

# Monthly Report July 2022

Vol. 74 No 7 Deutsche Bundesbank Monthly Report July 2022 2

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

The German original of this Monthly Report went to press at 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.



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### Abbreviations and symbols

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 Data unknown, not to be published or not meaningful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

Discrepancies in the totals are due to rounding.

### Commentaries

### Economic conditions

### Underlying trends

German 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 guarter 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

In May 2022, industrial production<sup>2</sup> was up slightly on the month after seasonal adjustment<sup>3</sup> (+1/2%). 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 (-11/4%). 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 nonmetallic 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 (-41/2%).

Industrial production up once again in May 2022

<sup>1</sup> 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.

**<sup>2</sup>** 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).

**<sup>3</sup>** 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

	Orders received (volume); 2015 = 100			
	Industry			
		of which:		Main con-
Period	Total	Domestic	Foreign	struction
2021 Q3 Q4	114.5 109.2	106.3 105.3	120.7 112.3	126.9 128.5
2022 Q1	112.0	103.4	118.6	127.6
Mar.	108.4	102.4	113.0	134.0
Apr. May	106.5 106.6	102.9 101.4	109.2 110.6	112.0
	Output; 201			
	Industry			
		of which:		
	Total	Inter- mediate goods	Capital goods	Con- struction
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
IVIdI.	93.5	100.3	84.5 97.6	110.4
May	95.1	101.0	89.5	114.4
	Foreign trad	e; € billion		Memo
	Superte	lana auto	Delener	item: Current account balance
2021.02			Balarice	In € DIIIOn
2021 Q3 Q4	340.99 357.21	296.87 326.47	44.13 30.73	64.08 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 mark	et		
	Employ- ment	Vacan- cies <sup>1</sup>	Un- employ- ment	Un- employ-
	Number in t	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. May June	45,520 45,555	864 873 872	2,289 2,284 2,417	5.0 5.0 5.3
	Prices: 2015	= 100		
	111003, 2015	Producer	Harmon-	
	Import prices	prices of industrial products	Con- struction prices <sup>2</sup>	ised con- sumer 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. May	137.9 139.1	145.0 147 3		116.7 118.0
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.

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 (-43/4%) and, excluding large orders, the decline was distinctly weaker (-23/4%). 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.

In May 2022, nominal industrial sales rose substantially on the previous month after seasonal adjustment (+31/2%). 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 (+11/2%). The increase was somewhat smaller after price adjustment (+1%). Nominal exports to the Russian Federation were up substantially but remained guite 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 guarter (+5%). After price adjustment, however, the increase was significantly lower (+11/4%). 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 adjustIndustrial new orders constant

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

Deutsche Bundesbank

ment (+31/2%), and even after price adjustment there was a clear increase (+21/2%). 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 (+91/2%). This growth was significantly lower after price adjustment due to surging import prices (+31/4%). 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  $(+\frac{1}{2})$ . 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 firstguarter 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

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.

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 exEmployment growth less pronounced than in recent months

Unemployment up sharply due to Ukrainian refugees Deutsche Bundesbank Monthly Report July 2022 8

> tent.<sup>4</sup> 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.<sup>5</sup> This was mainly due to public transport becoming significantly cheaper as a result of the temporary introduction of the €9 ticket.<sup>6</sup> 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.<sup>7</sup> 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<sup>8</sup>

#### Local government finances

Local governments (core budgets and offbudget entities) closed the first quarter of this year with a seasonal deficit, as usual. At  $\leq$ 5½ billion, it was  $\leq$ 3½ billion lower than in the first quarter of 2021. Local governments financed  $\leq$ 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.

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

**<sup>4</sup>** See Statistics provided by the Federal Employment Agency (2022), p. 13.

**<sup>5</sup>** The national consumer price index (CPI) showed an increase of 7.6%, compared with 7.9% in May.

<sup>6</sup> 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.

<sup>7</sup> 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.

<sup>8</sup> 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 ( $+ \notin 4\frac{1}{2}$  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 31/2%. 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 (+ $\in$ 41/2 billion). Additional central government funds of  $\notin$ 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.

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



### Finances of the statutory health insurance scheme<sup>\*</sup>



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  $\notin$ 2 billion in the first quarter of 2022. It had posted a slight surplus in the first quarter of 2021.<sup>10</sup> Excluding positive one-off effects, however, the deficit would have been somewhat higher last year than in the current year.

The health fund posted a deficit of just over €2 billion in the first quarter of 2022. A small sur-

plus 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 41/2% 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 €91/2 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 €11/2 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.

As in the same guarter of the previous year, the health insurance institutions achieved a largely balanced result. Total revenue saw strong growth of 61/2%, particularly on account of higher central government funds. The health insurance institutions' expenditure also increased by 61/2%, 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 (+61/2%), above all, rose strongly. Spending on hospital treatment – a major expenditure item – also climbed markedly, by 41⁄2%.<sup>11</sup> Expenditure on medical treatments increased by a more moderate 21/2%, following high growth in the previous year. Administrative expenditure grew by a very substantial 18%. Adjusted for higher pension Health fund: deficit of €2 billion

*Health insurance institutions: balanced result* 

**<sup>10</sup>** 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.

**<sup>11</sup>** 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  $\in$ 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  $\in$ 14 billion). The deficit was expected in the health fund: in the current year, it will pass on  $\notin$ 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  $\leq 16$  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

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.

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

High net issuance in the German bond market in May 2022

Net public sector issuance

#### Sales and purchases of debt securities

£	hil	lion
E	DII	non

	2021	2022	
Item	May	Apr.	May
Sales			
Domestic debt securities <sup>1</sup> of which:	32.0	- 2.2	23.9
Bank debt securities Public debt securities	- 3.4 28.2	- 3.2 0.2	4.1 14.9
Foreign debt securities <sup>2</sup>	5.2	- 15.2	0.7
Purchases			
Residents Credit institutions <sup>3</sup> Deutsche	31.7 - 2.2	- 2.3 - 16.9	28.2 5.5
Bundesbank Other sectors <sup>4</sup> of which: Domestic debt	25.5 8.3	13.1 1.5	14.4 8.3
securities	0.5	9.3	9.7
Non-residents <sup>2</sup>	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

by credit

institutions

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.

Domestic credit institutions raised their capital Net issuance 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).

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

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

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 (- $\in 0.1$  billion).

Purchases of debt securities

Net issuance of German equities

Inflows to mutual funds

### Balance of payments

Current account surplus down sharply Germany's current account recorded a surplus of  $\in 2.5$  billion in May 2022, down  $\in 6.4$  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  $\in$ 1.9 billion on the month to  $\in$ 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  $\in$ 6.5 billion (April:  $\in$ 11.1 billion). Domestic investors added  $\in$ 2.9 billion worth of securities issued by nonresidents to their portfolios on balance. They purchased foreign bonds ( $\in$ 5.5 billion), shares ( $\notin$ 1.5 billion) and mutual fund shares ( $\notin$ 0.7 billion)

#### Major items of the balance of payments

€ billion

	2021	2022	
Item	May	Apr.	Mayp
I. Current account 1. Goods Receipts Expenditure Momo itom:	+ 15.8 + 14.5 109.9 95.4	+ 9.0 + 4.3 119.1 114.7	+ 2.5 + 6.2 127.9 121.7
Foreign trade1 Exports Imports 2. Services Receipts Expenditure 3. Primary income Receipts Expenditure 4. Secondary income	+ 12.4 109.5 97.2 + 2.3 24.3 22.0 + 0.6 19.4 18.8 - 1.7	+ 0.8 122.3 121.5 - 1.2 29.0 30.1 + 10.5 20.2 9.7 - 4.7	+ 0.5 130.3 129.8 - 2.7 29.9 32.6 + 2.2 21.1 19.0 - 3.2
II. Capital account	- 0.4	- 1.3	- 2.7
<ul> <li>III. Financial account (increase: +)</li> <li>1. Direct investment Domestic investment</li> </ul>	+ 14.1 - 1.4	+ 4.6 + 12.8	+ 4.5 + 19.7
abroad Foreign investment	- 8.1	+ 28.8	+ 10.9
in the reporting country 2. Portfolio investment Domestic investment	- 6.7 + 5.3	+ 16.0 + 11.1	- 8.8 + 6.5
in foreign securities Shares <sup>2</sup>	+ 12.1 + 1.7	- 7.3 + 5.8	+ 2.9 + 1.5
shares <sup>3</sup> Short-term debt	+ 5.1	+ 2.1	+ 0.7
securities <sup>4</sup> Long-term debt	- 3.4	+ 2.0	- 4.7
securities <sup>5</sup> Foreign investment	+ 8.6	- 17.2	+ 5.5
in domestic securities Shares <sup>2</sup>	+ 6.7 + 0.9	- 18.4 - 3.7	- 3.6 - 0.7
Investment fund shares Short-term debt	+ 0.3	+ 0.5	+ 0.6
securities <sup>4</sup> Long-term debt	+ 4.2	- 7.5	- 7.1
securities <sup>5</sup>	+ 1.4	- 7.7	+ 3.6
3. Financial derivatives <sup>6</sup>	+ 3.2	+ 7.4	- 0.5
4. Other Investment <sup>2</sup> Monetary financial	+ 0.8	- 20.8	- 18 3
of which: Short-term	- 29.9	- 4.0	- 11.2
Enterprises and	. 5.2	. 0.2	- 86
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 <sup>10</sup>	- 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 nonfinancial 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 ( $\in 2.0$  billion), the volume of intra-group loans issued to business units in Germany from abroad fell significantly by €10.8 billion.

Other statistically recorded investment – which Net capital 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.

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

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imports in other investment

# 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 lowrisk 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 guarterly 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 midrange 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.<sup>1</sup> 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.<sup>2</sup>

... 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.).<sup>3</sup>

... 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,



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

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.<sup>4</sup> 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.<sup>5</sup> The net wealth of a household is ultimately calculated as the difference between total assets and liabilities (see also the chart on p. 21).

<sup>1</sup> 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.

<sup>2</sup> Data on non-financial assets are usually only available at the annual level.

<sup>3</sup> See European Central Bank (2020).

**<sup>4</sup>** 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.

**<sup>5</sup>** 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.<sup>1</sup>

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 selfevaluations 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.



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

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.<sup>3</sup> 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.<sup>4</sup>

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-anenvelope 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".<sup>5</sup> 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).<sup>6</sup>

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.<sup>8</sup> 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.<sup>10</sup> 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.<sup>11</sup> 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-

**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%.

**<sup>5</sup>** Specifically, data provided by "manager magazin" on the net wealth of the wealthiest Germans in 2011, 2014 and 2017 are used.

**<sup>6</sup>** 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).

corded so far.<sup>12</sup> This leads to an instrumentspecific 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.<sup>13</sup> 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

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 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.<sup>14</sup>

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).

## Balance sheet of a household – a stylised overview



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

#### Net wealth distribution<sup>\*</sup>



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.<sup>6</sup>

... 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.<sup>7</sup> 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.<sup>8</sup> 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

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

... accompanied

by discernible

differences in

wealth structure

**<sup>6</sup>** 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).

<sup>7</sup> The financial portfolio comprises deposits, debt securities, listed shares, investment funds and insurance claims. 8 See also Adam and Tzamourani (2016).

<sup>9</sup> 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).<sup>1</sup> 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



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

<sup>1</sup> 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.



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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



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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

the wealth distribution.<sup>10</sup> In addition, the rate of real estate ownership is comparatively low.<sup>11</sup> 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. 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.

# 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

**<sup>10</sup>** 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.

**<sup>11</sup>** 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

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.<sup>12</sup> 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

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 instrumentspecific 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.

Possible to calculate individual returns on financial portfolio using DWA

Calculation of

disaggregated

returns uses

approach for

aggregate total

determining

return

The methodology used to calculate disaggregated returns essentially follows the approach used to determine the aggregate total return.<sup>13</sup> 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-

**<sup>12</sup>** See, inter alia, Bayer et al. (2019) and Kaplan and Violante (2022).

**<sup>13</sup>** 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<sup>\*</sup>

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.<sup>14</sup>

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. 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.<sup>15</sup> 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.

Average real return rises with increasing net wealth

**<sup>14</sup>** For a detailed account of how real returns are calculated, see Deutsche Bundesbank (2015).

**<sup>15</sup>** 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.



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<sup>16</sup> – 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

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

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

Housing and business wealth also unevenly distributed

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.<sup>17</sup> 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.<sup>18</sup> 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.<sup>19</sup> For this reason, performance is estimated for non-financial business wealth in the same manner as for other equity.

<sup>17</sup> 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.



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

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



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- 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 vield.

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.

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

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

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

<sup>20</sup> 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

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.<sup>21</sup>

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

**<sup>21</sup>** 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.



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

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.

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



#### Total real return on assets along the net wealth distribution

DWA reveal heterogeneity among households which is typically hidden

in macrodata

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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.



# 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.<sup>1</sup> 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.<sup>2</sup>

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

### Aggregate use of savings by households in Germany<sup>\*</sup>

As a percentage of disposable income:



\* 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

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 buildup 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.<sup>3</sup>

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-

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.

**<sup>1</sup>** This phenomenon can also be observed in other advanced economies. See European Central Bank (2021a).

**<sup>2</sup>** See Deutsche Bundesbank (2021b, 2022) for savings motives in connection with the pandemic.

factual version of the Distributional Wealth Accounts is prepared, which assumes that there were no additional savings due to the pandemic.<sup>4</sup> 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.<sup>5</sup> 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,<sup>6</sup> 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.

6 See European Central Bank (2022b).

# Additional savings accumulated due to the pandemic



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

**<sup>4</sup>** 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)).

**<sup>5</sup>** 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)).

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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.<sup>22</sup> 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.<sup>23</sup> 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).

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# 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 countryspecific "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.<sup>1</sup> 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.<sup>2</sup> 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

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.

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.

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.<sup>3</sup> Expected lifetime income and consumption projected on that basis are often disrupted by

2 See Deutsche Bundesbank (2020a).

Free movement of capital promises efficiency gains ...

... and facilitates the sharing of risk ...

... as well as a smoothing of consumption

<sup>1</sup> 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.

**<sup>3</sup>** 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.<sup>4</sup> 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.<sup>5</sup> 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.<sup>6</sup>

# 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

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 nonresidents within a given period (month, guarter or year).<sup>7</sup> As these transactions can differ in character, they are broken down into subaccounts: the current account, capital account and financial account.<sup>8</sup> 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.

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

**<sup>4</sup>** 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.

**<sup>5</sup>** 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".

<sup>6</sup> 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.

**<sup>7</sup>** A detailed account of Germany's balance of payments for 2021 was presented in Deutsche Bundesbank (2022).

**<sup>8</sup>** 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**



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

The body of literature on the drivers of portfolio flows has grown rapidly over the past few years.<sup>9</sup> 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.

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

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.<sup>10</sup> 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.

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 Most studies examine only one side of the balance of payments

<sup>9</sup> See Koepke (2019).

**<sup>10</sup>** 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 crossborder 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 realtime 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.<sup>11</sup>

# Selected determinants of international portfolio flows

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.<sup>12</sup> According

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

**<sup>11</sup>** See, inter alia, Bettendorf and Karadimitropoulou (2022), Fratzscher (2012) and Lo Duca (2012).

**<sup>12</sup>** 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.<sup>13</sup>

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.<sup>14</sup> 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.<sup>15</sup> 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.<sup>16</sup> Nevertheless, the correlation is less significant in studies with high frequency data on portfolio flows.<sup>17</sup>

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 equiDevelopments in equity markets reflect expectations of future profits

**<sup>13</sup>** On this point, Koepke (2019) also identifies a link to portfolio theory according to Markowitz (1952).

**<sup>14</sup>** Some studies refer only to economic growth in advanced economies. This accounts for the bulk of global economic growth in statistical terms, however.

**<sup>15</sup>** See, for example, Baek (2006), Bettendorf and Karadimitropoulou (2022) and De Vita and Kyaw (2008).

**<sup>16</sup>** 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.

**<sup>17</sup>** See, for example, Bettendorf and Karadimitropoulou (2022) and Koepke (2018).

ties in all countries (push factor).<sup>18</sup> 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.<sup>19</sup> 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.<sup>20</sup>

... 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&P500 stock index.<sup>21</sup> 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 countryspecific 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.

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.<sup>22</sup>

Portfolio flows are also influenced by countryspecific 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.<sup>23</sup> An increase in country-specific risk thus impedes further capital inflows while boosting capital outflows.

Uncertainty triggers shifts to comparatively safe investments

**<sup>18</sup>** 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.

**<sup>19</sup>** See Bettendorf and Karadimitropoulou (2022), Chuhan et al. (1998), Fratzscher (2012), Froot et al. (2001) or Lo Duca (2012).

**<sup>20</sup>** This relationship is discussed in the literature under the concept of the "global financial cycle". See Rey (2013).

**<sup>21</sup>** 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.

**<sup>22</sup>** See, inter alia, Bettendorf and Karadimitropoulou (2022), Fratzscher (2012) and Lo Duca (2012).

**<sup>23</sup>** See Fratzscher (2012), Kim and Wu (2008) and World Bank (1997).

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Rising commoditv prices are a significant cost factor ...

Another significant driver of portfolio flows are commodity prices.<sup>24</sup> 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.<sup>25</sup> 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.<sup>26</sup>

# 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.<sup>27</sup>

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 Interest rate 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).<sup>28</sup> 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.

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.<sup>29</sup> In this context, even the mere expectations of a monetary policy measure have a significant impact.<sup>30</sup>

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.<sup>31</sup> 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

31 See Kerssenfischer (2019).

environment shaped by monetary policy in the United States

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

Monetary policy influences portfolio flows via two channels

<sup>24</sup> See, inter alia, Davis et al. (2021).

<sup>25</sup> See Barrot and Serven, Bettendorf and Karadimitropoulou (2022) and Sarno et al. (2016).

<sup>26</sup> See Bernanke (2005) as well as Reinhart et al. (2016).

<sup>27</sup> In view of this relationship, the global financial cycle is considered to play an important role. See, inter alia, Miranda-Agrippino and Rey (2020).

<sup>28</sup> See, inter alia, Bruno and Shin (2015).

<sup>29</sup> See Kalemli-Özcan (2019).

<sup>30</sup> See Koepke (2018) and Dahlhaus and Vasishtha (2020).

# 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.<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup> 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.

2 See also Deutsche Bundesbank (2020b).

<sup>1</sup> See, inter alia, Anaya et al. (2017), Ciminelli (2022), Kalemli-Özcan (2019) and Koepke (2018).

**<sup>3</sup>** 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.



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&P500 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.<sup>4</sup> Fund flow data are sourced from EPFR Global and serve as a proxy for balance of payments statistics on inter-

national portfolio investment, which are available at only a relatively low frequency in many countries.<sup>5</sup> The models are estimated using Bayesian methods.

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

<sup>4</sup> 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.

<sup>5</sup> 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.<sup>6</sup>

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.<sup>7</sup> 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.

**<sup>6</sup>** 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.

<sup>7</sup> See, inter alia, Kalemli-Özcan (2019) and Koepke (2018).

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

Impact greater in emerging market economies than in advanced economies effects, approximated by flows to investment funds, can vary considerably (see the box on p. 47).<sup>32</sup> 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.

In emerging market economies, the effects are much greater still:<sup>33</sup> 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

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.<sup>34</sup>

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

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.<sup>35</sup>

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.<sup>36</sup>

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.<sup>37</sup>

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

Heterogeneous investors

Information asymmetries

Budget constraints

Reappraisal of risks

**<sup>32</sup>** 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.

**<sup>33</sup>** This result is also consistent with other studies, such as Kalemli-Özcan (2019).

<sup>34</sup> See Lo Duca (2012).

**<sup>35</sup>** See Mody and Taylor (2012).

<sup>36</sup> See Forbes and Warnock (2012).

<sup>37</sup> 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.<sup>1</sup> To this end, a Bayesian dynamic factor model with timevarying coefficients and time-varying stochastic volatility is estimated.<sup>2</sup> 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.<sup>3</sup> 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  $(y_{i,i})$  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 timedependent. 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  $b_{i,i}$ , 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  $\sigma_{\eta i}\eta_{i,\nu}$  where  $\sigma_{\eta i}$  describes the variance and  $\eta_{i,\iota} \sim N(0,1)$  is true.

Both the factor and the country-specific component follow autoregressive processes of order p=2 and q=3:<sup>4</sup>

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

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  $\phi$ . In addition, the model also accounts for vari-

<sup>1</sup> See Bettendorf and Karadimitropoulou (2022).

<sup>2</sup> See Del Negro and Otrok (2008).

**<sup>3</sup>** 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.

			Aug.	Aug.	Aug.	Aug.	Aug.	Sep.
Region	Country	Factor	2005	2008	2011	2014	2017	2020
Advanced economies (bond funds)	Canada	Push factor	45	46 5.4	60 40	64	73	77
	France	Push factor	53	90	97	99	99	99
	Company	Pull factor	47	10	31	1	1	1
	Germany	Pull factor	49	30	19	12	91	92
	Italy	Push factor	54	88	96	98	99	99
	lapan	Pull factor Push factor	46	12 59	4 85	2 91	1 94	1 95
		Pull factor	66	41	15	9	6	5
	United Kingdom	Push factor	40	64 36	79 21	85 15	91 9	93
	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
	France	Push factor	50	81	93	97	98	98
	<i>.</i>	Pull factor	50	19	7	3	2	2
	Germany	Push factor Pull factor	39 61	39 61	1/	39 61	48 52	4,
	Italy	Push factor	43	68	85	89	90	91
	lanan	Pull factor Push factor	57	32	18 33	11 24	10 15	<u>9</u> 1(
	Jupun	Pull factor	65	61	67	76	85	90
	United Kingdom	Push factor	58	75	81	85	87	87
	United States	Puil lactor Push factor	20	25	35	15	12	12
		Pull factor	80	74	65	85	88	86
Emerging market economies (bond funds)	Brazil	Push factor	55	57	57	54	56	57
	China	Puil lactor Push factor	54	33	43 21	15	11	4.
		Pull factor	46	67	79	85	89	90
	India	Push factor Pull factor	53 47	26 74	12 88	5 95	3 97	2 96
	Indonesia	Push factor	49	67	74	74	67	65
	Russia	Pull factor	51	33	26	26	33	35
	Russia	Pull factor	49	29	23	25	27	28
	South Africa	Push factor	56	73	79	80	77	71
	Turkey	Pull factor Push factor	44 58	27	21 74	20 71	23	29
	i antej	Pull factor	42	30	26	29	37	52
Emerging market economies (equity funds)	Brazil	Push factor	43	52	49	47	42	40
	China	Pull factor	57	48	51	53 12	58	60
	China	Pull factor	58	65	20 80	87	93	95
	India	Push factor	36	46	40	33	23	22
	Indonesia	Pull factor Push factor	64 36	54 55	60 61	67 64	/7 66	78
		Pull factor	64	45	39	36	34	35
	Russia	Push factor	51	51	49	45	44	45
	South Africa	Puil lactor Push factor	49 39	49 63	76	55 82	50 84	55
		Pull factor	61	37	24	18	16	16
	Turkey	Push factor	53	58	59	52	45	44

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

\* 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.<sup>5</sup>

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.

<sup>5</sup> 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.

A study recently published by the Bundesbank analyses the relative importance of push and pull factors for portfolio flows.<sup>38</sup> 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).

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

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# 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.<sup>1</sup> 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 ecommerce are making cross-border retail payments more and more important.<sup>2</sup> 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.<sup>3</sup> With this in

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



Sources: SWIFT BI Watch and National Bank of Belgium. Deutsche Bundesbank mind, talk has now also turned to whether and how CBDC might contribute to efficiency gains.

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.<sup>4</sup>

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

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

Cross-border payments less efficient than domestic payments

... whilst, at the

retreating from this business

same time,

banks are

4 See Rice et al. (2020).

<sup>1</sup> See Rice et al. (2020).

<sup>2</sup> See Financial Stability Board (2020a).

<sup>3</sup> See Financial Stability Board (2020a).



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)<sup>5</sup> 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.<sup>6</sup>

- 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-

**<sup>5</sup>** 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.

**<sup>6</sup>** 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.

	is for clination getoss t						
	Payments segment						
Challenges	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.						
Courses Burg dark and table based and Financial Garbilla. Decad (2024)							

#### G20 countries' targets for enhancing cross-border payments

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.<sup>7</sup> Alongside the efforts of central banks and legislators, private sector initiatives can also help to achieve the objectives set by the G20 countries.<sup>8</sup>

<sup>7</sup> See Financial Stability Board (2021).

 $<sup>{\</sup>bf 8}$  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 crossborder 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.<sup>9</sup> Work is going into both wholesale CBDC<sup>10</sup> and retail CBDC.<sup>11</sup> 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.<sup>12</sup>

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, <sup>13</sup> 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.<sup>14</sup>

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

Interoperability beyond the G20 roadmap is important

<sup>9</sup> See Kosse and Mattei (2022).

**<sup>10</sup>** In this context, wholesale CBDC describes a CBDC which is primarily designed for use in payments between credit institutions/financial market infrastructures.

**<sup>11</sup>** Retail CBDC describes a CBDC which is designed to be used for payments by non-banks (e.g. the public, enterprises, public authorities).

**<sup>12</sup>** 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).

**<sup>13</sup>** J. P. Morgan Onyx is a blockchain platform for exchanging payments, digital assets and payment information. **14** See Kosse and Mattei (2022).

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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.<sup>15</sup> 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.<sup>16</sup> 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.<sup>17</sup> 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 crossborder usability is concerned.

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.<sup>18</sup> 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.

At the same time, new CBDC systems could encourage a harmonisation of legal frameworks or settlement standards. Besides the shared messaging standards<sup>19</sup> 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.<sup>20</sup> 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 creIntegration of currency exchange functionality could generate significant efficiency gains

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

<sup>15</sup> See Bank for International Settlements (2021a).

**<sup>16</sup>** For example, ISO 20022, which establishes a uniform standard for payment messages.

**<sup>17</sup>** 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.

<sup>18</sup> See European Central Bank (2021).

**<sup>19</sup>** For example, ISO 20022 (https://www.swift.com/ standards/iso-20022).

<sup>20</sup> See Bank for International Settlements (2022b).

Unilateral approach:

between

no need for

interoperability

CBDC payment

systems, ...

ate a toolbox for the provision of digital identity wallets, which could also be used for payments and the digital euro.<sup>21</sup>

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)<sup>22</sup> or trigger solutions,<sup>23</sup> enabling, for example, paymentversus-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.<sup>24</sup> 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 crossborder payments assume a certain degree of international cooperation among central banks. A multilateral<sup>25</sup> 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.<sup>26</sup> Crossborder 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.

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 foreigncurrency 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

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.

... but associated with a number of economic risks

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

**<sup>21</sup>** See European Commission: European digital identity (https://ec.europa.eu/info/strategy/priorities-2019-2024/ europe-fit-digital-age/european-digital-identity\_en).

**<sup>22</sup>** 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).

<sup>23</sup> See Deutsche Bundesbank (2021a).

<sup>24</sup> See Deutsche Bundesbank (2021b).

**<sup>25</sup>** 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).

**<sup>27</sup>** Major card companies and IT service providers have already launched initial projects heading in this direction.

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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.<sup>28</sup> 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.<sup>29</sup> 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.<sup>30</sup> 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.<sup>31,32</sup>

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

... especially if several central banks adopt a unilateral approach

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.

**<sup>28</sup>** 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.

**<sup>29</sup>** 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.

between countries.<sup>33</sup> 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<sup>34</sup> 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.<sup>35</sup> 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 crossborder 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,<sup>36</sup> 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 nonresidents. 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.<sup>37</sup> The appropriate concepts can be roughly divided into three categories, although the distinction between them is not always clearly delineated:<sup>38</sup>

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

#### Compatible systems

Compatible systems limit interoperability to compliance with common technical standards and harmonised leaislation 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.<sup>39</sup> Common technical standards, such as those relating to message formats, cryptographic techniques and user interfaces, can reduce the operational burden on those involved.<sup>40</sup> 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 crossborder 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.<sup>41</sup> 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

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.

Systems can be linked using interfaces and common clearing mechanisms

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

**<sup>37</sup>** 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.

<sup>38</sup> See Bank for International Settlements (2021a).

**<sup>39</sup>** 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.

**<sup>40</sup>** In order to settle transactions, it may be necessary for at least one agent to participate in both systems as a liquidity provider.

**<sup>41</sup>** As part of the TARGET2/T2S consolidation project, ISO 20022-compliant messages will be used across all TARGET services from November 2022 onwards.



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.<sup>42</sup> 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"<sup>43</sup> and "Jura"<sup>44</sup> projects, which look at the crossborder 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-

<sup>42</sup> See, for example, https://www.bundesbank.de/en/tasks/ payment-systems/publications/amplus

**<sup>43</sup>** The "Jasper-Ubin" project is being conducted by the Monetary Authority of Singapore and the Bank of Canada. See Accenture (2019).

**<sup>44</sup>** 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 guestions 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 multicurrency 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 crossborder 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<sup>45</sup> and Dunbar<sup>46</sup> projects are practical examples of conceptual studies for single systems, i.e. multicurrency DLT platforms based on wholesale CBDC. The innovative settlement of crossborder and cross-currency transactions aims to reduce transaction costs, settlement times and operational complexity.

### Hybrid systems

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 Forms combining different options could prevail

**<sup>45</sup>** 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).

**<sup>46</sup>** 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.<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup> 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.

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

<sup>1</sup> See Bank for International Settlements (2022a).

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 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.

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.<sup>47</sup> 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 The degree of interoperability may also increase efficiency gains, challenges and risks

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

<sup>47</sup> See Bank for International Settlements (2021a).
Frictions in the current	Potential improvements					
correspondent banking system	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	3 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 me exchange, are used	chanisms, e.g. for currency			
Limited transparency on status of transactions	Transparency depends on the degree of compatibility	High transparency if final settleme	ent is in real time			
Restricted access	Potentially enhanced access to cro	oss-border payments depending on	CBDC's access model			
Source: Bundesbank table based	Source: Bundesbank table based on Auer et al. (2021).					
Deutsche Bundesbank						

## Potential improvements resulting from alternative approaches to interoperable CBDC systems

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.

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.

Geopolitical aspects need to be considered Deutsche Bundesbank Monthly Report July 2022 74

## 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 crossborder 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 crossborder 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.

A multilateral approach thus offers the best chance for CBDC to help comprehensively reduce the frictions currently constraining crossborder 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.

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 Multilateral cooperation preferable to a unilateral approach

Costs of coordination make a globally uniform solution unrealistic

<sup>48</sup> 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.

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## 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).<sup>1</sup>

Long-term debt dominates Debt instruments predominantly constitute medium to long-term liabilities. They have become even more significant over time:<sup>2</sup> 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.

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).<sup>3</sup> The assistance loans were granted in connection with the soveriegn debt crisis.

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.<sup>4</sup> After the onset of the financial and economic crisis, residual maturities had mostly fallen markedly.

Large differences in national debt ratios

Increase in bonds' average residual maturity

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 to talling €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: shortterm 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.

**<sup>3</sup>** 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.

**<sup>4</sup>** 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<sup>5</sup>

# 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 onethird 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.<sup>6</sup> 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.<sup>7</sup> 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.<sup>8</sup> Since

8 Increase in Maastricht debt levels at nominal values.

## Government debt ratio of the euro area by instrument



Deutsche Bundesbank

### Government debt ratios of the euro countries by instrument

%, data as at end-2021



Deutsche Bundesbank

**<sup>5</sup>** The data used have been consistently available since the fourth quarter of 2013.

**<sup>6</sup>** 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).

<sup>7</sup> 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.



Residual maturity of central government debt securities

Source: Bloomberg (all government bonds) Deutsche Bundesbank

the onset of the financial and economic crisis, Eurosystem holdings account for around threequarters of the rise in debt (+ $\in$ 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. 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).

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.

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-

Differences in the level and evolution of debt ratios

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

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



#### Creditor structure of the government debt of the euro area, by sector<sup>\*</sup>

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.<sup>9</sup> Everywhere except for France, the holdings accumulated by

the Eurosystem exceeded the increase in debt over the same period.<sup>10</sup> 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.<sup>11</sup>

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-

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





**<sup>9</sup>** 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.

**<sup>10</sup>** 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.

**<sup>11</sup>** 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.<sup>1</sup>

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-

<sup>1</sup> See Deutsche Bundesbank (2018).

ment on Net Financial Assets (ANFA)).<sup>2</sup> 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).<sup>3</sup> The aforementioned ambiguities stemming from the different statistical definitions of the data (in particular with regard to the Eurosystem's holdings) affect this residual.

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.<sup>12</sup> 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 holdIn 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.

ings 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

<sup>2</sup> 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.

**<sup>12</sup>** 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<sup>\*</sup>

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

Italy and 35% for Spain.<sup>13</sup> In addition, the Eurosystem central banks can (under ANFA) hold government bonds in portfolios for nonmonetary 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%.<sup>14</sup> 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.<sup>15</sup> Put in highly simplified terms, national central banks' bond purchases convert the rate of interest paid on government debt from the countryspecific 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 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 España 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\*

%

	Germany		France		Italy		Spain	
Item	2014	2021	2014	2021	2014	2021	2014	2021
	Shares of	governm	ent debt					
Eurosystem central banks SMP	0	39	0	27	3 3	25 0	3 3	32 0
PSPP1 PEPP1	0	24 15	0 0	17 10	0 0	15 10	0 0	20 12
Foreign creditors <sup>2</sup>	58	30	58	41	35	27	39	33
Banks Loans Debt securities	26 15 11	16 10 6	20 11 9	14 8 6	30 12 18	24 10 15	32 9 23	19 6 13
Households Insurance corporations and pension funds	1 1	0 1	0 17	0 14	8 11	4 11	0 12	0 8
Other financial institutions Non-financial corporations	3 0	2 0	1 0	1 0	6 2	2 1	5 1	1 0
European Stability Mechanism Other	11	11	4	3	5	6	4 5	2 5
	Shares of	national	GDP					
Eurosystem central banks SMP	0	27	0	31	5 5	38 0	3 3	38 0
PSPP1 PEPP1	0 0	17 10	0 0	20 11	0 0	23 14	0 0	24 14
Foreign creditors <sup>2</sup>	44	21	55	46	47	40	41	39
Banks Loans Debt securities	19 11 8	11 7 4	19 10 9	16 8 7	41 17 25	37 15 22	34 10 24	23 7 16
Households Insurance corporations and pension funds Other financial institutions Non-financial corporations European Stability Mechanism	0 1 2 0	0 1 2 0	0 16 1 0	0 16 1 0	11 14 8 3	6 16 4 2	0 12 5 1 4	0 9 2 0 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.<sup>16</sup> 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.

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.

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

**<sup>16</sup>** 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

ltem	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) <sup>1</sup>	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) <sup>1</sup>	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 <sup>2</sup>	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 secondlargest 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.

# A look at the euro area as a whole

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

Euro area banks mainly hold claims on their home countries



play a crucial role in the national sovereignbank nexus.

At the end of 2021, banks' claims on their

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

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).<sup>17</sup> 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).<sup>18</sup>

## 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

**<sup>17</sup>** 46% of the claims on home countries are credit claims and 54% are government bonds.

**<sup>18</sup>** 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.



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%.<sup>19</sup>

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).<sup>20</sup> 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

### 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 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.

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.<sup>21</sup>

Close interconnectedness between banks and their home country continues

**<sup>19</sup>** 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.

**<sup>20</sup>** The situation in which individual banks find themselves can vary considerably.

**<sup>21</sup>** In addition, risks in banks' balance sheets arising from legacy debt, such as the various losses arising from nonperforming 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.

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#### I. Key economic data for the euro area

#### 1. Monetary developments and interest rates

	Money stock in v	various definitions '	1,2		Determinants of	the money stock 1		Interest rates			
			МЗ 3								
	M1	M2		3-month moving average (centred)	MFI lending, total	MFI lending to enterprises and households	Monetary capital formation 4	€STR <b>5,7</b>	3 month EURIBOR <b>6,7</b>	Yield on Euro- pean govern- ment bonds outstanding <sup>8</sup>	
Period	Annual percentag	ge change						% p.a. as a mont	thly 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	of the euro area b	alance of payme	nts r					Euro exchange i	Euro exchange rates 1		
	Current account	1	Financial accour	nt						Effective exch	ange rate <b>3</b>	
	Balance	of which: Goods	Balance Direct investment		Portfolio investment	Financial derivatives 2	Other investment	Reserve assets	Dollar rate	Nominal	Real 4	
Period	€ million								EUR 1 = USD	Q1 1999 = 10	0	
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	р 89.9	
May									1.0579	95.6	р 90.2	
June									1.0566	95.9	р 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.

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#### 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 c Annual percentag	lomestic proo	duct <sup>1</sup>							
2019 2020 2021	1.6 - 6.3 5.4	2.1 - 5.7 6.2	1.1 - 4.6 2.9	4.1 - 3.0 8.3	1.2 - 2.2 3.0	1.8 - 7.8 6.8	1.8 - 9.0 8.3	5.4 6.2 13.6	0.5 - 9.0 6.6	2.5 - 3.8 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 Q3	4.0	5.0	2.8	8.3	3.1	3.1	11.8	10.4	3.8	5.0
Q4 2022 O1	4.7	5.6 4.8	4.0	8.6 4.3	3.1 4.1	4.6 4.6	7.4	13.8	5.8 5.9	3.1 6.7
	Industrial pr	roduction <sup>2</sup>								
2019	- 0.7	4.8	r – 3.2	7.1	1.6	0.5	- 0.7	7.0	- 1.1	0.8
2020 2021	- 7.7 8.0	- 3.8 16.8	r – 9.6 r 4.7	- 2.8 6.8	- 3.2 4.1	- 10.9 5.9	- 2.1 10.2	14.5 16.4	- 11.4 12.2	- 1.8 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 r 203	- 0.2	- 0.0	2.1 22.3	4.7 15.6	40.6	10.4 32.6	3.7 12.6
Q3	5.9	19.4	r 2.5	7.1	4.5	2.6	9.7	27.6	4.9	6.3
2022 Q1	- 0.3	6.4	r – 1.2	4.2	3.1	- 0.4	4.4	- 15.0	4.0	4.0
	Capacity uti	lisation in ind of full capacity	dustry <sup>3</sup>					,	•	, ,
2019	82.2	81.2	84.6	72.6	81.0	84.5	71.6	77.3	77.4	76.3
2020 2021	74.5 81.4	75.6 80.1	84.8	67.6 78.2	76.9 81.2	73.8 81.1	71.0 75.6	68.8 78.2	53.4 76.4	72.0 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 Q3	83.0	80.9	86.1	78.6	81.5	82.9	74.4	80.8	77.5	75.5
Q4 2022 Q1	82.7	81.1	85.9	83.2 72.3	82.7 81.9	82.0 82.7	77.3	78.9	77.7	76.6
Q2	82.6 Standardise	d unemployr	nent rate <sup>4</sup>	70.0	80.2	82.2	76.7	82.6	78.8	75.6
~ ~ ~ ~	As a percentage	of civilian labour fo	orce				17.0			
2019 2020	7.5	5.4 5.6	3.0 3.6	4.5 7.0	6.7 7.8	8.2 7.8	17.3 16.3	5.0 5.6	10.0 9.2	6.3 8.1
2021 2022 Jan	e 7.7	e 6.3	3.6	е 6.2 го	e 7.7	e 7.9	e 14.8	e 6.3	e 9.5	e 7.6
Feb.	6.8	5.3	3.0	5.5	6.4	7.3	12.5	4.8	8.5	6.9
Apr.	6.7	5.3	2.9	5.5	6.2	7.3	12.2	4.8	8.3	6.6
May June	6.6	5.5	2.8	5.5	6.2	7.2		4.7 4.8	8.1	6.5
	Harmonised Annual percentag	I Index of Co ge change	nsumer Price	S						
2019 2020	1.2 0.3	1.2 0.4	<b>5</b> 1.4	2.3 - 0.6	1.1 0.4	1.3 0.5	0.5 - 1.3	0.9 - 0.5	0.6 - 0.1	2.7 0.1
2021	2.6	3.2	5 3.2	4.5	2.1	2.1	0.6	2.4	1.9	3.2
Feb. Mar.	5.1 5.9 7.4	8.5 9.5 9.3	5.1 5.5 7.6	11.0 11.6 14.8	4.1 4.4 5.8	3.3 4.2 5.1	5.5 6.3 8.0	5.0 5.7 6.9	5.1 6.2 6.8	7.5 8.8 11.5
Apr. May June	7.4 8.1 e 8.6	9.3 9.9 10.5	7.8 8.7 8.2	19.1 20.1 e 22.0	5.8 7.1 e 8.1	5.4 5.8 e 6.5	9.1 10.5 11.6	7.3 8.3 e 9.6	6.3 7.3 8.5	13.1 16.8 e 19.2
	General gov As a percentage	vernment fina	ancial balanc	e <sup>6</sup>						
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 - 2.4	- 5.5 - 2.6	- 8.9 - 6.5	- 7.4	- 5.1	- 9.6 - 7.2	- 4.5 - 7.3
	General gov As a percentage	vernment deb of GDP	ot <sup>6</sup>							
2019 2020	83.8 97.2	97.7 112.8	58.9 68.7	8.6 19.0	59.6 69.0	97.4 114.6	180.7 206.3	57.2 58.4	134.1 155.3	36.7 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 domest	tic product 1	
4.6 - 0.1 5.0	3.3 - 1.8 6.9	5.9 - 8.3 10.4	2.0 - 3.9 4.9	1.5 - 6.7 4.8	2.7 - 8.4 4.9	- 4.4 3.0	3.3 - 4.2 8.1	2.1 - 10.8 5.1	5.3 - 5.0 5.5	2019 2020 2021
0.3 1.6 8.3	1.3 5.2 12.9	- 7.9 0.1 16.4	- 3.3 - 2.2 10.2	- 5.7 - 5.0 13.1	- 6.4 - 5.3 16.0	- 1.8 0.2 9.6	- 3.1 1.5 16.1	- 8.8 - 4.5 17.8	- 3.8 - 2.1 13.0	2020 Q4 2021 Q1 Q2
4.8 5.2 4.6	5.1 4.8 4.1	14.1 11.8 7.6	5.4 6.2 6.7	5.4 6.3 9.5	4.5 5.8 11.1	1.3 1.4 3.1	5.0 10.4 9.8	3.4 5.5 6.4	5.3 6.4 5.9	Q3 Q4 2022 Q1
								Industrial   Annual pe	production <sup>2</sup> ercentage change	
2.9 - 1.7 20.0	- 3.1 - 10.8 8.4	1.1 - 0.3 - 0.2	- 0.9 - 3.9 5.0	- 0.1 - 5.9 11.2	- 2.2 - 7.3 3.5	0.5 - 9.1 10.4	2.8 - 6.4 9.9	0.5 - 9.8 7.5	4.4 - 7.3 6.4	2019 2020 2021
2.7 13.3	- 2.7 5.1	- 1.1 - 8.5	- 1.9 - 0.8	1.0 3.2	- 2.0 - 0.6	1.7 6.6	- 1.2 3.3	- 2.1 2.5	- 1.7 1.2	2020 Q4 2021 Q1
25.0 17.8 23.9	24.0 3.6 2.9	14.4 - 0.0 - 5.4	10.0 6.8 4.4	24.1 9.7 9.6	24.3 - 3.8 - 1.7	35.8 0.9 4.0	24.1 6.2 7.6	27.2 1.9 1.8	21.2 4.5 1.0	Q2 Q3 Q4
23.5	0.3	- 2.1	1.9	11.1	- 2.9	- 1.7	4.1	1.7	3.7	2022 Q1
	80.0	77.4	941	86 G	78.0			As a percenta	ge of full capacity	2010
77.3 73.0 76.7	80.0 72.5 81.9	70.7 76.8	84.1 78.3 82.4	86.6 79.5 87.1	78.0 74.9 79.2	87.2 79.5 82.2	84.3 78.5 84.4	80.3 74.4 77.8	63.8 51.5 51.3	2019 2020 2021
74.1 76.6 77.7	78.7 83.6 83.1	75.8 77.9 78.4	80.4 81.8 83.8	84.0 86.3 89.5	78.8 78.7 78.9	82.4 82.5 81.9	82.5 84.2 85.8	77.0 77.4 77.5	50.5 48.8 50.2	2021 Q1 Q2 Q3
78.3 77.9 77.5	82.1 81.8 80.1	62.9 64.6	83.6 84.0 84.3	88.5 88.4 89.0	80.2 81.8 82.5	82.1 82.8 83.9	85.2 86.4 85.5	79.2 78.8 80.0	55.6 55.4 58.1	2022 Q1 02
	I I I	I				•	Standardis	ed unemploy	yment rate <sup>4</sup> vilian labour force	
6.3 8.6 e 7.1	5.6 6.8 e 5.4	3.6 4.4 e 3.6	3.4 3.9 e 4.2	4.5 5.4 e 6.2	6.5 6.9 e 6.6	5.8 6.7 e 6.9	4.5 5.0 e 4.8	14.1 15.5 e 14.8	7.1 7.6 e 7.5	2019 2020 2021
6.5 6.2	4.5 4.5	3.3 3.4	3.6 3.4	4.7 4.8 4.3	5.9 5.8	6.4 6.4	4.2 4.0	13.2 13.3 13.4	6.2 6.0	2022 Jan. Feb. Mar
6.2 6.0	4.3 4.2 4.2	3.1 3.1	3.2 3.3	4.3 4.3 4.8	5.9 6.1	6.3 6.2	4.0 4.0 3.9	13.4 13.3 13.1	5.1 4.8	Apr. May
						I	l armonised I	ndex of Cons	sumer Prices	June
2.2 1.1	1.6 0.0	1.5 0.8	2.7 1.1	1.5 1.4	0.3 - 0.1	2.8 2.0	1.7 - 0.3	0.8 - 0.3	0.5 – 1.1	2019 2020
4.6 12.3 14.0	3.5 4.6 7.8	0.7 4.1 4.2	2.8 7.6 7.3	2.8 4.5 5.5	0.9 3.4 4.4	2.8 7.7 8.3	2.0 6.0 7.0	3.0 6.2 7.6	2.3 5.0 5.8	2021 2022 Jan. Feb.
15.6 16.6	7.9 9.0	4.5 5.4	11.7 11.2	6.6 7.1	5.5 7.4	9.6 10.9	6.0 7.4	9.8 8.3	6.2 8.6	Mar. Apr.
20.5	e 10.3	5.8 6.1	e 9.9	e 8.7	e 9.0	e 12.6	8.7 10.8	10.0	8.8 9.0	June
0.5	22	0.6	17	0.6	0.1	L _ 13		As a p	ercentage of GDP	2019
- 7.3 - 1.0	- 3.4 0.9	- 9.5 - 8.0	- 3.7 - 2.5	- 8.0 - 5.9	- 5.8 - 2.8	- 5.5 - 6.2	- 7.8 - 5.2	- 10.3 - 6.9	- 5.8 - 1.7	2013 2020 2021
							Ge	neral govern As a p	ment debt 6 ercentage of GDP	
35.9 46.6 44.3	22.3 24.8 24.4	40.7 53.4 57.0	48.5 54.3 52.1	70.6 83.3 82.8	116.6 135.2 127.4	48.1 59.7 63.1	65.6 79.8 74.7	98.3 120.0 118.4	91.1 115.0 103.6	2019 2020 2021

quarterly data seasonally adjusted. Data collection at the beginning of the quarter.  ${\bf 4}$  Monthly data seasonally adjusted.  ${\bf 5}$  Influenced by a temporary reduction of value

added tax between July and December 2020.  ${\bf 6}$  According to Maastricht Treaty definition.

## 1. The money stock and its counterparts $^{\ast}$ a) Euro area $^{1}$

	€	bil	lion
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	I. Lending to r in the euro ar	non-banks (no ea	n-MFIs)			II. Net claims on non-euro area residents				III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area					
		Enterprises and househo	olds	General government									Debt		
Period	Total	Total	of which: Securities	Total	of which: Securities	Total		Claims on non- euro area residents	Liabil- ities to non-euro area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	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

	I. Lending to in the euro ar	non-banks (no ea	n-MFIs)			II. Net claims on non-euro area residents			III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area					
		Enterprises and househo	olds	General government									Debt	
Period	Total	Total	of which: Securities	Total	of which: Securities	Total		Claims on non- euro area residents	Liabil- ities to non-euro area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	securities with maturities of over 2 years (net) 2	Capital and reserves <b>3</b>
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

#### a) Euro area 1

	V. Other fac	tors	VI. Money st	Ioney stock M3 (balance I plus II less IV less V)											
				Money stock	K M2							Debt	secur-	]	
		of which: Intra-			Money stock	: M1						ities v matu	vith rities		
IV. De- posits of central gov- ernments	Total 4	Eurosystem liability/ claim related to banknote issue	Total	Total	Total	Currency in circu- lation	Overnight deposits 5	Deposits with an agreed maturity of up to 2 years 5	Deposits at agreed notice of up to 3 months <b>5,6</b>	Repo transac- tions	Money market fund shares (net) <b>2,7,8</b>	of up 2 yea (incl. mark pape (net)	to rs money et r) <b>2,7</b>	Period	
- 17.2 - 98.5	- 40.1	0.0	108.9 129.4	85.9 125.2	100.7	7.8 11.8	93.0 140.6	- 17.3 - 35.2	2.5 8.1	5.3	14.1		12.5 3.2	2020 Oct. 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 30.4 19.6	33.2 5.2 73.2	0.0 0.0 0.0	69.1 52.6 83.2	32.3 65.4 101.6	44.5 71.8 82.6	2.6 7.3 10.5	41.9 64.5 72 2	- 30.6 - 18.0 7 3	18.4 11.6 11.7	29.9 2.8 - 18.6	18.5 - 30.7 - 47	_	5.7 13.1 13 3	2021 Jan. Feb. Mar	
- 32.3 - 8.5	14.2 48.9	0.0	94.5 110.1	69.1 115.6	88.9 116.7	8.5 13.2	80.4 103.5	- 27.9 - 11.7	8.1 10.7	15.3 - 4.1	8.9 - 8.9		6.8 8.1	Apr. May	
16.8 0.4	- 4.3	0.0	74.0 151.2	88.1	119.7	10.5 14.6	109.2 88.6	- 33.9	- 0.3	- 10.8 17.4	- 8.4	-	4.6 7.4	June July	
26.6 6.5	- 10.6 - 0.8	0.0 0.0	28.3 31.1	33.4 60.4	32.4 76.0	1.7 5.3	30.7 70.8	- 2.5 - 16.5	3.6 0.8	- 12.3 12.7	5.3 - 31.1	-	6.2 2.9	Aug Sep.	
- 2.4 - 48.5 - 44.5	- 75.0 84.9 - 20.1	0.0 0.0 0.0	129.3 95.9 87.6	84.7 83.7 114.4	70.5 102.7 104.0	6.8 6.0 20.6	63.7 96.7 83.3	19.2 - 19.7 6.9	- 5.0 0.7 3.6	13.2 - 4.4 - 41.8	31.5 26.2 – 6.7	-	0.8 5.0 4.0	Oct. Nov Dec	
68.1 44.6 13.7	91.4 26.6 54.7	0.0 0.0 0.0	- 23.9 39.8 104.2	- 23.9 70.2 112.8	- 51.4 77.1 92.7	1.0 9.1 22.5	- 52.3 68.0 70.1	14.9 - 14.9 16.1	12.6 8.0 4.0	63.5 9.4 - 21.8	- 23.2 - 37.2 - 1.7	-	6.1 2.1 2.1	2022 Jan. Feb. Mar	
- 22.1	- 71.4	0.0	91.3 23.9	57.0 56.4	52.2 61.2	11.2	41.1 53.4	2.7	2.1 10.0	28.8 5.5	20.2	_	12.9 27.1	Apr. May	

#### b) German contribution

		V. Oth	er factor	S		VI. Money stock M3 (balance I plus II less II less IV less V) 10														
				of which:				Compo	nents o	f the mor	ney sto	ck								
IV. De- posits centra ernme	of I gov- nts	Total		Intra- Eurosystem liability/ claim related to banknote issue <b>9,11</b>	Currency in circu- lation	Total		Overniq deposit	ght	Deposit with an agreed maturity of up to 2 years	5	Deposits at agreed notice of up to 3 months 6		Repo transac- tions		Money market fund shares (net) <b>7,8</b>		maturities with maturities of up to 2 (incl. mone market paper)(net	years ≩y	Period
	20.0 12.7 22.9	_	70.5 3.6 73.4	2.4 1.3 2.4	1.7 3.0 5.6	_	30.3 37.4 4.3	_	30.6 49.3 5.8		0.1 14.3 1.7	-	0.0 0.3 1.3		0.2 3.3 3.1	-	0.6 0.3 0.1		1.0 0.9 1.3	2020 Oct Nov Dec
-	40.3 15.4 2.3	-	95.7 29.1 38.0	1.1 2.3 2.5	0.9 1.5 2.7		27.8 10.8 29.1		45.9 20.3 24.3		14.8 8.5 0.6		1.6 1.2 0.1		3.8 2.4 5.0	-	0.0 0.0 0.5	-	1.1 0.3 0.1	2021 Jan. Feb. Mar
-	7.4 18.8 6.0	=	71.2 44.9 14.0	0.7 3.0 3.1	2.6 2.9 2.3	_	5.5 34.8 1.2		13.9 27.8 7.1	-	5.2 2.8 8.0	_	0.7 0.6 0.4		3.4 1.7 0.2	-	0.1 0.1 0.1	-	0.4 2.0 0.3	Apr. May June
-	12.0 0.7 7.1	-	75.2 13.2 77.3	4.2 2.9 4.6	3.7 0.2 0.8		17.4 21.0 7.3		21.2 20.4 7.6		4.1 1.6 1.3		0.3 0.3 0.6		0.6 0.1 1.5	-	0.1 0.0 0.0		0.1 2.3 0.1	July Aug Sep
-	3.9 7.2 27.8	-	53.7 42.3 135.3	3.3 3.7 5.3	1.6 1.2 4.5	-	16.4 25.0 0.4	_	3.9 40.9 12.8	-	13.0 12.3 9.1		0.4 0.1 1.6	- - -	0.4 4.7 0.3	-	0.1 0.3 0.3		0.4 1.4 1.7	Oct. Nov Dec
-	38.1 2.5 0.1	-	166.0 14.4 13.2	1.3 3.0 5.8	0.8 2.2 4.2	_	28.4 26.8 0.1	_	22.4 23.3 7.4		9.3 1.1 8.4	_	0.3 0.3 1.6	-	1.2 1.1 0.5		0.0 0.1 0.2	-	2.4 0.8 0.1	2022 Jan. Feb Mar
-	3.0 22.5	-	32.9 27.1	3.4 3.4	2.3 2.7		3.7 15.9	-	3.4 23.2	-	10.4 7.3		0.4 1.2	-	2.0 0.4	-	0.2 0.2	-	0.6 0.6	Apr. 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).

