	6.0	13.6	1.0	2.6	65.7	0.3	–	3.9	2.7

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

€ billion

Period	Changes in deposits under savings and loan contracts			Capital promised		Capital disbursed					Disbursement commitments outstanding at end of period		Interest and repayments received on building loans <sup>11</sup>		Memo item: Housing bonuses received <sup>13</sup>	
	Amounts paid into savings and loan accounts <sup>10</sup>	Interest credited on deposits under savings and loan contracts	Repayments of deposits under cancelled savings and loan contracts	Total	of which: Net allocations <sup>12</sup>	Total	Allocations			Newly granted interim and bridging loans and other building loans	Total	of which: Under allocated contracts	Total	of which: Repayments during quarter		
							Deposits under savings and loan contracts		Loans under savings and loan contracts <sup>10</sup>							
							Total	of which: Applied to settlement of interim and bridging loans	Total							of which: Applied to settlement of interim and bridging loans
<b>All building and loan associations</b>																
2022	27.5	2.0	8.7	51.5	30.7	48.5	20.2	4.1	5.3	3.8	23.0	16.4	6.7	5.4	4.1	0.2
2022 Dec.	2.5	1.4	0.6	3.6	2.8	3.9	1.8	0.3	0.5	0.3	1.5	16.4	6.7	0.4	1.0	0.0
2023 Jan.	2.5	0.0	0.6	3.5	2.8	3.7	1.7	0.3	0.6	0.4	1.3	15.8	6.7	0.4	.	0.0
Feb.	2.3	0.1	0.5	4.0	3.1	3.8	2.0	0.3	0.5	0.3	1.2	15.5	6.9	0.4	.	0.0
<b>Private building and loan associations</b>																
2022 Dec.	1.6	0.9	0.3	2.6	1.9	2.9	1.3	0.3	0.4	0.3	1.2	11.5	3.6	0.3	0.8	0.0
2023 Jan.	1.6	0.0	0.3	2.5	2.0	2.7	1.3	0.3	0.4	0.3	1.0	11.0	3.7	0.3	.	0.0
Feb.	1.5	0.0	0.3	2.8	2.1	2.9	1.5	0.2	0.4	0.3	1.0	10.6	3.7	0.3	.	0.0
<b>Public building and loan associations</b>																
2022 Dec.	0.8	0.5	0.2	1.0	0.9	1.0	0.5	0.1	0.2	0.1	0.3	4.9	3.1	0.1	0.3	0.0
2023 Jan.	0.8	0.0	0.2	1.0	0.8	0.9	0.5	0.1	0.2	0.1	0.3	4.8	3.1	0.1	.	0.0
Feb.	0.8	0.0	0.2	1.2	1.0	0.9	0.5	0.1	0.2	0.1	0.3	4.9	3.2	0.1	.	0.0

\* Excluding assets and liabilities and/or transactions of foreign branches. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** 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

Period	Number of		Balance sheet total 7	Lending to banks (MFIs)					Lending to non-banks (non-MFIs)					Other assets 7	
	German banks (MFIs) with foreign branches and/or foreign subsidiaries	foreign branches 1 and/or foreign subsidiaries		Total	Credit balances and loans			Money market paper, securities 2,3	Total	Loans			Money market paper, securities 2	Total	of which: Derivative financial instruments in the trading portfolio
					Total	German banks	Foreign banks			Total	Total	to German non-banks			
<b>Foreign branches</b>															
<b>End of year or month *</b>															
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	47	202	1,625.5	461.8	447.4	315.6	131.8	14.4	516.7	447.7	9.7	437.9	69.0	647.0	513.3
2022 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	207	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
Nov.	50	207	1,757.8	511.2	498.6	347.3	151.3	12.6	548.7	475.2	10.5	464.7	73.6	697.9	526.6
Dec.	47	202	1,625.5	461.8	447.4	315.6	131.8	14.4	516.7	447.7	9.7	437.9	69.0	647.0	513.3
2023 Jan.	47	201	1,638.4	503.3	488.3	346.1	142.2	14.9	510.1	439.4	9.5	429.9	70.7	625.0	462.3
<b>Changes *</b>															
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	- 4	- 5	+ 124.1	- 13.3	- 14.3	+ 17.8	- 32.1	+ 1.0	+ 6.7	+ 17.5	- 3.2	+ 20.6	- 10.8	+ 108.1	+ 103.0
2022 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	- 1	- 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
Nov.	± 0	-	- 113.5	- 17.9	- 17.5	- 12.4	- 5.0	- 0.4	- 0.4	- 0.8	- 0.8	- 0.0	+ 0.5	- 78.3	- 97.0
Dec.	- 3	- 5	- 131.0	- 46.9	- 48.7	- 31.7	- 17.0	+ 1.8	- 23.6	- 19.9	- 0.7	- 19.2	- 3.7	- 49.6	- 11.9
2023 Jan.	± 0	- 1	+ 13.3	+ 42.5	+ 42.0	+ 30.5	+ 11.5	+ 0.5	- 2.7	- 4.8	- 0.3	- 4.6	+ 2.1	- 21.6	- 50.4
<b>Foreign subsidiaries</b>															
<b>End of year or month *</b>															
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	11	32	256.7	61.5	52.0	20.5	31.4	9.5	145.8	124.5	13.3	111.2	21.3	49.4	0.0
2022 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
Nov.	11	33	258.2	58.1	49.5	19.4	30.1	8.6	148.4	127.0	13.4	113.6	21.4	51.7	0.0
Dec.	11	32	256.7	61.5	52.0	20.5	31.4	9.5	145.8	124.5	13.3	111.2	21.3	49.4	0.0
2023 Jan.	11	32	253.0	60.0	49.9	20.0	29.9	10.1	145.3	124.5	13.3	111.3	20.7	47.8	0.0
<b>Changes *</b>															
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	- 1	- 3	+ 6.5	+ 8.2	+ 5.2	- 0.2	+ 5.6	+ 2.8	+ 5.0	+ 6.9	+ 0.7	+ 6.3	- 1.9	- 6.5	± 0.0
2022 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	+ 0.3	+ 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
Nov.	-	-	+ 1.7	+ 5.4	+ 2.6	+ 0.1	+ 2.6	+ 2.8	+ 0.7	+ 1.4	+ 0.1	+ 1.2	- 0.7	- 4.4	± 0.0
Dec.	-	- 1	+ 0.2	+ 4.1	+ 3.0	+ 1.2	+ 1.8	+ 1.1	- 1.7	- 1.6	- 0.2	- 1.5	- 0.0	- 2.2	± 0.0
2023 Jan.	-	-	- 2.7	- 1.0	- 1.7	- 0.6	- 1.2	+ 0.7	- 0.0	+ 0.6	- 0.0	+ 0.6	- 0.6	- 1.6	± 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												Other liabilities 6,7		Period
of banks (MFIs)				of non-banks (non-MFIs)					Money market paper and debt securities outstanding 5	Working capital and own funds	Total	of which: Derivative financial instruments in the trading portfolio		
Total	Total	German banks	Foreign banks	Total	German non-banks 4			Foreign non-banks						
					Total	Shortterm	Medium and longterm							
<b>End of year or month *</b>													<b>Foreign branches</b>	
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	
943.4	573.6	435.2	138.5	369.8	10.4	8.9	1.5	359.4	61.7	63.1	557.4	512.9	2022	
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	2022 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.	
1,041.1	639.9	457.8	182.1	401.2	10.2	8.6	1.6	391.0	82.6	65.5	568.6	523.8	Nov.	
943.4	573.6	435.2	138.5	369.8	10.4	8.9	1.5	359.4	61.7	63.1	557.4	512.9	Dec.	
985.2	595.5	432.8	162.6	389.7	9.5	8.3	1.2	380.2	85.2	63.2	504.8	462.6	2023 Jan.	
<b>Changes *</b>													<b>Foreign subsidiaries</b>	
+ 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	
- 6.2	- 64.2	- 22.2	- 42.0	+ 58.0	+ 2.3	+ 2.6	- 0.3	+ 55.7	- 6.3	+ 11.8	+ 119.0	+ 109.5	2022	
- 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	2022 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.	
- 7.9	- 0.5	- 8.8	+ 8.3	- 7.4	- 0.5	- 0.3	- 0.2	- 6.9	- 0.9	- 0.8	- 98.8	- 98.9	Nov.	
- 94.3	- 63.2	- 22.6	- 40.6	- 31.1	+ 0.2	+ 0.3	- 0.1	- 31.3	- 19.6	- 2.4	- 11.2	- 10.9	Dec.	
+ 43.3	+ 23.2	- 2.3	+ 25.5	+ 20.1	- 0.8	- 0.6	- 0.2	+ 20.9	+ 24.0	+ 0.1	- 52.5	- 50.3	2023 Jan.	
<b>End of year or month *</b>													<b>Foreign subsidiaries</b>	
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	
189.4	67.5	38.6	28.9	122.0	6.9	4.6	2.3	115.1	13.5	20.1	33.7	0.0	2022	
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	2022 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.	
190.2	68.8	38.7	30.1	121.5	7.1	4.8	2.3	114.4	13.1	20.4	34.4	0.0	Nov.	
189.4	67.5	38.6	28.9	122.0	6.9	4.6	2.3	115.1	13.5	20.1	33.7	0.0	Dec.	
186.2	66.7	38.5	28.2	119.6	7.0	4.5	2.5	112.6	12.8	20.1	33.9	0.0	2023 Jan.	
<b>Changes *</b>													<b>Foreign subsidiaries</b>	
+ 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	
+ 7.7	+ 1.4	+ 5.6	- 4.2	+ 6.3	- 0.4	- 0.3	- 0.1	+ 6.7	- 2.9	- 0.2	+ 2.2	± 0.0	2022	
+ 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	2022 May	
- 1.5	- 2.0	- 0.4	- 1.6	+ 0.4	+ 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.	
+ 2.7	+ 0.6	+ 1.2	- 0.6	+ 2.1	- 0.3	- 0.3	- 0.0	+ 2.4	- 0.7	+ 0.1	- 0.4	± 0.0	Nov.	
+ 0.4	- 0.9	- 0.1	- 0.8	+ 1.3	- 0.2	- 0.2	+ 0.0	+ 1.5	+ 0.3	- 0.2	- 0.3	± 0.0	Dec.	
- 2.6	- 0.6	- 0.1	- 0.5	- 2.0	+ 0.1	- 0.1	+ 0.2	- 2.1	- 0.7	+ 0.0	+ 0.5	± 0.0	2023 Jan.	

domicile are regarded as a single branch. 2 Treasury bills, Treasury discount paper and other money market paper, debt securities. 3 Including own debt securities. 4 Excluding subordinated liabilities and non-negotiable debt securities. 5 Issues of negotiable and

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

## V. Minimum reserves

### 1. Reserve maintenance in the euro area

€ billion

Maintenance period beginning in <sup>1</sup>	Reserve base <sup>2</sup>	Required reserves before deduction of lump-sum allowance <sup>3</sup>	Required reserves after deduction of lump-sum allowance <sup>4</sup>	Current accounts <sup>5</sup>	Excess reserves (without deposit facility) <sup>6</sup>	Deficiencies <sup>7</sup>
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	16,843.0	168.4	168.0	195.6	28.1	0.0
2023 Jan.	.	.	.	.	.	.
Feb.	16,497.9	165.0	164.6	191.1	26.4	0.0
Mar. <sup>p</sup>	16,616.9	166.2	165.8	...	...	...

### 2. Reserve maintenance in Germany

€ billion

Maintenance period beginning in <sup>1</sup>	Reserve base <sup>2</sup>	German share of euro area reserve base as a percentage	Required reserves before deduction of lump-sum allowance <sup>3</sup>	Required reserves after deduction of lump-sum allowance <sup>4</sup>	Current accounts <sup>5</sup>	Excess reserves (without deposit facility) <sup>6</sup>	Deficiencies <sup>7</sup>
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	4,664,630	27.7	46,646	46,512	54,848	8,337	5
2023 Jan.	.	.	.	.	.	.	.
Feb.	4,465,360	27.1	44,654	44,519	54,170	9,651	1
Mar. <sup>p</sup>	4,561,926	27.5	45,619	45,485	...	...	...

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

€ billion

Maintenance period beginning in <sup>1</sup>	Big banks	Regional banks and other commercial banks	Branches of foreign banks	Landesbanken and savings banks	Credit cooperatives	Mortgage banks	Banks with special, development and other central support tasks
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	9,814	7,396	3,216	14,465	8,295	117	2,471
2023 Jan.	.	.	.	.	.	.	.
Feb.	9,341	6,898	3,064	13,926	8,356	111	2,343
Mar.	9,464	7,045	3,130	14,526	8,291	116	2,468

### b) Reserve base by subcategories of liabilities

€ billion

Maintenance period beginning in <sup>1</sup>	Liabilities (excluding savings deposits, deposits with building and loan associations and repos) to non-MFIs with agreed maturities of up to 2 years	Liabilities (excluding repos and deposits with building and loan associations) with agreed maturities of up to 2 years to MFIs that are resident in euro area countries but not subject to minimum reserve requirements	Liabilities (excluding repos and deposits with building and loan associations) with agreed maturities of up to 2 years to banks in non-euro area countries	Savings deposits with agreed periods of notice of up to 2 years	Liabilities arising from bearer debt securities issued with agreed maturities of up to 2 years and bearer money market paper after deduction of a standard amount for bearer debt certificates or deduction of such paper held by the reporting institution
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	3,352,177	12,609	566,227	543,694	116,094
2023 Jan.	.	.	.	.	.
Feb.	3,335,658	15,268	425,253	534,846	106,281
Mar.	3,392,359	13,044	477,719	524,019	110,215

<sup>1</sup> The reserve maintenance period starts on the settlement day of the main refinancing operation immediately following the meeting of the Governing Council of the ECB for which the discussion on the monetary policy stance is scheduled. <sup>2</sup> Article 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)). <sup>3</sup> Amount after applying the reserve ratio to the reserve base. The reserve ratio for liabilities with agreed maturities of up to two years was 2%

between 1 January 1999 and 17 January 2012. Since 18 January 2012, it has stood at 1%. <sup>4</sup> Article 6(2) of the Regulation (EU) 2021/378 of the European Central Bank on the application of minimum reserve requirements. <sup>5</sup> Average credit balances of credit institutions at national central banks. <sup>6</sup> Average credit balances less required reserves after deduction of the lump-sum allowance. <sup>7</sup> Required reserves after deduction of the lump-sum allowance.

## VI. Interest rates

### 1. ECB interest rates / basic rates of interest

% per annum

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

### 2. Eurosystem monetary policy operations allotted through tenders \*

Date of Settlement	Bid amount € million	Allotment amount	Fixed rate tenders		Variable rate tenders			Running for ... days
			Fixed rate	% per annum	Minimum bid rate	Marginal rate 1	Weighted average rate	
<b>Main refinancing operations</b>								
2023 Mar. 1		821	821	3.00	–	–	–	7
Mar. 8		851	851	3.00	–	–	–	7
Mar. 15		977	977	3.00	–	–	–	7
Mar. 22		974	974	3.50	–	–	–	7
Mar. 29		1 710	1 710	3.50	–	–	–	7
Apr. 5		1 167	1 167	3.50	–	–	–	7
Apr. 12		1 622	1 622	3.50	–	–	–	7
Apr. 19		1 535	1 535	3.50	–	–	–	7
<b>Long-term refinancing operations</b>								
2023 Jan. 26		775	775	2 ...	–	–	–	91
Feb. 23		577	577	2 ...	–	–	–	98
Mar. 30		743	743	2 ...	–	–	–	91

\* Source: ECB. 1 Lowest or highest interest rate at which funds were allotted or collected. 2 Interest payment on the maturity date; the rate will be fixed at: 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	EURIBOR ® 2					
		One-week funds	One-month funds	Three-month funds	Six-month funds	Twelve-month funds	
2022 Aug.	–0.085						
Sep.	0.355		–0.07	0.02	0.40	0.84	
Oct.	0.656		0.42	0.57	1.01	1.60	
Nov.	1.368		0.70	0.92	1.43	2.00	
Dec.	1.568		1.38	1.42	1.83	2.32	
2023 Jan.	1.902		1.60	1.72	2.06	2.56	
Feb.	2.275		1.89	1.98	2.35	2.86	
Mar.	2.572		2.30	2.37	2.64	3.14	
			2.57	2.71	2.91	3.27	3.65

1 Euro Short-Term Rate: on the basis of individual euro-denominated transactions conducted and settled on the previous business day, the European Central Bank publishes the €STR since 2 October 2019. T Monthly averages are calculations by Deutsche Bundesbank. Transactions are reported by euro area banks subject to reporting obligations in compliance with Money Market Statistical Reporting Regulation.

2 Monthly averages are own calculations by Deutsche Bundesbank based on Euribor ® daily rates calculated by the European Money Markets Institute (EMMI). The monthly data are unweighted averages. Information on the methodology of Euribor ® daily rates administered by EMMI is available here: <https://www.emmi-benchmarks.eu/benchmarks/euribor/methodology/>

## VI. Interest rates

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

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

End of month	Households' deposits				Non-financial corporations' deposits			
	with an agreed maturity of							
	up to 2 years		over 2 years		up to 2 years		over 2 years	
	Effective interest rate 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
2022 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	218,426	1.13	121,576	1.00	23,542
Dec.	1.16	84,147	0.86	220,466	1.39	123,678	1.02	22,605
2023 Jan.	1.37	103,036	0.87	221,773	1.67	131,363	1.05	23,299
Feb.	1.57	119,894	0.87	222,671	1.98	140,241	1.07	23,409

End of month	Housing loans to households <sup>3</sup>						Loans to households for consumption and other purposes <sup>4,5</sup>					
	with a maturity of											
	up to 1 year <sup>6</sup>		over 1 year and up to 5 years		over 5 years		up to 1 year <sup>6</sup>		over 1 year and up to 5 years		over 5 years	
	Effective interest rate 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
2022 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	1,533,123	7.51	47,012	3.60	75,908	3.46	333,366
Dec.	3.66	3,497	2.37	26,984	1.74	1,535,823	7.73	47,250	3.68	76,467	3.49	331,711
2023 Jan.	4.10	3,550	2.52	26,527	1.76	1,534,684	8.20	46,598	3.78	75,973	3.55	332,207
Feb.	4.32	3,429	2.64	26,317	1.77	1,536,492	8.44	47,291	3.84	75,755	3.59	332,184

End of month	Loans to non-financial corporations with a maturity of					
	up to 1 year <sup>6</sup>		over 1 year and up to 5 years		over 5 years	
	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2022 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.	3.49	213,334	2.49	236,253	1.96	879,122
Dec.	3.70	192,635	2.83	240,161	2.01	872,949
2023 Jan.	4.04	199,612	3.07	241,498	2.05	876,315
Feb.	4.28	194,392	3.22	246,157	2.07	878,922

\* 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). <sup>o</sup> The statistics on outstanding amounts are collected at the end of the month. <sup>1</sup> The effective interest rates are calculated either as

annualised agreed interest rates or as narrowly defined effective rates. Both calculation methods cover all interest payments on deposits and loans but not any other related charges which may occur for enquiries, administration, preparation of the documents, guarantees and credit insurance. <sup>2</sup> Data based on monthly balance sheet statistics. <sup>3</sup> Secured and unsecured loans for home purchase, including building and home improvements; including loans granted by building and loan associations and interim credits as well as transmitted loans granted by the reporting agents in their own name and for their own account. <sup>4</sup> Loans for consumption are defined as loans granted for the purpose of personal use in the consumption of goods and services. <sup>5</sup> For the purpose of these statistics, other loans are loans granted for other purposes such as business, debt consolidation, education, etc. <sup>6</sup> Including overdrafts (see also footnotes 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
2022 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	1,858,811	1.34	17,255	1.99	1,783	1.70	1,958	0.13	514,161	0.33	22,556
Dec.	0.07	1,857,241	1.53	20,197	2.01	1,738	1.52	2,138	0.16	510,188	0.40	22,970
2023 Jan.	0.09	1,839,201	1.68	26,082	2.14	2,941	1.97	2,504	0.20	498,875	0.53	23,945
Feb.	0.12	1,828,241	1.95	25,533	2.24	2,346	2.09	1,853	0.26	490,990	0.67	25,179

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	
2022 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	612,760	1.43	90,346	2.66	631	1.94	189	
Dec.	0.11	601,728	1.66	65,813	2.94	734	2.42	252	
2023 Jan.	0.19	595,205	1.96	89,287	2.92	671	2.41	89	
Feb.	0.28	580,959	2.31	100,034	3.09	539	1.96	263	

Loans to households											
Loans for consumption 4 with an initial rate fixation of											
Reporting period	Total (including charges)	of which:				floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years	
		Total	Renegotiated loans 9	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
2022 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
Dec.	6.62	6.71	7,270	7.69	1,091	7.64	465	5.26	3,083	7.79	3,722
2023 Jan.	7.49	7.54	8,159	8.43	1,607	7.95	406	6.01	2,728	8.34	5,025
Feb.	7.56	7.52	7,505	8.42	1,364	8.96	307	6.13	2,664	8.24	4,534

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 <sup>5</sup> with an initial rate fixation of											
Reporting period	Total		of which: Renegotiated loans <sup>9</sup>		floating rate or up to 1 year <sup>9</sup>		over 1 year and up to 5 years		over 5 years		
	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	
<b>Loans to households</b>											
2022 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	
Dec.	3.90	5,403	3.43	1,210	3.86	3,026	4.24	762	3.80	1,615	
2023 Jan.	4.10	3,906	3.74	1,286	3.98	2,082	4.55	621	4.07	1,203	
Feb.	4.35	3,065	4.03	814	4.36	1,467	4.83	508	4.10	1,090	
<b>of which: Loans to sole proprietors</b>											
2022 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	
Dec.	4.11	3,777	.	.	4.10	2,187	4.51	554	3.89	1,036	
2023 Jan.	4.18	2,830	.	.	4.06	1,489	4.75	465	4.07	876	
Feb.	4.44	2,297	.	.	4.47	1,105	4.94	411	4.15	781	

Loans to households (cont'd)													
Housing loans <sup>3</sup> with an initial rate fixation of													
Erhebungszeitraum	Total (including charges)		of which: Renegotiated loans <sup>9</sup>		floating rate or up to 1 year <sup>9</sup>		over 1 year and up to 5 years		over 5 year and up to 10 years		over 10 years		
	Annual percentage rate of charge <sup>10</sup> % p.a.	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million
<b>Total loans</b>													
2022 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	13,557	3.32	2,689	3.40	2,330	3.75	1,209	3.51	4,846	3.75	5,172
Dec.	3.60	3.52	13,514	3.17	2,756	3.57	2,620	3.74	1,267	3.41	4,837	3.55	4,790
2023 Jan.	3.73	3.66	12,735	3.47	3,076	3.95	2,244	3.80	1,196	3.45	4,531	3.70	4,764
Feb.	3.85	3.79	12,055	3.73	2,724	4.16	2,097	3.99	1,207	3.60	4,229	3.74	4,522
<b>of which: Collateralised loans <sup>11</sup></b>													
2022 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	6,083	.	.	3.22	806	3.62	563	3.42	2,402	3.57	2,312
Dec.	.	3.43	5,975	.	.	3.46	923	3.64	554	3.36	2,213	3.42	2,285
2023 Jan.	.	3.51	5,615	.	.	3.85	813	3.66	584	3.38	2,136	3.47	2,082
Feb.	.	3.64	5,134	.	.	4.04	763	3.84	556	3.49	1,928	3.58	1,887

