DEUTSCHE BUNDESBANK
EUROSYSTEM

Monthly Report
July 2022

Vol. 74
No 7

Deutsche Bundesbank
Wilhelm-Epstein-Strasse 14
60431 Frankfurt am Main
Germany

Postfach 10 06 02
60006 Frankfurt am Main
Germany

Tel.: +49 (0)69 9566 33512
Email: www.bundesbank.de/kontakt

Internet: www.bundesbank.de

Reproduction permitted only if source is stated.

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

The German original of this Monthly Report went to press at 16 p.m. on 19 July 2022.

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

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

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



Contents

Commentaries 5

Economic conditions 5
Public finances 8
Securities markets 11
Balance of payments 13

Distributional Wealth Accounts for households in Germany – results and use cases 15

Methodological aspects in compiling Distributional Wealth Accounts for households in Germany 18
Net wealth distribution and portfolio structure of households in Germany by international standards 23
The distribution of pandemic-related savings of households in Germany 34

Factors influencing international portfolio flows 39

Impact of US monetary policy on international portfolio flows 47
Variation in the importance of push and pull factors for portfolio flows over time 51

Cross-border interoperability of central bank digital currency 59

Automated market-makers 71

Government debt in the euro area: developments in creditor structure 77

Information on the data and their statistical definition 82

Statistical Section 1*

Key economic data for the euro area 5*
Overall monetary survey in the euro area 8*
Consolidated financial statement of the Eurosystem 16*
Banks 20*
Minimum reserves 42*
Interest rates 43*
Insurance corporations and pension funds 48*
Capital market 50*
Financial accounts 54*
Public finances in Germany 58*
Economic conditions in Germany 66*
External sector 75*

Overview of publications by the Deutsche Bundesbank 85*

Abbreviations and symbols

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 Data unknown, not to be published or not meaningful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

Discrepancies in the totals are due to rounding.

Commentaries

Economic conditions

Underlying trends

German economic activity likely to have more or less stagnated in Q2 2022

German economic activity is likely to have more or less stagnated in the second quarter of 2022. The elimination of most coronavirus mitigation measures lent a strong boost to previously beleaguered service providers and the related consumption expenditure. Hotel and restaurant sector revenues rose steeply on an average of April and May compared with the first quarter. According to the ifo Institute, the business situation of enterprises in the services sector (excluding trade) improved significantly overall in the spring. However, surging inflation weighed on households' purchasing power; their propensity to consume was also adversely affected by uncertainty regarding the future energy supply. The consumer climate index calculated by the market research institute GfK fell to a record low. The poor sentiment among consumers was reflected in substantially lower sales in retail and motor vehicle trade. According to ifo Institute surveys, shortages of materials and labour weighed on activity in the construction sector. Industry continued to be constrained by supply bottlenecks and, moreover, suffered from high uncertainty about future economic developments and from weaker demand – albeit starting from a high level. As a result, it was probably unable to maintain its first-quarter production levels. The considerable cutbacks in Russian gas deliveries since mid-June have been a major drag on enterprises and households, with gas prices skyrocketing as a result. This is also weighing on the outlook. In the current quarter, GDP growth is, from today's perspective, likely to be somewhat weaker than expected in the baseline scenario of the Bundesbank's June 2022 projection.[1]

Industry

Industrial production up once again in May 2022

In May 2022, industrial production[2] was up slightly on the month after seasonal adjustment[3] (+½%). It had already recovered somewhat in April from the distinct decline in March. This also applies to the production of motor vehicles and motor vehicle parts, which had previously contracted particularly steeply. According to the German Association of the Automotive Industry, the number of passenger cars manufactured rose slightly in June as well. Survey results provided by the ifo Institute and S&P Global suggest that supply bottlenecks in industry have now receded somewhat following the considerable exacerbation in March. On an average of April and May, industrial production nevertheless remained markedly below its first-quarter level (-1¼%). Enterprises produced distinctly fewer intermediate and capital goods than in the previous quarter. In the case of intermediate goods, the decline was particularly pronounced in the area of other non-metallic mineral products. This could have something to do with the sector's pronounced dependence on gas and surging gas prices. By contrast, consumer goods production contracted only slightly. However, isolated sectors, such as the pharmaceutical industry, experienced sharp declines in production. Overall, industrial production remained significantly below the level prior to the outbreak of the coronavirus pandemic (-4½%).

1 See Deutsche Bundesbank (2022). However, according to the current assessment, the German economy is likely to be much closer to the baseline scenario than the adverse risk scenario described by the Bundesbank's economists.
2 The time series for industrial production has been revised significantly. For example, the data for the economic sectors and aggregates as from January 2021 were reworked as part of the regular annual revision. In addition, the method used to calculate the production index for the manufacture of motor vehicles was changed. The results for this sector were revised back to January 2015. See Federal Statistical Office (2022).
3 Seasonal adjustment here and in the remainder of this text also includes adjustment for calendar variations, provided they can be verified and quantified.

Economic conditions in Germany*

Seasonally and calendar-adjusted

Period	Total	of which: Domestic	of which: Foreign	Main construction
	Orders received (volume); 2015 = 100			
	Industry			
2021 Q3	114.5	106.3	120.7	126.9
Q4	109.2	105.3	112.3	128.5
2022 Q1	112.0	103.4	118.6	127.6
Mar.	108.4	102.4	113.0	134.0
Apr.	106.5	102.9	109.2	112.0
May	106.6	101.4	110.6	…
	Output; 2015 = 100			
	Industry			
	Total	of which: Intermediate goods	of which: Capital goods	Construction
2021 Q3	94.4	101.7	86.2	113.8
Q4	96.8	101.3	91.6	113.6
2022 Q1	96.6	102.3	89.8	117.0
Mar.	93.5	100.3	84.5	116.4
Apr.	95.1	101.0	87.6	114.4
May	95.7	100.6	89.5	114.9
	Foreign trade; € billion			Memo item: Current account balance in € billion
	Exports	Imports	Balance	
2021 Q3	340.99	296.87	44.13	64.08
Q4	357.21	326.47	30.73	59.15
2022 Q1	363.99	343.50	20.49	46.68
Mar.	121.20	119.21	1.99	6.34
Apr.	126.45	123.36	3.08	10.73
May	128.50	127.65	0.85	9.08
	Labour market			
	Employment	Vacancies[1]	Unemployment	Unemployment rate %
	Number in thousands			
2021 Q4	45,167	799	2,426	5.3
2022 Q1	45,384	847	2,324	5.1
Q2	…	870	2,330	5.1
Apr.	45,520	864	2,289	5.0
May	45,555	873	2,284	5.0
June	…	872	2,417	5.3
	Prices; 2015 = 100			
	Import prices	Producer prices of industrial products	Construction prices[2]	Harmonised consumer prices
2021 Q4	120.8	125.7	132.2	111.1
2022 Q1	130.4	136.2	138.1	114.2
Q2	…	…	147.9	117.5
Apr.	137.9	145.0	.	116.7
May	139.1	147.3	.	118.0
June	…	…	.	117.9

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

Deutsche Bundesbank

Industrial new orders constant

In May 2022, industrial new orders remained constant in seasonally adjusted terms, after declining for three consecutive months. If large orders are excluded, however, they fell slightly. On an average of April and May, new orders decreased steeply compared with the first quarter (-4¾%) and, excluding large orders, the decline was distinctly weaker (-2¾%). Manufacturers of capital goods received considerably fewer orders. The mechanical engineering sector saw a slight uptick in orders, however. Demand for intermediate goods was down significantly. By contrast, orders for consumer goods picked up substantially, although demand for pharmaceutical products was considerably lower. Broken down by region, new orders from non-euro area countries dropped sharply and those from euro area countries considerably. Domestic orders dipped somewhat, too.

Industrial sales up sharply on account of high price increases; rise in exports and imports

In May 2022, nominal industrial sales rose substantially on the previous month after seasonal adjustment (+3½%). On an average of April and May, they grew markedly (+2%) compared with the first quarter, although this was attributable to steep price increases. Broken down by region, nominal sales were up in the euro area and in Germany, in particular. By contrast, sales in non-euro area countries fell somewhat. Broken down by sector, sales of intermediate and consumer goods rose sharply, while slightly fewer capital goods were sold. After seasonal adjustment, nominal exports of goods were markedly higher in May 2022 compared with the previous month (+1½%). The increase was somewhat smaller after price adjustment (+1%). Nominal exports to the Russian Federation were up substantially but remained quite considerably below the level prior to the outbreak of the war in Ukraine. On an average of April and May, nominal exports of goods rose steeply compared with the first quarter (+5%). After price adjustment, however, the increase was significantly lower (+1¼%). Real exports of goods to euro area countries improved markedly, while those to non-euro area countries were up only slightly. May saw a steep rise in nominal goods imports after seasonal adjust-

ment (+3½%), and even after price adjustment there was a clear increase (+2½%). As a result of the sanctions, nominal imports from Russia fell considerably once again, however. Taking the average for April and May, nominal imports of goods were up sharply compared with the first quarter (+9½%). This growth was significantly lower after price adjustment due to surging import prices (+3¼%). The increase is attributable primarily to imports from non-euro area countries, although slightly more goods were imported from the euro area, too. Broken down by product category, imports of chemical products, in particular, were higher.

Construction

Slight rise in construction output

After adjustment for seasonal variations, output in the construction sector increased slightly in May 2022 when compared with the previous month (+½%). On an average of April and May, however, sales were down markedly on the first quarter (-2%), with production in the main construction sector considerably below its first-quarter level. By contrast, the finishing sector saw only a slight drop in output. One factor contributing to the decline in construction output to a certain extent is likely to have been the favourable weather in the first quarter, which has now led to a countermovement. In addition, shortages of labour and materials probably intensified considerably compared with the winter quarter as is indicated by ifo Institute surveys among enterprises in the main construction sector. Signs of relief have been appearing recently, however. New orders in the main construction sector declined substantially in April – the latest month for which data are available – compared with the first quarter. Nevertheless, the order situation in construction is expected to be favourable. Although the reach of the order books as determined by ifo Institute surveys declined slightly in June, it remained high in a long-term comparison. Utilisation of equipment declined for the fourth consecutive month, but was still well above its long-term average.

Labour market

Employment growth less pronounced than in recent months

The seasonally adjusted rise in employment in May, in which the number of persons in employment increased by 35,000, was once again less pronounced than in the previous month. In addition to the relatively weak spring pick-up following a mild winter, increasing strains from the war on Ukraine and the – in part related – high energy prices and supply bottlenecks for intermediate goods are likely to be making themselves felt. However, it is also becoming increasingly difficult to fill vacancies in some areas of the services sector. According to an initial estimate by the Federal Employment Agency, the increase in employment subject to social security contributions was already rather weak in April. The use of cyclical short-time working declined further in April, with the number of new registrations for short-time work, in fact, exceptionally low in June. Other leading indicators of enterprises' hiring intentions are pointing to increasingly weaker job growth in the coming months.

Unemployment up sharply due to Ukrainian refugees

Following an almost uninterrupted decline for two years, registered unemployment rose steeply in June. In seasonally adjusted terms, the number of unemployed persons increased by 133,000 to 2.42 million. The unemployment rate was up by 0.3 percentage point to 5.3%. This can be explained mainly by the incorporation of Ukrainian refugees into the social security system with effect from June. Once they have received benefits for three months under the Act on Benefits Granted to Persons Seeking Asylum *(Asylbewerberleistungsgesetz),* they are recorded as unemployed if they are classified as being fit and available for work. As a result, in the vast majority of cases, these persons now receive the basic allowance for job seekers. According to the Federal Employment Agency, however, unemployment rose slightly even without the effect described above. This is likely to be due to the rather weak spring rebound and active labour market policy measures mitigating unemployment to a smaller ex-

tent.[4] It is also possible that unemployment might continue to rise over the coming months. The IAB unemployment barometer moved from positive to negative territory in June; however, the informative value of this indicator in economic terms is impaired by refugee movements.

Prices

Surging natural gas prices

Prices on the international energy markets in June 2022 were characterised by countervailing trends. Brent crude oil cost just under US$110 per barrel at last report, and thus slightly lower than at the end of May. By contrast, natural gas prices in Europe surged once again. This is likely to be largely due to supply shortages and concerns that Russia might halt gas deliveries altogether. The cost of a megawatt hour doubled from just over €80 at the beginning of June to around €170 at the end of the period under review.

Price pressures at upstream stages remain high

Overall, price increases at the upstream stages of the economy remained near the all-time high levels of the preceding months. Import prices increased by 31% in May compared with the previous year, just under 1 percentage point less than in March and April. At the domestic producer level, prices were up by 34%, which was roughly in line with the April figure. At both stages, price pressures for energy and intermediate goods were slightly weaker, while prices of consumer goods and capital goods once again accelerated.

Inflation rate down in June, mainly due to €9 ticket

The rate of consumer price inflation fell somewhat from a very high level as this report went to press. In June, the Harmonised Index of Consumer Prices (HICP) rose by 8.2% on the year, 0.5 percentage point lower than in May.[5] This was mainly due to public transport becoming significantly cheaper as a result of the temporary introduction of the €9 ticket.[6] Seasonally adjusted month-on-month inflation, at -0.1%, was likewise negative at the end of the period under review. Although energy prices continued to rise very sharply, inflation did not increase any further. This is likely to have been due, at least in part, to the temporary fuel rebate.[7] By contrast, food price inflation continued to accelerate sharply, while price pressures for industrial goods remained unchanged at their high level. The inflation rate is set to remain high over the next few months. It could even climb further in September with the expiry of temporary relief measures. However, the future trajectory of the energy commodity markets is very uncertain, especially with regard to natural gas deliveries from Russia. The risks to the price outlook are clearly tilted to the upside.

Public finances[8]

Local government finances

Deficit down significantly at start of year and largely covered by reserves

Local governments (core budgets and off-budget entities) closed the first quarter of this year with a seasonal deficit, as usual. At €5½ billion, it was €3½ billion lower than in the first quarter of 2021. Local governments financed €2 billion of the deficit by taking on new debt (according to the provisional debt statistics). They were able to cover the lion's share by making recourse to the reserves, which stemmed – in part – from the high surplus in the final quarter of 2021.

---

4 See Statistics provided by the Federal Employment Agency (2022), p. 13.
5 The national consumer price index (CPI) showed an increase of 7.6%, compared with 7.9% in May.
6 The effects of the €9 ticket can be seen in the HICP component "Combined passenger transport" (0735). Here, prices fell by 62.9% on the year in June, after having risen by as much as 1.7% in May. Taking into account the current HICP weight of the sub-component, which stands at 1.1%, the HICP rate in June was dampened by around 0.7 percentage point.
7 In early June, the bulk of the fuel rebate is likely to have been passed through to consumers. In the course of the month, the effect of the fuel rebate was probably then overshadowed by fluctuations in the price of crude oil as well as in the exchange rate.
8 In the short commentaries on public finances, the emphasis is on recent outturns. The quarterly editions of the Monthly Report (published in February, May, August and November), by contrast, contain an in-depth description of public finance developments during the preceding quarter. For detailed data on budgetary developments and public debt, see the statistical section of this report.

Strong revenue growth, mainly from local business tax, …

Revenue rose very sharply on the year, by 12% (+€7 billion). At 26%, tax receipts even grew more than twice as strongly (+€4½ billion). After deducting shares accruing to other government levels, local business tax – a large revenue item – increased by 25%. Local governments in Rhineland-Palatinate, in particular, benefited from this, as a vaccine manufacturer is based in this federal state. Local government shares in income tax doubled, rising by €1 billion. This is likely to be related to state governments' final settlements for 2021. Transfers from state government also saw strong growth (+7%, or €2 billion). Receipts from fees went up by 11%. Protective pandemic measures are likely to have had less of a restricting effect on facilities' operations than in the same quarter of the previous year.

… exceeded significant rise in expenditure

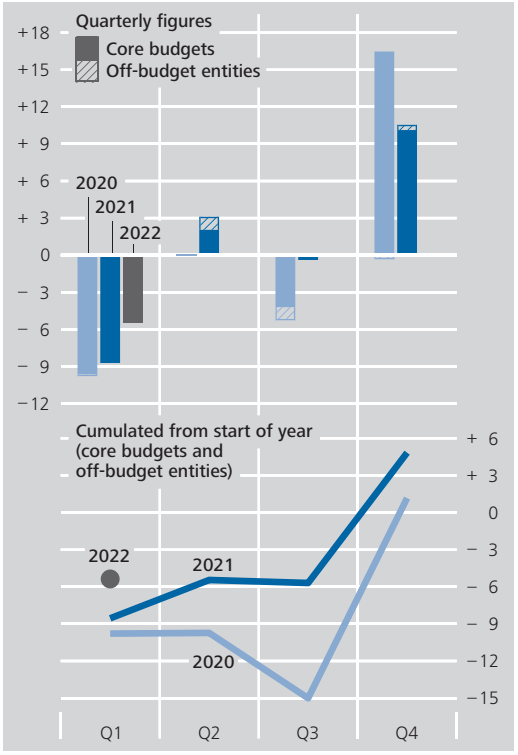
Expenditure increased significantly, by 6%. Personnel expenditure climbed particularly sharply (+8%), partly on account of a special effect in Baden-Württemberg. Other operating expenditure also rose substantially (+7%). Spending on social benefits, by contrast, increased only moderately, at 2%. On the one hand, the public long-term care insurance scheme has put a limit on the co-contribution rate of care recipients in care homes since the beginning of the year, easing the burden on social assistance. On the other hand, spending on benefits for asylum seekers increased. Expenditure on refugees from Ukraine probably only started to increase close to the end of the quarter. Fixed asset formation rose by 3½%. This was mainly attributable to construction investment (+5%). The growth in this and other operating expenditure is likely to broadly reflect strong price increases.

Prospect of local government surplus for year as a whole, but uncertainty is great

As things currently stand, a surplus is to be expected again for the year as a whole. For example, the March projection issued by the Federal Ministry of Finance for the Stability Council – updated to reflect the May tax estimate – suggests a similarly high surplus as in 2021 (+€4½ billion). Additional central government funds of €2 billion are intended to cover the additional costs incurred by local governments for spending on refugees from Ukraine. However, uncertainty is great, with high energy prices being a key factor. These also weigh on local government via local utilities companies; aside from lower profit distributions, local authorities may also have to step in to offset losses, under certain circumstances. The macroeconomic risks mainly affect local government through volatile local business tax, which is a large revenue item. A fundamental reform of local government finances remains advisable in order to ensure stable and commensurate funding of local government budgets.[9] This seems particularly important in order to enable governments to reinforce their infrastructure.

Local government fiscal balance

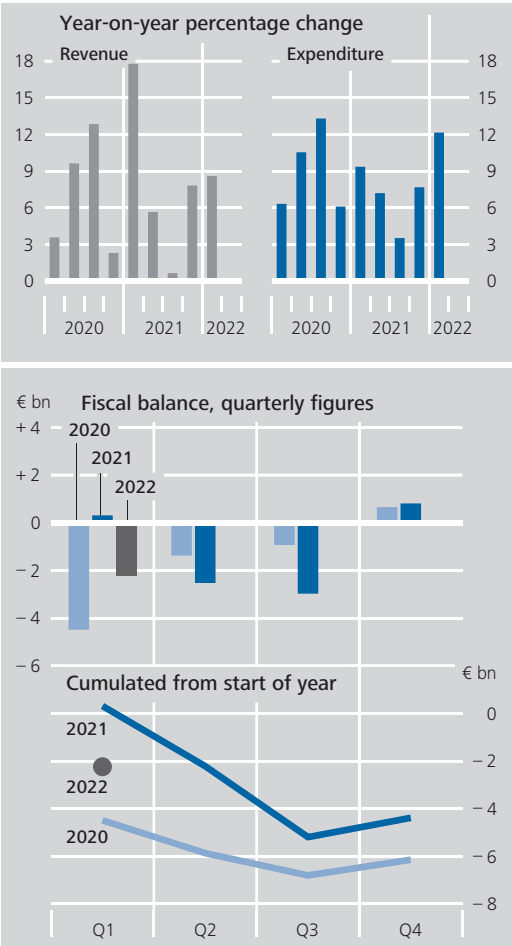
€ billion



Source: Federal Statistical Office.
Deutsche Bundesbank

9 For more information on starting points for securing stable local government finances, see Deutsche Bundesbank (2021).

Finances of the statutory health insurance scheme*



Source: Federal Ministry of Health. * Health fund and health insurance institutions (consolidated). Preliminary quarterly figures. The final annual figures differ from the total of the reported preliminary quarterly figures as the latter are not revised subsequently.
Deutsche Bundesbank

Statutory health insurance scheme

SHI scheme: deficit in the first quarter, deterioration solely due to one-off effects

The statutory health insurance (SHI) scheme (comprising the health insurance institutions and the health fund) recorded a deficit of just over €2 billion in the first quarter of 2022. It had posted a slight surplus in the first quarter of 2021.[10] Excluding positive one-off effects, however, the deficit would have been somewhat higher last year than in the current year.

Health fund: deficit of €2 billion

The health fund posted a deficit of just over €2 billion in the first quarter of 2022. A small surplus was recorded in the same quarter of the previous year, which was due to pre-funding by central government. Contribution receipts grew by just over 4½% compared with the same quarter last year. Around one-half of a percentage point of this was attributable to the slight increase in the average supplementary contribution rates. The fund also received special grants of €9½ billion from central government for its pandemic-related special expenditure in the first quarter, not only on the very substantial expansion of public coronavirus tests, but also for financial assistance to hospitals totalling €4 billion and vaccination costs of €1½ billion. The health fund's other expenditure rose steeply, by 7%. This was driven by the fact that central government increased its annual transfers to the health insurance institutions in order to stabilise the supplementary contribution rates.

Health insurance institutions: balanced result

As in the same quarter of the previous year, the health insurance institutions achieved a largely balanced result. Total revenue saw strong growth of 6½%, particularly on account of higher central government funds. The health insurance institutions' expenditure also increased by 6½%, including a 6% rise in spending on benefits. Particular growth was seen in those areas where the previous year's figures had been depressed on account of the pandemic. Expenditure on remedies and therapeutic appliances (+14%) and pharmaceuticals (+6½%), above all, rose strongly. Spending on hospital treatment – a major expenditure item – also climbed markedly, by 4½%.[11] Expenditure on medical treatments increased by a more moderate 2½%, following high growth in the previous year. Administrative expenditure grew by a very substantial 18%. Adjusted for higher pension

10 In 2021, reserves of €8 billion were redistributed among the institutions via the health fund. The associated payment flows did not influence either the financial situation of the SHI scheme as a whole or that of its two constituent parts taken in isolation. The revenue and expenditure developments described in the following are therefore adjusted for these payment flows.
11 Together with the aforementioned assistance from the health fund, payments from the SHI system to hospitals thus rose strongly by 8% at the start of the year.

provisions, however, it rose only to a limited extent. Excluding higher pension provisions, the institutions recorded a modest surplus.

2022: Health fund could close in balance, and …

In its autumn 2021 forecast, the group of SHI estimators assumed a deficit of €2 billion in the SHI system for 2022 as a whole (including the total additional central government grant to the health insurance institutions in the amount of €14 billion). The deficit was expected in the health fund: in the current year, it will pass on €2 billion from its reserves to the institutions. From the current perspective, by contrast, it seems the health fund could perform better, achieving a balanced result. In view of developments to date, for instance, revenue could be considerably higher than expected. However, there are substantial macroeconomic risks with regard to the second half of the year.

… health insurance institutions could record a surplus

Given an unchanged overall contribution rate, the group of SHI estimators anticipated a balanced result for the health insurance institutions. The financial resources from the health fund's reserves and the additional central government grant closed a funding gap of €16 billion. From the current perspective, the health insurance institutions could also perform better, thus recording a surplus. Expenditure could be somewhat lower than expected back in the autumn, for instance. Furthermore, the actual average supplementary contribution rate is just under 0.1 percentage point higher than previously anticipated.

High structural deficit and increasing expenditure pressure; however, predominantly temporary measures announced by health minister

The statutory health insurance scheme is set to face considerable challenges over the coming years, however. It is already structurally underfunded at present. This is likely to be exacerbated in the future as expenditure tends to rise more strongly than income subject to contributions. A financial reform of the statutory health insurance scheme is currently being discussed that would entail the predominantly structural deficit of 1 contribution rate point in 2023 (equivalent to around €16 billion) being covered with a combination of measures. The Federal Minister of Health anticipates an increase in the average supplementary contribution rate of 0.3 percentage point. In order to limit contribution rate rises on this scale, Federal Government plans to make a one-off payment of an additional €3 billion, including a loan of €1 billion by the end of 2026. Available health fund and health insurance institution reserves are also to be used. In total, these reserves are roughly twice as high as the special funds from central government. Various savings on the benefits side could, for a time, provide as much relief as the special funds from central government. Overall, this will close the expected financing gap next year. However, as the measures announced are mainly temporary in nature, the government would just be putting off taking necessary action.

Securities markets

Bond market

High net issuance in the German bond market in May 2022

At €137.6 billion, gross issuance in the German bond market in May 2022 was up slightly on the previous month's figure (€129.0 billion). After deducting redemptions, which were lower than in the previous month, and taking account of changes in issuers' holdings of their own debt securities, net issuance of domestic debt securities came to €23.9 billion. The outstanding volume of foreign debt securities in Germany rose by €0.7 billion during the reporting month, boosting the outstanding volume of debt instruments in the German market by €24.6 billion overall.

Net public sector issuance

The public sector issued debt securities to the tune of €14.9 billion net in the reporting month, compared with €0.2 billion in April. On balance, central government was the main issuer of new securities (€13.9 billion), placing above all 10-year and 30-year Federal bonds in the market (Bunds: €8.5 billion and €4.0 billion, respectively), but also two-year Federal Treasury notes (Schätze: €6.2 billion) and five-year Federal notes (Bobls: €3.6 billion). This contrasted with redemptions of Treasury dis-

Sales and purchases of debt securities

€ billion

Item	2021 May	2022 Apr.	2022 May
Sales			
Domestic debt securities[1]	32.0	– 2.2	23.9
of which:			
Bank debt securities	– 3.4	– 3.2	4.1
Public debt securities	28.2	0.2	14.9
Foreign debt securities[2]	5.2	– 15.2	0.7
Purchases			
Residents	31.7	– 2.3	28.2
Credit institutions[3]	– 2.2	– 16.9	5.5
Deutsche Bundesbank	25.5	13.1	14.4
Other sectors[4]	8.3	1.5	8.3
of which:			
Domestic debt securities	0.5	9.3	9.7
Non-residents[2]	5.6	– 15.1	– 3.6
Total sales/purchases	37.2	– 17.4	24.6

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

count paper (Bubills), amounting to €6.6 billion net. State and local governments issued bonds worth €1.0 billion net.

Enterprises' capital market debt higher

Domestic enterprises issued bonds with a net value of €4.9 billion in the reporting month, compared with €0.7 billion in April. On balance, non-financial corporations were the chief issuers.

Net issuance by credit institutions

Domestic credit institutions raised their capital market debt by €4.1 billion net in May, following net redemptions of €3.2 billion in April. The outstanding volume of debt securities issued by specialised credit institutions – which include, for example, public promotional banks – went up by €1.8 billion, thereby accounting for the bulk of the increase. Further growth was also seen in the outstanding volume of mortgage Pfandbriefe (€1.3 billion), of other bank debt securities that can be structured flexibly (€0.7 billion) and of public Pfandbriefe (€0.3 billion).

Purchases of debt securities

The Bundesbank was the main buyer of bonds in May, acquiring debt securities amounting to €14.4 billion net, predominantly under the Eurosystem's asset purchase programmes. Domestic non-banks purchased debt securities worth €8.3 billion net. On balance, these purchases solely involved domestic paper issued by the private sector. Domestic credit institutions expanded their bond portfolios by €5.5 billion net, while non-resident investors disposed of domestic debt securities worth €3.6 billion net.

Equity market

Net issuance of German equities

In the reporting month, domestic enterprises placed new shares worth €1.4 billion net in the German equity market. The volume of foreign equities in the German market rose by €2.5 billion over the same period. On balance, shares were purchased chiefly by domestic non-banks (€3.0 billion), but domestic credit institutions were likewise active in the market (€1.6 billion). By contrast, foreign investors reduced their equity exposure in Germany by €0.7 billion net.

Mutual funds

Inflows to mutual funds

In May, German mutual funds recorded net inflows of €5.1 billion (April: €9.3 billion). On balance, specialised funds reserved for institutional investors were the chief beneficiaries of such inflows (€4.0 billion). Among the various asset classes, the main sellers of new shares were open-end real estate funds and equity funds (€1.6 billion and €0.8 billion, respectively). The outstanding volume of foreign mutual fund units distributed in Germany rose by €0.7 billion in the reporting month. In May, domestic non-banks purchased mutual fund shares worth €5.2 billion net. Foreign investors bought German shares for €0.6 billion net, while domestic credit institutions scaled back their fund portfolio slightly (-€0.1 billion).

Balance of payments

Current account surplus down sharply

Germany's current account recorded a surplus of €2.5 billion in May 2022, down €6.4 billion on the previous month's level. Although the surplus in the goods account increased, this was outweighed by the sharp shift into a deficit for invisible current transactions, which comprise services as well as primary and secondary income.

Surplus in goods account up

In May, the surplus in the goods account grew by €1.9 billion on the month to €6.2 billion, but this was due to the rise in net goods exports in merchanting trade and the decline in net imports of non-monetary gold. In foreign trade, however, imports increased somewhat more strongly than exports.

Sharp decrease in invisible current transactions primarily due to dividend distributions

Invisible current transactions shifted from a surplus of €4.6 billion in April to a deficit of €3.7 billion in May. This was primarily attributable to the decline in net receipts in primary income by €8.3 billion to €2.2 billion, with higher dividend payments to non-residents from portfolio investment playing a key role. Furthermore, the deficit in the services account widened by €1.5 billion to €2.7 billion. Expenditure expanded more strongly than receipts, especially as travel expenditure picked up as is usual at this time of year. By contrast, the deficit in the secondary income account narrowed by €1.5 billion to €3.2 billion. Higher general government tax revenue from non-residents owing to the higher dividend payments on portfolio investments in particular contributed to this decrease.

Portfolio investment sees net capital exports

In May 2022, as in previous months, financial markets continued to be influenced by Russia's invasion of Ukraine and rising inflation rates. Germany's cross-border portfolio investment generated net capital exports of €6.5 billion (April: €11.1 billion). Domestic investors added €2.9 billion worth of securities issued by non-residents to their portfolios on balance. They purchased foreign bonds (€5.5 billion), shares (€1.5 billion) and mutual fund shares (€0.7 bil-

Major items of the balance of payments

€ billion

Item	2021 May	2022 Apr.	2022 May[p]
I. Current account	+ 15.8	+ 9.0	+ 2.5
1. Goods	+ 14.5	+ 4.3	+ 6.2
Receipts	109.9	119.1	127.9
Expenditure	95.4	114.7	121.7
Memo item:			
Foreign trade[1]	+ 12.4	+ 0.8	+ 0.5
Exports	109.5	122.3	130.3
Imports	97.2	121.5	129.8
2. Services	+ 2.3	− 1.2	− 2.7
Receipts	24.3	29.0	29.9
Expenditure	22.0	30.1	32.6
3. Primary income	+ 0.6	+ 10.5	+ 2.2
Receipts	19.4	20.2	21.1
Expenditure	18.8	9.7	19.0
4. Secondary income	− 1.7	− 4.7	− 3.2
II. Capital account	− 0.4	− 1.3	− 2.7
III. Financial account (increase: +)	+ 14.1	+ 4.6	+ 4.5
1. Direct investment	− 1.4	+ 12.8	+ 19.7
Domestic investment abroad	− 8.1	+ 28.8	+ 10.9
Foreign investment in the reporting country	− 6.7	+ 16.0	− 8.8
2. Portfolio investment	+ 5.3	+ 11.1	+ 6.5
Domestic investment in foreign securities	+ 12.1	− 7.3	+ 2.9
Shares[2]	+ 1.7	+ 5.8	+ 1.5
Investment fund shares[3]	+ 5.1	+ 2.1	+ 0.7
Short-term debt securities[4]	− 3.4	+ 2.0	− 4.7
Long-term debt securities[5]	+ 8.6	− 17.2	+ 5.5
Foreign investment in domestic securities	+ 6.7	− 18.4	− 3.6
Shares[2]	+ 0.9	− 3.7	− 0.7
Investment fund shares	+ 0.3	+ 0.5	+ 0.6
Short-term debt securities[4]	+ 4.2	− 7.5	− 7.1
Long-term debt securities[5]	+ 1.4	− 7.7	+ 3.6
3. Financial derivatives[6]	+ 3.2	+ 7.4	− 0.5
4. Other investment[7]	+ 6.8	− 26.8	− 21.4
Monetary financial institutions[8]	− 32.1	− 9.1	− 18.3
of which: Short-term	− 29.9	− 4.0	− 11.2
Enterprises and households[9]	+ 5.2	+ 0.2	− 8.6
General government	− 1.6	− 1.7	− 3.7
Bundesbank	+ 35.3	− 16.2	+ 9.2
5. Reserve assets	+ 0.2	+ 0.1	+ 0.2
IV. Errors and omissions[10]	− 1.2	− 3.2	+ 4.7

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

Deutsche Bundesbank

lion), while disposing of foreign money market paper (€4.7 billion). Non-resident investors offloaded German securities to the tune of €3.6 billion net, selling money market paper (€7.1 billion) and shares (€0.7 billion), whilst acquiring German bonds (€3.6 billion) and mutual fund shares (€0.6 billion).

Financial derivatives

In May, transactions in financial derivatives recorded net outflows (€0.5 billion).

Direct investment sees capital outflows

Direct investment generated net capital exports of €19.7 billion in the reporting month (April: €12.8 billion). Domestic enterprises injected their affiliates abroad with direct investment funds totalling €10.9 billion, boosting their equity capital by €11.6 billion. By contrast, repayments predominated in lending to affiliates abroad (€0.7 billion). Conversely, non-resident enterprises scaled back their direct investment in Germany by €8.8 billion. Although they too augmented their equity capital (€2.0 billion), the volume of intra-group loans issued to business units in Germany from abroad fell significantly by €10.8 billion.

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 €21.4 billion in May (following €26.8 billion in April). Monetary financial institutions (excluding the Bundesbank) recorded net capital imports (€18.3 billion). A decline in the net external position in other investment was also registered for enterprises and households (€8.6 billion) as well as general government (€3.7 billion). By contrast, the Bundesbank's net external claims went up by €9.2 billion. Its TARGET2 claims rose by €24.3 billion. At the same time, the Bundesbank's external liabilities also increased significantly, as non-euro area residents topped up their deposits with the Bundesbank.

Reserve assets

The Bundesbank's reserve assets grew – at transaction values – by €0.2 billion in May.

List of references

Deutsche Bundesbank (2022), Outlook for the German economy for 2022 to 2024, Monthly Report, June 2022, pp. 13-45.

Deutsche Bundesbank (2021), Local government finances: how cash advances can be limited and budget imbalances avoided, Monthly Report, June 2021, pp. 53-58.

Federal Statistical Office (2022), Revision of the industrial production index with regard to automotive production, https://www.destatis.de/EN/Themes/Economic-Sectors-Enterprises/Industry-Manufacturing/production-index-revision-automotive-production.html

Statistics provided by the Federal Employment (2022), Berichte: Blickpunkt Arbeitsmarkt – Monatsbericht zum Arbeits- und Ausbildungsmarkt, Nuremberg, June 2022.

Distributional Wealth Accounts for households in Germany – results and use cases

Previously, it was not possible to describe the wealth distribution of households in Germany at the level of individual households on a quarterly basis. Now, however, the Distributional Wealth Accounts (DWA) represent a new provisional dataset that combines two data perspectives: namely, they link the Bundesbank's Panel on Household Finances (PHF) with the national accounts statistics. The DWA thus incorporate the distributional information from the household survey and simultaneously reflect the quarterly dynamics and levels of the national accounts statistics in a consistent manner.

According to the DWA, wealth inequality has declined in recent years. One reason for this is that net wealth has grown particularly strongly for households in the bottom half of the distribution of wealth, albeit from a low level. These less wealthy households have accumulated a significant volume of low-risk assets, such as deposits and insurance claims, and at the same time considerably reduced their debt. Another reason for decreasing inequality is that households in the upper mid-range of the distribution benefited noticeably from the rising value of their housing wealth. Furthermore, the DWA reveal considerable heterogeneity in the composition of households' wealth. In the less wealthy half of the distribution, this wealth consists almost exclusively of low-risk assets. By contrast, the wealth structure of more wealthy households includes a much greater volume of capital market instruments and, above all, housing and business wealth.

As housing wealth, in particular, generated a high return alongside shares, the average real return on assets from 2009 to the beginning of 2022 was significantly higher in the top half of the wealth distribution than in the bottom half. In this connection, the results also show that the yield-lowering effect of inflation is especially noticeable at the lower tail of the wealth distribution. As these households chiefly hold low-yielding assets, high inflation rates consequently lead to negative real returns on their wealth in particular.

The dataset presented here is also likely to become more relevant to monetary policy in future. Multiple studies show that heterogeneity among households can affect the transmission of monetary policy. Thus, the way in which monetary policy measures work is also likely to depend on the distribution and structure of wealth. When assessing the impact of such measures, then, it generally makes sense to bear in mind the financial differences between households. It is precisely against this backdrop that the future provision of the DWA would appear to be particularly helpful for a central bank.

Introduction

DWA link microdata with national accounts statistics

With the Distributional Wealth Accounts (DWA) for households in Germany, there now exists a new provisional dataset that merges two different sources of information by linking the data from the Bundesbank's Panel on Household Finances (PHF) with the quarterly data from the national accounts statistics. These DWA enable analyses to be carried out at the level of individual households. In concrete terms, this means that decisive statements can be made on wealth and debt developments along the wealth distribution. Since the effectiveness of monetary and economic policy measures depends, amongst other things, on the distribution and structure of wealth and any potential associated balance sheet constraints, the provision of distributional statistics such as these seems particularly helpful for central banks. The dataset is still in the development phase, but significant progress has already been made. Potential adjustments as the process continues cannot be ruled out.

Key analytical findings reveal heterogeneous developments that usually remain hidden in macrodata

This article starts by providing an overview of the process of creating the DWA for households in Germany. In addition, it analyses the development of the distribution of wealth since 2009 in a stylised form. It goes on to determine portfolio returns at the individual household level and to analyse their development over time using the DWA. Finally, economic policy conclusions are drawn. The overall findings are as follows:

- The DWA provide higher-frequency and comparatively timely data on the distribution of various assets and liabilities across households in Germany.

- According to the DWA, wealth inequality has decreased since around 2014. This is due, for one thing, to the fact that aside from building up their financial assets substantially, the bottom half of the wealth distribution reduced their debt to a significant extent, thus contributing to an increase in net wealth. For another, the upper mid-range of the distribution benefited perceptibly from an increase in the value of housing wealth.

- The data from the DWA also indicate that there are significant differences in the composition of households' wealth along the wealth distribution. For example, the assets held by households in the bottom half of the distribution consist almost exclusively of low-risk forms of investment, such as deposits and insurance claims. By contrast, the wealth structure of more wealthy households includes a much greater volume of capital market instruments and, above all, housing and business wealth.

- The interaction between the different wealth structures and the varying returns on the individual asset types is reflected in noticeable differences in the level of the return on total assets along the wealth distribution. As housing wealth, in particular, generated a high return alongside shares, the average real return on assets from 2009 to the beginning of 2022 was significantly higher in the top half of the wealth distribution than in the bottom half.

Distributional wealth accounts for households in Germany: some stylised results

Quarterly DWA …

The DWA are characterised by the fact that they combine distributional information with the national accounts statistics in a consistent manner and make this available on a quarterly basis. Two sets of statistics are of key importance when compiling the DWA. First, the data from the Bundesbank's PHF study are considered. In this study, individual households in Germany are asked about their wealth and

their debt.[1] Second, data from the national accounts statistics are incorporated. The national accounts statistics describe the total wealth and wealth structure of the institutional sectors as a whole – i.e. also for the entire household sector in Germany. They include non-financial assets as determined by the Federal Statistical Office and the data on financial assets and liabilities compiled by the Bundesbank. However, the national accounts statistics do not allow for any statements to be made about the distribution of wealth. By contrast, the data from the PHF study provide very detailed information at the level of individual households, albeit only at intervals of around three years. In turn, the national accounts statistics predominantly record aggregate household wealth on a quarterly basis.[2]

… close the gap in wealth reporting between aggregated microdata and national accounts statistics …

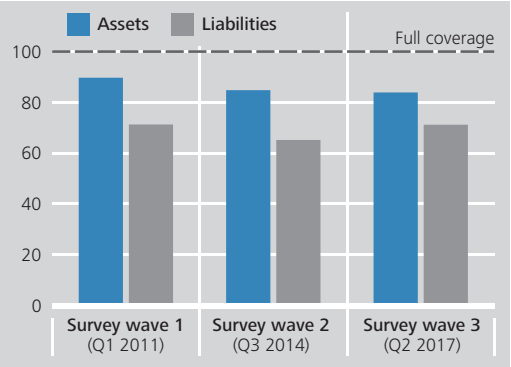
Although both sets of statistics are compiled with the same aim in mind – that is, to describe the wealth situation of German households – there is a considerable gap in wealth reporting between the aggregated microdata of the PHF study (extrapolated) and the national accounts statistics (for more on this, see the adjacent chart). A key contributing factor here is the inadequate coverage of very wealthy households in the PHF study. Against this backdrop, experts from the European System of Central Banks collaborating in various expert groups have, since 2015, endeavoured to link the data from household surveys with the national accounts statistics for the household sector within a consistent analytical framework, thereby closing the data gaps (see also the box on pp. 18 ff.).[3]

… and consistently reflect dynamics and levels of the national accounts statistics

Ultimately, the provisional dataset resulting from the work of the expert groups contains valuable information from both sets of statistics: it takes into account the distributional information from the household wealth survey at the individual household level, as well as the quarterly dynamics and levels of the national accounts statistics for the period since 2009. In this context, the DWA record level data on the basis of various wealth groupings for the following types of assets and liabilities: deposits, debt securities, listed shares, investment funds, insurance claims, financial and non-financial business wealth, housing wealth and liabilities in the form of mortgages and other debt.[4] Financial business wealth includes equity investments, i.e. unlisted shares and other equity. Non-financial business wealth, on the other hand, chiefly consists of the non-financial assets of sole proprietors such as self-employed persons and freelancers.[5] The net wealth of a household is ultimately calculated as the difference between total assets and liabilities (see also the chart on p. 21).

Coverage of assets in the Panel on Household Finances*

As a percentage of national accounts statistics



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations. * Aggregated data from the Panel on Household Finances (PHF).
Deutsche Bundesbank

1 With its Panel on Household Finances (PHF), the Bundesbank's Research Centre is able to capture the situation of households in Germany. On average, data for around 4,000 households are available for each of the three existing survey waves of the PHF. These data make it possible to analyse a multitude of topics: income and wealth distribution, property ownership, saving behaviour and provision for old age, jobs, and family. In addition, the PHF data feed into the Household Finance and Consumption Survey, a study conducted by the Eurosystem central banks, and thus play a key role at not only the national but also the European level.
2 Data on non-financial assets are usually only available at the annual level.
3 See European Central Bank (2020).
4 Insurance claims essentially refer to voluntary pensions, as they primarily comprise life insurance and annuity entitlements. Other debt constitutes all loans other than mortgages, such as consumer loans.
5 Owing to their legal form, these sole proprietors are to be assigned to the household sector.

Methodological aspects in compiling Distributional Wealth Accounts for households in Germany

There are currently two key sets of Bundesbank statistics which provide information on the wealth situation of households in Germany. First, there is the Panel on Household Finances (PHF), which gives detailed information on the individual wealth and debt situation of the households surveyed. Second, the national accounts statistics provide aggregate information on the amount and structure of wealth of the entire household sector. As both sets of statistics focus on household wealth in Germany, it might initially be assumed that they provide similar aggregate wealth figures. However, a simplified comparison of the data from the wealth survey and the national accounts statistics reveals significant differences (see also the chart below). An expert group within the European System of Central Banks (ESCB) identified two main sets of factors that explain these differences.[1]

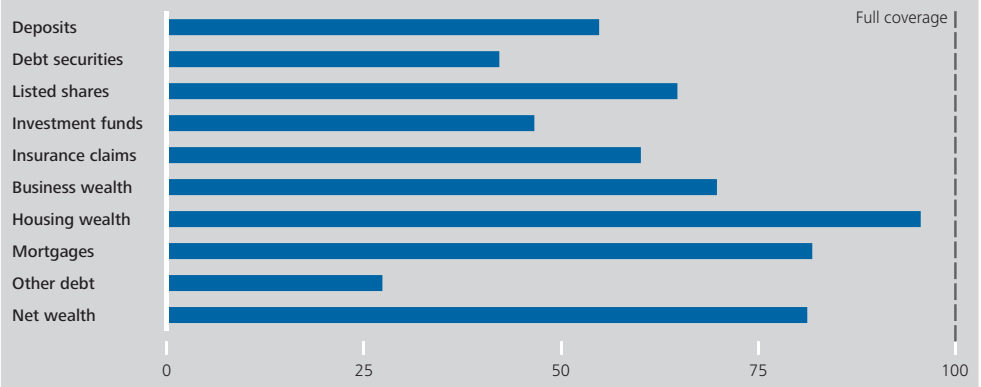
The first set of factors mainly concerns conceptual and methodological differences. These can potentially relate to individual or all components of wealth, and include differences in the definition of the population or periodicity and timeliness of the statistics. However, differing valuation concepts between the two sets of statistics are also a decisive factor. For example, the survey data typically reflect household self-evaluations of different assets and liabilities, whereas the national accounts statistics primarily measure assets on the basis of market values. Finally, when comparing the data, it should be borne in mind that wealthy households are typically underrepresented in the realised samples of the wealth survey.

The second set of factors relates to instrument-specific differences, which are mainly due to divergent definitions. In order to take account of these conceptual differences in particular, the Distributional Wealth Accounts include only those wealth com-

1 In December 2015, the Expert Group on Linking Macro and Micro Data for the household sector (EG-LMM) was established within the ESCB with the aim of analysing the comparability of data from the household wealth survey and the national accounts statistics. Based on these results, the expert group which succeeded it (Expert Group on Distributional Financial Accounts) was then tasked with developing a procedure for the compilation of the Distributional Wealth Accounts.

Instrument-specific coverage of the Panel on Household Finances*

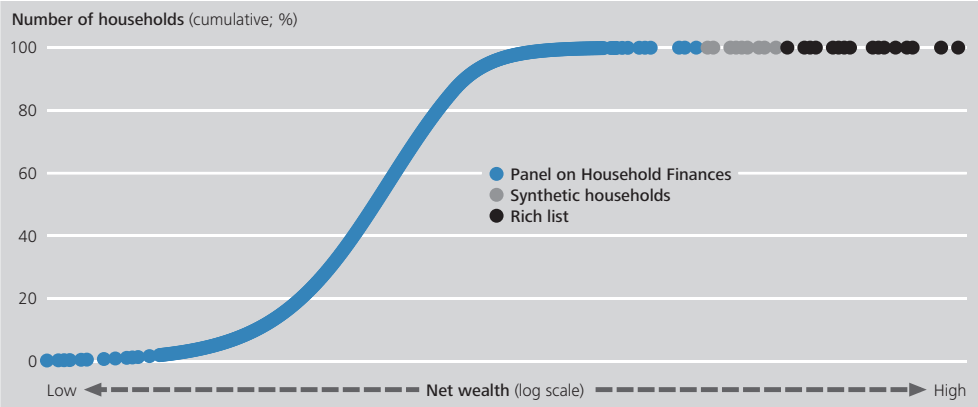
As a percentage of national accounts statistics



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations. * Aggregated data from the Panel on Household Finances (wave 2).

Deutsche Bundesbank

Stylised wealth distribution*



* Data from the Panel on Household Finances augmented by missing wealthy households.
Deutsche Bundesbank

ponents which are sufficiently comparable between the two sets of statistics. They do not, however, include those wealth positions that are only recorded in one of the two sources, such as "non-life insurance reserves", which only form part of the financial accounts. They also exclude assets which have a low degree of comparability owing to significant differences in how they are defined. These include occupational pensions, financial derivatives and other accounts receivable/payable. Ultimately, this approach results in a definition of wealth which – as measured by the national accounts statistics – covers around 90% of households' total assets.[2]

Despite using an adjusted concept of wealth, when it comes to net wealth there is still a notable gap between the aggregate of the household survey and the corresponding data from the national accounts statistics. On average, the net wealth recorded in the household survey over the three PHF waves is around €2,000 billion (20%) lower than the level in the national accounts statistics. A major contributing factor here is the absence of very wealthy households in the PHF, which continues to present a great challenge.[3] For one thing, only a small number of high-net-worth households are represented in the population. For another, willingness to participate in surveys decreases as net wealth increases.[4]

An advanced approach was developed to close the data gap for this population group

2 It should be noted here that for financial business wealth (sub-component of total business wealth), the corresponding level in the financial accounts (sum of unlisted shares and other equity held) appears to be recorded only incompletely. Stylised back-of-an-envelope calculations indicate that unlisted shares and other equity issued by non-financial corporations in Germany are underreported in the financial accounts. Accordingly, the reported volume for these two instruments is likely to be around €1,250 billion too low overall. Thus, when compiling the Distributional Wealth Accounts, an appropriately corrected level in the financial accounts is used. It is estimated that around 90% of German enterprises are family-owned (see Foundation for Family Businesses (2019)). Assuming that most of the aforementioned liabilities are held by households, this would imply a correction factor of 4.8 for households' holdings in 2017 with regard to these two wealth components. To obtain a time series for the correction factor, it is also assumed that the original stock was largely recorded correctly in 1991, implying a correction factor of 1. On the basis of these two data points, a time series for the correction factor can be computed using linear interpolation/extrapolation. Finally, multiplying the raw figure from the financial accounts by this time series yields an appropriately corrected value. For more on the underreporting of aggregate business wealth, see also Albers et al. (2020).
3 See European Central Bank (2020).
4 See, for example, Westermeier and Grabka (2015). It should be noted, however, that the Socio-Economic Panel (SOEP) was able to significantly improve the data situation in this area of the net wealth distribution by means of a new additional sample (SOEP-P) concerned with high wealth (see Schröder et al. (2020)).

as much as possible. The idea behind this approach is to add the absent very wealthy households to the original household survey dataset using a "rich list".[5] The observations on net wealth from this list supplement the PHF dataset. Since these data only take into account the top tail of the net wealth distribution, synthetic wealthy households are also estimated which then supplement the original PHF dataset as well. The net wealth of these synthetic households lies between that of the members of the rich list and the wealthiest households included in the wealth survey (see also the chart on p. 19).[6]

As the data on the added wealthy households all relate to net wealth, further adjustments are needed at the level of the individual wealth components in order to close the data gaps. The bulk of the gap in liabilities is attributed to very wealthy households. This allocation is based on two assumptions: first, that very wealthy households have access to generally large-volume credit contracts; and, second, that the liabilities of comparatively less wealthy households are adequately captured in the PHF.[7] Now that data on liabilities are available alongside net wealth, the level of gross wealth can be determined. The composition of gross wealth is based on the results of an additional SOEP-P sample and the 2018 Global Family Office Report.[8] This composition is ultimately assigned to very wealthy households as an initial portfolio structure.[9] In the event that the added households now hold certain assets on a larger scale than suggested by the data gaps, further adjustments are made. In concrete terms, this means that excess holdings are spread across comparable assets which are still underreported.[10] The portfolios of the synthetic households and rich list households generated in this way thus complement the original data from the wealth survey. It is shown that simply by adding the very wealthy households that have so far been absent from the data, the underreporting when it comes to total net wealth can be reduced by more than 50% on average.[11] The remaining data gaps are finally closed by means of proportional allocation, whereby each household is allocated part of the remaining data gap according to its share in the instrument-specific volume re-

5 Specifically, data provided by "manager magazin" on the net wealth of the wealthiest Germans in 2011, 2014 and 2017 are used.
6 This is done under the assumption that the wealth of very affluent households follows a Pareto distribution. The Pareto distribution is estimated on the basis of the PHF households whose net wealth exceeds €1 million and the wealth data from the rich list. Using this estimated distribution, synthetic households which lie in the unobserved range are then randomly drawn and added with a corresponding level of net wealth. For more on the approximation of the wealth distribution using Pareto distribution in the high-wealth range, see, inter alia, Vermeulen (2018) and the sources cited therein, as well as Waltl and Chakraborty (2022).
7 Liabilities are allocated to very wealthy households proportionally to net wealth, subject to the constraint that the later structure of gross wealth essentially matches the portfolio structure of millionaires in the SOEP-P. For more on the wealth structure in the SOEP-P, see Schröder et al. (2020).
8 See Schröder et al. (2020) and UBS/Campden Research (2018).
9 According to UBS/Campden Research (2018), the following portfolio structure is assumed: deposits (7.0%), debt securities (16.2%), listed shares (28.0%), investment funds (5.7%), financial business wealth (21.6%), housing wealth (18.1%), non-financial business wealth (3.4%). Taking into account the SOEP-P data, the portfolio shares of housing wealth and total business wealth are adjusted to 20% and 60% respectively. The remaining portfolio shares are rescaled accordingly, so that the sum of all shares equals 100%. This ultimately produces an initial portfolio composition which essentially reflects the results of the SOEP-P and serves as a benchmark.
10 Thus, for example, excess holdings of debt securities are distributed equally across investment funds and insurance claims. This reflects the fact that households can invest in debt securities indirectly via investment funds and life insurance. Similarly, excess holdings of listed shares are assigned to business wealth as well as to investment funds and insurance claims. Finally, excess holdings of housing wealth are distributed among shares, business wealth, investment funds and insurance claims.
11 Given average aggregate net wealth of around €10 trillion recorded across all three existing PHF survey waves, the data gap amounts to an average of roughly €2 trillion. By adding synthetically produced households to the original data from the household survey, this gap can be closed by an average of more than 50%.

corded so far.[12] This leads to an instrument-specific increase in holdings across all households, which ultimately enables full alignment of the wealth survey with the national accounts statistics.

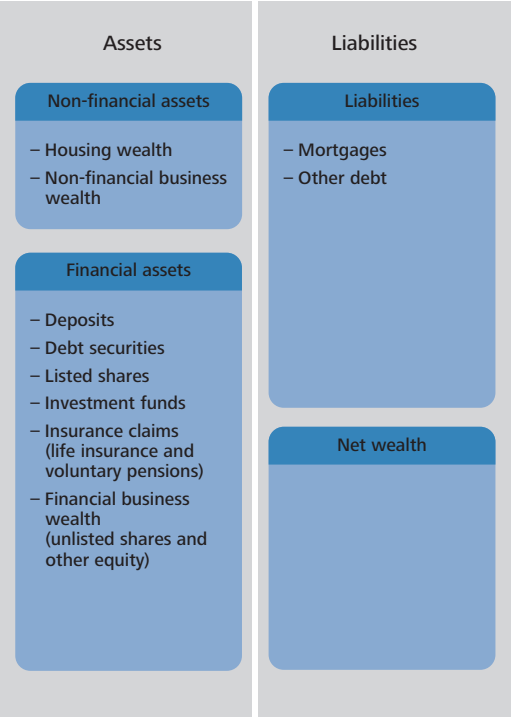
After linking the three existing PHF survey waves to the relevant data from the national accounts statistics, interpolation and extrapolation are used in the final step to translate the dynamics from the national accounts statistics to the individual households. The resulting dataset therefore consistently takes into account not only the distributional information from the wealth survey but also fully includes the levels and the quarterly dynamics of the national accounts statistics for the period since 2009.[13] Finally, however, it should be noted that the data at the current end, in particular, are subject to some degree of uncertainty owing to the extrapolation process. In this context, the extrapolation of the individual household data after the last available PHF survey wave from 2017 implicitly assumes that the saving and investment behaviour of households observed up to that point has not fundamentally changed. This simplifying assumption can be problematic, as crisis situations such as the coronavirus pandemic can, in principle, permanently change households' motives for saving and thus also their saving and investment behaviour.[14]

12 In this context, the advantage of proportional allocation is that, at the instrument level, it does not skew the distributional information generated up to that point in any specific direction but leaves it unchanged. **13** On average, data for around 4,000 households are available for the three existing PHF surveys. In addition, there are another 3,000 very wealthy households which are artificially generated on the basis of an estimated Pareto distribution in order to correct the underreporting at the top tail of the wealth distribution. **14** See, for example, Ercolani et al. (2021).

Breakdown of household groupings along net wealth distribution …

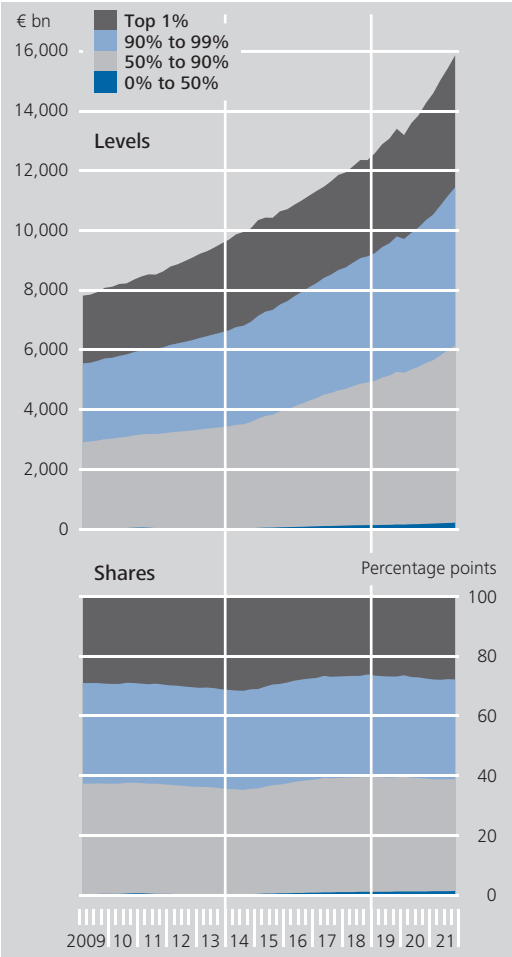
The chart on p. 22 shows the respective level of net wealth and the share in total net wealth for different groupings of households along the net wealth distribution. Specifically, the respective aggregate net wealth of four wealth groupings is considered: the top 1% of the wealth distribution, the next 9% of the distribution (90% to 99%), the 40% after that (50% to 90%) and the bottom half of the wealth distribution (0% to 50%). The DWA for the household sector show a high level of overall wealth inequality, although this has declined slightly over the duration of the dataset (from 2009 onwards, in other words). While the top 10% of the wealth distribution held more than 50% of German households' total net wealth over the observation period, the bottom half of the wealth distribution accounted for an extremely small share, averaging 0.6%. However, the distribution has shifted slightly in favour of the bottom half of the distribution over the observation period. The share of total net wealth held by the less wealthy 50% of households

Balance sheet of a household – a stylised overview



Source: Experimental Distributional Wealth Accounts (DWA). Deutsche Bundesbank

Net wealth distribution*



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations. * Wealth groupings based on net wealth distribution: the top 1% of the wealth distribution, the next 9% of the distribution (90% to 99%), the 40% after that (50% to 90%) and the bottom half of the wealth distribution (0% to 50%).
Deutsche Bundesbank

rose from 0.2% in 2009 to more than 1.2% in 2021.[6]

… reveals unequal wealth developments …

Against this backdrop, the chart on p. 25 shows average quarterly growth and the contributions to growth of major asset categories for the four different groupings of households. For the purpose of clarity, a distinction is made here between the financial portfolio, business wealth, housing wealth, and liabilities.[7] The aggregate net wealth of households in Germany has grown by an average of around 1.3% per quarter since 2009. This growth has been particularly strong for the bottom half of the distribution, albeit starting from a low level. In this context, households in the bottom half of the distribution have accumulated a significant volume of low-risk assets, such as deposits and insurance claims, in their financial portfolio, whilst at the same time markedly reducing their liabilities. The upper mid-range of the distribution, on the other hand, has benefited comparatively strongly from the increased value of housing wealth. One reason for this is that less wealthy households rarely own real estate. Another reason is that housing wealth accounts for a much smaller share of very wealthy households' total assets. The increases in house prices observed in recent years have therefore probably tended to have a balancing effect on the net wealth distribution, taken in isolation.[8] Finally, the growth in net wealth seen in the top 1% of the distribution is mainly attributable to increases in business wealth. The high share of growth accounted for by this asset type at the top tail of the distribution also reflects the increased importance of corporate savings in the wealth development of very wealthy households in recent decades. Although these are typically retained corporate profits, they are ultimately attributable to shareholders.[9]

… accompanied by discernible differences in wealth structure

The divergent developments in net wealth are due, amongst other things, to unequally distributed asset types, which are reflected in discernible differences in the wealth structure along the wealth distribution. Similar differences can also be identified in the euro area and in the United States (see also the box on pp. 23 ff.). Looking at the average structure of total wealth (gross) for the four wealth groupings between 2009 and 2021, it can be seen that the financial portfolio, in particular, dominates the asset structure of the bottom half of

6 In a longer-term context, however, a rise in inequality can be seen. For example, calculated in real terms (i.e. with all assets adjusted for purchasing power), the share of total net wealth accounted for by the bottom 50% of the distribution declined from more than 5% to less than 3% in the period between 1993 and 2018, thus almost halving. For more information, see Albers et al. (2020).
7 The financial portfolio comprises deposits, debt securities, listed shares, investment funds and insurance claims.
8 See also Adam and Tzamourani (2016).
9 See also Bauluz et al. (2022) and Mian et al. (2020).

Net wealth distribution and portfolio structure of households in Germany by international standards

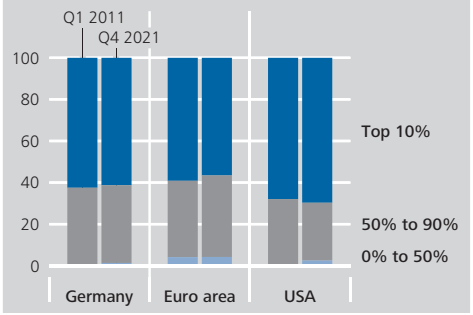
We will examine below how the net wealth distribution and portfolio structure of households in Germany compare with other countries, using the euro area (including Germany) and the United States as benchmarks. The dataset for the euro area is identical to that for Germany in terms of the definition of instruments. However, at the upper tail of the distribution, only values for the top 10% are available. In the German data, the wealth groupings "top 1%" and "next 9%" are consolidated accordingly. The figures for the United States are consolidated in the same manner. In addition, the data for the United States differ, in some cases considerably, from the German and euro area-wide figures regarding the definition of instruments. As a result, the portfolio breaks down into only three larger categories, where comparability is better than in the granular analysis: housing wealth, equity and business wealth (including investment funds), and other financial assets, defined here as the difference between total assets and the other two categories. It consists, in particular, of deposits and claims on insurance corporations.

Net wealth is distributed more unevenly in Germany than in the euro area, but is less concentrated than in the United States (see the adjacent chart).[1] According to this, the percentage share of the wealthiest 10% of households at the end of 2021 was somewhat smaller in the euro area than in Germany, but was noticeably higher in the United States. The share of the next 40% in Germany is roughly as high as in the euro area, but much larger than in the United States. In Germany, the share of the less wealthy 50% of households in total net wealth was around as small as in the United States. In the euro area, however, this share is noticeably higher. The net wealth distribution in Germany has changed only slightly compared with the first quarter of 2011. In the euro area, it has shifted from the top 10% of the distribution to the next 40%. In the United States, by contrast, the next 40% surrendered wealth shares to both the top 10% and the bottom 50% of the net wealth distribution.

The distribution of various wealth components between wealth groupings varies only marginally (see the upper chart on p. 24), with almost all housing wealth split halfway between the top 10% and the next 40% of the distribution. Equity and business wealth is almost exclusively owned by the top 10% of the distribution. German households stand out by comparison in terms of the distribution of other financial assets. Almost half of these are held by those households

Distribution of aggregate net wealth*

As a percentage of total



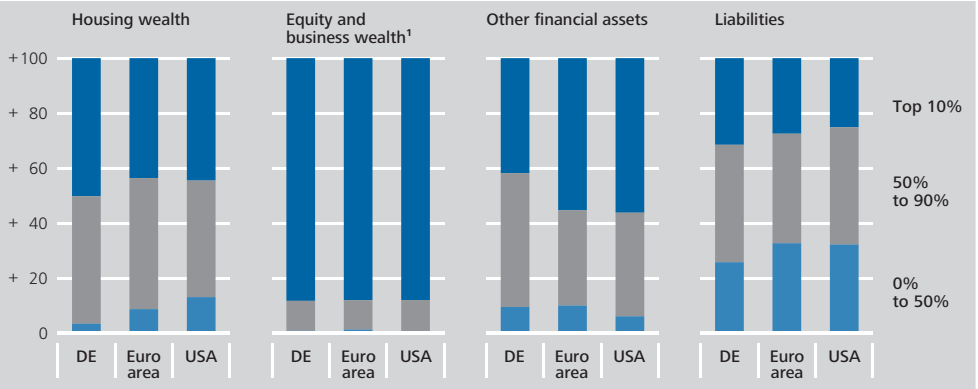
Sources: Experimental Distributional Wealth Accounts (DWA), ECB, Federal Reserve Board and Bundesbank calculations. * Wealth groupings based on net wealth distribution: the top 10% of the distribution of wealth (top 10%), the subsequent 40% (50% to 90%) and the bottom half of the distribution of wealth (0% to 50%).

Deutsche Bundesbank

1 For an international comparison of wealth inequality, see Balestra and Tonkin (2018) and Zucman (2019). Kuhn et al. (2020) provide a long-term assessment of developments in the United States.

Distribution of assets and liabilities

As a percentage of total, Q4 2021



Sources: Experimental Distributional Wealth Accounts (DWA), ECB, Federal Reserve Board and Bundesbank calculations. **1** Including investment funds.

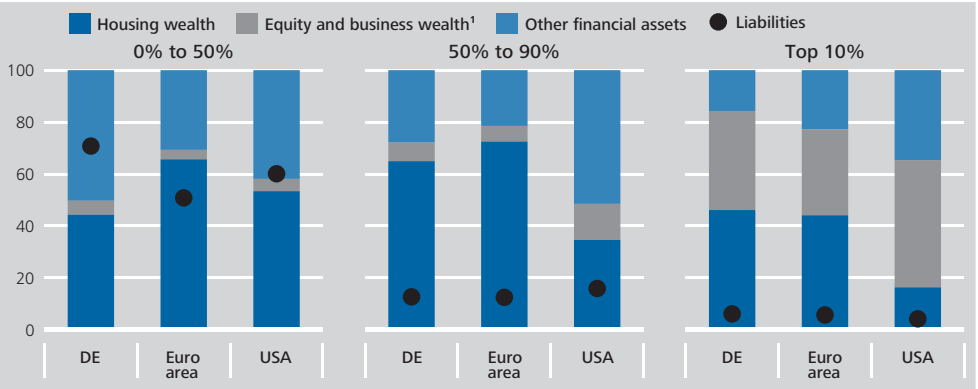
Deutsche Bundesbank

at the upper midpoint of the distribution. In the euro area and the United States, by contrast, the figure is just over one-third. The top 10% of the distribution in Germany hold a significantly smaller share, comparatively speaking. Liabilities, however, are distributed more evenly across the three wealth groupings. Owing to the uneven distribution of assets, this is reflected in significant differences in net wealth.

On the other hand, portfolio composition varies quite significantly across wealth groupings (see the chart below). In comparison with housing wealth, equity and business wealth are much more important in the top 10% of the distribution in the United States than in Germany and the euro area. By contrast, housing wealth plays a considerably smaller role. This means that the top 10% of wealth distribution in the United States is highly exposed to changes in corporate valuations. By comparison, their counterparts in Germany and the euro area are exposed, in particular, to house price swings. With regard to the next 40%, housing wealth, which accounts for just over two-thirds of the overall portfolio, is

Asset structure and liabilities of the aggregated wealth groupings

As a percentage of total assets, Q4 2021



Sources: Experimental Distributional Wealth Accounts (DWA), ECB, Federal Reserve Board and Bundesbank calculations. **1** Including investment funds.

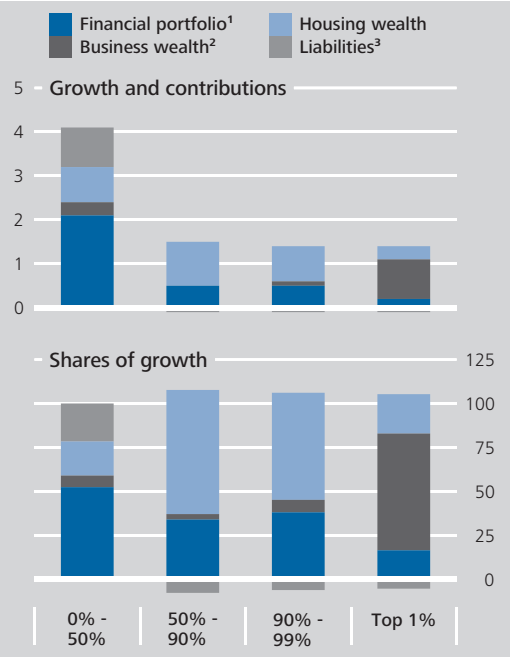
Deutsche Bundesbank

significantly more important in Germany and the euro area than in the United States, where housing wealth makes up only just over one-third. By contrast, for the next 40% of the distribution in the United States, other financial assets, especially in the form of pensions, account for around one-half of total assets. In Germany and the euro area, on the other hand, the share is only just over one-quarter. The portfolios of the less wealthy 50% of households in Germany and the United States are roughly comparable, with housing wealth and other financial assets each accounting for around half of this figure. By comparison, the share of housing wealth in the euro area, at just over two-thirds, is roughly twice that of other financial assets. For the bottom half of the wealth distribution in all three regions, equity and business wealth tend to be essentially a non-factor. Overall, this wealth grouping is therefore less exposed to market price fluctuations. However, owing to the high level of liabilities, especially those held by households in Germany, changes in interest rates can expect to be passed through much more strongly to the servicing of debt.

the wealth distribution.[10] In addition, the rate of real estate ownership is comparatively low.[11] By contrast, housing wealth makes up more than half of the total assets of the next 49%. For the top 1%, business wealth plays a significant role as well (see the upper chart on p. 26). Overall, it can be seen that the wealth of the top 1% of the distribution is therefore primarily vulnerable to changes in the valuation of business wealth, which largely consists of equity investments in the form of unlisted shares or other equity. By contrast, the wealth of households in the upper mid-range of the distribution is primarily exposed to potential price fluctuations for housing wealth.

Average quarterly growth of net wealth and contributions

Percentage points, 2009 to 2021



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations. **1** Deposits, debt securities, listed shares, investment funds and insurance claims. **2** Financial and non-financial business wealth. **3** Mortgages and other debt.

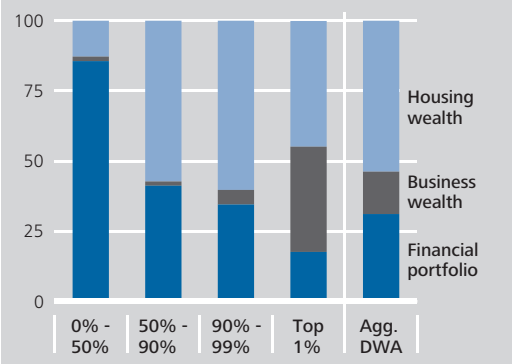
Deutsche Bundesbank

10 The average portfolio structure is determined by working out the average across all household-specific wealth structures. When depicting averages, conditional mean values are shown throughout, unless otherwise stated. Specifically, only households with positive total (gross) assets are included in the calculation.

11 According to the DWA, the rate of real estate ownership in the top and bottom halves of the distribution stands at around 85% and 15% respectively. See also Deutsche Bundesbank (2019).

Wealth structure along the net wealth distribution

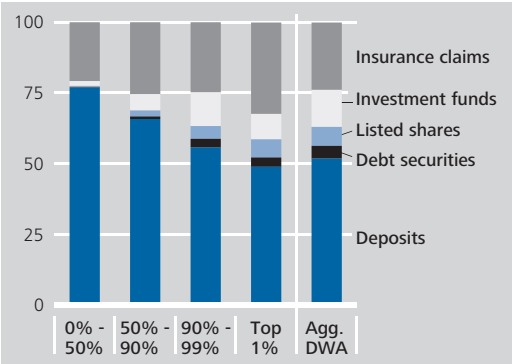
Percentage points, average per grouping or aggregate structure, 2009 to 2021



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations.
Deutsche Bundesbank

Structure of the financial portfolio along the net wealth distribution

Percentage points, average per grouping or aggregate structure, 2009 to 2021



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations.
Deutsche Bundesbank

Significant differences evident in composition of financial portfolio, too

In addition to the varying structures of households' total assets, however, the provisional DWA also show significant differences in the composition of their financial portfolios (see the lower chart on this page). The financial portfolio of the bottom half of the distribution consists almost solely of deposits and insurance claims. By comparison, the share of securities (debt securities, listed shares and investment funds) in the financial portfolio of wealthy households is significantly higher. Households in the bottom half of the wealth distribution favour liquid assets, such as deposits, precisely so they do not need to reduce their consumption as much in the event of unexpected income fluctuations. However, this precautionary saving motive declines as wealth rises. As a result, less liquid and thus riskier asset types are increasingly held in the portfolio.[12] Moreover, it is striking that the aggregate structure of the financial portfolio is most closely aligned with the average portfolio composition of the two top wealth groupings, i.e. the top 10% of the wealth distribution. This is essentially attributable to the size of the financial portfolio of this top 10%. The macroeconomic aggregate is primarily dominated by the financial assets held by these households: the wealthiest 10% hold around a 50% share of the aggregate financial portfolio wealth, while the less wealthy 50% hold only about 8%.

A disaggregated analysis of portfolio returns on financial assets

Possible to calculate individual returns on financial portfolio using DWA

In view of the varying structure of financial portfolios along the net wealth distribution, it is to be expected that differences in portfolio composition, coupled with differing instrument-specific returns, will produce a very mixed picture with regard to individual portfolio returns. As it is possible to calculate portfolio returns at the level of individual households over time using DWA data, these returns will be examined more closely in the following.

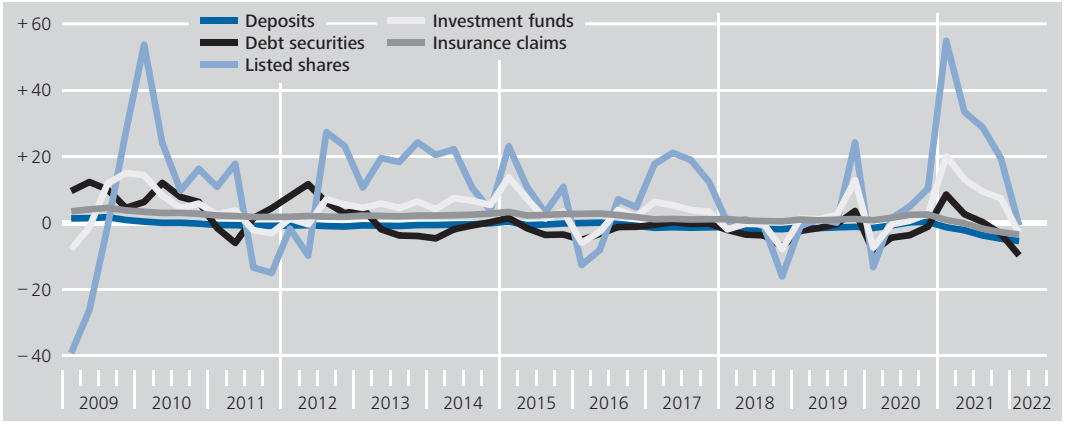
Calculation of disaggregated returns uses approach for determining aggregate total return

The methodology used to calculate disaggregated returns essentially follows the approach used to determine the aggregate total return.[13] The financial portfolio considered here comprises the following types of asset: deposits, debt securities, listed shares, investment funds and insurance claims. The total return on households' financial portfolios is calculated based on their main sources of income. Whilst interest payments are the only source of in-

12 See, inter alia, Bayer et al. (2019) and Kaplan and Violante (2022).
13 For a detailed account of how instrument-specific real returns and the total real return on financial assets are calculated, see Deutsche Bundesbank (2015).

Real return on various asset types in the financial portfolio*

Annual return (%)



Sources: Assekurata, German Insurance Association (Gesamtverband der Deutschen Versicherungswirtschaft) and Bundesbank calculations. * Adjusted for inflation using the consumer price index.

Deutsche Bundesbank

come a bank deposit can generate, for other types of financial asset, such as listed shares, debt securities, investment funds and insurance claims, income flows also depend on price effects. In addition, shares and investment funds that invest in equities commonly pay out dividends, too. Any attempt to calculate households' total return on the financial portfolio therefore needs to consider not just interest payments but these other components as well. The analysis also takes into account the fact that the purchasing power of nominal returns fluctuates due to inflation. This means that all the returns are analysed in real terms.[14]

Clear differences in returns on different types of financial asset

The above chart depicts the real returns on individual asset types since 2009. Developments here have varied quite considerably over the past few years. For instance, the real return on bank deposits and debt securities has been mostly negative in recent years. By contrast, the real return on listed shares and investment funds was predominantly positive, despite occasional fluctuations. Insurance claims also recorded a positive real return, for the most part. On average, however, this was lower than the return on securities. If the instrument-specific returns are now weighted by their share of the individual financial portfolio, the total real return of a household can be calculated.

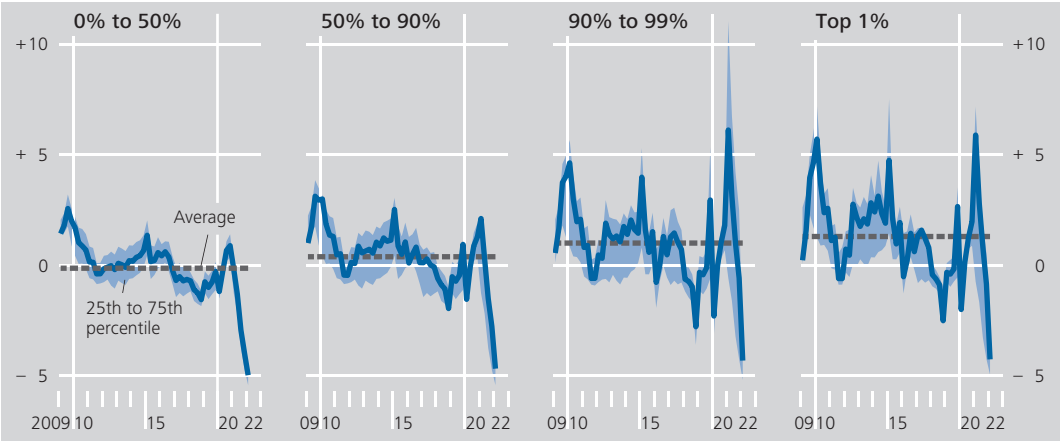
Average real return rises with increasing net wealth

The development of portfolio returns along the distribution of wealth is shown in the chart on p. 28. The continuous lines show the mean value of the respective wealth grouping at a given point in time. The shaded area represents the range of variation between the 25th and the 75th percentiles of the respective grouping. A comparison of the four wealth groupings shows that in the period between 2009 and the first quarter of 2022, the average real return (dashed line) rose as net wealth increased.[15] While the average real return comes to a mean of 0% for the bottom 50% of the distribution, it stands at around 1.5% for the top 1%. Furthermore, it can be seen that the volatility of the returns increases as net wealth rises. This is, first and foremost, the result of higher capital market investment; although households achieve higher returns on the capital market, they simultaneously bear heightened risk in the form of fluctuating asset valuations. Additionally, the shading shows that heterogeneity within a grouping also increases as net wealth rises.

14 For a detailed account of how real returns are calculated, see Deutsche Bundesbank (2015).
15 As the current DWA only provide data up to and including the fourth quarter of 2021, provisional portfolio returns for the first quarter of 2022 are calculated on the basis of the weighting from the fourth quarter of 2021.

Real return on the financial portfolio along the net wealth distribution

Annual return (%), average per grouping



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations.
Deutsche Bundesbank

Varying portfolio structures and differing returns on individual asset types reflected in marked differences in rate of return

Differences in the rate of return between wealth groupings are due to variations in portfolio composition coupled with the differing returns on individual asset types. This becomes particularly evident when looking at the contributions of the various assets to the total return across the four wealth groupings (see the chart on p. 29). For example, the total return for the bottom half of the wealth distribution is shaped almost exclusively by low-risk assets in the form of deposits and insurance claims. As the return on these two asset types has been relatively weak in recent years, the total return has also been correspondingly low and, in most cases, even negative. By contrast, the return for the top 10% of the wealth distribution was influenced significantly by the return on capital market instruments over the observation period. In particular, positive price developments contributed to high returns, which were then reflected correspondingly in the total return. For comparative purposes, the chart on p. 29 also tracks the development of aggregate real returns on the financial portfolio produced when only national accounts data are used for the calculation. Here, it can ultimately be established that analyses which do not take distributional information into account – such as the aggregate real portfolio returns of households in Germany[16] – have only presented a representative picture for the top end of the wealth distribution. By contrast, basing an analysis on the DWA allows for a much more differentiated assessment.

Portfolio returns of households in Germany including housing wealth

Housing and business wealth also unevenly distributed

In addition to the different structures in the financial portfolio, however, the DWA also show an unequal distribution of housing and business wealth across individual household groups: the wealth in the bottom half of the wealth distribution is predominantly made up of financial assets. By contrast, housing and business wealth account for a significant share in the top half. The focus on the financial portfolio therefore only offers an incomplete view with respect to the performance of total household assets. Taking the above into account, the following analysis additionally documents returns on total assets along the distribution. Here, disaggregated returns on assets are, as a rule, calculated using the same method as disaggregated returns on the financial portfolio. The key difference, however, is that financial

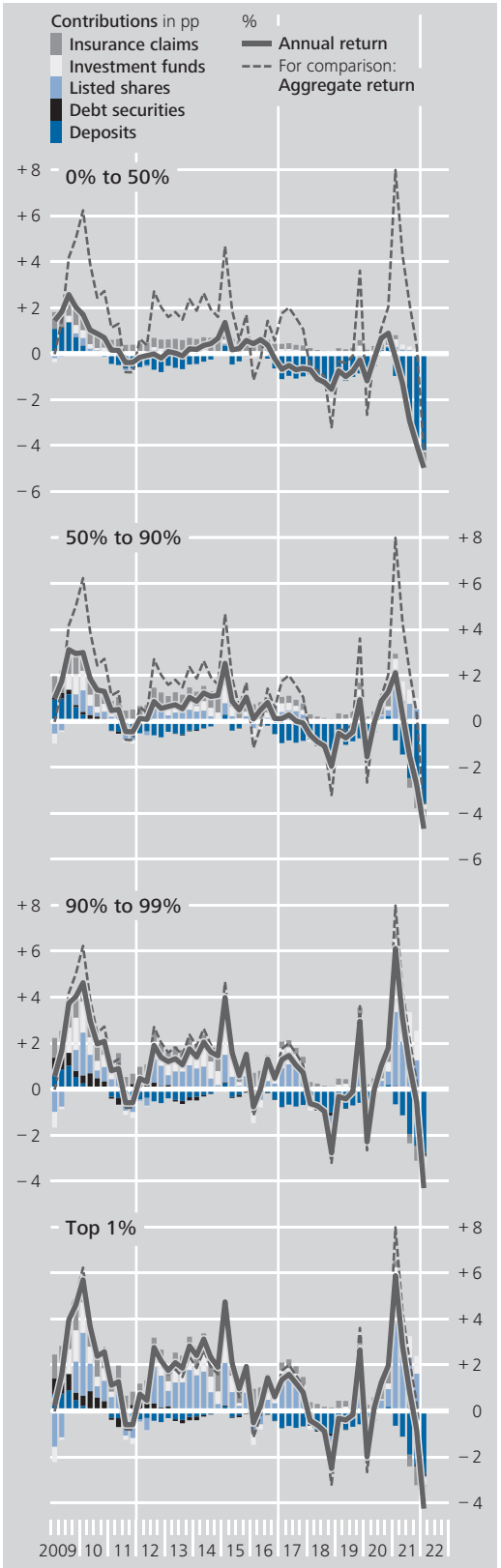
16 For information on the development of aggregate household portfolio returns in Germany, see Deutsche Bundesbank (2021c).

and non-financial business wealth and housing wealth are now also taken into account alongside traditional financial assets:

– Financial business wealth: this item comprises equity investments that are not traded on organised markets. Owing to a lack of market data, it is not possible to directly calculate the return for these instruments. It is therefore assumed that returns are generally similar to those of comparable tradable instruments. In the case of unlisted shares, for example, the same valuation changes and dividend yields are recognised as for listed shares.[17] The sum of these two components gives the total return on unlisted shares. Changes in the valuation of other equity are approximated on the basis of the information provided in the financial accounts.[18] The portion of the returns attributable to profit distributions is assumed to be equal to the observed dividend yield on listed shares. As with unlisted shares, these two components result in the total return on other equity. Finally, a weighted average is calculated from the two returns. This value is derived from the levels in the financial accounts for unlisted shares and other equity. This ultimately reflects the total return on financial business wealth.

– Non-financial business wealth: it is not possible to directly determine the return here either. However, this type of asset is, in principle, very similar to other equity.[19] For this reason, performance is estimated for non-financial business wealth in the same manner as for other equity.

Contributions of various asset types to the real return on the financial portfolio



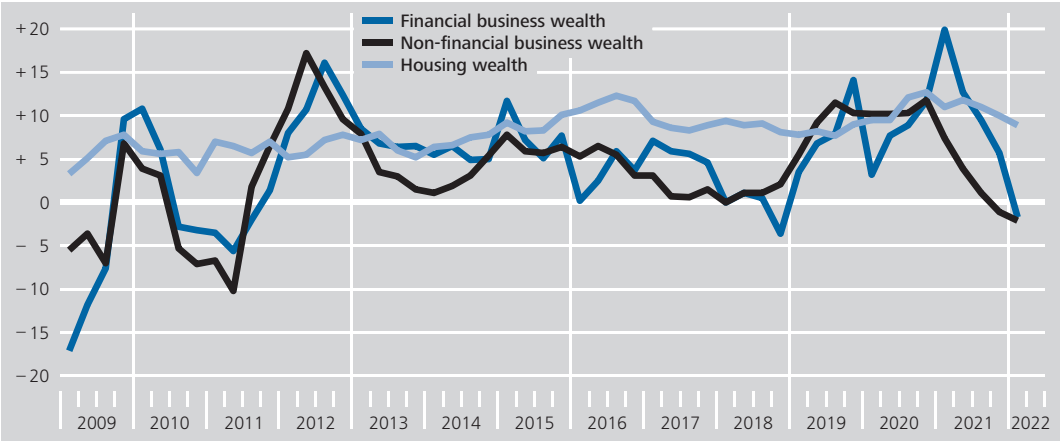
Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations.

Deutsche Bundesbank

17 In this context and in the absence of more detailed information, an identical sectoral structure is implicitly assumed for listed and unlisted public limited companies.
18 The valuation change is the difference between the quarterly stock change and the corresponding transaction.
19 If, for example, an individually-owned enterprise were to change its legal form to that of a general or limited partnership, the enterprise would typically be assigned to the non-financial corporations sector. The owner household would then hold a corresponding amount of other equity instead of the non-financial business wealth.

Real return on housing wealth and business wealth

Annual return (%)



Sources: Federal Statistical Office and Bundesbank calculations.
Deutsche Bundesbank

– Housing wealth: this category includes both dwellings and the land underlying dwellings. Returns are calculated using the house price and rent price indices of the Federal Statistical Office by applying a rent-price approach.[20] The year-on-year change in the house price index corresponds to the change in the valuation of housing wealth. The change in the rent price index compared with the previous year's figure for the house price index gives the rental yield. The total return on housing wealth is then calculated using the valuation changes and the rental yield.

Housing wealth in particular posted high returns in the 2009 to Q1 2022 period alongside shares

The above chart depicts the real returns on the three asset types since 2009. Over time, they have developed quite differently. Real returns on housing were consistently positive, rising from just over 3% in 2009 to around 11% at the beginning of 2022. By comparison, real returns on financial and non-financial business wealth were more volatile and also, on average, lower. They were even clearly in negative territory during the financial and economic crisis and the European sovereign debt crisis.

Taking these three additional asset types into account, it is now possible to calculate a real return on total assets which is expanded to include these asset components. The chart on p. 31 shows the development of real returns on the financial portfolio and on total assets along the wealth distribution. The lines show the average real returns for the respective wealth grouping. This expanded perspective on the real return on assets reveals clear differences: compared with the real return on the financial portfolio, the real return on assets is noticeably higher, especially for households in the top half of the distribution of wealth.

Taking housing and business wealth into account, real return on assets is noticeably higher, especially for the top half of the wealth distribution

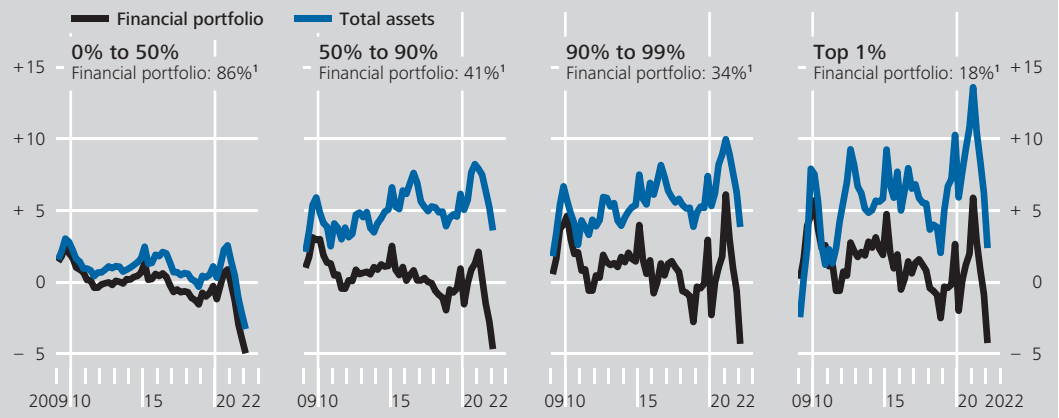
The main reason for these differences is the low level of housing and non-financial wealth in the bottom half of the wealth distribution when compared with the top half. Around 90% of households' real return on assets in the 50% to 99% range of the distribution was based on contributions from housing wealth (see the chart on p. 32). As this type of asset (alongside shares) recorded, on average, the highest return of all asset components in the observation period, it played a key role in

A low level of housing and non-financial wealth gives rise to a comparatively low real return on assets in the less wealthy half of the distribution

20 In principle, both indices only reflect their own dynamics. However, the rental yield corresponds to the development of rents in relation to the value of the real estate. Consequently, this approach initially envisages scaling the two indices according to an initial rent-price ratio at the starting time t_0 (see Jordà et al. (2019)). Based on this initial value, both indices can be depicted at each time t in such a way that the ratio of the scaled indices reflects the development of the rent-price ratio over time. The initial value is taken from the Jordà-Schularick-Taylor Macrohistory Database (version: 5 March 2021) (see Jordà et al. (2017)).

Total real return on assets along the net wealth distribution

Annual return (%), average per grouping



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations. **1** Average share of the financial portfolio in total assets between 2009 and 2022.

Deutsche Bundesbank

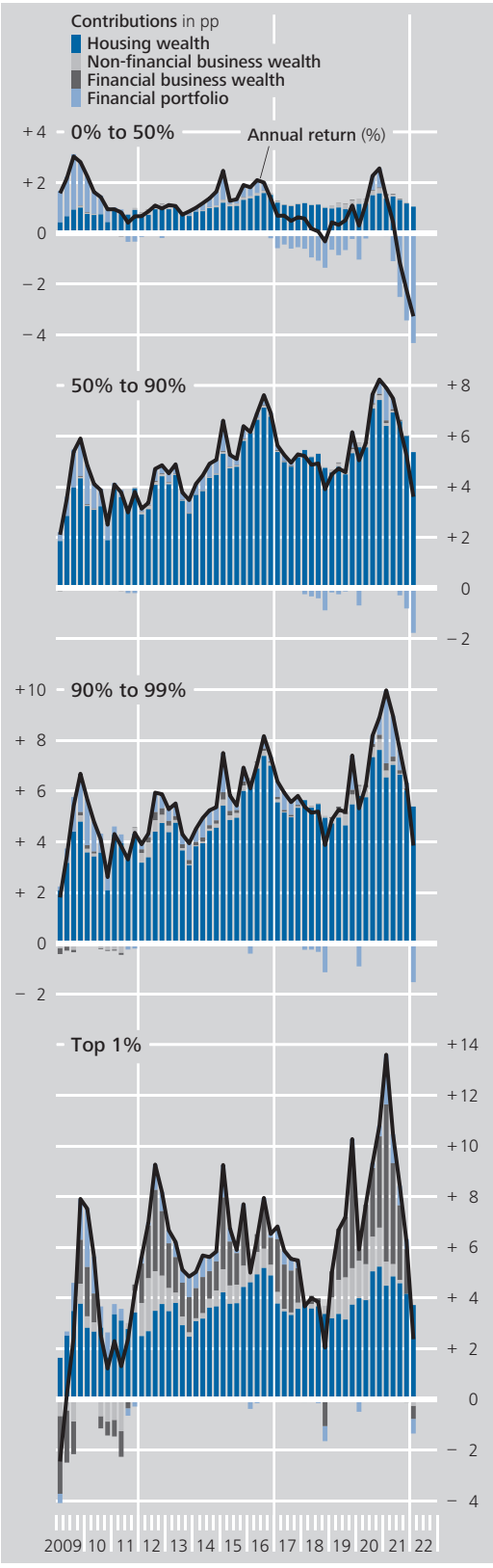
achieving a high total return. Housing wealth also made a significant contribution to total returns for the top 1% of the wealth distribution. This was, however, additionally boosted by a distinct contribution from business wealth. Overall, the contribution of the financial portfolio to returns plays only a minor role for households in the top half of the wealth distribution. By comparison, while housing wealth also made a consistently positive contribution to returns for the bottom half, this was nevertheless comparatively small, owing to the low proportion of housing wealth in the total. In addition, the results as a whole show that, in real terms, the yield-lowering effect of inflation is particularly noticeable at the bottom end of the wealth distribution. Compared with the rest of the households, the total assets of these households consist mainly of low-interest deposits. In this respect, high inflation rates tend to lead to negative real returns on assets.[21]

Households in the bottom half of the distribution nevertheless recorded a marked easing effect from a considerable decline in real interest expenditure

However, the finding that there is a comparatively low real return on assets for the bottom half of the wealth distribution owing to the high importance of low-yielding assets in the asset structure disregards the fact that the low interest rate environment of recent years also had a noticeable impact on the real interest rate on liabilities. Last year, for example, the real interest burden for mortgages and other debt reached historical lows of around -2.7% on average. By comparison, this figure stood at just over 5% in 2009. In order to account for this easing effect, the real return on a household's assets is additionally adjusted for real interest expenditure. The average leverage ratio (total liabilities as a percentage of total assets) of the bottom 50% of the distribution stood at around 90% in the observation period; in the top half, this ratio was only slightly more than 10%. As it is particularly those households in the bottom half of the distribution of wealth that are relatively heavily indebted, the adjustment has a notable effect in this area above others. For example, the adjusted real return on assets for the bottom half is clearly shifted into negative territory (see the upper chart on p. 33). However, this return has recorded a discernible upward trend over the past few years owing to the increased easing effect. It must nevertheless also be noted that around 20% of all households in Germany, which are located

21 It should be noted here that according to the consumer price index, the inflation rate is assumed to be identical for all households at time *t*. This is, however, a simplifying assumption, as it can mask considerable heterogeneity among households. Studies show, for example, that households with lower incomes are exposed to significantly higher individual inflation rates than households with higher incomes. See Gürer and Weichenrieder (2020). As this aspect would, in principle, reinforce the above assessment, this does not affect the general statement based on the available results.

Contributions of various asset types to total real return on assets



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations.

Deutsche Bundesbank

almost exclusively in the bottom half of the distribution of wealth, currently hold low-yielding assets for the most part while, at the same time, having no debt. These households therefore cannot benefit from lower real lending rates. This is why the current high level of inflation is mainly weighing on these households' low level of wealth in the form of significantly negative real returns on assets.

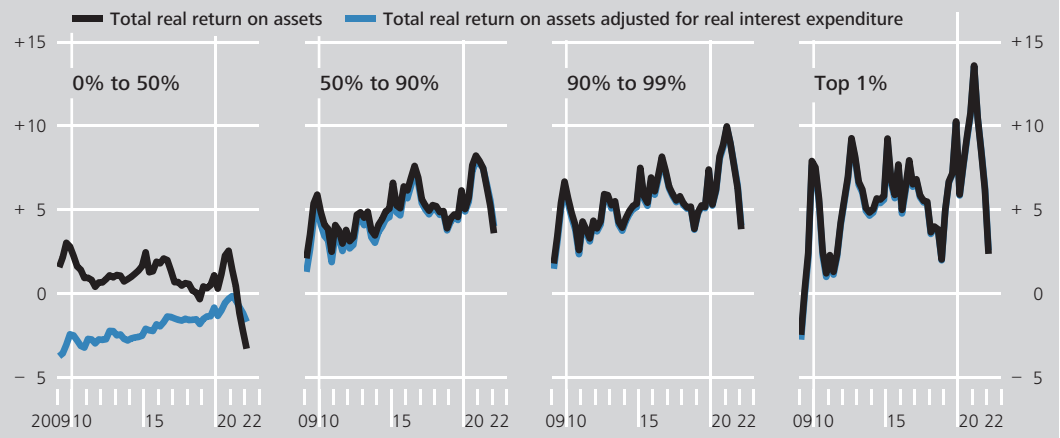
Conclusion

DWA consistently reflect data from the PHF and the national accounts statistics

The Distributional Wealth Accounts (DWA) for households in Germany represent a new provisional dataset combining two data perspectives: namely, they link the Bundesbank's Panel on Household Finances (PHF) with the national accounts statistics. The DWA incorporate the distributional information from the PHF and simultaneously reflect the quarterly dynamics and levels of the national accounts statistics in a consistent manner. As the dynamics of the dataset are derived from the national accounts data, the DWA also have a distinct advantage in terms of temporal availability compared with the complex and time-consuming PHF. This ultimately allows comprehensive analyses to be carried out on a quarterly basis at the level of individual households. Statements can then be made regarding the development of the wealth and debt situation along the wealth distribution, for example. According to these statements, the DWA show that wealth inequality has decreased slightly in recent years. This is due, on the one hand, to the fact that growth in net wealth for the bottom 50% of the distribution was particularly steep – albeit starting from a low level. In this context, the households in the less wealthy half built up a significant volume of low-risk assets such as deposits and insurance claims, whilst at the same time markedly reducing their debt. On the other hand, households in the upper mid-range of the distribution benefited noticeably from the rising value of their housing wealth.

Total real return on assets along the net wealth distribution

Annual return (%), average per grouping



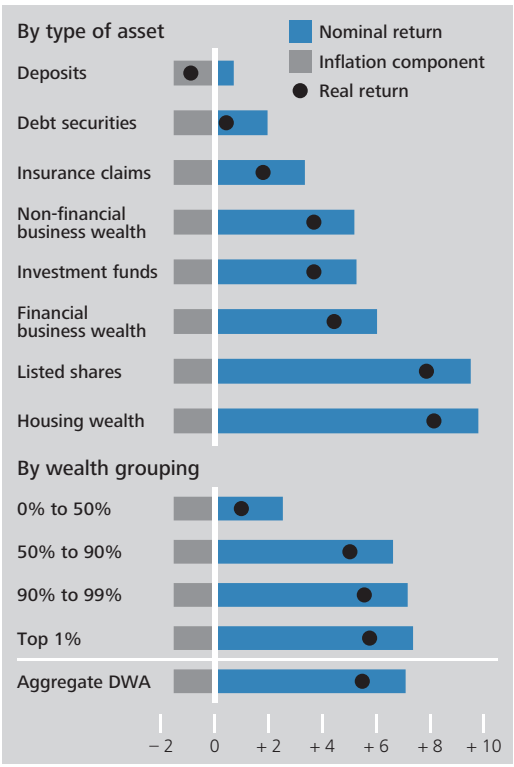
Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations.
Deutsche Bundesbank

DWA reveal heterogeneity among households which is typically hidden in macrodata

The DWA also reveal considerable heterogeneity among household wealth structures, which typically remains hidden when using macrodata. This aspect became particularly clear when looking at household-specific returns along the wealth distribution. Discernible differences in the composition of assets have a marked impact on the real return on assets of the respective household portfolio. For example, the wealth of the bottom half of the wealth distribution consists predominantly of low-risk asset types. The interest on these instruments has been relatively low in recent years, which has been reflected in a low total return. By contrast, households' wealth in the top half of the distribution consists to a much greater degree of capital market instruments and housing and business wealth, with these last two in particular accounting for a significant share of total wealth. As, on average, housing wealth – alongside listed shares – recorded the highest real return of all asset components in the observation period (2009 to early 2022), households in the top half of the distribution achieved a significantly higher total return. In addition, business wealth made a distinct contribution for the top 1% of the wealth distribution. Moreover, the results show that the yield-lowering effect of inflation is particularly noticeable at the bottom end of the wealth distribution. The total wealth of these households consists largely of low-interest deposits. As a result, high inflation rates are more likely to lead to negative real returns on assets in these cases especially.

Average return and inflation component

%, 2009 to Q1 2022



Deutsche Bundesbank

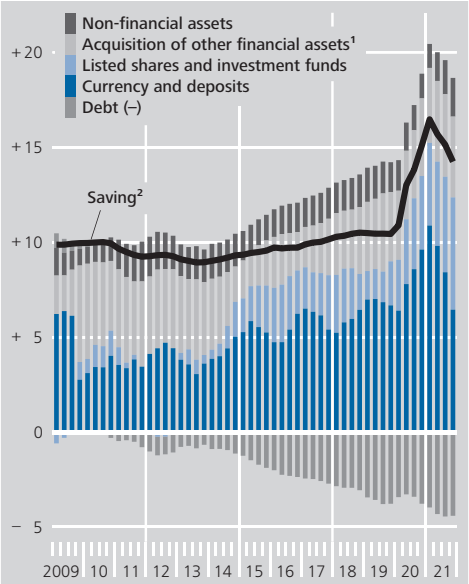
The distribution of pandemic-related savings of households in Germany

The saving and investment behaviour of households in Germany has been decisively shaped by the course of the coronavirus pandemic so far. At the start of the pandemic, for example, there was an exceptional increase in saving.[1] The main reason for this was reduced opportunities for consumption owing to measures to contain the coronavirus pandemic – businesses being ordered to close, for instance, and travel restrictions. However, concerns about catching the virus also led people to limit their spending, so this also contributed to increased saving. By contrast, precautionary saving due to expected income losses played only a minor role in view of extensive government support.[2]

In this context, the adjacent chart illustrates the exceptional increase in household saving at the beginning of 2020, as well as providing insight into how those savings were used. It shows that, at the start of the pandemic, the rise in savings was initially accompanied by large inflows to currency holdings and deposits, in particular. At the same time, there was a persistent upward trend in inflows to listed shares and investment funds. The build-up of deposits has subsided somewhat since the second quarter of 2021, which may indicate that, besides consumption normalising as some pandemic containment measures were rolled back, the additional savings were also reduced in some cases in order to cover higher energy and living costs. Given the continued strong inflows into listed shares and investment funds, the rebalancing of portfolios away from deposits and towards those specific forms of investment probably also played a certain role. Overall, the additional savings accumulated due to the pandemic are likely to have amounted to around €200 billion at the end of 2021. They are held primarily in the form of currency and deposits as well as listed shares and investment fund shares.[3]

Aggregate use of savings by households in Germany*

As a percentage of disposable income; rolling sum of last four quarters



* Households including non-profit institutions serving households. **1** Debt securities, unlisted shares, other equity, claims on insurance corporations, and remaining assets. **2** Including capital transfers.

Deutsche Bundesbank

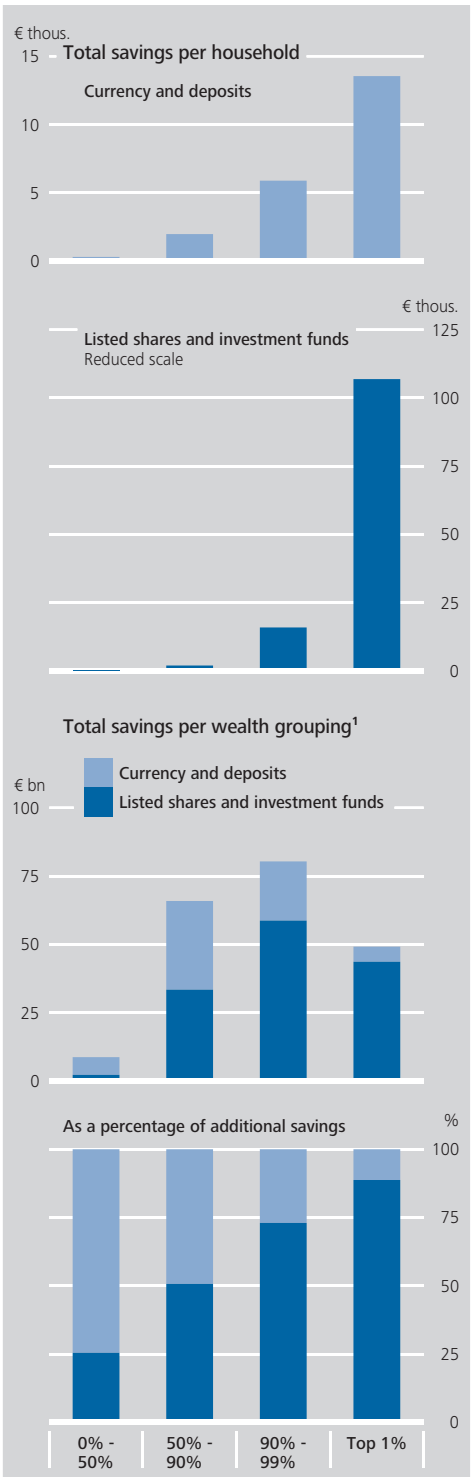
Given the high level of additional savings observed at the aggregate level, the question arises as to how these are distributed across individual households. This aspect can be illustrated in a stylised way using the Distributional Wealth Accounts. To do so, a counter-

1 This phenomenon can also be observed in other advanced economies. See European Central Bank (2021a).
2 See Deutsche Bundesbank (2021b, 2022) for savings motives in connection with the pandemic.
3 The volume of additional savings is determined by comparing quarterly saving since 2020 with the average quarterly savings for 2018 and 2019 (for a similar approach, see Batty et al. (2021)). The cumulative deviations over the 2020 to 2021 period ultimately yield the total volume of additional savings accumulated. According to this approach, the cumulative additional savings amount to around €200 billion. Calculations based on the macroeconomic projections point to comparable figures (see Deutsche Bundesbank (2021b, 2022)). The use of the additional savings can also be calculated in a similar way: the cumulative quarterly deviations of instrument-specific transactions since 2020 from the quarterly average for 2018 and 2019 indicate how the additional savings were invested during the observation period.

factual version of the Distributional Wealth Accounts is prepared, which assumes that there were no additional savings due to the pandemic.[4] Comparing the holdings in the counterfactual Distributional Wealth Accounts at the end of 2021 with the actual data ultimately reveals the distribution of the cumulative additional savings (see the adjacent chart). It can be seen that mainly households at the top tail of the wealth distribution have accumulated significant additional savings in absolute amounts. Whilst a household in the bottom half of the distribution currently has additional savings totalling around €420, a household in the top 1% of the distribution accounts for an additional amount of roughly €120,000 on average. Currency and deposits make up around 75% of the total additional savings for the bottom half of the wealth distribution. As net wealth increases, this share shifts markedly towards listed shares and investment funds.[5] In light of the significant rise in energy costs and the cost of living, the results suggest that the additional savings generally help mitigate the resulting financial burdens to a certain extent,[6] but they also show that this does not apply equally to all households. Extensive savings were built up mainly by wealthy households. Owing to the comparatively low volumes per household in the less wealthy half of the distribution, the buffer effect of the additional savings appears to be fairly limited for those households. Rising energy costs and the cost of living are therefore likely to place a greater strain on households at the bottom end of the wealth distribution compared with others.

Additional savings accumulated due to the pandemic

Q1 2020 to Q4 2021



Sources: Experimental Distributional Wealth Accounts (DWA) and Bundesbank calculations. **1** Wealth groupings based on net wealth distribution at the end of Q4 2021: the top 1% of the wealth distribution, the next 9% of the distribution (90% to 99%), the 40% after that (50% to 90%) and the bottom half of the wealth distribution (0% to 50%).

Deutsche Bundesbank

4 As the aggregate transactions in the chart on p. 34 indicate that the bulk of the excess savings have flowed into currency holdings and deposits as well as into listed shares and investment funds, for the counterfactual alternative, quarterly excess savings are accordingly deducted from these two asset types (distributed proportionally across these two categories; see also Batty et al. (2021)).
5 For more on the distribution of additional savings due to the pandemic in the international context, see European Central Bank (2021a). Overall, it can be seen that households with high incomes and wealth, in particular, have accumulated additional savings (see, inter alia, Bank of England (2020), Batty et al. (2021), Deutsche Bundesbank (2021b) and European Central Bank (2021b, 2022a)).
6 See European Central Bank (2022b).