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#### II. Overall monetary survey in the euro area

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

		Assets									
		Lending to non-	-banks (non-MFI	s) in the euro are	a						
			Enterprises and	households			General govern	ment			
End of	Total assets or				Debt	Shares and other			Debt	Claims on non- euro area	Other
month	liabilities	Total	Total	Loans	securities 2	equities	Total	Loans	securities 3	residents	assets
2020 Apr	Euro area (	€ billion) 1	14 240 0	11 022 4	1 614 2	802.2	4 050 5	1 019 1	2 0 41 4	6 592 2	
2020 Apr. May	30,449.1	19,309.4	14,349.9	12,020.6	1,614.3	802.2 802.8	4,959.5 5,141.4	1,018.1	3,941.4 4,127.7	6,464.0	4,556.4 4,425.1
July	30,406.4	19,761.9	14,451.9	12,013.7	1,653.7	816.1	5,310.0	1,005.3	4,304.7	6,297.2	4,347.3 4,395.3
Aug. Sep.	30,434.9 30,522.8	19,985.0 20,084.9	14,355.1 14,349.5	12,019.1 12,019.2	1,525.0 1,520.4	811.0 809.9	5,629.9 5,735.4	997.8 998.7	4,632.1 4,736.8	6,241.9 6,238.1	4,208.0 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. Dec.	30,749.4 30,438.8	20,292.0 20,266.1	14,457.7 14,438.3	12,090.4 12,042.9	1,542.2 1,532.2	825.0 863.2	5,834.4 5,827.8	1,003.4 990.2	4,831.0 4,837.6	6,331.0 6,108.9	4,126.4 4,063.8
2021 Jan. Feb. Mar.	30,643.8 30,546.3 30,827.0	20,387.8 20,463.6 20,653.7	14,466.2 14,500.5 14,576.8	12,067.8 12,090.1 12,185.3	1,535.8 1,541.1 1,512.6	862.6 869.3 879.0	5,921.6 5,963.1 6,076.9	999.4 992.4 993.3	4,922.1 4,970.6 5,083.5	6,299.8 6,300.7 6,360.7	3,956.2 3,782.0 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
June	30,890.4	20,788.2 20,890.7	14,652.8	12,198.6	1,530.0	892.6	6,237.8	1,006.2	5,169.2	6,400.0	3,668.1
July Aug.	31,313.8 31,438.1	21,028.7 21,047.9	14,708.3 14,684.9	12,278.0 12,261.1	1,543.6 1,533.4	886.7 890.4	6,320.4 6,363.1	1,011.3 1,002.3	5,309.1 5,360.8	6,504.2 6,653.5	3,781.0 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
Nov.	31,776.6	21,201.6 21,381.2	14,817.7 14,911.2	12,379.4 12,478.0	1,548.1 1,542.2	890.2 890.9	6,384.0 6,470.0	987.7 985.8	5,396.3 5,484.2	6,823.1 6,915.2	3,751.9 3,894.5
Dec. 2022 Jan.	31,777.4	21,384.3	14,917.1	12,462.9	1,567.2	887.0	6,524.9	988.5 999.2	5,478.8	6,909.4	3,654.3 3,931.0
Feb. Mar.	32,580.9 32,935.4	21,611.8 21,735.8	15,058.5 15,174.8	12,628.9 12,721.3	1,553.6 1,587.4	876.0 866.1	6,553.3 6,561.0	991.8 1,001.4	5,561.5 5,559.6	7,007.4 6,994.9	3,961.7 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
widy	Cormon co		6 hillion)	12,070.4	1,551.2	050.2	0,450.0	1,005.0	5,452.2	7,054.2	4,054.0
	German co	ntribution (	€ DIIIION)								
2020 Apr. May June	7,258.0 7,230.4 7,225.3	4,605.2 4,666.4 4,692.6	3,606.5 3,640.1 3,641.6	3,143.8 3,167.2 3,164.7	206.5 215.9 220.4	256.1 257.1 256.6	998.7 1,026.2 1,051.0	294.8 293.8 291.5	703.9 732.5 759.6	1,346.6 1,326.0 1,304.2	1,306.2 1,238.1 1,228.5
July	7,267.6	4,718.8 4 723 0	3,634.9 3 642 2	3,175.5 3 180 7	202.7 202.9	256.7 258.6	1,083.9 1 080 8	293.4 287.4	790.5 793 3	1,282.9 1,268.8	1,265.8 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. Nov. Dec.	7,257.1 7,240.5 7,172.5	4,801.4 4,841.7 4,839.4	3,670.3 3,688.6 3,695.5	3,200.4 3,213.7 3,216.4	210.7 214.3 214.7	259.3 260.6 264.5	1,131.1 1,153.1 1,143.9	292.0 290.2 286.4	839.1 862.9 857.4	1,278.8 1,261.9 1,224.1	1,176.8 1,136.9 1,109.1
2021 Jan. Feb. Mar.	7,220.7 7,182.0 7,233.5	4,865.5 4,885.0 4,939.8	3,705.9 3,724.3 3,761.1	3,224.4 3,238.8 3,273.4	216.4 217.4 217.3	265.1 268.1 270.4	1,159.6 1,160.7 1,178.7	286.5 283.8 282.6	873.1 877.0 896.1	1,307.6 1,305.0 1,315.4	1,047.6 991.9 978.3
Apr. May June	7,228.4 7,228.0 7,277.1	4,946.1 4,977.5 5.009.8	3,760.5 3,777.2 3,786.4	3,270.3 3,283.3 3,290.4	217.6 219.5 220.8	272.6 274.4 275.2	1,185.6 1,200.3 1,223.4	285.7 283.4 282.3	899.9 916.9 941.1	1,333.6 1,329.8 1.325.1	948.6 920.7 942.1
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. Sep.	7,395.2 7,398.6	5,087.3 5,110.8	3,824.6 3,840.8	3,325.1 3,336.4	221.4 224.7	278.1 279.7	1,262.8 1,270.1	280.8 280.7	982.0 989.4	1,336.0	971.9 952.6
Oct. Nov. Dec.	7,461.0 7,575.0 7,475.8	5,147.0 5,210.7 5,212.1	3,874.5 3,904.2 3,914.7	3,363.5 3,389.9 3,393.2	228.6 229.0 237.0	282.4 285.3 284.5	1,272.5 1,306.4 1,297.4	284.4 280.7 278.0	988.0 1,025.7 1,019.5	1,385.2 1,396.4 1,355.9	928.8 967.9 907.8
2022 Jan. Feb. Mar.	7,787.0 7,871.3 7.997.7	5,243.9 5,262.9 5.280.7	3,944.7 3,968.5 3.990.2	3,422.9 3,445.2 3.464.4	235.8 238.0 240.6	286.0 285.3 285.2	1,299.2 1,294.3 1,290.6	279.9 277.8 278.6	1,019.3 1,016.5 1.012.0	1,433.6 1,464.4 1.447.5	1,109.5 1,144.0 1.269.5
Apr. Mav	8,259.4 8,231.7	5,278.9 5.308.4	4,008.0 4.038.4	3,481.9 3.509.8	240.1 240.8	286.1 287.8	1,270.9 1.269.9	283.2 280.3	987.7 989.7	1,464.0 1.444.9	1,516.5 1.478.4
ividy	0,231./	5,508.4	4,038.4	3,509.8	240.8	207.8	1,209.9	280.3	969.7	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

Liabilities												
	Deposits of non-banks (non-MFIs) in the euro area											
			Enterprises and h	ouseholds								
					With agreed maturities of			At agreed notice of 6				
Currency in circulation 4	Total	of which: in euro <sup>5</sup>	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	a (€ billion) ¹			
1,273.5 1,293.5 1,306.6	13,996.0 14,302.8 14,478.2	12,953.0 13,164.0 13,208.9	13,065.1 13,264.9 13,310.8	7,852.4 8,009.7 8,066.5	762.3 779.7 763.6	188.2 188.4 186.8	1,876.7 1,881.9 1,877.8	2,343.4 2,363.7 2,375.5	42.1 41.4 40.6	2020 Apr. May June		
1,320.9 1,326.8 1,330.3	14,592.9 14,668.1 14,758.4	13,276.6 13,304.3 13,361.0	13,363.7 13,391.2 13,467.6	8,090.1 8,117.1 8,175.8	783.2 767.8 781.0	186.3 184.4 195.4	1,882.5 1,892.0 1,883.6	2,381.1 2,390.0 2,392.0	40.4 40.0 39.8	July Aug Sep.		
1,338.1 1,349.9 1,370.7	14,814.8 14,813.0 14,772.9	13,431.7 13,527.2 13,620.6	13,545.6 13,621.6 13,728.8	8,266.0 8,358.3 8,459.6	783.3 756.5 772.0	181.9 179.6 176.9	1,880.4 1,885.7 1,877.6	2,394.6 2,402.5 2,404.2	39.4 39.0 38.5	Oct. Nov. Dec.		
1,373.3 1,380.6 1,391.1	14,873.9 14,957.8 15.076.4	13,631.3 13,678.6 13,757.0	13,752.9 13,807.8 13,913.7	8,505.4 8,569.6 8,654.9	743.9 733.7 753.5	173.8 169.2 164.3	1,870.6 1,865.1 1,858.8	2,421.0 2,432.5 2,444.8	38.1 37.7 37.4	2021 Jan. Feb. Mar		
1,399.6 1,412.8 1 423 2	15,061.0 15,147.4 15,241.8	13,775.3 13,870.8 13,943.4	13,936.1 14,018.1 14 091 3	8,727.0 8,811.1 8,917.7	731.8 724.4 698.2	159.5 155.5 150.4	1,827.5 1,826.2 1 822 0	2,453.0 2,463.6 2,466.2	37.3 37.1 36.8	Apr. May		
1,437.6 1,439.2 1 444 5	15,335.4 15,386.3 15,442 5	14,017.2 14,039.3 14,075.3	14,185.7 14,196.7 14 239 7	9,006.7 9,030.0 9,092.9	705.9 707.3 701.1	153.6 151.2 140.0	1,817.0 1,809.9 1,806.7	2,466.2 2,462.4 2,463.3	36.3 35.9 35.6	July Aug Sen		
1,450.3 1,456.3 1,477.0	15,504.6 15,518.4 15,579.6	14,139.4 14,188.5 14,180.0	14,312.3 14,345.4 14,464.4	9,166.1 9,224.1 9,316.4	709.0 697.5 714 5	148.0 143.3 131.3	1,795.5 1,786.3 1,805.2	2,458.8 2,458.8 2,459.8 2,463.5	34.9 34.3 33.6	Oct. Nov.		
1,477.9 1,487.0	15,624.8 15,723.7	14,264.9 14,315.6	14,457.0 14,498.3 14,500.8	9,294.6 9,357.2	707.9	135.3 134.3 132 5	1,808.2 1,799.3	2,403.3 2,478.2 2,486.2	32.9 32.7	2022 Jan. Feb.		
1,520.7 1,528.5	15,840.3 15,875.1 15,884.2	14,413.3 14,463.3 14,500.2	14,653.0 14,674.0	9,439.8 9,493.4 9,530.1	709.3 689.6	123.3 123.4 120.3	1,809.3 1,801.7 1,801.6	2,491.1 2,493.0 2,503.4	32.2 32.1 29.0	Apr. May		
							Germa	an contributi	on (€ billion)			
286.5 291.8 296.5	3,997.3 4,080.7 4,132.2	3,828.9 3,885.8 3,873.6	3,665.7 3,710.9 3,711.6	2,359.6 2,396.9 2,408.7	149.2 158.3 152.1	30.0 29.0 29.6	563.6 563.6 559.0	532.2 532.5 532.6	31.1 30.7 29.7	2020 Apr. May June		
300.4 301.3 301.9	4,170.7 4,202.4 4,235.6	3,880.3 3,889.9 3,905.7	3,716.8 3,720.2 3,745.0	2,409.9 2,419.2 2,445.3	163.5 159.3 160.3	30.0 30.1 30.3	552.8 551.3 549.2	531.5 531.6 531.5	29.2 28.8 28.4	July Aug Sep.		
303.6 306.6 312.2	4,245.3 4,260.2 4,228.5	3,935.3 3,961.8 3.954.1	3,781.4 3,804.4 3.801.5	2,476.4 2,507.7 2,500.9	165.4 157.7 160.3	30.5 30.6 31.0	549.7 549.0 548.8	531.5 531.8 533.1	28.0 27.6 27.3	Oct. Nov. Dec.		
313.1 314.6 317 3	4,218.7 4,245.1 4 264 3	3,980.7 3,990.0 4 011 8	3,829.7 3,837.4 3,863.4	2,541.7 2,555.8 2 579 8	147.0 141.0 145.1	31.0 31.1 31.7	548.5 547.0 544.6	534.8 536.0 536.1	26.8 26.4 26.1	2021 Jan. Feb. Mar		
319.9 322.8 325.1	4,262.2 4,308.8 4 311 0	4,013.0 4,040.3 4 035 3	3,874.5 3,895.1 3,890 5	2,594.4 2,613.5 2,619.4	143.0 146.0 139.3	31.9 32.2 31.9	542.5 540.4 537 5	536.8 537.4 537.0	25.8 25.7 25.5	Apr. May		
328.8 329.0 329.8	4,313.9 4,333.1 4 340 5	4,047.3 4,065.2 4 064 1	3,911.3 3,923.1 3,919.8	2,645.8 2,659.1 2,652 1	136.0 135.6 132 2	31.4 31.3 31.3	536.0 535.7 533.6	536.7 536.4 535.8	25.2 25.2 25.0 24.8	July Aug		
331.4 332.6 337 1	4,354.3 4,390.5	4,080.9 4,107.1 4,113.0	3,950.3 3,968.0 3,968.5	2,681.4 2,710.9 2,691.5	143.0 132.5	31.1 30.3 30.1	534.8 534.6 544.6	535.8 535.5 535.5 537.0	24.6 24.3 24.1	Oct. Nov.		
337.9 340.1	4,418.1 4,444.1	4,139.2 4,161.0 4 159.0	4,006.8 4,017.1 4,014.6	2,737.3 2,752.3 2,755.3	135.4 132.4 130.7	29.7 29.4	543.6 542.3 540.4	537.0 537.4 537.7 536.0	23.4 23.1 22.9	2022 Jan. Feb.		
346.7 349.4	4,441.0 4,445.6 4,478.3	4,159.0 4,158.1 4,170.3	4,019.8 4,016.7	2,754.8 2,770.0	140.0 125.8	29.3 29.4 29.7	537.7 534.7	535.0 535.1 533.9	22.9 22.7 22.6	Apr. 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.

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#### II. Overall monetary survey in the euro area

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

	Liabilities (cont'd)												
	Deposits of n	ion-banks (nor	n-MFIs) in the	euro area (cor	it'd)								
	General gove	ernment							Repo transac	tions		Debt securiti	es
		Other genera	al government						in the euro a	rea			
				With agreed	maturities of		At agreed no	tice of 2			Money		
End of month	Central govern- ment	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	market fund shares (net) <b>3</b>	Total	of which: Denom- inated in euro
	Euro area	a (€ 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	1,352.7
2022 Jan. Feb. Mar	710.9 755.5 769.6	456.9 469.9 470.9	307.3 314.1 304 7	67.4 73.5 82.5	19.6 19.8 20.5	41.2 41.3 42.4	17.6 17.6 17.3	3.8 3.7 3.4	288.5 297.9 276.2	288.3 297.7 276.0	624.5 587.2 585.4	2,043.2 2,042.2 2,042.2 2,023.1	1,348.9 1,357.3 1,356.9
Apr. May	747.6 719.5	474.5 490.7	306.7 316.6	83.4 88.4	20.3 21.2 22.3	42.6 43.4	17.2 16.8	3.4 3.3	306.2 311.2	306.0 311.1	605.8 595.0	2,063.7 2,009.7	1,358.2 1,337.5
	German	contributi	on (€ billio	on)									
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<sup>9</sup>). **9** For the German contribution, the difference between the volume of euro banknotes

								Memo item:					
issued (net) 3						Other liability	/ items	Monetary ag (from 2002 ( excludes curi	gregates <b>7</b> German contril rency in circula	bution ation)			
With maturit up to 1 year 4	over 1 year and up to 2 years	over 2 years	Liabilities to non- euro area residents <b>5</b>	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 forma- tion 13	Monetary liabilities of central govern- ments (Post Office, Treasury) 14	End of month
										. Eu	ıro area (€	billion) <sup>1</sup>	
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
	_	_	_	_	_				Ge	erman con	itribution	(€ DIIIION)	
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.

## 3. Banking systems liquidity position \* Stocks

€ billion; period averages of daily positions

	Liquidity-prov	iding factors				Liquidity-abso	rbing factors					
		Monetary poli	cy operations c	of the Eurosyste	m							
Reserve maintenance period ending in 1	Net assets in gold and foreign currency	Main refinancing operations	Longer- term refinancing operations	Marginal lending facility	Other liquidity- providing operations 3	Deposit facility	Other liquidity- absorbing operations 4	Banknotes in circulation 5	Central government deposits	Other factors (net) 6	Credit institutions` current account balances (including minimum reserves) <b>7</b>	Base money <b>8</b>
	Eurosyste	m <sup>2</sup>										
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
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. Dec.	864.4 865.1	1.3 0.5	1,707.8 1,754.4	0.0 0.0	3,475.8 3,614.7	460.7 535.4	0.0 0.0	1,389.1 1,403.9	749.0 647.0	653.5 687.7	2,797.0 2,960.7	4,646.8 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
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
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. Dec.	835.1 839.2	0.2 0.2	2,209.9 2,208.8	0.0 0.0	4,512.3 4,655.6	738.5 745.0	0.0 0.0	1,507.4 1,521.4	671.3 628.3	833.7 965.7	3,806.5 3,843.3	6,052.4 6,109.7
2022 Jan. Feb. Mar.	877.7 887.2	0.3 0.3	2,201.5 2,201.3	0.0 0.0	4,750.2 4,842.0	734.2 746.0	0.0 0.0	1,540.6 1,550.6	582.0 642.6	1,160.5 1,091.1	3,812.3 3,900.8	6,087.1 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	Bundesbar	'nk	•	•			•		•		
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
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. Dec.	212.1 213.0	0.7 0.3	319.5 333.9	0.0 0.0	729.0 768.7	145.5 166.6	0.0 0.0	338.1 341.2	254.7 217.9	- 302.9 - 294.5	826.0 884.7	1,309.6 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
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
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
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. Dec.	200.3 201.3	0.1 0.0	439.1 440.3	0.0 0.0	978.5 1,015.8	204.4 206.4	0.0 0.0	367.4 370.9	217.7 220.4	- 235.2 - 219.4	1,061.6 1,077.1	1,633.3 1,654.4
2022 Jan. Feb. Mar.	212.4 215.6	0.3 0.1	421.7 421.7	0.0 0.0	1,034.0 1,057.9	204.5 211.8	0.0 0.0	374.6 378.1	205.6 191.1	- 165.1 - 193.7	1,048.8 1,108.0	1,627.9 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
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

Flows

Liquidity-prov	iding factors				Liquidity-abso	orbing factors						
	Monetary poli	icy operations c	of the Eurosyste	m						1		
Net assets in gold and foreign currency	Main refinancing operations	Longer- term refinancing operations	Marginal lending facility	Other liquidity- providing operations 3	Deposit facility	Other liquidity- absorbing operations 4	Banknotes in circulation 5	Central government deposits	Other factors (net) 6	Credit institutions` current account balances (including minimum reserves) <b>7</b>	Base money <sup>8</sup>	Reserve maintenance period ending in 1
										Eui	rosystem <sup>2</sup>	
+ 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
- 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.
- 1.5 + 0.7	± 0.0 - 0.8	+ 114.6 + 46.6	± 0.0 ± 0.0	+ 152.2 + 138.9	+ 47.5 + 74.7	± 0.0 ± 0.0	+ 7.9 + 14.8	+ 36.1 -102.0	+ 2.5 + 34.2	+ 171.3 + 163.7	+ 226.7 + 253.2	Oct. Nov. 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.
- 13.7	+ 0.1	- 0.2	± 0.0	+ 112.2	+ 11.1	± 0.0	+ 4.0	+ 65.5	- 110.5	+ 128.3	+ 143.4	Feb. Mar.
- 18.2	- 0.1	+ 262.2	± 0.0	+ 126.3	+ 78.4	± 0.0	+ 14.3	+ 48.7	- 34.5	+ 263.4	+ 356.1	Apr.
- 6.9	- 0.1	+ 52.4	± 0.0	+ 141.3	+ 30.1	± 0.0	+ 18.1	- 57.8	+ 25.7	+ 170.6	+ 218.7	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
+ 5.0	+ 0.1	+ 17.2	± 0.0	+ 134.4	+ 30.0	± 0.0	+ 14.1	- 16.6	+ 55.9	+ 73.1	+ 117.3	Sep.
+ 8.4 + 4.1	± 0.0 ± 0.0	- 3.3 - 1.1	± 0.0 ± 0.0	+ 133.4 + 143.3	- 28.1 + 6.5	± 0.0 ± 0.0	+ 7.5 + 14.0	+ 35.6 - 43.0	+ 43.3 + 132.0	+ 80.3 + 36.8	+ 59.6 + 57.3	Nov. Dec.
+ 38.5 + 9.5	+ 0.1 ± 0.0	- 7.3 - 0.2	± 0.0 ± 0.0	+ 94.6 + 91.8	- 10.8 + 11.8	± 0.0 ± 0.0	+ 19.2 + 10.0	- 46.3 + 60.6	+ 194.8 - 69.4	- 31.0 + 88.5	- 22.6 + 110.2	2022 Jan. Feb. 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.
+ 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
									D	eutsche Bu	Indesbank	
+ 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
- 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.
+ 0.0 + 0.9	- 0.1 - 0.4	+ 35.5 + 14.4	- 0.0 + 0.0	+ 37.0 + 39.8	+ 9.5 + 21.1	± 0.0 ± 0.0	+ 1.7 + 3.1	+ 15.0 - 36.8	- 5.0 + 8.4	+ 51.2 + 58.7	+ 62.3 + 82.9	Nov. 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.
- 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
+ 1.6	+ 0.1	+ 2.4	+ 0.0	+ 32.3	+ 6.5	± 0.0	+ 3.0	- 2.5	+ 29.9	- 0.9	+ 8.6	Sep.
+ 1.3 + 1.0	+ 0.0 - 0.1	+ 2.4 + 1.2	- 0.0 - 0.0	+ 27.8 + 37.3	- 6.4 + 2.1	± 0.0 ± 0.0	+ 2.4 + 3.5	+ 13.4 + 2.7	+ 5.7 + 15.7	+ 16.3 + 15.6	+ 12.3 + 21.1	Nov. Dec.
+ 11.1 + 3.2	+ 0.2 - 0.1	- 18.6 - 0.0	+ 0.0 + 0.0	+ 18.2 + 23.9	- 2.0 + 7.4	± 0.0 ± 0.0	+ 3.7 + 3.5	- 14.7 - 14.5	+ 54.3 - 28.6	- 28.3 + 59.2	- 26.6 + 70.1	2022 Jan. Feb. 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.
+ 6.6	+ 0.1	- 0.6	- 0.0	+ 18.7	- 7.7	± 0.0	+ 3.0	+ 0.2	+ 6.0	+ 24.1	+ 19.4	May 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								
				Claims on non-eur in foreign currency	o area residents der /	nominated		Claims on non-euro a residents denominate	area ed in euro	
As at reporting date		Total assets	Gold and gold receivables	Total	Receivables from the IMF	Balances with banks, security investments, external loans and other external assets	Claims on euro area residents denominated in foreign currency	Total	Balances with banks, security investments and loans	Claims arising from the credit facility under ERM II
		Eurosystem <sup>1</sup>	l							
2021 Dec. 2022 Jan.	17 24 31 7 14	8,511.5 8,512.3 8,566.4 8,573.3 8,594.0	517.9 517.9 559.4 559.4 559.4	490.6 491.3 500.1 497.2 496.2	215.3 215.6 218.9 218.9 218.9 218.9	275.3 275.7 281.2 278.3 277.3	24.4 24.7 24.6 26.1 26.6	11.6 13.3 13.0 10.0 10.5	11.6 13.3 13.0 10.0 10.5	- - - -
	21 28	8,600.3 8,622.6	559.4 559.4	495.6 496.7	218.9 219.0	276.7 277.7	26.7 26.7	10.4 10.2	10.4 10.2	
Feb.	4 11 18 25	8,630.1 8,651.8 8,667.9 8,671.3	559.4 559.4 559.4 559.4	496.8 497.1 498.9 499.2	219.3 219.3 219.3 219.3 219.3	277.5 277.8 279.5 279.8	25.6 25.8 24.1 24.0	10.0 10.1 10.0 10.2	10.0 10.1 10.0 10.2	
Mar.	4 11 18 25	8,673.0 8,687.0 8,700.0 8,710.6	559.4 559.4 559.5 559.5	498.2 498.9 498.4 498.7	219.3 219.4 219.3 220.4	278.9 279.5 279.0 278.4	25.4 24.7 24.6 24.9	10.4 10.4 10.6 12.4	10.4 10.4 10.6 12.4	
Apr.	1 8 15 22 29	8,754.0 8,763.7 8,787.9 8,790.9 8,783.6	604.5 604.5 604.5 604.5 604.5	500.2 498.6 500.0 499.3 499.3	222.0 220.2 220.2 220.3 220.3 220.2	278.1 278.4 279.8 279.0 279.0	26.4 25.8 25.3 26.6 27.1	11.3 10.0 10.0 10.1 10.4	11.3 10.0 10.0 10.1 10.4	
May	6 13 20 27	8,796.1 8,810.3 8,814.0 8,813.8	604.5 604.5 604.3 604.3	501.1 500.2 500.4 500.3	220.3 220.2 220.2 220.2 220.2	280.8 279.9 280.1 280.0	25.9 27.2 27.1 26.7	10.1 10.2 10.4 10.6	10.1 10.2 10.4 10.6	- - - -
June	3 10 17 24	8,817.9 8,820.9 8,827.9 8,836.0	604.3 604.3 604.3 604.3	500.8 501.3 503.8 502.6	220.2 220.2 220.2 220.2 220.2	280.6 281.1 283.6 282.4	26.2 26.8 25.0 26.6	10.1 10.8 11.2 12.1	10.1 10.8 11.2 12.1	- - -
July	1 8	8,788.8 8,774.4	604.3 604.3	519.3 519.0	225.9 226.6	293.4 292.4	26.9 27.5	11.6 10.3	11.6 10.3	
		Deutsche Bu	ndesbank							
2021 Dec.	17 24 31	2,960.9 2,968.1 3,012.2	160.9 160.9 173.8	86.2 86.2 87.6	54.1 54.1 54.9	32.1 32.1 32.6	0.0 0.0 0.0			
2022 Jan.	/ 14 21 28	2,942.1 2,946.1 2,912.1 2,922.8	173.8 173.8 173.8 173.8	87.9 87.9 87.8 88.1	54.9 54.9 54.9 54.9	33.0 32.9 32.9 33.2	0.0 0.0 0.0 0.0	 0.1 	 0.1 	
Feb.	4 11 18 25	2,921.6 2,934.4 2,932.3 2,923.7	173.8 173.8 173.8 173.8 173.8	88.4 88.9 89.0 89.0	55.1 55.1 55.1 55.1	33.3 33.7 33.9 33.9	0.0 0.0 0.0 0.0			- - -
Mar.	4 11 18 25	2,939.9 2,933.8 2,961.2 2,925.4	173.8 173.8 173.8 173.8 173.8	89.0 88.5 88.4 89.4	55.1 55.1 55.1 55.6	33.9 33.3 33.3 33.3 33.7	0.1 0.0 0.0 0.0	 0.0 	 0.0 	- - -
Apr.	1 8 15 22 29	2,972.8 2,950.8 2,952.6 2,945.6 2,945.6	187.8 187.8 187.8 187.7 187.7	90.0 89.8 89.8 89.9 90.1	56.0 56.0 56.0 56.1 56.1	34.0 33.7 33.7 33.8 34.0	0.0 0.0 0.0 0.0			
May	6 13 20 27	2,991.6 2,998.1 2,975.2 2,992.4	187.7 187.7 187.7 187.6 187.6	90.3 90.3 90.3 90.3 90.3	56.1 56.1 56.1 56.1 56.1	34.2 34.2 34.2 34.2 34.3	0.0 0.0 0.0 0.0			
June	3 10 17 24	2,992.8 2,975.2 2,999.7 2,968.5	187.6 187.6 187.6 187.6	90.2 90.5 90.9 91.1	56.1 56.1 56.1 56.1	34.1 34.4 34.8 35.1	0.0 0.0 0.0 0.0	_ 0.4 0.9 1.8		- - - -
July	1 8	3,013.1 2,950.0	187.6 187.6	93.6 93.4	57.7 57.7	35.9 35.8	0.0 0.0	1.5	1.5	

\* The consolidated financial statement of the Eurosystem comprises the financial statement of the European Central Bank (ECB) and the financial statements of the national central banks of the euro area Member States (NCBs). The balance sheet items

for foreign currency, securities, gold and financial instruments are valued at the end of the quarter.  ${\bf 1}$  Source: ECB.

### III. Consolidated financial statement of the Eurosystem

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

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#### III. Consolidated financial statement of the Eurosystem

#### 2. Liabilities \*

		€ billion												
				Liabilities to euro area credit institutions related to monetary policy operations denominated in euro								Liabilities to other euro and	rea residents	
As at reporting date		Total liabilities	Banknotes in circu- lation 1	Total	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed- term deposits	Fine- tuning reverse opera- tions	Deposits related to margin calls	Other liabilities to euro area credit institutions deno- minated in euro	Debt certifi- cates issued	Total	General govern- ment	Other liabilities
		Furosysten	n 3											
2021 Dec.	17 24 31	8,511.5 8,512.3 8,566.4	1,534.3 1,543.0 1,544.4	4,504.7 4,439.9 4,293.9	3,743.2 3,759.0 3,512.2	759.3 678.7 779.6	- - -	- - -	2.2 2.2 2.2	51.4 53.6 76.7		760.0 751.5 757.1	616.8 593.5 590.4	143.2 158.0 166.7
2022 Jan.	7 14 21 28	8,573.3 8,594.0 8,600.3 8,622.6	1,541.6 1,538.8 1,538.5 1,539.1	4,541.5 4,599.8 4,623.8 4,598.2	3,894.0 3,891.5 3,838.8 3,819.0	644.5 705.4 782.4 776.8	- - - -	- - - -	2.9 2.8 2.7 2.4	49.4 46.9 49.3 45.6		668.3 720.2 739.9 818.1	510.1 574.0 588.7 656.8	158.2 146.2 151.3 161.3
Feb.	4 11 18 25	8,630.1 8,651.8 8,667.9 8,671.3	1,540.4 1,542.3 1,543.5 1,546.5	4,700.5 4,679.4 4,637.1 4,636.9	3,897.7 4,069.3 3,876.6 3,875.5	800.7 607.4 757.9 759.0	- - -	- - - -	2.2 2.8 2.6 2.5	51.2 50.2 49.4 46.3		710.7 765.1 832.0 842.8	567.7 616.4 690.4 667.9	143.0 148.7 141.6 174.9
Mar.	4 11 18 25	8,673.0 8,687.0 8,700.0 8,710.6	1,556.2 1,565.2 1,569.1 1,571.3	4,656.7 4,648.0 4,582.1 4,605.9	3,855.9 3,836.6 3,992.4 3,839.6	798.6 809.2 587.0 763.7	- - -	- - -	2.2 2.2 2.7 2.7	56.3 49.4 48.4 52.7		770.1 793.6 854.2 866.3	601.2 629.0 699.4 708.2	169.0 164.6 154.7 158.2
Apr.	1 8 15 22 29	8,754.0 8,763.7 8,787.9 8,790.9 8,783.6	1,575.1 1,578.5 1,586.5 1,585.6 1,587.5	4,646.7 4,722.9 4,690.0 4,720.4 4,701.7	3,886.3 3,987.1 3,967.1 4,155.8 4,022.6	758.2 733.3 720.4 562.0 676.4			2.3 2.5 2.5 2.6 2.7	60.6 52.8 48.7 43.8 42.0	- - - -	787.0 761.7 835.7 811.0 810.1	628.7 609.3 677.7 656.0 646.0	158.3 152.4 158.0 155.1 164.2
May	6 13 20 27	8,796.1 8,810.3 8,814.0 8,813.8	1,589.2 1,590.5 1,590.9 1,594.0	4,729.1 4,729.8 4,679.3 4,692.9	4,012.8 4,079.6 3,997.8 3,987.3	713.7 647.8 678.9 703.2	- - - -	- - - -	2.7 2.4 2.6 2.5	48.7 46.6 47.8 42.6		747.1 782.1 825.6 825.8	589.6 620.7 660.1 662.5	157.4 161.4 165.5 163.2
June	3 10 17 24	8,817.9 8,820.9 8,827.9 8,836.0	1,597.5 1,598.7 1,599.6 1,600.2	4,768.8 4,781.3 4,675.5 4,642.9	4,060.2 4,026.7 4,139.0 3,986.7	706.3 752.3 534.3 654.2	- - - -	- - - -	2.3 2.3 2.3 2.0	52.1 49.9 49.0 51.0		758.2 756.4 847.3 895.7	593.9 598.7 686.2 715.0	164.3 157.6 161.1 180.7
July	1 8	8,788.8 8,774.4	1,603.6 1,606.4	4,591.8 4,642.8	3,853.3 3,914.7	736.3 726.0			2.1 2.1	71.0 55.9	-	835.0 819.9	647.3 627.7	187.7 192.2
		Deutsche E	Bundesbar	ık										
2021 Dec.	17 24 31	2,960.9 2,968.1 3,012.2	375.8 378.9 374.6	1,229.9 1,193.5 1,138.2	1,017.3 975.4 902.1	210.4 215.9 233.9		- - -	2.1 2.1 2.2	17.5 13.7 27.0	-	310.5 309.4 298.9	260.9 248.9 246.7	49.5 60.5 52.2
2022 Jan.	7 14 21 28	2,942.1 2,946.1 2,912.1 2,922.8	373.3 373.2 373.4 374.4	1,233.9 1,267.0 1,289.5 1,292.4	1,085.0 1,110.6 1,059.4 1,062.1	146.6 154.1 227.8 228.2			2.2 2.2 2.3 2.1	19.5 16.4 18.5 15.7		245.4 266.5 222.2 253.2	193.0 220.5 176.7 202.2	52.3 46.0 45.5 51.0
Feb.	4 11 18 25	2,921.6 2,934.4 2,932.3 2,923.7	374.0 375.4 375.9 378.0	1,340.7 1,335.5 1,324.7 1,304.6	1,094.6 1,179.8 1,100.4 1,071.0	244.0 153.4 222.1 231.4	- - -	- - - -	2.1 2.3 2.1 2.1	16.4 19.7 17.6 16.4		206.4 227.4 252.2 266.5	162.7 185.0 214.2 201.2	43.8 42.4 38.0 65.2
Mar.	4 11 18 25	2,939.9 2,933.8 2,961.2 2,925.4	379.1 383.3 385.2 385.9	1,315.2 1,322.8 1,299.4 1,301.1	1,078.3 1,084.0 1,167.3 1,082.0	234.8 236.7 130.0 217.1	- - -	- - -	2.1 2.1 2.1 2.1	20.0 16.9 17.7 17.0		243.7 238.3 274.4 252.5	174.0 181.8 224.3 200.0	69.7 56.5 50.1 52.4
Apr.	1 8 15 22 29	2,972.8 2,950.8 2,952.6 2,945.6 2,952.6	382.2 383.5 387.4 387.0 385.0	1,347.5 1,354.0 1,324.3 1,338.7 1,335.7	1,110.7 1,136.8 1,116.8 1,215.0 1,198.1	234.6 215.1 205.3 121.4 135.5			2.2 2.1 2.2 2.2 2.2	18.7 16.9 15.3 14.6 14.0	- - - -	230.4 213.9 248.5 229.7 223.4	181.1 166.4 201.7 184.6 178.8	49.3 47.5 46.7 45.0 44.6
May	6 13 20 27	2,991.6 2,998.1 2,975.2 2,992.4	386.7 388.3 388.6 390.0	1,350.6 1,339.4 1,323.6 1,320.3	1,133.7 1,136.1 1,122.3 1,116.7	214.6 201.0 198.9 201.2	- - - -	- - - -	2.3 2.4 2.4 2.4	17.1 17.6 15.9 16.0		216.3 251.7 240.6 269.1	169.5 206.1 197.7 227.3	46.8 45.7 42.9 41.8
June	3 10 17 24	2,992.8 2,975.2 2,999.7 2,968.5	388.7 389.7 390.9 390.9	1,346.6 1,329.9 1,297.9 1,295.7	1,132.9 1,116.1 1,181.7 1,154.4	211.5 211.5 114.0 139.3	- - - -	- - - -	2.2 2.3 2.2 2.0	18.7 18.1 17.6 15.5		248.9 252.0 297.8 284.3	205.6 209.8 250.7 231.7	43.4 42.3 47.1 52.5
July	1 8	3,013.1 2,950.0	389.1 390.6	1,322.5 1,303.6	1,106.4 1,087.8	214.0 213.8			2.1 2.0	24.8 21.9	-	277.5 255.1	218.1 186.8	59.5 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 in euro terrent denominated in euro to currency to euro area residents in foreign to euro currency to euro area residents in foreign to euro to to euro to to euro to euro t	. 17 24 31 7 14 21 28
Furosvstem <sup>3</sup>	17 24 31 7 14 21 28
Earosystem	17 24 31 7 14 21 28
531.7         13.8         3.8         3.8         -         176.1         320.4         -         506.0         109.3         2021 Dec           593.0         14.2         3.5         3.5         -         176.1         320.4         -         506.0         109.3         2021 Dec	31 7 14 21 28
710.0         14.1         2.7         2.7         -         178.8         324.6         -         554.8         109.3           586.8         14.4         3.5         3.5         -         178.8         324.6         -         554.8         109.3	14 21 28
503.4     14.1     3.9     3.9     -     178.8     322.7     -     554.8     109.6       466.8     14.2     3.4     3.4     -     178.8     321.2     -     554.8     109.6       439.3     14.5     3.6     -     178.8     320.8     -     554.8     109.6	л
446.1         13.1         3.3         3.3         -         178.8         321.1         -         554.8         109.9         Feb           431.1         13.1         3.3         3.3         -         178.8         323.5         -         554.9         110.0           420.4         13.2         3.3         3.3         -         178.8         325.4         -         554.9         109.9           415.6         13.0         3.5         3.5         -         178.8         323.1         -         554.9         109.9	11 18 25
447.2 13.2 3.7 3.7 - 178.8 323.1 - 554.9 112.7 Mar 444.2 12.8 3.8 3.8 - 178.8 320.6 - 554.9 115.7	: 4 11
458.3         12.3         4.2         4.2         -         178.8         322.1         -         554.9         115.7           427.4         11.7         5.2         5.2         -         178.8         320.8         -         554.9         115.7	18 25
452.5         12.5         5.4         5.4         -         180.2         319.1         -         598.9         115.9         Apr.           423.9         11.0         5.4         5.4         -         180.2         319.1         -         598.9         115.9         Apr.	. 1 8
398.7         12.1         5.0         5.0         -         180.2         316.0         -         598.9         115.9           395.8         11.7         5.4         5.4         -         180.2         322.1         -         598.9         115.9	15 22
411.9         11.5         5.6         5.6         -         180.2         318.3         -         598.9         115.9           446.1         11.6         5.7         5.7         -         180.2         323.6         -         598.9         116.0         Mav	29 v 6
425.3         11.7         5.7         5.7         -         180.2         323.4         -         598.9         116.0           437.2         11.3         5.6         5.6         -         180.2         321.3         -         598.9         116.0	13 20
426.4 11.1 5.6 5.6 – 180.2 320.5 – 598.9 116.0 409.9 11.4 5.5 5.5 – 180.2 320.6 – 598.9 114.9 Jun	27 e 3
403.3         11.7         5.6         5.6         -         180.2         320.1         -         598.9         114.9           422.3         11.1         6.2         6.2         -         180.2         322.9         -         598.9         114.9	10 17
410.6     10.9     6.9     6.9     -     180.2     323.7     -     598.9     114.9       434.0     11.5     6.2     6.2     -     184.9     327.5     -     608.5     114.8     July	24
	8
Deutsche Bundesbank	17
27.74         0.0         0.0         0.0         -         45.8         37.0         504.5         157.2         5.7           322.3         0.0         -         -         45.8         37.0         504.5         157.2         5.7           404.3         0.0         -         -         46.5         36.4         509.8         170.7         5.7	24 31
299.5 0.0 0.5 0.5 - 46.5 37.3 509.8 170.7 5.7 2022 Jan.	. 7 14
237.4         0.4         0.1         0.1         -         46.5         37.7         509.8         170.7         5.7           215.9         0.4         0.3         0.3         -         46.5         36.6         511.0         170.7         5.7	21 28
213.0         0.4         -0.0         -0.0         -         46.5         36.6         511.1         170.7         5.7         Feb           204.3         0.4         0.2         0.2         -         46.5         37.5         511.1         170.7         5.7         Feb	. 4 11
189.5         0.4         0.4         0.4         -         46.5         37.6         511.1         170.7         5.7           185.8         0.4         0.4         0.4         -         46.5         37.7         511.1         170.7         5.7	18 25
206.4         0.4         0.4         0.4         -         46.5         37.7         514.2         170.7         5.7         Mar           197.4         0.3         -0.0         -0.0         -         46.5         37.8         514.2         170.7         5.7         Mar	: 4 11
208.8         0.3         -0.0         -0.0         -         46.5         38.3         514.2         170.7         5.7           192.6         0.3         0.4         0.4         -         46.5         38.6         514.2         170.7         5.7	18 25
198.0         0.7         0.5         0.5         -         46.8         37.4         520.0         185.0         5.7         Apr.           186.5         0.7         0.3         0.3         -         46.8         37.6         520.0         185.0         5.7         Apr.	. 1
181.2     0.7     0.2     0.2     -     46.8     37.7     520.0     185.0     5.7       179.2     0.7     0.2     0.2     -     46.8     38.2     520.0     185.0     5.7       194.5     0.7     0.2     0.2     -     46.8     38.4     53.2     195.0     5.7	15 22 20
220.6 0.7 0.2 0.2 - 46.8 38.6 523.3 185.0 5.7 May	y 6
206.0         0.5         0.1         0.1         -         40.8         30.0         523.3         185.0         5.7           196.4         0.5         0.1         0.1         -         46.8         39.0         523.3         185.0         5.7	20 27
185.8 0.5 -0.0 -0.0 - 46.8 39.3 526.8 185.0 5.7 June	e 3
189.8         0.5         0.7         0.7         -         46.8         40.3         526.8         185.0         5.7           175.9         0.5         0.9         0.9         -         46.8         40.5         526.8         185.0         5.7	17 24
187.7         0.6         0.1         0.1         -         48.0         39.6         530.5         187.1         5.7         July           166.1         0.6         0.1         0.1         -         48.0         41.0         530.5         187.1         5.7         July	1 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.

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

€ billion

			Lending to b	anks (MFIs) in	the euro area	1	_			Lending to n	on-banks (nor	n-MFIs) in the	
				to banks in t	he home cour	ntry	to banks in c	other Member S	ates		to non-banks	s in the home	country
												Enterprises a holds	nd house-
Period	Balance sheet total 1	Cash in hand	Total	Total	Loans	Securities issued by banks	Total	Loans	Securities issued by banks	Total	Total	Total	Loans
											End	l of year c	r 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
		_	_			_				_		C	hanges <sup>3</sup>
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. Oct. Nov. Dec.	104.9 25.2 12.0 - 141.5	0.1 - 0.6 1.8	60.5 29.1 29.0 – 59.5	69.0 29.7 35.8 - 53.6	67.5 30.5 37.2 – 51.2	1.5 - 0.8 - 1.4 - 2.4	- 8.5 - 0.6 - 6.8 - 5.9	- 8.0 0.1 - 6.1 - 5.8	- 0.4 - 0.7 - 0.8 - 0.2	5.2 27.6 18.6 – 18.3	4.5 17.3 11.3 - 13.3	3.0 12.9 11.2 4.2	2.6 11.3 11.5 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

 ${}^{\star}$  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

euro area										Claims on no			
				to non-bank	s in other Men	nber States				residents			
	General gove	ernment			Enterprises a households	nd	General gove	ernment					
				1						1			
Convition	Tatal		Converting 2	Tatal	Tatal	of which:	Tatal		Convition	Tatal	of which:	Other	Devied
End of y		th	Securities 2	lotal	lotal	Loans	lotal	Loans	Securities	Iotai	Loans	assets	Period
259.8 262.3	594.0 585.8	350.3 339.2	243.7 246.6	399.2 392.3	275.1 267.6	158.1 144.6	124.1 124.6	30.4 27.8	93.7 96.9	970.3 921.2	745.0	1,239.4 849.7	2012 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
293.6	575.1	312.2	226.7	417.5	270.0	159.5	136.7	28.5	108.2	1,058.2	802.3	844.1	2015
297.2	433.9	264.5	170.5	401.0	271.8	176.5	119.2	29.8	90.6	1,033.2	778.5	650.2	2017
303.8	416.2	254.7	161.6	435.2	312.6	222.2	142.3	29.4	112.7	1,035.8	751.2	1,090.3	2019
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
301.1	425.1	256.0 257.3	171.4	457.4	311.0	214.5	145.4	29.2	117.0	1,063.9	808.9 793.4	1,176.3	Sep.
302.2 303.9	430.5 412.8	256.7 252.3	173.8 160.5	474.8 469.8	325.6 327.5	222.5 222.2	149.2 142.3	29.1 29.7	120.1 112.7	1,048.0 1,003.2	792.3 751.2	1,119.7	Nov. Dec.
304.9 307.1	414.0 413.4	253.3 250.6	160.7 162.9	478.4 478.5	330.8 334.5	224.5 227.0	147.6 144.0	28.7 28.8	118.9 115.2	1,087.5 1,093.8	834.6 843.9	1,029.5 974.4	2021 Jan. Feb.
310.2	414.4	249.3	158.9	483.8	339.4	232.3	139.7	30.3	109.4	1,122.5	876.2	930.3	Apr.
313.5	409.5 401.4	250.6 249.1	158.9 152.3	473.2 481.7	339.1 339.4	231.9 231.8	134.1 142.3	28.4 28.8	105.7 113.5	1,108.3 1,111.0	862.4 864.8	902.3 922.5	May June
314.2 315.4	402.2 398.9	251.3 248.0	150.8 150.9	482.0 484.0	344.2 346.1	236.6 238.8	137.8 137.9	28.6 28.3	109.2 109.6	1,097.1 1,084.8	849.1 839.7	964.3 954.2	July Aug.
316.0 319.9	402.4 395.1	248.3 249.7	154.1 145.4	490.7 489.5	352.5 356.0	241.7 244.3	138.2 133.4	27.9 30.3	110.3 103.2	1,087.9 1,134.6	840.8 889.6	934.8 910.9	Sep. Oct.
320.9 321.2	396.5 391.6	247.8 245.1	148.8 146.5	495.7 490.1	361.6 362.7	249.6 244.0	134.1 127.4	28.5 28.4	105.6 99.0	1,137.3 1,094.2	892.4 853.3	950.0 888.3	Nov. Dec.
322.4 322.8	390.6 384.8	246.9 244.7	143.6 140.0	502.7 507.2	377.7 381.4	260.4 262.7	125.0 125.8	28.5 28.6	96.5 97.2	1,171.3 1,190.1	925.2 939.6	1,090.8 1,125.9	2022 Jan. Feb.
322.3	390.0 382.9	245.2 246.5	144.8 136.4	510.4 505.4	379.5 378.8	259.4 257.8	130.9 126.7	29.0 32.2	101.9 94.4	1,169.2	921.9 926.0	1,249.9 1,496.5	Mar. Apr.
Changes	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
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 - 4.2	2.9 0.3	15.1	0.4 4.4	- 4.0 1.8	14.6 - 3.7	0.9 - 1.0	- 2.8	83.6 - 88.3	72.0	194.0 - 150.1	2014 2015
7.8	- 35.4 - 51.3 - 46.2	- 12.1 - 22.8 - 19.1	- 23.3 - 28.5 - 27.0	4.0	8.2 - 3.4	14.6 4.0	- 4.2 - 8.7 - 11.4	- 0.9 0.1 - 1.5	- 3.3 - 8.9 - 9.9	- 12.3	- 55.0	- 51.4 - 173.1	2016 2017 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
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	- 16.4	2020 Sep.
- 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	- 0.2	0.9	0.2	9.5 0.3	4.1 3.7	3.2 2.4	- 3.4	- 0.9	6.3	84.4	83.6 8.9	- 62.3 - 55.4	2021 Jan. 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.
2.7	- 8.1	- 0.3 - 1.4	0.7 - 6.7	- 5.6 7.8	- 0.1 - 0.4	0.3 - 0.6	- 5.5 8.2	- 1.9 0.4	- 3.6 7.7	- 11.4 - 5.7	- 11.4 - 5.3	- 28.0 19.9	May June
0.4	- 3.4	- 3.5	- 1.5 0.1	1.0 1.9	5.6 1.8	4.8	- 4.7 0.1	- 0.2	- 4.5	- 15.0 - 13.1	- 16.5 - 10.0	38.7 - 10.8	July Aug.
3.9	- 7.4	- 0.3	- 8.7	- 1.4	3.5 4 R	2.9 2.6 4.4	- 4.8	2.3	- 7.2	47.6	49.5	- 24.6 42.4	Oct.
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.
- 0.4	- 5.5	- 2.1	- 3.4 5.0	4.6 3.8	3.7	2.5	0.9 5.5	0.1	0.8	20.6	15.8	34.9 123.7	Feb. Mar.
0.2	- 6.8 - 0.7	- 1.4 - 2.0	- 8.2 1.3	- 5.3 9.5	- 1.6 8.8	- 2.7 6.7	- 3.7 0.7	- 3.2 - 0.8	- 6.9 1.5	- 13.8 - 8.4	- 14.2 - 8.8	246.6 - 38.2	Apr. May

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

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

€ billion

		Deposits of b	anks (MFIs)		Deposits of n	on-banks (nor	n-MFIs) in the	euro area					
		in the euro a	rea			Deposits of r	on-banks in th	ne home coun	try			Deposits of n	on-banks
			of banks										
								With agreed	maturities	At agreed no	tice		
	Balance		in the	in other					of which:		of which:		
D : 1	sheet	<b>T</b>	home	Member	<b>-</b>	<b>-</b>	o	<b>T</b>	up to	<b>-</b>	up to	<b>-</b>	
Period	total 1	Iotai	country	states	Iotai	Iotai	Overnight	Total	2 years	Iotai	3 months		overnight
2012	8 226 6	1 371 0	1 1 1 3 5 9	235.1	3 091 4	2 985 2	1 294 9	1 072 8	320.0	617.6	ENC 528.4	JOIYear C	7 monun   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	7,665.2	1,267.8	1,065.9	201.9	3,307.1	3,215.1	1,670.2	948.4	298.1	596.4	534.5	80.8	35.3
2016 2017	7,792.6 7,710.8	1,205.2 1,233.6	1,033.2 1,048.6	172.0 184.9	3,411.3 3,529.1	3,318.5 3,411.1	1,794.8 1,936.6	935.3 891.7	291.2 274.2	588.5 582.8	537.0 541.0	84.2 108.6	37.2 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 8/13 7	267.2	578.6 575.1	541.1 540.5	104.5 116 3	45.0 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 2020 Aug	9,172.2	1,628.6 1 /89 8	1,338.6	289.9 276.6	4,129.9	3,931.8	2,649.3	721.3	203.9 258.8	561.2	537.1	153.8 129.7	70.7
Sep.	9,097.4	1,523.9	1,252.4	270.0	3,975.9	3,795.1	2,436.7	798.3	250.0	560.1	531.7	140.6	72.8
Oct. Nov.	9,124.3 9,096.0	1,536.3 1,515.4	1,264.9 1,245.5	271.4 269.9	4,015.2 4,035.0	3,827.0 3,846.2	2,473.1 2,508.7	794.2 778.0	249.1 235.3	559.7 559.6	531.7 532.0	140.8 140.2	69.6 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
Feb.	9,150.4	1,580.0	1,262.3	322.7	4,044.0	3,855.8	2,550.8	757.4	219.4	561.6	536.1	138.4	68.2
Mar. Apr	9,261.9	1,634.1 1 659 9	1,336.6	297.6 315.8	4,068.3 4 079 3	3,876.2	2,569.2 2 588 3	/44./ 735.3	212.3 205.8	562.3	536.2	142.2 143.0	71.0 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
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. Sep.	9,319.3 9,325.3	1,686.5 1,667.9	1,365.8 1,354.2	320.7 313.6	4,119.2 4,108.9	3,925.6 3,913.6	2,648.6 2,640.2	715.5 712.7	194.1 194.3	561.5 560.7	536.6 535.9	147.8 148.8	74.7 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
Dec.	9,495.5	1,628.6	1,374.9	289.9	4,154.1 4,129.9	3,931.8	2,678.9	721.3	200.2 203.9	561.2	535.5	151.4	82.5 70.7
2022 Jan. Feb.	9,717.0 9.842.7	1,725.2 1.743.7	1,363.7 1.369.7	361.5 374.0	4,195.2 4,209.7	3,979.5 3.993.9	2,686.4 2.699.7	732.3 733.4	215.9 217.5	560.7 560.8	537.4 537.7	166.7 169.3	86.2 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. May	10,268.8 10,257.5	1,765.8	1,384.4	382.3 372.2	4,223.7 4,236.1	4,003.6	2,700.1 2,718.3	745.6 738.4	234.6 229.4	557.9 556.5	535.2 534.0	175.5 176.2	93.4 97.2
												C	hanges <sup>4</sup>
2013 2014	- 703.6 206.8	- 106.2 - 28.4	- 73.9 - 32.2	- 32.3 3.9	39.1 62.7	47.8 71.6	111.5 106.0	- 56.3 - 32.1	- 26.6 3.1	- 7.3 - 2.4	- 4.0 - 2.4	2.6 - 2.5	3.3 - 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 2017	184.3 8.0	- 31.6 30.6	- 2.2	- 29.4 15.8	105.7 124.2	105.2	124.3 145.8	- 11.1 - 32.5	- 15.3	- 8.0 - 5.6	2.4 1.5	2.7 16.4	1.9 5.8
2018 2019	101.8 483.4	- 20.1 12.6	- 25.7	5.6 22.6	112.4 132.1	114.7	137.7 154.1	- 18.8 - 30.6	- 6.5 - 6.6	- 4.3 - 3.4	- 0.6	- 4.3 10.6	2.3 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 16.6	1.8
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
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. Feb.	207.1	66.0 24.4	25.3	40.8 25.1	21.6 9.0	19.0 9.2	28.4 15.5	- 10.5 - 7.3	- 7.8 - 5.3	1.1 1.0	1.6 1.3	2.7 - 0.7	9.7 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. May	10.7	27.6	8.3 9.1	- 8.5	24.9	23.2	20.1	- 9.4	- 0.5	0.4	0.7	3.5	- 0.6
June	5.3 26.3	8.2 14 4	3./	4.4 7.0	- 16.6 22.3	- 19.8	- 9.4	- 9.8 - 4.1	- 7.1	- 0.6	- 0.4	4.5 - 4.9	6.1 - 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
Oct.	70.4	24.1	11.2	12.9	,.5 31.1	29.1	16.8	12.9	12.1	- 0.6	- 0.4	2.5	1.1
Nov. Dec.	95.5 - 326.2	26.4 - 90.4	9.6 - 36.3	16.7 - 54.1	12.9 - 24.3	12.5 - 24.3	21.1 - 29.6	- 8.4 3.9	- 6.2 3.7	- 0.3 1.4	- 0.1 1.6	- 0.3 2.4	4.2 - 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
Mar.	128.5	- 6.6	- 2.1	- 4.5	2.2	- 4.2	- 9.7	7.3	9.2	- 1.8	- 1.6	2.2 8.3	3.5 9.3
Apr. Mav	283.1	25.1 - 0.9	15.6 9.3	9.5 - 10.2	8.0 13.4	11.0 10.7	7.5 18.8	- 6.8	- 5.0	- 0.6 - 1.3	- 0.4	- 3.1	- 6.6 3.8
- ,								. •			-		

 ${}^{\star}$  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.