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

## VI. Interest rates

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

Reporting period	Loans to households (cont'd)						Loans to non-financial corporations					
	Revolving loans <sup>12</sup> and overdrafts <sup>13</sup> Credit card debt <sup>14</sup>		of which:				Revolving loans <sup>12</sup> and overdrafts <sup>13</sup> Credit card debt <sup>14</sup>		of which:			
			Revolving loans <sup>12</sup> and overdrafts <sup>13</sup>		Extended credit card debt				Revolving loans <sup>12</sup> and overdrafts <sup>13</sup>			
	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>2</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>2</sup> € million
2022 Feb.	7.08	36,335	6.95	28,225	14.96	4,103	2.62	85,173	2.63	84,843	2.72	86,709
Mar.	7.14	37,360	7.02	29,314	14.94	4,076	2.71	87,104	2.72	86,709	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	2.65	88,972
May	6.96	37,636	6.98	28,730	14.89	4,143	2.63	89,402	2.65	88,972	2.67	92,870
June	7.01	38,876	7.02	30,004	14.84	4,192	2.66	93,301	2.67	92,870	2.69	93,495
July	7.04	37,549	6.98	28,881	14.80	4,246	2.68	93,897	2.69	93,495	2.74	96,288
Aug.	7.17	38,113	7.17	29,170	14.94	4,305	2.73	96,714	2.74	96,288	3.05	96,819
Sep.	7.31	39,138	7.36	30,018	14.97	4,359	3.04	97,298	3.05	96,819	3.40	96,732
Oct.	7.78	38,898	7.74	30,031	15.66	4,479	3.39	97,186	3.40	96,732	3.76	97,371
Nov.	8.44	38,580	8.20	27,368	15.61	6,475	3.74	97,850	3.76	97,371	4.01	94,205
Dec.	8.70	38,597	8.53	27,493	15.55	6,515	3.99	94,611	4.01	94,205	4.32	97,791
2023 Jan.	9.16	38,116	8.95	27,199	16.34	6,480	4.31	98,205	4.32	97,791	4.65	97,854
Feb.	9.40	38,538	9.32	27,356	16.60	6,475	4.63	98,280	4.65	97,854		

Reporting period	Loans to non-financial corporations (cont'd)																	
	Total		of which:				Loans up to €1 million <sup>15</sup> with an initial rate fixation of						Loans over €1 million <sup>15</sup> with an initial rate fixation of					
			Renegotiated loans <sup>9</sup>		floating rate or up to 1 year <sup>9</sup>		over 1 year and up to 5 years		over 5 years		floating rate or up to 1 year <sup>9</sup>		over 1 year and up to 5 years		over 5 years			
	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>7</sup> € million		
<b>Total loans</b>																		
2022 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	76,430	3.14	20,220	3.53	10,542	4.71	1,587	3.80	1,046	2.94	51,493	3.51	3,923	3.33	7,839		
Dec.	3.45	107,068	3.42	32,607	3.91	11,995	4.98	1,854	3.81	1,138	3.35	75,616	3.55	6,334	3.25	10,131		
2023 Jan.	3.59	81,688	3.66	23,420	4.41	10,450	5.10	1,586	3.88	1,021	3.42	60,491	3.85	2,968	3.24	5,172		
Feb.	3.86	85,530	3.83	19,830	4.70	10,275	5.35	1,480	4.06	863	3.69	64,785	4.07	2,789	3.66	5,338		
<b>of which: Collateralised loans <sup>11</sup></b>																		
2022 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	9,542	.	.	3.45	462	3.93	93	3.49	269	3.56	6,290	3.81	739	3.12	1,689		
Dec.	3.41	17,202	.	.	3.72	588	4.08	126	3.41	291	3.41	10,703	4.20	1,417	3.08	4,077		
2023 Jan.	3.80	9,477	.	.	4.00	553	3.72	123	3.33	318	3.92	6,635	4.01	652	3.07	1,196		
Feb.	3.93	8,371	.	.	4.34	400	4.37	96	3.61	208	4.03	6,148	3.87	514	3.20	1,005		

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 <sup>1</sup>	Debt securities	Loans <sup>2</sup>	Shares and other equity	Investment fund shares/units	Financial derivatives	Technical reserves <sup>3</sup>	Non-financial assets	Remaining assets
<b>Insurance corporations <sup>4</sup></b>										
2020 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	2,300.4	205.1	377.2	290.5	463.7	767.8	4.0	84.5	41.6	66.2
Q4	2,288.6	193.6	381.4	281.5	467.2	766.6	3.4	79.7	38.8	76.4
<b>Life insurance</b>										
2020 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	112.0	170.5	163.2	107.1	541.0	1.1	12.2	22.4	21.7
Q4	1,140.7	105.7	174.9	157.2	111.7	537.6	1.1	11.2	19.6	21.6
<b>Non-life insurance</b>										
2020 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	663.7	77.4	119.4	70.6	99.9	209.1	0.1	43.4	14.1	29.6
Q4	663.6	74.5	118.4	69.5	99.9	212.6	0.2	42.8	14.2	31.5
<b>Reinsurance <sup>5</sup></b>										
2020 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	485.6	15.7	87.2	56.6	256.7	17.7	2.7	28.9	5.1	14.9
Q4	484.3	13.3	88.0	54.9	255.6	16.4	2.1	25.7	5.0	23.2
<b>Pension funds <sup>6</sup></b>										
2020 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	68.5	52.3	41.2	12.9	436.6	0.0	13.1	18.6	2.4
Q4	651.0	68.6	54.4	41.3	13.2	438.8	0.0	13.1	18.6	3.1

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. <sup>1</sup> Accounts receivable to monetary financial institutions, including registered bonds, borrowers' note loans and registered Pfandbriefe. <sup>2</sup> Including deposits retained on assumed reinsurance as well as registered bonds, borrowers' note loans and registered Pfandbriefe. <sup>3</sup> Including reinsurance recoverables and claims of

pension funds on pension managers. <sup>4</sup> Valuation of listed securities at the corresponding consistent price from the ESCB's securities database. <sup>5</sup> Not including the reinsurance business conducted by primary insurers, which is included there. <sup>6</sup> 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 <sup>1</sup>	Shares and other equity	Technical reserves			Financial derivatives	Remaining liabilities	Net worth <sup>4</sup>
					Total <sup>2</sup>	Life/pension entitlements <sup>3</sup>	Non-life			
<b>Insurance corporations</b>										
2020 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	2,300.4	33.9	73.7	538.9	1,513.1	1,268.9	244.2	7.2	133.6	–
Q4	2,288.6	32.1	70.3	545.1	1,495.0	1,256.6	238.4	5.4	140.5	–
<b>Life insurance</b>										
2020 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	138.1	942.9	942.9	–	2.9	47.2	–
Q4	1,140.7	2.8	16.5	137.0	932.2	932.2	–	2.1	50.0	–
<b>Non-life insurance</b>										
2020 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	663.7	1.2	10.5	169.7	431.7	308.0	123.7	0.5	50.0	–
Q4	663.6	1.2	10.5	171.6	426.8	307.5	119.3	0.4	53.2	–
<b>Reinsurance <sup>5</sup></b>										
2020 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	485.6	29.7	46.2	231.1	138.5	18.0	120.5	3.8	36.4	–
Q4	484.3	28.2	43.4	236.5	136.0	16.9	119.1	2.9	37.3	–
<b>Pension funds <sup>6</sup></b>										
2020 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	548.4	545.5	–	0.1	10.0	52.6
Q4	651.0	–	2.0	32.8	552.0	549.2	–	0.1	9.7	54.4

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. <sup>1</sup> Including deposits retained on ceded business as well as registered bonds, borrowers' note loans and registered Pfandbriefe. <sup>2</sup> Including claims of pension funds on pension managers and entitlements to non-pension benefits. <sup>3</sup> Technical reserves "life" taking account of transitional measures. Health insurance is also included in

the "non-life insurance" sector. <sup>4</sup> Own funds correspond to the sum of "Net worth" and "Shares and other equity". <sup>5</sup> Not including the reinsurance business conducted by primary insurers, which is included there. <sup>6</sup> 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

Period	Debt securities											
	Sales = total pur- chases	Sales					Purchases					
		Domestic debt securities <sup>1</sup>					Residents					
		Total	Bank debt securities	Corporate bonds (non-MFIs) <sup>2</sup>	Public debt secur- ities	Foreign debt secur- ities <sup>3</sup>	Total <sup>4</sup>	Credit in- stitutions including building and loan associations <sup>5</sup>	Deutsche Bundesbank	Other sectors <sup>6</sup>	Non- residents <sup>7</sup>	
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	58,735	- 31,962	- 47,404	- 1,330	16,776	90,697	44,384	- 12,124	- 11,951	68,459	14,351	
2015	15,219	- 36,010	- 65,778	26,762	3,006	51,229	99,225	- 66,330	121,164	44,391	- 84,006	
2016	68,998	27,429	19,177	18,265	- 10,012	41,569	161,776	- 58,012	187,500	32,288	- 92,778	
2017	51,034	11,563	1,096	7,112	3,356	39,471	134,192	- 71,454	161,012	44,634	- 83,158	
2018	78,657	16,630	33,251	12,433	- 29,055	62,027	107,155	- 24,417	67,328	64,244	- 28,499	
2019	139,611	68,536	29,254	32,505	6,778	71,075	60,195	8,059	2,408	49,728	79,416	
2020	451,409	374,034	14,462	88,703	270,870	77,374	285,318	18,955	226,887	39,476	166,091	
2021	233,453	221,648	31,941	19,754	169,953	11,805	255,702	- 41,852	245,198	52,356	- 22,249	
2022	155,940	156,190	59,322	35,221	61,648	- 219	155,609	2,915	49,774	102,920	331	
2022 Mar.	46,986	43,608	23,278	7,972	12,358	3,378	29,509	6,811	10,709	11,989	17,477	
Apr.	- 9,782	- 2,212	- 3,140	707	222	- 7,570	2,561	- 16,927	13,068	6,420	- 12,343	
May	22,147	23,911	4,066	4,901	14,944	- 1,763	24,117	5,485	14,400	4,233	- 1,970	
June	16,927	12,731	5,517	- 1,563	8,777	4,196	8,848	8,471	- 2,289	2,665	8,079	
July	- 17,525	- 13,509	- 7,536	11,041	- 17,014	- 4,016	- 6,403	10,710	- 13,670	- 3,443	- 11,122	
Aug.	15,672	22,057	2,780	2,225	17,052	- 6,385	- 3,617	- 10,189	- 726	7,298	19,289	
Sep.	9,558	15,007	32,705	3,897	- 21,595	- 5,449	18,638	7,491	- 3,147	14,294	- 9,080	
Oct.	- 1,614	- 3,868	- 6,143	- 2,570	4,846	2,254	17,813	4,260	3,619	9,934	- 19,427	
Nov.	45,419	36,891	2,672	5,087	29,133	8,528	13,173	193	4,041	8,940	32,246	
Dec.	- 27,425	- 31,394	- 15,450	- 6,091	- 9,853	4,001	11,231	- 18,577	- 6,015	35,823	- 38,656	
2023 Jan.	58,333	26,856	19,250	4,335	3,270	31,477	41,346	10,522	7,783	23,041	16,987	
Feb.	23,264	11,540	5,340	- 1,686	7,886	11,724	24,929	13,504	- 4,961	16,386	- 1,665	

€ million

Period	Shares							
	Sales = total purchases	Sales			Purchases			
		Domestic shares <sup>8</sup>	Foreign shares <sup>9</sup>		Residents			Non- residents <sup>12</sup>
					Total <sup>10</sup>	Credit insti- tutions <sup>5</sup>	Other sectors <sup>11</sup>	
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	17,337	11,991	5,346	-	2,851
2014	43,488	18,778	24,710	43,930	17,203	26,727	-	443
2015	56,979	7,668	49,311	46,721	- 5,421	52,142	-	10,258
2016	39,133	4,409	34,724	39,265	- 5,143	44,408	-	132
2017	52,932	15,570	37,362	51,270	7,031	44,239	-	1,662
2018	61,400	16,188	45,212	89,624	- 11,184	100,808	-	28,224
2019	54,830	9,076	45,754	43,070	- 1,119	44,189	-	11,759
2020	72,321	17,771	54,550	105,483	27	105,456	-	33,162
2021	115,746	49,066	66,681	102,927	10,869	92,058	-	12,819
2022	- 14,234	20,624	- 34,858	- 7,006	- 8,262	1,256	-	7,228
2022 Mar.	- 396	359	- 755	5,404	- 1,736	7,140	-	5,800
Apr.	926	150	775	7,486	477	7,009	-	6,560
May	5,101	1,411	3,690	5,756	1,600	4,156	-	655
June	- 25,124	894	- 26,018	- 23,703	- 3,308	20,395	-	1,421
July	- 2,745	1,374	- 4,119	- 2,030	- 2,145	115	-	715
Aug.	- 1,603	87	- 1,690	1,049	165	884	-	2,652
Sep.	- 986	1,166	- 2,152	- 12,004	- 529	11,475	-	11,018
Oct.	- 1,785	154	- 1,939	- 4,007	- 1,588	2,419	-	2,222
Nov.	- 5,647	247	- 5,894	- 8,903	- 1,414	10,317	-	3,256
Dec.	14,926	13,758	1,169	16,366	- 3,089	19,455	-	1,440
2023 Jan.	6,525	133	6,393	8,105	2,935	5,170	-	1,580
Feb.	4,875	2,371	2,505	6,118	4,494	1,624	-	1,243

<sup>1</sup> Net sales at market values plus/minus changes in issuers' portfolios of their own debt securities. <sup>2</sup> Including cross-border financing within groups from January 2011. <sup>3</sup> Net purchases or net sales (-) of foreign debt securities by residents; transaction values. <sup>4</sup> Domestic and foreign debt securities. <sup>5</sup> Book values; statistically adjusted. <sup>6</sup> Residual; also including purchases of domestic and foreign securities by domestic mutual funds. Up to end-2008 including Deutsche Bundesbank. <sup>7</sup> Net purchases or net sales (-) of domestic debt securities by non-residents; transaction values. <sup>8</sup> Excluding shares of public

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

## VIII. Capital market

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

€ million, nominal value

Period	Bank debt securities <sup>1</sup>						Corporate bonds (non-MFIs) <sup>2</sup>	Public debt securities	
	Total	Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special-purpose credit institutions	Other bank debt securities			
<b>Gross sales</b>									
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 <sup>3</sup>	1,206,483	717,002	29,059	7,621	511,222	169,103	73,371	416,108	
2017 <sup>3</sup>	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 <sup>6</sup>	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	1,683,265	861,989	66,811	11,929	700,062	83,188	169,680	651,596	
2022 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.	160,306	96,922	10,333	2,847	73,938	9,804	18,913	44,471	
Oct.	172,464	59,445	5,875	1,086	45,698	6,786	11,037	101,982	
Nov.	152,777	70,448	2,969	91	55,905	11,482	20,625	61,705	
Dec.	80,590	49,026	2,329	979	39,181	6,538	11,536	20,028	
2023 Jan.	132,817	74,019	10,797	929	52,888	9,405	14,710	44,088	
Feb.	155,547	81,549	2,245	1,729	63,284	14,292	12,146	61,853	
<b>of which: Debt securities with maturities of more than four years <sup>4</sup></b>									
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 <sup>3</sup>	375,859	173,900	24,741	5,841	78,859	64,460	47,818	154,144	
2017 <sup>3</sup>	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 <sup>6</sup>	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	485,287	164,864	41,052	7,139	91,143	25,530	56,491	263,932	
2022 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.	26,950	13,947	2,158	–	10,235	1,555	1,178	11,825	
Sep.	48,333	19,382	7,086	1,821	7,209	3,267	8,100	20,850	
Oct.	85,086	9,230	3,570	77	4,885	697	2,507	73,350	
Nov.	34,411	7,379	1,895	–	2,006	3,478	9,336	17,696	
Dec.	6,561	2,256	54	4	711	1,488	304	4,000	
2023 Jan.	47,131	21,923	4,927	529	14,197	2,271	3,408	21,800	
Feb.	51,429	14,913	820	310	10,272	3,511	3,065	33,450	
<b>Net sales <sup>5</sup></b>									
2012	–	85,298	–	4,177	–	3,259	–	6,401	21,298
2013	–	140,017	–	17,364	–	4,027	–	1,394	15,479
2014	–	34,020	–	6,313	–	862	–	10,497	12,383
2015	–	65,147	–	9,271	–	2,758	–	25,300	13,174
2016 <sup>3</sup>	–	21,951	–	2,176	–	12,979	–	18,177	7,020
2017 <sup>3</sup>	–	2,669	–	6,389	–	4,697	–	14,525	6,828
2018	–	2,758	–	19,814	–	6,564	–	5,453	9,738
2019	–	59,719	–	13,098	–	3,728	–	6,885	30,449
2020 <sup>6</sup>	–	473,795	–	8,661	–	8,816	–	11,398	49,536
2021	–	210,231	–	17,821	–	7,471	–	4,314	35,531
2022	–	135,853	–	23,894	–	9,399	–	6,444	30,671
2022 June	–	8,820	–	1,834	–	150	–	474	411
July	–	9,336	–	1,183	–	4,070	–	390	11,189
Aug.	–	14,436	–	4,546	–	1,290	–	758	119
Sep.	–	4,494	–	5,512	–	30	–	19,988	4,293
Oct.	–	44,009	–	3,797	–	1,764	–	1,187	4,111
Nov.	–	37,459	–	2,165	–	944	–	3,488	6,015
Dec.	–	42,448	–	3,643	–	3,697	–	216	1,825
2023 Jan.	–	24,590	–	6,314	–	1,551	–	4,815	3,554
Feb.	–	9,505	–	2,433	–	1,512	–	2,962	6,457

\* For definitions, see the explanatory notes in Statistical Series - Securities Issues Statistics on pages 43 f. <sup>1</sup> Excluding registered bank debt securities. <sup>2</sup> Including cross-border financing within groups from January 2011. <sup>3</sup> Sectoral reclassification of debt securities. <sup>4</sup> Maximum maturity according to the terms of issue. <sup>5</sup> Gross sales less

redemptions. <sup>6</sup> 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	Bank debt securities							Corporate bonds (non-MFIs)	Public debt securities
	Total	Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special-purpose credit institutions	Other bank debt securities			
2012	3,285,422	<sup>1</sup> 1,414,349	145,007	147,070	574,163	<sup>1</sup> 548,109	<sup>1</sup> 220,456	<sup>1</sup> 1,650,617	
2013	3,145,329	1,288,340	127,641	109,290	570,136	481,273	221,851	1,635,138	
2014	3,111,308	1,231,445	121,328	85,434	569,409	455,274	232,342	1,647,520	
2015	3,046,162	1,154,173	130,598	75,679	566,811	381,085	257,612	1,634,377	
2016 <sup>1</sup>	3,068,111	1,164,965	132,775	62,701	633,578	335,910	275,789	1,627,358	
2017 <sup>1</sup>	3,090,708	1,170,920	141,273	58,004	651,211	320,432	<sup>2</sup> 302,543	1,617,244	
2018	3,091,303	1,194,160	161,088	51,439	670,062	<sup>1</sup> 311,572	<sup>1 2</sup> 313,527	1,583,616	
2019	<sup>2</sup> 3,149,373	1,222,911	174,188	47,712	696,325	304,686	<sup>2</sup> 342,325	1,584,136	
2020 <sup>4</sup>	<sup>2</sup> 3,545,200	<sup>2</sup> 1,174,817	183,980	55,959	687,710	<sup>2</sup> 247,169	<sup>2</sup> 379,342	1,991,040	
2021	3,781,975	1,250,777	202,385	63,496	731,068	253,828	414,791	2,116,406	
2022	3,930,390	1,302,028	225,854	54,199	761,047	260,928	441,234	2,187,127	
2022 June	3,888,933	1,319,854	216,989	65,910	781,469	255,486	427,460	2,141,620	
July	3,884,902	1,318,884	218,402	61,866	781,839	256,776	439,064	2,126,954	
Aug.	3,902,580	1,323,750	222,515	60,585	785,306	255,344	439,457	2,139,374	
Sep.	3,913,133	1,357,666	228,228	60,631	808,553	260,254	443,512	2,111,954	
Oct.	3,954,338	1,345,723	231,901	58,854	796,028	258,940	438,743	2,169,872	
Nov.	3,981,275	1,333,432	229,589	57,912	784,494	261,438	444,010	2,203,833	
Dec.	3,930,390	1,302,028	225,854	54,199	761,047	260,928	441,234	2,187,127	
2023 Jan.	3,948,426	1,313,581	232,105	52,647	763,260	265,568	444,529	2,190,316	
Feb.	3,963,815	1,320,819	229,851	54,180	764,148	272,641	442,378	2,200,618	

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

bis unter 2  
2 bis unter 4  
4 bis unter 6  
6 bis unter 8  
8 bis unter 10  
10 bis unter 15  
15 bis unter 20  
20 und darüber

	1 206 082	472 001	61 059	18 815	310 851	81 276	82 031	652 051
2 bis unter 4	730 118	306 352	63 314	16 705	157 410	68 923	79 053	344 713
4 bis unter 6	642 413	236 288	52 931	6 928	132 295	44 134	70 071	336 053
6 bis unter 8	401 260	123 119	24 654	4 441	67 901	26 123	39 616	238 524
8 bis unter 10	255 205	76 931	14 901	3 044	40 538	18 448	33 097	145 177
10 bis unter 15	239 778	60 843	8 605	3 802	38 385	10 051	32 842	146 093
15 bis unter 20	126 462	14 591	3 536	357	8 521	2 177	13 994	97 877
20 und darüber	362 497	30 693	850	87	8 247	21 509	91 674	240 130

#### Position at end-February 2023

\* Including debt securities temporarily held in the issuers' portfolios. <sup>1</sup> Sectoral reclassification of debt securities. <sup>2</sup> Adjustments due to the change in the country of residence of the issuers or debt securities. <sup>3</sup> Calculated from month under review until final maturity for debt securities falling due en bloc and until mean maturity of the

residual amount outstanding for debt securities not falling due en bloc. <sup>4</sup> 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 <sup>2</sup>	
			cash payments and ex-change of convertible bonds <sup>1</sup>	issue of bonus shares	contribution of claims and other real assets	merger and transfer of assets	change of legal form	reduction of capital and liquidation			
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 <sup>3 4</sup>	183,461	1,673	2,411	2,419	542	—	858	65	—	2,775	1,950,224
2020 <sup>4</sup>	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	199,789	12,272	14,950	224	371	—	29	293	—	2,952	1,858,963
2022 June	187,396	340	138	29	328	—	—	108	—	47	1,744,789
July	186,233	1,194	120	39	—	—	1	25	—	1,847,025	1,847,025
Aug.	185,545	688	42	—	—	—	0	32	—	698	1,769,546
Sep.	186,436	36	33	—	—	—	7	—	—	62	1,635,332
Oct.	186,402	36	76	1	—	—	0	—	—	112	1,777,136
Nov.	186,351	57	31	13	0	—	0	0	—	102	1,918,565
Dec.	199,789	13,437	13,584	0	0	—	0	0	—	147	1,858,963
2023 Jan.	199,778	11	16	—	—	—	—	0	—	27	2,027,004
Feb.	199,890	112	149	0	0	—	0	0	—	37	2,064,731

\* Excluding shares of public limited investment companies. <sup>1</sup> Including shares issued out of company profits. <sup>2</sup> All marketplaces. Source: Bundesbank calculations based on data of the Herausgebergemeinschaft Wertpapier-Mitteilungen and Deutsche Börse

AG. <sup>3</sup> Methodological changes since October 2019. <sup>4</sup> Changes due to statistical adjustments.