As wealth distribution can affect the transmission of monetary policy, it seems helpful to be able to take due account of the financial differences between households

In addition to the use cases outlined above (see also the box on pp. 34 ff.), the dataset presented here is likely to become more relevant for monetary policy in future. There are a great many studies focusing on the interplay between monetary policy and inequality.[22] They show that, although monetary policy measures can generally have an impact on the distribution of wealth, the development of inequality over the past few decades has been driven predominantly by factors outside the scope of monetary policy. Of course, this must be seen in light of the fact that monetary policy typically has neither the mandate nor the appropriate instruments to steer distributions in a targeted manner. It is instead the finding that heterogeneity between households can affect the transmission of monetary policy that appears much more important. This means that the effectiveness of monetary policy measures depends, amongst other things, on the distribution and structure of wealth. Balance sheet constraints could also affect the impact of monetary policy measures.[23] When assessing the impact of such measures, then, it may generally be helpful to bear in mind the financial differences between households. It is precisely against this backdrop that the future provision of the DWA seems of particular interest to a central bank.

22 See Deutsche Bundesbank (2016) and European Central Bank (2021c) as well as the sources cited therein.
23 See, inter alia, Deutsche Bundesbank (2021a), Dobrew et al. (2021), Kaplan et al. (2018), Matusche and Wacks (2022), Slačálek et al. (2020) and Weidner et al. (2014).

List of references

Adam K. and P. Tzamourani (2016), Distributional consequences of asset price inflation in the euro area, European Economic Review 89, pp. 172-192.

Albers, T. N. H., C. Bartels and M. Schularick (2020), The Distribution of Wealth in Germany 1895-2018, ECONtribute Policy Brief No 001.

Balestra, C. and R. Tonkin (2018), Inequalities in household wealth across OECD countries: Evidence from the OECD Wealth Distribution Database, OECD Statistics Working Papers, 2018/01.

Bank of England (2020), How has Covid affected household savings?, Bank Overground, published on 25 November 2020, https://www.bankofengland.co.uk/bank-overground/2020/how-has-covid-affected-household-savings

Batty, M., E. Deeken and A. H. Volz (2021), Wealth Inequality and COVID-19: Evidence from the Distributional Financial Accounts, FEDS Notes, 30 August 2021.

Bauluz, L., F. Novokmet and M. Schularick (2022), The Anatomy of the Global Saving Glut, ECONtribute Discussion Paper, No 161.

Bayer, C., R. Luetticke, L. Pham-Dao and V. Tjaden (2019), Precautionary Savings, Illiquid Assets, and the Aggregate Consequences of Shocks to Household Income Risk, Econometrica 87(1), pp. 255-290.

Deutsche Bundesbank (2022), What are households using the additional savings accumulated during the coronavirus pandemic for?, Monthly Report, June 2022, pp. 23-24.

Deutsche Bundesbank (2021a), The impact of monetary policy depending on the debt situation in the non-financial private sector: Evidence for the euro area, Monthly Report, April 2021, pp. 15-32.

Deutsche Bundesbank (2021b), Households' motives for saving during the pandemic and their implications for the projection, Monthly Report, June 2021, pp. 25-28.

Deutsche Bundesbank (2021c), Developments in the real portfolio returns of households in Germany, Monthly Report, August 2021, pp. 39-42.

Deutsche Bundesbank (2019), Household wealth and finances in Germany: results of the 2017 survey, Monthly Report, April 2019, pp. 13-42.

Deutsche Bundesbank (2016), Distributional effects of monetary policy, Monthly Report, September 2016, pp. 13-36.

Deutsche Bundesbank (2015), German households' saving and investment behaviour in light of the low-interest-rate environment, Monthly Report, October 2015, pp. 13-31.

Dobrew, M., R. Gerke, S. Giesen and J. Röttger (2021), A comparison of monetary policy rules in a HANK model, Deutsche Bundesbank Technical Paper No 02/2021.

Ercolani, V., E. Guglielminetti and C. Rondinelli (2021), Fears for the future: Saving dynamics after the Covid-19 outbreak, Covid-19 note, June, Bank of Italy.

European Central Bank (2022a), The recent drivers of household savings across the wealth distribution, Economic Bulletin, Issue 3/2022, pp. 39-43.

European Central Bank (2022b), Energy prices and private consumption: what are the channels, Economic Bulletin, Issue 3/2022, pp. 69-84.

European Central Bank (2021a), The implications of savings accumulated during the pandemic for the global economic outlook, Economic Bulletin, Issue 5/2021, pp. 29-36.

European Central Bank (2021b), COVID-19 and the increase in household savings: an update, Economic Bulletin, Issue 5/2021, pp. 48-54.

European Central Bank (2021c), Monetary policy and inequality, Economic Bulletin, Issue 2/2021, pp. 84-103.

European Central Bank (2020), Understanding household wealth: linking macro and micro data to produce distributional financial accounts (Expert Group on Linking Macro and Micro Data for the household sector), ECB Statistics Paper Series, No 37.

Foundation for Family Businesses (2019), Die volkswirtschaftliche Bedeutung der Familienunternehmen, 5th edition, ZEW – Centre for European Economic Research Mannheim and Institute for SME Research Mannheim.

Gürer, E. and A. Weichenrieder (2020), Pro-rich inflation in Europe: Implications for the measurement of inequality, German Economic Review 21(1), pp. 107-138.

Jordà, Ò., K. Knoll, D. Kuvshinov, M. Schularick and A. M. Taylor (2019), The Rate Of Return On Everything, 1870-2015, Quarterly Journal of Economics 134, pp. 1225-1298.

Jordà, Ò., M. Schularick and A. M. Taylor (2017), Macrofinancial History and the New Business Cycle Facts, NBER Macroeconomics Annual 2016, Vol. 31.

Kaplan, G., B. Moll and G. Violante (2018), Monetary Policy According to HANK, American Economic Review 108(3), pp. 697-743.

Kaplan, G. and G. Violante (2022), The Marginal Propensity to Consume in Heterogeneous Agent Models, NBER Working Paper Series, No 30013.

Kuhn, M., M. Schularick and U. Steins (2020), Income and Wealth Inequality in America, 1949-2016, Journal of Political Economy 128(9), pp. 3469-3519.

Matusche, A. and J. Wacks (2022), Does Wealth Inequality Affect the Transmission of Monetary Policy?, mimeo.

Mian, A. R., L. Straub and A. Sufi (2020), The Saving Glut of the Rich, NBER Working Paper Series, No 26941 (revised February 2021).

Schröder, C., C. Bartels, K. Göbler, M. M. Grabka, J. König, R. Siegers and S. Zinn (2020), Improving the Coverage of the Top-Wealth Population in the Socio-Economic Panel (SOEP), SOEPpapers, 1114.

UBS/Campden Research (2018), The Global Family Office Report 2018.

Vermeulen, P. (2018), How fat is the top tail of the wealth distribution?, Review of Income and Wealth 64(2), pp. 357-387.

Waltl, S. R. and R. Chakraborty (2022), Missing the wealthy in the HFCS: micro problems with macro implications, The Journal of Economic Inequality 20, pp. 169-203.

Weidner, J., G. Kaplan and G. Violante (2014), The Wealthy Hand-to-Mouth, Brookings Papers on Economic Activity 45(1), pp. 77-153.

Westermeier, C. and M. M. Grabka (2015), Große statistische Unsicherheit beim Anteil der Top-Vermögenden in Deutschland, DIW Wochenbericht 7, pp. 123-133.

Zucman, G. (2019), Global Wealth Inequality, Annual Review of Economics 11, pp. 109-138.

Factors influencing international portfolio flows

The free movement of capital is a core element of open economies. It allows for efficiency gains and can help to mitigate country-specific risks internationally. Being closely interconnected with other countries can also be a source of risk, however, especially if it leads to unilateral dependencies.

Cross-border portfolio investment – transactions in equities, mutual fund shares and debt securities between residents and non-residents – accounts for a significant proportion of international capital flows. The comparatively high volatility of these transactions presents challenges in terms of economic policy, particularly for emerging market economies, but also for advanced economies, too. For this reason, there is great interest in gaining a better understanding of the factors that drive portfolio flows.

The economic literature makes a distinction between international "push" factors and country-specific "pull" factors. Domestic and foreign economic developments play a prominent role in this regard, while movements in equity markets, uncertainty, commodity prices, and the international interest rate environment are also significant drivers.

The international interest rate environment is shaped to a large extent by US monetary policy. Analysis reveals that the US Federal Reserve exerts an influence on international portfolio flows not only via "pure policy" responses, but also by means of the information that it provides on the US economy as a key driver of global economic activity. Bundesbank estimates find that monetary policy responses by the US Federal Reserve have a stronger impact on flows into bond funds investing in emerging market economies than on funds investing in advanced economies.

Another Bundesbank study shows that there is variation over time in the degree to which the drivers of cross-border capital flows affect fund flows into individual countries. In this context, there is variation across regions (advanced economies versus emerging market economies) and also across asset classes (equities versus bonds), with the international drivers of portfolio flows gaining in significance in various advanced economies, especially Member States of the European Union, over the 15 years under review. As regards portfolio flows into emerging market economies, the results are found to vary widely across countries.

Introduction

Cross-border capital flows have positive impact on economic developments, but also involve risks

The increasing interconnectedness of the global economy is directly linked to cross-border capital flows. The ability to invest capital around the world or raise capital abroad broadens the spectrum of investment opportunities. This can foster and entrench economic growth in the economies involved. However, a high degree of capital mobility is also a source of risk. Under the right conditions, it can promote abrupt swings in financial flows, destabilising the real economy.

Portfolio flows are particularly volatile

This holds particularly true for assets that are highly liquid and thereby exposed to constant influence from foreign and domestic factors. These mainly include securities that are traded globally. In the balance of payments, these cross-border securities transactions are consolidated under the item "portfolio investment". They include trading in equities, mutual fund shares and debt securities with non-residents.[1] The comparatively high volatility of these transactions presents challenges for emerging market economies in particular, but also for advanced economies, too. From an economic perspective, there is particular interest in understanding the factors that drive portfolio flows. The analyses presented in this article investigate the determinants and their significance for portfolio flows.[2] Particular attention is paid to the role played by US monetary policy as well as how the importance of international and country-specific factors varies over time.

This article begins by discussing the economic significance of cross-border capital flows, making a distinction between characteristics that support economic activity and those that inhibit it. It then explains how portfolio flows fit into the bigger picture of cross-border capital flows and the wider balance of payments, distinguishing between the various analytical methods that can be used to investigate portfolio flows. It is important to make this distinction because, in some cases, different research approaches in the economic literature come to different conclusions regarding the significance of individual factors. As there is such a wide range of factors that influence portfolio flows, this article focuses on some of the main drivers – such as economic developments, movements in equity markets, and risk aversion. Two analyses are presented in this context to highlight the effects of US monetary policy on portfolio flows as well as how the significance of drivers varies over time.

Economic significance of cross-border capital flows

Characteristics that support and stabilise the economy

Free movement of capital promises efficiency gains …

The free movement of capital, which opens up the possibility of employing funds worldwide, fosters the efficient allocation of capital around the world. As a result, consistent with the economic rationale of maximising profits and utility, financial resources are allocated where – for a given level of risk – they generate the highest return.

… and facilitates the sharing of risk …

Cross-border portfolio investment in particular offers investors a way of reducing their risk by adding a broadly diversified basket of different securities from different countries to their portfolio rather than a single paper.

… as well as a smoothing of consumption

Besides offering benefits in terms of efficiency, international capital flows are a means of offsetting temporary country-specific fluctuations in income and thus smoothing consumption.[3] Expected lifetime income and consumption projected on that basis are often disrupted by

1 The balance of payments statistics differentiate between portfolio investment and direct investment by categorising the former as holdings of less than 10% of an enterprise's shares.
2 See Deutsche Bundesbank (2020a).
3 The lifetime income theory posits that households prefer a smooth path of consumption to large fluctuations in their standard of living. See, for example, Obstfeld and Rogoff (1996).

unexpected events.[4] If, for example, a natural disaster depresses a country's economic output and thus also household incomes, international capital flows can help to sustain consumption through the crisis by borrowing from abroad.[5] In such a case, the households or general government affected by the natural disaster stabilise their consumption by means of an "intertemporal trade" – they borrow to bring some of their future consumption forward to the present.[6]

Characteristics that inhibit and destabilise the economy

Sudden stops, especially in emerging market economies

Having large stocks of assets or extensive liabilities abroad also entails being exposed to particular risks, however. Expectations that an economy will develop favourably typically generate strong capital imports and thus drive up that country's external liabilities. If these forecasts turn out to have been overly optimistic, financial flows can suddenly stop or, in unfavourable circumstances, even reverse. Sudden stops like this often lead to severe economic crises. One such event was the Asian crisis triggered in 1997: in the early 1990s, many South-East Asian economies were attracting strong flows from abroad. Investors seemed to have been expecting a high return on their capital in these countries. However, when the assessments of these countries' economic prospects changed, they pulled their capital out again. This process triggered severe recessions and currency crises in many South-East Asian countries. These then rippled to other parts of the world and caused crises there, too, such as in Mexico and Russia.

Advanced economies at risk of contagion as well

However, this does not mean that advanced economies are immune to financial distress and contagion, as proved in 2008 during the global financial crisis and shortly afterwards during the European sovereign debt crisis. Even countries with high net capital exports and corresponding levels of net external assets can be affected, especially if those assets are insufficiently diversified.

Portfolio flows as part of the balance of payments

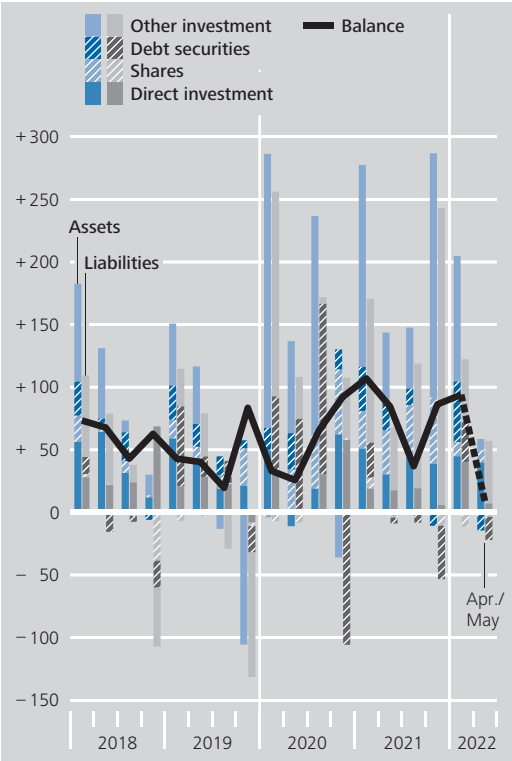
Importance of capital flows for an economy can be derived from balance of payments

The importance of cross-border capital flows, and thus also of portfolio flows, for an economy differs from one country to the next and can be derived from the balance of payments. The balance of payments records all economic transactions between residents and non-residents within a given period (month, quarter or year).[7] As these transactions can differ in character, they are broken down into sub-accounts: the current account, capital account and financial account.[8] Of these, the current and financial accounts are generally considered the most important. The current account records cross-border trade in goods, services as well as primary and secondary income. If this account is in surplus, this implies that a country's receipts from current transactions with non-residents are higher than the corresponding expenditure paid to non-residents. The payments associated with current transactions are recorded in the financial account.

4 A positive event would be an unexpected discovery of natural resources, for example, while a negative one would be an unforeseen natural disaster. For this model, the key aspect is that the event comes as a surprise. This is because a foreseeable decline in income, such as due to retirement, is, according to the lifetime income theory, generally always factored into consumption decisions, while only an unexpected change leads to an immediate shift in households' consumption and saving behaviour.
5 See Obstfeld and Rogoff (1996). The intertemporal approach to the current account is based on (net) capital flows in general. Many of the transactions belonging to this category would, in practice, be categorised as "other investment".
6 Enterprises and government, too, would generally borrow more in this kind of situation, albeit with different intentions in mind. These agents do not play any role in the intertemporal approach to the current account, however.
7 A detailed account of Germany's balance of payments for 2021 was presented in Deutsche Bundesbank (2022).
8 The current (sixth) edition of the International Monetary Fund's Balance of Payments and International Investment Position Manual states how individual transactions should be recorded.

Financial account

€ billion



Deutsche Bundesbank

However, the financial account records not only payments related to current transactions, but also cross-border transactions involving financial instruments of all kinds. These also include the portfolio investment mentioned above. In addition, the financial account makes a further distinction between direct investment, financial derivatives, reserve assets, and other investment. Other investment comprises loans and trade credits (where these do not constitute direct investment) as well as bank deposits and other capital.

Flows also particularly important in relation to GDP

The analysis presented in this article centres on portfolio investment, as this is influenced in a unique way by the short-term investment decisions of international investors. The significance of this asset category for a national economy becomes clear when the individual flows are expressed in relation to gross domestic product (GDP). For example, since the introduction of the euro, German investors have purchased foreign securities for an amount averaging 4.7% of German GDP each year. Non-residents, meanwhile, have added German securities to their portfolios for an average of 2.7% of German GDP. Added up over a little more than 20 years, the figures show that portfolio flows in Germany are highly important for the national economy and that there is significance in both their stabilising and destabilising characteristics. The same holds true for other countries.

Different analytical options for portfolio flows

Broad body of literature on portfolio flows, but findings are heterogeneous

The body of literature on the drivers of portfolio flows has grown rapidly over the past few years.[9] However, different investigations do not always produce the same findings. This is partly because, on closer inspection, the studies differ fairly substantially in some cases.

Not all studies on international capital flows focus on portfolio flows

First, not all studies focus exclusively on portfolio flows. Some examine international capital flows as a whole. Second, some studies break these flows down into direct investment, portfolio investment and other investment.[10] Within these categories, flows can also be subdivided further still – into equities, bonds and mutual fund shares in the portfolio investment category, for example. Equities and bonds are subject to different levels of demand, depending on the macroeconomic environment for individual investors. As a result, different study findings are possible in this regard, too, along different dimensions. It is therefore essential to define the capital and portfolio flows precisely in order to make the findings comparable.

Most studies examine only one side of the balance of payments

However, even investigations that focus explicitly on portfolio investment, and perhaps make a distinction between equities and debt securities as well, will not necessarily be based on the same data. While some authors take an

9 See Koepke (2019).
10 See, inter alia, Barrot and Serven (2018) and Cerutti et al. (2019).

interest in the evolution of net flows, the majority of cross-country analyses use gross flows. These studies typically investigate which factors drive increased demand for or sales of a particular country's equities and debt securities in international capital markets. Applied on a global scale, this approach explains cross-border portfolio investment in its entirety.

Fund flows can be a useful proxy

Another way to investigate rising or falling demand for securities using volume data (rather than price data) is to analyse flows into funds that invest in certain countries. Investment funds pool together the financial resources of international investors and are obliged to allocate them in line with their investment strategy. The data obtained in this manner differ from balance of payments statistics in two ways. First, the funds in question also receive flows from residents, for example from German savers who acquire stakes in German enterprises in this way. Second, the data capture only securities that are traded indirectly via investment companies, but not investors' direct transactions in individual equities or debt securities. One benefit of fund data, however, is that, unlike balance of payments statistics, they are available for many countries in near real-time and at a high frequency.

Financial flows often normalised

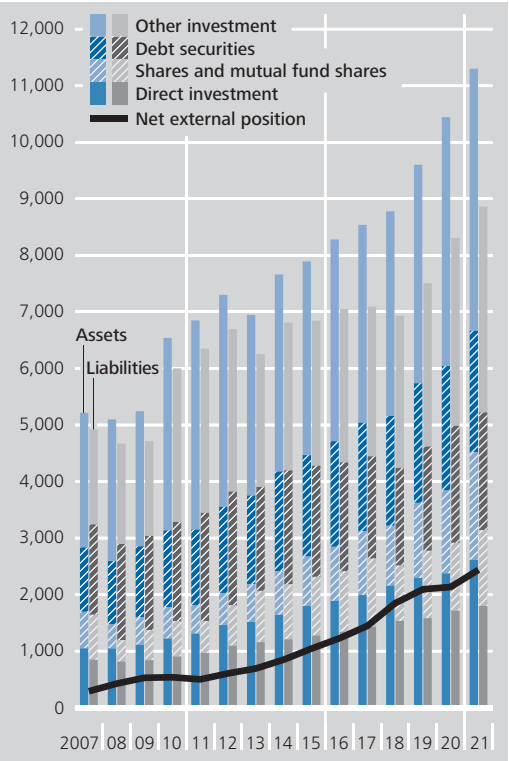
Ultimately, cross-country studies need to make the capital flows of differently sized countries comparable with one another, which is why the original data from the balance of payments are often expressed in relation to a country's GDP. Where fund flows are used as the dataset, it makes sense to use the existing total fund volume at the start of given a period as a point of reference. This also has the advantage of largely eliminating the influence of valuation changes. Lastly, it is also possible to logarithmise the original data as a way of visualising percentage changes rather than absolute variables.

Study samples differ, too

One final point is that studies often differ in terms of frequency, observation period, or the group of countries under review. All of these aspects mean that the empirical evidence regarding the significance of individual drivers of portfolio flows is inconsistent across studies.[11]

Germany's external position

€ billion



Deutsche Bundesbank

Selected determinants of international portfolio flows

Drivers can be broken down into international "push" factors and country-specific "pull" factors

For the most part, the economic literature already divides the drivers of portfolio flows into separate categories at a higher level, breaking them down into international "push" factors and country-specific "pull" factors.[12] According

11 See, inter alia, Bettendorf and Karadimitropoulou (2022), Fratzscher (2012) and Lo Duca (2012).

12 This categorisation goes back in particular to the work of Calvo et al. (1993). The authors found empirical evidence that international variables were especially significant as drivers of Latin American fund flows. Since then, the categorisation of drivers into push and pull factors has been used in many studies. This approach is not above criticism, however. This strict differentiation means that certain causes of portfolio flows, such as spillover effects between two countries, are not captured (see Koepke (2019) and Deutsche Bundesbank (2020a)).

to this approach, push factors lead to simultaneous and unidirectional changes in fund flows into different countries, while pull factors relate solely to fund flows into the country in question.[13]

Differentiation challenging in practice

However, in some ways, push and pull factors have a very close economic relationship with one another. It is therefore possible for one and the same variable to act as a push factor from a global perspective and as a pull factor from a country-specific perspective. An example of this is economic activity. While global economic activity is clearly a push factor, national economic activity represents a pull factor. The two factors are related, however: economic developments in large countries such as China or the United States have a significant impact on global economic activity as well. Conversely, economic activity in small open economies is crucially dependent on global economic activity. Analytically, it is thus all but impossible to draw a clear line between these two factors.

Push and pull factors can affect portfolio flows simultaneously and unidirectionally

Certain push and pull factors may indeed influence portfolio flows in the same direction. This is because domestic and foreign investments are not necessarily in competition with each other. Instead, investors first decide whether they want to invest at all and then have the opportunity to diversify their investments across borders depending on their strategy and the economic environment. As a result, unidirectional movements in push and pull factors can lead to unidirectional changes in fund flows domestically and abroad.

Economic developments an important determinant

Both global and country-specific economic developments influence fund flows into individual countries. From a macroeconomic perspective, strong economic growth increases expected returns and reduces investment risks; it therefore also leads to higher investment activity. The contribution of global economic growth increases with the strength of international trade and financial market linkages. Various empirical studies provide indications that growth in the global economy acts as a push factor.[14] However, the evidence on this matter is mixed. The relationship between the development of the global economy and capital flows appears to depend on how the respective model is specified and the region under consideration. Other studies find no statistically significant correlation whatsoever.[15] What is clearer is the significance of country-specific economic developments as a pull factor – it is clearly positive, so it supports capital flows into a country.[16] Nevertheless, the correlation is less significant in studies with high frequency data on portfolio flows.[17]

Developments in equity markets reflect expectations of future profits

In addition to current economic developments, expectations regarding the future path of the economy also play an important role in portfolio flows. Equity markets are a good proxy for these expectations because firms' equity prices are influenced by their discounted expected earnings. Accordingly, rising equity prices can be interpreted as an indication that market participants have positive expectations, while falling equity prices are typically associated with negative expectations. Economically speaking, this means that capital flows into individual countries should be positively correlated with how prices evolve in the local equity market (pull factor). However, global sentiment in equity markets is also likely to generally increase the propensity to invest in this form of investment and thus push up demand for equi-

13 On this point, Koepke (2019) also identifies a link to portfolio theory according to Markowitz (1952).
14 Some studies refer only to economic growth in advanced economies. This accounts for the bulk of global economic growth in statistical terms, however.
15 See, for example, Baek (2006), Bettendorf and Karadimitropoulou (2022) and De Vita and Kyaw (2008).
16 International trade and financial market linkages mean that, in practice, global and country-specific economic growth are often strongly correlated. In order to determine the significance of country-specific economic growth for fund flows, this first needs to be adjusted for the global economic component using statistical methods. In doing so, different estimation approaches may yield different results.
17 See, for example, Bettendorf and Karadimitropoulou (2022) and Koepke (2018).

ties in all countries (push factor).[18] Empirical studies find statistically significant evidence of correlations between equity market movements and fund flows, though it is mainly studies based on relatively high frequency data that are able to demonstrate the existence of strong correlations here.[19] This is plausible insofar as equity market movements, unlike economic data, can be mapped at a very high frequency, which gives them potentially greater short-term significance for investors.

There are risk indicators …

An increased perception of risk can, for example, be caused by economic and financial crises or political disputes. Here, a distinction should be made between global risks and country-specific risks. Given the particular importance of the United States for global financial conditions, US risk indicators are often used as a proxy for global risk assessment in the financial markets.[20]

… for global risks …

Uncertainty in the financial markets is typically reflected in increased volatility of equity returns. The degree of uncertainty can, for example, be derived from option prices and depicted using volatility indices such as the CBOE Volatility Index (VIX) for the S&P 500 stock index.[21] Furthermore, yield spreads have become established in the literature as a measure of risk. Well-known indicators of global risk include the TED spread (spread between the three-month LIBOR and three-month Treasury bills) and Moody's Baa-Aaa spread (spread between US corporate bonds with the corresponding ratings). While the TED spread serves as an indicator of risks in the interbank market, the Baa-Aaa spread represents risks across the entire corporate sector.

… and country-specific risks

Country-specific risks can be derived in an analogous manner, for example from national measures of volatility. In periods of heightened uncertainty, investors tend to sell off the affected portfolio investments. Accordingly, portfolio investment outflows are to be expected if the perception of risk increases. Where securitised credit default swaps (CDS) are available, their prices may also provide an indication of specific risks.

Uncertainty triggers shifts to comparatively safe investments

The empirical evidence lends weight to this hypothesis. A rise in the global risk assessment – expressed as changes in the VIX – is negatively correlated with the global flows to investment funds and is therefore a significant push factor. At the same time, such a rise is typically accompanied by increased demand for securities from the United States or other countries that are deemed to be comparatively safe (safe haven flows). As the VIX is derived from the US equity market, it is not surprising that its effects appear to play a particular role in equity transactions in advanced economies. In addition, evidence for alternative risk measures such as the TED spread and the Baa-Aaa spread can be found in studies analysing portfolio flows around the time of the global financial crisis. These studies show that increased demand for US securities can be observed even in cases where a global crisis originated in the United States.[22]

Portfolio flows are also influenced by country-specific measures of risk. Empirical studies show that external debt, the quality of political and financial institutions, and the assessments of rating agencies play a significant role as pull factors.[23] An increase in country-specific risk thus impedes further capital inflows while boosting capital outflows.

---

18 In the case of investment funds, this would be immediately evident from an increase in flows into equity funds. For balance of payments statistics, this would translate into an increase in cross-border purchases by non-banks, possibly supported by an increase in issuance.
19 See Bettendorf and Karadimitropoulou (2022), Chuhan et al. (1998), Fratzscher (2012), Froot et al. (2001) or Lo Duca (2012).
20 This relationship is discussed in the literature under the concept of the "global financial cycle". See Rey (2013).
21 The term "risk" is also used below as a synonym for "uncertainty". Here it does not mean risk in terms of the specific probability of losing capital (value at risk), but rather the intensity of price fluctuations in the equity markets.
22 See, inter alia, Bettendorf and Karadimitropoulou (2022), Fratzscher (2012) and Lo Duca (2012).
23 See Fratzscher (2012), Kim and Wu (2008) and World Bank (1997).

Rising commodity prices are a significant cost factor …

Another significant driver of portfolio flows are commodity prices.[24] They are a key cost factor, especially in the production of goods. While enterprises' dependence on commodity prices varies considerably across countries and sectors, increases in commodity prices nevertheless lead to higher costs and thus reduce enterprises' competitiveness and profits – except in the case of commodity exporters. As a result, it becomes less lucrative to finance production projects of the affected enterprises or to invest in these firms. In such an economic environment, it is to be expected that investors would offload portfolio investments, especially ones involving commodity-intensive production.

… but benefit commodity exporters

Empirical studies show that this relationship can be demonstrated across different estimation approaches. However, this driver does not act in the same direction for all countries. This is because commodity exporters tend to benefit from rising commodity prices, as price increases have a positive impact on earnings. Here, results indicate that the relationship has a greater impact on advanced economies.[25] This effect can be seen especially in relation to commodity cycles and has, for example, also been discussed in the economic policy debate on global imbalances.[26]

Impact of US monetary policy on international portfolio flows

International interest rate environment impacts portfolio flows

Portfolio flows in advanced economies and emerging market economies are strongly influenced by the international interest rate environment. As interest rates are an important monetary policy instrument, the role of monetary policy will be examined in more detail here. The focus is on monetary policy in the United States, as it significantly impacts financial conditions around the world.[27]

One possible transmission channel is through investors' search for yield and appetite for risk. A tightening of monetary policy in the United States leads directly to higher yields on US debt securities. Moreover, it typically reduces investors' risk appetite, as a given yield target can then be achieved with a less risky investment instrument (e.g. government bonds versus equities or US equities versus emerging market equities).[28] Owing to higher interest rates, on the one hand, and investors' lower risk appetite, on the other, investments in US securities therefore become more attractive, leading to portfolio shifts at the global level.

Interest rate environment shaped by monetary policy in the United States

Empirical analyses show the impact of US monetary policy on portfolio flows

Empirical analyses confirm the effects of monetary policy on portfolio flows. They indicate that the Federal Reserve's monetary policy affects fund flows both in advanced economies and emerging market economies.[29] In this context, even the mere expectations of a monetary policy measure have a significant impact.[30]

Monetary policy influences portfolio flows via two channels

In addition to the pure monetary policy impulse itself, the central bank can also send an information signal in press releases or press conferences by disclosing assessments of economic developments that represent new, surprising information for investors.[31] While a positive outlook would also lead to higher yields in the United States, it would also increase investors' risk appetite and simultaneously raise the expectation of positive spillover effects from the United States to the rest of the world. This would then result in rising gross inflows of funds to other countries as well. The positive information impulse thus leads to market reactions that are very similar to the effects of an increase in aggregate demand.

An analysis by the Bundesbank on the functioning of these two channels shows that the

---

24 See, inter alia, Davis et al. (2021).
25 See Barrot and Serven, Bettendorf and Karadimitropoulou (2022) and Sarno et al. (2016).
26 See Bernanke (2005) as well as Reinhart et al. (2016).
27 In view of this relationship, the global financial cycle is considered to play an important role. See, inter alia, Miranda-Agrippino and Rey (2020).
28 See, inter alia, Bruno and Shin (2015).
29 See Kalemli-Özcan (2019).
30 See Koepke (2018) and Dahlhaus and Vasishtha (2020).
31 See Kerssenfischer (2019).

Impact of US monetary policy on international portfolio flows

International portfolio flows are influenced by different drivers, which the literature usually breaks down into international "push" factors and country-specific "pull" factors. One key structural driver is monetary policy in the United States, which ranks as a global determinant, or push factor, owing to the special role the United States plays in shaping financial conditions worldwide.

Empirical evidence indicates that a tightening of monetary policy in the United States leads to outflows of funds in the rest of the world, especially in emerging market economies.[1] This box takes a closer look at how exactly US monetary policy influences portfolio investment around the world, given that central banks influence capital markets not only by means of monetary policy measures themselves, but also via what are known as central bank information shocks. When central banks present their decisions and explain them in press releases or at press conferences, they also explicitly or implicitly share their own assessment of the economic outlook, which for investors might contain a new and surprising piece of information.

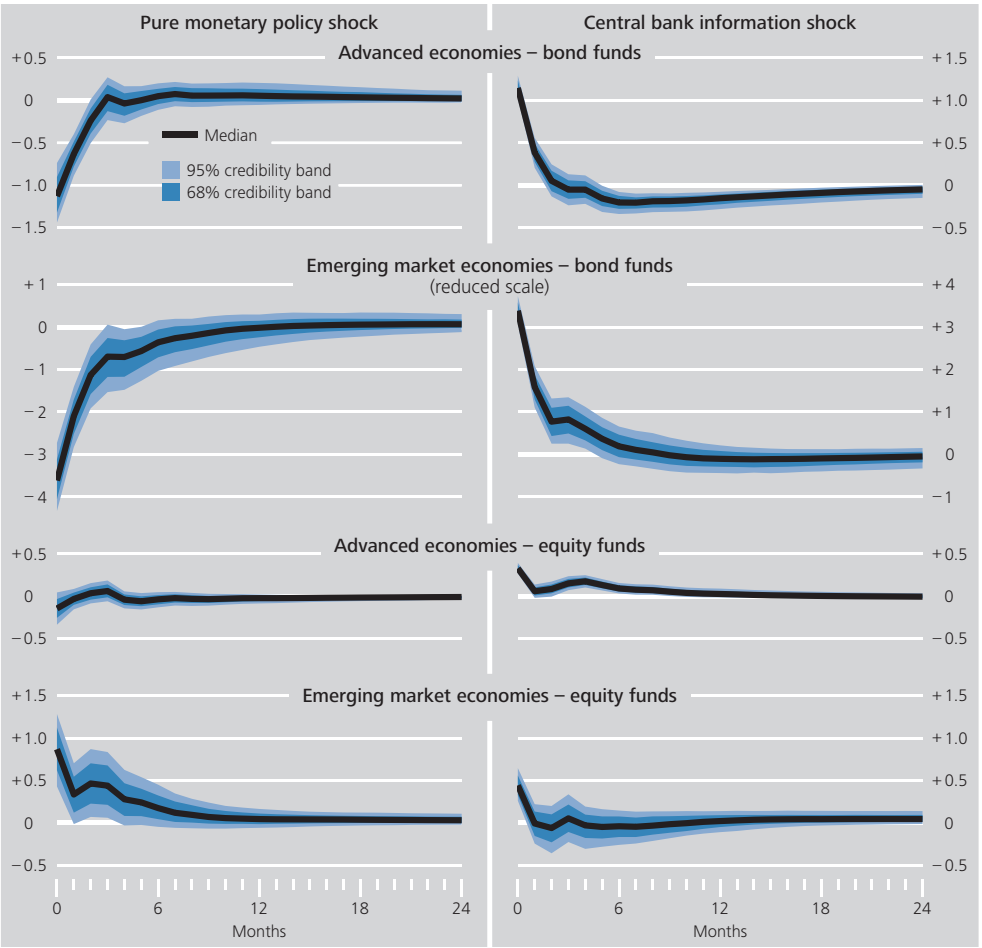
The effects of both these shocks – "pure policy" shocks and central bank information shocks – on portfolio flows can be estimated using proxy VAR models.[2] These models use instrument variables to identify the two shocks. Kerssenfischer (2019) shows how these instrument variables can be generated from high frequency data, using the scenario of a Eurosystem monetary policy shock. Applied to a monetary policy shock in the United States, the approach is based on changes in the two-year US government bond yield and percentage changes in the S&P 500 index within a relatively narrow window around announcements by the Federal Open Market Committee (FOMC). For the purposes of this analysis, the window is the day of the announcement: closing prices on the day of the announcement are compared with closing prices on the day before the announcement.[3] Thus, the investigation is based on the assumption that movements in equity prices and bond yields on the day of the FOMC announcement are driven primarily by the announcement itself. A (pure) policy shock can be expected to send equity prices and bond yields in different directions: taken in isolation, a contractionary monetary policy shock is likely to push up interest rates and dampen economic activity, probably causing bond yields to rise and equity prices to fall. A central bank information shock, by contrast, generally moves both variables in the same direction. Hence, a positive information shock – that is, an unexpectedly upbeat outlook for investors – can be expected not only to lead to rising interest rate expectations and bond yields, as with a pure policy shock, but also to have a positive effect on equity prices at the same time.

---

1 See, inter alia, Anaya et al. (2017), Ciminelli (2022), Kalemli-Özcan (2019) and Koepke (2018).
2 See also Deutsche Bundesbank (2020b).
3 Kerssenfischer (2019) uses a window of just a few minutes around announcements. This approach tends to improve the identification of shocks because it also means the effect can be disentangled from information that becomes known on the same day as the monetary policy decisions but at different times. However, this makes it more difficult for researchers without access to such data to replicate the results. Comparisons between shocks from high frequency data and daily data have shown that, in the present case, daily data provide tools that are good enough to clearly identify the shocks.

Monetary policy effects on selected fund flows*

Percentage points



* Impulse response functions of fund flows following various monetary policy shocks. Shocks are normalised such that they increase the yield on US government bonds with a two-year residual maturity by 25 basis points. Fund flows are shown as the monthly change relative to total net assets at the start of the respective period. The respective percentage point change relates to this ratio.

Deutsche Bundesbank

Proxy VAR models are estimated using monthly data for the period from August 2005 to December 2021. These models are fed with variables that capture key elements of the US capital market: the S&P 500 composite index, the US dollar's nominal effective exchange rate (NEER), the VIX volatility index and the yields of US government bonds with a residual maturity of two years. In addition, a variable is added to each model to represent fund flows of investment funds investing in a given region and asset class.[4] Fund flow data are sourced from EPFR Global and serve as a proxy for balance of payments statistics on international portfolio investment, which are available at only a relatively low frequency in many countries.[5] The models are estimated using Bayesian methods.

The estimation results produced by the VAR models are presented in the form of im-

4 The regions analysed here are advanced economies and emerging market economies. Economies are categorised according to their EPFR Global classification. The asset classes analysed here are equity funds and bond funds.

5 EPFR data and balance of payments statistics are not exactly the same in conceptual terms. One reason for discrepancies between the data is that the EPFR data also capture transactions by residents, which are omitted from the balance of payments statistics.

pulse response functions of the fund flows in each case. The shocks are scaled such that the median of the posterior distribution of two-year yields increases by 25 basis points. This way, the effects of a contractionary monetary policy shock can be compared with those of a positive central bank information shock. Fund flow responses are summarised in the chart on p. 48, which shows the respective estimated changes in fund flows compared with total net assets at the start of the period in percentage points.[6]

The monetary policy shock triggers immediate and significant declines in the fund flows into bond funds investing in advanced economies (1.1 percentage points; median) and emerging market economies (3.6 percentage points). Hence, the effects in emerging market economies are significantly stronger.[7] The picture is mixed for equity funds, however, for two reasons. First, the evidence of a decline in fund flows into advanced economies is not significant. Second, the results indicate a significant increase in fund flows into emerging market economies. One possible reason for this observation could be reallocations into funds with higher risk premia in emerging market economies.

A much more uniform picture is presented by the estimation results for fund flows following a positive central bank information shock. A positive shock of this kind causes fund flows to increase significantly, irrespective of region (advanced economies versus emerging market economies) and asset class (equities versus bonds). Here again, fund flows into bond funds investing in emerging market economies show a much stronger response than those focused on advanced economies: the information shock causes fund flows into emerging market economies to increase by 3.4 percentage points, while those into advanced economies rise by 1.1 percentage points. As regards equity funds, the responses are significantly smaller and smoother, with fund flows into advanced and emerging market economies increasing by 0.3 and 0.4 percentage point, respectively.

The results show the importance of specifying a monetary policy shock as precisely as possible, because a pure policy shock can affect capital flows differently than a central bank information shock, even though both shocks induce an interest rate rise in the specification shown. If, for example, the role of monetary policy were identified only via an exogenous rise in interest rates, the estimation results could be distorted and result in incorrect economic policy conclusions being drawn.

6 Total net assets at the start of a period will not necessarily match those at the end of the previous one because new funds may have been added to the sample.
7 See, inter alia, Kalemli-Özcan (2019) and Koepke (2018).

Bundesbank study: US monetary policy influences portfolio flows via monetary policy impulses and information impulses

effects, approximated by flows to investment funds, can vary considerably (see the box on p. 47).[32] The impulses in the study lead to an assumed increase in interest rates of 25 basis points in each case. However, a contractionary monetary policy impulse causes investors to reduce their investments in bond funds, while a positive information impulse leads to increased inflows of funds. It makes no difference here whether the funds invest in advanced or emerging market economies.

Impact greater in emerging market economies than in advanced economies

In emerging market economies, the effects are much greater still:[33] a pure monetary policy impulse in the United States leads to a simultaneous decline in flows to bond funds in emerging market economies, equivalent to 3.6% of holdings. In advanced economies, this decrease amounts to 1.1% of holdings. New information results in a similar pattern among these two groups of economies, albeit with an inverted sign. In this case, flows to bond funds in emerging market economies increase by around 3.4% and in advanced economies by 1.1% of their holdings. As a result, this means that models that do not distinguish between the two channels only partially capture the impact of monetary policy on cross-border purchases of debt securities, or even provide a distorted picture.

Mixed findings for equity funds

With regard to equity funds, the results are less consistent. While new, positively received information does lead to an increase in fund flows in both groups of economies, monetary policy impulses trigger a decline in fund flows only in advanced economies. In emerging market economies, fund flows are seen to increase, which may be attributable to shifts toward funds with higher risk premia in emerging market economies.

Time variation in the importance of drivers of international portfolio flows

Various causes of time variation in the importance of drivers of portfolio flows

In the above considerations, it was implicitly assumed that the importance of the various drivers of portfolio flows remained constant over time, and any variation in their specific influence over time was not taken into consideration. However, this assumption may be too restrictive, for example due to information asymmetries, heterogeneity amongst investors, budget constraints, and reappraisals of risks. Moreover, in the case of individual variables, certain thresholds also play an important role.[34]

Information asymmetries

Information asymmetries: If the supply and demand sides possess different information about the intrinsic value of a security, it is not possible for the market to clear completely. The drivers of portfolio flows would shift depending on whether there is excess supply or demand.[35]

Heterogeneous investors

Heterogeneous investors: Domestic and foreign investors may have different investment motives. A change in the importance of individual drivers may therefore reflect the activity of different groups of investors.[36]

Budget constraints

Budget constraints: Investors are, to some extent, tied to the specific risk profiles of managed portfolios. If the relevant specifications are violated, for example, due to financial market stress, this can lead to assets being sold off in the financial markets, which in turn can trigger further selling. As a result, the importance of risk measures may grow over time.[37]

Reappraisal of risks

Reappraisal of risks: Investors and economists learn from economic changes. For example,

---

32 Flows to investment funds are generally used as a proxy for portfolio flows. The advantage of these data is that they are available at a relatively high frequency and earlier than the official balance of payments statistics.
33 This result is also consistent with other studies, such as Kalemli-Özcan (2019).
34 See Lo Duca (2012).
35 See Mody and Taylor (2012).
36 See Forbes and Warnock (2012).
37 See Adrian and Shin (2010).

Variation in the importance of push and pull factors for portfolio flows over time

The extent to which portfolio flows are influenced by international (push) and country-specific (pull) factors has already been subject to both comprehensive and controversial discussion in the economic literature. A discussion paper recently published by the Bundesbank investigates the question of how the importance of these factors changes over time.[1] To this end, a Bayesian dynamic factor model with time-varying coefficients and time-varying stochastic volatility is estimated.[2] This model can be used to explain not only when certain factors were important for individual countries in the past, but also which factors are important at present. The approach is based on the idea that capital flows to individual countries can be broken down into a common component and a country-specific component. In this context, the model accounts for the fact that the weights of these components can shift over time. The common component is interpreted as a push factor and the country-specific component is interpreted as a pull factor.

For the analysis, portfolio flows are approximated using flows to investment funds, as these data are available earlier and at a higher frequency than balance of payments data. Monthly data on 26 emerging market economies and 21 advanced economies from EPFR Global are used for this purpose.[3] The observation period extends from August 2005 to September 2020. The investigation distinguishes between capital flows to advanced economies and those to emerging market economies. In addition, the data allow a distinction to be made between equity funds and bond funds. This results in four different variations, for each of which a factor model is estimated.

The objective of the factor model is to break down each individual time series under observation $(y_{i,t})$ into a common component, factor (f_t), and a country-specific component, residual $(\epsilon_{i,t})$:

$$y_{i,t} = a_i + b_{i,t} f_t + \epsilon_{i,t}\,.$$

The indices i and t represent the country and period under observation, respectively. The constant (a_i) refers to the specific country in question and is not time-dependent. By contrast, the factor can have a different impact on the respective fund flows for each country and at each point in time. The sensitivity of the fund flows to the factor is determined by the time-varying parameter $b_{i,t}$, which is assumed to follow a random walk:

$$b_{i,t} = b_{i,t-1} + \sigma_{\eta i}\eta_{i,t}\,.$$

The intensity of the time variation is defined by the term $\sigma_{\eta i}\eta_{i,t}$, where $\sigma_{\eta i}$ describes the variance and $\eta_{i,t} \sim N(0,1)$ is true.

Both the factor and the country-specific component follow autoregressive processes of order $p = 2$ and $q = 3$:[4]

$$f_t = \phi_{0,1} f_{t-1} + \ldots + \phi_{0,q} f_{t-q} + e^{h_{0,t}} u_{0,t}$$
$$\epsilon_{i,t} = \phi_{i,1}\epsilon_{i,t-1} + \ldots + \phi_{i,p}\epsilon_{i,t-p} + \sigma_i e^{h_{i,t}} u_{i,t}.$$

Here, $u_{0,t}$ and $u_{i,t}$ are the respective error terms. The autoregressive dynamics of the factor and the country-specific components are described using the parameters ϕ. In addition, the model also accounts for vari-

1 See Bettendorf and Karadimitropoulou (2022).
2 See Del Negro and Otrok (2008).
3 These fund data differ from balance of payments data in that they cover only a subset of the total portfolio flows and, at the same time, depict the total flows to funds that invest in a given country. This means that they also cover funds invested by residents.
4 The number of time lags corresponds to the specification in Del Negro and Otrok (2008). The lags account for the assumption that both the common and country-specific components represent macroeconomic variables as drivers of portfolio flows.

Breakdown of variance in flows into contributions of push and pull factors*

Percentage contributions

Region	Country	Factor	Aug. 2005	Aug. 2008	Aug. 2011	Aug. 2014	Aug. 2017	Sep. 2020
Advanced economies (bond funds)	Canada	Push factor	45	46	60	64	73	77
		Pull factor	55	54	40	36	27	23
	France	Push factor	53	90	97	99	99	99
		Pull factor	47	10	31	1	1	1
	Germany	Push factor	51	70	81	88	91	92
		Pull factor	49	30	19	12	9	8
	Italy	Push factor	54	88	96	98	99	99
		Pull factor	46	12	4	2	1	1
	Japan	Push factor	34	59	85	91	94	95
		Pull factor	66	41	15	9	6	5
	United Kingdom	Push factor	40	64	79	85	91	93
		Pull factor	60	36	21	15	9	7
	United States	Push factor	7	26	51	65	82	88
		Pull factor	93	74	49	35	18	12
Advanced economies (equity funds)	Canada	Push factor	20	24	14	5	11	12
		Pull factor	80	76	86	95	89	88
	France	Push factor	50	81	93	97	98	98
		Pull factor	50	19	7	3	2	2
	Germany	Push factor	39	39	17	39	48	47
		Pull factor	61	61	83	61	52	53
	Italy	Push factor	43	68	85	89	90	91
		Pull factor	57	32	18	11	10	9
	Japan	Push factor	35	39	33	24	15	10
		Pull factor	65	61	67	76	85	90
	United Kingdom	Push factor	58	75	81	85	87	87
		Pull factor	42	25	19	15	13	13
	United States	Push factor	20	26	35	15	12	14
		Pull factor	80	74	65	85	88	86
Emerging market economies (bond funds)	Brazil	Push factor	55	57	57	54	56	57
		Pull factor	45	43	43	46	44	43
	China	Push factor	54	33	21	15	11	10
		Pull factor	46	67	79	85	89	90
	India	Push factor	53	26	12	5	3	4
		Pull factor	47	74	88	95	97	96
	Indonesia	Push factor	49	67	74	74	67	65
		Pull factor	51	33	26	26	33	35
	Russia	Push factor	51	71	77	75	73	72
		Pull factor	49	29	23	25	27	28
	South Africa	Push factor	56	73	79	80	77	71
		Pull factor	44	27	21	20	23	29
	Turkey	Push factor	58	70	74	71	63	48
		Pull factor	42	30	26	29	37	52
Emerging market economies (equity funds)	Brazil	Push factor	43	52	49	47	42	40
		Pull factor	57	48	51	53	58	60
	China	Push factor	42	35	20	13	7	5
		Pull factor	58	65	80	87	93	95
	India	Push factor	36	46	40	33	23	22
		Pull factor	64	54	60	67	77	78
	Indonesia	Push factor	36	55	61	64	66	65
		Pull factor	64	45	39	36	34	35
	Russia	Push factor	51	51	49	45	44	45
		Pull factor	49	49	51	55	56	55
	South Africa	Push factor	39	63	76	82	84	84
		Pull factor	61	37	24	18	16	16
	Turkey	Push factor	53	58	59	52	45	44
		Pull factor	47	42	41	48	55	56

* The table shows the contributions of the respective push and pull factors to the variance in flows to investment funds that invest in particular countries.

Deutsche Bundesbank

ation in the volatility ($h_{i,t}$) of the components over time, which follows a random walk:

$$h_{i,t} = h_{i,t-1} + \sigma_{\zeta i}\zeta_{i,t},$$

where $\sigma_{\zeta i}$ describes the variance and $\zeta_{i,t} \sim N(0,1)$ is true.

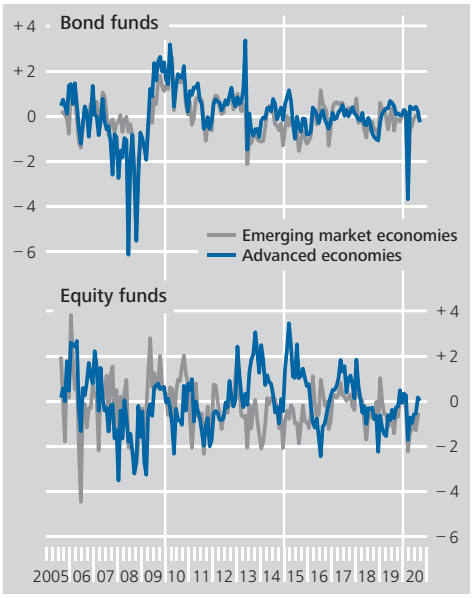
The estimated factors (f_t) in the four models are shown in the adjacent chart. Both the global financial crisis in 2008 and the financial market turmoil at the start of the COVID-19 pandemic in March 2020 are captured by all of the models in the common push factors. This suggests that the model correctly recognises global events and allocates them to the appropriate factor.

However, the key question of this analysis is: "To what extent does each factor influence the flow of funds to each country?". In order to answer this question, the variance in fund flows is broken down into the contributions of each factor. The table on p. 52 shows the relative contribution of each factor to the variance in flows to equity and bond funds in selected countries. In this case, this approach reveals a high degree of heterogeneity with regard to the relative importance of factors within different regions and asset classes. The table shows the shares of the variance in each fund flow that can be explained by push and pull factors at various points in time for selected countries. For example, the relative importance of push factors for portfolio flows to advanced economies has increased over time – this holds especially true for EU Member States. With regard to portfolio flows in emerging market economies, the results vary significantly by region (advanced versus emerging market economies) and asset class (equities versus bonds).

One advantage of this approach is that it is agnostic when determining the international and country-specific drivers. Commonalities are interpreted as push factors, whilst all other aspects are considered to be pull factors. This means that the factors are calculated in a purely statistical manner, which implicitly also takes account of variables that are unknown in the literature. For this reason, the results may differ from studies that focus on the importance of individual drivers.[5]

The model class presented here provides deep insight into the portfolio flows under observation not only with regard to their cross-section, but also into how they change over time. However, this comprehensive picture comes at a cost. Due to the considerable number of different parameters, the estimates are subject to a comparatively high level of uncertainty. This should be taken into consideration when interpreting the results.

Estimated factors for flows to investment funds*



Source: Bundesbank calculations based on data from EPFR Global. * Development over time of estimated factors derived from Bayesian dynamic factor models with time-varying coefficients for various samples. At each point in time, the respective medians of the posterior distributions are depicted.
Deutsche Bundesbank

5 See, inter alia, Fratzscher (2012) and Lo Duca (2012).

the global financial crisis also led to changes in modelling. Since the crisis, much more attention has been given to the real estate markets and the banking sector than had been before.

Thresholds

Thresholds: Certain variables may gain or lose importance for international capital flows if they exceed or fall short of specific thresholds. For example, foreign currency reserves contribute to the external stability of an economy, but, if holdings exceed a certain threshold, they may become less relevant as a variable for investors.

Estimating time variation is computationally intensive

It should therefore come as no surprise to find empirical evidence of shifts in the importance of drivers of portfolio flows. Nevertheless, the estimation methods for such matters are much more complex and have only recently gained in popularity.

Empirical studies sometimes resort to a temporal separation of samples

Before time variation was explicitly mapped in models, studies simply looked at individual time periods separately. For example, Fratzscher (2012) found that portfolio flows were heavily influenced by international drivers such as the TED spread at the time of the global financial crisis, while individual country-specific drivers gained in importance later on. In addition, the study also points to differences in the importance of drivers amongst individual countries. The fact that countries react to individual drivers to differing degrees can, for example, be attributed to the quality of institutions, country-specific risk, or macroeconomic fundamentals.

Major change in the importance of drivers following global financial crisis

Lo Duca (2012) published one of the first studies on portfolio flows to explicitly model time variation and found evidence of a change in the importance of individual drivers. In this context, the study established connections between flows and specific variables including confidence, credit risk in the interbank market, and regional developments in emerging market economies. The results of the study point to significant changes in the importance of individual drivers. Prior to the global financial crisis, the regional macroeconomic environment played an important role in portfolio equity flows to emerging market economies. However, following the collapse of the US investment bank Lehman Brothers in 2008, there was a significant withdrawal of equity portfolio investment from these countries. According to Lo Duca's model, a loss of confidence among market participants set in at this time, leading to a change in the importance of individual drivers of portfolio flows.

Increased significance of push factors as a whole for EU Member States

A study recently published by the Bundesbank analyses the relative importance of push and pull factors for portfolio flows.[38] The study does not examine individual drivers, however, but instead statistically determines pull factors and push factors from the flows and views each set of factors collectively (see the box on p. 51). This approach is agnostic as far as the specific factors are concerned. The advantage of this is that no material determinants are overlooked. The results suggest that time variation is of particular significance, with a high degree of heterogeneity in the importance of the factors within different regions (advanced economies versus emerging market economies) and asset classes (equities versus bonds). For example, the importance of push factors for portfolio flows in many advanced economies has increased significantly over time – especially in EU Member States. By contrast, with respect to flows into emerging market economies, the picture is very heterogeneous.

Conclusion

Portfolio flows are a key factor in the external interconnectedness of economies as well as in their economic development. This is because they contribute, amongst other things, to an efficient allocation of capital, enable investors to diversify their risk, and allow risk to be shared in the event of unforeseen events. However, notwithstanding the positive aspects,

38 See Bettendorf and Karadimitropoulou (2022).

close interconnectedness can also lead to external dependencies and help economic crises to spread more quickly. From an economic policy perspective, a sound understanding of the main drivers of capital flows is therefore essential.

Which variables have the greatest impact on portfolio flows depends on a number of criteria. The level of development (advanced economies versus emerging market economies) and the asset class (equities versus bonds) play key roles here. At the superordinate level, the respective drivers can be divided into global factors (push factors) and country-specific factors (pull factors). However, individual drivers affect portfolio flows both from a global economic perspective and from a country-specific perspective. In addition to other factors, such as economic developments, monetary policy also plays an important role, as it has a significant impact on the international interest rate environment and the risk assessment in the financial markets.

The results presented here suggest that the US Federal Reserve, in particular, has a significant impact on international portfolio flows (measured in terms of fund flows) through both pure monetary policy impulses as well as information impulses. A tightening of monetary policy that leads to an increase in the interest rate level in the United States can therefore influence investors' investment behaviour in different ways. While the monetary policy impulse, and the more challenging financing conditions for enterprises associated with this impulse, mean that there will tend to be a decline in flows to bond funds, the information impulse acts in the opposite direction. This is because the interest rate hike can be interpreted as a signal from the central bank that it expects an economic upturn. The impact of both impulses is stronger in emerging market economies than in advanced economies. For equity funds, the results are inconsistent.

Moreover, the importance of push and pull factors appears to be subject to significant time variation. For example, estimation results indicate a high degree of heterogeneity with regard to the importance of factors in different regions (advanced versus emerging market economies) and asset classes (equities versus bonds). The importance of push factors for portfolio flows in many advanced economies has increased over time – especially in EU Member States. With respect to portfolio flows to emerging market economies, the results are highly heterogeneous between individual countries. This is in line with the academic literature, which indicates that investors are increasingly differentiating between individual emerging market economies.

List of references

Adrian, T. and Y. S. Shin (2010), The Changing Nature of Financial Intermediation and the Financial Crisis of 2007-2009, Annual Review of Economics, Vol. 2, pp. 603-618.

Aguilar, C. P., R. O. Soares and R. Adalid (2020), Revisiting the monetary presentation of the euro area balance of payments, ECB Occasional Paper No 238.

Anaya, P., M. Hachula and C. J. Offermanns (2017), Spillovers of U. S. unconventional monetary policy to emerging markets: The role of capital flows, Journal of International Money and Finance, Vol. 73 (part B), pp. 275-295.

Baek, I.-M. (2006), Portfolio investment flows to Asia and Latin America: pull, push or market sentiment?, Journal of Asian Economics, Vol. 17(2), pp. 363-373.

Barrot, L.-D. and L. Serven (2018), Gross Capital Flows, Common Factors, and the Global Financial Cycle, World Bank Group, Policy Research Working Paper No 8354.

Bernanke, B. (2005), The Global Saving Glut and the U. S. Current Account Deficit, Remarks at the Sandridge Lecture, Virginia Association of Economics, Richmond, VA, 10 March 2005.

Bettendorf, T. and A. Karadimitropoulou (2022), Time-variation in the effects of push and pull factors on international portfolio flows, Deutsche Bundesbank Discussion Paper No 05/2022, March 2022.

Bruno, V. and H. S. Shin (2015), Cross-Border Banking and Global Liquidity, Review of Economic Studies, Vol. 82(2), pp. 535-564.

Calvo G., L Leiderman and C. Reinhart (1993), Capital Inflows and Real Exchange Rate Appreciation in Latin America: The Role of External Factors, IMF Staff Papers Vol. 40(1), pp. 108-151.

Cerutti, E., S. Claessens, and A. K. Rose (2019), How Important is the Global Financial Cycle? Evidence from Capital Flows, IMF Economic Review, Vol. 67, pp. 24-60.

Chuhan, P., S. Claessens, and N. Mamingi (1998), Equity and bond flows to Latin America and Asia: the role of global and country factors, Journal of Development Economics, Vol. 55(2), pp. 439-463.

Ciminelli, G., J. Rogers and W. Wu (2022), The Effects of U. S. Monetary Policy on International Mutual Fund Investment, mimeo.

Dahlhaus, T. and G. Vasishtha (2020), Monetary policy news in the US: Effects on emerging market capital flows, Journal of International Money and Finance, Vol. 109(C), pp. 1-17.

Davis, J. S., G. Valente and E. v. Wincoop (2021), Global drivers of gross and net capital flows, Journal of International Economics, Vol. 128, pp. 1-21.

De Vita, G. and K. S. Kyaw (2008), Determinants of capital flows to developing countries: a structural VAR analysis, Journal of Economic Studies, Vol. 36(4), pp. 304-322.

Del Negro, M. and C. Otrok (2008), Dynamic factor models with time-varying parameters: measuring changes in international business cycles, Staff Reports, No 326, Federal Reserve Bank of New York.

Deutsche Bundesbank (2022), German balance of payments in 2021, Monthly Report, March 2022, pp. 37-57.

Deutsche Bundesbank (2020a), Global financial interconnectedness and spillovers between the G20 countries, Monthly Report, September 2020, pp. 53-73.

Deutsche Bundesbank (2020b), The impact of monetary policy on the euro's exchange rate, Monthly Report, September 2020, pp. 19-51.

Dornbusch, R. (1976), Expectations and Exchange Rate Dynamics, Journal of Political Economy, Vol. 84(6), pp. 1161-1176.

Forbes, K. J. and F. Warnock, Capital flow waves: Surges, stops, flight, and retrenchment, Journal of International Economics, Vol. 88(2), pp. 235-251.

Fratzscher, M. (2012), Capital flows, push versus pull factors and the global financial crisis, Journal of International Economics, Vol. 88(2), pp. 341-356.

Froot, K. A., P. G. J. O'Connell and M. S. Seasholes (2001), The portfolio flows of international investors, Journal of Financial Economics, Vol. 59(2), pp. 151-193.

Kalemli-Özcan, S. (2019), U. S. Monetary Policy and International Risk Spillovers, NBER Working Paper No 26297, National Bureau of Economic Research.

Kerssenfischer, M. (2019), Information effects of euro area monetary policy: New evidence from high-frequency futures data, Deutsche Bundesbank Discussion Paper No 07/2019, February 2019.

Kim, S.-J. and E. Wu (2008), Sovereign credit ratings, capital flows and financial sector development in emerging markets, Emerging Markets Review, Vol. 9(1), pp. 17-39.

Koepke, R. (2019), What drives capital flows to emerging markets? A survey of the empirical literature, Journal of Economic Surveys, Vol. 33(2), pp. 516-540.

Koepke, R. (2018), Fed policy expectations and portfolio flows to emerging markets, Journal of International Financial Markets, Institutions and Money, Vol. 55(C), pp. 170-194.

Lo Duca, M. (2012), Modelling the time varying determinants of portfolio flows to emerging markets, ECB Working Paper Series, No 1468.

Markowitz, H. (1952), Portfolio Selection, The Journal of Finance, Vol. 7(1), pp. 77-91.

Miranda-Agrippino, S. and H. Rey (2020), U. S. Monetary Policy and the Global Financial Cycle, The Review of Economic Studies, Vol. 87(6), pp. 2754-2776.

Mody, A. and M. P. Taylor (2013), International capital crunches: the time-varying role of informational asymmetries, Applied Economics, Vol. 45(20), pp. 2961-2973.

Obstfeld, M. and K. Rogoff (1996), Foundations of International Macroeconomics, MIT Press.

Reinhart, C., V. Reinhart and C. Trebesch (2016), Global Cycles: Capital Flows, Commodities, and Sovereign Defaults, 1815-2015, American Economic Review, Vol. 106(5), pp. 574-580.

Rey, H. (2013), Dilemma not trilemma: the global financial cycle and monetary policy independence, Technical report, Proceedings, Economic Policy Symposium, Jackson Hole, WY.

Sarno, L., I. Tsiakas, and B. Ulloa (2016), What drives international portfolio flows?, Journal of International Money and Finance, Vol. 60, pp. 53-72.

World Bank (1997), Private capital flows to developing countries: the road to financial integration, World Bank Policy Research Report, Oxford University Press, Oxford.

Cross-border interoperability of central bank digital currency

The digitalisation of the economy, flourishing online commerce, global supply chains and migration are making cross-border payments more and more important. Compared with domestic transactions, payments across the borders of currency areas are more expensive, slower, less widely accessible and less transparent. This is particularly true of payments by individuals and enterprises. Central bank digital currency (CBDC) could help to overcome these obstacles.

As CBDC would inevitably necessitate the development of new infrastructures, it could act as a catalyst for enhancements in the cross-border payments space. Examples of such improvements would be the use of common message standards along the entire payment chain and faster settlement due to shorter process chains made up of fewer participants. Likewise, CBDC could present an opportunity to integrate currency exchange functionality into payment settlement. CBDC for financial institutions (wholesale CBDC) could also improve liquidity management in cross-border payments. In addition, programmable interfaces could help to link CBDC systems with one another or with other financial market infrastructures.

A multilateral approach is most likely to enable CBDC to help reduce the frictions currently hampering cross-border payments. This would involve central banks providing CBDC for use in their own currency area, but facilitating cross-border payments through interoperability of their own CBDC infrastructure with other payment systems. Such an approach would avert the macroeconomic risks associated with a unilateral approach whereby, outside of its domestic market, a currency area's CBDC would be held and used as a foreign currency. Depending on the extent of cooperation, a multilateral approach in the form of compatible systems, interlinked systems or a common platform could open up varying degrees of potential for faster, cheaper and more transparent payment settlement.

A higher degree of interoperability requires close cooperation between the central banks involved. Differences in legislation and national standards for data handling or cyber security provisions can hinder efforts towards greater interoperability. Differing national interests, fears over losing autonomy and control, and a lack of confidence in joint governance structures may also pose barriers to increased international cooperation.

The G20 countries have set 2027 as their target date for improving cross-border payments. As things currently stand, CBDC is unlikely to be able to make a meaningful contribution in the near future. In the medium term, however, the development of CBDC will provide a favourable foundation for establishing interoperability between payment systems through stronger cooperation among central banks; this offers prospects for mitigating the effects of the global retreat of correspondent banks. For that to come to fruition, central banks' work to develop CBDCs needs to be geared towards international usage and common standards from the outset.

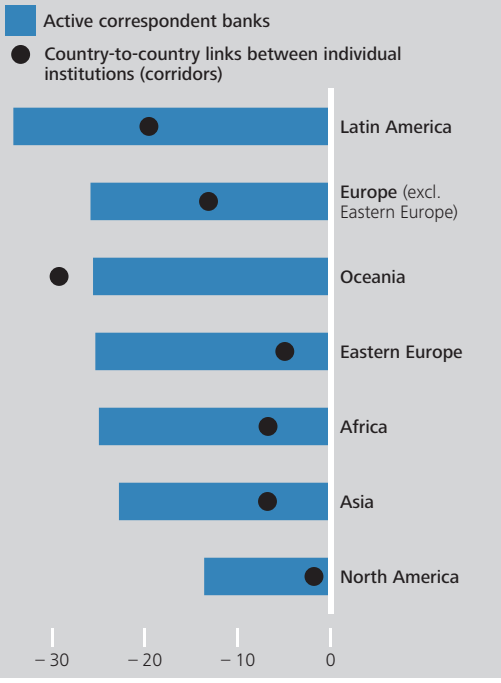
Introduction

The importance of cross-border payments is growing, …

A combination of factors has driven a dynamic evolution in international payments over recent years.[1] Irrespective of the current disruptions, global supply chains have led to a growing number of payments between firms in different countries. Increasing migration generally leads to a growing number of credit transfers being made by migrants to family members in their home countries (referred to as remittances) that constitute a significant inflow of funds for numerous countries relative to gross domestic product (GDP). New modes of working, increasing international tourism and the rise in international trade fuelled, in part, by e-commerce are making cross-border retail payments more and more important.[2] However, when it comes to settlement, which is predominantly conducted via correspondent banks and money transfer services (such as Western Union, MoneyGram and the like), there is significant room for improvement.[3] With this in mind, talk has now also turned to whether and how CBDC might contribute to efficiency gains.

Global decline in the number of correspondent banks between 2011 and 2019

%



Sources: SWIFT BI Watch and National Bank of Belgium.
Deutsche Bundesbank

… whilst, at the same time, banks are retreating from this business

For some years now, cross-border payments have additionally been suffering from the complete or partial retreat of financial institutions from correspondent banking activities in an effort to de-risk. Business relationships have been terminated, with the mounting costs of regulatory compliance being one of the motivating factors. The number of such links has fallen by almost one-fifth since 2011 and has made for significantly weaker competition. Particularly hard hit by the decline in correspondent banking relationships have been the regions of Africa, Latin America and Oceania, where some countries are heavily dependent on incoming remittances.[4]

Diminishing competitive intensity could ultimately lead to higher prices. There is also the risk that payment channels between certain countries will end up shut down altogether, leaving some regions entirely cut off from global payments. Last but not least, the dwindling of correspondent banking relationships could fuel recourse to payment channels that are less closely regulated and monitored (e.g. cash transfers or crypto-tokens).

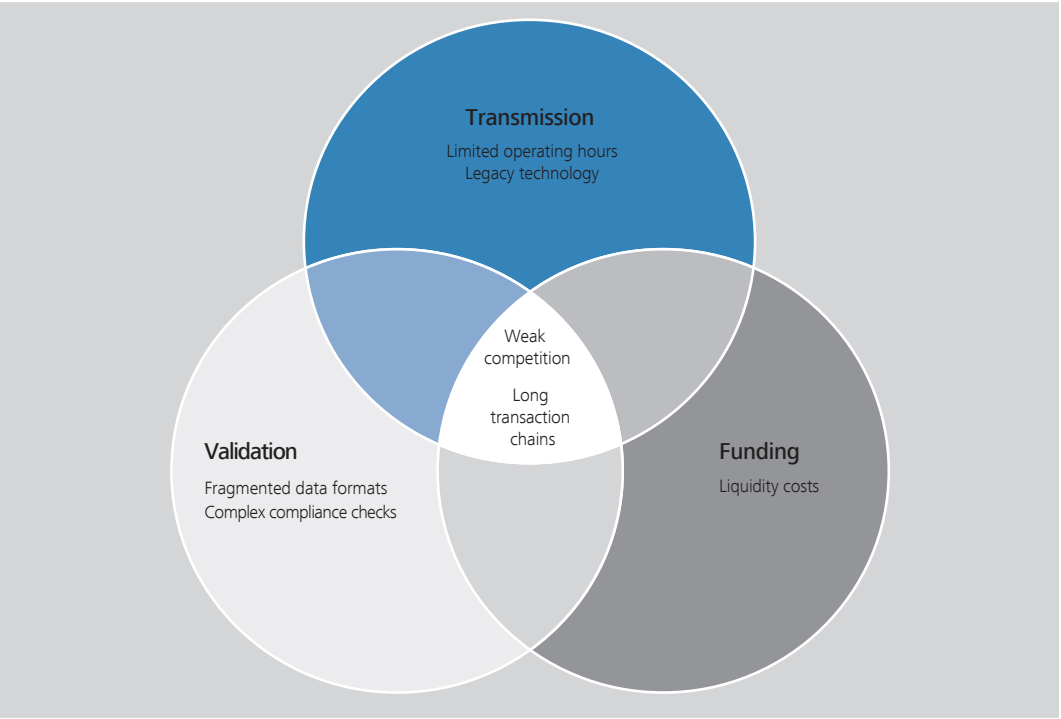
Frictions in cross-border payments and objectives for reducing them

Cross-border payments less efficient than domestic payments

Settlement of domestic payments has improved significantly in many countries in recent years; by contrast, cross-border payments are generally more expensive, slower, less transparent and are often only accessible to a smaller set of users than domestic payments. Having said that, this does not hold true for payments within the euro area, where – facilitated by a single currency – substantial investment has

1 See Rice et al. (2020).
2 See Financial Stability Board (2020a).
3 See Financial Stability Board (2020a).
4 See Rice et al. (2020).

Frictions in cross-border payments



Sources: Bundesbank chart based on Financial Stability Board (2020b).
Deutsche Bundesbank

gone into integrating national payment systems and creating a single European market for payments.

A number of frictions are causing these inefficiencies

As part of its work to enhance cross-border payments, the Financial Stability Board (FSB)[5] has pinpointed areas of friction that play a major role in the existing inefficiencies, which include high costs, low speed, limited access and limited transparency.[6]

- Fragmented and incomplete data: the use of fragmented data formats for the transmission of payment data means that important information – such as the know your customer (KYC) data essential for verification of the payer or recipient – sometimes does not get transmitted or is only communicated in truncated form. This makes automating payment processing more difficult and pushes up the cost of the transaction if the payment requires some manual processing.
- Complex compliance checks: different legal frameworks for the prevention of money laundering and terrorist financing lead to additional costs for the participants in the payment chain, and these are passed on to the end users.
- High liquidity costs: the complexity of the correspondent banking relationships between the institutions involved means the need for liquidity in various currencies is high; this entails commensurate costs.
- Frictions at settlement level: legacy technology, limited opening hours and long trans-

5 The FSB is an international body tasked with identifying any vulnerabilities in the international financial system and proposing and monitoring implementation of any action needed to address them. Its members include the central banks, supervisory authorities and finance ministries of the G20 countries as well as Hong Kong, the Netherlands, Spain, Singapore and Switzerland.
6 See Financial Stability Board (2021b). See also McKinsey and SWIFT (2018) for a look at the types and amounts of the various costs involved in cross-border payments.

G20 countries' targets for enhancing cross-border payments

Challenges	Payments segment		
	Payments between financial institutions (wholesale payments)	Payments between individuals and businesses (retail payments)	Remittances
Cost	No target set.	By the end of 2027, global average costs to be limited to 1% of payment amount. Costs no higher than 3% in any corridor.	By 2030, global average cost for a transfer of US$200 to be no higher than 3%. Costs no higher than 5% in any corridor.
Speed	By the end of 2027, 75% of cross-border payments to be settled within one hour, with the remaining 25% settled within one day.		
Access	By the end of 2027, all financial institutions to have at least one option (several, if possible) for engaging in cross-border payments.	By the end of 2027, all end-users to have at least one option for engaging in cross-border payments.	By the end of 2027, more than 90% of people (including those without a bank account) to be able to use electronic payment services for remittances.
Transparency	By 2027, all payment service providers to supply both the payer and the payee with a minimum standard of information regarding cross-border payments: (i) transaction costs (all costs along the payment chain, exchange rates and currency conversion fees); (ii) the expected time to deliver the funds; (iii) tracking of payment status; and (iv) terms of service.		

Source: Bundesbank table based on Financial Stability Board (2021).

Deutsche Bundesbank

action chains increase processing time and costs and make international payments less transparent.

Ultimately, these frictions also contribute to high barriers to market entry, resulting in the lack of competition in the cross-border payments space that we have already mentioned.

G20 have formulated targets to be achieved by 2027

In 2020, the G20 countries devised a roadmap with a view to addressing and eliminating the frictions described above. It consists of 19 building blocks that fall into a total of five focus areas. These include global harmonisation of regulatory frameworks, improvements to data quality, the expansion of existing payment infrastructures and the development of new infrastructures, as well as the definition of a common vision for enhanced cross-border payments.

As part of this common vision, concrete objectives for the various segments of cross-border payments have already been set, with the target of achieving them by 2027 (see the overview above). They address payments between financial institutions as well as retail payments, plus remittances, which are usually listed separately.

The goal is for payments by individuals and businesses to not cost any more than 1% of the transaction value and for the cost of remittances not to exceed 3% of the amount being transferred. Furthermore, 75% of all payments should be available to the payee within one hour. In addition, certain information is to be made transparent to payers and payees, such as the total cost of the transaction and the time it will take to settle.[7] Alongside the efforts of central banks and legislators, private sector initiatives can also help to achieve the objectives set by the G20 countries.[8]

7 See Financial Stability Board (2021).
8 For example, initiatives such as SWIFT gpi and SWIFT Go are intended to make for speedier and more transparent international payments.

Central bank digital currency – a new start?

CBDC is being explored throughout the world

The crux of the structural problem with international payments lies in the fact that such payments have to pass through several domestic payment systems with different designs (normally, the country where the payer is sending the funds from and the country of the payee). On top of this, a bridge (e.g. in the form of correspondent banking) is usually necessary as well to provide the technical connection between both systems and, where necessary, perform any currency exchange. Against this backdrop, investigations are currently under way looking at whether and how CBDC will open up options for creating new structures and thus the possibility of placing cross-border payments on a common footing.

Discussions around CBDC have gained noticeable momentum in the last few years. A survey conducted by the Bank for International Settlements (BIS) found that around 90% of the respondent central banks are exploring CBDC. One-third are at the pilot phase or already in development.[9] Work is going into both wholesale CBDC[10] and retail CBDC.[11] Initiatives are being motivated by different drivers in individual cases, with financial inclusion, monetary sovereignty and increased efficiency of domestic payments among the reasons cited. However, the desire for more efficient cross-border payment transactions is also playing into the central banks' efforts.

The Eurosystem is currently investigating the feasibility and possible design of a digital euro in the form of a retail CBDC. The ongoing investigation phase is set to run until October 2023 and reach a conclusion as to whether a digital euro should actually be developed and issued.[12]

Cross-border payments play a role in deliberations about CBDC

CBDC will not just be a means of payment; it will also require an infrastructure enabling issuance and circulation. For CBDC to be used in cross-border transactions, establishing interoperability between individual CBDC infrastructures is a must – in other words, they need to be able to work together as seamlessly as possible. Pilot phase CBDC projects being pioneered by central banks are concentrating on wholesale CBDC, with a focus on international payments in the interbank market (e.g. the Dunbar and mBridge projects described below). There are also initiatives in the private sector that are looking to create infrastructures for the cross-border use of wholesale CBDC (J. P. Morgan Onyx,[13] for instance).

Yet enhancing the cross-border payments landscape is also an important motivator behind retail CBDC projects, especially for emerging market and developing economies.[14]

Interoperability beyond the G20 roadmap is important

However, the majority of retail CBDC projects are currently geared more towards domestic payments, as the development of CBDC, even in the domestic context, raises numerous issues of a conceptual, technical and legal nature. Moreover, the timeframes that most of the projects are working with are unlikely to be compatible with the deadline set in the G20 roadmap. Nevertheless, it is still imperative that cross-border payments be included from the outset in the thinking going into designing CBDC. The new CBDC systems will only be able to aid in enhancing cross-border payments in future if they are interoperable. As well as generating stiffer competition by offering an additional settlement channel, CBDC and its unique technical design could enable efficiency gains

9 See Kosse and Mattei (2022).
10 In this context, wholesale CBDC describes a CBDC which is primarily designed for use in payments between credit institutions/financial market infrastructures.
11 Retail CBDC describes a CBDC which is designed to be used for payments by non-banks (e.g. the public, enterprises, public authorities).
12 The European Central Bank (ECB) is part of a consortium of eight central banks looking into the basic design of CBDC. Cross-border payments are one of the aspects feeding into their considerations. See Bank for International Settlements (2020).
13 J. P. Morgan Onyx is a blockchain platform for exchanging payments, digital assets and payment information.
14 See Kosse and Mattei (2022).

that are difficult – if not impossible – to attain using traditional instruments.

Ways in which central bank digital currency could mitigate frictions

Development of new structures can enable CBDC to act as a catalyst for smoothing frictions

Some of these efficiency gains can be achieved through the "accelerant" effect of new systems, as they promote a reinvention of the system landscape with the cross-border dimension in mind.[15] The scope for improving existing systems could be limited if expanding their functionality takes them to the bounds of what is technically feasible or if the costs of adapting them are higher than those of developing a new system. Meanwhile, the development of new payment settlement infrastructures can present a host of advantages that, over the medium term, outweigh the short-term investment costs. In many countries, CBDC systems are being developed precisely with the aim of increasing financial inclusion. This opens up the possibility of simultaneously expanding access to cross-border payments as well. Depending on how a given CBDC is designed, payment service providers that have so far been dependent on the services of banks could take on a greater role in the settlement infrastructure. Banks, too, could provide new services. For those banks that engage in international correspondent banking, the incentive to improve or participate in new systems would depend on how potential new income might measure up against the potential loss of previous business. Overall, competition at the customer interface could intensify and more innovative services could be offered.

New data standards and real-time settlement can increase efficiency

Newly developed systems can ensure efficient and transparent data processing through, for example, the application of uniform messaging standards.[16] This could cut down the need for (costly and time-consuming) manual intervention at the individual stages of the payment chain. In addition, transactions could be settled directly and in real time.[17] This would mean that payers and payees, in cross-border payments especially, could receive confirmation of successful settlement in a matter of seconds, which would minimise costs associated with risk monitoring and hedging. That would directly address two key challenges – a want of transparency and the high costs – where cross-border usability is concerned.

Integration of currency exchange functionality could generate significant efficiency gains

However, this would require currency exchange functions to be built into CBDC systems from the outset. This could be done, for example, via selected third parties or a market mechanism that is also incorporated into transaction settlement in real time.[18] Currency exchange in real time, enabled by the use of a wholesale CBDC, would – for example – serve to mitigate the issue of liquidity management in cross-border payments. In this way, wholesale CBDC could also support alternative private sector solutions for improving cross-border payments.

New systems for CBDC may encourage harmonisation of technical and legal standards

At the same time, new CBDC systems could encourage a harmonisation of legal frameworks or settlement standards. Besides the shared messaging standards[19] already mentioned, that might include, for example, more homogenised conditions for access to payment systems, harmonised rules for establishing settlement finality and extended operating hours for payment systems. CBDC could also prove to be a catalyst for digitalisation initiatives in the payments sphere.[20] In the European Union, for instance, CBDC forms part of the general digitalisation strategy, which also includes the interoperability of digital identities. In ths context, Member States have been called upon to cre-

15 See Bank for International Settlements (2021a).
16 For example, ISO 20022, which establishes a uniform standard for payment messages.
17 In correspondent banking particularly, the large number of parties involved in settlement mean that transactions can sometimes be hard to track. It is not possible for the payer and payee to check the whereabouts of a payment at all given moments. SWIFT has just recently successfully introduced the SWIFT gpi initiative, providing better tracking of transactions in the SWIFT network.
18 See European Central Bank (2021).
19 For example, ISO 20022 (https://www.swift.com/standards/iso-20022).
20 See Bank for International Settlements (2022b).

ate a toolbox for the provision of digital identity wallets, which could also be used for payments and the digital euro.[21]

Open interfaces could lend a significant boost to interoperability with other systems

The implementation of open interfaces would offer further advantages. From a technical perspective, this could be done using, say, application programming interfaces (APIs)[22] or trigger solutions,[23] enabling, for example, payment-versus-payment settlement in different currencies. Payment-versus-payment settlement in international transactions minimises settlement risk for buyers and sellers, since the funds denominated in different currencies change hands simultaneously.[24] With the help of such setups, CBDC systems could be made interoperable without a huge amount of effort, or could simplify international capital flows by means of linkages to securities settlement systems, for example. Open interfaces would also allow new CBDC systems in one country to be linked to traditional payment systems in another country. This could enable differences between countries and regions in terms of their development paths and the solutions that they are pursuing to be accommodated.

International central bank digital currency: multilateral cooperation instead of unilateral issuance

International CBDC: unilateral approach or multilateral cooperation

Many of the outlined opportunities of using CBDC to mitigate current frictions in cross-border payments assume a certain degree of international cooperation among central banks. A multilateral[25] approach of this nature could, in particular, see participating central banks issuing local-currency CBDC to be primarily held by residents of their currency area.[26] Cross-border payments would be made possible through the above-mentioned interoperability with other CBDC systems. By contrast, it would be possible to follow a fundamentally different approach, whereby central banks issue CBDC unilaterally and design it in such a way that it can be held across borders and be used internationally.

Unilateral approach: no need for interoperability between CBDC payment systems, …

Under a unilateral approach, cross-border payments would therefore be made within a single, closed payment system in a single, digital currency. There would be no need for interoperability with other CBDC systems in order to transfer money across national borders and no need for a currency exchange mechanism within the system. In practice, however, an option for converting foreign-currency CBDC into the respective national currency following a cross-border transaction would be required. Foreign payment service providers, for example, would also have to maintain foreign-currency accounts. This could result in additional costs for the end user, especially in situations where the foreign-currency CBDC could not be used to pay for goods and services abroad. A unilateral approach would therefore not be able to do away with a link to foreign payment systems entirely either; rather, such a link would be placed in the hands of private agents.[27]

… but associated with a number of economic risks

In addition, from an economic perspective, a number of risks place a question mark over the usefulness of a unilateral approach. At first glance, these primarily concern those countries in which CBDC would be used as a foreign currency but, on closer inspection, also the currency area issuing the CBDC.

If foreign-currency CBDC were to be used as a means of payment, for example a digital US

21 See European Commission: European digital identity (https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/european-digital-identity_en).
22 APIs are programming interfaces that allow regulated access to the systems of the respective parties. In Europe, these are regulated, inter alia, by the Payment Services Directive (PSD 2).
23 See Deutsche Bundesbank (2021a).
24 See Deutsche Bundesbank (2021b).
25 This approach includes a conceivable bilateral solution.
26 It may also make sense to make domestic CBDC available to non-residents spending time in the country (e.g. tourists).
27 Major card companies and IT service providers have already launched initial projects heading in this direction.

Consequences for the currency area using foreign-currency CBDC, …

dollar in the euro area, the domestic economy would be more affected by foreign economic developments. Model-based analyses, for instance, demonstrate that spillovers of economic shocks to the domestic economy are amplified in such cases. Domestic monetary policy would then have to respond to external developments to an increasing degree in order to stabilise economic and price developments at home.[28] At the same time, the scope for conducting effective monetary policy could be narrowed. To the extent that usage of CBDC as a means of payment also leads to the foreign currency being increasingly used as a unit of account at home, domestic monetary policy would lose force: if prices and wages are increasingly expressed in foreign currency, it will become more and more difficult for the central bank to use monetary policy measures to influence domestic prices and economic activity.[29] Not least for this reason, a central bank's unilateral effort to ensure that its own CBDC can be used internationally could be perceived abroad as undermining domestic monetary policy autonomy.

… and also for the issuing central bank, …

However, the expanded use of CBDC abroad would also have significant consequences for the central bank issuing the CBDC that can be used internationally. As CBDC is a liability of the issuing central bank, demand for CBDC from abroad would generally further extend its balance sheet. As a consequence, balance sheet risks would tend to increase. If the central bank were to issue CBDC against a foreign currency, for example, and build up foreign-currency holdings accordingly, its balance sheet would be more vulnerable to exchange rate fluctuations. In addition, such transactions would be the equivalent of foreign exchange market interventions at the expense of its own currency and, as such, subject to the commitments pledged by the G7 Finance Ministers and Central Bank Governors.[30] If, on the other hand, the central bank were to hold additional assets in its own currency, the value of its currency would tend to rise as a result of the additional demand from abroad. This, in turn, could have negative consequences for the competitiveness of the domestic economy.[31,32]

… especially if several central banks adopt a unilateral approach

If several central banks were to adopt a unilateral approach at the same time, this could ultimately also have a knock-on effect on their own ability to conduct monetary policy. If each country's CBDC is freely available abroad, foreign-currency means of payment would compete directly with domestic forms of money in all countries. Model-based analyses suggest that such currency competition could tend to lead to a convergence of interest rates

28 Ferrari Minesso et al. (2022) model the unilateral issuance of CBDC abroad, which can also be used for domestic payment purposes. As the foreign-currency CBDC increases the stock of foreign-currency assets held by domestic residents, any adjustment in response to exchange rate movements is stronger. This amplifies economic spillovers from the country issuing the CBDC and triggers a stronger domestic monetary policy response in the model.
29 Ikeda (2020) models such a "digital dollarisation" in which domestic prices and wages are denominated in foreign currency. Domestic monetary policy becomes less effective as digital dollarisation deepens, while the monetary policy of the foreign country that issues the digital currency used in the home country has a greater impact.
30 The communiqué from the G7 Finance Ministers' and Central Bank Governors' Meeting held in Bari, Italy, on 12 and 13 May 2017 states: "1. […] We reaffirm our existing G7 exchange rate commitments to market determined exchange rates and to consult closely in regard to actions in foreign exchange markets. We reaffirm that our fiscal and monetary policies have been and will remain oriented towards meeting our respective domestic objectives using domestic instruments and we will not target exchange rates for competitive purposes. We underscore the importance of all countries refraining from competitive devaluation […]". In the London communiqué of 5 June 2021, the G7 reaffirmed their adherence to these commitments.
31 Even in such a case, additional balance sheet risks may arise for central banks. This occurs when the stock of safe assets in its own currency is limited, necessitating the holding of increasingly risky securities.
32 If issuing CBDC were to lead to prices and wages being chiefly denominated in the domestic currency abroad, too, a currency appreciation would not have a significant impact on the domestic economy's competitiveness. This is because, for countries that predominantly use the same currency as a unit of account and as a means of payment, exchange rate fluctuations in another currency, which is hardly used for these purposes anymore, are generally less important.

between countries.[33] Instead of increasing their own international monetary and economic policy influence, such a system could actually narrow the scope for all participating central banks to conduct an independent monetary policy. The impossible trinity of international economic policy[34] could morph into a dilemma: although exchange rates could continue to fluctuate, were capital to move freely across borders, there would be less scope for independent monetary policy.

Restrictions could help to avoid risks, but they could run counter to the desired improvements

The above-mentioned risks associated with a unilateral approach could, in principle, be mitigated by designing the CBDC appropriately.[35] Indeed, debate in the euro area on potential caps for holding a possible digital euro (holding limits), for example, suggests that such restrictions may also be necessary in an international context. If, for example, the volume of domestic CBDC held abroad were to be strictly limited or if transactions were to be capped, the side effects would also be contained. Such restrictions, however, would run counter to the aim of using CBDC to address frictions in cross-border payments in the first place.

Multilateral cooperation approach preferred

For these reasons, instead of proceeding unilaterally, a multilateral approach could prove better suited to realising the potential of CBDC for cross-border payments. The participating central banks would then issue CBDC primarily in their own currency area,[36] but would make it interoperable across borders. Since large-scale holding or use of CBDC in foreign currency would not be envisaged, the macroeconomic risks of a unilateral approach would not arise.

These considerations apply to both retail CBDC and wholesale CBDC. For example, all current projects that use wholesale CBDC to simplify cross-border payments are characterised by strong multilateral approaches. These projects are also examining whether, for the purpose of simplifying payments, it would make sense to open up access to CBDC to foreign banks. If this were to happen, it would no longer be necessary to involve another bank in the recipient country. The experiments have generally shown that the issuing central bank would technically be able to obtain complete transparency about the CBDC held by foreign banks and implement various control and steering measures that enable a politically desired cap on wholesale CBDC circulating abroad. At present, however, in many countries access to central bank ac-

33 Benigno et al. (2022) model the impact of a global crypto-token that can be used internationally for payment purposes and thus competes with currencies issued by central banks. Because the token can be freely converted across national borders, changes in the value of the token in one of the countries have a direct impact on the exchange rate of the currencies to each other. Benigno et al. (2022) show that, while the currencies of the individual countries therefore do not compete directly, they may well do so indirectly. Under the model assumptions, this leads to a forced convergence of bond yields, i.e. the opportunity cost of holding money, between countries if the agents maintain equilibrium holdings of both the crypto-token and the respective local currency. In the model, this could only be avoided if central banks were to deviate from interest rate equality and lower their rates – which could lead them to the zero lower bound at which they would be unable to lower rates further. The outcome of this model can be applied to the context of international CBDC: if CBDC that can be used abroad were to compete directly with the respective domestic currency – not indirectly through a global crypto-token – interest rates would also tend to converge. The more similar the various forms of money in the model are, i.e. the more substitutable they are as means of payment from the user's perspective, the more this holds true.

34 In the economic literature of open economies, the impossible trinity describes the inability to simultaneously achieve the three potential objectives of free capital flows, fixed exchange rates and independent monetary policy.

35 In the model employed by Ferrari Minesso et al. (2022), described in footnote 28, for example, transaction restrictions for users of CBDC abroad mean that economic shocks from the country issuing the CBDC are transmitted less strongly across national borders.

36 Depending on the technical design, limiting the use of domestic CBDC to residents could be complex at an operational level, but so too would be implementing reliable identity and anti-money laundering controls for non-residents. If, for example, the CBDC is made available as a hardware token or in a purely decentralised network based on distributed ledger technology (DLT), it will be virtually impossible to restrict usage to a certain user group. By contrast, an account-based CBDC or a software token in a permissioned DLT network will enable usage to be restricted, for example, by refusing to open an account or set up a wallet as part of an identity check. Cross-border interoperability is likely to ensure that restricting usage to residents is not perceived as unduly restricting the free flow of capital. It will also be essential to ensure that the differing ways of treating various forms of central bank money do not give rise to a difference in value between cash and CBDC. The points outlined here also apply to the unilateral approach whereby, as mentioned above, at least a partial restriction of CBDC usage abroad would probably also be appropriate.

counts is restricted to domestic banks for risk, supervisory or monetary policy reasons.

Options for interoperable central bank digital currency

The concrete design of interoperability within the framework of a multilateral approach could take several forms.[37] The appropriate concepts can be roughly divided into three categories, although the distinction between them is not always clearly delineated:[38]

- compatible CBDC systems;
- interlinked CBDC systems;
- a single CBDC system.

Compatible systems

Compatible systems limit interoperability to compliance with common technical standards and harmonised legislation

The first option comprises CBDC systems that operate independently but are compatible. Interoperability is limited to compliance with common technical standards and, where necessary, harmonised legislation.[39] Common technical standards, such as those relating to message formats, cryptographic techniques and user interfaces, can reduce the operational burden on those involved.[40] Harmonised rules and standards simplify, for example, know your customer (KYC) and transaction monitoring processes. In principle, this applies both to CBDC and to private sector providers' means and methods of payment.

Despite these advantages, in practice there are major obstacles to overcome before systems are compatible, although these are probably smaller than those described below. This is because common standards can only be drawn up in joint coordination processes which, in turn, produce coordination costs. In addition, implementing common, uniform message standards can take years, as the example of ISO 20022 has shown. In 2004, the International Organization for Standardization (ISO) already published the 20022 standard for financial messages with the aim of harmonising cross-border payments and improving communication between stakeholders. In 2025 – 21 years later – it is due to be used across the board as a universal standard, at least in large-value payment systems.[41] At the same time, work on the G20 roadmap mentioned at the beginning of this article is aiming to harmonise the application of ISO 20022. Simply having a common standard does not necessarily mean that it is interpreted in the same way globally.

Yet at the same time this option still requires recourse to correspondent banking or alternative mechanisms in order to transfer a payment from one system to another.

Interlinked systems

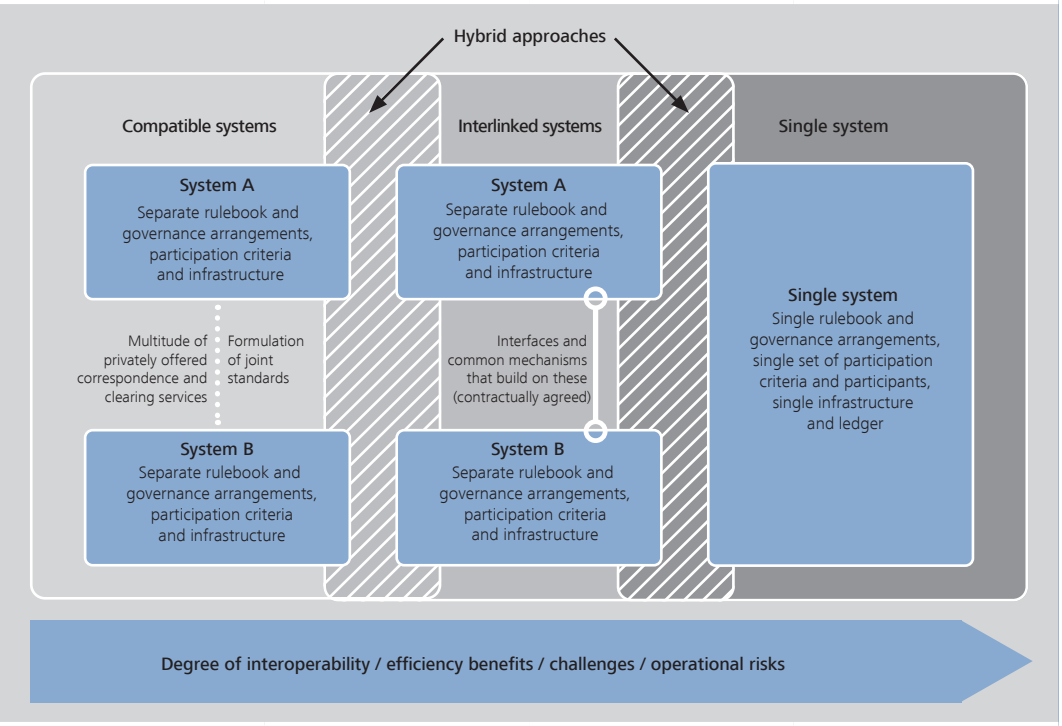
Systems can be linked using interfaces and common clearing mechanisms

The second option is to link various CBDC systems. This would enable a participant to make a payment from one CBDC system directly to a participant in another CBDC system without having to participate in the other CBDC system themselves. Such a set-up requires common technical interfaces and standards that enable information to be exchanged and thus payments to be made across different systems.

In addition, settlement could be simplified by using a central clearing agent to transfer payments to the other system or a common clearing mechanism. Such a clearing mechanism

37 Interoperability can and should, in principle, also be established with systems other than those for CBDC. However, this article focuses solely on cross-border cooperation between CBDC systems.
38 See Bank for International Settlements (2021a).
39 Central banks in six countries (Canada, Japan, Sweden, Switzerland, the United Kingdom and the United States), the ECB and the BIS have already begun to collaborate on fundamental questions regarding the design of CBDC; see BIS (2020). In future, initiatives such as these could form the basis of a cooperative approach or further-reaching joint activities.
40 In order to settle transactions, it may be necessary for at least one agent to participate in both systems as a liquidity provider.
41 As part of the TARGET2/T2S consolidation project, ISO 20022-compliant messages will be used across all TARGET services from November 2022 onwards.

Interoperability approaches for CBDC systems



Source: Bundesbank chart based on Auer et al. (2021).
Deutsche Bundesbank

could, for example, be designed in such a way that payments are booked via settlement accounts with a central agent. It would, for instance, keep accounts in different currencies for the participating central banks.[42] The alternative would be a decentralised approach in which each participating central bank holds accounts with all the other central banks. When currencies need to be exchanged, the central banks could either do this themselves or with the help of private sector intermediaries. This means that, if necessary, the central bank from whose currency area a payment request in CBDC is made would exchange the corresponding amount on the foreign exchange market and ultimately have it credited to the central bank in whose currency area the payee is located. The amount would then be credited to their account in local-currency CBDC.

The introduction of common mechanisms, such as technical interfaces, faces hurdles similar to those to agreement on uniform standards in the first option. It should also be borne in mind that the direct technical linking of the systems would require a much higher degree of detail within the necessary agreements.

Interlinked systems are being tested, for example, as part of the "Jasper-Ubin"[43] and "Jura"[44] projects, which look at the cross-border use of wholesale CBDC. Both projects show how transactions on interface-linked DLT systems can be synchronised over time to reduce, for instance, the risks – and thus the costs – of cross-border transactions involving multiple currencies. The Jura project successfully tested the cross-border purchase of a DLT-

42 See, for example, https://www.bundesbank.de/en/tasks/payment-systems/publications/amplus
43 The "Jasper-Ubin" project is being conducted by the Monetary Authority of Singapore and the Bank of Canada. See Accenture (2019).
44 The "Jura" project is being conducted by the Swiss National Bank, the Banque de France and the BIS Innovation Hub in collaboration with a private sector consortium. See Bank for International Settlements et al. (2021).

based security against wholesale CBDC in euro (delivery-versus-payment), followed by an exchange of the euro against wholesale CBDC in Swiss francs (payment-versus-payment). Technically, the security and the respective CBDC are issued on sub-systems, which in turn are linked via a common platform, with central banks retaining control over the issuance of their respective CBDC and the authorisation to participate in their sub-system.

Single system

Single CBDC systems in the form of multilateral platforms

The third option is based on the idea of a single CBDC system as a multilateral platform. As a general rule, it is not necessary to ensure compatibility or to link different CBDC systems. Instead, the concept provides for a single rulebook, a single technical system and a single set of participation criteria. Operators could be international institutions, a consortium of central banks, or a public-private partnership of central banks and the private sector. Given that the use of CBDC is to be seen as an integral component of this, platforms that are operated solely privately are unlikely to be an option.

Such a platform could have a single settlement currency or be capable of processing multiple currencies. If in the first case the single settlement currency were a national currency, such a system would have the properties of a unilateral approach. This system would thus also share the macroeconomic problems of unilateral approaches described above. If, on the other hand, a supranational settlement currency of its own were envisaged, fundamental questions would arise, such as what amount of such a currency would be issued and according to which rules. For these reasons, the current deliberations are focusing instead on multi-currency platforms. One advantage of using DLT could be that it would have a single technical platform with a single rulebook, yet still include decentralised elements, if necessary, and could provide some independent operational scope for the parties involved. Like in the Jura project, sub-networks could exist, but they would be more strongly integrated than systems linked via the common platform. Even in the case of multi-currency platforms, it would still be necessary to find a way for currency to be exchanged in cross-border transactions. One of several options is the automated market-maker using wholesale CBDC described in the box on p. 71.

Single systems are likely to offer their users greater operational functionality and efficiency than the options described above. Owing to the high degree of integration, a large number of the advantages of using CBDC in cross-border payments as described above could be achieved as no cross-system communication would be necessary for the individual transactions. At the same time, however, this increases the initial investment and the coordination costs between the parties involved in order to set up the system and to establish the requirements for common governance. The mBridge[45] and Dunbar[46] projects are practical examples of conceptual studies for single systems, i.e. multi-currency DLT platforms based on wholesale CBDC. The innovative settlement of cross-border and cross-currency transactions aims to reduce transaction costs, settlement times and operational complexity.

Hybrid systems

Forms combining different options could prevail

It is not always possible to distinguish clearly between the individual options, however. Hybrid approaches combining elements of the various options are therefore also conceivable in principle. For example, a single system could

45 The mBridge project is run by the BIS Innovation Hub Hong Kong Centre, the Hong Kong Monetary Authority, the Bank of Thailand, the Digital Currency Institute der People's Bank of China and the Central Bank of the United Arab Emirates. See Bank for International Settlements (2021b).
46 The Dunbar project is operated by the BIS Innovation Hub Singapore Centre, the Reserve Bank of Australia, Bank Negara Malaysia, the Monetary Authority of Singapore and the South African Reserve Bank. See Bank for International Settlements (2022a).

Automated market-makers

Apart from involving central banks or private intermediaries, currencies could, in principle, also be exchanged via automated market-makers (AMMs) on a common system for central bank digital currency (CBDC) based on distributed ledger technology.[1] AMMs could be integrated into the software protocol of such a system and automatically process currency exchange.

This involves banks provisioning an omnibus account with liquidity in the form of CBDC, which, in turn, can be withdrawn by other participants in exchange for other CBDC. This would mean liquidity would be centrally available to all participants, which could lead to a particularly good liquidity allocation within the system, without participants being dependent on intermediaries.[2] AMMs are already used as part of decentralised trading platforms in the decentralised finance sector. Nevertheless, practical problems may arise. One key challenge is in designing an appropriate incentive system that encourages banks to provide liquidity. On the one hand, banks would receive "liquidity tokens" for the funds that they have contributed, via which, in turn, the fees accrued for trades are distributed – as compensation and an incentive to provide liquidity. On the other hand, liquidity providers also bear the risk of price changes when it comes to re-exchanging the liquidity tokens for the funds that they have contributed. This is because trading transactions add an asset (e.g. a currency) to the omnibus account, while the respective other asset is withdrawn from it at the same time. The transaction therefore shifts the volume ratio of the tokens in the omnibus account. On the basis of an algorithm, these changes lead to opposing price changes. The price of the added asset decreases and the price of the withdrawn asset increases, whereby the user who carried out the exchange loses out (slippage loss). Prices therefore do not necessarily reflect supply and demand in the market, but rather encourage users to carry out opposing arbitrage transactions in order to restore the original volume ratio. The greater the shift an exchange transaction produces in the value ratio of a trading pair, the greater the slippage loss. It is therefore important that the omnibus account is sufficiently large, especially for less-traded currencies.[3] The incentive problem described above is one of the obstacles that would have to be removed before AMMs could potentially be used in a CBDC system.

1 See Bank for International Settlements (2022a).
2 See Bank for International Settlements (2022a).
3 See Deutsche Bundesbank (2021b).

be used within a region, which, in turn, is linked bilaterally to CBDC infrastructures in other countries. In practice, such hybrid systems could play a greater role in the future, especially because diverging national interests may make global agreement on a single approach appear unrealistic and possibly not even be desirable. It is more likely that various approaches will be implemented in a region, which could in turn be interlinked.

Examples of this can also be seen in some current projects. For example, the Jura project described above (interlinked systems) also contains elements of a common platform, which, in turn, is more consistent with the third option (single systems).

By contrast, although the mBridge project is based on a common platform, it also includes the possibility of linking this platform to other CBDC systems or other platforms. This, too, entails switching between interlinked and single systems. Future interoperability models may include different elements of each option in order to meet the needs of each currency area.

Potential and challenges for the cross-border use of central bank digital currency

All options could be an improvement over the current correspondent banking system

Compared with the current correspondent banking system, all three options promise significant improvements. In theory, interlinking CBDC systems may lead to faster, cheaper and more transparent cross-border payments. Depending on the design of the respective CBDC, this could also give additional user groups within the general public access to cross-border payments. At the same time, the degree of improvement depends on the version of the multilateral cooperation model that is chosen. The overview on p. 73 summarises the potential that each of the options for interoperable CBDC offer compared with the current correspondent banking system.

The degree of interoperability may also increase efficiency gains, challenges and risks

The degree of interoperability and potential efficiency gains will increase, whether in compatible, interlinked or single systems. However, as the degree of interoperability rises, so too will the complexity of the systems and thus the difficulty of implementing them. This will hold even if the new CBDC systems are only designed as compatible systems (as in the first option). It would need to be clarified, for example, which standards (e.g. messaging standards or standards for the transmission of data for anti-money laundering purposes) in payment processing are to be migrated from the existing systems and which ones are to be abandoned in favour of new, internationally compatible standards. The introduction and implementation of these international standards could pose major challenges for system users and would entail considerable costs. In addition, divergent national interests or different perspectives may hinder closer international cooperation and significantly delay work on the common standards or even bring it to a halt.

In-depth international cooperation can restrict each country's autonomy

To a certain extent, the in-depth international cooperation required for the interlinked and single systems is associated with ceding autonomy in favour of common governance structures, which represents an additional obstacle to linking payment systems.[47] This hurdle can be circumvented or at least mitigated by factoring at an early stage the cross-border use of CBDC systems into the development of new CBDC systems, before their development becomes too divergent in different jurisdictions.

Another obstacle could be the relatively high investment costs for new systems, which might be incurred in addition to the ongoing costs of the current systems. However, elements of existing systems could also be reused, possibly after modification. In this respect, too, it is probably advisable to incorporate the thinking behind the development and operation of a common platform into a country's own project activities at an early stage, as it would become

47 See Bank for International Settlements (2021a).

Potential improvements resulting from alternative approaches to interoperable CBDC systems

Frictions in the current correspondent banking system	Potential improvements		
	Compatible systems	Interlinked systems	Single system
High operational costs and (settlement) risks due to multiple bilateral account relationships and balances	Possible reduction in number of business relationships could reduce costs	Common clearing mechanism and settlement in real time could reduce costs and risks	Final settlement in real time and, where applicable, using liquidity-saving mechanisms could reduce costs and (settlement) risks
Different operating hours	Same operating hours if operating 24/7		
Different communication standards	Compatible communication standards can reduce data loss	Harmonised communication standards more or less eliminate data loss	Single communication standard eliminates data loss
Limited transparency on exchange rates and fees	Common calculation of exchange rates could increase transparency	High transparency if common mechanisms, e. g. for currency exchange, are used	
Limited transparency on status of transactions	Transparency depends on the degree of compatibility	High transparency if final settlement is in real time	
Restricted access	Potentially enhanced access to cross-border payments depending on CBDC's access model		

Source: Bundesbank table based on Auer et al. (2021).

Deutsche Bundesbank

more unlikely to achieve such a platform once national CBDC systems have already been introduced across the board.

Different legal and regulatory frameworks can make interoperability more difficult

Moreover, differences in legislation will be a major impediment to the cross-border interoperability of new payment systems. There are differences between countries not only in terms of anti-money laundering and combating the financing of terrorism (AML/CFT), but also regarding the rules governing risk management, cyber security and the handling of personal data. International harmonisation of legal frameworks could have a significant impact on national legal systems that is politically either difficult or impossible to deliver and which is also not offset by the prospect of more efficient cross-border payments.

Spillover effects can create risks through stronger interconnectedness

Another critical factor when setting up interoperable infrastructures is the close interconnectedness between systems in different economic areas. Facilitated by tight integration between system users, for example, the effects of localised crises in individual economic segments or of participant defaults could spread globally (spillover effects). Faster transaction processing due to closer links or integration is also associated with higher operational risk. As a general rule, the decision regarding the desired degree of interoperability therefore always requires a detailed risk analysis.

Geopolitical aspects need to be considered

Last but not least, greater cooperation always involves an increase in dependencies, which may also have political implications. For example, when using a single system, clear and binding rules for contingency procedures are required, which may lead to the mandatory exclusion of participants from the system in an emergency. Potential conflict could also arise when implementing financial sanctions of various types if they are assessed and implemented differently by the cooperating countries.