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# IV. Banks

_																Debt s	ecuritie	es issue	d 3							
ir	other Men	nber States	2					Depos	sits of																	
								centra	ii gover	nments		Liabilities	s													
F	vith agreed	maturities	ť	At agre	eea no	tice				of whi	ch:	from .		Money				of wh	ich:	Liabili	ties					
		of which:				of whi	ch:			domes central	itic I	repos wi non-ban	th ks	market fund				matur	ities	to noi euro	ר-	Capita	u I			
Т	otal	up to 2 years	ŀ	Total		up to 3 mon	ths	Total		govern ments	)-	in the euro area	a	shares	3	Total		of up 2 year	to 's <b>3</b>	area reside	nts	and reserv	es	Liabil	r ities <b>1</b>	Period
E	nd of ye	ear or m	ont	th																						
	42.3 44.0 42.0	14. 16. 15.	7 9 9		3.8 3.5 3.3		2.8 2.7 2.7		28.9 17.6 10.6		25.9 16.0 10.5	8	0.4 6.7 3.4		7.3 4.1 3.5	1,: 1, <sup>-</sup> 1,0	233.1 115.2 077.6		56.9 39.0 39.6		611.4 479.5 535.3		487.3 503.0 535.4	1	,344.7 944.5 ,125.6	2012 2013 2014
	42.2 43.9	16. 15.	0		3.3 3.1		2.8 2.6		11.3 8.6		9.6 7.9		2.5 2.2		3.5 2.4	1,0 1,0	017.7		48.3 47.2		526.2 643.4		569.3 591.5		971.1 906.3	2015 2016
	63.2 56.7	19. 15.	7		2.9 2.8		2.6 2.5		9.4 11.3		8.7 10.5		3.3 0.8		2.1 2.4		994.5 034.0		37.8 31.9		603.4 575.9		686.0 695.6		658.8 610.7	2017 2018
	59.0	16.	5		2.7		2.4		12.0		11.2		1.5		1.9	1,0	063.2		32.3		559.4		728.6	1	935.6	2019
	75.6 80.7	22.	8		2.6		2.3		49.8 44.2		48.6 43.5		9.4 2.2		2.5 2.3	1,	110.8		21.2 27.5		757.2		732.3		,031.3 809.0	2020
	63.6 65.2	19. 21.	.3 .8		2.6 2.6		2.3 2.3		30.6 40.2		29.8 39.0		1.7 1.2		1.9 2.6	1,0 1,0	063.9 077.3		25.5 25.6		682.1 687.1		699.9 720.4	1	,095.2 ,108.9	2020 Aug. Sep.
	68.6 68.7	25.	0		2.6		2.3		47.3 48 5		46.6 47.6		1.4		2.7	1,0	075.1		24.6		687.8 696 7		712.4	1	,093.3	Oct.
	75.6	30.	.6		2.6		2.3		49.8		48.6		9.4		2.5	1,0	056.9		21.2		617.6		710.8	1	,031.3	Dec.
	70.0 67.0	23.	.7		2.6		2.3		49.7 50.3		48.3 48.2		6.3 4.5		2.5	1,0	058.8 068.3		19.7 19.6		790.8 803.5		708.3		979.7 929.4	2021 Jan. Feb.
	68.7 70.3	22.	2		2.5 2.5		2.3 2.3		49.9 50.0		48.9 48.6		6.7 5.1		2.9	1,0	090.4 091.8		21.5		833.7 839.1		705.9		913.8 885.3	Apr.
	73.5 72.0	26. 25.	.7 .9		2.5 2.5		2.3 2.3		48.2 46.9		46.6 45.6		6.0 4.5		2.3 2.3	1,0 1,0	087.7 084.6		23.5 23.8		854.7 836.9		702.7 725.4		858.8 880.7	May June
	69.9 70.7	22. 24.	9		2.5 2.5		2.3 2.3		45.5 45.8		44.3 44.0	!	6.0 7.4		2.3 2.3	1,0 1,0	087.2 089.9		23.5 25.5		800.0 790.7		719.2 725.0		913.9 898.4	July Aua.
	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 66.4	17.	4		2.4		2.2		46.1		45.2 45.5		7.4 4.2		2.2	1, 1,	118.0 123.9		24.6		866.7 883.1		729.5		840.3 872.8	Nov.
	80.7 78.1	20.	3		2.4 2.4		2.2		44.2 48.9		43.5 45.5		2.2 3.0		2.3	1, 1,	126.9		27.5		907.4		732.3	1	,036.0	Dec. 2022 Jan.
	76.8 75.9	19. 19.	.8 .0		2.4 2.4		2.2 2.2		46.4 44.5		42.8 42.1		2.4 2.8		2.4 2.5	1, 1,	141.1 148.9		26.2 25.9		945.9 926.4		717.7 736.8	1	,080.0 ,195.6	Feb. Mar.
	79.8 76.7	22. 19	5		2.4 2.3		2.2 2.1		44.6 46.6		42.2 42.8		2.3 1.9		2.3 2.5	1, 1,	161.1 164.1		26.3 27.6		939.2 958.5		734.6 732.5	1	,438.9 .396.1	Apr. Mav
'с	hanges	4			- 1	l					-					,		1		1		1	(	1	,	.,
	- 0.5 - 2.3	2.	2	_	0.3 0.2	-	0.1 0.1	=	11.3 6.4	=	10.0 4.8		4.1	_	3.2 0.6		104.9	=	17.6	-	134.1 35.9		18.9 26.1	-	417.1	2013 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	4.	2	-	0.3	-	0.1	-	2.2 0.0 2.1	-	0.0	-	0.3 1.1	_	0.3	-	3.3	-	1.3 8.5	-	16.1		26.4 34.1	-	39.5 162.3	2016
	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	2018
	17.0 3.1	- 14.	.3	_	0.1 0.2	-	0.1 0.1	-	37.8 5.5	-	37.3 5.0	-	3.6 7.9		0.6 0.3		11.8 40.6	-	9.3 6.9		61.6 124.9	-	1.5 16.6	-	108.5 207.9	2020 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 0.2	- 0.	6	-	0.0	-	0.0		7.0 1.2		7.5 1.0		0.3 3.3	-	0.1	-	2.9 0.9	-	1.0	-	0.1	-	8.2 3.3	-	15.5 39.9	Nov.
	- 7.0	- 6.	.9		0.0		0.0	-	0.1	-	0.2	- :	0.3 3.0	_	0.0	_	9.0 2.8	-	0.5	-	173.2	-	3.7	_	23.2 49.8	2021 Jan.
	- 3.1 1.5	- 3. 1.	2	_	0.0 0.0	-	0.0 0.0	-	0.6 0.4	-	0.2 0.8	- :	1.8 2.1	-	0.0 0.5		8.9 15.7	-	0.1 1.7		12.2 24.0	-	6.2 7.1	-	48.9 10.8	Feb. Mar.
	1.8 3.2	1.	3	_	0.0 0.0	-	0.0 0.0	_	0.1 1.8	=	0.4 1.9	- :	2.2 0.9	_	0.1 0.1	_	7.3 2.7	-	0.4 2.5		11.1 17.0	-	3.7 2.8	-	31.3 27.1	Apr. Mav
	- 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
	0.7	- 2. 1.	0	-	0.0	-	0.0		0.3	-	0.2		1.3 1.4	-	0.1		2.3		2.0	-	9.9 45 5		5.4	-	20.5 14.9 32.4	Aug.
	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 14.3	- 6. 5.	4	-	0.0 0.0	-	0.0 0.0	-	0.7 2.4	-	0.4 2.0	-	3.2 2.0	-	0.1 0.2	-	1.7 14.2		1.4 1.4	-	11.7 127.3	-	5.9 4.6	-	40.3 63.4	Nov. Dec.
	- 2.7 - 1.3	- 2. - 0.	6	_	0.0 0.0		0.0 0.0	-	4.7 2.5	-	2.0 2.7	-	0.7 0.5	-	0.0 0.1		13.4 15.0	-	2.3 1.0		146.6 39.4	-	18.3 3.2		39.8 44.2	2022 Jan. Feb.
	- 1.0	- 0. 3	8	_	0.0	-	0.0	-	2.0 0.1	-	0.6	_	0.3	_	0.2 0 3		6.9 3 4	-	0.3	-	20.7	_	19.0 5 8		118.4 252 8	Mar. ∆nr
	- 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

 ${\bf 3}$  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.  ${\bf 4}$  Statistical breaks have been eliminated from the flow figures (see also footnote \* in Table II.1).

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

	€ billion												
				Lending to b	anks (MFIs)		Lending to n	on-banks (nor	n-MFIs)				
					of which:			of which:					
End of month	Number of reporting institu- tions	Balance sheet total 1	Cash in hand and credit balances with central banks	Total	Balances and loans	Securities issued by banks	Total	Loans for up to and including 1 year	for more than 1 year	Bills	Securities issued by non-banks	Partici- pating interests	Other assets 1
	All categ	ories of ba	anks										
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. Feb. Mar.	1,442 1,442 1,442	9,779.5 9,905.7 10,025.3	1,114.3 1,142.6 1,137.0	2,639.3 2,675.9 2,666.8	2,169.5 2,203.3 2,194.2	468.0 470.7 471.4	4,724.4 4,750.0 4,760.3	446.2 453.5 441.8	3,573.4 3,587.6 3,604.5	0 0 0	.3 691.1 .3 694.2 .3 700.1	94.9 94.9 94.6	1,206.5 1,242.3 1,366.5
Apr. May	1,441 1,439	10,333.5 10,321.6	1,252.2 1,173.6	2,589.8 2,675.5	2,116.4 2,199.3	471.2 473.8	4,780.9 4,801.0	454.6 458.6	3,627.3 3,640.1		.4 682.1 .3 685.3	94.6 94.5	1,615.9 1,577.0
	Commer	cial banks	6										
2022 Apr. May	249 249	4,644.4 4,622.0	628.3 642.4	1,164.0 1,157.7	1,082.9 1,078.1	80.7 79.2	1,504.6 1,512.6	297.9 303.5	988.0 988.0		.3 209.7 .3 211.8	31.8 31.6	1,315.6 1,277.6
	Big bar	ıks 7											
2022 Apr. May	3 3	2,379.3 2,386.1	179.7 179.4	563.2 565.1	534.1 534.7	29.2 30.4	697.8 697.2	146.7 142.8	449.0 449.9	0	.1 97.9 .0 100.4	26.2 26.2	912.4 918.2
	Region	al banks a	and other	commerci	al banks								
2022 Apr. May	138 138	1,808.6 1,777.8	292.4 308.9	436.3 427.8	385.9 380.2	49.9 47.2	681.8 686.8	107.5 113.8	465.0 463.5	0	.2 105.5 .2 105.2	5.0 4.7	393.2 349.7
	Branch	es of fore	ign banks										
2022 Apr. May	108 108	456.4 458.1	156.2 154.2	164.6 164.8	162.9 163.2	1.6 1.6	125.0 128.7	43.7 46.8	74.0 74.6	0	.1 6.3 .0 6.2	0.7 0.7	10.0 9.7
	Landesba	anken											
2022 Apr. May	6	912.3 907.8	132.1 118.1	241.1 248.2	191.6 197.2	49.1 50.7	423.2 423.1	46.2 45.0	335.9 336.3	0	.0 38.2 .0 38.3	8.1 8.1	107.9 110.3
	Savings k	banks											
2022 Apr. May	368 367	1,565.6 1,571.8	177.2 176.3	165.2 165.7	50.4 49.9	114.7 115.6	1,184.5 1,190.6	50.4 50.3	954.9 960.9		- 178.5 - 178.9	15.2 15.2	23.5 23.9
2022.4	Credit co	operative	S CT O	101.2			047.0				a.l. (22.2		27.4
2022 Apr. May	772	1,153.2	67.9	191.3	76.7	114.3	847.9 853.8	31.7	698.4	0	.0 123.3	19.1	27.1
	Mortgag	e banks											
2022 Apr. May	9 9	232.9 232.6	11.8 12.2	18.7 18.4	11.7	6.6 6.7	196.8 196.4	2.3	177.8		- 16.6 - 16.5	0.1 0.1	5.4 5.4
2022.4	Building	and loan a	associatio	ns			205.4		470.0		1 25.0		
2022 Apr. May	18	257.1 260.1	3.5 4.6	44.3 45.4	28.9 30.0	15.4	205.4 206.0	1.1	179.3		. 25.0	0.3	3.6 3.8
2022 Apr		th special	, developr	nent and		trai suppo		1 24.0	1 208 6		0 000	<b>I</b> 20.1	122 0
May	18	1,568.0	152.4	848.7	756.6	90.3	418.5	24.9	298.8	0	.0 90.9	20.1	129.0
2022 Apr		em: Fore	eign banks	5 °		ا <u>عد ما</u>	612.9	120.0			2 1012	1 26	[ [717]
May	141 141	2,117.8 2,093.6	339.7	596.5	563.2	33.1	618.1	135.0	378.3		.2 101.2	3.6	535.7
2022 Apr			111ajo11ty-0			aliks <sup>ש</sup>   סאס	107 0	06 7	1 202 4		2 040	L 20	E617
May	33	1,635.5	185.5	437.9	403.3	34.3 31.5	487.8	88.2	303.4		.2 94.9	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 Ioan associations: including deposits under savings

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#### IV. Banks

															-
	Deposits of	banks (MFIs)		Deposits of	non-banks (r	ion-MFIs)							Capital		
		of which:			of which:								published		
						Time deposi	ts 2		Savings dep	osits 4			partici-		
	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	rights capital, funds for general banking risks	Other liabi- lities 1	End of month
Ì						,	,					All cat	tegories c	of banks	
1	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 2,500.1 2,481.6	773.0 780.9 770.4	1,689.2 1,719.2 1,711.2	4,365.8 4,399.0 4,395.3	2,868.1 2,899.0 2,895.6	252.6 257.2 260.1	654.0 652.0 650.7	50.0 60.1 50.7	566.7 566.7 564.8	542.8 543.1 541.5	24.3 24.1 24.1	1,222.0 1,233.5 1,255.4	569.0 569.5 576.7	1,160.3 1,203.6 1,316.3	2022 Jan. Feb Mar
	2,498.2 2,521.3	741.2 783.2	1,756.9 1,738.1	4,431.3 4,438.7	2,907.0 2,941.4	287.1 263.1	649.5 648.1	62.5 62.5	563.7 562.3	540.5 539.3	23.9 24.0	1,263.1 1,261.8	578.7 579.4	1,562.2 1,520.3	Apr. May
			_	_	_	_	_		_	_	_	Co	ommercia	banks <sup>6</sup>	
	1,294.1 1,314.2	562.9 588.6	731.1 725.6	1,766.3 1,768.3	1,240.0 1,262.4	175.7 157.7	238.7 236.5	61.4 61.6	102.1 102.0	98.6 98.5	9.9 9.8	176.7 178.3	199.4 198.3	1,208.0 1,162.9	2022 Apr. May
	525 1	2110	212.2	<b>8</b> 435	590.0	800	76.7	1 29.1	867	020	1 11	130.6	BIG K		2022 Apr
l	533.1	211.9	313.2	838.4	590.0	82.3	76.5	32.3	86.7	83.8	1.1	130.0	74.2	811.3	May
									Re	egional b	anks and	other co	mmercial	banks	
	516.6 524.8	209.6 229.3	307.0 295.6	743.5 753.8	520.0 539.4	59.1 51.9	140.7 139.0	23.3 29.3	15.0 14.9	14.4 14.3	8.7 8.6	45.5 46.8	110.9 111.6	392.1 340.8	2022 Apr. May
	252.4		111.0	170.2	120.0		21.2				B	ranches c	of foreign	banks	2022 4
	252.4	141.4	115.9	179.3	130.0	27.6	21.3	-	0.4	0.4	0.1	0.8	14.3	10.8	May
			_	_	_	_	_		_	_	_	_	Lande	sbanken	
	297.5 298.7	49.8 64.2	247.6 234.5	279.2 271.8	157.4 154.9	46.5 41.1	69.6 70.2	0.8 0.7	5.6 5.6	5.6 5.6	0.0 0.0	182.1 181.7	43.1 43.1	110.4	2022 Apr. May
	244.0						12.0						Saving	gs banks	
	211.9 212.8	5.0 5.1	206.8 207.7	1,153.1	841.4 846.4	11./	13.8 13.9	-	276.2 275.4	260.6 259.9	9.9	16.1 16.2	132.5 133.3	52.0	2022 Apr. May
												Ci	redit coop	peratives	
	176.2 178.1	1.9 2.2	174.3 175.9	835.7 838.7	607.6 610.1	28.0 28.6	17.0 17.3	-	179.2 178.8	175.3 174.9	3.9 3.9	9.0 8.9	95.6 97.1	36.8 36.0	2022 Apr. May
													Mortgag	ge banks	
	62.1 62.3	3.9 3.8	58.2 58.5	52.9 52.8	2.3 2.1	3.8 4.0	46.9 46.6		-	=	<b>I</b> :	100.8 101.3	10.8 10.3	6.3 5.9	2022 Apr. May
											Buil	ding and	loan asso	ociations	
	37.2 39.4	3.3 3.3	33.9 36.0	193.8 193.9	3.5 3.7	1.7 1.6	188.0 188.1	_	0.5 0.5	0.5 0.5	0.1 0.1	4.1 4.6	12.2 12.2	9.9 10.0	2022 Apr. May
							Ba	nks with	special, o	developm	ent and o	other cen	tral supp	ort tasks	
	419.3 415.8	114.4 115.9	305.0 299.9	150.3 155.6	54.9 61.7	19.7 18.3	75.6 75.5	0.3 0.3	-	-		774.4 770.9	85.2 85.2	138.8 141.2	2022 Apr. May
											. M	emo iten	n: Foreign	banks <sup>8</sup>	
	715.7 728.9	354.2 375.6	361.5 353.3	699.2 700.1	517.9 527.1	61.4 54.0	96.7 95.8	11.0 9.0	20.6 20.5	20.3 20.3	2.7 2.6	43.9 44.4	86.4 86.5	572.6 533.7	2022 Apr. May
									of which	: Banks n	najority-o	wned by	foreign k	anks <sup>9</sup>	
	463.3 472.7	212.7 235.3	250.6 237.4	519.9 523.9	387.9 395.9	33.7 30.5	75.5 74.8	11.0 9.0	20.2 20.2	19.9 19.9	2.6 2.5	43.3 43.9	72.1 72.1	562.7 523.0	2022 Apr. 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' and "Branches of foreign 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.

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

€ billion Lending to domestic banks (MFIs) Lending to domestic non-banks (non-MFIs) Treasury Cash in Negotiable hills and Credit hand negotiable money (euro area banknotes balances with the market Memo money mar-Securities Credit Securities item: ket paper issued paper Bundesand balances issued by issued by Fiduciary issued by by non-Bills Bills Period Total Total coins) and loans banks Loans bank banks loans non-banks banks 1 End of year or month \* 2012 18.5 134.3 1,655.0 1,229.1 423.5 3,220.4 2,785.5 0.6 432.1 2.4 2.4 2.2 0.0 0.0 18.5 18.9 , 1,545.6 2.2 1.7 1.2 0.7 2013 85.6 1 153 1 1.7 390.8 3,131.6 2,692.6 0.5 437 2 1,425.9 2014 2.1 358.2 2,712.2 0.4 454.0 81.3 1,065.6 3,167.3 155.0 1.346.6 1.062.6 0.0 1.7 282.2 1.7 3.233.9 2.764.0 469.0 2015 19.2 0.4 0.4 0.0 0.8 264.3 2,823.8 0.4 2016 25.8 284.0 1,364.9 1,099.8 2.0 3,274.3 0.3 449.8 0.0 0.0 3,332.6 3,394.5 2017 31.9 392 5 1.407.5 1,163.4 0.7 243.4 1.9 2.894.0 04 0.7 437 5 1,323.5 239.0 2,990.2 0.2 2018 40.4 416.1 1,083.8 0.8 5.9 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 494 905.0 1.409.6 1,163.7 05 245 3 10.3 3 798 1 3 392 4 03 26 402.8 0.7 2020 Dec. 47.2 792.9 1,367.9 1,119.7 0.0 247.5 8.8 3.647.0 3,245.1 0.2 4.0 397.7 1,009.1 3,654.0 2021 Jan 44.6 1,283.1 1,032.1 0.0 0.7 250.2 9.2 3,250.7 0.3 6.6 396.3 400.0 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 0.0 0.9 257.7 6.7 45.5 983.4 1,419.4 1,160.8 9.8 3,699.1 3,287.5 0.2 404.7 Mar 44.7 1,062.1 1,362.4 1,105.7 0.0 0.9 255.8 3,693.9 3,287.5 0.2 5.6 400.5 9.8 Apr. 1,044.7 10.1 3,709.6 3,300.2 May 45.4 ,423.6 1,167.3 0.9 255.4 4.6 404.7 0.0 0 1 397.6 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 6.1 5.7 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 0.2 396.2 46.5 0.0 252.1 397.8 1,425.2 0.8 3,736.4 3,332.8 Aug 1,015.2 1,172.4 10.3 0.1 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 Sep 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 4 3 2 2 1 183 6 07 248.0 10.0 3 794 0 3 386 4 02 5.6 401 9 0.5 2.6 Dec. 49.4 905.0 1,409.6 1,163.7 245.3 10.3 3,798.1 3,392.4 0.3 402.8 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 \_ 401.3 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 0.6 0.7 3.866.6 3.5 3.2 246 9 9.9 9.9 3 470 0 0.2 0.2 Apr. 50.4 1.200.5 1 360 3 1 112 8 \_ 392.9 May 49.4 1,452.7 3,886.7 1,122.8 1,202.9 249.1 3,488.9 394.4 Changes \* 0.2 0.1 2013 0.0 48.8 204.1 170.6 0.0 0.7 32.7 4.4 ++ 0.3 0.1 0.6 4.8 \_ \_ 0.6 + 0.4 \_ 4.3 119.3 \_ 87.1 + 0.0 0.4 32.6 + + 36.7 20.6 \_ 0.1 \_ + 16.8 2014 + 2015 0.3 73.7 80.7 4.3 0.4 \_ 75.9 0.1 68.9 54.1 0.0 0.3 15.1 \_ 0.0 \_ + + + + + + 43.7 57.0 \_ 2016 6.5 129.1 + 48.1 + 66.9 \_ 0.9 17.9 + -0.4 + + 62.8 0.1 0.1 18.9 \_ + 0.0 + + \_ 2017 + 6.1 + 108.4+ 50.3 70.4 +
+
-0.0 20.1 0.1 + + 70.2 0.0 0.4 13.6 + 8.5 81.0 76.6 + -0.1 \_ 4.4 + + 71.5 105.4 0.1 0.5 \_ 33.2 2018 24.0 0.0 3.8 \_ \_ 59.7 \_ + + \_ 2019 + 2.8 + 63.0 61.1 0.0 0.2 1.6 1.4 + 126.7 + 129.1 0.1 3.1 5.5 + 316.4 2020 4 1 201.2 191 6 0.0 0.0 9.6 43 123 2 123.6 \_ 0 1 + 0.7 \_ 1.0 + + \_ + + + + + 2.2 152.2 147.8 + 2021 + 111.844.1 + 46.3 0.0 0.2 2.0 + 1.5 + + 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 + 216.2 2021 Jan. \_ 2.6 \_ 84 9 87.8 0.0 0.0 28 04 6.6 53 0.0 + 2.6 \_ 14 \_ + + 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 0.6 + 54.3 37.1 30.6 0.1 + 6.6 0.2 + 29.7 25.6 \_ 0.0 1.4 5.4 Mar 4.1 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 + \_ \_ 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 + 7.1 0.1 5.5 0.0 + 1.3 0.6 13.6 0.0 + June 1.9 13.3 0.1 0.3 0.4 + + 0.2 15.3 35.1 33.1 0.0 1.9 0.1 16.1 0.0 0.3 Julv + + \_ \_ \_ + + + 17.2 + + \_ 1.4 0.2 43.8 + + 54.4 + \_ 9.7 0.0 0.5 + Aug 53.4 0.1 0.0 10.9 1.7 \_ \_ 0.0 \_ Sep + 0.6 + 39.7 26.2 \_ 25.5 + \_ 0.1 0.6 0.0 + 13.5 + 9.2 + 0.0 1.2 + 5.4 Oct. 0.5 24 195 20.0 0.0 \_ 0.0 \_ 0.5 \_ 0 1 20 5 25 1 0.0 0.6 \_ 5.2 + + + \_ \_ \_ 0.0 + Nov + 0.3 + 16.6 + 12.9 + 15.9 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 \_ 27 + 0.3 43 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 + \_ 0.2 2.3 28.0 7.8 \_ 2.0 1.4 1.9 1.7 Feb + -+ -13.1 + 11.5 0.4 + 0.1 15.1 + 18.4 + 0.0 + \_ 5.2 + 9.5 \_ 6.0 + 10.9 \_ 0.0 0.0 + 27.3 23.0 0.0 Mar + + 82.3 0.3 0.2 8.4 0.9 + 114.2 \_ 82.3 \_ 0.4 0.0 0.0 Apr. + + \_ + 13.1 + 21.3 + + \_ May + 2.2 1.0 77.7 92.3 + 90.0 0.1 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;

			Deposits of	domestic ba	nks (MFIs) 3			Deposits of	domestic no	n-banks (non	-MFIs)			
Equalisa-	Memo item:	Partici- pating interests in domestic banks		Sight	Time	Redis-	Memo item:		Sight	Time	Savings	Bank	Memo item:	
tion claims 2	Fiduciary loans	and enterprises	Total	deposits 4	deposits 4	counted bills 5	Fiduciary loans	Total	de- posits	deposits 6	de- posits 7	savings bonds <sup>8</sup>	Fiduciary loans	Period
End of y	ear or mo	onth *		-				-	-					1
	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	5° 1 22		<b>I</b> 70.4	1 24.1	I		1 24	. 40.2	I. 110.4	1 53.0		17.0	1 17	2012
-	- 1.9	+ 2.4 + 2.0	- 29.0	+ 2.2	- 31.2	- 0.0	- 0.6	+ 40.2 + 69.7	+ 107.9	- 25.3	- 2.4	- 10.6	- 2.0	2013
	- 2.1 - 1.3 - 0.0 - 1.0 - 0.7	- 4.3 + 1.5 - 1.6 + 3.1 + 0.1	- 46.6 - 1.7 + 11.0 - 25.0 - 8.6	+ 3.3 + 0.3 - 18.4 - 3.1 + 1.6	- 50.0 - 2.0 + 29.4 - 21.9 - 10.2	$\begin{array}{rrrr} + & 0.0 \\ + & 0.0 \\ - & 0.0 \\ + & 0.0 \\ + & 0.0 \end{array}$	- 1.3 - 0.5 - 0.5 - 0.4 - 0.3	+ 106.5 + 104.7 + 103.1 + 117.7 + 122.5	+ 156.2 + 124.5 + 142.8 + 139.3 + 155.8	- 28.3 - 6.9 - 27.5 - 10.8 - 25.7	- 11.3 - 7.9 - 5.6 - 4.3 - 3.4	- 10.1 - 5.0 - 6.7 - 6.5 - 4.1	- 1.6 - 0.5 + 0.4 + 3.9 - 1.4	2015 2016 2017 2018 2019
-	+ 5.7 + 2.3	- 3.3 + 1.0	+ 313.4 + 105.2	+ 23.2 - 7.4	+ 290.2 + 112.6	- 0.0 + 0.0	+ 8.2 + 3.3	+ 221.6 + 95.3	+ 273.7 + 144.3	- 32.7 - 46.2	- 14.5 + 0.7	- 4.9 - 3.5	+ 1.9	2020 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 + 0.2 + 0.0	+ 0.1 + 0.1 + 0.7	+ 6.6 + 4.1 - 10.6	+ 3.5 - 0.8 - 6.4	+ 3.1 + 4.9 - 4.2	- 0.0 + 0.0	+ 0.1 + 0.2 + 0.1	+ 28.2 + 6.4 - 6.7	+ 33.9 + 10.0 - 5.4	- 5.0 - 2.9 - 0.3	- 0.6 - 0.5 - 0.8	- 0.2 - 0.2 - 0.2	- 0.1 - 0.2 - 0.2	July Aug. 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 + 0.3	- 0.0 - 0.1	+ 16.7 + 9.4	+ 3.0 + 2.2	+ 13.7 + 7.2	- 0.0	+ 0.2 + 0.3	+ 13.0 + 10.1	+ 9.5 + 18.8	+ 4.2 - 7.3	- 0.6 - 1.3	- 0.1 + 0.0	+ 0.0 - 0.2	Apr. 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.

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

€ billion Lending to foreign banks (MFIs) Lending to foreign non-banks (non-MFIs) Treasurv Cash in bills and Loans and bills hand Credit balances and loans, bills Negotiable negotiable money (nonmoney market euro area Medium Memo Medium market paper issued by banknotes and Securities item<sup>.</sup> and Securities paper Shortissued by Fiduciary and Shortlongissued by long issued by term Period coins) Total Total term term banks banks loans Total Total term non-banks non-banks End of year or month \* 2012 0.8 1,046.0 813.5 545.5 268.1 227.0 2.6 729.0 442.2 105.1 337.1 9.0 277.8 1.019.7 8.2 6.5 287.8 2013 0.2 782.4 546.6 235.8 7.2 230.1 2.5 701.0 404.9 100.3 304.6 0.2 618.7 7.9 1.1 94.4 2014 1,125.2 884.8 266.1 232.5 735.1 415.2 320.8 313.5 0.3 1,066.9 830.7 555.9 274.7 424.3 340.5 7.5 319.7 2015 1.2 235.0 1.0 751.5 83.8 2016 0.3 1.055.9 820.6 5198 300.7 05 234 9 1.0 756.2 451.6 90.1 361.4 5.0 299.6 277.5 225.0 2017 0.3 963.8 738.2 441.0 297.2 0.7 2.3 723.9 442.2 93.3 348.9 4.2 4.3 7.7 2018 0.2 1,014.1 771.9 503.8 268.1 1.0 241.3 3.0 762.0 489.6 99.9 389.7 268. 02 2019 1 064 2 814 0 5327 2813 18 248 5 37 795 3 513 1 1110 402 1 274 5 2020 0.2 1 024 3 784 8 532 1 252.8 26 236.8 4.0 822.8 523.0 125 4 397 5 288 5 11.3 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 14.0 294.3 548.2 Feb 0.6 1,146.4 9127 659.6 253 1 22 231.5 3.8 853.6 150.4 397 7 14.7 290.7 1,140.4 2.3 230.1 864.8 559.3 293.5 Mar 0.2 908.0 646.7 261.3 3.8 153.3 406.1 11.9 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 3.9 846.1 550.1 147.3 402.8 11.9 284.2 226.8 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 June 0.4 1,139.3 910.4 651.3 259.1 227.0 3.8 867.2 565.0 289.2 Julv 1.9 158.4 406.6 13.1 0.4 1.125.9 899.8 647.9 251.8 1.6 224.5 3.7 867.4 566.7 158.7 407.9 285.5 Aug 15.3 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 0.3 1.166.7 940.5 268.2 3.5 878.0 579.6 415.5 280.6 Oct. 672.2 0.9 225.3 164.1 17.7 Nov. 0.3 674.7 223.7 3.4 164.4 1,164.8 940.3 265.6 0.8 888.2 585.6 421.2 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 0.5 1.222.3 998.7 734.3 264.4 1.6 222.0 3.6 3.6 923.5 615.2 191.4 423.7 298.9 9.4 1,224.2 999.2 729.8 269.4 1.0 224.1 906.5 597.4 171.8 425.6 10.3 298.9 Mar 612.0 0.6 1.229.5 1.003.6 734.1 269.6 1.6 1.7 224.3 3.6 914.4 180.9 431.1 13.1 289.2 Apr. May 0.6 1,222.8 996.5 730.7 265.8 224.7 3.6 914.3 609.9 182.1 427.9 13.5 290.9 Changes \* 2.4 5.3 2013 0.5 22.7 26.9 1.3 25.6 1.8 ++ - 0.0 21.2 33.1 5.8 - 27.2 0.7 + 12.6 + 17.7 \_ 0.0 + 86.1 + 80.1 63.2 16.8 0.7 - 0.6 5.7 - 10.2 - 12.8 2.7 \_ 1.8 2014 + + + + 2015 0.1 91.8 82.2 3.8 0.8 0.1 6.1 9.2 6.5 2.0 86.0 6.7 27 1.1 + + \_ + + \_ - 0.0 2016 + 0.0 25.5 \_ 14.5 \_ 38.2 + 23.7 \_ 0.7 10.3 + 17.4 + 28.9 + 10.1 + 18.8 3.0 8.5 \_ \_ \_ 57.2 \_ \_ + 0.6 + 0.7 8.6 3.2 2017 + 0.0 48.7 61.5 + 12.8+ 0.0 8.5 4.7 + 13.0+ + 4.4 + -0.7 18.4 0.0 49.6 57 23.7 0.2 15.3 28.3 9.7 2018 + + 34.0 + + 18.3 + 25.2 0.4 + + + + 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 + 0.3 2020 0.0 \_ \_ 6.6 15.8 0.9 \_ 10.5 9.0 16.1 \_ 32.0 22.4 \_ \_ 34.4 14.7 + 5.7 + 3.6 \_ 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 + -03 + -11.1 147 140 + 07 \_ 04 \_ 3.2 - 01 6.3 90 + 75 + 15 07 \_ 35 + + + + . 11.7 \_ 1.7 4.9 0.7 0.3 10.1 15.8 5.6 + 0.1 + 0.03.9 + + 4.1 \_ 2.8 + 1.8 Mar + + + \_ 0.0 0.6 07 \_ 0.0 Apr 377 407 36.8 39 0 1 \_ 29 + 0.140 + -1 1 \_ 56 + + + + \_ -\_ \_ + 0.0 14.9 14.6 11.5 3.1 0.1 0.3 + 0.0 7.7 4.2 4.4 + 0.9 2.6 May 0.2 June + 0.2 \_ 41 \_ 3.7 \_ 6.3 + 26 + 0.1 0.5 - 0.0 + 49 \_ 1.8 \_ 1.7 \_ 0.2 \_ 15 + 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 0.3 1.2 \_ 0.0 \_ 139 \_ 112 3.6 \_ 76 \_ 0.2 \_ 2.5 - 01 0 1 14 + + 1 1 + 22 \_ 38 -+ + + \_ \_ \_ 17.0 \_ 2.9 \_ + 1.7 \_ + 5.6 Sep 0.1 18.7 19.8 0.6 0.1 + 10.0 4.6 3.4 0.2 + + 0.0 0.1 \_ - 0.1 9.9 7.6 Oct. 54.3 55.5 38.3 17.3 1.1 1.5 + 2.6 \_ + + + + + + 2.3 + 11.0 + 4.0 \_ \_ \_ 5.4 Nov 0.0 5.7 0.2 0.1 1.8 0.1 + 0.7 3.4 7.1 3.9 1.8 + + 1.1 \_ \_ \_ \_ - 14.0 Dec 0.0 65.7 64.3 \_ 60.9 \_ 3.5 0.5 0.9 + 0.0 \_ 178 12.7 1.4 \_ 6.3 + 2.5 + 0.1 + 34.8 2022 Jan 0.1 95.8 96.6 97.4 0.8 0.8 1.7 37.7 36.2 23 0.7 + \_ \_ + 1.4 + + + + + 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 + 0.0 0.0 1.5 5.8 4.3 0.6 2.1 + 0.0 18.3 18.9 - 20.1 + 0.8 0.2 Mar + + + 1.2 0.1 9.7 5.6 0.1 + 0.0 10.2 0.6 1.7 6.8 6.8 0.0 2.8 11.3 Apr. + 4.6 + H 0.4 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 2.3

 ${}^{\star}$  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

			Deposits of	foreign bank	s (MFIs)				Deposits of	foreign non-	banks (non-N	/IFIs)			
		Partici- pating interests			Time depos savings bon	its (including ds)	bank				Time depos savings dep savings bon	its (including osits and bar ids)	ık		
	Memo item: Fiduciary loans	in foreign banks and enter- prises	Total	Sight	Total	Short-	Medium and long- term	Memo item: Fiduciary loans	Total	Sight	Total	Short-	Medium and long- term	Memo item: Fiduciary loans	Period
ľ	End of y	ear or mo	nth *	acposits	Total			loans	Total	acposits	Total			louis	1 child
	32.6 30.8 14.0	46.4 39.0 35.6	691.1 515.7 609.2	289.4 222.6 277.1	401.7 293.2 332.1	284.6 196.0 242.7	117.0 97.2 89.4	0.1 0.1 0.1	237.6 257.8 221.0	107.2 118.1 113.0	130.3 139.7 107.9	69.1 76.8 47.8	61.2 62.9 60.1	1.2 1.0 0.7	2012 2013 2014
	13.1 13.1 12.1 11.8 11.5	30.5 28.7 24.3 22.1 21.3	611.9 696.1 659.0 643.1 680.6	323.4 374.4 389.6 370.6 339.3	288.5 321.6 269.4 272.5 341.2	203.8 234.2 182.4 185.6 243.2	84.7 87.5 87.0 86.8 98.0	0.1 0.0 0.0 -	201.1 206.2 241.2 231.5 229.8	102.6 100.3 109.4 110.2 112.3	98.5 105.9 131.8 121.3 117.4	49.3 55.2 68.1 63.7 60.5	49.2 50.8 63.8 57.6 57.0	0.7 0.7 0.3 0.1 0.1	2015 2016 2017 2018 2019
	11.3 11.1	17.2 16.6	761.2 914.6	428.8 456.0	332.5 458.6	205.1 301.5	127.3 157.2	_ 0.0	258.5 288.2	133.3 141.9	125.2 146.2	65.6 68.7	59.7 77.6	0.1 0.1	2020 2021
l	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 11.3 11.3	16.5 16.5 16.6	954.9 987.8 991.5	507.8 520.0 520.2	447.0 467.7 471.3	298.5 318.0 319.5	148.5 149.7 151.8		279.8 283.4 288.9	145.0 145.2 147.8	134.8 138.3 141.1	69.4 71.5 73.7	65.3 66.8 67.4	0.1 0.1 0.1	2021 Jan. Feb. Mar.
	11.3 11.3 11.3	16.5 16.5 16.5	1,008.7 1,013.1 1,016.2	522.1 513.9 539.5	486.6 499.2 476.7	343.1 360.2 335.5	143.5 139.0 141.3		295.8 304.0 290.8	150.7 148.4 148.4	145.0 155.6 142.5	81.0 88.0 79.9	64.1 67.6 62.6	0.1 0.1 0.1	Apr. May June
	11.2 11.2 11.2	16.0 16.3 16.3	981.6 969.4 1,003.9	525.0 513.0 528.2	456.6 456.4 475.8	304.9 293.0 315.7	151.7 163.5 160.1	_ 0.0 _	292.2 298.4 306.0	151.7 158.9 164.0	140.5 139.6 142.0	79.3 78.8 81.5	61.2 60.8 60.4	0.1 0.1 0.1	July Aug. Sep.
	11.2 11.3 11.1	16.3 16.4 16.6	1,031.2 1,068.2 914.6	550.5 565.4 456.0	480.7 502.8 458.6	320.4 335.0 301.5	160.3 167.9 157.2	0.0 0.0 0.0	320.9 315.5 288.2	169.8 171.3 141.9	151.1 144.2 146.2	83.3 75.5 68.7	67.8 68.7 77.6	0.1 0.1 0.1	Oct. Nov. Dec.
	11.1 11.1 11.1	16.1 16.0 15.7	1,098.5 1,130.4 1,113.8	635.9 640.4 632.7	462.7 490.0 481.1	321.8 349.8 349.8	140.8 140.2 131.3	0.0 0.0 0.0	339.9 361.2 361.6	177.2 194.5 200.0	162.7 166.7 161.6	82.1 87.0 82.0	80.5 79.7 79.6	0.1 0.1 0.1	2022 Jan. Feb. Mar.
	11.1 11.1	15.7 15.7	1,113.7 1,127.5	600.6 640.4	513.2 487.1	381.7 351.4	131.4 135.7	0.0 0.0	384.6 382.0	201.5 217.1	183.2 164.9	102.6 85.0	80.6 79.9	0.1 0.2	Apr. May
	Changes	5 *													
	- 1.8 + 0.1	- 7.2 - 3.8	- 174.0 + 76.3	- 75.6 + 47.8	- 98.4 + 28.5	- 83.1 + 39.0	- 15.4 - 10.5	- 0.0 - 0.0	+ 13.5 - 43.6	+ 9.6 - 8.3	+ 3.9 - 35.3	+ 6.9 - 30.7	- 3.0 - 4.6	- 0.2 + 0.2	2013 2014
	- 0.6 - 0.1 - 1.0 - 0.2 - 0.3	- 6.1 - 1.5 - 4.1 - 2.2 - 0.9	- 15.4 + 82.7 - 15.5 - 23.9 - 9.5	+ 40.6 + 51.0 + 25.2 - 23.4 - 49.4	- 56.0 + 31.7 - 40.8 - 0.4 + 39.8	- 48.6 + 27.0 - 43.2 + 2.1 + 28.0	- 7.4 + 4.7 + 2.4 - 2.6 + 11.8	$\begin{array}{rrrr} - & 0.0 \\ - & 0.0 \\ \pm & 0.0 \\ - & 0.0 \\ - & 0.0 \end{array}$	- 26.5 + 3.5 + 31.8 - 11.9 - 0.8	- 13.9 - 3.1 + 11.0 - 0.2 + 2.1	- 12.6 + 6.7 + 20.8 - 11.8 - 2.9	+ 0.3 + 5.9 + 15.6 - 5.7 - 1.8	- 13.0 + 0.8 + 5.2 - 6.0 - 1.1	- 0.0 - 0.0 - 0.4 - 0.2 - 0.0	2015 2016 2017 2018 2019
	- 0.2 - 0.2	- 3.9 - 0.8	+ 83.8 + 136.6	+ 87.8 + 19.8	- 4.1 + 116.8	- 34.7 + 89.2	+ 30.6 + 27.6	- + 0.0	+ 23.6 + 22.7	+ 13.8 + 6.4	+ 9.8 + 16.3	+ 7.1 + 0.0	+ 2.8 + 16.3	+ 0.0 - 0.0	2020 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 - 0.0 + 0.1	- 0.8 - 0.0 - 0.0	+ 191.3 + 32.7 - 1.8	+ 78.5 + 12.2 - 2.6	+ 112.9 + 20.5 + 0.8	+ 92.4 + 19.3 - 1.1	+ 20.5 + 1.2 + 1.9		+ 20.1 + 3.4 + 3.2	+ 12.3 + 0.0 + 1.6	+ 7.8 + 3.4 + 1.6	+ 3.6 + 2.0 + 1.3	+ 4.2 + 1.4 + 0.3	- 0.0 - 0.0 + 0.0	2021 Jan. Feb. Mar.
	- 0.0 + 0.0 - 0.1	+ 0.0 + 0.0 - 0.0	+ 23.2 + 4.9 - 1.9	+ 4.3 - 7.4 + 23.7	+ 19.0 + 12.2 - 25.6	+ 26.8 + 16.6 - 27.4	- 7.8 - 4.4 + 1.8		+ 7.9 + 8.6 - 14.8	+ 3.7 - 2.2 - 0.6	+ 4.2 + 10.8 - 14.2	+ 7.3 + 7.2 - 9.0	- 3.0 + 3.5 - 5.2	+ 0.0 - 0.0 - 0.0	Apr. May June
	- 0.1 + 0.0 - 0.0	- 0.5 + 0.2 + 0.0	- 34.8 - 12.8 + 30.5	- 14.6 - 12.3 + 12.9	- 20.2 - 0.5 + 17.6	- 30.6 - 12.2 + 21.4	+ 10.4 + 11.7 - 3.9	+ 0.0 - 0.0	+ 1.3 + 5.7 + 6.7	+ 2.9 + 6.7 + 4.9	- 1.6 - 1.1 + 1.7	- 0.3 - 0.6 + 2.3	- 1.3 - 0.5 - 0.6	+ 0.0 - 0.0 + 0.0	July Aug. Sep.
	+ 0.0 + 0.0 - 0.1	+ 0.1 + 0.1 + 0.2	+ 27.9 + 32.3 - 155.0	+ 22.7 + 12.5 -110.1	+ 5.2 + 19.9 - 44.9	+ 5.1 + 13.0 - 34.0	+ 0.2 + 6.9 - 10.9	+ 0.0 - -	+ 14.7 - 6.3 - 27.7	+ 5.8 + 0.8 - 29.6	+ 9.0 - 7.1 + 1.9	+ 1.6 - 8.4 - 7.0	+ 7.4 + 1.3 + 8.9	- 0.0 - 0.0 + 0.0	Oct. Nov. Dec.
	- 0.0 + 0.0 - 0.1	- 0.6 - 0.0 - 0.3	+ 180.8 + 33.4 - 18.3	+178.4 + 5.7 - 8.5	+ 2.4 + 27.8 - 9.8	+ 19.3 + 28.3 - 0.7	- 16.9 - 0.5 - 9.1		+ 50.8 + 21.2 - 0.1	+ 34.9 + 17.0 + 5.3	+ 16.0 + 4.2 - 5.4	+ 13.1 + 5.0 - 5.3	+ 2.9 - 0.8 - 0.1	- - - 0.0	2022 Jan. Feb. Mar.
	+ 0.0 - 0.0	- 0.1 + 0.0	- 13.2 + 18.7	- 39.6 + 42.5	+ 26.4 - 23.8	+ 27.6 - 28.6	- 1.1 + 4.8	-	+ 19.2 - 1.1	- 0.6 + 16.4	+ 19.8 - 17.5	+ 19.1 - 16.9	+ 0.6 - 0.5	+ 0.1	Apr. May