## VIII. Capital market

### 5. Yields and indices on German securities

Period	Yields on debt securities outstanding issued by residents 1								Price indices 2,3			
	Public debt securities				Bank debt securities				Debt securities		Shares	
	Total	Total	Listed Federal securities		Total	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	With a residual maturity of 9 to 10 years 4								
% per annum								Average daily rate	End-1998 = 100	End-1987 = 100	End-1987 = 1,000	
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	1.5	1.2	1.1	1.1	1.9	1.9	3.3	125.74	88.43	525.64	13,923.59	
2022 Aug.	1.5	1.1	1.0	1.0	1.9	1.9	3.3	131.87	94.89	493.47	12,834.96	
2022 Sep.	2.3	1.9	1.7	1.8	2.7	2.6	4.3	127.98	91.15	458.93	12,114.36	
2022 Oct.	2.7	2.3	2.1	2.2	3.2	3.1	4.9	127.58	90.65	498.00	13,253.74	
2022 Nov.	2.6	2.2	2.1	2.1	3.0	2.9	4.4	127.52	92.43	544.52	14,397.04	
2022 Dec.	2.5	2.2	2.1	2.1	3.0	2.9	4.2	125.74	88.43	525.64	13,923.59	
2023 Jan.	2.7	2.3	2.2	2.2	3.1	2.9	4.1	125.97	89.91	581.65	15,128.27	
2023 Feb.	2.8	2.5	2.4	2.4	3.2	3.1	4.1	123.74	87.57	583.92	15,365.14	

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

Period	€ million														
	Sales									Purchases					
	Sales = total purchases	Open-end domestic mutual funds 1 (sales receipts)								Residents					Non-residents 5
		Total	Mutual funds open to the general public				Foreign funds 4	Total	Credit institutions including building and loan associations 2		Other sectors 3				
Total			Money market funds	Securities-based funds	Real estate funds	Specialised funds			Total	of which: Foreign mutual fund shares	Total	of which: Foreign mutual fund shares			
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	137,294	97,711	3,998	- 473	862	1,000	93,713	39,583	141,134	819	- 1,745	140,315	41,328	- 3,841	
2015	189,802	146,136	30,420	318	22,345	3,636	115,716	43,665	181,932	7,362	494	174,570	43,171	7,870	
2016	149,288	119,369	21,301	- 342	11,131	7,384	98,068	29,919	156,236	2,877	- 3,172	153,359	33,091	- 6,948	
2017	148,214	94,921	29,560	- 235	21,970	4,406	65,361	53,292	150,740	4,938	1,048	145,802	52,244	- 2,526	
2018	108,293	103,694	15,279	377	4,166	6,168	88,415	4,599	114,973	2,979	- 2,306	111,994	6,905	- 6,680	
2019	171,666	122,546	17,032	- 447	5,097	10,580	105,514	49,120	176,210	2,719	- 812	173,491	49,932	- 4,544	
2020	151,960	116,028	19,193	- 42	11,343	8,795	96,835	35,932	150,998	336	- 1,656	150,662	37,588	962	
2021	274,261	157,861	41,016	482	31,023	7,841	116,845	116,401	282,694	13,154	254	269,540	116,147	- 8,433	
2022	112,637	79,022	6,057	482	444	5,071	72,991	33,614	115,872	3,170	- 1,459	112,702	35,073	- 3,235	
2022 Aug.	7,086	6,943	- 206	- 103	- 252	116	7,152	143	7,116	- 498	- 77	7,614	220	- 30	
2022 Sep.	- 59	1,349	- 1,343	64	- 1,577	288	2,712	- 1,408	- 211	- 320	- 294	109	- 1,114	152	
2022 Oct.	6,384	3,974	342	119	35	267	3,631	2,410	7,234	20	- 306	7,214	2,716	- 850	
2022 Nov.	911	- 2,635	612	- 2	400	190	- 3,247	3,546	1,581	499	- 22	1,082	3,524	- 671	
2022 Dec.	24,523	11,942	431	108	- 17	322	11,513	12,581	23,320	1,885	- 534	21,435	13,115	1,203	
2023 Jan.	14,093	8,014	2,506	- 218	2,185	557	5,508	6,079	13,890	- 4,078	- 672	17,968	6,751	203	
2023 Feb.	13,825	10,533	2,090	- 167	2,077	137	8,444	3,291	12,856	- 426	- 507	13,282	3,798	969	

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	2020	2021	2022	2021		2022			
				Q3	Q4	Q1	Q2	Q3	Q4
<b>Acquisition of financial assets</b>									
Currency and deposits	96.82	46.19	67.90	21.38	26.03	13.90	- 26.90	51.95	28.96
Debt securities	2.99	3.11	4.12	1.58	1.16	0.64	- 0.10	3.52	0.05
Short-term debt securities	1.27	2.27	1.23	0.26	1.12	0.39	- 1.94	3.00	- 0.22
Long-term debt securities	1.72	0.85	2.89	1.32	0.05	0.25	- 1.84	0.53	0.27
Memo item:									
Debt securities of domestic sectors	1.38	1.34	3.40	1.75	- 0.64	0.34	- 0.98	1.65	0.43
Non-financial corporations	- 0.17	0.74	0.87	0.59	- 0.57	0.17	- 0.17	0.74	0.14
Financial corporations	0.12	1.08	1.78	0.58	0.56	0.44	0.73	0.66	- 0.05
General government	1.44	- 0.48	0.74	0.58	- 0.63	- 0.27	0.43	0.25	0.34
Debt securities of the rest of the world	1.61	1.78	0.72	- 0.17	1.80	0.31	- 1.08	1.88	- 0.38
Loans	- 7.35	63.01	44.18	20.25	35.29	4.29	16.30	31.37	- 7.78
Short-term loans	- 4.27	44.68	27.96	19.16	18.60	2.69	12.28	27.97	- 14.97
Long-term loans	- 3.09	18.34	16.22	1.09	16.69	1.60	4.02	3.40	7.19
Memo item:									
Loans to domestic sectors	- 0.12	10.10	22.99	0.18	16.16	8.25	2.92	14.54	- 2.72
Non-financial corporations	- 12.27	7.11	23.94	- 1.21	13.38	2.44	5.52	8.47	7.51
Financial corporations	11.58	2.38	- 1.29	1.24	2.63	5.73	- 2.68	5.98	- 10.31
General government	0.57	0.61	0.34	0.15	0.15	0.08	0.08	0.08	0.08
Loans to the rest of the world	- 7.23	52.92	21.18	20.07	19.13	- 3.96	13.38	16.83	- 5.07
Equity and investment fund shares	101.62	163.24	123.73	30.13	44.16	42.09	50.04	4.53	27.07
Equity	88.85	141.46	123.84	27.39	35.87	39.91	51.89	6.81	25.22
Listed shares of domestic sectors	- 77.97	15.33	44.06	- 18.27	16.59	6.03	7.40	34.33	- 3.70
Non-financial corporations	- 78.06	16.89	43.77	- 18.80	18.30	5.58	7.12	34.91	- 3.84
Financial corporations	0.09	- 1.56	0.29	0.54	- 1.70	0.46	0.28	- 0.58	0.13
Listed shares of the rest of the world	5.01	5.11	5.53	4.64	0.70	- 0.26	3.16	0.08	2.55
Other equity <sup>1</sup>	161.80	121.03	74.25	41.02	18.58	34.13	41.33	- 27.60	26.38
Investment fund shares	12.77	21.78	- 0.11	2.74	8.29	2.17	- 1.85	- 2.28	1.85
Money market fund shares	3.79	0.66	- 0.38	- 0.41	1.73	- 1.22	- 0.42	- 1.12	2.37
Non-MMF investment fund shares	8.99	21.12	0.27	3.15	6.56	3.39	- 1.44	- 1.16	- 0.53
Insurance technical reserves	0.37	18.01	2.72	4.40	4.47	5.32	- 0.90	- 0.68	- 1.03
Financial derivatives	- 27.54	15.54	33.92	0.43	- 1.09	21.29	28.29	11.90	- 27.56
Other accounts receivable	59.30	71.37	28.93	11.71	53.23	- 9.79	- 33.89	- 52.36	124.97
<b>Total</b>	<b>226.22</b>	<b>380.47</b>	<b>305.50</b>	<b>89.88</b>	<b>163.26</b>	<b>77.75</b>	<b>32.83</b>	<b>50.23</b>	<b>144.68</b>
<b>External financing</b>									
Debt securities	36.89	20.86	14.13	10.29	- 1.12	10.95	3.77	1.37	- 1.96
Short-term securities	- 4.40	2.51	- 0.36	3.50	- 1.02	3.85	1.21	- 2.73	- 2.69
Long-term securities	41.29	18.35	14.49	6.79	- 0.10	7.10	2.56	4.10	0.72
Memo item:									
Debt securities of domestic sectors	18.12	9.16	5.92	2.14	1.78	5.65	1.64	0.20	- 1.57
Non-financial corporations	- 0.17	0.74	0.87	0.59	- 0.57	0.17	- 0.17	0.74	0.14
Financial corporations	19.86	9.11	4.52	1.78	2.61	5.35	1.87	- 0.74	- 1.96
General government	- 0.22	0.09	- 0.07	0.02	- 0.10	- 0.01	- 0.08	0.01	0.01
Households	- 1.35	- 0.79	0.59	- 0.26	- 0.15	0.14	0.01	0.19	0.25
Debt securities of the rest of the world	18.77	11.71	8.20	8.15	- 2.89	5.30	2.13	1.17	- 0.40
Loans	97.05	136.81	180.68	33.14	71.41	34.17	41.22	66.97	38.32
Short-term loans	- 2.80	81.44	105.49	23.97	29.93	29.25	21.81	46.53	7.90
Long-term loans	99.85	55.37	75.19	9.17	41.48	4.92	19.41	20.44	30.42
Memo item:									
Loans from domestic sectors	38.70	78.60	157.12	11.71	40.62	37.30	36.34	59.24	24.24
Non-financial corporations	- 12.27	7.11	23.94	- 1.21	13.38	2.44	5.52	8.47	7.51
Financial corporations	15.29	57.70	117.87	9.79	24.28	33.34	28.05	36.48	20.01
General government	35.68	13.79	15.31	3.13	2.96	1.52	2.78	14.29	- 3.28
Loans from the rest of the world	58.34	58.21	23.55	21.43	30.79	- 3.14	4.87	7.73	14.08
Equity	60.37	61.44	17.34	17.93	20.38	3.11	8.64	3.50	2.08
Listed shares of domestic sectors	- 62.25	26.38	57.11	- 21.41	24.50	12.93	10.15	33.33	0.70
Non-financial corporations	- 78.06	16.89	43.77	- 18.80	18.30	5.58	7.12	34.91	- 3.84
Financial corporations	3.47	- 2.37	2.33	- 3.23	- 0.68	5.19	- 1.41	- 4.46	3.01
General government	0.26	- 0.09	0.76	- 0.00	0.04	0.18	0.24	0.25	0.10
Households	12.08	11.96	10.24	0.63	6.84	1.98	4.21	2.63	1.43
Listed shares of the rest of the world	10.09	18.94	- 7.67	31.69	- 6.62	- 12.77	- 2.46	8.05	- 0.50
Other equity <sup>1</sup>	112.54	16.11	- 32.10	7.65	2.50	2.95	0.95	- 37.89	1.88
Insurance technical reserves	5.83	4.25	4.25	1.06	1.06	1.06	1.06	1.06	1.06
Financial derivatives and employee stock options	0.54	14.32	- 10.64	3.93	0.93	- 2.28	- 0.27	3.37	- 11.45
Other accounts payable	22.28	136.29	70.37	27.37	49.28	15.54	13.55	22.06	19.21
<b>Total</b>	<b>222.96</b>	<b>373.98</b>	<b>276.12</b>	<b>93.72</b>	<b>141.95</b>	<b>62.55</b>	<b>67.97</b>	<b>98.33</b>	<b>47.27</b>

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

## IX. Financial accounts

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

End of year/quarter; € billion

Item	2020	2021	2022	2021		2022			
				Q3	Q4	Q1	Q2	Q3	Q4
<b>Financial assets</b>									
Currency and deposits	717.4	727.5	795.3	710.3	727.5	731.7	698.7	767.4	795.3
Debt securities	51.5	54.3	53.8	53.3	54.3	53.4	51.3	53.7	53.8
Short-term debt securities	4.8	7.1	8.4	6.0	7.1	7.5	5.6	8.6	8.4
Long-term debt securities	46.7	47.2	45.5	47.3	47.2	45.9	45.7	45.1	45.5
Memo item:									
Debt securities of domestic sectors	22.1	23.3	24.7	24.0	23.3	23.0	23.0	24.1	24.7
Non-financial corporations	4.7	5.3	5.8	5.9	5.3	5.2	4.9	5.5	5.8
Financial corporations	13.4	14.5	15.0	14.0	14.5	14.6	14.7	14.9	15.0
General government	4.0	3.5	3.9	4.1	3.5	3.2	3.5	3.6	3.9
Debt securities of the rest of the world	29.4	31.0	29.2	29.3	31.0	30.4	28.2	29.7	29.2
Loans	725.1	780.5	827.2	744.4	780.5	785.9	806.5	840.9	827.2
Short-term loans	571.1	611.2	640.8	592.4	611.2	614.9	629.8	660.0	640.8
Long-term loans	154.0	169.2	186.3	152.0	169.2	171.0	176.7	180.9	186.3
Memo item:									
Loans to domestic sectors	412.5	422.6	445.5	406.4	422.6	430.8	433.7	448.3	445.5
Non-financial corporations	327.6	334.7	358.7	321.3	334.7	337.2	342.7	351.1	358.7
Financial corporations	76.9	79.3	78.0	76.7	79.3	85.0	82.4	88.3	78.0
General government	7.9	8.5	8.9	8.4	8.5	8.6	8.7	8.8	8.9
Loans to the rest of the world	312.7	357.9	381.6	338.0	357.9	355.1	372.7	392.6	381.6
Equity and investment fund shares	2,572.0	2,920.7	2,720.9	2,894.5	2,920.7	2,844.7	2,785.3	2,756.7	2,720.9
Equity	2,367.2	2,680.6	2,506.0	2,667.0	2,680.6	2,612.4	2,567.8	2,544.8	2,506.0
Listed shares of domestic sectors	307.0	393.0	331.8	371.5	393.0	350.1	305.0	307.5	331.8
Non-financial corporations	298.9	384.9	324.4	361.7	384.9	342.4	298.2	301.7	324.4
Financial corporations	8.1	8.0	7.4	9.8	8.0	7.7	6.8	5.7	7.4
Listed shares of the rest of the world	66.6	71.5	69.7	71.0	71.5	67.0	66.8	65.4	69.7
Other equity <sup>1</sup>	1,993.6	2,216.1	2,104.5	2,224.5	2,216.1	2,195.3	2,196.0	2,172.0	2,104.5
Investment fund shares	204.7	240.2	214.9	227.5	240.2	232.3	217.5	211.9	214.9
Money market fund shares	7.0	7.6	7.2	5.9	7.6	6.4	6.0	4.9	7.2
Non-MMF investment fund shares	197.7	232.6	207.7	221.6	232.6	225.9	211.5	207.0	207.7
Insurance technical reserves	62.1	64.8	42.2	64.1	64.8	48.1	45.8	43.7	42.2
Financial derivatives	30.9	106.0	92.4	106.6	106.0	147.8	164.4	199.0	92.4
Other accounts receivable	1,243.9	1,456.5	1,524.8	1,395.3	1,456.5	1,490.3	1,514.3	1,524.9	1,524.8
<b>Total</b>	<b>5,403.0</b>	<b>6,110.3</b>	<b>6,056.6</b>	<b>5,968.6</b>	<b>6,110.3</b>	<b>6,101.9</b>	<b>6,066.3</b>	<b>6,186.3</b>	<b>6,056.6</b>
<b>Liabilities</b>									
Debt securities	238.3	252.3	228.6	256.1	252.3	245.3	229.7	226.7	228.6
Short-term securities	7.1	9.6	9.3	10.6	9.6	13.4	14.7	12.0	9.3
Long-term securities	231.2	242.7	219.4	245.5	242.7	231.8	215.1	214.7	219.4
Memo item:									
Debt securities of domestic sectors	96.0	100.6	91.0	99.7	100.6	98.6	92.6	90.4	91.0
Non-financial corporations	4.7	5.3	5.8	5.9	5.3	5.2	4.9	5.5	5.8
Financial corporations	78.1	83.2	73.6	81.2	83.2	81.8	76.8	73.9	73.6
General government	0.4	0.4	0.3	0.5	0.4	0.4	0.3	0.3	0.3
Households	12.8	11.8	11.3	12.1	11.8	11.2	10.6	10.7	11.3
Debt securities of the rest of the world	142.3	151.7	137.7	156.4	151.7	146.7	137.1	136.2	137.7
Loans	2,270.6	2,403.7	2,588.1	2,331.7	2,403.7	2,440.0	2,485.6	2,559.6	2,588.1
Short-term loans	830.0	903.1	1,011.3	872.4	903.1	933.5	959.1	1,010.1	1,011.3
Long-term loans	1,440.5	1,500.6	1,576.8	1,459.4	1,500.6	1,506.5	1,526.5	1,549.5	1,576.8
Memo item:									
Loans from domestic sectors	1,391.8	1,470.8	1,628.0	1,431.9	1,470.8	1,508.8	1,542.7	1,603.2	1,628.0
Non-financial corporations	327.6	334.7	358.7	321.3	334.7	337.2	342.7	351.1	358.7
Financial corporations	962.2	1,020.5	1,138.7	998.0	1,020.5	1,054.9	1,080.5	1,118.3	1,138.7
General government	102.0	115.5	130.6	112.5	115.5	116.8	119.5	133.8	130.6
Loans from the rest of the world	878.8	932.9	960.2	899.9	932.9	931.1	942.9	956.4	960.2
Equity	3,260.9	3,689.0	2,988.1	3,645.9	3,689.0	3,391.9	2,994.2	2,843.1	2,988.1
Listed shares of domestic sectors	739.9	924.8	760.6	882.4	924.8	840.1	733.4	691.5	760.6
Non-financial corporations	298.9	384.9	324.4	361.7	384.9	342.4	298.2	301.7	324.4
Financial corporations	171.9	210.2	151.2	196.9	210.2	194.3	161.9	138.2	151.2
General government	56.3	69.9	69.2	70.6	69.9	70.0	70.7	61.4	69.2
Households	212.8	259.7	215.7	253.2	259.7	233.3	202.6	190.2	215.7
Listed shares of the rest of the world	995.6	1,126.3	823.9	1,119.2	1,126.3	984.0	795.8	731.9	823.9
Other equity <sup>1</sup>	1,525.5	1,637.9	1,403.6	1,644.2	1,637.9	1,567.9	1,465.0	1,419.7	1,403.6
Insurance technical reserves	283.1	287.4	291.6	286.3	287.4	288.4	289.5	290.6	291.6
Financial derivatives and employee stock options	83.4	137.9	63.1	134.9	137.9	143.5	137.1	161.0	63.1
Other accounts payable	1,275.8	1,525.4	1,620.2	1,446.1	1,525.4	1,546.3	1,565.3	1,649.7	1,620.2
<b>Total</b>	<b>7,412.2</b>	<b>8,295.8</b>	<b>7,779.8</b>	<b>8,101.2</b>	<b>8,295.8</b>	<b>8,055.4</b>	<b>7,701.3</b>	<b>7,730.7</b>	<b>7,779.8</b>