Outlook and conclusion

CBDC will likely come too late to make a significant contribution to achieving the G20 objectives …

The work initiated by the G20 countries aims to significantly improve the efficiency of cross-border payments, which would require considerable efforts in a relatively short period of time. The corresponding measures should address as many of the weaknesses identified by the G20 countries as possible. In particular, purely technical approaches will not have a lasting impact unless they are accompanied at the same time by a globally consistent implementation of the relevant legal regulations and an improvement in the exchange of information.

The specific objectives that have been formulated so far are supposed to be achieved by 2027. If this timetable is kept, CBDC is unlikely to make any material contribution, as most CBDC projects are at a very early stage and will not be able to unfold much of their potential in cross-border payments during this period. In this respect, it will also be necessary to place a high priority on exploring other private sector approaches, such as the linking of real-time retail payment systems. In recent years, many countries have invested in setting up such payment systems, often based on international standards. In countries with strong political and economic integration, the use of common technical infrastructures for the settlement of cross-currency payments in real time could also be considered outside of CBDC. Such an approach is currently being investigated by the Eurosystem in its efforts to improve TARGET Instant Payment Settlement.[48]

… but it is still worth unlocking the cross-border potential of CBDC

Nevertheless, CBDC will offer the opportunity to increase the speed of settlement of cross-border payments in the medium term, to reduce transaction costs and to intensify competition in international payments. CBDC systems will be designed to provide easy access to CBDC and are likely to increase financial inclusion in many countries, thereby broadening the scope for participation in payment transactions. CBDCs could also unfold their potential in cross-border payments in conjunction with other technologies. For example, linked eID ecosystems could reduce frictions with regard to compliance with financial sanctions as well as AML/CFT measures.

Multilateral cooperation preferable to a unilateral approach

A multilateral approach thus offers the best chance for CBDC to help comprehensively reduce the frictions currently constraining cross-border payments. Various central banks would collaborate in this endeavour: they would issue CBDC, which would held primarily in their own currency area but would allow cross-border payments through interoperability with other CBDC systems. This seems more advantageous than the option of individual central banks making their CBDC usable for cross-border payments unilaterally. Moreover, such an approach would not resolve existing frictions across national borders. If central banks were to even design their own CBDC in such a way that large amounts of it could be held abroad, this would harbour a number of economic risks – not least for themselves. And ultimately, such an approach could be seen as an attempt to create monetary policy or technological dependencies.

Costs of coordination make a globally uniform solution unrealistic

By contrast, were individual central banks to cooperate with each other, the question arises as to how CBDCs should be made interoperable. Any efficiency gains from a higher degree of integration generally come with higher coordination costs. Moreover, a growing degree of integration always implies the ceding of sovereignty, which means that efficiency gains must be weighed against other policy objectives. For example, a single, common worldwide CBDC platform involving a large number of currency areas from the outset is difficult to imagine at this juncture.

However, the combination of various, possibly hybrid approaches could be a more viable option. A high degree of interoperability is likely to be achievable among currency areas that are

48 See European Central Bank (2021).

A combination of hybrid approaches could provide the necessary flexibility

closely linked economically and politically, where the willingness to coordinate and compromise is comparatively high and the potential for conflict is limited. Regionally highly integrated systems of this kind could then be made compatible with one another or be interlinked. Ultimately, this would cover a large number of currency areas without having to enter into a multitude of bilateral cooperation agreements. That said, it remains crucial that interoperability has to be taken into account from the outset when designing CBDC.

List of references

Accenture (2019), Jasper Ubin Design Paper: Enabling Cross-Border High Value Transfer Using Distributed Ledger Technologies, https://www.accenture.com/_acnmedia/pdf-99/accenture-cross-border-distributed-ledger-technologies.pdf

Auer, R., P. Haene and H. Holden (2021), Multi-CBDC arrangements and the future of cross-border payments, BIS Papers, No 115, https://www.bis.org/publ/bppdf/bispap115.pdf

Bank for International Settlements (2022a), Project Dunbar – International settlements using multi-CBDCs, https://www.bis.org/publ/othp47.pdf

Bank for International Settlements (2022b), Options for access to and interoperability of CBDCs for cross-border payments, Report to the G20, https://www.bis.org/publ/othp52.pdf

Bank for International Settlements (2021a), Central bank digital currencies for cross-border payments, https://www.bis.org/publ/othp38.pdf

Bank for International Settlements (2021b), Inthanon-LionRock to mBridge, https://www.bis.org/publ/othp40.pdf

Bank for International Settlements (2020), Central bank digital currencies: foundational principles and core features, Report no 1 in a series of collaborations from a group of central banks, https://www.bis.org/publ/othp33.pdf

Bank for International Settlements, Banque de France and Swiss National Bank (2021), Project Jura – Cross-border settlement using wholesale CBDC, https://www.bis.org/publ/othp44.pdf

Benigno, P., L. M. Schilling and H. Uhlig (2022), Cryptocurrencies, Currency Competition, and the Impossible Trinity, Journal of International Economics, https://doi.org/10.1016/j.jinteco.2022.103601

Deutsche Bundesbank (2021a), Digital money: options for payments, Monthly Report, April 2021, pp. 57-75.

Deutsche Bundesbank (2021b), Crypto tokens and decentralised financial applications, Monthly Report, July 2021, pp. 31-48.

European Central Bank (2021), The Eurosystem's retail payments strategy, https://www.ecb.europa.eu/pub/pdf/other/ecb.eurosystemretailpaymentsstrategy~5a74eb9ac1.en.pdf

European Central Bank (2015), Ninth survey on correspondent banking in euro, https://www.ecb.europa.eu/pub/pdf/other/surveycorrespondentbankingineuro201502.en.pdf

Ferrari Minesso, M., A. Mehl and L. Stracca (2022), Central Bank Digital Currency in an Open Economy, Journal of Monetary Economics, https://doi.org/10.1016/j.jmoneco.2022.02.001

Financial Stability Board (2021), Targets for Addressing the Four Challenges of Cross-Border Payments, https://www.fsb.org/wp-content/uploads/P131021-2.pdf

Financial Stability Board (2020a), Enhancing Cross-border Payments, Stage 1 report to the G20, https://www.fsb.org/wp-content/uploads/P090420-1.pdf

Financial Stability Board (2020b), Enhancing Cross-border Payments, Stage 1 report to the G20 – Technical background report, April 2020, https://www.fsb.org/wp-content/uploads/P090420-2.pdf

G7 (2021), G7 Finance Ministers and Central Bank Governors Communiqué, 5 June 2021, London, United Kingdom, https://www.gov.uk/government/publications/g7-finance-ministers-meeting-june-2021-communique/g7-finance-ministers-and-central-bank-governors-communique

G7 (2017), Communiqué G7 Finance Ministers and Central Banks' Governors Meeting, Bari, Italy, 12-13 May 2017, http://www.g7italy.it/sites/default/files/documents/G7%20FM%26CBG%20-%20Bari%20Communiqu%c3%a9/index.pdf

Ikeda, D. (2020), Digital Money as a Unit of Account and Monetary Policy in Open Economies, IMES Discussion Paper Series 20-E-15, Institute for Monetary and Economic Studies, Bank of Japan.

Kosse, A. and I. Mattei (2022), Gaining momentum – Results of the 2021 BIS survey on central bank digital currencies, https://www.bis.org/publ/bppdf/bispap125.htm

McKinsey and SWIFT (2018), A vision for the future of cross-border payments, https://www.swift.com/node/185286

Rice, T., G. von Peter and C. Boar (2020), On the global retreat of correspondent banks, BIS Quarterly Review, March 2020, https://www.bis.org/publ/qtrpdf/r_qt2003g.htm

Government debt in the euro area: developments in creditor structure

Euro area government debt amounted to 96% of gross domestic product (GDP) at last count. This article describes how creditor structure has evolved in recent years. The focus is on the euro area as a whole and on the four largest Member States, Germany, France, Italy and Spain.

Creditor structure has shifted significantly since 2015 as a result of the Eurosystem's asset purchases. By the end of 2021, the European Central Bank (ECB) and the national central banks had bought government debt in a magnitude of 30% of euro area GDP. Meanwhile, the volume of debt held by other creditors fell. In relation to GDP it was consequently also lower than before the financial and economic crisis. Indebtedness to euro area banks and non-euro area creditors, in particular, has been on the decline since then.

In the large Member States, the respective national central banks, especially, acquired government bonds. As in the euro area as a whole, this was accompanied by a simultaneous decline in the weight of domestic banks and foreign creditors. Overall, government interest payments (including any risk premia) largely flow to domestic recipients, with a good portion going to the national central banks. Profit distributions by central banks mean that interest payments ultimately flow back to the government. De facto, the government thus pays the short-term, risk-free deposit rate for these bonds rather than the bond rate. This channel renders public finances more sensitive to changes in central bank interest rates. Meanwhile, the remaining bonds are less sensitive to interest rates because the residual maturities of government bonds have lengthened in recent years.

Commercial banks are the second-largest creditor sector in the euro area after central banks. Their weight as creditors has developed differently in the individual Member States. Compared with the period before the financial and economic crisis, banks in Germany currently hold less national government debt (securities and loans, as a percentage of GDP). In France, holdings were stable, overall, during this period. In Spain and Italy, meanwhile, they increased significantly on balance. A similar development is seen for the ratio of home-country government debt held by banks as a percentage of national banking systems' own funds. The nexus between national banking systems and their home country harbours risks to financial stability. Reducing these risks seems particularly important if risk sharing in the European banking union is to be stepped up. Reducing the regulatory privileges that government debt enjoys on bank balance sheets would reduce these risks. This proposal has, however, found no political majority to date.

Introduction

Focus on creditor structure of government debt

This article focuses on the creditor structure of euro area government debt. A brief outline will also be given of the structure of debt instruments. The euro area is analysed as a whole and, by way of example, the four largest euro area countries – Germany, France, Italy and Spain. Among the creditor groups, the Eurosystem (the ECB and the national central banks) and the national banking systems especially are looked at in greater detail. These groups have played a key role in shaping developments in recent years.

Various data sources are used

Different data sources are used in the various sections of the article. In some cases, their definitions differ, and the data are also obtained from different sources. The data sources, their statistical definition and the associated ambiguities are explained on pp. 82 and 83. The main data base used for creditor structure has been available since the middle of the last decade.

Government debt: size, instruments and residual maturity

High debt ratio in the euro area

At the end of 2021, the total government debt of all euro area countries amounted to 96% of the euro area's GDP. From a starting point of 70% at the end of 2008, the debt ratio had risen sharply during the financial and sovereign debt crisis. After declining moderately until 2019, the ratio jumped back up during the coronavirus pandemic. It reached 97% at the end of 2020, its highest level since the start of monetary union (see the upper chart on p. 79).[1]

Long-term debt dominates

Debt instruments predominantly constitute medium to long-term liabilities. They have become even more significant over time:[2] the percentage of liabilities with a maturity of more than one year in total debt rose from 85% at the end of 2008 to almost 90% at the end of 2021. The list is topped by debt securities (especially bonds), which are generally marketable. They have significantly greater weight than loans, which banks, in particular, issue to governments. State liabilities from currency and deposits represent only a small share of government debt, at around 3%. These are liabilities related to government coin issuance or deposits made with the government.

Large differences in national debt ratios

The individual Member States' debt ratios vary widely (see the lower chart on p. 79). Figures range from 18% in Estonia to 193% in Greece. The structure is mostly dominated by long-term debt in the form of securities. The main exceptions are those countries that still have significant levels of long-term assistance loans (Greece, Portugal and Cyprus).[3] The assistance loans were granted in connection with the sovereign debt crisis.

Increase in bonds' average residual maturity

The average residual maturity of government securities debt has increased in recent years (see the chart on p. 80 for the four large Member States). Changes in interest rates therefore have a smaller impact on government finances, as interest payments are, for the most part, fixed for longer periods.[4] After the onset of the financial and economic crisis, residual maturities had mostly fallen markedly.

---

1 In addition, the EU level took out debt for the Support to mitigate Unemployment Risks in an Emergency (SURE) programme and the Next Generation EU (NGEU) programme. The EU Member States ultimately shoulder the interest and principal payments for this debt. Where these funds are used to finance grants to the EU Member States, they are not included in national debt levels. For example, grants totalling €390 billion (in 2018 prices) are planned under the NGEU programme. This is equivalent to roughly 3% of the EU's GDP in 2021. For more detailed information, see Deutsche Bundesbank (2020, 2022a).

2 Classification into short-term and long-term liabilities according to Eurostat's Government Finance Statistics: short-term liabilities with original maturities of up to one year, long-term liabilities with original maturities of more than one year or without details on maturity.

3 Greece was also issued with bilateral assistance loans by the other euro area Member States (Greek Loan Facility). In addition, the Member States most affected by the sovereign debt crisis received financial assistance from the European Commission (under the European Financial Stabilisation Mechanism, EFSM) and the International Monetary Fund.

4 In individual cases, variable interest rates may also have been agreed for long maturities. On the other hand, debtors can also use derivatives to secure fixed interest rates beyond the residual maturity.

Government debt: structure of creditors[5]

A look at the euro area as a whole

In the middle of the last decade, euro area banks and foreign creditors represented the largest creditor groups

In the middle of the last decade, almost one-third of euro area countries' government debt was held outside of the euro area (see the chart on p. 81). Looking at the domestic euro area sectors, monetary financial institutions dominated (hereinafter referred to as "banks", excluding central banks). They also held almost one-third of total debt. They were followed by insurance corporations and pension funds (13%) as well as other financial institutions such as investment funds (9%). Looking at the euro area as a whole, households, international institutions, the Eurosystem and non-financial corporations played only a minor role as creditors.

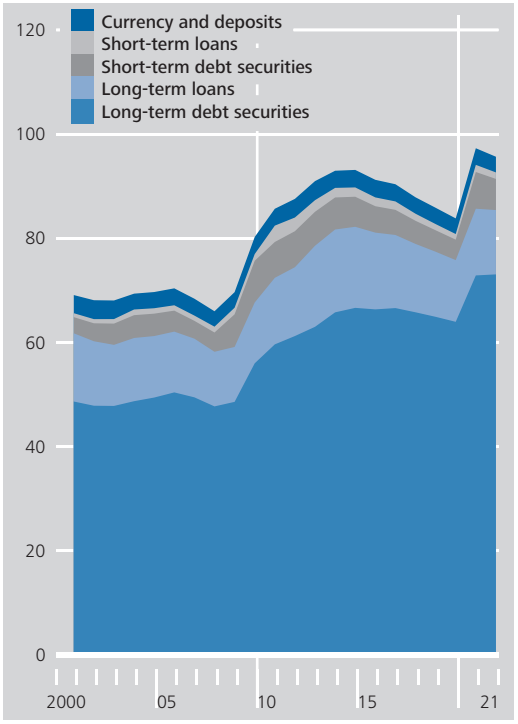
From 2015, large-scale government bond purchases by the Eurosystem central banks

Creditor structure has shifted considerably since then, mainly as a result of the Eurosystem's large-scale government bond purchases.[6] At the end of 2021, the Eurosystem's holdings of government bonds issued by Member States amounted to around €3.6 trillion, or 30% of euro area GDP.[7] The Eurosystem's holdings were therefore significantly larger than the increase in Member States' debt since the end of 2014, which amounted to €2.3 trillion.[8] Since

5 The data used have been consistently available since the fourth quarter of 2013.
6 The Eurosystem purchased public sector bonds on a large scale through the public sector purchase programme (PSPP) from March 2015 and the pandemic emergency purchase programme (PEPP) from March 2020. National central banks predominantly acquired bonds issued by their own Member State. The ECB bought around 10% of the purchase volume. Purchases by the national central banks are not subject to risk sharing, and the national central bank receives the interest income. The ECB purchases are subject to risk sharing. For information on the rationale behind and the design of the various programmes, see the Official Journal of the European Union L 39 (2020a) and the Official Journal of the European Union L 91 (2020b).
7 This does not include bonds purchased by supranational institutions. Including these "supras", holdings total around €4 trillion or 33% of euro area GDP. Holdings of government bonds that the Eurosystem central banks acquired in line with the Agreement on Net Financial Assets (ANFA) are likewise not included.
8 Increase in Maastricht debt levels at nominal values.

Government debt ratio of the euro area by instrument

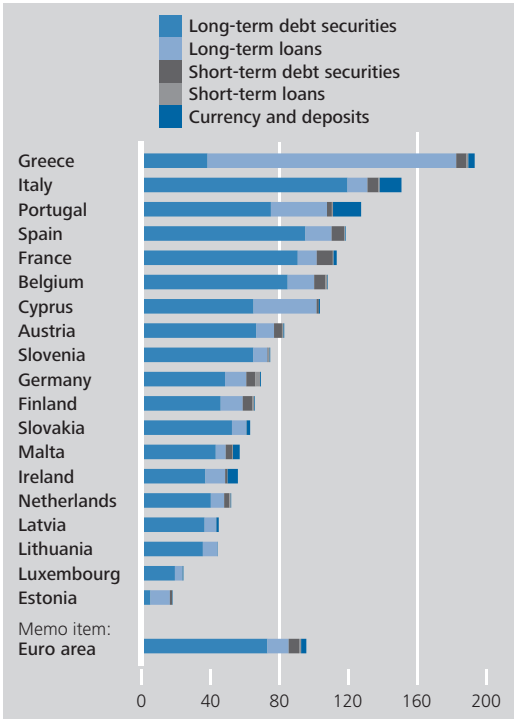
%, year-end data



Source: Eurostat.
Deutsche Bundesbank

Government debt ratios of the euro countries by instrument

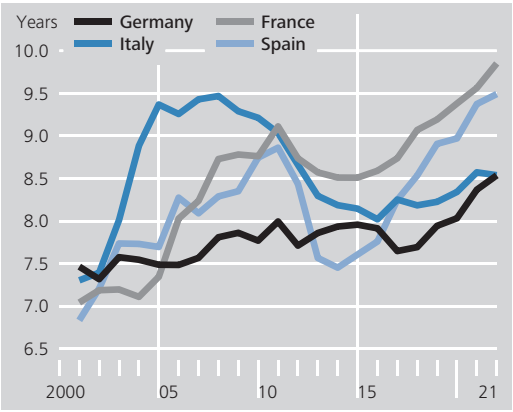
%, data as at end-2021



Source: Eurostat.
Deutsche Bundesbank

Residual maturity of central government debt securities

Data as at year-end



Source: Bloomberg (all government bonds).
Deutsche Bundesbank

the onset of the financial and economic crisis, Eurosystem holdings account for around three-quarters of the rise in debt (+€5.0 trillion since the end of 2008). As a percentage of GDP, debt not held by the Eurosystem is lower than before the financial and economic crisis.

Eurosystem largest creditor

The Eurosystem was thus by far the largest creditor sector at the end of 2021 (see the upper chart on p. 81). For almost all other sectors, the holdings of government debt fell in absolute terms and as a percentage of GDP as compared with the end of 2014. Insurance corporations and pension funds are the only exception. The decline in debt to foreign creditors (non-euro area) was particularly significant, followed by banks and other financial institutions within the euro area.

A closer look at Germany, France, Italy and Spain

Different creditor structures in the four large Member States

A more detailed description of developments in the four large Member States Germany, France, Italy and Spain is given below. Developments in their government debt ratios and creditor structures have diverged. They also differed significantly at the end of 2021.

Differences in the level and evolution of debt ratios

The debt ratios in the four countries rose considerably from different levels following the onset of the financial and economic crisis (see the lower chart on p. 81). By the time the coronavirus pandemic broke out in 2020, Germany's debt ratio was well below its level of end-2008 again. During the same period, the debt ratio in France continued to rise moderately, whereas it stagnated at the higher level in Spain and Italy. During the coronavirus pandemic in 2020 and 2021, all countries experienced a renewed sharp rise in their debt ratios. The German debt ratio was only 4 percentage points higher at the end of 2021 than at the end of 2008. In France, it had risen by 44 percentage points, in Italy by 45 percentage points and in Spain it was 79 percentage points higher (starting from a moderate level).

Prior to 2015, the main holders of government debt were foreign creditors in Germany and France and domestic banks in Italy and Spain

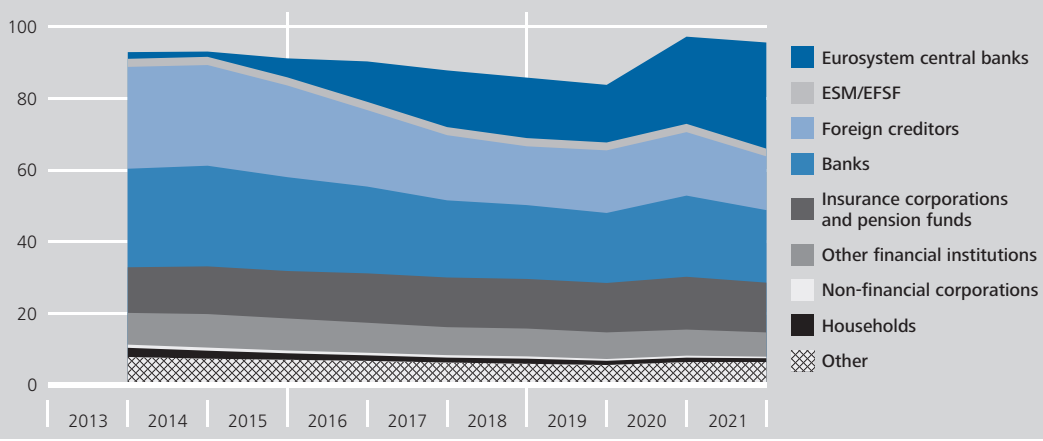
The table on p. 85 contains detailed information on the creditor structure of the four countries. It shows the holdings of the creditor groups both in relation to total debt and in relation to national GDP. In Germany and France, foreign creditors (in this case, creditors from outside the respective Member State excluding the Eurosystem central banks) held just under 60% of government debt in 2014. Domestic banks were the second-largest creditor group in Germany, holding around one-quarter of government debt, while the figure for France was around one-fifth. In Italy, meanwhile, external debt stood at just over one-third and in Spain at just under 40% of government debt. At close to one-third, debt to domestic banks was only moderately lower in these countries.

Creditor structure has shifted significantly since the start of the asset purchase programmes

In 2015, the large-scale asset purchases by the Eurosystem central banks started and altered creditor structures considerably (see the table on p. 85, chart on p. 84). At the end of 2021, asset holdings under the purchase programmes amounted to 39% in Germany, 27% in France, 25% in Italy and 32% in Spain, as a percentage of the respective government debt. In Germany and France, meanwhile, the shares held by foreign creditors (excluding the ECB, which is included under the Eurosystem in this presenta-

Creditor structure of the government debt of the euro area, by sector*

As a percentage of euro area GDP, year-end data



Sources: Eurostat, ECB, ESM and Bundesbank calculations. * For the methodology, see the box on p. 82.
Deutsche Bundesbank

tion), in particular, fell. They previously held an especially large percentage. In Italy, the shares of all other creditor groups fell relatively broadly. In Spain, the percentage held by domestic banks, in particular, dropped.

Eurosystem holdings (as a percentage of the respective GDP) range between 27% for Germany and 38% for Italy and Spain

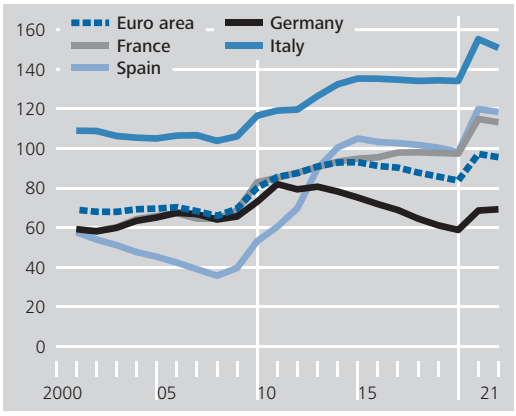
The macroeconomic relevance can be seen in holdings relative to national GDP. At the end of 2021, the Eurosystem's (Bundesbank's and ECB's) holdings of German government debt acquired for monetary policy purposes amounted to 27% of (German) GDP. The equivalent figure for France was 31%, while it was 38% for both Italy and Spain.[9] Everywhere except for France, the holdings accumulated by the Eurosystem exceeded the increase in debt over the same period.[10] For the pandemic years 2020 and 2021, the build-up of Eurosystem holdings in the four Member States was roughly in line with the increase in debt.[11]

Interest payments pass through to foreign creditors to only a limited extent

The creditor structure can be used to determine the extent to which government interest expenditure remains within a country or goes beyond its borders. This also applies to the risk premia that this expenditure contains. Debt held by foreign creditors as a percentage of GDP gives some indication of the flow of inter-

Government debt ratios of selected Member States

%, year-end data



Source: Eurostat.
Deutsche Bundesbank

9 The restrictions regarding the interpretation and presentation of the Eurosystem's share mentioned on p. 82 apply. The figures diverge because the purchases under the PSPP and PEPP are based on the Eurosystem's capital key. This is made up of the respective share of a Member State in the total population (currently for 2018) and euro area GDP (currently the average for 2013-17), whereby both have equal weighting. In 2021, the ratio of capital key to GDP share was 90% for Germany, 102% for France, 119% for Italy and 120% for Spain.

10 At the end of 2021, Germany's holdings of government bonds amounted to around €970 billion, whereas its debt level rose by €270 billion between 2014 and 2021. For France, the figures are around €760 billion and €770 billion respectively, for Italy around €670 billion and €470 billion respectively, and for Spain around €460 billion and €340 billion respectively.

11 For Germany and Italy, the ratio between the increase in Eurosystem holdings and the rise in debt was 109% over this period, for Spain it was 100%, and for France it was 82%.

Information on the data and their statistical definition

Various data sources were combined in this article so as to provide the most comprehensive picture possible. The data are not fully compatible in some cases, nor are they uniformly defined, leading to ambiguities in some places. However, this is unlikely to have a significant impact on the fundamental developments presented. The last date for which the data used are jointly available is the end of 2021.

Data on the volume and instrument structure of government debt are taken from Eurostat's Government Finance Statistics (GFS). This is general government debt (according to the national accounts) at nominal values, which is also referred to as the Maastricht debt level.[1]

Data on the creditor structure of securities are taken mainly from the Securities Holdings Statistics (SHS) and the Securities Holdings Statistics by Sector (SHSS) of the European Central Bank (ECB). These comprise the bond holdings of the aggregate sectors for the euro area as a whole and for individual Member States, excluding central banks in each case. Consistent data are available for these from the fourth quarter of 2013. All figures are nominal.

These securities data are supplemented by data on the creditor structure of banks' credit claims (nominal values), taken from the ECB's balance sheet statistics. No separate information on holders is available for credit claims on general government not held by banks or government liabilities from currency and deposits (6% and 1%, respectively, of total debt in the euro area). These categories are reported under "Other".

These data are supplemented by data from the European Stability Mechanism (ESM) on the outstanding financial assistance provided under the European Financial Stability facility (EFSF) and the ESM (nominal values).

Data on the government bonds of Member States held by the Eurosystem are taken from publications by the ECB and the national central banks. The holdings reported include all purchases of public sector bonds issued by Member States under the monetary policy asset purchase programmes (purchases of bonds issued by supranational institutions are not taken into account in this article). However, in addition to government bonds issued by Member States, the Eurosystem also purchases bonds issued by national development banks and other national public undertakings. The latter are not usually included in national government debt. In this respect, the Eurosystem's actual holdings of government debt (as defined by the GFS) are likely to be lower than reported here (this is probably the case for Germany, at least).

Moreover, the holdings of the Eurosystem are measured differently to the other figures reported in this article. For example, only holdings under the Securities Markets Programme are published at nominal values. By contrast, holdings under the significantly larger purchase programmes from 2015 onwards are reported according to balance sheet data. Wherever the Eurosystem has purchased securities at prices above the nominal value, its share is thus overstated (this is likely to have been the case in most instances).

However, the share of Eurosystem central banks as creditors of government bonds is underreported in a different context. Specifically, the Eurosystem's reported shares do not include government bonds purchased by national central banks for their own portfolios outside the monetary policy asset purchase programmes (based on the Agree-

1 See Deutsche Bundesbank (2018).

ment on Net Financial Assets (ANFA)).[2] Data on the holdings of domestic government bonds that these contain are not published.

Government bonds held abroad are not explicitly recorded in the creditor structure statistics, which are the main source used here. This is because securities depositories from non-euro area countries are not subject to reporting requirements. For this reason, the category of government debt held abroad was calculated and reported as a residual figure in this article. This is the result of the difference between the outstanding national debt securities according to the GFS and the sum of the holdings reported in the SHS and SHSS holdings statistics as well as the holdings of the Eurosystem (again, excluding supranational bonds).[3] The aforementioned ambiguities stemming from the different statistical definitions of the data (in particular with regard to the Eurosystem's holdings) affect this residual. In this respect, Germany's external debt, for example, is likely to be underestimated whilst Italy's is overestimated. There is one further aspect to bear in mind when interpreting and differentiating between the domestic country and foreign countries. Although the reported statistics distinguish domestic holdings of government bonds from holdings abroad, this does not necessarily mean they are held by domestic or foreign creditors in each case. Foreign creditors can also hold government bonds in domestic safe custody accounts, and vice versa.

2 ANFA governs the extent to which the national central banks are allowed to invest beyond monetary policy purposes. See Deutsche Bundesbank (2016).
3 In order to provide financial assistance to Member States that were hit especially hard by the financial and debt crisis, euro area countries jointly borrowed through the EFSF. In the figures reported for individual Member States in this article, this share was allocated to external debt.

est to other countries. To examine this aspect, the analysis of Eurosystem bond holdings conducted so far has to be expanded to include a distinction between domestic and foreign holdings. From a national perspective, the ECB's holdings are held largely by foreign creditors. This is because they are subject to risk sharing and, therefore, the bulk of the interest paid on the ECB's holdings goes to other countries.[12] By contrast, all interest payments on national central banks' holdings remain within their respective home countries. Defined in this way, debt held by foreign creditors in Germany amounted to 23% of German GDP. The equivalent figure for France was 49%, 43% for Italy and 44% for Spain.

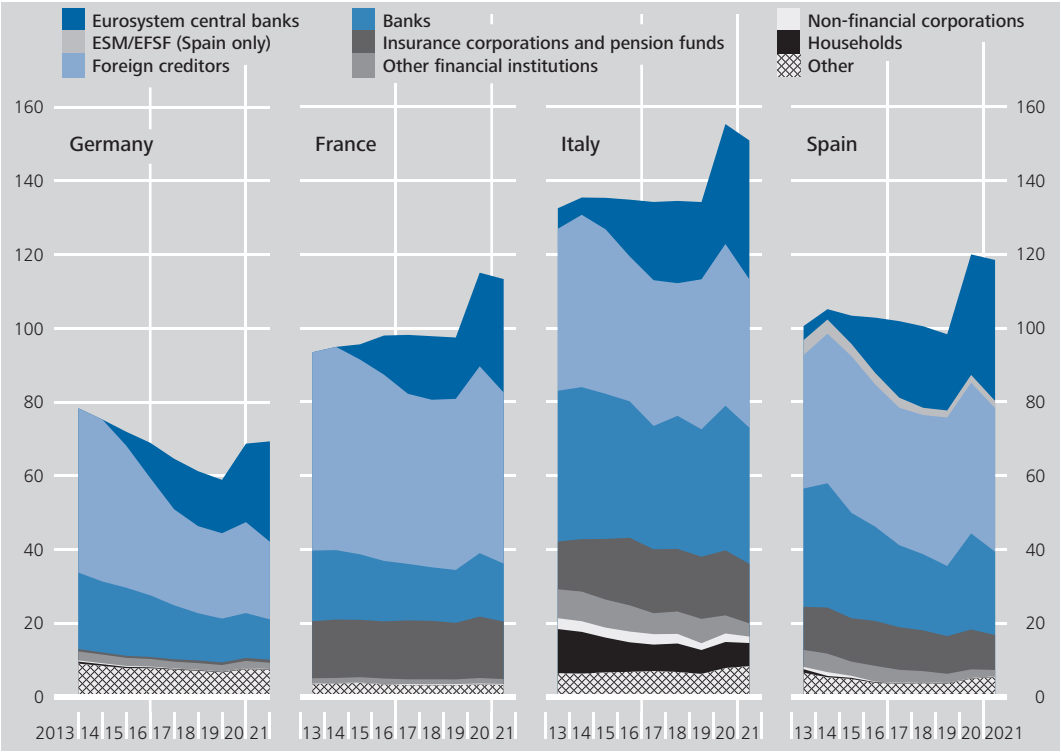
National central banks have sizeable claims on home countries

At present, a large share of the interest expenditure remaining inside respective euro area countries is being channelled to their national central banks, mainly owing to the national central banks' holdings of bonds issued by their home countries. In addition, there are the holdings of bonds issued by the home countries and purchased by the Eurosystem with risk sharing (see the table on p. 86). This is because the interest paid on these bonds is distributed to all national central banks in line with the capital key. At the end of 2021, holdings calculated in this manner as a percentage of national GDP stood at 25% (Bundesbank holdings) for Germany, 28% for France, 34% for

12 The Eurosystem agreed on full risk sharing for purchases under the Securities Markets Programme (SMP). For purchases under the PSPP and PEPP, it agreed that 20% of purchases would be subject to risk sharing. These are the ECB's purchases of government bonds and bonds issued by development banks and other public undertakings, as well as purchases by the national central banks of bonds issued by supranational institutions (10% in each instance). Interest income on holdings subject to risk sharing is distributed between the national central banks in accordance with the Eurosystem's capital key. 80% of purchases under the PSPP and PEPP are excluded from risk sharing. These are purchases by the national central banks of securities issued by regional and local governments, development banks and other public undertakings within the national central banks' jurisdiction.

Creditor structure of the government debt of selected Member States, by sector*

As a percentage of national GDP, year-end data



Sources: Eurostat, ECB, ESM and Bundesbank calculations. * For the methodology, see the box on p. 82.
Deutsche Bundesbank

Italy and 35% for Spain.[13] In addition, the Eurosystem central banks can (under ANFA) hold government bonds in portfolios for non-monetary policy purposes. The Bundesbank does not make use of this option. The relevant ANFA balance sheet items of the Banque de France total around 2% of national GDP, while those for the Banca d'Italia amount to 7% and those for the Banco de España 2%.[14] The share of government bonds issued by national central banks' home countries within these aggregate items is not published, but is likely to be substantial in some cases.

Eurosystem bond purchases affect debt burden on government finances …

Eurosystem government bond holdings influence the way in which debt puts pressure on government finances and in which interest rate changes affect government finances.[15] Put in highly simplified terms, national central banks' bond purchases convert the rate of interest paid on government debt from the country-specific medium to longer-term bond rates (including any risk premia) to a variable interest

13 For these figures, bonds purchased by the Eurosystem with risk sharing were allocated to the respective Member States according to the capital key. These are SMP holdings and the ECB's country-specific purchases under the PSPP and the PEPP, each excluding holdings of bonds issued by supranational institutions. In addition, central banks also receive income from holdings of non-domestic securities and bonds issued by supranational institutions for purchases of which risk sharing has been agreed. As a percentage of national GDP, the Eurosystem's holdings of this nature amounted to around 5% for the Bundesbank, 6% for the Banque de France and 7% for the Banca d'Italia and the Banco de España.

14 The data were taken from the balance sheets of the national central banks for the 2021 financial year. These figures concern all relevant euro-denominated investments, not just national government bonds. The table on p. 86 shows, in particular, balance sheet items 7.2. (Other securities not held for monetary policy purposes) and 11.3 (Other financial assets). Relevant supplementary information in the annual reports has been taken into account. See Banca d'Italia (2022), Banco de España (2022), Banque de France (2022) and Deutsche Bundesbank (2022b). The Bundesbank has no holdings in this context. The Banque de France has holdings of €43.4 billion and the Banco de España holdings of €28.8 billion. In its annual report on other investment in euro area government bonds, the Banca d'Italia reported a figure of €125.1 billion.

15 For more details on the mechanism outlined here in a simplified manner as well as additional influences and features, see Deutsche Bundesbank (2021a).

Government debt of Germany, France, Italy and Spain, by creditor sector*

%

Item	Germany		France		Italy		Spain	
	2014	2021	2014	2021	2014	2021	2014	2021
	Shares of government debt							
Eurosystem central banks	0	39	0	27	3	25	3	32
SMP					3	0	3	0
PSPP[1]	0	24	0	17	0	15	0	20
PEPP[1]	0	15	0	10	0	10	0	12
Foreign creditors[2]	58	30	58	41	35	27	39	33
Banks	26	16	20	14	30	24	32	19
Loans	15	10	11	8	12	10	9	6
Debt securities	11	6	9	6	18	15	23	13
Households	1	0	0	0	8	4	0	0
Insurance corporations and pension funds	1	1	17	14	11	11	12	8
Other financial institutions	3	2	1	1	6	2	5	1
Non-financial corporations	0	0	0	0	2	1	1	0
European Stability Mechanism	.	.	.	.	.	.	4	2
Other	11	11	4	3	5	6	5	5
	Shares of national GDP							
Eurosystem central banks	0	27	0	31	5	38	3	38
SMP					5	0	3	0
PSPP[1]	0	17	0	20	0	23	0	24
PEPP[1]	0	10	0	11	0	14	0	14
Foreign creditors[2]	44	21	55	46	47	40	41	39
Banks	19	11	19	16	41	37	34	23
Loans	11	7	10	8	17	15	10	7
Debt securities	8	4	9	7	25	22	24	16
Households	0	0	0	0	11	6	0	0
Insurance corporations and pension funds	1	1	16	16	14	16	12	9
Other financial institutions	2	2	1	1	8	4	5	2
Non-financial corporations	0	0	0	0	3	2	1	0
European Stability Mechanism	.	.	.	.	.	.	4	2
Other	8	7	4	3	6	8	5	5

Sources: Eurostat, ECB, ESM and Bundesbank calculations. * See the methodological notes on p. 82, in particular with respect to shares held by Eurosystem central banks and by foreign creditors. 1 Excluding bonds issued by supranational institutions. 2 Residual government debt that cannot be attributed to any of the creditor groups listed here (therefore also excluding Eurosystem central banks).

Deutsche Bundesbank

rate at the monetary policy (risk-free) rate. This is due to the fact that interest payments on the purchased government bonds go to the national central banks. As bond purchases grew, so did commercial banks' deposits at central banks. In turn, the national central banks pay interest on these (now 0%, previously at a negative deposit facility rate). The difference between income from bond holdings and expenditure on the deposit facility affects central bank profit. As soon as it is distributed, it has an impact on government finances.[16] In this respect, the balance sheet link between central banks and government finances means that interest rates on bonds (including risk premia) flow back to the Member States, which effectively pay the short-term deposit rate.

… and sensitivity to short-term changes in central bank interest rates

In terms of interest rate risk to government finances, the described lengthening of the residual maturities for government debt should therefore be interpreted with caution. Where central banks engage in maturity transformation via their balance sheets, this increases the sensitivity of government finances to short-term changes in central bank interest rates. This counterbalances the longer residual maturities.

16 The timeframe can be influenced by provisions and loss carryforwards.

Bond holdings of selected Eurosystem central banks as at the end of 2021, including bonds allocated according to interest income

As a percentage of national GDP

Item	Deutsche Bundesbank	Banque de France	Banca d'Italia	Banco de España
Bonds issued by the home country not subject to risk sharing (own holdings)	24.4	27.5	33.7	34.3
PSPP excluding bonds issued by supranational institutions	15.0	17.6	20.8	21.5
PEPP excluding bonds issued by supranational institutions	9.3	9.9	12.9	12.8
Bonds issued by the home country (via risk sharing)[1]	0.8	0.7	0.7	0.5
SMP	.	.	0.0	0.0
PSPP excluding bonds issued by supranational institutions	0.5	0.4	0.4	0.3
PEPP excluding bonds issued by supranational institutions	0.3	0.3	0.3	0.2
Bonds issued outside the home country (via risk sharing)[1]	5.0	5.7	6.7	7.2
SMP	0.0	0.1	0.0	0.1
PSPP excluding bonds issued by supranational institutions	1.2	1.5	1.8	1.9
PEPP excluding bonds issued by supranational institutions	0.8	1.0	1.1	1.2
Bonds issued by supranational institutions	2.9	3.2	3.8	3.9
Memo item:				
Holdings of asset positions in line with ANFA[2]	0.0	1.7	7.0	2.4

Sources: Eurostat, balance sheet data of the Banco de España, Banca d'Italia, Banque de France and Deutsche Bundesbank as well as Bundesbank calculations. **1** Holdings of public sector bonds purchased by the Eurosystem subject to risk sharing were reallocated to the national central banks according to the capital key. **2** Not necessarily bonds issued by the home country.

Deutsche Bundesbank

Bond purchases are reflected in central bank profits

The varying interest rates on holdings of government bonds issued by the home country are reflected in the national central banks' balance sheets. Although other effects also play a role (including changes in provisions and reserves), this can be seen, for example, in last year's annual accounts of the national central banks of the four large Member States. While the Bundesbank did not distribute any profit to the government in 2022 (2021 financial year), transfers (including payments of profit-related taxes) amounted to 0.3% of GDP in France and Spain and to 0.8% of GDP in Italy in the same year.

Government debt held by the national banking sector

The domestic banking system is the second-largest creditor sector in the euro area after central banks. The banking system is of particular importance in terms of financial stability. The sovereign debt crisis showed that problems with government finances and in the banking system can quickly be mutually reinforcing and pose a threat to financial stability. For example, government solvency risks feed through various transmission channels to affect the credit quality and funding options of banks. At the same time, distress in the banking system can trigger or exacerbate sovereign debt crises. In view of this, changes in national banking sectors' claims on their home countries are of particular interest.

As major lenders to government, banks play a particularly important role in safeguarding financial stability

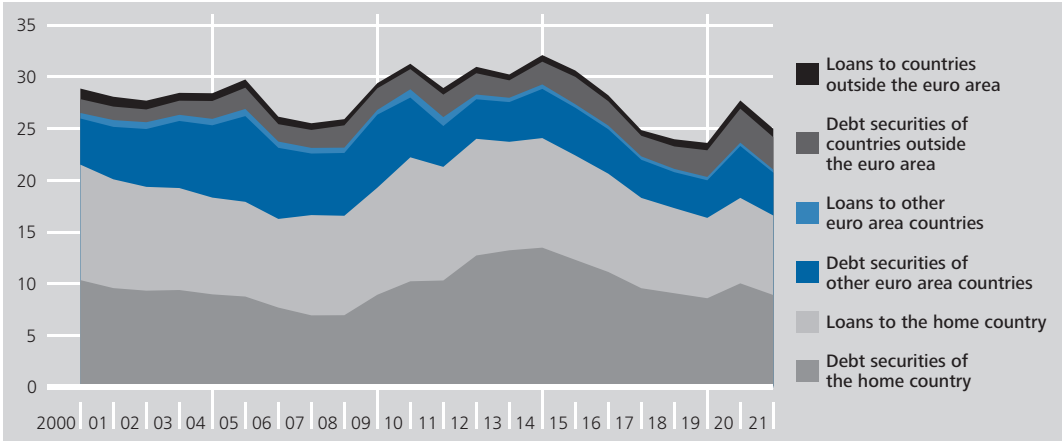
A look at the euro area as a whole

Euro area banks mainly hold claims on their home countries

At the end of 2021, the aggregate euro area banking sector (euro area monetary financial institutions excluding central banks) held claims on Member States amounting to 21% of GDP (see the chart on p. 87). These were mainly claims on the respective home country. These

Claims of banks in the euro area on countries

As a percentage of euro area GDP, year-end data



Sources: Eurostat, ECB and Bundesbank calculations.
Deutsche Bundesbank

play a crucial role in the national sovereign-bank nexus.

Banks' claims on home countries as they were prior to financial and economic crisis

At the end of 2021, banks' claims on their home countries were back at a level similar to the one recorded at the end of 2008 (17% of euro area GDP in each case; see the chart above).[17] Over the course of the financial and sovereign debt crisis, banks had considerably expanded their holdings of these claims (particularly government bonds). However, they reduced them again when the Eurosystem launched its large-scale asset purchase programmes.

Ratio of government bond holdings to own funds somewhat reduced

Looking at claims in relation to the own funds of domestic banks, the picture is similar. These funds are ultimately the buffer that banks can use to absorb any losses. Comparing claims on the home countries to the own funds of the domestic banking system, this figure has fallen slightly, from 90% prior to the financial and economic crisis to just under 80% (see the lower chart on p. 88).[18]

A closer look at Germany, France, Italy and Spain

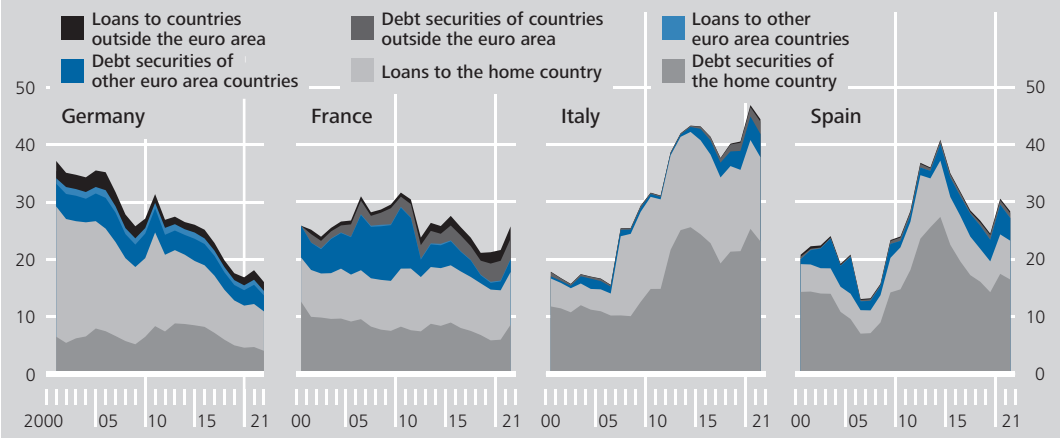
In turn, developments in the four large Member States were very different (see the upper chart on p. 88). Upon the outbreak of the financial and economic crisis, banks in all Member States increased their claims on their respective home countries. In Germany and France, these claims rose only slightly and remained roughly at the level then reached from 2011 onwards. By contrast, banks domiciled in Spain and Italy considerably expanded their claims on their home countries. Following the launch of the Eurosystem's purchase programmes, banks' claims on their home countries fell in all Member States from 2015 onwards, especially in Spain. In Italy, this trend then reversed starting in early 2018 amid heightened uncertainty surrounding the country's elections and the formation of a new government. In France and Spain, the banking sectors started expanding their holdings of national government bonds again when the coronavirus pandemic broke out. Compared with the situation prior to the financial and economic crisis, it was only in Germany that banks' claims on the home country decreased – in relation to GDP, they went from just under 19% at the end of 2008 to 11% at the end of 2021. At 16% of GDP, the

Differing developments in the four large Member States

17 46% of the claims on home countries are credit claims and 54% are government bonds.
18 Own funds of the domestic banking sector are defined as capital and reserves according to the ECB's balance sheet statistics. These values may differ from bank to bank. They are therefore only a rough, aggregate indicator.

Claims of banks in selected Member States on countries

As a percentage of national GDP, year-end values



Sources: Eurostat, ECB and Bundesbank calculations.
Deutsche Bundesbank

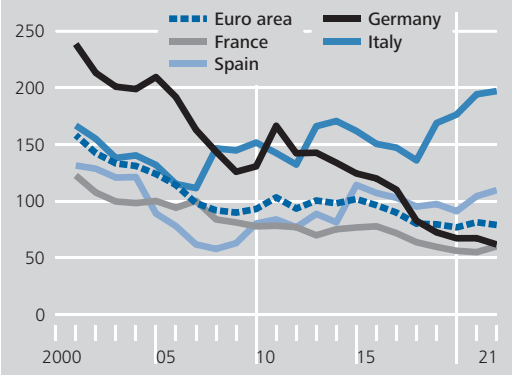
ratio in France was back on par with the one recorded at the end of 2008. In Spain, it went up from 14% to 23%, whilst in Italy, starting at 24%, it reached a new peak of 38%.[19]

Banking sectors in Spain, but especially Italy, vulnerable to sovereign default risks

Looking at the claims on each home country in relation to the own funds of its domestic banks also reveals a mixed picture (see the chart above).[20] While the ratio for Germany stood at 126% at the end of 2008, it had fallen to 62% by the end of 2021. For France, this figure decreased from 77% to 56% over the same period. By contrast, these ratios increased in Spain and Italy. Following the outbreak of the financial and economic crisis, they rose from 67% to 110% in Spain and in Italy from 147% to just under 200% at the end of the period under review.

Bank sectors of selected Member States: claims on the home country in relation to own funds

%, year-end data



Sources: Eurostat, ECB and Bundesbank calculations.
Deutsche Bundesbank

Close interconnectedness between banks and their home country continues

Overall, it is clear that banks are interconnected, sometimes closely, with their home country. Compared with the situation prior to the financial and economic crisis, the link is in some cases even stronger. Banks, therefore, have not all become more resilient to the fiscal risks of their home country. In this respect, financial stability risks remain. Further steps towards broader risk redistribution within the framework of the banking union are currently under discussion. If this should fail to achieve a larger-scale redistribution of fiscal risks, it would be necessary to place a tight limit on the risks for banks arising from government bonds.[21]

19 Deviations from the table on p. 85 arise from the valuation approach used in the balance sheet statistics, which report bond holdings at book values. By contrast, they are reported at nominal values in the SHSS holdings statistics. Bonds accounted for 37% of domestic banks' total claims on the home country for Germany, 46% for France, 61% for Italy and 71% for Spain.
20 The situation in which individual banks find themselves can vary considerably.
21 In addition, risks in banks' balance sheets arising from legacy debt, such as the various losses arising from non-performing loans, would have to be sufficiently mitigated in advance. The current resolution regime for banks also needs to be reformed so that, wherever possible, no public funds will be used to bail out banks in future. For more details, see Deutsche Bundesbank (2021b).

Reducing the regulatory privileges that government debt enjoys on bank balance sheets would go some way to achieving this, but so far this has lacked a political majority.

List of references

Banca d'Italia (2022), Annual Accounts – Ordinary Meeting of Shareholders 2021 – 128th Financial Year, 31 March 2022.

Banco de España (2022), Annual Accounts of the Banco De España 2021, 29 March 2022.

Banque de France (2022), Annual Report – Financial Management and Accounts, 9 June 2022.

Deutsche Bundesbank (2022a), Public finances in the euro area: current developments and challenges, Monthly Report, June 2022, pp. 75-81.

Deutsche Bundesbank (2022b), Annual Report 2021.

Deutsche Bundesbank (2021a), Government finances: Central bank bond purchases increase sensitivity to interest rate changes, Monthly Report, June 2021, pp. 39-45.

Deutsche Bundesbank (2021b), Planned refinement of the European resolution regime, Financial Stability Review 2021, pp. 72-74.

Deutsche Bundesbank (2020), The informative value of national fiscal indicators in respect of debt at the European level, Monthly Report, December 2020, pp. 37-47.

Deutsche Bundesbank (2018), Maastricht debt: methodological principles, compilation and development in Germany, Monthly Report, April 2018, pp. 57-78.

Deutsche Bundesbank (2016), The role and effects of the Agreement on Net Financial Assets (ANFA) in the context of implementing monetary policy, Monthly Report, March 2016, pp. 83-93.

Official Journal of the European Union L 39 (2020a), Decision (EU) 2020/188 of the European Central Bank of 3 February 2020 on a secondary markets public sector asset purchase programme (ECB/2020/9) (recast), 12 February 2020, pp. 12-18.

Official Journal of the European Union L 91 (2020b), Decision (EU) 2020/440 of the European Central Bank of 24 March 2020 on a temporary pandemic emergency purchase programme (ECB/2020/17), 25 March 2020, pp. 1-4.

Statistical Section

Contents

I. Key economic data for the euro area

1. Monetary developments and interest rates 5*
2. External transactions and positions 5*
3. General economic indicators 6*

II. Overall monetary survey in the euro area

1. The money stock and its counterparts 8*
2. Consolidated balance sheet of monetary financial institutions (MFIs) 10*
3. Banking system's liquidity position 14*

III. Consolidated financial statement of the Eurosystem

1. Assets 16*
2. Liabilities 18*

IV. Banks

1. Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany 20*
2. Principal assets and liabilities of banks (MFIs) in Germany, by category of banks 24*
3. Assets and liabilities of banks (MFIs) in Germany vis-à-vis residents 26*
4. Assets and liabilities of banks (MFIs) in Germany vis-à-vis non-residents 28*
5. Lending by banks (MFIs) in Germany to domestic non-banks (non-MFIs) 30*
6. Lending by banks (MFIs) in Germany to domestic enterprises and households, housing loans, sectors of economic activity 32*
7. Deposits of domestic non-banks (non-MFIs) at banks (MFIs) in Germany 34*
8. Deposits of domestic households and non-profit institutions at banks (MFIs) in Germany 36*
9. Deposits of domestic government at banks (MFIs) in Germany, by creditor group 36*
10. Savings deposits and bank savings bonds of banks (MFIs) in Germany sold to non-banks (non-MFIs) 38*
11. Debt securities and money market paper outstanding of banks (MFIs) in Germany 38*
12. Building and loan associations (MFIs) in Germany 39*
13. Assets and liabilities of the foreign branches and foreign subsidiaries of German banks (MFIs) 40*

V. Minimum reserves

1. Reserve maintenance in the euro area 42*
2. Reserve maintenance in Germany 42*

VI. Interest rates

1. ECB interest rates / basic rates of interest 43*
2. Eurosystem monetary policy operations allotted through tenders 43*
3. Money market rates, by month 43*
4. Interest rates and volumes for outstanding amounts and new business of German banks (MFIs) 44*

VII. Insurance corporations and pension funds

1. Assets 48*
2. Liabilities 49*

VIII. Capital market

1. Sales and purchases of debt securities and shares in Germany 50*
2. Sales of debt securities issued by residents 51*
3. Amounts outstanding of debt securities issued by residents 52*
4. Shares in circulation issued by residents 52*
5. Yields and indices on German securities 53*
6. Sales and purchases of mutual fund shares in Germany 53*

IX. Financial accounts

1. Acquisition of financial assets and external financing of non-financial corporations 54*
2. Financial assets and liabilities of non-financial corporations 55*
3. Acquisition of financial assets and external financing of households 56*
4. Financial assets and liabilities of households 57*

X. Public finances in Germany

1. General government: deficit/surplus and debt level as defined in the Maastricht Treaty .. 58*
2. General government: revenue, expenditure and deficit/surplus as shown in the national accounts 58*
3. General government: budgetary development 59*
4. Central, state and local government: budgetary development 59*
5. Central, state and local government: tax revenue 60*
6. Central and state government and European Union: tax revenue, by type 60*

7. Central, state and local government: individual taxes ... 61*
8. German statutory pension insurance scheme: budgetary development and assets ... 61*
9. Federal Employment Agency: budgetary development ... 62*
10. Statutory health insurance scheme: budgetary development ... 62*
11. Statutory long-term care insurance scheme: budgetary development ... 63*
12. Central government: borrowing in the market ... 63*
13. General government: debt by creditor ... 63*
14. Maastricht debt by instrument ... 64*
15. Maastricht debt of central government by instrument and category ... 65*

XI. Economic conditions in Germany

1. Origin and use of domestic product, distribution of national income ... 66*
2. Output in the production sector ... 67*
3. Orders received by industry ... 68*
4. Orders received by construction ... 69*
5. Retail trade turnover ... 69*
6. Labour market ... 70*
7. Prices ... 71*
8. Households' income ... 72*
9. Negotiated pay rates (overall economy) ... 72*
10. Assets, equity and liabilities of listed non-financial groups ... 73*
11. Revenues and operating income of listed non-financial groups ... 74*

XII. External sector

1. Major items of the balance of payments of the euro area ... 75*
2. Major items of the balance of payments of the Federal Republic of Germany ... 76*
3. Foreign trade (special trade) of the Federal Republic of Germany, by country and group of countries ... 77*
4. Services and primary income of the Federal Republic of Germany ... 78*
5. Secondary income and Capital account of the Federal Republic of Germany ... 78*
6. Financial account of the Federal Republic of Germany ... 79*
7. External position of the Bundesbank ... 80*
8. External positions of enterprises ... 81*
9. ECB's euro foreign exchange reference rates of selected currencies ... 82*
10. Euro area countries and irrevocable euro conversion rates in the third stage of Economic and Monetary Union ... 82*
11. Effective exchange rates of the euro and indicators of the German economy's price competitiveness ... 83*

I. Key economic data for the euro area

1. Monetary developments and interest rates

	Money stock in various definitions [1,2]				Determinants of the money stock [1]			Interest rates		
			M3 [3]							
Period	M1	M2		3-month moving average (centred)	MFI lending, total	MFI lending to enterprises and households	Monetary capital formation [4]	€STR [5,7]	3 month EURIBOR [6,7]	Yield on European government bonds outstanding [8]
	Annual percentage change							% p.a. as a monthly average		
2020 Oct.	13.9	10.4	10.4	10.6	8.3	4.3	– 0.5	– 0.55	– 0.51	– 0.2
Nov.	14.5	10.8	10.9	11.2	8.6	4.4	– 0.7	– 0.56	– 0.52	– 0.2
Dec.	15.6	11.7	12.2	11.9	9.3	5.0	– 0.5	– 0.56	– 0.54	– 0.2
2021 Jan.	16.4	12.2	12.5	12.3	9.4	4.8	– 0.9	– 0.56	– 0.55	– 0.2
Feb.	16.4	12.1	12.3	11.6	9.6	4.7	– 0.9	– 0.56	– 0.54	– 0.1
Mar.	13.7	10.2	10.1	10.6	8.6	4.0	– 0.3	– 0.56	– 0.54	0.0
Apr.	12.4	9.2	9.4	9.4	7.3	3.4	– 0.3	– 0.57	– 0.54	0.1
May	11.7	8.4	8.6	8.8	6.3	2.9	– 1.0	– 0.56	– 0.54	0.2
June	11.8	8.3	8.4	8.3	6.0	3.3	– 0.6	– 0.56	– 0.54	0.2
July	11.0	7.6	7.8	8.1	5.8	3.1	– 0.5	– 0.57	– 0.55	0.0
Aug.	11.1	7.8	8.0	7.8	5.5	2.8	– 0.8	– 0.57	– 0.55	– 0.1
Sep.	11.1	7.6	7.6	7.7	5.6	3.3	– 0.7	– 0.57	– 0.55	0.1
Oct.	10.7	7.5	7.7	7.5	5.6	3.6	– 0.3	– 0.57	– 0.55	0.2
Nov.	10.0	7.1	7.3	7.3	5.8	3.7	– 0.5	– 0.57	– 0.57	0.2
Dec.	9.8	7.0	6.9	6.9	6.1	3.9	– 0.5	– 0.58	– 0.58	0.1
2022 Jan.	9.2	6.8	6.5	6.6	6.2	4.3	– 0.3	– 0.58	– 0.56	0.4
Feb.	9.1	6.8	6.4	6.4	6.3	4.4	– 0.4	– 0.58	– 0.53	0.8
Mar.	8.8	6.6	6.2	6.2	6.1	4.5	– 0.7	– 0.58	– 0.50	0.9
Apr.	8.2	6.3	6.1	6.0	6.4	5.0	– 0.1	– 0.58	– 0.45	1.4
May	7.8	6.0	5.6	...	6.3	5.3	0.2	– 0.59	– 0.39	1.7
June	...	...	...	...	...	...	...	– 0.58	– 0.24	2.2

1 Source: ECB. **2** Seasonally adjusted. **3** Excluding money market fund shares/units, money market paper and debt securities with a maturity of up to two years held by non-euro area residents. **4** Longer-term liabilities to euro area non-MFIs. **5** Euro Short-Term Rate. **6** Euro interbank offered rate. **7** See also footnotes to Table VI.4, p. 43•. **8** GDP-weighted yield on ten-year government bonds. Countries included: DE, FR, NL, BE, AT, FI, IE, PT, ES, IT, GR, SK, CY, SI.

2. External transactions and positions *

	Selected items of the euro area balance of payments [r]								Euro exchange rates [1]		
	Current account		Financial account							Effective exchange rate [3]	
Period	Balance	of which: Goods	Balance	Direct investment	Portfolio investment	Financial derivatives [2]	Other investment	Reserve assets	Dollar rate	Nominal	Real [4]
	€ million								EUR 1 = USD ...	Q1 1999 = 100	
2020 Oct.	+ 34,074	+ 38,966	+ 48,808	+ 26,599	+ 110,105	+ 5,089	– 95,899	+ 2,914	1.1775	101.3	94.7
Nov.	+ 29,820	+ 35,704	+ 37,485	– 56,374	+ 196,739	+ 11,770	– 112,040	– 2,610	1.1838	100.6	94.3
Dec.	+ 45,453	+ 39,773	+ 44,573	– 101,234	+ 280,114	– 28,792	– 107,264	+ 1,749	1.2170	101.8	95.2
2021 Jan.	+ 20,686	+ 21,755	+ 50,974	+ 54,448	+ 34,832	+ 11,070	– 48,422	– 954	1.2171	101.3	95.3
Feb.	+ 26,148	+ 33,478	+ 52,787	+ 30,274	+ 110,154	– 1,765	– 84,303	– 1,573	1.2098	100.6	94.5
Mar.	+ 38,660	+ 37,500	+ 7,643	+ 40,948	– 63,199	– 6,046	+ 36,383	– 443	1.1899	100.3	94.1
Apr.	+ 37,478	+ 28,077	+ 14,052	– 2,853	+ 39,700	+ 6,969	– 30,357	+ 593	1.1979	100.6	94.2
May	+ 15,929	+ 26,704	+ 42,495	+ 14,517	+ 90,512	– 6,940	– 56,916	+ 1,323	1.2146	100.8	94.2
June	+ 27,633	+ 31,414	+ 63,577	– 4,840	+ 41,067	– 2,298	+ 24,449	+ 5,199	1.2047	100.2	93.7
July	+ 36,848	+ 33,476	+ 40,749	+ 42,833	+ 5,012	+ 18,311	– 25,069	– 338	1.1822	99.7	93.5
Aug.	+ 21,055	+ 15,432	+ 37,205	+ 42,728	+ 34,827	+ 1,635	– 164,067	+ 122,082	1.1772	99.3	93.2
Sep.	+ 32,820	+ 20,817	+ 5,229	+ 21,333	+ 16,126	+ 4,116	– 37,749	+ 1,404	1.1770	99.4	93.3
Oct.	+ 8,547	+ 11,924	+ 30,483	+ 21,667	+ 34,957	+ 13,983	– 43,313	+ 3,190	1.1601	98.4	92.4
Nov.	+ 10,026	+ 14,562	– 2,990	+ 3,659	+ 60,386	+ 26,205	– 93,744	+ 504	1.1414	97.6	91.7
Dec.	+ 25,718	+ 10,434	– 264	+ 27,308	+ 22,896	+ 4,427	– 54,088	– 807	1.1304	97.1	91.2
2022 Jan.	– 6,787	– 9,073	+ 29,082	– 1,174	+ 73,618	+ 2,743	– 43,960	– 2,144	1.1314	96.6	91.2
Feb.	+ 407	+ 3,722	– 44	+ 31,466	– 33,167	– 3,777	+ 3,731	+ 1,703	1.1342	96.9	91.7
Mar.	+ 7,376	+ 5,113	– 15,106	– 4,310	– 73,063	– 4,280	+ 66,465	+ 82	1.1019	95.9	91.3
Apr.	– 5,437	– 4,567	– 41,900	+ 33,580	+ 3,793	+ 8,697	– 87,302	– 667	1.0819	95.2	p 89.9
May	...	...	...	...	...	...	...	...	1.0579	95.6	p 90.2
June	...	...	...	...	...	...	...	...	1.0566	95.9	p 90.4

***** Source: ECB, according to the international standards of the International Monetary Fund's Balance of Payments Manual (sixth edition). **1** Monthly averages, see also Tables XII.10 and 11, pp. 82•/ 83•. **2** Including employee stock options. **3** Bundesbank calculation. Against the currencies of the EER-19 group. **4** Based on consumer price indices.

I. Key economic data for the euro area

3. General economic indicators

Period	Euro area	Belgium	Germany	Estonia	Finland	France	Greece	Ireland	Italy	Latvia
Real gross domestic product [1] Annual percentage change										
2019	1.6	2.1	1.1	4.1	1.2	1.8	1.8	5.4	0.5	2.5
2020	− 6.3	− 5.7	− 4.6	− 3.0	− 2.2	− 7.8	− 9.0	6.2	− 9.0	− 3.8
2021	5.4	6.2	2.9	8.3	3.0	6.8	8.3	13.6	6.6	4.5
2020 Q4	− 4.2	− 4.3	− 1.9	− 1.5	− 0.1	− 3.6	− 7.1	3.9	− 5.8	− 1.2
2021 Q1	− 0.9	0.0	− 3.0	3.7	− 1.5	1.9	− 0.8	11.4	0.3	− 0.9
Q2	14.7	15.1	10.8	12.7	7.5	19.5	15.0	19.5	17.9	10.6
Q3	4.0	5.0	2.8	8.3	3.1	3.1	11.8	10.4	3.8	5.0
Q4	4.7	5.6	1.8	8.6	3.1	4.6	7.4	13.8	5.8	3.1
2022 Q1	5.4	4.8	4.0	4.3	4.1	4.6	7.9	10.7	5.9	6.7
Industrial production [2] Annual percentage change										
2019	− 0.7	4.8	r − 3.2	7.1	1.6	0.5	− 0.7	7.0	− 1.1	0.8
2020	− 7.7	− 3.8	r − 9.6	− 2.8	− 3.2	− 10.9	− 2.1	14.5	− 11.4	− 1.8
2021	8.0	16.8	r 4.7	6.8	4.1	5.9	10.2	16.4	12.2	6.5
2020 Q4	− 0.2	0.6	r − 2.1	3.2	− 2.1	− 4.2	3.1	25.0	− 2.5	2.2
2021 Q1	5.0	8.4	r − 0.3	− 0.2	− 0.0	2.1	4.7	40.6	10.4	3.7
Q2	23.7	29.8	r 20.3	15.1	4.3	22.3	15.6	33.2	32.6	12.6
Q3	5.9	19.4	r 2.5	7.1	4.5	2.6	9.7	27.6	4.9	6.3
Q4	0.2	11.2	r − 1.2	5.7	7.3	− 0.4	11.3	− 18.2	4.6	3.6
2022 Q1	− 0.3	6.4	r − 1.2	4.2	3.1	0.1	4.4	− 15.0	1.4	4.0
Capacity utilisation in industry [3] As a percentage of full capacity										
2019	82.2	81.2	84.6	72.6	81.0	84.5	71.6	77.3	77.4	76.3
2020	74.5	75.6	77.3	67.6	76.9	73.8	71.0	68.8	53.4	72.0
2021	81.4	80.1	84.8	78.2	81.2	81.1	75.6	78.2	76.4	75.2
2021 Q1	79.2	78.9	82.1	74.0	78.9	79.3	73.0	76.8	75.1	74.1
Q2	80.8	79.6	84.9	76.8	81.6	80.2	74.4	73.6	75.4	74.7
Q3	83.0	80.9	86.1	78.6	81.5	82.9	77.8	80.8	77.5	75.5
Q4	82.7	81.1	85.9	83.2	82.7	82.0	77.3	81.6	77.7	76.6
2022 Q1	82.4	80.0	85.8	72.3	81.9	82.7	76.8	78.9	78.7	75.5
Q2	82.6	80.2	84.9	70.0	80.2	82.2	76.7	82.6	78.8	75.6
Standardised unemployment rate [4] As a percentage of civilian labour force										
2019	7.5	5.4	3.0	4.5	6.7	8.2	17.3	5.0	10.0	6.3
2020	7.8	5.6	3.6	7.0	7.8	7.8	16.3	5.6	9.2	8.1
2021	e 7.7	e 6.3	3.6	e 6.2	e 7.7	e 7.9	e 14.8	e 6.3	e 9.5	e 7.6
2022 Jan.	6.9	5.4	3.1	5.8	7.0	7.3	13.2	5.0	8.7	7.2
Feb.	6.8	5.3	3.0	5.5	6.4	7.3	12.5	4.8	8.5	6.9
Mar.	6.8	5.2	2.9	5.5	6.4	7.3	12.2	5.1	8.3	6.7
Apr.	6.7	5.3	2.9	5.5	6.2	7.2	12.7	4.8	8.3	6.6
May	6.6	5.5	2.8	5.5	6.2	7.2	...	4.7	8.1	6.5
June	...	...	...	...	...	...	...	4.8	...	...
Harmonised Index of Consumer Prices Annual percentage change										
2019	1.2	1.2	1.4	2.3	1.1	1.3	0.5	0.9	0.6	2.7
2020	0.3	0.4	5 0.4	− 0.6	0.4	0.5	− 1.3	− 0.5	− 0.1	0.1
2021	2.6	3.2	5 3.2	4.5	2.1	2.1	0.6	2.4	1.9	3.2
2022 Jan.	5.1	8.5	5.1	11.0	4.1	3.3	5.5	5.0	5.1	7.5
Feb.	5.9	9.5	5.5	11.6	4.4	4.2	6.3	5.7	6.2	8.8
Mar.	7.4	9.3	7.6	14.8	5.8	5.1	8.0	6.9	6.8	11.5
Apr.	7.4	9.3	7.8	19.1	5.8	5.4	9.1	7.3	6.3	13.1
May	8.1	9.9	8.7	20.1	7.1	5.8	10.5	8.3	7.3	16.8
June	e 8.6	10.5	8.2	e 22.0	e 8.1	e 6.5	11.6	e 9.6	8.5	e 19.2
General government financial balance [6] As a percentage of GDP										
2019	− 0.7	− 2.0	1.5	0.1	− 0.9	− 3.1	1.1	0.5	− 1.5	− 0.6
2020	− 7.1	− 9.0	− 4.3	− 5.6	− 5.5	− 8.9	− 10.2	− 5.1	− 9.6	− 4.5
2021	− 5.1	− 5.5	− 3.7	− 2.4	− 2.6	− 6.5	− 7.4	− 1.9	− 7.2	− 7.3
General government debt [6] As a percentage of GDP										
2019	83.8	97.7	58.9	8.6	59.6	97.4	180.7	57.2	134.1	36.7
2020	97.2	112.8	68.7	19.0	69.0	114.6	206.3	58.4	155.3	43.3
2021	95.6	108.2	69.3	18.1	65.8	112.9	193.3	56.0	150.8	44.8

Sources: Eurostat, European Commission, European Central Bank, Federal Statistical Office, Bundesbank calculations. Latest data are partly based on press reports and are provisional. **1** Euro area: quarterly data seasonally and calendar adjusted. **2** Manufacturing, mining and energy: adjusted for working-day variations. **3** Manufacturing:

I. Key economic data for the euro area

Lithuania	Luxembourg	Malta	Netherlands	Austria	Portugal	Slovakia	Slovenia	Spain	Cyprus	Period
										Real gross domestic product [1]
										Annual percentage change
4.6	3.3	5.9	2.0	1.5	2.7	2.6	3.3	2.1	5.3	2019
– 0.1	– 1.8	– 8.3	– 3.9	– 6.7	– 8.4	– 4.4	– 4.2	– 10.8	– 5.0	2020
5.0	6.9	10.4	4.9	4.8	4.9	3.0	8.1	5.1	5.5	2021
0.3	1.3	– 7.9	– 3.3	– 5.7	– 6.4	– 1.8	– 3.1	– 8.8	– 3.8	2020 Q4
1.6	5.2	0.1	– 2.2	– 5.0	– 5.3	0.2	1.5	– 4.5	– 2.1	2021 Q1
8.3	12.9	16.4	10.2	13.1	16.0	9.6	16.1	17.8	13.0	Q2
4.8	5.1	14.1	5.4	5.4	4.5	1.3	5.0	3.4	5.3	Q3
5.2	4.8	11.8	6.2	6.3	5.8	1.4	10.4	5.5	6.4	Q4
4.6	4.1	7.6	6.7	9.5	11.1	3.1	9.8	6.4	5.9	2022 Q1
										Industrial production [2]
										Annual percentage change
2.9	– 3.1	1.1	– 0.9	– 0.1	– 2.2	0.5	2.8	0.5	4.4	2019
– 1.7	– 10.8	– 0.3	– 3.9	– 5.9	– 7.3	– 9.1	– 6.4	– 9.8	– 7.3	2020
20.0	8.4	– 0.2	5.0	11.2	3.5	10.4	9.9	7.5	6.4	2021
2.7	– 2.7	– 1.1	– 1.9	1.0	– 2.0	1.7	– 1.2	– 2.1	– 1.7	2020 Q4
13.3	5.1	– 8.5	– 0.8	3.2	– 0.6	6.6	3.3	2.5	1.2	2021 Q1
25.0	24.0	14.4	10.0	24.1	24.3	35.8	24.1	27.2	21.2	Q2
17.8	3.6	– 0.0	6.8	9.7	– 3.8	0.9	6.2	1.9	4.5	Q3
23.9	2.9	– 5.4	4.4	9.6	– 1.7	4.0	7.6	1.8	1.0	Q4
23.5	0.3	– 2.1	1.9	11.1	– 2.9	– 1.7	4.1	1.7	3.7	2022 Q1
										Capacity utilisation in industry [3]
										As a percentage of full capacity
77.3	80.0	77.4	84.1	86.6	78.0	87.2	84.3	80.3	63.8	2019
73.0	72.5	70.7	78.3	79.5	74.9	79.5	78.5	74.4	51.5	2020
76.7	81.9	76.8	82.4	87.1	79.2	82.2	84.4	77.8	51.3	2021
74.1	78.7	75.8	80.4	84.0	78.8	82.4	82.5	77.0	50.5	2021 Q1
76.6	83.6	77.9	81.8	86.3	78.7	82.5	84.2	77.4	48.8	Q2
77.7	83.1	78.4	83.8	89.5	78.9	81.9	85.8	77.5	50.2	Q3
78.3	82.1	75.2	83.6	88.5	80.2	82.1	85.2	79.2	55.6	Q4
77.9	81.8	62.9	84.0	88.4	81.8	82.8	86.4	78.8	55.4	2022 Q1
77.5	80.1	64.6	84.3	89.0	82.5	83.9	85.5	80.0	58.1	Q2
										Standardised unemployment rate [4]
										As a percentage of civilian labour force
6.3	5.6	3.6	3.4	4.5	6.5	5.8	4.5	14.1	7.1	2019
8.6	6.8	4.4	3.9	5.4	6.9	6.7	5.0	15.5	7.6	2020
e 7.1	e 5.4	e 3.6	e 4.2	e 6.2	e 6.6	e 6.9	e 4.8	e 14.8	e 7.5	2021
6.5	4.5	3.3	3.6	4.7	5.9	6.4	4.2	13.2	6.2	2022 Jan.
6.2	4.5	3.4	3.4	4.8	5.8	6.4	4.0	13.3	6.0	Feb.
6.1	4.3	3.2	3.3	4.3	5.9	6.3	4.0	13.4	5.5	Mar.
6.2	4.2	3.1	3.2	4.3	5.9	6.3	4.0	13.3	5.1	Apr.
6.0	4.2	3.1	3.3	4.8	6.1	6.2	3.9	13.1	4.8	May
...	...	...	...	...	...	...	...	...	...	June
										Harmonised Index of Consumer Prices
										Annual percentage change
2.2	1.6	1.5	2.7	1.5	0.3	2.8	1.7	0.8	0.5	2019
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
12.3	4.6	4.1	7.6	4.5	3.4	7.7	6.0	6.2	5.0	2022 Jan.
14.0	7.8	4.2	7.3	5.5	4.4	8.3	7.0	7.6	5.8	Feb.
15.6	7.9	4.5	11.7	6.6	5.5	9.6	6.0	9.8	6.2	Mar.
16.6	9.0	5.4	11.2	7.1	7.4	10.9	7.4	8.3	8.6	Apr.
18.5	9.1	5.8	10.2	7.7	8.1	11.8	8.7	8.5	8.8	May
20.5	e 10.3	6.1	e 9.9	e 8.7	e 9.0	e 12.6	10.8	10.0	9.0	June
										General government financial balance [6]
										As a percentage of GDP
0.5	2.3	0.6	1.7	0.6	0.1	– 1.3	0.4	– 3.1	1.3	2019
– 7.3	– 3.4	– 9.5	– 3.7	– 8.0	– 5.8	– 5.5	– 7.8	– 10.3	– 5.8	2020
– 1.0	0.9	– 8.0	– 2.5	– 5.9	– 2.8	– 6.2	– 5.2	– 6.9	– 1.7	2021
										General government debt [6]
										As a percentage of GDP
35.9	22.3	40.7	48.5	70.6	116.6	48.1	65.6	98.3	91.1	2019
46.6	24.8	53.4	54.3	83.3	135.2	59.7	79.8	120.0	115.0	2020
44.3	24.4	57.0	52.1	82.8	127.4	63.1	74.7	118.4	103.6	2021

quarterly data seasonally adjusted. Data collection at the beginning of the quarter. **4** Monthly data seasonally adjusted. **5** Influenced by a temporary reduction of value added tax between July and December 2020. **6** According to Maastricht Treaty definition.

II. Overall monetary survey in the euro area

1. The money stock and its counterparts *

a) Euro area [1]

€ billion

Period	I. Lending to non-banks (non-MFIs) in the euro area					II. Net claims on non-euro area residents			III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
		Enterprises and households		General government									
	Total	Total	of which: Securities	Total	of which: Securities	Total	Claims on non-euro area residents	Liabilities to non-euro area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) [2]	Capital and reserves [3]
2020 Oct.	69.9	30.9	– 4.7	39.0	33.1	– 26.7	87.6	114.3	– 17.4	– 4.3	– 0.4	– 29.7	17.1
Nov.	117.4	72.8	29.0	44.6	45.3	– 30.4	91.8	122.2	4.7	13.2	– 0.5	– 10.7	2.7
Dec.	– 3.6	– 1.0	30.0	– 2.6	6.2	– 46.9	– 194.4	– 147.5	9.3	– 5.5	– 0.5	– 14.3	29.7
2021 Jan.	133.3	30.1	4.3	103.2	94.1	38.8	162.4	123.6	– 36.2	– 9.2	0.1	– 16.0	– 11.1
Feb.	99.8	33.8	9.0	66.0	72.7	– 14.7	28.9	43.6	– 1.2	– 5.7	– 0.5	– 2.4	7.4
Mar.	176.0	100.7	8.5	75.3	74.0	– 5.9	– 6.7	– 0.7	12.2	– 9.0	– 0.3	1.2	20.3
Apr.	55.9	13.3	8.6	42.6	29.0	– 11.4	104.5	115.9	– 36.9	– 23.9	– 0.1	– 7.5	– 5.4
May	124.9	48.3	15.2	76.6	77.6	2.6	24.5	21.8	– 23.5	– 1.2	– 0.2	– 15.1	– 6.9
June	94.5	37.2	0.8	57.3	58.6	9.2	– 74.4	– 83.6	26.8	– 6.1	– 0.4	– 4.2	37.6
July	112.9	56.0	8.1	56.8	50.3	– 4.2	74.3	78.6	3.1	– 4.7	– 0.6	9.3	– 0.9
Aug.	35.0	– 16.6	– 7.8	51.7	60.9	– 4.7	141.2	146.0	– 5.9	– 7.3	– 0.4	– 7.0	8.9
Sep.	107.4	72.9	3.7	34.4	43.2	– 40.1	– 58.2	– 18.1	16.6	– 4.5	– 0.4	8.3	13.2
Oct.	80.6	68.3	21.3	12.3	18.5	– 16.4	192.3	208.7	11.4	– 10.7	– 0.7	16.8	6.0
Nov.	156.1	89.3	– 3.6	66.8	67.5	– 26.3	15.0	41.3	– 7.0	– 10.6	– 0.7	1.8	2.5
Dec.	53.0	27.9	20.3	25.1	22.6	– 51.4	– 203.4	– 151.9	4.5	18.0	– 0.8	– 25.0	12.3
2022 Jan.	166.4	91.4	– 10.3	75.0	64.7	– 1.5	136.0	137.4	– 18.4	– 14.7	– 0.1	9.4	– 13.0
Feb.	113.3	46.8	2.0	66.5	73.8	– 14.0	83.1	97.1	– 12.3	– 8.9	– 0.4	1.6	– 4.7
Mar.	157.4	112.2	26.4	45.3	36.0	3.4	– 20.8	– 24.2	– 4.2	2.8	– 0.7	– 27.2	20.8
Apr.	110.9	96.3	20.4	14.7	4.7	– 81.2	– 57.6	23.6	5.6	– 10.7	– 0.1	– 1.3	17.7
May	117.2	91.1	6.2	26.0	33.6	– 63.6	40.1	103.7	– 7.2	2.0	– 3.2	– 18.0	12.0

b) German contribution

Period	I. Lending to non-banks (non-MFIs) in the euro area					II. Net claims on non-euro area residents			III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
		Enterprises and households		General government									
	Total	Total	of which: Securities	Total	of which: Securities	Total	Claims on non-euro area residents	Liabilities to non-euro area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) [2]	Capital and reserves [3]
2020 Oct.	48.7	22.1	6.6	26.7	23.9	30.1	– 16.6	– 46.8	– 2.0	– 0.5	– 0.4	– 4.5	3.4
Nov.	44.0	19.6	4.5	24.5	26.0	– 15.1	7.4	22.5	0.6	– 1.5	– 0.4	0.2	2.3
Dec.	– 0.9	7.5	3.6	– 8.4	– 4.6	– 107.2	– 35.1	72.1	– 7.5	– 1.3	– 0.3	– 7.1	1.2
2021 Jan.	30.1	12.1	3.1	18.1	18.1	41.7	79.7	38.0	– 11.4	– 2.9	– 0.6	– 1.6	– 6.4
Feb.	29.8	18.8	4.6	11.1	13.4	26.3	7.0	– 19.3	0.8	– 1.8	– 0.3	4.3	– 1.4
Mar.	54.1	35.8	1.8	18.3	19.5	– 61.9	1.9	63.9	3.5	– 3.5	– 0.3	7.1	0.2
Apr.	11.4	0.5	2.4	10.8	7.0	67.3	25.3	– 42.0	9.3	– 2.4	– 0.3	6.4	5.6
May	33.4	16.8	3.2	16.6	18.9	– 35.0	– 10.9	24.1	– 10.3	– 2.8	– 0.1	– 7.3	0.0
June	30.0	8.7	2.4	21.4	22.3	– 36.1	– 5.3	30.8	3.2	– 3.4	– 0.2	– 7.3	14.1
July	42.9	22.4	2.2	20.4	18.4	42.8	– 14.6	– 57.4	5.1	– 1.8	– 0.3	4.3	2.8
Aug.	28.5	16.6	1.6	11.9	15.7	– 18.0	18.2	36.2	2.0	– 0.5	– 0.2	0.9	1.9
Sep.	33.1	16.7	5.4	16.4	16.5	– 92.2	– 0.7	91.5	3.8	– 2.2	– 0.2	2.6	3.6
Oct.	37.8	34.7	7.2	3.0	– 0.6	47.0	47.6	0.7	18.6	1.4	– 0.2	15.6	1.8
Nov.	54.0	28.5	3.4	25.4	28.0	– 59.0	– 4.2	54.8	5.0	– 0.6	– 0.2	4.7	1.1
Dec.	12.8	10.9	6.8	2.0	4.7	– 122.9	– 47.1	75.8	– 2.3	9.1	– 0.2	– 13.2	2.0
2022 Jan.	40.4	31.0	1.4	9.4	7.5	111.9	72.2	– 39.7	– 4.0	– 1.1	– 0.8	12.6	– 14.8
Feb.	32.7	27.6	3.4	5.2	7.2	16.0	21.9	5.9	5.1	– 1.3	– 0.2	7.0	– 0.4
Mar.	37.0	23.3	4.1	13.7	12.9	– 44.2	– 22.2	22.0	6.1	– 2.0	– 0.2	4.1	4.2
Apr.	19.0	18.9	2.7	0.1	– 4.5	19.1	– 13.0	– 32.1	4.4	– 2.7	– 0.2	3.2	4.1
May	43.4	33.2	3.7	10.3	13.1	– 29.9	– 1.0	29.0	2.1	– 2.3	– 0.1	2.0	2.5

***** The data in this table are based on the consolidated balance sheet of monetary financial institutions (MFIs) (Table II.2); statistical breaks have been eliminated from the flow figures (see also the "Notes on the figures" in the "Explanatory notes" of the Statistical Series Banking Statistics). **1** Source: ECB. **2** Excluding MFIs' portfolios. **3** After deduction of inter-MFI participations. **4** Including the counterparts of monetary liabilities of central governments. **5** Including the monetary liabilities of central governments (Post Office, Treasury). **6** In Germany, only savings deposits. **7** Paper held by residents outside the euro area has been eliminated. **8** Less German MFIs' holdings

II. Overall monetary survey in the euro area

a) Euro area [1]

IV. Deposits of central governments	V. Other factors		VI. Money stock M3 (balance I plus II less III less IV less V)										Period
	Total [4]	of which: Intra-Eurosystem liability/ claim related to banknote issue	Total	Money stock M2				Deposits with an agreed maturity of up to 2 years [5]	Deposits at agreed notice of up to 3 months [5,6]	Repo transactions	Money market fund shares (net) [2,7,8]	Debt securities with maturities of up to 2 years (incl. money market paper) (net) [2,7]	
				Total	Money stock M1								
					Total	Currency in circulation	Overnight deposits [5]						
− 17.2	− 40.1	0.0	108.9	85.9	100.7	7.8	93.0	− 17.3	2.5	5.3	14.1	12.5	2020 Oct.
− 98.5	52.3	0.0	129.4	125.2	152.4	11.8	140.6	− 35.2	8.1	− 0.7	1.1	3.2	Nov.
− 128.1	− 52.0	0.0	138.2	128.3	117.1	20.8	96.2	10.6	0.6	− 24.7	20.1	− 3.5	Dec.
78.3	33.2	0.0	69.1	32.3	44.5	2.6	41.9	− 30.6	18.4	29.9	18.5	5.7	2021 Jan.
30.4	5.2	0.0	52.6	65.4	71.8	7.3	64.5	− 18.0	11.6	2.8	− 30.7	13.1	Feb.
19.6	73.2	0.0	83.2	101.6	82.6	10.5	72.2	7.3	11.7	− 18.6	− 4.7	− 13.3	Mar.
− 32.3	14.2	0.0	94.5	69.1	88.9	8.5	80.4	− 27.9	8.1	15.3	8.9	6.8	Apr.
− 8.5	48.9	0.0	110.1	115.6	116.7	13.2	103.5	− 11.7	10.7	− 4.1	− 8.9	8.1	May
16.8	− 4.3	0.0	74.0	88.1	119.7	10.5	109.2	− 33.9	2.3	− 10.8	− 8.4	− 4.6	June
0.4	− 55.8	0.0	151.2	113.5	103.3	14.6	88.6	10.5	− 0.3	17.4	22.6	7.4	July
26.6	− 10.6	0.0	28.3	33.4	32.4	1.7	30.7	− 2.5	3.6	− 12.3	5.3	− 6.2	Aug.
6.5	− 0.8	0.0	31.1	60.4	76.0	5.3	70.8	− 16.5	0.8	12.7	− 31.1	2.9	Sep.
− 2.4	− 75.0	0.0	129.3	84.7	70.5	6.8	63.7	19.2	− 5.0	13.2	31.5	0.8	Oct.
− 48.5	84.9	0.0	95.9	83.7	102.7	6.0	96.7	− 19.7	0.7	− 4.4	26.2	− 5.0	Nov.
− 44.5	− 20.1	0.0	87.6	114.4	104.0	20.6	83.3	6.9	3.6	− 41.8	− 6.7	− 4.0	Dec.
68.1	91.4	0.0	− 23.9	− 23.9	− 51.4	1.0	− 52.3	14.9	12.6	63.5	− 23.2	6.1	2022 Jan.
44.6	26.6	0.0	39.8	70.2	77.1	9.1	68.0	− 14.9	8.0	9.4	− 37.2	− 2.1	Feb.
13.7	54.7	0.0	104.2	112.8	92.7	22.5	70.1	16.1	4.0	− 21.8	− 1.7	2.1	Mar.
− 22.1	− 71.4	0.0	91.3	57.0	52.2	11.2	41.1	2.7	2.1	28.8	20.2	12.9	Apr.
− 28.1	63.7	0.0	23.9	56.4	61.2	7.8	53.4	− 14.8	10.0	5.5	− 10.9	− 27.1	May

b) German contribution

IV. Deposits of central governments	V. Other factors			VI. Money stock M3 (balance I plus II less III less IV less V) [10]								Period
	Total	of which:		Total	Components of the money stock							
		Intra-Eurosystem liability/ claim related to banknote issue [9,11]	Currency in circulation		Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits at agreed notice of up to 3 months [6]	Repo transactions	Money market fund shares (net) [7,8]	maturities with maturities of up to 2 years (incl. money market paper)(net) [7]	
− 20.0	70.5	2.4	1.7	30.3	30.6	− 0.1	− 0.0	0.2	0.6	− 1.0	2020 Oct.
− 12.7	3.6	1.3	3.0	37.4	49.3	− 14.3	0.3	3.3	− 0.3	− 0.9	Nov.
− 22.9	− 73.4	2.4	5.6	− 4.3	− 5.8	− 1.7	1.3	3.1	0.1	− 1.3	Dec.
− 40.3	95.7	1.1	0.9	27.8	45.9	− 14.8	1.6	− 3.8	− 0.0	− 1.1	2021 Jan.
15.4	29.1	2.3	1.5	10.8	20.3	− 8.5	1.2	− 2.4	− 0.0	0.3	Feb.
− 2.3	− 38.0	2.5	2.7	29.1	24.3	− 0.6	0.1	5.0	0.5	− 0.1	Mar.
− 7.4	71.2	0.7	2.6	5.5	13.9	− 5.2	0.7	− 3.4	− 0.1	− 0.4	Apr.
18.8	− 44.9	3.0	2.9	34.8	27.8	2.8	0.6	1.7	− 0.1	2.0	May
6.0	− 14.0	3.1	2.3	− 1.2	7.1	− 8.0	− 0.4	− 0.2	0.1	0.3	June
− 12.0	75.2	4.2	3.7	17.4	21.2	− 4.1	− 0.3	0.6	− 0.1	0.1	July
0.7	− 13.2	2.9	0.2	21.0	20.4	− 1.6	− 0.3	0.1	0.0	2.3	Aug.
7.1	− 77.3	4.6	0.8	7.3	7.6	− 1.3	− 0.6	1.5	− 0.0	0.1	Sep.
− 3.9	53.7	3.3	1.6	16.4	3.9	13.0	− 0.4	− 0.4	− 0.1	0.4	Oct.
7.2	− 42.3	3.7	1.2	25.0	40.9	− 12.3	− 0.1	− 4.7	− 0.3	1.4	Nov.
27.8	− 135.3	5.3	4.5	− 0.4	− 12.8	9.1	1.6	− 0.3	0.3	1.7	Dec.
− 38.1	166.0	1.3	0.8	28.4	22.4	9.3	0.3	− 1.2	0.0	− 2.4	2022 Jan.
2.5	14.4	3.0	2.2	26.8	23.3	1.1	0.3	1.1	0.1	0.8	Feb.
− 0.1	− 13.2	5.8	4.2	− 0.1	− 7.4	8.4	− 1.6	0.5	0.2	− 0.1	Mar.
− 3.0	32.9	3.4	2.3	3.7	− 3.4	10.4	− 0.4	− 2.0	− 0.2	− 0.6	Apr.
22.5	− 27.1	3.4	2.7	15.9	23.2	− 7.3	− 1.2	0.4	0.2	0.6	May

of paper issued by euro area MFIs. **9** Including national banknotes still in circulation. **10** The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates and are therefore not comparable with the erstwhile German money stocks M1, M2 or M3. **11** The difference between the volume of euro banknotes actually issued by the Bundesbank and the amount disclosed in accordance with the accounting regime chosen by the Eurosystem (see also footnote 2 on banknote circulation in Table III.2).

II. Overall monetary survey in the euro area

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

End of month	Total assets or liabilities	Assets										
		Lending to non-banks (non-MFIs) in the euro area									Claims on non-euro area residents	Other assets
			Enterprises and households				General government					
		Total	Total	Loans	Debt securities 2	Shares and other equities	Total	Loans	Debt securities 3			
	Euro area (€ billion) 1											
2020 Apr.	30,449.1	19,309.4	14,349.9	11,933.4	1,614.3	802.2	4,959.5	1,018.1	3,941.4	6,583.3	4,556.4
May	30,500.5	19,611.5	14,470.1	12,020.6	1,646.6	802.8	5,141.4	1,013.8	4,127.7	6,464.0	4,425.1
June	30,406.4	19,761.9	14,451.9	11,982.0	1,653.7	816.1	5,310.0	1,005.3	4,304.7	6,297.2	4,347.3
July	30,598.6	19,912.2	14,334.1	12,013.7	1,506.0	814.5	5,578.1	1,006.0	4,572.1	6,291.1	4,395.3
Aug.	30,434.9	19,985.0	14,355.1	12,019.1	1,525.0	811.0	5,629.9	997.8	4,632.1	6,241.9	4,208.0
Sep.	30,522.8	20,084.9	14,349.5	12,019.2	1,520.4	809.9	5,735.4	998.7	4,736.8	6,238.1	4,199.8
Oct.	30,687.0	20,162.5	14,376.6	12,054.8	1,520.5	801.3	5,785.9	1,004.2	4,781.7	6,337.4	4,187.0
Nov.	30,749.4	20,292.0	14,457.7	12,090.4	1,542.2	825.0	5,834.4	1,003.4	4,831.0	6,331.0	4,126.4
Dec.	30,438.8	20,266.1	14,438.3	12,042.9	1,532.2	863.2	5,827.8	990.2	4,837.6	6,108.9	4,063.8
2021 Jan.	30,643.8	20,387.8	14,466.2	12,067.8	1,535.8	862.6	5,921.6	999.4	4,922.1	6,299.8	3,956.2
Feb.	30,546.3	20,463.6	14,500.5	12,090.1	1,541.1	869.3	5,963.1	992.4	4,970.6	6,300.7	3,782.0
Mar.	30,827.0	20,653.7	14,576.8	12,185.3	1,512.6	879.0	6,076.9	993.3	5,083.5	6,360.7	3,812.6
Apr.	30,752.9	20,667.2	14,566.6	12,169.2	1,509.7	887.7	6,100.6	1,007.2	5,093.4	6,396.3	3,689.5
May	30,890.4	20,788.2	14,612.8	12,198.6	1,521.6	892.6	6,175.5	1,006.2	5,169.2	6,434.1	3,668.1
June	30,991.0	20,890.7	14,652.8	12,234.6	1,530.0	888.3	6,237.8	1,004.8	5,233.1	6,400.0	3,700.3
July	31,313.8	21,028.7	14,708.3	12,278.0	1,543.6	886.7	6,320.4	1,011.3	5,309.1	6,504.2	3,781.0
Aug.	31,438.1	21,047.9	14,684.9	12,261.1	1,533.4	890.4	6,363.1	1,002.3	5,360.8	6,653.5	3,736.6
Sep.	31,473.8	21,133.9	14,757.6	12,331.3	1,534.9	891.4	6,376.3	993.6	5,382.7	6,620.6	3,719.3
Oct.	31,776.6	21,201.6	14,817.7	12,379.4	1,548.1	890.2	6,384.0	987.7	5,396.3	6,823.1	3,751.9
Nov.	32,190.9	21,381.2	14,911.2	12,478.0	1,542.2	890.9	6,470.0	985.8	5,484.2	6,915.2	3,894.5
Dec.	31,777.4	21,384.3	14,917.1	12,462.9	1,567.2	887.0	6,467.3	988.5	5,478.8	6,738.8	3,654.3
2022 Jan.	32,392.6	21,552.2	15,027.3	12,590.2	1,553.1	884.0	6,524.9	999.2	5,525.8	6,909.4	3,931.0
Feb.	32,580.9	21,611.8	15,058.5	12,628.9	1,553.6	876.0	6,553.3	991.8	5,561.5	7,007.4	3,961.7
Mar.	32,935.4	21,735.8	15,174.8	12,721.3	1,587.4	866.1	6,561.0	1,001.4	5,559.6	6,994.9	4,204.8
Apr.	33,587.6	21,761.4	15,251.9	12,803.6	1,597.8	850.5	6,509.5	1,011.3	5,498.2	7,082.8	4,743.4
May	33,512.0	21,823.8	15,327.8	12,878.4	1,591.2	858.2	6,496.0	1,003.8	5,492.2	7,034.2	4,654.0
	German contribution (€ billion)										
2020 Apr.	7,258.0	4,605.2	3,606.5	3,143.8	206.5	256.1	998.7	294.8	703.9	1,346.6	1,306.2
May	7,230.4	4,666.4	3,640.1	3,167.2	215.9	257.1	1,026.2	293.8	732.5	1,326.0	1,238.1
June	7,225.3	4,692.6	3,641.6	3,164.7	220.4	256.6	1,051.0	291.5	759.6	1,304.2	1,228.5
July	7,267.6	4,718.8	3,634.9	3,175.5	202.7	256.7	1,083.9	293.4	790.5	1,282.9	1,265.8
Aug.	7,167.3	4,723.0	3,642.2	3,180.7	202.9	258.6	1,080.8	287.4	793.3	1,268.8	1,175.5
Sep.	7,236.4	4,749.2	3,647.1	3,184.0	204.9	258.1	1,102.1	289.7	812.4	1,293.8	1,193.4
Oct.	7,257.1	4,801.4	3,670.3	3,200.4	210.7	259.3	1,131.1	292.0	839.1	1,278.8	1,176.8
Nov.	7,240.5	4,841.7	3,688.6	3,213.7	214.3	260.6	1,153.1	290.2	862.9	1,261.9	1,136.9
Dec.	7,172.5	4,839.4	3,695.5	3,216.4	214.7	264.5	1,143.9	286.4	857.4	1,224.1	1,109.1
2021 Jan.	7,220.7	4,865.5	3,705.9	3,224.4	216.4	265.1	1,159.6	286.5	873.1	1,307.6	1,047.6
Feb.	7,182.0	4,885.0	3,724.3	3,238.8	217.4	268.1	1,160.7	283.8	877.0	1,305.0	991.9
Mar.	7,233.5	4,939.8	3,761.1	3,273.4	217.3	270.4	1,178.7	282.6	896.1	1,315.4	978.3
Apr.	7,228.4	4,946.1	3,760.5	3,270.3	217.6	272.6	1,185.6	285.7	899.9	1,333.6	948.6
May	7,228.0	4,977.5	3,777.2	3,283.3	219.5	274.4	1,200.3	283.4	916.9	1,329.8	920.7
June	7,277.1	5,009.8	3,786.4	3,290.4	220.8	275.2	1,223.4	282.3	941.1	1,325.1	942.1
July	7,362.7	5,062.4	3,808.5	3,310.2	221.9	276.4	1,253.9	284.4	969.5	1,317.4	982.9
Aug.	7,395.2	5,087.3	3,824.6	3,325.1	221.4	278.1	1,262.8	280.8	982.0	1,336.0	971.9
Sep.	7,398.6	5,110.8	3,840.8	3,336.4	224.7	279.7	1,270.1	280.7	989.4	1,335.1	952.6
Oct.	7,461.0	5,147.0	3,874.5	3,363.5	228.6	282.4	1,272.5	284.4	988.0	1,385.2	928.8
Nov.	7,575.0	5,210.7	3,904.2	3,389.9	229.0	285.3	1,306.4	280.7	1,025.7	1,396.4	967.9
Dec.	7,475.8	5,212.1	3,914.7	3,393.2	237.0	284.5	1,297.4	278.0	1,019.5	1,355.9	907.8
2022 Jan.	7,787.0	5,243.9	3,944.7	3,422.9	235.8	286.0	1,299.2	279.9	1,019.3	1,433.6	1,109.5
Feb.	7,871.3	5,262.9	3,968.5	3,445.2	238.0	285.3	1,294.3	277.8	1,016.5	1,464.4	1,144.0
Mar.	7,997.7	5,280.7	3,990.2	3,464.4	240.6	285.2	1,290.6	278.6	1,012.0	1,447.5	1,269.5
Apr.	8,259.4	5,278.9	4,008.0	3,481.9	240.1	286.1	1,270.9	283.2	987.7	1,464.0	1,516.5
May	8,231.7	5,308.4	4,038.4	3,509.8	240.8	287.8	1,269.9	280.3	989.7	1,444.9	1,478.4

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

II. Overall monetary survey in the euro area

Liabilities										
	Deposits of non-banks (non-MFIs) in the euro area									
			Enterprises and households							
					With agreed maturities of			At agreed notice of [6]		
Currency in circulation [4]	Total	of which: in euro [5]	Total	Overnight	up to 1 year	over 1 year and up to 2 years	over 2 years	up to 3 months	over 3 months	End of month
										Euro area (€ billion) [1]
1,273.5	13,996.0	12,953.0	13,065.1	7,852.4	762.3	188.2	1,876.7	2,343.4	42.1	2020 Apr.
1,293.5	14,302.8	13,164.0	13,264.9	8,009.7	779.7	188.4	1,881.9	2,363.7	41.4	May
1,306.6	14,478.2	13,208.9	13,310.8	8,066.5	763.6	186.8	1,877.8	2,375.5	40.6	June
1,320.9	14,592.9	13,276.6	13,363.7	8,090.1	783.2	186.3	1,882.5	2,381.1	40.4	July
1,326.8	14,668.1	13,304.3	13,391.2	8,117.1	767.8	184.4	1,892.0	2,390.0	40.0	Aug.
1,330.3	14,758.4	13,361.0	13,467.6	8,175.8	781.0	195.4	1,883.6	2,392.0	39.8	Sep.
1,338.1	14,814.8	13,431.7	13,545.6	8,266.0	783.3	181.9	1,880.4	2,394.6	39.4	Oct.
1,349.9	14,813.0	13,527.2	13,621.6	8,358.3	756.5	179.6	1,885.7	2,402.5	39.0	Nov.
1,370.7	14,772.9	13,620.6	13,728.8	8,459.6	772.0	176.9	1,877.6	2,404.2	38.5	Dec.
1,373.3	14,873.9	13,631.3	13,752.9	8,505.4	743.9	173.8	1,870.6	2,421.0	38.1	2021 Jan.
1,380.6	14,957.8	13,678.6	13,807.8	8,569.6	733.7	169.2	1,865.1	2,432.5	37.7	Feb.
1,391.1	15,076.4	13,757.0	13,913.7	8,654.9	753.5	164.3	1,858.8	2,444.8	37.4	Mar.
1,399.6	15,061.0	13,775.3	13,936.1	8,727.0	731.8	159.5	1,827.5	2,453.0	37.3	Apr.
1,412.8	15,147.4	13,870.8	14,018.1	8,811.1	724.4	155.5	1,826.2	2,463.6	37.1	May
1,423.2	15,241.8	13,943.4	14,091.3	8,917.7	698.2	150.4	1,822.0	2,466.2	36.8	June
1,437.6	15,335.4	14,017.2	14,185.7	9,006.7	705.9	153.6	1,817.0	2,466.2	36.3	July
1,439.2	15,386.3	14,039.3	14,196.7	9,030.0	707.3	151.2	1,809.9	2,462.4	35.9	Aug.
1,444.5	15,442.5	14,075.3	14,239.7	9,092.9	701.1	140.0	1,806.7	2,463.3	35.6	Sep.
1,450.3	15,504.6	14,139.4	14,312.3	9,166.1	709.0	148.0	1,795.5	2,458.8	34.9	Oct.
1,456.3	15,518.4	14,188.5	14,345.4	9,224.1	697.5	143.3	1,786.3	2,459.8	34.3	Nov.
1,477.0	15,579.6	14,310.0	14,464.4	9,316.4	714.5	131.3	1,805.2	2,463.5	33.6	Dec.
1,477.9	15,624.8	14,264.9	14,457.0	9,294.6	707.9	135.3	1,808.2	2,478.2	32.9	2022 Jan.
1,487.0	15,723.7	14,315.6	14,498.3	9,357.2	688.6	134.3	1,799.3	2,486.2	32.7	Feb.
1,509.6	15,840.3	14,415.5	14,599.8	9,439.8	703.7	123.5	1,809.5	2,491.1	32.2	Mar.
1,520.7	15,875.1	14,463.3	14,653.0	9,493.4	709.3	123.4	1,801.7	2,493.0	32.1	Apr.
1,528.5	15,884.2	14,500.2	14,674.0	9,530.1	689.6	120.3	1,801.6	2,503.4	29.0	May
										German contribution (€ billion)
286.5	3,997.3	3,828.9	3,665.7	2,359.6	149.2	30.0	563.6	532.2	31.1	2020 Apr.
291.8	4,080.7	3,885.8	3,710.9	2,396.9	158.3	29.0	563.6	532.5	30.7	May
296.5	4,132.2	3,873.6	3,711.6	2,408.7	152.1	29.6	559.0	532.6	29.7	June
300.4	4,170.7	3,880.3	3,716.8	2,409.9	163.5	30.0	552.8	531.5	29.2	July
301.3	4,202.4	3,889.9	3,720.2	2,419.2	159.3	30.1	551.3	531.6	28.8	Aug.
301.9	4,235.6	3,905.7	3,745.0	2,445.3	160.3	30.3	549.2	531.5	28.4	Sep.
303.6	4,245.3	3,935.3	3,781.4	2,476.4	165.4	30.5	549.7	531.5	28.0	Oct.
306.6	4,260.2	3,961.8	3,804.4	2,507.7	157.7	30.6	549.0	531.8	27.6	Nov.
312.2	4,228.5	3,954.1	3,801.5	2,500.9	160.3	31.0	548.8	533.1	27.3	Dec.
313.1	4,218.7	3,980.7	3,829.7	2,541.7	147.0	31.0	548.5	534.8	26.8	2021 Jan.
314.6	4,245.1	3,990.0	3,837.4	2,555.8	141.0	31.1	547.0	536.0	26.4	Feb.
317.3	4,264.3	4,011.8	3,863.4	2,579.8	145.1	31.7	544.6	536.1	26.1	Mar.
319.9	4,262.2	4,013.0	3,874.5	2,594.4	143.0	31.9	542.5	536.8	25.8	Apr.
322.8	4,308.8	4,040.3	3,895.1	2,613.5	146.0	32.2	540.4	537.4	25.7	May
325.1	4,311.0	4,035.3	3,890.5	2,619.4	139.3	31.9	537.5	537.0	25.5	June
328.8	4,313.9	4,047.3	3,911.3	2,645.8	136.0	31.4	536.0	536.7	25.2	July
329.0	4,333.1	4,065.2	3,923.1	2,659.1	135.6	31.3	535.7	536.4	25.0	Aug.
329.8	4,340.5	4,064.1	3,919.8	2,662.1	132.2	31.2	533.6	535.8	24.8	Sep.
331.4	4,354.3	4,080.9	3,950.3	2,681.4	143.0	31.1	534.8	535.5	24.6	Oct.
332.6	4,390.5	4,107.1	3,968.0	2,710.9	132.5	30.3	534.6	535.5	24.3	Nov.
337.1	4,425.2	4,113.0	3,968.5	2,691.5	141.2	30.1	544.6	537.0	24.1	Dec.
337.9	4,418.1	4,139.2	4,006.8	2,737.3	135.4	29.7	543.6	537.4	23.4	2022 Jan.
340.1	4,444.1	4,161.0	4,017.1	2,752.3	132.4	29.4	542.3	537.7	23.1	Feb.
344.3	4,441.6	4,159.0	4,014.6	2,755.3	130.7	29.3	540.4	536.0	22.9	Mar.
346.7	4,445.6	4,158.1	4,019.8	2,754.8	140.0	29.4	537.7	535.1	22.7	Apr.
349.4	4,478.3	4,170.3	4,016.7	2,770.0	125.8	29.7	534.7	533.9	22.6	May

euro banknotes put into circulation by the Bundesbank in accordance with the accounting regime chosen by the Eurosystem (see also footnote 2 on banknote circulation in Table III.2). The volume of currency actually put into circulation by the Bundesbank can be calculated by adding to this total the item "Intra-Eurosystem liability/claim related to banknote issue" (see "Other liability items"). **5** Excluding central governments' deposits. **6** In Germany, only savings deposits.