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

€ billion

	Lending to dor	nestic	:	Short-1	erm lenc	ling												Medi	um- and lo	ong-tei	m
	non-banks, tot	al				to ente	erprises a	nd hous	seholds			to gene	eral gove	rnment						to en	ter-
Period	including negotiable money market paper, securitie equalisation	ex ne mo es, pa eq	cluding gotiable oney market per, securities, palisation					Loans		Negotiab money market	le	to gene	i di gore			Treasury	y				
	claims	cla	aims	Total		Total		bills		paper		Total		Loans		bills		Total		Total	
																	E	nd o	of year	or m	onth *
2012 2013 2014	3,220.4 3,131.6 3,167.3	4 5 3	2,786.1 2,693.2 2,712.6		376.1 269.1 257.5		316.8 217.7 212.7		316.3 217.0 212.1		0.5 0.6 0.6		59.3 51.4 44.8		57.6 50.8 44.7		1.7 0.6 0.1		2,844.3 2,862.6 2,909.8		2,310.9 2,328.6 2,376.8
2015 2016 2017 2018 2019	3,233.9 3,274.3 3,332.6 3,394.9 3,521.9	555	2,764.4 2,824.2 2,894.4 2,990.4 3,119.5		255.5 248.6 241.7 249.5 260.4		207.8 205.7 210.9 228.0 238.8		207.6 205.4 210.6 227.6 238.4		0.2 0.3 0.3 0.4 0.4		47.8 42.9 30.7 21.5 21.6		47.5 42.8 30.3 21.7 18.7		0.2 0.1 0.4 - 0.2 2.9		2,978.3 3,025.8 3,090.9 3,145.0 3,261.1		2,451.4 2,530.0 2,640.0 2,732.8 2,866.9
2020 2021	3,647.0 3,798.1	1	3,245.3 3,392.7		243.3 249.7		221.6 232.2		221.2 231.9		0.4 0.3		21.6 17.5		18.0 15.2		3.6 2.3		3,403.8 3,548.4		3,013.0 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. Feb. Mar.	3,654.0 3,669.3 3,699.1	D 3 1	3,251.0 3,261.9 3,287.7		247.7 249.5 261.3		221.9 224.2 236.6		221.3 223.6 236.0		0.6 0.6 0.6		25.8 25.3 24.7		19.7 18.5 18.6		6.1 6.8 6.1		3,406.3 3,419.7 3,437.8		3,018.4 3,031.9 3,048.6
Apr. May June	3,693.9 3,709.0 3,709.2	9 5 2	3,287.7 3,300.4 3,305.8		248.6 248.7 250.7		223.5 225.4 225.8		222.8 224.6 225.0		0.7 0.8 0.8		25.1 23.3 24.9		20.2 19.5 19.9		4.9 3.8 5.1		3,445.2 3,460.9 3,458.5		3,061.5 3,075.1 3,082.5
July Aug. Sep.	3,725.3 3,736.4 3,749.8	3 4 3	3,323.0 3,332.9 3,342.1		248.2 245.0 247.8		221.0 221.1 224.5		220.2 220.4 223.8		0.8 0.7 0.7		27.2 23.9 23.4		21.9 18.9 19.6		5.3 4.9 3.7		3,477.1 3,491.5 3,501.9		3,102.5 3,116.8 3,123.2
Oct. Nov. Dec.	3,770.2 3,794.0 3,798.7	2 ) 1	3,367.1 3,386.5 3,392.7		256.5 255.6 249.7		232.5 232.9 232.2		231.9 232.3 231.9		0.6 0.6 0.3		24.0 22.7 17.5		19.5 17.7 15.2		4.4 5.0 2.3		3,513.7 3,538.4 3,548.4		3,142.9 3,164.9 3,174.6
2022 Jan. Feb. Mar.	3,812.8 3,826.9 3,853.8	3 5 8	3,409.2 3,426.2 3,449.2		262.6 267.4 273.6		242.3 246.9 254.8		241.7 246.1 254.0		0.6 0.8 0.8		20.3 20.5 18.9		17.8 16.3 16.3		2.5 4.2 2.5		3,550.2 3,559.1 3,580.1		3,180.4 3,195.3 3,209.5
Apr. May	3,866.6 3,886.7	5	3,470.2 3,489.1		277.5 280.1		257.9 262.5		257.0 261.5		0.9 1.0		19.6 17.6		17.1 15.4		2.5 2.2		3,589.1 3,606.6		3,226.2 3,242.6
																				Cha	nges *
2013 2014	+ 4.4 + 36.7	4 7	+ 0.1 + 20.5	=	13.8 11.6	-	5.8 4.5	=	6.3 4.5	+ -	0.5 0.0	-	8.0 7.1	_	7.0 6.5	-	1.1 0.6	++++	18.2 48.3	+ +	17.6 52.5
2015 2016 2017 2018 2019	+ 68.9 + 43.7 + 57.0 + 71.9 + 126.7	9 7 5 7	+ 54.1 + 62.7 + 70.2 + 105.3 + 129.1	+ - + +	1.6 5.2 6.5 6.6 11.7	- + +	1.3 0.3 5.6 15.8 11.6	- + +	0.9 0.4 5.6 15.7 11.6	- + + +	0.4 0.1 0.0 0.1 0.0	+ - - +	2.9 4.9 12.1 9.2 0.1	+ - - -	2.8 4.8 12.4 8.6 3.0	+ - + -	0.1 0.2 0.3 0.6 3.1	+ + + +	67.2 48.9 63.5 65.0 115.0	+ + + +	73.9 79.8 103.4 102.0 132.8
2020 2021	+ 123.2 + 152.2	2	+ 123.6 + 147.8	- +	19.6 8.8	-+	19.8 13.8	-+	19.8 13.8		0.0 0.1	+ -	0.2 4.9	-	0.5 2.8	+ -	0.7 2.1	+ +	142.8 143.4	+ +	145.6 157.9
2020 Dec.	- 14.1	1	- 2.3	-	15.5	-	7.7	-	7.5	-	0.2	-	7.8	-	4.4	-	3.4	+	1.4	+	11.2
2021 Jan. Feb. Mar.	+ 6.0 + 15.3 + 29.7	5 3 7	+ 5.3 + 10.9 + 25.6	+ + +	4.4 1.8 11.2	+ + +	0.3 2.3 12.5	+ + +	0.1 2.3 12.5	+ + -	0.2 0.0 0.0	+ - -	4.2 0.5 1.3	+ - +	1.7 1.2 0.0	+ + -	2.5 0.7 1.4	+ + +	2.1 13.5 18.5	+ + +	5.2 13.3 16.3
Apr. May June	- 5.2 + 15.0 - 0.4	2 5 4	- 0.0 + 12.5 + 5.5	- + +	12.8 0.1 2.0	- + +	13.1 1.8 0.3	- + +	13.2 1.7 0.4	+ + -	0.1 0.1 0.1	+ - +	0.3 1.8 1.7	+ - +	1.6 0.6 0.4	- - +	1.2 1.2 1.3	+ + -	7.5 15.5 2.4	+ + +	13.0 13.4 7.3
July Aug. Sep.	+ 16. <sup>2</sup> + 10.9 + 13.9	1	+ 17.2 + 9.7 + 9.3	- - +	2.0 3.2 3.3	- + +	4.2 0.1 3.7	- + +	4.3 0.2 3.8	+ - -	0.0 0.1 0.0	+ - -	2.3 3.3 0.5	+ - +	2.0 2.9 0.7	+ - -	0.3 0.4 1.2	+ + +	18.1 14.1 10.2	+ + +	19.5 14.2 6.2
Oct. Nov. Dec.	+ 20.5 + 25.5 + 4.5	5	+ 25.1 + 20.5 + 6.3	+ + -	8.7 1.2 5.8	+ + -	8.1 2.4 0.6	+ + -	8.2 2.4 0.3	- + -	0.1 0.0 0.3	+ - -	0.5 1.2 5.2	- - -	0.2 1.8 2.5	+ + -	0.7 0.6 2.7	+ + +	11.8 24.4 10.1	+ + +	19.8 19.9 9.8
2022 Jan. Feb. Mar.	+ 14.7 + 15.7 + 27.3	7 1 3	+ 16.5 + 18.4 + 23.0	+ + +	12.9 6.2 6.2	+ + +	10.1 6.0 7.9	+ + +	9.8 5.8 7.9	+ + -	0.3 0.2 0.0	+ + -	2.8 0.2 1.6	+ - +	2.6 1.5 0.1	+ + -	0.2 1.7 1.7	+ + +	1.8 9.0 21.0	+ + +	5.8 14.9 14.2
Apr. May	+ 13. + 20.	1	+ 21.4 + 18.8	++	3.9 2.6	+++	3.1 4.6	+++	3.0 4.5	+++	0.1 0.0	+ _	0.7 2.0	+ -	0.7 1.7	+ -	0.0 0.3	++++	9.3 17.5	+++	17.0 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.

lending	9																							
prises a	and hou	iseholds								to ge	neral gov	vernme	nt											
Loans			_									Loans												
Total		Medium- term		Long- term		Securi	ties	Memo item: Fiducia loans	ary	Total		Total		Mediu term	m-	Long- term		Secur- ities 1		Equal- isation claims 2		Memo item: Fiducia loans	iry	Period
End	of yea	ar or m	ontl	า *																				1
2, 2, 2,	,119.5 ,136.9 ,172.7	24 24 25	49.7 48.0 51.7		1,869.8 1,888.9 1,921.0		191.4 191.7 204.2		31.4 28.9 24.4		533.4 534.0 532.9		292.7 288.4 283.1		39.4 38.8 33.5		253.3 249.7 249.6		240.7 245.6 249.8				3.5 2.7 2.1	2012 2013 2014
2, 2, 2, 2, 2, 2,	,232.4 ,306.5 ,399.5 ,499.4 ,626.4	25 26 27 28 30	56.0 54.1 73.5 32.6 01.3		1,976.3 2,042.4 2,125.9 2,216.8 2,325.1		219.0 223.4 240.6 233.4 240.5		18.3 17.3 17.4 16.5 15.7		527.0 495.8 450.9 412.1 394.2		277.0 269.4 254.0 241.7 235.9		27.9 23.9 22.5 19.7 17.2		249.0 245.5 231.5 222.0 218.8		250.0 226.4 196.9 170.4 158.2		- - - -		2.1 1.8 1.7 1.4 1.5	2015 2016 2017 2018 2019
2	,771.8 ,915.7	31 31	10.5 14.5	4	2,461.4 2,601.2		241.1 258.9		22.4 24.7		390.8 373.8		234.3 229.9		15.7 14.3		218.6 215.6		156.6 143.9		_		1.1 1.0	2020 2021
2	,771.8	31	10.5	2	2,461.4		241.1		22.4		390.8		234.3		15.7		218.6		156.6		-		1.1	2020 Dec.
2, 2, 2,	,776.4 ,787.7 ,802.4	30 30 31	07.8 09.7 14.5	4	2,468.6 2,478.1 2,487.9		242.0 244.2 246.1		22.5 22.8 23.1		387.9 387.8 389.3		233.6 232.0 230.7		15.3 15.4 15.2		218.3 216.6 215.5		154.3 155.8 158.6		-		1.2 1.1 1.1	2021 Jan. Feb. Mar.
2, 2, 2,	,813.9 ,825.1 ,831.8	31 31 31	13.6 11.7 10.0		2,500.3 2,513.5 2,521.8		247.6 249.9 250.7		23.4 23.6 23.9		383.7 385.9 376.0		230.8 231.1 229.2		15.0 14.9 14.7		215.8 216.2 214.5		153.0 154.8 146.8				1.1 1.1 1.1	Apr. May June
2, 2, 2,	,851.4 ,864.5 ,870.0	31 31 31	10.7 11.5 10.1		2,540.8 2,553.1 2,559.9		251.0 252.2 253.2		24.0 24.2 24.2		374.6 374.7 378.7		229.5 229.1 228.7		14.9 14.7 14.3		214.6 214.4 214.4		145.1 145.6 150.1				1.1 1.1 1.0	July Aug. Sep.
2, 2, 2,	,885.5 ,906.5 ,915.7	31 31 31	13.5 15.6 14.5		2,572.0 2,590.9 2,601.2		257.4 258.4 258.9		24.1 24.2 24.7		370.9 373.5 373.8		230.2 230.0 229.9		14.6 14.5 14.3		215.6 215.6 215.6		140.7 143.5 143.9				1.0 1.0 1.0	Oct. Nov. Dec.
2, 2, 2,	,920.6 ,935.4 ,950.1	31 31 31	12.8 13.8 16.1		2,607.8 2,621.6 2,633.9		259.8 259.9 259.4		24.7 24.6 24.7		369.8 363.8 370.7		229.1 228.5 228.8		13.9 13.9 13.7		215.2 214.5 215.1		140.7 135.4 141.8				1.0 1.1 1.1	2022 Jan. Feb. Mar.
2	,966.8 ,983.1	31 31	17.3 19.8	4	2,649.5 2,663.4		259.4 259.5		24.9 25.1		362.9 364.0		229.5 229.1		13.7 13.7		215.8 215.4		133.5 134.9		-		1.0 1.0	Apr. May
Char	nges *																							
++++	17.7 39.9	- +	0.1 5.6	+ +	17.8 34.3	-+	0.1 12.5	=	2.5 1.8	+ -	0.6 4.1	-	4.3 8.5	=	0.7 5.1	=	3.6 3.4	++++	4.9 4.3		_	=	0.8 0.2	2013 2014
+++++++++++++++++++++++++++++++++++++++	59.0 75.1 87.6 108.7 126.0	+ + + + 1 + 1	4.5 9.7 9.4 19.3 18.9	+ + + +	54.6 65.4 78.2 89.4 107.2	+ + + - +	14.8 4.7 15.8 6.7 6.8	- - + -	2.1 0.9 0.1 0.9 0.8	- - - -	6.6 30.9 39.9 37.1 17.8	- - - -	6.9 7.3 10.6 10.5 5.5	- - - -	4.8 4.0 1.3 2.7 2.6	- - - -	2.0 3.3 9.3 7.8 2.9	+ - - -	0.2 23.6 29.4 26.6 12.3		- - - -	+ - - +	0.0 0.4 0.1 0.0 0.1	2015 2016 2017 2018 2019
++++	145.0 140.1	+	9.4 5.6	+ +	135.5 134.5	+	0.6 17.8	+	6.1 2.3	-	2.8 14.6	-	1.1 3.3	-	1.5 1.3	+	0.4 2.0	-	1.7 11.3		-	-	0.4 0.0	2020
+	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 11.1 14.4	- + +	2.7 1.8 4.7	+ + +	7.1 9.3 9.7	+ + +	0.9 2.1 1.9	+++++++++++++++++++++++++++++++++++++++	0.1 0.3 0.3	- + +	3.1 0.2 2.1		0.8 1.3 1.4	- + -	0.4 0.1 0.2		0.5 1.4 1.2	- + +	2.3 1.5 3.5		-	+ - -	0.1 0.0 0.0	2021 Jan. Feb. Mar.
+++++++	11.5 11.0 6.5	- - -	0.9 1.9 1.7	+ + +	12.4 13.0 8.2	+ + +	1.5 2.3 0.8	+++++++++++++++++++++++++++++++++++++++	0.2 0.2 0.3	- + -	5.5 2.1 9.7	+++	0.1 0.3 1.8		0.2 0.1 0.2	+++	0.3 0.4 1.5	- + -	5.6 1.8 7.9			- + -	0.0 0.0 0.0	Apr. May June
++++++	19.2 13.0 5.2	+ + -	0.2 0.8 1.4	+ + +	19.0 12.3 6.6	+ + +	0.3 1.2 1.0	+++	0.1 0.2 0.0	- - +	1.4 0.1 4.0	+	0.3 0.6 0.4	+ - -	0.2 0.1 0.5	+ - +	0.1 0.4 0.0	- + +	1.7 0.5 4.4		-	- - +	0.0 0.0 0.0	July Aug. Sep.
+++++++	15.6 18.9 9.3	+ + -	3.5 4.4 1.1	+ + +	12.1 14.5 10.4	+ + +	4.1 1.0 0.5	- + +	0.1 0.1 0.5	- + +	7.9 4.4 0.2	++	1.4 0.9 0.1	+ - -	0.3 0.1 0.1	+++++++	1.1 1.0 0.0	- + +	9.4 3.5 0.4			- - +	0.0 0.0 0.0	Oct. Nov. Dec.
+++++++	4.9 14.8 14.7	- + +	1.7 1.0 2.3	+ + +	6.6 13.8 12.4	+ + -	0.8 0.1 0.5	- + +	0.0 0.0 0.1	- - +	4.0 6.0 6.8	- - +	0.8 0.7 0.4		0.4 0.0 0.2	- - +	0.4 0.6 0.6	- - +	3.2 5.3 6.5		-		0.0 0.0 0.0	2022 Jan. Feb. Mar.
+++	17.0 16.4	+++	1.5 2.5	+ +	15.6 13.9	-+	0.0 0.1	+++	0.2 0.3	-+	7.7 1.1	+ -	0.6 0.4	+ -	0.0 0.0	+ -	0.6 0.3	-+	8.4 1.4		_	-	0.0 0.0	Apr. May

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

€ billion

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

 $\star$  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

																						Lendi	ng to			
Servio	es secto	or (incluc	dina th	ne profe	essions	;)		Mem	o items:			Lendi	ing to e	mploy	ees and	other Other	lendind	ials n			_	non-p	profit in	stitutio	ns	
		of whicl	h:		23510112	,										o uner		of wł	nich:							
Total		Housing	j	Holding	g nies	Other real estate activit	Lies	Lend to se empl perso	ing lf- oyed ons <b>2</b>	Lendir to cra enterp	ng ft prises	Total		Hous	sing	Total		Instal	ment .3	Debit balance on wag salary and pensior accoun	es ge, n	Total		of wh Housi loans	ich: ng	Period
End	of ye	ear or	qua	rter *																			Lenc	ling,	total	
	843.7	2	86.6		53.8		204.1		464.0		47.9	1	,353.4	I	1,118.3		235.2		177.4		6.7		16.2		4.0	2020
	863.3 872.0 881.4 890.8	2' 2' 3' 3'	93.7 96.9 04.0 08.6		59.2 58.2 57.5 63.8		204.3 208.6 210.5 207.9		467.7 473.6 478.3 483.8		48.3 48.7 48.9 48.3	1 1 1	,364.8 ,386.3 ,410.5 ,429.3		1,132.6 1,154.0 1,176.6 1,196.6		232.2 232.4 233.9 232.7		175.4 174.8 176.4 184.1		6.6 6.6 7.0 6.9		16.4 16.2 16.3 16.7		4.1 4.1 4.3 4.4	2021 Mar. June Sep. Dec.
	906.2	3	15.6		66.2		209.8		489.1		49.1	1	,444.9	I	1,211.4		233.5		184.4		7.1		16.8 Short	l -term le	4.4 endina	2022 Mar.
	61.9		15.7		9.6		10.5		20.9		3.7		28.6	I	3.4		25.2		1.3		6.7		0.6		0.0	2020
	67.9 67.1 63.3 65.5		16.5 16.0 16.9 14.5		12.3 11.5 10.3 13.0		10.2 10.4 9.8 10.0		20.5 21.0 20.5 19.7		3.9 4.1 4.3 3.8		27.9 28.6 29.6 28.6		3.4 3.4 3.4 2.5		24.6 25.2 26.2 26.1		1.3 1.4 1.5 1.4		6.6 6.6 7.0 6.9		0.7 0.5 0.5 0.5		0.0 0.0 0.0 0.0	2021 Mar. June Sep. Dec.
	69.2	I	15.3		14.0		10.5		20.3		4.4		29.2	1	2.5		26.7		1.6		7.1	N	0.7 Iedium	l -term le	0.0 ndina	2022 Mar.
	89.6		20.4		11.8		24.5		32.0		3.5		79.6	I	20.0		59.6		56.1		-		0.5		0.0	2020
	94.9 95.7 96.7 97.0		21.9 22.2 23.2 23.1		14.4 14.4 13.8 15.2		25.2 26.4 27.4 27.1		31.5 31.3 31.1 30.0		3.6 3.4 3.4 3.3		77.6 76.7 76.3 74.4		19.8 19.8 20.0 19.8		57.8 56.9 56.3 54.6		54.2 53.1 52.4 50.6		- - -		0.5 0.5 0.6 0.6		0.0 0.0 0.1 0.1	2021 Mar. June Sep. 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.
	692.3	2	50 5 1		32 /		169 1	1	/11 1		40.7	1	245 3		1 09/ 9		150 /	I	120.0		_1		Long	-term le I	ending	2020
	700.5 709.2 721.3 728.4	2 2 2 2 2	55.3 58.7 63.9 71.1		32.5 32.3 33.3 35.6		168.9 171.8 173.3 170.8		415.7 421.3 426.7 434.1		40.8 41.1 41.2 41.3	1 1 1 1	,259.3 ,259.3 ,281.1 ,304.7 ,326.3		1,109.5 1,130.8 1,153.3 1,174.3		149.8 150.3 151.4 152.0		119.9 120.3 122.6 132.1		- - -		15.2 15.2 15.3 15.6		4.1 4.1 4.2 4.3	2021 Mar. June Sep. Dec.
	740.2		//.5		36.81		172.11		438.8		41.4	1	,342.3	I	1,189.2		153.1		133.21		-1		15.6	1 14	4.4	2022 Mar.
Cna	nge c	uring	qua	rter																			Lenc	ling, '	total	
+ + + + +	19.6 8.7 9.4 18.8 14.9	+ + + + +	7.0 3.2 6.5 7.3 6.7	+ - + +	5.4 0.9 0.8 4.2 2.4	+ + + +	0.3 4.3 1.7 2.8 1.7	+ + + +	3.2 5.8 4.2 5.2 5.0	+ + + - +	0.4 0.4 0.2 0.6 0.7	+++++++++++++++++++++++++++++++++++++++	11.6 21.3 24.3 18.8 15.8	+++++++++++++++++++++++++++++++++++++++	14.6 21.1 22.7 19.6 14.9	- + + -	2.9 0.2 1.6 0.7 0.9	- + - +	2.0 0.4 1.1 0.1 0.5	- + -	0.0 0.1 0.5 0.2 0.2	+ - + +	0.2 0.2 0.1 0.4 0.1	+++++++++++++++++++++++++++++++++++++++	0.1 0.0 0.1 0.1 0.0	2021 Q1 Q2 Q3 Q4 2022 Q1
																							Short	-term le	ending	
+ + + +	6.0 0.8 2.7 3.4 3.6	+ - + -	0.7 0.5 0.9 1.1 0.8	+ - + +	2.7 0.8 1.2 2.5 0.9	- + - +	0.3 0.2 0.6 0.5 0.5	- + - +	0.4 0.5 0.5 0.6 0.6	+++++++++++++++++++++++++++++++++++++++	0.2 0.2 0.2 0.5 0.7	- + + -	0.5 0.6 1.0 0.3 0.6	- + + -	0.0 0.0 0.2 0.0	- + + -	0.5 0.6 1.0 0.1 0.6	- + + -	0.0 0.1 0.1 0.0 0.2	- + -	0.0 0.1 0.5 0.2 0.2	+ - + +	0.1 0.1 0.0 0.1 0.1	- + + + +	0.0 0.0 0.0 0.0 0.0	2021 Q1 Q2 Q3 Q4 2022 Q1
																						N	1edium	-term le	ending	
+++++++	5.6 0.8 0.8 1.7 0.3	+ + + +	1.5 0.3 0.8 1.3 0.3	+ - + +	2.6 0.0 0.5 1.4 0.2	+ + + -	0.9 1.2 0.9 0.4 0.1		0.5 0.2 0.2 0.4 0.1	+ - - -	0.1 0.2 0.1 0.1	- - - -	2.2 0.9 0.4 1.3 1.0	- + + -	0.3 0.1 0.2 0.1 0.1	- - - -	1.9 1.0 0.6 1.1 0.9	- - - -	1.9 1.1 0.7 1.3 0.9		- - - -	+ - + +	0.0 0.1 0.1 0.0 0.1	+ + + +	0.0 0.0 0.0 0.0 0.0	2021 Q1 Q2 Q3 Q4 2022 Q1
							<b>c c i</b>	1											·				Long	-term le	ending	2024 51
+++++++++++++++++++++++++++++++++++++++	8.0 8.8 11.3 13.6 11.5	+ + + + +	4.8 3.4 4.7 7.2 6.3	+ - + +	0.1 0.1 1.0 0.4 1.2	- + + +	0.2 2.9 1.3 2.7 1.1	+ + + +	4.1 5.5 4.9 6.2 4.5	+ + + + +	0.1 0.3 0.1 0.1 0.1	+++++++++++++++++++++++++++++++++++++++	14.3 21.6 23.6 20.4 16.2	+++++++++++++++++++++++++++++++++++++++	14.8 21.0 22.5 19.9 15.0	- + + +	0.6 0.6 1.2 0.5 1.2	- + + +	0.1 0.6 1.7 1.2 1.3		- - - -	+ - + +	0.1 0.0 0.1 0.3 0.0	+++++++++++++++++++++++++++++++++++++++	0.1 0.0 0.1 0.1 0.0	2021 Q1 Q2 Q3 Q4 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.

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

	€ billion																						
				Time	deposits	1,2												Memo	item:				
Period	Deposits, total	Sigl	nt osits	Total		for up to and incluc	) d ling r	for mo	ore thar	for up to and includi 2 year	2 I ing s	for mo than 2 year	ore s	Saving	ıs its 3	Bank saving: bonds	S 4	Fiducia	ary	Subordina liabilities (excluding negotiabl debt securities	ated g le	Liabilities arising from repo	OS
	Domest	ic no	n-bank	s. to	tal															End of	f vear	or mo	nth *
2019	3.661	.0	2.236.3	I	816.2		202.7		613.5	1	52.7		560.8		575.2		33.2		32.5	1	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 2021 June	3,976 3,936	.3	2,654.6		736.0 735.7		161.0 158.1		574.9 577.5		49.7 47.4		525.2 530.1		561.2 562.6		24.5 26.1		34.2 34.6		17.1 14.4		1.3 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. Sen	3,971	0	2,656.0		727.8 726 1		151.2 152 7		576.7 573 5		48.1 47.8		528.5 525 7		561.5		25.6		34.3 34.1		14.3 14.4		1.5
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		731.8 736.0		157.1 161.0		574.7 574 9		49.9 49 7		524.8 525.2		559.9 561.2		24.8 24.5		33.6 34.2		15.3 17 1		0.9
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. Mar.	4,037	.8	2,704.5		748.5 755.2		175.5 183.4		573.0 571.7		48.7 49.2		524.3 522.5		560.9 559.0		23.9 23.9		33.8 33.8		17.1 17.2		1.2 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	i i	17.1	_	0.8
																						Chang	ges *
2020 2021	+ 221 + 95	.6 + .3 +	144.3	-	32.7 46.2	_	15.0 27.3	_	17.7 18.9	+	4.8 1.5	-	12.9 20.5	+	14.5 0.7	-	4.9 3.5	+ -	1.9 0.2	+	0.3 2.7	+	0.1 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 Aug.	+ 28 + 6	.2 +	33.9 10.0	-	5.0 2.9	_	2.8 4.2	+	2.2 1.3	+++	0.3 0.4	+	2.5 0.9	-	0.6 0.5	_	0.2	-	0.1 0.2	-	0.0	+ -	0.6 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. Nov.	+ 28 + 13	.8 + .3 +	21.5	+ -	13.2 7.6	+ -	11.0 6.4	+ -	2.2 1.2	+++	1.3 0.8	+ -	0.9 2.0	=	0.6 0.2	-	0.2	-	0.2	++	1.0 0.0	_	0.2
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. Feb.	+ 49	.6 + .9 +	36.3 13.6	+ -	14.1 1.6	+ -	15.0 0.4	_	0.9 1.2	_	0.2 0.8	-	0.7	+	0.4 0.1	-	0.4 0.2	-	0.3	+	0.0 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. May	+ 13 + 10	.0 + .1 +	9.5 18.8	+ -	4.2 7.3	+ -	6.4 6.5	_	2.2 0.8	+++	0.8 1.1	=	3.0 2.0	=	0.6 1.3	+	0.1 0.0	+ -	0.0 0.2	+ -	0.1 0.1	-	0.5 0.2
	Domest	ic go	vernme	ent		-		-		-								-		End of	f year	or mo	nth *
2019	237	1	74.7		154.9		76.0		78.9	1	26.1	1	52.8	1	3.4		4.1		24.7	1	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 2021 June	210 209	.1	82.4 81.5		121.9 121.5		42.0 43.8		79.9 77.6		23.8 20.3		56.1 57.3		2.5 2.6		3.3 3.4		25.8 25.2		2.0 2.0		1.0 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. Sep.	207	.9 .8	84.1 84.8		117.9 120.1		38.8 42.2		79.0 78.0		21.2 20.8		57.9 57.2		2.6 2.5		3.4 3.4		25.3 25.2		2.0 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. Dec.	213	.7	86.1 82.4		121.8 121.9		41.4 42.0		80.4 79.9		23.5 23.8		56.9 56.1		2.5 2.5		3.3 3.3		25.1 25.8		2.0 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. Mar.	237	.9 .0	91.4 85.2		140.7 150.0		61.0 69.7		79.7 80.3		23.7 24.4		56.0 56.0		2.5 2.4		3.3 3.4		25.5 25.5		2.0 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	I	25.6	j.	2.0	Chan	-
2020	- 6	<b>.</b>	57		11.6		16 5		19		5 2		10.1		0.6.		0.4		0.7		01	Chang	yes
2020	- 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 5.0		2.3		2.0	-	0.4	+	0.5		0.9		0.0	_	0.1		0.1	_	0.0	+	0.2
Aug.	- 3	.9 -	2.5	-	1.4	-	2.2	+	1.4	+	0.5	+	0.5	+	0.0	-	0.0	+	0.0	-	0.0	_	- 0.2
Sep. Oct		.3 + 1 +	0.4		2.6	+	3.Z	+	0.7	+	0.4	-	0.3		0.1	_	0.0	-	0.1	_	0.0		_
Nov.	- o	1 +	0.9	<del> </del>	1.0	-	2.1	+	1.1	+	1.3	-	0.3	-	0.0	+	0.0	-	0.1	+	0.0		-
2022 Jan.	+ 23	4 +	5.7 6.1	+ +	17.4	+	0.0 17.3	+	0.0	+	0.5		0.8	-	0.0	_	0.0		0.7	+	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		-
Apr.	+ 2	7 +	1.0	+ +	9.4 1.7		o.7 1.1	+	0.7	+	0.6	-	0.0		0.0	+	0.0	+	0.0	+	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	I.	-

\* 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.

Including subordinated liabilities and liabilities arising from registered debt securities.
 Including deposits under savings and loan contracts (see Table IV.12).
 Excluding deposits under savings and loan contracts (see also footnote 2).

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

	€ billion											
			Time deposit	s <b>1,2</b>						Memo item:		
Period	Deposits, total	Sight deposits	Total	for up to and including 1 year	for more that	for up to and including 2 years	for more than 2 years	Savings deposits 3	Bank savings bonds 4	Fiduciary Ioans	Subordinated liabilities (excluding negotiable debt securities)	Liabilities arising from repos
	Domesti	c enterpris	es and hou	iseholds							End of yea	r 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	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.	3,788.0	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	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	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	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	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	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	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	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	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	8 - 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	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	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	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 + 8.5	+ 2.5	+ 5.3	- 2.8	+ 0.2	- 3.0	- 0.6	- 0.1	- 0.1	+ 0.1	- 0.5
May		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	n: Domestie	enterprise	25	-	-	-	-	-	-	End of yea	r 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           775.4           772.1	359.6	80.7	278.9	15.4	263.6	5.7	8.5	2.3	9.6	1.5
Aug.	1,148.4		358.9	79.9	279.0	15.3	263.7	5.7	8.5	2.3	9.5	1.5
Sep.	1,141.4		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. May	1,165.3	5 792.4 806.0	360.0 346.7	88.0	272.0 270.4	16.0	256.1	5.2	7.7	2.3	12.4	1.1 0.8
												Changes *
2020 2021 2021 June July	+ 81.0 + 28.5 - 12.3 + 18.3	$\begin{array}{c} + & 101.2 \\ + & 47.1 \\ - & 4.2 \\ - & 17.4 \end{array}$	- 18.0 - 16.8 - 8.0 + 1.1	+ 7.0 - 1.2 - 6.0 + 3.1	- 25.0 - 15.7 - 2.0 - 2.0	$\begin{array}{c} - & 0.4 \\ + & 0.5 \\ - & 0.3 \\ - & 0.0 \end{array}$	- 24.6 - 16.2 - 1.8 - 2.0	- 0.8 - 0.5 - 0.1 - 0.0	- 1.3 - 1.3 - 0.0 - 0.1	$ \begin{array}{r} - & 0.0 \\ + & 0.0 \\ + & 0.1 \\ - & 0.0 \end{array} $	- 0.5 + 2.6 + 0.0 - 0.0	+ 0.1 + 0.2 - 0.0 + 0.8
Aug.	+ 14.6	5 + 15.4	- 0.8	- 0.8	+ 0.0	$\begin{array}{c c} - & 0.1 \\ - & 0.1 \\ + & 0.1 \end{array}$	+ 0.1	- 0.0	- 0.1	+ 0.0	- 0.0	- 0.0
Sep.	- 5.4	4 - 2.5	- 2.9	- 1.1	- 1.8		- 1.6	+ 0.0	- 0.0	+ 0.0	+ 0.0	+ 0.2
Oct.	+ 18.7	7 + 7.7	+ 11.1	+ 10.2	+ 0.8		+ 0.7	- 0.1	- 0.0	- 0.0	+ 1.0	- 0.2
Dec. 2022 Jan.	+ 6. - 23.4 + 27.8	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	- 5.4 + 3.3 - 2.6	- 3.9 + 3.1 - 2.1	- 1.5 + 0.2 - 0.5	- 0.1 + 0.3 + 0.1	- 1.4 - 0.1 - 0.7	- 0.2 - 0.2 - 0.2	- 0.2 - 0.0 - 0.2	+ 0.0 + 0.0 + 0.0	- 0.0 + 1.8 - 0.1	- 0.6 - 0.6 + 0.8
Feb. Mar. Apr.	- 5.3 + 6.6 - 6.6	8 – 2.6 5 + 8.8 5 – 9.6	- 2.7 - 2.2 + 3.2	- 1.9 - 0.7 + 5.4	- 0.7 - 1.5 - 2.2	$\begin{vmatrix} - & 0.5 \\ + & 0.0 \\ + & 0.4 \end{vmatrix}$	- 0.3 - 1.6 - 2.6	+ 0.0 + 0.0 - 0.0	- 0.0 + 0.0 - 0.1	$\begin{array}{c} - & 0.1 \\ + & 0.0 \\ + & 0.0 \end{array}$	+ 0.0 + 0.0 + 0.1	+ 0.2 + 0.3 - 0.5
May	- 0.5	5 <b>+</b> 12.6	<b> </b> - 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.

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

	€ billion	€ billion												
		Sight deposits						Time deposits	1,2					
			by creditor gro	oup					by creditor gro	oup				
	Deposits of		Domestic hou	seholds					Domestic hou	seholds				
Period	domestic households and non-profit institutions, total	Total	Total	Self- employed	Employees	Other individuals	Domestic non-profit institu- tions	Total	Total	Self- employed	Employees	Other		
. chou		Total	Total	persons	Linployees	individuals	lions	Total	Total	Fn	d of year o	r month *		
2019	2 392 4	1 547 2	1 507 9	266 3	1 081 6	160 1	393	261 7	248 3	20.8	190 2	1 373 I		
2020 2021	2,539.5 2,623.6	1,713.8 1,807.1	1,672.7 1,762.4	291.1 308.6	1,215.4 1,288.4	166.2 165.4	41.1 44.7	258.6 249.8	245.1 237.8	19.3 18.2	190.5 185.6	35.2 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. Feb. Mar.	2,621.9 2,634.8 2,620.8	1,806.6 1,819.9 1,808.3	1,761.8 1,774.2 1,761.9	310.8 310.4 303.6	1,285.6 1,299.6 1,296.3	165.4 164.3 162.0	44.8 45.7 46.4	249.1 248.8 248.3	237.5 236.9 236.3	18.2 18.4 18.6	184.0 183.4 182.9	35.2 35.1 34.9		
Apr. May	2,637.6 2,635.6	1,827.0 1,827.0	1,780.5 1,780.3	309.6 311.6	1,308.1 1,308.0	162.8 160.8	46.4 46.7	247.6 247.0	235.9 235.0	18.6 18.6	182.5 181.8	34.9 34.6		
											(	Changes *		
2020 2021	+ 147.5 + 84.7	+ 166.9 + 93.8	+ 165.0 + 90.3	+ 26.0 + 17.3	+ 131.5 + 73.7	+ 7.5 - 0.6	+ 1.8 + 3.5	- 3.1 - 8.6	- 3.2 - 7.2	- 1.5 - 1.1	- 1.6 - 4.7	- 0.2 - 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. Feb. Mar.	- 1.6 + 12.8 - 14.0	- 0.5 + 13.3 - 11.6	- 0.6 + 12.4 - 12.4	+ 2.2 - 0.5 - 6.8	- 2.8 + 14.0 - 3.3	- 0.0 - 1.1 - 2.3	+ 0.1 + 0.9 + 0.8	- 0.7 - 0.4 - 0.5	- 0.3 - 0.6 - 0.5	- 0.0 + 0.1 + 0.2	- 0.2 - 0.6 - 0.5	- 0.1 - 0.2 - 0.2		
Apr. May	+ 16.8 - 0.9	+ 18.2 + 1.0	+ 18.2 + 0.8	+ 6.0 + 2.0	+ 11.4 - 0.2	+ 0.8 - 1.1	+ 0.0 + 0.2	- 0.7 - 0.6	- 0.4 - 0.9	+ 0.0	- 0.4 - 0.6	+ 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.  ${\bf 1}$  Including subordinated liabilities and liabilities arising from

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

	€ billion												
	Deposits												
		Federal Gove	ernment and it	s special fund	<sub>S</sub> 1			State govern	ments				
				Time deposit	S					Time deposit	ts		
Period	Domestic government, total	Total	Sight deposits	for up to and including 1 year	for more than 1 year	Savings deposits and bank savings bonds <sup>2</sup>	Memo item: Fiduciary Ioans	Total	Sight deposits	for up to and including 1 year	for more than 1 year	Savings deposits and bank savings bonds 2	Memo item: Fiduciary Ioans
											End	of year o	r 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 2021	229.5 210.1	48.6 43.5	4.8 4.2	7.2 3.2	36.5 36.0	0.0 0.1	11.3 11.7	46.5 47.4	21.2 21.7	11.4 13.8	13.2 11.3	0.7 0.6	14.1 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. Feb. Mar.	233.5 237.9 241.0	45.5 42.8 42.1	4.4 4.7 4.9	5.0 2.1 1.2	36.0 36.0 36.0	0.1 0.1 0.1	11.7 11.7 11.7	59.3 59.7 61.7	27.1 26.3 23.5	20.2 21.2 26.1	11.3 11.6 11.6	0.6 0.5 0.5	13.8 13.8 13.8
Apr. May	243.7 255.6	42.2 42.8	5.1 5.6	1.1 1.1	36.0 36.0	0.1 0.1	11.7 11.7	60.7 62.0	21.9 21.1	26.9 29.0	11.4 11.4	0.5 0.5	13.8 13.9
												(	Thanges *
2020 2021	- 6.9 - 17.9	+ 37.3 - 5.0	- 0.6 - 0.5	+ 5.7 - 4.1	+ 32.2 - 0.4	- 0.0 + 0.0	- 0.3 + 0.3	- 7.0 + 1.0	+ 0.2 + 0.6	- 5.7 + 2.3	- 1.3 - 1.8	- 0.2 - 0.1	+ 1.0 + 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. Feb. Mar.	+ 23.4 + 4.3 + 3.2	+ 2.0 - 2.7 - 0.6	+ 0.2 + 0.2 + 0.2	+ 1.8 - 2.9 - 0.9	- 0.0 - 0.0 + 0.0	- 0.0 - 0.0 - 0.0	+ 0.0 + 0.0 + 0.0	+ 11.9 + 0.5 + 1.9	+ 5.4 - 0.8 - 2.9	+ 6.4 + 1.0 + 4.8	+ 0.0 + 0.3 - 0.0	- 0.0 - 0.0 - 0.0	- 0.3 + 0.0 - 0.0
Apr. May	+ 2.7 + 11.5	+ 0.0 + 0.6	+ 0.2 + 0.6	- 0.1 + 0.0	+ 0.0 + 0.0	- 0.0 - 0.0	+ 0.0 - 0.0	- 1.0 + 1.3	- 1.6 - 0.8	+ 0.8 + 2.0	- 0.3 + 0.1	- 0.0 - 0.0	+ 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

					Savings depo	sits 3			Memo item:			
	by maturity											
		more than 1	year 2									
			of which:							Subordinated liabilities		
Domestic non-profit institu- tions	up to and including 1 year	Total	up to and including 2 years	more than 2 years	Total	Domestic households	Domestic non-profit institu- tions	Bank savings bonds 4	Fiduciary Ioans	(excluding negotiable debt securities) 5	Liabilities arising from repos	Period
End of ye	ar or mon	th *										
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 12.0	40.1 31.7	218.5 218.1	12.0 10.1	206.5 208.0	552.0 553.4	545.7 547.2	6.3 6.2	15.1 13.2	6.7 6.1	2.7 2.8		2020 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 11.9 11.9	31.4 31.1 31.1	217.8 217.6 217.2	9.6 9.5 9.3	208.2 208.2 207.9	553.2 553.2 551.4	547.1 547.2 545.5	6.1 6.0 5.9	13.0 12.8 12.8	6.1 6.0 6.0	2.9 2.9 2.9		2022 Jan. Feb. Mar
11.7 12.0	31.0 30.9	216.6 216.1	9.1 9.0	207.5 207.2	550.3 549.0	544.4 543.1	5.9 5.9	12.7 12.6	5.9 5.7	2.9 2.8	-	Apr. May
Changes	*											
+ 0.2 - 1.4	- 5.5 - 8.4	+ 2.4 - 0.2	+ 0.9 - 1.9	+ 1.6 + 1.6	- 13.0 + 1.4	- 12.3 + 1.5	- 0.7 - 0.1	- 3.3 - 1.9	+ 1.3 - 0.6	+ 0.2 + 0.2	=	2020 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 + 0.3 - 0.0	- 0.2 - 0.2 - 0.1	- 0.4 - 0.1 - 0.5	- 0.5 - 0.1 - 0.2	+ 0.1 - 0.0 - 0.3	- 0.2 + 0.1 - 1.8	- 0.1 + 0.1 - 1.7	- 0.1 - 0.0 - 0.1	- 0.2 - 0.2 - 0.1	+ 0.0 - 0.1 + 0.0	+ 0.0 + 0.0 + 0.0		2022 Jan. Feb. Mar
- 0.3 + 0.4	- 0.1 - 0.1	- 0.5 - 0.5	- 0.2 - 0.1	- 0.3 - 0.4	- 0.6 - 1.3	- 0.6 - 1.3	- 0.0 - 0.0	- 0.1 - 0.0	- 0.1 - 0.2	+ 0.0 - 0.0	-	Apr. 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).  ${\bf 4}$  Including liabilities arising from non-negotiable bearer debt securities.  ${\bf 5}$  Included in time deposits.

Local government and local government associations (including municipal special-purpose associations) Social security funds	
Time deposits 3 Time deposits	
Source     Savings     Memo     Savings     Memo       for up to and     for more     and bank     item:     for up     for more     and bank     item:       Sight     including     than     savings     Fiduciary     Sight     including     than     savings     Fiduciary       Total     deposits     1 year     1 year     bonds 2.4     loans     Total     deposits     1 year     sodings 2     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           70.9         48.5         6.0         12.0         4.4         0.0         48.3         8.0         19.0         20.5         0.8	- 2020 - 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           68.8         45.4         7.0         12.0         4.3         0.0         66.6         15.0         30.7         20.1         0.8           67.4         43.3         7.5         12.2         4.4         0.0         69.8         13.6         34.9         20.5         0.8	– 2022 Jan. – Feb. – Mar
67.5         43.1         7.6         12.4         4.4         0.0         73.4         16.1         35.3         21.1         0.9           72.4         47.9         7.0         13.1         4.4         0.0         78.4         16.8         39.0         21.7         0.9	– Apr. – May
Changes *	
+ 3.5       + 5.9       - 0.6       - 1.3       - 0.5       - 0.0       - 40.8       + 0.2       - 15.9       - 24.8       - 0.3         + 2.8       + 5.6       - 2.0       - 0.2       - 0.5       - 16.8       - 2.2       - 13.9       - 0.6       + 0.1	- 2020 - 2021
+ 4.9 + 4.5 + 0.6 - 0.2 + 0.0 6.4 - 5.2 - 1.2 - 0.1 + 0.0	- 2021 Dec.
$ \begin{vmatrix} -6.2 \\ +4.0 \\ -1.4 \\ -2.1 \\ \end{vmatrix} + \begin{vmatrix} -6.6 \\ +0.5 \\ +0.6 \\ -0.1 \\ +0.2 \\ \end{vmatrix} + \begin{vmatrix} -0.0 \\ -0.0 \\ -0.0 \\ -0.0 \\ -0.1 \\ -0.0 \\ -0.0 \\ -0.1 \\ -0.0 \\ -0.0 \\ -0.0 \\ -0.0 \\ -1.5 \\ -0.0 \\ +3.1 \\ -0.5 \\ -0.0 \\ +3.1 \\ -0.5 \\ -0.0 \\ +0.0 \\ \end{vmatrix} + \begin{vmatrix} -0.0 \\ $	– 2022 Jan. – Feb. – Mar
$ \begin{vmatrix} + & 0.1 \\ + & 6.0 \end{vmatrix} \begin{pmatrix} - & 0.2 \\ + & 4.8 \end{vmatrix} \begin{pmatrix} + & 0.1 \\ + & 0.8 \end{vmatrix} \begin{pmatrix} + & 0.3 \\ + & 0.4 \end{vmatrix} \begin{pmatrix} - & 0.0 \\ + & 0.0 \end{vmatrix} \begin{pmatrix} - & + & 3.6 \\ - & + & 3.6 \end{vmatrix} \begin{pmatrix} + & 2.6 \\ + & 0.7 \end{vmatrix} \begin{pmatrix} + & 0.4 \\ + & 0.5 \end{vmatrix} \begin{pmatrix} + & 0.0 \\ - & 0.0 \end{vmatrix} $	– Apr. – 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).

Period

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

	€ billion												
	Savings depos	sits 1								Bank savings	bonds, 3 sold t	:0	
		of residents					of non-resid	dents			domestic non	-banks	
			at 3 months notice		at more than months' noti	n 3 ice			Memo item:			of which:	
	Total	Total	Total	of which: Special savings facilities <b>2</b>	Total	of which: Special savings facilities <sup>2</sup>	Total	of which: At 3 months' notice	Interest credited on savings deposits	non-banks, total	Total	With maturities of more than 2 years	foreign non-banks
	End of ye	ar or mont	th *			-	-	-		-	-	-	
	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
	566.8 567.1	560.6 561.2	533.3 537.1	288.0 269.0	27.3 24.1	18.0 14.8	6.3 5.9	5.7 5.4	1.8 1.5	30.2 24.7	28.3 24.5	22.1 19.5	1.9 0.2
r.	566.7 566.7 564.8	560.8 560.9 559.0	537.5 537.8 536.2	266.3 266.6 265.0	23.3 23.1 22.9	14.3 14.1 13.9	5.9 5.8 5.8	5.4 5.4 5.3	0.1 0.1 0.1	24.3 24.1 24.1	24.2 23.9 23.9	19.2 19.0 19.0	0.2 0.2 0.2
/	563.7 562.3	557.9 556.6	535.3 534.0	262.0 262.2	22.7 22.5	13.7 13.5	5.7 5.7	5.3 5.2	0.1 0.1	23.9 24.0	23.8 23.8	18.9 18.8	0.1 0.1
	Changes <sup>*</sup>	t.											
	- 14.8 + 0.3	- 14.5 + 0.7	- 7.2 + 3.9	- 24.6 - 18.5	- 7.3 - 3.2	- 6.7 - 3.2	- 0.3 - 0.4	- 0.2 - 0.3	:	- 5.7 - 5.2	- 4.9 - 3.5	- 3.0 - 2.3	- 0.7 - 1.7
r.	- 0.5 + 0.0 - 1.9	- 0.4 + 0.1 - 1.8	+ 0.3 + 0.3 - 1.6	- 2.7 + 0.2 - 1.5	- 0.8 - 0.2 - 0.2	- 0.5 - 0.2 - 0.2	- 0.0 - 0.0 - 0.1	- 0.0 - 0.0 - 0.0		- 0.4 - 0.2 + 0.0	- 0.4 - 0.2 + 0.0	- 0.3 - 0.2 - 0.0	- 0.0 - 0.0 - 0.0
y	- 0.7 - 1.4	- 0.6 - 1.3	- 0.4 - 1.2	- 3.1 + 0.2	- 0.2 - 0.1	- 0.2 - 0.2	- 0.0 - 0.1	- 0.0 - 0.1	:	- 0.1 + 0.0	- 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 Excluding deposits under savings and loan contracts, which are classified as time

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

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

	€ billion													
	Negotiable b	earer debt s	ecurities and	money mar	ket paper						Non-negot	iable		
		of which:									bearer deb securities a	t nd		
						with matur	ities of				money mai paper 6	ket	Subordinate	d
						up to and includi	ng 1 year	more than and includi	1 year up to ng 2 years			of which:		
Period	Total	Floating rate bonds 1	Zero coupon bonds 1,2	Foreign currency bonds <b>3,4</b>	Certifi- cates of deposit	Total	of which: without a nominal quarantee 5	Total	of which: without a nominal quarantee 5	more than 2 vears	Total	maturities of more than 2 years	negotiable debt securities	non- negotiable debt securities
	End of ye	ear or me	onth *				<u> </u>		<u> </u>	,		,		
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 2021	1,119.0 1,173.6	117.1 106.8	12.7 13.5	313.6 331.4	89.4 98.7	94.3 106.8	1.5 1.9	23.8 18.0	3.1 4.5	1,000.9 1,048.8	1.1 0.9	0.9 0.7	34.8 34.6	0.4 0.1
2022 Jan. Feb. Mar.	1,187.6 1,199.1 1,219.8	104.8 102.5 100.5	14.6 14.0 14.2	336.1 330.1 337.0	94.2 92.3 105.8	102.6 101.1 114.7	2.2 3.0 2.9	17.8 17.6 17.8	4.5 4.6 4.4	1,067.3 1,080.4 1,087.4	0.7 0.5 0.6	0.5 0.4 0.5	34.4 34.4 35.6	0.1 0.1 0.1
Apr. May	1,227.1 1,226.2	100.1 98.3	14.3 15.0	344.7 339.3	104.2 100.2	113.1 109.3	3.0 2.4	15.2 16.2	4.5 4.5	1,098.8 1,100.7	0.5 0.4	0.4 0.4	36.0 35.7	0.1 0.1
	Changes	*												
2020 2021	- 20.5 + 54.0	- 5.2 - 10.3	- 0.8 + 0.8	- 54.1 + 17.6	- 22.3 + 9.4	- 22.2 + 12.6	- 1.1 + 0.4	+ 0.2 - 5.9	- 1.1 + 1.3	+ 1.5 + 47.3	+ 0.3 + 0.4	+ 0.2 + 0.3	+ 2.1 - 0.2	- 0.0 - 0.3
2022 Jan. Feb. Mar.	+ 14.0 + 11.4 + 20.8	- 2.0 - 2.2 - 2.0	+ 1.1 - 0.6 + 0.3	+ 4.7 - 6.1 + 6.9	- 4.5 - 1.9 + 13.4	- 4.2 - 1.5 + 13.6	+ 0.3 + 0.8 - 0.1	- 0.3 - 0.2 + 0.2	+ 0.1 + 0.0 - 0.2	+ 18.5 + 13.1 + 7.0	- 0.2 - 0.2 + 0.1	- 0.2 - 0.1 + 0.1	+ 0.1 + 0.0 + 1.2	
Apr. May	+ 7.3 - 1.0	- 0.4 - 1.8	+ 0.0 + 0.4	+ 7.7 - 5.4	- 1.5 - 4.1	- 1.6 - 3.8	+ 0.1 - 0.6	- 2.6 + 0.9	+ 0.1 + 0.1	+ 11.4 + 1.9	- 0.1 - 0.0	- 0.1 - 0.0	+ 0.4 - 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).