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

## IX. Financial accounts

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

€ billion

Item	2020	2021	2022	2021		2022			
				Q3	Q4	Q1	Q2	Q3	Q4
<b>Acquisition of financial assets</b>									
Currency and deposits	213.31	146.16	106.06	12.03	32.62	10.65	27.21	32.96	35.24
Currency	61.94	60.55	44.57	15.06	16.24	13.55	11.39	13.58	6.05
Deposits	151.36	85.61	61.48	- 3.04	16.38	- 2.90	15.81	19.37	29.20
Transferable deposits	165.34	90.84	47.63	2.69	16.35	- 0.99	23.73	20.48	4.41
Time deposits	1.29	- 5.09	29.80	- 3.92	- 0.17	- 0.16	- 4.31	6.22	27.73
Savings deposits (including savings certificates)	- 15.26	- 0.13	- 15.94	- 1.81	0.20	- 2.07	- 3.61	- 7.32	- 2.95
Debt securities	- 5.94	- 5.89	25.07	- 1.32	- 0.62	2.81	4.85	5.36	12.06
Short-term debt securities	0.08	0.31	1.98	- 0.10	0.03	- 0.02	0.05	0.17	1.77
Long-term debt securities	- 6.02	- 6.20	23.09	- 1.22	- 0.64	2.83	4.80	5.18	10.28
Memo item:									
Debt securities of domestic sectors	- 2.56	- 3.70	20.31	- 0.99	- 0.39	2.26	3.77	3.76	10.52
Non-financial corporations	- 1.32	- 0.83	0.50	- 0.25	- 0.16	0.08	- 0.02	0.21	0.23
Financial corporations	- 1.26	- 2.57	17.47	- 0.66	- 0.23	2.34	3.18	2.94	9.01
General government	0.02	- 0.30	2.35	- 0.08	0.00	- 0.16	0.61	0.61	1.29
Debt securities of the rest of the world	- 3.38	- 2.19	4.76	- 0.32	- 0.23	0.55	1.08	1.60	1.53
Equity and investment fund shares	90.18	136.54	77.42	34.68	42.10	30.54	22.26	9.12	15.50
Equity	48.53	31.76	26.97	7.57	14.30	7.82	10.01	3.98	5.16
Listed shares of domestic sectors	16.05	14.21	12.31	2.34	6.29	2.70	5.55	3.36	0.71
Non-financial corporations	11.92	12.64	9.91	1.82	6.12	1.97	3.90	2.68	1.36
Financial corporations	4.14	1.58	2.40	0.52	0.17	0.74	1.64	0.67	- 0.66
Listed shares of the rest of the world	23.29	10.87	8.68	3.77	5.26	3.47	2.46	- 0.45	3.20
Other equity <sup>1</sup>	9.19	6.68	5.97	1.46	2.76	1.64	2.01	1.07	1.26
Investment fund shares	41.65	104.79	50.45	27.11	27.80	22.72	12.25	5.14	10.34
Money market fund shares	0.09	0.18	0.82	- 0.01	0.18	- 0.02	0.28	0.12	0.44
Non-MMF investment fund shares	41.56	104.61	49.63	27.12	27.62	22.74	11.97	5.02	9.90
Non-life insurance technical reserves and provision for calls under standardised guarantees	18.34	20.31	3.40	3.73	5.60	5.60	- 0.84	- 0.55	- 0.81
Life insurance and annuity entitlements	47.71	51.63	32.72	13.23	11.00	6.52	5.87	12.28	8.03
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	33.70	27.36	53.67	7.54	10.57	15.29	14.45	10.52	13.42
Financial derivatives and employee stock options	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other accounts receivable <sup>2</sup>	- 10.48	- 0.85	- 9.65	5.07	- 24.87	13.62	- 3.18	- 4.42	- 15.67
<b>Total</b>	<b>386.82</b>	<b>375.26</b>	<b>288.68</b>	<b>74.96</b>	<b>76.41</b>	<b>85.03</b>	<b>70.61</b>	<b>65.26</b>	<b>67.78</b>
<b>External financing</b>									
Loans	83.92	98.63	84.92	30.68	23.70	20.34	28.10	25.95	10.53
Short-term loans	- 5.61	0.86	2.60	1.21	- 1.61	0.66	1.09	0.74	0.11
Long-term loans	89.52	97.77	82.33	29.46	25.31	19.67	27.01	25.22	10.43
Memo item:									
Mortgage loans	85.69	100.35	80.94	29.34	25.77	19.20	26.81	23.37	11.56
Consumer loans	- 4.29	- 0.89	4.60	2.38	- 2.04	0.23	0.91	2.59	0.87
Entrepreneurial loans	2.51	- 0.83	- 0.61	- 1.04	- 0.04	0.91	0.39	- 0.01	- 1.90
Memo item:									
Loans from monetary financial institutions	83.17	94.32	82.56	28.38	23.91	20.70	27.94	24.46	9.45
Loans from financial corporations other than MFIs	0.75	4.31	2.36	2.30	- 0.21	- 0.37	0.16	1.49	1.08
Loans from general government and rest of the world	0.00	- 0.00	- 0.00	0.00	- 0.00	- 0.00	0.00	0.00	0.00
Financial derivatives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other accounts payable	0.01	0.90	3.92	0.25	0.63	- 0.94	0.68	1.10	3.08
<b>Total</b>	<b>83.93</b>	<b>99.53</b>	<b>88.84</b>	<b>30.93</b>	<b>24.32</b>	<b>19.40</b>	<b>28.78</b>	<b>27.05</b>	<b>13.61</b>

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



## IX. Financial accounts

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

End of year/quarter; € billion

Item	2020	2021	2022	2021		2022			
				Q3	Q4	Q1	Q2	Q3	Q4
<b>Financial assets</b>									
Currency and deposits	2,860.4	3,005.5	3,113.7	2,973.2	3,005.5	3,017.2	3,047.2	3,083.7	3,113.7
Currency	324.5	385.1	429.6	368.8	385.1	398.6	410.0	423.6	429.6
Deposits	2,535.8	2,620.5	2,684.1	2,604.4	2,620.5	2,618.6	2,637.2	2,660.1	2,684.1
Transferable deposits	1,674.1	1,764.4	1,811.7	1,748.1	1,764.4	1,763.5	1,786.7	1,807.3	1,811.7
Time deposits	302.8	297.3	330.1	297.8	297.3	298.5	297.9	307.6	330.1
Savings deposits (including savings certificates)	558.9	558.8	542.3	558.6	558.8	556.7	552.6	545.3	542.3
Debt securities	113.3	109.6	125.1	110.1	109.6	109.5	107.8	110.4	125.1
Short-term debt securities	1.6	1.8	3.9	1.8	1.8	1.7	1.7	1.9	3.9
Long-term debt securities	111.7	107.8	121.2	108.3	107.8	107.7	106.1	108.5	121.2
Memo item:									
Debt securities of domestic sectors	76.7	75.3	88.4	75.3	75.3	75.2	74.7	76.1	88.4
Non-financial corporations	10.9	9.8	9.5	10.2	9.8	9.4	8.9	8.9	9.5
Financial corporations	63.3	63.2	74.6	62.9	63.2	63.8	63.3	64.2	74.6
General government	2.6	2.2	4.2	2.2	2.2	2.0	2.5	3.0	4.2
Debt securities of the rest of the world	36.6	34.3	36.7	34.8	34.3	34.3	33.1	34.3	36.7
Equity and investment fund shares	1,536.4	1,900.5	1,726.9	1,787.9	1,900.5	1,841.4	1,694.5	1,661.2	1,726.9
Equity	801.8	968.0	875.0	917.4	968.0	927.8	845.3	828.2	875.0
Listed shares of domestic sectors	243.3	296.0	255.9	287.1	296.0	271.0	236.1	223.2	255.9
Non-financial corporations	204.0	250.4	208.0	244.3	250.4	224.7	195.1	183.3	208.0
Financial corporations	39.2	45.6	47.9	42.7	45.6	46.3	41.0	39.9	47.9
Listed shares of the rest of the world	180.6	249.3	213.8	223.3	249.3	241.1	210.7	210.2	213.8
Other equity <sup>1</sup>	378.0	422.7	405.3	407.1	422.7	415.7	398.5	394.8	405.3
Investment fund shares	734.6	932.5	851.9	870.5	932.5	913.6	849.3	833.0	851.9
Money market fund shares	2.3	2.5	3.3	2.3	2.5	2.5	2.8	2.9	3.3
Non-MMF investment fund shares	732.2	930.0	848.6	868.2	930.0	911.1	846.5	830.1	848.6
Non-life insurance technical reserves and provision for calls under standardised guarantees	412.2	432.5	45.2	426.9	432.5	51.3	48.9	46.8	45.2
Life insurance and annuity entitlements	1,112.1	1,162.2	1,094.8	1,151.6	1,162.2	1,278.4	1,157.0	1,103.2	1,094.8
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	956.8	986.2	1,120.1	973.6	986.2	1,124.0	1,114.8	1,110.6	1,120.1
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable <sup>2</sup>	27.9	27.5	27.8	28.5	27.5	25.8	27.5	27.3	27.8
<b>Total</b>	<b>7,019.0</b>	<b>7,624.0</b>	<b>7,253.7</b>	<b>7,451.8</b>	<b>7,624.0</b>	<b>7,447.5</b>	<b>7,197.8</b>	<b>7,143.2</b>	<b>7,253.7</b>
<b>Liabilities</b>									
Loans	1,923.8	2,024.4	2,112.2	2,000.5	2,024.4	2,045.5	2,074.7	2,103.0	2,112.2
Short-term loans	53.2	53.0	55.5	55.6	53.0	53.7	54.8	55.8	55.5
Long-term loans	1,870.6	1,971.4	2,056.6	1,944.9	1,971.4	1,991.8	2,020.0	2,047.2	2,056.6
Memo item:									
Mortgage loans	1,447.5	1,549.4	1,632.7	1,523.0	1,549.4	1,569.5	1,597.9	1,621.5	1,632.7
Consumer loans	226.1	224.5	228.9	226.7	224.5	224.9	225.5	228.1	228.9
Entrepreneurial loans	250.2	250.5	250.6	250.8	250.5	251.1	251.3	253.4	250.6
Memo item:									
Loans from monetary financial institutions	1,824.6	1,920.3	2,004.0	1,896.1	1,920.3	1,941.0	1,968.8	1,995.3	2,004.0
Loans from financial corporations other than MFIs	99.1	104.1	108.2	104.4	104.1	104.5	106.0	107.6	108.2
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	19.5	20.3	24.3	19.7	20.3	19.4	20.1	21.2	24.3
<b>Total</b>	<b>1,943.3</b>	<b>2,044.7</b>	<b>2,136.5</b>	<b>2,020.2</b>	<b>2,044.7</b>	<b>2,064.9</b>	<b>2,094.9</b>	<b>2,124.2</b>	<b>2,136.5</b>

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

## X. Public finances in Germany

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

Period	€ billion					As a percentage of GDP				
	General government	Central government	State government	Local government	Social security funds	General government	Central government	State government	Local government	Social security funds
<b>Deficit/surplus <sup>1</sup></b>										
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	- 101.3	- 129.2	+ 12.4	+ 8.8	+ 6.7	- 2.6	- 3.3	+ 0.3	+ 0.2	+ 0.2
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	- 5.0	- 36.4	+ 18.0	+ 5.9	+ 7.5	- 0.3	- 1.9	+ 1.0	+ 0.3	+ 0.4
H2 pe	- 96.3	- 92.8	- 5.6	+ 3.0	- 0.8	- 4.9	- 4.7	- 0.3	+ 0.1	- 0.0
<b>Debt level <sup>2</sup></b>										
<b>End of year or quarter</b>										
2016	2,161.6	1,365.6	642.3	166.2	1.2	69.0	43.6	20.5	5.3	0.0
2017	2,130.5	1,361.7	616.8	168.3	0.8	65.2	41.7	18.9	5.2	0.0
2018	2,083.4	1,334.7	603.1	161.7	0.7	61.9	39.7	17.9	4.8	0.0
2019 p	2,068.8	1,312.7	612.6	160.3	0.7	59.6	37.8	17.6	4.6	0.0
2020 p	2,339.9	1,527.1	664.3	162.0	7.5	68.7	44.8	19.5	4.8	0.2
2021 p	2,494.6	1,679.8	665.1	164.1	0.4	69.3	46.6	18.5	4.6	0.0
2022 p	2,563.1	1,776.9	636.6	171.2	2.2	66.3	45.9	16.5	4.4	0.1
2021 Q1 p	2,368.9	1,552.6	667.5	162.0	16.2	69.7	45.7	19.6	4.8	0.5
Q2 p	2,418.8	1,602.7	667.8	163.2	21.2	69.3	45.9	19.1	4.7	0.6
Q3 p	2,452.5	1,630.6	673.1	162.6	24.3	69.2	46.0	19.0	4.6	0.7
Q4 p	2,494.6	1,679.8	665.1	164.1	0.4	69.3	46.6	18.5	4.6	0.0
2022 Q1 p	2,498.8	1,684.9	664.0	163.7	3.1	67.9	45.8	18.0	4.4	0.1
Q2 p	2,536.6	1,724.1	660.2	165.8	3.3	67.7	46.0	17.6	4.4	0.1
Q3 p	2,551.5	1,757.8	644.9	165.6	3.7	67.0	46.2	16.9	4.4	0.1
Q4 p	2,563.1	1,776.9	636.6	171.2	2.2	66.3	45.9	16.5	4.4	0.1

Sources: Federal Statistical Office and Bundesbank calculations. **1** The deficit/surplus in accordance with ESA 2010 corresponds to the Maastricht definition. **2** Quarterly GDP ratios are based on the national output of the four preceding quarters.

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

Period	Revenue				Expenditure							Deficit/surplus	Memo item: Total tax burden <sup>1</sup>
	Total	of which: Taxes	Social contributions	Other	Total	of which: Social benefits	Compensation of employees	Intermediate consumption	Gross capital formation	Interest	Other		
<b>€ billion</b>													
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	1,820.8	957.5	665.8	197.5	1,922.1	974.2	306.7	236.9	101.6	26.1	276.5	- 101.3	1,633.3
<b>As a percentage of GDP</b>													
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	17.2	5.1	49.7	25.2	7.9	6.1	2.6	0.7	7.2	- 2.6	42.2
<b>Percentage growth rates</b>													
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	+ 6.4	+ 7.9	+ 5.1	+ 3.7	+ 4.1	+ 3.5	+ 4.2	+ 4.3	+ 8.8	+ 25.8	+ 2.7	.	+ 6.8

Source: Federal Statistical Office. \* Figures in accordance with ESA 2010. **1** Taxes and social contributions plus customs duties and bank levies to the Single Resolution Fund.

## X. Public finances in Germany

### 3. General government: budgetary development (as per the government finance statistics)

€ billion

Period	Central, state and local government 1									Social security funds 2			General government, total			
	Revenue			Expenditure						Deficit/ surplus	Rev- enue 6	Expend- iture	Deficit/ surplus	Rev- enue	Expend- iture	Deficit/ surplus
	Total 4	of which:		Total 4	of which: 3											
		Taxes	Finan- cial transac- tions 5		Person- nel expend- iture	Current grants	Interest	Fixed asset forma- tion	Finan- cial transac- tions 5							
2016	859.7	705.8	8.8	842.8	251.3	320.8	43.3	48.3	11.7	+ 16.8	601.8	594.8	+ 7.1	1,352.5	1,328.6	+ 23.9
2017	897.6	734.5	7.7	867.8	261.5	327.2	41.9	51.7	13.8	+ 29.8	631.5	622.0	+ 9.5	1,414.9	1,375.6	+ 39.3
2018	949.2	776.3	6.0	904.0	272.4	337.3	39.1	55.1	16.1	+ 45.2	656.2	642.5	+ 13.6	1,488.1	1,429.3	+ 58.8
2019	1,007.7	799.4	11.0	973.9	285.9	348.9	33.5	62.2	16.8	+ 33.7	685.0	676.7	+ 8.3	1,571.2	1,529.2	+ 42.0
2020	944.3	739.9	13.7	1,109.7	299.4	422.0	25.8	68.6	59.9	- 165.4	719.5	747.8	- 28.3	1,516.2	1,709.9	- 193.7
2021	1,105.4	833.3	25.3	1,239.9	310.7	530.8	21.0	69.3	26.1	- 134.5	769.2	777.1	- 6.5	1,701.5	1,844.0	- 142.4
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	215.6	158.1	2.7	275.4	72.2	119.1	8.6	15.4	3.4	- 59.8	175.9	187.0	- 11.1	358.1	429.0	- 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	240.7	185.3	4.3	300.6	75.5	130.8	7.3	11.1	14.6	- 59.9	182.4	196.3	- 13.9	385.2	458.9	- 73.8
Q2 P	267.0	195.8	7.5	297.1	74.8	122.7	10.7	15.2	10.5	- 30.2	185.9	197.0	- 11.1	414.1	455.3	- 41.2
Q3 P	270.9	210.7	7.4	290.2	75.8	121.6	- 0.4	16.5	10.4	- 19.3	183.4	191.9	- 8.6	413.5	441.4	- 27.8
Q4 P	332.9	237.7	6.1	347.8	84.1	148.0	3.1	26.4	- 9.4	- 14.9	197.3	190.4	+ 6.9	492.6	500.6	- 8.0
2022 Q1 P	278.0	224.0	5.0	279.1	79.6	116.3	5.5	11.9	7.0	- 1.0	193.8	199.8	- 6.0	430.1	437.2	- 7.1
Q2 P	287.8	224.6	5.1	294.0	77.8	125.9	10.6	15.3	5.9	- 6.2	199.9	196.7	+ 3.2	444.5	447.5	- 3.1
Q3 P	272.2	207.0	13.3	303.2	78.1	116.5	10.8	17.7	10.8	- 31.0	194.0	197.6	- 3.6	422.9	457.5	- 34.6

Source: Bundesbank calculations based on Federal Statistical Office data. 1 Annual figures based on the quarterly figures of the Federal Statistical Office, core budgets and off-budget entities which are assigned to the general government sector. 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 Excluding 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
2016	344.7	338.4	+ 6.2	380.2	372.0	+ 8.2	247.1	241.7	+ 5.4
2017	357.8	352.8	+ 5.0	396.7	385.5	+ 11.3	258.5	247.7	+ 10.7
2018	374.4	363.5	+ 10.9	419.6	399.8	+ 19.9	270.0	260.1	+ 9.8
2019	382.5	369.2	+ 13.3	436.3	419.3	+ 17.0	282.4	276.7	+ 5.7
2020	341.4	472.1	- 130.7	455.5	489.0	- 33.6	295.2	293.2	+ 2.0
2021	370.3	585.9	- 215.6	509.3	508.7	+ 0.5	308.0	303.4	+ 4.6
2020 Q1	92.3	90.4	+ 1.9	105.6	99.7	+ 5.9	57.9	67.7	- 9.8
Q2	70.8	114.8	- 44.0	108.2	128.0	- 19.8	69.4	69.4	+ 0.1
Q3	83.7	105.4	- 21.7	112.9	113.7	- 0.8	67.5	72.6	- 5.1
Q4	94.5	161.5	- 67.0	127.4	146.3	- 18.9	100.3	83.5	+ 16.8
2021 Q1	75.0	127.5	- 52.5	113.7	120.7	- 7.1	61.1	69.7	- 8.6
Q2	86.4	123.5	- 37.1	122.8	122.0	+ 0.8	74.6	71.7	+ 2.9
Q3	93.9	128.7	- 34.7	125.9	120.2	+ 5.7	74.6	74.9	- 0.3
Q4	115.1	206.3	- 91.2	145.6	144.5	+ 1.2	97.6	87.0	+ 10.6
2022 Q1	94.7	114.0	- 19.3	134.6	122.7	+ 11.9	68.4	73.8	- 5.4
Q2	99.7	123.5	- 23.7	133.2	123.6	+ 9.6	81.0	77.3	+ 3.7
Q3	89.0	127.8	- 38.7	126.1	121.4	+ 4.7	81.1	80.3	+ 0.8

Source: Federal Ministry of Finance, Federal Statistical Office data and Bundesbank calculations. 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 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	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	Total	Central government 1	State government 1	European Union 2					
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		
2022	895,854	760,321	372,121	349,583	38,617	134,146	+ 1,387	34,911		
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	205,544	174,232	84,078	80,020	10,133	33,618	- 2,306	7,953		
Q4	241,767	205,950	101,778	95,471	8,702	41,607	- 5,790	8,121		
2022 Jan.	.	53,484	24,430	25,848	3,205	.	.	2,499		
Feb.	.	59,329	29,399	25,764	4,166	.	.	2,396		
2023 Jan.	.	53,826	26,082	25,563	2,181	.	.	2,555		
Feb.	.	57,034	29,570	23,719	3,745	.	.	2,555		

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	Joint taxes											Local government share in joint taxes		
	Total 1	Income taxes 2					Value added taxes (VAT) 7			Local business tax transfers 8	Central government taxes 9		State government taxes 9	EU customs duties
		Total	Wage tax 3	Assessed income tax 4	Corporation tax 5	Investment income tax 6	Total	Domestic VAT	Import VAT					
2016	648,309	291,492	184,826	53,833	27,442	25,391	217,090	165,932	51,157	7,831	104,441	22,342	5,113	41,345
2017	674,598	312,462	195,524	59,428	29,259	28,251	226,355	170,498	55,856	8,580	99,934	22,205	5,063	45,141
2018	713,576	332,141	208,231	60,415	33,425	30,069	234,800	175,437	59,363	9,078	108,586	23,913	5,057	48,571
2019	735,869	344,016	219,660	63,711	32,013	28,632	243,256	183,113	60,143	8,114	109,548	25,850	5,085	51,379
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
2022	814,886	390,111	227,205	77,411	46,334	39,161	284,850	198,201	86,649	6,347	96,652	30,097	6,829	54,565
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
Q4	221,464	109,652	67,205	21,704	13,186	7,557	72,339	47,889	24,451	2,740	28,302	6,444	1,987	15,514
2022 Jan.	57,559	26,230	19,945	2,019	1,502	2,764	23,523	17,189	6,333	270	4,292	2,822	422	4,075
Feb.	63,163	22,038	18,266	1,400	296	2,075	27,723	24,688	3,035	340	9,781	2,731	550	3,834
2023 Jan.	58,034	25,989	20,778	1,996	860	2,355	24,808	17,242	7,566	348	4,129	2,280	481	4,208
Feb.	60,557	21,160	17,720	522	290	2,628	26,523	23,615	2,908	19	10,340	1,960	556	3,523

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 2022: 46.6:50.5:2.8. The EU share is deducted from central government's share. **8** Respective percentage share of central and state government for 2022: 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

Period	Central government taxes 1								State government taxes 1				Local government taxes		
	Energy tax	Solidarity surcharge	Tobacco tax	Insurance tax	Motor vehicle tax	Electricity tax	Alcohol tax	Other	Tax on the acquisition of land and buildings	Inheritance tax	Betting and lottery tax	Other	Total	of which:	
														Local business tax 2	Real property taxes
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
2022	33,667	11,978	14,229	15,672	9,499	6,830	2,191	2,585	17,122	9,226	2,569	1,180	87,315	70,382	15,282
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	21,463	16,792	4,249
Q4	13,020	3,049	4,467	2,567	2,147	1,725	606	722	3,555	2,023	611	254	23,043	19,298	3,380
2022 Jan.	391	666	538	818	883	629	177	191	1,588	900	259	75	.	.	.
Feb.	1,514	498	748	5,371	764	505	223	158	1,616	813	229	73	.	.	.
2023 Jan.	283	678	461	829	872	611	165	229	1,205	764	238	73	.	.	.
Feb.	1,351	531	890	5,862	738	532	219	217	988	661	234	77	.	.	.

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

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

€ million

Period	Revenue 1			Expenditure 1			Deficit/surplus	Assets 3				Memo item: Administrative assets	
	Total	of which:		Total	of which:			Total	Deposits 4	Securities	Equity interests, mortgages and other loans 5		Real estate
		Contributions 2	Payments from central government		Pension payments	Pensioners' health insurance							
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
2022 p	362,939	258,217	104,029	360,029	308,556	23,786	+2,911	46,082	44,186	1,399	446	51	3,767
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
Q4	96,931	70,750	25,995	93,444	79,944	6,170	+3,487	46,082	44,186	1,399	446	51	3,767

Sources: German pension insurance scheme and Bundesbank calculations. \* Excluding the German pension insurance scheme for mining, railway and maritime industries. The final annual figures generally differ from the total of the reported quarterly figures as the latter are not revised. **1** Including financial compensation payments. Excluding in-

vestment spending and proceeds. **2** Including contributions for recipients of government cash benefits. **3** Largely corresponds to the sustainability reserves. End of year or quarter. **4** Including cash. **5** Excluding loans to other social security funds.