II. Overall monetary survey in the euro area

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

End of month	Liabilities (cont'd)												
	Deposits of non-banks (non-MFIs) in the euro area (cont'd)								Repo transactions with non-banks in the euro area		Money market fund shares (net) [3]	Debt securities	
	General government												
		Other general government											
				With agreed maturities of			At agreed notice of [2]						
	Central government	Total	Overnight	up to 1 year	over 1 year and up to 2 years	over 2 years	up to 3 months	over 3 months	Total	of which: Enterprises and households		Total	of which: Denominated in euro
	Euro area (€ billion) [1]												
2020 Apr.	502.3	428.6	233.9	84.0	29.4	56.4	21.1	3.8	289.0	288.6	542.9	2,158.7	1,472.6
May	603.1	434.8	245.9	81.7	28.4	54.7	20.3	3.8	297.8	297.5	542.3	2,134.3	1,470.7
June	726.2	441.1	259.5	82.4	24.6	51.8	19.3	3.4	254.8	254.6	556.6	2,105.0	1,453.7
July	787.6	441.5	264.3	80.1	23.2	51.0	19.4	3.5	271.8	271.6	586.4	2,055.1	1,434.5
Aug.	828.4	448.5	273.6	79.5	22.1	50.3	19.6	3.5	266.9	266.7	587.0	2,036.6	1,425.3
Sep.	848.8	442.1	274.8	74.4	20.8	49.1	19.5	3.4	237.7	237.5	595.2	2,059.6	1,431.0
Oct.	831.5	437.6	277.4	69.6	20.8	47.0	19.5	3.4	243.1	242.9	609.3	2,043.2	1,418.6
Nov.	733.0	458.4	307.1	64.6	17.8	46.1	19.4	3.3	246.4	246.4	610.3	2,025.2	1,406.4
Dec.	604.8	439.3	294.7	60.3	17.2	44.8	19.0	3.3	221.4	221.3	625.9	1,995.5	1,386.3
2021 Jan.	683.2	437.8	294.4	58.9	17.4	44.1	19.2	3.8	251.6	251.5	644.4	1,990.9	1,369.7
Feb.	713.6	436.4	296.4	54.3	19.0	43.9	19.2	3.7	254.6	254.5	613.7	2,004.4	1,369.6
Mar.	733.1	429.6	295.4	52.1	16.4	43.2	18.9	3.7	236.5	236.5	609.1	2,005.5	1,357.4
Apr.	700.9	424.0	293.9	48.5	16.2	42.9	18.9	3.6	251.1	251.0	617.9	1,991.6	1,350.5
May	692.4	436.9	308.3	47.7	15.9	42.4	19.1	3.5	246.7	246.7	608.4	1,980.7	1,339.4
June	709.3	441.2	314.0	46.6	16.3	42.0	18.8	3.5	236.5	236.5	600.0	1,984.2	1,332.5
July	709.7	440.1	313.9	45.6	16.6	42.0	18.6	3.5	253.9	253.9	622.6	1,999.3	1,334.0
Aug.	736.1	453.5	329.1	43.9	17.0	42.0	18.0	3.4	241.7	241.7	627.9	1,988.5	1,334.0
Sep.	742.7	460.1	334.6	46.3	16.6	41.3	18.1	3.3	257.3	257.2	596.8	2,011.7	1,343.3
Oct.	740.3	451.9	323.3	48.1	18.0	41.6	17.7	3.3	270.3	270.3	628.3	2,031.7	1,353.1
Nov.	691.5	481.6	349.8	50.3	19.1	41.7	17.5	3.3	266.4	266.4	654.5	2,040.2	1,352.7
Dec.	646.7	468.4	337.4	49.7	19.4	41.1	17.6	3.2	224.7	223.5	647.7	2,016.3	1,345.8
2022 Jan.	710.9	456.9	307.3	67.4	19.6	41.2	17.6	3.8	288.5	288.3	624.5	2,043.2	1,348.9
Feb.	755.5	469.9	314.1	73.5	19.8	41.3	17.6	3.7	297.9	297.7	587.2	2,042.2	1,357.3
Mar.	769.6	470.9	304.7	82.5	20.5	42.4	17.3	3.4	276.2	276.0	585.4	2,023.1	1,356.9
Apr.	747.6	474.5	306.7	83.4	21.2	42.6	17.2	3.4	306.2	306.0	605.8	2,063.7	1,358.2
May	719.5	490.7	316.6	88.4	22.3	43.4	16.8	3.3	311.2	311.1	595.0	2,009.7	1,337.5
	German contribution (€ billion)												
2020 Apr.	87.5	244.0	94.7	74.4	23.7	48.3	2.7	0.4	3.4	3.3	2.1	550.6	306.2
May	116.2	253.6	108.0	72.9	22.9	46.7	2.8	0.3	2.4	2.3	1.9	543.1	305.4
June	174.0	246.5	106.1	74.1	19.5	44.0	2.5	0.3	0.9	0.7	1.8	532.8	297.2
July	208.5	245.3	109.6	71.4	18.3	43.2	2.5	0.3	2.1	2.0	1.6	523.3	293.3
Aug.	229.5	252.8	118.7	71.3	17.4	42.4	2.6	0.3	1.7	1.5	1.9	517.9	291.1
Sep.	244.7	245.8	119.4	66.0	16.5	41.1	2.5	0.3	1.3	1.1	2.0	525.3	296.1
Oct.	224.8	239.1	119.1	61.7	16.6	39.0	2.5	0.3	1.4	1.3	2.7	519.9	296.2
Nov.	212.1	243.7	131.6	57.3	14.0	38.0	2.5	0.2	9.1	9.1	2.4	515.5	296.1
Dec.	189.2	237.8	131.9	52.8	13.5	36.8	2.5	0.2	12.2	12.2	2.5	503.3	290.1
2021 Jan.	148.9	240.1	136.5	51.6	13.5	35.8	2.4	0.2	8.4	8.4	2.4	503.3	284.6
Feb.	164.3	243.4	142.8	47.3	15.2	35.5	2.5	0.2	6.0	6.0	2.4	510.0	288.4
Mar.	161.9	239.0	144.4	44.9	12.7	34.4	2.4	0.2	11.0	11.0	2.9	523.3	289.8
Apr.	154.6	233.1	142.4	41.5	12.5	34.1	2.4	0.2	7.6	7.6	2.8	524.3	296.2
May	173.3	240.3	150.8	41.0	12.5	33.4	2.4	0.2	9.2	9.2	2.2	518.0	293.2
June	179.3	241.2	152.9	39.9	13.0	32.8	2.4	0.2	9.0	9.0	2.3	515.5	294.6
July	167.3	235.3	148.0	38.9	13.3	32.5	2.4	0.2	9.6	9.6	2.2	518.3	295.1
Aug.	168.1	241.8	155.7	37.3	13.9	32.4	2.4	0.2	9.7	9.7	2.2	522.4	303.1
Sep.	175.2	245.6	158.2	39.8	13.4	31.7	2.3	0.2	11.2	11.2	2.2	530.1	305.5
Oct.	171.3	232.7	142.7	40.9	14.8	31.8	2.3	0.2	10.8	10.8	2.1	547.9	316.4
Nov.	178.4	244.1	155.2	38.8	16.1	31.6	2.2	0.2	6.1	6.1	1.8	556.5	324.8
Dec.	206.2	250.5	161.9	39.1	16.4	30.7	2.3	0.2	5.8	4.8	2.1	547.6	316.3
2022 Jan.	168.1	243.3	139.1	54.6	16.5	30.7	2.2	0.2	4.7	4.7	2.2	562.8	325.1
Feb.	170.6	256.3	147.8	59.2	16.3	30.6	2.2	0.2	5.8	5.8	2.3	572.5	338.8
Mar.	170.6	256.4	137.6	68.8	17.0	30.7	2.2	0.1	6.3	6.3	2.4	581.5	354.8
Apr.	167.6	258.2	137.6	70.0	17.6	30.6	2.2	0.2	4.4	4.4	2.2	596.5	357.3
May	190.1	271.4	144.2	75.3	18.5	31.1	2.2	0.2	4.8	4.8	2.4	596.7	358.9

***** Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and national central banks (the Eurosystem). **1** Source: ECB. **2** In Germany, only savings deposits. **3** Excluding holdings of MFIs; for the German contribution, excluding German MFIs' portfolios of securities issued by MFIs in the euro area. **4** In Germany, bank debt securities with maturities of up to one year are classed as money market paper. **5** Excluding liabilities arising from securities issued. **6** After deduction of inter-MFI participations. **7** The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates and are therefore not comparable with the erstwhile German money stocks M1, M2 or M3. **8** Including DEM banknotes still in circulation (see also footnote 4 on p. 10*). **9** For the German contribution, the difference between the volume of euro banknotes

II. Overall monetary survey in the euro area

issued (net) [3]						Other liability items		Memo item: Monetary aggregates [7] (from 2002 German contribution excludes currency in circulation)					
With maturities of													
up to 1 year [4]	over 1 year and up to 2 years	over 2 years	Liabilities to non-euro area residents [5]	Capital and reserves [6]	Excess of inter-MFI liabilities	Total [8]	of which: Intra-Eurosystem-liability/ claim related to banknote issue [9]	M1 [10]	M2 [11]	M3 [12]	Monetary capital formation [13]	Monetary liabilities of central governments (Post Office, Treasury) [14]	End of month
Euro area (€ billion) [1]													
12.7	21.3	2,124.8	5,058.7	2,947.0	– 25.5	4,208.7	0.0	9,490.6	12,941.2	13,619.4	7,050.8	153.0	2020 Apr.
4.1	22.2	2,108.0	4,956.8	2,952.8	– 33.1	4,053.3	0.0	9,682.0	13,166.2	13,836.0	7,042.6	154.7	May
– 0.3	20.6	2,084.7	4,723.1	2,977.4	– 4.2	4,008.9	0.0	9,768.9	13,242.8	13,915.4	7,035.8	158.0	June
– 11.9	19.9	2,047.1	4,744.5	3,017.5	– 54.6	4,064.1	0.0	9,813.1	13,308.1	14,012.0	7,042.1	159.4	July
– 15.4	19.2	2,032.9	4,711.2	3,014.5	– 38.8	3,862.5	0.0	9,856.0	13,340.6	14,027.9	7,033.2	160.0	Aug.
– 14.4	15.3	2,058.7	4,666.9	3,011.2	– 15.9	3,879.2	0.0	9,923.5	13,428.0	14,122.0	7,045.9	163.9	Sep.
– 2.2	15.2	2,030.1	4,789.8	3,038.2	– 47.9	3,858.5	0.0	10,025.3	13,516.4	14,233.1	7,038.6	165.3	Oct.
– 1.5	17.4	2,009.2	4,868.1	2,995.8	– 44.2	3,884.8	0.0	10,167.5	13,629.7	14,354.2	6,979.2	174.0	Nov.
– 4.6	16.9	1,983.2	4,671.6	3,020.5	– 11.3	3,771.5	0.0	10,278.9	13,750.6	14,480.1	6,967.9	176.0	Dec.
1.9	15.7	1,973.3	4,821.4	2,998.4	– 10.2	3,700.0	0.0	10,326.2	13,784.9	14,551.1	6,928.3	177.5	2021 Jan.
13.8	16.4	1,974.2	4,872.9	2,953.0	– 10.8	3,520.1	0.0	10,398.7	13,851.2	14,604.3	6,877.6	176.8	Feb.
– 0.7	16.9	1,989.3	4,944.3	2,967.6	15.9	3,580.6	0.0	10,490.2	13,964.4	14,699.0	6,899.9	173.1	Mar.
6.5	16.6	1,968.5	4,989.3	2,948.0	10.5	3,484.0	0.0	10,569.9	14,021.8	14,781.1	6,827.9	173.5	Apr.
14.8	15.9	1,950.0	4,995.9	2,968.5	53.4	3,476.5	0.0	10,684.4	14,134.5	14,887.0	6,827.9	176.1	May
10.6	16.1	1,957.6	4,964.4	2,979.9	57.4	3,503.6	0.0	10,811.2	14,231.7	14,971.1	6,841.7	180.3	June
16.9	17.1	1,965.4	5,051.0	3,024.8	38.9	3,550.3	0.0	10,914.9	14,345.4	15,122.6	6,888.9	180.9	July
11.9	16.3	1,960.4	5,201.1	3,024.5	29.8	3,499.0	0.0	10,956.6	14,380.5	15,152.9	6,876.1	182.3	Aug.
14.0	17.9	1,979.8	5,226.5	2,997.6	16.1	3,480.9	0.0	11,035.4	14,444.8	15,191.7	6,864.3	187.4	Sep.
14.5	17.8	1,999.5	5,433.0	2,999.7	– 22.8	3,481.5	0.0	11,103.9	14,527.5	15,318.4	6,874.5	188.2	Oct.
12.8	17.8	2,009.6	5,516.9	3,037.4	21.6	3,679.1	0.0	11,196.0	14,607.5	15,414.5	6,912.5	189.7	Nov.
8.9	18.0	1,989.4	5,379.3	3,024.0	54.1	3,374.7	0.0	11,299.6	14,721.8	15,502.3	6,896.4	195.0	Dec.
16.0	18.2	2,009.1	5,553.7	2,999.4	62.6	3,718.0	0.0	11,252.2	14,701.7	15,483.5	6,894.5	196.0	2022 Jan.
25.5	5.6	2,011.2	5,641.7	2,995.0	55.5	3,750.5	0.0	11,331.6	14,773.3	15,523.5	6,883.1	195.0	Feb.
27.4	5.7	1,990.0	5,626.3	3,007.8	80.7	3,986.1	0.0	11,425.6	14,887.8	15,629.5	6,885.3	195.1	Mar.
32.1	15.7	2,015.9	5,764.9	2,987.4	67.3	4,396.6	0.0	11,494.1	14,965.6	15,744.6	6,883.1	197.2	Apr.
25.1	– 4.6	1,989.2	5,823.3	2,927.2	79.7	4,353.2	0.0	11,549.1	15,013.7	15,759.8	6,793.6	197.8	May
German contribution (€ billion)													
15.9	6.9	527.8	942.0	759.1	– 1,003.6	2,007.1	458.2	2,454.3	3,266.4	3,294.7	1,930.3	0.0	2020 Apr.
14.9	7.3	520.8	917.3	756.1	– 1,003.8	1,932.8	458.5	2,505.0	3,323.2	3,349.8	1,918.3	0.0	May
14.8	7.1	510.9	939.7	769.1	– 1,074.1	1,923.1	458.1	2,514.8	3,325.2	3,349.7	1,913.0	0.0	June
12.8	6.7	503.7	907.0	784.6	– 1,089.1	1,967.5	460.5	2,519.5	3,336.8	3,360.1	1,913.6	0.0	July
12.0	7.2	498.7	891.2	778.4	– 1,114.7	1,888.5	464.3	2,537.9	3,350.2	3,372.9	1,899.9	0.0	Aug.
12.4	6.7	506.2	952.4	787.3	– 1,172.8	1,905.3	467.0	2,564.6	3,371.8	3,394.2	1,912.5	0.0	Sep.
11.1	7.0	501.8	906.4	794.7	– 1,107.6	1,894.1	469.4	2,595.4	3,403.6	3,425.7	1,913.5	0.0	Oct.
10.0	7.1	498.4	923.3	780.2	– 1,109.5	1,859.4	470.7	2,639.3	3,433.2	3,461.8	1,893.5	0.0	Nov.
9.0	6.6	487.7	985.7	787.5	– 1,192.0	1,844.9	473.1	2,632.8	3,426.1	3,456.4	1,888.4	0.0	Dec.
7.8	6.8	488.7	1,026.4	778.3	– 1,113.3	1,796.5	474.2	2,678.2	3,458.5	3,483.9	1,878.3	0.0	2021 Jan.
7.4	7.5	495.1	1,007.6	756.3	– 1,095.7	1,750.3	476.5	2,698.6	3,471.7	3,494.9	1,860.6	0.0	Feb.
8.1	6.8	508.4	1,080.1	754.4	– 1,144.4	1,742.0	479.0	2,724.1	3,497.0	3,525.7	1,868.2	0.0	Mar.
7.8	6.6	510.0	1,029.5	759.2	– 1,074.2	1,717.0	479.7	2,736.8	3,505.0	3,529.7	1,871.8	0.0	Apr.
9.6	6.7	501.7	1,051.5	768.2	– 1,126.5	1,696.6	482.8	2,764.3	3,535.8	3,563.5	1,869.6	0.0	May
9.8	6.9	498.8	1,088.8	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	574.5	1,307.1	748.8	– 1,195.4	2,289.2	526.8	2,914.2	3,699.6	3,728.9	1,911.8	0.0	May

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 [1]	Liquidity-providing factors					Liquidity-absorbing factors						
		Monetary policy operations of the Eurosystem										
	Net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations [3]	Deposit facility	Other liquidity-absorbing operations [4]	Banknotes in circulation [5]	Central government deposits	Other factors (net) [6]	Credit institutions` current account balances (including minimum reserves) [7]	Base money [8]
Eurosystem [2]												
2020 June	950.4	0.3	984.2	0.0	2,986.9	299.9	0.0	1,347.9	477.1	830.5	1,966.5	3,614.4
July	871.3	0.8	1,401.5	0.0	3,168.2	356.0	0.0	1,365.7	671.2	703.1	2,345.9	4,067.5
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	865.9	1.3	1,593.2	0.0	3,323.6	413.2	0.0	1,381.2	712.9	651.0	2,625.7	4,420.1
Oct.	.	.	.	.	.	.	.	.	.	.	.	.
Nov.	864.4	1.3	1,707.8	0.0	3,475.8	460.7	0.0	1,389.1	749.0	653.5	2,797.0	4,646.8
Dec.	865.1	0.5	1,754.4	0.0	3,614.7	535.4	0.0	1,403.9	647.0	687.7	2,960.7	4,900.0
2021 Jan.	848.6	0.3	1,792.6	0.0	3,712.9	586.9	0.0	1,429.4	530.3	778.4	3,029.4	5,045.7
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	834.9	0.4	1,792.4	0.0	3,825.1	598.0	0.0	1,433.4	595.8	667.9	3,157.7	5,189.1
Apr.	816.7	0.3	2,054.6	0.0	3,951.4	676.4	0.0	1,447.7	644.5	633.4	3,421.1	5,545.2
May	.	.	.	.	.	.	.	.	.	.	.	.
June	809.8	0.2	2,107.0	0.0	4,092.7	706.5	0.0	1,465.8	586.7	659.1	3,591.7	5,763.9
July	821.7	0.1	2,196.0	0.0	4,244.5	736.6	0.0	1,485.8	652.3	734.5	3,653.1	5,875.5
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	826.7	0.2	2,213.2	0.0	4,378.9	766.6	0.0	1,499.9	635.7	790.4	3,726.2	5,992.8
Oct.	.	.	.	.	.	.	.	.	.	.	.	.
Nov.	835.1	0.2	2,209.9	0.0	4,512.3	738.5	0.0	1,507.4	671.3	833.7	3,806.5	6,052.4
Dec.	839.2	0.2	2,208.8	0.0	4,655.6	745.0	0.0	1,521.4	628.3	965.7	3,843.3	6,109.7
2022 Jan.	.	.	.	.	.	.	.	.	.	.	.	.
Feb.	877.7	0.3	2,201.5	0.0	4,750.2	734.2	0.0	1,540.6	582.0	1,160.5	3,812.3	6,087.1
Mar.	887.2	0.3	2,201.3	0.0	4,842.0	746.0	0.0	1,550.6	642.6	1,091.1	3,900.8	6,197.3
Apr.	913.2	0.4	2,199.8	0.0	4,889.2	714.9	0.0	1,575.9	667.8	1,116.7	3,927.3	6,218.1
May	.	.	.	.	.	.	.	.	.	.	.	.
June	934.2	0.5	2,198.8	0.0	4,939.1	681.3	0.0	1,591.5	624.1	1,129.1	4,046.1	6,319.0
Deutsche Bundesbank												
2020 June	248.7	0.1	122.5	0.0	623.1	85.0	0.0	326.4	137.6	– 172.6	618.1	1,029.5
July	222.1	0.5	235.2	0.0	655.9	108.2	0.0	331.5	205.0	– 238.1	707.1	1,146.8
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	212.1	0.8	284.0	0.0	692.0	136.0	0.0	336.4	239.6	– 298.0	774.8	1,247.3
Oct.	.	.	.	.	.	.	.	.	.	.	.	.
Nov.	212.1	0.7	319.5	0.0	729.0	145.5	0.0	338.1	254.7	– 302.9	826.0	1,309.6
Dec.	213.0	0.3	333.9	0.0	768.7	166.6	0.0	341.2	217.9	– 294.5	884.7	1,392.5
2021 Jan.	208.3	0.1	341.1	0.0	791.3	178.9	0.0	347.3	189.4	– 252.8	878.0	1,404.2
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	205.3	0.1	341.0	0.0	816.9	177.5	0.0	348.3	172.7	– 298.0	962.8	1,488.6
Apr.	198.0	0.0	407.3	0.0	845.8	203.0	0.0	351.7	187.4	– 300.4	1,008.9	1,563.5
May	.	.	.	.	.	.	.	.	.	.	.	.
June	194.3	0.0	420.5	0.0	884.3	208.5	0.0	356.8	187.3	– 301.9	1,046.7	1,612.0
July	197.4	0.0	434.3	0.0	918.5	204.2	0.0	362.0	206.8	– 270.8	1,046.2	1,612.4
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	199.0	0.1	436.7	0.0	950.8	210.7	0.0	365.0	204.3	– 240.8	1,045.3	1,621.0
Oct.	.	.	.	.	.	.	.	.	.	.	.	.
Nov.	200.3	0.1	439.1	0.0	978.5	204.4	0.0	367.4	217.7	– 235.2	1,061.6	1,633.3
Dec.	201.3	0.0	440.3	0.0	1,015.8	206.4	0.0	370.9	220.4	– 219.4	1,077.1	1,654.4
2022 Jan.	.	.	.	.	.	.	.	.	.	.	.	.
Feb.	212.4	0.3	421.7	0.0	1,034.0	204.5	0.0	374.6	205.6	– 165.1	1,048.8	1,627.9
Mar.	215.6	0.1	421.7	0.0	1,057.9	211.8	0.0	378.1	191.1	– 193.7	1,108.0	1,698.0
Apr.	223.9	0.1	420.8	0.0	1,068.7	197.7	0.0	384.9	196.7	– 189.1	1,123.3	1,705.9
May	.	.	.	.	.	.	.	.	.	.	.	.
June	230.4	0.1	420.2	0.0	1,087.4	189.9	0.0	388.0	196.9	– 183.1	1,147.4	1,725.3

Discrepancies may arise from rounding. * The banking system's liquidity position is defined as the current account holdings in euro of euro area credit institutions with the Eurosystem. Amounts are derived from the consolidated financial statement of the Eurosystem and the financial statement of the Bundesbank. **1** Figures are daily averages for the reserve maintenance period ending in the month indicated. Following the changeover in the frequency of Governing Council monetary policy meetings to a six-week cycle, a reserve maintenance period no longer ends in every month. No figures are available in such cases. **2** Source: ECB. **3** Includes liquidity provided under the Eurosystem's asset purchase programmes. **4** From August 2009 includes liquidity absorbed as a result of the Eurosystem's foreign exchange swap operations. **5** From 2002 euro banknotes and other banknotes which have been issued by the national central banks of the Eurosystem and which are still in circulation. In accordance with the accounting procedure chosen by the Eurosystem for the issue of euro banknotes, a share of 8% of the total value of the euro banknotes in circulation is

II. Overall monetary survey in the euro area

Flows

Liquidity-providing factors					Liquidity-absorbing factors							
	Monetary policy operations of the Eurosystem											
Net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations [3]	Deposit facility	Other liquidity-absorbing operations [4]	Banknotes in circulation [5]	Central government deposits	Other factors (net) [6]	Credit institutions` current account balances (including minimum reserves) [7]	Base money [8]	Reserve maintenance period ending in [1]
Eurosystem [2]												
+ 24.1	− 0.3	+ 118.5	± 0.0	+ 202.7	+ 28.1	± 0.0	+ 26.0	+102.7	+ 41.9	+ 146.3	+ 200.6	2020 June
− 79.1	+ 0.5	+ 417.3	± 0.0	+ 181.3	+ 56.1	± 0.0	+ 17.8	+194.1	− 127.4	+ 379.4	+ 453.1	July
.	.	.	.	.	.	.	.	.	.	.	.	Aug.
− 5.4	+ 0.5	+ 191.7	± 0.0	+ 155.4	+ 57.2	± 0.0	+ 15.5	+ 41.7	− 52.1	+ 279.8	+ 352.6	Sep.
.	.	.	.	.	.	.	.	.	.	.	.	Oct.
− 1.5	± 0.0	+ 114.6	± 0.0	+ 152.2	+ 47.5	± 0.0	+ 7.9	+ 36.1	+ 2.5	+ 171.3	+ 226.7	Nov.
+ 0.7	− 0.8	+ 46.6	± 0.0	+ 138.9	+ 74.7	± 0.0	+ 14.8	−102.0	+ 34.2	+ 163.7	+ 253.2	Dec.
− 16.5	− 0.2	+ 38.2	± 0.0	+ 98.2	+ 51.5	± 0.0	+ 25.5	−116.7	+ 90.7	+ 68.7	+ 145.7	2021 Jan.
.	.	.	.	.	.	.	.	.	.	.	.	Feb.
− 13.7	+ 0.1	− 0.2	± 0.0	+ 112.2	+ 11.1	± 0.0	+ 4.0	+ 65.5	− 110.5	+ 128.3	+ 143.4	Mar.
− 18.2	− 0.1	+ 262.2	± 0.0	+ 126.3	+ 78.4	± 0.0	+ 14.3	+ 48.7	− 34.5	+ 263.4	+ 356.1	Apr.
.	.	.	.	.	.	.	.	.	.	.	.	May
− 6.9	− 0.1	+ 52.4	± 0.0	+ 141.3	+ 30.1	± 0.0	+ 18.1	− 57.8	+ 25.7	+ 170.6	+ 218.7	June
+ 11.9	− 0.1	+ 89.0	± 0.0	+ 151.8	+ 30.1	± 0.0	+ 20.0	+ 65.6	+ 75.4	+ 61.4	+ 111.6	July
.	.	.	.	.	.	.	.	.	.	.	.	Aug.
+ 5.0	+ 0.1	+ 17.2	± 0.0	+ 134.4	+ 30.0	± 0.0	+ 14.1	− 16.6	+ 55.9	+ 73.1	+ 117.3	Sep.
.	.	.	.	.	.	.	.	.	.	.	.	Oct.
+ 8.4	± 0.0	− 3.3	± 0.0	+ 133.4	− 28.1	± 0.0	+ 7.5	+ 35.6	+ 43.3	+ 80.3	+ 59.6	Nov.
+ 4.1	± 0.0	− 1.1	± 0.0	+ 143.3	+ 6.5	± 0.0	+ 14.0	− 43.0	+ 132.0	+ 36.8	+ 57.3	Dec.
.	.	.	.	.	.	.	.	.	.	.	.	2022 Jan.
+ 38.5	+ 0.1	− 7.3	± 0.0	+ 94.6	− 10.8	± 0.0	+ 19.2	− 46.3	+ 194.8	− 31.0	− 22.6	Feb.
+ 9.5	± 0.0	− 0.2	± 0.0	+ 91.8	+ 11.8	± 0.0	+ 10.0	+ 60.6	− 69.4	+ 88.5	+ 110.2	Mar.
+ 26.0	+ 0.1	− 1.5	± 0.0	+ 47.2	− 31.1	± 0.0	+ 25.3	+ 25.2	+ 25.6	+ 26.5	+ 20.8	Apr.
.	.	.	.	.	.	.	.	.	.	.	.	May
+ 21.0	+ 0.1	− 1.0	± 0.0	+ 49.9	− 33.6	± 0.0	+ 15.6	− 43.7	+ 12.4	+ 118.8	+ 100.9	June
Deutsche Bundesbank												
+ 10.7	− 0.1	+ 15.7	+ 0.0	+ 37.8	+ 8.7	± 0.0	+ 2.3	+ 35.6	+ 2.0	+ 15.3	+ 26.3	2020 June
− 26.6	+ 0.4	+ 112.6	− 0.0	+ 32.8	+ 23.2	± 0.0	+ 5.1	+ 67.5	− 65.5	+ 89.0	+ 117.3	July
.	.	.	.	.	.	.	.	.	.	.	.	Aug.
− 10.0	+ 0.3	+ 48.9	+ 0.0	+ 36.1	+ 27.9	± 0.0	+ 5.0	+ 34.6	− 59.9	+ 67.6	+ 100.5	Sep.
.	.	.	.	.	.	.	.	.	.	.	.	Oct.
+ 0.0	− 0.1	+ 35.5	− 0.0	+ 37.0	+ 9.5	± 0.0	+ 1.7	+ 15.0	− 5.0	+ 51.2	+ 62.3	Nov.
+ 0.9	− 0.4	+ 14.4	+ 0.0	+ 39.8	+ 21.1	± 0.0	+ 3.1	− 36.8	+ 8.4	+ 58.7	+ 82.9	Dec.
− 4.7	− 0.2	+ 7.1	+ 0.0	+ 22.6	+ 12.3	± 0.0	+ 6.1	− 28.5	+ 41.7	− 6.7	+ 11.7	2021 Jan.
.	.	.	.	.	.	.	.	.	.	.	.	Feb.
− 3.0	− 0.0	− 0.1	− 0.0	+ 25.6	− 1.4	± 0.0	+ 1.0	− 16.7	− 45.2	+ 84.8	+ 84.4	Mar.
− 7.3	− 0.1	+ 66.3	+ 0.0	+ 28.8	+ 25.5	± 0.0	+ 3.4	+ 14.7	− 2.4	+ 46.0	+ 74.9	Apr.
.	.	.	.	.	.	.	.	.	.	.	.	May
− 3.7	+ 0.0	+ 13.2	+ 0.0	+ 38.6	+ 5.5	± 0.0	+ 5.1	− 0.1	− 1.5	+ 37.9	+ 48.5	June
+ 3.1	− 0.0	+ 13.8	− 0.0	+ 34.2	− 4.3	± 0.0	+ 5.2	+ 19.4	+ 31.1	− 0.5	+ 0.4	July
.	.	.	.	.	.	.	.	.	.	.	.	Aug.
+ 1.6	+ 0.1	+ 2.4	+ 0.0	+ 32.3	+ 6.5	± 0.0	+ 3.0	− 2.5	+ 29.9	− 0.9	+ 8.6	Sep.
.	.	.	.	.	.	.	.	.	.	.	.	Oct.
+ 1.3	+ 0.0	+ 2.4	− 0.0	+ 27.8	− 6.4	± 0.0	+ 2.4	+ 13.4	+ 5.7	+ 16.3	+ 12.3	Nov.
+ 1.0	− 0.1	+ 1.2	− 0.0	+ 37.3	+ 2.1	± 0.0	+ 3.5	+ 2.7	+ 15.7	+ 15.6	+ 21.1	Dec.
.	.	.	.	.	.	.	.	.	.	.	.	2022 Jan.
+ 11.1	+ 0.2	− 18.6	+ 0.0	+ 18.2	− 2.0	± 0.0	+ 3.7	− 14.7	+ 54.3	− 28.3	− 26.6	Feb.
+ 3.2	− 0.1	− 0.0	+ 0.0	+ 23.9	+ 7.4	± 0.0	+ 3.5	− 14.5	− 28.6	+ 59.2	+ 70.1	Mar.
+ 8.2	− 0.0	− 0.9	− 0.0	+ 10.8	− 14.2	± 0.0	+ 6.8	+ 5.6	+ 4.6	+ 15.2	+ 7.9	Apr.
.	.	.	.	.	.	.	.	.	.	.	.	May
+ 6.6	+ 0.1	− 0.6	− 0.0	+ 18.7	− 7.7	± 0.0	+ 3.0	+ 0.2	+ 6.0	+ 24.1	+ 19.4	June

allocated to the ECB on a monthly basis. The counterpart of this adjustment is shown under "Other factors". The remaining 92% of the value of the euro banknotes in circulation is allocated, likewise on a monthly basis, to the NCBs, with each NCB showing in its balance sheet the share of the euro banknotes issued corresponding to its paid-up share in the ECB's capital. The difference between the value of the euro banknotes allocated to an NCB and the value of the euro banknotes which that NCB has put into circulation is likewise shown under "Other factors". From 2003 euro banknotes only. **6** Remaining items in the consolidated financial statement of the Eurosystem and the financial statement of the Bundesbank. **7** Equal to the difference between the sum of liquidity-pro viding factors and the sum of liquidity-absorbing factors. **8** Calculated as the sum of the "Deposit facility", "Banknotes in circulation" and "Credit institutions' current account balances".

III. Consolidated financial statement of the Eurosystem

1. Assets *

€ billion

As at reporting date	Total assets	Gold and gold receivables	Claims on non-euro area residents denominated in foreign currency			Claims on euro area residents denominated in foreign currency	Claims on non-euro area residents denominated in euro		
			Total	Receivables from the IMF	Balances with banks, security investments, external loans and other external assets		Total	Balances with banks, security investments and loans	Claims arising from the credit facility under ERM II
Eurosystem [1]									
2021 Dec. 17	8,511.5	517.9	490.6	215.3	275.3	24.4	11.6	11.6	–
24	8,512.3	517.9	491.3	215.6	275.7	24.7	13.3	13.3	–
31	8,566.4	559.4	500.1	218.9	281.2	24.6	13.0	13.0	–
2022 Jan. 7	8,573.3	559.4	497.2	218.9	278.3	26.1	10.0	10.0	–
14	8,594.0	559.4	496.2	218.9	277.3	26.6	10.5	10.5	–
21	8,600.3	559.4	495.6	218.9	276.7	26.7	10.4	10.4	–
28	8,622.6	559.4	496.7	219.0	277.7	26.7	10.2	10.2	–
Feb. 4	8,630.1	559.4	496.8	219.3	277.5	25.6	10.0	10.0	–
11	8,651.8	559.4	497.1	219.3	277.8	25.8	10.1	10.1	–
18	8,667.9	559.4	498.9	219.3	279.5	24.1	10.0	10.0	–
25	8,671.3	559.4	499.2	219.3	279.8	24.0	10.2	10.2	–
Mar. 4	8,673.0	559.4	498.2	219.3	278.9	25.4	10.4	10.4	–
11	8,687.0	559.4	498.9	219.4	279.5	24.7	10.4	10.4	–
18	8,700.0	559.5	498.4	219.3	279.0	24.6	10.6	10.6	–
25	8,710.6	559.5	498.7	220.4	278.4	24.9	12.4	12.4	–
Apr. 1	8,754.0	604.5	500.2	222.0	278.1	26.4	11.3	11.3	–
8	8,763.7	604.5	498.6	220.2	278.4	25.8	10.0	10.0	–
15	8,787.9	604.5	500.0	220.2	279.8	25.3	10.0	10.0	–
22	8,790.9	604.5	499.3	220.3	279.0	26.6	10.1	10.1	–
29	8,783.6	604.5	499.3	220.2	279.0	27.1	10.4	10.4	–
May 6	8,796.1	604.5	501.1	220.3	280.8	25.9	10.1	10.1	–
13	8,810.3	604.5	500.2	220.2	279.9	27.2	10.2	10.2	–
20	8,814.0	604.3	500.4	220.2	280.1	27.1	10.4	10.4	–
27	8,813.8	604.3	500.3	220.2	280.0	26.7	10.6	10.6	–
June 3	8,817.9	604.3	500.8	220.2	280.6	26.2	10.1	10.1	–
10	8,820.9	604.3	501.3	220.2	281.1	26.8	10.8	10.8	–
17	8,827.9	604.3	503.8	220.2	283.6	25.0	11.2	11.2	–
24	8,836.0	604.3	502.6	220.2	282.4	26.6	12.1	12.1	–
July 1	8,788.8	604.3	519.3	225.9	293.4	26.9	11.6	11.6	–
8	8,774.4	604.3	519.0	226.6	292.4	27.5	10.3	10.3	–
Deutsche Bundesbank									
2021 Dec. 17	2,960.9	160.9	86.2	54.1	32.1	0.0	–	–	–
24	2,968.1	160.9	86.2	54.1	32.1	0.0	–	–	–
31	3,012.2	173.8	87.6	54.9	32.6	0.0	–	–	–
2022 Jan. 7	2,942.1	173.8	87.9	54.9	33.0	0.0	–	–	–
14	2,946.1	173.8	87.9	54.9	32.9	0.0	–	–	–
21	2,912.1	173.8	87.8	54.9	32.9	0.0	0.1	0.1	–
28	2,922.8	173.8	88.1	54.9	33.2	0.0	–	–	–
Feb. 4	2,921.6	173.8	88.4	55.1	33.3	0.0	–	–	–
11	2,934.4	173.8	88.9	55.1	33.7	0.0	–	–	–
18	2,932.3	173.8	89.0	55.1	33.9	0.0	–	–	–
25	2,923.7	173.8	89.0	55.1	33.9	0.0	–	–	–
Mar. 4	2,939.9	173.8	89.0	55.1	33.9	0.1	–	–	–
11	2,933.8	173.8	88.5	55.1	33.3	0.0	–	–	–
18	2,961.2	173.8	88.4	55.1	33.3	0.0	0.0	0.0	–
25	2,925.4	173.8	89.4	55.6	33.7	0.0	–	–	–
Apr. 1	2,972.8	187.8	90.0	56.0	34.0	0.0	–	–	–
8	2,950.8	187.8	89.8	56.0	33.7	0.0	–	–	–
15	2,952.6	187.8	89.8	56.0	33.7	0.0	–	–	–
22	2,945.6	187.7	89.9	56.1	33.8	0.0	–	–	–
29	2,952.6	187.7	90.1	56.1	34.0	0.0	–	–	–
May 6	2,991.6	187.7	90.3	56.1	34.2	0.0	–	–	–
13	2,998.1	187.7	90.3	56.1	34.2	0.0	–	–	–
20	2,975.2	187.6	90.3	56.1	34.2	0.0	–	–	–
27	2,992.4	187.6	90.3	56.1	34.3	0.0	–	–	–
June 3	2,992.8	187.6	90.2	56.1	34.1	0.0	–	–	–
10	2,975.2	187.6	90.5	56.1	34.4	0.0	0.4	0.4	–
17	2,999.7	187.6	90.9	56.1	34.8	0.0	0.9	0.9	–
24	2,968.5	187.6	91.1	56.1	35.1	0.0	1.8	1.8	–
July 1	3,013.1	187.6	93.6	57.7	35.9	0.0	1.5	1.5	–
8	2,950.0	187.6	93.4	57.7	35.8	0.0	–	–	–

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

III. Consolidated financial statement of the Eurosystem

Lending to euro area credit institutions related to monetary policy operations denominated in euro							Other claims on euro area credit institutions denominated in euro	Securities of euro area residents in euro			General government debt denominated in euro	Other assets	As at reporting date
Total	Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations	Structural reverse operations	Marginal lending facility	Credits related to margin calls		Total	Securities held for monetary policy purposes	Other securities			
Eurosystem [1]													
2,209.8	0.1	2,209.7	–	–	–	–	32.0	4,885.9	4,713.7	172.2	22.2	317.0	2021 Dec. 17
2,201.7	0.2	2,201.5	–	–	–	–	28.4	4,896.6	4,723.8	172.8	22.2	316.2	24
2,201.9	0.4	2,201.5	–	–	–	–	26.6	4,886.5	4,713.5	173.0	22.2	332.3	31
2,201.9	0.4	2,201.5	–	–	–	–	30.7	4,896.1	4,723.1	173.0	22.2	329.8	2022 Jan. 7
2,201.9	0.4	2,201.5	–	–	–	–	31.7	4,921.5	4,748.7	172.8	22.2	324.0	14
2,201.9	0.4	2,201.5	–	–	–	–	30.5	4,934.5	4,761.3	173.2	22.2	319.0	21
2,201.7	0.2	2,201.5	–	–	–	–	32.0	4,955.7	4,783.4	172.3	22.2	318.0	28
2,201.7	0.2	2,201.5	–	–	–	–	32.6	4,970.1	4,800.3	169.8	22.1	311.9	Feb. 4
2,201.8	0.2	2,201.5	–	–	0.1	–	27.9	4,990.8	4,820.2	170.7	22.1	316.8	11
2,201.8	0.3	2,201.5	–	–	–	–	27.3	5,008.3	4,836.9	171.5	22.1	316.0	18
2,201.9	0.4	2,201.5	–	–	–	–	27.6	5,011.1	4,839.4	171.6	22.1	315.7	25
2,201.3	0.2	2,201.1	–	–	–	–	30.1	5,018.0	4,848.7	169.2	22.1	308.0	Mar. 4
2,201.4	0.3	2,201.1	–	–	–	–	25.6	5,031.9	4,862.4	169.5	22.1	312.6	11
2,201.3	0.2	2,201.0	–	–	–	–	28.4	5,042.8	4,873.1	169.7	22.1	312.4	18
2,201.3	0.2	2,201.0	–	–	–	–	33.5	5,054.1	4,883.7	170.4	22.1	304.2	25
2,199.5	0.4	2,198.9	–	–	0.3	–	34.1	5,045.7	4,877.5	168.2	22.1	310.2	Apr. 1
2,199.3	0.4	2,198.9	–	–	0.0	–	32.4	5,061.2	4,892.6	168.6	22.1	309.9	8
2,199.4	0.5	2,198.9	–	–	0.0	–	32.8	5,082.8	4,914.1	168.6	22.1	311.0	15
2,199.3	0.5	2,198.8	–	–	0.0	–	32.0	5,082.1	4,915.3	166.8	22.1	314.9	22
2,199.6	0.7	2,198.8	–	–	–	–	28.0	5,084.0	4,919.2	164.8	22.1	308.7	29
2,199.4	0.5	2,198.8	–	–	0.0	–	30.7	5,092.8	4,927.8	165.0	22.1	309.5	May 6
2,199.3	0.5	2,198.8	–	–	–	–	29.5	5,105.9	4,940.6	165.3	22.1	311.4	13
2,199.2	0.3	2,198.8	–	–	–	–	29.9	5,114.7	4,949.4	165.3	22.1	306.0	20
2,199.5	0.7	2,198.9	–	–	–	–	28.3	5,117.1	4,952.7	164.4	22.1	305.0	27
2,199.3	0.4	2,198.9	–	–	–	–	30.7	5,119.4	4,954.5	165.0	22.1	304.9	June 3
2,199.3	0.4	2,198.8	–	–	–	–	31.9	5,121.4	4,956.1	165.3	22.1	303.0	10
2,199.5	0.7	2,198.8	–	–	–	–	36.4	5,125.1	4,959.2	165.9	22.1	300.5	17
2,199.5	0.7	2,198.8	–	–	–	–	32.2	5,130.7	4,963.7	167.0	22.1	305.9	24
2,126.1	1.5	2,124.6	–	–	–	–	34.5	5,129.1	4,963.5	165.6	21.7	315.4	July 1
2,125.6	1.0	2,124.6	–	–	0.0	–	28.4	5,123.0	4,956.9	166.1	21.7	314.6	8
Deutsche Bundesbank													
440.6	0.0	440.6	–	–	0.0	–	5.0	1,027.6	1,027.6	–	4.4	1,236.2	2021 Dec. 17
421.8	0.2	421.7	–	–	0.0	–	4.3	1,029.6	1,029.6	–	4.4	1,260.7	24
422.0	0.3	421.7	–	–	0.0	–	3.5	1,027.7	1,027.7	–	4.4	1,293.1	31
422.0	0.3	421.7	–	–	0.0	–	4.0	1,025.3	1,025.3	–	4.4	1,224.6	2022 Jan. 7
422.0	0.3	421.7	–	–	0.0	–	3.4	1,031.6	1,031.6	–	4.4	1,222.9	14
422.1	0.4	421.7	–	–	0.0	–	3.1	1,034.7	1,034.7	–	4.4	1,186.0	21
421.8	0.2	421.7	–	–	0.0	–	3.3	1,041.9	1,041.9	–	4.4	1,189.4	28
421.8	0.2	421.7	–	–	0.0	–	4.3	1,048.9	1,048.9	–	4.4	1,179.8	Feb. 4
421.9	0.2	421.7	–	–	0.1	–	4.6	1,053.7	1,053.7	–	4.4	1,187.1	11
421.8	0.2	421.7	–	–	0.0	–	4.3	1,057.5	1,057.5	–	4.4	1,181.4	18
421.8	0.2	421.7	–	–	0.0	–	4.8	1,057.2	1,057.2	–	4.4	1,172.7	25
421.7	0.0	421.7	–	–	0.0	–	4.4	1,059.6	1,059.6	–	4.4	1,186.9	Mar. 4
421.7	0.0	421.7	–	–	0.0	–	4.0	1,060.1	1,060.1	–	4.4	1,181.2	11
421.7	0.0	421.7	–	–	0.0	–	7.0	1,065.6	1,065.6	–	4.4	1,200.2	18
421.7	0.0	421.7	–	–	0.0	–	5.2	1,065.9	1,065.9	–	4.4	1,165.0	25
420.3	0.1	420.2	–	–	0.0	–	5.2	1,068.4	1,068.4	–	4.4	1,196.6	Apr. 1
420.2	0.0	420.2	–	–	0.0	–	4.4	1,067.3	1,067.3	–	4.4	1,176.9	8
420.3	0.1	420.2	–	–	0.0	–	4.8	1,074.1	1,074.1	–	4.4	1,171.5	15
420.3	0.1	420.2	–	–	0.0	–	6.1	1,075.6	1,075.6	–	4.4	1,161.6	22
420.4	0.3	420.2	–	–	0.0	–	3.8	1,079.5	1,079.5	–	4.4	1,166.6	29
420.2	0.0	420.2	–	–	0.0	–	4.3	1,084.4	1,084.4	–	4.4	1,200.2	May 6
420.2	0.0	420.2	–	–	0.0	–	3.9	1,089.0	1,089.0	–	4.4	1,202.4	13
420.2	0.1	420.2	–	–	0.0	–	4.0	1,088.4	1,088.4	–	4.4	1,180.2	20
420.5	0.3	420.2	–	–	0.0	–	4.3	1,093.3	1,093.3	–	4.4	1,191.9	27
420.2	0.0	420.2	–	–	0.0	–	5.9	1,095.3	1,095.3	–	4.4	1,189.1	June 3
420.2	0.1	420.2	–	–	0.0	–	5.4	1,091.2	1,091.2	–	4.4	1,175.5	10
420.2	0.1	420.2	–	–	0.0	–	6.3	1,093.9	1,093.9	–	4.4	1,195.4	17
420.3	0.1	420.2	–	–	0.0	–	5.3	1,091.2	1,091.2	–	4.4	1,166.7	24
404.2	0.7	403.6	–	–	0.0	–	4.2	1,091.1	1,091.1	–	4.4	1,226.4	July 1
403.8	0.3	403.6	–	–	0.0	–	4.2	1,078.6	1,078.6	–	4.4	1,178.0	8

III. Consolidated financial statement of the Eurosystem

2. Liabilities *

€ billion

As at reporting date		Total liabilities	Banknotes in circulation [1]	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro						Other liabilities to euro area credit institutions denominated in euro	Debt certificates issued	Liabilities to other euro area residents denominated in euro		
				Total	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls			Total	General government	Other liabilities
Eurosystem [3]														
2021 Dec.	17	8,511.5	1,534.3	4,504.7	3,743.2	759.3	–	–	2.2	51.4	–	760.0	616.8	143.2
	24	8,512.3	1,543.0	4,439.9	3,759.0	678.7	–	–	2.2	53.6	–	751.5	593.5	158.0
	31	8,566.4	1,544.4	4,293.9	3,512.2	779.6	–	–	2.2	76.7	–	757.1	590.4	166.7
2022 Jan.	7	8,573.3	1,541.6	4,541.5	3,894.0	644.5	–	–	2.9	49.4	–	668.3	510.1	158.2
	14	8,594.0	1,538.8	4,599.8	3,891.5	705.4	–	–	2.8	46.9	–	720.2	574.0	146.2
	21	8,600.3	1,538.5	4,623.8	3,838.8	782.4	–	–	2.7	49.3	–	739.9	588.7	151.3
	28	8,622.6	1,539.1	4,598.2	3,819.0	776.8	–	–	2.4	45.6	–	818.1	656.8	161.3
Feb.	4	8,630.1	1,540.4	4,700.5	3,897.7	800.7	–	–	2.2	51.2	–	710.7	567.7	143.0
	11	8,651.8	1,542.3	4,679.4	4,069.3	607.4	–	–	2.8	50.2	–	765.1	616.4	148.7
	18	8,667.9	1,543.5	4,637.1	3,876.6	757.9	–	–	2.6	49.4	–	832.0	690.4	141.6
	25	8,671.3	1,546.5	4,636.9	3,875.5	759.0	–	–	2.5	46.3	–	842.8	667.9	174.9
Mar.	4	8,673.0	1,556.2	4,656.7	3,855.9	798.6	–	–	2.2	56.3	–	770.1	601.2	169.0
	11	8,687.0	1,565.2	4,648.0	3,836.6	809.2	–	–	2.2	49.4	–	793.6	629.0	164.6
	18	8,700.0	1,569.1	4,582.1	3,992.4	587.0	–	–	2.7	48.4	–	854.2	699.4	154.7
	25	8,710.6	1,571.3	4,605.9	3,839.6	763.7	–	–	2.7	52.7	–	866.3	708.2	158.2
Apr.	1	8,754.0	1,575.1	4,646.7	3,886.3	758.2	–	–	2.3	60.6	–	787.0	628.7	158.3
	8	8,763.7	1,578.5	4,722.9	3,987.1	733.3	–	–	2.5	52.8	–	761.7	609.3	152.4
	15	8,787.9	1,586.5	4,690.0	3,967.1	720.4	–	–	2.5	48.7	–	835.7	677.7	158.0
	22	8,790.9	1,585.6	4,720.4	4,155.8	562.0	–	–	2.6	43.8	–	811.0	656.0	155.1
	29	8,783.6	1,587.5	4,701.7	4,022.6	676.4	–	–	2.7	42.0	–	810.1	646.0	164.2
May	6	8,796.1	1,589.2	4,729.1	4,012.8	713.7	–	–	2.7	48.7	–	747.1	589.6	157.4
	13	8,810.3	1,590.5	4,729.8	4,079.6	647.8	–	–	2.4	46.6	–	782.1	620.7	161.4
	20	8,814.0	1,590.9	4,679.3	3,997.8	678.9	–	–	2.6	47.8	–	825.6	660.1	165.5
	27	8,813.8	1,594.0	4,692.9	3,987.3	703.2	–	–	2.5	42.6	–	825.8	662.5	163.2
June	3	8,817.9	1,597.5	4,768.8	4,060.2	706.3	–	–	2.3	52.1	–	758.2	593.9	164.3
	10	8,820.9	1,598.7	4,781.3	4,026.7	752.3	–	–	2.3	49.9	–	756.4	598.7	157.6
	17	8,827.9	1,599.6	4,675.5	4,139.0	534.3	–	–	2.3	49.0	–	847.3	686.2	161.1
	24	8,836.0	1,600.2	4,642.9	3,986.7	654.2	–	–	2.0	51.0	–	895.7	715.0	180.7
July	1	8,788.8	1,603.6	4,591.8	3,853.3	736.3	–	–	2.1	71.0	–	835.0	647.3	187.7
	8	8,774.4	1,606.4	4,642.8	3,914.7	726.0	–	–	2.1	55.9	–	819.9	627.7	192.2
Deutsche Bundesbank														
2021 Dec.	17	2,960.9	375.8	1,229.9	1,017.3	210.4	–	–	2.1	17.5	–	310.5	260.9	49.5
	24	2,968.1	378.9	1,193.5	975.4	215.9	–	–	2.1	13.7	–	309.4	248.9	60.5
	31	3,012.2	374.6	1,138.2	902.1	233.9	–	–	2.2	27.0	–	298.9	246.7	52.2
2022 Jan.	7	2,942.1	373.3	1,233.9	1,085.0	146.6	–	–	2.2	19.5	–	245.4	193.0	52.3
	14	2,946.1	373.2	1,267.0	1,110.6	154.1	–	–	2.2	16.4	–	266.5	220.5	46.0
	21	2,912.1	373.4	1,289.5	1,059.4	227.8	–	–	2.3	18.5	–	222.2	176.7	45.5
	28	2,922.8	374.4	1,292.4	1,062.1	228.2	–	–	2.1	15.7	–	253.2	202.2	51.0
Feb.	4	2,921.6	374.0	1,340.7	1,094.6	244.0	–	–	2.1	16.4	–	206.4	162.7	43.8
	11	2,934.4	375.4	1,335.5	1,179.8	153.4	–	–	2.3	19.7	–	227.4	185.0	42.4
	18	2,932.3	375.9	1,324.7	1,100.4	222.1	–	–	2.1	17.6	–	252.2	214.2	38.0
	25	2,923.7	378.0	1,304.6	1,071.0	231.4	–	–	2.1	16.4	–	266.5	201.2	65.2
Mar.	4	2,939.9	379.1	1,315.2	1,078.3	234.8	–	–	2.1	20.0	–	243.7	174.0	69.7
	11	2,933.8	383.3	1,322.8	1,084.0	236.7	–	–	2.1	16.9	–	238.3	181.8	56.5
	18	2,961.2	385.2	1,299.4	1,167.3	130.0	–	–	2.1	17.7	–	274.4	224.3	50.1
	25	2,925.4	385.9	1,301.1	1,082.0	217.1	–	–	2.1	17.0	–	252.5	200.0	52.4
Apr.	1	2,972.8	382.2	1,347.5	1,110.7	234.6	–	–	2.2	18.7	–	230.4	181.1	49.3
	8	2,950.8	383.5	1,354.0	1,136.8	215.1	–	–	2.1	16.9	–	213.9	166.4	47.5
	15	2,952.6	387.4	1,324.3	1,116.8	205.3	–	–	2.1	15.3	–	248.5	201.7	46.7
	22	2,945.6	387.0	1,338.7	1,215.0	121.4	–	–	2.2	14.6	–	229.7	184.6	45.0
	29	2,952.6	385.0	1,335.7	1,198.1	135.5	–	–	2.2	14.0	–	223.4	178.8	44.6
May	6	2,991.6	386.7	1,350.6	1,133.7	214.6	–	–	2.3	17.1	–	216.3	169.5	46.8
	13	2,998.1	388.3	1,339.4	1,136.1	201.0	–	–	2.4	17.6	–	251.7	206.1	45.7
	20	2,975.2	388.6	1,323.6	1,122.3	198.9	–	–	2.4	15.9	–	240.6	197.7	42.9
	27	2,992.4	390.0	1,320.3	1,116.7	201.2	–	–	2.4	16.0	–	269.1	227.3	41.8
June	3	2,992.8	388.7	1,346.6	1,132.9	211.5	–	–	2.2	18.7	–	248.9	205.6	43.4
	10	2,975.2	389.7	1,329.9	1,116.1	211.5	–	–	2.3	18.1	–	252.0	209.8	42.3
	17	2,999.7	390.9	1,297.9	1,181.7	114.0	–	–	2.2	17.6	–	297.8	250.7	47.1
	24	2,968.5	390.9	1,295.7	1,154.4	139.3	–	–	2.0	15.5	–	284.3	231.7	52.5
July	1	3,013.1	389.1	1,322.5	1,106.4	214.0	–	–	2.1	24.8	–	277.5	218.1	59.5
	8	2,950.0	390.6	1,303.6	1,087.8	213.8	–	–	2.0	21.9	–	255.1	186.8	68.3

***** The consolidated financial statement of the Eurosystem comprises the financial statement of the European Central Bank (ECB) and the financial statements of the national central banks of the euro area Member States (NCBs). The balance sheet items for foreign currency, securities, gold and financial instruments are valued at market rates at the end of the quarrter. **1** In accordance with the accounting procedure chosen by the Eurosystem for the issue of euro banknotes, a share of 8% of the total value of the euro banknotes in circulation is allocated to the ECB on a monthy basis. The counterpart of this adjustment is disclosed as an "Intra-Eurosystem liability related to

III. Consolidated financial statement of the Eurosystem

Liabilities to non-euro area residents denominated in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents denominated in foreign currency			Counterpart of special drawing rights allocated by the IMF	Other liabilities [2]	Intra-Eurosystem liability related to euro banknote issue [1]	Revaluation accounts	Capital and reserves	As at reporting date
		Total	Deposits, balances and other liabilities	Liabilities arising from the credit facility under ERM II						
Eurosystem [3]										
531.7	13.8	3.8	3.8	–	176.1	320.4	–	506.0	109.3	2021 Dec. 17
593.0	14.2	3.5	3.5	–	176.1	322.3	–	506.0	109.3	24
710.0	14.1	2.7	2.7	–	178.8	324.6	–	554.8	109.3	31
586.8	14.4	3.5	3.5	–	178.8	324.6	–	554.8	109.6	2022 Jan. 7
504.4	14.1	3.9	3.9	–	178.8	322.7	–	554.8	109.6	14
466.8	14.2	3.4	3.4	–	178.8	321.2	–	554.8	109.6	21
439.3	14.5	3.6	3.6	–	178.8	320.8	–	554.8	109.6	28
446.1	13.1	3.3	3.3	–	178.8	321.1	–	554.8	109.9	Feb. 4
431.1	13.1	3.3	3.3	–	178.8	323.5	–	554.9	110.0	11
420.4	13.2	3.3	3.3	–	178.8	325.4	–	554.9	109.9	18
415.6	13.0	3.5	3.5	–	178.8	323.1	–	554.9	109.9	25
447.2	13.2	3.7	3.7	–	178.8	323.1	–	554.9	112.7	Mar. 4
444.2	12.8	3.8	3.8	–	178.8	320.6	–	554.9	115.7	11
458.3	12.3	4.2	4.2	–	178.8	322.1	–	554.9	115.7	18
427.4	11.7	5.2	5.2	–	178.8	320.8	–	554.9	115.7	25
452.5	12.5	5.4	5.4	–	180.2	319.1	–	598.9	115.9	Apr. 1
423.9	11.0	5.4	5.4	–	180.2	312.5	–	598.9	115.9	8
398.7	12.1	5.0	5.0	–	180.2	316.0	–	598.9	115.9	15
395.8	11.7	5.4	5.4	–	180.2	322.1	–	598.9	115.9	22
411.9	11.5	5.6	5.6	–	180.2	318.3	–	598.9	115.9	29
446.1	11.6	5.7	5.7	–	180.2	323.6	–	598.9	116.0	May 6
425.3	11.7	5.7	5.7	–	180.2	323.4	–	598.9	116.0	13
437.2	11.3	5.6	5.6	–	180.2	321.3	–	598.9	116.0	20
426.4	11.1	5.6	5.6	–	180.2	320.5	–	598.9	116.0	27
409.9	11.4	5.5	5.5	–	180.2	320.6	–	598.9	114.9	June 3
403.3	11.7	5.6	5.6	–	180.2	320.1	–	598.9	114.9	10
422.3	11.1	6.2	6.2	–	180.2	322.9	–	598.9	114.9	17
410.6	10.9	6.9	6.9	–	180.2	323.7	–	598.9	114.9	24
434.0	11.5	6.2	6.2	–	184.9	327.5	–	608.5	114.8	July 1
396.5	11.4	6.1	6.1	–	184.9	327.0	–	608.5	114.8	8
Deutsche Bundesbank										
277.4	0.0	– 0.0	– 0.0	–	45.8	36.7	504.5	157.2	5.7	2021 Dec. 17
322.3	0.0	– 0.0	– 0.0	–	45.8	37.0	504.5	157.2	5.7	24
404.3	0.0	–	–	–	46.5	36.4	509.8	170.7	5.7	31
299.5	0.0	0.5	0.5	–	46.5	37.3	509.8	170.7	5.7	2022 Jan. 7
252.4	0.0	0.4	0.4	–	46.5	37.4	509.8	170.7	5.7	14
237.4	0.4	0.1	0.1	–	46.5	37.7	509.8	170.7	5.7	21
215.9	0.4	0.3	0.3	–	46.5	36.6	511.0	170.7	5.7	28
213.0	0.4	– 0.0	– 0.0	–	46.5	36.6	511.1	170.7	5.7	Feb. 4
204.3	0.4	0.2	0.2	–	46.5	37.5	511.1	170.7	5.7	11
189.5	0.4	0.4	0.4	–	46.5	37.6	511.1	170.7	5.7	18
185.8	0.4	0.4	0.4	–	46.5	37.7	511.1	170.7	5.7	25
206.4	0.4	0.4	0.4	–	46.5	37.7	514.2	170.7	5.7	Mar. 4
197.4	0.3	– 0.0	– 0.0	–	46.5	37.8	514.2	170.7	5.7	11
208.8	0.3	– 0.0	– 0.0	–	46.5	38.3	514.2	170.7	5.7	18
192.6	0.3	0.4	0.4	–	46.5	38.6	514.2	170.7	5.7	25
198.0	0.7	0.5	0.5	–	46.8	37.4	520.0	185.0	5.7	Apr. 1
186.5	0.7	0.3	0.3	–	46.8	37.6	520.0	185.0	5.7	8
181.2	0.7	0.2	0.2	–	46.8	37.7	520.0	185.0	5.7	15
179.2	0.7	0.2	0.2	–	46.8	38.2	520.0	185.0	5.7	22
194.5	0.7	0.2	0.2	–	46.8	38.4	523.3	185.0	5.7	29
220.6	0.7	0.2	0.2	–	46.8	38.6	523.3	185.0	5.7	May 6
200.8	0.5	0.2	0.2	–	46.8	38.8	523.3	185.0	5.7	13
206.0	0.5	0.1	0.1	–	46.8	39.0	523.3	185.0	5.7	20
196.4	0.5	0.1	0.1	–	46.8	39.2	523.3	185.0	5.7	27
185.8	0.5	– 0.0	– 0.0	–	46.8	39.3	526.8	185.0	5.7	June 3
180.9	0.5	0.3	0.3	–	46.8	39.5	526.8	185.0	5.7	10
189.8	0.5	0.7	0.7	–	46.8	40.3	526.8	185.0	5.7	17
175.9	0.5	0.9	0.9	–	46.8	40.5	526.8	185.0	5.7	24
187.7	0.6	0.1	0.1	–	48.0	39.6	530.5	187.1	5.7	July 1
166.1	0.6	0.1	0.1	–	48.0	41.0	530.5	187.1	5.7	8

euro banknote issue". The remaining 92% of the value of the euro banknotes in circulation is allocated, likewise on an monthly basis, to the NCBs, with each NCB showing in its balance sheet the share of the euro banknotes issued corresponding to its paid-up share in the ECB's capital. The difference between the value of the euro banknotes allocated to the NCB according to the aforementioned accounting procedure and the value of euro banknotes put into circulation is also disclosed as an "Intra-Eurosystem claim/liability related to banknote issue". **2** For the Deutsche Bundesbank: including DEM banknotes still in circulation. **3** Source: ECB.

IV. Banks

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

€ billion

Period	Balance sheet total 1	Cash in hand	Lending to banks (MFIs) in the euro area							Lending to non-banks (non-MFIs) in the			
			Total	to banks in the home country			to banks in other Member States			Total	to non-banks in the home country		
				Total	Loans	Securities issued by banks	Total	Loans	Securities issued by banks		Total	Enterprises and households	
												Total	Loans
	End of year or month												
2012	8,226.6	19.2	2,309.0	1,813.2	1,363.8	449.4	495.9	322.2	173.7	3,688.6	3,289.4	2,695.5	2,435.7
2013	7,528.9	18.7	2,145.0	1,654.8	1,239.1	415.7	490.2	324.6	165.6	3,594.3	3,202.1	2,616.3	2,354.0
2014	7,802.3	19.2	2,022.8	1,530.5	1,147.2	383.3	492.3	333.9	158.4	3,654.5	3,239.4	2,661.2	2,384.8
2015	7,665.2	19.5	2,013.6	1,523.8	1,218.0	305.8	489.8	344.9	144.9	3,719.9	3,302.5	2,727.4	2,440.0
2016	7,792.6	26.0	2,101.4	1,670.9	1,384.2	286.7	430.5	295.0	135.5	3,762.9	3,344.5	2,805.6	2,512.0
2017	7,710.8	32.1	2,216.3	1,821.1	1,556.3	264.8	395.2	270.1	125.2	3,801.7	3,400.7	2,918.8	2,610.1
2018	7,776.0	40.6	2,188.0	1,768.3	1,500.7	267.5	419.7	284.8	134.9	3,864.0	3,458.2	3,024.3	2,727.0
2019	8,311.0	43.4	2,230.1	1,759.8	1,493.5	266.3	470.4	327.6	142.8	4,020.1	3,584.9	3,168.7	2,864.9
2020	8,943.3	47.5	2,622.7	2,177.9	1,913.5	264.4	444.8	307.1	137.7	4,179.6	3,709.8	3,297.0	2,993.1
2021	9,172.2	49.7	2,789.6	2,333.0	2,069.6	263.4	456.6	324.4	132.2	4,350.4	3,860.4	3,468.8	3,147.6
2020 Aug.	8,985.5	46.0	2,595.4	2,127.5	1,858.5	269.0	467.9	328.0	139.9	4,148.3	3,691.9	3,266.7	2,966.1
Sep.	9,097.4	46.1	2,657.2	2,196.9	1,926.4	270.6	460.3	320.7	139.5	4,153.9	3,696.5	3,269.8	2,968.7
Oct.	9,124.3	46.3	2,686.7	2,226.8	1,957.0	269.8	459.9	320.9	139.0	4,181.8	3,713.6	3,283.1	2,980.6
Nov.	9,096.0	45.7	2,684.1	2,232.1	1,965.3	266.9	452.0	313.9	138.1	4,198.6	3,723.7	3,293.3	2,991.0
Dec.	8,943.3	47.5	2,622.7	2,177.9	1,913.5	264.4	444.8	307.1	137.7	4,179.6	3,709.8	3,297.0	2,993.1
2021 Jan.	9,150.4	44.9	2,793.5	2,309.4	2,042.2	267.2	484.1	348.8	135.3	4,195.0	3,716.6	3,302.6	2,997.8
Feb.	9,148.1	45.5	2,824.0	2,328.8	2,060.6	268.2	495.2	361.1	134.1	4,210.4	3,731.9	3,318.5	3,011.4
Mar.	9,261.9	45.7	2,904.5	2,419.8	2,145.0	274.8	484.8	351.2	133.6	4,245.8	3,762.0	3,347.6	3,038.5
Apr.	9,269.2	44.9	2,935.1	2,441.4	2,168.7	272.8	493.7	360.0	133.7	4,236.4	3,756.9	3,347.0	3,036.8
May	9,277.1	45.7	2,974.7	2,485.3	2,212.9	272.4	489.4	355.6	133.9	4,246.1	3,772.8	3,363.3	3,049.8
June	9,293.7	46.5	2,959.9	2,469.9	2,197.4	272.5	490.0	356.7	133.3	4,253.7	3,772.0	3,370.7	3,056.9
July	9,321.9	46.8	2,943.6	2,448.2	2,178.3	269.9	495.3	361.1	134.2	4,270.2	3,788.1	3,386.0	3,071.8
Aug.	9,319.3	46.9	2,950.1	2,457.4	2,188.5	268.8	492.8	359.5	133.3	4,283.3	3,799.4	3,400.4	3,085.0
Sep.	9,325.3	47.4	2,952.3	2,472.9	2,203.6	269.3	479.4	344.9	134.5	4,303.0	3,812.2	3,409.8	3,093.8
Oct.	9,395.0	47.8	2,979.8	2,490.1	2,221.1	269.0	489.7	356.2	133.5	4,322.0	3,832.5	3,437.3	3,117.5
Nov.	9,495.5	48.1	3,008.0	2,519.5	2,253.4	266.1	488.5	355.4	133.1	4,352.1	3,856.4	3,459.8	3,138.9
Dec.	9,172.2	49.7	2,789.6	2,333.0	2,069.6	263.4	456.6	324.4	132.2	4,350.4	3,860.4	3,468.8	3,147.6
2022 Jan.	9,717.0	47.7	3,029.2	2,522.4	2,258.2	264.2	506.8	375.0	131.8	4,378.1	3,875.3	3,484.8	3,162.4
Feb.	9,842.7	47.7	3,082.6	2,564.8	2,299.1	265.8	517.8	383.9	133.9	4,396.3	3,889.1	3,504.4	3,181.6
Mar.	9,962.9	50.0	3,066.9	2,546.2	2,281.9	264.3	520.7	387.1	133.7	4,426.8	3,916.4	3,526.5	3,204.1
Apr.	10,268.8	51.0	3,112.2	2,578.0	2,313.7	264.2	534.2	400.5	133.8	4,434.6	3,929.2	3,546.3	3,223.8
May	10,257.5	50.0	3,119.0	2,592.7	2,326.2	266.5	526.3	394.0	132.3	4,464.2	3,949.6	3,567.5	3,244.7
	Changes 3												
2013	− 703.6	− 0.5	− 257.1	− 249.2	− 216.5	− 32.7	− 7.9	1.6	− 9.5	13.6	16.6	23.6	21.6
2014	206.8	0.4	− 126.2	− 128.6	− 95.3	− 33.4	2.4	7.2	− 4.8	55.1	40.0	52.3	36.8
2015	− 191.4	0.3	− 18.2	− 12.1	66.1	− 78.2	− 6.1	6.6	− 12.8	64.8	64.1	68.1	56.6
2016	184.3	6.5	120.3	178.4	195.3	− 16.8	− 58.1	− 49.2	− 8.8	57.5	53.4	88.8	81.0
2017	8.0	6.1	135.9	165.0	182.6	− 17.6	− 29.1	− 19.6	− 9.5	51.3	63.5	114.8	101.1
2018	101.8	8.5	− 29.2	− 49.7	− 53.4	3.7	20.6	13.0	7.6	78.7	71.9	118.1	127.8
2019	483.4	2.8	20.7	− 3.8	− 2.3	− 1.5	24.5	16.9	7.5	161.8	130.5	148.2	140.9
2020	769.5	4.1	505.4	524.2	512.6	11.6	− 18.8	− 16.2	− 2.6	161.0	130.0	132.3	132.2
2021	207.2	2.2	161.3	155.6	156.4	− 0.8	5.7	11.7	− 5.9	175.7	154.6	173.7	155.9
2020 Sep.	104.9	0.1	60.5	69.0	67.5	1.5	− 8.5	− 8.0	− 0.4	5.2	4.5	3.0	2.6
Oct.	25.2	0.2	29.1	29.7	30.5	− 0.8	− 0.6	0.1	− 0.7	27.6	17.3	12.9	11.3
Nov.	12.0	− 0.6	29.0	35.8	37.2	− 1.4	− 6.8	− 6.1	− 0.8	18.6	11.3	11.2	11.5
Dec.	− 141.5	1.8	− 59.5	− 53.6	− 51.2	− 2.4	− 5.9	− 5.8	− 0.2	− 18.3	− 13.3	4.2	2.7
2021 Jan.	207.1	− 2.6	170.2	131.4	128.6	2.9	38.8	41.1	− 2.2	17.4	7.9	6.8	5.3
Feb.	− 2.3	0.7	30.3	19.2	18.2	1.1	11.0	12.2	− 1.2	15.9	15.5	15.7	13.4
Mar.	100.0	0.2	78.0	90.0	83.7	6.3	− 12.0	− 11.5	− 0.5	34.3	29.7	28.8	27.0
Apr.	21.2	− 0.8	33.6	23.0	24.6	− 1.6	10.6	10.5	0.2	− 8.8	− 5.2	− 0.1	− 1.1
May	10.7	0.8	38.9	44.1	44.4	− 0.3	− 5.2	− 5.5	0.3	10.4	16.0	15.7	13.0
June	5.3	0.9	− 17.1	− 16.3	− 15.8	− 0.5	− 0.8	− 0.2	− 0.6	7.3	− 0.5	7.6	6.7
July	26.3	0.2	− 15.0	− 19.5	− 17.5	− 2.0	4.5	4.4	0.1	17.3	16.4	15.6	15.3
Aug.	− 3.9	0.2	6.7	9.3	10.3	− 1.0	− 2.6	− 1.7	− 0.9	13.2	11.2	14.7	13.4
Sep.	3.0	0.4	0.1	14.4	13.9	0.5	− 14.4	− 15.6	1.3	19.8	13.0	9.4	8.8
Oct.	70.4	0.5	27.7	17.3	17.6	− 0.3	10.5	11.4	− 1.0	19.2	20.6	28.0	24.1
Nov.	95.5	0.3	26.6	29.2	32.2	− 3.0	− 2.5	− 2.1	− 0.5	30.6	25.2	22.1	21.0
Dec.	− 326.2	1.6	− 218.7	− 186.4	− 183.6	− 2.8	− 32.2	− 31.2	− 1.0	− 0.9	4.7	9.4	9.1
2022 Jan.	340.3	− 1.9	238.6	189.0	186.9	2.1	49.6	49.7	− 0.1	28.1	15.4	16.2	14.9
Feb.	128.5	− 0.0	52.7	41.4	39.7	1.7	11.3	9.1	2.2	20.4	15.8	21.3	20.9
Mar.	119.7	2.2	− 15.5	− 18.4	− 17.2	− 1.2	2.9	3.0	− 0.1	31.4	27.6	22.2	22.6
Apr.	283.1	1.0	41.6	30.8	30.8	0.0	10.8	10.6	0.2	7.5	12.8	19.7	19.4
May	− 9.6	− 1.0	7.1	14.9	12.5	2.3	− 7.8	− 6.4	− 1.4	30.8	21.3	22.1	21.7

* This table serves to supplement the "Overall monetary survey" in Section II. Unlike the other tables in Section IV, this table includes - in addition to the figures reported by banks (including building and loan associations) - data from money market funds. **1** See footnote 1 in Table IV.2. **2** Including debt securities arising from the exchange

IV. Banks

euro area														
				to non-banks in other Member States						Claims on non-euro area residents			
	General government				Enterprises and households		General government						
Securities	Total	Loans	Securities [2]	Total	Total	of which: Loans	Total	Loans	Securities	Total	of which: Loans	Other assets [1]	Period
End of year or month													
259.8	594.0	350.3	243.7	399.2	275.1	158.1	124.1	30.4	93.7	970.3	745.0	1,239.4	2012
262.3	585.8	339.2	246.6	392.3	267.6	144.6	124.6	27.8	96.9	921.2	690.5	849.7	2013
276.4	578.2	327.9	250.4	415.0	270.0	142.7	145.0	31.9	113.2	1,050.1	805.0	1,055.8	2014
287.4	575.1	324.5	250.6	417.5	276.0	146.4	141.5	29.4	112.1	1,006.5	746.3	905.6	2015
293.6	538.9	312.2	226.7	418.4	281.7	159.5	136.7	28.5	108.2	1,058.2	802.3	844.1	2016
308.7	481.9	284.3	197.6	401.0	271.8	158.3	129.1	29.8	99.3	991.9	745.3	668.9	2017
297.2	433.9	263.4	170.5	405.8	286.7	176.5	119.2	28.6	90.6	1,033.2	778.5	650.2	2018
303.8	416.2	254.7	161.6	435.2	312.6	199.0	122.6	29.4	93.2	1,035.8	777.5	981.5	2019
303.9	412.8	252.3	160.5	469.8	327.5	222.2	142.3	29.7	112.7	1,003.2	751.2	1,090.3	2020
321.2	391.6	245.1	146.5	490.1	362.7	244.0	127.4	28.4	99.0	1,094.2	853.3	888.3	2021
300.7	425.1	253.7	171.4	456.5	311.1	214.5	145.4	29.2	116.1	1,037.6	784.0	1,158.2	2020 Aug.
301.1	426.7	256.0	170.8	457.4	311.0	215.2	146.4	29.3	117.0	1,063.9	808.9	1,176.3	Sep.
302.5	430.5	257.3	173.2	468.2	318.6	219.6	149.5	30.2	119.3	1,049.9	793.4	1,159.6	Oct.
302.2	430.5	256.7	173.8	474.8	325.6	222.5	149.2	29.1	120.1	1,048.0	792.3	1,119.7	Nov.
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	Dec.
304.9	414.0	253.3	160.7	478.4	330.8	224.5	147.6	28.7	118.9	1,087.5	834.6	1,029.5	2021 Jan.
307.1	413.4	250.6	162.9	478.5	334.5	227.0	144.0	28.8	115.2	1,093.8	843.9	974.4	Feb.
309.1	414.4	249.3	165.1	483.8	339.4	232.3	144.4	28.9	115.5	1,105.7	855.5	960.1	Mar.
310.2	409.9	251.0	158.9	479.5	339.8	232.3	139.7	30.3	109.4	1,122.5	876.2	930.3	Apr.
313.5	409.5	250.6	158.9	473.2	339.1	231.9	134.1	28.4	105.7	1,108.3	862.4	902.3	May
313.8	401.4	249.1	152.3	481.7	339.4	231.8	142.3	28.8	113.5	1,111.0	864.8	922.5	June
314.2	402.2	251.3	150.8	482.0	344.2	236.6	137.8	28.6	109.2	1,097.1	849.1	964.3	July
315.4	398.9	248.0	150.9	484.0	346.1	238.8	137.9	28.3	109.6	1,084.8	839.7	954.2	Aug.
316.0	402.4	248.3	154.1	490.7	352.5	241.7	138.2	27.9	110.3	1,087.9	840.8	934.8	Sep.
319.9	395.1	249.7	145.4	489.5	356.0	244.3	133.4	30.3	103.2	1,134.6	889.6	910.9	Oct.
320.9	396.5	247.8	148.8	495.7	361.6	249.6	134.1	28.5	105.6	1,137.3	892.4	950.0	Nov.
321.2	391.6	245.1	146.5	490.1	362.7	244.0	127.4	28.4	99.0	1,094.2	853.3	888.3	Dec.
322.4	390.6	246.9	143.6	502.7	377.7	260.4	125.0	28.5	96.5	1,171.3	925.2	1,090.8	2022 Jan.
322.8	384.8	244.7	140.0	507.2	381.4	262.7	125.8	28.6	97.2	1,190.1	939.6	1,125.9	Feb.
322.3	390.0	245.2	144.8	510.4	379.5	259.4	130.9	29.0	101.9	1,169.2	921.9	1,249.9	Mar.
322.5	382.9	246.5	136.4	505.4	378.8	257.8	126.7	32.2	94.4	1,174.5	926.0	1,496.5	Apr.
322.8	382.1	244.5	137.7	514.6	387.5	264.5	127.1	31.4	95.7	1,166.1	917.3	1,458.2	May
Changes [3]													
2.0	– 7.0	– 10.9	3.9	– 3.0	– 3.4	– 9.3	0.5	– 2.6	3.1	– 38.8	– 47.2	– 420.8	2013
15.5	– 12.3	– 15.1	2.9	15.1	0.4	– 4.0	14.6	0.9	13.8	83.6	72.0	194.0	2014
11.5	– 3.9	– 4.2	0.3	0.7	4.4	1.8	– 3.7	– 1.0	– 2.8	– 88.3	– 101.0	– 150.1	2015
7.8	– 35.4	– 12.1	– 23.3	4.0	8.2	14.6	– 4.2	– 0.9	– 3.3	51.4	55.0	– 51.4	2016
13.7	– 51.3	– 22.8	– 28.5	– 12.2	– 3.4	4.0	– 8.7	0.1	– 8.9	– 12.3	– 6.7	– 173.1	2017
– 9.8	– 46.2	– 19.1	– 27.0	6.8	18.2	18.6	– 11.4	– 1.5	– 9.9	29.0	18.9	14.8	2018
7.3	– 17.7	– 8.6	– 9.1	31.3	29.5	26.9	1.7	0.0	1.7	– 32.1	– 33.3	330.3	2019
0.2	– 2.4	– 1.7	– 0.7	31.0	30.6	20.9	0.3	– 0.4	0.7	– 9.7	– 8.2	108.8	2020
17.8	– 19.1	– 6.1	– 13.1	21.1	35.5	22.6	– 14.3	– 1.1	– 13.2	71.7	84.9	– 203.7	2021
0.4	1.5	2.2	– 0.7	0.7	– 0.1	0.7	0.9	0.1	0.7	21.1	20.0	18.0	2020 Sep.
1.6	4.4	2.0	2.5	10.4	7.3	4.2	3.0	0.9	2.1	– 15.3	– 16.7	– 16.4	Oct.
– 0.3	0.2	– 0.5	0.7	7.3	7.6	3.6	– 0.3	– 1.1	0.8	6.4	6.6	– 41.4	Nov.
1.5	– 17.5	– 4.4	– 13.2	– 4.9	1.9	0.3	– 6.9	0.6	– 7.4	– 36.3	– 34.4	– 29.3	Dec.
1.5	1.1	0.9	0.2	9.5	4.1	3.2	5.3	– 0.9	6.3	84.4	83.6	– 62.3	2021 Jan.
2.3	– 0.2	– 2.4	2.3	0.3	3.7	2.4	– 3.4	0.1	– 3.4	6.3	8.9	– 55.4	Feb.
1.9	0.9	– 1.3	2.2	4.6	4.2	4.9	0.4	0.1	0.3	2.8	3.3	– 15.3	Mar.
1.0	– 5.0	1.7	– 6.7	– 3.6	0.9	0.7	– 4.5	1.5	– 6.0	26.0	29.0	– 28.8	Apr.
2.7	0.4	– 0.3	0.7	– 5.6	– 0.1	0.3	– 5.5	– 1.9	– 3.6	– 11.4	– 11.4	– 28.0	May
0.8	– 8.1	– 1.4	– 6.7	7.8	– 0.4	– 0.6	8.2	0.4	7.7	– 5.7	– 5.3	19.9	June
0.4	0.7	2.3	– 1.5	1.0	5.6	4.8	– 4.7	– 0.2	– 4.5	– 15.0	– 16.5	38.7	July
1.2	– 3.4	– 3.5	0.1	1.9	1.8	2.2	0.1	– 0.3	0.4	– 13.1	– 10.0	– 10.8	Aug.
0.6	3.6	0.3	3.2	6.8	6.3	2.9	0.5	– 0.4	0.9	0.1	– 1.5	– 17.4	Sep.
3.9	– 7.4	1.2	– 8.7	– 1.4	3.5	2.6	– 4.8	2.3	– 7.2	47.6	49.5	– 24.6	Oct.
1.1	3.0	– 0.9	4.0	5.5	4.8	4.4	0.6	– 1.6	2.2	– 4.5	– 3.6	42.4	Nov.
0.3	– 4.7	– 2.6	– 2.2	– 5.6	0.9	– 5.3	– 6.5	– 0.1	– 6.3	– 45.9	– 41.0	– 62.3	Dec.
1.3	– 0.8	1.8	– 2.6	12.7	14.8	16.0	– 2.1	0.2	– 2.2	72.3	66.7	3.3	2022 Jan.
0.5	– 5.5	– 2.1	– 3.4	4.6	3.7	2.5	0.9	0.1	0.8	20.6	15.8	34.9	Feb.
– 0.4	5.5	0.5	5.0	3.8	– 1.7	– 3.3	5.5	0.4	5.1	– 22.2	– 19.2	123.7	Mar.
0.2	– 6.8	1.4	– 8.2	– 5.3	– 1.6	– 2.7	– 3.7	3.2	– 6.9	– 13.8	– 14.2	246.6	Apr.
0.4	– 0.7	– 2.0	1.3	9.5	8.8	6.7	0.7	– 0.8	1.5	– 8.4	– 8.8	– 38.2	May

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

IV. Banks

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

€ billion

Period	Balance sheet total [1]	Deposits of banks (MFIs) in the euro area			Deposits of non-banks (non-MFIs) in the euro area								
						Deposits of non-banks in the home country						Deposits of non-banks	
			of banks					With agreed maturities		At agreed notice			
		Total	in the home country	in other Member States	Total	Total	Overnight	Total	of which: up to 2 years	Total	of which: up to 3 months	Total	Overnight
	End of year or month												
2012	8,226.6	1,371.0	1,135.9	235.1	3,091.4	2,985.2	1,294.9	1,072.8	320.0	617.6	528.4	77.3	31.2
2013	7,528.9	1,345.4	1,140.3	205.1	3,130.5	3,031.5	1,405.3	1,016.2	293.7	610.1	532.4	81.3	33.8
2014	7,802.3	1,324.0	1,112.3	211.7	3,197.7	3,107.4	1,514.3	985.4	298.1	607.7	531.3	79.7	34.4
2015	7,665.2	1,267.8	1,065.9	201.9	3,307.1	3,215.1	1,670.2	948.4	291.5	596.4	534.5	80.8	35.3
2016	7,792.6	1,205.2	1,033.2	172.0	3,411.3	3,318.5	1,794.8	935.3	291.2	588.5	537.0	84.2	37.2
2017	7,710.8	1,233.6	1,048.6	184.9	3,529.1	3,411.1	1,936.6	891.7	274.2	582.8	541.0	108.6	42.5
2018	7,776.0	1,213.8	1,021.8	192.0	3,642.8	3,527.0	2,075.5	872.9	267.2	578.6	541.1	104.5	45.0
2019	8,311.0	1,242.8	1,010.4	232.4	3,778.1	3,649.8	2,230.9	843.7	261.7	575.1	540.5	116.3	54.6
2020	8,943.3	1,493.2	1,237.0	256.3	4,021.6	3,836.7	2,508.4	767.8	227.1	560.5	533.2	135.1	57.0
2021	9,172.2	1,628.6	1,338.6	289.9	4,129.9	3,931.8	2,649.3	721.3	203.9	561.2	537.1	153.8	70.7
2020 Aug.	8,985.5	1,489.8	1,213.2	276.6	3,951.0	3,790.7	2,421.8	808.3	258.8	560.6	531.8	129.7	63.6
Sep.	9,097.4	1,523.9	1,252.4	271.5	3,975.9	3,795.1	2,436.7	798.3	251.4	560.1	531.7	140.6	72.8
Oct.	9,124.3	1,536.3	1,264.9	271.4	4,015.2	3,827.0	2,473.1	794.2	249.1	559.7	531.7	140.8	69.6
Nov.	9,096.0	1,515.4	1,245.5	269.9	4,035.0	3,846.2	2,508.7	778.0	235.3	559.6	532.0	140.2	69.0
Dec.	8,943.3	1,493.2	1,237.0	256.3	4,021.6	3,836.7	2,508.4	767.8	227.1	560.5	533.2	135.1	57.0
2021 Jan.	9,150.4	1,560.0	1,262.3	297.7	4,044.0	3,855.8	2,536.8	757.4	219.4	561.6	534.8	138.4	65.8
Feb.	9,148.1	1,584.4	1,261.7	322.7	4,053.2	3,865.2	2,552.4	750.1	214.1	562.6	536.1	137.7	68.2
Mar.	9,261.9	1,634.1	1,336.6	297.6	4,068.3	3,876.2	2,569.2	744.7	212.3	562.3	536.2	142.2	71.0
Apr.	9,269.2	1,659.9	1,344.1	315.8	4,079.3	3,886.3	2,588.3	735.3	205.8	562.7	536.9	143.0	70.2
May	9,277.1	1,661.1	1,353.0	308.1	4,103.8	3,909.2	2,614.0	732.0	205.0	563.2	537.5	146.4	70.4
June	9,293.7	1,670.8	1,357.4	313.4	4,088.4	3,890.3	2,605.4	722.3	198.1	562.6	537.1	151.3	76.7
July	9,321.9	1,682.5	1,362.0	320.4	4,110.8	3,918.9	2,638.6	718.3	196.7	562.0	536.8	146.4	74.0
Aug.	9,319.3	1,686.5	1,365.8	320.7	4,119.2	3,925.6	2,648.6	715.5	194.1	561.5	536.6	147.8	74.7
Sep.	9,325.3	1,667.9	1,354.2	313.6	4,108.9	3,913.6	2,640.2	712.7	194.3	560.7	535.9	148.8	77.1
Oct.	9,395.0	1,690.9	1,364.7	326.2	4,140.0	3,942.6	2,657.0	725.5	206.4	560.1	535.6	151.4	78.1
Nov.	9,495.5	1,718.6	1,374.9	343.8	4,154.1	3,956.1	2,678.9	717.4	200.2	559.8	535.5	151.4	82.5
Dec.	9,172.2	1,628.6	1,338.6	289.9	4,129.9	3,931.8	2,649.3	721.3	203.9	561.2	537.1	153.8	70.7
2022 Jan.	9,717.0	1,725.2	1,363.7	361.5	4,195.2	3,979.5	2,686.4	732.3	215.9	560.7	537.4	166.7	86.2
Feb.	9,842.7	1,743.7	1,369.7	374.0	4,209.7	3,993.9	2,699.7	733.4	217.5	560.8	537.7	169.3	90.1
Mar.	9,962.9	1,737.5	1,367.8	369.8	4,212.3	3,990.1	2,690.3	740.9	226.7	559.0	536.1	177.7	99.4
Apr.	10,268.8	1,766.8	1,384.4	382.3	4,223.7	4,003.6	2,700.1	745.6	234.6	557.9	535.2	175.5	93.4
May	10,257.5	1,765.9	1,393.7	372.2	4,236.1	4,013.3	2,718.3	738.4	229.4	556.5	534.0	176.2	97.2
	Changes [4]												
2013	– 703.6	– 106.2	– 73.9	– 32.3	39.1	47.8	111.5	– 56.3	– 26.6	– 7.3	4.0	2.6	3.3
2014	206.8	– 28.4	– 32.2	3.9	62.7	71.6	106.0	– 32.1	3.1	– 2.4	– 2.4	– 2.5	– 0.0
2015	– 191.4	– 62.1	– 50.3	– 11.9	104.1	104.8	153.2	– 37.0	– 10.1	– 11.3	4.2	– 0.4	– 0.3
2016	184.3	– 31.6	– 2.2	– 29.4	105.7	105.2	124.3	– 11.1	1.4	– 8.0	2.4	2.7	1.9
2017	8.0	30.6	14.8	15.8	124.2	107.7	145.8	– 32.5	– 15.3	– 5.6	1.5	16.4	5.8
2018	101.8	– 20.1	– 25.7	5.6	112.4	114.7	137.7	– 18.8	– 6.5	– 4.3	1.2	– 4.3	2.3
2019	483.4	12.6	– 10.0	22.6	132.1	120.0	154.1	– 30.6	– 6.6	– 3.4	– 0.6	10.6	8.7
2020	769.5	340.0	317.0	23.0	244.9	188.4	277.6	– 74.7	– 34.9	– 14.5	– 7.2	18.7	1.8
2021	207.2	133.4	103.4	30.0	107.3	96.2	141.4	– 45.8	– 23.3	0.6	3.9	16.6	13.6
2020 Sep.	104.9	33.1	38.7	– 5.7	24.1	3.7	14.4	– 10.2	– 7.6	– 0.5	– 0.1	10.7	9.1
Oct.	25.2	12.3	12.4	– 0.1	39.1	32.1	36.4	– 3.9	– 3.3	– 0.4	– 0.0	0.1	– 3.3
Nov.	12.0	8.2	8.4	– 0.1	25.6	20.2	36.4	– 16.0	– 13.6	– 0.1	0.3	4.1	3.9
Dec.	– 141.5	– 25.2	– 7.9	– 17.3	– 12.3	– 8.7	0.3	– 10.0	– 8.0	1.0	1.3	– 4.8	– 11.8
2021 Jan.	207.1	66.0	25.3	40.8	21.6	19.0	28.4	– 10.5	– 7.8	1.1	1.6	2.7	9.7
Feb.	– 2.3	24.4	– 0.7	25.1	9.0	9.2	15.5	– 7.3	– 5.3	1.0	1.3	– 0.7	2.4
Mar.	100.0	47.8	73.8	– 26.0	13.6	9.9	15.8	– 5.6	– 1.9	– 0.3	0.1	4.0	2.5
Apr.	21.2	27.6	8.3	19.3	12.5	11.2	20.1	– 9.4	– 6.5	0.4	0.7	1.2	– 0.6
May	10.7	0.6	9.1	– 8.5	24.9	23.2	26.0	– 3.2	– 0.7	0.5	0.6	3.5	0.3
June	5.3	8.2	3.7	4.4	– 16.6	– 19.8	– 9.4	– 9.8	– 7.1	– 0.6	– 0.4	4.5	6.1
July	26.3	14.4	7.4	7.0	22.3	28.6	33.2	– 4.1	– 1.4	– 0.6	– 0.3	– 4.9	– 3.1
Aug.	– 3.9	3.9	3.7	0.2	7.8	6.5	9.9	– 2.8	– 2.6	– 0.5	– 0.3	0.9	0.2
Sep.	3.0	– 19.5	– 11.7	– 7.8	– 7.3	– 8.9	– 6.5	– 1.6	0.4	– 0.8	– 0.6	0.7	2.7
Oct.	70.4	24.1	11.2	12.9	31.1	29.1	16.8	12.9	12.1	– 0.6	– 0.4	2.5	1.1
Nov.	95.5	26.4	9.6	16.7	12.9	12.5	21.1	– 8.4	– 6.2	– 0.3	– 0.1	– 0.3	4.2
Dec.	– 326.2	– 90.4	– 36.3	– 54.1	– 24.3	– 24.3	– 29.6	3.9	3.7	1.4	1.6	2.4	– 11.9
2022 Jan.	340.3	93.8	23.2	70.6	64.3	47.0	36.5	10.9	11.9	– 0.4	0.3	12.6	15.3
Feb.	128.5	19.3	6.1	13.2	14.2	14.6	13.4	1.1	1.6	0.1	0.3	2.2	3.5
Mar.	119.7	– 6.6	– 2.1	– 4.5	2.2	– 4.2	– 9.7	7.3	9.2	– 1.8	– 1.6	8.3	9.3
Apr.	283.1	25.1	15.6	9.5	8.0	11.0	7.5	4.1	7.2	– 0.6	– 0.4	– 3.1	– 6.6
May	– 9.6	– 0.9	9.3	– 10.2	13.4	10.7	18.8	– 6.8	– 5.0	– 1.3	– 1.2	0.6	3.8

* This table serves to supplement the "Overall monetary survey" in Section II. Unlike the other tables in Section IV, this table includes - in addition to the figures reported by banks (including building and loan associations) - data from money market funds. **1** See footnote 1 in Table IV.2. **2** Excluding deposits of central governments.

IV. Banks

in other Member States [2]				Deposits of central governments		Liabilities arising from repos with non-banks in the euro area	Money market fund shares issued [3]	Debt securities issued [3]		Liabilities to non-euro area residents	Capital and reserves	Other Liabilities [1]	Period
With agreed maturities		At agreed notice											
Total	of which: up to 2 years	Total	of which: up to 3 months	Total	of which: domestic central governments			Total	of which: with maturities of up to 2 years [3]				
End of year or month													
42.3	14.7	3.8	2.8	28.9	25.9	80.4	7.3	1,233.1	56.9	611.4	487.3	1,344.7	2012
44.0	16.9	3.5	2.7	17.6	16.0	6.7	4.1	1,115.2	39.0	479.5	503.0	944.5	2013
42.0	15.9	3.3	2.7	10.6	10.5	3.4	3.5	1,077.6	39.6	535.3	535.4	1,125.6	2014
42.2	16.0	3.3	2.8	11.3	9.6	2.5	3.5	1,017.7	48.3	526.2	569.3	971.1	2015
43.9	15.8	3.1	2.6	8.6	7.9	2.2	2.4	1,030.3	47.2	643.4	591.5	906.3	2016
63.2	19.7	2.9	2.6	9.4	8.7	3.3	2.1	994.5	37.8	603.4	686.0	658.8	2017
56.7	15.8	2.8	2.5	11.3	10.5	0.8	2.4	1,034.0	31.9	575.9	695.6	610.7	2018
59.0	16.5	2.7	2.4	12.0	11.2	1.5	1.9	1,063.2	32.3	559.4	728.6	935.6	2019
75.6	30.6	2.6	2.3	49.8	48.6	9.4	2.5	1,056.9	21.2	617.6	710.8	1,031.3	2020
80.7	22.8	2.4	2.2	44.2	43.5	2.2	2.3	1,110.8	27.5	757.2	732.3	809.0	2021
63.6	19.3	2.6	2.3	30.6	29.8	1.7	1.9	1,063.9	25.5	682.1	699.9	1,095.2	2020 Aug.
65.2	21.8	2.6	2.3	40.2	39.0	1.2	2.6	1,077.3	25.6	687.1	720.4	1,108.9	Sep.
68.6	25.0	2.6	2.3	47.3	46.6	1.4	2.7	1,075.1	24.6	687.8	712.4	1,093.3	Oct.
68.7	24.3	2.6	2.3	48.5	47.6	9.1	2.5	1,070.0	23.3	696.7	713.1	1,054.3	Nov.
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	Dec.
70.0	23.7	2.6	2.3	49.7	48.3	6.3	2.5	1,058.8	19.7	790.8	708.3	979.7	2021 Jan.
67.0	20.5	2.5	2.3	50.3	48.2	4.5	2.5	1,068.3	19.6	803.5	702.4	929.4	Feb.
68.7	22.0	2.5	2.3	49.9	48.9	6.7	2.9	1,090.4	21.5	833.7	712.0	913.8	Mar.
70.3	23.2	2.5	2.3	50.0	48.6	5.1	2.9	1,091.8	21.0	839.1	705.9	885.3	Apr.
73.5	26.7	2.5	2.3	48.2	46.6	6.0	2.3	1,087.7	23.5	854.7	702.7	858.8	May
72.0	25.9	2.5	2.3	46.9	45.6	4.5	2.3	1,084.6	23.8	836.9	725.4	880.7	June
69.9	22.9	2.5	2.3	45.5	44.3	6.0	2.3	1,087.2	23.5	800.0	719.2	913.9	July
70.7	24.0	2.5	2.3	45.8	44.0	7.4	2.3	1,089.9	25.5	790.7	725.0	898.4	Aug.
69.2	22.4	2.5	2.2	46.6	45.2	7.3	2.2	1,100.5	25.1	840.1	735.9	862.6	Sep.
70.9	23.4	2.4	2.2	46.1	45.2	7.4	2.2	1,118.0	24.6	866.7	729.5	840.3	Oct.
66.4	17.4	2.4	2.2	46.6	45.5	4.2	2.1	1,123.9	26.0	883.1	736.5	872.8	Nov.
80.7	22.8	2.4	2.2	44.2	43.5	2.2	2.3	1,110.8	27.5	757.2	732.3	809.0	Dec.
78.1	20.3	2.4	2.2	48.9	45.5	3.0	2.3	1,126.9	25.3	907.4	721.2	1,036.0	2022 Jan.
76.8	19.8	2.4	2.2	46.4	42.8	2.4	2.4	1,141.1	26.2	945.9	717.7	1,080.0	Feb.
75.9	19.0	2.4	2.2	44.5	42.1	2.8	2.5	1,148.9	25.9	926.4	736.8	1,195.6	Mar.
79.8	22.5	2.4	2.2	44.6	42.2	2.3	2.3	1,161.1	26.3	939.2	734.6	1,438.9	Apr.
76.7	19.9	2.3	2.1	46.6	42.8	1.9	2.5	1,164.1	27.6	958.5	732.5	1,396.1	May
Changes [4]													
– 0.5	2.2	– 0.3	– 0.1	– 11.3	– 10.0	4.1	– 3.2	– 104.9	– 17.6	– 134.1	18.9	– 417.1	2013
– 2.3	– 1.2	– 0.2	– 0.1	– 6.4	– 4.8	– 3.4	– 0.6	– 63.7	– 0.2	35.9	26.1	178.3	2014
– 0.1	0.0	0.0	0.1	– 0.4	– 1.9	– 1.0	– 0.0	– 86.8	7.7	– 30.3	28.0	– 143.2	2015
1.1	0.0	– 0.3	– 0.1	– 2.2	– 1.2	– 0.3	– 1.1	8.6	– 1.3	116.1	26.4	– 39.5	2016
10.8	4.2	– 0.1	– 0.0	– 0.0	– 0.0	1.1	– 0.3	– 3.3	– 8.5	– 16.1	34.1	– 162.3	2017
– 6.4	– 4.1	– 0.1	– 0.1	2.1	2.1	– 2.6	0.3	30.0	– 5.9	– 36.0	7.4	10.3	2018
2.0	0.6	– 0.1	– 0.1	1.4	1.4	5.6	– 0.5	22.3	0.1	– 47.9	30.0	329.1	2019
17.0	14.3	– 0.1	– 0.1	37.8	37.3	3.6	0.6	11.8	– 9.3	61.6	– 1.5	108.5	2020
3.1	– 8.0	– 0.2	– 0.1	– 5.5	– 5.0	– 7.9	0.3	40.6	6.9	124.9	16.6	– 207.9	2021
1.6	2.4	– 0.0	– 0.0	9.6	9.2	– 0.5	0.7	10.5	0.0	2.6	19.6	14.9	2020 Sep.
3.4	3.2	– 0.0	0.0	7.0	7.5	0.3	0.1	– 2.9	– 1.0	– 0.1	– 8.2	– 15.5	Oct.
0.2	– 0.6	– 0.0	– 0.0	1.2	1.0	3.3	– 0.2	– 0.9	– 1.2	12.6	3.3	– 39.9	Nov.
7.0	6.3	0.0	0.0	1.3	1.0	0.3	– 0.0	– 9.0	– 1.9	– 71.4	– 0.7	– 23.2	Dec.
– 7.0	– 6.9	0.0	0.0	– 0.1	– 0.2	– 3.0	– 0.0	2.8	– 0.5	173.2	– 3.7	– 49.8	2021 Jan.
– 3.1	– 3.2	– 0.0	– 0.0	0.6	– 0.2	– 1.8	– 0.0	8.9	– 0.1	12.2	– 6.2	– 48.9	Feb.
1.5	1.3	– 0.0	0.0	– 0.4	0.8	2.1	0.5	15.7	1.7	24.0	7.1	– 10.8	Mar.
1.8	1.3	– 0.0	– 0.0	0.1	– 0.4	– 2.2	– 0.1	7.3	– 0.4	11.1	– 3.7	– 31.3	Apr.
3.2	3.5	– 0.0	0.0	– 1.8	– 1.9	0.9	– 0.1	– 2.7	2.5	17.0	– 2.8	– 27.1	May
– 1.6	– 0.9	– 0.0	– 0.0	– 1.3	– 1.0	– 1.5	0.1	– 7.7	0.2	– 22.7	20.9	24.6	June
– 1.8	– 2.7	– 0.0	– 0.0	– 1.4	– 1.3	1.5	– 0.1	2.3	– 0.2	– 37.2	– 5.4	28.5	July
0.7	1.0	– 0.0	– 0.0	0.3	– 0.2	1.4	– 0.0	2.2	2.0	– 9.9	5.6	– 14.9	Aug.
– 1.9	– 1.6	– 0.0	– 0.0	0.8	1.2	– 0.1	– 0.0	7.0	– 0.5	45.5	10.0	– 32.4	Sep.
1.5	0.9	– 0.0	– 0.0	– 0.5	0.0	0.1	– 0.1	17.3	– 0.5	27.1	– 6.4	– 22.8	Oct.
– 4.5	– 6.1	– 0.0	– 0.0	0.7	0.4	– 3.2	– 0.1	1.7	1.4	11.7	5.9	40.3	Nov.
14.3	5.4	0.0	0.0	– 2.4	– 2.0	– 2.0	0.2	– 14.2	1.4	– 127.3	– 4.6	– 63.4	Dec.
– 2.7	– 2.6	– 0.0	– 0.0	4.7	2.0	0.7	– 0.0	13.4	– 2.3	146.6	– 18.3	39.8	2022 Jan.
– 1.3	– 0.5	– 0.0	– 0.0	– 2.5	– 2.7	– 0.5	0.1	15.0	1.0	39.4	– 3.2	44.2	Feb.
– 1.0	– 0.8	– 0.0	– 0.0	– 2.0	– 0.6	0.3	0.2	6.9	– 0.3	– 20.7	19.0	118.4	Mar.
3.6	3.2	– 0.0	– 0.0	0.1	0.0	– 0.5	– 0.3	3.4	0.2	0.4	– 5.8	252.8	Apr.
– 3.1	– 2.6	– 0.0	– 0.0	2.0	0.6	– 0.4	0.2	1.6	0.0	19.3	– 0.9	– 41.9	May

3 In Germany, debt securities with maturities of up to one year are classed as money market paper; up to the January 2002 Monthly Report they were published together with money market fund shares. **4** Statistical breaks have been eliminated from the flow figures (see also footnote * in Table II.1).

IV. Banks

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

€ billion

End of month	Number of reporting institutions	Balance sheet total [1]	Cash in hand and credit balances with central banks	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)					Participating interests	Other assets [1]
				Total	of which:		Total	of which:					
					Balances and loans	Securities issued by banks		Loans		Bills	Securities issued by non-banks		
								for up to and including 1 year	for more than 1 year				
All categories of banks													
2021 Dec.	1,446	9,233.3	955.4	2,510.2	2,041.2	468.1	4,669.3	398.2	3,566.3	0.4	693.7	95.9	1,002.5
2022 Jan.	1,442	9,779.5	1,114.3	2,639.3	2,169.5	468.0	4,724.4	446.2	3,573.4	0.3	691.1	94.9	1,206.5
Feb.	1,442	9,905.7	1,142.6	2,675.9	2,203.3	470.7	4,750.0	453.5	3,587.6	0.3	694.2	94.9	1,242.3
Mar.	1,442	10,025.3	1,137.0	2,666.8	2,194.2	471.4	4,760.3	441.8	3,604.5	0.3	700.1	94.6	1,366.5
Apr.	1,441	10,333.5	1,252.2	2,589.8	2,116.4	471.2	4,780.9	454.6	3,627.3	0.4	682.1	94.6	1,615.9
May	1,439	10,321.6	1,173.6	2,675.5	2,199.3	473.8	4,801.0	458.6	3,640.1	0.3	685.3	94.5	1,577.0
Commercial banks [6]													
2022 Apr.	249	4,644.4	628.3	1,164.0	1,082.9	80.7	1,504.6	297.9	988.0	0.3	209.7	31.8	1,315.6
May	249	4,622.0	642.4	1,157.7	1,078.1	79.2	1,512.6	303.5	988.0	0.3	211.8	31.6	1,277.6
Big banks [7]													
2022 Apr.	3	2,379.3	179.7	563.2	534.1	29.2	697.8	146.7	449.0	0.1	97.9	26.2	912.4
May	3	2,386.1	179.4	565.1	534.7	30.4	697.2	142.8	449.9	0.0	100.4	26.2	918.2
Regional banks and other commercial banks													
2022 Apr.	138	1,808.6	292.4	436.3	385.9	49.9	681.8	107.5	465.0	0.2	105.5	5.0	393.2
May	138	1,777.8	308.9	427.8	380.2	47.2	686.8	113.8	463.5	0.2	105.2	4.7	349.7
Branches of foreign banks													
2022 Apr.	108	456.4	156.2	164.6	162.9	1.6	125.0	43.7	74.0	0.1	6.3	0.7	10.0
May	108	458.1	154.2	164.8	163.2	1.6	128.7	46.8	74.6	0.0	6.2	0.7	9.7
Landesbanken													
2022 Apr.	6	912.3	132.1	241.1	191.6	49.1	423.2	46.2	335.9	0.0	38.2	8.1	107.9
May	6	907.8	118.1	248.2	197.2	50.7	423.1	45.0	336.3	0.0	38.3	8.1	110.3
Savings banks													
2022 Apr.	368	1,565.6	177.2	165.2	50.4	114.7	1,184.5	50.4	954.9	–	178.5	15.2	23.5
May	367	1,571.8	176.3	165.7	49.9	115.6	1,190.6	50.3	960.9	–	178.9	15.2	23.9
Credit cooperatives													
2022 Apr.	773	1,153.2	67.9	191.3	76.7	114.3	847.9	31.7	692.8	0.0	123.3	19.1	27.1
May	772	1,158.8	67.4	191.5	76.2	114.9	853.8	31.7	698.4	0.0	123.6	19.1	27.0
Mortgage banks													
2022 Apr.	9	232.9	11.8	18.7	11.7	6.6	196.8	2.3	177.8	–	16.6	0.1	5.4
May	9	232.6	12.2	18.4	11.3	6.7	196.4	2.4	177.5	–	16.5	0.1	5.4
Building and loan associations													
2022 Apr.	18	257.1	3.5	44.3	28.9	15.4	205.4	1.1	179.3	.	25.0	0.3	3.6
May	18	260.1	4.6	45.4	30.0	15.4	206.0	1.2	180.2	.	24.6	0.3	3.8
Banks with special, development and other central support tasks													
2022 Apr.	18	1,568.0	231.4	765.2	674.2	90.3	418.5	24.9	298.6	0.0	90.9	20.1	132.8
May	18	1,568.7	152.4	848.7	756.6	91.3	418.5	24.6	298.8	0.0	91.5	20.1	129.0
Memo item: Foreign banks [8]													
2022 Apr.	141	2,117.8	327.3	602.5	566.3	35.9	612.8	129.9	377.5	0.2	101.2	3.6	571.7
May	141	2,093.6	339.7	596.5	563.2	33.1	618.1	135.0	378.3	0.2	100.4	3.6	535.7
of which: Banks majority-owned by foreign banks [9]													
2022 Apr.	33	1,661.4	171.1	437.9	403.3	34.3	487.8	86.2	303.4	0.2	94.9	2.9	561.7
May	33	1,635.5	185.5	431.7	400.0	31.5	489.5	88.2	303.7	0.2	94.2	2.9	526.0

***** 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)											
	of which:			of which:										
					Time deposits [2]			Savings deposits [4]						
Total	Sight deposits	Time deposits	Total	Sight deposits	for up to and including 1 year	for more than 1 year [2]	Memo item: Liabilities arising from repos [3]	Total	of which: At 3 months' notice	Bank savings bonds	Bearer debt securities out-standing [5]	Capital including published reserves, partici-pation rights capital, funds for general banking risks	Other liabi-lities [1]	End of month
All categories of banks														
2,253.1	573.1	1,679.9	4,264.5	2,796.5	224.3	651.9	32.0	567.1	542.6	24.7	1,208.2	564.9	942.7	2021 Dec.
2,462.3	773.0	1,689.2	4,365.8	2,868.1	252.6	654.0	50.0	566.7	542.8	24.3	1,222.0	569.0	1,160.3	2022 Jan.
2,500.1	780.9	1,719.2	4,399.0	2,899.0	257.2	652.0	60.1	566.7	543.1	24.1	1,233.5	569.5	1,203.6	Feb.
2,481.6	770.4	1,711.2	4,395.3	2,895.6	260.1	650.7	50.7	564.8	541.5	24.1	1,255.4	576.7	1,316.3	Mar.
2,498.2	741.2	1,756.9	4,431.3	2,907.0	287.1	649.5	62.5	563.7	540.5	23.9	1,263.1	578.7	1,562.2	Apr.
2,521.3	783.2	1,738.1	4,438.7	2,941.4	263.1	648.1	62.5	562.3	539.3	24.0	1,261.8	579.4	1,520.3	May
Commercial banks [6]														
1,294.1	562.9	731.1	1,766.3	1,240.0	175.7	238.7	61.4	102.1	98.6	9.9	176.7	199.4	1,208.0	2022 Apr.
1,314.2	588.6	725.6	1,768.3	1,262.4	157.7	236.5	61.6	102.0	98.5	9.8	178.3	198.3	1,162.9	May
Big banks [7]														
525.1	211.9	313.2	843.5	590.0	89.0	76.7	38.1	86.7	83.8	1.1	130.6	74.2	806.0	2022 Apr.
533.1	219.0	314.1	838.4	591.9	82.3	76.5	32.3	86.7	83.8	1.1	130.9	72.4	811.3	May
Regional banks and other commercial banks														
516.6	209.6	307.0	743.5	520.0	59.1	140.7	23.3	15.0	14.4	8.7	45.5	110.9	392.1	2022 Apr.
524.8	229.3	295.6	753.8	539.4	51.9	139.0	29.3	14.9	14.3	8.6	46.8	111.6	340.8	May
Branches of foreign banks														
252.4	141.4	111.0	179.3	130.0	27.6	21.3	–	0.4	0.4	0.1	0.6	14.3	9.8	2022 Apr.
256.2	140.4	115.9	176.1	131.2	23.5	21.0	–	0.4	0.4	0.1	0.5	14.4	10.8	May
Landesbanken														
297.5	49.8	247.6	279.2	157.4	46.5	69.6	0.8	5.6	5.6	0.0	182.1	43.1	110.4	2022 Apr.
298.7	64.2	234.5	271.8	154.9	41.1	70.2	0.7	5.6	5.6	0.0	181.7	43.1	112.5	May
Savings banks														
211.9	5.0	206.8	1,153.1	841.4	11.7	13.8	–	276.2	260.6	9.9	16.1	132.5	52.0	2022 Apr.
212.8	5.1	207.7	1,157.6	846.4	11.9	13.9	–	275.4	259.9	10.0	16.2	133.3	51.9	May
Credit cooperatives														
176.2	1.9	174.3	835.7	607.6	28.0	17.0	–	179.2	175.3	3.9	9.0	95.6	36.8	2022 Apr.
178.1	2.2	175.9	838.7	610.1	28.6	17.3	–	178.8	174.9	3.9	8.9	97.1	36.0	May
Mortgage banks														
62.1	3.9	58.2	52.9	2.3	3.8	46.9	–	–	–	.	100.8	10.8	6.3	2022 Apr.
62.3	3.8	58.5	52.8	2.1	4.0	46.6	–	–	–	.	101.3	10.3	5.9	May
Building and loan associations														
37.2	3.3	33.9	193.8	3.5	1.7	188.0	–	0.5	0.5	0.1	4.1	12.2	9.9	2022 Apr.
39.4	3.3	36.0	193.9	3.7	1.6	188.1	–	0.5	0.5	0.1	4.6	12.2	10.0	May
Banks with special, development and other central support tasks														
419.3	114.4	305.0	150.3	54.9	19.7	75.6	0.3	–	–	.	774.4	85.2	138.8	2022 Apr.
415.8	115.9	299.9	155.6	61.7	18.3	75.5	0.3	–	–	.	770.9	85.2	141.2	May
Memo item: Foreign banks [8]														
715.7	354.2	361.5	699.2	517.9	61.4	96.7	11.0	20.6	20.3	2.7	43.9	86.4	572.6	2022 Apr.
728.9	375.6	353.3	700.1	527.1	54.0	95.8	9.0	20.5	20.3	2.6	44.4	86.5	533.7	May
of which: Banks majority-owned by foreign banks [9]														
463.3	212.7	250.6	519.9	387.9	33.7	75.5	11.0	20.2	19.9	2.6	43.3	72.1	562.7	2022 Apr.
472.7	235.3	237.4	523.9	395.9	30.5	74.8	9.0	20.2	19.9	2.5	43.9	72.1	523.0	May

and loan contracts (see Table IV.12). **3** Included in time deposits. **4** Excluding deposits under savings and loan contracts (see also footnote 2). **5** Including subordinated negotiable bearer debt securities; excluding non-negotiable bearer debt securities. **6** Commercial banks comprise the sub-groups "Big banks", "Regional banks and other commercial banks" and "Branches of foreign banks". **7** Deutsche Bank AG, Dresdner Bank AG (up to Nov. 2009), Commerzbank AG, UniCredit Bank AG (formerly Bayerische Hypo- und Vereinsbank AG), Deutsche Postbank AG (from December 2004 up to April 2018) and DB Privat- und Firmenkundenbank AG (from May 2018) (see the explanatory notes in the Statistical Series Banking statistics, Table I.3, banking group "Big banks "). **8** Sum of the banks majority-owned by foreign banks and included in other categories of banks and the category "Branches (with dependent legal status) of foreign banks". **9** Separate presentation of the banks majority-owned by foreign banks included in other banking categories.