€ billion Г

E hillion

Т

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

			Lending to	banks (MF	ls)	Lending to	o non-banks	(non-MFIs)		Deposits of	of banks	Deposits of	of non-			
			Credit			Building lo	ans		Secur-			Dariks (110)				Memo
End of year/month	Num- ber of associ- ations	Balance sheet total 1	bal- ances and loans (ex- cluding building loans) 2	Building Ioans 3	Bank debt secur- ities 4	Loans under savings and loan con- tracts	Interim and bridging loans	Other building loans	ities (in- cluding Treasury bills and Treasury discount paper) 5	Deposits under savings and loan con- tracts	Sight and time deposits	Deposits under savings and loan con- tracts	Sight and time de- posits <b>7</b>	Bearer debt secur- ities out- stand- ing	Capital (includ- ing pub- lished re- serves) <b>8</b>	item: New con- tracts entered into in year or month <b>9</b>
	All bu	uilding a	nd loan	associat	tions											
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
	Privat	te buildi	ng and I	oan ass	ociations	5										
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	c buildin	g and lo	oan asso	ciations											
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

Changes rubeposits under savings and loan contracts non deposits on other and loan and loan and and loan and and loan and and and and and and and and and a		THOINING €															
Allocations		Changes in	n deposits		Capital pro	omised	Capital disb	ursed					Disburser	ment	Interest an	ıd	
Period         Period         Building         Solution (Section 1)         Memory savings and loan contracts         Loans under savings and loan contracts         Newly granted and contracts         Building contracts         Newly granted and contracts         Newly granted		loan contr	acts					Allocation	5				outstand	ing at	received or	n	
Period         Provide and savings and and coan courts         9.1         52.3         7.7, tracts         7.7, tracts         7.0         9.1			Internet	Repay- ments				Deposits u savings an loan contr	nder d acts	Loans und savings an loan contra	er d acts <b>10</b>	Newly	end of pe				
All building and loan associations         2021 Ar.       27.7       2.0       9.1       52.3       27.7       47.1       18.3       4.0       3.4       24.7       18.6       6.3       6.1       4.9       0.1         2022 Mar.       2.2       0.0       0.8       5.0       2.4       4.5       1.6       0.3       0.4       0.3       2.6       20.0       6.6       0.5       1.2       0.0         Apr.       2.2       0.0       0.8       4.9       2.7       4.3       1.7       0.4       0.4       0.4       2.0       20.0       6.6       0.5       .       0.0       0.0         Private building and loan associations       Private building and loan associations       1.7       0.3       0.4       0.3       0.2       2.0       14.5       3.5       0.4       .5       0.0       0.0       0.0       0.0       0.	Period	Amounts paid into savings and loan ac- counts <b>10</b>	credited on deposits under savings and loan con- tracts	deposits under cancelled savings and loan con- tracts	Total	of which: Net alloca- tions <b>12</b>	Total	Total	of which: Applied to settle- ment of interim and bridging loans	Total	of which: Applied to settle- ment of interim and bridging loans	interim and bridging loans and other building loans	Total	of which: Under alloc- ated con- tracts	Total	of which: Repay- ments during quarter	Memo item: Housing bonuses re- ceived <b>13</b>
2021 x022 Mar.       27.7 2.3 0.0 0.8 5.0 0.8 5.0 2.4 4.1 4.5 1.6 0.3 0.4 0.4 0.4 0.3 2.2 20.0 6.5 0.5 1.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0		Item de to     Contra to     Cont															
Apr. May       2.2 2.6       0.0 0.1       0.8 0.8       4.7 4.9       2.6 2.7       4.1 4.3       1.7 1.7       0.4 0.3       0.4 0.4       0.4 0.3       2.0 2.0       2.0 6.7       6.6 0.5       0.5 0.5       .       0.0 0.0         2022 Mar. May       1.5       0.0       0.4       3.4       1.7       3.5       1.2       0.2       0.3       0.2       2.0       6.6       0.5       .       0.0       0.0         Apr. May       1.4       0.0       0.4       3.3       1.9       3.2       1.3       0.3       0.3       0.3       0.3       1.5       14.3       3.5       0.4       0.9       0.0         May       1.6       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         Public building and load       3.4       1.6       3.2       1.2       0.3       0.3       0.3       0.3       1.5       1.4.3       3.5       0.4       .       0.0       0.0         2022 Mar.       0.8       0.0       0.3       1.6       0.8       1.0       0.4       0.1       0.1       0.1	2021 2022 Mar.	27.7 2.3	2.0 0.0	9.1 0.8	52.3 5.0	27.7 2.4	47.1 4.5	18.3 1.6	4.0 0.3	4.2 0.4	3.4 0.3	24.7 2.6	18.6 20.0	6.3 6.5	6.1 0.5	4.9 1.2	0.1 0.0
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. May       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       0.0         May       1.6       0.0       0.4       3.4       1.6       3.2       1.2       0.3       0.3       0.3       1.5       14.3       3.5       0.4       .       0.0       0.0         Public building and loan associations       3.2       1.2       0.3       0.3       0.1       0.1       0.5       5.5       3.0       0.1       0.3       0.0         Apr. May       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         May       1.0       0.0       0.4       0.1       0.1       0.1       0.1       0.5       5.6       3.1       0.1       0.0       0.0         May	Apr. May	2.2 2.6 Private	0.0 0.1 building	0.8 0.8 1 and Io	4.7 4.9	2.6 2.7	4.1 4.3	1.7 1.7	0.4 0.3	0.4 0.4	0.4 0.3	2.0 2.2	20.0 20.0	6.6 6.7	0.5 0.5		0.0 0.0
Apr. May         1.4         0.0         0.4         3.4         1.7         3.3         1.2         0.2         0.3         0.2         2.0         14.3         3.3         0.4         0.9         0.0           Apr. May         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         0.0           May         1.6         0.0         0.4         3.4         1.6         3.2         1.3         0.3         0.3         0.3         0.3         1.5         14.3         3.5         0.4         .         0.0           Public building and loan associations         1.0         0.4         0.1         0.1         0.1         0.5         5.5         3.0         0.1         0.3         0.0           Apr. May         0.8         0.0         0.3         1.3         0.8         1.0         0.4         0.1         0.1         0.5         5.6         3.1         0.1         0.0           May         1.0         0.0         0.4         0.1         0.1         0.1         0.5         5.8         3.3         0.1	2022 Mar	1 5				1 1 7	l 25	1 2	0.2	0.2	0.2	1 20	145	<u>&gt;</u> _	0.4		0.0
Apr. May       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       0.3       0.2       1.7       14.3       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       0.5       5.5       3.0       0.1       0.3       0.0         Apr. May       0.8       0.0       0.3       1.3       0.8       1.0       0.4       0.1       0.1       0.5       5.6       3.1       0.1       0.3       0.0         May       1.0       0.0       0.5       1.5       1.0       1.1       0.5       0.1       0.1       0.5       5.8       3.3       0.1       0.0         May       1.0       0.0       0.5       1.5       1.0       1.1       0.5       0.1       0.1       0.5       5.8       3.3       0.1       0.0       0.0	2022 IVIdI.	1.5	0.0	0.4	5.4	1.7	5.5	1.2	0.2	0.5	0.2	2.0	14.5	5.5	0.4	0.9	0.0
2022 Mar.       0.8       0.0       0.3       1.6       0.8       1.0       0.4       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       0.5       5.6       3.1       0.1       .       0.0	Apr. May	1.4 1.6 Public I	0.0 0.0	0.4 0.4	3.3 3.4 n associ	1.6 1.6	3.2	1.3	0.3	0.3	0.3	1.5	14.3	3.5	0.4		0.0
Apr.         0.8         0.0         0.3         1.6         0.8         1.0         0.4         0.1         0.1         0.5         5.5         3.0         0.1         0.3         0.3         0.0           Apr.         0.8         0.0         0.3         1.3         0.8         1.0         0.4         0.1         0.1         0.5         5.5         3.0         0.1         0.3         0.0           May         1.0         0.0         0.5         1.5         1.0         1.1         0.5         0.1         0.1         0.5         5.6         3.1         0.1         .         0.0	2022 Мак						1.0	0.4	0.1	0.1	0.1						
Apr.       0.8       0.0       0.3       1.3       0.8       1.0       0.4       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       0.5       5.8       3.3       0.1       .       0.0	2022 Iviar.	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. May	0.8 1.0	0.0 0.0	0.3 0.5	1.3 1.5	0.8 1.0	1.0 1.1	0.4 0.5	0.1 0.1	0.1 0.1	0.1 0.1	0.5 0.5	5.6 5.8	3.1 3.3	0.1 0.1		0.0 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 Ioan associations, claims arising from registered debt securities and central bank credit balances. 3 Loans under savings and Ioan contracts and interim and bridging Ioans. 4 Including menuery market paper and small amounts of other securities issued by banks. 5 Including equalisation claims. 6 Including liabilities to building and Ioan associations. 7 Including small amounts of avaings denosits. 8 Including neuricination induct capital and fund for general banking 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".

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

	€ billion																
	Number of			Lending to	banks (MFIs	)			Lending t	o non-banks	(non-MFIs)			Othe	assets	7	
Period	German banks (MFIs) with foreign branches and/or foreign subsi- diaries	foreign branches 1 and/or foreign subsi- diaries	Balance sheet total 7	Total	Credit bala	German banks	Foreign banks	Money market paper, secur- ities 2,3	Total	Loans	to German non- banks	to foreign non- banks	Money market paper, secur- ities 2	Total		of which Derivat financia instrum in the trading portfol	ch: tive al nents Jio
	Foreian	branche	s										Enc	dof	vear c	or mor	nth *
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 July Aug. Sep.	50 50 50	207 204 204 205	1,524.4 1,537.2 1,518.6	444.9 448.2 452.9	437.8 431.0 434.3 439.1	266.8 273.1 279.3	164.2 161.2 159.8	13.4 13.8 13.9 13.8	497.2 494.0 489.2 485.2	410.8 407.3 404.4	13.2 13.2 13.1	397.6 394.1 391.3	83.2 81.9 80.8		585.5 599.8 580.5		436.6 437.4 415.3
Oct. Nov. Dec.	52 50 51	207 204 207	1,552.0 1,595.0 1,504.5	495.3 495.2 471.2	481.3 481.1 457.8	310.3 306.5 297.9	171.0 174.6 159.9	13.9 14.2 13.4	497.7 506.4 497.2	417.4 425.8 418.8	13.3 13.0 12.9	404.1 412.7 405.9	80.3 80.6 78.4		559.0 593.4 536.1	4	402.4 436.9 404.5
2022 Jan. Feb. Mar.	50 50 50	209 209 208	1,618.8 1,634.4 1,674.9	563.0 566.4 564.7	548.5 551.9 550.5	366.5 379.5 369.7	181.9 172.4 180.8	14.6 14.5 14.2	537.7 539.7 540.1	460.1 464.4 461.4	13.1 13.2 13.5	447.0 451.1 447.9	77.6 75.3 78.7		518.1 528.3 570.1		378.0 384.8 421.1
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
																Chang	ges *
2020 2021	- 2 + 1	+ 9 + 1	+104.2 - 48.4	- 20.3 + 87.3	- 15.5 + 87.1	- 2.8 + 84.9	- 12.7 + 2.2	- 4.8 + 0.3	+ 0.2 -26.2	- 1.0 - 6.5	- 5.4 - 1.3	+ 4.4 - 5.1	+ 1.2 - 19.7	+ -	164.2 136.9	+ -	179.6 128.1
2021 Aug. Sep.	=	+ 1	+ 12.6 - 19.8	+ 3.1 + 2.9	+ 3.0 + 3.1	+ 6.3 + 6.1	- 3.2 - 3.1	+ 0.0 - 0.1	- 5.5 - 8.8	- 4.1 - 7.0	+ 0.0 - 0.1	- 4.1 - 6.9	- 1.4 - 1.8	+ -	14.1 20.4	+ -	0.3 24.3
Oct. Nov. Dec.	+ 2 - 2 + 1	+ 2 - 3 + 3	+ 33.7 + 43.0 - 90.4	+ 42.6 - 2.3 - 24.0	+ 42.5 - 2.5 - 23.2	+ 31.0 - 3.7 - 8.6	+ 11.5 + 1.2 - 14.6	+ 0.1 + 0.2 - 0.8	+13.0 + 4.4 - 9.2	+ 13.4 + 5.0 - 7.0	+ 0.2 - 0.2 - 0.1	+ 13.2 + 5.2 - 6.8	- 0.3 - 0.6 - 2.2	+ -	21.2 33.0 57.3	+ -	12.6 32.3 32.5
2022 Jan. Feb. Mar.	- 1 - -	+ 2 - - 1	+113.7 + 15.8 + 40.1	+ 90.4 + 3.8 - 2.0	+ 89.2 + 3.9 - 1.7	+ 68.7 + 13.0 - 9.9	+ 20.5 - 9.0 + 8.1	+ 1.2 - 0.1 - 0.3	+36.3 + 3.3 - 1.0	+ 37.6 + 5.4 - 4.3	+ 0.2 + 0.1 + 0.2	+ 37.4 + 5.3 - 4.6	- 1.4 - 2.1 + 3.3	- + +	18.6 10.4 41.5	- + +	27.9 7.1 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	subsidia	ries										End	d of y	year c	r mor	nth *
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 2021	12 12	36 35	229.5 246.0	44.8 50.8	39.9 44.4	17.4 20.7	22.5 23.7	4.9 6.3	139.7 139.5	114.4 116.3	13.1 12.6	101.4 103.7	25.3		44.9 55.7		0.0
2021 July Aug. Sep.	12 12 13	35 35 36	236.5 236.6 244.6	44.7 44.0 51.9	39.6 39.1 47.1	20.1 18.9 21.9	19.5 20.2 25.2	5.1 5.0 4.8	136.4 137.7 138.5	112.6 113.5 114.5	12.0 12.1 12.2	100.6 101.5 102.3	23.8 24.2 24.0		55.4 54.8 54.1		0.0 0.0 0.0
Oct. Nov. Dec.	12 12 12	35 35 35	246.1 247.1 246.0	50.9 52.9 50.8	45.9 46.7 44.4	24.3 24.0 20.7	21.6 22.8 23.7	5.0 6.2 6.3	138.5 138.5 139.5	115.4 115.4 116.3	12.5 12.6 12.6	102.9 102.8 103.7	23.1 23.1 23.2		56.6 55.7 55.7		0.0 0.0 0.0
2022 Jan. Feb. Mar.	12 12 12	35 35 35	245.1 245.7 249.3	45.9 46.2 45.9	40.9 41.4 40.9	20.1 21.1 20.6	20.8 20.3 20.3	5.0 4.8 5.0	140.6 140.6 143.4	117.5 117.7 119.7	12.7 12.7 12.9	104.8 105.0 106.8	23.1 22.9 23.7		58.5 58.9 60.0		0.0 0.0 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
																Chang	ges *
2020 2021	- 3 ± 0	- 5 - 1	- 0.8 + 12.0	- 5.3 + 3.8	- 5.0 + 2.8	- 1.0 + 3.4	- 4.0 - 0.5	- 0.3 + 1.0	+ 3.3 - 2.5	+ 0.8	- 1.3 - 0.5	+ 2.1	+ 2.4	++++	1.2 10.8	± ±	0.0
2021 Aug.	<del>.</del>	-	- 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. Oct.	+ 1	+ 1	+ 1.5	+ 7.3	+ 7.6	+ 3.0	+ 4.6	- 0.3 + 0.2	+ 0.4	+ 0.5	+ 0.1	+ 0.4	- 0.2	+	0.7 2.5		0.0 0.0
Nov. Dec.			- 0.2	+ 1.3	+ 0.3	- 0.4	+ 0.6 + 0.8	+ 1.0 + 0.1	- 0.6 + 0.9	- 0.6	+ 0.1 + 0.0	- 0.7	+ 0.0	-	0.9	± ±	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. Mar. Apr.	-	-	+ 0.8 + 3.2 + 1.4	+ 0.4 - 0.5 + 2.0	+ 0.6 - 0.7 + 2.1	+ 1.0 - 0.5 + 1.0	- 0.4 - 0.2 + 1.1	- 0.2 + 0.2 - 0.1	+ 0.1 + 2.6 + 0.5	+ 0.3 + 1.8 + 0.6	+ 0.0 + 0.2 - 0.1	+ 0.3 + 1.6 + 0.6	$\begin{array}{ c c c } - & 0.2 \\ + & 0.8 \\ - & 0.0 \end{array}$	++	0.3 1.1 1.1	± ± ±	0.0 0.0 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

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# IV. Banks

Deposits												Other liabilitie	s <b>6,7</b>	]
	of banks (N	FIs)		of non-banks	(non-MF	Fls)								
					German	n non-	banks 4							
Total	Total	German banks	Foreign banks	Total	Total		Shortterm	Medium and longterm	Foreign non-banks	Money market paper and debt securities outstand- ing 5	Working capital and own funds	Total	of which: Derivative financial instruments in the trading portfolio	Period
End of ye	ar or mo	nth *										Foreig	n 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
872.2 950.2	588.5 638.5	431.8 461.2	156.7 177.3	283.7 311.7		11.7 8.1	10.2 6.3	1.5 1.8	272.0 303.6	61.5 65.2	49.9 51.3	568.6 437.9	523.1 403.4	2020 2021
930.2 932.9 937.3	622.8 624.6 618.3	444.9 438.7 432.9	177.9 185.9 185.4	307.3 308.3 319.0		8.7 8.5 9.6	7.2 7.0 7.8	1.5 1.5 1.8	298.7 299.8 309.4	74.7 81.6 81.1	51.2 51.3 51.6	468.4 471.3 448.6	435.5 436.0 414.2	2021 July Aug. Sep.
982.8 988.0 950.2	654.6 655.8 638.5	469.2 458.2 461.2	185.4 197.6 177.3	328.2 332.2 311.7		9.0 8.9 8.1	7.2 7.1 6.3	1.8 1.8 1.8	319.2 323.3 303.6	83.7 82.6 65.2	51.7 51.9 51.3	433.8 472.4 437.9	401.3 435.9 403.4	Oct. Nov. Dec.
1,066.8 1,079.5 1,087.0	659.1 664.5 663.1	457.3 466.8 462.8	201.8 197.6 200.3	407.7 415.0 423.9		9.5 9.8 10.7	7.7 8.1 9.0	1.8 1.7 1.7	398.2 405.2 413.2	86.1 82.7 80.7	51.8 51.8 52.3	414.1 420.4 454.9	377.6 383.8 418.8	2022 Jan. Feb. 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 + 71.1	- 13.3 + 43.1	- 21.4 + 31.0	+ 8.1 + 12.0	+ 4.1 + 28.1	1 2	1.0 3.6	+ 0.3 - 3.9	- 1.4	+ 5.1 + 31.7	- 28.1	- 3.5	+ 157.6 - 130.8	+ 162.0 - 119.7	2020 2021
+ 2.3	+ 1.4	- 6.2	+ 7.5	+ 0.9	-	0.2	- 0.2	- 03	+ 1.1	+ 6.6	+ 0.2	+ 3.0	+ 0.6	2021 Aug.
+ 46.0	+ 36.8	+ 36.3	+ 0.5	+ 9.2	-	0.6	- 0.6	- 0.0	+ 9.4	+ 2.9	+ 0.1	- 14.8	- 12.9	Oct.
+ 3.4 - 37.8	- 0.4 - 17.3	- 9.6 + 3.0	+ 9.2 - 20.3	+ 3.9 - 20.5	-	0.1 0.8	- 0.1 - 0.8	+ 0.0 - 0.0	+ 4.0 - 19.7	- 2.4 - 17.5	+ 0.3 - 0.7	+ 38.6 - 34.5	+ 34.6 - 32.5	Nov. Dec.
+ 114.7 + 13.3 + 7.0	+ 18.7 + 6.0 - 1.8	- 4.0 + 9.6 - 4.0	+ 22.7 - 3.6 + 2.2	+ 96.0 + 7.3 + 8.8	+ + +	1.4 0.3 0.9	+ 1.4 + 0.4 + 0.9	+ 0.0 - 0.1 + 0.0	+ 94.6 + 7.0 + 7.9	+ 20.4 - 3.2 - 2.4	+ 0.6 + 0.0 + 0.5	- 23.8 + 6.3 + 34.5	- 25.8 + 6.3 + 35.0	2022 Jan. Feb. 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 ye	ar or mo	nth *										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
163.4 178.6	59.6 64.2	34.1 33.0	25.5 31.2	103.8 114.4		6.7 7.3	4.2 4.9	2.5 2.4	97.1 107.1	16.6 16.4	20.3 20.3	29.2 30.7	0.0 0.0	2020 2021
169.7 169.8 175.4	58.6 58.2 61.5	32.4 31.1 30.0	26.3 27.1 31.5	111.1 111.6 113.9		6.6 6.6 6.6	4.2 4.2 4.2	2.4 2.4 2.4	104.5 105.0 107.3	17.7 17.5 18.4	20.5 20.8 20.7	28.6 28.6 30.0	0.0 0.0 0.0	2021 July Aug. Sep.
177.6 177.5 178.6	63.8 62.6 64.2	32.8 31.1 33.0	31.0 31.5 31.2	113.8 114.9 114.4		6.9 7.0 7.3	4.5 4.6 4.9	2.4 2.4 2.4	106.9 107.9 107.1	17.9 17.5 16.4	20.4 20.3 20.3	30.1 31.7 30.7	0.0 0.0 0.0	Oct. Nov. Dec.
179.6 180.9 184.0	64.8 66.3 66.5	33.2 33.7 34.2	31.7 32.7 32.3	114.7 114.5 117.5		7.2 7.4 7.5	4.8 5.0 5.1	2.4 2.4 2.4	107.5 107.1 110.0	15.9 15.8 15.7	19.9 19.8 19.8	29.8 29.3 29.8	0.0 0.0 0.0	2022 Jan. Feb. 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 + 12.1	- 7.3 + 3.2	- 2.5 - 1.1	- 4.8 + 4.3	+ 8.7 + 8.9	++	0.0 0.6	+ 0.3 + 0.6	- 0.3	+ 8.7 + 8.3	+ 0.6 - 0.3	- 1.8 + 0.1	- 1.0 + 0.2	$ \begin{array}{cccc} \pm & 0.0 \\ \pm & 0.0 \end{array} $	2020 2021
- 0.1 + 4.9	- 0.5 + 3.0	- 1.3 - 1.0	+ 0.8 + 40	+ 0.5	+	0.0	+ 0.0	+ 0.0	+ 0.4	- 0.2	+ 0.3	- 0.1	$\pm 0.0$ $\pm 0.0$	2021 Aug. Sep
+ 2.3 - 1.0	+ 2.3 - 1.6	+ 2.7 - 1.6	- 0.4 + 0.1	- 0.0 + 0.6	+++	0.0 0.3 0.1	+ 0.3 + 0.1	+ 0.0 + 0.0	- 0.3 + 0.4	- 0.5	- 0.3 - 0.0	+ 0.1 + 1.2	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Oct. Nov.
+ 0.9 + 0.4	+ 1.5 + 0.4	+ 1.9 + 0.2	+ 0.2	- 0.6 + 0.0	+ -	0.2	+ 0.3	+ 0.0	+ 0.1	- 1.2	- 0.0	- 1.2	$     \pm 0.0     \pm 0.0 $	Dec. 2022 Jan.
+ 1.5 + 2.8 + 1.6	+ 1.6 + 0.1 + 3.1	+ 0.5 + 0.5 + 1.9	+ 1.1 - 0.5 + 1.2	- 0.1 + 2.7 - 1.5	+++	0.2 0.0 0.2	+ 0.2 + 0.1 - 0.2	- 0.0 - 0.0 - 0.0	- 0.4 + 2.7 - 1.2	- 0.1 - 0.1 - 0.2	$\begin{array}{c} - & 0.1 \\ + & 0.1 \\ + & 0.1 \end{array}$	- 0.5 + 0.4 - 0.1	$ \begin{array}{cccc} \pm & 0.0 \\ \pm & 0.0 \\ \pm & 0.0 \end{array} $	Feb. Mar. 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.  ${\bf 6}$  Including subordinated liabilities.  ${\bf 7}$  See also Table IV.2, footnote 1.

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#### V. Minimum reserves

#### 1. Reserve maintenance in the euro area

€ billion Maintenance Required reserves Required reserves before deduction of lump-sum allowance 3 after deduction of lump-sum allowance 4 period beginning in 1 Reserve base 2 Current accounts 5 Excess reserves 6 Deficiencies 7 2015 11,375.0 443.8 0.0 113.8 113.3 557.1 11,918.5 119.2 118.8 919.0 800.3 0.0 2016 124.2 127.8 123.8 127.4 1,275.2 1,332.1 0.0 2017 12,415.8 1,151.4 1,204.8 2018 12,775.2 2019 13,485.4 134.9 134.5 1,623.7 1,489.3 0.0 3,029.4 3,812.3 2020 14.590.4 145.9 145.5 2.883.9 0.0 2021 15,576.6 155.8 155.4 3,656.9 0.1 2022 Apr. P May 15.812.7 158.1 157.8 4.046.1 3.888.3 0.0 June р

## 2. Reserve maintenance in Germany

€ billion Maintenance German share of Required reserves Required reserves period euro area reserve base before deduction of after deduction of Reserve base 2 Deficiencies 7 beginning in 1 as a percentage lump-sum allowance 3 lump-sum allowance 4 Current accounts 5 Excess reserves 6 2015 3,137,353 27.6 31,374 31,202 174,361 143,159 0 2016 2017 3,371,095 3,456,192 28.3 27.8 33,711 34,562 33,546 34,404 301,989 424,547 268,443 390,143 0 2 1 35,633 37,280 2018 3 563 306 27 9 35 479 453 686 418 206 2019 3,728,027 27.6 37,131 486,477 449,346 0 2020 27.6 27.4 40.062 878.013 837.951 4.020.792 40.208 1 2021 4,260,398 42,464 1,048,819 0 42,604 1,006,355 2022 Apr. **P** May 4,381,728 277 43,817 43.678 1,147,397 1,103,720 0 . 44,087 June P 4.408.672 43,948

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

	€ billion						
Maintenance period beginning in <b>1</b>	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 2016 2017 2018 2019	6,105 6,384 6,366 7,384 7,684	5,199 5,390 5,678 4,910 5,494	2,012 2,812 3,110 3,094 2,765	10,432 10,905 11,163 11,715 12,273	5,649 5,960 6,256 6,624 7,028	226 236 132 95 109	1,578 1,859 1,699 1,658 1,778
2020 2021	8,151 9,113	6,371 6,713	3,019 2,943	12,912 13,682	7,547 8,028	111 109	2,028 1,876
2022 Apr.	9,417	7,154	3,021	13,929	8,091	98	1,968
June	9,539	6,977	3,000	14,053	8,112	94	2,173

## b) Reserve base by subcategories of liabilities

€ billion Liabilities arising from bearer debt Liabilities (excluding repos and deposits with building and loan securities issued with agreed maturities of up to 2 years and bearer Liabilities (excluding savings associations) with agreed maturities of up to 2 years to MFIs that are Liabilities (excluding repos and deposits with building and loan money market paper after deduction of a standard amount for bearer debt deposits, deposits with building and loan associations certificates or deduction of such paper held by the reporting institution and repos) to non-MFIs with resident in euro area countries but associations) with agreed maturities of up to 2 years to Savings deposits with agreed periods of notice of up agreed maturities of up to 2 not subject to minimum reserve years requirements banks in non-euro area countries to 2 years 1,879 1,595 375,891 592,110 585,099 104,146 133,776 2,063,317 447,524 415,084 2,203,100 2.338.161 628 581,416 120,894 2,458,423 1,162 414,463 576,627 112,621 2.627.478 1,272 410.338 577,760 111.183 2,923,462 1,607 436,696 560,770 105,880 3.079.722 9.030 508,139 561,608 101.907 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 for liabilities with average marked provides of the the reserve ratio of the reserve ratio of the reserve ratio for liabilities with average marked maturities of un to the reserve and the reserve ratio of the reser 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.

# 1. ECB interest rates / basic rates of interest

#### % per annum

ECB interest rates	CB interest rates							Basic rates of interest					
		Main refin operation	nancing Is				Main refin operatior	nancing Is			Basic rate of		Basic rate of
			Minimum	Mar- ginal				Minimum	Mar- ginal		interest as per		interest as per
Applicable	Deposit	Fixed	bid	lending	Applicable	Deposit	Fixed	bid	lending	Applicable	Civil	Applicable	Civil
from	facility	rate	rate	facility	from	facility	rate	rate	facility	from	Code 1	from	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		1.07		0.07
June 15	1./5	-	2.75	3.75	Dec. 14	0.25	1.00		1.75	2003 Jan. 1	1.9/	2011 July 1	0.37
Aug. 9 Oct. 11	2.00	]	3.00	4.00	2012 July 11	0.00	0.75	_	1 50	July I	1.22	2012 Jan 1	0.12
Dec 13	2.23	L _	3.50	4.23	2012 July 11	0.00	0.75		1.50	2004 Jan 1	1 14	2012 Jan. 1	0.12
0000.15	2.50		5.50	4.50	2013 May 8	0.00	0.50	-	1.00		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	, í	
					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	2015 0	0.00	0.05			2006 Jan. 1	1.37	2045 1 4	0.00
Oct. 9	3.25	3./5		4.25	2015 Dec. 9	-0.30	0.05		0.30	July 1	1.95	2015 Jan. 1	- 0.83
Doc. 10	2.75	2.20		3.75	2016 Mar 16	-0.40	0.00	_	0.25	2007 Jan 1	2 70	2016 July 1	_ ^ 99
Dec. 10	2.00	2.50	_	5.00	2010 Wiai. 10	-0.40	0.00		0.25		3 19	2010 July 1	- 0.88
2009 Jan. 21	1.00	2.00	-	3.00	2019 Sep. 18	-0.50	0.00	-	0.25	july i			
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

1 Pursuant to Section 247 of the Civil Code.

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

			Fixed rate tenders	rs Variable rate tenders			
	Bid amount	Allotment amount	Fixed rate	Minimum bid rate	Marginal rate 1	Weighted average rate	
Date of Settlement	€ million		% per annum	-			Running for days
Main refinanci	ng operations						
2022 Jun. 1 Jun. 8 Jun. 15 Jun. 22	410 447 669 688	410 447 669 688	0,00 0,00 0,00				777777777777777777777777777777777777777
Jun. 29 Jul. 6 Jul. 13	1 483 1 041 916	1 483 1 041 916	0,00 0,00 0,00	-			, 7 7 7 7
Long-term refi	nancing operatio	ns	-	•	•	•	•
2022 May 26 Jun. 30	44 401	44 401	2 2	-	-	-	91 91

 $\star$  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 \*

Monthly average 2021 Dec. 2022 Jan. Feb. Mar. Apr. May June

	% per annum						
			EURIBOR 2				
y e	€STR 1	EONIA 1	One-week funds	One-month funds	Three-month funds	Six-month funds	Twelve-month funds
ec.	- 0.577	- 0.49	- 0.58	- 0.60	- 0.58	- 0.55	- 0.50
in.	- 0.578		- 0.58	- 0.57	- 0.56	- 0.53	- 0.48
eb.	- 0.577		- 0.57	- 0.55	- 0.53	- 0.48	- 0.34
lar.	- 0.579	· ·	- 0.57	- 0.54	- 0.50	- 0.42	- 0.24
pr.	- 0.584		- 0.57	- 0.54	- 0.45	- 0.31	0.01
lay	- 0.585		- 0.57	- 0.55	- 0.39	- 0.14	0.29
ine	- 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 ( $\leq$ 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)

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

a) Outstanding amounts °

Households' deposits				Non-financial corporations' deposits					
with an agreed matur	ity of								
up to 2 years		over 2 years		up to 2 years		over 2 years			
Effective interest rate 1 % p.a.	Volume <sup>2</sup> € million	Effective interest rate 1 % p.a.	Volume <sup>2</sup> € million	Effective interest rate 1 % p.a.	Volume <sup>2</sup> € million	Effective interest rate 1 % p.a.	Volume <sup>2</sup> € million		
0.24	48,897	0.96	220,455	- 0.21	74,080	0.83	21,45		
0.23	48,834	0.95	220,118	- 0.23	71,148	0.88	21,46		
0.23	45,300	0.94	219,790	- 0.23	69,514	0.82	20,96		
0.22	44,901	0.93	219,708	- 0.26	68,741	0.81	21,05		
0.23	44,268	0.93	219,587	- 0.28	69,338	0.78	21,22		
0.23	43,497	0.92	219,456	- 0.29	75,404	0.77	22,44		
0.22	42,503	0.91	219,058	- 0.30	70,830	0.76	22,79		
0.18	41,979	0.91	220,289	- 0.37	75,038	0.74	22,96		
0.18	41,157	0.90	220,225	- 0.31	72,404	0.73	23,07		
0.18	40,586	0.90	220,056	- 0.30	71,560	0.71	23,68		
0.17	40,201	0.89	219,655	- 0.28	68,341	0.74	24,01		
0.18	39,503	0.88	219,264	- 0.27	73,001	0.73	23,47		
0.19	39,659	0.87	218,855	- 0.20	65,308	0.73	23,35		

	Housing loans	to households	3				Loans to households for consumption and other purposes 4,5					
	with a maturit	y of										
	up to 1 year 6		over 1 year an up to 5 years	d	over 5 years		up to 1 year 6		over 1 year an up to 5 years	d	over 5 years	
of :h	Effective interest rate 1 % p.a.	Volume <b>²</b> € million	Effective interest rate 1 % p.a.	Volume <b>2</b> € million	Effective interest rate 1 % p.a.	Volume <b>2</b> € million	Effective interest rate 1 % p.a.	Volume <b>2</b> € million	Effective interest rate 1 % p.a.	Volume <b>²</b> € million	Effective interest rate 1 % p.a.	Volume <b>2</b> € million
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
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

	Loans to non-financial corpor	ans to non-financial corporations with a maturity of										
	up to 1 year 6		over 1 year and up to 5 years		over 5 years							
End of	Effective interest rate 1	Volume ²	Effective interest rate 1	Volume ²	Effective interest rate 1	Volume ²						
month	% p.a.	€ million	% p.a.	€ million	% p.a.	€ 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 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 account. **4** Loans for consumption of goods and services. **5** For the purpose of personal use in the consumption of goods and services. **5** For the purposes, debt consolidation, education, etc. **6** Including overdrafts (see also footnotes 12 to 14 on p. 47). 12 to 14 on p. 47 ).

End of month 2021 May June July Aug Sep. Oct. Nov Dec. 2022 Jan. Feb. Mar. Apr. May

End of month 2021 Ma Jun July Au Sep Oct No Dec 2022 Jan Feb Ma

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

Households' o	deposits										
		with an agree	d maturity of					redeemable a	t notice <sup>8</sup> of		
Overnight	Overnight		up to 1 year		over 1 year and up to 2 years		over 2 years		hs	over 3 months	
Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <sup>2</sup> € million	Effective interest rate 1 % p.a.	Volume ² € million
- 0.01 - 0.01 - 0.01 - 0.01 - 0.01	1,786,469 1,788,689 1,800,235 1,797,331 1,791,879	0.01 - 0.04 0.02 0.02 - 0.01	2,399 2,957 2,414 2,315 2,254	0.37 0.23 0.28 0.25 0.26	307 310 401 278 241	0.32 0.28 0.29 0.34 0.34	529 566 695 558 513	0.09 0.09 0.08 0.08 0.08 0.08	537,061 536,727 536,463 536,145 535,555	0.16 0.16 0.16 0.16 0.15	25,715 25,503 25,216 24,993 24,780
- 0.01 - 0.01 - 0.01	1,800,411 1,808,547 1,806,993	0.06 0.09 - 0.07	1,944 1,879 2,327	0.25 0.21 0.20	228 266 204	0.39 0.48 0.51	474 650 721	0.08 0.08 0.08	535,197 535,140 536,715	0.15 0.15 0.14	24,558 24,329 24,116
- 0.01 - 0.02 - 0.02	1,806,352 1,819,881 1,808,690	0.11 0.06 0.12	2,132 2,167 2,044	0.22 0.25 0.28	363 226 258	0.36 0.33 0.38	642 564 824	0.08 0.07 0.07	537,038 537,327 535,696	0.14 0.13 0.13	23,363 23,136 22,897
- 0.02 - 0.02	1,826,796 1,827,315	0.14 0.14	1,974 2,053	0.39 0.53	292 569	0.46 0.66	694 1,023	0.07 0.07	534,800 533,590	0.13 0.14	22,686 22,562

	Non-financial corpora	on-financial corporations' deposits											
			with an agreed matur	ity of									
	Overnight		up to 1 year		over 1 year and up to	2 years	over 2 years						
rting d	Effective interest rate 1 % p.a.	Volume <b>2</b> € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million					
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	× .	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					
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					

	Loans to household	Loans to households											
	Loans for consumpt	ion 4 with an in	itial rate fixation	of									
	Total (including charges)	Total		of which: Renegotiated loans <b>9</b>		floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years			
Reporting period	Annual percentage rate of charge <b>10</b> % p.a.	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € 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 float 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 insurance.

Reporting period 2021 May June July Aug Sep. Oct. Nov. Dec. 2022 Jan Feb. Mar. Apr. May

Reporti period 2021 N Ju A Se С ſ D 2022 Ja N

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

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

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

	Loans to househo	lds (cont'd)					Loans to non-fin	ancial corporations	5	
			of which:						of which:	
	Revolving loans 13 and overdrafts 13 Credit card debt 1	4	Revolving loans and overdrafts 1	12 3	Extended credit card debt		Revolving loans and overdrafts <sup>1</sup> Credit card debt	12 3 14	Revolving loans and overdrafts 1	12 3
Reporting period	Effective interest rate 1 % p.a.		Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate <sup>1</sup> % p.a.	Volume <sup>2</sup> € million	Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume <b>2</b> € 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

	Loans to non-financial corporations (cont'd)															
			of which:		Loans up 1	to €1 millior	n 15 with ar	initial rate	fixation of		Loans ove	r €1 million	15 with an	initial rate f	xation of	
	Total		Renegotia loans 9	ted	floating ra up to 1 ye	te or ar 9	over 1 yea up to 5 ye	r and ars	over 5 yea	rs	floating ra up to 1 ye	te or ar 9	over 1 yea up to 5 ye	r and ars	over 5 yea	rs
Reporting period	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume <b>7</b> € million	Effective interest rate 1 % p.a.	Volume 7 € million
	Total lo	ans														
2021 May June	1.32 1.28	58,626 83,129	1.53 1.29	16,038 27,883	1.89 1.93	8,462 9,481	2.33 2.37	1,179 1,409	1.56 1.54	1,578 1,734	1.20 1.19	36,993 52,578	1.42 0.78	2,491 6,948	1.06 1.28	7,923 10,979
July Aug. Sep.	1.35 1.33 1.36	70,171 54,047 69,341	1.42 1.58 1.33	20,858 14,739 23,411	1.84 1.79 1.83	9,608 7,827 9,309	2.26 2.31 2.39	1,403 1,094 1,198	1.52 1.44 1.48	1,753 1,308 1,245	1.30 1.25 1.28	41,858 33,740 45,311	1.29 1.14 1.44	3,934 3,001 4,339	1.00 1.08 1.06	11,615 7,077 7,939
Oct. Nov. Dec.	1.21 1.18 1.20	71,404 75,363 105,525	1.32 1.34 1.32	20,386 18,828 29,572	1.76 1.85 1.94	9,149 9,681 10,348	2.38 2.35 2.28	1,247 1,402 1,529	1.50 1.44 1.45	1,242 1,474 1,817	1.08 1.03 1.05	48,160 48,548 71,028	1.43 0.95 1.40	2,573 4,444 5,515	1.07 1.16 1.18	9,033 9,814 15,288
2022 Jan. Feb. Mar.	1.29 1.32 1.50	64,813 66,898 99,725	1.26 1.22 1.39	21,030 18,910 29,044	1.80 1.78 1.78	8,812 9,056 10,692	2.39 2.55 2.54	1,280 1,205 1,571	1.53 1.63 1.83	1,443 1,445 1,981	1.14 1.13 1.38	44,620 42,295 68,399	1.49 1.71 1.77	1,821 3,088 5,314	1.27 1.42 1.65	6,837 9,809 11,768
Apr. May	1.53 1.49	74,483 78,530	1.51 1.73	19,771 18,948	1.82 1.82	9,033 9,416	2.63 2.82	1,388 1,359	2.19 2.30	1,883 1,707	1.31 1.17	47,761 53,164	1.79 2.65	3,673 3,419	1.91 2.16	10,745 9,465
	of w	hich: Co	ollaterali	sed loan	IS <sup>11</sup>											
2021 May June	1.46 1.36	7,097 13,761			1.76 1.79	340 410	1.73 1.84	75 109	1.21 1.20	404 444	1.68 1.35	3,830 8,365	1.15 1.38	439 1,110	1.11 1.35	2,009 3,323
July Aug. Sep.	1.41 1.45 1.35	10,857 7,709 11,637			1.68 1.81 1.71	445 328 405	1.57 1.76 2.14	117 85 61	1.24 1.18 1.17	404 308 284	1.56 1.55 1.35	6,539 4,191 7,760	1.30 1.69 1.92	933 819 827	1.02 1.09 1.06	2,419 1,978 2,300
Oct. Nov. Dec.	1.29 1.34 1.27	10,023 8,064 18,534			1.72 1.76 1.69	371 359 438	1.87 1.60 1.93	78 96 113	1.24 1.19 1.23	298 382 430	1.46 1.43 1.20	5,810 4,537 11,302	1.90 1.36 1.73	660 704 1,948	0.73 1.08 1.18	2,806 1,986 4,303
2022 Jan. Feb. Mar.	1.25 1.60 1.40	10,159 9,498 14,380			1.66 1.66 1.71	371 296 503	1.54 1.98 2.07	102 87 120	1.35 1.37 1.63	406 318 444	1.19 1.63 1.15	7,044 4,798 9,349	1.20 1.85 2.56	386 1,166 1,117	1.37 1.46 1.63	1,850 2,833 2,847
Apr. May	1.72 2.01	9,355 9,129			1.92 1.95	325 385	2.15 2.41	113 116	1.93 2.18	481 465	1.53 1.81	5,242 5,246	1.68 3.02	817 726	2.07 2.13	2,377 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 reparted by (d) there is no funds are borrowed and repaid; (c) the loan may be used repeatedly; (d) there is no obligation of regular repayment of funds.  ${\bf 13}$  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 variable 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. Deutsche Bundesbank Monthly Report July 2022 48<sup>•</sup>

#### VII. Insurance corporations and pension funds

#### 1. Assets

	€ billion									
		Currency				Investment				
End of	Total	and	Debt	Loans 2	Shares and	fund	Financial	Technical	Non-financial	Remaining
yeanquarter		rnorations 4	securities		other equity	shares/units	denvatives	16361763 -	435613	335613
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
Q2	2,517.5	317.0	460.5	371.9	409.4	738.7	4.3	68.5	38.7	58.5
Q3 Q4	2,547.1 2,587.4	311.1 301.7	472.9 478.9	373.8 370.6	411.3 425.4	809.5 841.0	4.4 4.7	67.1	39.0 38.2	58.0 58.7
2021 Q1 02	2,575.3 2,591.4	292.4 280.5	466.8 466.5	361.7 361.3	437.8 449.6	844.7 864.5	3.9 3.4	72.0 72.6	38.9 39.0	57.2 54.1
Q3 04	2,633.2	271.8	471.3	358.3	464.4	882.1 903 3	3.3	87.9 85.1	38.4 40.8	55.8
2022 Q1	2,543.0	245.0	441.0	333.9	471.4	860.4	2.7	87.9	41.1	59.6
	Life insur	ance								
2019 Q3 O4	1,350.1 1,325.2	205.3 194.8	242.5 227.6	225.2 217.6	57.9 61.1	563.6 570.4	3.1 2.4	10.4	20.9 21.1	21.0 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 Q3	1,347.1 1,369.2	192.3 188.4	234.4 241.6	223.6 225.7	64.4 66.1	577.0 592.6	2.8 3.0	13.7	20.3 20.6	18.5 17.6
Q4 2021 Q1	1,395.8 1 361 2	183.5 170.4	242.7 231 5	229.9 219.6	70.2	616.5 614 3	3.3 2 1	14.3	20.8 21.5	14.5 13.2
Q2	1,371.7	164.4	231.3	219.4	78.0	627.2	2.0	14.1	21.5	13.8
Q4	1,400.8	152.4	232.7	211.8	93.5	658.0	1.5	14.6	20.0	14.3
2022 Q1	1,313.0 Non-lifo i	137.6	211.8	193.6	99.9	619.5	0.9	13.9	22.1	13.8
2019 03	682.6	11501ance	135 3	79 9	80.6	189.4	0.4	38.8	113	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 Q2	669.3 685.4	111.1 111.8	131.3 134.4	79.8 82.4	80.0 81.1	186.9 197.0	0.3 0.4	38.7 39.5	12.0 12.1	29.3 26.7
Q3 Q4	693.0 703.1	109.3 105.9	137.6 139.5	83.3 84.5	82.7 85.1	203.1 210.2	0.4 0.5	38.5 37.6	12.1 12.7	26.3 27.3
2021 Q1	716.8	108.1	139.5	83.6	88.7	215.1	0.4	40.0	12.8	28.6
Q3	720.5	98.8	140.4	83.8	93.9	223.3	0.4	46.6	12.0	27.5
Q4 2022 Q1	732.4	94.7	139.9	84.8	97.8	227.8	0.3	44.7	14.0	28.4 30.8
	Reinsurar	nce <sup>5</sup>			•			,	•	′
2019 Q3	459.9 475 2	10.8	90.7 90.2	52.1 58 3	259.6	15.3 14 5	1.0	9.6	5.9	15.0 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 Q3	485.0 485.0	12.9 13.5	91.7 93.7	65.9 64.9	264.0 262.6	14.6 13.7	1.1 1.0	15.2 15.0	6.3 6.3	13.3 14.2
Q4 2021 Q1	488.5 497 3	12.3 13.9	96.7 95.8	56.3 58 5	270.2	14.3 15.4	1.0 1.4	16.3	4.7	16.9 15 3
Q2	499.4	12.8	94.8	58.4	280.9	15.6	1.0	18.1	4.6	13.1
Q3 Q4	516.7	14.3	96.1	58.6	281.6	17.5	1.0	25.9	4.7	14.2
2022 Q1	508.2	15.5	95.1	59.3	272.6	16.3	1.6	27.9	5.0	15.0
2019 03		us º I 856	80.7	31.0	365	415 5		86	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 Q2	601.0 626.0	92.2 91.8	56.8 58.8	48.9 49.8	9.4 9.8	362.0 383.4	0.1 0.1	11.3 11.3	17.6 18.3	2.7 2.8
Q3 Q4	638.5 662.9	91.1 88.9	59.6 60.6	50.2 49.5	10.1 10.3	394.7 419.5	0.2 0.2	11.6 11.9	18.5 18.8	2.5 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 Q3	683.2 689.8	85.0 82.9	60.2 60.4	49.3	11.3	445.1 453.6	0.1	12.1	17.8	2.3
Q4 2022 Q1	709.8 687.6	82.1 76.4	60.0 56.9	48.7	11.3 12.1	4/3.5	0.1	12.4	18.4 18.4	3.2 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 as of 2020 QT han values, previously book values. 5 including tensorance 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 Changen data courses included. 7 Change in data sources.

#### VII. Insurance corporations and pension funds

## 2. Liabilities

	€ billion									
					Technical reserve	5				
End of	Total	Debt securities	Loope 1	Shares and	Total 2	Life/ pension	Non life	Financial	Remaining	Not worth 4
yeanquarter		issued		other equity	10181 2	enutiements 3	Non-me	derivatives	liabilities	Net Worth 4
2010 02	Insurance co	orporations		1 400 F	1760.4	1 5 4 2 0	226.4	1 22	I 121 F	
Q4	2,492.5 2,473.9	31.7 31.7	75.8	488.5 515.3	1,769.4	1,543.0	226.4 215.3	1.9	131.5	-
2020 Q1	2,426.8	31.8	82.4	464.3	1,721.8	1,483.2	238.6	2.4	124.1	-
Q2 Q3	2,517.5 2,547.1	33.1 34.3	82.2 80.0	505.3	1,767.6	1,527.7 1,549.1	239.9 236.4	1.9	127.3	-
Q4	2,587.4	36.6	79.7	540.4	1,799.0	1,579.2	219.8	1.6	130.2	-
Q2	2,575.3 2,591.4	34.8 33.0	81.4 81.3	551.7	1,778.7	1,541.3 1,556.4	237.4 237.3	2.5	126.2	
Q3 04	2,633.2 2 649 9	35.4 36.1	82.8 82.0	567.3 579 7	1,818.0 1 821 1	1,569.1 1 578 4	248.9 242 7	2.5 2.5	127.0 128.6	
2022 Q1	2,543.0	34.4	82.2	565.5	1,728.6	1,474.6	254.0	4.0	128.3	-
	Life insur	ance		•					•	
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	-
Q2	1,295.7	3.6 3.8	19.3	114.2	1,117.8	1,117.8	-	0.6	40.3	-
Q3 04	1,369.2 1,395.8	3.9 3.9	19.5 20.7	136.8 142.8	1,164.7 1,185.6	1,164.7 1,185.6		0.5 0.5	43.7	
2021 Q1	1,361.2	3.3	19.9	143.1	1,154.3	1,154.3	-	1.0	39.6	-
Q2 03	1,371.7	3.3	20.4	144.2 148.1	1,164.9 1,176.4	1,164.9 1,176.4		1.0	37.9 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 i	nsurance								
2019 Q3 Q4	682.6 673.5	1.2 1.2	9.1	149.7	471.9 457.2	354.8 349.4	117.1 107.8	0.1	50.6 52.0	
2020 Q1	669.3	1.3	9.8	141.9	468.2	344.4	123.8	0.1	48.0	-
Q2 03	685.4 693.0	1.3 1.2	9.5	149.3	478.1 482.1	355.6 362.3	122.5 119.8	0.1	47.1	
Q4	703.1	1.3	9.7	157.9	482.9	368.7	114.2	0.0	51.2	-
2021 Q1 02	716.8	1.2 1.2	10.6	162.8 166.4	491.6 493.6	362.6 366 3	129.0 127 3	0.1	50.5 48.4	
Q3	727.5	1.2	10.5	169.2	499.0	367.9	131.2	0.2	47.5	-
Q4 2022 Q1	732.4	1.4	10.8	176.2	493.0 484.0	367.6	125.4	0.2	50.9	_
2022 Q1	Reinsurar	1	<b>I</b> 11.0	1,1,1,5	-10-1.0	547.2	150.0	0.5		
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 02	461.7	26.9 28.1	53.3 53.5	208.1	135.9 139.1	21.0 21.8	114.9 117.4	1.7	35.8 36.8	
Q3	485.0	29.2	50.9	227.0	138.7	22.1	116.6	1.0	38.1	-
2021 01	408.3	31.4	50.9	239.0	130.4	24.8	103.6	1.4	36.2	_
Q2	499.4	28.5	50.4	248.3	135.2	25.2	110.0	1.1	35.9	-
Q3 Q4	519.0	30.9	50.5	250.1	142.7	24.9	117.8	1.3	35.5	-
2022 Q1	508.2	30.0	50.4	248.4	140.9	23.8	117.2	2.3	36.1	-
	Pension fun	ds <sup>6</sup>								
2019 Q3 Q4	726.5 735.8		8.2 8.4	8.4 8.6	628.2 638.0	628.2 638.0		-	2.9 3.7	78.9 77.1
2020 Q1 7	601.0	-	1.6	22.6	497.5	496.9	-	0.3	8.8	70.3
Q2 Q3	638.5		1.6	25.6	507.3	506.7	-	0.3	8.9 8.9	82.4 88.9
Q4	662.9	-	1.6	28.4	528.5	527.9	-	0.3	9.0	95.1
2021 Q1 Q2	664.3 683.2		1.6 1.8	28.8 31.1	529.3 536.5	528.1 534.8		0.3 0.2	8.6 9.3	95.8 104.3
Q3 Q4	689.8 709.8		1.8 1.9	31.5 31.8	541.1 560.5	538.9 557.6		0.2	9.3 9.2	106.0 106.4
2022 01	687.6	l _	1.4	28.7	555.1	552.2	_	0.1	73	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.

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

€ million													
Debt securities													
	Sales					Purchases							
	Domestic debt	securities 1				Residents							
Salos							Credit in-						
=				Public	Foreign		including						
total pur-		Bank debt	Corporate bonds	debt secur-	debt secur-		building and loan	Deutsche	Other	Non-			
chases	Total	securities	(non-MFIs) 2	ities	ities 3	Total 4	associations 5	Bundesbank	sectors 6	reside	ents 7		
146,620 33,649 51,813 – 15 971	- 1,212 13,575 - 21,419 - 101,616	- 7,621 - 46,796 - 98,820 - 117 187	24,044 850 - 8,701 153	- 17,635 59,521 86,103 15 415	147,831 20,075 73,231 85 645	92,682 - 23,876 - 3,767 16,409	- 103,271 - 94,793 - 42,017 - 25,778	22,967 36,805 - 3,573 - 12,708	172,986 34,112 41,823 54 895	_	53,938 57,525 55,581 32 379		
64,775	- 31,962	- 47,404	- 1,330	16,776	96,737	50,408	- 12,124	- 11,951	74,483		14,366		
33,024 71,380 54 840	- 36,010 27,429 11 563	- 65,778 19,177 1 096	26,762 18,265 7 112	3,006 - 10,012 3,356	69,034 43,951 43,277	116,493 164,148 137 907	- 66,330 - 58,012 - 71,454	121,164 187,500 161,012	61,659 34,660 48 349	=	83,471 92,768 83.067		
64,682 136,117	16,630 68,536	33,251 29,254	12,433 32,505	- 29,055 6,778	48,052 67,581	93,103 59,013	- 24,417 8,059	67,328 2,408	50,192 48,546	-	28,421 77,104		
437,976 283,684	374,034 221,648	14,462 31,941	88,703 19,754	270,870 169,953	63,941 62,036	274,979 310,838	18,955 – 41,852	226,887 245,198	29,138 107,492	-	162,996 27,154		
28,916	15,267	1,998	- 283	13,553	13,649	30,959	- 583	22,605	8,937	-	2,043		
13,168 27,503 27,619	3,091 34,709 17,160	- 9,235 6,868 12,855	3,715 1,227 8,183	8,611 26,615 – 3,878	10,077 - 7,206 10,460	30,955 11,907 32,908	- 5,500 - 5,337 6,387	25,087 17,312 17,663	11,368 - 68 8,858	-	17,787 15,596 5,289		
103 39,728 – 39,780	3,176 31,488 - 23,893	7,354 6,574 – 17,511	- 7,515 8,351 - 8,944	3,337 16,563 2,561	- 3,073 8,241 - 15,886	9,377 34,851 – 1,271	- 17,904 - 529 - 9,420	20,765 23,375 14,137	6,517 12,005 – 5,988	-	9,275 4,877 38,509		
50,489 32,161 62,464	25,937 27,538 43,108	10,503 10,579 22,778	6,559 3,056 7,972	8,876 13,902 12,358	24,552 4,624 19,356	41,057 25,309 46,054	- 2,870 8,057 6,811	14,990 14,793 10,709	28,936 2,459 28,535		9,432 6,852 16,409		
- 17,449 24,645	- 2,238 23,908	- 3,167 4,064	707 4,899	222 14,944	- 15,211 737	- 2,311 28,196	- 16,927 5,484	13,068 14,400	1,548 8,312	=	15,138 3,551		

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

 Net sales at market values plus/minus changes in issuers' portfolios of their own debt securities.
 Including cross-border financing within groups from January 2011.
 Net purchases or net sales (-) of foreign debt securities by residents; transaction values.
 Domestic and foreign debt securities.
 Book values; statistically adjusted.
 Residual; also including purchases of domestic and foreign securities by domestic mutual funds.
 Up to end-2008 including Deutsche Bundesbank.
 Net purchases or net sales (-) of domestic debt securities by non-residents; transaction values.
 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 scurities 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.