## X. Public finance in Germany

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

€ million

Period	Revenue				Expenditure						Deficit/ surplus	Memo item: Deficit- offsetting grant or loan from central government
	Total 1	of which:			Total	of which:						
		Contri- butions	Insolvency compen- sation levy	Government funds		Unemploy- ment benefit 2	Short-time working benefits 3	Job promotion 4	Insolvency benefit payment	Adminis- trative expendi- ture 5		
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
2022	37,831	31,651	1,062	–	37,530	16,588	3,865	7,125	534	6,256	+ 300	423
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	–
Q4	10,398	8,679	289	–	8,987	4,016	156	1,889	145	1,888	+ 1,411	423

Source: Federal Employment Agency and Bundesbank calculations. \* 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, meas-

ures to encourage job take-up, rehabilitation, integration, 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

Period	Revenue 1			Expenditure 1							Deficit/ surplus	
	Total	of which:		Total	of which:							
		Contri- butions	Central government funds 2		Hospital treatment	Pharma- ceuticals	Medical treatment	Dental treatment 3	Remedies and therapeutic appliances	Sickness benefits		Adminis- trative expendi- ture 4
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
2022 <sup>p</sup>	315,392	262,379	50,223	310,668	84,453	48,408	47,193	16,801	21,344	17,958	12,611	+ 4,725
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
Q4	81,512	70,384	9,091	74,894	21,659	12,242	11,717	4,310	5,442	4,486	3,148	+ 6,617

Source: Federal Ministry of Health and Bundesbank calculations. 1 The final annual figures generally differ from the total of the reported quarterly figures as the latter are not revised. Excluding revenue and expenditure as part of the risk structure compensation

scheme. 2 Federal grant and liquidity assistance. 3 Including dentures. 4 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		Expenditure 1						Deficit/ surplus
	Total	of which:	Total	of which:					
		Contributions		Non-cash care benefits	Inpatient care total 2	Nursing benefit	Contributions to pension insur- ance scheme 3	Administrative expenditure	
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
2022 p	57,783	52,451	60,030	10,247	20,478	14,917	3,209	2,148	- 2,247
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
Q4	15,813	14,067	15,078	2,581	5,281	3,892	837	528	+ 735

Source: Federal Ministry of Health and Bundesbank calculations. \* The final annual figures generally differ from the total of the reported provisional quarterly figures as the latter are not revised. 1 Including transfers to the long-term care provident fund. 2 In-

cluding benefits for short-term care and daytime/night-time nursing care, inter alia. 3 For non-professional carers.

### 12. Maastricht debt by creditor

€ million

Period (end of year or quarter)	Banking system					Domestic non-banks					Foreign creditors
	Total	Bundesbank		Domestic MFIs		Total	Other domestic financial corporations		Other domestic creditors		
		Total	of which:	Total	of which:		Total	of which:	Total	of which:	
			Debt securities		Debt securities			Debt securities		Debt securities	
2016	2,161,570	205,391	191,880	585,456	223,408	211,514	111,843	48,630	14,181	1,110,578	1,012,274
2017	2,130,519	319,159	305,301	557,950	194,620	180,105	81,126	45,106	10,456	1,028,199	941,748
2018	2,083,367	364,731	350,487	516,113	167,505	186,345	89,793	44,124	8,724	972,054	892,224
2019	2,068,810	366,562	352,025	480,190	158,119	183,669	88,727	48,738	7,224	989,652	908,794
2020	2,339,934	522,392	507,534	517,602	157,828	191,079	99,688	41,093	8,372	1,067,768	996,570
2021	2,494,587	716,004	700,921	509,199	144,646	191,656	103,125	39,444	7,436	1,038,284	969,176
2022 p	2,563,081	741,363	726,147	521,043	126,890	211,216	126,370	43,796	8,972	1,045,662	980,484
2020 Q1	2,114,285	371,076	356,469	492,264	163,767	185,852	92,853	49,820	7,746	1,015,272	935,548
Q2	2,284,382	424,141	409,393	558,877	172,258	186,264	93,879	49,942	8,600	1,065,157	983,998
Q3	2,358,574	468,723	453,952	531,714	167,754	189,464	97,649	51,791	8,100	1,116,882	1,046,058
Q4	2,339,934	522,392	507,534	517,602	157,828	191,079	99,688	41,093	8,372	1,067,768	996,570
2021 Q1	2,368,916	561,443	546,539	491,994	162,960	190,044	99,241	50,869	8,060	1,074,566	1,010,738
Q2	2,418,789	620,472	605,429	494,443	151,182	189,839	99,581	39,995	7,700	1,074,040	1,008,690
Q3	2,452,516	669,659	654,600	496,369	152,068	191,531	101,702	41,857	8,069	1,053,100	987,782
Q4	2,494,587	716,004	700,921	509,199	144,646	191,656	103,125	39,444	7,436	1,038,284	969,176
2022 Q1 p	2,498,760	737,978	722,843	493,359	143,410	193,909	105,978	37,842	6,959	1,035,672	969,145
Q2 p	2,536,603	759,385	744,213	497,518	133,999	202,461	115,357	39,891	8,086	1,037,347	971,585
Q3 p	2,551,520	741,360	726,147	528,509	126,865	202,427	116,416	39,610	8,986	1,039,614	969,073
Q4 p	2,563,081	741,363	726,147	521,043	126,890	211,216	126,370	43,796	8,972	1,045,662	980,484

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

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### 13. Maastricht debt by instrument

€ million

Period (end of year or quarter)	Total	Currency and deposits <sup>1</sup>	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
<b>General government</b>								
2016	2,161,570	15,491	69,715	1,483,871	96,254	496,239	.	.
2017	2,130,519	14,298	48,789	1,484,462	88,841	494,129	.	.
2018	2,083,367	14,680	52,572	1,456,160	79,171	480,783	.	.
2019	2,068,810	14,449	56,350	1,458,540	64,464	475,007	.	.
2020 Q1	2,114,285	11,410	84,160	1,472,222	74,813	471,680	.	.
Q2	2,284,382	13,120	134,272	1,533,857	133,665	469,468	.	.
Q3	2,358,574	11,886	190,939	1,582,574	104,075	469,099	.	.
Q4	2,339,934	14,486	173,851	1,596,141	85,384	470,072	.	.
2021 Q1	2,368,916	12,283	190,022	1,637,516	62,725	466,371	.	.
Q2	2,418,789	13,065	182,660	1,689,923	69,272	463,869	.	.
Q3	2,452,516	13,565	192,481	1,711,741	70,629	464,100	.	.
Q4	2,494,587	17,743	195,420	1,729,884	88,684	462,855	.	.
2022 Q1 P	2,498,760	15,676	172,881	1,775,454	70,285	464,464	.	.
Q2 P	2,536,603	17,793	161,918	1,811,322	75,954	469,616	.	.
Q3 P	2,551,520	22,631	150,016	1,797,472	82,941	498,460	.	.
Q4 P	2,563,081	16,985	150,704	1,818,159	92,781	484,452	.	.
<b>Central government</b>								
2016	1,365,579	15,491	55,208	1,123,853	50,004	121,022	556	8,567
2017	1,361,680	14,298	36,297	1,131,896	48,305	130,885	1,131	10,618
2018	1,334,661	14,680	42,246	1,107,140	43,067	127,528	933	9,975
2019	1,312,675	14,449	38,480	1,101,866	29,956	127,924	605	10,301
2020 Q1	1,340,794	11,410	56,679	1,103,934	40,120	128,652	605	8,119
Q2	1,487,263	13,120	109,217	1,139,510	96,960	128,457	585	7,026
Q3	1,550,507	11,886	166,559	1,178,687	64,470	128,905	605	11,713
Q4	1,527,062	14,486	154,498	1,180,683	48,414	128,981	609	14,521
2021 Q1	1,552,615	12,283	167,485	1,212,495	31,284	129,068	602	22,929
Q2	1,602,675	13,065	165,374	1,259,206	36,297	128,734	643	29,448
Q3	1,630,577	13,565	170,962	1,280,586	37,116	128,348	687	31,382
Q4	1,679,842	17,743	176,428	1,300,416	57,806	127,448	640	8,080
2022 Q1 P	1,684,879	15,676	155,119	1,340,340	41,903	131,841	531	10,451
Q2 P	1,724,097	17,793	147,674	1,373,617	47,652	137,362	604	10,552
Q3 P	1,757,787	22,631	144,987	1,369,630	56,254	164,285	768	13,203
Q4 P	1,776,883	16,985	146,974	1,391,710	71,867	149,348	8,826	9,159
<b>State government</b>								
2016	642,291	-	14,515	361,996	20,482	245,298	11,273	1,694
2017	616,790	-	12,543	354,688	19,790	229,769	14,038	2,046
2018	603,143	-	10,332	351,994	19,250	221,567	14,035	1,891
2019	612,559	-	17,873	360,495	19,076	215,115	14,934	1,826
2020 Q1	626,402	-	27,484	372,021	16,329	210,568	12,292	1,783
Q2	648,455	-	25,056	398,404	17,267	207,728	11,059	2,085
Q3	659,035	-	24,382	408,310	20,208	206,136	11,701	2,090
Q4	664,284	-	19,354	419,862	19,481	205,587	11,924	1,410
2021 Q1	667,504	-	22,538	429,641	14,367	200,958	10,942	1,998
Q2	667,750	-	17,287	435,726	16,169	198,568	12,454	2,047
Q3	673,140	-	21,521	436,506	16,312	198,801	11,414	2,119
Q4	665,104	-	18,994	434,930	14,313	196,866	12,441	1,766
2022 Q1 P	663,981	-	17,765	440,766	12,390	193,061	11,697	1,935
Q2 P	660,246	-	14,247	443,413	12,056	190,530	11,449	1,777
Q3 P	644,911	-	5,031	433,503	14,826	191,552	14,099	2,200
Q4 P	636,554	-	3,732	432,252	11,782	188,788	11,704	1,701
<b>Local government</b>								
2016	166,205	-	-	2,404	27,002	136,798	1,819	431
2017	168,305	-	-	3,082	24,909	140,314	1,881	466
2018	161,729	-	1	3,046	20,903	137,779	1,884	497
2019	160,250	-	-	2,996	19,607	137,647	1,856	532
2020 Q1	161,020	-	-	3,128	20,257	137,636	1,824	508
Q2	161,393	-	-	3,094	20,236	138,063	2,084	350
Q3	162,760	-	-	2,961	21,108	138,691	2,106	339
Q4	161,974	-	-	3,366	18,520	140,088	1,402	330
2021 Q1	161,985	-	-	3,121	18,025	140,839	2,009	320
Q2	163,157	-	-	3,121	19,079	140,957	2,070	313
Q3	162,609	-	-	3,000	18,311	141,298	2,127	306
Q4	164,118	-	-	3,241	17,978	142,899	1,768	293
2022 Q1 P	163,678	-	-	3,052	16,821	143,804	1,933	315
Q2 P	165,754	-	-	2,902	16,961	145,891	1,823	361
Q3 P	165,560	-	-	2,856	15,926	146,778	2,247	358
Q4 P	171,150	-	-	2,883	18,210	150,057	1,748	470

For footnotes see end of table.



## X. Public finances in Germany

### 13. Maastricht debt by instrument (cont'd)

€ million

Period (end of year or quarter)	Total	Currency and deposits <sup>1</sup>	Debt securities by original maturity		Loans by original maturity		Memo item: <sup>2</sup>	
			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
<b>Social security funds</b>								
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	3,320	-	-	-	3,078	242	2,939	4,124
Q3 P	3,686	-	-	-	3,439	247	3,311	4,665
Q4 P	2,196	-	-	-	1,589	607	1,424	12,372

Source: Bundesbank calculations based on data from the Federal Statistical Office and the Federal Republic of Germany - Finance Agency. <sup>1</sup> Particularly liabilities resulting from coins in circulation. <sup>2</sup> 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.

### 14. Maastricht debt of central government by instrument and category

€ million

Period (end of year or quarter)	Currency and deposits <sup>2</sup>		Debt securities									Loans <sup>1</sup>	
	Total <sup>1</sup>	Federal day bond	Total <sup>1</sup>	of which: <sup>3</sup>					Inflation- linked Federal securities <sup>6</sup>	Capital indexation of inflation- linked securities			
				Conventional Federal bonds (Bunds)	Conventional Federal notes (Boblis)	Conventional Federal Treasury notes (Schätze) <sup>4</sup>	Treasury discount paper (Bubills) <sup>5</sup>	Federal savings notes			Green Federal securities		
2007	987,909	6,675	.	917,584	564,137	173,949	102,083	37,385	10,287	.	13,464	506	63,650
2008	1,019,905	12,466	3,174	928,754	571,913	164,514	105,684	40,795	9,649	.	19,540	1,336	78,685
2009	1,086,173	9,981	2,495	1,013,072	577,798	166,471	113,637	104,409	9,471	.	24,730	1,369	63,121
2010	1,337,160	10,890	1,975	1,084,019	602,624	185,586	126,220	85,867	8,704	.	35,906	2,396	242,251
2011	1,346,869	10,429	2,154	1,121,331	615,200	199,284	130,648	58,297	8,208	.	44,241	3,961	215,109
2012	1,390,377	9,742	1,725	1,177,168	631,425	217,586	117,719	56,222	6,818	.	52,119	5,374	203,467
2013	1,392,735	10,582	1,397	1,192,025	643,200	234,759	110,029	50,004	4,488	.	51,718	4,730	190,127
2014	1,398,472	12,146	1,187	1,206,203	653,823	244,633	103,445	27,951	2,375	.	63,245	5,368	180,123
2015	1,371,933	13,949	1,070	1,188,463	663,296	232,387	96,389	18,536	1,305	.	74,495	5,607	169,521
2016	1,365,579	15,491	1,010	1,179,062	670,245	221,551	95,727	23,609	737	.	66,464	3,602	171,026
2017	1,361,680	14,298	966	1,168,193	693,687	203,899	91,013	10,037	289	.	72,855	4,720	179,190
2018	1,334,661	14,680	921	1,149,386	710,513	182,847	86,009	12,949	48	.	64,647	5,139	170,595
2019	1,312,675	14,449	-	1,140,346	719,747	174,719	89,230	13,487	.	.	69,805	6,021	157,880
2020	1,527,062	14,486	.	1,335,181	801,910	179,560	98,543	113,141	.	9,876	58,279	3,692	177,395
2021	1,679,842	17,743	.	1,476,844	892,464	190,839	103,936	153,978	.	21,627	65,390	6,722	185,255
2022 P	1,776,883	16,985	.	1,538,683	947,349	198,084	113,141	137,990	.	36,411	72,357	15,844	221,215
2020 Q1	1,340,794	11,410	.	1,160,613	721,343	182,095	91,084	23,572	.	.	71,028	5,310	168,772
Q2	1,487,263	13,120	.	1,248,728	774,587	178,329	95,622	79,987	.	.	56,061	3,752	225,416
Q3	1,550,507	11,886	.	1,345,246	790,288	191,388	99,276	127,478	.	6,050	57,144	3,737	193,375
Q4	1,527,062	14,486	.	1,335,181	801,910	179,560	98,543	113,141	.	9,876	58,279	3,692	177,395
2021 Q1	1,552,615	12,283	.	1,379,980	814,864	189,935	103,910	134,800	.	11,026	60,687	3,857	160,352
Q2	1,602,675	13,065	.	1,424,579	861,455	184,413	104,997	139,451	.	16,526	62,569	5,056	165,031
Q3	1,630,577	13,565	.	1,451,549	869,195	198,692	105,398	146,533	.	19,824	63,851	5,456	165,464
Q4	1,679,842	17,743	.	1,476,844	892,464	190,839	103,936	153,978	.	21,627	65,390	6,722	185,255
2022 Q1 P	1,684,879	15,676	.	1,495,459	911,280	204,534	108,702	140,427	.	23,961	67,776	7,809	173,744
Q2 P	1,724,097	17,793	.	1,521,291	937,949	198,472	111,343	138,495	.	29,425	70,217	11,209	185,014
Q3 P	1,757,787	22,631	.	1,514,617	918,838	208,509	111,675	137,740	.	35,527	71,498	12,879	220,539
Q4 P	1,776,883	16,985	.	1,538,683	947,349	198,084	113,141	137,990	.	36,411	72,357	15,844	221,215

Sources: Federal Republic of Germany - Finance Agency, Federal Statistical Office, and Bundesbank calculations. <sup>1</sup> 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. <sup>2</sup> Particularly liabilities

resulting from coins in circulation. <sup>3</sup> Issuances by the Federal Republic of Germany. Excluding issuers' holdings of own securities but including those held by other government entities. <sup>4</sup> Including medium-term notes issued by the Treuhand agency (expired in 2011). <sup>5</sup> Including Federal Treasury financing papers (expired in 2014). <sup>6</sup> Excluding inflation-induced indexation of capital.

## XI. Economic conditions in Germany

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

Item	2020			2021			2022			2021			2022		
	2020	2021	2022	2020	2021	2022	2.Vj.	3.Vj.	4.Vj.	1.Vj.	2.Vj.	3.Vj.	4.Vj.		
	Index 2015=100			Annual percentage change											
<b>At constant prices, chained</b>															
<b>I. Origin of domestic product</b>															
Production sector (excluding construction)	100.4	104.9	104.9	- 7.2	4.5	- 0.0	20.2	2.6	- 1.1	1.1	- 0.1	0.9	- 1.9		
Construction	102.1	100.7	97.8	2.0	- 1.4	- 2.9	4.1	2.3	- 6.1	4.5	- 3.4	- 4.6	- 6.2		
Wholesale/retail trade, transport and storage, hotel and restaurant services	101.0	103.9	108.0	- 7.5	2.8	4.0	11.5	3.2	4.1	9.1	5.8	2.4	- 0.7		
Information and communication	120.8	125.2	129.6	0.1	3.6	3.5	7.0	3.9	2.9	3.4	2.9	4.0	3.7		
Financial and insurance activities	98.9	99.1	101.3	3.6	0.3	2.2	- 0.2	- 0.1	0.6	2.3	2.1	2.5	1.8		
Real estate activities	102.2	103.1	104.3	0.4	0.9	1.1	3.1	0.2	0.7	1.6	1.2	0.7	1.0		
Business services <sup>1</sup>	105.1	109.8	112.7	- 5.0	4.4	2.7	13.0	6.5	4.4	6.5	2.3	1.0	1.1		
Public services, education and health	105.4	107.6	110.2	- 1.1	2.0	2.4	8.6	- 0.2	1.6	2.4	0.8	2.8	3.7		
Other services	91.2	91.5	97.1	- 11.6	0.4	6.1	9.0	1.5	4.3	8.5	8.3	2.3	5.9		
Gross value added	102.8	105.6	107.5	- 3.9	2.7	1.8	10.7	2.2	1.2	3.6	1.7	1.4	0.4		
Gross domestic product <sup>2</sup>	103.2	105.9	107.8	- 3.7	2.6	1.8	10.6	1.8	1.2	3.9	1.7	1.3	0.3		
<b>II. Use of domestic product</b>															
Private consumption <sup>3</sup>	101.1	101.5	105.9	- 5.7	0.4	4.3	6.5	1.4	3.1	8.5	7.0	2.1	0.4		
Government consumption	113.8	118.1	119.5	4.0	3.8	1.2	8.5	2.1	1.4	4.2	- 0.1	0.2	0.5		
Machinery and equipment	100.8	104.3	107.7	- 11.0	3.5	3.3	20.8	- 2.1	- 2.6	0.7	0.7	8.9	3.1		
Premises	112.9	112.9	110.9	- 3.9	0.0	- 1.7	4.4	0.6	- 3.2	3.4	- 3.4	- 1.7	- 4.9		
Other investment <sup>4</sup>	116.3	117.6	120.0	- 3.3	1.0	2.1	4.1	1.6	0.7	1.7	1.8	2.4	2.5		
Changes in inventories <sup>5,6</sup>	.	.	.	- 0.3	0.5	0.5	- 0.4	1.0	0.9	- 0.7	0.3	1.2	0.9		
Domestic demand	106.1	108.1	111.5	- 3.0	1.9	3.1	7.1	2.3	2.4	5.0	3.6	2.9	1.0		
Net exports <sup>6</sup>	.	.	.	- 0.8	0.8	- 1.2	3.8	- 0.3	- 1.0	- 0.9	- 1.7	- 1.5	- 0.6		
Exports	101.0	110.8	113.9	- 9.3	9.7	2.9	28.2	7.4	7.2	3.6	2.4	5.1	0.5		
Imports	107.6	117.3	124.3	- 8.5	9.0	6.0	20.6	9.3	11.1	6.3	6.9	9.2	1.9		
Gross domestic product <sup>2</sup>	103.2	105.9	107.8	- 3.7	2.6	1.8	10.6	1.8	1.2	3.9	1.7	1.3	0.3		
<b>At current prices (€ billion)</b>															
<b>III. Use of domestic product</b>															
Private consumption <sup>3</sup>	1,713.5	1,773.8	1,978.9	- 5.1	3.5	11.6	8.3	5.3	7.9	13.8	14.1	9.5	9.3		
Government consumption	748.0	797.5	848.4	6.4	6.6	6.4	7.9	6.2	6.1	9.1	5.8	5.4	5.3		
Machinery and equipment	217.5	229.4	253.7	- 9.8	5.5	10.6	22.6	- 0.3	0.2	6.2	7.6	17.4	11.2		
Premises	384.8	416.7	474.6	5.9	8.3	13.9	9.5	12.8	10.3	18.7	14.7	13.3	9.4		
Other investment <sup>4</sup>	133.8	137.7	144.0	- 2.8	2.9	4.6	5.8	3.4	2.9	5.6	5.0	4.9	3.1		
Changes in inventories <sup>5</sup>	16.1	55.1	87.9	.	.	.	.	.	.	.	.	.	.		
Domestic use	3,213.8	3,410.2	3,787.5	- 1.9	6.1	11.1	9.3	7.8	9.4	12.8	12.7	11.2	7.9		
Net exports	191.7	191.6	79.5	.	.	.	.	.	.	.	.	.	.		
Exports	1,464.8	1,693.9	1,946.6	- 9.6	15.6	14.9	33.3	15.1	17.1	15.4	16.4	18.6	9.8		
Imports	1,273.1	1,502.4	1,867.1	- 10.6	18.0	24.3	30.0	20.3	26.7	25.6	28.3	31.7	13.1		
Gross domestic product <sup>2</sup>	3,405.4	3,601.8	3,867.1	- 2.0	5.8	7.4	11.5	6.3	6.3	8.9	8.0	6.1	6.5		
<b>IV. Prices (2015=100)</b>															
Private consumption	105.7	109.0	116.5	0.6	3.1	6.9	1.7	3.8	4.7	5.0	6.6	7.3	8.8		
Gross domestic product	109.1	112.4	118.6	1.8	3.1	5.5	0.9	4.4	5.0	4.9	6.2	4.8	6.2		
Terms of trade	102.8	100.1	95.4	2.0	- 2.6	- 4.7	- 3.5	- 2.7	- 4.2	- 5.7	- 5.3	- 6.4	- 1.6		
<b>V. Distribution of national income</b>															
Compensation of employees	1,853.9	1,918.0	2,029.8	- 0.1	3.5	5.8	5.1	4.7	4.6	6.6	5.6	4.8	6.3		
Entrepreneurial and property income	717.7	825.4	828.7	- 4.6	15.0	0.4	39.9	9.7	10.5	3.6	- 2.7	4.0	- 3.9		
National income	2,571.6	2,743.4	2,858.5	- 1.4	6.7	4.2	13.4	6.2	6.1	5.6	3.2	4.5	3.5		
Memo item: Gross national income	3,505.7	3,729.5	3,998.9	- 2.4	6.4	7.2	11.9	7.3	6.9	9.2	7.6	6.0	6.3		