IV. Banks

3. Assets and liabilities of banks (MFIs) in Germany vis-à-vis residents *

€ billion

Period	Cash in hand (euro area banknotes and coins)	Credit balances with the Bundesbank	Lending to domestic banks (MFIs)						Lending to domestic non-banks (non-MFIs)				
			Total	Credit balances and loans	Bills	Negotiable money market paper issued by banks	Securities issued by banks	Memo item: Fiduciary loans	Total	Loans	Bills	Treasury bills and negotiable money market paper issued by non-banks	Securities issued by non-banks [1]
													End of year or month *
2012	18.5	134.3	1,655.0	1,229.1	–	2.4	423.5	2.4	3,220.4	2,785.5	0.6	2.2	432.1
2013	18.5	85.6	1,545.6	1,153.1	0.0	1.7	390.8	2.2	3,131.6	2,692.6	0.5	1.2	437.2
2014	18.9	81.3	1,425.9	1,065.6	0.0	2.1	358.2	1.7	3,167.3	2,712.2	0.4	0.7	454.0
2015	19.2	155.0	1,346.6	1,062.6	0.0	1.7	282.2	1.7	3,233.9	2,764.0	0.4	0.4	469.0
2016	25.8	284.0	1,364.9	1,099.8	0.0	0.8	264.3	2.0	3,274.3	2,823.8	0.3	0.4	449.8
2017	31.9	392.5	1,407.5	1,163.4	0.0	0.7	243.4	1.9	3,332.6	2,894.0	0.4	0.7	437.5
2018	40.4	416.1	1,323.5	1,083.8	0.0	0.8	239.0	5.9	3,394.5	2,990.2	0.2	0.2	403.9
2019	43.2	476.6	1,254.7	1,016.2	0.0	0.7	237.9	4.5	3,521.5	3,119.2	0.3	3.3	398.7
2020	47.2	792.9	1,367.9	1,119.7	0.0	0.7	247.5	8.8	3,647.0	3,245.1	0.2	4.0	397.7
2021	49.4	905.0	1,409.6	1,163.7	–	0.5	245.3	10.3	3,798.1	3,392.4	0.3	2.6	402.8
2020 Dec.	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 Jan.	44.6	1,009.1	1,283.1	1,032.1	0.0	0.7	250.2	9.2	3,654.0	3,250.7	0.3	6.6	396.3
Feb.	45.0	929.2	1,382.3	1,130.2	0.0	1.0	251.1	9.6	3,669.3	3,261.7	0.2	7.4	400.0
Mar.	45.5	983.4	1,419.4	1,160.8	0.0	0.9	257.7	9.8	3,699.1	3,287.5	0.2	6.7	404.7
Apr.	44.7	1,062.1	1,362.4	1,105.7	0.0	0.9	255.8	9.8	3,693.9	3,287.5	0.2	5.6	400.5
May	45.4	1,044.7	1,423.6	1,167.3	0.0	0.9	255.4	10.1	3,709.6	3,300.2	0.1	4.6	404.7
June	46.1	1,042.8	1,409.7	1,153.8	0.0	0.8	255.1	10.3	3,709.2	3,305.7	0.2	5.8	397.6
July	46.3	1,059.2	1,372.0	1,118.1	0.0	0.8	253.2	10.3	3,725.3	3,322.9	0.2	6.1	396.2
Aug.	46.5	1,015.2	1,425.2	1,172.4	0.0	0.8	252.1	10.3	3,736.4	3,332.8	0.1	5.7	397.8
Sep.	47.1	1,054.9	1,399.9	1,147.7	0.0	0.7	251.5	10.3	3,749.8	3,341.9	0.1	4.4	403.3
Oct.	47.6	1,052.4	1,419.3	1,167.7	0.0	0.7	250.9	10.3	3,770.2	3,366.9	0.2	5.0	398.0
Nov.	47.9	1,068.7	1,432.2	1,183.6	–	0.7	248.0	10.0	3,794.0	3,386.4	0.2	5.6	401.9
Dec.	49.4	905.0	1,409.6	1,163.7	–	0.5	245.3	10.3	3,798.1	3,392.4	0.3	2.6	402.8
2022 Jan.	47.4	1,066.0	1,439.2	1,191.8	–	0.7	246.7	10.1	3,812.8	3,409.0	0.2	3.1	400.5
Feb.	47.2	1,094.0	1,453.6	1,204.6	–	0.3	248.7	10.0	3,826.5	3,426.0	0.2	5.0	395.3
Mar.	49.5	1,086.3	1,442.6	1,195.1	–	0.3	247.3	10.0	3,853.8	3,449.0	0.2	3.3	401.3
Apr.	50.4	1,200.5	1,360.3	1,112.8	–	0.6	246.9	9.9	3,866.6	3,470.0	0.2	3.5	392.9
May	49.4	1,122.8	1,452.7	1,202.9	–	0.7	249.1	9.9	3,886.7	3,488.9	0.2	3.2	394.4
													Changes *
2013	+ 0.0	– 48.8	– 204.1	– 170.6	+ 0.0	– 0.7	– 32.7	– 0.2	+ 4.4	+ 0.3	– 0.1	– 0.6	+ 4.8
2014	+ 0.4	– 4.3	– 119.3	– 87.1	+ 0.0	+ 0.4	– 32.6	+ 0.1	+ 36.7	+ 20.6	– 0.1	– 0.6	+ 16.8
2015	+ 0.3	+ 73.7	– 80.7	– 4.3	– 0.0	– 0.4	– 75.9	– 0.1	+ 68.9	+ 54.1	– 0.0	– 0.3	+ 15.1
2016	+ 6.5	+ 129.1	+ 48.1	+ 66.9	–	– 0.9	– 17.9	+ 0.4	+ 43.7	+ 62.8	– 0.1	– 0.1	– 18.9
2017	+ 6.1	+ 108.4	+ 50.3	+ 70.4	– 0.0	+ 0.0	– 20.1	– 0.1	+ 57.0	+ 70.2	+ 0.0	+ 0.4	– 13.6
2018	+ 8.5	+ 24.0	– 81.0	– 76.6	+ 0.0	+ 0.1	– 4.4	+ 3.8	+ 71.5	+ 105.4	– 0.1	– 0.5	– 33.2
2019	+ 2.8	+ 59.7	– 63.0	– 61.1	– 0.0	– 0.2	– 1.6	– 1.4	+ 126.7	+ 129.1	+ 0.1	+ 3.1	– 5.5
2020	+ 4.1	+ 316.4	+ 201.2	+ 191.6	– 0.0	+ 0.0	+ 9.6	+ 4.3	+ 123.2	+ 123.6	– 0.1	+ 0.7	– 1.0
2021	+ 2.2	+ 111.8	+ 44.1	+ 46.3	– 0.0	– 0.2	– 2.0	+ 1.5	+ 152.2	+ 147.8	+ 0.0	– 2.2	+ 6.6
2020 Dec.	+ 1.8	– 70.3	+ 16.0	+ 18.4	–	– 0.1	– 2.3	+ 0.2	– 14.1	– 2.3	+ 0.0	– 3.6	– 8.1
2021 Jan.	– 2.6	+ 216.2	– 84.9	– 87.8	+ 0.0	+ 0.0	+ 2.8	+ 0.4	+ 6.6	+ 5.3	+ 0.0	+ 2.6	– 1.4
Feb.	+ 0.3	– 79.9	+ 98.9	+ 97.8	–	+ 0.3	+ 0.8	+ 0.4	+ 15.3	+ 11.0	– 0.0	+ 0.7	+ 3.6
Mar.	+ 0.6	+ 54.3	+ 37.1	+ 30.6	–	– 0.1	+ 6.6	+ 0.2	+ 29.7	+ 25.6	– 0.0	– 1.4	+ 5.4
Apr.	– 0.8	+ 78.7	– 56.7	– 54.9	– 0.0	– 0.1	– 1.7	+ 0.0	– 5.2	+ 0.0	– 0.0	– 1.1	– 4.1
May	+ 0.8	– 17.5	+ 61.2	+ 61.6	–	+ 0.0	– 0.4	+ 0.4	+ 15.6	+ 12.5	– 0.0	– 1.1	+ 4.2
June	+ 0.6	– 1.9	– 13.6	– 13.3	– 0.0	– 0.1	– 0.3	+ 0.1	– 0.4	+ 5.5	+ 0.0	+ 1.3	– 7.1
July	+ 0.2	+ 15.3	– 35.1	– 33.1	–	– 0.0	– 1.9	+ 0.1	+ 16.1	+ 17.2	+ 0.0	+ 0.3	– 1.4
Aug.	+ 0.2	– 43.8	+ 53.4	+ 54.4	–	+ 0.1	– 1.1	– 0.0	+ 10.9	+ 9.7	– 0.0	– 0.5	+ 1.7
Sep.	+ 0.6	+ 39.7	– 26.2	– 25.5	+ 0.0	– 0.1	– 0.6	– 0.0	+ 13.5	+ 9.2	+ 0.0	– 1.2	+ 5.4
Oct.	+ 0.5	– 2.4	+ 19.5	+ 20.0	+ 0.0	– 0.0	– 0.5	– 0.1	+ 20.5	+ 25.1	+ 0.0	+ 0.6	– 5.2
Nov.	+ 0.3	+ 16.6	+ 12.9	+ 15.9	– 0.0	– 0.0	– 2.9	– 0.3	+ 25.5	+ 20.4	+ 0.0	+ 0.6	+ 4.5
Dec.	+ 1.6	– 163.6	– 22.4	– 19.6	–	– 0.1	– 2.7	+ 0.3	+ 4.3	+ 6.2	+ 0.1	– 3.0	+ 0.9
2022 Jan.	– 2.0	+ 161.0	+ 27.8	+ 26.3	–	+ 0.1	+ 1.4	– 0.3	+ 14.7	+ 16.6	– 0.1	+ 0.5	– 2.3
Feb.	– 0.2	+ 28.0	+ 13.1	+ 11.5	–	– 0.4	+ 2.0	– 0.1	+ 15.1	+ 18.4	+ 0.0	+ 1.9	– 5.2
Mar.	+ 2.3	– 7.8	– 10.9	– 9.5	–	– 0.0	– 1.4	– 0.0	+ 27.3	+ 23.0	– 0.0	– 1.7	+ 6.0
Apr.	+ 0.9	+ 114.2	– 82.3	– 82.3	–	+ 0.3	– 0.4	– 0.0	+ 13.1	+ 21.3	+ 0.0	+ 0.2	– 8.4
May	– 1.0	– 77.7	+ 92.3	+ 90.0	–	+ 0.1	+ 2.2	– 0.0	+ 20.1	+ 18.9	– 0.1	– 0.3	+ 1.5

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

IV. Banks

Equalisation claims [2]	Memo item: Fiduciary loans	Participating interests in domestic banks and enterprises	Deposits of domestic banks (MFIs) [3] Total	Sight deposits [4]	Time deposits [4]	Redis-counted bills [5]	Memo item: Fiduciary loans	Deposits of domestic non-banks (non-MFIs) Total	Sight de-posits	Time deposits [6]	Savings de-posits [7]	Bank savings bonds [8]	Memo item: Fiduciary loans	Period
End of year or month *														
–	34.8	90.0	1,135.5	132.9	1,002.6	0.0	36.3	3,090.2	1,306.5	1,072.5	617.6	93.6	34.9	2012
–	31.6	92.3	1,140.3	125.6	1,014.7	0.0	33.2	3,048.7	1,409.9	952.0	610.1	76.6	32.9	2013
–	26.5	94.3	1,111.9	127.8	984.0	0.0	11.7	3,118.2	1,517.8	926.7	607.8	66.0	30.9	2014
–	20.4	89.6	1,065.6	131.1	934.5	0.0	6.1	3,224.7	1,673.7	898.4	596.5	56.1	29.3	2015
–	19.1	91.0	1,032.9	129.5	903.3	0.1	5.6	3,326.7	1,798.2	889.6	588.5	50.4	28.8	2016
–	19.1	88.1	1,048.2	110.7	937.4	0.0	5.1	3,420.9	1,941.0	853.2	582.9	43.7	30.0	2017
–	18.0	90.9	1,020.9	105.5	915.4	0.0	4.7	3,537.6	2,080.1	841.5	578.6	37.3	33.9	2018
–	17.3	90.4	1,010.2	107.2	902.9	0.0	4.4	3,661.0	2,236.3	816.2	575.2	33.2	32.5	2019
–	23.5	78.3	1,236.7	125.0	1,111.6	0.0	13.1	3,885.2	2,513.0	783.3	560.6	28.3	34.4	2020
–	25.7	79.2	1,338.4	117.2	1,221.3	0.0	16.4	3,976.3	2,654.6	736.0	561.2	24.5	34.2	2021
–	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 Dec.
–	23.7	78.2	1,261.6	140.5	1,121.2	0.0	13.6	3,904.5	2,542.0	773.1	561.6	27.9	34.3	2021 Jan.
–	24.0	78.2	1,260.6	138.0	1,122.5	0.0	14.2	3,913.7	2,557.5	766.1	562.6	27.5	34.3	Feb.
–	24.3	78.3	1,336.0	135.4	1,200.6	0.0	14.7	3,925.8	2,575.2	761.2	562.3	27.1	34.4	Mar.
–	24.5	77.7	1,343.0	136.2	1,206.8	0.0	15.1	3,935.7	2,594.6	751.6	562.8	26.8	34.4	Apr.
–	24.7	78.6	1,351.9	140.0	1,211.9	0.0	15.5	3,956.3	2,620.5	746.2	563.2	26.3	34.6	May
–	25.0	78.7	1,357.0	132.7	1,224.3	0.0	15.8	3,936.4	2,612.1	735.7	562.6	26.1	34.6	June
–	25.1	78.1	1,360.7	136.1	1,224.5	0.0	15.9	3,964.6	2,646.0	730.7	562.0	25.9	34.5	July
–	25.2	78.2	1,364.7	135.3	1,229.4	0.0	16.1	3,971.0	2,656.0	727.8	561.5	25.6	34.3	Aug.
–	25.2	79.0	1,353.8	128.9	1,224.9	0.0	16.2	3,960.3	2,647.9	726.1	560.7	25.5	34.1	Sep.
–	25.1	79.0	1,363.6	132.9	1,230.7	0.0	16.2	3,989.1	2,664.3	739.3	560.1	25.3	33.9	Oct.
–	25.2	79.1	1,373.9	135.2	1,238.6	0.0	16.3	4,002.4	2,685.9	731.8	559.9	24.8	33.6	Nov.
–	25.7	79.2	1,338.4	117.2	1,221.3	0.0	16.4	3,976.3	2,654.6	736.0	561.2	24.5	34.2	Dec.
–	25.7	78.6	1,363.7	137.2	1,226.5	0.0	16.4	4,025.9	2,690.9	750.0	560.8	24.2	33.9	2022 Jan.
–	25.7	78.7	1,369.7	140.5	1,229.2	0.0	16.6	4,037.8	2,704.5	748.5	560.9	23.9	33.8	Feb.
–	25.8	78.7	1,367.7	137.7	1,230.1	0.0	16.5	4,033.7	2,695.6	755.2	559.0	23.9	33.8	Mar.
–	25.9	78.7	1,384.4	140.6	1,243.8	0.0	16.7	4,046.7	2,705.6	759.4	557.9	23.8	33.8	Apr.
–	26.2	78.6	1,393.7	142.7	1,251.0	0.0	17.1	4,056.8	2,724.3	752.1	556.6	23.8	33.6	May
Changes *														
–	– 3.3	+ 2.4	– 79.4	– 24.1	– 55.3	+ 0.0	– 3.4	+ 40.2	+ 118.4	– 53.9	– 7.4	– 17.0	– 1.7	2013
–	– 1.9	+ 2.0	– 29.0	+ 2.2	– 31.2	– 0.0	– 0.6	+ 69.7	+ 107.9	– 25.3	– 2.4	– 10.6	– 2.0	2014
–	– 2.1	– 4.3	– 46.6	+ 3.3	– 50.0	+ 0.0	– 1.3	+ 106.5	+ 156.2	– 28.3	– 11.3	– 10.1	– 1.6	2015
–	– 1.3	+ 1.5	– 1.7	+ 0.3	– 2.0	+ 0.0	– 0.5	+ 104.7	+ 124.5	– 6.9	– 7.9	– 5.0	– 0.5	2016
–	– 0.0	– 1.6	+ 11.0	– 18.4	+ 29.4	– 0.0	– 0.5	+ 103.1	+ 142.8	– 27.5	– 5.6	– 6.7	+ 0.4	2017
–	– 1.0	+ 3.1	– 25.0	– 3.1	– 21.9	+ 0.0	– 0.4	+ 117.7	+ 139.3	– 10.8	– 4.3	– 6.5	+ 3.9	2018
–	– 0.7	+ 0.1	– 8.6	+ 1.6	– 10.2	+ 0.0	– 0.3	+ 122.5	+ 155.8	– 25.7	– 3.4	– 4.1	– 1.4	2019
–	+ 5.7	– 3.3	+ 313.4	+ 23.2	+ 290.2	– 0.0	+ 8.2	+ 221.6	+ 273.7	– 32.7	– 14.5	– 4.9	+ 1.9	2020
–	+ 2.3	+ 1.0	+ 105.2	– 7.4	+ 112.6	+ 0.0	+ 3.3	+ 95.3	+ 144.3	– 46.2	+ 0.7	– 3.5	– 0.2	2021
–	+ 0.6	+ 0.1	– 8.1	– 9.6	+ 1.5	–	+ 0.5	– 9.2	– 2.3	– 7.6	+ 1.0	– 0.2	– 0.0	2020 Dec.
–	+ 0.2	– 0.1	+ 24.9	+ 15.7	+ 9.2	+ 0.0	+ 0.5	+ 19.2	+ 28.9	– 10.3	+ 1.1	– 0.4	– 0.1	2021 Jan.
–	+ 0.3	+ 0.1	– 1.2	– 2.4	+ 1.2	– 0.0	+ 0.6	+ 9.1	+ 15.4	– 7.0	+ 1.0	– 0.4	– 0.0	Feb.
–	+ 0.3	+ 0.1	+ 75.1	– 2.6	+ 77.7	–	+ 0.5	+ 12.2	+ 17.7	– 4.8	– 0.3	– 0.4	+ 0.1	Mar.
–	+ 0.2	– 0.6	+ 7.1	+ 0.8	+ 6.3	+ 0.0	+ 0.3	+ 9.8	+ 19.6	– 9.8	+ 0.4	– 0.3	– 0.0	Apr.
–	+ 0.3	+ 0.3	+ 8.9	+ 3.9	+ 5.0	–	+ 0.5	+ 20.6	+ 26.0	– 5.3	+ 0.5	– 0.5	+ 0.2	May
–	+ 0.2	+ 0.1	+ 5.0	– 7.3	+ 12.3	+ 0.0	+ 0.3	– 19.8	– 8.5	– 10.5	– 0.6	– 0.2	– 0.0	June
–	+ 0.1	+ 0.1	+ 6.6	+ 3.5	+ 3.1	–	+ 0.1	+ 28.2	+ 33.9	– 5.0	– 0.6	– 0.2	– 0.1	July
–	+ 0.2	+ 0.1	+ 4.1	– 0.8	+ 4.9	– 0.0	+ 0.2	+ 6.4	+ 10.0	– 2.9	– 0.5	– 0.2	– 0.2	Aug.
–	+ 0.0	+ 0.7	– 10.6	– 6.4	– 4.2	+ 0.0	+ 0.1	– 6.7	– 5.4	– 0.3	– 0.8	– 0.2	– 0.2	Sep.
–	– 0.1	+ 0.1	+ 10.5	+ 4.0	+ 6.5	+ 0.0	+ 0.0	+ 28.8	+ 16.4	+ 13.2	– 0.6	– 0.2	– 0.2	Oct.
–	+ 0.1	+ 0.1	+ 10.2	+ 2.3	+ 7.9	–	+ 0.1	+ 13.3	+ 21.5	– 7.6	– 0.2	– 0.3	– 0.3	Nov.
–	+ 0.5	+ 0.1	– 35.4	– 18.0	– 17.4	– 0.0	+ 0.0	– 25.9	– 31.2	+ 4.1	+ 1.4	– 0.2	+ 0.6	Dec.
–	– 0.0	– 0.6	+ 23.5	+ 18.3	+ 5.2	– 0.0	+ 0.0	+ 49.6	+ 36.3	+ 14.1	– 0.4	– 0.4	– 0.3	2022 Jan.
–	+ 0.0	+ 0.1	+ 6.0	+ 3.3	+ 2.7	– 0.0	+ 0.2	+ 11.9	+ 13.6	– 1.6	+ 0.1	– 0.2	– 0.2	Feb.
–	+ 0.1	+ 0.0	– 1.9	– 2.8	+ 0.8	–	– 0.0	– 4.1	– 9.0	+ 6.6	– 1.8	+ 0.0	–	Mar.
–	+ 0.2	– 0.0	+ 16.7	+ 3.0	+ 13.7	–	+ 0.2	+ 13.0	+ 9.5	+ 4.2	– 0.6	– 0.1	+ 0.0	Apr.
–	+ 0.3	– 0.1	+ 9.4	+ 2.2	+ 7.2	– 0.0	+ 0.3	+ 10.1	+ 18.8	– 7.3	– 1.3	+ 0.0	– 0.2	May

including subordinated liabilities. **4** Including liabilities arising from monetary policy operations with the Bundesbank. **5** Own acceptances and promissory notes outstanding. **6** Since the inclusion of building and loan associations in January 1999, including deposits under savings and loan contracts (see Table IV.12). **7** Excluding deposits under savings and loan contracts (see also footnote 8). **8** Including liabilities arising from non-negotiable bearer debt securities.

IV. Banks

4. Assets and liabilities of banks (MFIs) in Germany vis-à-vis non-residents *

€ billion

Period	Cash in hand (non-euro area banknotes and coins)	Lending to foreign banks (MFIs)							Lending to foreign non-banks (non-MFIs)					
		Total	Credit balances and loans, bills			Negotiable money market paper issued by banks	Securities issued by banks	Memo item: Fiduciary loans	Total	Loans and bills			Treasury bills and negotiable money market paper issued by non-banks	Securities issued by non-banks
			Total	Short-term	Medium and long-term					Total	Short-term	Medium and long-term		
														End of year or month *
2012	0.8	1,046.0	813.5	545.5	268.1	5.4	227.0	2.6	729.0	442.2	105.1	337.1	9.0	277.8
2013	0.2	1,019.7	782.4	546.6	235.8	7.2	230.1	2.5	701.0	404.9	100.3	304.6	8.2	287.8
2014	0.2	1,125.2	884.8	618.7	266.1	7.9	232.5	1.1	735.1	415.2	94.4	320.8	6.5	313.5
2015	0.3	1,066.9	830.7	555.9	274.7	1.2	235.0	1.0	751.5	424.3	83.8	340.5	7.5	319.7
2016	0.3	1,055.9	820.6	519.8	300.7	0.5	234.9	1.0	756.2	451.6	90.1	361.4	5.0	299.6
2017	0.3	963.8	738.2	441.0	297.2	0.7	225.0	2.3	723.9	442.2	93.3	348.9	4.2	277.5
2018	0.2	1,014.1	771.9	503.8	268.1	1.0	241.3	3.0	762.0	489.6	99.9	389.7	4.3	268.1
2019	0.2	1,064.2	814.0	532.7	281.3	1.8	248.5	3.7	795.3	513.1	111.0	402.1	7.7	274.5
2020	0.2	1,024.3	784.8	532.1	252.8	2.6	236.8	4.0	822.8	523.0	125.4	397.5	11.3	288.5
2021	0.3	1,100.7	877.5	614.7	262.7	0.4	222.8	3.5	871.2	572.2	151.5	420.7	8.0	290.9
2020 Dec.	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 Jan.	0.2	1,135.1	897.8	645.6	252.2	2.6	234.7	3.8	846.9	538.6	142.7	395.8	14.0	294.3
Feb.	0.6	1,146.4	912.7	659.6	253.1	2.2	231.5	3.8	853.6	548.2	150.4	397.7	14.7	290.7
Mar.	0.2	1,140.4	908.0	646.7	261.3	2.3	230.1	3.8	864.8	559.3	153.3	406.1	11.9	293.5
Apr.	0.2	1,172.3	943.1	680.7	262.3	2.3	227.0	3.9	855.5	555.5	152.6	402.9	13.0	287.0
May	0.2	1,157.2	928.1	669.8	258.3	2.4	226.8	3.9	846.1	550.1	147.3	402.8	11.9	284.2
June	0.4	1,159.3	930.3	666.6	263.7	2.5	226.4	3.9	855.1	551.6	146.7	404.9	10.5	293.0
July	0.4	1,139.3	910.4	651.3	259.1	1.9	227.0	3.8	867.2	565.0	158.4	406.6	13.1	289.2
Aug.	0.4	1,125.9	899.8	647.9	251.8	1.6	224.5	3.7	867.4	566.7	158.7	407.9	15.3	285.5
Sep.	0.3	1,113.1	885.7	634.6	251.1	1.1	226.3	3.6	876.0	569.3	156.6	412.7	15.1	291.6
Oct.	0.3	1,166.7	940.5	672.2	268.2	0.9	225.3	3.5	878.0	579.6	164.1	415.5	17.7	280.6
Nov.	0.3	1,164.8	940.3	674.7	265.6	0.8	223.7	3.4	888.2	585.6	164.4	421.2	14.3	288.3
Dec.	0.3	1,100.7	877.5	614.7	262.7	0.4	222.8	3.5	871.2	572.2	151.5	420.7	8.0	290.9
2022 Jan.	0.3	1,200.2	977.7	714.1	263.6	1.2	221.3	3.5	911.6	610.7	187.0	423.7	10.3	290.7
Feb.	0.5	1,222.3	998.7	734.3	264.4	1.6	222.0	3.6	923.5	615.2	191.4	423.7	9.4	298.9
Mar.	0.5	1,224.2	999.2	729.8	269.4	1.0	224.1	3.6	906.5	597.4	171.8	425.6	10.3	298.9
Apr.	0.6	1,229.5	1,003.6	734.1	269.6	1.6	224.3	3.6	914.4	612.0	180.9	431.1	13.1	289.2
May	0.6	1,222.8	996.5	730.7	265.8	1.7	224.7	3.6	914.3	609.9	182.1	427.9	13.5	290.9
														Changes *
2013	− 0.5	− 22.7	− 26.9	− 1.3	− 25.6	+ 1.8	+ 2.4	− 0.0	− 21.2	− 33.1	− 5.8	− 27.2	− 0.7	+ 12.6
2014	− 0.0	+ 86.1	+ 80.1	+ 63.2	+ 16.8	+ 0.7	+ 5.3	− 0.6	+ 5.7	− 10.2	− 12.8	+ 2.7	− 1.8	+ 17.7
2015	+ 0.1	− 91.8	− 86.0	− 82.2	− 3.8	− 6.7	+ 0.8	− 0.1	− 6.1	− 9.2	− 6.5	− 2.7	+ 1.1	+ 2.0
2016	+ 0.0	− 25.5	− 14.5	− 38.2	+ 23.7	− 0.7	− 10.3	− 0.0	+ 17.4	+ 28.9	+ 10.1	+ 18.8	− 3.0	− 8.5
2017	+ 0.0	− 57.2	− 48.7	− 61.5	+ 12.8	+ 0.0	− 8.5	+ 0.6	− 4.7	+ 13.0	+ 8.6	+ 4.4	+ 0.7	− 18.4
2018	+ 0.0	+ 49.6	+ 34.0	+ 57.7	− 23.7	+ 0.2	+ 15.3	+ 0.7	+ 18.3	+ 28.3	+ 3.2	+ 25.2	− 0.4	− 9.7
2019	− 0.0	− 4.1	− 11.3	− 21.9	+ 10.7	+ 0.8	+ 6.3	+ 0.7	+ 26.8	+ 19.9	+ 12.7	+ 7.3	+ 3.0	+ 3.8
2020	− 0.0	− 32.0	− 22.4	− 6.6	− 15.8	+ 0.9	− 10.5	+ 0.3	+ 34.4	+ 14.7	+ 9.0	+ 5.7	+ 3.6	+ 16.1
2021	+ 0.0	+ 52.8	+ 71.1	+ 68.9	+ 2.2	− 2.5	− 15.8	− 0.5	+ 37.8	+ 39.7	+ 29.8	+ 9.9	− 3.2	+ 1.4
2020 Dec.	− 0.0	− 26.9	− 26.3	− 28.9	+ 2.6	− 0.9	+ 0.2	− 0.1	− 19.3	− 13.7	− 13.6	− 0.0	− 2.7	− 3.0
2021 Jan.	− 0.0	+ 106.1	+ 108.3	+ 110.3	− 1.9	− 0.1	− 2.1	− 0.1	+ 22.5	+ 14.5	+ 17.8	− 3.3	+ 2.7	+ 5.3
Feb.	+ 0.3	+ 11.1	+ 14.7	+ 14.0	+ 0.7	− 0.4	− 3.2	− 0.1	+ 6.3	+ 9.0	+ 7.5	+ 1.5	+ 0.7	− 3.5
Mar.	− 0.3	− 11.7	− 10.1	− 15.8	+ 5.6	+ 0.1	− 1.7	+ 0.0	+ 3.9	+ 4.9	+ 0.7	+ 4.1	− 2.8	+ 1.8
Apr.	− 0.0	+ 37.7	+ 40.7	+ 36.8	+ 3.9	− 0.1	− 2.9	+ 0.1	− 4.0	+ 0.6	+ 0.7	− 0.0	+ 1.1	− 5.6
May	+ 0.0	− 14.9	− 14.6	− 11.5	− 3.1	− 0.1	− 0.3	+ 0.0	− 7.7	− 4.2	− 4.4	+ 0.2	− 0.9	− 2.6
June	+ 0.2	− 4.1	− 3.7	− 6.3	+ 2.6	+ 0.1	− 0.5	− 0.0	+ 4.9	− 1.8	− 1.7	− 0.2	− 1.5	+ 8.2
July	+ 0.0	− 21.8	− 20.5	− 15.7	− 4.8	− 0.6	− 0.7	− 0.1	+ 12.9	+ 13.0	+ 11.7	+ 1.4	+ 2.6	− 2.8
Aug.	− 0.0	− 13.9	− 11.2	− 3.6	− 7.6	− 0.2	− 2.5	− 0.1	− 0.1	+ 1.4	+ 0.3	+ 1.1	+ 2.2	− 3.8
Sep.	− 0.1	− 18.7	− 19.8	− 17.0	− 2.9	− 0.6	+ 1.7	− 0.1	+ 10.0	+ 4.6	+ 1.2	+ 3.4	− 0.2	+ 5.6
Oct.	+ 0.0	+ 54.3	+ 55.5	+ 38.3	+ 17.3	− 0.1	− 1.1	− 0.1	+ 1.5	+ 9.9	+ 7.6	+ 2.3	+ 2.6	− 11.0
Nov.	− 0.0	− 5.7	− 3.9	+ 0.2	− 4.0	− 0.1	− 1.8	− 0.1	+ 5.4	+ 1.8	+ 1.1	+ 0.7	− 3.4	+ 7.1
Dec.	− 0.0	− 65.7	− 64.3	− 60.9	− 3.5	− 0.5	− 0.9	+ 0.0	− 17.8	− 14.0	− 12.7	− 1.4	− 6.3	+ 2.5
2022 Jan.	+ 0.1	+ 95.8	+ 96.6	+ 97.4	− 0.8	+ 0.8	− 1.7	+ 0.1	+ 37.7	+ 36.2	+ 34.8	+ 1.4	+ 2.3	− 0.7
Feb.	+ 0.2	+ 23.2	+ 22.1	+ 20.8	+ 1.2	+ 0.4	+ 0.7	+ 0.0	+ 12.7	+ 5.2	+ 4.6	+ 0.5	− 0.8	+ 8.4
Mar.	− 0.0	− 0.0	− 1.5	− 5.8	+ 4.3	− 0.6	+ 2.1	+ 0.0	− 18.3	− 18.9	− 20.1	+ 1.2	+ 0.8	− 0.2
Apr.	+ 0.1	− 9.7	− 10.2	− 4.6	− 5.6	+ 0.6	− 0.1	+ 0.0	− 1.7	+ 6.8	+ 6.8	+ 0.0	+ 2.8	− 11.3
May	+ 0.0	− 1.1	− 1.8	− 0.1	− 1.7	+ 0.1	+ 0.5	+ 0.0	+ 3.7	+ 1.1	+ 2.2	− 1.1	+ 0.4	+ 2.3

* 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.

IV. Banks

Memo item: Fiduciary loans	Participating interests in foreign banks and enterprises	Deposits of foreign banks (MFIs)						Deposits of foreign non-banks (non-MFIs)						Period
		Total	Sight deposits	Time deposits (including bank savings bonds)			Memo item: Fiduciary loans	Total	Sight deposits	Time deposits (including savings deposits and bank savings bonds)			Memo item: Fiduciary loans	
				Total	Short-term	Medium and long-term				Total	Short-term	Medium and long-term		
End of year or month *														
32.6	46.4	691.1	289.4	401.7	284.6	117.0	0.1	237.6	107.2	130.3	69.1	61.2	1.2	2012
30.8	39.0	515.7	222.6	293.2	196.0	97.2	0.1	257.8	118.1	139.7	76.8	62.9	1.0	2013
14.0	35.6	609.2	277.1	332.1	242.7	89.4	0.1	221.0	113.0	107.9	47.8	60.1	0.7	2014
13.1	30.5	611.9	323.4	288.5	203.8	84.7	0.1	201.1	102.6	98.5	49.3	49.2	0.7	2015
13.1	28.7	696.1	374.4	321.6	234.2	87.5	0.0	206.2	100.3	105.9	55.2	50.8	0.7	2016
12.1	24.3	659.0	389.6	269.4	182.4	87.0	0.0	241.2	109.4	131.8	68.1	63.8	0.3	2017
11.8	22.1	643.1	370.6	272.5	185.6	86.8	0.0	231.5	110.2	121.3	63.7	57.6	0.1	2018
11.5	21.3	680.6	339.3	341.2	243.2	98.0	–	229.8	112.3	117.4	60.5	57.0	0.1	2019
11.3	17.2	761.2	428.8	332.5	205.1	127.3	–	258.5	133.3	125.2	65.6	59.7	0.1	2020
11.1	16.6	914.6	456.0	458.6	301.5	157.2	0.0	288.2	141.9	146.2	68.7	77.6	0.1	2021
11.3	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 Dec.
11.3	16.5	954.9	507.8	447.0	298.5	148.5	–	279.8	145.0	134.8	69.4	65.3	0.1	2021 Jan.
11.3	16.5	987.8	520.0	467.7	318.0	149.7	–	283.4	145.2	138.3	71.5	66.8	0.1	Feb.
11.3	16.6	991.5	520.2	471.3	319.5	151.8	–	288.9	147.8	141.1	73.7	67.4	0.1	Mar.
11.3	16.5	1,008.7	522.1	486.6	343.1	143.5	–	295.8	150.7	145.0	81.0	64.1	0.1	Apr.
11.3	16.5	1,013.1	513.9	499.2	360.2	139.0	–	304.0	148.4	155.6	88.0	67.6	0.1	May
11.3	16.5	1,016.2	539.5	476.7	335.5	141.3	–	290.8	148.4	142.5	79.9	62.6	0.1	June
11.2	16.0	981.6	525.0	456.6	304.9	151.7	–	292.2	151.7	140.5	79.3	61.2	0.1	July
11.2	16.3	969.4	513.0	456.4	293.0	163.5	0.0	298.4	158.9	139.6	78.8	60.8	0.1	Aug.
11.2	16.3	1,003.9	528.2	475.8	315.7	160.1	–	306.0	164.0	142.0	81.5	60.4	0.1	Sep.
11.2	16.3	1,031.2	550.5	480.7	320.4	160.3	0.0	320.9	169.8	151.1	83.3	67.8	0.1	Oct.
11.3	16.4	1,068.2	565.4	502.8	335.0	167.9	0.0	315.5	171.3	144.2	75.5	68.7	0.1	Nov.
11.1	16.6	914.6	456.0	458.6	301.5	157.2	0.0	288.2	141.9	146.2	68.7	77.6	0.1	Dec.
11.1	16.1	1,098.5	635.9	462.7	321.8	140.8	0.0	339.9	177.2	162.7	82.1	80.5	0.1	2022 Jan.
11.1	16.0	1,130.4	640.4	490.0	349.8	140.2	0.0	361.2	194.5	166.7	87.0	79.7	0.1	Feb.
11.1	15.7	1,113.8	632.7	481.1	349.8	131.3	0.0	361.6	200.0	161.6	82.0	79.6	0.1	Mar.
11.1	15.7	1,113.7	600.6	513.2	381.7	131.4	0.0	384.6	201.5	183.2	102.6	80.6	0.1	Apr.
11.1	15.7	1,127.5	640.4	487.1	351.4	135.7	0.0	382.0	217.1	164.9	85.0	79.9	0.2	May
Changes *														
– 1.8	– 7.2	– 174.0	– 75.6	– 98.4	– 83.1	– 15.4	– 0.0	+ 13.5	+ 9.6	+ 3.9	+ 6.9	– 3.0	– 0.2	2013
+ 0.1	– 3.8	+ 76.3	+ 47.8	+ 28.5	+ 39.0	– 10.5	– 0.0	– 43.6	– 8.3	– 35.3	– 30.7	– 4.6	+ 0.2	2014
– 0.6	– 6.1	– 15.4	+ 40.6	– 56.0	– 48.6	– 7.4	– 0.0	– 26.5	– 13.9	– 12.6	+ 0.3	– 13.0	– 0.0	2015
– 0.1	– 1.5	+ 82.7	+ 51.0	+ 31.7	+ 27.0	+ 4.7	– 0.0	+ 3.5	– 3.1	+ 6.7	+ 5.9	+ 0.8	– 0.0	2016
– 1.0	– 4.1	– 15.5	+ 25.2	– 40.8	– 43.2	+ 2.4	± 0.0	+ 31.8	+ 11.0	+ 20.8	+ 15.6	+ 5.2	– 0.4	2017
– 0.2	– 2.2	– 23.9	– 23.4	– 0.4	+ 2.1	– 2.6	– 0.0	– 11.9	– 0.2	– 11.8	– 5.7	– 6.0	– 0.2	2018
– 0.3	– 0.9	– 9.5	– 49.4	+ 39.8	+ 28.0	+ 11.8	– 0.0	– 0.8	+ 2.1	– 2.9	– 1.8	– 1.1	– 0.0	2019
– 0.2	– 3.9	+ 83.8	+ 87.8	– 4.1	– 34.7	+ 30.6	–	+ 23.6	+ 13.8	+ 9.8	+ 7.1	+ 2.8	+ 0.0	2020
– 0.2	– 0.8	+ 136.6	+ 19.8	+ 116.8	+ 89.2	+ 27.6	+ 0.0	+ 22.7	+ 6.4	+ 16.3	+ 0.0	+ 16.3	– 0.0	2021
– 0.2	– 1.7	– 72.1	– 60.9	– 11.2	– 12.6	+ 1.4	–	– 20.3	– 20.3	– 0.0	– 0.1	+ 0.1	+ 0.0	2020 Dec.
– 0.0	– 0.8	+ 191.3	+ 78.5	+ 112.9	+ 92.4	+ 20.5	–	+ 20.1	+ 12.3	+ 7.8	+ 3.6	+ 4.2	– 0.0	2021 Jan.
– 0.0	– 0.0	+ 32.7	+ 12.2	+ 20.5	+ 19.3	+ 1.2	–	+ 3.4	+ 0.0	+ 3.4	+ 2.0	+ 1.4	– 0.0	Feb.
+ 0.1	– 0.0	– 1.8	– 2.6	+ 0.8	– 1.1	+ 1.9	–	+ 3.2	+ 1.6	+ 1.6	+ 1.3	+ 0.3	+ 0.0	Mar.
– 0.0	+ 0.0	+ 23.2	+ 4.3	+ 19.0	+ 26.8	– 7.8	–	+ 7.9	+ 3.7	+ 4.2	+ 7.3	– 3.0	+ 0.0	Apr.
+ 0.0	+ 0.0	+ 4.9	– 7.4	+ 12.2	+ 16.6	– 4.4	–	+ 8.6	– 2.2	+ 10.8	+ 7.2	+ 3.5	– 0.0	May
– 0.1	– 0.0	– 1.9	+ 23.7	– 25.6	– 27.4	+ 1.8	–	– 14.8	– 0.6	– 14.2	– 9.0	– 5.2	– 0.0	June
– 0.1	– 0.5	– 34.8	– 14.6	– 20.2	– 30.6	+ 10.4	–	+ 1.3	+ 2.9	– 1.6	– 0.3	– 1.3	+ 0.0	July
+ 0.0	+ 0.2	– 12.8	– 12.3	– 0.5	– 12.2	+ 11.7	+ 0.0	+ 5.7	+ 6.7	– 1.1	– 0.6	– 0.5	– 0.0	Aug.
– 0.0	+ 0.0	+ 30.5	+ 12.9	+ 17.6	+ 21.4	– 3.9	– 0.0	+ 6.7	+ 4.9	+ 1.7	+ 2.3	– 0.6	+ 0.0	Sep.
+ 0.0	+ 0.1	+ 27.9	+ 22.7	+ 5.2	+ 5.1	+ 0.2	+ 0.0	+ 14.7	+ 5.8	+ 9.0	+ 1.6	+ 7.4	– 0.0	Oct.
+ 0.0	+ 0.1	+ 32.3	+ 12.5	+ 19.9	+ 13.0	+ 6.9	–	– 6.3	+ 0.8	– 7.1	– 8.4	+ 1.3	– 0.0	Nov.
– 0.1	+ 0.2	– 155.0	–110.1	– 44.9	– 34.0	– 10.9	–	– 27.7	– 29.6	+ 1.9	– 7.0	+ 8.9	+ 0.0	Dec.
– 0.0	– 0.6	+ 180.8	+178.4	+ 2.4	+ 19.3	– 16.9	–	+ 50.8	+ 34.9	+ 16.0	+ 13.1	+ 2.9	–	2022 Jan.
+ 0.0	– 0.0	+ 33.4	+ 5.7	+ 27.8	+ 28.3	– 0.5	–	+ 21.2	+ 17.0	+ 4.2	+ 5.0	– 0.8	–	Feb.
– 0.1	– 0.3	– 18.3	– 8.5	– 9.8	– 0.7	– 9.1	–	– 0.1	+ 5.3	– 5.4	– 5.3	– 0.1	– 0.0	Mar.
+ 0.0	– 0.1	– 13.2	– 39.6	+ 26.4	+ 27.6	– 1.1	–	+ 19.2	– 0.6	+ 19.8	+ 19.1	+ 0.6	–	Apr.
– 0.0	+ 0.0	+ 18.7	+ 42.5	– 23.8	– 28.6	+ 4.8	–	– 1.1	+ 16.4	– 17.5	– 16.9	– 0.5	+ 0.1	May

IV. Banks

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

€ billion

Period	Lending to domestic non-banks, total		Short-term lending							Medium- and long-term	
				to enterprises and households			to general government				to enter-
	including negotiable money market paper, securities, equalisation claims	excluding negotiable money market paper, securities, equalisation claims	Total	Total	Loans and bills	Negotiable money market paper	Total	Loans	Treasury bills	Total	Total
	End of year or month *										
2012	3,220.4	2,786.1	376.1	316.8	316.3	0.5	59.3	57.6	1.7	2,844.3	2,310.9
2013	3,131.6	2,693.2	269.1	217.7	217.0	0.6	51.4	50.8	0.6	2,862.6	2,328.6
2014	3,167.3	2,712.6	257.5	212.7	212.1	0.6	44.8	44.7	0.1	2,909.8	2,376.8
2015	3,233.9	2,764.4	255.5	207.8	207.6	0.2	47.8	47.5	0.2	2,978.3	2,451.4
2016	3,274.3	2,824.2	248.6	205.7	205.4	0.3	42.9	42.8	0.1	3,025.8	2,530.0
2017	3,332.6	2,894.4	241.7	210.9	210.6	0.3	30.7	30.3	0.4	3,090.9	2,640.0
2018	3,394.5	2,990.4	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
2020 Dec.	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 Jan.	3,654.0	3,251.0	247.7	221.9	221.3	0.6	25.8	19.7	6.1	3,406.3	3,018.4
Feb.	3,669.3	3,261.9	249.5	224.2	223.6	0.6	25.3	18.5	6.8	3,419.7	3,031.9
Mar.	3,699.1	3,287.7	261.3	236.6	236.0	0.6	24.7	18.6	6.1	3,437.8	3,048.6
Apr.	3,693.9	3,287.7	248.6	223.5	222.8	0.7	25.1	20.2	4.9	3,445.2	3,061.5
May	3,709.6	3,300.4	248.7	225.4	224.6	0.8	23.3	19.5	3.8	3,460.9	3,075.1
June	3,709.2	3,305.8	250.7	225.8	225.0	0.8	24.9	19.9	5.1	3,458.5	3,082.5
July	3,725.3	3,323.0	248.2	221.0	220.2	0.8	27.2	21.9	5.3	3,477.1	3,102.5
Aug.	3,736.4	3,332.9	245.0	221.1	220.4	0.7	23.9	18.9	4.9	3,491.5	3,116.8
Sep.	3,749.8	3,342.1	247.8	224.5	223.8	0.7	23.4	19.6	3.7	3,501.9	3,123.2
Oct.	3,770.2	3,367.1	256.5	232.5	231.9	0.6	24.0	19.5	4.4	3,513.7	3,142.9
Nov.	3,794.0	3,386.5	255.6	232.9	232.3	0.6	22.7	17.7	5.0	3,538.4	3,164.9
Dec.	3,798.1	3,392.7	249.7	232.2	231.9	0.3	17.5	15.2	2.3	3,548.4	3,174.6
2022 Jan.	3,812.8	3,409.2	262.6	242.3	241.7	0.6	20.3	17.8	2.5	3,550.2	3,180.4
Feb.	3,826.5	3,426.2	267.4	246.9	246.1	0.8	20.5	16.3	4.2	3,559.1	3,195.3
Mar.	3,853.8	3,449.2	273.6	254.8	254.0	0.8	18.9	16.3	2.5	3,580.1	3,209.5
Apr.	3,866.6	3,470.2	277.5	257.9	257.0	0.9	19.6	17.1	2.5	3,589.1	3,226.2
May	3,886.7	3,489.1	280.1	262.5	261.5	1.0	17.6	15.4	2.2	3,606.6	3,242.6
	Changes *										
2013	+ 4.4	+ 0.1	– 13.8	– 5.8	– 6.3	+ 0.5	– 8.0	– 7.0	– 1.1	+ 18.2	+ 17.6
2014	+ 36.7	+ 20.5	– 11.6	– 4.5	– 4.5	– 0.0	– 7.1	– 6.5	– 0.6	+ 48.3	+ 52.5
2015	+ 68.9	+ 54.1	+ 1.6	– 1.3	– 0.9	– 0.4	+ 2.9	+ 2.8	+ 0.1	+ 67.2	+ 73.9
2016	+ 43.7	+ 62.7	– 5.2	– 0.3	– 0.4	+ 0.1	– 4.9	– 4.8	– 0.2	+ 48.9	+ 79.8
2017	+ 57.0	+ 70.2	– 6.5	+ 5.6	+ 5.6	+ 0.0	– 12.1	– 12.4	+ 0.3	+ 63.5	+ 103.4
2018	+ 71.5	+ 105.3	+ 6.6	+ 15.8	+ 15.7	+ 0.1	– 9.2	– 8.6	– 0.6	+ 65.0	+ 102.0
2019	+ 126.7	+ 129.1	+ 11.7	+ 11.6	+ 11.6	+ 0.0	+ 0.1	– 3.0	+ 3.1	+ 115.0	+ 132.8
2020	+ 123.2	+ 123.6	– 19.6	– 19.8	– 19.8	– 0.0	+ 0.2	– 0.5	+ 0.7	+ 142.8	+ 145.6
2021	+ 152.2	+ 147.8	+ 8.8	+ 13.8	+ 13.8	– 0.1	– 4.9	– 2.8	– 2.1	+ 143.4	+ 157.9
2020 Dec.	– 14.1	– 2.3	– 15.5	– 7.7	– 7.5	– 0.2	– 7.8	– 4.4	– 3.4	+ 1.4	+ 11.2
2021 Jan.	+ 6.6	+ 5.3	+ 4.4	+ 0.3	+ 0.1	+ 0.2	+ 4.2	+ 1.7	+ 2.5	+ 2.1	+ 5.2
Feb.	+ 15.3	+ 10.9	+ 1.8	+ 2.3	+ 2.3	+ 0.0	– 0.5	– 1.2	+ 0.7	+ 13.5	+ 13.3
Mar.	+ 29.7	+ 25.6	+ 11.2	+ 12.5	+ 12.5	– 0.0	– 1.3	+ 0.0	– 1.4	+ 18.5	+ 16.3
Apr.	– 5.2	– 0.0	– 12.8	– 13.1	– 13.2	+ 0.1	+ 0.3	+ 1.6	– 1.2	+ 7.5	+ 13.0
May	+ 15.6	+ 12.5	+ 0.1	+ 1.8	+ 1.7	+ 0.1	– 1.8	– 0.6	– 1.2	+ 15.5	+ 13.4
June	– 0.4	+ 5.5	+ 2.0	+ 0.3	+ 0.4	– 0.1	+ 1.7	+ 0.4	+ 1.3	– 2.4	+ 7.3
July	+ 16.1	+ 17.2	– 2.0	– 4.2	– 4.3	+ 0.0	+ 2.3	+ 2.0	+ 0.3	+ 18.1	+ 19.5
Aug.	+ 10.9	+ 9.7	– 3.2	+ 0.1	+ 0.2	– 0.1	– 3.3	– 2.9	– 0.4	+ 14.1	+ 14.2
Sep.	+ 13.5	+ 9.3	+ 3.3	+ 3.7	+ 3.8	– 0.0	– 0.5	+ 0.7	– 1.2	+ 10.2	+ 6.2
Oct.	+ 20.5	+ 25.1	+ 8.7	+ 8.1	+ 8.2	– 0.1	+ 0.5	– 0.2	+ 0.7	+ 11.8	+ 19.8
Nov.	+ 25.5	+ 20.5	+ 1.2	+ 2.4	+ 2.4	+ 0.0	– 1.2	– 1.8	+ 0.6	+ 24.4	+ 19.9
Dec.	+ 4.3	+ 6.3	– 5.8	– 0.6	– 0.3	– 0.3	– 5.2	– 2.5	– 2.7	+ 10.1	+ 9.8
2022 Jan.	+ 14.7	+ 16.5	+ 12.9	+ 10.1	+ 9.8	+ 0.3	+ 2.8	+ 2.6	+ 0.2	+ 1.8	+ 5.8
Feb.	+ 15.1	+ 18.4	+ 6.2	+ 6.0	+ 5.8	+ 0.2	+ 0.2	– 1.5	+ 1.7	+ 9.0	+ 14.9
Mar.	+ 27.3	+ 23.0	+ 6.2	+ 7.9	+ 7.9	– 0.0	– 1.6	+ 0.1	– 1.7	+ 21.0	+ 14.2
Apr.	+ 13.1	+ 21.4	+ 3.9	+ 3.1	+ 3.0	+ 0.1	+ 0.7	+ 0.7	+ 0.0	+ 9.3	+ 17.0
May	+ 20.1	+ 18.8	+ 2.6	+ 4.6	+ 4.5	+ 0.0	– 2.0	– 1.7	– 0.3	+ 17.5	+ 16.4

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

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

IV. Banks

lending												
prises and households					to general government							
Loans						Loans						
Total	Medium-term	Long-term	Securities	Memo item: Fiduciary loans	Total	Total	Medium-term	Long-term	Securities [1]	Equalisation claims [2]	Memo item: Fiduciary loans	Period
End of year or month *												
2,119.5	249.7	1,869.8	191.4	31.4	533.4	292.7	39.4	253.3	240.7	–	3.5	2012
2,136.9	248.0	1,888.9	191.7	28.9	534.0	288.4	38.8	249.7	245.6	–	2.7	2013
2,172.7	251.7	1,921.0	204.2	24.4	532.9	283.1	33.5	249.6	249.8	–	2.1	2014
2,232.4	256.0	1,976.3	219.0	18.3	527.0	277.0	27.9	249.0	250.0	–	2.1	2015
2,306.5	264.1	2,042.4	223.4	17.3	495.8	269.4	23.9	245.5	226.4	–	1.8	2016
2,399.5	273.5	2,125.9	240.6	17.4	450.9	254.0	22.5	231.5	196.9	–	1.7	2017
2,499.4	282.6	2,216.8	233.4	16.5	412.1	241.7	19.7	222.0	170.4	–	1.4	2018
2,626.4	301.3	2,325.1	240.5	15.7	394.2	235.9	17.2	218.8	158.2	–	1.5	2019
2,771.8	310.5	2,461.4	241.1	22.4	390.8	234.3	15.7	218.6	156.6	–	1.1	2020
2,915.7	314.5	2,601.2	258.9	24.7	373.8	229.9	14.3	215.6	143.9	–	1.0	2021
2,771.8	310.5	2,461.4	241.1	22.4	390.8	234.3	15.7	218.6	156.6	–	1.1	2020 Dec.
2,776.4	307.8	2,468.6	242.0	22.5	387.9	233.6	15.3	218.3	154.3	–	1.2	2021 Jan.
2,787.7	309.7	2,478.1	244.2	22.8	387.8	232.0	15.4	216.6	155.8	–	1.1	Feb.
2,802.4	314.5	2,487.9	246.1	23.1	389.3	230.7	15.2	215.5	158.6	–	1.1	Mar.
2,813.9	313.6	2,500.3	247.6	23.4	383.7	230.8	15.0	215.8	153.0	–	1.1	Apr.
2,825.1	311.7	2,513.5	249.9	23.6	385.9	231.1	14.9	216.2	154.8	–	1.1	May
2,831.8	310.0	2,521.8	250.7	23.9	376.0	229.2	14.7	214.5	146.8	–	1.1	June
2,851.4	310.7	2,540.8	251.0	24.0	374.6	229.5	14.9	214.6	145.1	–	1.1	July
2,864.5	311.5	2,553.1	252.2	24.2	374.7	229.1	14.7	214.4	145.6	–	1.1	Aug.
2,870.0	310.1	2,559.9	253.2	24.2	378.7	228.7	14.3	214.4	150.1	–	1.0	Sep.
2,885.5	313.5	2,572.0	257.4	24.1	370.9	230.2	14.6	215.6	140.7	–	1.0	Oct.
2,906.5	315.6	2,590.9	258.4	24.2	373.5	230.0	14.5	215.6	143.5	–	1.0	Nov.
2,915.7	314.5	2,601.2	258.9	24.7	373.8	229.9	14.3	215.6	143.9	–	1.0	Dec.
2,920.6	312.8	2,607.8	259.8	24.7	369.8	229.1	13.9	215.2	140.7	–	1.0	2022 Jan.
2,935.4	313.8	2,621.6	259.9	24.6	363.8	228.5	13.9	214.5	135.4	–	1.1	Feb.
2,950.1	316.1	2,633.9	259.4	24.7	370.7	228.8	13.7	215.1	141.8	–	1.1	Mar.
2,966.8	317.3	2,649.5	259.4	24.9	362.9	229.5	13.7	215.8	133.5	–	1.0	Apr.
2,983.1	319.8	2,663.4	259.5	25.1	364.0	229.1	13.7	215.4	134.9	–	1.0	May
Changes *												
+ 17.7	– 0.1	+ 17.8	– 0.1	– 2.5	+ 0.6	– 4.3	– 0.7	– 3.6	+ 4.9	–	– 0.8	2013
+ 39.9	+ 5.6	+ 34.3	+ 12.5	– 1.8	– 4.1	– 8.5	– 5.1	– 3.4	+ 4.3	–	– 0.2	2014
+ 59.0	+ 4.5	+ 54.6	+ 14.8	– 2.1	– 6.6	– 6.9	– 4.8	– 2.0	+ 0.2	–	+ 0.0	2015
+ 75.1	+ 9.7	+ 65.4	+ 4.7	– 0.9	– 30.9	– 7.3	– 4.0	– 3.3	– 23.6	–	– 0.4	2016
+ 87.6	+ 9.4	+ 78.2	+ 15.8	+ 0.1	– 39.9	– 10.6	– 1.3	– 9.3	– 29.4	–	– 0.1	2017
+ 108.7	+ 19.3	+ 89.4	– 6.7	– 0.9	– 37.1	– 10.5	– 2.7	– 7.8	– 26.6	–	– 0.0	2018
+ 126.0	+ 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
+ 9.5	– 1.0	+ 10.5	+ 1.7	+ 0.7	– 9.8	+ 0.0	– 0.0	+ 0.0	– 9.9	–	– 0.1	2020 Dec.
+ 4.3	– 2.7	+ 7.1	+ 0.9	+ 0.1	– 3.1	– 0.8	– 0.4	– 0.5	– 2.3	–	+ 0.1	2021 Jan.
+ 11.1	+ 1.8	+ 9.3	+ 2.1	+ 0.3	+ 0.2	– 1.3	+ 0.1	– 1.4	+ 1.5	–	– 0.0	Feb.
+ 14.4	+ 4.7	+ 9.7	+ 1.9	+ 0.3	+ 2.1	– 1.4	– 0.2	– 1.2	+ 3.5	–	– 0.0	Mar.
+ 11.5	– 0.9	+ 12.4	+ 1.5	+ 0.2	– 5.5	+ 0.1	– 0.2	+ 0.3	– 5.6	–	– 0.0	Apr.
+ 11.0	– 1.9	+ 13.0	+ 2.3	+ 0.2	+ 2.1	+ 0.3	– 0.1	+ 0.4	+ 1.8	–	+ 0.0	May
+ 6.5	– 1.7	+ 8.2	+ 0.8	+ 0.3	– 9.7	– 1.8	– 0.2	– 1.5	– 7.9	–	– 0.0	June
+ 19.2	+ 0.2	+ 19.0	+ 0.3	+ 0.1	– 1.4	+ 0.3	+ 0.2	+ 0.1	– 1.7	–	– 0.0	July
+ 13.0	+ 0.8	+ 12.3	+ 1.2	+ 0.2	– 0.1	– 0.6	– 0.1	– 0.4	+ 0.5	–	– 0.0	Aug.
+ 5.2	– 1.4	+ 6.6	+ 1.0	– 0.0	+ 4.0	– 0.4	– 0.5	+ 0.0	+ 4.4	–	+ 0.0	Sep.
+ 15.6	+ 3.5	+ 12.1	+ 4.1	– 0.1	– 7.9	+ 1.4	+ 0.3	+ 1.1	– 9.4	–	– 0.0	Oct.
+ 18.9	+ 4.4	+ 14.5	+ 1.0	+ 0.1	+ 4.4	+ 0.9	– 0.1	+ 1.0	+ 3.5	–	– 0.0	Nov.
+ 9.3	– 1.1	+ 10.4	+ 0.5	+ 0.5	+ 0.2	– 0.1	– 0.1	+ 0.0	+ 0.4	–	+ 0.0	Dec.
+ 4.9	– 1.7	+ 6.6	+ 0.8	– 0.0	– 4.0	– 0.8	– 0.4	– 0.4	– 3.2	–	– 0.0	2022 Jan.
+ 14.8	+ 1.0	+ 13.8	+ 0.1	+ 0.0	– 6.0	– 0.7	– 0.0	– 0.6	– 5.3	–	– 0.0	Feb.
+ 14.7	+ 2.3	+ 12.4	– 0.5	+ 0.1	+ 6.8	+ 0.4	– 0.2	+ 0.6	+ 6.5	–	– 0.0	Mar.
+ 17.0	+ 1.5	+ 15.6	– 0.0	+ 0.2	– 7.7	+ 0.6	+ 0.0	+ 0.6	– 8.4	–	– 0.0	Apr.
+ 16.4	+ 2.5	+ 13.9	+ 0.1	+ 0.3	+ 1.1	– 0.4	– 0.0	– 0.3	+ 1.4	–	– 0.0	May

IV. Banks

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

€ billion

Period	Lending to domestic enterprises and households (excluding holdings of negotiable money market paper and excluding securities portfolios) [1]														
		of which:				Lending to enterprises and self-employed persons									
			Housing loans												
	Total	Mortgage loans, total	Total	Mortgage loans secured by residential real estate	Other housing loans	Total	of which: Housing loans	Manufacturing	Electricity, gas and water supply; refuse disposal, mining and quarrying	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Agriculture, forestry, fishing and aquaculture	Transportation and storage; post and telecommunications	Financial intermediation (excluding MFIs) and insurance companies
Lending, total															**End of year or quarter ***
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 Mar.	3,038.4	1,618.9	1,587.9	1,302.5	285.4	1,657.2	451.2	149.2	123.0	84.6	139.1	55.4	60.1	182.5
June	3,056.8	1,634.6	1,619.5	1,316.7	302.8	1,654.3	461.4	142.5	122.1	85.7	135.5	56.0	57.9	182.6
Sep.	3,093.7	1,653.1	1,648.9	1,337.4	311.4	1,666.9	467.9	143.9	122.2	87.7	136.7	56.2	56.3	182.6
Dec.	3,147.5	1,591.4	1,678.2	1,373.0	305.2	1,701.5	477.2	146.1	128.3	98.0	140.4	55.9	55.6	186.3
2022 Mar.	3,204.0	1,613.7	1,701.0	1,391.9	309.0	1,742.4	485.1	150.9	134.3	101.3	145.3	56.3	54.9	193.2
Short-term lending															
2020	221.2	–	8.0	–	8.0	192.1	4.6	29.0	6.9	16.0	37.0	3.6	6.1	31.6
2021 Mar.	236.0	–	8.0	–	8.0	207.4	4.7	33.4	6.4	16.7	38.9	3.9	6.1	34.2
June	225.0	–	7.8	–	7.8	195.9	4.5	28.8	5.5	16.7	34.7	4.2	4.4	34.4
Sep.	223.8	–	7.8	–	7.8	193.7	4.4	30.4	5.1	17.1	35.6	4.0	4.1	34.1
Dec.	231.8	–	6.9	–	6.9	202.7	4.4	31.6	9.1	18.0	36.4	3.3	3.9	35.0
2022 Mar.	254.0	–	7.0	–	7.0	224.1	4.5	36.5	14.0	19.5	39.3	3.6	4.1	38.0
Medium-term lending															
2020	310.5	–	38.5	–	38.5	230.4	18.5	30.2	5.4	14.8	19.3	4.8	15.0	51.4
2021 Mar.	314.5	–	38.9	–	38.9	236.4	19.1	29.2	5.1	15.3	19.7	4.5	14.7	52.9
June	310.0	–	39.7	–	39.7	232.8	19.8	27.7	5.0	15.3	19.5	4.5	14.1	51.2
Sep.	310.1	–	40.2	–	40.2	233.3	20.2	27.8	5.2	15.8	19.3	4.5	12.3	51.7
Dec.	314.5	–	40.5	–	40.5	239.5	20.6	28.3	5.4	19.3	20.8	4.3	12.3	52.0
2022 Mar.	316.1	–	40.8	–	40.8	242.2	21.0	28.9	5.6	20.0	22.0	4.2	11.7	53.1
Long-term lending															
2020	2,461.4	1,601.8	1,519.1	1,285.1	234.0	1,201.0	420.2	87.5	111.2	51.8	79.4	47.0	38.7	93.0
2021 Mar.	2,487.9	1,618.9	1,541.0	1,302.5	238.5	1,213.5	427.4	86.6	111.5	52.6	80.5	47.1	39.3	95.4
June	2,521.8	1,634.6	1,572.0	1,316.7	255.3	1,225.5	437.2	86.0	111.6	53.7	81.3	47.3	39.4	97.0
Sep.	2,559.9	1,653.1	1,600.9	1,337.4	263.5	1,240.0	443.4	85.6	111.9	54.9	81.8	47.7	39.9	96.8
Dec.	2,601.2	1,591.4	1,630.9	1,373.0	257.8	1,259.3	452.2	86.2	113.8	60.8	83.2	48.3	39.4	99.3
2022 Mar.	2,633.9	1,613.7	1,653.1	1,391.9	261.2	1,276.0	459.6	85.5	114.8	61.8	84.0	48.4	39.2	102.1
Lending, total															**Change during quarter ***
2021 Q1	+ 44.8	+ 17.1	+ 22.2	+ 17.3	+ 4.9	+ 33.0	+ 7.6	+ 2.5	– 0.7	+ 1.9	+ 3.2	+ 0.1	+ 0.2	+ 6.2
Q2	+ 17.9	+ 20.9	+ 30.7	+ 21.0	+ 9.7	– 3.2	+ 9.6	– 6.7	– 0.9	+ 1.1	– 3.7	+ 0.6	– 2.2	– 0.0
Q3	+ 37.1	+ 18.5	+ 29.1	+ 19.7	+ 9.4	+ 12.7	+ 6.3	+ 1.4	+ 0.1	+ 2.0	+ 0.5	+ 0.1	– 1.7	+ 1.0
Q4	+ 54.1	+ 18.0	+ 28.6	+ 18.9	+ 9.7	+ 34.9	+ 9.0	+ 2.2	+ 5.9	+ 1.5	+ 3.7	– 0.2	– 0.6	+ 3.7
2022 Q1	+ 57.9	+ 17.9	+ 22.0	+ 16.6	+ 5.3	+ 42.0	+ 7.0	+ 4.8	+ 6.3	+ 3.2	+ 4.7	+ 0.4	– 1.1	+ 8.9
Short-term lending															
2021 Q1	+ 14.9	–	+ 0.0	–	+ 0.0	+ 15.4	+ 0.1	+ 4.4	– 0.5	+ 0.7	+ 1.8	+ 0.3	+ 0.1	+ 2.6
Q2	– 11.1	–	– 0.2	–	– 0.2	– 11.6	– 0.2	– 4.6	– 0.9	– 0.1	– 4.2	+ 0.4	– 1.7	+ 0.2
Q3	– 0.3	–	– 0.1	–	– 0.1	– 1.3	– 0.1	+ 1.7	– 0.4	+ 0.4	+ 0.6	– 0.2	– 0.3	– 0.3
Q4	+ 10.3	–	– 0.2	–	– 0.2	+ 10.5	+ 0.0	+ 1.1	+ 3.9	+ 1.0	+ 0.9	– 0.6	– 0.2	+ 1.0
2022 Q1	+ 23.5	–	+ 0.1	–	+ 0.1	+ 22.7	+ 0.1	+ 4.9	+ 4.9	+ 1.6	+ 2.9	+ 0.3	+ 0.2	+ 4.4
Medium-term lending															
2021 Q1	+ 3.8	–	+ 0.4	–	+ 0.4	+ 5.9	+ 0.6	– 1.0	– 0.2	+ 0.4	+ 0.4	– 0.2	– 0.4	+ 1.5
Q2	– 4.5	–	+ 0.8	–	+ 0.8	– 3.5	+ 0.7	– 1.5	– 0.1	+ 0.0	– 0.3	– 0.1	– 0.6	– 1.8
Q3	– 0.4	–	+ 0.6	–	+ 0.6	– 0.1	+ 0.4	+ 0.1	+ 0.2	+ 0.5	– 0.6	+ 0.0	– 1.8	+ 0.7
Q4	+ 6.8	–	+ 0.4	–	+ 0.4	+ 8.0	+ 0.5	+ 0.5	+ 0.2	+ 3.5	+ 1.6	– 0.1	+ 0.0	+ 0.5
2022 Q1	+ 1.7	–	+ 0.3	–	+ 0.3	+ 2.7	+ 0.4	+ 0.5	+ 0.3	+ 0.7	+ 1.2	– 0.0	– 0.7	+ 1.2
Long-term lending															
2021 Q1	+ 26.1	+ 17.1	+ 21.8	+ 17.3	+ 4.5	+ 11.7	+ 6.9	– 0.9	+ 0.1	+ 0.7	+ 1.0	+ 0.1	+ 0.5	+ 2.2
Q2	+ 33.6	+ 20.9	+ 30.2	+ 21.0	+ 9.1	+ 12.0	+ 9.1	– 0.7	+ 0.1	+ 1.1	+ 0.7	+ 0.3	+ 0.2	+ 1.5
Q3	+ 37.8	+ 18.5	+ 28.6	+ 19.7	+ 8.9	+ 14.1	+ 6.0	– 0.4	+ 0.3	+ 1.1	+ 0.5	+ 0.2	+ 0.5	+ 0.6
Q4	+ 37.0	+ 18.0	+ 28.4	+ 18.9	+ 9.5	+ 16.4	+ 8.4	+ 0.6	+ 1.8	– 3.0	+ 1.2	+ 0.6	– 0.5	+ 2.2
2022 Q1	+ 32.7	+ 17.9	+ 21.5	+ 16.6	+ 4.9	+ 16.5	+ 6.5	– 0.7	+ 1.1	+ 0.9	+ 0.7	+ 0.1	– 0.6	+ 3.4

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

IV. Banks

Services sector (including the professions)				Memo items:		Lending to employees and other individuals					Lending to non-profit institutions		Period
	of which:							Other lending					
									of which:				
Total	Housing enterprises	Holding companies	Other real estate activities	Lending to self-employed persons [2]	Lending to craft enterprises	Total	Housing loans	Total	Instalment loans [3]	Debit balances on wage, salary and pension accounts	Total	of which: Housing loans	
End of year or quarter *												**Lending, total**	
843.7	286.6	53.8	204.1	464.0	47.9	1,353.4	1,118.3	235.2	177.4	6.7	16.2	4.0	2020
863.3	293.7	59.2	204.3	467.7	48.3	1,364.8	1,132.6	232.2	175.4	6.6	16.4	4.1	2021 Mar.
872.0	296.9	58.2	208.6	473.6	48.7	1,386.3	1,154.0	232.4	174.8	6.6	16.2	4.1	June
881.4	304.0	57.5	210.5	478.3	48.9	1,410.5	1,176.6	233.9	176.4	7.0	16.3	4.3	Sep.
890.8	308.6	63.8	207.9	483.8	48.3	1,429.3	1,196.6	232.7	184.1	6.9	16.7	4.4	Dec.
906.2	315.6	66.2	209.8	489.1	49.1	1,444.9	1,211.4	233.5	184.4	7.1	16.8	4.4	2022 Mar.
											Short-term lending		
61.9	15.7	9.6	10.5	20.9	3.7	28.6	3.4	25.2	1.3	6.7	0.6	0.0	2020
67.9	16.5	12.3	10.2	20.5	3.9	27.9	3.4	24.6	1.3	6.6	0.7	0.0	2021 Mar.
67.1	16.0	11.5	10.4	21.0	4.1	28.6	3.4	25.2	1.4	6.6	0.5	0.0	June
63.3	16.9	10.3	9.8	20.5	4.3	29.6	3.4	26.2	1.5	7.0	0.5	0.0	Sep.
65.5	14.5	13.0	10.0	19.7	3.8	28.6	2.5	26.1	1.4	6.9	0.5	0.0	Dec.
69.2	15.3	14.0	10.5	20.3	4.4	29.2	2.5	26.7	1.6	7.1	0.7	0.0	2022 Mar.
											Medium-term lending		
89.6	20.4	11.8	24.5	32.0	3.5	79.6	20.0	59.6	56.1	–	0.5	0.0	2020
94.9	21.9	14.4	25.2	31.5	3.6	77.6	19.8	57.8	54.2	–	0.5	0.0	2021 Mar.
95.7	22.2	14.4	26.4	31.3	3.4	76.7	19.8	56.9	53.1	–	0.5	0.0	June
96.7	23.2	13.8	27.4	31.1	3.4	76.3	20.0	56.3	52.4	–	0.6	0.1	Sep.
97.0	23.1	15.2	27.1	30.0	3.3	74.4	19.8	54.6	50.6	–	0.6	0.1	Dec.
96.8	22.8	15.5	27.2	30.0	3.2	73.4	19.7	53.7	49.6	–	0.5	0.1	2022 Mar.
											Long-term lending		
692.3	250.5	32.4	169.1	411.1	40.7	1,245.3	1,094.9	150.4	120.0	–	15.1	4.0	2020
700.5	255.3	32.5	168.9	415.7	40.8	1,259.3	1,109.5	149.8	119.9	–	15.2	4.1	2021 Mar.
709.2	258.7	32.3	171.8	421.3	41.1	1,281.1	1,130.8	150.3	120.3	–	15.2	4.1	June
721.3	263.9	33.3	173.3	426.7	41.2	1,304.7	1,153.3	151.4	122.6	–	15.3	4.2	Sep.
728.4	271.1	35.6	170.8	434.1	41.3	1,326.3	1,174.3	152.0	132.1	–	15.6	4.3	Dec.
740.2	277.5	36.8	172.1	438.8	41.4	1,342.3	1,189.2	153.1	133.2	–	15.6	4.4	2022 Mar.
Change during quarter *												**Lending, total**	
+ 19.6	+ 7.0	+ 5.4	+ 0.3	+ 3.2	+ 0.4	+ 11.6	+ 14.6	– 2.9	– 2.0	– 0.0	+ 0.2	+ 0.1	2021 Q1
+ 8.7	+ 3.2	– 0.9	+ 4.3	+ 5.8	+ 0.4	+ 21.3	+ 21.1	+ 0.2	– 0.4	– 0.1	– 0.2	+ 0.0	Q2
+ 9.4	+ 6.5	– 0.8	+ 1.7	+ 4.2	+ 0.2	+ 24.3	+ 22.7	+ 1.6	+ 1.1	+ 0.5	+ 0.1	+ 0.1	Q3
+ 18.8	+ 7.3	+ 4.2	+ 2.8	+ 5.2	– 0.6	+ 18.8	+ 19.6	– 0.7	– 0.1	– 0.2	+ 0.4	+ 0.1	Q4
+ 14.9	+ 6.7	+ 2.4	+ 1.7	+ 5.0	+ 0.7	+ 15.8	+ 14.9	+ 0.9	+ 0.5	+ 0.2	+ 0.1	+ 0.0	2022 Q1
											Short-term lending		
+ 6.0	+ 0.7	+ 2.7	– 0.3	– 0.4	+ 0.2	– 0.5	– 0.0	– 0.5	– 0.0	– 0.0	+ 0.1	– 0.0	2021 Q1
– 0.8	– 0.5	– 0.8	+ 0.2	+ 0.5	+ 0.2	+ 0.6	+ 0.0	+ 0.6	+ 0.1	– 0.1	– 0.1	+ 0.0	Q2
– 2.7	+ 0.9	– 1.2	– 0.6	– 0.5	+ 0.2	+ 1.0	+ 0.0	+ 1.0	+ 0.1	+ 0.5	– 0.0	+ 0.0	Q3
+ 3.4	– 1.1	+ 2.5	+ 0.5	– 0.6	– 0.5	– 0.3	– 0.2	– 0.1	– 0.0	– 0.2	+ 0.1	+ 0.0	Q4
+ 3.6	+ 0.8	+ 0.9	+ 0.5	+ 0.6	+ 0.7	+ 0.6	+ 0.0	+ 0.6	+ 0.2	+ 0.2	+ 0.1	+ 0.0	2022 Q1
											Medium-term lending		
+ 5.6	+ 1.5	+ 2.6	+ 0.9	– 0.5	+ 0.1	– 2.2	– 0.3	– 1.9	– 1.9	–	+ 0.0	+ 0.0	2021 Q1
+ 0.8	+ 0.3	– 0.0	+ 1.2	– 0.2	– 0.2	– 0.9	+ 0.1	– 1.0	– 1.1	–	– 0.1	+ 0.0	Q2
+ 0.8	+ 0.8	– 0.5	+ 0.9	– 0.2	– 0.1	– 0.4	+ 0.2	– 0.6	– 0.7	–	+ 0.1	+ 0.0	Q3
+ 1.7	+ 1.3	+ 1.4	– 0.4	– 0.4	– 0.1	– 1.3	– 0.1	– 1.1	– 1.3	–	+ 0.0	+ 0.0	Q4
– 0.3	– 0.3	+ 0.2	+ 0.1	– 0.1	– 0.1	– 1.0	– 0.1	– 0.9	– 0.9	–	– 0.1	– 0.0	2022 Q1
											Long-term lending		
+ 8.0	+ 4.8	+ 0.1	– 0.2	+ 4.1	+ 0.1	+ 14.3	+ 14.8	– 0.6	– 0.1	–	+ 0.1	+ 0.1	2021 Q1
+ 8.8	+ 3.4	– 0.1	+ 2.9	+ 5.5	+ 0.3	+ 21.6	+ 21.0	+ 0.6	+ 0.6	–	– 0.0	+ 0.0	Q2
+ 11.3	+ 4.7	+ 1.0	+ 1.3	+ 4.9	+ 0.1	+ 23.6	+ 22.5	+ 1.2	+ 1.7	–	+ 0.1	+ 0.1	Q3
+ 13.6	+ 7.2	+ 0.4	+ 2.7	+ 6.2	+ 0.1	+ 20.4	+ 19.9	+ 0.5	+ 1.2	–	+ 0.3	+ 0.1	Q4
+ 11.5	+ 6.3	+ 1.2	+ 1.1	+ 4.5	+ 0.1	+ 16.2	+ 15.0	+ 1.2	+ 1.3	–	+ 0.0	+ 0.0	2022 Q1

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

IV. Banks

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

€ billion

Period	Deposits, total	Sight deposits	Time deposits [1,2]				Savings deposits [3]	Bank savings bonds [4]	Memo item:		
			Total	for up to and including 1 year	for more than 1 year [2]				Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities)	Liabilities arising from repos
					Total	for up to and including 2 years	for more than 2 years				
	Domestic non-banks, total										**End of year or month ***
2019	3,661.0	2,236.3	816.2	202.7	613.5	52.7	560.8	575.2	33.2	32.5	14.7	0.2
2020	3,885.2	2,513.0	783.3	188.9	594.4	47.9	546.5	560.6	28.3	34.4	14.4	0.1
2021	3,976.3	2,654.6	736.0	161.0	574.9	49.7	525.2	561.2	24.5	34.2	17.1	1.3
2021 June	3,936.4	2,612.1	735.7	158.1	577.5	47.4	530.1	562.6	26.1	34.6	14.4	1.0
July	3,964.6	2,646.0	730.7	155.4	575.3	47.7	527.6	562.0	25.9	34.5	14.3	1.5
Aug.	3,971.0	2,656.0	727.8	151.2	576.7	48.1	528.5	561.5	25.6	34.3	14.3	1.5
Sep.	3,960.3	2,647.9	726.1	152.7	573.5	47.8	525.7	560.7	25.5	34.1	14.4	1.6
Oct.	3,989.1	2,664.3	739.3	163.6	575.7	49.1	526.6	560.1	25.3	33.9	15.3	1.4
Nov.	4,002.4	2,685.9	731.8	157.1	574.7	49.9	524.8	559.9	24.8	33.6	15.3	0.9
Dec.	3,976.3	2,654.6	736.0	161.0	574.9	49.7	525.2	561.2	24.5	34.2	17.1	1.3
2022 Jan.	4,025.9	2,690.9	750.0	175.9	574.1	49.5	524.6	560.8	24.2	33.9	17.1	1.1
Feb.	4,037.8	2,704.5	748.5	175.5	573.0	48.7	524.3	560.9	23.9	33.8	17.1	1.2
Mar.	4,033.7	2,695.6	755.2	183.4	571.7	49.2	522.5	559.0	23.9	33.8	17.2	1.6
Apr.	4,046.7	2,705.6	759.4	189.8	569.6	50.1	519.5	557.9	23.8	33.8	17.3	1.1
May	4,056.8	2,724.3	752.1	183.3	568.7	51.2	517.6	556.6	23.8	33.6	17.1	0.8
												Changes *
2020	+ 221.6	+ 273.7	− 32.7	− 15.0	− 17.7	− 4.8	− 12.9	− 14.5	− 4.9	+ 1.9	− 0.3	− 0.1
2021	+ 95.3	+ 144.3	− 46.2	− 27.3	− 18.9	+ 1.5	− 20.5	+ 0.7	− 3.5	− 0.2	+ 2.7	+ 1.2
2021 June	− 19.8	− 8.5	− 10.5	− 7.8	− 2.7	+ 0.2	− 2.9	− 0.6	− 0.2	− 0.0	− 0.0	+ 0.2
July	+ 28.2	+ 33.9	− 5.0	− 2.8	− 2.2	+ 0.3	− 2.5	− 0.6	− 0.2	− 0.1	− 0.0	+ 0.6
Aug.	+ 6.4	+ 10.0	− 2.9	− 4.2	+ 1.3	+ 0.4	+ 0.9	− 0.5	− 0.2	− 0.2	−	− 0.0
Sep.	− 6.7	− 5.4	− 0.3	+ 2.1	− 2.4	− 0.6	− 1.8	− 0.8	− 0.2	− 0.2	+ 0.1	+ 0.2
Oct.	+ 28.8	+ 16.4	+ 13.2	+ 11.0	+ 2.2	+ 1.3	+ 0.9	− 0.6	− 0.2	− 0.2	+ 1.0	− 0.2
Nov.	+ 13.3	+ 21.5	− 7.6	− 6.4	− 1.2	+ 0.8	− 2.0	− 0.2	− 0.3	− 0.3	+ 0.0	− 0.6
Dec.	− 25.9	− 31.2	+ 4.1	+ 3.9	+ 0.2	− 0.2	+ 0.4	+ 1.4	− 0.2	+ 0.6	+ 1.8	+ 0.4
2022 Jan.	+ 49.6	+ 36.3	+ 14.1	+ 15.0	− 0.9	− 0.2	− 0.7	− 0.4	− 0.4	− 0.3	− 0.0	− 0.2
Feb.	+ 11.9	+ 13.6	− 1.6	− 0.4	− 1.2	− 0.8	− 0.3	+ 0.1	− 0.2	− 0.2	+ 0.1	+ 0.2
Mar.	− 4.1	− 9.0	+ 6.6	+ 7.9	− 1.3	+ 0.5	− 1.8	− 1.8	+ 0.0	−	+ 0.0	+ 0.3
Apr.	+ 13.0	+ 9.5	+ 4.2	+ 6.4	− 2.2	+ 0.8	− 3.0	− 0.6	− 0.1	+ 0.0	+ 0.1	− 0.5
May	+ 10.1	+ 18.8	− 7.3	− 6.5	− 0.8	+ 1.1	− 2.0	− 1.3	+ 0.0	− 0.2	− 0.1	− 0.2
	Domestic government											**End of year or month ***
2019	237.1	74.7	154.9	76.0	78.9	26.1	52.8	3.4	4.1	24.7	2.2	0.2
2020	229.5	80.1	143.0	59.6	83.5	20.9	62.6	2.7	3.7	25.4	2.1	−
2021	210.1	82.4	121.9	42.0	79.9	23.8	56.1	2.5	3.3	25.8	2.0	1.0
2021 June	209.0	81.5	121.5	43.8	77.6	20.3	57.3	2.6	3.4	25.2	2.0	0.2
July	211.8	86.6	119.2	41.6	77.7	20.6	57.0	2.6	3.4	25.2	2.0	−
Aug.	207.9	84.1	117.9	38.8	79.0	21.2	57.9	2.6	3.4	25.3	2.0	−
Sep.	210.8	84.8	120.1	42.2	78.0	20.8	57.2	2.5	3.4	25.2	2.0	−
Oct.	213.9	85.2	122.9	43.5	79.5	22.2	57.3	2.5	3.3	25.2	2.0	−
Nov.	213.7	86.1	121.8	41.4	80.4	23.5	56.9	2.5	3.3	25.1	2.0	−
Dec.	210.1	82.4	121.9	42.0	79.9	23.8	56.1	2.5	3.3	25.8	2.0	1.0
2022 Jan.	233.5	88.5	139.2	59.2	80.0	24.0	56.0	2.5	3.3	25.5	2.0	−
Feb.	237.9	91.4	140.7	61.0	79.7	23.7	56.0	2.5	3.3	25.5	2.0	−
Mar.	241.0	85.2	150.0	69.7	80.3	24.4	56.0	2.4	3.4	25.5	2.0	−
Apr.	243.7	86.2	151.8	70.8	80.9	25.0	55.9	2.4	3.4	25.6	2.0	−
May	255.6	91.4	158.4	76.1	82.2	25.9	56.3	2.4	3.4	25.6	2.0	−
												Changes *
2020	− 6.9	+ 5.7	− 11.6	− 16.5	+ 4.8	− 5.3	+ 10.1	− 0.6	− 0.4	+ 0.7	− 0.1	− 0.2
2021	− 17.9	+ 3.4	− 20.8	− 17.7	− 3.0	+ 2.9	− 6.0	− 0.2	− 0.4	+ 0.4	− 0.0	+ 1.0
2021 June	− 9.3	− 6.9	− 2.3	− 2.0	− 0.4	+ 0.5	− 0.9	− 0.0	− 0.1	− 0.1	− 0.0	+ 0.2
July	+ 2.7	+ 5.0	− 2.2	− 2.2	+ 0.0	+ 0.3	− 0.3	− 0.0	− 0.0	− 0.0	− 0.0	− 0.2
Aug.	− 3.9	− 2.5	− 1.4	− 2.8	+ 1.4	+ 0.5	+ 0.8	+ 0.0	− 0.0	+ 0.0	− 0.0	−
Sep.	+ 4.3	+ 1.8	+ 2.6	+ 3.2	− 0.7	− 0.4	− 0.3	− 0.1	− 0.0	− 0.1	− 0.0	−
Oct.	+ 3.1	+ 0.4	+ 2.9	+ 1.3	+ 1.6	+ 1.4	+ 0.2	− 0.0	− 0.0	+ 0.0	− 0.0	−
Nov.	− 0.1	+ 0.9	− 1.0	− 2.1	+ 1.1	+ 1.3	− 0.3	− 0.0	+ 0.0	− 0.1	+ 0.0	−
Dec.	− 3.6	− 3.7	+ 0.0	+ 0.6	− 0.6	+ 0.3	− 0.8	+ 0.0	− 0.0	+ 0.7	+ 0.0	+ 1.0
2022 Jan.	+ 23.4	+ 6.1	+ 17.4	+ 17.3	+ 0.1	+ 0.2	− 0.1	− 0.0	−	− 0.3	− 0.0	− 1.0
Feb.	+ 4.3	+ 2.9	+ 1.4	+ 1.7	− 0.3	− 0.2	− 0.1	− 0.0	− 0.0	+ 0.0	+ 0.0	−
Mar.	+ 3.2	− 6.2	+ 9.4	+ 8.7	+ 0.7	+ 0.6	+ 0.1	− 0.0	+ 0.1	− 0.0	− 0.0	−
Apr.	+ 2.7	+ 1.0	+ 1.7	+ 1.1	+ 0.6	+ 0.6	− 0.0	− 0.0	+ 0.0	+ 0.1	+ 0.0	−
May	+ 11.5	+ 5.2	+ 6.2	+ 5.2	+ 1.0	+ 0.9	+ 0.1	− 0.0	+ 0.1	− 0.0	− 0.0	−

***** 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					
Domestic enterprises and households												**End of year or month ***
2019	3,423.9	2,161.6	661.4	126.7	534.7	26.6	508.0	571.8	29.1	7.8	12.6	0.0
2020	3,655.7	2,432.9	640.3	129.3	511.0	27.0	483.9	557.9	24.6	9.0	12.3	0.1
2021	3,766.2	2,572.2	614.1	119.0	495.0	25.9	469.2	558.7	21.2	8.4	15.1	0.3
2021 June	3,727.4	2,530.5	614.2	114.3	499.9	27.1	472.8	560.0	22.6	9.3	12.4	0.7
July	3,752.8	2,559.4	611.4	113.8	497.7	27.1	470.6	559.5	22.4	9.3	12.3	1.5
Aug.	3,763.1	2,571.9	610.0	112.3	497.6	27.0	470.7	559.0	22.3	9.1	12.3	1.5
Sep.	3,749.4	2,563.1	606.0	110.5	495.5	27.0	468.5	558.2	22.1	8.9	12.4	1.6
Oct.	3,775.1	2,579.2	616.4	120.2	496.2	27.0	469.3	557.6	22.0	8.7	13.4	1.4
Nov.	3,788.6	2,599.8	610.0	115.7	494.3	26.3	467.9	557.4	21.4	8.5	13.3	0.9
Dec.	3,766.2	2,572.2	614.1	119.0	495.0	25.9	469.2	558.7	21.2	8.4	15.1	0.3
2022 Jan.	3,792.4	2,602.4	610.8	116.6	494.1	25.5	468.6	558.3	20.8	8.4	15.0	1.1
Feb.	3,799.9	2,613.1	607.8	114.5	493.3	24.9	468.3	558.4	20.6	8.2	15.1	1.2
Mar.	3,792.7	2,610.4	605.1	113.7	491.4	24.8	466.6	556.6	20.5	8.2	15.2	1.6
Apr.	3,802.9	2,619.4	607.6	119.0	488.6	25.1	463.6	555.5	20.4	8.2	15.2	1.1
May	3,801.2	2,632.9	593.7	107.2	486.5	25.3	461.2	554.2	20.4	8.0	15.1	0.8
												Changes *
2020	+ 228.5	+ 268.0	− 21.1	+ 1.5	− 22.6	+ 0.5	− 23.0	− 13.9	− 4.6	+ 1.2	− 0.2	+ 0.1
2021	+ 113.2	+ 140.9	− 25.5	− 9.6	− 15.9	− 1.4	− 14.5	+ 0.9	− 3.1	− 0.6	+ 2.8	+ 0.2
2021 June	− 10.5	− 1.6	− 8.2	− 5.8	− 2.4	− 0.4	− 2.0	− 0.6	− 0.2	+ 0.1	+ 0.0	− 0.0
July	+ 25.4	+ 28.9	− 2.7	− 0.5	− 2.2	+ 0.0	− 2.2	− 0.5	− 0.2	− 0.1	− 0.0	+ 0.8
Aug.	+ 10.3	+ 12.4	− 1.5	− 1.5	− 0.0	− 0.1	+ 0.1	− 0.5	− 0.2	− 0.2	+ 0.0	− 0.0
Sep.	− 11.0	− 7.2	− 2.9	− 1.1	− 1.7	− 0.2	− 1.5	− 0.8	− 0.1	− 0.2	+ 0.1	+ 0.2
Oct.	+ 25.7	+ 16.0	+ 10.3	+ 9.7	+ 0.7	− 0.0	+ 0.7	− 0.6	− 0.2	− 0.2	+ 1.0	− 0.2
Nov.	+ 13.5	+ 20.6	− 6.6	− 4.3	− 2.3	− 0.6	− 1.7	− 0.2	− 0.3	− 0.2	− 0.0	− 0.6
Dec.	− 22.3	− 27.5	+ 4.1	+ 3.3	+ 0.8	− 0.5	+ 1.2	+ 1.3	− 0.2	− 0.1	+ 1.8	− 0.6
2022 Jan.	+ 26.2	+ 30.2	− 3.3	− 2.3	− 1.0	− 0.4	− 0.6	− 0.4	− 0.4	+ 0.0	− 0.0	+ 0.8
Feb.	+ 7.5	+ 10.7	− 3.0	− 2.1	− 0.9	− 0.6	− 0.3	+ 0.1	− 0.2	− 0.2	+ 0.0	+ 0.2
Mar.	− 7.4	− 2.7	− 2.8	− 0.8	− 2.0	− 0.1	− 1.9	− 1.8	− 0.1	+ 0.0	+ 0.0	+ 0.3
Apr.	+ 10.3	+ 8.5	+ 2.5	+ 5.3	− 2.8	+ 0.2	− 3.0	− 0.6	− 0.1	− 0.1	+ 0.1	− 0.5
May	− 1.4	+ 13.5	− 13.6	− 11.7	− 1.8	+ 0.2	− 2.0	− 1.3	− 0.0	− 0.2	− 0.1	− 0.2
of which: Domestic enterprises												**End of year or month ***
2019	1,031.5	614.4	399.7	81.1	318.6	15.5	303.1	6.7	10.7	2.4	10.1	0.0
2020	1,116.1	719.1	381.7	89.2	292.5	15.0	277.5	5.8	9.4	2.3	9.7	0.1
2021	1,142.7	765.1	364.3	87.4	276.9	15.8	261.1	5.3	8.0	2.3	12.2	0.3
2021 June	1,115.6	742.7	358.5	77.6	280.9	15.4	265.5	5.8	8.6	2.3	9.6	0.7
July	1,133.9	760.0	359.6	80.7	278.9	15.4	263.6	5.7	8.5	2.3	9.6	1.5
Aug.	1,148.4	775.4	358.9	79.9	279.0	15.3	263.7	5.7	8.5	2.3	9.5	1.5
Sep.	1,141.4	772.1	355.1	78.1	277.0	15.5	261.5	5.7	8.5	2.3	9.6	1.6
Oct.	1,160.1	779.7	366.3	88.4	277.9	15.6	262.3	5.7	8.4	2.3	10.6	1.4
Nov.	1,166.2	791.7	361.1	84.3	276.7	15.5	261.3	5.5	8.0	2.3	10.5	0.9
Dec.	1,142.7	765.1	364.3	87.4	276.9	15.8	261.1	5.3	8.0	2.3	12.2	0.3
2022 Jan.	1,170.4	795.8	361.6	85.3	276.4	15.9	260.4	5.1	7.8	2.4	12.2	1.1
Feb.	1,165.1	793.2	359.0	83.4	275.6	15.4	260.2	5.2	7.8	2.2	12.2	1.2
Mar.	1,171.9	802.1	356.9	82.7	274.2	15.5	258.7	5.2	7.8	2.3	12.3	1.6
Apr.	1,165.3	792.4	360.0	88.0	272.0	16.0	256.1	5.2	7.7	2.3	12.4	1.1
May	1,165.6	806.0	346.7	76.3	270.4	16.3	254.1	5.1	7.7	2.3	12.3	0.8
												Changes *
2020	+ 81.0	+ 101.2	− 18.0	+ 7.0	− 25.0	− 0.4	− 24.6	− 0.8	− 1.3	− 0.0	− 0.5	+ 0.1
2021	+ 28.5	+ 47.1	− 16.8	− 1.2	− 15.7	+ 0.5	− 16.2	− 0.5	− 1.3	+ 0.0	+ 2.6	+ 0.2
2021 June	− 12.3	− 4.2	− 8.0	− 6.0	− 2.0	− 0.3	− 1.8	− 0.1	− 0.0	+ 0.1	+ 0.0	− 0.0
July	+ 18.3	+ 17.4	+ 1.1	+ 3.1	− 2.0	− 0.0	− 2.0	− 0.0	− 0.1	− 0.0	− 0.0	+ 0.8
Aug.	+ 14.6	+ 15.4	− 0.8	− 0.8	+ 0.0	− 0.1	+ 0.1	− 0.0	− 0.1	+ 0.0	− 0.0	− 0.0
Sep.	− 5.4	− 2.5	− 2.9	− 1.1	− 1.8	− 0.1	− 1.6	+ 0.0	− 0.0	+ 0.0	+ 0.0	+ 0.2
Oct.	+ 18.7	+ 7.7	+ 11.1	+ 10.2	+ 0.8	+ 0.1	+ 0.7	− 0.1	− 0.0	− 0.0	+ 1.0	− 0.2
Nov.	+ 6.1	+ 11.9	− 5.4	− 3.9	− 1.5	− 0.1	− 1.4	− 0.2	− 0.2	+ 0.0	− 0.0	− 0.6
Dec.	− 23.4	− 26.5	+ 3.3	+ 3.1	+ 0.2	+ 0.3	− 0.1	− 0.2	− 0.0	+ 0.0	+ 1.8	− 0.6
2022 Jan.	+ 27.8	+ 30.8	− 2.6	− 2.1	− 0.5	+ 0.1	− 0.7	− 0.2	− 0.2	+ 0.0	− 0.1	+ 0.8
Feb.	− 5.3	− 2.6	− 2.7	− 1.9	− 0.7	− 0.5	− 0.3	+ 0.0	− 0.0	− 0.1	+ 0.0	+ 0.2
Mar.	+ 6.6	+ 8.8	− 2.2	− 0.7	− 1.5	+ 0.0	− 1.6	+ 0.0	+ 0.0	+ 0.0	+ 0.0	+ 0.3
Apr.	− 6.6	− 9.6	+ 3.2	+ 5.4	− 2.2	+ 0.4	− 2.6	− 0.0	− 0.1	+ 0.0	+ 0.1	− 0.5
May	− 0.5	+ 12.6	− 13.0	− 11.7	− 1.4	+ 0.3	− 1.7	− 0.0	+ 0.0	− 0.0	− 0.1	− 0.2

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

IV. Banks

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

€ billion

Period	Deposits of domestic households and non-profit institutions, total	Sight deposits					Time deposits [1,2]				
		Total	by creditor group				Total	by creditor group			
			Domestic households			Domestic non-profit institutions		Domestic households			
			Total	Self-employed persons	Employees	Other individuals		Total	Self-employed persons	Employees	Other individuals
	End of year or month *										
2019	2,392.4	1,547.2	1,507.9	266.3	1,081.6	160.1	39.3	261.7	248.3	20.8	190.2	37.3
2020	2,539.5	1,713.8	1,672.7	291.1	1,215.4	166.2	41.1	258.6	245.1	19.3	190.5	35.2
2021	2,623.6	1,807.1	1,762.4	308.6	1,288.4	165.4	44.7	249.8	237.8	18.2	185.6	33.9
2021 Dec.	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 Jan.	2,621.9	1,806.6	1,761.8	310.8	1,285.6	165.4	44.8	249.1	237.5	18.2	184.0	35.2
Feb.	2,634.8	1,819.9	1,774.2	310.4	1,299.6	164.3	45.7	248.8	236.9	18.4	183.4	35.1
Mar.	2,620.8	1,808.3	1,761.9	303.6	1,296.3	162.0	46.4	248.3	236.3	18.6	182.9	34.9
Apr.	2,637.6	1,827.0	1,780.5	309.6	1,308.1	162.8	46.4	247.6	235.9	18.6	182.5	34.9
May	2,635.6	1,827.0	1,780.3	311.6	1,308.0	160.8	46.7	247.0	235.0	18.6	181.8	34.6
	Changes *											
2020	+ 147.5	+ 166.9	+ 165.0	+ 26.0	+ 131.5	+ 7.5	+ 1.8	− 3.1	− 3.2	− 1.5	− 1.6	− 0.2
2021	+ 84.7	+ 93.8	+ 90.3	+ 17.3	+ 73.7	− 0.6	+ 3.5	− 8.6	− 7.2	− 1.1	− 4.7	− 1.3
2021 Dec.	+ 1.1	− 1.0	− 1.2	− 1.8	+ 0.8	− 0.2	+ 0.2	+ 0.8	+ 0.7	+ 0.1	+ 0.4	+ 0.2
2022 Jan.	− 1.6	− 0.5	− 0.6	+ 2.2	− 2.8	− 0.0	+ 0.1	− 0.7	− 0.3	− 0.0	− 0.2	− 0.1
Feb.	+ 12.8	+ 13.3	+ 12.4	− 0.5	+ 14.0	− 1.1	+ 0.9	− 0.4	− 0.6	+ 0.1	− 0.6	− 0.2
Mar.	− 14.0	− 11.6	− 12.4	− 6.8	− 3.3	− 2.3	+ 0.8	− 0.5	− 0.5	+ 0.2	− 0.5	− 0.2
Apr.	+ 16.8	+ 18.2	+ 18.2	+ 6.0	+ 11.4	+ 0.8	+ 0.0	− 0.7	− 0.4	+ 0.0	− 0.4	+ 0.0
May	− 0.9	+ 1.0	+ 0.8	+ 2.0	− 0.2	− 1.1	+ 0.2	− 0.6	− 0.9	−	− 0.6	− 0.3

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

9. Deposits of domestic government at banks (MFIs) in Germany, by creditor group *

€ billion

Period	Deposits											
	Domestic government, total	Federal Government and its special funds [1]						State governments					
		Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds [2]	Memo item: Fiduciary loans	Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds [2]	Memo item: Fiduciary loans
				for up to and including 1 year	for more than 1 year					for up to and including 1 year	for more than 1 year		
	End of year or month *												
2019	237.1	11.2	5.4	1.5	4.2	0.1	11.6	53.8	21.1	17.1	14.5	1.0	13.1
2020	229.5	48.6	4.8	7.2	36.5	0.0	11.3	46.5	21.2	11.4	13.2	0.7	14.1
2021	210.1	43.5	4.2	3.2	36.0	0.1	11.7	47.4	21.7	13.8	11.3	0.6	14.1
2021 Dec.	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 Jan.	233.5	45.5	4.4	5.0	36.0	0.1	11.7	59.3	27.1	20.2	11.3	0.6	13.8
Feb.	237.9	42.8	4.7	2.1	36.0	0.1	11.7	59.7	26.3	21.2	11.6	0.5	13.8
Mar.	241.0	42.1	4.9	1.2	36.0	0.1	11.7	61.7	23.5	26.1	11.6	0.5	13.8
Apr.	243.7	42.2	5.1	1.1	36.0	0.1	11.7	60.7	21.9	26.9	11.4	0.5	13.8
May	255.6	42.8	5.6	1.1	36.0	0.1	11.7	62.0	21.1	29.0	11.4	0.5	13.9
	Changes *												
2020	− 6.9	+ 37.3	− 0.6	+ 5.7	+ 32.2	− 0.0	− 0.3	− 7.0	+ 0.2	− 5.7	− 1.3	− 0.2	+ 1.0
2021	− 17.9	− 5.0	− 0.5	− 4.1	− 0.4	+ 0.0	+ 0.3	+ 1.0	+ 0.6	+ 2.3	− 1.8	− 0.1	+ 0.0
2021 Dec.	− 3.6	− 2.0	− 2.4	+ 0.3	+ 0.0	− 0.0	+ 0.3	− 0.0	− 0.6	+ 0.9	− 0.3	− 0.0	+ 0.4
2022 Jan.	+ 23.4	+ 2.0	+ 0.2	+ 1.8	− 0.0	− 0.0	+ 0.0	+ 11.9	+ 5.4	+ 6.4	+ 0.0	− 0.0	− 0.3
Feb.	+ 4.3	− 2.7	+ 0.2	− 2.9	− 0.0	− 0.0	+ 0.0	+ 0.5	− 0.8	+ 1.0	+ 0.3	− 0.0	+ 0.0
Mar.	+ 3.2	− 0.6	+ 0.2	− 0.9	+ 0.0	− 0.0	+ 0.0	+ 1.9	− 2.9	+ 4.8	− 0.0	− 0.0	− 0.0
Apr.	+ 2.7	+ 0.0	+ 0.2	− 0.1	+ 0.0	− 0.0	+ 0.0	− 1.0	− 1.6	+ 0.8	− 0.3	− 0.0	+ 0.0
May	+ 11.5	+ 0.6	+ 0.6	+ 0.0	+ 0.0	− 0.0	− 0.0	+ 1.3	− 0.8	+ 2.0	+ 0.1	− 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

Domestic non-profit institutions	Savings deposits [3] by maturity: up to and including 1 year	Savings deposits [3] by maturity: more than 1 year [2] Total	Savings deposits [3] by maturity: more than 1 year [2] of which: up to and including 2 years	Savings deposits [3] by maturity: more than 1 year [2] of which: more than 2 years	Savings deposits [3] Total	Savings deposits [3] Domestic households	Savings deposits [3] Domestic non-profit institutions	Bank savings bonds [4]	Memo item: Fiduciary loans	Memo item: Subordinated liabilities (excluding negotiable debt securities) [5]	Memo item: Liabilities arising from repos	Period
End of year or month *												
13.3	45.6	216.1	11.2	204.9	565.1	558.1	7.0	18.4	5.4	2.4	–	2019
13.5	40.1	218.5	12.0	206.5	552.0	545.7	6.3	15.1	6.7	2.7	–	2020
12.0	31.7	218.1	10.1	208.0	553.4	547.2	6.2	13.2	6.1	2.8	–	2021
12.0	31.7	218.1	10.1	208.0	553.4	547.2	6.2	13.2	6.1	2.8	–	2021 Dec.
11.6	31.4	217.8	9.6	208.2	553.2	547.1	6.1	13.0	6.1	2.9	–	2022 Jan.
11.9	31.1	217.6	9.5	208.2	553.2	547.2	6.0	12.8	6.0	2.9	–	Feb.
11.9	31.1	217.2	9.3	207.9	551.4	545.5	5.9	12.8	6.0	2.9	–	Mar.
11.7	31.0	216.6	9.1	207.5	550.3	544.4	5.9	12.7	5.9	2.9	–	Apr.
12.0	30.9	216.1	9.0	207.2	549.0	543.1	5.9	12.6	5.7	2.8	–	May
Changes *												
+ 0.2	– 5.5	+ 2.4	+ 0.9	+ 1.6	– 13.0	– 12.3	– 0.7	– 3.3	+ 1.3	+ 0.2	–	2020
– 1.4	– 8.4	– 0.2	– 1.9	+ 1.6	+ 1.4	+ 1.5	– 0.1	– 1.9	– 0.6	+ 0.2	–	2021
+ 0.2	+ 0.3	+ 0.6	– 0.8	+ 1.3	+ 1.5	+ 1.6	– 0.1	– 0.2	– 0.1	+ 0.0	–	2021 Dec.
– 0.4	– 0.2	– 0.4	– 0.5	+ 0.1	– 0.2	– 0.1	– 0.1	– 0.2	+ 0.0	+ 0.0	–	2022 Jan.
+ 0.3	– 0.2	– 0.1	– 0.1	– 0.0	+ 0.1	+ 0.1	– 0.0	– 0.2	– 0.1	+ 0.0	–	Feb.
– 0.0	– 0.1	– 0.5	– 0.2	– 0.3	– 1.8	– 1.7	– 0.1	– 0.1	+ 0.0	+ 0.0	–	Mar.
– 0.3	– 0.1	– 0.5	– 0.2	– 0.3	– 0.6	– 0.6	– 0.0	– 0.1	– 0.1	+ 0.0	–	Apr.
+ 0.4	– 0.1	– 0.5	– 0.1	– 0.4	– 1.3	– 1.3	– 0.0	– 0.0	– 0.2	– 0.0	–	May

registered debt securities. **2** Including deposits under savings and loan contracts (see Table IV.12). **3** Excluding deposits under savings and loan contracts (see also footnote 2). **4** Including liabilities arising from non-negotiable bearer debt securities. **5** Included in time deposits.