Period

Dec. 2022 Jan. Feb. Mar. Apr. May

Period

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

	€ million, nominal value							
		Bank debt securities 1						
			Mortgage	Public	Debt securities issued by special- purpose	Other bank	Corporate bonds	Public
Period	Total	Total	Pfandbriefe	Pfandbriefe	credit institutions	debt securities	(non-MFIs) 2	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 <b>3</b>	1,206,483	717,002	29,059	7,621	511,222	169,103	73,371	416,108
2017 <b>3</b>	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
Feb. Mar.	136,066 123,858 168,436	69,054 67,336 85,551	5,602	1,510 1,364 875	50,426 54,198 72,212	5,953 6,600 6,862	9,451 16,473	47,071 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 se	ecurities with ma	turities of more	e than four yea	rs <sup>4</sup>			
2011	368,039	153,309	13,142	8,500	72,985	58,684	41,299	173,431
2012 2013 2014	421,018 372,805 420,006	177,088 151,797 157,720	16,482 17,678	6,482 10,007 8,904	60,662 61,674	64,646 69,462	44,042 45,244 56,249	175,765 206,037
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 <b>6</b>	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
Nov. Dec.	29,324 15,792	9,512 4,714	3,528 1,705 1,625	500 1,150	4,165 1,258	2,121 3,142 680	2,131 5,667 1,259	25,355 14,145 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		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.

# 3. Amounts outstanding of debt securities issued by residents \*

€ million, nominal value

	c minori, nom		e									
			Bank debt	securities								
End of year or month/ Maturity in years	Total		Total		Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special-purpose credit institutions	Other bank debt securities	Corporate bonds (non-MFIs)		Public debt securitie:	s
2011 2012 2013 2014	3,37 3,28 3,14 3,11	70,721 85,422 45,329 11,308	1	1,515,911 1,414,349 1,288,340 1,231,445	149,185 145,007 127,641 121,328	188,663 147,070 109,290 85,434	577,423 574,163 570,136 569,409	1 600,640 548,109 481,273 455,274	1 2 2 2 2	47,585 20,456 21,851 32,342	1,60 1 1,65 1,65 1,64	07,226 50,617 35,138 47,520
2015 2016 <b>1</b> 2017 <b>1</b> 2018 2019	3,04 3,06 3,09 3,09 2 3,14	46,162 68,111 90,708 91,303 49,373	1 1 1 1	1,154,173 1,164,965 1,170,920 1,194,160 1,222,911	130,598 132,775 141,273 161,088 174,188	75,679 62,701 58,004 51,439 47,712	566,811 633,578 651,211 670,062 696,325	381,085 335,910 320,432 1 311,572 304,686	2 2 3 12 3 2 3	57,612 75,789 02,543 13,527 42,325	1,63 1,62 1,61 1,58 1,58	34,377 27,358 17,244 83,616 84,136
2020 <b>4</b> 2021	2 3,54 3,78	45,200 81,975	2 1	1,174,817 1,250,777	183,980 202,385	55,959 63,496	687,710 731,068 735,268	2 247,169 253,828	<b>2</b> 3 4	79,342 14,791	1,99 2,11	91,040 16,406
Oct. Nov. Dec.	3,72 3,76 3,80 3,78	49,030 61,389 05,409 81,975	1 1 1	1,242,232 1,250,677 1,262,369 1,250,777	202,470 200,532 202,385	63,409 63,672 63,496	730,167 741,009 731,068	253,090 254,631 257,157 253,828	4444	13,813 20,551 14,791	2,03 2,09 2,12 2,12	96,898 22,489 16,406
2022 Jan. Feb. Mar.	3,79 3,80 3,85	93,633 05,493 51,703	1	1,267,273 1,277,071 1,302,963	208,867 211,728 213,413	63,110 63,984 64,234	739,737 746,531 769,133	255,559 254,828 256,182	4 4 4	20,487 16,380 24,584	2,10 2,11 2,12	05,873 12,042 24,156
Apr. May	3,85 3,87	52,737 70,198	1	1,311,841 1,309,629	214,466 214,981	63,960 65,720	776,662 773,798	256,752 255,131	4	24,036 27,139	2,11 2,13	16,860 33,430
	Breakdow	vn by i	remainir	ng perio	d to maturity <sup>3</sup>				Posit	ion at	end-May 2	2022
bis unter 2 2 bis unter 4 4 bis unter 6 6 bis unter 8 8 bis unter 10 10 bis unter 15 15 bis unter 20 20 und darüber	1 24 71 55 39 28 23 10 33	40 396 14 953 54 710 93 595 86 696 39 400 05 389 35 059		458 560 311 786 218 879 131 352 80 577 62 190 16 878 29 408	58 274 54 277 44 517 33 745 12 217 7 671 3 327 953	27 878 15 108 10 515 5 954 1 415 4 403 359 88	302 277 185 990 111 994 68 965 45 677 38 394 11 300 9 200	70 131 56 411 51 852 22 687 21 268 11 722 1 893 19 167		79 923 82 257 63 497 43 331 27 019 36 610 14 509 79 993	70 32 27 21 17 14 7 22	01 913 20 910 72 335 18 911 79 100 40 600 74 002 25 658

\* 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

			1									
			Change in domes	tic public limited c	ompanies' capital	due to						
Period	Share capital = circulation at end of period under review	Net increase or net decrease (-) during period under review	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 legal for	of m	reduction of capit and liquidat	on al	Memo item: Share circulation at market values (market capita- lisation) level at end of period under review 2
2011 2012 2013 2014	177,167 178,617 171,741 177,097	2,570 1,449 - 6,879 5,356	6,390 3,046 2,971 5,332	552 129 718 1.265	462 570 476 1.714	- - -	552 478 1,432 465	-	762 594 619 1.044	- - -	3,532 2,411 8,992 1,446	924,214 1,150,188 1,432,658 1,478,063
2015 2016 2017 2018 2019 <b>34</b>	177,416 176,355 178,828 180,187 183,461	319 - 1,062 2,471 1,357 1,673	4,634 3,272 3,894 3,670 2,411	397 319 776 716 2,419	599 337 533 82 542	- - - -	1,394 953 457 1,055 858	- - - -	1,385 2,165 661 1,111 65	- - - -	2,535 1,865 1,615 946 2,775	1,614,442 1,676,397 1,933,733 1,634,155 1,950,224
2020 <b>4</b> 2021	181,881 186,580	- 2,872 4,152	1,877 9,561	219 672	178 35		2,051 326		460 212		2,635 5,578	1,963,588 2,301,942
2021 Sep.	186,316	230	678	6	11	-	14	-	9	-	443	2,238,994
Oct. Nov. Dec.	188,444 188,352 186,580	2,127 - 109 - 2,595	2,166 85 524	16 _ 16	- 6 -		4 5 201		35 1 106	- - -	16 194 2,827	2,267,343 2,198,231 2,301,942
2022 Jan. Feb. Mar.	186,830 186,737 186,993	250 - 110 256	341 64 260	0 9 91	2 40 -	-   -   -	9 11 0	-   -   -	23 76 25	- - -	61 137 70	2,211,900 2,060,901 2,076,514
Apr. May	186,971 187,056	25 84	47 215	1 42	0		0 0	-	4 0	-	19 172	2,007,353 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.

## 5. Yields and indices on German securities

Yields or	n debt s	securities	outsta	inding is	sued by	/ residents 1					Price indices 2,3			
		Public deb	ot secu	urities			Bank	debt secu	irities		Debt securities		Shares	
				Listed Federal	securit	ies								
Total		Total		Total		With a residual maturity of 9 to 10 years <b>4</b>	Tota	1	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 ar	6 per annum										Average daily rate	End-1998 = 100	End-1987 = 100	End-1987 = 1,000
	2.5 2.6 1.4 1.3 1.0		2.4 2.4 1.3 1.3 1.0		2.4 2.4 1.3 1.3 1.0	2.7 2.6 1.5 1.6 1.2		2.7 2.9 1.6 1.3 0.9	3.3 3.5 2.1 2.1 1.7	4.0 4.3 3.7 3.4 2.9	124.96 131.48 135.11 132.11 139.68	102.95 109.53 111.18 105.92 114.37	368.72 304.60 380.03 466.53 468.39	6,914.19 5,898.39 7,612.39 9,552.10 9,805.59
_	0.5 0.1 0.3 0.4 0.1	_	0.4 0.0 0.2 0.3 0.2	_	0.4 0.0 0.2 0.3 0.3	0.5 0.1 0.3 0.4 - 0.3		0.5 0.3 0.4 0.6 0.1	1.2 1.0 0.9 1.0 0.3	2.4 2.1 1.7 2.5 2.5	139.52 142.50 140.53 141.84 143.72	112.42 112.72 109.03 109.71 111.32	508.80 526.55 595.45 474.85 575.80	10,743.01 11,481.06 12,917.64 10,558.96 13,249.01
_	0.2 0.1	-	0.4 0.3	-	0.5 0.4	- 0.5 - 0.4	-	0.0 0.1	0.1 0.2	1.7 0.9	146.15 144.23	113.14 108.88	586.72 654.20	13,718.78 15,884.86
	0.1 0.4 0.6	-	0.1 0.2 0.3	-	0.2 0.1 0.2	- 0.1 0.2 0.3		0.2 0.6 0.8	0.5 0.8 1.0	1.2 1.7 2.1	143.24 141.55 138.06	107.29 105.86 102.90	636.37 593.56 583.63	15,471.20 14,461.02 14,414.75
	1.1 1.3 1.9		0.8 1.0 1.5		0.7 0.9 1 4	0.7 1.0 1 4		1.4 1.6 2 1	1.5 1.7 2 3	2.5 3.0 3.8	135.85 135.30 133.21	99.80 97.98 96.13	564.54 561.04 494 98	14,097.88 14,388.35 12,783,7

**1** Bearer debt securities with maximum maturities according to the terms of issue of over 4 years. Structured debt securities, debt securities with unscheduled redemption, zero coupon bonds, floating rate notes and bonds not denominated in Euro are not included. Group yields for the various categories of securities are weighted by the amounts outstanding of the debt securities included in the calculation. Monthly figures

are calculated on the basis of the yields on all the business days in a month. The annual figures are the unweighted means of the monthly figures. Adjustment of the scope of securities included on 1 May 2020. **2** End of year or month. **3** Source: Deutsche Börse AG. **4** Only debt securities eligible as underlying instruments for futures contracts; calculated as unweighted averages.

#### 6. Sales and purchases of mutual fund shares in Germany

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

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

				2020	2021				2022
Itom	2010	2020	2021	04	01	03	03	04	01
	2015	2020	2021			Q2	69	<u>  </u>	Q1
Currency and deposits	<b>I</b> 17.93	96.81	40.12	3.69	21.81	l - 25.36	19.57	24.11	14.83
Debt securities Short-term debt securities Long-term debt securities Memo item:	- 2.37 - 1.29 - 1.08	2.99 1.27 1.72	3.11 2.27 0.85	- 0.20 - 0.18 - 0.02	- 1.53 0.12 - 1.65	1.90 0.77 1.13	1.58 0.26 1.32	1.16 1.12 0.05	0.62 0.39 0.23
Debt securities of domestic sectors Non-financial corporations Financial corporations General government Debt securities of the rest of the world	- 0.58 0.49 - 0.64 - 0.43 - 1.79	1.38 - 0.17 0.12 1.44 1.61	1.34 0.74 1.08 - 0.48 1.78	0.10 - 0.48 0.09 0.49 - 0.30	- 0.64 0.10 - 0.55 - 0.20 - 0.88	0.87 0.62 0.48 - 0.24 1.03	1.75 0.59 0.58 0.58 – 0.17	- 0.64 - 0.57 0.56 - 0.63 1.80	0.34 0.17 0.44 - 0.27 0.28
Loans Short-term loans Long-term loans Memo item:	- 1.49 12.60 - 14.09	- 9.65 - 7.30 - 2.36	50.00 38.01 11.99	9.65 6.11 3.55	- 0.38 - 3.95 3.57	6.35 7.92 - 1.57	13.40 11.48 1.92	30.64 22.56 8.08	5.36 - 2.72 8.08
Loans to domestic sectors Non-financial corporations Financial corporations General government Loans to the rest of the world	- 26.04 - 28.14 1.86 0.24 24.55	- 1.15 - 12.27 10.57 0.55 - 8.51	9.49 7.11 2.38 0.00 40.51	3.89 - 4.90 8.65 0.14 5.77	- 6.40 - 1.66 - 4.75 0.00 6.02	- 0.14 - 3.40 3.26 0.00 6.49	0.03 - 1.21 1.24 0.00 13.37	16.01 13.38 2.63 0.00 14.63	7.85 2.44 5.41 0.00 - 2.49
Equity and investment fund shares Equity Listed shares of domestic sectors Non-financial corporations Financial corporations Listed shares of the rest of the world Other equity 1 Investment fund shares Money market fund shares Non-MMF investment fund shares	115.72 106.72 6.18 4.62 1.55 7.26 93.28 9.00 1.78 7.22	110.36 97.59 - 77.97 - 78.06 0.09 6.63 168.92 12.77 3.79 8.99	152.30 130.52 15.33 16.89 - 1.56 5.69 109.51 21.78 0.66 21.12	12.05 6.14 - 67.75 - 68.34 0.60 4.09 69.80 5.91 1.34 4.57	45.95 42.12 12.08 0.01 0.72 29.32 3.83 - 0.47 4.31	36.54 29.62 4.92 5.32 - 0.41 26.31 6.92 - 0.19 7.11	27.00 24.27 - 18.27 - 18.80 0.54 5.37 37.16 2.74 - 0.41 3.15	42.81 34.52 16.59 18.30 - 1.70 1.20 16.73 8.29 1.73 6.56	46.14 44.09 6.03 5.58 0.46 0.14 37.92 2.05 - 1.22 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
τοται [ 00.15   224.57   340.24   05.38   100.28   15.72   74.37   155.88   88.19									
Debt securities Short-term securities Long-term securities Memo item:	20.52 4.88 15.64	36.89 - 4.40 41.29	20.86 2.51 18.35	- 3.93 - 5.42 1.49	2.77 - 1.19 3.96	8.92 1.23 7.69	10.29 3.50 6.79	- 1.12 - 1.02 - 0.10	10.95 3.85 7.10
Debt securities of domestic sectors Non-financial corporations Financial corporations General government Households Debt securities of the rest of the world	6.61 0.49 5.31 0.47 0.34 13.91	18.12 - 0.17 19.86 - 0.22 - 1.35 18.77	9.17 0.74 9.12 0.09 - 0.78 11.70	0.05 - 0.48 1.18 0.01 - 0.65 - 3.98	1.96 0.10 1.98 0.14 - 0.26 0.81	3.29 0.62 2.76 0.03 - 0.12 5.63	2.14 0.59 1.78 0.02 - 0.26 8.15	1.78 - 0.57 2.61 - 0.10 - 0.15 - 2.89	5.64 0.17 5.34 - 0.01 0.14 5.31
Loans Short-term loans Long-term loans Memo item:	82.74 26.32 56.42	79.12 - 12.02 91.14	91.65 47.43 44.22	9.41 - 0.25 9.65	31.98 26.83 5.16	- 10.47 - 7.56 - 2.91	20.51 12.61 7.90	49.63 15.56 34.07	39.28 34.87 4.42
Loans from domestic sectors Non-financial corporations Financial corporations General government Loans from the rest of the world	29.49 - 28.14 56.99 0.64 53.25	31.20 - 12.27 7.63 35.83 47.92	65.39 7.11 43.57 14.71 26.26	- 0.78 - 4.90 - 7.64 11.76 10.19	35.31 - 1.66 34.35 2.62 - 3.33	- 13.90 - 3.40 - 15.53 5.02 3.43	6.89 - 1.21 5.48 2.62 13.61	37.09 13.38 19.27 4.45 12.55	39.29 2.44 36.90 - 0.05 - 0.01
Equity Listed shares of domestic sectors Non-financial corporations Financial corporations General government Households Listed shares of the rest of the world Other equity 1	11.69 - 24.77 4.62 - 33.41 - 0.01 4.03 - 1.16 37.61	60.37 - 62.25 - 78.06 3.47 0.26 12.08 10.09 112.54	61.44 26.38 16.89 - 2.37 - 0.09 11.96 18.94 16.11	21.89 - 66.70 - 68.34 1.40 - 0.01 0.25 1.68 86.91	14.63 15.28 12.08 0.02 - 0.07 3.25 - 4.97 4.32	8.50 8.02 5.32 1.52 - 0.07 1.25 - 1.16 1.64	17.93 - 21.41 - 18.80 - 3.23 - 0.00 0.63 31.69 7.65	20.38 24.50 18.30 - 0.68 0.04 6.84 - 6.62 2.50	3.11 12.94 5.58 5.19 0.18 1.99 - 12.78 2.95
Insurance technical reserves	7.55	5.84	5.84	1.46	1.46	1.46	1.46	1.46	1.46
Other accounts pavable	- 1.38   8.21	15 29	154 58	1.26 22.40	50 12	8.20	31.93	63.03	0.37 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

				2020	2021				2022
Item	2019	2020	2021	04	01	02	03	04	01
	2015	2020	2021	ų.	4.	4-	43	4.	4.
Financial assets									
Currency and deposits	578.6		721.9		713.7	693.5	706.4	721.9	726.8
Short-term debt securities	49.6	51.5 4.8	54.6	4.8	49.9	51.9	6.2	54.6	53.7
Long-term debt securities Memo item:	45.9	46.7	47.2	46.7	44.9	46.0	47.3	47.2	45.9
Debt securities of domestic sectors	21.1	22.1	23.3	22.1	21.4	22.3	24.0	23.3	23.0
Financial corporations	13.6	13.4	14.5	13.4	12.9	13.4	14.0	14.5	14.6
Debt securities of the rest of the world	2.6	4.0 29.4	3.5 31.3	4.0 29.4	28.5	3.6 29.6	4.1 29.5	3.5 31.3	3.2 30.8
Loans	731.9	725.0	778.0	725.0	726.4	732.4	746.9	778.0	784.9
Short-term loans Long-term loans	568.5 163.5	566.1 158.8	605.1 172.9	566.1 158.8	562.7	570.5 161.9	582.7	605.1 172.9	603.6 181.3
Memo item:	414.5	/12.2	122.8	/12.2	106.9	106.8	106.8	122.8	420.7
Non-financial corporations	339.9	327.6	334.7	327.6	325.9	322.5	321.3	334.7	337.2
General government	67.3	7.8	80.2	7.9	73.1	76.3	77.6	80.2	85.6 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 Equity	2,439.7 2,249.7	2,534.2 2,329.5	2,889.9 2,649.7	2,534.2 2,329.5	2,701.1 2,488.7	2,788.2 2,564.1	2,844.7 2,617.3	2,889.9 2,649.7	2,815.9 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
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 Other equity 1	52.2	68.1 1,954.4	73.5 2,183.2	68.1 1,954.4	2,056.8	70.2 2,110.3	72.6 2,173.2	73.5 2,183.2	69.5 2,164.1
Investment fund shares	190.0	204.7	240.2	204.7	212.4	224.1	227.5	240.2	232.2
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
	5,141.7	5,357.5	5,985.5	5,357.5	5,629.7	5,/1/.8	5,908.6	5,985.5	6,088.1
	1 2017				L 220 F		1 2564		1 245 2
Short-term securities	204.7	238.3	252.3 9.6	238.3	239.5	249.3	10.6	252.3 9.6	245.3 13.4
Long-term securities Memo item:	192.9	231.2	242.7	231.2	233.6	242.1	245.5	242.7	231.8
Debt securities of domestic sectors	77.7	96.0	100.6	96.0	95.6	99.5	99.7	100.6	98.6
Financial corporations	5.0	4.7 78.1	5.3 83.2	4.7	78.0	5.3 81.2	81.2	5.3 83.2	5.2 81.8
General government Households	0.6	0.4 12.8	0.4	0.4	0.5	0.5 12.5	0.5	0.4	0.4 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 Short-term 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
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
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 Financial corporations	339.9 967.7	327.6 970.9	334.7 1.016.2	327.6 970.9	325.9	322.5 991.5	321.3 997.8	334.7 1.016.2	337.2 1.056.9
General government	50.4	87.4	101.5	87.4	89.6	94.7	97.3	101.5	101.4
	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
Financial corporations	158.0	171.9	210.2	171.9	193.0	202.9	196.9	210.2	342.4 194.3
General government Households	51.8 191.3	56.3 212.8	69.9 259.7	56.3 212.8	67.3 237.6	71.8 246.3	70.6	69.9 259.7	70.0 233.2
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
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)

€	bil	lion
€	ווס	lion

				2020	2024				2022
				2020	2021				2022
Item	2019	2020	2021	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 Deposits	35.26	61.86 151.36	59.79 85.74	16.47 58.82	12.66	16.45 36.63	14.97	15.70 16.34	13.47
Transferable deposits	111.01	165.34	90.84	56.20	34.10	37.70	2.69	16.35	- 0.99
Time deposits Savings deposits (including savings certificates)	- 5.95	1.29	- 4.97 - 0.13	2.52 0.10	0.06	- 1.06	- 3.76	- 0.21	- 1.12
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
Memo item:	- 1.54	0.02	- 0.20	- 5.05	- 2.02	- 1.52	- 1.22	- 0.04	2.05
Debt securities of domestic sectors	- 2.93	- 2.56	- 3.70	- 1.79	- 1.07	- 1.26	- 0.99	- 0.39	2.26
Financial corporations	- 2.23	- 1.26	- 2.57	- 1.02	- 0.28	- 1.02	- 0.25	- 0.23	2.34
General government Debt securities of the rest of the world	- 0.92	0.02	- 0.30	- 0.15	- 0.12	- 0.11	- 0.08	0.00	- 0.16
			1 426.52		1 20.00			1 12.40	
Equity and investment fund shares Equity	49.20	48.53	31.74	7.73	28.09	7.28	34.68	42.10	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 Financial corporations	3.52	11.92	12.64	0.33	3.12	1.58	1.82	6.12	1.97
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
Money market fund shares	- 0.32	0.09	0.18	- 0.29	25.50	- 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	1	I	1	I	1	I	I	1	I
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 81 55	- 5.61	0.86	- 1.12	0.47	0.79	1.21	- 1.61	0.66
Memo item:	01.55	09.52	57.78	20.27	10.20	20.74	23.47	23.31	19.09
Mortgage loans	68.58	85.69	100.36	25.51	18.69	26.54	29.34	25.78	19.22
Entrepreneurial loans	- 0.43	2.51	- 0.89	0.29	- 0.82	1.08	- 1.04	- 2.04	0.23
Memo item:									
Loans from monetary financial institutions	73.41	83.17	94.32 4 32	22.37	14.85	27.19	28.38	23.91	20.70
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

 ${\bf 1}$  Including unlisted shares.  ${\bf 2}$  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

				2020	2021				2022
Item	2019	2020	2021	04	01	02	03	04	01
	2015	2020	2021	4.	4.	4-	45	4.	<b>4</b> .
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 Deposits	262.6	324.4	384.2	324.4	337.1 2.571.6	353.6 2.608.3	368.5	384.2	397.7 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 Savings deposits (including savings certificates)	301.6 574.2	302.8 558.9	297.7 558.8	302.8 558.9	302.9 560.4	301.9 560.4	297.9 558.6	297.7 558.8	296.3 556.7
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	1.9 109.7	1.8	1.8	1.7
Memo item:	115.0	111.7	107.0		111.0	105.7	100.5	107.0	107.7
Debt securities of domestic sectors	81.5	76.7	75.3	76.7	77.3	76.5	75.3	75.3	75.2
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 Listed shares of domestic sectors	708.0	806.4 243 3	969.1 296.0	806.4 243 3	868.6 271.7	904.8 280.0	923.8	969.1 296.0	926.5 271.0
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 Other equity 1	347.8	180.6 382.6	249.3 423.8	180.6 382.6	199.5 397.4	216.5 408.2	223.3 413.4	249.3 423.8	240.9 414 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	1	I	1	I			I	I	ı
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 Memo item:	1,778.9	1,8/1.3	1,970.5	1,8/1.3	1,886.0	1,915.1	1,944.9	1,970.5	1,987.6
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
Memo item:	247.7	250.2	250.5	250.2	250.2	251.2	250.8	250.5	251.1
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 Loans from general government and rest of the world	96.3 0.0	99.9 0.0	103.2	99.9 0.0	99.8 0.0	102.2 0.0	104.4	103.2	100.2 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

 ${\bf 1}$  Including unlisted shares.  ${\bf 2}$  Including accumulated interest-bearing surplus shares with insurance corporations.

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

	General government	Central government	State government	Local government	Social security funds	General government	Central government	State government	Local government	Social security funds
Period	€ billion					As a percentage	of GDP			
	Deficit/surp	lus <sup>1</sup>								
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 <b>P</b>	+ 64.4	+ 21.1	+ 11.7	+ 15.6	+ 16.0	+ 1.9	+ 0.6	+ 0.3	+ 0.5	+ 0.5
2019 <b>P</b>	+ 51.1	+ 22.0	+ 13.8	+ 6.1	+ 9.1	+ 1.5	+ 0.6	+ 0.4	+ 0.2	+ 0.3
2020 <b>p</b>	- 145.2	- 86.4	- 30.1	+ 6.3	- 35.0	- 4.3	- 2.6	- 0.9	+ 0.2	- 1.0
2021 <b>pe</b>	- 130.8	- 142.4	+ 3.3	+ 4.0	+ 4.3	- 3.7	- 4.0	+ 0.1	+ 0.1	+ 0.1
2020 H1 <b>P</b>	- 47.8	- 26.9	- 9.2	+ 0.8	- 12.5	- 2.9	- 1.6	- 0.6	+ 0.0	- 0.8
H2 <b>P</b>	- 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 <sup>2</sup>								End of yea	ir 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 <b>p</b>	2,062.6	1,322.9	600.8	155.1	0.7	61.2	39.3	17.8	4.6	0.0
2019 <b>p</b>	2,045.7	1,299.7	609.8	152.9	0.7	58.9	37.4	17.6	4.4	0.0
2020 <b>p</b>	2,314.1	1,512.9	660.6	154.1	7.4	68.7	44.9	19.6	4.6	0.2
2021 <b>p</b>	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 <b>P</b>	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\*

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

Source: Federal Statistical Office. \* Figures in accordance with ESA 2010.  ${\bf 1}$  Taxes and social contributions plus customs duties and bank levies to the Single Resolution Fund.

## 3. General government: budgetary development (as per the government finance statistics)

	€ billion															
	Central, sta	te and loca	al governm	ent 1							Social secu	rity funds 2		General go	vernment, 1	total
	Revenue			Expenditur	e											
		of which:			of which:	3				]						
Period	Total 4	Taxes	Finan- cial transac- tions <b>5</b>	Total <b>4</b>	Person- nel expend- iture	Current grants	Interest	Fixed asset forma- tion	Finan- cial transac- tions <b>5</b>	Deficit/ surplus	Rev- enue <b>6</b>	Expend- iture	Deficit/ surplus	Rev- enue	Expend- iture	Deficit/ surplus
2015 <b>P</b>	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 <b>p</b>	862.3	705.8	9.0	844.5	844.5         251.3         321.6         43.4         49.0         1           869.4         261.6         327.9         42.0         52.3         1						601.8	594.8	+ 7.1	1,355.1	1,330.2	+ 24.9
2017 <b>P</b>	900.3	734.5	7.9	869.4	869.4 261.6 327.9 42.0 52.3 1 905.6 273.5 238.0 20.2 55.8 1						631.5	622.0	+ 9.5	1,417.5	1,377.2	+ 40.3
2018 <b>P</b>	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 <b>p</b>	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 <b>P</b>	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 <b>P</b>	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 <b>P</b>	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 <b>p</b>	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 <b>P</b>	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 <b>p</b>	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 <b>P</b>	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 <b>P</b>	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	2 75.8 117.5 - 0.4 16.5 10.4				10.4	- 19.3	183.4	191.9	- 8.6	413.5	441.4	- 27.8
Q4 <b>P</b>	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								
	Central governmen	t		State government	2,3		Local government	3	
Period	Revenue 1	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus
2015 <b>P</b>	338.3	326.5	+ 11.8	355.1	350.6	+ 4.5	232.7	229.1	+ 3.6
2016 <b>P</b>	344.7	338.4	+ 6.2	381.1	372.4	+ 8.8	248.9	243.1	+ 5.8
2017 <b>P</b>	357.8	352.8	+ 5.0	397.7	385.8	+ 11.8	260.3	249.1	+ 11.2
2018 <b>P</b>	374.4	363.5	+ 10.9	420.5	400.1	+ 20.4	271.8	261.5	+ 10.2
2019 <b>P</b>	382.5	369.2	+ 13.3	437.2	419.6	+ 17.6	284.2	278.1	+ 6.1
2020 <b>P</b>	341.4	472.1	– 130.7	456.4	489.4	- 33.0	297.0	294.6	+ 2.4
2021 <b>P</b>	370.3	585.9	- 215.6	513.1	508.9	+ 4.2	309.9	304.8	+ 5.1
2019 Q1 <b>P</b>	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 <b>P</b>	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 <b>P</b>	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 <b>P</b>	83.7	105.4	- 21.7	112.9	113.7	- 0.8	67.5	72.6	- 5.1
Q4 <b>P</b>	94.5	161.5	- 67.0	127.4	146.3	- 18.9	100.3	83.5	+ 16.8
2021 Q1 <b>p</b>	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 <b>p</b>	93.9	128.7	- 34.7	125.9	120.2	+ 5.7	74.6	74.9	- 0.3
Q4 <b>p</b>	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 in-

cluded 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.

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#### X. Public finances in Germany

#### 5. Central, state and local government: tax revenue

€ million

Period 2015 2016 2017 2018 2019 2020 2021 2020 Q QQQ 2021 Q C Q Q 2022 Q 2021 A M

	Стипног							
		Central and state gove	ernment and European	1 Union				
	Total	Total	Central government <b>1</b>	State government <b>1</b>	European Union <sup>2</sup>	Local government <b>3</b>	Balance of untransferred tax shares <b>4</b>	Memo item: Amounts deducted in the Federal budget <b>5</b>
	673,276 705,797 734,540 776,314 799,416	580,485 606,965 629,458 665,005 684,491	308,849 316,854 336,730 349,134 355,050	240,698 260,837 271,046 287,282 298,519	30,938 29,273 21,682 28,589 30,921	93,003 98,648 105,158 111,308 114,902	- 212 + 186 - 76 + 1 + 23	27,241 27,836 27,368 26,775 25,998
	739,911 833,337	632,268 706,978	313,381 342,988	286,065 325,768	32,822 38,222	107,916 125,000	- 274 + 1,359	30,266 29,321
1 2 3 4	198,375 158,161 182,202 201,173	168,123 135,185 156,397 172,564	83,086 68,653 78,502 83,140	75,420 59,557 72,613 78,475	9,617 6,974 5,282 10,949	18,875 25,107 25,234 38,700	+ 11,377 - 2,131 + 571 - 10,090	6,855 6,997 9,705 6,709
1 2 3 4	189,316 191,931 211,364 240,726	159,271 163,158 180,378 204,171	72,814 81,129 87,603 101,442	73,137 74,024 84,312 94,295	13,320 8,005 8,464 8,433	19,882 29,609 29,726 45,784	+ 10,163 - 835 + 1,260 - 9,229	6,887 7,438 7,823 7,173
1	224,006	189,158	92,112	87,240	9,806	24,772	+ 10,077	7,261
pr. ay	:	47,886 47,113	23,203 23,117	21,816 20,899	2,867 3,097			2,479 2,479
or. ay	:	52,743 51,356	25,483 25,130	23,918 22,938	3,341 3,288			2,649 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 govern-ment 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 be-tween 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	-									-	-		
	Joint taxes												
	Income taxes	2				Value added	taxes (VAT)	7		]			Memo item:
Total <b>1</b>	Total	Wage tax <b>3</b>	Assessed income tax <b>4</b>	Corpora- tion tax <b>5</b>	Invest- ment income tax <b>6</b>	Total	Domestic VAT	Import VAT	Local business tax trans- fers <b>8</b>	Central govern- ment taxes <b>9</b>	State govern- ment taxes <b>9</b>	EU customs duties	Local govern- ment share in joint taxes
620,287 648,309 674,598 713,576 735,869	273,258 291,492 312,462 332,141 344,016	178,891 184,826 195,524 208,231 219,660	48,580 53,833 59,428 60,415 63,711	19,583 27,442 29,259 33,425 32,013	26,204 25,391 28,251 30,069 28,632	209,921 217,090 226,355 234,800 243,256	159,015 165,932 170,498 175,437 183,113	50,905 51,157 55,856 59,363 60,143	7,407 7,831 8,580 9,078 8,114	104,204 104,441 99,934 108,586 109,548	20,339 22,342 22,205 23,913 25,850	5,159 5,113 5,063 5,057 5,085	39,802 41,345 45,141 48,571 51,379
682,376 760,953	320,798 370,296	209,286 218,407	58,982 72,342	24,268 42,124	28,261 37,423	219,484 250,800	168,700 187,631	50,784 63,169	3,954 4,951	105,632 98,171	27,775 31,613	4,734 5,122	50,107 53,976
181,374 146,360 168,308 186,334	88,009 69,928 73,766 89,094	53,389 50,760 47,470 57,667	18,711 10,633 13,492 16,146	8,495 2,348 5,411 8,014	7,415 6,187 7,392 7,268	60,060 44,262 59,819 55,343	46,038 31,625 47,933 43,105	14,022 12,638 11,886 12,238	244 1,170 796 1,744	24,517 23,525 25,930 31,660	7,406 6,326 6,784 7,259	1,139 1,149 1,212 1,234	13,251 11,175 11,910 13,770
171,974 175,242 193,910 219,827	86,381 84,505 90,619 108,791	50,854 50,783 53,857 62,913	17,826 14,347 17,973 22,196	10,203 8,860 9,853 13,208	7,498 10,515 8,936 10,474	54,795 57,634 69,528 68,843	45,403 43,399 49,052 49,777	9,392 14,235 20,476 19,066	252 1,215 1,189 2,295	21,712 23,210 23,469 29,780	7,757 7,398 7,813 8,645	1,076 1,281 1,292 1,473	12,703 12,085 13,532 15,656
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
51,471 50,012	22,156 16,654	18,439 13,918	318 - 218	1,250 – 21	2,150 2,975	18,316 22,740	13,189 16,595	5,127 6,146	998 215	7,083 7,611	2,441 2,382	478 410	3,586 2,899
56,555 54,992	24,257 22,587	20,221 19,193	555 487	1,223 153	2,258 2,755	20,774 21,235	14,364 17,527	6,411 3,707	1,229 287	7,306	2,430 2,583	559 506	3,813 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). ment), real property taxes and other local government taxes, or the balance of un-transferred 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 inter-est 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 re-search 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 for 2021: 41.4:58.6. **9** For the breakdown, see Table X. 7.

Period 2015 2016 2017 2018 2019 2020 2021 2020 Q1 Q2 Q3 Q4 2021 Q1 Q2 Q3 Q4 2022 Q1 2021 Apr Ma 2022 Apr Ma - 11

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

	€ million														
	Central gov	ernment tax	<sub>(es</sub> 1						State gover	nment taxes	; 1		Local gover	nment taxes	5
									Tax on		Dotting			of which:	
Period	Energy tax	Soli- darity surcharge	Tobacco tax	Insurance tax	Motor vehicle tax	Electri- city tax	Alcohol tax	Other	sition of land and buildings	Inherit- ance tax	and lottery tax	Other	Total	Local business tax <b>2</b>	Real property taxes
2015 2016 2017 2018 2019	39,594 40,091 41,022 40,882	15,930 16,855 17,953 18,927	14,921 14,186 14,399 14,339 14,257	12,419 12,763 13,269 13,779	8,805 8,952 8,948 9,047	6,593 6,569 6,944 6,858	2,070 2,070 2,094 2,133 2,118	3,872 2,955 -4,695 2,622	11,249 12,408 13,139 14,083 15,789	6,290 7,006 6,114 6,813	1,712 1,809 1,837 1,894	1,088 1,119 1,115 1,122	60,396 65,319 68,522 71,817 71,661	45,752 50,103 52,899 55,904	13,215 13,654 13,966 14,203
2020 2021	37,635 37,120	18,676 11,028	14,651 14,733	14,553 14,980	9,526 9,546	6,561 6,691	2,238 2,089	1,792 1,984	16,055 18,335	8,600 9,824	2,044 2,333	1,076 1,121	61,489 77,335	45,471 61,251	14,676 14,985
2020 Q1 Q2 Q3 Q4	4,966 8,117 9,985 14,566	4,930 4,235 4,365 5,145	2,413 3,772 3,978 4,487	6,766 2,606 2,817 2,365	2,634 2,426 2,366 2,101	1,708 1,585 1,499 1,768	562 455 506 715	537 328 414 513	4,525 3,566 3,730 4,234	1,981 2,154 2,262 2,203	542 425 509 567	358 181 283 254	17,245 12,971 14,690 16,584	13,391 8,842 10,242 12,997	3,403 3,895 4,095 3,283
2021 Q1 Q2 Q3 Q4	4,126 8,717 9,532 14,745	3,171 2,546 2,338 2,972	2,585 4,053 3,636 4,458	6,776 2,843 2,911 2,449	2,567 2,469 2,381 2,130	1,692 1,640 1,618 1,741	395 528 514 651	400 413 538 633	4,716 4,231 4,571 4,816	2,110 2,374 2,457 2,884	578 538 516 700	353 255 269 244	17,594 17,904 18,643 23,194	13,798 13,692 14,215 19,546	3,503 4,034 4,133 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. May	2,424 3,114	492 495	1,466 1,251	1,014 1,069	819 769	578 541	134 249	155 125	1,403 1,383	772 755	182 160	84 84			· ·
2022 Apr. May	2,777 3,034	631 652	1,202 1,254	942 1,116	802 796	591 539	146 186	214 217	1,368 1,519	747 758	230 222	84 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													
	Revenue 1,2			Expenditure 1	,2				Assets 1,4					
		of which:			of which:							- ··		
Period	Total	Contri- butions <b>3</b>	Payments from central govern- ment	Total	Pension payments	Pen- sioners' health insurance	Deficit surplu	t/ IS	Total	Deposits <b>5</b>	Securities	Equity interests, mort- gages and other loans <b>6</b>	Real estate	Memo item: Adminis- trative assets
2015	276,129	194,486	80,464	277,717	236,634	16,705	- 1	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	- 1	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	- 1	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	- 1	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	- 1	777	39,779	37,975	1,446	304	55	3,949
Q3	82,689	58,109	24,418	86,497	74,054	5,591	- 1	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	- 1	100	36,941	35,554	988	345	53	3,871
Q3	85,535	59,941	25,468	87,123	74,453	5,718	- 1	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 sub-

sequently. **2** Including financial compensation payments. Excluding investment spending and proceeds. **3** Including contributions for recipients of government cash benefits. **4** Largely corresponds to the sustainability reserves. End of year or quarter. **5** Including cash. **6** Excluding loans to other social security funds.

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#### X. Public finances in Germany

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

	€ million												
	Revenue				Expenditure								
		of which:				of which:							offsetting
Period	Total <b>1</b>	Contri- butions	Insolvency compen- sation levy	Government funds	Total	Unemploy- ment benefit <b>2</b>	Short-time working benefits <b>3</b>	Job promotion <b>4</b>	Re- integration payment	Insolvency benefit payment	Adminis- trative expend- iture <b>5</b>	Deficit/ surplus	grant or loan from central govern- ment
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' pen-sion fund. 1 Excluding central government deficit-offsetting grant or Ioan. 2 Un-employment benefit in case of unemployment. 3 Including seasonal short-time working benefits and restructuring short-time working benefits, restructuring meas-ures and refunds of social contributions. 4 Vocational training, measures to en-

courage 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

Revenue 1			Expenditure 1									
	of which:			of which:								
Total	Contri- butions <b>2</b>	Central govern- ment funds <b>3</b>	Total	Hospital treatment	Pharma- ceuticals	Medical treatment	Dental treatment <b>4</b>	Remedies and therapeutic appliances	Sickness benefits	Adminis- trative expend- iture <b>5</b>	Defic surpl	it/ us
210,147 223,692 233,814 242,360 251,295 269,158	195,774 206,830 216,227 224,912 233,125 237,588	11,500 14,000 14,500 14,500 14,500 27,940	213,727 222,936 230,773 239,706 252,440 275,268	67,979 70,450 72,303 74,506 77,551 78,531	34,576 35,981 37,389 38,327 40,635 42,906	35,712 37,300 38,792 39,968 41,541 44,131	13,488 13,790 14,070 14,490 15,010 14,967	13,674 14,256 14,776 15,965 17,656 18,133	11,227 11,677 12,281 13,090 14,402 15,956	10,482 11,032 10,912 11,564 11,136 11,864	- + + -	3,580 757 3,041 2,654 1,145 6,110
59,809 62,121 62,143 67,094	55,622 57,858 57,763 61,884	3,625 3,625 3,625 3,625 3,625	62,485 62,858 62,716 64,075	19,586 19,210 19,109 19,497	9,947 10,127 10,229 10,353	10,386 10,421 10,278 10,455	3,738 3,821 3,630 3,821	4,106 4,289 4,467 4,713	3,649 3,535 3,558 3,659	2,707 2,774 2,804 2,975	- - +	2,676 736 573 3,019
61,949 68,108 70,130 68,645	57,419 58,096 59,403 62,672	3,625 9,359 10,151 4,805	66,438 69,487 71,063 67,987	20,049 17,674 20,913 19,887	11,086 10,492 10,567 10,729	10,806 10,908 11,642 11,019	3,804 3,389 3,774 3,891	4,470 3,986 4,852 4,725	4,061 4,143 3,829 3,920	2,816 2,980 2,970 3,039	- - +	4,489 1,378 934 658
72,970 71,964 70,592 74,020	59,338 61,819 61,899 66,678	13,303 9,965 7,942 5,767	72,660 74,492 73,569 73,209	19,631 20,287 20,748 21,340	11,175 11,275 11,756 12,043	11,564 11,536 10,730 11,252	4,069 4,219 4,060 4,062	4,564 5,085 5,085 5,290	4,287 4,120 4,004 4,200	2,967 2,850 2,849 3,109	+ - +	310 2,529 2,977 810
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 compen-sation 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.

Q4 2022 Q1

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

	€ million									
	Revenue		Expenditure 1							
				of which:						
Period	Total	of which: Contributions <b>2</b>	Total	Non-cash care benefits <sup>3</sup>	Inpatient care total <b>4</b>	Nursing benefit	Contributions to pension insur- ance scheme <b>5</b>	Administrative expenditure	Deficit/ surplus	
2015	30,825	30,751	29,101	4,626	13,003	6,410	960	1,273	+	1,723
2016	32,171	32,100	30,936	4,904	13,539	6,673	983	1,422	+	1,235
2017	36,305	36,248	38,862	6,923	16,034	10,010	1,611	1,606	-	2,557
2018	37,949	37,886	41,265	7,703	16,216	10,809	2,093	1,586	-	3,315
2019	47,228	46,508	44,008	8,257	16,717	11,689	2,392	1,781	+	3,220
2020	50,622	48,003	49,284	8,794	16,459	12,786	2,714	1,946	+	1,338
2021 <b>P</b>	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 sub-sequently. 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 insur-

ance 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

## 13. General government: debt by creditor\*

€ million

	£ IIIIII							
	Total	new borro	wing	1	of w Char	hich: ige	Char	nge
					in m	oney	In m	oney
Period	Gross	2	Net		lloan	.et	Indend	sits 3
. chou			iver		To arris	,	acpt	55115
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
								I

Source: Federal Republic of Germany – Finance Agency. **1** Including the Financial Market Stabilisation Fund, the In-vestment and Repayment Fund and the Restructuring Fund for Credit Institutions. **2** After deducting repurchases. **3** Ex-cluding the central account balance with the Deutsche Bundes-bank.

	€ million					
		Banking sys	tem	Domestic non	-banks	
Period (end of year or quarter)	Total	Bundes- bank	Domestic MFIs <b>pe</b>	Other do- mestic fi- nancial cor- porations <b>pe</b>	Other domestic creditors <b>1</b>	Foreign creditors <b>P</b> e
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 <b>p</b>	2,314,090	522,392	492,545	191,497	53,629	1,054,027
2021 <b>p</b>	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.  $\star$  As defined in the Maastricht Treaty.  ${\bf 1}$  Calculated as a residual.

# 14. Maastricht debt by instrument

	€ million							
			Debt securities by orig	inal maturity	Loans by original matu	ırity	Memo item: 2	
Period (end of year or quarter)	Total	Currency and deposits <b>1</b>	Short-term debt securities (up to one year)	Long-term debt securities (more than one year)	Short-term loans (up to one year)	Long-term loans (more than one year)	Debt vis-à-vis other government subsectors	Claims vis-à-vis other government subsectors
	General gov	ernment						
2015 2016 2017 2018	2,177,231 2,161,540 2,111,360 2,062,629	13,949 15,491 14,298 14,680	65,676 69,715 48,789 52,572	1,499,010 1,483,871 1,484,462 1,456,160	90,350 96,254 87,799 77,296	508,246 496,208 476,012 461,919		
2019 Q1 Q2 Q3 Q4	2,072,772 2,063,198 2,080,195 2,045,744	15,512 12,719 17,438 14,449	64,218 56,256 62,602 49,180	1,460,634 1,463,027 1,465,529 1,458,540	72,005 75,284 79,918 69,289	460,402 455,911 454,709 454,286	· · · · · · · · · · · · · · · · · · ·	
2020 Q1 P Q2 P Q3 P Q4 P	2,090,099 2,259,576 2,333,149 2,314,090	11,410 13,120 11,886 14,486	70,912 122,225 180,445 163,401	1,472,222 1,533,857 1,582,574 1,593,586	85,137 142,708 111,480 94,288	450,418 447,666 446,764 448,330		· · · · · · · · · · · · · · · · · · ·
2021 Q1 P Q2 P Q3 P Q4 P	2,345,044 2,398,790 2,432,545 2,475,776	12,200 12,901 13,319 17,743	180,788 175,436 183,243 183,990	1,637,903 1,690,507 1,712,600 1,731,270	69,739 76,438 79,614 101,870	444,414 443,508 443,770 440,902		
2022 Q1 <b>P</b>	2,482,516	15,655	172,294	1,776,631	75,228	442,708	I .	
	Central gove	ernment						
2015 2016 2017 2018	1,371,933 1,365,579 1,349,945 1,322,905	13,949 15,491 14,298 14,680	49,512 55,208 36,297 42,246	1,138,951 1,123,853 1,131,896 1,107,140	45,256 50,004 47,761 42,057	124,265 121,022 119,693 116,782	1,062 556 1,131 933	13,667 8,567 10,618 9,975
2019 Q1 Q2 Q3 Q4	1,324,377 1,320,239 1,327,958 1,299,726	15,512 12,719 17,438 14,449	50,032 42,752 48,934 38,480	1,102,604 1,109,057 1,105,439 1,101,866	39,185 38,950 39,067 28,617	117,044 116,761 117,080 116,314	809 835 704 605	11,583 13,862 13,849 10,301
2020 Q1 P Q2 P Q3 P Q4 P	1,327,548 1,473,720 1,536,666 1,512,917	11,410 13,120 11,886 14,486	56,680 109,221 166,564 154,498	1,103,934 1,139,510 1,178,687 1,180,683	38,714 95,489 62,933 46,811	116,809 116,381 116,596 116,439	605 585 605 609	8,125 7,037 11,731 14,545
2021 Q1 P Q2 P Q3 P Q4 P 2022 Q1 P	1,538,572 1,588,734 1,616,738 1,666,432	12,200 12,901 13,319 17,743	167,484 165,373 170,961 176,427 155,117	1,212,495 1,259,206 1,280,586 1,300,416	29,838 35,008 35,984 56,836 40,788	116,247 115,888 115,010 119,260	632 631 677 656	22,956 29,479 31,417 7,975 10,488
2022 Q1 P	State govern	ment	155,117	1,340,340	40,788	113,200	1 554	10,488
2015	50 E 21	ı	16 160	262.276	22.240	257 677	1 15 967	2 2 4 9
2015 2016 2017 2018	642,291 614,926 600,776		10,109 14,515 12,543 10,332	362,376 361,996 354,688 351,994	23,349 20,482 19,628 18,864	237,627 245,298 228,067 219,587	15,867 11,273 14,038 14,035	2,348 1,694 2,046 1,891
Q2 Q3 Q4	612,478 610,700 620,694 609,828		14,190 13,508 13,671 10,703	367,571 363,723 360,495	24,784 29,765 25,768	217,621 214,838 213,535 212,862	15,229 17,631 17,755 14,934	2,004 1,887 1,957 1,826
Q2 P Q3 P Q4 P	645,075 655,581 660,572		14,234 13,006 13,882 8,904	398,404 408,310 417,307	28,382 28,298 29,662 30,371	208,200 205,368 203,728 203,991	12,297 11,070 11,717 11,946	2,085 2,090 1,411
Q2 P Q3 P Q4 P 2022 Q1 P	669,596 674,769 668,951 667,953		10,064 12,284 7,564 17,178	436,434 437,437 436,157 441.837	25,197 26,603 29,084 16,981	197,901 198,446 196,146 191,956	12,637 11,555 12,305 11,661	2,073 2,151 1,684 1,970
	Local govern	iment	- , .				- <b>,</b>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
2015 2016 2017 2018	163,439 166,174 162,745 155,127		- - - 1	2,047 2,404 3,082 3,046	27,474 27,002 24,572 20,425	133,918 136,768 135,091 131,655	2,143 1,819 1,881 1,884	463 431 466 497
2019 Q1 Q2 Q3 Q4	153,387 152,014 151,489 152,891		1	2,960 2,961 3,016 2,996	18,857 18,814 18,574 19,079	131,570 130,239 129,899 130,816	2,139 2,016 2,065 1,856	498 525 555 532
2020 Q1 P Q2 P Q3 P Q4 P	153,423 153,556 154,685 154,054			3,128 3,094 2,961 3,366	19,734 19,718 20,596 18,137	130,560 130,744 131,128 132,551	1,825 2,085 2,107 1,406	508 350 339 330
2021 Q1 P Q2 P Q3 P Q4 P	154,202 155,485 155,050 154,717		- - - -	3,121 3,121 3,000 3,171	17,429 18,467 18,077 17,203	133,652 133,897 133,973 134,343 135,072	2,020 2,090 2,156 1,695	345 348 344 348
		-	-	. 3,354			,575	

For footnotes see end of table.