Source: Federal Statistical Office; figures computed in February 2023. <sup>1</sup> Professional, scientific, technical, administration and support service activities. <sup>2</sup> Gross value added plus taxes on products (netted with subsidies on products). <sup>3</sup> Including non-profit insti-

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

## XI. Economic conditions in Germany

### 2. Output in the production sector \*

Adjusted for working-day variations ◦

Production sector, total	of which:											
	Construc-tion	Energy	Industry									
			Total	of which: by main industrial grouping				of which: by economic sector				
				Inter-mediate goods	Capital goods	Durable goods	Non-durable goods	Manu-facture of basic metals and fabricated metal products	Manu-facture of computers, electronic and optical products and electrical equipment	Machinery and equipment	Motor vehicels, trailers and semi-trailers	
<b>2015 = 100</b>												
% 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												
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
2022 x	97.8	112.6	85.1	96.2	99.5	92.1	105.7	99.6	96.4	113.5	96.6	76.4
2021 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	97.8	116.4	79.2	96.0	99.5	91.4	105.5	99.9	95.9	117.0	96.3	75.0
Q4 x	100.0	120.2	83.6	97.8	93.1	100.1	107.5	100.6	92.8	116.0	105.6	83.1
2022 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	99.1	120.6	81.9	96.7	102.2	91.7	102.0	97.4	97.6	115.3	95.4	75.5
Aug. 2	91.3	110.5	77.6	89.1	95.3	81.4	97.9	96.4	89.9	112.2	89.0	60.2
Sep.	102.9	118.2	78.0	102.2	101.1	101.2	116.6	105.8	100.1	123.4	104.5	89.3
Oct. x	101.5	122.7	80.4	99.4	100.2	96.7	112.2	104.0	100.5	117.8	98.6	83.8
Nov. x	105.3	124.4	84.5	103.6	100.4	105.5	113.9	104.0	99.8	123.1	105.7	95.4
Dec. x	93.3	113.5	85.8	90.3	78.8	98.2	96.3	93.7	78.1	107.2	112.5	70.0
2023 Jan. x	88.7	82.0	89.1	89.9	94.3	85.0	92.7	94.2	91.4	108.6	83.4	78.5
Feb. x,p	95.5	98.7	81.2	96.1	96.4	96.6	100.6	92.7	95.2	113.9	91.5	94.7

### Annual percentage change

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
2022 x	- 0.6	- 1.5	- 2.3	- 0.4	- 3.1	+ 1.8	+ 2.0	+ 0.5	- 2.5	+ 4.4	+ 0.7	+ 3.4
2021 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	+ 0.9	- 2.5	- 1.7	+ 1.9	- 2.7	+ 7.5	+ 3.6	- 1.7	- 2.1	+ 7.3	+ 1.7	+ 21.5
Q4 x	- 1.4	- 3.7	- 10.6	- 0.2	- 5.9	+ 5.3	- 1.2	- 2.1	- 3.2	+ 6.0	+ 3.4	+ 11.8
2022 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	- 1.3	- 2.5	+ 5.3	- 1.4	- 3.2	+ 0.8	- 0.3	- 3.6	- 3.7	+ 5.1	- 2.6	+ 2.6
Aug. 2	+ 1.3	- 2.0	- 3.2	+ 2.5	- 2.6	+ 9.3	+ 7.0	- 1.9	- 1.4	+ 7.3	+ 2.9	+ 30.9
Sep.	+ 2.8	- 3.0	- 6.8	+ 4.7	- 2.4	+ 12.8	+ 4.3	+ 0.3	- 1.1	+ 9.4	+ 4.9	+ 36.1
Oct. x	- 0.6	- 0.9	- 12.7	+ 0.4	- 4.1	+ 5.5	- 0.6	- 2.1	- 1.0	+ 6.6	+ 2.4	+ 14.2
Nov. x	- 0.5	- 2.4	- 9.2	+ 0.6	- 3.9	+ 5.8	- 0.5	- 3.5	- 3.5	+ 8.8	+ 3.8	+ 13.7
Dec. x	- 3.3	- 7.9	- 9.9	- 1.6	- 10.3	+ 4.6	- 2.5	- 0.6	- 5.6	+ 2.2	+ 3.8	+ 6.9
2023 Jan. x	- 1.6	- 0.5	- 9.5	- 0.9	- 5.7	+ 4.4	- 3.9	- 1.7	- 2.9	+ 5.2	+ 1.8	+ 11.5
Feb. x,p	+ 0.6	+ 1.6	- 14.1	+ 1.7	- 4.7	+ 9.9	- 4.2	- 4.1	- 2.4	+ 5.7	+ 2.8	+ 20.6

Source of the unadjusted figures: Federal Statistical Office. \* For explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Tables III.1.a to III.1.c ◦ 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 ◦

Period	Industry		of which:				Consumer goods		of which:			
	2015 = 100	Annual percentage change	Intermediate goods		Capital goods		2015 = 100	Annual percentage change	Durable goods		Non-durable goods	
			2015 = 100	Annual percentage change	2015 = 100	Annual percentage change			2015 = 100	Annual percentage change	2015 = 100	Annual percentage change
<b>Total</b>												
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	105.7	- 1.2	124.4	+ 0.9	99.6	- 2.1
2021	119.3	+ 22.7	124.6	+ 27.3	116.3	+ 21.7	117.5	+ 11.2	146.5	+ 17.8	107.9	+ 8.3
2022	126.2	+ 5.8	138.4	+ 11.1	118.3	+ 1.7	129.0	+ 9.8	164.8	+ 12.5	117.2	+ 8.6
2022 Feb. r	128.8	+ 15.8	136.6	+ 16.3	123.9	+ 15.3	128.9	+ 17.7	153.9	+ 17.4	120.7	+ 17.8
Mar. r	138.9	+ 7.2	153.1	+ 13.6	129.2	+ 1.6	145.5	+ 18.6	193.8	+ 30.8	129.6	+ 13.5
Apr. r	123.4	+ 5.1	142.9	+ 13.1	109.7	- 2.8	136.4	+ 23.9	188.7	+ 16.1	119.1	+ 28.3
May r	123.9	+ 8.8	139.4	+ 13.3	113.8	+ 5.1	127.5	+ 11.9	178.8	+ 13.8	110.6	+ 11.0
June r	129.3	+ 2.1	142.4	+ 11.6	120.4	- 4.1	136.0	+ 3.0	168.3	+ 11.2	125.3	- 0.2
July r	127.7	- 0.3	143.7	+ 12.4	118.9	- 7.5	120.7	- 5.2	149.9	- 0.7	111.0	- 7.1
Aug. r	114.5	+ 7.6	128.3	+ 11.0	104.9	+ 4.8	122.2	+ 9.9	161.0	+ 18.9	109.4	+ 5.9
Sep. r	123.6	+ 0.8	132.0	+ 6.3	117.1	- 4.6	134.4	+ 17.9	166.3	+ 19.5	123.9	+ 17.2
Oct. r	125.5	+ 7.1	134.9	+ 8.1	119.3	+ 6.3	128.9	+ 7.6	173.6	+ 22.3	114.2	+ 1.5
Nov. r	124.4	- 0.7	135.4	+ 1.9	117.0	- 3.1	129.4	+ 3.9	149.6	- 0.1	122.8	+ 5.7
Dec. r	121.3	- 1.9	127.6	+ 6.2	118.6	- 6.5	112.0	- 2.2	139.8	- 6.2	102.9	- 0.2
2023 Jan. r	125.8	- 5.3	139.2	- 3.5	118.1	- 6.9	122.2	- 3.3	135.6	- 11.9	117.8	+ 0.3
Feb. p	129.4	+ 0.5	133.6	- 2.2	127.2	+ 2.7	125.9	- 2.3	154.3	+ 0.3	116.5	- 3.5
<b>From the domestic market</b>												
2019	101.2	- 5.6	99.1	- 8.7	103.0	- 3.4	101.2	- 1.7	116.2	+ 1.3	96.1	- 2.8
2020	94.9	- 6.2	94.1	- 5.0	95.1	- 7.7	98.0	- 3.2	105.5	- 9.2	95.4	- 0.7
2021	115.5	+ 21.7	119.5	+ 27.0	113.1	+ 18.9	108.0	+ 10.2	114.9	+ 8.9	105.6	+ 10.7
2022	122.7	+ 6.2	135.4	+ 13.3	112.6	- 0.4	118.2	+ 9.4	125.0	+ 8.8	115.9	+ 9.8
2022 Feb. r	123.3	+ 14.4	132.3	+ 17.4	116.4	+ 11.1	118.4	+ 18.0	117.6	+ 7.0	118.7	+ 22.2
Mar. r	138.4	+ 9.3	148.7	+ 13.9	130.8	+ 4.0	130.3	+ 19.1	142.8	+ 8.7	126.1	+ 23.7
Apr. r	123.6	+ 11.7	138.5	+ 18.2	109.8	+ 3.1	130.5	+ 27.6	137.7	+ 7.4	128.0	+ 36.9
May r	122.4	+ 9.0	136.3	+ 14.9	112.0	+ 3.1	113.3	+ 12.4	138.0	+ 13.7	104.9	+ 11.8
June r	125.6	- 1.6	137.0	+ 9.5	116.0	- 11.1	124.7	+ 0.6	127.4	+ 8.7	123.8	- 2.0
July r	124.5	- 3.3	143.9	+ 14.1	110.1	- 16.7	110.4	- 9.0	124.7	+ 7.5	105.6	- 14.2
Aug. r	110.2	+ 5.5	124.9	+ 12.0	97.9	- 0.5	108.2	+ 2.1	121.3	+ 9.4	103.7	- 0.7
Sep. r	120.6	+ 9.6	128.8	+ 9.2	112.9	+ 8.2	125.7	+ 21.9	123.5	+ 16.3	126.4	+ 23.9
Oct. r	120.5	+ 4.2	133.8	+ 8.8	108.9	- 1.0	121.7	+ 10.1	123.7	+ 15.9	121.0	+ 8.2
Nov. r	123.2	+ 3.2	134.4	+ 6.1	113.3	- 0.4	125.7	+ 8.9	128.2	+ 9.0	124.9	+ 9.0
Dec. r	115.4	- 3.0	127.5	+ 14.5	108.6	- 14.9	92.1	- 12.7	99.3	- 2.6	89.7	- 15.9
2023 Jan. r	121.5	- 2.6	137.3	- 1.0	110.5	- 3.0	105.0	- 10.7	105.7	- 9.0	104.8	- 11.3
Feb. p	127.0	+ 3.0	133.2	+ 0.7	124.1	+ 6.6	111.4	- 5.9	113.7	- 3.3	110.6	- 6.8
<b>From abroad</b>												
2019	107.6	- 4.8	108.3	- 5.5	106.9	- 4.6	111.5	- 3.5	129.0	+ 5.6	105.9	- 6.6
2020	98.9	- 8.1	102.0	- 5.8	95.9	- 10.3	111.8	+ 0.3	139.6	+ 8.2	102.8	- 2.9
2021	122.2	+ 23.6	130.1	+ 27.5	118.2	+ 23.3	124.8	+ 11.6	171.9	+ 23.1	109.6	+ 6.6
2022	128.8	+ 5.4	141.6	+ 8.8	121.8	+ 3.0	137.4	+ 10.1	196.8	+ 14.5	118.2	+ 7.8
2022 Feb. r	132.9	+ 16.9	141.2	+ 15.1	128.4	+ 17.7	137.0	+ 17.5	183.1	+ 23.6	122.2	+ 14.6
Mar. r	139.2	+ 5.6	157.8	+ 13.1	128.2	+ 0.2	157.3	+ 18.3	234.8	+ 45.1	132.3	+ 7.0
Apr. r	123.2	+ 0.6	147.6	+ 8.2	109.6	- 6.1	140.9	+ 21.3	229.7	+ 20.8	112.2	+ 21.6
May r	125.0	+ 8.5	142.8	+ 11.7	114.9	+ 6.3	138.5	+ 11.7	211.6	+ 13.8	114.9	+ 10.4
June r	132.1	+ 4.9	148.2	+ 13.8	123.0	+ 0.4	144.7	+ 4.7	201.2	+ 12.5	126.4	+ 1.0
July r	130.2	+ 2.0	143.4	+ 10.4	124.2	- 1.7	128.6	- 2.5	170.2	- 4.9	115.1	- 1.4
Aug. r	117.7	+ 9.1	132.0	+ 9.9	109.1	+ 7.9	133.0	+ 15.5	193.0	+ 24.4	113.7	+ 11.0
Sep. r	125.9	- 4.8	135.4	+ 3.3	119.6	- 10.6	141.2	+ 15.4	200.8	+ 21.1	121.9	+ 12.4
Oct. r	129.3	+ 9.1	136.0	+ 7.3	125.5	+ 10.6	134.5	+ 5.9	213.7	+ 25.6	109.0	- 3.6
Nov. r	125.3	- 3.5	136.5	- 2.2	119.2	- 4.6	132.3	+ 0.6	166.8	- 5.0	121.2	+ 3.2
Dec. r	125.7	- 1.1	127.7	- 1.5	124.6	- 1.5	127.4	+ 4.9	172.3	- 7.8	113.0	+ 12.5
2023 Jan. r	129.1	- 7.3	141.2	- 6.0	122.7	- 8.9	135.6	+ 1.7	159.7	- 13.3	127.8	+ 9.3
Feb. p	131.2	- 1.3	134.0	- 5.1	129.1	+ 0.5	137.1	+ 0.1	186.9	+ 2.1	121.0	- 1.0

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. ◦ Using JDemetra+ 2.2.2 (X13).

## XI. Economic conditions in Germany

### 4. Orders received by construction \*

Adjusted for working-day variations ◦

Zeit	Breakdown by type of construction												Breakdown by client 1			
	Structural engineering												Civil engineering			
	Total		Residential construction		Industrial construction		Public sector construction		Industrial clients		Public sector 2					
	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change
2019	146.2	+ 8.2	145.3	+ 10.3	150.4	+ 9.7	142.6	+ 10.8	138.9	+ 10.9	147.1	+ 5.9	148.1	+ 8.8	141.3	+ 6.6
2020	145.6	- 0.4	144.2	- 0.8	160.8	+ 6.9	130.2	- 8.7	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	+ 20.3	158.5	+ 12.0	153.0	+ 3.9	161.5	+ 15.7	146.7	+ 2.4
2022	166.8	+ 4.9	161.7	- 1.5	167.7	- 3.8	155.0	- 1.0	166.8	+ 5.2	172.7	+ 12.9	171.9	+ 6.4	160.5	+ 9.4
2022 Jan.	142.8	+ 6.8	145.5	+ 3.9	165.7	+ 13.7	134.1	- 8.3	121.2	+ 24.1	139.8	+ 10.7	149.2	- 1.1	121.7	+ 14.1
Feb.	155.7	+ 8.7	161.0	+ 8.1	176.0	+ 9.1	158.2	+ 7.5	121.8	+ 6.7	149.5	+ 9.3	165.2	+ 15.2	132.5	+ 0.3
Mar.	209.5	+ 32.7	208.5	+ 32.9	219.4	+ 25.1	201.2	+ 42.4	200.0	+ 29.6	210.6	+ 32.4	217.2	+ 43.9	194.6	+ 25.2
Apr.	164.2	+ 2.5	157.7	- 0.4	178.1	- 3.8	142.7	+ 2.3	146.4	+ 4.7	171.8	+ 5.9	154.0	+ 4.0	167.5	+ 5.5
May	175.9	+ 10.6	172.1	+ 5.5	182.1	- 1.1	163.0	+ 11.0	173.5	+ 12.4	180.2	+ 16.9	170.7	+ 13.1	178.1	+ 16.5
June	175.2	+ 6.4	166.3	+ 0.7	177.9	+ 0.2	153.3	- 4.3	176.6	+ 24.0	185.6	+ 13.1	177.5	+ 6.5	171.0	+ 10.7
July	180.6	+ 12.9	179.3	+ 6.5	171.1	- 4.5	178.0	+ 8.7	211.5	+ 40.4	182.1	+ 21.2	190.1	+ 19.9	175.4	+ 17.0
Aug.	157.2	- 1.1	148.2	- 8.8	145.1	- 13.2	143.0	- 12.4	178.0	+ 23.6	167.6	+ 8.3	155.9	- 1.6	165.9	+ 7.4
Sep.	164.2	- 9.3	159.4	- 15.6	162.5	- 15.1	153.9	- 20.3	169.5	+ 2.6	169.9	- 1.1	166.1	- 13.8	163.2	+ 1.3
Oct.	161.8	+ 2.0	145.1	- 14.1	148.3	- 12.3	140.2	- 18.4	153.0	- 2.7	181.2	+ 23.4	172.5	+ 0.5	157.8	+ 14.8
Nov.	148.3	+ 2.1	134.7	- 5.7	130.9	- 17.9	127.0	- 4.2	176.1	+ 38.6	164.0	+ 10.7	155.2	- 2.7	150.9	+ 25.3
Dec.	166.0	- 10.4	162.2	- 21.0	154.8	- 21.1	165.5	- 4.4	174.5	- 50.9	170.4	+ 5.4	188.6	+ 1.0	146.9	- 16.8
2023 Jan.	132.2	- 7.4	125.7	- 13.6	126.8	- 23.5	128.4	- 4.3	112.1	- 7.5	139.7	- 0.1	145.8	- 2.3	119.8	- 1.6

Source of the unadjusted figures: Federal Statistical Office. \* At current prices; excluding value added tax; for explanatory notes, see Statistical Series – Seasonally adjusted

business statistics, Table III.2.f. ◦ Using JDemetra+ 2.2.2 (X13). 1 Excluding residential construction. 2 Including road construction.

### 5. Retail trade turnover \*

Adjusted for calendar variations ◦

Zeit	of which:															
	In stores by enterprises main product range															
	Food, beverages, tobacco 1		Textiles, clothing, footwear and leather goods		Information and communications equipment		Construction and flooring materials, household appliances, furniture		Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles		Retail sale via mail order houses or via internet as well as other retail sale 2					
	At current prices	Annual percentage change	At 2015 prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change		
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	124.7	+ 2.7	116.7	+ 0.7	121.7	+ 0.2	78.1	- 4.6	95.4	- 10.8	110.4	- 5.7	135.2	+ 7.8	189.9	+ 12.4
2022	134.4	+ 7.8	115.8	- 0.8	128.4	+ 5.5	102.6	+ 31.4	107.5	+ 12.7	123.0	+ 11.4	145.0	+ 7.2	188.7	- 0.6
2022 Feb.	118.4	+ 14.0	107.7	+ 9.8	114.8	+ 0.3	71.9	+ 216.7	96.6	+ 54.6	112.4	+ 66.5	131.1	+ 5.4	171.3	- 3.1
Mar.	137.8	+ 6.3	122.5	+ 0.2	132.1	± 0.0	93.2	+ 60.4	101.4	+ 19.9	136.4	+ 11.3	146.0	+ 7.7	192.3	- 5.8
Apr.	132.4	+ 9.8	116.4	+ 2.9	127.0	+ 2.3	101.7	+ 156.8	93.9	+ 32.8	131.6	+ 23.7	139.5	+ 6.1	181.1	- 5.3
May	133.8	+ 6.8	115.9	- 1.2	127.5	+ 0.6	109.2	+ 75.3	89.5	+ 21.8	129.9	+ 14.9	140.2	+ 8.0	181.1	- 8.2
June	130.7	+ 0.6	112.5	- 7.7	126.9	+ 4.3	105.2	- 7.1	92.7	- 3.8	119.5	- 5.2	141.5	+ 7.1	174.6	- 4.6
July	135.5	+ 8.0	116.1	- 1.3	130.9	+ 8.5	105.6	+ 2.7	100.2	- 0.9	122.1	+ 0.2	149.0	+ 9.3	182.1	+ 14.1
Aug.	130.1	+ 6.0	110.6	- 3.9	126.2	+ 10.0	98.1	- 2.4	98.5	- 2.4	114.4	- 3.5	142.8	+ 6.6	173.2	+ 4.3
Sep.	133.4	+ 10.7	111.9	- 0.3	125.3	+ 11.9	116.3	+ 16.2	108.7	+ 6.2	119.1	+ 5.0	145.1	+ 10.8	186.7	+ 9.2
Oct.	138.6	+ 6.5	115.0	- 4.6	132.7	+ 11.0	115.9	+ 0.8	111.9	+ 2.5	126.0	+ 0.1	146.0	+ 3.5	193.2	+ 1.5
Nov.	148.4	+ 5.8	123.6	- 4.8	133.6	+ 10.0	116.8	+ 11.1	136.8	+ 1.2	130.1	+ 0.2	157.2	+ 6.9	236.1	+ 0.4
Dec.	152.7	+ 4.9	126.8	- 5.7	147.0	+ 6.9	126.0	+ 29.1	148.4	+ 0.4	123.0	+ 0.8	162.1	+ 4.0	210.6	- 4.2
2023 Jan.	124.8	+ 3.4	104.1	- 6.1	123.5	+ 6.3	84.6	+ 18.8	109.8	- 1.5	109.5	- 1.4	140.8	+ 1.4	172.1	- 5.3
Feb.	123.0	+ 3.9	101.4	- 5.8	123.9	+ 7.9	79.5	+ 10.6	99.3	+ 2.8	108.9	- 3.1	137.9	+ 5.2	166.4	- 2.9

Source of the unadjusted figures: Federal Statistical Office. \* Excluding value added tax; for explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Table III.4.c. ◦ 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

### 8. Households' income \*

Period	Gross wages and salaries <sup>1</sup>		Net wages and salaries <sup>2</sup>		Monetary social benefits received <sup>3</sup>		Mass income <sup>4</sup>		Disposable income <sup>5</sup>		Saving <sup>6</sup>		Saving ratio <sup>7</sup>
	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	As percentage
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
2022	1,670.0	6.3	1,128.8	6.2	538.5	1.1	1,667.3	4.5	2,233.2	6.9	254.2	- 19.6	11.4
2021 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	388.4	7.3	261.2	6.8	134.2	- 2.6	395.4	3.4	541.4	3.7	78.8	- 31.9	14.5
Q2	400.4	6.2	263.9	5.3	131.1	- 2.8	395.0	2.4	548.0	6.4	57.2	- 32.6	10.4
Q3	412.7	5.0	285.8	5.2	137.5	4.8	423.3	5.1	566.3	8.8	55.9	2.8	9.9
Q4	468.5	6.8	317.9	7.5	135.7	5.2	453.6	6.8	577.5	8.4	62.4	2.0	10.8

Source: Federal Statistical Office; figures computed in February 2023. \* Households including non-profit institutions serving households. **1** Residence concept. **2** After deducting the wage tax payable on gross wages and salaries and employees' contributions to the social security funds. **3** Social security benefits in cash from the social security funds, central, state and local government and foreign countries, pension payments (net), private funded social benefits, less social contributions on social benefits, consumption-related taxes and public charges. **4** Net wages and salaries plus

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

### 9. Negotiated pay rates (overall economy)

Period	Index of negotiated wages <sup>1</sup>								Memo item: Wages and salaries per employee <sup>3</sup>	
	On an hourly basis		On a monthly basis				Basic pay rates <sup>2</sup>			
	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	100.0	2.3	100.0	2.3	100.0	2.3	100.0	2.4	100.0	2.9
2016	102.2	2.2	102.2	2.2	102.2	2.2	102.2	2.2	102.5	2.5
2017	104.5	2.3	104.5	2.3	104.6	2.3	104.7	2.4	105.1	2.6
2018	107.6	3.0	107.6	3.0	107.5	2.8	107.6	2.8	108.4	3.2
2019	110.8	3.0	110.8	3.0	110.3	2.6	110.4	2.6	111.7	3.0
2020	113.2	2.1	113.2	2.2	112.5	2.0	112.6	2.0	111.6	- 0.1
2021	114.9	1.5	114.9	1.5	114.4	1.6	114.3	1.5	115.3	3.3
2022	117.9	2.7	117.9	2.6	116.7	2.0	116.7	2.0	120.7	4.7
2021 Q3	117.9	0.8	117.9	0.8	116.6	1.2	114.4	1.3	115.1	4.0
Q4	127.5	1.5	127.6	1.5	127.5	2.3	115.0	1.7	127.2	3.7
2022 Q1	110.8	4.2	110.8	4.2	108.0	1.5	115.5	1.5	113.2	5.4
Q2	109.9	2.0	109.9	1.9	109.2	2.1	116.6	2.1	116.0	4.3
Q3	120.9	2.5	120.8	2.5	119.5	2.5	116.9	2.2	119.3	3.6
Q4	130.1	2.0	130.1	2.0	130.1	2.0	117.7	2.4	134.2	5.5
2022 Aug.	109.4	1.9	109.4	1.9	109.3	2.2	116.9	2.2	.	.
Sep.	109.3	2.0	109.3	2.0	109.3	2.0	117.0	2.1	.	.
Oct.	110.0	0.9	109.9	0.9	109.9	0.7	117.6	2.3	.	.
Nov.	167.9	2.5	167.9	2.5	168.1	2.5	117.6	2.2	.	.
Dec.	112.4	2.4	112.4	2.4	112.3	2.5	118.1	2.6	.	.
2023 Jan.	115.9	6.8	115.8	6.7	110.8	2.6	118.6	2.7	.	.
Feb.	117.6	6.5	117.6	6.5	110.9	2.7	118.6	2.7	.	.