Local government and local government associations (including municipal special-purpose associations) Total	Sight deposits	Time deposits [3] for up to and including 1 year	Time deposits [3] for more than 1 year	Savings deposits and bank savings bonds [2,4]	Memo item: Fiduciary loans	Social security funds Total	Sight deposits	Time deposits for up to and including 1 year	Time deposits for more than 1 year	Savings deposits and bank savings bonds [2]	Memo item: Fiduciary loans	Period
End of year or month *												
65.3	37.4	8.6	14.0	5.4	0.0	106.8	10.8	48.8	46.2	1.1	–	2019
68.5	43.2	8.0	12.4	4.9	0.0	66.0	10.9	32.9	21.4	0.8	–	2020
70.9	48.5	6.0	12.0	4.4	0.0	48.3	8.0	19.0	20.5	0.8	–	2021
70.9	48.5	6.0	12.0	4.4	0.0	48.3	8.0	19.0	20.5	0.8	–	2021 Dec.
64.7	41.8	6.5	12.1	4.4	0.0	64.0	15.1	27.6	20.6	0.8	–	2022 Jan.
68.8	45.4	7.0	12.0	4.3	0.0	66.6	15.0	30.7	20.1	0.8	–	Feb.
67.4	43.3	7.5	12.2	4.4	0.0	69.8	13.6	34.9	20.5	0.8	–	Mar.
67.5	43.1	7.6	12.4	4.4	0.0	73.4	16.1	35.3	21.1	0.9	–	Apr.
72.4	47.9	7.0	13.1	4.4	0.0	78.4	16.8	39.0	21.7	0.9	–	May
Changes *												
+ 3.5	+ 5.9	– 0.6	– 1.3	– 0.5	– 0.0	– 40.8	+ 0.2	– 15.9	– 24.8	– 0.3	–	2020
+ 2.8	+ 5.6	– 2.0	– 0.2	– 0.5	–	– 16.8	– 2.2	– 13.9	– 0.6	+ 0.1	–	2021
+ 4.9	+ 4.5	+ 0.6	– 0.2	+ 0.0	–	– 6.4	– 5.2	– 1.2	– 0.1	+ 0.0	–	2021 Dec.
– 6.2	– 6.6	+ 0.5	+ 0.0	– 0.0	–	+ 15.7	+ 7.1	+ 8.6	+ 0.0	– 0.0	–	2022 Jan.
+ 4.0	+ 3.6	+ 0.6	– 0.1	– 0.0	–	+ 2.5	– 0.0	+ 3.1	– 0.5	– 0.0	–	Feb.
– 1.4	– 2.1	+ 0.5	+ 0.2	+ 0.1	–	+ 3.3	– 1.5	+ 4.3	+ 0.5	+ 0.0	–	Mar.
+ 0.1	– 0.2	+ 0.1	+ 0.3	– 0.0	–	+ 3.6	+ 2.6	+ 0.4	+ 0.6	+ 0.0	–	Apr.
+ 6.0	+ 4.8	+ 0.8	+ 0.4	+ 0.0	–	+ 3.6	+ 0.7	+ 2.4	+ 0.5	– 0.0	–	May

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

IV. Banks

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

€ billion

Period	Savings deposits [1]								Memo item: Interest credited on savings deposits	Bank savings bonds, [3] sold to			
		of residents					of non-residents				domestic non-banks		
			at 3 months' notice		at more than 3 months' notice								
	Total	Total	Total	of which: Special savings facilities [2]	Total	of which: Special savings facilities [2]	Total	of which: At 3 months' notice		non-banks, total	Total	of which: With maturities of more than 2 years	foreign non-banks
	End of year or month *												
2019	581.8	575.2	540.5	313.2	34.7	24.7	6.6	5.9	2.0	35.9	33.2	25.1	2.6
2020	566.8	560.6	533.3	288.0	27.3	18.0	6.3	5.7	1.8	30.2	28.3	22.1	1.9
2021	567.1	561.2	537.1	269.0	24.1	14.8	5.9	5.4	1.5	24.7	24.5	19.5	0.2
2022 Jan.	566.7	560.8	537.5	266.3	23.3	14.3	5.9	5.4	0.1	24.3	24.2	19.2	0.2
Feb.	566.7	560.9	537.8	266.6	23.1	14.1	5.8	5.4	0.1	24.1	23.9	19.0	0.2
Mar.	564.8	559.0	536.2	265.0	22.9	13.9	5.8	5.3	0.1	24.1	23.9	19.0	0.2
Apr.	563.7	557.9	535.3	262.0	22.7	13.7	5.7	5.3	0.1	23.9	23.8	18.9	0.1
May	562.3	556.6	534.0	262.2	22.5	13.5	5.7	5.2	0.1	24.0	23.8	18.8	0.1
	Changes *												
2020	− 14.8	− 14.5	− 7.2	− 24.6	− 7.3	− 6.7	− 0.3	− 0.2	.	− 5.7	− 4.9	− 3.0	− 0.7
2021	+ 0.3	+ 0.7	+ 3.9	− 18.5	− 3.2	− 3.2	− 0.4	− 0.3	.	− 5.2	− 3.5	− 2.3	− 1.7
2022 Jan.	− 0.5	− 0.4	+ 0.3	− 2.7	− 0.8	− 0.5	− 0.0	− 0.0	.	− 0.4	− 0.4	− 0.3	− 0.0
Feb.	+ 0.0	+ 0.1	+ 0.3	+ 0.2	− 0.2	− 0.2	− 0.0	− 0.0	.	− 0.2	− 0.2	− 0.2	− 0.0
Mar.	− 1.9	− 1.8	− 1.6	− 1.5	− 0.2	− 0.2	− 0.1	− 0.0	.	+ 0.0	+ 0.0	− 0.0	− 0.0
Apr.	− 0.7	− 0.6	− 0.4	− 3.1	− 0.2	− 0.2	− 0.0	− 0.0	.	− 0.1	− 0.1	− 0.1	− 0.0
May	− 1.4	− 1.3	− 1.2	+ 0.2	− 0.1	− 0.2	− 0.1	− 0.1	.	+ 0.0	+ 0.0	− 0.0	−

* See Table IV.2, footnote *; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** Excluding deposits under savings and loan contracts, which are classified as time deposits. **2** Savings deposits bearing interest at a rate which exceeds the minimum or basic rate of interest. **3** Including liabilities arising from non-negotiable bearer debt securities.

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

€ billion

Period	Negotiable bearer debt securities and money market paper										Non-negotiable bearer debt securities and money market paper [6]		Subordinated	
		of which:				with maturities of								
						up to and including 1 year		more than 1 year up to and including 2 years						
	Total	Floating rate bonds [1]	Zero coupon bonds [1,2]	Foreign currency bonds [3,4]	Certificates of deposit	Total	of which: without a nominal guarantee [5]	Total	of which: without a nominal guarantee [5]	more than 2 years	Total	of which: with maturities of more than 2 years	negotiable debt securities	non-negotiable debt securities
	End of year or month *													
2019	1,140.7	123.5	28.6	367.7	96.7	117.7	2.6	23.6	4.2	999.4	0.9	0.7	31.5	0.4
2020	1,119.0	117.1	12.7	313.6	89.4	94.3	1.5	23.8	3.1	1,000.9	1.1	0.9	34.8	0.4
2021	1,173.6	106.8	13.5	331.4	98.7	106.8	1.9	18.0	4.5	1,048.8	0.9	0.7	34.6	0.1
2022 Jan.	1,187.6	104.8	14.6	336.1	94.2	102.6	2.2	17.8	4.5	1,067.3	0.7	0.5	34.4	0.1
Feb.	1,199.1	102.5	14.0	330.1	92.3	101.1	3.0	17.6	4.6	1,080.4	0.5	0.4	34.4	0.1
Mar.	1,219.8	100.5	14.2	337.0	105.8	114.7	2.9	17.8	4.4	1,087.4	0.6	0.5	35.6	0.1
Apr.	1,227.1	100.1	14.3	344.7	104.2	113.1	3.0	15.2	4.5	1,098.8	0.5	0.4	36.0	0.1
May	1,226.2	98.3	15.0	339.3	100.2	109.3	2.4	16.2	4.5	1,100.7	0.4	0.4	35.7	0.1
	Changes *													
2020	− 20.5	− 5.2	− 0.8	− 54.1	− 22.3	− 22.2	− 1.1	+ 0.2	− 1.1	+ 1.5	+ 0.3	+ 0.2	+ 2.1	− 0.0
2021	+ 54.0	− 10.3	+ 0.8	+ 17.6	+ 9.4	+ 12.6	+ 0.4	− 5.9	+ 1.3	+ 47.3	+ 0.4	+ 0.3	− 0.2	− 0.3
2022 Jan.	+ 14.0	− 2.0	+ 1.1	+ 4.7	− 4.5	− 4.2	+ 0.3	− 0.3	+ 0.1	+ 18.5	− 0.2	− 0.2	+ 0.1	−
Feb.	+ 11.4	− 2.2	− 0.6	− 6.1	− 1.9	− 1.5	+ 0.8	− 0.2	+ 0.0	+ 13.1	− 0.2	− 0.1	+ 0.0	−
Mar.	+ 20.8	− 2.0	+ 0.3	+ 6.9	+ 13.4	+ 13.6	− 0.1	+ 0.2	− 0.2	+ 7.0	+ 0.1	+ 0.1	+ 1.2	−
Apr.	+ 7.3	− 0.4	+ 0.0	+ 7.7	− 1.5	− 1.6	+ 0.1	− 2.6	+ 0.1	+ 11.4	− 0.1	− 0.1	+ 0.4	−
May	− 1.0	− 1.8	+ 0.4	− 5.4	− 4.1	− 3.8	− 0.6	+ 0.9	+ 0.1	+ 1.9	− 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. **1** Including debt securities denominated in foreign currencies. **2** Issue value when floated. **3** Including floating rate notes and zero coupon bonds denominated in foreign currencies. **4** Bonds denominated in non-euro area currencies. **5** Negotiable bearer debt securities and money market paper with a nominal guarantee of less than 100%. **6** Non-negotiable bearer debt securities are classified among bank savings bonds (see also Table IV.10, footnote 2).

IV. Banks

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

€ billion

End of year/month	Number of associations	Balance sheet total [1]	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)				Deposits of banks (MFIs) [6]		Deposits of non-banks (non-MFIs)		Bearer debt securities outstanding	Capital (including published reserves) [8]	Memo item: New contracts entered into in year or month [9]
			Credit balances and loans (excluding building loans) [2]	Building loans [3]	Bank debt securities [4]	Building loans			Securities (including Treasury bills and Treasury discount paper) [5]	Deposits under savings and loan contracts	Sight and time deposits	Deposits under savings and loan contracts	Sight and time deposits [7]			
						Loans under savings and loan contracts	Interim and bridging loans	Other building loans								
All building and loan associations																
2021	18	253.2	30.0	0.0	15.7	10.1	130.5	36.7	26.5	3.0	30.1	184.4	9.2	4.2	12.4	71.4
2022 Mar.	18	255.8	31.2	0.0	15.4	10.0	131.9	37.9	25.7	3.0	32.4	184.9	9.2	4.2	12.3	6.1
Apr.	18	257.1	32.4	0.0	15.4	10.1	132.1	38.3	25.0	3.0	34.2	184.6	9.1	4.1	12.2	6.4
May	18	260.1	34.7	0.0	15.4	10.1	132.6	38.7	24.6	3.0	36.4	184.8	9.2	4.6	12.2	7.6
Private building and loan associations																
2022 Mar.	10	179.7	15.9	–	6.9	7.3	102.9	32.2	11.8	1.7	29.7	120.1	8.8	4.2	8.4	3.7
Apr.	10	180.7	17.1	–	6.9	7.4	103.0	32.5	11.1	1.7	31.3	119.8	8.7	4.1	8.3	4.0
May	10	183.5	19.5	–	6.9	7.4	103.3	32.9	10.8	1.7	33.5	119.9	8.7	4.6	8.3	4.5
Public building and loan associations																
2022 Mar.	8	76.2	15.3	0.0	8.5	2.7	29.0	5.7	13.9	1.3	2.7	64.8	0.4	–	3.9	2.4
Apr.	8	76.4	15.3	0.0	8.5	2.7	29.2	5.8	13.8	1.3	2.9	64.9	0.4	–	3.9	2.5
May	8	76.6	15.2	0.0	8.5	2.7	29.3	5.9	13.8	1.3	2.9	64.8	0.5	–	3.9	3.1

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 [11]		Memo item: Housing bonuses received [13]
							Allocations									
							Deposits under savings and loan contracts		Loans under savings and loan contracts [10]		Newly granted interim and bridging loans and other building loans					
	Amounts paid into savings and loan accounts [10]	Interest credited on deposits under savings and loan contracts	Repayments of deposits under cancelled savings and loan contracts	Total	of which: Net allocations [12]	Total	Total	of which: Applied to settlement of interim and bridging loans	Total	of which: Applied to settlement of interim and bridging loans		Total	of which: Under allocated contracts	Total	of which: Repayments during quarter	
All building and loan associations																
2021	27.7	2.0	9.1	52.3	27.7	47.1	18.3	4.0	4.2	3.4	24.7	18.6	6.3	6.1	4.9	0.1
2022 Mar.	2.3	0.0	0.8	5.0	2.4	4.5	1.6	0.3	0.4	0.3	2.6	20.0	6.5	0.5	1.2	0.0
Apr.	2.2	0.0	0.8	4.7	2.6	4.1	1.7	0.4	0.4	0.4	2.0	20.0	6.6	0.5	.	0.0
May	2.6	0.1	0.8	4.9	2.7	4.3	1.7	0.3	0.4	0.3	2.2	20.0	6.7	0.5	.	0.0
Private building and loan associations																
2022 Mar.	1.5	0.0	0.4	3.4	1.7	3.5	1.2	0.2	0.3	0.2	2.0	14.5	3.5	0.4	0.9	0.0
Apr.	1.4	0.0	0.4	3.3	1.9	3.2	1.3	0.3	0.3	0.3	1.5	14.3	3.5	0.4	.	0.0
May	1.6	0.0	0.4	3.4	1.6	3.2	1.2	0.3	0.3	0.2	1.7	14.2	3.5	0.4	.	0.0
Public building and loan associations																
2022 Mar.	0.8	0.0	0.3	1.6	0.8	1.0	0.4	0.1	0.1	0.1	0.5	5.5	3.0	0.1	0.3	0.0
Apr.	0.8	0.0	0.3	1.3	0.8	1.0	0.4	0.1	0.1	0.1	0.5	5.6	3.1	0.1	.	0.0
May	1.0	0.0	0.5	1.5	1.0	1.1	0.5	0.1	0.1	0.1	0.5	5.8	3.3	0.1	.	0.0

***** Excluding assets and liabilities and/or transactions of foreign branches. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** 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: German banks (MFIs) with foreign branches and/or foreign subsidiaries	Number of: foreign branches [1] and/or foreign subsidiaries	Balance sheet total [7]	Lending to banks (MFIs): Total	Lending to banks (MFIs): Credit balances and loans: Total	Lending to banks (MFIs): Credit balances and loans: German banks	Lending to banks (MFIs): Credit balances and loans: Foreign banks	Lending to banks (MFIs): Money market paper, securities [2,3]	Lending to non-banks (non-MFIs): Total	Lending to non-banks (non-MFIs): Loans: Total	Lending to non-banks (non-MFIs): Loans: to German non-banks	Lending to non-banks (non-MFIs): Loans: to foreign non-banks	Lending to non-banks (non-MFIs): Money market paper, securities [2]	Other assets [7]: Total	Other assets [7]: of which: Derivative financial instruments in the trading portfolio
Foreign branches															**End of year or month ***
2019	52	198	1,453.0	407.3	389.2	216.0	173.2	18.1	534.3	436.1	19.7	416.4	98.2	511.5	361.7
2020	50	206	1,552.2	376.7	364.0	213.2	150.8	12.7	504.8	409.6	14.3	395.3	95.2	670.7	523.6
2021	51	207	1,504.5	471.2	457.8	297.9	159.9	13.4	497.2	418.8	12.9	405.9	78.4	536.1	404.5
2021 July	50	204	1,524.4	444.9	431.0	266.8	164.2	13.8	494.0	410.8	13.2	397.6	83.2	585.5	436.6
Aug.	50	204	1,537.2	448.2	434.3	273.1	161.2	13.9	489.2	407.3	13.2	394.1	81.9	599.8	437.4
Sep.	50	205	1,518.6	452.9	439.1	279.3	159.8	13.8	485.2	404.4	13.1	391.3	80.8	580.5	415.3
Oct.	52	207	1,552.0	495.3	481.3	310.3	171.0	13.9	497.7	417.4	13.3	404.1	80.3	559.0	402.4
Nov.	50	204	1,595.0	495.2	481.1	306.5	174.6	14.2	506.4	425.8	13.0	412.7	80.6	593.4	436.9
Dec.	51	207	1,504.5	471.2	457.8	297.9	159.9	13.4	497.2	418.8	12.9	405.9	78.4	536.1	404.5
2022 Jan.	50	209	1,618.8	563.0	548.5	366.5	181.9	14.6	537.7	460.1	13.1	447.0	77.6	518.1	378.0
Feb.	50	209	1,634.4	566.4	551.9	379.5	172.4	14.5	539.7	464.4	13.2	451.1	75.3	528.3	384.8
Mar.	50	208	1,674.9	564.7	550.5	369.7	180.8	14.2	540.1	461.4	13.5	447.9	78.7	570.1	421.1
Apr.	50	208	1,784.0	556.5	542.2	370.7	171.5	14.3	552.8	474.5	13.3	461.2	78.3	674.7	529.5
															Changes *
2020	− 2	+ 9	+104.2	− 20.3	− 15.5	− 2.8	− 12.7	− 4.8	+ 0.2	− 1.0	− 5.4	+ 4.4	+ 1.2	+ 164.2	+ 179.6
2021	+ 1	+ 1	− 48.4	+ 87.3	+ 87.1	+84.9	+ 2.2	+ 0.3	−26.2	− 6.5	− 1.3	− 5.1	−19.7	− 136.9	− 128.1
2021 Aug.	−	−	+ 12.6	+ 3.1	+ 3.0	+ 6.3	− 3.2	+ 0.0	− 5.5	− 4.1	+ 0.0	− 4.1	− 1.4	+ 14.1	+ 0.3
Sep.	−	+ 1	− 19.8	+ 2.9	+ 3.1	+ 6.1	− 3.1	− 0.1	− 8.8	− 7.0	− 0.1	− 6.9	− 1.8	− 20.4	− 24.3
Oct.	+ 2	+ 2	+ 33.7	+ 42.6	+ 42.5	+31.0	+ 11.5	+ 0.1	+13.0	+ 13.4	+ 0.2	+ 13.2	− 0.3	− 21.2	− 12.6
Nov.	− 2	− 3	+ 43.0	− 2.3	− 2.5	− 3.7	+ 1.2	+ 0.2	+ 4.4	+ 5.0	− 0.2	+ 5.2	− 0.6	+ 33.0	+ 32.3
Dec.	+ 1	+ 3	− 90.4	− 24.0	− 23.2	− 8.6	− 14.6	− 0.8	− 9.2	− 7.0	− 0.1	− 6.8	− 2.2	− 57.3	− 32.5
2022 Jan.	− 1	+ 2	+113.7	+ 90.4	+ 89.2	+68.7	+ 20.5	+ 1.2	+36.3	+ 37.6	+ 0.2	+ 37.4	− 1.4	− 18.6	− 27.9
Feb.	−	−	+ 15.8	+ 3.8	+ 3.9	+13.0	− 9.0	− 0.1	+ 3.3	+ 5.4	+ 0.1	+ 5.3	− 2.1	+ 10.4	+ 7.1
Mar.	−	− 1	+ 40.1	− 2.0	− 1.7	− 9.9	+ 8.1	− 0.3	− 1.0	− 4.3	+ 0.2	− 4.6	+ 3.3	+ 41.5	+ 35.7
Apr.	−	−	+106.5	− 13.1	− 13.1	+ 1.0	− 14.2	+ 0.1	− 1.3	+ 0.7	− 0.1	+ 0.8	− 2.0	+ 102.0	+ 104.5
Foreign subsidiaries															**End of year or month ***
2019	15	41	235.2	52.5	46.7	18.3	28.4	5.7	139.0	116.1	14.4	101.7	22.9	43.7	0.0
2020	12	36	229.5	44.8	39.9	17.4	22.5	4.9	139.7	114.4	13.1	101.4	25.3	44.9	0.0
2021	12	35	246.0	50.8	44.4	20.7	23.7	6.3	139.5	116.3	12.6	103.7	23.2	55.7	0.0
2021 July	12	35	236.5	44.7	39.6	20.1	19.5	5.1	136.4	112.6	12.0	100.6	23.8	55.4	0.0
Aug.	12	35	236.6	44.0	39.1	18.9	20.2	5.0	137.7	113.5	12.1	101.5	24.2	54.8	0.0
Sep.	13	36	244.6	51.9	47.1	21.9	25.2	4.8	138.5	114.5	12.2	102.3	24.0	54.1	0.0
Oct.	12	35	246.1	50.9	45.9	24.3	21.6	5.0	138.5	115.4	12.5	102.9	23.1	56.6	0.0
Nov.	12	35	247.1	52.9	46.7	24.0	22.8	6.2	138.5	115.4	12.6	102.8	23.1	55.7	0.0
Dec.	12	35	246.0	50.8	44.4	20.7	23.7	6.3	139.5	116.3	12.6	103.7	23.2	55.7	0.0
2022 Jan.	12	35	245.1	45.9	40.9	20.1	20.8	5.0	140.6	117.5	12.7	104.8	23.1	58.5	0.0
Feb.	12	35	245.7	46.2	41.4	21.1	20.3	4.8	140.6	117.7	12.7	105.0	22.9	58.9	0.0
Mar.	12	35	249.3	45.9	40.9	20.6	20.3	5.0	143.4	119.7	12.9	106.8	23.7	60.0	0.0
Apr.	12	35	253.6	49.4	44.1	21.5	22.6	5.3	145.3	121.6	12.8	108.8	23.7	58.8	0.0
															Changes *
2020	− 3	− 5	− 0.8	− 5.3	− 5.0	− 1.0	− 4.0	− 0.3	+ 3.3	+ 0.8	− 1.3	+ 2.1	+ 2.4	+ 1.2	± 0.0
2021	± 0	− 1	+ 12.0	+ 3.8	+ 2.8	+ 3.4	− 0.5	+ 1.0	− 2.5	− 0.5	− 0.5	− 0.0	− 2.1	+ 10.8	± 0.0
2021 Aug.	−	−	− 0.0	− 0.7	− 0.6	− 1.3	+ 0.7	− 0.1	+ 1.2	+ 0.8	+ 0.0	+ 0.8	+ 0.4	− 0.5	± 0.0
Sep.	+ 1	+ 1	+ 7.0	+ 7.3	+ 7.6	+ 3.0	+ 4.6	− 0.3	+ 0.4	+ 0.5	+ 0.1	+ 0.4	− 0.2	− 0.7	± 0.0
Oct.	− 1	− 1	+ 1.5	− 0.9	− 1.1	+ 2.4	− 3.6	+ 0.2	− 0.0	+ 0.9	+ 0.3	+ 0.5	− 0.9	+ 2.5	± 0.0
Nov.	−	−	− 0.2	+ 1.3	+ 0.3	− 0.4	+ 0.6	+ 1.0	− 0.6	− 0.6	+ 0.1	− 0.7	+ 0.0	− 0.9	± 0.0
Dec.	−	−	− 1.4	− 2.3	− 2.4	− 3.2	+ 0.8	+ 0.1	+ 0.9	+ 0.8	+ 0.0	+ 0.7	+ 0.1	− 0.0	± 0.0
2022 Jan.	−	−	− 1.9	− 5.0	− 3.9	− 0.7	− 3.0	− 1.4	+ 0.7	+ 0.8	+ 0.0	+ 0.8	− 0.1	+ 2.6	± 0.0
Feb.	−	−	+ 0.8	+ 0.4	+ 0.6	+ 1.0	− 0.4	− 0.2	+ 0.1	+ 0.3	+ 0.0	+ 0.3	− 0.2	+ 0.3	± 0.0
Mar.	−	−	+ 3.2	− 0.5	− 0.7	− 0.5	− 0.2	+ 0.2	+ 2.6	+ 1.8	+ 0.2	+ 1.6	+ 0.8	+ 1.1	± 0.0
Apr.	−	−	+ 1.4	+ 2.0	+ 2.1	+ 1.0	+ 1.1	− 0.1	+ 0.5	+ 0.6	− 0.1	+ 0.6	− 0.0	− 1.1	± 0.0

***** In this table "foreign" also includes the country of domicile of the foreign branches and foreign subsidiaries. Statistical breaks have been eliminated from the changes. (Breaks owing to changes in the reporting population have not been eliminated from the flow figures for the foreign subsidiaries.) The figures for the latest date are always to be regarded as provisional; subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** Several branches in a given country of

IV. Banks

Deposits									Money market paper and debt securities outstanding [5]	Working capital and own funds	Other liabilities [6,7]		Period
	of banks (MFIs)			of non-banks (non-MFIs)									
					German non-banks [4]								
Total	Total	German banks	Foreign banks	Total	Total	Shortterm	Medium and longterm	Foreign non-banks			Total	of which: Derivative financial instruments in the trading portfolio	
End of year or month *												**Foreign branches**	
894.1	613.6	453.2	160.4	280.5	12.7	10.1	2.7	267.8	94.6	53.4	410.9	361.1	2019
872.2	588.5	431.8	156.7	283.7	11.7	10.2	1.5	272.0	61.5	49.9	568.6	523.1	2020
950.2	638.5	461.2	177.3	311.7	8.1	6.3	1.8	303.6	65.2	51.3	437.9	403.4	2021
930.2	622.8	444.9	177.9	307.3	8.7	7.2	1.5	298.7	74.7	51.2	468.4	435.5	2021 July
932.9	624.6	438.7	185.9	308.3	8.5	7.0	1.5	299.8	81.6	51.3	471.3	436.0	Aug.
937.3	618.3	432.9	185.4	319.0	9.6	7.8	1.8	309.4	81.1	51.6	448.6	414.2	Sep.
982.8	654.6	469.2	185.4	328.2	9.0	7.2	1.8	319.2	83.7	51.7	433.8	401.3	Oct.
988.0	655.8	458.2	197.6	332.2	8.9	7.1	1.8	323.3	82.6	51.9	472.4	435.9	Nov.
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	Dec.
1,066.8	659.1	457.3	201.8	407.7	9.5	7.7	1.8	398.2	86.1	51.8	414.1	377.6	2022 Jan.
1,079.5	664.5	466.8	197.6	415.0	9.8	8.1	1.7	405.2	82.7	51.8	420.4	383.8	Feb.
1,087.0	663.1	462.8	200.3	423.9	10.7	9.0	1.7	413.2	80.7	52.3	454.9	418.8	Mar.
1,075.8	655.6	453.6	202.0	420.1	10.5	8.7	1.8	409.7	88.6	53.3	566.4	526.8	Apr.
Changes *													
− 9.2	− 13.3	− 21.4	+ 8.1	+ 4.1	− 1.0	+ 0.3	− 1.4	+ 5.1	− 28.1	− 3.5	+ 157.6	+ 162.0	2020
+ 71.1	+ 43.1	+ 31.0	+ 12.0	+ 28.1	− 3.6	− 3.9	+ 0.3	+ 31.7	+ 0.1	+ 1.4	− 130.8	− 119.7	2021
+ 2.3	+ 1.4	− 6.2	+ 7.5	+ 0.9	− 0.2	− 0.2	−	+ 1.1	+ 6.6	+ 0.2	+ 3.0	+ 0.6	2021 Aug.
+ 1.8	− 8.7	− 5.8	− 2.9	+ 10.5	+ 1.1	+ 0.8	+ 0.3	+ 9.4	− 1.6	+ 0.3	− 22.9	− 21.8	Sep.
+ 46.0	+ 36.8	+ 36.3	+ 0.5	+ 9.2	− 0.6	− 0.6	− 0.0	+ 9.8	+ 2.9	+ 0.1	− 14.8	− 12.9	Oct.
+ 3.4	− 0.4	− 9.6	+ 9.2	+ 3.9	− 0.1	− 0.1	+ 0.0	+ 4.0	− 2.4	+ 0.3	+ 38.6	+ 34.6	Nov.
− 37.8	− 17.3	+ 3.0	− 20.3	− 20.5	− 0.8	− 0.8	− 0.0	− 19.7	− 17.5	− 0.7	− 34.5	− 32.5	Dec.
+ 114.7	+ 18.7	− 4.0	+ 22.7	+ 96.0	+ 1.4	+ 1.4	+ 0.0	+ 94.6	+ 20.4	+ 0.6	− 23.8	− 25.8	2022 Jan.
+ 13.3	+ 6.0	+ 9.6	− 3.6	+ 7.3	+ 0.3	+ 0.4	− 0.1	+ 7.0	− 3.2	+ 0.0	+ 6.3	+ 6.3	Feb.
+ 7.0	− 1.8	− 4.0	+ 2.2	+ 8.8	+ 0.9	+ 0.9	+ 0.0	+ 7.9	− 2.4	+ 0.5	+ 34.5	+ 35.0	Mar.
− 15.2	− 11.0	− 9.2	− 1.8	− 4.2	− 0.2	− 0.3	+ 0.1	− 4.0	+ 5.3	+ 0.9	+ 108.8	+ 108.0	Apr.
End of year or month *												**Foreign subsidiaries**	
165.7	68.7	36.6	32.1	97.0	6.6	3.9	2.7	90.4	16.0	22.1	31.4	0.0	2019
163.4	59.6	34.1	25.5	103.8	6.7	4.2	2.5	97.1	16.6	20.3	29.2	0.0	2020
178.6	64.2	33.0	31.2	114.4	7.3	4.9	2.4	107.1	16.4	20.3	30.7	0.0	2021
169.7	58.6	32.4	26.3	111.1	6.6	4.2	2.4	104.5	17.7	20.5	28.6	0.0	2021 July
169.8	58.2	31.1	27.1	111.6	6.6	4.2	2.4	105.0	17.5	20.8	28.6	0.0	Aug.
175.4	61.5	30.0	31.5	113.9	6.6	4.2	2.4	107.3	18.4	20.7	30.0	0.0	Sep.
177.6	63.8	32.8	31.0	113.8	6.9	4.5	2.4	106.9	17.9	20.4	30.1	0.0	Oct.
177.5	62.6	31.1	31.5	114.9	7.0	4.6	2.4	107.9	17.5	20.3	31.7	0.0	Nov.
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	Dec.
179.6	64.8	33.2	31.7	114.7	7.2	4.8	2.4	107.5	15.9	19.9	29.8	0.0	2022 Jan.
180.9	66.3	33.7	32.7	114.5	7.4	5.0	2.4	107.1	15.8	19.8	29.3	0.0	Feb.
184.0	66.5	34.2	32.3	117.5	7.5	5.1	2.4	110.0	15.7	19.8	29.8	0.0	Mar.
187.8	70.6	36.1	34.4	117.2	7.2	4.8	2.4	110.0	15.5	19.9	30.3	0.0	Apr.
Changes *													
+ 1.4	− 7.3	− 2.5	− 4.8	+ 8.7	+ 0.0	+ 0.3	− 0.3	+ 8.7	+ 0.6	− 1.8	− 1.0	± 0.0	2020
+ 12.1	+ 3.2	− 1.1	+ 4.3	+ 8.9	+ 0.6	+ 0.6	− 0.1	+ 8.3	− 0.3	+ 0.1	+ 0.2	± 0.0	2021
− 0.1	− 0.5	− 1.3	+ 0.8	+ 0.5	+ 0.0	+ 0.0	+ 0.0	+ 0.4	− 0.2	+ 0.3	− 0.1	± 0.0	2021 Aug.
+ 4.9	+ 3.0	− 1.0	+ 4.0	+ 1.9	+ 0.0	+ 0.0	− 0.0	+ 1.9	+ 0.9	− 0.0	+ 1.2	± 0.0	Sep.
+ 2.3	+ 2.3	+ 2.7	− 0.4	− 0.0	+ 0.3	+ 0.3	+ 0.0	− 0.3	− 0.5	− 0.3	+ 0.1	± 0.0	Oct.
− 1.0	− 1.6	− 1.6	+ 0.1	+ 0.6	+ 0.1	+ 0.1	+ 0.0	+ 0.4	− 0.4	− 0.0	+ 1.2	± 0.0	Nov.
+ 0.9	+ 1.5	+ 1.9	− 0.3	− 0.6	+ 0.2	+ 0.3	− 0.0	− 0.9	− 1.2	− 0.0	− 1.2	± 0.0	Dec.
+ 0.4	+ 0.4	+ 0.2	+ 0.2	+ 0.0	− 0.1	− 0.1	+ 0.0	+ 0.1	− 0.5	− 0.5	− 1.2	± 0.0	2022 Jan.
+ 1.5	+ 1.6	+ 0.5	+ 1.1	− 0.1	+ 0.2	+ 0.2	− 0.0	− 0.4	− 0.1	− 0.1	− 0.5	± 0.0	Feb.
+ 2.8	+ 0.1	+ 0.5	− 0.5	+ 2.7	+ 0.0	+ 0.1	− 0.0	+ 2.7	− 0.1	+ 0.1	+ 0.4	± 0.0	Mar.
+ 1.6	+ 3.1	+ 1.9	+ 1.2	− 1.5	− 0.2	− 0.2	− 0.0	− 1.2	− 0.2	+ 0.1	− 0.1	± 0.0	Apr.

domicile are regarded as a single branch. **2** Treasury bills, Treasury discount paper and other money market paper, debt securities. **3** Including own debt securities. **4** Excluding subordinated liabilities and non-negotiable debt securities. **5** Issues of negotiable and non-negotiable debt securities and money market paper. **6** Including subordinated liabilities. **7** See also Table IV.2, footnote 1.

V. Minimum reserves

1. Reserve maintenance in the euro area

€ billion

Maintenance period beginning in [1]	Reserve base [2]	Required reserves before deduction of lump-sum allowance [3]	Required reserves after deduction of lump-sum allowance [4]	Current accounts [5]	Excess reserves [6]	Deficiencies [7]
2015	11,375.0	113.8	113.3	557.1	443.8	0.0
2016	11,918.5	119.2	118.8	919.0	800.3	0.0
2017	12,415.8	124.2	123.8	1,275.2	1,151.4	0.0
2018	12,775.2	127.8	127.4	1,332.1	1,204.8	0.0
2019	13,485.4	134.9	134.5	1,623.7	1,489.3	0.0
2020	14,590.4	145.9	145.5	3,029.4	2,883.9	0.0
2021	15,576.6	155.8	155.4	3,812.3	3,656.9	0.1
2022 Apr. p	15,812.7	158.1	157.8	4,046.1	3,888.3	0.0
May	.	.	.	.	.	.
June p	...	...	...	...	...	...

2. Reserve maintenance in Germany

€ billion

Maintenance period beginning in [1]	Reserve base [2]	German share of euro area reserve base as a percentage	Required reserves before deduction of lump-sum allowance [3]	Required reserves after deduction of lump-sum allowance [4]	Current accounts [5]	Excess reserves [6]	Deficiencies [7]
2015	3,137,353	27.6	31,374	31,202	174,361	143,159	0
2016	3,371,095	28.3	33,711	33,546	301,989	268,443	0
2017	3,456,192	27.8	34,562	34,404	424,547	390,143	2
2018	3,563,306	27.9	35,633	35,479	453,686	418,206	1
2019	3,728,027	27.6	37,280	37,131	486,477	449,346	0
2020	4,020,792	27.6	40,208	40,062	878,013	837,951	1
2021	4,260,398	27.4	42,604	42,464	1,048,819	1,006,355	0
2022 Apr. p	4,381,728	27.7	43,817	43,678	1,147,397	1,103,720	0
May	.	.	.	.	.	.	.
June p	4,408,672	...	44,087	43,948	...	...	...

a) Required reserves of individual categories of banks

€ billion

Maintenance period beginning in [1]	Big banks	Regional banks and other commercial banks	Branches of foreign banks	Landesbanken and savings banks	Credit cooperatives	Mortgage banks	Banks with special, development and other central support tasks
2015	6,105	5,199	2,012	10,432	5,649	226	1,578
2016	6,384	5,390	2,812	10,905	5,960	236	1,859
2017	6,366	5,678	3,110	11,163	6,256	132	1,699
2018	7,384	4,910	3,094	11,715	6,624	95	1,658
2019	7,684	5,494	2,765	12,273	7,028	109	1,778
2020	8,151	6,371	3,019	12,912	7,547	111	2,028
2021	9,113	6,713	2,943	13,682	8,028	109	1,876
2022 Apr.	9,417	7,154	3,021	13,929	8,091	98	1,968
May	.	.	.	.	.	.	.
June	9,539	6,977	3,000	14,053	8,112	94	2,173

b) Reserve base by subcategories of liabilities

€ billion

Maintenance period beginning in [1]	Liabilities (excluding savings deposits, deposits with building and loan associations and repos) to non-MFIs with agreed maturities of up to 2 years	Liabilities (excluding repos and deposits with building and loan associations) with agreed maturities of up to 2 years to MFIs that are resident in euro area countries but not subject to minimum reserve requirements	Liabilities (excluding repos and deposits with building and loan associations) with agreed maturities of up to 2 years to banks in non-euro area countries	Savings deposits with agreed periods of notice of up to 2 years	Liabilities arising from bearer debt securities issued with agreed maturities of up to 2 years and bearer money market paper after deduction of a standard amount for bearer debt certificates or deduction of such paper held by the reporting institution
2015	2,063,317	1,879	375,891	592,110	104,146
2016	2,203,100	1,595	447,524	585,099	133,776
2017	2,338,161	628	415,084	581,416	120,894
2018	2,458,423	1,162	414,463	576,627	112,621
2019	2,627,478	1,272	410,338	577,760	111,183
2020	2,923,462	1,607	436,696	560,770	105,880
2021	3,079,722	9,030	508,139	561,608	101,907
2022 Apr.	3,154,265	12,984	550,922	562,634	100,923
May	.	.	.	.	.
June	3,191,196	14,042	534,721	559,709	109,056

1 The reserve maintenance period starts on the settlement day of the main refinancing operation immediately following the meeting of the Governing Council of the ECB for which the discussion on the monetary policy stance is scheduled. **2** Article 5 of the Regulation (EU) 2021/378 of the European Central Bank on the application of minimum reserve requirements (excluding liabilities to which a reserve ratio of 0% applies, pursuant to Article 6(1)(a)). **3** Amount after applying the reserve ratio to the reserve base. The reserve ratio for liabilities with agreed maturities of up to two years was 2% between 1 January 1999 and 17 January 2012. Since 18 January 2012, it has stood at 1%. **4** Article 6(2) of the Regulation (EU) 2021/378 of the European Central Bank on the application of minimum reserve requirements. **5** Average credit balances of credit institutions at national central banks. **6** Average credit balances less required reserves after deduction of the lump-sum allowance. **7** Required reserves after deduction of the lump-sum allowance.

VI. Interest rates

1. ECB interest rates / basic rates of interest

% per annum

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

1 Pursuant to Section 247 of the Civil Code.

2. Eurosystem monetary policy operations allotted through tenders *

			Fixed rate tenders	Variable rate tenders			
Date of Settlement	Bid amount	Allotment amount	Fixed rate	Minimum bid rate	Marginal rate [1]	Weighted average rate	Running for … days
	€ million		% per annum				
Main refinancing operations							
2022 Jun. 1	410	410	0,00	-	-	-	7
Jun. 8	447	447	0,00	-	-	-	7
Jun. 15	669	669	0,00	-	-	-	7
Jun. 22	688	688	0,00	-	-	-	7
Jun. 29	1 483	1 483	0,00	-	-	-	7
Jul. 6	1 041	1 041	0,00	-	-	-	7
Jul. 13	916	916	0,00	-	-	-	7
Long-term refinancing operations							
2022 May 26	44	44	[2] …	-	-	-	91
Jun. 30	401	401	[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]	EONIA [1]	EURIBOR [2]				
			One-week funds	One-month funds	Three-month funds	Six-month funds	Twelve-month funds
2021 Dec.	– 0.577	– 0.49	– 0.58	– 0.60	– 0.58	– 0.55	– 0.50
2022 Jan.	– 0.578	.	– 0.58	– 0.57	– 0.56	– 0.53	– 0.48
Feb.	– 0.577	.	– 0.57	– 0.55	– 0.53	– 0.48	– 0.34
Mar.	– 0.579	.	– 0.57	– 0.54	– 0.50	– 0.42	– 0.24
Apr.	– 0.584	.	– 0.57	– 0.54	– 0.45	– 0.31	0.01
May	– 0.585	.	– 0.57	– 0.55	– 0.39	– 0.14	0.29
June	– 0.582	.	– 0.57	– 0.53	– 0.24	0.16	0.85

***** Averages are Bundesbank calculations. Neither the Deutsche Bundesbank nor anyone else can be held liable for any irregularity or inaccuracy of the EONIA or the EURIBOR. **1** Euro overnight index average: weighted average overnight rate for interbank operations; calculated by the European Central Bank from January 4th 1999 until September 30th 2019 based on real turnover according to the act/360 method. Since October 1st 2019 calculated as Euro Short-Term Rate (€STR) + 8.5 basis points spread. **2** Euro interbank offered rate: unweighted average rate calculated by Reuters since 30 December 1998 according to the act/360 method. Administrator for EONIA and EURIBOR: European Money Markets Institute (EMMI)

VI. Interest rates

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

End of month	Households' deposits				Non-financial corporations' deposits			
	with an agreed maturity of							
	up to 2 years		over 2 years		up to 2 years		over 2 years	
	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2021 May	0.24	48,897	0.96	220,455	– 0.21	74,080	0.83	21,455
June	0.23	48,834	0.95	220,118	– 0.23	71,148	0.88	21,464
July	0.23	45,300	0.94	219,790	– 0.23	69,514	0.82	20,964
Aug.	0.22	44,901	0.93	219,708	– 0.26	68,741	0.81	21,058
Sep.	0.23	44,268	0.93	219,587	– 0.28	69,338	0.78	21,227
Oct.	0.23	43,497	0.92	219,456	– 0.29	75,404	0.77	22,443
Nov.	0.22	42,503	0.91	219,058	– 0.30	70,830	0.76	22,793
Dec.	0.18	41,979	0.91	220,289	– 0.37	75,038	0.74	22,966
2022 Jan.	0.18	41,157	0.90	220,225	– 0.31	72,404	0.73	23,078
Feb.	0.18	40,586	0.90	220,056	– 0.30	71,560	0.71	23,680
Mar.	0.17	40,201	0.89	219,655	– 0.28	68,341	0.74	24,011
Apr.	0.18	39,503	0.88	219,264	– 0.27	73,001	0.73	23,471
May	0.19	39,659	0.87	218,855	– 0.20	65,308	0.73	23,355

End of month	Housing loans to households 3						Loans to households for consumption and other purposes 4,5					
	with a maturity of											
	up to 1 year 6		over 1 year and up to 5 years		over 5 years		up to 1 year 6		over 1 year and up to 5 years		over 5 years	
	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2021 May	1.94	4,575	1.55	26,759	1.87	1,390,096	6.63	43,692	3.33	82,120	3.36	323,923
June	1.91	4,485	1.54	26,949	1.85	1,399,549	6.60	45,343	3.33	81,846	3.35	323,511
July	1.92	4,642	1.53	26,996	1.83	1,410,004	6.53	44,338	3.33	81,734	3.34	325,291
Aug.	1.94	4,581	1.52	27,041	1.82	1,418,884	6.60	44,785	3.33	81,447	3.32	325,890
Sep.	1.94	4,521	1.52	27,117	1.80	1,427,271	6.67	45,750	3.32	81,133	3.32	325,265
Oct.	1.97	4,623	1.52	27,324	1.79	1,436,840	6.59	44,700	3.32	80,768	3.30	326,197
Nov.	2.08	3,680	1.52	26,929	1.77	1,446,574	6.53	44,871	3.32	79,066	3.30	328,130
Dec.	2.02	3,547	1.52	26,755	1.75	1,454,553	6.60	44,914	3.32	78,679	3.28	327,421
2022 Jan.	2.02	3,690	1.52	26,583	1.74	1,457,059	6.69	44,473	3.32	78,019	3.27	328,346
Feb.	2.02	3,559	1.52	26,620	1.73	1,464,103	6.61	44,903	3.32	77,521	3.26	328,991
Mar.	2.10	3,620	1.53	26,670	1.71	1,473,852	6.59	46,226	3.33	77,518	3.25	328,996
Apr.	2.08	3,636	1.54	26,766	1.71	1,483,015	6.52	45,715	3.33	77,073	3.25	329,959
May	2.15	3,583	1.55	26,874	1.70	1,492,091	6.52	46,474	3.33	76,662	3.25	330,455

End of month	Loans to non-financial corporations with a maturity of					
	up to 1 year 6		over 1 year and up to 5 years		over 5 years	
	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2021 May	1.93	153,129	1.65	194,737	1.68	802,212
June	2.01	149,474	1.65	193,910	1.67	801,420
July	1.94	148,978	1.64	194,327	1.65	808,937
Aug.	1.94	148,766	1.63	196,065	1.64	811,706
Sep.	1.97	149,784	1.64	194,697	1.63	811,174
Oct.	1.92	158,326	1.63	197,964	1.62	813,714
Nov.	1.91	156,340	1.58	203,103	1.61	819,855
Dec.	1.82	161,611	1.56	202,457	1.59	822,730
2022 Jan.	1.81	166,574	1.57	202,813	1.58	824,650
Feb.	1.80	172,663	1.56	202,563	1.58	830,564
Mar.	1.90	179,074	1.58	204,001	1.57	832,210
Apr.	1.91	180,007	1.58	206,200	1.57	838,405
May	1.87	184,784	1.62	208,921	1.58	842,917

***** The interest rate statistics gathered on a harmonised basis in the euro area from January 2003 are collected in Germany on a sample basis. The MFI interest rate statistics are based on the interest rates applied by MFIs and the related volumes of euro-denominated deposits and loans to households and non-financial corporations domiciled in the euro area. The household sector comprises individuals (including sole proprietors) and non-profit institutions serving households. Non-financial corporations include all enterprises other than insurance corporations, banks and other financial institutions. The most recent figures are in all cases to be regarded as provisional. Subsequent revisions appearing in the following Monthly Report are not specially marked. Further information on the MFI interest rate statistics can be found on the Bundesbank's website (Statistics/Money and capital markets/Interest rates and yields/Interest rates on deposits and loans). **o** The statistics on outstanding amounts are collected at the end of the month. **1** The effective interest rates are calculated either as annualised agreed interest rates or as narrowly defined effective rates. Both calculation methods cover all interest payments on deposits and loans but not any other related charges which may occur for enquiries, administration, preparation of the documents, guarantees and credit insurance. **2** Data based on monthly balance sheet statistics. **3** Secured and unsecured loans for home purchase, including building and home improvements; including loans granted by building and loan associations and interim credits as well as transmitted loans granted by the reporting agents in their own name and for their own account. **4** Loans for consumption are defined as loans granted for the purpose of personal use in the consumption of goods and services. **5** For the purpose of these statistics, other loans are loans granted for other purposes such as business, debt consolidation, education, etc. **6** Including overdrafts (see also footnotes 12 to 14 on p. 47).

VI. Interest rates

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

Reporting period	Households' deposits											
	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	
	Effective interest rate [1] % p.a.	Volume [2] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [2] € million	Effective interest rate [1] % p.a.	Volume [2] € million
2021 May	– 0.01	1,786,469	0.01	2,399	0.37	307	0.32	529	0.09	537,061	0.16	25,715
June	– 0.01	1,788,689	– 0.04	2,957	0.23	310	0.28	566	0.09	536,727	0.16	25,503
July	– 0.01	1,800,235	0.02	2,414	0.28	401	0.29	695	0.08	536,463	0.16	25,216
Aug.	– 0.01	1,797,331	0.02	2,315	0.25	278	0.34	558	0.08	536,145	0.16	24,993
Sep.	– 0.01	1,791,879	– 0.01	2,254	0.26	241	0.34	513	0.08	535,555	0.15	24,780
Oct.	– 0.01	1,800,411	0.06	1,944	0.25	228	0.39	474	0.08	535,197	0.15	24,558
Nov.	– 0.01	1,808,547	0.09	1,879	0.21	266	0.48	650	0.08	535,140	0.15	24,329
Dec.	– 0.01	1,806,993	– 0.07	2,327	0.20	204	0.51	721	0.08	536,715	0.14	24,116
2022 Jan.	– 0.01	1,806,352	0.11	2,132	0.22	363	0.36	642	0.08	537,038	0.14	23,363
Feb.	– 0.02	1,819,881	0.06	2,167	0.25	226	0.33	564	0.07	537,327	0.13	23,136
Mar.	– 0.02	1,808,690	0.12	2,044	0.28	258	0.38	824	0.07	535,696	0.13	22,897
Apr.	– 0.02	1,826,796	0.14	1,974	0.39	292	0.46	694	0.07	534,800	0.13	22,686
May	– 0.02	1,827,315	0.14	2,053	0.53	569	0.66	1,023	0.07	533,590	0.14	22,562

Reporting period	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	
	Effective interest rate [1] % p.a.	Volume [2] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million
2021 May	– 0.11	564,627	– 0.34	53,947	– 0.04	194	0.37	231
June	– 0.12	569,903	– 0.50	64,520	– 0.14	278	0.20	200
July	– 0.12	581,879	– 0.48	57,334	– 0.22	322	0.09	168
Aug.	– 0.13	589,698	– 0.50	47,074	– 0.17	174	0.07	699
Sep.	– 0.12	590,408	– 0.50	48,685	x .	x .	0.11	333
Oct.	– 0.13	598,979	– 0.51	70,382	– 0.21	214	0.19	1,102
Nov.	– 0.13	604,607	– 0.52	47,155	– 0.16	619	0.25	732
Dec.	– 0.14	585,718	– 0.58	43,578	– 0.07	836	0.19	1,004
2022 Jan.	– 0.14	596,648	– 0.50	38,323	– 0.18	311	0.28	1,033
Feb.	– 0.14	594,874	– 0.48	30,745	0.03	234	0.63	1,123
Mar.	– 0.15	607,552	– 0.50	42,187	0.09	417	1.09	1,069
Apr.	– 0.15	600,726	– 0.49	42,722	0.37	633	1.12	182
May	– 0.15	609,224	– 0.44	41,544	0.45	1,237	1.35	514

Reporting period	Loans to households											
	Loans for consumption [4] with an initial rate fixation of											
	Total (including charges)	Total		of which: Renegotiated loans [9]		floating rate or up to 1 year [9]		over 1 year and up to 5 years		over 5 years		
	Annual percentage rate of charge [10] % p.a.	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million
2021 May	5.49	5.37	7,573	6.21	1,400	7.01	301	4.24	2,605	5.90	4,667
June	5.52	5.40	8,979	6.25	1,741	7.20	359	4.23	3,090	5.94	5,530
July	5.55	5.47	9,279	6.30	1,924	7.15	386	4.26	3,014	5.98	5,880
Aug.	5.54	5.44	8,696	6.29	1,747	7.54	340	4.30	2,828	5.89	5,528
Sep.	5.54	5.46	8,474	6.28	1,669	7.59	323	4.29	2,783	5.94	5,368
Oct.	5.58	5.50	8,375	6.30	1,660	7.55	345	4.34	2,677	5.95	5,353
Nov.	5.46	5.43	8,076	6.17	1,524	7.24	408	4.34	2,691	5.88	4,976
Dec.	5.35	5.36	6,927	6.04	1,221	6.75	465	4.31	2,445	5.84	4,017
2022 Jan.	5.53	5.54	8,604	6.19	1,862	7.29	383	4.29	2,643	6.01	5,578
Feb.	5.41	5.45	8,372	6.14	1,641	7.31	378	4.28	2,652	5.90	5,343
Mar.	5.34	5.38	10,208	6.24	1,935	7.28	397	4.08	3,481	5.97	6,330
Apr.	5.70	5.64	8,523	6.35	1,682	7.93	316	4.46	2,654	6.08	5,553
May	5.81	5.77	9,792	6.51	1,924	8.03	332	4.56	3,067	6.24	6,393

For footnotes * and 1 to 6, see p. 44•. For footnote x see p. 47•. **+** For deposits with an agreed maturity and all loans excluding revolving loans and overdrafts, credit card debt: new business covers all new agreements between households or non-financial corporations and the bank. The interest rates are calculated as volume-weighted average rates of all new agreements concluded during the reporting month. For overnight deposits, deposits redeemable at notice, revolving loans and overdrafts, credit card debt: new business is collected in the same way as outstanding amounts for the sake of simplicity. This means that all outstanding deposit and lending business at the end of the month has to be incorporated in the calculation of average rates of interest. **7** Estimated. The volume of new business is extrapolated to form the underlying total using a grossing-up procedure. **8** Including non-financial corporations' deposits; including fidelity and growth premiums. **9** Excluding overdrafts. **10** Annual percentage rate of charge, which contains other related charges which may occur for enquiries, administration, preparation of the documents, guarantees and credit insurance.

VI. Interest rates

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

Loans to households (cont'd)

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

Reporting period	Total		of which: Renegotiated loans [9]		floating rate or up to 1 year [9]		over 1 year and up to 5 years		over 5 years	
	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million
Loans to households										
2021 May	1.74	3,877	1.51	909	1.79	1,589	2.32	550	1.51	1,738
June	1.63	5,170	1.53	1,119	1.55	2,198	2.26	702	1.51	2,270
July	1.68	4,950	1.50	1,428	1.71	1,920	2.09	732	1.52	2,298
Aug.	1.74	4,101	1.60	806	1.88	1,594	2.17	612	1.48	1,895
Sep.	1.65	4,401	1.46	951	1.72	1,950	1.99	626	1.47	1,825
Oct.	1.69	4,327	1.54	1,068	1.79	1,792	2.23	631	1.42	1,904
Nov.	1.68	4,433	1.39	847	1.65	1,759	2.42	704	1.44	1,970
Dec.	1.64	5,757	1.48	1,144	1.58	2,326	2.45	860	1.44	2,571
2022 Jan.	1.62	4,552	1.48	1,288	1.54	1,914	2.32	622	1.49	2,016
Feb.	1.76	4,173	1.60	859	1.69	1,560	2.55	514	1.62	2,099
Mar.	1.87	5,992	1.61	1,247	1.70	2,149	2.43	724	1.85	3,119
Apr.	2.03	4,980	1.70	1,170	1.82	1,829	2.33	760	2.10	2,391
May	2.32	4,275	2.03	913	1.84	1,386	2.89	628	2.46	2,261
of which: Loans to sole proprietors										
2021 May	1.85	2,624	.	.	1.93	1,052	2.29	451	1.59	1,121
June	1.70	3,581	.	.	1.64	1,516	2.38	508	1.52	1,557
July	1.71	3,514	.	.	1.75	1,339	2.10	587	1.53	1,588
Aug.	1.89	2,666	.	.	2.05	1,045	2.35	441	1.57	1,180
Sep.	1.72	2,879	.	.	1.76	1,259	2.21	444	1.49	1,176
Oct.	1.75	2,884	.	.	1.84	1,193	2.17	514	1.46	1,177
Nov.	1.83	2,674	.	.	1.83	1,076	2.47	461	1.56	1,137
Dec.	1.73	3,787	.	.	1.76	1,495	2.48	564	1.47	1,728
2022 Jan.	1.71	2,950	.	.	1.64	1,227	2.38	455	1.54	1,268
Feb.	1.88	2,728	.	.	1.92	970	2.68	380	1.64	1,378
Mar.	1.96	3,879	.	.	1.84	1,414	2.58	512	1.88	1,953
Apr.	2.13	3,210	.	.	1.92	1,079	2.42	577	2.16	1,554
May	2.40	2,886	.	.	2.00	928	2.95	493	2.48	1,465

Loans to households (cont'd)

Housing loans [3] with an initial rate fixation of

Erhebungszeitraum	Total (including charges)	Total		of which: Renegotiated loans [9]		floating rate or up to 1 year [9]		over 1 year and up to 5 years		over 5 year and up to 10 years		over 10 years	
	Annual percentage rate of charge [10] % p.a.	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million
Total loans													
2021 May	1.31	1.27	22,786	1.35	3,379	1.83	2,064	1.30	1,568	1.09	8,416	1.29	10,738
June	1.34	1.29	25,161	1.34	3,327	1.74	2,374	1.33	1,775	1.12	9,196	1.33	11,815
July	1.36	1.31	25,121	1.36	3,808	1.76	2,686	1.32	1,649	1.14	9,216	1.34	11,570
Aug.	1.31	1.27	22,735	1.32	3,095	1.78	2,324	1.37	1,514	1.10	7,975	1.28	10,922
Sep.	1.31	1.26	22,232	1.33	2,986	1.80	2,204	1.33	1,451	1.09	7,631	1.27	10,946
Oct.	1.32	1.28	22,630	1.29	3,683	1.79	2,353	1.33	1,613	1.10	8,013	1.29	10,650
Nov.	1.36	1.32	22,516	1.31	3,079	1.83	2,022	1.43	1,564	1.15	8,171	1.33	10,759
Dec.	1.37	1.32	23,851	1.27	3,446	1.80	2,383	1.39	1,661	1.16	8,614	1.34	11,194
2022 Jan.	1.39	1.35	25,085	1.33	4,969	1.83	2,527	1.35	1,706	1.19	8,661	1.37	12,191
Feb.	1.49	1.45	26,299	1.43	4,706	1.86	2,270	1.45	1,606	1.29	9,322	1.48	13,100
Mar.	1.69	1.65	32,270	1.63	6,216	1.93	2,704	1.65	1,987	1.50	11,809	1.71	15,770
Apr.	1.98	1.94	25,813	1.90	4,946	2.01	2,323	1.88	1,703	1.81	10,024	2.04	11,763
May	2.29	2.25	27,269	2.20	4,758	2.10	2,491	2.10	1,834	2.12	10,907	2.42	12,038
of which: Collateralised loans [11]													
2021 May	.	1.19	9,797	.	.	1.74	747	1.09	725	1.01	3,738	1.25	4,587
June	.	1.23	10,630	.	.	1.69	836	1.14	793	1.06	4,071	1.29	4,930
July	.	1.25	10,467	.	.	1.66	934	1.15	749	1.08	3,906	1.33	4,878
Aug.	.	1.21	9,407	.	.	1.67	821	1.21	665	1.03	3,442	1.25	4,479
Sep.	.	1.20	9,471	.	.	1.67	802	1.13	664	1.03	3,299	1.24	4,706
Oct.	.	1.20	9,766	.	.	1.70	874	1.16	746	1.02	3,569	1.25	4,577
Nov.	.	1.23	9,668	.	.	1.72	708	1.22	685	1.08	3,670	1.29	4,605
Dec.	.	1.25	10,265	.	.	1.70	783	1.22	727	1.09	3,784	1.31	4,971
2022 Jan.	.	1.28	11,005	.	.	1.75	942	1.18	861	1.13	4,087	1.33	5,115
Feb.	.	1.37	11,593	.	.	1.74	749	1.28	826	1.24	4,366	1.43	5,652
Mar.	.	1.57	14,566	.	.	1.80	936	1.54	974	1.46	5,637	1.64	7,019
Apr.	.	1.86	11,672	.	.	1.88	804	1.71	831	1.77	4,658	1.96	5,379
May	.	2.20	12,086	.	.	1.96	839	2.08	856	2.11	5,030	2.34	5,361

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

VI. Interest rates

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

Reporting period	Loans to households (cont'd)						Loans to non-financial corporations			
	Revolving loans [12] and overdrafts [13] Credit card debt [14]		of which: Revolving loans [12] and overdrafts [13]		of which: Extended credit card debt		Revolving loans [12] and overdrafts [13] Credit card debt [14]		of which: Revolving loans [12] and overdrafts [13]	
	Effective interest rate [1] % p.a.	Volume [2] € million	Effective interest rate [1] % p.a.	Volume [2] € million	Effective interest rate [1] % p.a.	Volume [2] € million	Effective interest rate [1] % p.a.	Volume [2] € million	Effective interest rate [1] % p.a.	Volume [2] € million
2021 May	7.28	34,454	7.01	27,148	15.51	3,905	2.79	72,023	2.80	71,766
June	7.23	35,815	7.05	28,056	15.55	3,938	2.86	72,488	2.87	72,184
July	7.11	35,046	6.90	27,102	15.54	3,987	2.75	73,098	2.76	72,788
Aug.	7.12	35,662	6.99	27,343	15.58	4,039	2.79	72,942	2.80	72,622
Sep.	7.19	36,720	7.06	28,404	15.53	4,098	2.79	74,750	2.81	74,389
Oct.	7.10	35,633	6.94	27,535	15.02	4,109	2.81	75,550	2.83	75,182
Nov.	7.01	36,013	6.90	27,565	15.01	4,153	2.77	76,312	2.79	75,909
Dec.	7.11	36,163	6.93	28,124	14.94	4,165	2.73	76,261	2.75	75,914
2022 Jan.	7.20	36,030	6.97	28,433	14.97	4,110	2.61	81,598	2.62	81,290
Feb.	7.08	36,335	6.95	28,225	14.96	4,103	2.62	85,173	2.63	84,843
Mar.	7.14	37,360	7.02	29,314	14.94	4,076	2.71	87,104	2.72	86,709
Apr.	7.00	36,819	6.91	28,444	14.96	4,100	2.65	88,202	2.66	87,834
May	6.96	37,636	6.98	28,730	14.89	4,143	2.63	89,403	2.65	88,973

Reporting period	Loans to non-financial corporations (cont'd)															
	Total		of which: Renegotiated loans [9]		Loans up to €1 million [15] with an initial rate fixation of: floating rate or up to 1 year [9]		over 1 year and up to 5 years		over 5 years		Loans over €1 million [15] with an initial rate fixation of: floating rate or up to 1 year [9]		over 1 year and up to 5 years		over 5 years	
	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million	Effective interest rate [1] % p.a.	Volume [7] € million
Total loans																
2021 May	1.32	58,626	1.53	16,038	1.89	8,462	2.33	1,179	1.56	1,578	1.20	36,993	1.42	2,491	1.06	7,923
June	1.28	83,129	1.29	27,883	1.93	9,481	2.37	1,409	1.54	1,734	1.19	52,578	0.78	6,948	1.28	10,979
July	1.35	70,171	1.42	20,858	1.84	9,608	2.26	1,403	1.52	1,753	1.30	41,858	1.29	3,934	1.00	11,615
Aug.	1.33	54,047	1.58	14,739	1.79	7,827	2.31	1,094	1.44	1,308	1.25	33,740	1.14	3,001	1.08	7,077
Sep.	1.36	69,341	1.33	23,411	1.83	9,309	2.39	1,198	1.48	1,245	1.28	45,311	1.44	4,339	1.06	7,939
Oct.	1.21	71,404	1.32	20,386	1.76	9,149	2.38	1,247	1.50	1,242	1.08	48,160	1.43	2,573	1.07	9,033
Nov.	1.18	75,363	1.34	18,828	1.85	9,681	2.35	1,402	1.44	1,474	1.03	48,548	0.95	4,444	1.16	9,814
Dec.	1.20	105,525	1.32	29,572	1.94	10,348	2.28	1,529	1.45	1,817	1.05	71,028	1.40	5,515	1.18	15,288
2022 Jan.	1.29	64,813	1.26	21,030	1.80	8,812	2.39	1,280	1.53	1,443	1.14	44,620	1.49	1,821	1.27	6,837
Feb.	1.32	66,898	1.22	18,910	1.78	9,056	2.55	1,205	1.63	1,445	1.13	42,295	1.71	3,088	1.42	9,809
Mar.	1.50	99,725	1.39	29,044	1.78	10,692	2.54	1,571	1.83	1,981	1.38	68,399	1.77	5,314	1.65	11,768
Apr.	1.53	74,483	1.51	19,771	1.82	9,033	2.63	1,388	2.19	1,883	1.31	47,761	1.79	3,673	1.91	10,745
May	1.49	78,530	1.73	18,948	1.82	9,416	2.82	1,359	2.30	1,707	1.17	53,164	2.65	3,419	2.16	9,465
of which: Collateralised loans [11]																
2021 May	1.46	7,097	.	.	1.76	340	1.73	75	1.21	404	1.68	3,830	1.15	439	1.11	2,009
June	1.36	13,761	.	.	1.79	410	1.84	109	1.20	444	1.35	8,365	1.38	1,110	1.35	3,323
July	1.41	10,857	.	.	1.68	445	1.57	117	1.24	404	1.56	6,539	1.30	933	1.02	2,419
Aug.	1.45	7,709	.	.	1.81	328	1.76	85	1.18	308	1.55	4,191	1.69	819	1.09	1,978
Sep.	1.35	11,637	.	.	1.71	405	2.14	61	1.17	284	1.35	7,760	1.92	827	1.06	2,300
Oct.	1.29	10,023	.	.	1.72	371	1.87	78	1.24	298	1.46	5,810	1.90	660	0.73	2,806
Nov.	1.34	8,064	.	.	1.76	359	1.60	96	1.19	382	1.43	4,537	1.36	704	1.08	1,986
Dec.	1.27	18,534	.	.	1.69	438	1.93	113	1.23	430	1.20	11,302	1.73	1,948	1.18	4,303
2022 Jan.	1.25	10,159	.	.	1.66	371	1.54	102	1.35	406	1.19	7,044	1.20	386	1.37	1,850
Feb.	1.60	9,498	.	.	1.66	296	1.98	87	1.37	318	1.63	4,798	1.85	1,166	1.46	2,833
Mar.	1.40	14,380	.	.	1.71	503	2.07	120	1.63	444	1.15	9,349	2.56	1,117	1.63	2,847
Apr.	1.72	9,355	.	.	1.92	325	2.15	113	1.93	481	1.53	5,242	1.68	817	2.07	2,377
May	2.01	9,129	.	.	1.95	385	2.41	116	2.18	465	1.81	5,246	3.02	726	2.13	2,191

For footnotes * and 1 to 6, see p. 44•. For footnotes + and 7 to 10, see p. 45•; **11** For the purposes of the interest rate statistics, a loan is considered to be secured if collateral (amongst others financial collateral, real estate collateral, debt securities) in at least the same value as the loan amount has been posted, pledged or assigned. **12** Including revolving loans which have all the following features: (a) the borrower may use or withdraw the funds to a pre-approved credit limit without giving prior notice to the lender; (b) the amount of available credit can increase and decrease as funds are borrowed and repaid; (c) the loan may be used repeatedly; (d) there is no obligation of regular repayment of funds. **13** Overdrafts are defined as debit balances on current accounts. They include all bank overdrafts regardless of whether they are within or beyond the limits agreed between customers and the bank. **14** Including convenience and extended credit card debt. Convenience credit is defined as the credit granted at an interest rate of 0% in the period between payment transactions effected with the card during one billing cycle and the date at which the debt balances from this specific billing cycle become due. **15** The amount category refers to the single loan transaction considered as new business. **x** Dominated by the business of one or two banks. Therefore, the value cannot be published due to confidentiality.

VII. Insurance corporations and pension funds

1. Assets

€ billion

End of year/quarter	Total	Currency and deposits [1]	Debt securities	Loans [2]	Shares and other equity	Investment fund shares/units	Financial derivatives	Technical reserves [3]	Non-financial assets	Remaining assets
Insurance corporations [4]										
2019 Q3	2,492.5	333.0	468.5	357.2	398.2	768.3	4.6	58.8	38.0	66.0
Q4	2,473.9	317.5	448.2	355.6	407.3	778.3	3.6	64.9	39.8	58.8
2020 Q1	2,426.8	318.2	452.0	364.1	383.1	738.2	4.5	68.5	38.6	59.6
Q2	2,517.5	317.0	460.5	371.9	409.4	788.7	4.3	68.5	38.7	58.5
Q3	2,547.1	311.1	472.9	373.8	411.3	809.5	4.4	67.1	39.0	58.0
Q4	2,587.4	301.7	478.9	370.6	425.4	841.0	4.7	68.1	38.2	58.7
2021 Q1	2,575.3	292.4	466.8	361.7	437.8	844.7	3.9	72.0	38.9	57.2
Q2	2,591.4	280.5	466.5	361.3	449.6	864.5	3.4	72.6	39.0	54.1
Q3	2,633.2	271.8	471.3	358.3	464.4	882.1	3.3	87.9	38.4	55.8
Q4	2,649.9	261.4	468.7	355.1	472.9	903.3	3.2	85.1	40.8	59.4
2022 Q1	2,543.0	245.0	441.0	333.9	471.4	860.4	2.7	87.9	41.1	59.6
Life insurance										
2019 Q3	1,350.1	205.3	242.5	225.2	57.9	563.6	3.1	10.4	20.9	21.0
Q4	1,325.2	194.8	227.6	217.6	61.1	570.4	2.4	13.7	21.1	16.5
2020 Q1	1,295.7	191.4	231.0	220.6	62.0	538.1	2.2	13.9	20.3	16.3
Q2	1,347.1	192.3	234.4	223.6	64.4	577.0	2.8	13.7	20.3	18.5
Q3	1,369.2	188.4	241.6	225.7	66.1	592.6	3.0	13.6	20.6	17.6
Q4	1,395.8	183.5	242.7	229.9	70.2	616.5	3.3	14.3	20.8	14.5
2021 Q1	1,361.2	170.4	231.5	219.6	74.3	614.3	2.1	14.2	21.5	13.2
Q2	1,371.7	164.4	231.3	219.4	78.0	627.2	2.0	14.1	21.5	13.8
Q3	1,386.6	159.1	232.2	214.8	87.7	642.8	1.9	13.4	20.8	13.8
Q4	1,400.8	152.4	232.7	211.8	93.5	658.0	1.7	14.6	21.9	14.3
2022 Q1	1,313.0	137.6	211.8	193.6	99.9	619.5	0.9	13.9	22.1	13.8
Non-life insurance										
2019 Q3	682.6	116.9	135.3	79.9	80.6	189.4	0.4	38.8	11.3	30.0
Q4	673.5	111.2	130.4	79.6	83.6	193.3	0.4	36.2	12.2	26.7
2020 Q1	669.3	111.1	131.3	79.8	80.0	186.9	0.3	38.7	12.0	29.3
Q2	685.4	111.8	134.4	82.4	81.1	197.0	0.4	39.5	12.1	26.7
Q3	693.0	109.3	137.6	83.3	82.7	203.1	0.4	38.5	12.1	26.3
Q4	703.1	105.9	139.5	84.5	85.1	210.2	0.5	37.6	12.7	27.3
2021 Q1	716.8	108.1	139.5	83.6	88.7	215.1	0.4	40.0	12.8	28.6
Q2	720.3	103.3	140.4	83.5	90.6	221.6	0.4	40.4	12.8	27.3
Q3	727.5	98.8	140.2	83.8	93.9	223.3	0.4	46.6	12.9	27.8
Q4	732.4	94.7	139.9	84.8	97.8	227.8	0.3	44.7	14.0	28.4
2022 Q1	721.8	91.9	134.1	81.0	98.9	224.7	0.2	46.1	14.0	30.8
Reinsurance [5]										
2019 Q3	459.9	10.8	90.7	52.1	259.6	15.3	1.0	9.6	5.9	15.0
Q4	475.2	11.5	90.2	58.3	262.6	14.5	0.8	15.1	6.6	15.6
2020 Q1	461.7	15.7	89.8	63.7	241.0	13.3	1.9	15.9	6.3	14.1
Q2	485.0	12.9	91.7	65.9	264.0	14.6	1.1	15.2	6.3	13.3
Q3	485.0	13.5	93.7	64.9	262.6	13.7	1.0	15.0	6.3	14.2
Q4	488.5	12.3	96.7	56.3	270.2	14.3	1.0	16.3	4.7	16.9
2021 Q1	497.3	13.9	95.8	58.5	274.7	15.4	1.4	17.7	4.7	15.3
Q2	499.4	12.8	94.8	58.4	280.9	15.6	1.0	18.1	4.6	13.1
Q3	519.0	13.9	98.9	59.6	282.7	16.1	1.0	28.0	4.7	14.2
Q4	516.7	14.3	96.1	58.6	281.6	17.5	1.1	25.9	4.9	16.6
2022 Q1	508.2	15.5	95.1	59.3	272.6	16.3	1.6	27.9	5.0	15.0
Pension funds [6]										
2019 Q3	726.5	85.6	80.7	31.0	36.5	415.5	–	8.6	46.7	22.0
Q4	735.8	85.2	79.6	31.1	38.7	421.1	–	8.8	48.9	22.3
2020 Q1 [7]	601.0	92.2	56.8	48.9	9.4	362.0	0.1	11.3	17.6	2.7
Q2	626.0	91.8	58.8	49.8	9.8	383.4	0.1	11.3	18.3	2.8
Q3	638.5	91.1	59.6	50.2	10.1	394.7	0.2	11.6	18.5	2.5
Q4	662.9	88.9	60.6	49.5	10.3	419.5	0.2	11.9	18.8	3.1
2021 Q1	664.3	86.2	58.7	48.6	10.8	427.9	0.2	12.1	17.6	2.3
Q2	683.2	85.0	60.2	49.3	11.3	445.1	0.1	12.1	17.8	2.3
Q3	689.8	82.9	60.4	48.8	11.8	453.6	0.1	12.2	17.8	2.2
Q4	709.8	82.1	60.0	48.7	11.3	473.5	0.1	12.4	18.4	3.2
2022 Q1	687.6	76.4	56.9	46.3	12.1	462.5	0.0	12.9	18.4	2.1

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 as of 2020 Q1. Until 2019 Q4 these are compiled using Solvency I supervisory data, supplemented by voluntary reports and own calculations. **1** Accounts receivable to monetary financial institutions, including registered bonds, borrowers' note loans and registered Pfandbriefe. For pension funds as of 2020 Q1 fair values, previously book values. **2** Including deposits retained on assumed reinsurance as well as registered bonds, borrowers' note loans and registered Pfandbriefe. For pension funds as of 2020 Q1 fair values, previously book values. **3** Including reinsurance recoverables and claims of pension funds on pension managers. **4** Valuation of listed securities at the corresponding consistent price from the ESCB's securities database. **5** Not including the reinsurance business conducted by primary insurers, which is included there. **6** The term "pension funds" refers to the institutional sector "pension funds" of the European System of Accounts. Pension funds thus comprise company pension schemes and occupational pension schemes for the self-employed. Social security funds are not included. **7** Change in data sources.

VII. Insurance corporations and pension funds

2. Liabilities

€ billion

End of year/quarter	Total	Debt securities issued	Loans [1]	Shares and other equity	Technical reserves			Financial derivatives	Remaining liabilities	Net worth [4]
					Total [2]	Life/ pension entitlements [3]	Non-life			
Insurance corporations										
2019 Q3	2,492.5	31.7	69.3	488.5	1,769.4	1,543.0	226.4	2.2	131.5	–
Q4	2,473.9	31.7	75.8	515.3	1,714.9	1,499.6	215.3	1.9	134.4	–
2020 Q1	2,426.8	31.8	82.4	464.3	1,721.8	1,483.2	238.6	2.4	124.1	–
Q2	2,517.5	33.1	82.2	505.3	1,767.6	1,527.7	239.9	1.9	127.3	–
Q3	2,547.1	34.3	80.0	515.7	1,785.5	1,549.1	236.4	1.7	129.9	–
Q4	2,587.4	36.6	79.7	540.4	1,799.0	1,579.2	219.8	1.6	130.2	–
2021 Q1	2,575.3	34.8	81.4	551.7	1,778.7	1,541.3	237.4	2.5	126.2	–
Q2	2,591.4	33.0	81.3	558.9	1,793.7	1,556.4	237.3	2.2	122.2	–
Q3	2,633.2	35.4	82.8	567.3	1,818.0	1,569.1	248.9	2.5	127.0	–
Q4	2,649.9	36.1	82.0	579.7	1,821.1	1,578.4	242.7	2.5	128.6	–
2022 Q1	2,543.0	34.4	82.2	565.5	1,728.6	1,474.6	254.0	4.0	128.3	–
Life insurance										
2019 Q3	1,350.1	3.7	15.6	116.0	1,171.9	1,171.9	–	0.6	42.4	–
Q4	1,325.2	3.6	19.1	127.6	1,129.7	1,129.7	–	0.5	44.7	–
2020 Q1	1,295.7	3.6	19.3	114.2	1,117.8	1,117.8	–	0.6	40.3	–
Q2	1,347.1	3.8	19.2	129.8	1,150.3	1,150.3	–	0.5	43.4	–
Q3	1,369.2	3.9	19.5	136.8	1,164.7	1,164.7	–	0.5	43.7	–
Q4	1,395.8	3.9	20.7	142.8	1,185.6	1,185.6	–	0.5	42.2	–
2021 Q1	1,361.2	3.3	19.9	143.1	1,154.3	1,154.3	–	1.0	39.6	–
Q2	1,371.7	3.3	20.4	144.2	1,164.9	1,164.9	–	1.0	37.9	–
Q3	1,386.6	3.3	19.3	148.1	1,176.4	1,176.4	–	1.1	38.4	–
Q4	1,400.8	3.3	20.7	148.2	1,185.5	1,185.5	–	0.9	42.2	–
2022 Q1	1,313.0	3.2	19.9	142.8	1,103.6	1,103.6	–	1.4	42.1	–
Non-life insurance										
2019 Q3	682.6	1.2	9.1	149.7	471.9	354.8	117.1	0.1	50.6	–
Q4	673.5	1.2	9.3	153.7	457.2	349.4	107.8	0.1	52.0	–
2020 Q1	669.3	1.3	9.8	141.9	468.2	344.4	123.8	0.1	48.0	–
Q2	685.4	1.3	9.5	149.3	478.1	355.6	122.5	0.1	47.1	–
Q3	693.0	1.2	9.6	151.9	482.1	362.3	119.8	0.1	48.1	–
Q4	703.1	1.3	9.7	157.9	482.9	368.7	114.2	0.0	51.2	–
2021 Q1	716.8	1.2	10.6	162.8	491.6	362.6	129.0	0.1	50.5	–
Q2	720.3	1.2	10.5	166.4	493.6	366.3	127.3	0.1	48.4	–
Q3	727.5	1.2	10.5	169.2	499.0	367.9	131.2	0.2	47.5	–
Q4	732.4	1.4	10.8	176.2	493.0	367.6	125.4	0.2	50.9	–
2022 Q1	721.8	1.3	11.8	174.3	484.0	347.2	136.8	0.3	50.1	–
Reinsurance [5]										
2019 Q3	459.9	26.8	44.7	222.8	125.6	16.3	109.3	1.5	38.5	–
Q4	475.2	26.9	47.4	234.0	128.0	20.6	107.5	1.3	37.7	–
2020 Q1	461.7	26.9	53.3	208.1	135.9	21.0	114.9	1.7	35.8	–
Q2	485.0	28.1	53.5	226.2	139.1	21.8	117.4	1.3	36.8	–
Q3	485.0	29.2	50.9	227.0	138.7	22.1	116.6	1.0	38.1	–
Q4	488.5	31.4	49.3	239.6	130.4	24.8	105.6	1.0	36.7	–
2021 Q1	497.3	30.2	50.9	245.8	132.8	24.4	108.4	1.4	36.2	–
Q2	499.4	28.5	50.4	248.3	135.2	25.2	110.0	1.1	35.9	–
Q3	519.0	30.9	53.0	250.1	142.7	24.9	117.8	1.3	41.1	–
Q4	516.7	31.4	50.5	255.3	142.6	25.3	117.3	1.4	35.5	–
2022 Q1	508.2	30.0	50.4	248.4	140.9	23.8	117.2	2.3	36.1	–
Pension funds [6]										
2019 Q3	726.5	–	8.2	8.4	628.2	628.2	–	–	2.9	78.9
Q4	735.8	–	8.4	8.6	638.0	638.0	–	–	3.7	77.1
2020 Q1 [7]	601.0	–	1.6	22.6	497.5	496.9	–	0.3	8.8	70.3
Q2	626.0	–	1.6	25.6	507.3	506.7	–	0.3	8.9	82.4
Q3	638.5	–	1.6	27.3	511.4	510.8	–	0.3	8.9	88.9
Q4	662.9	–	1.6	28.4	528.5	527.9	–	0.3	9.0	95.1
2021 Q1	664.3	–	1.6	28.8	529.3	528.1	–	0.3	8.6	95.8
Q2	683.2	–	1.8	31.1	536.5	534.8	–	0.2	9.3	104.3
Q3	689.8	–	1.8	31.5	541.1	538.9	–	0.2	9.3	106.0
Q4	709.8	–	1.9	31.8	560.5	557.6	–	0.1	9.2	106.4
2022 Q1	687.6	–	1.4	28.7	555.1	552.2	–	0.1	7.3	95.0

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 as of 2020 Q1. Until 2019 Q4 these are compiled using Solvency I supervisory data, supplemented by voluntary reports and own calculations. **1** Including deposits retained on ceded business as well as registered bonds, borrowers' note loans and registered Pfandbriefe. **2** Including claims of pension funds on pension managers and entitlements to non-pension benefits. **3** Technical reserves "life" taking account of transitional measures. Health insurance is also included in the "non-life insurance" sector. **4** Own funds correspond to the sum of "Net worth" and "Shares and other equity". **5** Not including the reinsurance business conducted by primary insurers, which is included there. **6** Valuation at book values. The term "pension funds" refers to the institutional sector "pension funds" of the European System of Accounts. Pension funds thus comprise company pension schemes and occupational pension schemes for the self-employed. Social security funds are not included. **7** Change in data sources.

VIII. Capital market

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

€ million

Period	Debt securities										
		Sales					Purchases				
		Domestic debt securities [1]					Residents				
	Sales = total purchases	Total	Bank debt securities	Corporate bonds (non-MFIs) [2]	Public debt securities	Foreign debt securities [3]	Total [4]	Credit institutions including building and loan associations [5]	Deutsche Bundesbank	Other sectors [6]	Non-residents [7]
2010	146,620	– 1,212	– 7,621	24,044	– 17,635	147,831	92,682	– 103,271	22,967	172,986	53,938
2011	33,649	13,575	– 46,796	850	59,521	20,075	– 23,876	– 94,793	36,805	34,112	57,525
2012	51,813	– 21,419	– 98,820	– 8,701	86,103	73,231	– 3,767	– 42,017	– 3,573	41,823	55,581
2013	– 15,971	– 101,616	– 117,187	153	15,415	85,645	16,409	– 25,778	– 12,708	54,895	– 32,379
2014	64,775	– 31,962	– 47,404	– 1,330	16,776	96,737	50,408	– 12,124	– 11,951	74,483	14,366
2015	33,024	– 36,010	– 65,778	26,762	3,006	69,034	116,493	– 66,330	121,164	61,659	– 83,471
2016	71,380	27,429	19,177	18,265	– 10,012	43,951	164,148	– 58,012	187,500	34,660	– 92,768
2017	54,840	11,563	1,096	7,112	3,356	43,277	137,907	– 71,454	161,012	48,349	– 83,067
2018	64,682	16,630	33,251	12,433	– 29,055	48,052	93,103	– 24,417	67,328	50,192	– 28,421
2019	136,117	68,536	29,254	32,505	6,778	67,581	59,013	8,059	2,408	48,546	77,104
2020	437,976	374,034	14,462	88,703	270,870	63,941	274,979	18,955	226,887	29,138	162,996
2021	283,684	221,648	31,941	19,754	169,953	62,036	310,838	– 41,852	245,198	107,492	– 27,154
2021 June	28,916	15,267	1,998	– 283	13,553	13,649	30,959	– 583	22,605	8,937	– 2,043
July	13,168	3,091	– 9,235	3,715	8,611	10,077	30,955	– 5,500	25,087	11,368	– 17,787
Aug.	27,503	34,709	6,868	1,227	26,615	– 7,206	11,907	– 5,337	17,312	– 68	15,596
Sep.	27,619	17,160	12,855	8,183	– 3,878	10,460	32,908	6,387	17,663	8,858	– 5,289
Oct.	103	3,176	7,354	– 7,515	3,337	– 3,073	9,377	– 17,904	20,765	6,517	– 9,275
Nov.	39,728	31,488	6,574	8,351	16,563	8,241	34,851	– 529	23,375	12,005	4,877
Dec.	– 39,780	– 23,893	– 17,511	– 8,944	2,561	– 15,886	– 1,271	– 9,420	14,137	– 5,988	– 38,509
2022 Jan.	50,489	25,937	10,503	6,559	8,876	24,552	41,057	– 2,870	14,990	28,936	9,432
Feb.	32,161	27,538	10,579	3,056	13,902	4,624	25,309	8,057	14,793	2,459	6,852
Mar.	62,464	43,108	22,778	7,972	12,358	19,356	46,054	6,811	10,709	28,535	16,409
Apr.	– 17,449	– 2,238	– 3,167	707	222	– 15,211	– 2,311	– 16,927	13,068	1,548	– 15,138
May	24,645	23,908	4,064	4,899	14,944	737	28,196	5,484	14,400	8,312	– 3,551

€ million

Period	Shares						
		Sales		Purchases			
				Residents			
	Sales = total purchases	Domestic shares [8]	Foreign shares [9]	Total [10]	Credit institutions [5]	Other sectors [11]	Non-residents [12]
2010	37,767	20,049	17,718	36,406	7,340	29,066	1,360
2011	25,833	21,713	4,120	40,804	670	40,134	– 14,971
2012	15,061	5,120	9,941	14,405	10,259	4,146	656
2013	20,187	10,106	10,081	17,336	11,991	5,345	2,851
2014	43,501	18,778	24,723	43,950	17,203	26,747	– 449
2015	44,165	7,668	36,497	34,437	– 5,421	39,858	9,728
2016	30,896	4,409	26,487	31,037	– 5,143	36,180	– 141
2017	51,571	15,570	36,001	49,913	7,031	42,882	1,658
2018	54,883	16,188	38,695	83,107	– 11,184	94,291	– 28,224
2019	46,021	9,076	36,945	33,675	– 1,119	34,794	12,346
2020	83,859	17,771	66,088	115,960	27	115,933	– 32,101
2021	125,541	49,066	76,475	124,105	10,869	113,236	1,436
2021 June	12,178	5,166	7,013	15,030	36	14,994	– 2,851
July	6,139	825	5,314	3,849	– 74	3,923	2,290
Aug.	11,293	4,667	6,626	11,585	204	11,381	– 291
Sep.	13,516	4,660	8,855	15,099	3,374	11,725	– 1,583
Oct.	10,042	5,498	4,544	15,060	1,401	13,659	– 5,018
Nov.	6,393	2,367	4,026	15,628	2,698	12,930	– 9,235
Dec.	13,692	10,698	2,995	6,987	– 1,848	8,835	6,705
2022 Jan.	6,155	396	5,760	9,711	2,076	7,635	– 3,556
Feb.	– 5,455	628	– 6,084	– 4,539	– 1,599	– 2,940	– 916
Mar.	9,478	359	9,119	14,188	– 1,736	15,924	– 4,710
Apr.	6,207	150	6,056	9,419	477	8,942	– 3,212
May	3,872	1,411	2,461	4,576	1,600	2,976	– 703

1 Net sales at market values plus/minus changes in issuers' portfolios of their own debt securities. **2** Including cross-border financing within groups from January 2011. **3** Net purchases or net sales (-) of foreign debt securities by residents; transaction values. **4** Domestic and foreign debt securities. **5** Book values; statistically adjusted. **6** Residual; also including purchases of domestic and foreign securities by domestic mutual funds. Up to end-2008 including Deutsche Bundesbank. **7** Net purchases or net sales (-) of domestic debt securities by non-residents; transaction values. **8** Excluding shares of public limited investment companies; at issue prices. **9** Net purchases or net sales (-) of foreign shares (including direct investment) by residents; transaction values. **10** Domestic and foreign shares. **11** Residual; also including purchases of domestic and foreign securities by domestic mutual funds. **12** Net purchases or net sales (-) of domestic shares (including direct investment) by non-residents; transaction values. — The figures for the most recent date are provisional; revisions are not specially marked.

VIII. Capital market

2. Sales of debt securities issued by residents *

€ million, nominal value

Period	Total	Bank debt securities 1					Corporate bonds (non-MFIs) 2	Public debt securities
		Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special-purpose credit institutions	Other bank debt securities		
Gross sales								
2011	1,337,772	658,781	31,431	24,295	376,876	226,180	86,614	592,375
2012	1,340,568	702,781	36,593	11,413	446,153	208,623	63,258	574,530
2013	1,433,628	908,107	25,775	12,963	692,611	176,758	66,630	458,892
2014	1,362,056	829,864	24,202	13,016	620,409	172,236	79,873	452,321
2015	1,359,422	852,045	35,840	13,376	581,410	221,417	106,675	400,701
2016 3	1,206,483	717,002	29,059	7,621	511,222	169,103	73,371	416,108
2017 3	1,047,822	619,199	30,339	8,933	438,463	141,466	66,290	362,332
2018	1,148,091	703,416	38,658	5,673	534,552	124,530	91,179	353,496
2019	1,285,541	783,977	38,984	9,587	607,900	127,504	94,367	407,197
2020 6	1,870,084	778,411	39,548	18,327	643,380	77,156	184,206	907,466
2021	1,658,004	795,271	41,866	17,293	648,996	87,116	139,775	722,958
2021 Sep.	153,543	68,421	4,772	1,250	55,371	7,028	20,886	64,236
Oct.	135,102	61,412	4,207	530	48,932	7,744	8,280	65,411
Nov.	129,342	59,684	2,153	1,000	47,873	8,658	10,898	58,759
Dec.	83,511	37,389	2,675	1,707	28,987	4,020	5,058	41,064
2022 Jan.	136,066	69,054	11,165	1,510	50,426	5,953	13,257	53,754
Feb.	123,858	67,336	5,174	1,364	54,198	6,600	9,451	47,071
Mar.	168,436	85,551	5,602	875	72,212	6,862	16,473	66,412
Apr.	129,238	68,828	3,091	140	59,957	5,640	8,317	52,093
May	139,084	71,012	3,777	1,809	60,597	4,830	15,238	52,833
of which: Debt securities with maturities of more than four years 4								
2011	368,039	153,309	13,142	8,500	72,985	58,684	41,299	173,431
2012	421,018	177,086	23,374	6,482	74,386	72,845	44,042	199,888
2013	372,805	151,797	16,482	10,007	60,662	64,646	45,244	175,765
2014	420,006	157,720	17,678	8,904	61,674	69,462	56,249	206,037
2015	414,593	179,150	25,337	9,199	62,237	82,379	68,704	166,742
2016 3	375,859	173,900	24,741	5,841	78,859	64,460	47,818	154,144
2017 3	357,506	170,357	22,395	6,447	94,852	46,663	44,891	142,257
2018	375,906	173,995	30,934	4,460	100,539	38,061	69,150	132,760
2019	396,617	174,390	26,832	6,541	96,673	44,346	69,682	152,544
2020 6	658,521	165,097	28,500	7,427	90,839	38,330	77,439	415,985
2021	486,335	171,799	30,767	6,336	97,816	36,880	64,234	250,303
2021 Sep.	58,157	18,007	4,400	0	10,365	3,241	12,400	27,750
Oct.	44,782	17,278	3,528	30	11,600	2,121	2,151	25,353
Nov.	29,324	9,512	1,705	500	4,165	3,142	5,667	14,145
Dec.	15,792	4,714	1,625	1,150	1,258	680	1,259	9,820
2022 Jan.	50,605	25,823	9,165	1,510	12,587	2,561	3,583	21,200
Feb.	41,368	22,391	3,487	1,364	14,364	3,175	2,101	16,876
Mar.	44,448	17,785	3,236	300	11,718	2,532	6,408	20,255
Apr.	28,734	13,879	1,926	50	10,089	1,814	1,050	13,805
May	33,822	12,448	3,173	1,264	6,238	1,774	4,423	16,950
Net sales 5								
2011	22,518	– 54,582	– 1,657	– 44,290	– 32,904	– 44,852	– 3,189	80,289
2012	– 85,298	– 100,198	– 4,177	– 41,660	– 3,259	– 51,099	– 6,401	21,298
2013	– 140,017	– 125,932	– 17,364	– 37,778	– 4,027	– 66,760	1,394	– 15,479
2014	– 34,020	– 56,899	– 6,313	– 23,856	– 862	– 25,869	10,497	12,383
2015	– 65,147	– 77,273	9,271	– 9,754	– 2,758	– 74,028	25,300	– 13,174
2016 3	21,951	10,792	2,176	– 12,979	16,266	5,327	18,177	– 7,020
2017 3	2,669	5,954	6,389	– 4,697	18,788	– 14,525	6,828	– 10,114
2018	2,758	26,648	19,814	– 6,564	18,850	– 5,453	9,738	– 33,630
2019	59,719	28,750	13,098	– 3,728	26,263	– 6,885	30,449	519
2020 6	473,795	28,147	8,661	8,816	22,067	– 11,398	49,536	396,113
2021	210,231	52,578	17,821	7,471	22,973	4,314	35,531	122,123
2021 Sep.	17,297	11,684	2,474	65	11,735	– 2,590	10,401	– 4,788
Oct.	9,819	7,037	2,418	– 536	3,831	1,325	513	2,269
Nov.	35,511	6,760	– 2,052	221	6,788	1,803	5,562	23,189
Dec.	– 27,509	– 13,602	1,753	– 179	– 11,559	– 3,618	– 6,028	– 7,878
2022 Jan.	10,739	12,647	6,459	– 397	5,370	1,214	5,409	– 7,317
Feb.	18,055	10,554	2,870	869	7,435	– 619	924	6,577
Mar.	41,894	23,733	2,097	250	20,258	1,128	7,541	10,620
Apr.	– 16,610	– 4,444	720	– 310	– 4,339	– 515	– 1,343	– 10,823
May	24,354	3,708	685	1,774	1,970	– 721	3,607	17,039

***** For definitions, see the explanatory notes in Statistical Series - Securities Issues Statistics on pages 43 f. **1** Excluding registered bank debt securities. **2** Including cross-border financing within groups from January 2011. **3** Sectoral reclassification of debt securities. **4** Maximum maturity according to the terms of issue. **5** Gross sales less redemptions. **6** Methodological changes since January 2020. — The figures for the year 2020 have been revised. The figures for the most recent date are provisional. Revisions are not specially marked.

VIII. Capital market

3. Amounts outstanding of debt securities issued by residents *

€ million, nominal value

End of year or month/ Maturity in years	Total	Bank debt securities					Corporate bonds (non-MFIs)	Public debt securities
		Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special-purpose credit institutions	Other bank debt securities		
2011	3,370,721	1,515,911	149,185	188,663	577,423	600,640	247,585	1,607,226
2012	3,285,422	1 1,414,349	145,007	147,070	574,163	1 548,109	1 220,456	1 1,650,617
2013	3,145,329	1,288,340	127,641	109,290	570,136	481,273	221,851	1,635,138
2014	3,111,308	1,231,445	121,328	85,434	569,409	455,274	232,342	1,647,520
2015	3,046,162	1,154,173	130,598	75,679	566,811	381,085	257,612	1,634,377
2016 1	3,068,111	1,164,965	132,775	62,701	633,578	335,910	275,789	1,627,358
2017 1	3,090,708	1,170,920	141,273	58,004	651,211	320,432	2 302,543	1,617,244
2018	3,091,303	1,194,160	161,088	51,439	670,062	1 311,572	1 2 313,527	1,583,616
2019	2 3,149,373	1,222,911	174,188	47,712	696,325	304,686	2 342,325	1,584,136
2020 4	2 3,545,200	2 1,174,817	183,980	55,959	687,710	2 247,169	2 379,342	1,991,040
2021	3,781,975	1,250,777	202,385	63,496	731,068	253,828	414,791	2,116,406
2021 Sep.	3,749,036	1,242,232	199,933	63,941	725,268	253,090	413,416	2,093,388
Oct.	3,761,389	1,250,677	202,470	63,409	730,167	254,631	413,813	2,096,898
Nov.	3,805,409	1,262,369	200,532	63,672	741,009	257,157	420,551	2,122,489
Dec.	3,781,975	1,250,777	202,385	63,496	731,068	253,828	414,791	2,116,406
2022 Jan.	3,793,633	1,267,273	208,867	63,110	739,737	255,559	420,487	2,105,873
Feb.	3,805,493	1,277,071	211,728	63,984	746,531	254,828	416,380	2,112,042
Mar.	3,851,703	1,302,963	213,413	64,234	769,133	256,182	424,584	2,124,156
Apr.	3,852,737	1,311,841	214,466	63,960	776,662	256,752	424,036	2,116,860
May	3,870,198	1,309,629	214,981	65,720	773,798	255,131	427,139	2,133,430
Breakdown by remaining period to maturity 3								**Position at end-May 2022**
bis unter 2	1 240 396	458 560	58 274	27 878	302 277	70 131	79 923	701 913
2 bis unter 4	714 953	311 786	54 277	15 108	185 990	56 411	82 257	320 910
4 bis unter 6	554 710	218 879	44 517	10 515	111 994	51 852	63 497	272 335
6 bis unter 8	393 595	131 352	33 745	5 954	68 965	22 687	43 331	218 911
8 bis unter 10	286 696	80 577	12 217	1 415	45 677	21 268	27 019	179 100
10 bis unter 15	239 400	62 190	7 671	4 403	38 394	11 722	36 610	140 600
15 bis unter 20	105 389	16 878	3 327	359	11 300	1 893	14 509	74 002
20 und darüber	335 059	29 408	953	88	9 200	19 167	79 993	225 658

***** Including debt securities temporarily held in the issuers' portfolios. **1** Sectoral reclassification of debt securities. **2** Adjustments due to the change in the country of residence of the issuers or debt securities. **3** Calculated from month under review until final maturity for debt securities falling due en bloc and until mean maturity of the residual amount outstanding for debt securities not falling due en bloc. **4** Methodological changes since January 2020. — The figures for the year 2020 have been revised. The figures for the most recent date are provisional. Revisions are not specially marked.

4. Shares in circulation issued by residents *

€ million, nominal value

Period	Share capital = circulation at end of period under review	Net increase or net decrease (-) during period under review	Change in domestic public limited companies' capital due to						Memo item: Share circulation at market values (market capitalisation) level at end of period under review 2
			cash payments and ex-change of convertible bonds 1	issue of bonus shares	contribution of claims and other real assets	merger and transfer of assets	change of legal form	reduction of capital and liquidation	
2011	177,167	2,570	6,390	552	462	– 552	– 762	– 3,532	924,214
2012	178,617	1,449	3,046	129	570	– 478	594	– 2,411	1,150,188
2013	171,741	– 6,879	2,971	718	476	– 1,432	– 619	– 8,992	1,432,658
2014	177,097	5,356	5,332	1,265	1,714	– 465	– 1,044	– 1,446	1,478,063
2015	177,416	319	4,634	397	599	– 1,394	– 1,385	– 2,535	1,614,442
2016	176,355	– 1,062	3,272	319	337	– 953	– 2,165	– 1,865	1,676,397
2017	178,828	2,471	3,894	776	533	– 457	– 661	– 1,615	1,933,733
2018	180,187	1,357	3,670	716	82	– 1,055	– 1,111	– 946	1,634,155
2019 3 4	183,461	1,673	2,411	2,419	542	– 858	– 65	– 2,775	1,950,224
2020 4	181,881	– 2,872	1,877	219	178	– 2,051	– 460	– 2,635	1,963,588
2021	186,580	4,152	9,561	672	35	– 326	– 212	– 5,578	2,301,942
2021 Sep.	186,316	230	678	6	11	– 14	– 9	– 443	2,238,994
Oct.	188,444	2,127	2,166	16	–	– 4	– 35	– 16	2,267,343
Nov.	188,352	– 109	85	–	6	– 5	– 1	– 194	2,198,231
Dec.	186,580	– 2,595	524	16	–	– 201	– 106	– 2,827	2,301,942
2022 Jan.	186,830	250	341	0	2	– 9	– 23	– 61	2,211,900
Feb.	186,737	– 110	64	9	40	– 11	– 76	– 137	2,060,901
Mar.	186,993	256	260	91	–	– 0	– 25	– 70	2,076,514
Apr.	186,971	25	47	1	–	– 0	– 4	– 19	2,007,353
May	187,056	84	215	42	0	– 0	– 0	– 172	2,004,018

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

VIII. Capital market

5. Yields and indices on German securities

Period	Yields on debt securities outstanding issued by residents [1]							Price indices [2,3]			
		Public debt securities			Bank debt securities			Debt securities		Shares	
			Listed Federal securities								
	Total	Total	Total	With a residual maturity of 9 to 10 years [4]	Total	With a residual maturity of more than 9 years and up to 10 years	Corporate bonds (non-MFIs)	German bond index (REX)	iBoxx € Germany price index	CDAX share price index	German share index (DAX)
	% per annum							Average daily rate	End-1998 = 100	End-1987 = 100	End-1987 = 1,000
2010	2.5	2.4	2.4	2.7	2.7	3.3	4.0	124.96	102.95	368.72	6,914.19
2011	2.6	2.4	2.4	2.6	2.9	3.5	4.3	131.48	109.53	304.60	5,898.35
2012	1.4	1.3	1.3	1.5	1.6	2.1	3.7	135.11	111.18	380.03	7,612.39
2013	1.3	1.3	1.3	1.6	1.3	2.1	3.4	132.11	105.92	466.53	9,552.16
2014	1.0	1.0	1.0	1.2	0.9	1.7	2.9	139.68	114.37	468.39	9,805.55
2015	0.5	0.4	0.4	0.5	0.5	1.2	2.4	139.52	112.42	508.80	10,743.01
2016	0.1	0.0	0.0	0.1	0.3	1.0	2.1	142.50	112.72	526.55	11,481.06
2017	0.3	0.2	0.2	0.3	0.4	0.9	1.7	140.53	109.03	595.45	12,917.64
2018	0.4	0.3	0.3	0.4	0.6	1.0	2.5	141.84	109.71	474.85	10,558.96
2019	– 0.1	– 0.2	– 0.3	– 0.3	0.1	0.3	2.5	143.72	111.32	575.80	13,249.01
2020	– 0.2	– 0.4	– 0.5	– 0.5	– 0.0	0.1	1.7	146.15	113.14	586.72	13,718.78
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 Jan.	0.1	– 0.1	– 0.2	– 0.2	0.2	0.5	1.2	143.24	107.29	636.37	15,471.20
Feb.	0.4	0.2	0.1	0.2	0.6	0.8	1.7	141.55	105.86	593.56	14,461.02
Mar.	0.6	0.3	0.2	0.3	0.8	1.0	2.1	138.06	102.90	583.63	14,414.75
Apr.	1.1	0.8	0.7	0.7	1.4	1.5	2.5	135.85	99.80	564.54	14,097.88
May	1.3	1.0	0.9	1.0	1.6	1.7	3.0	135.30	97.98	561.04	14,388.35
June	1.9	1.5	1.4	1.4	2.1	2.3	3.8	133.21	96.13	494.98	12,783.77

1 Bearer debt securities with maximum maturities according to the terms of issue of over 4 years. Structured debt securities, debt securities with unscheduled redemption, zero coupon bonds, floating rate notes and bonds not denominated in Euro are not included. Group yields for the various categories of securities are weighted by the amounts outstanding of the debt securities included in the calculation. Monthly figures are calculated on the basis of the yields on all the business days in a month. The annual figures are the unweighted means of the monthly figures. Adjustment of the scope of securities included on 1 May 2020. **2** End of year or month. **3** Source: Deutsche Börse AG. **4** Only debt securities eligible as underlying instruments for futures contracts; calculated as unweighted averages.

6. Sales and purchases of mutual fund shares in Germany

€ million

Period	Sales								Purchases					
		Open-end domestic mutual funds [1] (sales receipts)							Residents					
			Mutual funds open to the general public							Credit institutions including building and loan associations [2]		Other sectors [3]		
				of which:										
	Sales = total purchases	Total	Total	Money market funds	Securities-based funds	Real estate funds	Specialised funds	Foreign funds [4]	Total	Total	of which: Foreign mutual fund shares	Total	of which: Foreign mutual fund shares	Non-residents [5]
2010	106,190	84,906	13,381	– 148	8,683	1,897	71,345	21,284	102,591	3,873	6,290	98,718	14,994	3,598
2011	46,512	45,221	– 1,340	– 379	– 2,037	1,562	46,561	1,290	39,474	– 7,576	– 694	47,050	1,984	7,035
2012	111,236	89,942	2,084	– 1,036	97	3,450	87,859	21,293	114,676	– 3,062	– 1,562	117,738	22,855	– 3,437
2013	123,736	91,337	9,184	– 574	5,596	3,376	82,153	32,400	117,028	771	100	116,257	32,300	6,710
2014	140,233	97,711	3,998	– 473	862	1,000	93,713	42,521	144,075	819	– 1,745	143,256	44,266	– 3,840
2015	181,889	146,136	30,420	318	22,345	3,636	115,716	35,753	174,018	7,362	494	166,656	35,259	7,871
2016	156,985	119,369	21,301	– 342	11,131	7,384	98,068	37,615	163,934	2,877	– 3,172	161,057	40,787	– 6,947
2017	153,756	94,921	29,560	– 235	21,970	4,406	65,361	58,834	156,282	4,938	1,048	151,344	57,786	– 2,526
2018	132,033	103,694	15,279	377	4,166	6,168	88,415	28,339	138,713	2,979	– 2,306	135,734	30,645	– 6,680
2019	176,254	122,546	17,032	– 447	5,097	10,580	105,514	53,708	180,772	2,719	– 812	178,053	54,520	– 4,519
2020	178,613	116,028	19,193	– 42	11,343	8,795	96,835	62,585	176,751	336	– 1,656	176,415	64,241	1,862
2021	261,295	157,861	41,016	482	31,023	7,841	116,845	103,434	264,055	13,154	254	250,901	103,180	– 2,760
2021 Nov.	29,103	13,176	3,779	– 68	3,006	651	9,398	15,927	30,066	1,737	640	28,329	15,287	– 963
Dec.	48,350	34,875	3,380	121	2,182	751	31,495	13,475	49,676	1,186	– 704	48,490	14,179	– 1,326
2022 Jan.	23,418	16,969	5,142	– 25	3,876	1,164	11,827	6,448	22,780	1,178	120	21,602	6,328	638
Feb.	10,925	12,223	– 910	102	– 1,364	296	13,132	– 1,298	11,212	526	– 107	10,686	– 1,191	– 287
Mar.	5,368	6,548	– 299	188	– 1,082	596	6,847	– 1,180	7,930	– 132	– 244	8,062	– 936	– 2,562
Apr.	11,416	9,302	2,398	– 288	1,900	676	6,904	2,113	10,952	154	393	10,798	1,720	463
May	5,710	5,058	1,045	251	380	381	4,013	652	5,073	– 132	– 434	5,205	1,086	637

1 Including public limited investment companies. **2** Book values. **3** Residual. **4** Net purchases or net sales (-) of foreign fund shares by residents; transaction values. **5** Net purchases or net sales (-) of domestic fund shares by non-residents; transaction values. — The figures for the most recent date are provisional; revisions are not specially marked.