#### 14. Maastricht debt by instrument (cont'd)

	€ million							
			Debt securities by orig	inal maturity	Loans by original matu	ırity	Memo item: 2	
Period (end of year or quarter)	Total	Currency and deposits <b>1</b>	Short-term debt securities (up to one year)	Long-term debt securities (more than one year)	Short-term loans (up to one year)	Long-term loans (more than one year)	Debt vis-à-vis other government subsectors	Claims vis-à-vis other government subsectors
	Social securi	ty funds						
2015 2016 2017 2018	1,502 1,232 807 690				537 562 262 388	965 670 545 302	91 89 15 16	2,685 3,044 3,934 4,506
2019 Q1 Q2 Q3 Q4	723 742 594 711				453 557 391 375	270 185 203 336	16 16 16 16	4,110 4,224 4,179 4,753
2020 Q1 P Q2 P Q3 P Q4 P	775 980 4,602 7,439			- - - -	287 581 4,210 7,128	488 399 392 311	16 16 3,956 6,931	4,328 4,284 4,226 4,606
2021 Q1 P Q2 P Q3 P Q4 P	16,179 21,194 24,248 333				15,985 20,995 24,053 111	194 199 195 222	15,853 20,860 23,872 –	4,209 4,318 4,348 4,650
2022 Q1 <b>P</b>	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 Debt securities Currency and deposits 2 of which: 3 of which: 3 Inflation-Inflation-Capital linked linked indexation Federal Treasury Period Federal Federal Federal Federal of inflation Treasury discount Federal Federal (end of year bonds notes bonds notes linked notes savings paper (Bunds) 4 (Bobls) 4 (Bubills) 6 or quarter) Total 1 Total 1 day bond Total 1 (Bunds) (Bobls) securities (Schätze) 5 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 1 7 4 928 754 571 913 164 514 12 017 7 5 2 2 1 3 3 6 105 684 40 795 9 6 4 9 78 685 577,798 7,748 2009 1,086,173 9,981 2,495 1,013,072 166,471 16,982 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 16,769 5,374 117,719 56,222 203,467 35,350 6,818 10,582 41,105 2013 1.392.735 1.397 1.192.025 643.200 234,759 10.613 110.029 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 719,747 6,021 13,487 1,299,726 14,449 1,140,346 174,719 69,805 89,230 144,931 14,486 58,279 3,692 2020 **P** 1,512,917 1,335,181 808,300 183,046 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 18,288 2019 Q1 1,324,377 15,512 902 1,152,636 709,008 178,900 66,531 4,191 89,782 31 156,229 Q2 Q3 1,320,239 1,327,958 12,719 17,438 852 822 1,151,809 720,904 711,482 173,313 183,268 68,110 \_ 5,691 5,639 91,024 90,416 15,042 18,100 19 155,711 156,147 69.088 Q4 1,299,726 14,449 1,140,346 719,747 174,719 69,805 6,021 89,230 13,487 144,931 23 572 2020 O1 P 1.327.548 11,410 1.160.614 721.343 182.095 71.028 5,310 91.084 155 524 774,587 \_ 1,473,720 13,120 1,248,731 178,329 79,987 Q2 P 56,061 3,752 95,622 211,869 03 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 14,486 58,279 98,543 113,141 163,250 1,512,917 1,335,181 808,300 183,046 3,692 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 Q3 P 12,901 13,319 1,424,579 1,451,547 873,345 884,358 5,056 5,456 139,451 146,533 151,255 151,872 1,588,734 189,048 62,569 104,997 \_ 1.616.738 203,353 63,851 105,398 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 67,776 7.809 108,702 160,048 930,351 209,424 140,427

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).

## 1. Origin and use of domestic product, distribution of national income

							2020		2021				2022
	2019	2020	2021	2019	2020	2021	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Item	Index 20	15=100		Annual p	ercentage	change							
At constant prices, chained													
<ol> <li>Origin of domestic product Production sector (excluding construction) Construction Wholesale/retail trade, transport and storage, hotel and restaurant services Information and communication Financial and insurance activities</li> </ol>	108.0 104.2 109.1 120.7 95.3	98.0 108.2 103.5 119.5 95.8	101.9 106.3 106.8 123.3 95.4	- 1.6 0.4 3.3 3.8 1.3	- 9.3 3.8 - 5.2 - 1.0 0.5	4.1 - 1.7 3.2 3.2 - 0.4	- 9.5 - 1.8 - 2.7 - 1.1 1.3	- 1.4 9.0 - 2.9 0.5 - 0.4	- 1.9 - 4.4 - 7.5 0.5 - 1.4	20.1 3.0 12.6 6.5 – 0.7	2.7 1.6 3.7 2.9 - 0.1	- 1.7 - 6.4 4.8 3.3 0.6	- 0.3 2.2 8.7 3.9 3.6
Real estate activities Business services 1 Public services, education and health Other services	102.7 110.7 107.0 103.3	102.3 102.5 103.5 92.5	103.2 108.1 106.7 93.3	0.9 0.1 1.8 1.9	- 0.4 - 7.4 - 3.2 -10.5	0.9 5.5 3.1 0.8	0.2 - 8.2 0.0 - 3.9	- 0.4 - 6.9 - 3.8 -16.0	0.2 - 5.7 - 3.3 -10.4	1.8 12.4 10.6 8.4	0.8 9.4 3.1 2.3	0.9 7.2 2.9 5.1	0.6 7.6 4.3 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 Government consumption Machinery and equipment Premises Other investment 4 Changes in inventories 5,6	107.0 110.0 113.1 108.7 119.9	100.8 113.9 100.5 111.4 121.1	101.1 117.2 103.8 111.5 121.9	1.6 3.0 1.0 1.1 5.5 – 0.1	- 5.9 3.5 -11.2 2.5 1.0 - 0.9	0.3 2.9 3.3 0.0 0.7 1.1	- 3.4 4.0 - 9.5 - 0.6 0.3 - 1.9	- 5.7 4.2 - 2.9 5.1 1.3 - 1.3	- 9.4 2.4 0.6 - 1.9 - 2.0 0.5	6.4 6.4 20.8 4.4 2.9 0.2	1.6 2.0 - 2.0 0.5 1.0 1.9	3.3 1.1 - 2.8 - 3.0 0.8 1.6	8.5 1.8 0.4 2.2 1.2 0.9
Domestic demand Net exports 6 Exports Imports	109.5 111.2 117.5	105.2 100.8 107.4	107.6 110.5 117.2	1.8 - 0.7 1.1 2.9	- 4.0 - 0.8 - 9.3 - 8.6	2.3 0.8 9.6 9.1	- 3.7 - 0.1 - 9.1 -10.1	- 3.3 1.2 - 3.1 - 6.4	- 4.3 1.0 - 0.2 - 2.9	7.2 3.8 28.2 20.6	3.4 - 0.4 7.4 9.5	3.2 - 1.1 6.9 11.2	6.0 - 1.6 2.9 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 Government consumption	1,802.9 705.2	1,708.0 754.6	1,766.6	2.9 5.2	- 5.3 7.0	3.4 6.1	- 3.7 7.3	- 5.6	- 7.7	8.3 7.0	5.6 5.7	8.0 5.1	13.8 6.9
Premises Other investment 4 Changes in inventories 5	241.1 364.1 137.0 26.8	216.9 380.1 138.9 –23.7	411.6 141.5 29.9	2.4 5.4 6.9	-10.0 4.4 1.4	5.3 8.3 1.9	- 8.3 0.0 0.6	- 1.9 5.7 1.7	- 0.1 - 0.9	9.5 4.1	- 0.2 12.7 2.2	- 0.1 10.5 2.0	4.4 17.4 3.3
Domestic use Net exports Exports	3,277.1 196.2 1,619.4	3,174.8 192.8 1,462.1	3,378.3 192.4 1,690.6	3.7 1.7	- 3.1 - 9.7	6.4 15.6	- 3.4 - 9.9	- 3.0 - 3.8	- 2.7	9.7 33.4	8.9 15.0	10.0 17.0	12.2 14.8
Gross domestic product <sup>2</sup>	3,473.4	3,367.6	3,570.6	3.1	- 3.0	6.0	- 12.5	- 8.1	- 2.1	30.0 11.9	7.3	6.8	8.0
IV. Prices (2015=100) Private consumption Gross domestic product Terms of trade	105.1 107.0 100.8	105.8 108.8 102.9	109.0 112.1 100.3	1.3 2.1 0.7	0.6 1.6 2.0	3.1 3.0 – 2.5	- 0.3 1.0 1.8	0.1 0.6 1.2	1.8 1.8 0.3	1.7 1.0 - 3.5	3.9 4.3 - 2.5	4.6 4.9 - 4.0	5.0 3.9 - 4.8
V. Distribution of national income Compensation of employees Entrepreneurial and property income	1,855.5 752.7	1,852.1 676.1	1,921.4 778.5	4.6 - 1.5	- 0.2 -10.2	3.7 15.1	- 0.7 - 7.4	0.4 - 2.2	- 0.5 2.3	5.4 42.3	4.9 12.8	4.9 12.6	6.6 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.

## 2. Output in the production sector \*

Adjusted for working-day variations  ${\bf o}$ 

		of which:										
				Industry								
					of which: by r	nain industrial g	grouping		of which: by e	economic secto	r	
	Production sector, total r)	Construc- tion	Energy	Total r)	Inter- mediate goods	Capital goods r)	Durable goods	Non- durable goods	Manu- facture of basic metals and fabricated metal products	Manu- facture of computers, electronic and optical products and electrical equipment	Macinery and equipment	Motor vehicels, trailers and semi- trailers r)
	2015 = 10	00										
% of total 1 Period	100	14,04	6,37	79,59	29,45	36,98	2.27	10,89	10,31	9,95	12,73	14,16
2018 2019	105.3 102.9	109.0 112.7	97.4 90.4	105.3 102.2	105.5 101.8	104.6 102.6	106.2 106.2	106.9 101.0	107.4 102.8	109.0 106.5	106.5 103.4	99.9 94.9
2020 2021 r	95.0 98.4	116.1 114.3	84.4 87.1	92.2 96.6	94.9 102.7	88.2 90.5	97.6 103.6	97.2 99.1	90.6 98.9	98.5 108.7	89.5 95.9	75.9 73.9
2021 Q1 r Q2 r Q3 r Q4 r	96.4 99.0 96.9 101.5	94.7 118.1 119.4 124.8	92.3 81.8 80.6 93.5	97.0 97.0 94.2 97.9	104.0 105.3 102.3 98.9	91.6 90.2 85.1 95.1	100.8 103.0 101.9 108.7	95.6 96.5 101.6 102.8	100.1 101.6 97.9 95.9	107.3 108.7 109.0 109.5	91.2 95.4 94.7 102.2	84.7 74.8 61.7 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 June r	97.8 100.5	117.2 121.0	81.4 77.2	95.7 98.7	105.3 106.1	87.4 91.4	100.3 106.8	96.7 101.5	100.4 103.4	107.1 111.9	92.8 98.9	71.4 71.6
July <b>2,r</b> Aug. <b>2,r</b> Sep. r	100.4 90.1 100.1	123.7 112.7 121.8	77.8 80.2 83.7	98.1 86.9 97.6	105.6 97.8 103.6	91.0 74.5 89.7	102.3 91.5 111.8	101.0 98.3 105.5	101.3 91.2 101.2	109.7 104.6 112.8	97.9 86.5 99.6	73.6 46.0 65.6
Oct. r Nov. r Dec. r	102.1 105.8 96.5	123.8 127.4 123.2	92.1 93.1 95.2	99.0 103.0 91.8	104.5 104.5 87.8	91.7 99.7 93.9	112.9 114.5 98.8	106.2 107.8 94.3	101.5 103.4 82.7	110.5 113.1 104.9	96.3 101.8 108.4	73.4 83.9 65.5
2022 Jan. r Feb. r Mar. r	90.1 94.9 103.0	82.4 97.1 116.7	98.5 94.5 92.6	90.7 94.5 101.5	100.0 101.2 108.4	81.4 87.9 92.9	96.5 105.0 110.6	95.8 96.7 110.2	94.1 97.5 104.4	103.2 107.8 118.6	81.9 89.0 100.7	70.4 78.5 70.6
Apr. × May ×,p	96.3 96.3	114.1 114.9	89.0 81.0	93.8 94.3	101.5 101.0	85.6 87.2	105.1 102.7	98.5 98.5	97.3 97.1	107.5 109.0	88.9 90.8	70.7 73.2
	Annual pe	ercentage	change									
2018 2019	+ 0.9 - 2.3	+ 0.3 + 3.4	- 1.5 - 7.2	+ 1.2 - 2.9	+ 0.6 - 3.5	+ 1.0 - 1.9	- 0.7 ± 0.0	+ 3.8 - 5.5	+ 1.1 - 4.3	+ 1.9 - 2.3	+ 2.3 - 2.9	- 1.6 - 5.0
2020 2021 r	- 7.7 + 3.6	+ 3.0 - 1.6	- 6.6 + 3.2	- 9.8 + 4.8	- 6.8 + 8.2	- 14.0 + 2.6	- 8.1 + 6.1	- 3.8 + 2.0	- 11.9 + 9.2	- 7.5 + 10.4	- 13.4 + 7.2	- 20.0 - 2.6
2021 Q1 r Q2 r Q3 r Q4 r	- 1.0 + 16.9 + 2.3 - 1.8	- 4.7 + 1.9 + 0.8 - 4.6	- 2.1 + 12.4 + 2.2 + 1.9	- 0.2 + 21.0 + 2.6 - 1.5	+ 2.8 + 23.0 + 8.4 + 0.7	- 1.4 + 25.0 - 2.9 - 4.9	- 0.8 + 22.1 + 4.0 + 2.1	- 4.3 + 4.9 + 3.7 + 3.8	+ 1.9 + 28.9 + 9.2 + 0.4	+ 3.8 + 23.1 + 12.3 + 4.0	- 0.2 + 17.3 + 9.3 + 3.7	- 0.2 + 57.9 - 21.9 - 19.4
2022 Q1 1	+ 17.8	+ 4.2	+ 13.5	+ 21.8	+ 25.4	+ 23.6	+ 3.2	+ 5.5	+ 29.9	+ 2.4	+ 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
Aug. 2,r Sep. r	+ 1.8 - 0.6	$\begin{array}{c} + & 5.2 \\ - & 0.9 \\ \pm & 0.0 \end{array}$	- 0.5 + 4.6	+ 2.6 - 1.1	+ 7.4 + 4.9	- 2.7 - 7.2	- 0.1 + 2.1	+ 4.9 + 2.7	+ 6.4 + 4.4	+ 10.2 + 11.6 + 9.3	+ 9.8 + 5.3	- 24.0 - 28.4
Nov. r Dec. r	- 1.1 - 1.9 - 2.4	- 0.6 - 2.3 - 10.3	+ 0.8 + 1.4 + 3.4	- 1.4 - 2.1 - 0.9	+ 1.8 + 0.3 - 0.1	- 5.8 - 6.3 - 2.4	+ 3.9 + 0.1 + 2.4	+ 3.3 + 6.1 + 1.8	+ 2.5 + 0.3 - 1.9	+ 5.7 + 1.8 + 4.7	+ 6.6 + 3.0 + 1.7	- 23.6 - 20.5 - 12.3
2022 Jan. r Feb. r Mar. r	+ 1.2 + 2.7 - 4.5	+ 9.4 + 9.7 - 3.1	+ 0.8 + 8.9 + 0.1	± 0.0 + 1.1 - 5.1	- 0.3 + 1.8 - 3.6	- 1.3 - 2.0 - 9.5	+ 1.2 + 6.3 + 2.3	+ 4.6 + 8.4 + 3.9	- 0.4 + 0.9 - 4.5	+ 2.8 + 3.3 + 1.2	+ 1.2 + 0.7 - 3.5	- 8.0 - 6.9 - 24.4
Apr. × May ×,p	- 2.5	- 1.7 - 2.0	+ 2.4 - 0.5	- 3.0	- 2.9 - 4.1	- 6.8 - 0.2	+ 3.2 + 2.4	+ 7.9 + 1.9	- 3.8	+ 0.3 + 1.8	- 5.8	- 13.1 + 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  $\sigma$  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.

## 3. Orders received by industry \*

Adjusted for working-day variations •

				of which:														
													of which:					
	Industry			Intermediate g	goods		Capital goods			Consumer goo	ods		Durable good	5		Non-durable g	oods	
Period	2015 = 100	Annua percen change	l itage e	2015 = 100	Annua percer chang	l itage e	2015 = 100	Annua percen change	l tage e	2015 = 100	Annua percen change	l tage e	2015 = 100	Annua percen change	l itage e	2015 = 100	Annua percen change	l tage e
	Total																	
2018 2019	110.5 104.9	+	1.7 5.1	111.5 103.5	+ -	1.9 7.2	109.9 105.4	+ _	1.3 4.1	110.0 107.0	+ -	4.1 2.7	118.9 123.3	+++	2.1 3.7	107.1 101.7	+ _	4.8 5.0
2020 2021	97.2 119.3	- +	7.3 22.7	97.9 124.6	-+	5.4 27.3	95.6 116.3	-+	9.3 21.7	105.8 117.4	- +	1.1 11.0	124.4 146.5	+++	0.9 17.8	99.6 107.9	-+	2.1 8.3
2021 May June	113.9 126.7	+++++	59.7 31.8	123.1 127.6	+ +	60.5 48.4	108.4 125.4	+++	67.0 22.9	113.9 132.1	++++	19.6 33.6	157.2 151.3	+++	41.6 31.7	99.6 125.7	+++	10.8 34.3
July Aug. Sep.	128.1 106.4 122.6	+ + +	32.9 16.7 17.7	127.9 115.6 124.2	+ + +	35.5 28.7 22.1	128.5 100.1 122.7	+ + +	33.3 10.6 17.1	127.3 111.2 113.9	+ + +	20.8 6.5 2.2	151.0 135.4 139.1	+ + -	25.5 9.1 5.0	119.5 103.3 105.7	+ + +	18.9 5.5 5.7
Oct. Nov. Dec.	117.2 125.4 123.7	+ + +	7.4 10.3 13.9	124.9 132.9 120.2	+ + +	15.3 16.6 18.2	112.2 120.9 127.0	+ + +	2.7 6.1 11.8	119.8 124.5 114.5	+ + +	7.5 13.0 11.6	141.9 149.6 148.9	- + +	2.1 8.2 13.4	112.5 116.2 103.2	+ + +	12.2 15.0 10.7
2022 Jan. Feb. Mar.	131.2 128.3 140.1	+ + +	19.8 15.4 8.2	143.7 136.7 152.7	+++++++++++++++++++++++++++++++++++++++	19.2 16.3 13.3	124.0 122.6 131.5	+ + +	20.9 14.0 3.4	127.5 132.5 146.5	+ + +	16.1 21.0 19.4	152.9 149.8 182.6	+ + +	8.1 14.3 23.3	119.2 126.9 134.7	+ + +	19.8 23.8 17.8
Apr. May <b>p</b>	125.0 124.0	++	6.4 8.9	143.5 139.4	+++	13.5 13.2	111.9 113.7	- +	0.9 4.9	139.1 130.5	++	26.3 14.6	185.7 176.3	+++	14.2 12.2	123.7 115.4	+++	33.3 15.9
	From the	dome	estic n	narket														
2018 2019	107.2 101.2	+ -	0.2 5.6	108.6 99.1	+ -	1.4 8.7	106.6 103.0	=	1.1 3.4	103.0 101.2	+ -	1.4 1.7	114.7 116.2	+++	5.5 1.3	98.9 96.2	=	0.4 2.7
2020 2021	94.9 115.5	+	6.2 21.7	94.1 119.6	+	5.0 27.1	95.2 113.1	+	7.6 18.8	98.0 108.0	+	3.2 10.2	105.5 114.8	+	9.2 8.8	95.4 105.6	+	0.8 10.7
2021 May June	112.3 127.7	+++++	50.3 22.4	118.7 125.1	+ +	58.7 53.9	108.6 130.5	+++	49.6 3.7	100.8 124.0	+++++++++++++++++++++++++++++++++++++++	14.4 36.0	121.5 117.1	+++	21.7 16.6	93.8 126.3	+++	11.5 43.4
July Aug. Sep.	128.7 104.5 110.0	+ + +	35.2 18.1 10.6	126.1 111.5 117.9	+++++++++++++++++++++++++++++++++++++++	34.7 26.4 23.6	132.1 98.4 104.3	+++++++++++++++++++++++++++++++++++++++	37.6 13.1 1.6	121.3 106.0 103.0	+ + +	22.4 6.0 1.3	116.0 110.9 106.1	+ - -	11.0 0.4 15.3	123.1 104.4 102.0	+++++++++++++++++++++++++++++++++++++++	26.5 8.5 8.9
Oct. Nov. Dec.	115.6 119.4 119.1	+ + +	10.6 9.3 21.3	123.1 126.7 111.4	+ + +	15.3 11.8 17.3	110.0 113.8 127.7	+ + +	7.2 7.1 25.1	110.4 115.4 105.5	+ + +	5.6 10.3 16.1	106.7 117.6 101.9	- - -	10.8 5.4 2.0	111.7 114.6 106.7	+ + +	12.4 17.1 23.4
2022 Jan. Feb. Mar.	122.2 123.4 137.4	+ + +	18.4 14.4 8.6	137.7 132.1 148.2	+ + +	21.0 17.2 13.7	109.9 116.0 128.9	+ + +	15.7 10.6 2.5	116.5 122.9 132.0	+ + +	20.1 22.5 20.7	106.0 115.6 135.9	- + +	4.5 5.2 3.6	120.1 125.4 130.7	+ + +	30.1 29.1 28.1
Apr. May p	124.8 123.2	++	12.6 9.7	139.8 136.5	+++	19.3 15.0	110.5 112.6	+++	3.7 3.7	135.2 118.7	++	32.2 17.8	134.0 139.7	+++	4.5 15.0	135.6 111.6	+++	45.0 19.0
	From abro	bad																
2018 2019	113.0 107.7	+ -	2.9 4.7	114.6 108.3	+ -	2.4 5.5	111.9 106.9	+ -	2.8 4.5	115.5 111.5	+ -	6.1 3.5	122.2 129.1	+	0.5 5.6	113.4 105.9	+ -	8.5 6.6
2020 2021	98.9 122.2	+	8.2 23.6	102.0 130.1	+	5.8 27.5	95.9 118.2	+	10.3 23.3	111.8 124.8	++	0.3 11.6	139.5 171.9	++	8.1 23.2	102.8 109.6	+	2.9 6.6
2021 May June	115.2 125.9	++	67.4 40.2	127.9 130.2	++	62.3 43.1	108.2 122.4	++	79.4 39.7	124.0 138.3	++	23.1 32.0	186.0 178.8	++	55.0 41.2	104.1 125.2	++	10.3 28.0
Aug. Sep.	127.7 107.9 132.2	+++++++++++++++++++++++++++++++++++++++	31.2 15.6 22.6	129.9 120.1 131.1	+++++++++++++++++++++++++++++++++++++++	36.3 31.3 20.7	126.3 101.1 133.8	++++++	9.2 26.1	131.9 115.2 122.4	+++++++++++++++++++++++++++++++++++++++	6.9 2.8	179.1 155.2 165.7	+++++++++++++++++++++++++++++++++++++++	34.7 15.5 1.5	102.4 108.5	++++++	3.2 3.4 3.4
Oct. Nov. Dec.	118.5 129.9 127.1	+++++++++++++++++++++++++++++++++++++++	5.2 10.9 9.1	126.8 139.5 129.7	+++++++++++++++++++++++++++++++++++++++	15.3 21.5 19.1	113.5 125.1 126.5	+ + +	0.1 5.6 4.9	127.0 131.5 121.5	+ + +	8.8 14.8 8.8	170.2 175.4 186.8	+ + +	2.9 17.4 21.9	113.1 117.4 100.5	+ + +	12.0 13.6 2.1
2022 Jan. Feb. Mar.	138.0 132.0 142.2	+ + +	20.7 16.1 7.9	150.1 141.6 157.6	+ + +	17.4 15.4 13.0	132.5 126.5 133.0	++++++	23.6 15.9 3.9	136.1 140.0 157.8	+ + +	13.6 20.1 18.6	190.6 177.4 220.2	+ + +	14.9 19.8 36.2	118.5 128.0 137.7	++++++	12.9 20.1 11.3
Apr. May <b>p</b>	125.2 124.6	+++++	2.2 8.2	147.5 142.6	+++++	8.1 11.5	112.7 114.4	- +	3.4 5.7	142.1 139.6	+++++	22.3 12.6	227.3 205.7	++++++	19.5 10.6	114.6 118.3	+++++	24.2 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.  $\mathbf{o}$  Using JDemetra+ 2.2.2 (X13).

## 4. Orders received by construction \*

Adjusted for working-day variations o

2022

			Breakdown	by type o	f constructior	ı							Breakdown	by client 1		
			Structural e	ngineering	1											
	Total		Total		Residential constructior	ı	Industrial constructior	ı	Public secto constructior	r า	Civil engineering		Industrial cli	ients	Public sector 2	
Zeit	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age 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 •

					1											
					of which:											
					In stores by	enterprise	es main produ	uct range								
	Total				Food, bever tobacco 1	ages,	Textiles, clothing, foodwear a leather goo	nd ds	Information and communica equipment	tions	Constructio and flooring materials, household appliances, furniture	n J	Retail sale c pharmaceut and medica goods, cosr and toilet articles	if ical I netic	Retail sale v mail order h or via intern as well as other retail	ia iouses iet sale 2
	At current prices		At 2015 pri	ces	At current p	orices										
	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change	2015 = 100	Annual percent- age change
	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
	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
3	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
	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
1ay	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
une	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
uly	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
.ug.	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
ep.	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
ot.	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
ov.	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
ec.	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
an.	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
eb.	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
1ar.	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
.pr.	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
1ay	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.

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#### XI. Economic conditions in Germany

#### 6. Labour market \*

	Employment	1	Employment	subject to so	ocial contribu	utions 2			Short-time w	orkers 3	Unemployr	nent 4		
			Total		of which:			]		of which:		of which:		
Period	Thou- sands	Annual percentage change	Thou- sands	Annual percentage change	Produc- tion sector Thousands	Services excluding temporary employ- ment	Temporary employ- ment	Solely jobs exempt from social contri- butions 2	Total	Cyclically induced	Total	Assigned to the legal category of the Third Book of the Social Security Code (SGB III)	Unem- ploy- ment rate in % <b>4,5</b>	Vacan- cies, thou- sands <b>4,6</b>
2017	44,251	+ 1.4	32,234	+ 2.3	9,146	21,980	868	4,742	114	24	2,533	<b>7</b> 855	5.7	731
2018 2019 2020 2021	44,858 45,268 44,898 44,918	+ 1.4 + 0.9 - 0.8 + 0.0	32,964 33,518 33,579 33,897	+ 2.3 + 1.7 + 0.2 + 0.9	9,349 9,479 9,395 9,344	22,532 23,043 23,277 23,602	840 751 660 702	4,671 4,579 4,290 4,101	118 145 2,939 1,852	25 60 2,847 1,744	2,340 8 2,267 2,695 2,613	802 827 1,137 999	5.2 8 5.0 5.9 5.7	796 774 613 706
2019 Q2 Q3 Q4 2020 Q1 Q2 Q3 Q4 2021 Q1 Q2 Q3 Q4 2022 Q1 Q2 2022 Q1 Q2	45,230 45,378 45,559 45,122 44,712 44,794 44,965 44,451 44,742 45,088 45,391 <b>9</b> 45,138 	+ 1.0 + 0.8 + 0.7 - 1.1 - 1.3 - 1.3 - 1.5 + 0.1 + 0.7 + 0.9 <b>9</b> + 1.5 	33,388 33,548 33,924 33,642 33,415 33,424 33,836 33,568 33,718 33,929 34,374 10 34,237	+ 1.8 + 1.5 + 1.4 + 0.1 - 0.4 - 0.3 - 0.2 + 0.9 + 1.5 + 1.6 <b>10</b> + 2.0	9,455 9,491 9,551 9,387 9,359 9,395 9,294 9,322 9,347 9,415 <b>10</b> 9,347	22,932 23,049 23,388 23,284 23,137 23,171 23,518 23,376 23,446 23,606 23,982 10 23,941	750 753 738 686 640 640 676 697 719 727 10 714 	4,615 4,598 4,522 4,458 4,235 4,273 4,194 4,051 4,066 4,161 4,125 <b>10</b> 4,055 	51 66 161 1,219 5,399 2,705 2,433 3,473 2,164 935 835 	43 58 105 5,388 2,691 2,361 3,157 2,143 915 762 10 799 	8 2,227 2,276 2,204 2,385 2,770 2,904 2,722 2,878 2,691 2,545 2,341 2,417 2,311	778 827 811 960 1,154 1,266 1,167 1,248 1,024 920 802 802 874 777	8         4.9           5.0         4.8           5.2         6.0           6.3         5.9           6.3         5.9           5.5         5.1           5.3         5.1           5.3         5.1           5.3         5.1	795 794 729 683 593 583 595 586 658 774 804 818 864
2019 Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec. 2020 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.	44,894 44,971 45,134 45,259 45,297 45,312 45,307 45,516 45,592 45,622 45,622 45,160 45,160 45,160 44,676 44,676 44,676 44,672 44,672 44,972 45,002 44,838	$\begin{array}{c} + 1.2 \\ + 1.1 \\ + 1.1 \\ + 1.0 \\ + 0.9 \\ + 0.9 \\ + 0.7 \\ + 0.8 \\ + 0.8 \\ + 0.7 \\ + 0.6 \\ + 0.6 \\ + 0.6 \\ + 0.2 \\ - 0.7 \\ - 1.3 \\ - 1.4 \\ - 1.4 \\ - 1.4 \\ - 1.4 \\ - 1.4 \\ - 1.4 \\ - 1.4 \end{array}$	33,199 33,286 33,383 33,407 33,610 33,968 33,968 33,968 33,624 33,624 33,624 33,624 33,624 33,624 33,624 33,624 33,624 33,624 33,233 33,482 33,322 33,233 33,482 33,792 33,862 33,869 33,700	$\begin{array}{r} + 2.0 \\ + 1.9 \\ + 1.8 \\ + 1.8 \\ + 1.6 \\ + 1.4 \\ + 1.5 \\ + 1.4 \\ + 1.4 \\ + 1.4 \\ + 1.3 \\ + 1.1 \\ + 0.1 \\ - 0.3 \\ - 0.3 \\ - 0.4 \\ - 0.4 \\ - 0.4 \\ - 0.4 \\ - 0.2 \\ - 0.1 \end{array}$	9,416 9,442 9,457 9,455 9,455 9,505 9,505 9,583 9,567 9,559 9,474 9,432 9,427 9,440 9,396 9,367 9,355 9,322 9,367 9,327	22,794 22,855 22,968 22,948 22,948 22,941 23,341 23,341 23,344 23,255 23,278 23,278 23,204 23,083 23,084 23,024 23,024 23,218 23,218 23,454 23,559 23,478	758 749 753 749 750 757 750 754 742 694 683 675 643 624 629 635 642 656 642 656 656 656 656 6666	4,564 4,577 4,627 4,644 4,568 4,517 4,512 4,531 4,532 4,531 4,471 4,461 4,350 4,194 4,206 4,260 4,270	310 246 49 53 51 55 60 84 111 124 247 382 439 2,834 6,007 5,726 4,464 3,319 2,551 2,244 2,037 2,405 2,856	29 32 40 45 51 75 102 115 97 133 134 2,580 5,995 5,715 4,452 3,306 2,537 2,229 2,021 2,386 2,676	2,373 2,301 2,229 8 2,226 2,216 2,275 2,319 2,234 2,204 2,180 2,227 2,426 2,396 2,335 2,644 2,813 2,853 2,644 2,813 2,853 2,644 2,813 2,853 2,910 2,955 2,847 2,760 2,669 2,707	908 850 795 772 766 825 848 808 985 900 838 985 971 925 1,093 1,172 1,197 1,258 1,302 1,238 1,183 1,152 1,166	5.3 5.1 4.9 5.0 5.1 4.9 5.1 4.9 4.8 4.8 4.9 5.3 5.1 5.1 5.8 6.1 6.2 6.2 6.3 6.4 6.2 6.2 6.2 6.2 6.3 5.9 5.9	784 797 796 792 798 799 795 787 764 688 690 691 626 584 570 573 584 591 602 601 581
2021 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec. 2022 Jan. Feb. Mar. Apr. May June	44,430 44,423 44,501 44,608 44,726 44,956 45,028 45,028 45,028 45,280 45,280 45,280 45,570 45,448 45,350 45,5121 9 45,236 9 45,379 9 45,379 9 45,438	$\begin{array}{c} & - 1.6 \\ & - 1.6 \\ & - 1.3 \\ & - 0.4 \\ & + 0.1 \\ & + 0.5 \\ & + 0.6 \\ & + 0.7 \\ & + 0.7 \\ & + 0.7 \\ & + 0.7 \\ & + 1.0 \\ & + 1.1 \\ & + 1.4 \\ & + 1.6 \\ & 9 \\ & + 1.7 \\ & 9 \\ & + 1.7 \\ & 9 \\ & + 1.7 \\ & 9 \\ & + 1.7 \end{array}$	33,515 33,521 33,636 33,689 33,747 33,802 33,731 33,994 34,323 34,369 34,449 34,284 10 34,287 10 34,237 10 34,332 10 34,361	- 0.3 - 0.3 - 0.0 + 0.8 + 1.3 + 1.4 + 1.5 + 1.5 + 1.5 + 1.6 + 1.7 <b>10</b> + 2.1 <b>10</b> + 2.1 <b>10</b> + 2.1 <b>10</b> + 2.0 	9,282 9,281 9,309 9,324 9,326 9,324 9,326 9,324 9,358 9,432 9,423 9,364 10 9,345 10 9,345 10 9,345 10 9,345 10 9,368 10 9,365 	23,347 23,343 23,397 23,427 23,461 23,504 23,458 23,903 23,965 24,039 23,980 10 23,997 10 23,997 10 24,034 	657 662 685 687 703 716 715 722 726 722 726 727 727 728 729 729 720 729 720 720 720 720 720 720 720 720 720 720	4,045 4,026 4,039 4,067 4,151 4,194 4,153 4,123 4,123 4,123 4,133 4,133 4,112 10 4,041 10 4,053 10 4,078 	3,638 3,766 3,016 2,583 2,342 1,568 1,568 1,568 1,568 1,568 859 780 767 957    	3,294 3,358 2,818 2,560 2,320 1,548 838 839 762 750 772 10 850 10 814 10 733 10 401 	2,901 2,904 2,827 2,771 2,687 2,590 2,578 2,465 2,377 2,317 2,330 2,462 2,462 2,428 2,362 2,309 2,309 2,260 2,363	1,298 1,270 1,177 1,091 1,020 961 956 940 864 814 789 803 903 803 903 884 835 884 835 880 771 761	6.3 6.2 6.0 5.9 5.7 5.6 5.4 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1	566 583 609 629 654 693 744 779 799 809 808 794 792 822 839 852 855 877

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 pre-liminary 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.

## 7. Prices

	Harmonis	ed Ind	ex of	Consu	imer Prices						Γ								HWWI	
			of v	vhich:											Index of producer		Indices of foreign trac	le prices	Index of Wo Prices of Rav	rld Market v Materials 4
									of	which:					prices of industrial	Index of				
					Non-				Act	ual ts	Col	nsumer re index	Con-	ion	sold on	prices of				
	Total		Foo	d 1,2	industrial goods 1	Ene	ergy 1	Services	for 1 hou	ising	(na	tional ncept)	price		domestic market 3	cultural products 3	Exports	Imports	Energy 5	Other raw materials 6
Period	2015 = 1	00			5		57												2020 = 100	
	Index	امررما																		
2018		104 0	•	106 7	103.0	1	102 3	104	2	104 6		103.8	1	10.2	103 7	109.0	1019	102 7	174 1	99.9
2019	, ·	105.5	, .	108.4	104.2	,	103.7	105.	7	106.1		105.3	1	15.3	104.8	111.5	102.4	101.7	150.2	98.7
2020	7	105.8 109.2	7	110.9	7 104.1 7 106.7	7	99.0 109.0	7 106. 7 109.	0	107.6	7	105.8	7 1	27.0	103.8	8 117.5	101.7 107.4	110.4	220.7	137.6
2020 Aug. Sep.	7	106.2 105.8	7 · 7 ·	110.1 109.9	7 102.6 7 103.6	7 7	97.6 96.9	7 109. 7 108.	0	107.8 107.8	777	106.0 105.8	7 1	15.7	103.2 103.6	104.8 103.5	101.2 101.3	96.5 96.8	95.8 97.1	98.4 103.5
Oct. Nov.	7 · 7 ·	105.8 104.7	7 · 7 · 7 ·	110.2 110.3	7 103.9 7 104.0 7 103.4	777	97.0 96.0 97.4	7 107. 7 105. 7 106	6	108.0 108.1	777	105.9 105.0 105.5	7 1	16.0	103.7 103.9 104.7	103.8 103.9	101.4 101.8 101.9	97.1 97.6	103.3 109.5	104.9 107.1 112.3
2021 Jan. Feb.		105.5 106.8 107.4		112.3 113.0	105.1 105.5		102.6 104.1	106. 106. 107.	9	108.4 108.5		106.3 107.0	1	21.2	104.7 106.2 106.9	104.2 106.8 108.9	101.5 102.8 103.3	100.1 101.8	141.6 146.0	120.6 124.7
Mar. Apr. Mav		107.9 108.4 108.7		113.1 114.5 114.2	105.7 105.8 106.3		106.2 106.1 106.7	107. 108. 108.	6 3 7	108.6 108.7 108.9		107.5 108.2 108.7	1	25.1	107.9 108.8 110.4	114.0 115.9 118.5	104.1 104.9 105.6	103.6 105.0 106.8	150.3 154.1 168.3	130.4 134.3 144.9
June	7	109.1 109.7	, ·	114.1 114.4	106.5 7 106.4	7	107.6 109.0	109. 7 110	1	108.9 109 1	7	109.1 110 1			111.8 113.9	117.7 117 3	106.4 107.7	108.5 110.9	183.0 204.8	142.3 141 9
Aug. Sep.	7 · 7 ·	109.8 110.1	7 ' 7 '	114.4 114.4	7 106.5 7 107.6	7 7	109.4 110.1	7 110. 7 109.	3	109.2 109.3	7 7	110.1 110.1	7 1	29.4	115.6 118.3	118.8 8 117.4	108.5 109.5	112.4 113.9	217.6 256.1	138.9 136.3
Oct. Nov. Dec.	7 7 7	110.7 111.0 111.3	7 · 7 · 7 ·	114.5 114.9 115.7	<ul> <li>7 108.0</li> <li>7 108.4</li> <li>7 108.6</li> </ul>	7 · 7 · 7 ·	114.6 116.7 115.0	<ul> <li>7 110.</li> <li>7 109.</li> <li>7 110.</li> </ul>	0 5 3	109.5 109.5 109.6	7 7 7	110.7 110.5 111.1	7 1	32.2	122.8 123.8 130.0	120.7 125.6 127.2	111.0 111.9 113.0	118.2 121.7 121.8	352.7 304.4 352.9	143.0 143.0 148.3
2022 Jan. Feb. Mar.		112.3 113.3 116.1		117.2 118.2 119.1	108.4 109.1 110.4		123.7 127.4 146.1	109. 110. 110.	8 2	109.9 110.0 110.2		111.5 112.5 115.3	1	38.1	132.8 134.6 141.2	129.2 133.4 153.6	115.0 116.1 120.7	127.0 128.6 135.9	327.8 336.0 504.2	157.0 166.5 185.4
Apr. May		116.9 118.2		122.2	111.3 112.3		142.7 146.7	111. 112. 111	7	110.4 110.6		116.2 117.3 117.4	1	47.9	145.2 147.5	162.3 161.2	121.7 122.4	138.3 139.5	407.8 366.8	184.8 178.9 169.6
June	Annua	l per	cen	tage	change	e e	147.0			110.0		117.4	I						505.5	105.0
2018	+	1.9	.	+ 2.6	+ 0.8		+ 4.9	+ 1.	6	+ 1.6	1	+ 1.8	+	4.7	+ 2.6	+ 0.4	+ 1.2	+ 2.6	+ 25.4	+ 0.3
2020	7 + 7 +	0.4	7.	+ 2.3	<b>7</b> – 0.1	7	- 4.5	7 + 1. 7 + 2	2	+ 1.4	7	+ 0.5	7 +	1.4	- 1.0	- 3.1	- 0.7	- 4.3	- 33.4	+ 1.3
2021	, +	5.2		+ 2.9	7 + 2.5		+10.1	r + 2.		+ 1.5	ľ	+ 5.1	, +	0.0	+ 10.5	0 + 0.0	+ 5.0	+ 13.5	+ 120.7	+ 57.0
2020 Aug. Sep.	7 – 7 –	0.1 0.4	7. 7.	+ 1.2 + 1.0	7 – 0.8 7 – 1.1	7	- 6.0 - 6.6	7 + 1. 7 + 1.	1	+ 1.4 + 1.3	7 7	$     \pm 0.0 \\     - 0.2 $	7 -	0.1	- 1.2 - 1.0	- 6.8 - 5.8	- 1.1 - 1.1	- 4.0 - 4.3	- 29.3 - 32.3	+ 2.3 + 5.9
Oct. Nov. Dec.	7 – 7 – 7 –	0.5 0.7 0.7	7. 7. 7.	+ 1.5 + 1.2 + 0.6	7 - 1.0 7 - 1.1 7 - 1.6	7 7 7	- 6.6 - 7.4 - 6.0	<b>7</b> + 0. <b>7</b> + 0. <b>7</b> + 0.	7 6 8	+ 1.3 + 1.3 + 1.3	7 7 7	- 0.2 - 0.3 - 0.3	7 -	0.3	- 0.7 - 0.5 + 0.2	- 5.9 - 7.2 - 8.9	- 1.0 - 0.6 - 0.6	- 3.9 - 3.8 - 3.4	- 29.1 - 28.0 - 20.8	+ 7.0 + 8.4 + 11.1
2021 Jan. Feb.	++	1.6 1.6		+ 2.0 + 1.6	+ 1.1 + 1.2		- 2.2 + 0.2	+ 2. + 2.	5	+ 1.3 + 1.3		+ 1.0 + 1.3	+	2.9	+ 0.9 + 1.9	- 5.7 - 4.6	+ 0.1 + 0.7	- 1.2 + 1.4	- 2.2 + 15.9	+ 17.7 + 24.6
Apr. May	+++	2.0 2.1 2.4		+ 1.9 + 2.0 + 1.5	+ 0.3 + 0.4 + 0.9		+ 4.5 + 7.6 + 9.5	+ 2. + 1. + 1.	5	+ 1.2 + 1.2 + 1.3		+ 1.7 + 2.0 + 2.5	+	5.7	+ 5.2 + 7.2	+ 0.3 + 2.8 + 8.6	+ 2.2 + 3.3 + 4.2	+ 0.9 + 10.3 + 11.8	+ 79.1 + 128.3 + 127.4	+ 30.1 + 45.0 + 56.0
June July	+ 7 +	2.1 3.1	7	+ 1.2 + 3.8	+ 1.6 7 + 3.8	7	+ 9.0 +11.2	+ 0. 7 + 0.	9 7	+ 1.2 + 1.3	7	+ 2.3 + 3.8			+ 8.5 + 10.4	+ 7.0 + 9.1	+ 5.0 + 6.3	+ 12.9 + 15.0	+ 113.0 + 126.0	+ 51.2 + 48.1
Aug. Sep.	7 + 7 + 7 ·	3.4 4.1	7. 7. 7	+ 3.9 + 4.1	7 + 3.8 7 + 3.9 7 - 3.9	7	+12.1 +13.6	7 + 1. 7 + 1. 7 - 7	2 8	+ 1.3 + 1.4	777	+ 3.9 + 4.1	7 +	11.8	+ 12.0 + 14.2	+ 13.4 8 + 13.4	+ 7.2 + 8.1	+ 16.5 + 17.7	+ 127.1 + 163.7	+ 41.2 + 31.7
Nov. Dec.	7 + 7 + 7 +	4.0 6.0 5.7	7 . 7 . 7 .	+ 3.9 + 4.2 + 5.3	<b>7</b> + 4.2 <b>7</b> + 5.0	7 7 7	+21.6 +18.1	7 + 2. 7 + 3. 7 + 3.	8	+ 1.4 + 1.3 + 1.3	, 7 7	+ 4.5 + 5.2 + 5.3	7 +	14.0	+ 18.4 + 19.2 + 24.2	+ 10.3 + 20.9 + 22.1	+ 9.5 + 9.9 + 10.9	+ 21.7 + 24.7 + 24.0	+ 241.4 + 178.0 + 189.7	+ 30.3 + 33.5 + 32.1
2022 Jan. Feb. Mar.	+++++	5.1 5.5 7.6		+ 4.4 + 4.6 + 5.3	+ 3.1 + 3.4 + 4.4		+20.6 +22.4 +37.6	+ 2. + 2. + 2.	7 7 8	+ 1.4 + 1.4 + 1.5		+ 4.9 + 5.1 + 7.3	+	13.9	+ 25.0 + 25.9 + 30.9	+ 21.0 + 22.5 + 34.7	+ 11.9 + 12.4 + 15.9	+ 26.9 + 26.3 + 31.2	+ 131.5 + 130.1 + 235.5	+ 30.2 + 33.5 + 42.2
Apr. May June	++++++	7.8 8.7 8.2	.	+ 6.7 + 8.8 + 9.9	+ 5.2 + 5.6 + 5.6		+34.5 +37.5 +37.4	+ 3. + 3. + 1.	1 0 7	+ 1.6 + 1.6 + 1.7		+ 7.4 + 7.9 + 7.6	+	18.2 	+ 33.5 + 33.6 	+ 40.0 + 36.0 	+ 16.0 + 15.9 	+ 31.7 + 30.6 	+ 164.6 + 117.9 + 112.7	+ 37.6 + 23.5 + 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 eu-

ro 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. Deutsche Bundesbank Monthly Report July 2022 72•

#### XI. Economic conditions in Germany

## 8. Households' income \*

	Gross wages salaries 1	and	Net wages a salaries <sup>2</sup>	nd	Monetary so benefits rece	cial ived 3	Mass income	4	Disposable ir	icome 5	Saving 6		Saving ratio <b>7</b>
Period	€ 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 2016 2017 2018 2019 2020 2021	1,285.5 1,337.4 1,395.4 1,462.6 1,524.1 1,514.1 1,572.0	4.2 4.0 4.3 4.8 4.2 - 0.7 3.8	863.3 896.3 932.5 976.3 1,022.0 1,021.3 1,065.3	4.0 3.8 4.0 4.7 4.7 - 0.1 4.3	410.5 426.2 441.8 454.3 474.4 518.8 529.2	4.2 3.8 3.6 2.8 4.4 9.4 2.0	1,273.8 1,322.5 1,374.3 1,430.6 1,496.4 1,540.1 1,594.5	4.0 3.8 3.9 4.1 4.6 2.9 3.5	1,782.3 1,841.5 1,905.2 1,975.8 2,021.6 2,035.1 2,078.4	2.8 3.3 3.5 3.7 2.3 0.7 2.1	179.4 187.8 202.8 223.7 218.7 327.1 311.8	5.1 4.7 8.0 10.3 - 2.2 49.6 - 4.7	10.1 10.2 10.6 11.3 10.8 16.1 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 Q2 Q3 Q4	361.8 377.4 393.5 439.3	- 1.2 6.1 5.2 5.1	245.0 251.3 272.2 296.7	- 0.5 7.0 5.5 5.2	136.2 134.0 130.5 128.5	8.9 2.7 - 1.2 - 2.1	381.2 385.3 402.7 425.2	2.6 5.5 3.2 2.9	516.3 509.9 520.4 531.8	- 0.8 3.7 2.4 3.3	113.7 83.0 54.2 60.8	35.1 - 14.8 - 18.5 - 22.9	22.0 16.3 10.4 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 includ-ing 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 increme. disposable income.

#### 9. Negotiated pay rates (overall economy)

	Index of negotiat	ed wages 1								
			On a monthly ba	sis						
	On an hourly bas	is	Total		Total excluding one-off payment	5	Basic pay rates 2		Memo item: Wages and salari per employee 3	es
Period	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 2016 2017 2018	100.0 102.2 104.5 107.6	2.3 2.2 2.2 3.0	100.0 102.2 104.5 107.5	2.3 2.2 2.2 3.0	100.0 102.2 104.5 107.5	2.3 2.2 2.3 2.8	100.0 102.3 104.7 107.6	2.4 2.3 2.4 2.8	100.0 102.5 105.1 108.5	2.9 2.5 2.6 3.2
2019	110.7	2.9	110.6	2.8	110.1	2.5	110.2	2.4	111.7	3.0
2020 2021	112.9 114.7	2.0 1.6	112.9 114.6	2.1 1.6	112.2 114.1	1.9 1.7	112.3 114.1	1.9 1.6	111.5 115.5	- 0.1 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 Q2 Q3 Q4	106.0 107.7 117.8 127.3	1.4 2.3 1.0 1.6	106.0 107.6 117.7 127.2	1.4 2.3 1.0 1.6	106.1 106.8 116.4 127.2	1.5 1.4 1.4 2.4	113.4 113.9 114.2 114.7	1.5 1.5 1.5 1.8	107.4 111.4 115.4 127.6	0.1 5.7 4.3 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. Dec.	163.4 109.5	- 1.7 - 0.3	163.4 109.5	- 1.7 - 0.3	163.5 109.2	2.2 1.8	114.8 114.8	1.8 1.8	:	· .
2022 Jan. Feb. Mar.	108.4 110.5 113.3	2.2 4.2 6.8	108.3 110.4 113.2	2.2 4.2 6.8	107.7 107.8 107.8	1.5 1.7 1.6	115.2 115.2 115.3	1.6 1.6 1.6		· · ·
Apr. May	109.5 111.1	2.2 4.2	109.4 111.0	2.2 4.2	109.2 109.1	2.1 2.2	116.1 116.4	2.0 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.