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

retirement provisions). **3** Source: Federal Statistical Office; figures computed in February 2023.



XI. Economic conditions in Germany

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

End of year/half

Period	Assets								Equity and liabilities							
	Total assets	Non-current assets	of which:			Current assets	of which:		Cash 1	Equity	Total	Liabilities				
			Intangible assets	Tangible assets	Financial assets		Inventories	Trade receivables				Total	Long-term		Short-term	
													of which: Financial debt	Total	Financial debt	Trade payables
<b>Total (€ billion)</b>																
2018 3	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																
2018 3	100.0	59.4	20.9	23.6	11.1	40.6	9.6	9.1	6.7	30.5	69.5	35.8	21.6	33.7	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
<b>Groups with a focus on the production sector (€ billion) 2</b>																
2018 3	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																
2018 3	100.0	56.6	18.1	22.0	12.9	43.5	10.9	8.8	6.5	29.6	70.4	35.4	20.6	35.0	11.0	7.1
2019	100.0	60.6	18.2	24.6	13.9	39.4	10.6	8.2	5.9	28.8	71.3	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
<b>Groups with a focus on the services sector (€ billion)</b>																
2018 3	439.7	321.3	152.7	137.9	11.0	118.3	14.9	46.1	33.3	153.1	286.6	165.5	116.3	121.1	21.3	52.5
2019	497.7	373.3	166.7	171.8	13.7	124.4	13.7	49.1	31.6	158.8	338.9	203.8	152.6	135.1	32.3	49.6
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																
2018 3	100.0	73.1	34.7	31.4	2.5	26.9	3.4	10.5	7.6	34.8	65.2	37.6	26.5	27.6	4.8	11.9
2019	100.0	75.0	33.5	34.5	2.8	25.0	2.8	9.9	6.4	31.9	68.1	41.0	30.7	27.2	6.5	10.0
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.



## XII. External sector

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

€ million

Item	2020 r	2021 r	2022 r	2022					2023	
				Q2 r	Q3 r	Q4 r	November r	December r	January P	
I. Current Account	+ 183,194	+ 284,610	- 136,528	- 53,581	- 72,479	- 2,072	+ 1,049	+ 16,772	- 1,915	
1. Goods										
Receipts	2,179,754	2,500,116	2,915,084	723,620	743,458	772,154	270,689	244,852	230,215	
Expenditure	1,846,662	2,220,650	2,999,872	750,732	799,297	767,752	264,060	238,071	236,902	
Balance	+ 333,091	+ 279,466	- 84,784	- 27,112	- 55,838	+ 4,405	+ 6,630	+ 6,782	- 6,688	
2. Services										
Receipts	876,740	1,015,401	1,227,830	302,169	326,480	327,371	103,737	115,421	99,458	
Expenditure	888,747	916,663	1,108,461	257,135	304,769	303,269	96,277	105,241	89,030	
Balance	- 12,006	+ 98,738	+ 119,372	+ 45,035	+ 21,712	+ 24,103	+ 7,460	+ 10,180	+ 10,428	
3. Primary income										
Receipts	719,931	826,715	901,559	223,207	212,785	261,553	81,952	102,289	76,416	
Expenditure	701,137	762,099	911,740	258,343	209,108	252,487	80,476	89,861	70,713	
Balance	+ 18,796	+ 64,618	- 10,181	- 35,136	+ 3,676	+ 9,067	+ 1,477	+ 12,428	+ 5,703	
4. Secondary income										
Receipts	128,376	152,109	159,328	42,428	36,468	44,499	13,314	17,789	13,521	
Expenditure	285,062	310,319	320,261	78,795	78,496	84,144	27,832	30,406	24,880	
Balance	- 156,685	- 158,208	- 160,936	- 36,368	- 42,029	- 39,646	- 14,518	- 12,618	- 11,359	
II. Capital account	+ 4,537	+ 47,356	+ 136,384	+ 104,431	+ 3,624	+ 20,279	+ 2,749	+ 12,396	- 1,599	
III. Financial account <sup>1</sup>	+ 180,459	+ 312,080	+ 13,902	+ 29,040	- 52,760	+ 47,328	- 29,780	+ 60,308	+ 17,639	
1. Direct investment	- 197,021	+ 297,726	+ 126,311	+ 111,249	- 18,755	+ 20,830	+ 2,902	+ 19,479	- 7,693	
By resident units abroad the euro area	- 118,567	+ 164,218	- 190,314	+ 64,010	+ 67,994	- 377,876	+ 7,409	- 262,822	+ 4,213	
By non-resident units of the euro area	+ 78,455	- 133,509	- 316,625	- 47,238	+ 86,749	- 398,706	+ 4,507	- 282,300	+ 11,906	
2. Portfolio investment	+ 527,748	+ 316,362	- 277,600	- 40,356	- 175,718	- 14,862	- 54,229	+ 59,168	+ 6,824	
By resident units abroad the euro area	+ 686,703	+ 789,273	- 235,075	- 126,831	- 183,977	+ 93,565	+ 39,319	+ 52,857	+ 51,905	
Equity and investment fund shares	+ 320,089	+ 368,439	- 189,474	- 61,322	- 107,833	- 3,740	- 3,798	+ 8,299	+ 46,457	
Short-term debt securities	+ 120,686	+ 119,469	- 122,568	- 68,724	- 51,900	+ 59,106	+ 15,366	+ 38,719	- 25,370	
Long-term debt securities	+ 245,925	+ 301,369	+ 76,969	+ 3,216	- 24,244	+ 38,199	+ 27,751	+ 5,839	+ 30,818	
By non-resident units of the euro area	+ 158,955	+ 472,913	+ 42,528	- 86,475	- 8,257	+ 108,427	+ 93,548	- 6,311	+ 45,082	
Equity and investment fund shares	+ 166,698	+ 666,629	+ 54,675	- 11,041	- 15,776	+ 130,267	+ 43,998	+ 11,269	- 3,043	
Short-term debt securities	+ 114,088	+ 27,795	- 58,307	- 82,476	- 33,561	- 26,319	+ 29,891	- 15,661	+ 4,540	
Long-term debt securities	- 121,829	- 221,511	+ 46,160	+ 7,042	+ 41,080	+ 4,479	+ 19,659	- 1,919	+ 43,585	
3. Financial derivatives and employee stock options	+ 18,550	+ 68,325	+ 62,764	+ 28,798	+ 43,919	- 8,340	+ 10	- 9,147	+ 9,317	
4. Other investment	- 182,004	- 500,408	+ 84,556	- 72,967	+ 90,405	+ 40,645	+ 21,024	- 13,803	+ 17,815	
Eurosysteem	- 207,309	- 442,693	+ 180,600	- 2,440	+ 65,795	- 67,926	+ 12,426	- 127,398	+ 170,735	
General government MFIs <sup>2</sup>	+ 16,648	- 69,600	- 46,688	- 30,012	- 22,489	+ 5,550	- 18,570	+ 21,430	+ 11,305	
Enterprises and households	+ 18,378	- 128,864	- 297,229	- 88,936	- 41,400	+ 70,979	- 8,077	+ 77,481	- 111,661	
5. Reserve assets	+ 13,182	+ 130,076	+ 17,872	+ 2,316	+ 7,390	+ 9,055	+ 513	+ 4,612	- 8,622	
IV. Net errors and omissions	- 7,270	- 19,887	+ 14,048	- 21,810	+ 16,095	+ 29,121	- 33,577	+ 31,140	+ 21,153	

\* Source: ECB, according to the international standards of the International Monetary Fund's Balance of Payments Manual (sixth edition). <sup>1</sup> Increase: + / decrease: -. <sup>2</sup> 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						Balance of capital account 2	Financial account 3		
	Total	Goods		Services	Primary income	Secondary income		Total	of which: Reserve assets	Errors and omissions 4
		Total	of which: Supplementary trade items 1							
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	+ 211,477	+ 219,629	- 14,296	- 25,303	+ 58,646	- 41,495	+ 3,255	+ 230,931	- 2,564	+ 16,200
2015	+ 259,781	+ 248,394	- 15,405	- 18,516	+ 69,324	- 39,420	+ 265	+ 237,733	- 2,213	- 22,313
2016	+ 270,200	+ 252,409	- 19,921	- 20,987	+ 77,258	- 38,480	+ 2,451	+ 258,906	+ 1,686	- 13,744
2017	+ 255,964	+ 255,077	- 13,613	- 23,994	+ 77,046	- 52,165	- 2,653	+ 268,306	- 1,269	+ 14,996
2018	+ 267,609	+ 221,983	- 22,985	- 15,806	+ 112,389	- 50,958	+ 914	+ 242,889	+ 392	- 25,634
2019	+ 283,849	+ 219,548	- 32,263	- 13,553	+ 128,602	- 50,747	- 3,705	+ 200,312	- 544	- 79,832
2020	+ 240,239	+ 191,031	- 8,907	+ 7,418	+ 96,014	- 54,224	- 9,120	+ 191,481	- 51	- 39,638
2021	+ 278,689	+ 194,388	+ 4,757	+ 4,802	+ 138,545	- 59,046	- 1,179	+ 248,551	+ 31,892	- 28,959
2022	+ 162,300	+ 111,887	+ 9,999	- 30,769	+ 150,017	- 68,835	- 18,644	+ 219,819	+ 4,426	+ 76,164
2020 Q1	+ 64,049	+ 53,016	- 2,762	- 1,247	+ 27,440	- 15,160	- 1,574	+ 26,412	+ 133	- 36,063
Q2	+ 37,569	+ 27,704	- 2,216	+ 6,000	+ 13,287	- 9,423	- 914	+ 14,699	+ 243	- 21,955
Q3	+ 62,279	+ 55,197	- 933	- 4,752	+ 22,659	- 10,824	- 2,450	+ 66,302	- 1,276	+ 6,473
Q4	+ 76,342	+ 55,114	- 2,996	+ 7,417	+ 32,628	- 18,816	- 4,181	+ 84,069	+ 848	+ 11,908
2021 Q1	+ 77,373	+ 57,527	+ 679	+ 5,095	+ 32,650	- 17,899	- 834	+ 72,025	+ 385	- 4,514
Q2	+ 67,702	+ 48,292	+ 868	+ 7,141	+ 21,166	- 8,897	- 2,336	+ 87,467	+ 58	+ 22,101
Q3	+ 65,695	+ 49,316	+ 145	- 5,830	+ 37,736	- 15,527	+ 1,985	+ 16,702	+ 31,199	- 50,977
Q4	+ 67,919	+ 39,252	+ 3,064	- 1,604	+ 46,994	- 16,723	+ 7	+ 72,358	+ 250	+ 4,432
2022 Q1	+ 59,495	+ 34,428	+ 3,927	+ 2,953	+ 40,362	- 18,249	- 3,021	+ 78,775	+ 2,200	+ 22,301
Q2	+ 30,314	+ 27,027	+ 7,766	+ 5,459	+ 22,259	- 13,513	- 4,780	+ 67,323	+ 597	+ 41,790
Q3	+ 19,402	+ 19,911	- 361	- 22,661	+ 39,507	- 17,356	- 5,860	- 30,017	+ 784	- 43,559
Q4	+ 53,089	+ 30,520	- 1,333	- 5,603	+ 47,889	- 19,718	- 4,984	+ 103,737	+ 845	+ 55,633
2020 Sep.	+ 24,508	+ 20,855	- 545	- 182	+ 7,291	- 3,455	- 1,205	+ 24,521	- 53	+ 1,218
Oct.	+ 24,808	+ 20,377	- 679	+ 1,302	+ 7,678	- 4,550	- 1,718	+ 26,041	+ 140	+ 2,951
Nov.	+ 22,669	+ 18,297	- 64	+ 2,739	+ 9,198	- 7,565	- 2,526	+ 21,981	+ 89	+ 1,839
Dec.	+ 28,866	+ 16,440	- 2,253	+ 3,375	+ 15,752	- 6,702	+ 62	+ 36,045	+ 618	+ 7,118
2021 Jan.	+ 21,402	+ 15,161	+ 200	+ 1,554	+ 11,132	- 6,445	- 667	+ 17,047	+ 743	- 3,688
Feb.	+ 22,176	+ 18,147	+ 39	+ 1,739	+ 9,312	- 7,022	- 1,596	+ 22,939	+ 102	+ 2,360
Mar.	+ 33,795	+ 24,219	+ 441	+ 1,802	+ 12,206	- 4,432	+ 1,430	+ 32,038	- 460	+ 3,186
Apr.	+ 24,445	+ 16,424	+ 441	+ 3,520	+ 8,407	- 3,905	- 897	+ 29,252	- 251	+ 5,705
May	+ 16,786	+ 14,730	- 102	+ 2,453	+ 1,511	- 1,908	- 528	+ 23,514	+ 211	+ 7,257
June	+ 26,471	+ 17,139	+ 530	+ 1,168	+ 11,248	- 3,084	- 911	+ 34,700	+ 98	+ 9,140
July	+ 21,623	+ 18,516	- 472	- 1,848	+ 10,917	- 5,962	- 487	+ 1,156	+ 102	- 19,980
Aug.	+ 18,381	+ 12,984	+ 897	- 3,024	+ 13,086	- 4,665	+ 532	+ 17,522	+ 31,254	- 1,391
Sep.	+ 25,690	+ 17,816	- 280	- 958	+ 13,733	- 4,901	+ 1,939	- 1,977	- 158	- 29,606
Oct.	+ 18,128	+ 15,135	+ 1,038	- 4,720	+ 13,280	- 5,567	+ 506	+ 13,955	+ 261	- 4,680
Nov.	+ 22,113	+ 14,414	+ 759	+ 138	+ 13,670	- 6,108	- 1,007	+ 33,852	+ 963	+ 12,746
Dec.	+ 27,678	+ 9,704	+ 1,266	+ 2,978	+ 20,043	- 5,048	+ 508	+ 24,551	- 974	- 3,634
2022 Jan.	+ 16,678	+ 6,950	+ 803	+ 1,719	+ 14,181	- 6,173	- 417	+ 29,438	+ 309	+ 13,177
Feb.	+ 23,232	+ 15,092	+ 1,472	+ 2,076	+ 11,673	- 5,609	- 1,637	+ 48,042	+ 1,161	+ 26,446
Mar.	+ 19,585	+ 12,386	+ 1,653	+ 842	+ 14,508	- 6,467	- 968	+ 12,995	+ 730	- 17,322
Apr.	+ 11,312	+ 5,271	+ 2,536	- 962	+ 12,425	- 5,421	- 1,556	+ 19,988	+ 83	+ 10,232
May	+ 3,577	+ 11,096	+ 4,323	- 2,009	- 3,881	- 1,628	- 2,724	+ 893	+ 161	+ 40
June	+ 15,424	+ 10,661	+ 906	- 2,488	+ 13,715	- 6,464	- 501	+ 46,441	+ 353	+ 31,518
July	+ 7,714	+ 7,849	+ 382	- 6,224	+ 13,001	- 6,912	- 2,321	- 23,333	- 484	- 28,726
Aug.	+ 509	+ 2,096	- 567	- 9,706	+ 14,077	- 5,957	- 1,261	+ 16,672	+ 81	+ 17,424
Sep.	+ 11,179	+ 9,967	- 176	- 6,731	+ 12,429	- 4,486	- 2,277	- 23,355	+ 1,187	- 32,257
Oct.	+ 7,875	+ 6,243	- 34	- 5,996	+ 13,076	- 5,447	- 2,212	+ 42,339	+ 672	+ 36,676
Nov.	+ 19,595	+ 13,428	+ 731	- 1,016	+ 13,661	- 6,479	- 2,129	+ 2,163	+ 425	- 19,630
Dec.	+ 25,618	+ 10,849	- 2,030	+ 1,409	+ 21,152	- 7,792	- 643	+ 63,561	- 252	+ 38,586
2023 Jan. r	+ 16,964	+ 11,678	+ 233	- 1,534	+ 12,362	- 5,542	- 4,700	+ 10,584	- 341	- 1,679
Feb. p	+ 22,605	+ 18,973	+ 521	- 2,644	+ 12,309	- 6,032	- 423	+ 28,965	+ 143	+ 6,783

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

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

€ million

Zeit	Services								Primary income		
	Total	of which:							Compensation of employees	Investment income	Other primary income <sup>3</sup>
		Transport	Travel <sup>1</sup>	Financial services	Charges for the use of intellectual property	Telecommunications-, computer and information services	Other business services	Government goods and services <sup>2</sup>			
2018	- 15,806	- 2,044	- 44,543	+ 10,059	+ 17,219	- 7,060	+ 723	+ 3,322	+ 671	+ 112,410	- 692
2019	- 13,553	+ 3,607	- 45,947	+ 10,755	+ 18,368	- 9,763	- 2,948	+ 3,489	+ 492	+ 128,990	- 880
2020	+ 7,418	- 5,302	- 14,678	+ 10,051	+ 17,665	- 7,770	- 4,426	+ 3,368	+ 3,196	+ 94,205	- 1,387
2021	+ 4,802	- 6,635	- 24,323	+ 8,306	+ 32,834	- 8,466	- 9,361	+ 3,531	+ 2,664	+ 137,881	- 1,999
2022	- 30,769	- 8,643	- 54,977	+ 9,464	+ 31,406	- 11,241	- 10,085	+ 4,078	+ 1,993	+ 152,926	- 4,902
2021 Q2	+ 7,141	- 930	- 2,163	+ 2,461	+ 8,288	- 1,664	- 1,808	+ 921	+ 517	+ 23,548	- 2,900
Q3	+ 5,830	- 931	- 13,518	+ 1,084	+ 9,484	- 2,457	- 2,546	+ 953	+ 71	+ 38,996	- 1,189
Q4	- 1,604	- 3,073	- 8,636	+ 2,551	+ 9,344	- 1,551	- 3,757	+ 763	+ 824	+ 43,098	+ 3,071
2022 Q1	+ 2,953	- 2,849	- 6,117	+ 1,996	+ 11,530	- 3,704	- 1,520	+ 1,063	+ 1,288	+ 40,527	- 1,453
Q2	+ 5,459	- 187	- 13,270	+ 2,270	+ 7,307	- 2,182	- 2,722	+ 1,062	+ 425	+ 25,841	- 4,007
Q3	- 22,661	- 3,727	- 23,112	+ 2,159	+ 5,874	- 3,429	- 3,712	+ 1,100	- 82	+ 41,295	- 1,705
Q4	- 5,603	- 1,880	- 12,478	+ 3,039	+ 6,695	- 1,926	- 2,131	+ 853	+ 362	+ 45,264	+ 2,263
2022 Apr.	- 962	- 164	- 3,132	+ 833	+ 2,647	- 1,270	- 792	+ 291	+ 101	+ 13,017	- 693
May	- 2,009	- 300	- 4,200	+ 861	+ 2,205	- 824	- 934	+ 307	+ 132	- 1,524	- 2,490
June	- 2,488	+ 276	- 5,938	+ 576	+ 2,455	- 88	- 996	+ 463	+ 192	+ 14,348	- 825
July	- 6,224	- 777	- 6,034	+ 804	+ 1,542	- 1,446	- 1,287	+ 326	- 54	+ 13,614	- 559
Aug.	- 9,706	- 2,244	- 8,760	+ 676	+ 1,673	- 783	- 1,335	+ 317	- 22	+ 14,668	- 569
Sep.	- 6,731	- 706	- 8,318	+ 679	+ 2,659	- 1,199	- 1,090	+ 457	- 7	+ 13,013	- 577
Oct.	- 5,996	- 315	- 8,419	+ 642	+ 2,127	- 1,050	- 108	+ 335	+ 93	+ 13,662	- 680
Nov.	- 1,016	- 836	- 2,407	+ 956	+ 1,859	- 371	- 1,446	+ 327	+ 74	+ 14,226	- 639
Dec.	+ 1,409	- 729	- 1,652	+ 1,441	+ 2,710	- 505	- 577	+ 192	+ 194	+ 17,376	+ 3,582
2023 Jan. r	- 1,534	- 637	- 2,326	+ 771	+ 1,928	- 1,434	- 1,302	+ 391	+ 449	+ 12,557	- 644
Feb. p	- 2,644	- 1,395	- 2,334	+ 419	+ 965	- 917	- 390	+ 347	+ 412	+ 12,420	- 524