IX. Financial accounts

1. Acquisition of financial assets and external financing of non-financial corporations (non-consolidated)

€ billion

Item	2019	2020	2021	2020	2021				2022
				Q4	Q1	Q2	Q3	Q4	Q1
Acquisition of financial assets									
Currency and deposits	17.93	96.81	40.12	3.69	21.81	– 25.36	19.57	24.11	14.83
Debt securities	– 2.37	2.99	3.11	– 0.20	– 1.53	1.90	1.58	1.16	0.62
Short-term debt securities	– 1.29	1.27	2.27	– 0.18	0.12	0.77	0.26	1.12	0.39
Long-term debt securities	– 1.08	1.72	0.85	– 0.02	– 1.65	1.13	1.32	0.05	0.23
Memo item:									
Debt securities of domestic sectors	– 0.58	1.38	1.34	0.10	– 0.64	0.87	1.75	– 0.64	0.34
Non-financial corporations	0.49	– 0.17	0.74	– 0.48	0.10	0.62	0.59	– 0.57	0.17
Financial corporations	– 0.64	0.12	1.08	0.09	– 0.55	0.48	0.58	0.56	0.44
General government	– 0.43	1.44	– 0.48	0.49	– 0.20	– 0.24	0.58	– 0.63	– 0.27
Debt securities of the rest of the world	– 1.79	1.61	1.78	– 0.30	– 0.88	1.03	– 0.17	1.80	0.28
Loans	– 1.49	– 9.65	50.00	9.65	– 0.38	6.35	13.40	30.64	5.36
Short-term loans	12.60	– 7.30	38.01	6.11	– 3.95	7.92	11.48	22.56	– 2.72
Long-term loans	– 14.09	– 2.36	11.99	3.55	3.57	– 1.57	1.92	8.08	8.08
Memo item:									
Loans to domestic sectors	– 26.04	– 1.15	9.49	3.89	– 6.40	– 0.14	0.03	16.01	7.85
Non-financial corporations	– 28.14	– 12.27	7.11	– 4.90	– 1.66	– 3.40	– 1.21	13.38	2.44
Financial corporations	1.86	10.57	2.38	8.65	– 4.75	3.26	1.24	2.63	5.41
General government	0.24	0.55	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Loans to the rest of the world	24.55	– 8.51	40.51	5.77	6.02	6.49	13.37	14.63	– 2.49
Equity and investment fund shares	115.72	110.36	152.30	12.05	45.95	36.54	27.00	42.81	46.14
Equity	106.72	97.59	130.52	6.14	42.12	29.62	24.27	34.52	44.09
Listed shares of domestic sectors	6.18	– 77.97	15.33	– 67.75	12.08	4.92	– 18.27	16.59	6.03
Non-financial corporations	4.62	– 78.06	16.89	– 68.34	12.08	5.32	– 18.80	18.30	5.58
Financial corporations	1.55	0.09	– 1.56	0.60	0.01	– 0.41	0.54	– 1.70	0.46
Listed shares of the rest of the world	7.26	6.63	5.69	4.09	0.72	– 1.61	5.37	1.20	0.14
Other equity [1]	93.28	168.92	109.51	69.80	29.32	26.31	37.16	16.73	37.92
Investment fund shares	9.00	12.77	21.78	5.91	3.83	6.92	2.74	8.29	2.05
Money market fund shares	1.78	3.79	0.66	1.34	– 0.47	– 0.19	– 0.41	1.73	– 1.22
Non-MMF investment fund shares	7.22	8.99	21.12	4.57	4.31	7.11	3.15	6.56	3.26
Insurance technical reserves	1.81	2.76	2.87	0.80	0.78	0.80	0.61	0.68	– 0.11
Financial derivatives	– 0.62	– 27.52	15.95	– 11.28	13.93	2.31	0.45	– 0.73	18.66
Other accounts receivable	– 64.82	48.81	81.88	50.68	19.72	– 6.81	11.76	57.21	2.69
Total	66.15	224.57	346.24	65.38	100.28	15.72	74.37	155.88	88.19
External financing									
Debt securities	20.52	36.89	20.86	– 3.93	2.77	8.92	10.29	– 1.12	10.95
Short-term securities	4.88	– 4.40	2.51	– 5.42	– 1.19	1.23	3.50	– 1.02	3.85
Long-term securities	15.64	41.29	18.35	1.49	3.96	7.69	6.79	– 0.10	7.10
Memo item:									
Debt securities of domestic sectors	6.61	18.12	9.17	0.05	1.96	3.29	2.14	1.78	5.64
Non-financial corporations	0.49	– 0.17	0.74	– 0.48	0.10	0.62	0.59	– 0.57	0.17
Financial corporations	5.31	19.86	9.12	1.18	1.98	2.76	1.78	2.61	5.34
General government	0.47	– 0.22	0.09	0.01	0.14	0.03	0.02	– 0.10	– 0.01
Households	0.34	– 1.35	– 0.78	– 0.65	– 0.26	– 0.12	– 0.26	– 0.15	0.14
Debt securities of the rest of the world	13.91	18.77	11.70	– 3.98	0.81	5.63	8.15	– 2.89	5.31
Loans	82.74	79.12	91.65	9.41	31.98	– 10.47	20.51	49.63	39.28
Short-term loans	26.32	– 12.02	47.43	– 0.25	26.83	– 7.56	12.61	15.56	34.87
Long-term loans	56.42	91.14	44.22	9.65	5.16	– 2.91	7.90	34.07	4.42
Memo item:									
Loans from domestic sectors	29.49	31.20	65.39	– 0.78	35.31	– 13.90	6.89	37.09	39.29
Non-financial corporations	– 28.14	– 12.27	7.11	– 4.90	– 1.66	– 3.40	– 1.21	13.38	2.44
Financial corporations	56.99	7.63	43.57	– 7.64	34.35	– 15.53	5.48	19.27	36.90
General government	0.64	35.83	14.71	11.76	2.62	5.02	2.62	4.45	– 0.05
Loans from the rest of the world	53.25	47.92	26.26	10.19	– 3.33	3.43	13.61	12.55	– 0.01
Equity	11.69	60.37	61.44	21.89	14.63	8.50	17.93	20.38	3.11
Listed shares of domestic sectors	– 24.77	– 62.25	26.38	– 66.70	15.28	8.02	– 21.41	24.50	12.94
Non-financial corporations	4.62	– 78.06	16.89	– 68.34	12.08	5.32	– 18.80	18.30	5.58
Financial corporations	– 33.41	3.47	– 2.37	1.40	0.02	1.52	– 3.23	– 0.68	5.19
General government	– 0.01	0.26	– 0.09	– 0.01	– 0.07	– 0.07	– 0.00	0.04	0.18
Households	4.03	12.08	11.96	0.25	3.25	1.25	0.63	6.84	1.99
Listed shares of the rest of the world	– 1.16	10.09	18.94	1.68	– 4.97	– 1.16	31.69	– 6.62	– 12.78
Other equity [1]	37.61	112.54	16.11	86.91	4.32	1.64	7.65	2.50	2.95
Insurance technical reserves	7.55	5.84	5.84	1.46	1.46	1.46	1.46	1.46	1.46
Financial derivatives and employee stock options	– 1.38	0.54	14.32	1.26	1.27	8.20	3.93	0.93	0.37
Other accounts payable	8.21	15.29	154.58	22.40	50.12	10.08	31.35	63.03	29.03
Total	129.32	198.05	348.69	52.48	102.22	26.69	85.46	134.31	84.21

1 Including unlisted shares.

IX. Financial accounts

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

End of year/quarter; € billion

Item	2019	2020	2021	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1
Financial assets									
Currency and deposits	578.6	717.6	721.9	717.6	713.7	693.5	706.4	721.9	726.8
Debt securities	49.6	51.5	54.6	51.5	49.9	51.9	53.5	54.6	53.7
Short-term debt securities	3.7	4.8	7.4	4.8	5.0	5.9	6.2	7.4	7.9
Long-term debt securities	45.9	46.7	47.2	46.7	44.9	46.0	47.3	47.2	45.9
Memo item:									
Debt securities of domestic sectors	21.1	22.1	23.3	22.1	21.4	22.3	24.0	23.3	23.0
Non-financial corporations	5.0	4.7	5.3	4.7	4.7	5.3	5.9	5.3	5.2
Financial corporations	13.6	13.4	14.5	13.4	12.9	13.4	14.0	14.5	14.6
General government	2.6	4.0	3.5	4.0	3.8	3.6	4.1	3.5	3.2
Debt securities of the rest of the world	28.4	29.4	31.3	29.4	28.5	29.6	29.5	31.3	30.8
Loans	731.9	725.0	778.0	725.0	726.4	732.4	746.9	778.0	784.9
Short-term loans	568.5	566.1	605.1	566.1	562.7	570.5	582.7	605.1	603.6
Long-term loans	163.5	158.8	172.9	158.8	163.7	161.9	164.2	172.9	181.3
Memo item:									
Loans to domestic sectors	414.5	413.3	422.8	413.3	406.9	406.8	406.8	422.8	430.7
Non-financial corporations	339.9	327.6	334.7	327.6	325.9	322.5	321.3	334.7	337.2
Financial corporations	67.3	77.8	80.2	77.8	73.1	76.3	77.6	80.2	85.6
General government	7.3	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
Loans to the rest of the world	317.4	311.7	355.2	311.7	319.5	325.6	340.1	355.2	354.2
Equity and investment fund shares	2,439.7	2,534.2	2,889.9	2,534.2	2,701.1	2,788.2	2,844.7	2,889.9	2,815.9
Equity	2,249.7	2,329.5	2,649.7	2,329.5	2,488.7	2,564.1	2,617.3	2,649.7	2,583.7
Listed shares of domestic sectors	342.0	307.0	393.0	307.0	359.4	383.5	371.5	393.0	350.1
Non-financial corporations	332.9	298.9	384.9	298.9	350.9	375.0	361.7	384.9	342.4
Financial corporations	9.0	8.1	8.0	8.1	8.5	8.5	9.8	8.0	7.7
Listed shares of the rest of the world	52.2	68.1	73.5	68.1	72.5	70.2	72.6	73.5	69.5
Other equity [1]	1,855.5	1,954.4	2,183.2	1,954.4	2,056.8	2,110.3	2,173.2	2,183.2	2,164.1
Investment fund shares	190.0	204.7	240.2	204.7	212.4	224.1	227.5	240.2	232.2
Money market fund shares	3.2	7.0	7.6	7.0	6.5	6.3	5.9	7.6	6.4
Non-MMF investment fund shares	186.8	197.7	232.6	197.7	205.9	217.8	221.6	232.6	225.8
Insurance technical reserves	59.2	62.1	64.8	62.1	62.8	63.6	64.1	64.8	64.8
Financial derivatives	31.6	31.1	26.0	31.1	30.9	52.0	106.6	26.0	147.9
Other accounts receivable	1,251.2	1,236.0	1,450.3	1,236.0	1,344.9	1,336.3	1,386.4	1,450.3	1,494.0
Total	5,141.7	5,357.5	5,985.5	5,357.5	5,629.7	5,717.8	5,908.6	5,985.5	6,088.1
Liabilities									
Debt securities	204.7	238.3	252.3	238.3	239.5	249.3	256.1	252.3	245.3
Short-term securities	11.9	7.1	9.6	7.1	5.9	7.2	10.6	9.6	13.4
Long-term securities	192.9	231.2	242.7	231.2	233.6	242.1	245.5	242.7	231.8
Memo item:									
Debt securities of domestic sectors	77.7	96.0	100.6	96.0	95.6	99.5	99.7	100.6	98.6
Non-financial corporations	5.0	4.7	5.3	4.7	4.7	5.3	5.9	5.3	5.2
Financial corporations	57.8	78.1	83.2	78.1	78.0	81.2	81.2	83.2	81.8
General government	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4
Households	14.4	12.8	11.8	12.8	12.5	12.5	12.1	11.8	11.2
Debt securities of the rest of the world	127.0	142.3	151.7	142.3	143.9	149.8	156.4	151.7	146.6
Loans	2,178.5	2,251.6	2,353.2	2,251.6	2,292.2	2,278.4	2,301.9	2,353.2	2,397.8
Short-term loans	831.3	813.1	864.2	813.1	842.6	834.7	847.8	864.2	900.7
Long-term loans	1,347.2	1,438.4	1,489.0	1,438.4	1,449.6	1,443.6	1,454.1	1,489.0	1,497.1
Memo item:									
Loans from domestic sectors	1,357.9	1,385.9	1,452.3	1,385.9	1,425.0	1,408.8	1,416.4	1,452.3	1,495.4
Non-financial corporations	339.9	327.6	334.7	327.6	325.9	322.5	321.3	334.7	337.2
Financial corporations	967.7	970.9	1,016.2	970.9	1,009.5	991.5	997.8	1,016.2	1,056.9
General government	50.4	87.4	101.5	87.4	89.6	94.7	97.3	101.5	101.4
Loans from the rest of the world	820.6	865.7	900.9	865.7	867.2	869.6	885.5	900.9	902.4
Equity	3,096.8	3,260.9	3,689.0	3,260.9	3,522.5	3,640.3	3,645.9	3,689.0	3,391.9
Listed shares of domestic sectors	734.1	739.9	924.8	739.9	848.8	896.1	882.4	924.8	840.0
Non-financial corporations	332.9	298.9	384.9	298.9	350.9	375.0	361.7	384.9	342.4
Financial corporations	158.0	171.9	210.2	171.9	193.0	202.9	196.9	210.2	194.3
General government	51.8	56.3	69.9	56.3	67.3	71.8	70.6	69.9	70.0
Households	191.3	212.8	259.7	212.8	237.6	246.3	253.2	259.7	233.2
Listed shares of the rest of the world	958.6	995.6	1,126.3	995.6	1,081.5	1,125.8	1,119.2	1,126.3	984.0
Other equity [1]	1,404.2	1,525.5	1,637.9	1,525.5	1,592.3	1,618.4	1,644.2	1,637.9	1,567.9
Insurance technical reserves	277.3	283.1	289.0	283.1	284.6	286.1	287.5	289.0	290.4
Financial derivatives and employee stock options	68.8	83.3	47.7	83.3	57.2	76.5	128.7	47.7	136.7
Other accounts payable	1,302.0	1,285.7	1,538.3	1,285.7	1,388.4	1,375.8	1,454.9	1,538.3	1,581.0
Total	7,128.2	7,402.9	8,169.5	7,402.9	7,784.4	7,906.3	8,075.0	8,169.5	8,043.2

1 Including unlisted shares.

IX. Financial accounts

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

€ billion

Item	2019	2020	2021	2020	2021				2022
				Q4	Q1	Q2	Q3	Q4	Q1
Acquisition of financial assets									
Currency and deposits	146.74	213.23	145.52	75.28	48.30	53.09	12.09	32.05	9.29
Currency	35.26	61.86	59.79	16.47	12.66	16.45	14.97	15.70	13.47
Deposits	111.49	151.36	85.74	58.82	35.64	36.63	– 2.87	16.34	– 4.17
Transferable deposits	111.01	165.34	90.84	56.20	34.10	37.70	2.69	16.35	– 0.99
Time deposits	5.95	1.29	– 4.97	2.52	0.06	– 1.06	– 3.76	– 0.21	– 1.12
Savings deposits (including savings certificates)	– 5.47	– 15.26	– 0.13	0.10	1.48	– 0.01	– 1.81	0.20	– 2.07
Debt securities	– 1.86	– 5.94	– 5.89	– 3.18	– 2.66	– 1.30	– 1.32	– 0.62	2.79
Short-term debt securities	– 0.53	0.08	0.31	– 0.16	0.16	0.22	– 0.10	0.03	– 0.04
Long-term debt securities	– 1.34	– 6.02	– 6.20	– 3.03	– 2.82	– 1.52	– 1.22	– 0.64	2.83
Memo item:									
Debt securities of domestic sectors	– 2.93	– 2.56	– 3.70	– 1.79	– 1.07	– 1.26	– 0.99	– 0.39	2.26
Non-financial corporations	0.21	– 1.32	– 0.83	– 0.62	– 0.28	– 0.13	– 0.25	– 0.16	0.08
Financial corporations	– 2.23	– 1.26	– 2.57	– 1.02	– 0.67	– 1.02	– 0.66	– 0.23	2.34
General government	– 0.92	0.02	– 0.30	– 0.15	– 0.12	– 0.11	– 0.08	0.00	– 0.16
Debt securities of the rest of the world	1.07	– 3.38	– 2.19	– 1.39	– 1.59	– 0.04	– 0.33	– 0.23	0.53
Equity and investment fund shares	49.20	90.18	136.53	21.48	28.09	31.66	34.68	42.10	30.51
Equity	18.92	48.53	31.74	7.73	2.60	7.28	7.57	14.30	7.79
Listed shares of domestic sectors	6.61	16.05	14.21	– 0.35	3.39	2.20	2.34	6.29	2.71
Non-financial corporations	3.52	11.92	12.64	0.33	3.12	1.58	1.82	6.12	1.97
Financial corporations	3.09	4.14	1.58	– 0.68	0.27	0.62	0.52	0.17	0.74
Listed shares of the rest of the world	7.45	23.28	10.86	6.44	– 1.72	3.54	3.77	5.26	3.44
Other equity [1]	4.86	9.19	6.68	1.64	0.92	1.54	1.46	2.76	1.64
Investment fund shares	30.28	41.65	104.79	13.75	25.50	24.38	27.11	27.80	22.72
Money market fund shares	– 0.32	0.09	0.18	– 0.29	0.09	– 0.07	– 0.01	0.18	– 0.02
Non-MMF investment fund shares	30.60	41.56	104.61	14.04	25.41	24.46	27.12	27.62	22.74
Non-life insurance technical reserves and provision for calls under standardised guarantees	17.95	18.34	20.31	1.73	5.40	5.58	3.73	5.60	5.67
Life insurance and annuity entitlements	37.76	47.65	51.92	13.04	16.40	11.14	13.30	11.07	13.15
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	37.31	33.74	27.34	9.78	6.00	4.34	5.03	11.98	5.43
Financial derivatives and employee stock options	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other accounts receivable [2]	– 14.28	– 10.38	– 1.26	– 17.41	21.43	– 3.27	6.74	– 26.16	17.47
Total	272.82	386.81	374.48	100.72	122.96	101.24	74.26	76.02	84.32
External financing									
Loans	82.57	83.92	98.64	25.15	16.73	27.53	30.68	23.70	20.36
Short-term loans	1.02	– 5.61	0.86	– 1.12	0.47	0.79	1.21	– 1.61	0.66
Long-term loans	81.55	89.52	97.78	26.27	16.26	26.74	29.47	25.31	19.69
Memo item:									
Mortgage loans	68.58	85.69	100.36	25.51	18.69	26.54	29.34	25.78	19.22
Consumer loans	14.42	– 4.29	– 0.89	– 0.66	– 1.14	– 0.09	2.38	– 2.04	0.23
Entrepreneurial loans	– 0.43	2.51	– 0.82	0.29	– 0.82	1.08	– 1.04	– 0.04	0.91
Memo item:									
Loans from monetary financial institutions	73.41	83.17	94.32	22.37	14.85	27.19	28.38	23.91	20.70
Loans from financial corporations other than MFIs	9.16	0.75	4.32	2.78	1.89	0.34	2.30	– 0.21	– 0.35
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	0.01
Financial derivatives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other accounts payable	0.73	0.01	0.90	– 0.38	0.01	0.01	0.25	0.63	– 0.95
Total	83.30	83.93	99.54	24.77	16.74	27.54	30.93	24.33	19.40

1 Including unlisted shares. **2** Including accumulated interest-bearing surplus shares with insurance corporations.

IX. Financial accounts

4. Financial assets and liabilities of households (non-consolidated)

End of year/quarter; € billion

Item	2019	2020	2021	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1
Financial assets									
Currency and deposits	2,647.4	2,860.3	3,005.1	2,860.3	2,908.7	2,961.8	2,973.1	3,005.1	3,014.1
Currency	262.6	324.4	384.2	324.4	337.1	353.6	368.5	384.2	397.7
Deposits	2,384.8	2,535.8	2,620.9	2,535.8	2,571.6	2,608.3	2,604.6	2,620.9	2,616.4
Transferable deposits	1,509.1	1,674.1	1,764.4	1,674.1	1,708.3	1,746.0	1,748.1	1,764.4	1,763.5
Time deposits	301.6	302.8	297.7	302.8	302.9	301.9	297.9	297.7	296.3
Savings deposits (including savings certificates)	574.2	558.9	558.8	558.9	560.4	560.4	558.6	558.8	556.7
Debt securities	121.4	113.3	109.6	113.3	112.8	111.6	110.1	109.6	109.4
Short-term debt securities	1.6	1.6	1.8	1.6	1.7	1.9	1.8	1.8	1.7
Long-term debt securities	119.8	111.7	107.8	111.7	111.0	109.7	108.3	107.8	107.7
Memo item:									
Debt securities of domestic sectors	81.5	76.7	75.3	76.7	77.3	76.5	75.3	75.3	75.2
Non-financial corporations	12.4	10.9	9.8	10.9	10.5	10.5	10.2	9.8	9.4
Financial corporations	66.6	63.3	63.2	63.3	64.4	63.7	62.9	63.2	63.8
General government	2.5	2.6	2.2	2.6	2.4	2.3	2.2	2.2	2.0
Debt securities of the rest of the world	39.9	36.5	34.3	36.5	35.4	35.1	34.8	34.3	34.2
Equity and investment fund shares	1,388.2	1,541.0	1,901.6	1,541.0	1,659.4	1,746.3	1,794.3	1,901.6	1,839.9
Equity	708.0	806.4	969.1	806.4	868.6	904.8	923.8	969.1	926.5
Listed shares of domestic sectors	223.9	243.3	296.0	243.3	271.7	280.0	287.1	296.0	271.0
Non-financial corporations	182.3	204.0	250.4	204.0	228.2	236.9	244.3	250.4	224.7
Financial corporations	41.6	39.2	45.6	39.2	43.4	43.1	42.7	45.6	46.3
Listed shares of the rest of the world	136.3	180.6	249.3	180.6	199.5	216.5	223.3	249.3	240.9
Other equity [1]	347.8	382.6	423.8	382.6	397.4	408.2	413.4	423.8	414.7
Investment fund shares	680.3	734.6	932.5	734.6	790.7	841.5	870.5	932.5	913.4
Money market fund shares	2.3	2.3	2.5	2.3	2.4	2.3	2.3	2.5	2.5
Non-MMF investment fund shares	678.0	732.2	930.0	732.2	788.3	839.2	868.2	930.0	910.9
Non-life insurance technical reserves and provision for calls under standardised guarantees	393.8	412.2	432.5	412.2	417.6	423.2	426.9	432.5	438.2
Life insurance and annuity entitlements	1,069.1	1,112.1	1,162.2	1,112.1	1,128.0	1,138.7	1,151.6	1,162.2	1,175.5
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	924.5	956.8	986.2	956.8	962.8	967.2	972.2	986.2	985.6
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable [2]	29.6	27.9	27.5	27.9	27.8	28.2	28.5	27.5	25.8
Total	6,574.1	7,023.6	7,624.7	7,023.6	7,217.1	7,377.0	7,456.6	7,624.7	7,588.4
Liabilities									
Loans	1,837.9	1,924.6	2,023.5	1,924.6	1,939.6	1,969.5	2,000.5	2,023.5	2,041.2
Short-term loans	59.0	53.2	53.0	53.2	53.6	54.4	55.6	53.0	53.7
Long-term loans	1,778.9	1,871.3	1,970.5	1,871.3	1,886.0	1,915.1	1,944.9	1,970.5	1,987.6
Memo item:									
Mortgage loans	1,358.7	1,448.2	1,548.5	1,448.2	1,464.8	1,493.8	1,523.0	1,548.5	1,565.3
Consumer loans	231.4	226.1	224.5	226.1	224.6	224.4	226.7	224.5	224.9
Entrepreneurial loans	247.7	250.2	250.5	250.2	250.2	251.2	250.8	250.5	251.1
Memo item:									
Loans from monetary financial institutions	1,741.6	1,824.6	1,920.3	1,824.6	1,839.8	1,867.3	1,896.1	1,920.3	1,941.0
Loans from financial corporations other than MFIs	96.3	99.9	103.2	99.9	99.8	102.2	104.4	103.2	100.2
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	19.9	19.4	19.1	19.4	20.6	19.5	19.8	19.1	20.5
Total	1,857.7	1,943.9	2,042.6	1,943.9	1,960.2	1,989.0	2,020.3	2,042.6	2,061.8

1 Including unlisted shares. **2** Including accumulated interest-bearing surplus shares with insurance corporations.

X. Public finances in Germany

1. General government: deficit/surplus and debt level as defined in the Maastricht Treaty

Period	General government	Central government	State government	Local government	Social security funds	General government	Central government	State government	Local government	Social security funds
	€ billion					As a percentage of GDP				
	Deficit/surplus[1]									
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 **p**	+ 64.4	+ 21.1	+ 11.7	+ 15.6	+ 16.0	+ 1.9	+ 0.6	+ 0.3	+ 0.5	+ 0.5
2019 **p**	+ 51.1	+ 22.0	+ 13.8	+ 6.1	+ 9.1	+ 1.5	+ 0.6	+ 0.4	+ 0.2	+ 0.3
2020 **p**	– 145.2	– 86.4	– 30.1	+ 6.3	– 35.0	– 4.3	– 2.6	– 0.9	+ 0.2	– 1.0
2021 **pe**	– 130.8	– 142.4	+ 3.3	+ 4.0	+ 4.3	– 3.7	– 4.0	+ 0.1	+ 0.1	+ 0.1
2020 H1 **p**	– 47.8	– 26.9	– 9.2	+ 0.8	– 12.5	– 2.9	– 1.6	– 0.6	+ 0.0	– 0.8
H2 **p**	– 97.4	– 59.5	– 20.9	+ 5.5	– 22.5	– 5.6	– 3.4	– 1.2	+ 0.3	– 1.3
2021 H1 **pe**	– 74.3	– 59.5	– 3.5	+ 1.4	– 12.7	– 4.3	– 3.5	– 0.2	+ 0.1	– 0.7
H2 **pe**	– 56.5	– 82.9	+ 6.8	+ 2.6	+ 17.0	– 3.0	– 4.5	+ 0.4	+ 0.1	+ 0.9
	Debt level[2]									End of year or quarter
2016	2,161.5	1,365.6	642.3	166.2	1.2	69.0	43.6	20.5	5.3	0.0
2017	2,111.4	1,349.9	614.9	162.7	0.8	64.6	41.3	18.8	5.0	0.0
2018 **p**	2,062.6	1,322.9	600.8	155.1	0.7	61.2	39.3	17.8	4.6	0.0
2019 **p**	2,045.7	1,299.7	609.8	152.9	0.7	58.9	37.4	17.6	4.4	0.0
2020 **p**	2,314.1	1,512.9	660.6	154.1	7.4	68.7	44.9	19.6	4.6	0.2
2021 **p**	2,475.8	1,666.4	669.0	154.7	0.3	69.3	46.7	18.7	4.3	0.0
2020 Q1 **p**	2,090.1	1,327.5	623.1	153.4	0.8	60.1	38.1	17.9	4.4	0.0
Q2 **p**	2,259.6	1,473.7	645.1	153.6	1.0	66.4	43.3	19.0	4.5	0.0
Q3 **p**	2,333.1	1,536.7	655.6	154.7	4.6	69.0	45.5	19.4	4.6	0.1
Q4 **p**	2,314.1	1,512.9	660.6	154.1	7.4	68.7	44.9	19.6	4.6	0.2
2021 Q1 **p**	2,345.0	1,538.6	665.6	154.2	16.2	69.9	45.8	19.8	4.6	0.5
Q2 **p**	2,398.8	1,588.7	669.6	155.5	21.2	69.6	46.1	19.4	4.5	0.6
Q3 **p**	2,432.5	1,616.7	674.8	155.1	24.2	69.3	46.1	19.2	4.4	0.7
Q4 **p**	2,475.8	1,666.4	669.0	154.7	0.3	69.3	46.7	18.7	4.3	0.0
2022 Q1 **p**	2,482.5	1,671.2	668.0	157.2	3.1	68.2	45.9	18.4	4.3	0.1

Sources: Federal Statistical Office and Bundesbank calculations. **1** The deficit/surplus in accordance with ESA 2010 corresponds to the Maastricht definition. **2** Quarterly GDP ratios are based on the national output of the four preceding quarters.

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

Period	Revenue				Expenditure							Deficit/ surplus	Memo item: Total tax burden **1**
	Total	of which: Taxes	of which: Social contributions	of which: Other	Total	of which: Social benefits	of which: Compensation of employees	of which: Intermediate consumption	of which: Gross capital formation	of which: Interest	of which: Other		
	€ billion												
2016	1,426.7	739.2	524.3	163.3	1,390.4	754.5	240.7	162.5	68.1	37.3	127.2	+ 36.4	1,270.4
2017	1,486.9	773.3	549.5	164.2	1,443.3	784.8	250.6	169.5	71.6	33.8	132.9	+ 43.7	1,329.5
2018 **p**	1,557.3	808.2	572.6	176.5	1,492.8	805.6	260.3	176.2	78.4	31.1	141.3	+ 64.4	1,387.8
2019 **p**	1,613.8	834.4	598.2	181.2	1,562.7	846.6	272.7	184.2	83.7	27.3	148.3	+ 51.1	1,439.7
2020 **p**	1,566.9	782.1	607.9	176.9	1,712.1	905.2	284.1	209.8	90.9	21.0	201.2	– 145.2	1,397.0
2021 **pe**	1,711.1	888.2	633.3	189.6	1,841.9	938.0	294.0	229.9	92.1	21.8	266.0	– 130.8	1,529.0
	As a percentage of GDP												
2016	45.5	23.6	16.7	5.2	44.4	24.1	7.7	5.2	2.2	1.2	4.1	+ 1.2	40.5
2017	45.5	23.7	16.8	5.0	44.2	24.0	7.7	5.2	2.2	1.0	4.1	+ 1.3	40.7
2018 **p**	46.2	24.0	17.0	5.2	44.3	23.9	7.7	5.2	2.3	0.9	4.2	+ 1.9	41.2
2019 **p**	46.5	24.0	17.2	5.2	45.0	24.4	7.9	5.3	2.4	0.8	4.3	+ 1.5	41.5
2020 **p**	46.5	23.2	18.1	5.3	50.8	26.9	8.4	6.2	2.7	0.6	6.0	– 4.3	41.5
2021 **pe**	47.9	24.9	17.7	5.3	51.6	26.3	8.2	6.4	2.6	0.6	7.5	– 3.7	42.8
	Percentage growth rates												
2016	+ 4.5	+ 4.8	+ 4.6	+ 2.9	+ 4.1	+ 4.5	+ 3.3	+ 6.2	+ 5.6	– 11.7	+ 4.9	.	+ 4.7
2017	+ 4.2	+ 4.6	+ 4.8	+ 0.5	+ 3.8	+ 4.0	+ 4.1	+ 4.3	+ 5.1	– 9.3	+ 4.5	.	+ 4.7
2018 **p**	+ 4.7	+ 4.5	+ 4.2	+ 7.5	+ 3.4	+ 2.7	+ 3.9	+ 3.9	+ 9.5	– 8.0	+ 6.3	.	+ 4.4
2019 **p**	+ 3.6	+ 3.2	+ 4.5	+ 2.7	+ 4.7	+ 5.1	+ 4.8	+ 4.5	+ 6.8	– 12.2	+ 5.0	.	+ 3.7
2020 **p**	– 2.9	– 6.3	+ 1.6	– 2.4	+ 9.6	+ 6.9	+ 4.2	+ 13.9	+ 8.7	– 23.4	+ 35.7	.	– 3.0
2021 **pe**	+ 9.2	+ 13.6	+ 4.2	+ 7.2	+ 7.6	+ 3.6	+ 3.5	+ 9.6	+ 1.3	+ 4.0	+ 32.3	.	+ 9.5

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											
		of which:			of which: [3]										
	Total [4]	Taxes	Financial transactions [5]	Total [4]	Personnel expenditure	Current grants	Interest	Fixed asset formation	Financial transactions [5]	Deficit/ surplus	Revenue [6]	Expenditure	Deficit/ surplus	Revenue	Expenditure	Deficit/ surplus
2015 **p**	829.8	673.3	10.4	804.3	244.1	302.7	49.8	46.4	12.5	+ 25.5	575.0	573.1	+ 1.9	1,301.1	1,273.6	+ 27.4
2016 **p**	862.3	705.8	9.0	844.5	251.3	321.6	43.4	49.0	11.8	+ 17.8	601.8	594.8	+ 7.1	1,355.1	1,330.2	+ 24.9
2017 **p**	900.3	734.5	7.9	869.4	261.6	327.9	42.0	52.3	13.8	+ 30.8	631.5	622.0	+ 9.5	1,417.5	1,377.2	+ 40.3
2018 **p**	951.8	776.3	6.2	905.6	272.5	338.0	39.2	55.8	16.1	+ 46.2	656.2	642.5	+ 13.6	1,490.7	1,430.9	+ 59.8
2019 **p**	1,010.3	799.4	11.2	975.5	285.9	349.7	33.6	62.9	16.8	+ 34.8	685.0	676.7	+ 8.3	1,573.8	1,530.8	+ 43.0
2020 **p**	946.9	739.9	13.9	1,108.0	299.5	422.8	25.9	69.2	59.9	– 161.1	719.5	747.8	– 28.3	1,518.8	1,708.1	– 189.3
2021 **p**	1,101.6	833.3	24.9	1,240.4	310.6	530.9	21.0	69.5	26.2	– 138.9	769.2	775.2	– 6.0	1,698.3	1,843.2	– 144.9
2019 Q1 **p**	240.9	192.7	2.5	227.7	68.3	88.5	11.5	10.2	3.3	+ 13.2	163.3	166.4	– 3.1	374.3	364.1	+ 10.2
Q2 **p**	256.3	201.7	2.0	236.1	70.1	87.0	12.2	13.0	2.6	+ 20.1	169.9	168.4	+ 1.5	396.1	374.5	+ 21.6
Q3 **p**	245.3	194.7	3.4	236.7	70.9	86.2	4.5	16.4	3.1	+ 8.6	168.8	170.3	– 1.5	384.0	376.9	+ 7.1
Q4 **p**	269.1	210.6	3.2	272.2	76.1	87.5	5.1	22.5	7.7	– 3.1	181.9	172.6	+ 9.3	420.7	414.5	+ 6.2
2020 Q1 **p**	244.8	197.4	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**	211.9	158.1	2.7	271.8	72.2	119.1	8.6	15.4	3.4	– 59.8	175.9	187.0	– 11.1	354.5	425.4	– 70.9
Q3 **p**	227.8	181.4	4.0	282.3	72.4	102.0	1.4	18.3	34.3	– 54.5	181.1	195.0	– 13.9	370.1	438.5	– 68.4
Q4 **p**	259.3	202.0	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	185.2	4.3	300.6	75.5	134.4	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	297.2	74.8	123.2	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	117.5	– 0.4	16.5	10.4	– 19.3	183.4	191.9	– 8.6	413.5	441.4	– 27.8
Q4 **p**	326.6	237.8	5.5	342.5	83.9	148.1	3.1	25.9	– 9.4	– 15.9	197.3	190.4	+ 6.9	486.3	495.3	– 9.0

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

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

€ billion

Period	Central government			State government [2,3]			Local government [3]		
	Revenue [1]	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus
2015 **p**	338.3	326.5	+ 11.8	355.1	350.6	+ 4.5	232.7	229.1	+ 3.6
2016 **p**	344.7	338.4	+ 6.2	381.1	372.4	+ 8.8	248.9	243.1	+ 5.8
2017 **p**	357.8	352.8	+ 5.0	397.7	385.8	+ 11.8	260.3	249.1	+ 11.2
2018 **p**	374.4	363.5	+ 10.9	420.5	400.1	+ 20.4	271.8	261.5	+ 10.2
2019 **p**	382.5	369.2	+ 13.3	437.2	419.6	+ 17.6	284.2	278.1	+ 6.1
2020 **p**	341.4	472.1	– 130.7	456.4	489.4	– 33.0	297.0	294.6	+ 2.4
2021 **p**	370.3	585.9	– 215.6	513.1	508.9	+ 4.2	309.9	304.8	+ 5.1
2019 Q1 **p**	84.7	86.1	– 1.4	105.7	96.7	+ 8.9	58.2	63.2	– 4.9
Q2 **p**	97.7	90.3	+ 7.4	106.0	100.2	+ 5.8	70.6	65.9	+ 4.7
Q3 **p**	93.2	91.3	+ 1.9	107.9	102.6	+ 5.2	69.1	69.2	– 0.1
Q4 **p**	106.9	101.5	+ 5.4	115.5	118.4	– 2.9	84.5	78.4	+ 6.0
2020 Q1 **p**	92.3	90.4	+ 1.9	105.6	99.7	+ 5.9	57.9	67.7	– 9.8
Q2 **p**	70.8	114.8	– 44.0	108.2	128.0	– 19.8	69.4	69.4	+ 0.1
Q3 **p**	83.7	105.4	– 21.7	112.9	113.7	– 0.8	67.5	72.6	– 5.1
Q4 **p**	94.5	161.5	– 67.0	127.4	146.3	– 18.9	100.3	83.5	+ 16.8
2021 Q1 **p**	75.0	127.5	– 52.5	113.7	120.7	– 7.1	61.1	69.7	– 8.6
Q2 **p**	86.4	123.5	– 37.1	122.8	122.0	+ 0.8	74.6	71.7	+ 2.9
Q3 **p**	93.9	128.7	– 34.7	125.9	120.2	+ 5.7	74.6	74.9	– 0.3
Q4 **p**	115.1	206.3	– 91.2	148.5	144.3	+ 4.2	97.6	87.0	+ 10.6

Source: Bundesbank calculations based on Federal Statistical Office data. **1** Any amounts of the Bundesbank's profit distribution exceeding the reference value that were used to repay parts of the debt of central government's special funds are not included here. **2** Including the local authority level of the city states Berlin, Bremen and Hamburg. **3** Quarterly data of core budgets and off-budget entities which are assigned to the general government sector.

X. Public finances in Germany

5. Central, state and local government: tax revenue

€ million

Period	Total	Central and state government and European Union				Local government [3]	Balance of untransferred tax shares [4]	Memo item: Amounts deducted in the Federal budget [5]
		Total	Central government [1]	State government [1]	European Union [2]			
2015	673,276	580,485	308,849	240,698	30,938	93,003	– 212	27,241
2016	705,797	606,965	316,854	260,837	29,273	98,648	+ 186	27,836
2017	734,540	629,458	336,730	271,046	21,682	105,158	– 76	27,368
2018	776,314	665,005	349,134	287,282	28,589	111,308	+ 1	26,775
2019	799,416	684,491	355,050	298,519	30,921	114,902	+ 23	25,998
2020	739,911	632,268	313,381	286,065	32,822	107,916	– 274	30,266
2021	833,337	706,978	342,988	325,768	38,222	125,000	+ 1,359	29,321
2020 Q1	198,375	168,123	83,086	75,420	9,617	18,875	+ 11,377	6,855
Q2	158,161	135,185	68,653	59,557	6,974	25,107	– 2,131	6,997
Q3	182,202	156,397	78,502	72,613	5,282	25,234	+ 571	9,705
Q4	201,173	172,564	83,140	78,475	10,949	38,700	– 10,090	6,709
2021 Q1	189,316	159,271	72,814	73,137	13,320	19,882	+ 10,163	6,887
Q2	191,931	163,158	81,129	74,024	8,005	29,609	– 835	7,438
Q3	211,364	180,378	87,603	84,312	8,464	29,726	+ 1,260	7,823
Q4	240,726	204,171	101,442	94,295	8,433	45,784	– 9,229	7,173
2022 Q1	224,006	189,158	92,112	87,240	9,806	24,772	+ 10,077	7,261
2021 Apr.	.	47,886	23,203	21,816	2,867	.	.	2,479
May	.	47,113	23,117	20,899	3,097	.	.	2,479
2022 Apr.	.	52,743	25,483	23,918	3,341	.	.	2,649
May	.	51,356	25,130	22,938	3,288	.	.	2,613

Sources: Federal Ministry of Finance, Federal Statistical Office and Bundesbank calculations. **1** Before deducting or adding supplementary central government transfers, regionalisation funds (local public transport), compensation for the transfer of motor vehicle tax to central government and consolidation assistance, which central government remits to state government. See the last column for the volume of these amounts which are deducted from tax revenue in the Federal budget. **2** Customs duties and shares in VAT and gross national income accruing to the EU from central government tax revenue. **3** Including local government taxes in the city states Berlin, Bremen and Hamburg. Including revenue from offshore wind farms. **4** Difference between local government's share in the joint taxes received by the state government cash offices in the period in question (see Table X. 6) and the amounts passed on to local government in the same period. **5** Volume of the positions mentioned under footnote 1.

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

€ million

Period	Total [1]	Joint taxes									Central government taxes [9]	State government taxes [9]	EU customs duties	Memo item: Local government share in joint taxes
		Income taxes [2]					Value added taxes (VAT) [7]			Local business tax transfers [8]				
		Total	Wage tax [3]	Assessed income tax [4]	Corporation tax [5]	Investment income tax [6]	Total	Domestic VAT	Import VAT					
2015	620,287	273,258	178,891	48,580	19,583	26,204	209,921	159,015	50,905	7,407	104,204	20,339	5,159	39,802
2016	648,309	291,492	184,826	53,833	27,442	25,391	217,090	165,932	51,157	7,831	104,441	22,342	5,113	41,345
2017	674,598	312,462	195,524	59,428	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
2020 Q1	181,374	88,009	53,389	18,711	8,495	7,415	60,060	46,038	14,022	244	24,517	7,406	1,139	13,251
Q2	146,360	69,928	50,760	10,633	2,348	6,187	44,262	31,625	12,638	1,170	23,525	6,326	1,149	11,175
Q3	168,308	73,766	47,470	13,492	5,411	7,392	59,819	47,933	11,886	796	25,930	6,784	1,212	11,910
Q4	186,334	89,094	57,667	16,146	8,014	7,268	55,343	43,105	12,238	1,744	31,660	7,259	1,234	13,770
2021 Q1	171,974	86,381	50,854	17,826	10,203	7,498	54,795	45,403	9,392	252	21,712	7,757	1,076	12,703
Q2	175,242	84,505	50,783	14,347	8,860	10,515	57,634	43,399	14,235	1,215	23,210	7,398	1,281	12,085
Q3	193,910	90,619	53,857	17,973	9,853	8,936	69,528	49,052	20,476	1,189	23,469	7,813	1,292	13,532
Q4	219,827	108,791	62,913	22,196	13,208	10,474	68,843	49,777	19,066	2,295	29,780	8,645	1,473	15,656
2022 Q1	203,130	96,245	56,206	20,915	11,178	7,946	73,584	54,234	19,350	615	22,252	8,975	1,459	13,972
2021 Apr.	51,471	22,156	18,439	318	1,250	2,150	18,316	13,189	5,127	998	7,083	2,441	478	3,586
May	50,012	16,654	13,918	– 218	– 21	2,975	22,740	16,595	6,146	215	7,611	2,382	410	2,899
2022 Apr.	56,555	24,257	20,221	555	1,223	2,258	20,774	14,364	6,411	1,229	7,306	2,430	559	3,813
May	54,992	22,587	19,193	487	153	2,755	21,235	17,527	3,707	287	7,795	2,583	506	3,637

Source: Federal Ministry of Finance and Bundesbank calculations. **1** This total, unlike that in Table X. 5, does not include the receipts from the equalisation of burdens levies, local business tax (less local business tax transfers to central and state government), real property taxes and other local government taxes, or the balance of untransferred tax shares. **2** Respective percentage share of central, state and local government in revenue: wage tax and assessed income tax 42.5:42.5:15, corporation tax and non-assessed taxes on earnings 50:50:-, final withholding tax on interest income and capital gains, non-assessed taxes on earnings 44:44:12. **3** After deducting child benefits and subsidies for supplementary private pension plans. **4** After deducting employee refunds and research grants. **5** After deducting research grants. **6** Final withholding tax on interest income and capital gains, non-assessed taxes on earnings. **7** The allocation of revenue to central, state and local government, which is adjusted at more regular intervals, is regulated in Section 1 of the Revenue Adjustment Act. Respective percentage share of central, state and local government in revenue for 2021: 45.1:51.2:3.7. The EU share is deducted from central government's share. **8** Respective percentage share of central and state government for 2021: 41.4:58.6. **9** For the breakdown, see Table X. 7.

X. Public finances in Germany

7. Central, state and local government: individual taxes

€ million

Period	Central government taxes [1]								State government taxes [1]				Local government taxes		
	Energy tax	Solidarity surcharge	Tobacco tax	Insurance tax	Motor vehicle tax	Electricity tax	Alcohol tax	Other	Tax on the acquisition of land and buildings	Inheritance tax	Betting and lottery tax	Other	Total	of which: Local business tax [2]	of which: Real property taxes
2015	39,594	15,930	14,921	12,419	8,805	6,593	2,070	3,872	11,249	6,290	1,712	1,088	60,396	45,752	13,215
2016	40,091	16,855	14,186	12,763	8,952	6,569	2,070	2,955	12,408	7,006	1,809	1,119	65,319	50,103	13,654
2017	41,022	17,953	14,399	13,269	8,948	6,944	2,094	– 4,695	13,139	6,114	1,837	1,115	68,522	52,899	13,966
2018	40,882	18,927	14,339	13,779	9,047	6,858	2,133	2,622	14,083	6,813	1,894	1,122	71,817	55,904	14,203
2019	40,683	19,646	14,257	14,136	9,372	6,689	2,118	2,648	15,789	6,987	1,975	1,099	71,661	55,527	14,439
2020	37,635	18,676	14,651	14,553	9,526	6,561	2,238	1,792	16,055	8,600	2,044	1,076	61,489	45,471	14,676
2021	37,120	11,028	14,733	14,980	9,546	6,691	2,089	1,984	18,335	9,824	2,333	1,121	77,335	61,251	14,985
2020 Q1	4,966	4,930	2,413	6,766	2,634	1,708	562	537	4,525	1,981	542	358	17,245	13,391	3,403
Q2	8,117	4,235	3,772	2,606	2,426	1,585	455	328	3,566	2,154	425	181	12,971	8,842	3,895
Q3	9,985	4,365	3,978	2,817	2,366	1,499	506	414	3,730	2,262	509	283	14,690	10,242	4,095
Q4	14,566	5,145	4,487	2,365	2,101	1,768	715	513	4,234	2,203	567	254	16,584	12,997	3,283
2021 Q1	4,126	3,171	2,585	6,776	2,567	1,692	395	400	4,716	2,110	578	353	17,594	13,798	3,503
Q2	8,717	2,546	4,053	2,843	2,469	1,640	528	413	4,231	2,374	538	255	17,904	13,692	4,034
Q3	9,532	2,338	3,636	2,911	2,381	1,618	514	538	4,571	2,457	516	269	18,643	14,215	4,133
Q4	14,745	2,972	4,458	2,449	2,130	1,741	651	633	4,816	2,884	700	244	23,194	19,546	3,316
2022 Q1	4,452	2,840	2,372	7,175	2,594	1,785	531	503	5,061	2,827	701	385	21,492	17,454	3,577
2021 Apr.	2,424	492	1,466	1,014	819	578	134	155	1,403	772	182	84	.	.	.
May	3,114	495	1,251	1,069	769	541	249	125	1,383	755	160	84	.	.	.
2022 Apr.	2,777	631	1,202	942	802	591	146	214	1,368	747	230	84	.	.	.
May	3,034	652	1,254	1,116	796	539	186	217	1,519	758	222	85	.	.	.

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

8. German statutory pension insurance scheme: budgetary development and assets*

€ million

Period	Revenue [1,2]			Expenditure [1,2]			Deficit/ surplus	Assets [1,4]					Memo item: Administrative assets
	Total	of which: Contributions [3]	of which: Payments from central government	Total	of which: Pension payments	of which: Pensioners' health insurance		Total	Deposits [5]	Securities	Equity interests, mortgages and other loans [6]	Real estate	
2015	276,129	194,486	80,464	277,717	236,634	16,705	– 1,588	35,556	32,795	2,506	167	88	4,228
2016	286,399	202,249	83,154	288,641	246,118	17,387	– 2,242	34,094	31,524	2,315	203	52	4,147
2017	299,826	211,424	87,502	299,297	255,261	18,028	+ 529	35,366	33,740	1,335	238	53	4,032
2018	312,788	221,572	90,408	308,356	263,338	18,588	+ 4,432	40,345	38,314	1,713	262	56	4,008
2019	327,298	232,014	94,467	325,436	277,282	20,960	+ 1,861	42,963	40,531	2,074	303	56	3,974
2020	335,185	235,988	98,447	339,072	289,284	21,865	– 3,887	39,880	38,196	1,286	344	55	3,901
2021	348,679	245,185	102,772	347,486	296,343	22,734	+ 1,192	42,014	40,320	1,241	400	52	3,807
2019 Q1	77,984	54,393	23,426	78,630	67,328	5,087	– 646	39,432	37,637	1,474	263	57	4,001
Q2	81,410	57,837	23,408	80,804	69,011	5,205	+ 605	40,232	38,639	1,272	264	57	3,996
Q3	80,305	56,637	23,481	82,716	70,633	5,330	– 2,411	38,386	36,876	1,183	271	56	3,995
Q4	86,756	63,133	23,413	82,849	70,674	5,333	+ 3,907	42,945	40,539	2,074	276	56	3,987
2020 Q1	80,578	55,999	24,436	82,622	70,829	5,346	– 2,045	40,840	38,636	1,848	300	56	3,966
Q2	82,098	57,515	24,413	82,875	70,889	5,346	– 777	39,779	37,975	1,446	304	55	3,949
Q3	82,689	58,109	24,418	86,497	74,054	5,591	– 3,808	36,898	35,197	1,333	313	55	3,925
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

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

X. Public finances in Germany

9. Federal Employment Agency: budgetary development*

€ million

Period	Revenue				Expenditure							Deficit/ surplus	Deficit-offsetting grant or loan from central government
	Total 1	of which:			Total	of which:							
		Contributions	Insolvency compensation levy	Government funds		Unemployment benefit 2	Short-time working benefits 3	Job promotion 4	Re-integration payment	Insolvency benefit payment	Administrative expenditure 5		
2015	35,159	29,941	1,333	–	31,439	14,846	771	6,295	.	654	5,597	+ 3,720	–
2016	36,352	31,186	1,114	–	30,889	14,435	749	7,035	.	595	5,314	+ 5,463	–
2017	37,819	32,501	882	–	31,867	14,055	769	7,043	.	687	6,444	+ 5,952	–
2018	39,335	34,172	622	–	33,107	13,757	761	6,951	.	588	8,129	+ 6,228	–
2019	35,285	29,851	638	–	33,154	15,009	772	7,302	.	842	6,252	+ 2,131	–
2020	33,678	28,236	630	–	61,013	20,617	22,719	7,384	.	1,214	6,076	– 27,335	6,913
2021	35,830	29,571	1,302	–	57,570	19,460	21,003	7,475	.	493	6,080	– 21,739	16,935
2019 Q1	8,369	7,027	148	–	8,597	3,969	403	1,818	.	179	1,450	– 228	–
Q2	8,685	7,440	156	–	8,136	3,673	204	1,832	.	243	1,475	+ 549	–
Q3	8,650	7,263	162	–	7,829	3,682	68	1,711	.	190	1,510	+ 821	–
Q4	9,581	8,121	172	–	8,592	3,685	98	1,941	.	230	1,816	+ 989	–
2020 Q1	8,123	6,851	153	–	9,301	4,469	392	1,934	.	235	1,470	– 1,179	–
Q2	7,906	6,691	151	–	17,005	4,869	7,977	1,793	.	254	1,407	– 9,099	–
Q3	8,350	6,934	153	–	18,619	5,737	8,637	1,701	.	472	1,414	– 10,269	–
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	–

Source: Federal Employment Agency. * Including transfers to the civil servants' pension fund. 1 Excluding central government deficit-offsetting grant or loan. 2 Unemployment benefit in case of unemployment. 3 Including seasonal short-time working benefits and restructuring short-time working benefits, restructuring measures and refunds of social contributions. 4 Vocational training, measures to encourage job take-up, rehabilitation, compensation top-up payments and promotion of business start-ups. 5 Including collection charges to other social security funds , excluding administrative expenditure within the framework of the basic allowance for job seekers.

10. Statutory health insurance scheme: budgetary development

€ million

Period	Revenue 1			Expenditure 1								Deficit/ surplus
	Total	of which:		Total	of which:							
		Contributions 2	Central government funds 3		Hospital treatment	Pharmaceuticals	Medical treatment	Dental treatment 4	Remedies and therapeutic appliances	Sickness benefits	Administrative expenditure 5	
2015	210,147	195,774	11,500	213,727	67,979	34,576	35,712	13,488	13,674	11,227	10,482	– 3,580
2016	223,692	206,830	14,000	222,936	70,450	35,981	37,300	13,790	14,256	11,677	11,032	+ 757
2017	233,814	216,227	14,500	230,773	72,303	37,389	38,792	14,070	14,776	12,281	10,912	+ 3,041
2018	242,360	224,912	14,500	239,706	74,506	38,327	39,968	14,490	15,965	13,090	11,564	+ 2,654
2019	251,295	233,125	14,500	252,440	77,551	40,635	41,541	15,010	17,656	14,402	11,136	– 1,145
2020	269,158	237,588	27,940	275,268	78,531	42,906	44,131	14,967	18,133	15,956	11,864	– 6,110
2021	289,270	249,734	36,977	294,602	82,748	46,199	45,075	16,335	20,163	16,612	11,735	– 5,332
2019 Q1	59,809	55,622	3,625	62,485	19,586	9,947	10,386	3,738	4,106	3,649	2,707	– 2,676
Q2	62,121	57,858	3,625	62,858	19,210	10,127	10,421	3,821	4,289	3,535	2,774	– 736
Q3	62,143	57,763	3,625	62,716	19,109	10,229	10,278	3,630	4,467	3,558	2,804	– 573
Q4	67,094	61,884	3,625	64,075	19,497	10,353	10,455	3,821	4,713	3,659	2,975	+ 3,019
2020 Q1	61,949	57,419	3,625	66,438	20,049	11,086	10,806	3,804	4,470	4,061	2,816	– 4,489
Q2	68,108	58,096	9,359	69,487	17,674	10,492	10,908	3,389	3,986	4,143	2,980	– 1,378
Q3	70,130	59,403	10,151	71,063	20,913	10,567	11,642	3,774	4,852	3,829	2,970	– 934
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

Source: Federal Ministry of Health. 1 The final annual figures generally differ from the total of the reported provisional quarterly figures as the latter are not revised subsequently. Excluding revenue and expenditure as part of the risk structure compensation scheme. 2 Including contributions from subsidised low-paid part-time employment. 3 Federal grant and liquidity assistance. 4 Including dentures. 5 Net, i.e. after deducting reimbursements for expenses for levying contributions incurred by other social security funds.

X. Public finances in Germany

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

€ million

Period	Revenue		Expenditure 1						Deficit/ surplus	
				of which:						
	Total	of which: Contributions 2	Total	Non-cash care benefits 3	Inpatient care total 4	Nursing benefit	Contributions to pension insurance scheme 5	Administrative expenditure		
2015	30,825	30,751	29,101	4,626	13,003	6,410	960	1,273	+	1,723
2016	32,171	32,100	30,936	4,904	13,539	6,673	983	1,422	+	1,235
2017	36,305	36,248	38,862	6,923	16,034	10,010	1,611	1,606	–	2,557
2018	37,949	37,886	41,265	7,703	16,216	10,809	2,093	1,586	–	3,315
2019	47,228	46,508	44,008	8,257	16,717	11,689	2,392	1,781	+	3,220
2020	50,622	48,003	49,284	8,794	16,459	12,786	2,714	1,946	+	1,338
2021 p	52,503	49,696	53,850	9,510	16,452	13,920	3,041	2,032	–	1,347
2019 Q1	11,123	10,938	10,728	2,060	4,082	2,833	547	437	+	396
Q2	11,795	11,620	10,812	2,012	4,132	2,868	588	449	+	983
Q3	11,734	11,557	11,159	2,098	4,234	2,972	598	450	+	576
Q4	12,592	12,413	11,252	2,062	4,243	3,064	626	433	+	1,339
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

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

12. Central government: borrowing in the market

€ million

Period	Total new borrowing 1		of which: Change in money market loans	Change in money market deposits 3
	Gross 2	Net		
2015	+ 167,655	– 16,386	– 5,884	– 1,916
2016	+ 182,486	– 11,331	– 2,332	– 16,791
2017	+ 171,906	+ 4,531	+ 11,823	+ 2,897
2018	+ 167,231	– 16,248	– 91	– 1,670
2019	+ 185,070	+ 63	– 8,044	– 914
2020	+ 456,828	+ 217,904	+ 24,181	– 3,399
2019 Q1	+ 56,654	+ 3,281	– 2,172	– 1,199
Q2	+ 48,545	+ 5,491	– 279	+ 7,227
Q3	+ 48,053	+ 4,030	+ 176	– 5,093
Q4	+ 31,817	– 12,738	– 5,768	– 1,849
2020 Q1	+ 65,656	+ 31,296	+ 9,236	+ 1,698
Q2	+ 185,560	+ 126,585	+ 31,212	– 7,314
Q3	+ 159,067	+ 80,783	– 6,080	+ 588
Q4	+ 46,545	– 20,760	– 10,187	+ 1,629
2021 Q1	+ 109,953	+ 42,045	– 11,737	– 4,708
Q2	+ 146,852	+ 57,601	+ 3,463	+ 1,576

Source: Federal Republic of Germany – Finance Agency. **1** Including the Financial Market Stabilisation Fund, the Investment and Repayment Fund and the Restructuring Fund for Credit Institutions. **2** After deducting repurchases. **3** Excluding the central account balance with the Deutsche Bundesbank.

13. General government: debt by creditor*

€ million

Period (end of year or quarter)	Total	Banking system		Domestic non-banks		Foreign creditors pe
		Bundesbank	Domestic MFIs pe	Other domestic financial corporations pe	Other domestic creditors 1	
2015	2,177,231	85,952	607,446	217,604	52,453	1,213,776
2016	2,161,540	205,391	585,446	211,797	48,631	1,110,275
2017	2,111,360	319,159	538,801	180,145	45,109	1,028,146
2018	2,062,629	364,731	495,374	186,399	44,129	971,995
2019	2,045,744	366,562	464,612	183,741	48,740	982,089
2020 p	2,314,090	522,392	492,545	191,497	53,629	1,054,027
2021 p	2,475,776	716,004	493,773	191,386	46,195	1,028,418
2019 Q1	2,072,772	359,884	483,567	185,767	44,244	999,309
Q2	2,063,198	361,032	475,693	184,077	43,358	999,037
Q3	2,080,195	358,813	473,766	185,300	49,755	1,012,562
Q4	2,045,744	366,562	464,612	183,741	48,740	982,089
2020 Q1 p	2,090,099	371,076	481,651	186,021	49,824	1,001,527
Q2 p	2,259,576	424,141	546,446	186,616	49,949	1,052,424
Q3 p	2,333,149	468,723	517,114	189,832	51,775	1,105,704
Q4 p	2,314,090	522,392	492,545	191,497	53,629	1,054,027
2021 Q1 p	2,345,044	561,443	476,087	190,467	52,141	1,064,906
Q2 p	2,398,790	620,472	477,542	190,219	44,004	1,066,553
Q3 p	2,432,545	669,659	481,474	191,940	45,707	1,043,766
Q4 p	2,475,776	716,004	493,773	191,386	46,195	1,028,418
2022 Q1 p	2,482,516	737,978	470,276	193,266	44,405	1,036,590

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

X. Public finances in Germany

14. Maastricht debt by instrument

€ million

Period (end of year or quarter)	Total	Currency and deposits [1]	Debt securities by original maturity: Short-term debt securities (up to one year)	Debt securities by original maturity: Long-term debt securities (more than one year)	Loans by original maturity: Short-term loans (up to one year)	Loans by original maturity: Long-term loans (more than one year)	Memo item: [2] Debt vis-à-vis other government subsectors	Memo item: [2] Claims vis-à-vis other government subsectors
General government								
2015	2,177,231	13,949	65,676	1,499,010	90,350	508,246	.	.
2016	2,161,540	15,491	69,715	1,483,871	96,254	496,208	.	.
2017	2,111,360	14,298	48,789	1,484,462	87,799	476,012	.	.
2018	2,062,629	14,680	52,572	1,456,160	77,296	461,919	.	.
2019 Q1	2,072,772	15,512	64,218	1,460,634	72,005	460,402	.	.
Q2	2,063,198	12,719	56,256	1,463,027	75,284	455,911	.	.
Q3	2,080,195	17,438	62,602	1,465,529	79,918	454,709	.	.
Q4	2,045,744	14,449	49,180	1,458,540	69,289	454,286	.	.
2020 Q1 p	2,090,099	11,410	70,912	1,472,222	85,137	450,418	.	.
Q2 p	2,259,576	13,120	122,225	1,533,857	142,708	447,666	.	.
Q3 p	2,333,149	11,886	180,445	1,582,574	111,480	446,764	.	.
Q4 p	2,314,090	14,486	163,401	1,593,586	94,288	448,330	.	.
2021 Q1 p	2,345,044	12,200	180,788	1,637,903	69,739	444,414	.	.
Q2 p	2,398,790	12,901	175,436	1,690,507	76,438	443,508	.	.
Q3 p	2,432,545	13,319	183,243	1,712,600	79,614	443,770	.	.
Q4 p	2,475,776	17,743	183,990	1,731,270	101,870	440,902	.	.
2022 Q1 p	2,482,516	15,655	172,294	1,776,631	75,228	442,708	.	.
Central government								
2015	1,371,933	13,949	49,512	1,138,951	45,256	124,265	1,062	13,667
2016	1,365,579	15,491	55,208	1,123,853	50,004	121,022	556	8,567
2017	1,349,945	14,298	36,297	1,131,896	47,761	119,693	1,131	10,618
2018	1,322,905	14,680	42,246	1,107,140	42,057	116,782	933	9,975
2019 Q1	1,324,377	15,512	50,032	1,102,604	39,185	117,044	809	11,583
Q2	1,320,239	12,719	42,752	1,109,057	38,950	116,761	835	13,862
Q3	1,327,958	17,438	48,934	1,105,439	39,067	117,080	704	13,849
Q4	1,299,726	14,449	38,480	1,101,866	28,617	116,314	605	10,301
2020 Q1 p	1,327,548	11,410	56,680	1,103,934	38,714	116,809	605	8,125
Q2 p	1,473,720	13,120	109,221	1,139,510	95,489	116,381	585	7,037
Q3 p	1,536,666	11,886	166,564	1,178,687	62,933	116,596	605	11,731
Q4 p	1,512,917	14,486	154,498	1,180,683	46,811	116,439	609	14,545
2021 Q1 p	1,538,572	12,200	167,484	1,212,495	29,838	116,553	632	22,956
Q2 p	1,588,734	12,901	165,373	1,259,206	35,008	116,247	631	29,479
Q3 p	1,616,738	13,319	170,961	1,280,586	35,984	115,888	677	31,417
Q4 p	1,666,432	17,743	176,427	1,300,416	56,836	115,010	656	7,975
2022 Q1 p	1,671,160	15,655	155,117	1,340,340	40,788	119,260	534	10,488
State government								
2015	659,521	–	16,169	362,376	23,349	257,627	15,867	2,348
2016	642,291	–	14,515	361,996	20,482	245,298	11,273	1,694
2017	614,926	–	12,543	354,688	19,628	228,067	14,038	2,046
2018	600,776	–	10,332	351,994	18,864	219,587	14,035	1,891
2019 Q1	612,478	–	14,190	361,293	19,374	217,621	15,229	2,004
Q2	610,700	–	13,508	357,571	24,784	214,838	17,631	1,887
Q3	620,694	–	13,671	363,723	29,765	213,535	17,755	1,957
Q4	609,828	–	10,703	360,495	25,768	212,862	14,934	1,826
2020 Q1 p	623,096	–	14,234	372,021	28,582	208,260	12,297	1,783
Q2 p	645,075	–	13,006	398,404	28,298	205,368	11,070	2,085
Q3 p	655,581	–	13,882	408,310	29,662	203,728	11,717	2,090
Q4 p	660,572	–	8,904	417,307	30,371	203,991	11,946	1,411
2021 Q1 p	665,620	–	13,305	430,103	23,404	198,808	11,023	2,018
Q2 p	669,596	–	10,064	436,434	25,197	197,901	12,637	2,073
Q3 p	674,769	–	12,284	437,437	26,603	198,446	11,555	2,151
Q4 p	668,951	–	7,564	436,157	29,084	196,146	12,305	1,684
2022 Q1 p	667,953	–	17,178	441,837	16,981	191,956	11,661	1,970
Local government								
2015	163,439	–	–	2,047	27,474	133,918	2,143	463
2016	166,174	–	–	2,404	27,002	136,768	1,819	431
2017	162,745	–	–	3,082	24,572	135,091	1,881	466
2018	155,127	–	1	3,046	20,425	131,655	1,884	497
2019 Q1	153,387	–	1	2,960	18,857	131,570	2,139	498
Q2	152,014	–	–	2,961	18,814	130,239	2,016	525
Q3	151,489	–	–	3,016	18,574	129,899	2,065	555
Q4	152,891	–	–	2,996	19,079	130,816	1,856	532
2020 Q1 p	153,423	–	–	3,128	19,734	130,560	1,825	508
Q2 p	153,556	–	–	3,094	19,718	130,744	2,085	350
Q3 p	154,685	–	–	2,961	20,596	131,128	2,107	339
Q4 p	154,054	–	–	3,366	18,137	132,551	1,406	330
2021 Q1 p	154,202	–	–	3,121	17,429	133,652	2,020	345
Q2 p	155,485	–	–	3,121	18,467	133,897	2,090	348
Q3 p	155,050	–	–	3,000	18,077	133,973	2,156	344
Q4 p	154,717	–	–	3,171	17,203	134,343	1,695	348
2022 Q1 p	157,227	–	–	3,054	18,201	135,972	1,973	363

For footnotes see end of table.

X. Public finances in Germany

14. Maastricht debt by instrument (cont'd)

€ million

Period (end of year or quarter)	Total	Currency and deposits [1]	Debt securities by original maturity: Short-term debt securities (up to one year)	Debt securities by original maturity: Long-term debt securities (more than one year)	Loans by original maturity: Short-term loans (up to one year)	Loans by original maturity: Long-term loans (more than one year)	Memo item: [2] Debt vis-à-vis other government subsectors	Memo item: [2] Claims vis-à-vis other government subsectors
Social security funds								
2015	1,502	–	–	–	537	965	91	2,685
2016	1,232	–	–	–	562	670	89	3,044
2017	807	–	–	–	262	545	15	3,934
2018	690	–	–	–	388	302	16	4,506
2019 Q1	723	–	–	–	453	270	16	4,110
Q2	742	–	–	–	557	185	16	4,224
Q3	594	–	–	–	391	203	16	4,179
Q4	711	–	–	–	375	336	16	4,753
2020 Q1 **p**	775	–	–	–	287	488	16	4,328
Q2 **p**	980	–	–	–	581	399	16	4,284
Q3 **p**	4,602	–	–	–	4,210	392	3,956	4,226
Q4 **p**	7,439	–	–	–	7,128	311	6,931	4,606
2021 Q1 **p**	16,179	–	–	–	15,985	194	15,853	4,209
Q2 **p**	21,194	–	–	–	20,995	199	20,860	4,318
Q3 **p**	24,248	–	–	–	24,053	195	23,872	4,348
Q4 **p**	333	–	–	–	111	222	–	4,650
2022 Q1 **p**	3,064	–	–	–	2,863	201	2,720	4,067

Source: Bundesbank calculations based on data from the Federal Statistical Office and the Federal Republic of Germany – Finance Agency. **1** Particularly liabilities resulting from coins in circulation. **2** Besides direct loan relationships, claims and debt vis-à-vis other government subsectors also comprise securities holdings purchased on the market. No entry for general government as debt and claims are consolidated between different government subsectors.

15. Maastricht debt of central government by instrument and category

€ million

Period (end of year or quarter)	Total [1]	Currency and deposits [2]: Total [1]	Currency and deposits [2]: of which: [3] Federal day bond	Debt securities: Total [1]	Debt securities: of which: [3] Federal bonds (Bunds)	Federal notes (Bobls)	Inflation-linked Federal bonds (Bunds) [4]	Inflation-linked Federal notes (Bobls) [4]	Capital indexation of inflation-linked securities	Federal Treasury notes (Schätze) [5]	Treasury discount paper (Bubills) [6]	Federal savings notes	Loans [1]
2007	987,909	6,675	.	917,584	564,137	173,949	10,019	3,444	506	102,083	37,385	10,287	63,650
2008	1,019,905	12,466	3,174	928,754	571,913	164,514	12,017	7,522	1,336	105,684	40,795	9,649	78,685
2009	1,086,173	9,981	2,495	1,013,072	577,798	166,471	16,982	7,748	1,369	113,637	104,409	9,471	63,121
2010	1,337,160	10,890	1,975	1,084,019	602,624	185,586	25,958	9,948	2,396	126,220	85,867	8,704	242,251
2011	1,346,869	10,429	2,154	1,121,331	615,200	199,284	29,313	14,927	3,961	130,648	58,297	8,208	215,109
2012	1,390,377	9,742	1,725	1,177,168	631,425	217,586	35,350	16,769	5,374	117,719	56,222	6,818	203,467
2013	1,392,735	10,582	1,397	1,192,025	643,200	234,759	41,105	10,613	4,730	110,029	50,004	4,488	190,127
2014	1,398,472	12,146	1,187	1,206,203	653,823	244,633	48,692	14,553	5,368	103,445	27,951	2,375	180,123
2015	1,371,933	13,949	1,070	1,188,463	663,296	232,387	59,942	14,553	5,607	96,389	18,536	1,305	169,521
2016	1,365,579	15,491	1,010	1,179,062	670,245	221,551	51,879	14,585	3,602	95,727	23,609	737	171,026
2017	1,349,945	14,298	966	1,168,193	693,687	203,899	58,365	14,490	4,720	91,013	10,037	289	167,455
2018	1,322,905	14,680	921	1,149,386	710,513	182,847	64,647	–	5,139	86,009	12,949	48	158,839
2019	1,299,726	14,449	–	1,140,346	719,747	174,719	69,805	–	6,021	89,230	13,487	.	144,931
2020 **p**	1,512,917	14,486	.	1,335,181	808,300	183,046	58,279	–	3,692	98,543	113,141	.	163,250
2021 **p**	1,666,432	17,743	.	1,476,843	909,276	195,654	65,390	–	6,722	103,936	153,978	.	171,846
2019 Q1	1,324,377	15,512	902	1,152,636	709,008	178,900	66,531	–	4,191	89,782	18,288	31	156,229
Q2	1,320,239	12,719	852	1,151,809	720,904	173,313	68,110	–	5,691	91,024	15,042	19	155,711
Q3	1,327,958	17,438	822	1,154,373	711,482	183,268	69,088	–	5,639	90,416	18,100	–	156,147
Q4	1,299,726	14,449	–	1,140,346	719,747	174,719	69,805	–	6,021	89,230	13,487	.	144,931
2020 Q1 **p**	1,327,548	11,410	.	1,160,614	721,343	182,095	71,028	–	5,310	91,084	23,572	.	155,524
Q2 **p**	1,473,720	13,120	.	1,248,731	774,587	178,329	56,061	–	3,752	95,622	79,987	.	211,869
Q3 **p**	1,536,666	11,886	.	1,345,251	796,338	191,388	57,144	–	3,737	99,276	127,478	.	179,529
Q4 **p**	1,512,917	14,486	.	1,335,181	808,300	183,046	58,279	–	3,692	98,543	113,141	.	163,250
2021 Q1 **p**	1,538,572	12,200	.	1,379,979	821,254	194,571	60,687	–	3,857	103,910	134,800	.	146,392
Q2 **p**	1,588,734	12,901	.	1,424,579	873,345	189,048	62,569	–	5,056	104,997	139,451	.	151,255
Q3 **p**	1,616,738	13,319	.	1,451,547	884,358	203,353	63,851	–	5,456	105,398	146,533	.	151,872
Q4 **p**	1,666,432	17,743	.	1,476,843	909,276	195,654	65,390	–	6,722	103,936	153,978	.	171,846
2022 Q1 **p**	1,671,160	15,655	.	1,495,458	930,351	209,424	67,776	–	7,809	108,702	140,427	.	160,048

Sources: Federal Republic of Germany – Finance Agency, Federal Statistical Office, and Bundesbank calculations. **1** Comprises all of central government, i.e. all off-budget entities in addition to the core budget, including the government-owned bad bank FMS Wertmanagement and liabilities attributed to central government from an economic perspective under the European System of Accounts (ESA) 2010. **2** Particularly liabilities resulting from coins in circulation. **3** Issuances by the Federal Republic of Germany. Excluding issuers' holdings of own securities but including those held by other government entities. **4** Excluding inflation-induced indexation of capital. **5** Including medium-term notes issued by the Treuhand agency (expired in 2011). **6** Including Federal Treasury financing papers (expired in 2014).

XI. Economic conditions in Germany

1. Origin and use of domestic product, distribution of national income

Item	2019	2020	2021	2019	2020	2021	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Q1
	Index 2015=100			Annual percentage change									
At constant prices, chained													
I. Origin of domestic product													
Production sector (excluding construction)	108.0	98.0	101.9	− 1.6	− 9.3	4.1	− 9.5	− 1.4	− 1.9	20.1	2.7	− 1.7	− 0.3
Construction	104.2	108.2	106.3	0.4	3.8	− 1.7	− 1.8	9.0	− 4.4	3.0	1.6	− 6.4	2.2
Wholesale/retail trade, transport and storage, hotel and restaurant services	109.1	103.5	106.8	3.3	− 5.2	3.2	− 2.7	− 2.9	− 7.5	12.6	3.7	4.8	8.7
Information and communication	120.7	119.5	123.3	3.8	− 1.0	3.2	− 1.1	0.5	0.5	6.5	2.9	3.3	3.9
Financial and insurance activities	95.3	95.8	95.4	1.3	0.5	− 0.4	1.3	− 0.4	− 1.4	− 0.7	− 0.1	0.6	3.6
Real estate activities	102.7	102.3	103.2	0.9	− 0.4	0.9	0.2	− 0.4	0.2	1.8	0.8	0.9	0.6
Business services [1]	110.7	102.5	108.1	0.1	− 7.4	5.5	− 8.2	− 6.9	− 5.7	12.4	9.4	7.2	7.6
Public services, education and health	107.0	103.5	106.7	1.8	− 3.2	3.1	0.0	− 3.8	− 3.3	10.6	3.1	2.9	4.3
Other services	103.3	92.5	93.3	1.9	−10.5	0.8	− 3.9	−16.0	−10.4	8.4	2.3	5.1	8.5
Gross value added	107.3	102.1	105.0	1.0	− 4.9	2.9	− 3.9	− 2.4	− 3.5	10.9	3.3	1.7	3.6
Gross domestic product [2]	107.2	102.3	105.3	1.1	− 4.6	2.9	− 3.6	− 1.9	− 3.0	10.8	2.8	1.8	4.0
II. Use of domestic product													
Private consumption [3]	107.0	100.8	101.1	1.6	− 5.9	0.3	− 3.4	− 5.7	− 9.4	6.4	1.6	3.3	8.5
Government consumption	110.0	113.9	117.2	3.0	3.5	2.9	4.0	4.2	2.4	6.4	2.0	1.1	1.8
Machinery and equipment	113.1	100.5	103.8	1.0	−11.2	3.3	− 9.5	− 2.9	0.6	20.8	− 2.0	− 2.8	0.4
Premises	108.7	111.4	111.5	1.1	2.5	0.0	− 0.6	5.1	− 1.9	4.4	0.5	− 3.0	2.2
Other investment [4]	119.9	121.1	121.9	5.5	1.0	0.7	0.3	1.3	− 2.0	2.9	1.0	0.8	1.2
Changes in inventories [5,6]	.	.	.	− 0.1	− 0.9	1.1	− 1.9	− 1.3	0.5	0.2	1.9	1.6	0.9
Domestic demand	109.5	105.2	107.6	1.8	− 4.0	2.3	− 3.7	− 3.3	− 4.3	7.2	3.4	3.2	6.0
Net exports [6]	.	.	.	− 0.7	− 0.8	0.8	− 0.1	1.2	1.0	3.8	− 0.4	− 1.1	− 1.6
Exports	111.2	100.8	110.5	1.1	− 9.3	9.6	− 9.1	− 3.1	− 0.2	28.2	7.4	6.9	2.9
Imports	117.5	107.4	117.2	2.9	− 8.6	9.1	−10.1	− 6.4	− 2.9	20.6	9.5	11.2	7.2
Gross domestic product [2]	107.2	102.3	105.3	1.1	− 4.6	2.9	− 3.6	− 1.9	− 3.0	10.8	2.8	1.8	4.0
At current prices (€ billion)													
III. Use of domestic product													
Private consumption [3]	1,802.9	1,708.0	1,766.6	2.9	− 5.3	3.4	− 3.7	− 5.6	− 7.7	8.3	5.6	8.0	13.8
Government consumption	705.2	754.6	800.3	5.2	7.0	6.1	7.3	7.7	6.5	7.0	5.7	5.1	6.9
Machinery and equipment	241.1	216.9	228.4	2.4	−10.0	5.3	− 8.3	− 1.9	2.0	22.7	− 0.2	− 0.1	4.4
Premises	364.1	380.1	411.6	5.4	4.4	8.3	0.0	5.7	− 0.1	9.5	12.7	10.5	17.4
Other investment [4]	137.0	138.9	141.5	6.9	1.4	1.9	0.6	1.7	− 0.9	4.1	2.2	2.0	3.3
Changes in inventories [5]	26.8	−23.7	29.9	.	.	.	.	.	.	.	.	.	.
Domestic use	3,277.1	3,174.8	3,378.3	3.7	− 3.1	6.4	− 3.4	− 3.0	− 2.7	9.7	8.9	10.0	12.2
Net exports	196.2	192.8	192.4	.	.	.	.	.	.	.	.	.	.
Exports	1,619.4	1,462.1	1,690.6	1.7	− 9.7	15.6	− 9.9	− 3.8	0.8	33.4	15.0	17.0	14.8
Imports	1,423.2	1,269.3	1,498.2	2.7	−10.8	18.0	−12.5	− 8.1	− 2.1	30.0	20.4	26.8	25.7
Gross domestic product [2]	3,473.4	3,367.6	3,570.6	3.1	− 3.0	6.0	− 2.7	− 1.3	− 1.3	11.9	7.3	6.8	8.0
IV. Prices (2015=100)													
Private consumption	105.1	105.8	109.0	1.3	0.6	3.1	− 0.3	0.1	1.8	1.7	3.9	4.6	5.0
Gross domestic product	107.0	108.8	112.1	2.1	1.6	3.0	1.0	0.6	1.8	1.0	4.3	4.9	3.9
Terms of trade	100.8	102.9	100.3	0.7	2.0	− 2.5	1.8	1.2	0.3	− 3.5	− 2.5	− 4.0	− 4.8
V. Distribution of national income													
Compensation of employees	1,855.5	1,852.1	1,921.4	4.6	− 0.2	3.7	− 0.7	0.4	− 0.5	5.4	4.9	4.9	6.6
Entrepreneurial and property income	752.7	676.1	778.5	− 1.5	−10.2	15.1	− 7.4	− 2.2	2.3	42.3	12.8	12.6	1.6
National income	2,608.2	2,528.2	2,699.9	2.8	− 3.1	6.8	− 2.8	− 0.3	0.4	13.6	7.2	6.8	5.1
Memo item: Gross national income	3,586.0	3,461.3	3,677.8	3.2	− 3.5	6.3	− 3.4	− 1.7	− 1.2	11.8	7.8	7.2	8.8

Source: Federal Statistical Office; figures computed in May 2022. **1** Professional, scientific, technical, administration and support service activities. **2** Gross value added plus taxes on products (netted with subsidies on products). **3** Including non-profit institutions serving households. **4** Intellectual property rights (inter alia, computer soft ware and entertainment, literary or artistic originals) and cultivated assets. **5** Including net increase in valuables. **6** Contribution of growth to GDP.

XI. Economic conditions in Germany

2. Output in the production sector *

Adjusted for working-day variations **o**

	Production sector, total r)	of which: Construction	of which: Energy	Industry: Total r)	of which: by main industrial grouping: Intermediate goods	Capital goods r)	Durable goods	Non-durable goods	of which: by economic sector: Manufacture of basic metals and fabricated metal products	Manufacture of computers, electronic and optical products and electrical equipment	Macinery and equipment	Motor vehicels, trailers and semi-trailers r)
2015 = 100												
% of total **1**	100	14,04	6,37	79,59	29,45	36,98	2.27	10,89	10,31	9,95	12,73	14,16
Period												
2018	105.3	109.0	97.4	105.3	105.5	104.6	106.2	106.9	107.4	109.0	106.5	99.9
2019	102.9	112.7	90.4	102.2	101.8	102.6	106.2	101.0	102.8	106.5	103.4	94.9
2020	95.0	116.1	84.4	92.2	94.9	88.2	97.6	97.2	90.6	98.5	89.5	75.9
2021 r	98.4	114.3	87.1	96.6	102.7	90.5	103.6	99.1	98.9	108.7	95.9	73.9
2021 Q1 r	96.4	94.7	92.3	97.0	104.0	91.6	100.8	95.6	100.1	107.3	91.2	84.7
Q2 r	99.0	118.1	81.8	97.0	105.3	90.2	103.0	96.5	101.6	108.7	95.4	74.8
Q3 r	96.9	119.4	80.6	94.2	102.3	85.1	101.9	101.6	97.9	109.0	94.7	61.7
Q4 r	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 r	96.0	98.7	95.2	95.6	103.2	87.4	104.0	100.9	98.7	109.9	90.5	73.2
2021 May r	97.8	117.2	81.4	95.7	105.3	87.4	100.3	96.7	100.4	107.1	92.8	71.4
June r	100.5	121.0	77.2	98.7	106.1	91.4	106.8	101.5	103.4	111.9	98.9	71.6
July 2,r	100.4	123.7	77.8	98.1	105.6	91.0	102.3	101.0	101.3	109.7	97.9	73.6
Aug. 2,r	90.1	112.7	80.2	86.9	97.8	74.5	91.5	98.3	91.2	104.6	86.5	46.0
Sep. r	100.1	121.8	83.7	97.6	103.6	89.7	111.8	105.5	101.2	112.8	99.6	65.6
Oct. r	102.1	123.8	92.1	99.0	104.5	91.7	112.9	106.2	101.5	110.5	96.3	73.4
Nov. r	105.8	127.4	93.1	103.0	104.5	99.7	114.5	107.8	103.4	113.1	101.8	83.9
Dec. r	96.5	123.2	95.2	91.8	87.8	93.9	98.8	94.3	82.7	104.9	108.4	65.5
2022 Jan. r	90.1	82.4	98.5	90.7	100.0	81.4	96.5	95.8	94.1	103.2	81.9	70.4
Feb. r	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. r	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. x	96.3	114.1	89.0	93.8	101.5	85.6	105.1	98.5	97.3	107.5	88.9	70.7
May x,p	96.3	114.9	81.0	94.3	101.0	87.2	102.7	98.5	97.1	109.0	90.8	73.2
Annual percentage change												
2018	+ 0.9	+ 0.3	− 1.5	+ 1.2	+ 0.6	+ 1.0	− 0.7	+ 3.8	+ 1.1	+ 1.9	+ 2.3	− 1.6
2019	− 2.3	+ 3.4	− 7.2	− 2.9	− 3.5	− 1.9	± 0.0	− 5.5	− 4.3	− 2.3	− 2.9	− 5.0
2020	− 7.7	+ 3.0	− 6.6	− 9.8	− 6.8	− 14.0	− 8.1	− 3.8	− 11.9	− 7.5	− 13.4	− 20.0
2021 r	+ 3.6	− 1.6	+ 3.2	+ 4.8	+ 8.2	+ 2.6	+ 6.1	+ 2.0	+ 9.2	+ 10.4	+ 7.2	− 2.6
2021 Q1 r	− 1.0	− 4.7	− 2.1	− 0.2	+ 2.8	− 1.4	− 0.8	− 4.3	+ 1.9	+ 3.8	− 0.2	− 0.2
Q2 r	+ 16.9	+ 1.9	+ 12.4	+ 21.0	+ 23.0	+ 25.0	+ 22.1	+ 4.9	+ 28.9	+ 23.1	+ 17.3	+ 57.9
Q3 r	+ 2.3	+ 0.8	+ 2.2	+ 2.6	+ 8.4	− 2.9	+ 4.0	+ 3.7	+ 9.2	+ 12.3	+ 9.3	− 21.9
Q4 r	− 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 r	− 0.4	+ 4.2	+ 3.1	− 1.5	− 0.8	− 4.6	+ 3.2	+ 5.5	− 1.5	+ 2.4	− 0.8	− 13.7
2021 May r	+ 17.8	+ 3.5	+ 13.5	+ 21.8	+ 25.4	+ 23.6	+ 17.6	+ 8.0	+ 29.9	+ 23.7	+ 19.7	+ 48.4
June r	+ 6.0	− 0.7	+ 4.5	+ 7.6	+ 18.0	+ 0.1	+ 9.9	+ 4.9	+ 20.2	+ 18.4	+ 2.5	− 9.5
July 2,r	+ 5.7	+ 3.2	+ 2.6	+ 6.5	+ 13.2	+ 1.7	+ 10.2	+ 3.6	+ 17.2	+ 16.2	+ 13.2	− 13.5
Aug. 2,r	+ 1.8	− 0.9	− 0.5	+ 2.6	+ 7.4	− 2.7	− 0.1	+ 4.9	+ 6.4	+ 11.6	+ 9.8	− 24.0
Sep. r	− 0.6	± 0.0	+ 4.6	− 1.1	+ 4.9	− 7.2	+ 2.1	+ 2.7	+ 4.4	+ 9.3	+ 5.3	− 28.4
Oct. r	− 1.1	− 0.6	+ 0.8	− 1.4	+ 1.8	− 5.8	+ 3.9	+ 3.3	+ 2.5	+ 5.7	+ 6.6	− 23.6
Nov. r	− 1.9	− 2.3	+ 1.4	− 2.1	+ 0.3	− 6.3	+ 0.1	+ 6.1	+ 0.3	+ 1.8	+ 3.0	− 20.5
Dec. r	− 2.4	− 10.3	+ 3.4	− 0.9	− 0.1	− 2.4	+ 2.4	+ 1.8	− 1.9	+ 4.7	+ 1.7	− 12.3
2022 Jan. r	+ 1.2	+ 9.4	+ 0.8	± 0.0	− 0.3	− 1.3	+ 1.2	+ 4.6	− 0.4	+ 2.8	+ 1.2	− 8.0
Feb. r	+ 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. r	− 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. x	− 2.5	− 1.7	+ 2.4	− 3.0	− 2.9	− 6.8	+ 3.2	+ 7.9	− 3.8	+ 0.3	− 5.8	− 13.1
May x,p	− 1.5	− 2.0	− 0.5	− 1.5	− 4.1	− 0.2	+ 2.4	+ 1.9	− 3.3	+ 1.8	− 2.2	+ 2.5

Source of the unadjusted figures: Federal Statistical Office. * For explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Tabels III.1.a to III.1.c **o** Using JDemetra+ 2.2.2 (X13). **1** Share of gross value added at factor cost of the production sector in the base year 2015. **2** Influenced by a change in holiday dates. **x** Provisional; estimated and adjusted in advance by the Federal Statistical Office to the results of the Quarterly Production Survey and the Quarterly Survey in the specialised construction industry, respectively.

XI. Economic conditions in Germany

3. Orders received by industry *

Adjusted for working-day variations **o**

Period	Industry		of which: Intermediate goods		Capital goods		Consumer goods		of which: Durable goods		Non-durable goods	
	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change
Total												
2018	110.5	+ 1.7	111.5	+ 1.9	109.9	+ 1.3	110.0	+ 4.1	118.9	+ 2.1	107.1	+ 4.8
2019	104.9	− 5.1	103.5	− 7.2	105.4	− 4.1	107.0	− 2.7	123.3	+ 3.7	101.7	− 5.0
2020	97.2	− 7.3	97.9	− 5.4	95.6	− 9.3	105.8	− 1.1	124.4	+ 0.9	99.6	− 2.1
2021	119.3	+ 22.7	124.6	+ 27.3	116.3	+ 21.7	117.4	+ 11.0	146.5	+ 17.8	107.9	+ 8.3
2021 May	113.9	+ 59.7	123.1	+ 60.5	108.4	+ 67.0	113.9	+ 19.6	157.2	+ 41.6	99.6	+ 10.8
June	126.7	+ 31.8	127.6	+ 48.4	125.4	+ 22.9	132.1	+ 33.6	151.3	+ 31.7	125.7	+ 34.3
July	128.1	+ 32.9	127.9	+ 35.5	128.5	+ 33.3	127.3	+ 20.8	151.0	+ 25.5	119.5	+ 18.9
Aug.	106.4	+ 16.7	115.6	+ 28.7	100.1	+ 10.6	111.2	+ 6.5	135.4	+ 9.1	103.3	+ 5.5
Sep.	122.6	+ 17.7	124.2	+ 22.1	122.7	+ 17.1	113.9	+ 2.2	139.1	− 5.0	105.7	+ 5.7
Oct.	117.2	+ 7.4	124.9	+ 15.3	112.2	+ 2.7	119.8	+ 7.5	141.9	− 2.1	112.5	+ 12.2
Nov.	125.4	+ 10.3	132.9	+ 16.6	120.9	+ 6.1	124.5	+ 13.0	149.6	+ 8.2	116.2	+ 15.0
Dec.	123.7	+ 13.9	120.2	+ 18.2	127.0	+ 11.8	114.5	+ 11.6	148.9	+ 13.4	103.2	+ 10.7
2022 Jan.	131.2	+ 19.8	143.7	+ 19.2	124.0	+ 20.9	127.5	+ 16.1	152.9	+ 8.1	119.2	+ 19.8
Feb.	128.3	+ 15.4	136.7	+ 16.3	122.6	+ 14.0	132.5	+ 21.0	149.8	+ 14.3	126.9	+ 23.8
Mar.	140.1	+ 8.2	152.7	+ 13.3	131.5	+ 3.4	146.5	+ 19.4	182.6	+ 23.3	134.7	+ 17.8
Apr.	125.0	+ 6.4	143.5	+ 13.5	111.9	− 0.9	139.1	+ 26.3	185.7	+ 14.2	123.7	+ 33.3
May **p**	124.0	+ 8.9	139.4	+ 13.2	113.7	+ 4.9	130.5	+ 14.6	176.3	+ 12.2	115.4	+ 15.9
From the domestic market												
2018	107.2	+ 0.2	108.6	+ 1.4	106.6	− 1.1	103.0	+ 1.4	114.7	+ 5.5	98.9	− 0.4
2019	101.2	− 5.6	99.1	− 8.7	103.0	− 3.4	101.2	− 1.7	116.2	+ 1.3	96.2	− 2.7
2020	94.9	− 6.2	94.1	− 5.0	95.2	− 7.6	98.0	− 3.2	105.5	− 9.2	95.4	− 0.8
2021	115.5	+ 21.7	119.6	+ 27.1	113.1	+ 18.8	108.0	+ 10.2	114.8	+ 8.8	105.6	+ 10.7
2021 May	112.3	+ 50.3	118.7	+ 58.7	108.6	+ 49.6	100.8	+ 14.4	121.5	+ 21.7	93.8	+ 11.5
June	127.7	+ 22.4	125.1	+ 53.9	130.5	+ 3.7	124.0	+ 36.0	117.1	+ 16.6	126.3	+ 43.4
July	128.7	+ 35.2	126.1	+ 34.7	132.1	+ 37.6	121.3	+ 22.4	116.0	+ 11.0	123.1	+ 26.5
Aug.	104.5	+ 18.1	111.5	+ 26.4	98.4	+ 13.1	106.0	+ 6.0	110.9	− 0.4	104.4	+ 8.5
Sep.	110.0	+ 10.6	117.9	+ 23.6	104.3	+ 1.6	103.0	+ 1.3	106.1	− 15.3	102.0	+ 8.9
Oct.	115.6	+ 10.6	123.1	+ 15.3	110.0	+ 7.2	110.4	+ 5.6	106.7	− 10.8	111.7	+ 12.4
Nov.	119.4	+ 9.3	126.7	+ 11.8	113.8	+ 7.1	115.4	+ 10.3	117.6	− 5.4	114.6	+ 17.1
Dec.	119.1	+ 21.3	111.4	+ 17.3	127.7	+ 25.1	105.5	+ 16.1	101.9	− 2.0	106.7	+ 23.4
2022 Jan.	122.2	+ 18.4	137.7	+ 21.0	109.9	+ 15.7	116.5	+ 20.1	106.0	− 4.5	120.1	+ 30.1
Feb.	123.4	+ 14.4	132.1	+ 17.2	116.0	+ 10.6	122.9	+ 22.5	115.6	+ 5.2	125.4	+ 29.1
Mar.	137.4	+ 8.6	148.2	+ 13.7	128.9	+ 2.5	132.0	+ 20.7	135.9	+ 3.6	130.7	+ 28.1
Apr.	124.8	+ 12.6	139.8	+ 19.3	110.5	+ 3.7	135.2	+ 32.2	134.0	+ 4.5	135.6	+ 45.0
May **p**	123.2	+ 9.7	136.5	+ 15.0	112.6	+ 3.7	118.7	+ 17.8	139.7	+ 15.0	111.6	+ 19.0
From abroad												
2018	113.0	+ 2.9	114.6	+ 2.4	111.9	+ 2.8	115.5	+ 6.1	122.2	− 0.5	113.4	+ 8.5
2019	107.7	− 4.7	108.3	− 5.5	106.9	− 4.5	111.5	− 3.5	129.1	+ 5.6	105.9	− 6.6
2020	98.9	− 8.2	102.0	− 5.8	95.9	− 10.3	111.8	+ 0.3	139.5	+ 8.1	102.8	− 2.9
2021	122.2	+ 23.6	130.1	+ 27.5	118.2	+ 23.3	124.8	+ 11.6	171.9	+ 23.2	109.6	+ 6.6
2021 May	115.2	+ 67.4	127.9	+ 62.3	108.2	+ 79.4	124.0	+ 23.1	186.0	+ 55.0	104.1	+ 10.3
June	125.9	+ 40.2	130.2	+ 43.1	122.4	+ 39.7	138.3	+ 32.0	178.8	+ 41.2	125.2	+ 28.0
July	127.7	+ 31.2	129.9	+ 36.3	126.3	+ 30.6	131.9	+ 19.7	179.1	+ 34.7	116.7	+ 13.4
Aug.	107.9	+ 15.6	120.1	+ 31.3	101.1	+ 9.2	115.2	+ 6.9	155.2	+ 15.5	102.4	+ 3.2
Sep.	132.2	+ 22.6	131.1	+ 20.7	133.8	+ 26.1	122.4	+ 2.8	165.7	+ 1.5	108.5	+ 3.4
Oct.	118.5	+ 5.2	126.8	+ 15.3	113.5	+ 0.1	127.0	+ 8.8	170.2	+ 2.9	113.1	+ 12.0
Nov.	129.9	+ 10.9	139.5	+ 21.5	125.1	+ 5.6	131.5	+ 14.8	175.4	+ 17.4	117.4	+ 13.6
Dec.	127.1	+ 9.1	129.7	+ 19.1	126.5	+ 4.9	121.5	+ 8.8	186.8	+ 21.9	100.5	+ 2.1
2022 Jan.	138.0	+ 20.7	150.1	+ 17.4	132.5	+ 23.6	136.1	+ 13.6	190.6	+ 14.9	118.5	+ 12.9
Feb.	132.0	+ 16.1	141.6	+ 15.4	126.5	+ 15.9	140.0	+ 20.1	177.4	+ 19.8	128.0	+ 20.1
Mar.	142.2	+ 7.9	157.6	+ 13.0	133.0	+ 3.9	157.8	+ 18.6	220.2	+ 36.2	137.7	+ 11.3
Apr.	125.2	+ 2.2	147.5	+ 8.1	112.7	− 3.4	142.1	+ 22.3	227.3	+ 19.5	114.6	+ 24.2
May **p**	124.6	+ 8.2	142.6	+ 11.5	114.4	+ 5.7	139.6	+ 12.6	205.7	+ 10.6	118.3	+ 13.6

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

XI. Economic conditions in Germany

4. Orders received by construction *

Adjusted for working-day variations **o**

Zeit	Total		Breakdown by type of construction										Breakdown by client **1**			
			Structural engineering													
			Total		Residential construction		Industrial construction		Public sector construction		Civil engineering		Industrial clients		Public sector **2**	
	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change
2018	135.1	+ 10.4	131.7	+ 7.0	137.1	+ 11.4	128.7	+ 4.2	125.2	+ 2.7	138.9	+ 14.2	136.1	+ 13.6	132.6	+ 6.1
2019	146.2	+ 8.2	145.3	+ 10.3	150.4	+ 9.7	142.5	+ 10.7	138.8	+ 10.9	147.2	+ 6.0	148.1	+ 8.8	141.3	+ 6.6
2020	145.6	− 0.4	144.2	− 0.8	160.8	+ 6.9	130.3	− 8.6	141.5	+ 1.9	147.3	+ 0.1	139.6	− 5.7	143.3	+ 1.4
2021	159.0	+ 9.2	164.1	+ 13.8	174.3	+ 8.4	156.6	+ 20.2	158.7	+ 12.2	153.0	+ 3.9	161.6	+ 15.8	146.7	+ 2.4
2021 Apr.	160.2	+ 7.0	158.3	+ 18.0	185.2	+ 40.5	139.5	+ 1.6	139.9	+ 7.5	162.3	− 3.2	148.1	+ 5.5	158.8	− 7.2
May	159.0	+ 14.7	163.0	+ 31.8	184.2	+ 26.3	146.7	+ 42.6	154.1	+ 20.6	154.2	− 1.2	150.8	+ 24.2	152.9	− 0.8
June	164.6	− 1.8	165.2	+ 7.9	177.5	+ 7.6	160.4	+ 15.0	142.6	− 13.5	164.0	− 11.2	166.7	+ 15.4	154.5	− 21.2
July	160.0	+ 7.2	168.4	+ 10.6	179.1	+ 12.9	163.7	+ 19.2	150.5	− 19.2	150.2	+ 2.9	158.6	+ 15.9	149.9	− 5.0
Aug.	158.9	+ 16.4	162.5	+ 20.5	167.1	+ 5.4	163.3	+ 43.4	144.0	+ 6.4	154.8	+ 11.9	158.5	+ 21.9	154.4	+ 18.4
Sep.	181.0	+ 19.3	189.0	+ 20.2	191.5	+ 10.0	193.2	+ 36.9	165.4	+ 1.9	171.7	+ 18.3	192.9	+ 31.9	161.1	+ 11.5
Oct.	158.7	+ 11.3	168.8	+ 11.7	169.1	− 7.2	171.7	+ 35.1	157.2	+ 13.9	146.8	+ 10.7	171.6	+ 21.3	137.5	+ 15.0
Nov.	145.3	+ 4.1	143.0	− 2.7	159.5	− 5.0	132.6	+ 0.3	127.3	− 4.6	148.0	+ 13.0	159.5	+ 10.9	120.4	+ 2.4
Dec.	185.3	+ 24.3	205.7	+ 41.1	196.2	+ 3.5	173.7	+ 50.3	356.7	+ 213.4	161.6	+ 5.7	186.9	+ 38.2	176.8	+ 25.9
2022 Jan.	142.8	+ 6.9	145.4	+ 4.1	165.7	+ 13.7	134.0	− 8.1	121.0	+ 24.2	139.9	+ 10.7	149.1	− 1.0	121.7	+ 14.1
Feb.	155.7	+ 8.7	161.0	+ 8.1	176.0	+ 9.1	158.3	+ 7.5	121.8	+ 6.7	149.5	+ 9.4	165.3	+ 15.3	132.4	+ 0.2
Mar.	209.6	+ 32.7	208.8	+ 32.9	219.4	+ 25.1	201.7	+ 42.4	200.5	+ 29.6	210.4	+ 32.3	217.4	+ 44.0	194.6	+ 25.2
Apr.	164.2	+ 2.5	157.6	− 0.4	178.1	− 3.8	142.5	+ 2.2	146.2	+ 4.5	171.9	+ 5.9	153.9	+ 3.9	167.5	+ 5.5

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

5. Retail trade turnover *

Adjusted for calendar variations **o**

Zeit	Total				of which:											
					In stores by enterprises main product range											
					Food, beverages, tobacco **1**		Textiles, clothing, foodwear and leather goods		Information and communications equipment		Construction and flooring materials, household appliances, furniture		Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles		Retail sale via mail order houses or via internet as well as other retail sale **2**	
	At current prices		At 2015 prices		At current prices											
	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change
2018	110.7	+ 2.9	107.5	+ 1.6	109.6	+ 3.5	105.6	− 2.3	107.1	+ 0.8	103.0	± 0.0	112.5	+ 4.5	127.7	+ 6.0
2019	114.9	+ 3.8	110.9	+ 3.2	112.1	+ 2.3	106.7	+ 1.0	108.9	+ 1.7	107.1	+ 4.0	118.7	+ 5.5	138.4	+ 8.4
2020	121.4	+ 5.7	115.9	+ 4.5	121.2	+ 8.1	81.9	− 23.2	106.9	− 1.8	117.1	+ 9.3	125.5	+ 5.7	169.0	+ 22.1
2021 **3**	124.9	+ 2.9	116.9	+ 0.9	121.9	+ 0.6	78.1	− 4.6	95.4	− 10.8	110.3	− 5.8	135.4	+ 7.9	191.3	+ 13.2
2021 May	125.5	+ 1.5	117.5	− 0.3	127.1	− 0.3	62.2	− 20.8	74.3	− 22.9	113.3	− 11.6	128.6	+ 12.6	199.8	+ 18.2
June	129.9	+ 7.1	121.9	+ 5.2	121.9	+ 2.3	113.0	+ 18.2	97.8	− 5.0	125.0	+ 2.3	132.4	+ 9.8	184.3	+ 13.4
July	126.2	+ 2.6	118.2	+ 0.5	120.5	+ 1.1	104.0	+ 5.9	102.1	− 6.4	121.4	− 3.4	136.4	+ 10.0	161.3	+ 3.1
Aug.	123.3	+ 2.3	115.6	+ 0.4	115.2	− 4.8	100.5	+ 9.7	101.8	− 2.4	116.8	− 0.3	132.8	+ 10.7	169.5	+ 9.0
Sep.	121.3	+ 1.5	113.0	− 0.7	112.5	− 1.1	100.1	− 0.7	100.6	− 3.7	113.1	− 4.2	132.1	+ 7.0	171.5	+ 6.5
Oct.	130.5	+ 0.9	120.8	− 1.8	119.6	− 2.3	114.3	+ 4.7	108.5	− 10.6	124.3	− 4.5	143.3	+ 10.1	192.2	+ 5.3
Nov.	138.3	+ 1.0	128.2	− 1.8	121.2	− 1.9	104.5	+ 15.5	132.7	− 14.4	128.1	− 9.0	144.2	+ 7.2	233.3	+ 2.0
Dec.	144.9	+ 4.4	133.8	+ 1.1	138.6	− 1.0	98.7	+ 41.8	143.0	+ 5.7	124.0	+ 3.4	150.0	+ 4.5	218.7	− 0.4
2022 Jan.	118.2	+ 14.0	108.7	+ 10.2	113.5	− 1.8	70.5	+ 263.4	103.5	+ 64.8	105.0	+ 75.9	135.4	+ 5.8	183.5	− 1.8
Feb.	116.2	+ 10.8	105.8	+ 6.8	111.8	− 1.9	71.2	+ 219.3	90.5	+ 43.4	109.1	+ 54.3	129.2	+ 0.3	171.6	− 3.8
Mar.	136.1	+ 5.2	121.2	− 0.8	130.3	− 1.3	90.4	+ 54.0	95.9	+ 8.6	132.9	+ 10.3	142.8	+ 5.0	193.5	− 6.4
Apr.	129.8	+ 7.2	114.3	+ 0.6	124.9	+ 0.6	98.0	+ 150.6	89.6	+ 29.3	127.1	+ 18.9	135.9	+ 3.3	182.3	− 5.8
May	131.3	+ 4.6	114.1	− 2.9	125.6	− 1.2	106.6	+ 71.4	84.7	+ 14.0	126.8	+ 11.9	134.6	+ 4.7	181.8	− 9.0

Source of the unadjusted figures: Federal Statistical Office. * Excluding value added tax; for explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Table III.4.c. **o** Using JDemetra+ 2.2.2 (X13). **1** Including stalls and markets. **2** Excluding stores, stalls and markets. **3** As of January 2021 figures are provisional, partially revised, and particularly uncertain in recent months due to estimates for missing reports.

XI. Economic conditions in Germany

6. Labour market *

Period	Employment [1]		Employment subject to social contributions [2]					Solely jobs exempt from social contributions [2]	Short-time workers [3]		Unemployment [4]		Unemployment rate in % [4,5]	Vacancies, thousands [4,6]
			Total		of which:					of which:		of which:		
	Thousands	Annual percentage change	Thousands	Annual percentage change	Production sector	Services excluding temporary employment	Temporary employment		Total	Cyclically induced	Total	Assigned to the legal category of the Third Book of the Social Security Code (SGB III)		
					Thousands									
2017	44,251	+ 1.4	32,234	+ 2.3	9,146	21,980	868	4,742	114	24	2,533	[7] 855	5.7	731
2018	44,858	+ 1.4	32,964	+ 2.3	9,349	22,532	840	4,671	118	25	2,340	802	5.2	796
2019	45,268	+ 0.9	33,518	+ 1.7	9,479	23,043	751	4,579	145	60	[8] 2,267	827	[8] 5.0	774
2020	44,898	− 0.8	33,579	+ 0.2	9,395	23,277	660	4,290	2,939	2,847	2,695	1,137	5.9	613
2021	44,918	+ 0.0	33,897	+ 0.9	9,344	23,602	702	4,101	1,852	1,744	2,613	999	5.7	706
2019 Q2	45,230	+ 1.0	33,388	+ 1.8	9,455	22,932	750	4,615	51	43	[8] 2,227	778	[8] 4.9	795
Q3	45,378	+ 0.8	33,548	+ 1.5	9,491	23,049	753	4,598	66	58	2,276	827	5.0	794
Q4	45,559	+ 0.7	33,924	+ 1.4	9,551	23,388	738	4,522	161	105	2,204	811	4.8	729
2020 Q1	45,122	+ 0.5	33,642	+ 1.3	9,439	23,284	686	4,458	1,219	949	2,385	960	5.2	683
Q2	44,712	− 1.1	33,415	+ 0.1	9,387	23,137	640	4,235	5,399	5,388	2,770	1,154	6.0	593
Q3	44,794	− 1.3	33,424	− 0.4	9,359	23,171	640	4,273	2,705	2,691	2,904	1,266	6.3	583
Q4	44,965	− 1.3	33,836	− 0.3	9,395	23,518	676	4,194	2,433	2,361	2,722	1,167	5.9	595
2021 Q1	44,451	− 1.5	33,568	− 0.2	9,294	23,376	665	4,051	3,473	3,157	2,878	1,248	6.3	586
Q2	44,742	+ 0.1	33,718	+ 0.9	9,322	23,446	697	4,066	2,164	2,143	2,691	1,024	5.9	658
Q3	45,088	+ 0.7	33,929	+ 1.5	9,347	23,606	719	4,161	935	915	2,545	920	5.5	774
Q4	45,391	+ 0.9	34,374	+ 1.6	9,415	23,982	727	4,125	835	762	2,341	802	5.1	804
2022 Q1	[9] 45,138	[9] + 1.5	[10] 34,237	[10] + 2.0	[10] 9,347	[10] 23,941	[10] 714	[10] 4,055	...	[10] 799	2,417	874	5.3	818
Q2	...	...	...	...	...	...	...	...	...	...	2,311	777	[11] 5.0	864
2019 Feb.	44,894	+ 1.2	33,199	+ 2.0	9,416	22,794	758	4,564	310	29	2,373	908	5.3	784
Mar.	44,971	+ 1.1	33,286	+ 1.9	9,442	22,855	749	4,574	246	32	2,301	850	5.1	797
Apr.	45,134	+ 1.1	33,383	+ 1.8	9,457	22,925	753	4,607	49	40	2,229	795	4.9	796
May	45,259	+ 1.0	33,433	+ 1.8	9,462	22,968	749	4,627	53	45	[8] 2,236	772	[8] 4.9	792
June	45,297	+ 0.9	33,407	+ 1.6	9,455	22,948	750	4,646	51	43	2,216	766	4.9	798
July	45,312	+ 0.9	33,360	+ 1.6	9,450	22,901	757	4,644	55	47	2,275	825	5.0	799
Aug.	45,307	+ 0.7	33,610	+ 1.4	9,505	23,101	750	4,568	60	51	2,319	848	5.1	795
Sep.	45,516	+ 0.8	33,938	+ 1.5	9,583	23,341	754	4,517	84	75	2,234	808	4.9	787
Oct.	45,592	+ 0.8	33,966	+ 1.4	9,567	23,398	748	4,510	111	102	2,204	795	4.8	764
Nov.	45,622	+ 0.7	33,968	+ 1.4	9,559	23,423	742	4,532	124	115	2,180	800	4.8	736
Dec.	45,463	+ 0.6	33,740	+ 1.4	9,474	23,344	694	4,531	247	97	2,227	838	4.9	687
2020 Jan.	45,140	+ 0.6	33,608	+ 1.4	9,432	23,255	689	4,471	382	133	2,426	985	5.3	668
Feb.	45,160	+ 0.6	33,624	+ 1.3	9,427	23,278	683	4,461	439	134	2,396	971	5.3	690
Mar.	45,066	+ 0.2	33,648	+ 1.1	9,440	23,290	675	4,350	2,834	2,580	2,335	925	5.1	691
Apr.	44,798	− 0.7	33,430	+ 0.1	9,396	23,141	643	4,194	6,007	5,995	2,644	1,093	5.8	626
May	44,662	− 1.3	33,328	− 0.3	9,367	23,083	624	4,206	5,726	5,715	2,813	1,172	6.1	584
June	44,676	− 1.4	33,323	− 0.3	9,355	23,084	629	4,260	4,464	4,452	2,853	1,197	6.2	570
July	44,687	− 1.4	33,233	− 0.4	9,322	23,024	635	4,302	3,319	3,306	2,910	1,258	6.3	573
Aug.	44,722	− 1.3	33,482	− 0.4	9,367	23,218	642	4,266	2,551	2,537	2,955	1,302	6.4	584
Sep.	44,972	− 1.2	33,792	− 0.4	9,421	23,454	656	4,240	2,244	2,229	2,847	1,238	6.2	591
Oct.	45,054	− 1.2	33,862	− 0.3	9,410	23,530	671	4,229	2,037	2,021	2,760	1,183	6.0	602
Nov.	45,002	− 1.4	33,899	− 0.2	9,400	23,559	696	4,166	2,405	2,386	2,699	1,152	5.9	601
Dec.	44,838	− 1.4	33,700	− 0.1	9,327	23,478	666	4,134	2,856	2,676	2,707	1,166	5.9	581
2021 Jan.	44,430	− 1.6	33,515	− 0.3	9,282	23,347	657	4,045	3,638	3,294	2,901	1,298	6.3	566
Feb.	44,423	− 1.6	33,521	− 0.3	9,281	23,343	662	4,026	3,766	3,358	2,904	1,270	6.3	583
Mar.	44,501	− 1.3	33,636	− 0.0	9,309	23,397	685	4,032	3,016	2,818	2,827	1,177	6.2	609
Apr.	44,608	− 0.4	33,689	+ 0.8	9,324	23,427	687	4,039	2,583	2,560	2,771	1,091	6.0	629
May	44,726	+ 0.1	33,747	+ 1.3	9,326	23,461	703	4,067	2,342	2,320	2,687	1,020	5.9	654
June	44,892	+ 0.5	33,802	+ 1.4	9,324	23,504	716	4,151	1,568	1,548	2,614	961	5.7	693
July	44,956	+ 0.6	33,731	+ 1.5	9,304	23,458	715	4,194	1,088	1,068	2,590	956	5.6	744
Aug.	45,028	+ 0.7	33,994	+ 1.5	9,358	23,658	722	4,153	857	838	2,578	940	5.6	779
Sep.	45,280	+ 0.7	34,323	+ 1.6	9,432	23,903	726	4,123	859	839	2,465	864	5.4	799
Oct.	45,376	+ 0.7	34,369	+ 1.5	9,425	23,965	724	4,123	780	762	2,377	814	5.2	809
Nov.	45,448	+ 1.0	34,449	+ 1.6	9,423	24,039	739	4,133	767	750	2,317	789	5.1	808
Dec.	45,350	+ 1.1	34,284	+ 1.7	9,364	23,980	708	4,112	957	772	2,330	803	5.1	794
2022 Jan.	45,058	+ 1.4	[10] 34,167	[10] + 1.9	[10] 9,329	[10] 23,896	[10] 710	[10] 4,042	...	[10] 850	2,462	903	5.4	792
Feb.	45,121	+ 1.6	[10] 34,237	[10] + 2.1	[10] 9,345	[10] 23,937	[10] 719	[10] 4,041	...	[10] 814	2,428	884	5.3	822
Mar.	[9] 45,236	[9] + 1.7	[10] 34,332	[10] + 2.1	[10] 9,368	[10] 23,999	[10] 719	[10] 4,053	...	[10] 733	2,362	835	5.1	839
Apr.	[9] 45,379	[9] + 1.7	[10] 34,361	[10] + 2.0	[10] 9,365	[10] 24,034	[10] 711	[10] 4,078	...	[10] 401	2,309	800	5.0	852
May	[9] 45,498	[9] + 1.7	...	...	...	...	...	...	...	...	2,260	771	[11] 4.9	865
June	...	...	...	...	...	...	...	...	...	...	2,363	761	5.2	877

Sources: Federal Statistical Office; Federal Employment Agency. * Annual and quarterly figures: averages; calculated by the Bundesbank; deviations from the official figures are due to rounding. **1** Workplace concept; averages. **2** Monthly figures: end of month. **3** Number within a given month. **4** Mid-month level. **5** Relative to the total civilian labour force. **6** Excluding government-assisted forms of employment and seasonal jobs, including jobs located abroad. **7** From January 2017 persons receiving additional income assistance (unemployment benefit and unemployment benefit II at the same time) shall be assigned to the legal category of the Third Book of the Social Security Code (SGB III). **8** Statistical break due to late recording of unemployed persons in the legal category of the Second Book of the Social Security Code (SGB II). **9** Initial preliminary estimate by the Federal Statistical Office. **10** Unadjusted figures estimated by the Federal Employment Agency. In 2020 and 2021, the estimated values for Germany deviated from the final data by a maximum of 0.1% for employees subject to social contributions, by a maximum of 0.9% for persons solely in jobs exempt from social contributions, and by a maximum of 28,1% for cyclically induced short-time work. **11** From May 2022, calculated on the basis of new labour force figures.