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

End of year/half

		Assets								Equity and	liabilities					
			of which:				of which:				Liabilities					
												Long-term	1	Short-term	ı	
															of which:	
		Non-						Trado					of which:			
Period	Total assets	current	Intangible assets	Tangible assets	Financial assets	Current assets	Inven- tories	receiv- ables	Cash 1	Equity	Total	Total	Financial debt	Total	Financial debt	Trade pavables
	Total (€	billion)								1. 2						
2018 <b>3</b> 2019	2,589.0	1,536.7 1 769 7	540.8 586 3	610.8 737 1	288.5 333.4	1,052.3	249.5 257 5	234.7	172.6 168.4	789.8 821.0	1,799.2	925.7 1 091 2	558.7 676 3	873.4 888.4	257.5 289.8	205.0
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 2020 H1	2,891.4	1,800.9	625.0	734.0	308.0 319.7	1,320.4	272.1	216.4	209.0	994.4 793.7	2,297.6	1,206.9	754.2	913.9	335.5	238.0 179.7
H2 2021 H1	2,850.0 3,017.6	1,797.3 1,877.0	607.5 649.3	733.1 745.0	335.1 343.7	1,052.7 1,140.6	243.6 256.2	225.9 273.2	240.5 240.8	811.5 906.9	2,038.5 2,110.7	1,181.5 1,178.6	746.3 751.9	857.0 932.1	304.4 297.4	196.1 206.9
H2 p	3,292.0 As a perce	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
20183	100.0	59.4	20.9	23.6	11.1	40.6	9.6	9.1	6.7	30.5	69.5	35.8	21.6	33.7	10.0	7.9
2019 2020	100.0	63.1	20.9	26.3	11.9	36.9	9.2 8.6	8.5 7.9	8.4	29.5	70.7	41.5	24.2	30.1	10.4	7.4 6.9
2021 P 2020 H1	100.0 100.0	59.9 62.3	20.7 21.6	23.5 25.4	11.2 11.1	40.1 37.7	8.3 8.9	10.3 7.5	8.2 7.6	30.2 27.5	69.8 72.6	36.7 40.9	23.5 26.1	33.1 31.6	9.4 11.6	7.2 6.2
H2	100.0 100.0	63.1	21.3	25.7	11.8 11.4	36.9 37.8	8.6 8.5	7.9 9.1	8.4 8.0	28.5 30.1	71.5 70.0	41.5 39.1	26.2	30.1 30.9	10.7 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
20183	2 149 3	with a	tocus or	1 the pro	Dduction	sector	(€ billior 234.5	<b>1)</b> 2   188.6	139.2	636.7	1 512 6	760.2	447 4	7523	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 2021 p	2,265.0 2,626.3	1,354.9	399.0 441.7	543.5	320.0 347.4	1,147.0	228.7 254.4	281.7	212.3	764.7	1,828.7	904.7 918.5	536.9	943.1	267.3	149.8
2020 H1 H2	2,304.8 2,265.0	1,351.9 1,354.9	406.4 399.0	547.1 543.5	303.3 320.0	952.9 910.1	243.9 228.7	171.5 179.5	171.3 187.9	614.6 636.2	1,690.2 1,628.7	912.1 904.7	548.4 536.9	778.0 724.0	294.6 267.3	137.0 149.8
2021 H1 H2 P	2,392.8 2,626.3	1,398.3 1,479.3	416.6 441.7	551.0 573.9	322.5 347.4	994.6 1,147.0	240.6 254.4	221.9 281.7	192.4 212.3	703.5 764.7	1,689.4 1,861.6	892.3 918.5	532.0 548.5	797.1 943.1	261.3 274.9	162.1 184.0
20102	As a perce	ntage of to	tal assets			40.5						25.4				7.4
20183	100.0	56.6 60.6	18.1	22.0	12.9	43.5 39.4	10.9	8.8	6.5 5.9	29.6	70.4	35.4 38.5	20.6	35.0 32.7	11.0	6.9
2020 2021 <b>P</b>	100.0 100.0	59.8 56.3	17.6 16.8	24.0 21.9	14.1 13.2	40.2 43.7	10.1 9.7	7.9 10.7	8.3 8.1	28.1 29.1	71.9 70.9	39.9 35.0	23.7 20.9	32.0 35.9	11.8 10.5	6.6 7.0
2020 H1 H2	100.0 100.0	58.7 59.8	17.6 17.6	23.7 24.0	13.2 14.1	41.3 40.2	10.6 10.1	7.4 7.9	7.4 8.3	26.7 28.1	73.3 71.9	39.6 39.9	23.8 23.7	33.8 32.0	12.8 11.8	6.0 6.6
2021 H1 H2 P	100.0 100.0	58.4 56.3	17.4 16.8	23.0 21.9	13.5 13.2	41.6 43.7	10.1 9.7	9.3 10.7	8.0 8.1	29.4 29.1	70.6 70.9	37.3 35.0	22.2 20.9	33.3 35.9	10.9 10.5	6.8 7.0
	Groups	with a	focus or	the ser	vices se	ctor (€ k	illion)									
2018 <b>3</b> 2019	439.7 497.7	321.3 373.3	152.7 166.7	137.9 171.8	11.0 13.7	118.3 124.4	14.9 13.7	46.1 49.1	33.3 31.6	153.1 158.8	286.6 338.9	165.5 203.8	116.3 152.6	121.1 135.1	21.3 32.3	52.5 49.6
2020 2021 <b>p</b>	585.0	442.4	208.5	189.6	15.1	142.6	14.9 17.7	46.4	52.6 57.3	175.3	409.7	276.7	209.4	133.0	37.1	46.3
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 2021 H1	624.7	442.4	208.5	189.6	21.2	142.6	14.9	40.4 51.4	52.6 48.4	203.4	409.7	276.7	209.4	135.0	36.1	46.3
H2 P	665.7 As a perce	492.2 ntage of to	238.5 tal assets	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
2018 <b>3</b> 2019	100.0 100.0	- 73.1 75.0	34.7 33.5	31.4 34.5	2.5 2.8	26.9 25.0	3.4 2.8	10.5 9.9	7.6 6.4	34.8 31.9	65.2 68.1	37.6 41.0	26.5 30.7	27.6 27.2	4.8 6.5	11.9 10.0
2020 2021 n	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 2020 H1	100.0	76.5	35.8 37.3	31.9	3.2 2.8	20.1	2.7	6.5 7.7	8.4	34.5 30.5	69.5	45.3 46.3	35.0 35.1	22.2	5.3 7.0	8.1 7.3
H2 2021 H1	100.0 100.0	75.6 76.6	35.6 37.2	32.4 31.1	2.6 3.4	24.4 23.4	2.6 2.5	7.9 8.2	9.0 7.8	30.0 32.6	70.0 67.4	47.3 45.8	35.8 35.2	22.7 21.6	6.3 5.8	7.9 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.

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#### XI. Economic conditions in Germany

## 11. Revenues and operating income of listed non-financial groups \*

					Operating sation (EBI	income bef TDA 1) as a	ore depreci	ation and a e of revenue	morti- es			Operating	income (EB	IT) as a per	centage of I	evenues
			Operating	income			Distributio	n 2						Distributio	n 2	
			before dep and amort	preciation isation	Weighted		First		Third	Operating		Weighted		First		Third
	Revenues		(EBITDA 1	)	average		quartile	Median	quartile	income (EE	BIT)	average		quartile	Median	quartile
		Annual per- centage		Annual per- centage		Annual change in per- centage					Annual per- centage		Annual change in per- centage			
Period	€ billion 3	change 4	€ billion 3	change 4	%	points 4	%	%	%	€ billion 3	change 4	%	points 4	%	%	%
	Total															
2014 2015	1,564.3 1,633.9	1.0 6.9	198.7 195.9	5.0 - 1.1	12.7 12.0	0.5 - 1.0	5.9 6.3	10.3 10.6	17.4 17.8	109.3 91.5	8.6 - 16.4	7.0 5.6	0.5 - 1.5	1.9 1.8	6.2 6.7	11.1 11.3
2016 2017	1,624.3 1,719.3	- 0.4 5.1	214.4 243.4	7.8 14.6	13.2 14.2	1.0 1.2	6.7 7.0	11.4 11.0	17.9 18.0	111.7 141.9	9.0 33.3	6.9 8.3	0.5 1.8	2.6 2.5	6.7 6.8	12.0 12.1
2018 <b>6</b> 2019	1,706.8 1,764.6	0.7 2.6	232.8 233.6	- 0.9 0.4	13.6 13.2	- 0.2 - 0.3	6.1 6.9	10.6 12.2	17.8 19.2	129.2 105.5	- 6.3 - 17.9	7.6 6.0	- 0.6 - 1.5	2.1 1.6	6.5 5.8	11.9 11.8
2020 2021 p	1,632.8 1,994.7	- 8.8 20.4	213.6 305.8	- 7.7 41.5	13.1 15.3	0.2 2.3	6.5 7.8	11.5 13.4	17.9 19.9	52.1 169.6	- 41.0 228.0	3.2 8.5	- 2.1 5.4	- 0.8 2.9	4.9 8.2	10.5 12.2
2017 H1 H2	843.9 878 5	6.7 3 5	125.7 117 4	14.6 14.6	14.9 13 4	1.0 1 3	5.7 6 9	10.1 12.0	17.1 19.2	78.4 63.0	29.6 38.2	9.3 7 2	1.6 1.8	1.8 3.2	5.8 7 4	11.6 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
2019 H1	861.3	2.7	112.3	- 4.0	13.0	- 0.9	6.5	11.2	18.6	53.4	- 23.3	6.2	- 2.1	1.5	5.7	12.5
H2 2020 H1	744.5	- 14.4	78.2	- 34.1	10.5	- 3.0	6.6 4.8	9.9	20.0 16.7	7.9	- 88.0	5.8 1.1	- 5.3	- 2.1	3.5	8.8
H2 2021 H1	888.4 920.0	- 3.3 20.3	135.4 152.5	17.1 88.4	15.2 16.6	2.8 6.0	7.6 7.4	13.2 12.6	19.8 19.5	44.2 85.5	8.7	5.0 9.3	0.7 8.4	1.7 2.3	6.5 7.8	11.6 12.2
H2 p	1,075.6	20.4   with a	153.5   focus or	13.4   http://www.com/	14.3   duction	sector	8.4   5	13.2	20.8	84.1	88.9	7.8	2.9	2.9	7.8	13.4
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 2016	1,309.7 1,295.9	7.0 - 0.8	149.0 161.9	- 2.6 6.3	11.4 12.5	- 1.1 0.8	6.3 6.5	10.5 10.6	16.3 16.0	69.1 84.8	- 19.7 4.2	5.3 6.5	- 1.8 0.3	2.2 2.8	6.6 6.3	10.4 10.5
2017 20186	1,395.9 1,367.7	5.5 1.0	187.5 175.7	16.6 - 1.5	13.4 12.9	1.3 - 0.3	7.1 6.9	11.0 10.7	15.8 16.0	112.5 100.7	40.6 - 7.1	8.1 7.4	2.0 - 0.6	3.2 2.8	6.7 6.9	10.4 11.4
2019	1,410.9 1,285,2	2.0 - 9.4	168.1 143.6	- 4.4 - 8.6	11.9 11.2	- 0.8 0 1	6.9 5.7	11.3 10.6	16.6 16.5	76.3 29.1	- 23.8 - 48 1	5.4 2 3	- 1.8 - 2 3	1.4	5.7 4 3	10.1 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 HT H2	701.4	7.3 3.7	86.0	18.7	14.6	1.4	6.0 7.0	10.1	16.1	46.2	37.3 45.5	9.5 6.6	2.1 1.9	2.3 3.6	5.8	10.8
2018 H1 6 H2	681.9 695.4	- 0.1 2.1	94.9 83.1	- 3.4 0.7	13.9 12.0	- 0.5 - 0.2	7.0 6.2	10.9 11.1	16.7 16.2	60.0 42.1	- 5.9 - 8.7	8.8 6.1	- 0.6 - 0.7	2.9 2.0	6.8 6.4	11.5 11.4
2019 H1 H2	689.9 721.0	2.4 1.7	83.3 84.8	- 8.8 0.3	12.1 11.8	- 1.5 - 0.2	7.1 6.1	10.9 10.8	16.1 16.9	41.9 34.4	- 26.8 - 19.7	6.1 4.8	- 2.4 - 1.3	1.8 0.6	6.0 5.2	9.5 11.1
2020 H1 H2	580.6 704.6	- 16.0 - 3.0	49.0 94.6	- 42.4 25.4	8.4 13.4	- 3.8 3.4	4.4 7.0	8.8 12.1	14.9 18.6	0.2 28.9	- 101.7 19.7	0.0 4.1	- 6.2 1.1	- 2.1 0.3	3.1 6.0	7.8 10.5
2021 H1 H2 P	731.9 854.2	24.0 21.1	112.1 104.9	128.8 11.3	15.3 12.3	7.0 - 1.1	8.2 7.8	12.6 12.4	18.6 17.5	67.7 59.1	105.2	9.3 6.9	9.4 2.9	2.9 2.7	7.9 7.0	12.1 11.5
	Groups	with a	focus or	h the ser	vices se	ctor				,				•		
2014	344.2	0.8	46.5	1.8	13.5	0.1	6.0 5.9	12.3	22.6	24.1	4.3	7.0	0.2	2.6	6.3	13.7
2016	328.4	1.3	52.5	12.8	16.0	1.6 0.8	6.8 6.8	13.4	25.1	26.9	24.4	8.2 9.1	1.5	2.3	8.2 7.2	15.3 15.1
20186 2019	339.2 353.7	- 0.6 4.8	57.1 65.4	1.3 15.2	16.8 18.5	0.3 1.7	5.5 6.9	10.5 13.7	24.7 24.5	28.5 29.2	- 3.5	8.4 8.3	- 0.3 - 0.2	1.4 2.4	5.8 6.2	16.6 16.2
2020 2021 p	347.6 408 9	- 6.1	70.0	- 5.4	20.1	0.1	6.9 7.6	13.3 15.0	22.1	23.0 42.8	- 22.1	6.6 10 5	- 1.4	- 1.2	6.5	12.2
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
2018 H1 6	166.3	0.2	25.9	2.8	15.6	0.4	3.8	9.5	24.0	12.6	- 1.9	7.6	- 0.2	- 0.9	4.7	15.3
12 2019 H1	174.0	- 1.3 4.0	31.3 29.0	- 0.0	18.0	0.2 1.4	6.7 5.7	12.3	25.0 24.4	15.9	- 4.6 - 7.5	9.1 6.7	- 0.3	0.0	7.0 4.9	17.8
H2 2020 H1	182.7 163.9	5.5 - 8.1	36.5 29.2	16.9 - 9.4	20.0 17.8	1.9 - 0.3	7.1 5.6	15.1 10.8	24.4 21.2	17.7 7.7	10.9 - 36.4	9.7 4.7	0.5 - 2.1	1.8 - 2.2	8.2 4.3	16.3 10.9
H2 2021 H1	183.8 188.1	- 4.2	40.8	- 2.2	22.2	0.4	8.9	14.7	23.3	15.3 17.9	- 12.8	8.3 9.5	- 0.9	2.6	7.5	13.3
H2 P	221.4	17.9	40.3	18.2	21.3	0.1	9.4	16.5	24.3	25.1	59.1	11.3	4.8 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. Ex-cluding groups engaged in real estate activities. **1** Earnings before interest, taxes, de-preciation and amortisation. **2** Quantile data are based on the groups' unweighted re-turn on sales. **3** Annual figures do not always match the sum of the two half-year fig-

ures. 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.

## 1. Major items of the balance of payments of the euro area $^{\star}$

€ million

				2021		2022			
Item	2019 r	2020 r	2021 r	Q3 r	Q4 r	Q1 r	February <b>r</b>	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 Expenditure Balance	2,390,756 2,083,527 + 307,230	2,187,668 1,845,143 + 342,526	2,504,403 2,218,825 + 285,573	622,455 552,729 + 69,725	671,475 634,554 + 36,920	677,718 677,956 – 238	219,525 215,803 + 3,722	254,014 248,901 + 5,113	233,158 237,725 – 4,567
2. Services Receipts Expenditure Balance	1,018,798 982,729 + 36,070	866,556 865,180 + 1,374	1,001,378 906,156 + 95,222	265,110 230,845 + 34,265	291,195 272,115 + 19,080	270,187 240,719 + 29,467	84,748 77,694 + 7,053	95,948 84,842 + 11,106	92,761 79,586 + 13,175
3. Primary income Receipts Expenditure Balance	855,383 772,766 + 82,620	715,559 684,183 + 31,376	810,638 732,386 + 78,251	185,984 165,168 + 20,816	216,559 188,135 + 28,425	201,556 187,755 + 13,801	63,597 57,592 + 6,005	70,979 69,148 + 1,831	69,589 72,086 – 2,497
4. Secondary income Receipts Expenditure Balance	123,291 271,356 – 148,066	126,638 284,911 – 158,271	154,464 311,965 – 157,503	36,660 70,743 - 34,084	42,817 82,951 - 40,135	37,515 79,549 – 42,034	12,030 28,403 – 16,373	14,314 24,988 – 10,674	12,220 23,768 – 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
<ol> <li>Direct investment By resident units abroad the euro area</li> </ol>	+ 86,091 + 46,496	- 200,794 - 137,138	+ 292,022 + 148,889	+ 106,894 + 44,551	+ 52,634 - 16,014	+ 25,982 + 48,447	+ 31,466 + 13,746	- 4,310 - 18,779	+ 33,580 + 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 By resident units abroad	- 104,930	+ 538,328	+ 427,270	+ 55,965	+ 118,239	- 32,612	- 33,167	- 73,063	+ 3,793
the euro area Equity and investment fund shares	+ 423,918 + 58,261	+ 686,807 + 319,347	+ 772,132	+ 126,214 + 44,352	+ 140,645 + 24,505	- 20,994	- 26,381	- 42,958	- 53,138
Short-term debt securities	+ 6,565	+ 121,088	+ 116,846	- 8,476	+ 82,623	- 59,212	+ 5,786	- 19,369	- 50,500
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 Equity and	+ 528,848	+ 148,479	+ 344,863	+ 70,250	+ 22,405	+ 11,617	+ 6,786	+ 30,105	- 56,931
investment fund shares Short-term	+ 283,968	+ 163,535	+ 519,946	+ 129,618	+ 145,570	- 63,928	- 3,932	- 32,656	+ 3,424
debt securities Long-term debt securities	- 26,090 + 270,967	+ 112,497	+ 40,042	+ 13,859	- 81,475	+ 81,563	+ 22,556	+ 42,778	- 19,755
<ol> <li>Financial derivatives and employee stock options</li> </ol>	+ 7,673	+ 29,703	+ 69,667	+ 24,062	+ 44,615	- 5,314	- 3,777	- 4,280	+ 8,697
<ol> <li>Other investment Eurosystem General government MFIs 2 Enterprises and households</li> </ol>	+ 249,506 + 144,207 + 5,268 + 186,982 - 86,953	- 185,599 - 203,619 - 16,333 + 20,405 + 13,952	- 577,196 - 442,880 - 72,593 - 125,367 + 63,646	- 226,885 - 166,708 - 45,934 - 33,112 + 18,871	- 191,145 - 357,069 + 3,119 + 183,971 - 21,165	+ 26,236 + 184,196 + 2,062 - 233,851 + 73,830	+ 3,731 + 19,838 - 4,132 - 56,315 + 44,339	+ 66,465 - 51,924 - 1,264 + 43,938 + 75,717	- 87,302 + 57,915 - 24,012 - 114,446 - 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. Major items of the balance of payments of the Federal Republic of Germany (balances)

	€ milli	on																		
	Curre	nt Account													Financ	ial account	3			
			Good	5																
Zeit	Total		Total		of which Supple trade it	ch: mentary :ems 1	Service	es	Prima incom	ry ne	Seco incor	ndary me	Balance capital accoun	e of t <b>2</b>	Total		of whi Reserv assets	ch: e	Errors and omissic	ins 4
2007 2008 2009	+ + +	171,493 144,954 142,744	+ + +	201,728 184,160 140,626	- - -	1,183 3,947 6,605	- - -	32,465 29,122 17,642	+ + +	35,620 24,063 54,524	- - -	33,390 34,147 34,764	- - -	1,597 893 1,858	+ + +	183,169 121,336 129,693	+ + +	953 2,008 8,648	+ - -	13,273 22,725 11,194
2010 2011 2012 2013 2014	+ + + +	147,298 167,340 195,712 184,352 210,906	+ + + +	160,829 162,970 199,531 203,802 219,629	- - - -	6,209 9,357 11,388 12,523 14,296	- - - -	25,255 29,930 30,774 39,321 25,303	+ + + +	51,306 69,087 65,658 63,284 57,752	- - - -	39,582 34,787 38,703 43,413 41,172	+ + - +	1,219 419 413 563 2,936	+ + + +	92,757 120,857 151,417 226,014 240,258	+ + + -	1,613 2,836 1,297 838 2,564	- - + +	55,760 46,902 43,882 42,224 26,416
2015 2016 2017 2018 2019	+ + + + +	260,286 266,689 255,814 267,729 262,903	+ + + +	248,394 252,409 255,077 221,983 215,456	- - - -	15,405 19,921 13,613 22,985 30,887	- - - -	18,516 20,987 23,994 15,806 18,100	+ + + +	69,262 76,199 76,404 111,890 115,359	- - - -	38,854 40,931 51,673 50,338 49,811	- + - + -	48 2,142 2,936 580 887	+ + + +	234,392 261,123 276,697 246,928 186,317	- + - +	2,213 1,686 1,269 392 544	- + -	25,845 7,708 23,819 21,381 75,700
2020 2021	++++	238,741 264,981	+ +	189,963 192,150	- +	7,246 3,091	+ +	2,725 314	+ +	98,780 126,606	-	52,727 54,090		5,829 1,376	+ +	216,515 314,750	- +	51 31,892	- +	16,397 51,145
2019 Q2 Q3 Q4	++++++	59,361 64,013 68,030	+ + +	52,177 57,726 49,432	- - -	7,580 7,447 11,400	- - -	2,223 11,912 3,126	+ + +	16,014 30,937 35,102	- - -	6,606 12,738 13,378	- + -	509 235 1,412	+ + +	40,266 19,657 83,477	+ - -	444 349 576	- - +	18,586 44,590 16,860
2020 Q1 Q2 Q3 Q4	+ + + +	62,570 37,621 62,788 75,762	+ + + +	52,090 28,076 55,716 54,082	- - - -	2,656 1,806 695 2,089	- + - +	2,238 5,190 5,827 5,599	+ + + +	27,396 13,563 23,501 34,320	- - -	14,679 9,209 10,601 18,238	- + -	608 55 1,493 3,783	+ + + +	33,152 25,747 65,414 92,203	+ + - +	133 243 1,276 848	- - + +	28,810 11,929 4,118 20,223
2021 Q1 Q2 Q3 Q4	+ + + +	75,009 63,932 61,165 64,875	+ + + +	57,190 47,133 49,076 38,751	+ - - +	1,200 194 34 2,119	+ + - -	3,281 6,401 8,160 1,208	+ + + +	31,814 18,624 34,277 41,892	- - - -	17,276 8,225 14,029 14,560	- - + -	331 1,788 1,745 1,002	+ + + +	106,919 84,594 36,922 86,314	+ + +	385 58 31,199 250	+ + - +	32,241 22,450 25,987 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. Feb. Mar.	+ + +	15,929 21,309 25,331	+ + +	14,031 19,874 18,185	- - +	905 1,884 133	- - -	859 1,316 62	+ + +	10,181 7,135 10,080	- - -	7,423 4,383 2,872	+ - -	198 101 706	+ + +	3,819 15,791 13,542	+ + -	898 750 1,514	- - -	12,309 5,418 11,083
Apr. May June	+ + +	10,787 6,134 20,700	+ + +	4,530 8,575 14,971	- + -	102 87 1,791	+ + +	1,675 1,110 2,406	+ + +	9,003 23 4,538	- - -	4,421 3,573 1,214	+ - -	110 9 47	+ + +	11,487 2,095 12,165	+ + -	950 33 740	+ - -	589 4,029 8,489
July Aug. Sep.	+ + +	20,883 16,852 25,053	+ + +	20,319 13,976 21,421	- + -	330 38 404	- - -	2,709 2,543 575	+ + +	7,024 8,850 7,627	- - -	3,751 3,432 3,419	- + -	1,005 412 900	+ + +	14,644 30,512 20,258	- - -	611 611 53	- + -	5,234 13,248 3,895
Oct. Nov. Dec.	+ + +	24,773 22,799 28,191	+ + +	20,389 18,384 15,308	- + -	415 164 1,838	+ + +	782 2,120 2,697	+ + +	8,128 9,835 16,356	- - -	4,527 7,541 6,171	- - -	1,386 2,266 132	+ + +	25,983 23,695 42,524	+ + +	140 89 618	+ + +	2,596 3,162 14,466
2021 Jan. Feb. Mar.	++++++	20,394 20,814 33,801	+ + +	14,733 18,248 24,208	+ + +	301 44 855	+ + +	896 1,159 1,227	+ + +	11,006 9,016 11,792	- - -	6,241 7,609 3,427	- - +	458 1,461 1,588	+ + +	22,458 52,644 31,817	+ + -	743 102 460	+ + -	2,522 33,291 3,572
Apr. May June	+++++++	23,029 15,757 25,147	+ + +	15,866 14,492 16,775	+ - -	83 160 117	+ + +	3,051 2,344 1,005	+ + +	7,812 644 10,167	- - -	3,701 1,724 2,800	- - -	700 375 713	+ + +	35,418 14,146 35,029	- + +	251 211 98	+ - +	13,090 1,235 10,595
July Aug. Sep.	+++++++	20,669 16,987 23,509	+ + +	18,645 12,859 17,573	- + -	451 645 229	- - -	2,511 3,543 2,105	+ + +	9,907 11,922 12,447	- - -	5,372 4,251 4,406	- + +	626 493 1,877	+ + +	5,325 20,653 10,944	+ + -	102 31,254 158	- + -	14,718 3,173 14,442
Oct. Nov. Dec.	+++++++	19,141 21,329 24,405	+ + +	15,259 14,820 8,672	+ + +	1,117 893 109	- + +	2,802 71 1,523	+ + +	11,783 12,021 18,088		5,099 5,582 3,878	+ - -	416 1,153 265	+ + +	21,714 48,411 16,190	+ + -	261 963 974	+ + -	2,157 28,235 7,951
2022 Jan. Feb. Mar.	+++++++	12,519 21,057 18,768	+ + +	5,831 15,649 12,824	+ + +	1,230 2,346 225	- + -	338 414 2,543	+ + +	13,100 10,415 13,380	- - -	6,074 5,421 4,893	- - -	104 1,297 464	+ + +	55,703 28,963 9,337	+ + +	309 1,161 730	+ + -	43,288 9,203 8,967
Apr. May <b>p</b>	++++	8,979 2,531	+++	4,343 6,199				1,170 2,688	+++	10,497 2,185	-	4,691 3,166		1,272 2,705	+++	4,556 4,509	+++	83 161	- +	3,151 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.

 ${\bf 3}$  Net lending: + / net borrowing: -.  ${\bf 4}$  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.

# 3. Foreign trade (special trade) of the Federal Republic of Germany, by country and group of countries $^{\star}$

€ million

					2021	2022		_		
Group of countries/country		2019	2020	2021	Dec.	Jan.	Feb.	Mar.	Apr.	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 Imports Balance	492,308 409,863 + 82,445	441,853 371,211 + 70,643	518,910 438,698 + 80,212	44,043 39,458 + 4,586	41,910 35,556 + 6,353	47,272 41,149 + 6,123	51,854 44,983 + 6,871	47,608 41,060 + 6,548	50,718 44,455 + 6,263
of which:	Exports	66,076	60,118	71,926	5,930	5,819	6,484	7,533	7,208	7,278
Austria	Imports	44,059	40,454	47,568	4,205	3,740	4,457	4,956	4,763	5,133
Belgium and Luxembourg	Balance Exports Imports	+ 22,017 52,006 46,322	+ 19,663 48,824 39,584	+ 24,358 57,392 55,338	+ 1,726 4,896 4,767	+ 2,079 4,635 4,279	+ 2,026 5,385 4,752	+ 2,577 6,023 5,543	+ 2,445 5,601 4,932	+ 2,145 5,414 5,827
France	Balance	+ 5,683	+ 9,240	+ 2,054	+ 128	+ 356	+ 633	+ 4/9	+ 669	- 414
	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
Italy	Balance	+ 40,364	+ 34,546	+ 40,080	+ 3,005	+ 3,417	+ 3,583	+ 3,911	+ 3,660	+ 3,923
	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 Imports Balance	205,949 183,387 + 22,561	193,888 175,444 + 18,444	228,338 199,983 + 28,354	19,212 17,066 + 2,146	17,823 15,623 + 2,200	20,588 17,905 + 2,683	23,095 19,969 + 3,126	20,567 18,007 + 2,560	22,152 20,212 + 1,940
2. Other European countries	Exports Imports Balance	204,575 154,441 + 50,134	189,180 135,822 + 53,358	198,741 165,281 + 33,460	15,827 16,680 – 854	16,425 17,623 – 1,198	17,361 17,601 – 240	18,402 21,127 - 2,724	15,918 19,674 – 3,756	17,517 18,610 – 1,093
of which: Switzerland	Exports Imports Balance	56,345 45,824 + 10,521	56,265 45,556 + 10,708	60,617 48,886 + 11,730	4,945 3,840 + 1,105	5,206 4,110 + 1,096	5,387 4,596 + 792	6,469 5,213 + 1,256	5,372 4,775 + 596	6,020 4,712 + 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	5,486	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 Imports Balance	421,728 355,390 + 66,338	380,292 343,270 + 37,022	427,496 398,322 + 29,173	37,706 37,329 + 376	33,864 37,391 – 3,527	37,819 35,675 + 2,144	44,316 44,291 + 25	37,795 42,554 – 4,758	42,455 47,208 – 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 Imports Balance	118,680 71,334 + 47,346	103,476 67,694 + 35,782	122,038 72,126 + 49,911	10,695 6,370 + 4,325	9,964 6,173 + 3,792	10,937 6,119 + 4.818	13,821 7,680 + 6.141	11,922 6,698 + 5,224	13,439 7,795 + 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 Imports	28,663 7,460	25,882 6,721	26,112 7,507	2,782 718	1,953	2,204	2,466 735	1,981 939	2,218 1,036
Japan	Exports Imports	+ 21,202 20,662 23,904	+ 19,161 17,396 21,427	+ 18,605 18,238 23,489	+ 2,064 1,504 1,884	+ 1,397 1,557 1,858	+ 1,505 1,737 1,933	+ 1,732 1,921 2,111	+ 1,042 1,611 2,089	+ 1,182 1,675 2,219
People's Republic of China <sup>2</sup>	Exports Imports Balance	95,984 110,054 - 14.070	95,840 117,373 - 21,533	- 5,251 103,690 142,260 - 38,570	- 380 8,442 14,784 - 6,341	- 301 7,918 14,620 - 6,702	9,066 13,536 - 4.470	10,450 16,493 - 6.043	- 477 8,254 16,681 - 8.427	9,207 9,207 17,176 - 7,969
New industrial countries	Exports	54,164	50,590	55,241	5,072	4,501	4,992	5,431	4,740	5,434
and emerging markets	Imports	51,748	48,222	55,403	4,816	5,162	5,028	5,510	5,297	7,255
of Asia 3	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.

4. Services and primary income of the Federal Republic of Germany (balances)

	€ million																					
	Servio	es															Prima	ry income				
			of w	hich:																		
Zeit	Total		Tran	sport	Trave	əj 1	Finar	ncial	Char the u intel prop	ges for use of lectual ierty	Teleo catic com infor servi	communi- ons-, puter and mation ces	Other busine service	255 25	Gouv good servio	ernment s and es <b>2</b>	Comp of em	ensation ployees	Inve	stment me	Other prima incom	у ез
2017 2018 2019		23,994 15,806 18,100		3,679 2,044 72	-	43,558 44,543 45,947	+ + +	9,613 10,060 10,999	+ + +	14,903 17,219 18,299		8,188 7,060 9,697	- + -	1,065 723 2,984	+ + +	2,177 3,322 3,489	+ + +	1,139 671 846	+ + +	76,669 112,223 115,462	- - -	1,403 1,004 949
2020 2021	+ +	2,725 314	-	9,392 12,067	-	14,678 21,924	+++	10,239 8,737	+ +	17,546 31,878	-	7,107 7,515	-	4,382 8,523	++++	3,363 3,513	+ +	3,234 2,605	+ +	97,017 126,146	-	1,471 2,145
2020 Q3 Q4	- +	5,827 5,599	-	2,735 2,902	-	7,386 98	+++	2,233 2,713	+ +	3,331 4,880	-	2,031 928	-	1,586 1,007	+++	895 668	++	283 1,067	+ +	24,338 29,998	-+	1,120 3,255
2021 Q1 Q2 Q3 Q4	+ + -	3,281 6,401 8,160 1,208	- - -	3,183 2,075 2,259 4,551		13 2,151 14,130 5,629	+ + + +	2,251 2,589 1,221 2,676	+ + + +	5,756 8,007 9,080 9,035		2,478 1,329 2,169 1,539	- - -	1,436 1,164 2,331 3,592	+ + + +	884 914 946 769	+ + - +	1,324 494 77 864	+ + + +	31,487 21,077 35,585 37,996	- - - +	997 2,947 1,232 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 Aug. Sep.		2,511 3,543 2,105		961 438 861		3,234 5,364 5,532	+ - +	886 418 753	+ + +	2,719 2,818 3,543		1,283 334 552	- - -	1,240 621 469	+++++++++++++++++++++++++++++++++++++++	291 303 353	- - -	43 26 8	+ + +	10,358 12,356 12,871	- - -	408 408 416
Oct. Nov. Dec.	- + +	2,802 71 1,523	- - -	1,157 1,122 2,272		3,543 1,354 733	+ + +	1,115 646 915	+ + +	2,593 3,318 3,125		637 830 72	- - -	1,813 1,478 301	+ + +	285 182 302	+ + +	248 252 364	+ + +	12,006 12,184 13,807	- - +	472 415 3,918
2022 Jan. Feb. Mar.	- + -	338 414 2,543		1,741 1,844 1,966		1,141 1,249 2,246	+++++++++++++++++++++++++++++++++++++++	894 714 694	+ + +	2,714 2,773 2,132		1,340 875 1,005	- - -	458 232 1,056	+++++++	311 322 317	+ + +	437 434 361	+ + +	13,068 10,396 13,460	- - -	405 415 441
Apr. May <b>p</b>	=	1,170 2,688	=	805 497	-	2,247 3,777	+++	912 819	++++	2,189 1,772	-	1,203 711	-	707 1,154	+++	288 302	+++	68 105	++++	11,054 4,434	-	625 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.

 ${\bf 3}$  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)

	€ millic	n																		
	Second	lary incom	e												Capital	account				
			Genera	al governm	ent				All sec	tors exclud	ling g	general goverr	nment	2						
					of wh	ich:					of v	which:								
Zeit	Total		Total		Currer intern coope	nt ational eration <b>1</b>	Currei taxes incom etc.	nt on ie, wealth,	Total		Pers bet resi nor hou	sonal transfer: ween dent and n-resident useholds <b>3</b>	of wł Work remit	nich: ers' tances	Total		Non- non-f assets	produced inancial	Capita transfe	l ers
2017 2018 2019		51,673 50,338 49,811		23,191 28,710 28,986	=	9,851 10,186 10,728	+ + +	9,665 10,230 11,742		28,482 21,627 20,825			+ + +	4,613 5,142 5,431	- + -	2,936 580 887	+++++++++++++++++++++++++++++++++++++++	926 3,349 3,028		3,863 2,769 3,915
2020 2021	-	52,727 54,090	-	34,127 32,567	-	12,239 7,039	++	10,929 11,982	-	18,600 21,523		•	+++	5,908 6,170	-	5,829 1,376	+++	380 3,191	-	6,209 4,567
2020 Q3 Q4	-	10,601 18,238	-	6,387 13,375	=	3,264 4,391	+++	2,153 1,752	-	4,215 4,863	+	1,482	+++	1,477 1,477	-	1,493 3,783	-+	34 295	-	1,459 4,078
2021 Q1 Q2 Q3 Q4	- - - -	17,276 8,225 14,029 14,560	- - -	11,088 3,644 8,787 9,048	+ - -	327 1,113 2,834 3,420	+ + + +	2,297 5,341 2,199 2,144	- - -	6,188 4,582 5,242 5,511	+	1,548	+ + + +	1,543 1,543 1,543 1,543	- - + -	331 1,788 1,745 1,002	+ - + +	123 1,578 2,918 1,728	- - - -	454 211 1,173 2,730
2022 Q1 2021 July Aug. Sep	- - -	16,388 5,372 4,251 4 406	- - -	10,040 3,462 2,813 2,512	- - -	2,369 2,317 277 240	+ + + +	2,410 712 410 1.077	- - -	6,348 1,910 1,438 1 894	+	515	+ + +	1,598 514 514 514	- - + +	1,865 626 493 1 877	- - +	1,885 208 686 2 440	+	20 418 192 563
Oct. Nov. Dec.		5,099 5,582 3,878	- - -	3,257 3,691 2,101		122 743 2,555	+ + +	472 347 1,325		1,843 1,892 1,777	++++++	516 516 516	+ + +	514 514 514	+ - -	416 1,153 265	+ - +	786 513 1,455	- - -	370 640 1,720
2022 Jan. Feb. Mar.	-   -   -	6,074 5,421 4,893	- - -	4,295 3,893 1,852		1,394 829 145	+ + +	454 940 1,016	- - -	1,779 1,527 3,041	++++	534 537	+ + +	533 533 533	-   -   -	104 1,297 464	-	291 1,257 337	+ - -	187 40 127
Apr. May <b>p</b>	-	4,691 3,166	-	2,728 868	=	426 488	+++	1,060 2,699	-	1,963 2,298	+++	534 534	+++	533 533	-	1,272 2,705	-	790 2,295	-	482 410

 $1\,$  Excluding capital transfers, where identifiable. Includes current international cooperation and other current transfers.  $2\,$  Includes insurance premiums and claims

(excluding life insurance policies).  ${\bf 3}$  Transfers between resident and non-resident households.

## 6. Financial account of the Federal Republic of Germany (net)

€ million

				2021		2022			
Item	2019	2020	2021	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:	40 705	24.020	55 475	17.012	7.000	20 707	6 434	5 304	5 074
Reinvestment of earnings 1	+ 40,785	+ 21,039	+ 55,475	+ 17,913	+ 7,203	+ 20,797	+ 6,124	+ 5,381	+ 5,871
2 Portfolio investment	+ 134 961	+ 191 740	+ 221 477	+ 55 285	+ 20,833	+ 59730	+ 26.029	- 7268	+ 2857
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 >	60 157	60.089	68 202	1 5 692	_ 252	47 202	17 390	_ 17 190	5 476
3. Financial derivatives and	+ 00,157	+ 00,005	+ 00,252	+ 5,052	555	+ 47,202	+ 17,500	17,105	+ 5,470
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
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
5 Posonio assots	- 70,915	+ 243,112	+ 123,394	+ 15,111	+ 145,592	- 91,650	+ 20,403	- 35,820	+ 24,695
J. Neselve assets	544	- 51	+ 51,092	+ 51,199	- 250	+ 2,200	- 750	+ 85	+ 101
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	1 220	1 1 797	, 3,003	1 1 95 2	1 2 294	. 642	. 974	_ 01
Debt instruments	+ 40 192	+ 79.068	+ 4,787	+ 13.887	- 3956	+ 35,284	+ 3870	+ 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	14.400	- 02 707		. 0.533	6 072	E 244	11 202	7 405	7 120
Long-term 5	+ 14,400	+ 83,707	+ 25,027	+ 9,552	- 0,073	- 5,244	+ 11,203	- 7,485	- 7,158
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	12 078	, 20.212	120 200	1 27 460	, 90.279	_ 14.909	1 160	, 25.042	. 5519
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	+ /5,11/	+ 262,648	- 201,1/2	+ 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

 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).
 Including participation certificates.
 Including reinvestment of earnings.
 Short-term: original maturity up to one year.
 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. Deutsche Bundesbank Monthly Report July 2022 80•

#### XII. External sector

## 7. External position of the Bundesbank \*

	€ million										
	External asset	s									
		Reserve asset	s				Other investment				
End of reporting period	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	External liabilities 3ä, 4	Net external position 5
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 2006 2007 2008 2009	130,268 104,389 179,492 230,775 323,286	86,181 84,765 92,545 99,185 125,541	47,924 53,114 62,433 68,194 83,939	1,601 1,525 1,469 1,576 13,263	2,948 1,486 949 1,709 2,705	33,708 28,640 27,694 27,705 25,634	43,184 18,696 84,420 129,020 190,288	29,886 5,399 71,046 115,650 177,935	902 928 2,527 2,570 7,458	115,377 134,697 176,569 237,893 247,645	- 30,308 2,923 - 7,118 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.

## 8. External positions of enterprises \*

	€ million														
	Claims on non-residents							Liabilities to	ilities to non-residents						
			Claims on foreign non-banks							Liabilities to	non-banks				
					from trade of	redits						from trade of	redits		
End of reporting		Balances with foreign		from financial		Credit terms	Advance payments		Loans from foreign		from financial		Credit terms	Advance payments	
period	Total	banks	Total	operations	Total	granted	effected	Total	banks	Total	operations	Total	used	received	
	Rest of t	he world													
2018 2019	933,849 963,967	234,970 227,688	698,880 736,279	466,225 502,594	232,654 233,685	217,969 217,370	14,686 16,314	1,232,594 1,305,705	146,575 167,656	1,086,019 1,138,048	879,752 927,650	206,267 210,399	135,214 134,768	71,053 75,630	
2020 2021	1,021,200	248,779 260,321	772,421 892,188	544,059 604,424	228,362 287,764	211,891 270,847	16,471 16,917	1,394,364 1,548,984	171,998 218,886	1,222,366 1,330,098	1,012,503 1,066,016	209,863 264,082	129,098 175,351	80,766 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. Feb. Mar.	1,182,691 1,197,848 1,215,926	270,790 268,435 280,049	911,902 929,412 935,878	621,146 620,512 614,010	290,756 308,901 321,868	273,635 280,714 293,304	17,121 28,187 28,564	1,578,209 1,567,699 1,575,472	219,558 214,946 200,446	1,358,651 1,352,753 1,375,026	1,089,067 1,072,422 1,081,713	269,583 280,331 293,313	179,085 180,331 193,098	90,498 99,999 100,215	
Apr. May <b>p</b>	1,266,969 1,257,958	290,472 278,201	976,498 979,758	651,264 648,901	325,234 330,857	296,190 301,081	29,044 29,776	1,629,738 1,620,542	212,997 208,627	1,416,741 1,411,915	1,123,694 1,113,838	293,047 298,077	189,904 194,239	103,142 103,838	
	EU Member States (27 excl. GB)														
2018 2019	544,009 572,324	177,064 176,847	366,944 395,476	274,402 304,605	92,542 90,871	84,191 82,120	8,351 8,752	801,772 836,863	88,161 91,122	713,611 745,740	631,814 660,385	81,798 85,355	61,161 62,692	20,637 22,664	
2020 2021	609,449 660,768	187,703 198.911	421,746 461,857	332,983 350,591	88,763 111,266	79,780 102,689	8,983 8,578	884,904 978.060	95,716 153,424	789,188 824,636	702,991 713.878	86,197 110.758	61,357 84,237	24,841 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. Feb. Mar.	671,660 681,358 699,393	215,565 211,676 215,782	456,095 469,682 483,611	345,388 348,920 355,742	110,707 120,762 127,869	102,134 108,053 115,140	8,572 12,709 12,729	971,933 973,954 981,025	142,339 142,276 136,454	829,594 831,677 844,571	722,051 716,073 725,830	107,544 115,604 118,742	80,084 84,901 88,163	27,460 30,703 30,579	
Apr. May <b>P</b>	728,052 722,209	231,393 220,683	496,659 501,526	365,832 366,245	130,827 135,281	118,000 122,351	12,827 12,930	996,555 999,331	136,904 134,313	859,651 865,018	740,339 740,054	119,311 124,964	87,983 93,282	31,328 31,682	
	Extra-EU	Member	States (2	27 incl. G	B)										
2018 2019	389,841 391,643	57,905 50,841	331,935 340,803	191,823 197,989	140,112 142,814	133,777 135,251	6,335 7,563	430,822 468,842	58,415 76,534	372,408 392,308	247,939 267,265	124,469 125,043	74,053 72,077	50,416 52,967	
2020	411,751	61,076	350,675	211,076	139,599 176 498	132,112	7,487	509,460 570 924	76,282	433,178	309,512	123,666	67,741	55,925 62,210	
2021 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. Feb. Mar.	511,031 516,490 516,534	55,225 56,759 64,267	455,806 459,731 452,267	275,758 271,591 258,268	180,049 188,139 193,999	171,500 172,661 178,164	8,549 15,478 15,835	606,275 593,744 594,446	77,219 72,670 63,991	529,056 521,074 530,455	367,017 356,349 355,883	162,039 164,725 174,572	99,001 95,429 104,935	63,038 69,297 69,636	
Apr. May P	538,918 535,749	59,079 57,518	479,839 478,232	285,432 282,656	194,407 195,575	178,190 178,730	16,217 16,846	633,183 621,211	76,093 74,315	557,090 546,896	383,355 373,784	173,735 173,113	101,921 100,957	71,814 72,156	
	Euro are	a (19)													
2018 2019	467,428 493,062	156,887 158,102	310,542 334,960	238,963 264,834	71,579 70,127	64,295 62,531	7,283 7,595	735,094 761,144	68,959 70,561	666,136 690,584	601,205 624,607	64,931 65,977	49,138 48,775	15,792 17,202	
2020 2021	522,933 553,838	166,846 176,279	356,087 377,560	287,662 289,330	68,425 88,230	60,750 80,844	7,674 7,386	799,046 896,256	74,101 131,735	724,945 764,521	658,931 675,868	66,014 88,653	47,100 68,232	18,914 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. Feb. Mar.	575,958 583,733 596,153	197,224 192,153 195,325	378,734 391,581 400,828	291,435 295,971 299,564	87,300 95,610 101,264	79,960 84,169 89,818	7,339 11,441 11,446	891,509 893,089 897,685	121,646 121,854 116,893	769,863 771,235 780,793	685,108 679,362 686,158	84,755 91,874 94,635	63,633 67,627 70,651	21,122 24,247 23,984	
Apr. May P	628,773 622,527	213,684 203,944	415,090 418,582	310,796 310,692	104,294 107,891	92,824 96,247	11,470 11,643	914,122 914,208	116,900 112,765	797,222 801,443	701,576 701,266	95,646 100,177	71,124 75,470	24,522 24,707	
	Extra-Eu	ro area (1	19)												
2018 2019	466,421 470,905	78,083 69,586	388,338 401,319	227,262 237,761	161,076 163,558	153,673 154,839	7,403 8,719	497,500 544,560	77,617 97,096	419,883 447,465	278,548 303,043	141,336 144,422	86,075 85,993	55,260 58,428	
2020 2021	498,267 598,671	81,933 84,042	416,334 514,629	256,397 315,094	159,937 199,535	151,141 190,003	8,796 9,532	595,318 652,728	97,897 87,151	497,421 565,577	353,572 390,148	143,849 175,429	81,997 107,119	61,852 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. Feb. Mar.	606,733 614,115 619,773	73,566 76,283 84,723	533,167 537,832 535,050	329,711 324,541 314,445	203,456 213,291 220,604	193,674 196,545 203,486	9,782 16,746 17,118	686,699 674,609 677,787	97,912 93,092 83,553	588,788 581,516 594,234	403,959 393,060 395,555	184,829 188,456 198,679	115,452 112,704 122,447	69,377 75,752 76,231	
Apr. May <b>p</b>	638,196 635,432	76,788 74,256	561,408 561,175	340,468 338,209	220,940 222,966	203,366 204,833	17,574 18,133	715,616 706,334	96,097 95,862	619,519 610,472	422,118 412,572	197,400 197,900	118,780 118,769	78,620 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.

## 9. ECB's euro foreign exchange reference rates of selected currencies \*

EUR 1 = currency units ...

Yearly or monthly	Australia	Canada	China	Denmark	Japan	Norway	Sweden	Switzerland	United Kingdom	United States	
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	7.4578	140.31	8.3544	9.0985	1.2146	0.80612	1.3285	
2015 2016 2017 2018 2019	1.4777 1.4883 1.4732 1.5797 1.6109	1.4001 1.4186 1.4659 1.4647 1.5294 1.4855	6.9733 7.3522 7.6290 7.8081 7.7355	7.4540 7.4587 7.4452 7.4386 7.4532 7.4661	134.31 120.20 126.71 130.40 122.01	8.9496 9.2906 9.3270 9.5975 9.8511	9.3535 9.4689 9.6351 10.2583 10.5891	1.0679 1.0902 1.1117 1.1550 1.1124	0.72584 0.81948 0.87667 0.88471 0.87777	1.1095 1.1069 1.1297 1.1810 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	СҮР	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

#### 11. Effective exchange rates of the euro and indicators of the German economy's price competitiveness \*

01	1000	- 100
Q1	1333	= 100

Per 19

20

20

	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						Based on th	ased on the deflators of total sales <sup>3</sup> vis-à-vis Based on consumer price inc					dices vis-à-vis
							26 selected industrial countries 4						
			In real terms based on	based on				of which:					
ad	Nominal	In real terms based on consumer	the deflators of gross domestic	costs of national	Nominal	In real terms based on consumer	Total	Euro area	Non- euro area	27 countries 5	26 selected industrial	27 countries 5	CO countries 6
9	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
00	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
)1 )2	87.6 89.8	87.2 90.2	86.7 89.8	84.5 88.0	90.2 94.5	86.9 90.5	91.7 92.4	96.6 95.7	86.0 88.5	90.5 91.1	93.0 93.5	91.7 92.2	91.0 91.9
)3 )4	100.4 104.2	101.4 105.2	100.8 103.8	99.0 102.2	106.4 110.9	101.6 105.4	95.9 96.2	94.8 93.6	97.6 100.0	95.3 95.6	97.0 98.5	96.7 98.2	96.8 98.4
15	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
)7	102.8	105.9	101.2	101.0	112.7	102.5	93.5	90.4 89.6	102.0	91.6	100.9	98.3	96.0 97.3
18 19	110.1	1109.7	105.5	104.8	117.4	106.9	94.9 95.2	88.3	105.1	91.3	102.4	98.4 98.6	97.5 97.9
0	104.4 104.2	102.9	98.5 96.7	100.9	111.9 112 7	99.0 98.5	92.5 92.1	88.7 88.5	98.2 97.6	88.2 87.4	98.8 98.2	94.3 93.5	92.5 91.9
2	98.5	96.7	91.1	93.6	107.5	93.7 96.8	90.1	88.3	92.5	84.7 86.7	95.9 98 1	90.5 97 3	88.9
4	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
5 6	92.5 95.2	89.5 91.4	85.5 87.8	86.0 p 87.3	106.1 110.1	88.6 90.6	89.8 90.7	90.3 90.8	88.9 90.4	83.6 84.9	94.4 95.0	87.8 88.8	86.9 88.1
7 8	97.4 99.9	93.4 95.5	88.9 90.5	p 88.0 p 89.6	112.4 117.3	91.8 95.0	91.9 93.2	90.9 91.0	93.3 96.4	85.7 86.7	96.3 97.7	89.9 91.2	88.9 90.8
9	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
20 21	99.6 99.6	93.5 93.4	89.4 P 88.6	р 87.7 р 86.1	119.4 120.8	93.9 94.2	92.1 93.3	91.3 91.9	93.3 95.4	86.2 86.7	96.4 97.4	90.1 90.7	90.2 91.0
0 Jan. Feb. Mar.	96.9 96.2 98.8	91.3 90.5 93.0	88.0	р 87.0	114.1 113.5 117.8	90.4 89.8 93.1	91.7	91.4	92.0	85.5	95.8 95.5 96.3	89.1 88.7 90.0	88.4 88.0 89.9
Apr. May	98.1 98.3	92.5 92.5	88.6	p 875	117.5 117.5	93.0 92.8	91 3	91.2	91.2	85.8	96.1 96.3	90.1 90.2	90.2 90.3
June	99.7	93.8			119.1	93.9					97.0	90.8	90.8
July Aug.	100.4 101.5	94.4 94.9	90.3	р 88.5	120.3	94.8 95.9	92.6	91.3	94.5	86.9	96.0 97.0	90.0 90.7	90.2 91.2
Sep. Oct	101.5	94.9			122.4	95.8 95.7					96.8 96.7	90.6 90.5	91.1 91.0
Nov. Dec.	100.6 101.8	94.3 95.2	90.5	р 87.9	121.6 122.9	95.2 96.0	93.0	91.3	95.4	86.8	96.5 97.0	90.1 90.5	90.5 90.9
1 Jan. Feb.	101.3 100.6	95.3 94.5	90.0	p 88.0	122.4 121.5	96.0 95.1	93.3	91.6	95.7	86.9	98.0 98.0	91.4 91.3	91.8 91.5
Mar. Apr.	100.3 100.6	94.1 94.2			121.2	94.8 95.1					97.7 97.8	91.1 91.2	91.4 91.6
May June	100.8 100.2	94.2 93.7	89.3	р 86.4	122.3 121.5	95.1 94.5	93.0	91.2	95.6	86.4	98.1 97.9	91.3 91.1	91.8 91.5
July Aug. Sep.	99.7 99.3 99.4	93.5 93.2 93.3	р 88.7	р 85.7	120.8 120.4 120.4	94.2 93.9 93.8	93.8	92.2	95.9	87.0	97.6 97.3 97.3	91.0 90.6 90.7	91.2 90.9 90.8
Oct. Nov. Dec.	98.4 97.6 97.1	92.4 91.7 91.2	р 86.5	p 84.3	119.5 118.8 119.0	93.1 92.6 92.5	93.3	92.5	94.5	86.4	96.6 96.2 95.8	90.0 89.5 89.0	90.2 89.8 89.5
2 Jan. Feb. Mar.	96.6 96.9 95.9	91.2 91.7 91.3	p 84.6	р 83.1	118.6 118.9 118.4	р 92.3 р 92.7 р 92.8	92.2	91.6	93.1	85.1	96.0 96.1 96.3	89.0 89.1 89.5	р 89.5 р 89.5 р 90.0
Apr. May June	95.2 95.6 95.9	p89.9p90.2p90.4			116.4 116.2 116.5	p90.4p90.2p90.3					96.1 96.6 <b>p</b> 96.0	P         89.0           P         89.6           P         89.0	P         88.9           P         89.3           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.

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# 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<sup>1,2</sup>
- 2 Banking statistics, customer classification, January 2022<sup>2</sup>

For footnotes, see p. 88°.

- 3 Aufbau der bankstatistischen Tabellen, July 2013<sup>1,2</sup>
- 7 Notes on the coding list for the balance of payments statistics, September 2013

# Special Publications

Makro-ökonometrisches Mehr-Länder-Modell, November 1996<sup>1</sup>

Europäische Organisationen und Gremien im Bereich von Währung und Wirtschaft, May 1997<sup>1</sup>

Die Zahlungsbilanz der ehemaligen DDR 1975 bis 1989, August 1999<sup>1</sup>

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<sup>1</sup>

Die Deutsche Bundesbank – Aufgabenfelder, rechtlicher Rahmen, Geschichte, April 2006<sup>1</sup>

European economic and monetary union, April 2008

Weltweite Organisationen und Gremien im Bereich von Währung und Wirtschaft, March 2013<sup>1</sup>

# Discussion Papers<sup>o</sup>

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<sup>1</sup>
- 2a Solvency Regulation and Liquidity Regulation, February 2008<sup>2</sup>

\* 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.

Publication available in German only.
 Available only as a download.

 $<sup>{\</sup>bf o}$  Discussion papers published from 2000 are available online.