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

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

### 5. Secondary income and Capital account of the Federal Republic of Germany (balances)

€ million

Zeit	Secondary income						Capital account			
	Total	General government			All sectors excluding general government <sup>2</sup>			Total	Non-produced non-financial assets	Capital transfers
		Total	of which:		Total	of which:				
		Current international cooperation <sup>1</sup>	Current taxes on income, wealth, etc.		Personal transfers between resident and non-resident households <sup>3</sup>	of which: Workers' remittances				
2018	- 50,958	- 33,109	- 10,849	+ 9,753	- 17,848	.	+ 5,142	+ 914	+ 3,349	- 2,435
2019	- 50,747	- 30,251	- 11,473	+ 11,591	- 20,496	.	+ 5,431	- 3,705	- 298	- 3,407
2020	- 54,224	- 36,074	- 13,498	+ 10,767	- 18,150	.	+ 5,908	- 9,120	- 3,418	- 5,702
2021	- 59,046	- 36,974	- 11,303	+ 11,888	- 22,072	.	+ 6,170	- 1,179	- 392	- 787
2022	- 68,835	- 41,923	- 17,878	+ 14,041	- 26,913	.	+ 7,149	- 18,644	- 14,397	- 4,247
2021 Q2	- 8,897	- 4,221	- 1,592	+ 5,316	- 4,676	.	+ 1,543	- 2,336	- 2,458	+ 121
Q3	- 15,527	- 9,973	- 4,119	+ 2,158	- 5,554	.	+ 1,543	+ 1,985	+ 1,985	- 1
Q4	- 16,723	- 11,058	- 5,349	+ 2,135	- 5,664	.	+ 1,543	+ 7	+ 963	- 956
2022 Q1	- 18,249	- 10,960	- 3,153	+ 2,477	- 7,288	.	+ 1,719	- 3,021	- 2,865	- 156
Q2	- 13,513	- 5,957	- 3,247	+ 7,339	- 7,556	+ 2,357	+ 1,810	- 4,780	- 3,988	- 792
Q3	- 17,356	- 11,401	- 3,727	+ 2,138	- 5,955	+ 1,841	+ 1,810	- 5,860	- 4,533	- 1,326
Q4	- 19,718	- 13,604	- 7,751	+ 2,086	- 6,113	.	+ 1,810	- 4,984	- 3,011	- 1,973
2022 Apr.	- 5,421	- 2,955	- 582	+ 1,125	- 2,466	+ 876	+ 603	- 1,556	- 1,124	- 431
May	- 1,628	+ 1,154	- 609	+ 4,982	- 2,782	+ 741	+ 603	- 2,724	- 2,650	- 73
June	- 6,464	- 4,155	- 2,056	+ 1,232	- 2,308	+ 741	+ 603	- 501	- 214	- 287
July	- 6,912	- 4,701	- 1,865	+ 441	- 2,211	+ 614	+ 603	- 2,321	- 1,950	- 371
Aug.	- 5,957	- 4,111	- 1,275	+ 426	- 1,847	+ 613	+ 603	- 1,261	- 1,028	- 233
Sep.	- 4,486	- 2,589	- 587	+ 1,271	- 1,897	+ 613	+ 603	- 2,277	- 1,555	- 722
Oct.	- 5,447	- 3,509	- 1,505	+ 524	- 1,938	+ 610	+ 600	- 2,212	- 1,559	- 653
Nov.	- 6,479	- 4,468	- 1,623	+ 417	- 2,010	.	+ 600	- 2,129	- 1,846	- 283
Dec.	- 7,792	- 5,628	- 4,623	+ 1,145	- 2,165	.	+ 611	- 643	+ 394	- 1,037
2023 Jan. r	- 5,542	- 3,794	- 1,910	+ 654	- 1,749	.	+ 603	- 4,700	- 4,169	- 532
Feb. p	- 6,032	- 3,880	- 924	+ 990	- 2,153	.	+ 564	- 423	- 407	- 16

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

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

## XII. External sector

### 6. Financial account of the Federal Republic of Germany (net)

€ million

Item	2020	2021	2022	2022				2023	
				Q2	Q3	Q4	December	January r	February p
I. Net domestic investment abroad (increase: +)	+ 724,008	+ 819,754	+ 320,200	+ 111,344	+ 111,380	- 73,938	- 129,818	+ 25,996	+ 21,393
1. Direct investment	+ 134,017	+ 180,852	+ 169,006	+ 59,242	+ 54,790	+ 10,260	- 5,707	- 13,805	+ 27,538
Equity	+ 89,898	+ 121,136	+ 114,061	+ 29,926	+ 18,184	+ 32,688	- 486	- 1,003	+ 12,516
of which:									
Reinvestment of earnings <sup>1</sup>	+ 17,533	+ 59,185	+ 69,943	+ 17,629	+ 17,110	+ 12,154	- 2,850	- 2,444	+ 10,881
Debt instruments	+ 44,119	+ 59,716	+ 54,945	+ 29,316	+ 36,607	- 22,429	- 5,220	- 12,802	+ 15,023
2. Portfolio investment	+ 166,417	+ 174,958	+ 16,697	+ 1,650	- 26,789	+ 23,963	+ 13,565	+ 42,177	+ 17,352
Shares <sup>2</sup>	+ 53,110	+ 46,753	- 16,698	+ 3,233	- 9,893	- 9,357	- 3,017	+ 4,621	+ 2,337
Investment fund shares <sup>3</sup>	+ 35,932	+ 116,401	+ 33,614	+ 3,555	- 1,045	+ 18,537	+ 12,581	+ 6,079	+ 3,291
Short-term <sup>4</sup>									
debt securities	+ 10,507	- 107	+ 12,340	+ 342	+ 2,183	+ 5,126	+ 3,366	+ 7,930	- 438
Long-term <sup>5</sup>									
debt securities	+ 66,867	+ 11,912	- 12,559	- 5,480	- 18,034	+ 9,657	+ 634	+ 23,547	+ 12,161
3. Financial derivatives and employee stock options <sup>6</sup>	+ 94,579	+ 60,178	+ 42,677	+ 12,880	+ 14,786	- 2,054	- 10,114	+ 9,376	+ 7,339
4. Other investment <sup>7</sup>	+ 329,046	+ 371,874	+ 87,394	+ 36,975	+ 67,808	- 106,951	- 127,310	- 11,411	- 30,979
MFIs <sup>8</sup>	- 4,313	+ 112,903	+ 59,476	- 19,410	+ 42,210	- 103,228	- 118,099	+ 61,298	- 1,009
Short-term	+ 3,683	+ 99,380	+ 34,961	- 7,293	+ 20,786	- 109,790	- 117,127	+ 65,936	+ 326
Long-term	- 8,021	+ 13,204	+ 24,474	- 12,101	+ 21,411	+ 6,490	- 1,037	- 4,641	- 1,304
Enterprises and households <sup>9</sup>	+ 88,179	+ 143,700	+ 38,708	+ 19,485	- 14,817	- 13,419	- 47,637	+ 33,176	+ 17,808
Short-term	+ 44,218	+ 113,230	+ 15,881	+ 12,780	- 20,699	- 21,086	- 49,184	+ 31,252	+ 16,363
Long-term	+ 22,325	- 13,944	- 7,625	- 1,340	- 2,019	- 244	- 1,495	+ 191	+ 355
General government	+ 2,069	- 8,123	- 24,958	- 10,774	- 8,675	+ 645	- 3,803	+ 8,391	- 2,089
Short-term	+ 3,461	- 7,256	- 23,451	- 10,201	- 8,600	+ 920	- 3,852	+ 2,261	- 2,051
Long-term	- 2,485	- 2,327	- 2,883	- 591	- 617	- 274	+ 50	+ 4,448	- 179
Bundesbank	+ 243,112	+ 123,394	+ 14,167	+ 47,675	+ 49,090	+ 9,051	+ 42,229	- 114,275	- 45,689
5. Reserve assets	- 51	+ 31,892	+ 4,426	+ 597	+ 784	+ 845	- 252	- 341	+ 143
II. Net foreign investment in the reporting country (increase: +)	+ 532,526	+ 571,203	+ 100,381	+ 44,021	+ 141,397	- 177,676	- 193,379	+ 15,411	- 7,572
1. Direct investment	+ 138,902	+ 80,483	+ 43,725	+ 6,245	+ 25,215	- 15,589	- 32,069	- 18,053	+ 9,456
Equity	+ 45,841	+ 41,374	+ 14,811	- 560	+ 3,507	+ 3,618	+ 1,226	+ 8,177	+ 2,622
of which:									
Reinvestment of earnings <sup>1</sup>	+ 707	+ 7,659	+ 7,123	+ 2,470	- 1,096	+ 1,344	- 141	+ 2,744	+ 2,470
Debt instruments	+ 93,061	+ 39,109	+ 28,914	+ 6,805	+ 21,708	- 19,207	- 33,295	- 26,230	+ 6,834
2. Portfolio investment	+ 150,014	- 28,581	- 7,600	- 11,147	+ 4,948	- 23,214	- 38,894	+ 15,609	- 1,991
Shares <sup>2</sup>	- 17,040	+ 2,101	- 4,695	- 5,911	+ 7,486	+ 2,941	- 1,441	- 1,581	- 1,295
Investment fund shares <sup>3</sup>	+ 962	- 8,433	- 3,235	+ 998	- 1,624	- 318	+ 1,203	+ 203	+ 969
Short-term <sup>4</sup>									
debt securities	+ 84,459	+ 29,313	- 37,218	- 2,658	- 4,041	- 24,696	- 17,436	- 6,619	- 11,743
Long-term <sup>5</sup>									
debt securities	+ 81,632	- 51,563	+ 37,548	- 3,575	+ 3,128	- 1,142	- 21,220	+ 23,605	+ 10,078
3. Other investment <sup>7</sup>	+ 243,611	+ 519,301	+ 64,255	+ 48,923	+ 111,234	- 138,873	- 122,416	+ 17,855	- 15,038
MFIs <sup>8</sup>	+ 108,426	+ 161,287	+ 152,946	+ 6,112	+ 68,279	- 187,546	- 185,932	+ 129,667	+ 4,610
Short-term	+ 74,908	+ 115,265	+ 160,854	+ 2,551	+ 48,862	- 181,523	- 178,666	+ 127,680	+ 7,119
Long-term	+ 33,579	+ 46,044	- 7,910	+ 3,563	+ 19,417	- 6,025	- 7,267	+ 1,987	- 2,510
Enterprises and households <sup>9</sup>	+ 32,084	+ 135,961	+ 6,958	+ 26,702	+ 38,589	- 36,507	- 37,716	+ 14,387	+ 31,750
Short-term	+ 14,969	+ 99,877	- 9,271	+ 25,442	+ 37,273	- 46,236	- 38,647	+ 10,507	+ 29,481
Long-term	+ 13,511	+ 12,382	+ 8,907	- 553	- 398	+ 8,020	+ 462	+ 3,481	+ 1,922
General government	- 7,840	- 4,742	- 4,931	- 239	+ 2,837	- 7,399	- 8,479	- 732	- 445
Short-term	- 7,557	- 2,134	- 2,478	- 343	+ 2,843	- 7,371	- 8,521	- 264	- 287
Long-term	- 280	- 2,605	- 2,451	+ 105	- 6	- 25	+ 42	- 468	- 158
Bundesbank	+ 110,941	+ 226,796	- 90,717	+ 16,347	+ 1,528	+ 92,579	+ 109,710	- 125,467	- 50,953
III. Net financial account (net lending: +/net borrowing: -)	+ 191,481	+ 248,551	+ 219,819	+ 67,323	- 30,017	+ 103,737	+ 63,561	+ 10,584	+ 28,965

<sup>1</sup> 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). <sup>2</sup> Including participation certificates. <sup>3</sup> Including reinvestment of earnings. <sup>4</sup> Short-term: original maturity up to one year. <sup>5</sup> Up to and including 2012 without accrued interest. Long-term: original maturity of more than one year or unlimited.

<sup>6</sup> Balance of transactions arising from options and financial futures contracts as well as employee stock options. <sup>7</sup> Includes in particular loans, trade credits as well as currency and deposits. <sup>8</sup> Excluding Bundesbank. <sup>9</sup> 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										External liabilities 3a, 4	Net external position 5
	Total	Reserve assets				Other investment						
		Total	Gold and gold receivables	Special drawing rights	Reserve position in the IMF	Currency, deposits and securities	Total	of which: Clearing accounts within the ESCB 1	Portfolio investment 2			
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 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
2023 Jan.	1,508,507	281,692	190,062	48,256	9,437	33,938	1,176,042	1,162,354	50,772	793,716	–	714,791
Feb.	1,455,724	276,016	183,755	48,582	9,480	34,199	1,130,353	1,114,888	49,356	743,006	–	712,718
Mar.	1,522,539	288,131	196,405	48,039	9,373	34,314	1,184,604	1,170,620	49,804	791,478	–	731,061

\* 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

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

EUR 1 = currency units ...

Yearly or monthly average	Australia	Canada	China	Denmark	Japan	Norway	Sweden	Switzerland	United Kingdom	United States
	AUD	CAD	CNY	DKK	JPY	NOK	SEK	CHF	GBP	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 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
2023 Jan.	1.5523	1.4474	7.3173	7.4383	140.54	10.7149	11.2051	0.9961	0.88212	1.0769
Feb.	1.5514	1.4400	7.3244	7.4447	142.38	10.9529	11.1725	0.9905	0.88550	1.0715
Mar.	1.6034	1.4649	7.3807	7.4456	143.01	11.2858	11.2276	0.9908	0.88192	1.0706

\* Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB; for additional rates 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

Period	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		
	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	27 selected industrial countries 4			37 countries 5	27 selected industrial countries 4	37 countries 5	60 countries 6
							Total	of which:					
						Euro area countries	Non-euro area countries						
1999	96.2	96.1	95.9	96.2	96.6	95.9	97.9	99.6	95.7	97.7	98.3	98.1	97.8
2000	87.0	86.8	86.0	85.7	88.1	86.1	91.9	97.5	85.4	91.1	93.1	92.3	91.2
2001	87.5	87.1	86.6	84.5	90.2	86.9	91.7	96.6	86.0	90.5	93.0	91.7	91.0
2002	89.8	90.2	89.6	88.1	94.5	90.5	92.3	95.7	88.3	91.0	93.5	92.2	91.9
2003	100.4	101.4	100.8	99.2	106.4	101.6	95.9	94.8	97.5	95.3	97.0	96.7	96.8
2004	104.2	105.3	103.8	102.4	110.9	105.4	96.1	93.6	99.9	95.6	98.5	98.2	98.4
2005	102.8	104.0	101.8	100.6	109.1	103.0	94.7	92.0	98.7	93.2	98.4	97.1	96.7
2006	102.8	104.0	101.2	99.5	109.2	102.3	93.5	90.4	98.1	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	104.5	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	98.1	88.1	98.8	94.3	92.5
2011	104.2	102.1	96.7	99.4	112.8	98.6	92.1	88.4	97.5	87.3	98.2	93.5	91.9
2012	98.5	96.8	91.2	93.6	107.6	93.8	90.0	88.3	92.4	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	96.7	114.7	97.2	92.9	89.6	97.6	87.3	98.2	92.5	91.5
2015	92.5	89.5	85.6	86.0	106.2	88.6	89.7	90.2	88.8	83.6	94.4	87.8	87.0
2016	95.2	91.5	87.9	p 87.3	110.2	90.6	90.6	90.7	90.4	84.9	95.0	88.8	88.1
2017	97.5	93.4	89.1	p 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	90.6	p 89.6	117.4	95.0	93.2	91.0	96.3	86.7	97.7	91.2	90.8
2019	98.1	93.2	88.9	p 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	89.4	p 87.8	119.5	93.9	92.3	91.5	93.4	86.4	96.4	90.1	90.2
2021	99.6	93.5	p 88.7	p 86.1	120.9	94.3	93.4	92.0	95.4	86.8	97.4	90.7	91.0
2022	95.5	p 90.7	p 83.7	p 81.6	116.8	p 90.8	92.2	92.0	92.3	85.2	96.0	p 89.2	p 89.1
2020 Oct.	101.3	94.8			122.6	95.7					96.7	90.6	91.0
2020 Nov.	100.6	94.3	90.5	p 88.0	121.8	95.2	93.1	91.4	95.5	86.9	96.5	90.1	90.5
2020 Dec.	101.8	95.2			123.1	96.0					97.0	90.5	90.9
2021 Jan.	101.4	95.3			122.6	96.0					97.9	91.3	91.7
2021 Feb.	100.7	94.6	90.1	p 88.1	121.7	95.2	93.4	91.8	95.7	87.0	98.0	91.2	91.5
2021 Mar.	100.3	94.2			121.4	94.9					97.7	91.1	91.4
2021 Apr.	100.6	94.3			122.1	95.2					97.9	91.3	91.7
2021 May	100.8	94.4	89.4	p 86.6	122.4	95.3	93.2	91.4	95.8	86.6	98.0	91.3	91.8
2021 June	100.3	93.8			121.7	94.6					97.9	91.1	91.5
2021 July	99.7	93.5			121.0	94.3					97.7	91.0	91.3
2021 Aug.	99.4	93.2	p 88.6	p 85.8	120.6	93.9	93.7	92.3	95.7	87.0	97.4	90.7	90.9
2021 Sep.	99.5	93.3			120.6	93.8					97.3	90.6	90.7
2021 Oct.	98.5	92.4			119.6	93.1					96.7	90.0	90.2
2021 Nov.	97.6	91.8	p 86.6	p 84.0	119.0	92.6	93.4	92.6	94.6	86.4	96.1	89.4	89.7
2021 Dec.	97.1	91.2			119.2	92.4					95.7	88.9	89.4
2022 Jan.	96.6	91.1			118.7	p 92.2					95.9	89.0	p 89.4
2022 Feb.	96.9	91.7	p 84.9	p 82.8	119.1	p 92.6	92.9	92.3	93.7	85.7	96.1	89.1	p 89.5
2022 Mar.	95.9	91.4			118.6	p 92.7					96.3	89.5	p 90.0
2022 Apr.	95.2	89.9			116.6	p 90.2					96.1	89.0	p 88.9
2022 May	95.6	90.3	p 83.5	p 81.2	116.4	p 90.1	92.1	91.8	92.5	84.9	96.5	89.6	p 89.3
2022 June	95.9	90.6			116.7	p 90.2					95.7	88.8	p 88.5
2022 July	94.1	89.1			114.7	p 88.9					94.9	88.0	p 87.6
2022 Aug.	93.6	88.8	p 82.0	p 80.0	114.2	p 88.6	91.6	92.0	90.8	84.7	94.5	87.7	p 87.3
2022 Sep.	94.2	p 89.8			114.6	p 89.3					96.0	89.2	p 88.8
2022 Oct.	94.8	p 91.1			115.5	p 90.6					96.1	p 89.8	p 89.4
2022 Nov.	96.0	p 92.0	p 84.6	p 82.4	117.2	p 91.7	92.2	91.9	92.5	85.6	97.1	p 90.7	p 90.4
2022 Dec.	97.0	p 92.3			119.2	p 92.6					96.2	p 89.7	p 89.8
2023 Jan.	97.3	p 92.5			119.9	p 92.9					p 97.4	p 90.3	p 90.4
2023 Feb.	97.3	p 92.7	...	...	120.1	p 93.2	...	...	...	...	p 97.6	p 90.5	p 90.6
2023 Mar.	97.5	p 93.0			120.5	p 93.5					p 97.9	p 90.8	p 91.0

\* The effective exchange rate corresponds to the weighted external value of the currency concerned. The method of calculating the indicators of the German economy's price competitiveness is consistent with the procedure 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 Zealand, 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, from 2023 including Croatia) 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 composition). 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

#### 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

#### **February 2023**

- The current economic situation in Germany

#### **March 2023**

- German balance of payments in 2022
- The impact of digitalisation on labour productivity growth
- German enterprises' profitability and financing in 2021

#### **April 2023**

- Money market conditions and remuneration of government deposits
- Household wealth and finances in Germany: Results of the 2021 household wealth survey
- Turning point in payments
- Sustainability risks in banking supervision

## **■ 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<sup>1,2</sup>
- 2 Banking statistics, customer classification, January 2022<sup>2</sup>

3	Aufbau der bankstatistischen Tabellen, July 2013 <sup>1,2</sup>	47/2022	On the macroeconomic effects of reinvestments in asset purchase programmes
7	Notes on the coding list for the balance of payments statistics, September 2013	48/2022	Real interest rates, bank borrowing, and fragility
<b>■ Special Publications</b>		49/2022	Estimating the impact of quality adjustment on consumer price inflation
	Makro-ökonomisches Mehr-Länder-Modell, November 1996 <sup>1</sup>	50/2022	Score-based calibration testing for multivariate forecast distributions
	Europäische Organisationen und Gremien im Bereich von Währung und Wirtschaft, May 1997 <sup>1</sup>	51/2022	The preferential treatment of green bonds
	Die Zahlungsbilanz der ehemaligen DDR 1975 bis 1989, August 1999 <sup>1</sup>	52/2022	Bayesian VARs and prior calibration in times of COVID-19
	The market for German Federal securities, May 2000	01/2023	Make-up strategies with incomplete markets and bounded rationality
	Macro-Econometric Multi-Country Model: MEMMOD, June 2000	02/2023	Households' expectations and regional COVID-19 dynamics
	Bundesbank Act, September 2002	03/2023	Inflation expectations in the wake of the war in Ukraine
	Die Europäische Union: Grundlagen und Politikbereiche außerhalb der Wirtschafts- und Währungsunion, April 2005 <sup>1</sup>	04/2023	Shocks to transition risk
	Die Deutsche Bundesbank – Aufgabenfelder, rechtlicher Rahmen, Geschichte, April 2006 <sup>1</sup>	05/2023	Time-varying shock return correlation, news shocks, and business cycles
	European economic and monetary union, April 2008	06/2023	Asset allocation with recursive parameter updating and macroeconomic regime identifiers
	Weltweite Organisationen und Gremien im Bereich von Währung und Wirtschaft, March 2013 <sup>1</sup>		
<b>■ Discussion Papers<sup>o</sup></b>			
	46/2022		
	What drives inflation? Disentangling demand and supply factors		

07/2023

The rollout of internal credit risk model: Implications for the novel partial-use philosophy

08/2023

Pricing the Bund term structure with linear regressions – without an observable short rate

09/2023

Banks of a feather: The informational advantage of being alike

10/2023

On the empirical relevance of the exchange rate as a shock absorber at the zero lower bound

11/2023

Banks' net interest margin and changes in the term structure

12/2023

Long-term deposit funding and demand for central bank funds: Evidence from targeted longer-term refinancing operations

## ■ 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<sup>1</sup>
- 2a Solvency Regulation and Liquidity Regulation, February 2008<sup>2</sup>

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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.

○ Discussion papers published from 2000 are available online.

<sup>1</sup> Publication available in German only.

<sup>2</sup> Available only as a download.