XI. Economic conditions in Germany

7. Prices

Period	Harmonised Index of Consumer Prices: Total	of which: Food [1,2]	of which: Non-energy industrial goods [1]	of which: Energy [1]	of which: Services [1]	of which: Actual rents for housing	Memo item: Consumer price index (national concept)	Construction price index	Index of producer prices of industrial products sold on the domestic market [3]	Index of producer prices of agricultural products [3]	Indices of foreign trade prices: Exports	Indices of foreign trade prices: Imports	HWWI Index of World Market Prices of Raw Materials [4]: Energy [5]	HWWI Index of World Market Prices of Raw Materials [4]: Other raw materials [6]
	2015 = 100												2020 = 100	
Index level														
2018	104.0	106.7	103.0	102.3	104.2	104.6	103.8	110.2	103.7	109.0	101.9	102.7	174.1	99.9
2019	105.5	108.4	104.2	103.7	105.7	106.1	105.3	115.3	104.8	111.5	102.4	101.7	150.2	98.7
2020	[7] 105.8	[7] 110.9	[7] 104.1	[7] 99.0	[7] 106.9	107.6	[7] 105.8	[7] 117.0	103.8	108.0	101.7	97.3	100.0	100.0
2021	[7] 109.2	[7] 114.1	[7] 106.7	[7] 109.0	[7] 109.0	109.0	[7] 109.1	[7] 127.0	114.7	[8] 117.5	107.4	110.4	220.7	137.6
2020 Aug.	[7] 106.2	[7] 110.1	[7] 102.6	[7] 97.6	[7] 109.0	107.8	[7] 106.0	[7] 115.7	103.2	104.8	101.2	96.5	95.8	98.4
Sep.	[7] 105.8	[7] 109.9	[7] 103.6	[7] 96.9	[7] 108.0	107.8	[7] 105.8		103.6	103.5	101.3	96.8	97.1	103.5
Oct.	[7] 105.8	[7] 110.2	[7] 103.9	[7] 97.0	[7] 107.6	108.0	[7] 105.9		103.7	103.8	101.4	97.1	103.3	104.9
Nov.	[7] 104.7	[7] 110.3	[7] 104.0	[7] 96.0	[7] 105.5	108.1	[7] 105.0	[7] 116.0	103.9	103.9	101.8	97.6	109.5	107.1
Dec.	[7] 105.3	[7] 109.9	[7] 103.4	[7] 97.4	[7] 106.9	108.2	[7] 105.5		104.7	104.2	101.9	98.2	121.8	112.3
2021 Jan.	106.8	112.3	105.1	102.6	106.9	108.4	106.3		106.2	106.8	102.8	100.1	141.6	120.6
Feb.	107.4	113.0	105.5	104.1	107.3	108.5	107.0	121.2	106.9	108.9	103.3	101.8	146.0	124.7
Mar.	107.9	113.1	105.7	106.2	107.6	108.6	107.5		107.9	114.0	104.1	103.6	150.3	130.4
Apr.	108.4	114.5	105.8	106.1	108.3	108.7	108.2		108.8	115.9	104.9	105.0	154.1	134.3
May	108.7	114.2	106.3	106.7	108.7	108.9	108.7	125.1	110.4	118.5	105.6	106.8	168.3	144.9
June	109.1	114.1	106.5	107.6	109.1	108.9	109.1		111.8	117.7	106.4	108.5	183.0	142.3
July	[7] 109.7	[7] 114.4	[7] 106.4	[7] 109.0	[7] 110.2	109.1	[7] 110.1		113.9	117.3	107.7	110.9	204.8	141.9
Aug.	[7] 109.8	[7] 114.4	[7] 106.5	[7] 109.4	[7] 110.3	109.2	[7] 110.1	[7] 129.4	115.6	118.8	108.5	112.4	217.6	138.9
Sep.	[7] 110.1	[7] 114.4	[7] 107.6	[7] 110.1	[7] 109.9	109.3	[7] 110.1		118.3	[8] 117.4	109.5	113.9	256.1	136.3
Oct.	[7] 110.7	[7] 114.5	[7] 108.0	[7] 114.6	[7] 110.0	109.5	[7] 110.7		122.8	120.7	111.0	118.2	352.7	143.0
Nov.	[7] 111.0	[7] 114.9	[7] 108.4	[7] 116.7	[7] 109.5	109.5	[7] 110.5	[7] 132.2	123.8	125.6	111.9	121.7	304.4	143.0
Dec.	[7] 111.3	[7] 115.7	[7] 108.6	[7] 115.0	[7] 110.3	109.6	[7] 111.1		130.0	127.2	113.0	121.8	352.9	148.3
2022 Jan.	112.3	117.2	108.4	123.7	109.8	109.9	111.5		132.8	129.2	115.0	127.0	327.8	157.0
Feb.	113.3	118.2	109.1	127.4	110.2	110.0	112.5	138.1	134.6	133.4	116.1	128.6	336.0	166.5
Mar.	116.1	119.1	110.4	146.1	110.6	110.2	115.3		141.2	153.6	120.7	135.9	504.2	185.4
Apr.	116.9	122.2	111.3	142.7	111.7	110.4	116.2		145.2	162.3	121.7	138.3	407.8	184.8
May	118.2	124.2	112.3	146.7	112.0	110.6	117.3	147.9	147.5	161.2	122.4	139.5	366.8	178.9
June	118.1	125.4	112.5	147.8	111.0	110.8	117.4	...	...	...	...	...	389.3	169.6
Annual percentage change														
2018	+ 1.9	+ 2.6	+ 0.8	+ 4.9	+ 1.6	+ 1.6	+ 1.8	+ 4.7	+ 2.6	+ 0.4	+ 1.2	+ 2.6	+ 25.4	+ 0.3
2019	+ 1.4	+ 1.6	+ 1.1	+ 1.4	+ 1.5	+ 1.5	+ 1.4	+ 4.7	+ 1.1	+ 2.3	+ 0.5	− 1.0	− 13.7	− 1.2
2020	[7] + 0.4	[7] + 2.3	[7] − 0.1	[7] − 4.5	[7] + 1.2	+ 1.4	[7] + 0.5	[7] + 1.4	− 1.0	− 3.1	− 0.7	− 4.3	− 33.4	+ 1.3
2021	[7] + 3.2	[7] + 2.9	[7] + 2.5	[7] +10.1	[7] + 2.0	+ 1.3	[7] + 3.1	[7] + 8.6	+ 10.5	[8] + 8.8	+ 5.6	+ 13.5	+ 120.7	+ 37.6
2020 Aug.	[7] − 0.1	[7] + 1.2	[7] − 0.8	[7] − 6.0	[7] + 1.1	+ 1.4	[7] ± 0.0	[7] − 0.1	− 1.2	− 6.8	− 1.1	− 4.0	− 29.3	+ 2.3
Sep.	[7] − 0.4	[7] + 1.0	[7] − 1.1	[7] − 6.6	[7] + 1.0	+ 1.3	[7] − 0.2		− 1.0	− 5.8	− 1.1	− 4.3	− 32.3	+ 5.9
Oct.	[7] − 0.5	[7] + 1.5	[7] − 1.0	[7] − 6.6	[7] + 0.7	+ 1.3	[7] − 0.2		− 0.7	− 5.9	− 1.0	− 3.9	− 29.1	+ 7.0
Nov.	[7] − 0.7	[7] + 1.2	[7] − 1.1	[7] − 7.4	[7] + 0.6	+ 1.3	[7] − 0.3	[7] − 0.3	− 0.5	− 7.2	− 0.6	− 3.8	− 28.0	+ 8.4
Dec.	[7] − 0.7	[7] + 0.6	[7] − 1.6	[7] − 6.0	[7] + 0.8	+ 1.3	[7] − 0.3		+ 0.2	− 8.9	− 0.6	− 3.4	− 20.8	+ 11.1
2021 Jan.	+ 1.6	+ 2.0	+ 1.1	− 2.2	+ 2.5	+ 1.3	+ 1.0		+ 0.9	− 5.7	+ 0.1	− 1.2	− 2.2	+ 17.7
Feb.	+ 1.6	+ 1.6	+ 1.2	+ 0.2	+ 2.0	+ 1.3	+ 1.3	+ 2.9	+ 1.9	− 4.6	+ 0.7	+ 1.4	+ 15.9	+ 24.6
Mar.	+ 2.0	+ 1.9	+ 0.5	+ 4.5	+ 2.0	+ 1.2	+ 1.7		+ 3.7	+ 0.3	+ 2.2	+ 6.9	+ 79.1	+ 36.1
Apr.	+ 2.1	+ 2.0	+ 0.4	+ 7.6	+ 1.5	+ 1.2	+ 2.0		+ 5.2	+ 2.8	+ 3.3	+ 10.3	+ 128.3	+ 45.0
May	+ 2.4	+ 1.5	+ 0.9	+ 9.5	+ 1.9	+ 1.3	+ 2.5	+ 5.7	+ 7.2	+ 8.6	+ 4.2	+ 11.8	+ 127.4	+ 56.0
June	+ 2.1	+ 1.2	+ 1.6	+ 9.0	+ 0.9	+ 1.2	+ 2.3		+ 8.5	+ 7.0	+ 5.0	+ 12.9	+ 113.0	+ 51.2
July	[7] + 3.1	[7] + 3.8	[7] + 3.8	[7] +11.2	[7] + 0.7	+ 1.3	[7] + 3.8		+ 10.4	+ 9.1	+ 6.3	+ 15.0	+ 126.0	+ 48.1
Aug.	[7] + 3.4	[7] + 3.9	[7] + 3.8	[7] +12.1	[7] + 1.2	+ 1.3	[7] + 3.9	[7] + 11.8	+ 12.0	+ 13.4	+ 7.2	+ 16.5	+ 127.1	+ 41.2
Sep.	[7] + 4.1	[7] + 4.1	[7] + 3.9	[7] +13.6	[7] + 1.8	+ 1.4	[7] + 4.1		+ 14.2	[8] + 13.4	+ 8.1	+ 17.7	+ 163.7	+ 31.7
Oct.	[7] + 4.6	[7] + 3.9	[7] + 3.9	[7] +18.1	[7] + 2.2	+ 1.4	[7] + 4.5		+ 18.4	+ 16.3	+ 9.5	+ 21.7	+ 241.4	+ 36.3
Nov.	[7] + 6.0	[7] + 4.2	[7] + 4.2	[7] +21.6	[7] + 3.8	+ 1.3	[7] + 5.2	[7] + 14.0	+ 19.2	+ 20.9	+ 9.9	+ 24.7	+ 178.0	+ 33.5
Dec.	[7] + 5.7	[7] + 5.3	[7] + 5.0	[7] +18.1	[7] + 3.2	+ 1.3	[7] + 5.3		+ 24.2	+ 22.1	+ 10.9	+ 24.0	+ 189.7	+ 32.1
2022 Jan.	+ 5.1	+ 4.4	+ 3.1	+20.6	+ 2.7	+ 1.4	+ 4.9		+ 25.0	+ 21.0	+ 11.9	+ 26.9	+ 131.5	+ 30.2
Feb.	+ 5.5	+ 4.6	+ 3.4	+22.4	+ 2.7	+ 1.4	+ 5.1	+ 13.9	+ 25.9	+ 22.5	+ 12.4	+ 26.3	+ 130.1	+ 33.5
Mar.	+ 7.6	+ 5.3	+ 4.4	+37.6	+ 2.8	+ 1.5	+ 7.3		+ 30.9	+ 34.7	+ 15.9	+ 31.2	+ 235.5	+ 42.2
Apr.	+ 7.8	+ 6.7	+ 5.2	+34.5	+ 3.1	+ 1.6	+ 7.4		+ 33.5	+ 40.0	+ 16.0	+ 31.7	+ 164.6	+ 37.6
May	+ 8.7	+ 8.8	+ 5.6	+37.5	+ 3.0	+ 1.6	+ 7.9	+ 18.2	+ 33.6	+ 36.0	+ 15.9	+ 30.6	+ 117.9	+ 23.5
June	+ 8.2	+ 9.9	+ 5.6	+37.4	+ 1.7	+ 1.7	+ 7.6	...	...	...	...	...	+ 112.7	+ 19.2

Sources: Eurostat; Federal Statistical Office and Bundesbank calculation based on data from the Federal Statistical Office; for the Index of World Market Prices of Raw Materials: HWWI. **1** The last data point is at times based on the Bundesbank's own estimates. **2** Including alcoholic beverages and tobacco. **3** Excluding value added tax. **4** For the euro area, in euro. **5** Coal, crude oil (Brent) and natural gas. **6** Food, beverages and tobacco as well as industrial raw materials. **7** Influenced by a temporary reduction of value added tax between July and December 2020. **8** From September 2021 onwards provisional figures.

XI. Economic conditions in Germany

8. Households' income *

Period	Gross wages and salaries [1]		Net wages and salaries [2]		Monetary social benefits received [3]		Mass income [4]		Disposable income [5]		Saving [6]		Saving ratio [7]
	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	As percentage
2014	1,234.2	4.0	830.5	3.9	394.0	2.6	1,224.5	3.5	1,734.5	2.6	170.6	8.6	9.8
2015	1,285.5	4.2	863.3	4.0	410.5	4.2	1,273.8	4.0	1,782.3	2.8	179.4	5.1	10.1
2016	1,337.4	4.0	896.3	3.8	426.2	3.8	1,322.5	3.8	1,841.5	3.3	187.8	4.7	10.2
2017	1,395.4	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	1,462.6	4.8	976.3	4.7	454.3	2.8	1,430.6	4.1	1,975.8	3.7	223.7	10.3	11.3
2019	1,524.1	4.2	1,022.0	4.7	474.4	4.4	1,496.4	4.6	2,021.6	2.3	218.7	– 2.2	10.8
2020	1,514.1	– 0.7	1,021.3	– 0.1	518.8	9.4	1,540.1	2.9	2,035.1	0.7	327.1	49.6	16.1
2021	1,572.0	3.8	1,065.3	4.3	529.2	2.0	1,594.5	3.5	2,078.4	2.1	311.8	– 4.7	15.0
2020 Q4	417.9	0.1	282.1	1.1	131.3	10.4	413.3	3.9	514.9	0.7	78.9	60.6	15.3
2021 Q1	361.8	– 1.2	245.0	– 0.5	136.2	8.9	381.2	2.6	516.3	– 0.8	113.7	35.1	22.0
Q2	377.4	6.1	251.3	7.0	134.0	2.7	385.3	5.5	509.9	3.7	83.0	– 14.8	16.3
Q3	393.5	5.2	272.2	5.5	130.5	– 1.2	402.7	3.2	520.4	2.4	54.2	– 18.5	10.4
Q4	439.3	5.1	296.7	5.2	128.5	– 2.1	425.2	2.9	531.8	3.3	60.8	– 22.9	11.4
2022 Q1	388.4	7.4	261.7	6.8	131.9	– 3.1	393.6	3.3	536.6	3.9	78.2	– 31.2	14.6

Source: Federal Statistical Office; figures computed in May 2022. * Households including non-profit institutions serving households. **1** Residence concept. **2** After deducting the wage tax payable on gross wages and salaries and employees' contributions to the social security funds. **3** Social security benefits in cash from the social security funds, central, state and local government and foreign countries, pension payments (net), private funded social benefits, less social contributions on social benefits, consumption-related taxes and public charges. **4** Net wages and salaries plus monetary social benefits received. **5** Mass income plus operating surplus, mixed income, property income (net), other current transfers received, income of non-profit institutions serving households, less taxes (excluding wage tax and consumption-related taxes) and other current transfers paid. Including the increase in claims on company pension funds. **6** Including the increase in claims on company pension funds. **7** Saving as a percentage of disposable income.

9. Negotiated pay rates (overall economy)

Period	Index of negotiated wages [1]								Memo item: Wages and salaries per employee [3]	
	On an hourly basis		On a monthly basis							
			Total		Total excluding one-off payments		Basic pay rates [2]			
	2015=100	Annual percentage change	2015=100	Annual percentage change	2015=100	Annual percentage change	2015=100	Annual percentage change	2015=100	Annual percentage change
2014	97.7	3.1	97.8	2.9	97.7	2.8	97.7	2.8	97.2	2.9
2015	100.0	2.3	100.0	2.3	100.0	2.3	100.0	2.4	100.0	2.9
2016	102.2	2.2	102.2	2.2	102.2	2.2	102.3	2.3	102.5	2.5
2017	104.5	2.2	104.5	2.2	104.5	2.3	104.7	2.4	105.1	2.6
2018	107.6	3.0	107.5	3.0	107.5	2.8	107.6	2.8	108.5	3.2
2019	110.7	2.9	110.6	2.8	110.1	2.5	110.2	2.4	111.7	3.0
2020	112.9	2.0	112.9	2.1	112.2	1.9	112.3	1.9	111.5	– 0.1
2021	114.7	1.6	114.6	1.6	114.1	1.7	114.1	1.6	115.5	3.6
2020 Q4	125.3	2.5	125.2	2.5	124.2	1.7	112.7	1.7	122.8	1.2
2021 Q1	106.0	1.4	106.0	1.4	106.1	1.5	113.4	1.5	107.4	0.1
Q2	107.7	2.3	107.6	2.3	106.8	1.4	113.9	1.5	111.4	5.7
Q3	117.8	1.0	117.7	1.0	116.4	1.4	114.2	1.5	115.4	4.3
Q4	127.3	1.6	127.2	1.6	127.2	2.4	114.7	1.8	127.6	3.9
2022 Q1	110.7	4.4	110.6	4.4	107.8	1.6	115.2	1.6	113.4	5.5
2021 Nov.	163.4	1.7	163.4	1.7	163.5	2.2	114.8	1.8	.	.
Dec.	109.5	– 0.3	109.5	– 0.3	109.2	1.8	114.8	1.8	.	.
2022 Jan.	108.4	2.2	108.3	2.2	107.7	1.5	115.2	1.6	.	.
Feb.	110.5	4.2	110.4	4.2	107.8	1.7	115.2	1.6	.	.
Mar.	113.3	6.8	113.2	6.8	107.8	1.6	115.3	1.6	.	.
Apr.	109.5	2.2	109.4	2.2	109.2	2.1	116.1	2.0	.	.
May	111.1	4.2	111.0	4.2	109.1	2.2	116.4	2.2	.	.

1 Current data are normally revised on account of additional reports. **2** Excluding one-off payments and covenants (capital formation benefits, special payments, such as annual bonuses, holiday pay, Christmas bonuses (13th monthly salary payment) and retirement provisions). **3** Source: Federal Statistical Office; figures computed in May 2022.

XI. Economic conditions in Germany

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

End of year/half

Period	Assets									Equity and liabilities						
			of which:				of which:				Liabilities					
												Long-term		Short-term		
															of which:	
	Total assets	Non-current assets	Intangible assets	Tangible assets	Financial assets	Current assets	Inventories	Trade receivables	Cash 1	Equity	Total	Total	of which: Financial debt	Total	Financial debt	Trade payables
	Total (€ billion)															
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 p	3,292.0	1,971.6	680.1	773.9	368.6	1,320.4	272.1	338.2	269.6	994.4	2,297.6	1,206.9	772.1	1,090.7	310.4	238.0
2020 H1	2,891.4	1,800.9	625.0	734.0	319.7	1,090.5	257.6	216.4	220.7	793.7	2,097.7	1,183.8	754.2	913.9	335.5	179.7
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	343.7	1,140.6	256.2	273.2	240.8	906.9	2,110.7	1,178.6	751.9	932.1	297.4	206.9
H2 p	3,292.0	1,971.6	680.1	773.9	368.6	1,320.4	272.1	338.2	269.6	994.4	2,297.6	1,206.9	772.1	1,090.7	310.4	238.0
	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 p	100.0	59.9	20.7	23.5	11.2	40.1	8.3	10.3	8.2	30.2	69.8	36.7	23.5	33.1	9.4	7.2
2020 H1	100.0	62.3	21.6	25.4	11.1	37.7	8.9	7.5	7.6	27.5	72.6	40.9	26.1	31.6	11.6	6.2
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	9.1	8.0	30.1	70.0	39.1	24.9	30.9	9.9	6.9
H2 p	100.0	59.9	20.7	23.5	11.2	40.1	8.3	10.3	8.2	30.2	69.8	36.7	23.5	33.1	9.4	7.2
	Groups with a focus on the production sector (€ billion) 2															
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 p	2,626.3	1,479.3	441.7	573.9	347.4	1,147.0	254.4	281.7	212.3	764.7	1,861.6	918.5	548.5	943.1	274.9	184.0
2020 H1	2,304.8	1,351.9	406.4	547.1	303.3	952.9	243.9	171.5	171.3	614.6	1,690.2	912.1	548.4	778.0	294.6	137.0
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	221.9	192.4	703.5	1,689.4	892.3	532.0	797.1	261.3	162.1
H2 p	2,626.3	1,479.3	441.7	573.9	347.4	1,147.0	254.4	281.7	212.3	764.7	1,861.6	918.5	548.5	943.1	274.9	184.0
	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 p	100.0	56.3	16.8	21.9	13.2	43.7	9.7	10.7	8.1	29.1	70.9	35.0	20.9	35.9	10.5	7.0
2020 H1	100.0	58.7	17.6	23.7	13.2	41.3	10.6	7.4	7.4	26.7	73.3	39.6	23.8	33.8	12.8	6.0
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	9.3	8.0	29.4	70.6	37.3	22.2	33.3	10.9	6.8
H2 p	100.0	56.3	16.8	21.9	13.2	43.7	9.7	10.7	8.1	29.1	70.9	35.0	20.9	35.9	10.5	7.0
	Groups with a focus on the services sector (€ billion)															
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 p	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 H1	586.6	449.0	218.7	186.8	16.3	137.6	13.7	44.9	49.4	179.1	407.6	271.7	205.7	135.9	40.9	42.6
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	194.1	21.2	146.1	15.5	51.4	48.4	203.4	421.3	286.4	219.9	135.0	36.1	44.8
H2 p	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
	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 p	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 H1	100.0	76.5	37.3	31.9	2.8	23.5	2.3	7.7	8.4	30.5	69.5	46.3	35.1	23.2	7.0	7.3
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 p	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

***** Non-financial groups admitted to the Prime Standard segment of the Frankfurt Stock Exchange which publish IFRS consolidated financial statements on a quarterly or half-yearly basis and make a noteworthy contribution to value added in Germany. Excluding groups engaged in real estate activities. **1** Including cash equivalents. **2** Including groups in agriculture and forestry. **3** From H1 2018 or 2018 onwards: significant changes in IFRS standards, impairing comparability with previous periods.

XI. Economic conditions in Germany

11. Revenues and operating income of listed non-financial groups *

Period	Revenues		Operating income before depreciation and amortisation (EBITDA 1)		Operating income before depreciation and amortisation (EBITDA 1) as a percentage of revenues					Operating income (EBIT)		Operating income (EBIT) as a percentage of revenues				
					Weighted average		Distribution 2					Weighted average		Distribution 2		
							First quartile	Median	Third quartile					First quartile	Median	Third quartile
	€ billion 3	Annual percentage change 4	€ billion 3	Annual percentage change 4	%	Annual change in percentage points 4	%	%	%	€ billion 3	Annual percentage change 4	%	Annual change in percentage points 4	%	%	%
Total																
2014	1,564.3	1.0	198.7	5.0	12.7	0.5	5.9	10.3	17.4	109.3	8.6	7.0	0.5	1.9	6.2	11.1
2015	1,633.9	6.9	195.9	– 1.1	12.0	– 1.0	6.3	10.6	17.8	91.5	– 16.4	5.6	– 1.5	1.8	6.7	11.3
2016	1,624.3	– 0.4	214.4	7.8	13.2	1.0	6.7	11.4	17.9	111.7	9.0	6.9	0.5	2.6	6.7	12.0
2017	1,719.3	5.1	243.4	14.6	14.2	1.2	7.0	11.0	18.0	141.9	33.3	8.3	1.8	2.5	6.8	12.1
2018 6	1,706.8	0.7	232.8	– 0.9	13.6	– 0.2	6.1	10.6	17.8	129.2	– 6.3	7.6	– 0.6	2.1	6.5	11.9
2019	1,764.6	2.6	233.6	0.4	13.2	– 0.3	6.9	12.2	19.2	105.5	– 17.9	6.0	– 1.5	1.6	5.8	11.8
2020	1,632.8	– 8.8	213.6	– 7.7	13.1	0.2	6.5	11.5	17.9	52.1	– 41.0	3.2	– 2.1	– 0.8	4.9	10.5
2021 p	1,994.7	20.4	305.8	41.5	15.3	2.3	7.8	13.4	19.9	169.6	228.0	8.5	5.4	2.9	8.2	12.2
2017 H1	843.9	6.7	125.7	14.6	14.9	1.0	5.7	10.1	17.1	78.4	29.6	9.3	1.6	1.8	5.8	11.6
H2	878.5	3.5	117.4	14.6	13.4	1.3	6.9	12.0	19.2	63.0	38.2	7.2	1.8	3.2	7.4	12.4
2018 H1 6	848.2	– 0.1	120.8	– 2.1	14.2	– 0.3	5.1	10.6	18.2	72.7	– 5.3	8.6	– 0.5	1.7	6.4	12.5
H2	869.4	1.4	114.4	0.5	13.2	– 0.1	6.3	11.2	18.0	58.0	– 7.6	6.7	– 0.6	2.1	6.8	12.5
2019 H1	861.3	2.7	112.3	– 4.0	13.0	– 0.9	6.5	11.8	18.6	53.4	– 23.3	6.2	– 2.1	1.5	5.7	11.7
H2	903.7	2.4	121.3	4.8	13.4	0.3	6.6	11.8	20.0	52.0	– 11.4	5.8	– 0.9	0.8	6.1	12.5
2020 H1	744.5	– 14.4	78.2	– 34.1	10.5	– 3.0	4.8	9.9	16.7	7.9	– 88.0	1.1	– 5.3	– 2.1	3.5	8.8
H2	888.4	– 3.3	135.4	17.1	15.2	2.8	7.6	13.2	19.8	44.2	8.7	5.0	0.7	1.7	6.5	11.6
2021 H1	920.0	20.3	152.5	88.4	16.6	6.0	7.4	12.6	19.5	85.5	.	9.3	8.4	2.3	7.8	12.2
H2 p	1,075.6	20.4	153.5	13.4	14.3	– 0.9	8.4	13.2	20.8	84.1	88.9	7.8	2.9	2.9	7.8	13.4
Groups with a focus on the production sector 5																
2014	1,220.0	1.0	152.2	5.9	12.5	0.6	5.8	10.1	15.5	85.2	9.8	7.0	0.6	1.7	6.0	10.6
2015	1,309.7	7.0	149.0	– 2.6	11.4	– 1.1	6.3	10.5	16.3	69.1	– 19.7	5.3	– 1.8	2.2	6.6	10.4
2016	1,295.9	– 0.8	161.9	6.3	12.5	0.8	6.5	10.6	16.0	84.8	4.2	6.5	0.3	2.8	6.3	10.5
2017	1,395.9	5.5	187.5	16.6	13.4	1.3	7.1	11.0	15.8	112.5	40.6	8.1	2.0	3.2	6.7	10.4
2018 6	1,367.7	1.0	175.7	– 1.5	12.9	– 0.3	6.9	10.7	16.0	100.7	– 7.1	7.4	– 0.6	2.8	6.9	11.4
2019	1,410.9	2.0	168.1	– 4.4	11.9	– 0.8	6.9	11.3	16.6	76.3	– 23.8	5.4	– 1.8	1.4	5.7	10.1
2020	1,285.2	– 9.4	143.6	– 8.6	11.2	0.1	5.7	10.6	16.5	29.1	– 48.1	2.3	– 2.3	– 0.7	4.3	9.8
2021 p	1,585.8	22.4	217.0	51.6	13.7	2.6	7.9	12.8	17.9	126.8	354.3	8.0	5.9	2.8	7.8	11.1
2017 H1	695.1	7.3	101.5	18.7	14.6	1.4	6.0	10.1	16.1	66.3	37.3	9.5	2.1	2.3	5.8	10.8
H2	701.4	3.7	86.0	14.2	12.3	1.1	7.0	11.7	16.9	46.2	45.5	6.6	1.9	3.6	7.2	10.8
2018 H1 6	681.9	– 0.1	94.9	– 3.4	13.9	– 0.5	7.0	10.9	16.7	60.0	– 5.9	8.8	– 0.6	2.9	6.8	11.5
H2	695.4	2.1	83.1	0.7	12.0	– 0.2	6.2	11.1	16.2	42.1	– 8.7	6.1	– 0.7	2.0	6.4	11.4
2019 H1	689.9	2.4	83.3	– 8.8	12.1	– 1.5	7.1	10.9	16.1	41.9	– 26.8	6.1	– 2.4	1.8	6.0	9.5
H2	721.0	1.7	84.8	0.3	11.8	– 0.2	6.1	10.8	16.9	34.4	– 19.7	4.8	– 1.3	0.6	5.2	11.1
2020 H1	580.6	– 16.0	49.0	– 42.4	8.4	– 3.8	4.4	8.8	14.9	0.2	– 101.7	0.0	– 6.2	– 2.1	3.1	7.8
H2	704.6	– 3.0	94.6	25.4	13.4	3.4	7.0	12.1	18.6	28.9	19.7	4.1	1.1	0.3	6.0	10.5
2021 H1	731.9	24.0	112.1	128.8	15.3	7.0	8.2	12.6	18.6	67.7	.	9.3	9.4	2.9	7.9	12.1
H2 p	854.2	21.1	104.9	11.3	12.3	– 1.1	7.8	12.4	17.5	59.1	105.2	6.9	2.9	2.7	7.0	11.5
Groups with a focus on the services sector																
2014	344.2	0.8	46.5	1.8	13.5	0.1	6.0	12.3	22.6	24.1	4.3	7.0	0.2	2.6	6.3	13.7
2015	324.1	6.1	46.9	4.0	14.5	– 0.3	5.9	11.1	22.1	22.3	– 3.8	6.9	– 0.7	1.3	6.7	13.9
2016	328.4	1.3	52.5	12.8	16.0	1.6	6.8	13.4	25.1	26.9	24.4	8.2	1.5	2.3	8.2	15.3
2017	323.4	3.5	55.9	8.3	17.3	0.8	6.8	11.5	23.0	29.4	11.4	9.1	0.6	2.1	7.2	15.1
2018 6	339.2	– 0.6	57.1	1.3	16.8	0.3	5.5	10.5	24.7	28.5	– 3.5	8.4	– 0.3	1.4	5.8	16.6
2019	353.7	4.8	65.4	15.2	18.5	1.7	6.9	13.7	24.5	29.2	2.8	8.3	– 0.2	2.4	6.2	16.2
2020	347.6	– 6.1	70.0	– 5.4	20.1	0.1	6.9	13.3	22.1	23.0	– 22.1	6.6	– 1.4	– 1.2	6.5	12.2
2021 p	408.9	13.0	88.8	21.6	21.7	1.6	7.6	15.0	24.0	42.8	79.7	10.5	3.9	3.0	9.2	15.6
2017 H1	148.8	4.6	24.2	0.4	16.2	– 0.6	5.2	9.8	21.0	12.1	0.3	8.2	– 0.3	1.2	5.6	14.5
H2	177.1	2.5	31.5	15.6	17.8	2.0	6.6	12.5	24.6	16.8	21.6	9.5	1.5	2.9	7.8	17.9
2018 H1 6	166.3	0.2	25.9	2.8	15.6	0.4	3.8	9.5	22.7	12.6	– 1.9	7.6	– 0.2	– 0.9	4.7	15.3
H2	174.0	– 1.3	31.3	– 0.0	18.0	0.2	6.7	11.3	25.6	15.9	– 4.6	9.1	– 0.3	2.2	7.0	17.8
2019 H1	171.4	4.0	29.0	13.1	16.9	1.4	5.7	12.3	24.4	11.6	– 7.5	6.7	– 0.9	0.0	4.9	14.5
H2	182.7	5.5	36.5	16.9	20.0	1.9	7.1	15.1	24.4	17.7	10.9	9.7	0.5	1.8	8.2	16.3
2020 H1	163.9	– 8.1	29.2	– 9.4	17.8	– 0.3	5.6	10.8	21.2	7.7	– 36.4	4.7	– 2.1	– 2.2	4.3	10.9
H2	183.8	– 4.2	40.8	– 2.2	22.2	0.4	8.9	14.7	23.3	15.3	– 12.8	8.3	– 0.9	2.6	7.5	13.3
2021 H1	188.1	7.7	40.3	26.1	21.5	3.1	6.9	12.6	24.5	17.8	119.9	9.5	4.8	0.9	6.9	13.6
H2 p	221.4	17.9	48.7	18.2	22.0	0.1	9.4	16.5	24.7	25.1	59.1	11.3	3.0	3.8	9.5	17.7

***** Non-financial groups admitted to the Prime Standard segment of the Frankfurt Stock Exchange which publish IFRS consolidated financial statements on a quarterly or half-yearly basis and make a noteworthy contribution to value added in Germany. Excluding groups engaged in real estate activities. **1** Earnings before interest, taxes, depreciation and amortisation. **2** Quantile data are based on the groups' unweighted return on sales. **3** Annual figures do not always match the sum of the two half-year figures. See Quality report on consolidated financial statement statistics, p. 3. **4** Adjusted for substantial changes in the basis of consolidation of large groups and in the reporting sample. See the explanatory notes in Statistical Series Seasonally adjusted business statistics. **5** Including groups in agriculture and forestry. **6** From H1 2018 or 2018 onwards: significant changes in IFRS standards, impairing comparability with previous periods.

XII. External sector

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

€ million

Item	2019 r	2020 r	2021 r	2021		2022			
				Q3 r	Q4 r	Q1 r	February r	March	April p
I. Current Account	+ 277,849	+ 216,998	+ 301,548	+ 90,723	+ 44,291	+ 996	+ 407	+ 7,376	– 5,437
1. Goods									
Receipts	2,390,756	2,187,668	2,504,403	622,455	671,475	677,718	219,525	254,014	233,158
Expenditure	2,083,527	1,845,143	2,218,825	552,729	634,554	677,956	215,803	248,901	237,725
Balance	+ 307,230	+ 342,526	+ 285,573	+ 69,725	+ 36,920	– 238	+ 3,722	+ 5,113	– 4,567
2. Services									
Receipts	1,018,798	866,556	1,001,378	265,110	291,195	270,187	84,748	95,948	92,761
Expenditure	982,729	865,180	906,156	230,845	272,115	240,719	77,694	84,842	79,586
Balance	+ 36,070	+ 1,374	+ 95,222	+ 34,265	+ 19,080	+ 29,467	+ 7,053	+ 11,106	+ 13,175
3. Primary income									
Receipts	855,383	715,559	810,638	185,984	216,559	201,556	63,597	70,979	69,589
Expenditure	772,766	684,183	732,386	165,168	188,135	187,755	57,592	69,148	72,086
Balance	+ 82,620	+ 31,376	+ 78,251	+ 20,816	+ 28,425	+ 13,801	+ 6,005	+ 1,831	– 2,497
4. Secondary income									
Receipts	123,291	126,638	154,464	36,660	42,817	37,515	12,030	14,314	12,220
Expenditure	271,356	284,911	311,965	70,743	82,951	79,549	28,403	24,988	23,768
Balance	– 148,066	– 158,271	– 157,503	– 34,084	– 40,135	– 42,034	– 16,373	– 10,674	– 11,548
II. Capital account	– 26,857	– 3,086	+ 41,311	+ 13,895	+ 12,929	+ 7,339	+ 2,842	+ 2,507	+ 2,539
III. Financial account 1	+ 244,341	+ 194,663	+ 341,940	+ 83,183	+ 27,229	+ 13,932	– 44	– 15,106	– 41,900
1. Direct investment	+ 86,091	– 200,794	+ 292,022	+ 106,894	+ 52,634	+ 25,982	+ 31,466	– 4,310	+ 33,580
By resident units abroad the euro area	+ 46,496	– 137,138	+ 148,889	+ 44,551	– 16,014	+ 48,447	+ 13,746	– 18,779	+ 50,478
By non-resident units of the euro area	– 39,596	+ 63,654	– 143,130	– 62,341	– 68,646	+ 22,465	– 17,720	– 14,469	+ 16,898
2. Portfolio investment	– 104,930	+ 538,328	+ 427,270	+ 55,965	+ 118,239	– 32,612	– 33,167	– 73,063	+ 3,793
By resident units abroad the euro area	+ 423,918	+ 686,807	+ 772,132	+ 126,214	+ 140,645	– 20,994	– 26,381	– 42,958	– 53,138
Equity and investment fund shares	+ 58,261	+ 319,347	+ 352,979	+ 44,352	+ 24,505	– 18,689	– 27,391	– 39,562	– 7,188
Short-term debt securities	+ 6,565	+ 121,088	+ 116,846	– 8,476	+ 82,623	– 59,212	+ 5,786	– 19,369	– 50,500
Long-term debt securities	+ 359,093	+ 246,368	+ 302,307	+ 90,339	+ 33,517	+ 56,906	– 4,777	+ 15,973	+ 4,550
By non-resident units of the euro area	+ 528,848	+ 148,479	+ 344,863	+ 70,250	+ 22,405	+ 11,617	+ 6,786	+ 30,105	– 56,931
Equity and investment fund shares	+ 283,968	+ 163,535	+ 519,946	+ 129,618	+ 145,570	– 63,928	– 3,932	– 32,656	+ 3,424
Short-term debt securities	– 26,090	+ 112,497	+ 40,042	+ 13,859	– 81,475	+ 81,563	+ 22,556	+ 42,778	– 19,755
Long-term debt securities	+ 270,967	– 127,553	– 215,125	– 73,227	– 41,690	– 6,018	– 11,839	+ 19,983	– 40,600
3. Financial derivatives and employee stock options	+ 7,673	+ 29,703	+ 69,667	+ 24,062	+ 44,615	– 5,314	– 3,777	– 4,280	+ 8,697
4. Other investment	+ 249,506	– 185,599	– 577,196	– 226,885	– 191,145	+ 26,236	+ 3,731	+ 66,465	– 87,302
Eurosystem	+ 144,207	– 203,619	– 442,880	– 166,708	– 357,069	+ 184,196	+ 19,838	– 51,924	+ 57,915
General government	+ 5,268	– 16,333	– 72,593	– 45,934	+ 3,119	+ 2,062	– 4,132	– 1,264	– 24,012
MFIs 2	+ 186,982	+ 20,405	– 125,367	– 33,112	+ 183,971	– 233,851	– 56,315	+ 43,938	– 114,446
Enterprises and households	– 86,953	+ 13,952	+ 63,646	+ 18,871	– 21,165	+ 73,830	+ 44,339	+ 75,717	– 6,759
5. Reserve assets	+ 5,998	+ 13,026	+ 130,180	+ 123,148	+ 2,887	– 359	+ 1,703	+ 82	– 667
IV. Net errors and omissions	– 6,652	– 19,252	– 918	– 21,436	– 29,991	+ 5,597	– 3,293	– 24,989	– 39,002

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

XII. External sector

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

€ million

Zeit	Current Account						Balance of capital account [2]	Financial account [3]		Errors and omissions [4]
	Total	Goods		Services	Primary income	Secondary income		Total	of which: Reserve assets	
		Total	of which: Supplementary trade items [1]							
2007	+ 171,493	+ 201,728	− 1,183	− 32,465	+ 35,620	− 33,390	− 1,597	+ 183,169	+ 953	+ 13,273
2008	+ 144,954	+ 184,160	− 3,947	− 29,122	+ 24,063	− 34,147	− 893	+ 121,336	+ 2,008	− 22,725
2009	+ 142,744	+ 140,626	− 6,605	− 17,642	+ 54,524	− 34,764	− 1,858	+ 129,693	+ 8,648	− 11,194
2010	+ 147,298	+ 160,829	− 6,209	− 25,255	+ 51,306	− 39,582	+ 1,219	+ 92,757	+ 1,613	− 55,760
2011	+ 167,340	+ 162,970	− 9,357	− 29,930	+ 69,087	− 34,787	+ 419	+ 120,857	+ 2,836	− 46,902
2012	+ 195,712	+ 199,531	− 11,388	− 30,774	+ 65,658	− 38,703	− 413	+ 151,417	+ 1,297	− 43,882
2013	+ 184,352	+ 203,802	− 12,523	− 39,321	+ 63,284	− 43,413	− 563	+ 226,014	+ 838	+ 42,224
2014	+ 210,906	+ 219,629	− 14,296	− 25,303	+ 57,752	− 41,172	+ 2,936	+ 240,258	− 2,564	+ 26,416
2015	+ 260,286	+ 248,394	− 15,405	− 18,516	+ 69,262	− 38,854	− 48	+ 234,392	− 2,213	− 25,845
2016	+ 266,689	+ 252,409	− 19,921	− 20,987	+ 76,199	− 40,931	+ 2,142	+ 261,123	+ 1,686	− 7,708
2017	+ 255,814	+ 255,077	− 13,613	− 23,994	+ 76,404	− 51,673	− 2,936	+ 276,697	− 1,269	+ 23,819
2018	+ 267,729	+ 221,983	− 22,985	− 15,806	+ 111,890	− 50,338	+ 580	+ 246,928	+ 392	− 21,381
2019	+ 262,903	+ 215,456	− 30,887	− 18,100	+ 115,359	− 49,811	− 887	+ 186,317	− 544	− 75,700
2020	+ 238,741	+ 189,963	− 7,246	+ 2,725	+ 98,780	− 52,727	− 5,829	+ 216,515	− 51	− 16,397
2021	+ 264,981	+ 192,150	+ 3,091	+ 314	+ 126,606	− 54,090	− 1,376	+ 314,750	+ 31,892	+ 51,145
2019 Q2	+ 59,361	+ 52,177	− 7,580	− 2,223	+ 16,014	− 6,606	− 509	+ 40,266	+ 444	− 18,586
Q3	+ 64,013	+ 57,726	− 7,447	− 11,912	+ 30,937	− 12,738	+ 235	+ 19,657	− 349	− 44,590
Q4	+ 68,030	+ 49,432	− 11,400	− 3,126	+ 35,102	− 13,378	− 1,412	+ 83,477	− 576	+ 16,860
2020 Q1	+ 62,570	+ 52,090	− 2,656	− 2,238	+ 27,396	− 14,679	− 608	+ 33,152	+ 133	− 28,810
Q2	+ 37,621	+ 28,076	− 1,806	+ 5,190	+ 13,563	− 9,209	+ 55	+ 25,747	+ 243	− 11,929
Q3	+ 62,788	+ 55,716	− 695	− 5,827	+ 23,501	− 10,601	− 1,493	+ 65,414	− 1,276	+ 4,118
Q4	+ 75,762	+ 54,082	− 2,089	+ 5,599	+ 34,320	− 18,238	− 3,783	+ 92,203	+ 848	+ 20,223
2021 Q1	+ 75,009	+ 57,190	+ 1,200	+ 3,281	+ 31,814	− 17,276	− 331	+ 106,919	+ 385	+ 32,241
Q2	+ 63,932	+ 47,133	− 194	+ 6,401	+ 18,624	− 8,225	− 1,788	+ 84,594	+ 58	+ 22,450
Q3	+ 61,165	+ 49,076	− 34	− 8,160	+ 34,277	− 14,029	+ 1,745	+ 36,922	+ 31,199	− 25,987
Q4	+ 64,875	+ 38,751	+ 2,119	− 1,208	+ 41,892	− 14,560	− 1,002	+ 86,314	+ 250	+ 22,441
2022 Q1	+ 52,344	+ 34,305	+ 3,802	− 2,468	+ 36,895	− 16,388	− 1,865	+ 94,003	+ 2,200	+ 43,524
2019 Dec.	+ 24,284	+ 11,784	− 5,357	+ 2,016	+ 15,269	− 4,784	− 37	+ 22,677	− 113	− 1,570
2020 Jan.	+ 15,929	+ 14,031	− 905	− 859	+ 10,181	− 7,423	+ 198	+ 3,819	+ 898	− 12,309
Feb.	+ 21,309	+ 19,874	− 1,884	− 1,316	+ 7,135	− 4,383	− 101	+ 15,791	+ 750	− 5,418
Mar.	+ 25,331	+ 18,185	+ 133	− 62	+ 10,080	− 2,872	− 706	+ 13,542	− 1,514	− 11,083
Apr.	+ 10,787	+ 4,530	− 102	+ 1,675	+ 9,003	− 4,421	+ 110	+ 11,487	+ 950	+ 589
May	+ 6,134	+ 8,575	+ 87	+ 1,110	+ 23	− 3,573	− 9	+ 2,095	+ 33	− 4,029
June	+ 20,700	+ 14,971	− 1,791	+ 2,406	+ 4,538	− 1,214	− 47	+ 12,165	− 740	− 8,489
July	+ 20,883	+ 20,319	− 330	− 2,709	+ 7,024	− 3,751	− 1,005	+ 14,644	− 611	− 5,234
Aug.	+ 16,852	+ 13,976	+ 38	− 2,543	+ 8,850	− 3,432	+ 412	+ 30,512	− 611	+ 13,248
Sep.	+ 25,053	+ 21,421	− 404	− 575	+ 7,627	− 3,419	− 900	+ 20,258	− 53	− 3,895
Oct.	+ 24,773	+ 20,389	− 415	+ 782	+ 8,128	− 4,527	− 1,386	+ 25,983	+ 140	+ 2,596
Nov.	+ 22,799	+ 18,384	+ 164	+ 2,120	+ 9,835	− 7,541	− 2,266	+ 23,695	+ 89	+ 3,162
Dec.	+ 28,191	+ 15,308	− 1,838	+ 2,697	+ 16,356	− 6,171	− 132	+ 42,524	+ 618	+ 14,466
2021 Jan.	+ 20,394	+ 14,733	+ 301	+ 896	+ 11,006	− 6,241	− 458	+ 22,458	+ 743	+ 2,522
Feb.	+ 20,814	+ 18,248	+ 44	+ 1,159	+ 9,016	− 7,609	− 1,461	+ 52,644	+ 102	+ 33,291
Mar.	+ 33,801	+ 24,208	+ 855	+ 1,227	+ 11,792	− 3,427	+ 1,588	+ 31,817	− 460	− 3,572
Apr.	+ 23,029	+ 15,866	+ 83	+ 3,051	+ 7,812	− 3,701	− 700	+ 35,418	− 251	+ 13,090
May	+ 15,757	+ 14,492	− 160	+ 2,344	+ 644	− 1,724	− 375	+ 14,146	+ 211	− 1,235
June	+ 25,147	+ 16,775	− 117	+ 1,005	+ 10,167	− 2,800	− 713	+ 35,029	+ 98	+ 10,595
July	+ 20,669	+ 18,645	− 451	− 2,511	+ 9,907	− 5,372	− 626	+ 5,325	+ 102	− 14,718
Aug.	+ 16,987	+ 12,859	+ 645	− 3,543	+ 11,922	− 4,251	+ 493	+ 20,653	+ 31,254	+ 3,173
Sep.	+ 23,509	+ 17,573	− 229	− 2,105	+ 12,447	− 4,406	+ 1,877	+ 10,944	− 158	− 14,442
Oct.	+ 19,141	+ 15,259	+ 1,117	− 2,802	+ 11,783	− 5,099	+ 416	+ 21,714	+ 261	+ 2,157
Nov.	+ 21,329	+ 14,820	+ 893	+ 71	+ 12,021	− 5,582	− 1,153	+ 48,411	+ 963	+ 28,235
Dec.	+ 24,405	+ 8,672	+ 109	+ 1,523	+ 18,088	− 3,878	− 265	+ 16,190	− 974	− 7,951
2022 Jan.	+ 12,519	+ 5,831	+ 1,230	− 338	+ 13,100	− 6,074	− 104	+ 55,703	+ 309	+ 43,288
Feb.	+ 21,057	+ 15,649	+ 2,346	+ 414	+ 10,415	− 5,421	− 1,297	+ 28,963	+ 1,161	+ 9,203
Mar.	+ 18,768	+ 12,824	+ 225	− 2,543	+ 13,380	− 4,893	− 464	+ 9,337	+ 730	− 8,967
Apr.	+ 8,979	+ 4,343	.	− 1,170	+ 10,497	− 4,691	− 1,272	+ 4,556	+ 83	− 3,151
May p	+ 2,531	+ 6,199	.	− 2,688	+ 2,185	− 3,166	− 2,705	+ 4,509	+ 161	+ 4,684

1 For example, warehouse transactions for the account of residents, deductions of goods returned and deductions of exports and imports in connection with goods for processing. **2** Including net acquisition/disposal of non-produced non-financial assets. **3** Net lending: + / net borrowing: -. **4** Statistical errors and omissions resulting from the difference between the balance on the financial account and the balances on the current account and the capital account.

XII. External sector

3. Foreign trade (special trade) of the Federal Republic of Germany, by country and group of countries *

€ million

Group of countries/country		2019	2020	2021	2021 Dec.	2022 Jan.	2022 Feb.	2022 Mar.	2022 Apr.	2022 May
All countries [1]	Exports	1,328,152	1,206,928	1,375,658	117,016	110,247	123,273	138,012	122,300	133,313
	Imports	1,104,141	1,026,502	1,203,174	110,622	106,266	112,423	130,516	121,454	130,658
	Balance	+ 224,010	+ 180,427	+ 172,484	+ 6,393	+ 3,980	+ 10,850	+ 7,496	+ 846	+ 2,655
I. European countries	Exports	902,831	824,921	945,989	79,082	76,157	85,220	93,351	84,092	90,387
	Imports	747,692	682,477	803,962	73,204	68,802	76,655	86,079	78,740	83,277
	Balance	+ 155,140	+ 142,444	+ 142,026	+ 5,878	+ 7,355	+ 8,566	+ 7,272	+ 5,352	+ 7,110
1. EU Member States (27)	Exports	698,257	635,741	747,248	63,255	59,732	67,859	74,949	68,174	72,870
	Imports	593,251	546,655	638,681	56,523	51,179	59,054	64,953	59,066	64,667
	Balance	+ 105,006	+ 89,087	+ 108,566	+ 6,732	+ 8,553	+ 8,806	+ 9,996	+ 9,108	+ 8,203
Euro area (19) countries	Exports	492,308	441,853	518,910	44,043	41,910	47,272	51,854	47,608	50,718
	Imports	409,863	371,211	438,698	39,458	35,556	41,149	44,983	41,060	44,455
	Balance	+ 82,445	+ 70,643	+ 80,212	+ 4,586	+ 6,353	+ 6,123	+ 6,871	+ 6,548	+ 6,263
of which:										
Austria	Exports	66,076	60,118	71,926	5,930	5,819	6,484	7,533	7,208	7,278
	Imports	44,059	40,454	47,568	4,205	3,740	4,457	4,956	4,763	5,133
	Balance	+ 22,017	+ 19,663	+ 24,358	+ 1,726	+ 2,079	+ 2,026	+ 2,577	+ 2,445	+ 2,145
Belgium and Luxembourg	Exports	52,006	48,824	57,392	4,896	4,635	5,385	6,023	5,601	5,414
	Imports	46,322	39,584	55,338	4,767	4,279	4,752	5,543	4,932	5,827
	Balance	+ 5,683	+ 9,240	+ 2,054	+ 128	+ 356	+ 633	+ 479	+ 669	− 414
France	Exports	106,564	90,910	102,144	8,406	8,317	9,146	10,163	9,247	9,898
	Imports	66,199	56,364	62,065	5,400	4,901	5,563	6,252	5,588	5,975
	Balance	+ 40,364	+ 34,546	+ 40,080	+ 3,005	+ 3,417	+ 3,583	+ 3,911	+ 3,660	+ 3,923
Italy	Exports	67,887	60,634	75,322	6,062	5,983	7,073	7,834	6,638	7,627
	Imports	57,100	53,906	65,379	5,494	4,629	6,018	6,541	5,843	6,445
	Balance	+ 10,786	+ 6,728	+ 9,942	+ 568	+ 1,354	+ 1,055	+ 1,292	+ 795	+ 1,183
Netherlands	Exports	91,528	84,579	100,403	9,661	8,158	9,109	9,295	8,975	9,471
	Imports	97,816	87,024	105,509	10,476	9,683	9,543	10,871	10,112	10,468
	Balance	− 6,288	− 2,445	− 5,106	− 815	− 1,525	− 434	− 1,577	− 1,136	− 997
Spain	Exports	44,218	37,618	43,700	3,511	3,593	3,948	4,203	3,910	4,416
	Imports	33,126	31,281	34,262	3,399	2,828	3,427	3,417	2,991	3,440
	Balance	+ 11,092	+ 6,337	+ 9,438	+ 112	+ 765	+ 521	+ 786	+ 919	+ 976
Other EU Member States	Exports	205,949	193,888	228,338	19,212	17,823	20,588	23,095	20,567	22,152
	Imports	183,387	175,444	199,983	17,066	15,623	17,905	19,969	18,007	20,212
	Balance	+ 22,561	+ 18,444	+ 28,354	+ 2,146	+ 2,200	+ 2,683	+ 3,126	+ 2,560	+ 1,940
2. Other European countries	Exports	204,575	189,180	198,741	15,827	16,425	17,361	18,402	15,918	17,517
	Imports	154,441	135,822	165,281	16,680	17,623	17,601	21,127	19,674	18,610
	Balance	+ 50,134	+ 53,358	+ 33,460	− 854	− 1,198	− 240	− 2,724	− 3,756	− 1,093
of which:										
Switzerland	Exports	56,345	56,265	60,617	4,945	5,206	5,387	6,469	5,372	6,020
	Imports	45,824	45,556	48,886	3,840	4,110	4,596	5,213	4,775	4,712
	Balance	+ 10,521	+ 10,708	+ 11,730	+ 1,105	+ 1,096	+ 792	+ 1,256	+ 596	+ 1,308
United Kingdom	Exports	79,166	67,086	65,349	4,956	5,402	5,838	6,549	5,618	5,980
	Imports	38,397	35,018	32,170	2,652	2,689	2,554	3,635	3,486	3,346
	Balance	+ 40,770	+ 32,068	+ 33,179	+ 2,305	+ 2,712	+ 3,284	+ 2,914	+ 2,132	+ 2,634
II. Non-European countries	Exports	421,728	380,292	427,496	37,706	33,864	37,819	44,316	37,795	42,455
	Imports	355,390	343,270	398,322	37,329	37,391	35,675	44,291	42,554	47,208
	Balance	+ 66,338	+ 37,022	+ 29,173	+ 376	− 3,527	+ 2,144	+ 25	− 4,758	− 4,753
1. Africa	Exports	23,627	20,086	23,111	1,938	1,802	1,920	2,292	1,915	2,193
	Imports	24,475	18,758	26,034	2,168	2,205	2,155	3,183	2,914	2,963
	Balance	− 848	+ 1,328	− 2,924	− 230	− 403	− 235	− 891	− 999	− 770
2. America	Exports	165,602	141,375	167,737	14,573	13,574	14,878	18,330	16,310	18,254
	Imports	100,007	94,005	101,269	9,096	8,685	8,396	11,034	9,685	10,964
	Balance	+ 65,595	+ 47,370	+ 66,468	+ 5,477	+ 4,889	+ 6,483	+ 7,296	+ 6,626	+ 7,290
of which:										
United States	Exports	118,680	103,476	122,038	10,695	9,964	10,937	13,821	11,922	13,439
	Imports	71,334	67,694	72,126	6,370	6,173	6,119	7,680	6,698	7,795
	Balance	+ 47,346	+ 35,782	+ 49,911	+ 4,325	+ 3,792	+ 4,818	+ 6,141	+ 5,224	+ 5,644
3. Asia	Exports	221,278	208,146	224,993	20,153	17,477	19,930	22,397	18,397	20,806
	Imports	227,036	226,646	266,836	25,522	25,912	24,723	29,375	29,283	32,432
	Balance	− 5,759	− 18,500	− 41,843	− 5,370	− 8,435	− 4,793	− 6,979	− 10,886	− 11,625
of which:										
Middle East	Exports	28,663	25,882	26,112	2,782	1,953	2,204	2,466	1,981	2,218
	Imports	7,460	6,721	7,507	718	557	699	735	939	1,036
	Balance	+ 21,202	+ 19,161	+ 18,605	+ 2,064	+ 1,397	+ 1,505	+ 1,732	+ 1,042	+ 1,182
Japan	Exports	20,662	17,396	18,238	1,504	1,557	1,737	1,921	1,611	1,675
	Imports	23,904	21,427	23,489	1,884	1,858	1,933	2,111	2,089	2,219
	Balance	− 3,243	− 4,032	− 5,251	− 380	− 301	− 196	− 190	− 477	− 544
People's Republic of China [2]	Exports	95,984	95,840	103,690	8,442	7,918	9,066	10,450	8,254	9,207
	Imports	110,054	117,373	142,260	14,784	14,620	13,536	16,493	16,681	17,176
	Balance	− 14,070	− 21,533	− 38,570	− 6,341	− 6,702	− 4,470	− 6,043	− 8,427	− 7,969
New industrial countries and emerging markets of Asia [3]	Exports	54,164	50,590	55,241	5,072	4,501	4,992	5,431	4,740	5,434
	Imports	51,748	48,222	55,403	4,816	5,162	5,028	5,510	5,297	7,255
	Balance	+ 2,416	+ 2,368	− 162	+ 256	− 661	− 35	− 79	− 557	− 1,821
4. Oceania and polar regions	Exports	11,221	10,685	11,655	1,042	1,011	1,090	1,297	1,173	1,202
	Imports	3,872	3,861	4,183	542	589	401	699	672	850
	Balance	+ 7,349	+ 6,824	+ 7,472	+ 500	+ 422	+ 690	+ 599	+ 501	+ 352

***** Source: Federal Statistical Office. Exports (f.o.b.) by country of destination, Imports (c.i.f.) by country of origin. Individual countries and groups of countries according to the current position. EU excl. UK. **1** Including fuel and other supplies for ships and aircraft and other data not classifiable by region. **2** Excluding Hong Kong. **3** Brunei Darussalam, Hong Kong, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore, Taiwan and Thailand.

XII. External sector

4. Services and primary income of the Federal Republic of Germany (balances)

€ million

Zeit	Services									Primary income		
	Total	of which: Transport	Travel [1]	Financial services	Charges for the use of intellectual property	Telecommunications-, computer and information services	Other business services	Gouvernment goods and services [2]		Compensation of employees	Investment income	Other primary income [3]
2017	− 23,994	− 3,679	− 43,558	+ 9,613	+ 14,903	− 8,188	− 1,065	+ 2,177		+ 1,139	+ 76,669	− 1,403
2018	− 15,806	− 2,044	− 44,543	+ 10,060	+ 17,219	− 7,060	+ 723	+ 3,322		+ 671	+ 112,223	− 1,004
2019	− 18,100	− 72	− 45,947	+ 10,999	+ 18,299	− 9,697	− 2,984	+ 3,489		+ 846	+ 115,462	− 949
2020	+ 2,725	− 9,392	− 14,678	+ 10,239	+ 17,546	− 7,107	− 4,382	+ 3,363		+ 3,234	+ 97,017	− 1,471
2021	+ 314	− 12,067	− 21,924	+ 8,737	+ 31,878	− 7,515	− 8,523	+ 3,513		+ 2,605	+ 126,146	− 2,145
2020 Q3	− 5,827	− 2,735	− 7,386	+ 2,233	+ 3,331	− 2,031	− 1,586	+ 895		+ 283	+ 24,338	− 1,120
Q4	+ 5,599	− 2,902	− 98	+ 2,713	+ 4,880	− 928	− 1,007	+ 668		+ 1,067	+ 29,998	+ 3,255
2021 Q1	+ 3,281	− 3,183	− 13	+ 2,251	+ 5,756	− 2,478	− 1,436	+ 884		+ 1,324	+ 31,487	− 997
Q2	+ 6,401	− 2,075	− 2,151	+ 2,589	+ 8,007	− 1,329	− 1,164	+ 914		+ 494	+ 21,077	− 2,947
Q3	− 8,160	− 2,259	− 14,130	+ 1,221	+ 9,080	− 2,169	− 2,331	+ 946		− 77	+ 35,585	− 1,232
Q4	− 1,208	− 4,551	− 5,629	+ 2,676	+ 9,035	− 1,539	− 3,592	+ 769		+ 864	+ 37,996	+ 3,031
2022 Q1	− 2,468	− 5,551	− 4,636	+ 2,301	+ 7,619	− 3,220	− 1,746	+ 949		+ 1,233	+ 36,924	− 1,262
2021 July	− 2,511	− 961	− 3,234	+ 886	+ 2,719	− 1,283	− 1,240	+ 291		− 43	+ 10,358	− 408
Aug.	− 3,543	− 438	− 5,364	− 418	+ 2,818	− 334	− 621	+ 303		− 26	+ 12,356	− 408
Sep.	− 2,105	− 861	− 5,532	+ 753	+ 3,543	− 552	− 469	+ 353		− 8	+ 12,871	− 416
Oct.	− 2,802	− 1,157	− 3,543	+ 1,115	+ 2,593	− 637	− 1,813	+ 285		+ 248	+ 12,006	− 472
Nov.	+ 71	− 1,122	− 1,354	+ 646	+ 3,318	− 830	− 1,478	+ 182		+ 252	+ 12,184	− 415
Dec.	+ 1,523	− 2,272	− 733	+ 915	+ 3,125	− 72	− 301	+ 302		+ 364	+ 13,807	+ 3,918
2022 Jan.	− 338	− 1,741	− 1,141	+ 894	+ 2,714	− 1,340	− 458	+ 311		+ 437	+ 13,068	− 405
Feb.	+ 414	− 1,844	− 1,249	+ 714	+ 2,773	− 875	− 232	+ 322		+ 434	+ 10,396	− 415
Mar.	− 2,543	− 1,966	− 2,246	+ 694	+ 2,132	− 1,005	− 1,056	+ 317		+ 361	+ 13,460	− 441
Apr.	− 1,170	− 805	− 2,247	+ 912	+ 2,189	− 1,203	− 707	+ 288		+ 68	+ 11,054	− 625
May p	− 2,688	− 497	− 3,777	+ 819	+ 1,772	− 711	− 1,154	+ 302		+ 105	+ 4,434	− 2,354

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

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

€ million

Zeit	Secondary income								Capital account		
		General government			All sectors excluding general government [2]						
			of which:			of which:					
	Total	Total	Current international cooperation [1]	Current taxes on income, wealth, etc.	Total	Personal transfers between resident and non-resident households [3]	of which: Workers' remittances		Total	Non-produced non-financial assets	Capital transfers
2017	− 51,673	− 23,191	− 9,851	+ 9,665	− 28,482	.	+ 4,613		− 2,936	+ 926	− 3,863
2018	− 50,338	− 28,710	− 10,186	+ 10,230	− 21,627	.	+ 5,142		+ 580	+ 3,349	− 2,769
2019	− 49,811	− 28,986	− 10,728	+ 11,742	− 20,825	.	+ 5,431		− 887	+ 3,028	− 3,915
2020	− 52,727	− 34,127	− 12,239	+ 10,929	− 18,600	.	+ 5,908		− 5,829	+ 380	− 6,209
2021	− 54,090	− 32,567	− 7,039	+ 11,982	− 21,523	.	+ 6,170		− 1,376	+ 3,191	− 4,567
2020 Q3	− 10,601	− 6,387	− 3,264	+ 2,153	− 4,215	.	+ 1,477		− 1,493	− 34	− 1,459
Q4	− 18,238	− 13,375	− 4,391	+ 1,752	− 4,863	+ 1,482	+ 1,477		− 3,783	+ 295	− 4,078
2021 Q1	− 17,276	− 11,088	+ 327	+ 2,297	− 6,188	.	+ 1,543		− 331	+ 123	− 454
Q2	− 8,225	− 3,644	− 1,113	+ 5,341	− 4,582	.	+ 1,543		− 1,788	− 1,578	− 211
Q3	− 14,029	− 8,787	− 2,834	+ 2,199	− 5,242	.	+ 1,543		+ 1,745	+ 2,918	− 1,173
Q4	− 14,560	− 9,048	− 3,420	+ 2,144	− 5,511	+ 1,548	+ 1,543		− 1,002	+ 1,728	− 2,730
2022 Q1	− 16,388	− 10,040	− 2,369	+ 2,410	− 6,348	.	+ 1,598		− 1,865	− 1,885	+ 20
2021 July	− 5,372	− 3,462	− 2,317	+ 712	− 1,910	.	+ 514		− 626	− 208	− 418
Aug.	− 4,251	− 2,813	− 277	+ 410	− 1,438	+ 515	+ 514		+ 493	+ 686	− 192
Sep.	− 4,406	− 2,512	− 240	+ 1,077	− 1,894	.	+ 514		+ 1,877	+ 2,440	− 563
Oct.	− 5,099	− 3,257	− 122	+ 472	− 1,843	+ 516	+ 514		+ 416	+ 786	− 370
Nov.	− 5,582	− 3,691	− 743	+ 347	− 1,892	+ 516	+ 514		− 1,153	− 513	− 640
Dec.	− 3,878	− 2,101	− 2,555	+ 1,325	− 1,777	+ 516	+ 514		− 265	+ 1,455	− 1,720
2022 Jan.	− 6,074	− 4,295	− 1,394	+ 454	− 1,779	.	+ 533		− 104	− 291	+ 187
Feb.	− 5,421	− 3,893	− 829	+ 940	− 1,527	+ 534	+ 533		− 1,297	− 1,257	− 40
Mar.	− 4,893	− 1,852	− 145	+ 1,016	− 3,041	+ 537	+ 533		− 464	− 337	− 127
Apr.	− 4,691	− 2,728	− 426	+ 1,060	− 1,963	+ 534	+ 533		− 1,272	− 790	− 482
May p	− 3,166	− 868	− 488	+ 2,699	− 2,298	+ 534	+ 533		− 2,705	− 2,295	− 410

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

XII. External sector

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

€ million

Item	2019	2020	2021	2021		2022			
				Q3	Q4	Q1	March	April	May p
I. Net domestic investment abroad (increase: +)	+ 251,072	+ 739,081	+ 844,810	+ 147,616	+ 276,086	+ 204,882	+ 43,856	+ 13,112	+ 31,053
1. Direct investment	+ 139,279	+ 119,458	+ 163,651	+ 43,555	+ 38,791	+ 44,793	+ 896	+ 28,757	+ 10,886
Equity	+ 116,157	+ 90,170	+ 113,012	+ 35,950	+ 11,956	+ 29,186	+ 8,120	+ 10,067	+ 11,581
of which:									
Reinvestment of earnings [1]	+ 40,785	+ 21,039	+ 55,475	+ 17,913	+ 7,203	+ 20,797	+ 6,124	+ 5,381	+ 5,871
Debt instruments	+ 23,122	+ 29,288	+ 50,638	+ 7,606	+ 26,835	+ 15,607	− 7,224	+ 18,690	− 695
2. Portfolio investment	+ 134,961	+ 191,740	+ 221,477	+ 55,285	+ 42,049	+ 59,730	+ 26,029	− 7,268	+ 2,857
Shares [2]	+ 13,672	+ 65,214	+ 56,007	+ 19,786	+ 12,910	+ 7,228	+ 7,853	+ 5,830	+ 1,468
Investment fund shares [3]	+ 53,708	+ 62,585	+ 103,434	+ 22,168	+ 39,858	+ 3,970	− 1,180	+ 2,113	+ 652
Short-term [4] debt securities	+ 7,424	+ 3,852	− 6,256	+ 7,639	− 10,366	+ 1,329	+ 1,975	+ 1,978	− 4,739
Long-term [5] debt securities	+ 60,157	+ 60,089	+ 68,292	+ 5,692	− 353	+ 47,202	+ 17,380	− 17,189	+ 5,476
3. Financial derivatives and employee stock options [6]	+ 24,544	+ 96,276	+ 60,977	+ 10,230	+ 18,916	+ 10,566	− 6,947	+ 7,401	− 459
4. Other investment [7]	− 47,168	+ 331,659	+ 366,813	+ 7,347	+ 176,081	+ 87,593	+ 23,149	− 15,860	+ 17,607
MFIs [8]	+ 9,256	− 4,522	+ 112,866	− 31,971	− 15,065	+ 139,954	− 20,529	− 3,536	− 414
Short-term	− 8,901	+ 3,526	+ 99,548	− 23,041	− 26,717	+ 131,275	− 26,399	+ 2,069	+ 2,536
Long-term	+ 18,157	− 8,048	+ 13,318	− 8,931	+ 11,652	+ 8,679	+ 5,869	− 5,604	− 2,951
Enterprises and households [9]	+ 14,348	+ 90,994	+ 138,858	+ 24,931	+ 44,797	+ 45,131	+ 25,740	+ 25,287	− 3,048
Short-term	+ 793	+ 45,448	+ 124,088	+ 17,622	+ 46,917	+ 43,566	+ 27,722	+ 22,520	− 4,499
Long-term	+ 13,555	+ 45,545	+ 14,770	+ 7,309	− 2,119	+ 1,565	− 1,982	+ 2,767	+ 1,451
General government	+ 144	+ 2,076	− 8,305	− 724	+ 756	− 5,842	− 2,464	− 1,792	− 3,626
Short-term	+ 3,357	+ 3,461	− 7,502	− 456	+ 1,061	− 5,362	− 2,544	− 1,658	− 3,638
Long-term	− 3,213	− 1,385	− 803	− 268	− 305	− 480	+ 80	− 134	+ 12
Bundesbank	− 70,915	+ 243,112	+ 123,394	+ 15,111	+ 145,592	− 91,650	+ 20,403	− 35,820	+ 24,695
5. Reserve assets	− 544	− 51	+ 31,892	+ 31,199	+ 250	+ 2,200	+ 730	+ 83	+ 161
II. Net foreign investment in the reporting country (increase: +)	+ 64,756	+ 522,566	+ 530,060	+ 110,694	+ 189,772	+ 110,879	+ 34,520	+ 8,556	+ 26,544
1. Direct investment	+ 63,683	+ 122,929	+ 61,833	+ 19,265	+ 5,884	+ 40,074	+ 4,717	+ 15,966	− 8,825
Equity	+ 23,492	+ 43,862	+ 36,972	+ 5,379	+ 9,840	+ 4,684	+ 847	+ 685	+ 2,002
of which:									
Reinvestment of earnings [1]	− 492	+ 1,880	+ 4,787	+ 3,003	+ 1,952	+ 3,284	+ 642	+ 874	− 91
Debt instruments	+ 40,192	+ 79,068	+ 24,861	+ 13,887	− 3,956	+ 35,390	+ 3,870	+ 15,281	− 10,827
2. Portfolio investment	+ 65,309	+ 148,877	− 33,617	− 8,155	− 53,336	+ 21,283	+ 9,137	− 18,391	− 3,623
Shares [2]	− 7,275	− 15,982	− 3,703	+ 420	− 7,583	− 9,199	− 4,710	− 3,716	− 709
Investment fund shares [3]	− 4,519	+ 1,862	− 2,760	− 1,096	− 2,847	− 2,211	− 2,562	+ 463	+ 637
Short-term [4] debt securities	+ 14,400	+ 83,707	+ 25,027	+ 9,532	− 6,073	− 5,244	+ 11,203	− 7,485	− 7,138
Long-term [5] debt securities	+ 62,704	+ 79,290	− 52,181	− 17,011	− 36,833	+ 37,937	+ 5,206	− 7,653	+ 3,587
3. Other investment [7]	− 64,237	+ 250,760	+ 501,843	+ 99,584	+ 237,225	+ 49,522	+ 20,665	+ 10,982	+ 38,991
MFIs [8]	− 10,214	+ 108,323	+ 159,384	− 2,854	− 114,455	+ 266,244	− 19,236	+ 5,613	+ 17,906
Short-term	− 20,978	+ 74,805	+ 115,401	− 19,087	− 127,741	+ 290,964	− 9,742	+ 6,103	+ 13,731
Long-term	+ 10,764	+ 33,517	+ 43,984	+ 16,233	+ 13,286	− 24,720	− 9,494	− 490	+ 4,175
Enterprises and households [9]	+ 43,978	+ 39,313	+ 120,200	+ 27,460	+ 89,278	− 14,909	+ 4,160	+ 25,042	+ 5,518
Short-term	+ 11,681	+ 18,361	+ 115,536	+ 25,692	+ 80,436	− 17,519	+ 5,127	+ 23,315	+ 4,915
Long-term	+ 32,297	+ 20,952	+ 4,663	+ 1,768	+ 8,842	+ 2,610	− 967	+ 1,727	+ 604
General government	+ 1,620	− 7,817	− 4,537	− 140	− 246	− 641	+ 1,842	− 66	+ 26
Short-term	+ 1,424	− 7,664	− 2,186	− 156	− 661	+ 2,078	+ 1,816	− 161	+ 17
Long-term	+ 196	− 153	− 2,351	+ 15	+ 416	− 2,719	+ 26	+ 94	+ 9
Bundesbank	− 99,621	+ 110,941	+ 226,796	+ 75,117	+ 262,648	− 201,172	+ 33,899	− 19,608	+ 15,541
III. Net financial account (net lending: +/net borrowing: -)	+ 186,317	+ 216,515	+ 314,750	+ 36,922	+ 86,314	+ 94,003	+ 9,337	+ 4,556	+ 4,509

1 Estimated on the basis of the figures on the level of direct investment stocks abroad and in the Federal Republic of Germany (see Statistical series, direct investment statistics). **2** Including participation certificates. **3** Including reinvestment of earnings. **4** Short-term: original maturity up to one year. **5** Up to and including 2012 without accrued interest. Long-term: original maturity of more than one year or unlimited. **6** Balance of transactions arising from options and financial futures contracts as well as employee stock options. **7** Includes in particular loans, trade credits as well as currency and deposits. **8** Excluding Bundesbank. **9** Includes the following sectors: financial corporations (excluding monetary financial institutions) as well as non-financial corporations, households and non-profit institutions serving households.

XII. External sector

7. External position of the Bundesbank *

€ million

End of reporting period	External assets									External liabilities 3ä, 4	Net external position 5
		Reserve assets					Other investment				
	Total	Total	Gold and gold receivables	Special drawing rights	Reserve position in the IMF	Currency, deposits and securities	Total	of which: Clearing accounts within the ESCB 1	Portfolio investment 2		
1999 Jan. 6	95,316	93,940	29,312	1,598	6,863	56,167	1,376	–	–	9,628	85,688
2002	103,948	85,002	36,208	1,888	6,384	40,522	18,780	4,995	166	66,278	37,670
2003	95,394	76,680	36,533	1,540	6,069	32,538	18,259	4,474	454	83,329	12,065
2004	93,110	71,335	35,495	1,512	5,036	29,292	21,110	7,851	665	95,014	– 1,904
2005	130,268	86,181	47,924	1,601	2,948	33,708	43,184	29,886	902	115,377	14,891
2006	104,389	84,765	53,114	1,525	1,486	28,640	18,696	5,399	928	134,697	– 30,308
2007	179,492	92,545	62,433	1,469	949	27,694	84,420	71,046	2,527	176,569	2,923
2008	230,775	99,185	68,194	1,576	1,709	27,705	129,020	115,650	2,570	237,893	– 7,118
2009	323,286	125,541	83,939	13,263	2,705	25,634	190,288	177,935	7,458	247,645	75,641
2010	524,695	162,100	115,403	14,104	4,636	27,957	337,921	325,553	24,674	273,241	251,454
2011	714,662	184,603	132,874	14,118	8,178	29,433	475,994	463,311	54,065	333,730	380,932
2012	921,002	188,630	137,513	13,583	8,760	28,774	668,672	655,670	63,700	424,999	496,003
2013	721,741	143,753	94,876	12,837	7,961	28,080	523,153	510,201	54,834	401,524	320,217
2014	678,804	158,745	107,475	14,261	6,364	30,646	473,274	460,846	46,784	396,314	282,490
2015	800,709	159,532	105,792	15,185	5,132	33,423	596,638	584,210	44,539	481,787	318,921
2016	990,450	175,765	119,253	14,938	6,581	34,993	767,128	754,263	47,557	592,723	397,727
2017	1,142,845	166,842	117,347	13,987	4,294	31,215	923,765	906,941	52,238	668,527	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
2020 Jan.	1,090,725	209,432	154,867	14,785	6,110	33,671	828,120	811,435	53,173	580,866	509,859
Feb.	1,106,033	215,748	159,889	14,857	5,989	35,014	836,782	821,562	53,503	577,011	529,022
Mar.	1,218,815	213,722	158,677	14,812	5,965	34,268	952,781	935,126	52,312	617,919	600,896
Apr.	1,214,851	226,903	170,359	14,935	6,857	34,753	934,333	918,814	53,615	616,319	598,532
May	1,209,328	223,125	167,780	14,650	6,787	33,908	931,521	916,145	54,682	612,403	596,925
June	1,294,167	226,135	170,728	14,603	6,955	33,849	1,012,982	995,083	55,050	618,825	675,342
July	1,323,691	233,547	180,400	14,179	7,465	31,503	1,034,282	1,019,214	55,862	599,189	724,503
Aug.	1,358,137	230,309	177,973	14,129	7,423	30,784	1,071,521	1,056,231	56,307	600,390	757,747
Sep.	1,414,933	227,150	173,979	14,293	7,632	31,246	1,131,686	1,115,189	56,097	649,781	765,151
Oct.	1,346,367	227,767	174,433	14,346	7,656	31,332	1,061,498	1,047,327	57,102	619,445	726,922
Nov.	1,347,202	212,286	159,737	14,193	7,535	30,820	1,078,270	1,060,263	56,647	625,921	721,282
Dec.	1,429,236	219,127	166,904	14,014	8,143	30,066	1,152,757	1,136,002	57,353	781,339	647,898
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

***** Assets and liabilities vis-à-vis all countries within and outside the euro area. Up to December 2000 the levels at the end of each quarter are shown, owing to revaluations, at market prices; within each quarter, however, the levels are computed on the basis of cumulative transaction values. From January 2001 all end-of-month levels are valued at market prices. **1** Mainly net claims on TARGET2 balances (acc. to the respective country designation), since November 2000 also balances with non-euro area central banks within the ESCB. **2** Mainly long-term debt securities from issuers within the euro area. **3** Including estimates of currency in circulation abroad. **4** See Deutsche Bundesbank, Monthly Report, October 2014, p. 22. **5** Difference between External assets and External liabilities. **6** Euro opening balance sheet of the Bundesbank as at 1 January 1999.

XII. External sector

8. External positions of enterprises *

€ million

End of reporting period	Claims on non-residents							Liabilities to non-residents						
			Claims on foreign non-banks							Liabilities to non-banks				
					from trade credits							from trade credits		
	Total	Balances with foreign banks	Total	from financial operations	Total	Credit terms granted	Advance payments effected	Total	Loans from foreign banks	Total	from financial operations	Total	Credit terms used	Advance payments received
Rest of the world														
2018	933,849	234,970	698,880	466,225	232,654	217,969	14,686	1,232,594	146,575	1,086,019	879,752	206,267	135,214	71,053
2019	963,967	227,688	736,279	502,594	233,685	217,370	16,314	1,305,705	167,656	1,138,048	927,650	210,399	134,768	75,630
2020	1,021,200	248,779	772,421	544,059	228,362	211,891	16,471	1,394,364	171,998	1,222,366	1,012,503	209,863	129,098	80,766
2021	1,152,509	260,321	892,188	604,424	287,764	270,847	16,917	1,548,984	218,886	1,330,098	1,066,016	264,082	175,351	88,730
2021 Dec.	1,152,509	260,321	892,188	604,424	287,764	270,847	16,917	1,548,984	218,886	1,330,098	1,066,016	264,082	175,351	88,730
2022 Jan.	1,182,691	270,790	911,902	621,146	290,756	273,635	17,121	1,578,209	219,558	1,358,651	1,089,067	269,583	179,085	90,498
Feb.	1,197,848	268,435	929,412	620,512	308,901	280,714	28,187	1,567,699	214,946	1,352,753	1,072,422	280,331	180,331	99,999
Mar.	1,215,926	280,049	935,878	614,010	321,868	293,304	28,564	1,575,472	200,446	1,375,026	1,081,713	293,313	193,098	100,215
Apr.	1,266,969	290,472	976,498	651,264	325,234	296,190	29,044	1,629,738	212,997	1,416,741	1,123,694	293,047	189,904	103,142
May p	1,257,958	278,201	979,758	648,901	330,857	301,081	29,776	1,620,542	208,627	1,411,915	1,113,838	298,077	194,239	103,838
EU Member States (27 excl. GB)														
2018	544,009	177,064	366,944	274,402	92,542	84,191	8,351	801,772	88,161	713,611	631,814	81,798	61,161	20,637
2019	572,324	176,847	395,476	304,605	90,871	82,120	8,752	836,863	91,122	745,740	660,385	85,355	62,692	22,664
2020	609,449	187,703	421,746	332,983	88,763	79,780	8,983	884,904	95,716	789,188	702,991	86,197	61,357	24,841
2021	660,768	198,911	461,857	350,591	111,266	102,689	8,578	978,060	153,424	824,636	713,878	110,758	84,237	26,521
2021 Dec.	660,768	198,911	461,857	350,591	111,266	102,689	8,578	978,060	153,424	824,636	713,878	110,758	84,237	26,521
2022 Jan.	671,660	215,565	456,095	345,388	110,707	102,134	8,572	971,933	142,339	829,594	722,051	107,544	80,084	27,460
Feb.	681,358	211,676	469,682	348,920	120,762	108,053	12,709	973,954	142,276	831,677	716,073	115,604	84,901	30,703
Mar.	699,393	215,782	483,611	355,742	127,869	115,140	12,729	981,025	136,454	844,571	725,830	118,742	88,163	30,579
Apr.	728,052	231,393	496,659	365,832	130,827	118,000	12,827	996,555	136,904	859,651	740,339	119,311	87,983	31,328
May p	722,209	220,683	501,526	366,245	135,281	122,351	12,930	999,331	134,313	865,018	740,054	124,964	93,282	31,682
Extra-EU Member States (27 incl. GB)														
2018	389,841	57,905	331,935	191,823	140,112	133,777	6,335	430,822	58,415	372,408	247,939	124,469	74,053	50,416
2019	391,643	50,841	340,803	197,989	142,814	135,251	7,563	468,842	76,534	392,308	267,265	125,043	72,077	52,967
2020	411,751	61,076	350,675	211,076	139,599	132,112	7,487	509,460	76,282	433,178	309,512	123,666	67,741	55,925
2021	491,741	61,410	430,331	253,833	176,498	168,158	8,340	570,924	65,462	505,463	352,138	153,324	91,115	62,210
2021 Dec.	491,741	61,410	430,331	253,833	176,498	168,158	8,340	570,924	65,462	505,463	352,138	153,324	91,115	62,210
2022 Jan.	511,031	55,225	455,806	275,758	180,049	171,500	8,549	606,275	77,219	529,056	367,017	162,039	99,001	63,038
Feb.	516,490	56,759	459,731	271,591	188,139	172,661	15,478	593,744	72,670	521,074	356,349	164,725	95,429	69,297
Mar.	516,534	64,267	452,267	258,268	193,999	178,164	15,835	594,446	63,991	530,455	355,883	174,572	104,935	69,636
Apr.	538,918	59,079	479,839	285,432	194,407	178,190	16,217	633,183	76,093	557,090	383,355	173,735	101,921	71,814
May p	535,749	57,518	478,232	282,656	195,575	178,730	16,846	621,211	74,315	546,896	373,784	173,113	100,957	72,156
Euro area (19)														
2018	467,428	156,887	310,542	238,963	71,579	64,295	7,283	735,094	68,959	666,136	601,205	64,931	49,138	15,792
2019	493,062	158,102	334,960	264,834	70,127	62,531	7,595	761,144	70,561	690,584	624,607	65,977	48,775	17,202
2020	522,933	166,846	356,087	287,662	68,425	60,750	7,674	799,046	74,101	724,945	658,931	66,014	47,100	18,914
2021	553,838	176,279	377,560	289,330	88,230	80,844	7,386	896,256	131,735	764,521	675,868	88,653	68,232	20,421
2021 Dec.	553,838	176,279	377,560	289,330	88,230	80,844	7,386	896,256	131,735	764,521	675,868	88,653	68,232	20,421
2022 Jan.	575,958	197,224	378,734	291,435	87,300	79,960	7,339	891,509	121,646	769,863	685,108	84,755	63,633	21,122
Feb.	583,733	192,153	391,581	295,971	95,610	84,169	11,441	893,089	121,854	771,235	679,362	91,874	67,627	24,247
Mar.	596,153	195,325	400,828	299,564	101,264	89,818	11,446	897,685	116,893	780,793	686,158	94,635	70,651	23,984
Apr.	628,773	213,684	415,090	310,796	104,294	92,824	11,470	914,122	116,900	797,222	701,576	95,646	71,124	24,522
May p	622,527	203,944	418,582	310,692	107,891	96,247	11,643	914,208	112,765	801,443	701,266	100,177	75,470	24,707
Extra-Euro area (19)														
2018	466,421	78,083	388,338	227,262	161,076	153,673	7,403	497,500	77,617	419,883	278,548	141,336	86,075	55,260
2019	470,905	69,586	401,319	237,761	163,558	154,839	8,719	544,560	97,096	447,465	303,043	144,422	85,993	58,428
2020	498,267	81,933	416,334	256,397	159,937	151,141	8,796	595,318	97,897	497,421	353,572	143,849	81,997	61,852
2021	598,671	84,042	514,629	315,094	199,535	190,003	9,532	652,728	87,151	565,577	390,148	175,429	107,119	68,309
2021 Dec.	598,671	84,042	514,629	315,094	199,535	190,003	9,532	652,728	87,151	565,577	390,148	175,429	107,119	68,309
2022 Jan.	606,733	73,566	533,167	329,711	203,456	193,674	9,782	686,699	97,912	588,788	403,959	184,829	115,452	69,377
Feb.	614,115	76,283	537,832	324,541	213,291	196,545	16,746	674,609	93,092	581,516	393,060	188,456	112,704	75,752
Mar.	619,773	84,723	535,050	314,445	220,604	203,486	17,118	677,787	83,553	594,234	395,555	198,679	122,447	76,231
Apr.	638,196	76,788	561,408	340,468	220,940	203,366	17,574	715,616	96,097	619,519	422,118	197,400	118,780	78,620
May p	635,432	74,256	561,175	338,209	222,966	204,833	18,133	706,334	95,862	610,472	412,572	197,900	118,769	79,131

* The assets and liabilities vis-à-vis non-residents of banks (MFIs) in Germany are shown in Table 4 of Section IV., "Banks". Statistical increases and decreases have not been eliminated; to this extent, the changes in totals are not comparable with the figures shown in Table XII.7.

XII. External sector

9. ECB`s euro foreign exchange reference rates of selected currencies *

EUR 1 = currency units ...

Yearly or monthly average	Australia AUD	Canada CAD	China CNY	Denmark DKK	Japan JPY	Norway NOK	Sweden SEK	Switzerland CHF	United Kingdom GBP	United States USD
2010	1.4423	1.3651	8.9712	7.4473	116.24	8.0043	9.5373	1.3803	0.85784	1.3257
2011	1.3484	1.3761	8.9960	7.4506	110.96	7.7934	9.0298	1.2326	0.86788	1.3920
2012	1.2407	1.2842	8.1052	7.4437	102.49	7.4751	8.7041	1.2053	0.81087	1.2848
2013	1.3777	1.3684	8.1646	7.4579	129.66	7.8067	8.6515	1.2311	0.84926	1.3281
2014	1.4719	1.4661	8.1857	7.4548	140.31	8.3544	9.0985	1.2146	0.80612	1.3285
2015	1.4777	1.4186	6.9733	7.4587	134.31	8.9496	9.3535	1.0679	0.72584	1.1095
2016	1.4883	1.4659	7.3522	7.4452	120.20	9.2906	9.4689	1.0902	0.81948	1.1069
2017	1.4732	1.4647	7.6290	7.4386	126.71	9.3270	9.6351	1.1117	0.87667	1.1297
2018	1.5797	1.5294	7.8081	7.4532	130.40	9.5975	10.2583	1.1550	0.88471	1.1810
2019	1.6109	1.4855	7.7355	7.4661	122.01	9.8511	10.5891	1.1124	0.87777	1.1195
2020	1.6549	1.5300	7.8747	7.4542	121.85	10.7228	10.4848	1.0705	0.88970	1.1422
2021	1.5749	1.4826	7.6282	7.4370	129.88	10.1633	10.1465	1.0811	0.85960	1.1827
2021 Feb.	1.5605	1.5354	7.8136	7.4367	127.49	10.2791	10.0887	1.0858	0.87268	1.2098
Mar.	1.5444	1.4970	7.7465	7.4363	129.38	10.1469	10.1692	1.1065	0.85873	1.1899
Apr.	1.5544	1.4975	7.8051	7.4367	130.49	10.0376	10.1620	1.1031	0.86527	1.1979
May	1.5653	1.4732	7.8109	7.4362	132.57	10.0931	10.1471	1.0968	0.86258	1.2146
June	1.5761	1.4713	7.7391	7.4364	132.63	10.1444	10.1172	1.0940	0.85872	1.2047
July	1.5926	1.4806	7.6536	7.4373	130.35	10.3767	10.1979	1.0856	0.85613	1.1822
Aug.	1.6118	1.4827	7.6237	7.4369	129.28	10.4195	10.2157	1.0762	0.85287	1.1772
Sep.	1.6087	1.4910	7.6007	7.4361	129.66	10.1861	10.1710	1.0857	0.85683	1.1770
Oct.	1.5669	1.4436	7.4500	7.4398	131.21	9.8143	10.0557	1.0708	0.84694	1.1601
Nov.	1.5615	1.4339	7.2927	7.4373	130.12	9.9661	10.0459	1.0522	0.84786	1.1414
Dec.	1.5781	1.4463	7.1993	7.4362	128.80	10.1308	10.2726	1.0408	0.84875	1.1304
2022 Jan.	1.5770	1.4282	7.1922	7.4411	130.01	10.0070	10.3579	1.0401	0.83503	1.1314
Feb.	1.5825	1.4422	7.1957	7.4408	130.66	10.0544	10.5342	1.0461	0.83787	1.1342
Mar.	1.4946	1.3950	6.9916	7.4404	130.71	9.7367	10.5463	1.0245	0.83638	1.1019
Apr.	1.4663	1.3652	6.9605	7.4391	136.61	9.6191	10.3175	1.0211	0.83655	1.0819
May	1.4995	1.3588	7.0830	7.4405	136.24	10.1453	10.4956	1.0355	0.84969	1.0579
June	1.5044	1.3537	7.0734	7.4392	141.57	10.2972	10.6005	1.0245	0.85759	1.0566

* Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB; for additional euro foreign exchange reference rates, see Statistical Series Exchange rate statistics.

10. Euro area countries and irrevocable euro conversion rates in the third stage of Economic and Monetary Union

From	Country	Currency	ISO currency code	EUR 1 = currency units …
1999 January 1	Austria	Austrian schilling	ATS	13.7603
	Belgium	Belgian franc	BEF	40.3399
	Finland	Finnish markka	FIM	5.94573
	France	French franc	FRF	6.55957
	Germany	Deutsche Mark	DEM	1.95583
	Ireland	Irish pound	IEP	0.787564
	Italy	Italian lira	ITL	1,936.27
	Luxembourg	Luxembourg franc	LUF	40.3399
	Netherlands	Dutch guilder	NLG	2.20371
	Portugal	Portuguese escudo	PTE	200.482
	Spain	Spanish peseta	ESP	166.386
2001 January 1	Greece	Greek drachma	GRD	340.750
2007 January 1	Slovenia	Slovenian tolar	SIT	239.640
2008 January 1	Cyprus	Cyprus pound	CYP	0.585274
	Malta	Maltese lira	MTL	0.429300
2009 January 1	Slovakia	Slovak koruna	SKK	30.1260
2011 January 1	Estonia	Estonian kroon	EEK	15.6466
2014 January 1	Latvia	Latvian lats	LVL	0.702804
2015 January 1	Lithuania	Lithuanian litas	LTL	3.45280

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 group						Indicators of the German economy's price competitiveness						
	EER-19 [1]				EER-42 [2]		Based on the deflators of total sales [3] vis-à-vis				Based on consumer price indices vis-à-vis		
							26 selected industrial countries [4]						
								of which:					
	Nominal	In real terms based on consumer price indices	In real terms based on the deflators of gross domestic product [3]	In real terms based on unit labour costs of national economy [3]	Nominal	In real terms based on consumer price indices	Total	Euro area countries	Non-euro area countries	37 countries [5]	26 selected industrial countries [4]	37 countries [5]	60 countries [6]
1999	96.2	96.2	96.1	96.2	96.6	96.0	97.9	99.6	95.9	97.7	98.3	98.1	97.8
2000	87.1	86.9	86.2	85.6	88.1	86.2	92.0	97.5	85.5	91.2	93.1	92.3	91.2
2001	87.6	87.2	86.7	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	89.8	88.0	94.5	90.5	92.4	95.7	88.5	91.1	93.5	92.2	91.9
2003	100.4	101.4	100.8	99.0	106.4	101.6	95.9	94.8	97.6	95.3	97.0	96.7	96.8
2004	104.2	105.2	103.8	102.2	110.9	105.4	96.2	93.6	100.0	95.6	98.5	98.2	98.4
2005	102.8	103.9	101.8	100.5	109.0	102.9	94.8	92.0	98.8	93.3	98.4	97.1	96.7
2006	102.8	103.9	101.2	99.3	109.1	102.3	93.5	90.4	98.2	91.6	98.6	96.7	96.0
2007	106.3	106.9	103.3	101.0	112.7	104.5	94.5	89.6	102.0	92.0	100.9	98.3	97.3
2008	110.1	109.7	105.5	104.8	117.4	106.9	94.9	88.3	105.1	91.3	102.4	98.4	97.5
2009	111.6	110.6	106.7	108.5	120.5	108.0	95.2	89.2	104.7	92.0	101.9	98.6	97.9
2010	104.4	102.9	98.5	100.9	111.9	99.0	92.5	88.7	98.2	88.2	98.8	94.3	92.5
2011	104.2	101.9	96.7	99.3	112.7	98.5	92.1	88.5	97.6	87.4	98.2	93.5	91.9
2012	98.5	96.7	91.1	93.6	107.5	93.7	90.1	88.3	92.5	84.7	95.9	90.5	88.9
2013	102.0	99.8	94.1	96.5	112.2	96.8	92.3	88.8	97.5	86.7	98.1	92.3	90.9
2014	102.3	99.1	94.0	96.6	114.5	97.1	92.9	89.6	97.7	87.4	98.2	92.5	91.5
2015	92.5	89.5	85.5	86.0	106.1	88.6	89.8	90.3	88.9	83.6	94.4	87.8	86.9
2016	95.2	91.4	87.8	p 87.3	110.1	90.6	90.7	90.8	90.4	84.9	95.0	88.8	88.1
2017	97.4	93.4	88.9	p 88.0	112.4	91.8	91.9	90.9	93.3	85.7	96.3	89.9	88.9
2018	99.9	95.5	90.5	p 89.6	117.3	95.0	93.2	91.0	96.4	86.7	97.7	91.2	90.8
2019	98.1	93.1	88.7	p 87.1	115.4	92.4	92.2	91.2	93.5	85.8	96.4	89.9	89.4
2020	99.6	93.5	89.4	p 87.7	119.4	93.9	92.1	91.3	93.3	86.2	96.4	90.1	90.2
2021	99.6	93.4	p 88.6	p 86.1	120.8	94.2	93.3	91.9	95.4	86.7	97.4	90.7	91.0
2020 Jan.	96.9	91.3			114.1	90.4					95.8	89.1	88.4
Feb.	96.2	90.5	88.0	p 87.0	113.5	89.8	91.7	91.4	92.0	85.5	95.5	88.7	88.0
Mar.	98.8	93.0			117.8	93.1					96.3	90.0	89.9
Apr.	98.1	92.5			117.5	93.0					96.1	90.1	90.2
May	98.3	92.5	88.6	p 87.5	117.5	92.8	91.3	91.2	91.2	85.8	96.3	90.2	90.3
June	99.7	93.8			119.1	93.9					97.0	90.8	90.8
July	100.4	94.4			120.3	94.8					96.0	90.0	90.2
Aug.	101.5	94.9	90.3	p 88.5	122.4	95.9	92.6	91.3	94.5	86.9	97.0	90.7	91.2
Sep.	101.5	94.9			122.4	95.8					96.8	90.6	91.1
Oct.	101.3	94.7			122.4	95.7					96.7	90.5	91.0
Nov.	100.6	94.3	90.5	p 87.9	121.6	95.2	93.0	91.3	95.4	86.8	96.5	90.1	90.5
Dec.	101.8	95.2			122.9	96.0					97.0	90.5	90.9
2021 Jan.	101.3	95.3			122.4	96.0					98.0	91.4	91.8
Feb.	100.6	94.5	90.0	p 88.0	121.5	95.1	93.3	91.6	95.7	86.9	98.0	91.3	91.5
Mar.	100.3	94.1			121.2	94.8					97.7	91.1	91.4
Apr.	100.6	94.2			121.9	95.1					97.8	91.2	91.6
May	100.8	94.2	89.3	p 86.4	122.3	95.1	93.0	91.2	95.6	86.4	98.1	91.3	91.8
June	100.2	93.7			121.5	94.5					97.9	91.1	91.5
July	99.7	93.5			120.8	94.2					97.6	91.0	91.2
Aug.	99.3	93.2	p 88.7	p 85.7	120.4	93.9	93.8	92.2	95.9	87.0	97.3	90.6	90.9
Sep.	99.4	93.3			120.4	93.8					97.3	90.7	90.8
Oct.	98.4	92.4			119.5	93.1					96.6	90.0	90.2
Nov.	97.6	91.7	p 86.5	p 84.3	118.8	92.6	93.3	92.5	94.5	86.4	96.2	89.5	89.8
Dec.	97.1	91.2			119.0	92.5					95.8	89.0	89.5
2022 Jan.	96.6	91.2			118.6	p 92.3					96.0	89.0	p 89.5
Feb.	96.9	91.7	p 84.6	p 83.1	118.9	p 92.7	92.2	91.6	93.1	85.1	96.1	89.1	p 89.5
Mar.	95.9	91.3			118.4	p 92.8					96.3	89.5	p 90.0
Apr.	95.2	p 89.9			116.4	p 90.4					96.1	p 89.0	p 88.9
May	95.6	p 90.2	...	...	116.2	p 90.2	...	...	...	...	96.6	p 89.6	p 89.3
June	95.9	p 90.4			116.5	p 90.3					p 96.0	p 89.0	p 88.6

* The effective exchange rate corresponds to the weighted external value of the currency concerned. The method of calculating the indicators of the German economy's price competitiveness is consistent with the procedure to compute the effective exchange rates of the euro. A decline in the figures implies an increase in competitiveness. The weights are based on trade in manufactured goods and services. For more detailed information on methodology and weighting scale, see the website of the Deutsche Bundesbank (https://www.bundesbank.de/content/796162). **1** The calculations are based on the weighted averages of the changes in the bilateral exchange rates of the euro vis-à-vis the currencies of the following countries: Australia, Bulgaria, Canada, China, Croatia, Czechia, Denmark, Hong Kong, Hungary, Japan, Norway, Poland, Romania, Singapore, South Korea, Sweden, Switzerland, the United Kingdom and the United States. Where current price and wage indices were not available, estimates were used. **2** Includes countries belonging to the group EER-19 and additionally Algeria, Argentina, Brazil, Chile, Colombia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, Peru, Philippines, the Russian Federation, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey, Ukraine and United Arab Emirates. The ECB suspends the publication and calculation of the euro foreign exchange reference rate against Russian rouble with effect from March 2, 2022 until further notice. For the calculation of effective exchange rates, an indicative rate is used for the Russian Federation from that date. It is calculated from the daily RUB/USD rates determined by the Bank of Russia in conjunction with the respective ECB's euro foreign exchange reference rate to the US dollar. **3** Annual and quarterly averages. **4** Euro area countries (from 2001 including Greece, from 2007 including Slovenia, from 2008 including Cyprus and Malta, from 2009 including Slovakia, from 2011 including Estonia, from 2014 including Latvia, from 2015 including Lithuania) as well as Canada, Denmark, Japan, Norway, Sweden, Switzerland, the United Kingdom and the United States. **5** Euro area countries (current composition) and countries belonging to the group EER-19. **6** Euro area countries (current composition) and countries belonging to the group EER-42.

Overview of publications by the Deutsche Bundesbank

This overview provides information about selected recent economic and statistical publications by the Deutsche Bundesbank. Unless otherwise indicated, these publications are available in both English and German, in printed form and on the Bundesbank's website.

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

Annual Report

Financial Stability Review

Monthly Report

A list of the articles published in the period from 2010 to 2021 is available on the Bundesbank's website.

Monthly Report articles

September 2021
- The Eurosystem's monetary policy strategy
- The impact of the Eurosystem's monetary policy on Bitcoin and other crypto tokens
- The performance of German credit institutions in 2020

October 2021
- State government finances in 2020: deficit due to temporary effects of pandemic, escape clauses also used to build reserves
- The global economy during the coronavirus pandemic
- What do households in Germany think about the digital euro? First results from surveys and interviews
- The regulation of remuneration at credit institutions

November 2021
- The current economic situation in Germany

December 2021
- Outlook for the German economy for 2022 to 2024
- German enterprises' profitability and financing in 2020

January 2022
- Changes in the secured money market
- Climate change and climate policy: analytical requirements and options from a central bank perspective
- Scenario-based equity valuation effects induced by greenhouse gas emissions

February 2022
- The current economic situation in Germany

March 2022
- Monetary policy in a prolonged period of low interest rates – a discussion of the concept of the reversal rate
- German balance of payments in 2021

April 2022
- Potential macroeconomic consequences of the war in Ukraine – simulations based on a severe risk scenario
- Development of the debt situation in the euro area private non-financial sector since the outbreak of the COVID-19 pandemic
- Central government's debt brake: options for stability-oriented further development
- Demand for euro banknotes issued by the Bundesbank: current developments

May 2022
- The current economic situation in Germany

June 2022
- Outlook for the German economy for 2022 to 2024
- Pension insurance scheme: long-term scenarios and reform options
- Inflation-induced bracket creep in the income tax scale
- Public finances in the euro area: current developments and challenges
- The Bundesbank's surveys of firms – applications for assessing the financial situation in the corporate sector

July 2022
- Distributional Wealth Accounts for households in Germany – results and use cases
- Factors influencing international portfolio flows
- Cross-border interoperability of central bank digital currency
- Government debt in the euro area: developments in creditor structure

Statistical Series*

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

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

Economic activity and prices
- Seasonally adjusted business statistics, monthly

Exchange rates
- Exchange rate statistics, monthly

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

Macroeconomic accounting systems
- Financial accounts, June

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

Special Statistical Publications

1 Banking statistics guidelines, January 2022[1,2]

2 Banking statistics, customer classification, January 2022[2]

For footnotes, see p. 88•.

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

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

Special Publications

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

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

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

The market for German Federal securities, May 2000

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

Bundesbank Act, September 2002

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

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

European economic and monetary union, April 2008

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

Discussion Papers°

11/2022
Wealth and subjective well-being in Germany

12/2022
Inflation expectations and climate concern

13/2022
Adressing COVID-19 outliers in BVARs with stochastic volatility

14/2022
Interest rate shocks, competition and bank liquidity creation

15/2022
Financial crises and shadow banks: A quantitative analysis

16/2022
What moves markets?

17/2022
Would households understand average inflation targeting?

18/2022
Time inconsistency and overdraft use: Evidence from transaction data and behavioral measurement experiments

19/2022
The impact of German public support transfers on firm finance – Evidence from the Covid-19 crisis

20/2022
Foreign exchange interventions and their impact on expectations: Evidence from the USD/ILS options market

21/2022
Monetary policy and endogenous financial crises

22/2022
The augmented bank balance-sheet channel of monetary policy

For footnotes, see p. 88•.

23/2022
Pulling ourselves up by our bootstraps: the greenhouse gas value of products, enterprises and industries

24/2022
CDS market structure and bond spreads

25/2022
Carbon pricing, border adjustment and climate clubs: An assessment with EMuSe

26/2022
Spending effects of child-related fiscal transfers

27/2022
The impact of weight shifts on inflation: Evidence for the euro area HICP

28/2022
Smart or smash? The effect of financial sanctions on trade in goods and services

Banking legislation

1 Bundesbank Act, July 2013, and Statute of the European System of Central Banks and of the European Central Bank, June 1998

2 Gesetz über das Kreditwesen, January 2008[1]

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

---

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