

Monthly Report September 2022

Vol. 74 No 9

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

Postfach 10 06 02 60006 Frankfurt am Main Germany

Tel.: +49 (0)69 9566 33512

Email: www.bundesbank.de/kontakt

Internet: www.bundesbank.de

Reproduction permitted only if source is stated.

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

The German original of this Monthly Report went to press at 11 a.m. on 16 September 2022.

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

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

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



Contents

Commentaries	
Economic conditions	
Public finances	
Securities markets	
alance of payments	
Negative interest rate policy period and pandemic as	reflected in
the Bank Lending Survey	
Conducting and evaluating the Bank Lending Survey	
Ad hoc questions in the Bank Lending Survey	
The Bank Lending Survey as a lead of lending	
Productivity effects of reallocation in the corporate se	ector during
the COVID-19 crisis	_
Digitalisation in the German corporate sector since the onset of the co	ronavirus
pandemic	
The role of start-ups during the COVID-19 crisis for economic activity in	Germany
■ The performance of German credit institutions in 202	1
nterpreting profitability components broken down by category of bank	s in the context
of Brexit	
Methodological notes	
Change in German banks' interest expenditure caused by adjustments i	
conditions in deposit business with non-banks in the 2021 calendar yea	
Estimation of the effect of an interest rate reversal on the interest marg	
redit institutions	
The role of the International Monetary Fund in preven	-
managing crises	
Enocial drawing rights and their use	
Special drawing rights and their use	
The International Monetary Fund and climate change	
The Institutional View of the International Monetary Fund	
The International Monetary Fund's financial resources: size and distribu	=
Article IV consultation and Financial Sector Assessment Program with G	iermany in 2022

Statistical Section	1
Key economic data for the euro area	5
Overall monetary survey in the euro area	8
Consolidated financial statement of the Eurosystem	16
Banks	20
Minimum reserves	42
Interest rates	43
Insurance corporations and pension funds	48
Capital market	50
Financial accounts	54
Public finances in Germany	58
Economic conditions in Germany	66
External sector	75 °
Overview of publications by the Deutsche Bundesbank	85 °

Abbreviations and symbols

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

Discrepancies in the totals are due to rounding.

Commentaries

Economic conditions

Underlying trends

Mounting signs of recession in German economy There are mounting signs of a recession in the German economy in the sense of a significant, broad-based and sustained decline in economic output. This is mainly due to the considerable deterioration in aggregate supply conditions – especially energy supply – as a result of Russia's war of aggression against Ukraine. High inflation and uncertainty regarding the supply of energy and its costs will affect not only gas and electricity-intensive industries and their export business and investment, but also private consumption and those service providers dependent on it.

Economic output likely to fall somewhat in current quarter ...

After managing a slight increase in the second quarter, economic output is likely to fall somewhat in the current quarter. July had already got off to a mixed start. The retail sector, for example, was able to expand its sales in real terms, and the elimination of most of the coronavirus protective measures has probably continued to have a slight impact on food services and tourism. However, industrial and main construction output was noticeably down on the month. According to the ifo Institute, enterprises expressed less satisfaction with their current business in August and were still pessimistic about the future outlook. According to S&P Global, purchasing managers reported falling business in industry and services. The consumer climate index calculated by the market research institute GfK dropped for the third time in succession to reach a new historical low, mainly due to a sharp increase in consumers' propensity to save.

... and to shrink markedly in the final quarter of 2022 and first quarter of 2023 The gloom present in the German economy and among consumers also reflects the recent intensification of supply squeezes in the gas market, which also affects electricity prices. Now that Russia's gas deliveries to Germany have largely been terminated, the gas supply situation will be extremely tight in the coming months. As things currently stand, though, even without deliveries via the Nord Stream 1 pipeline, it was just about possible to avoid formal steps towards rationing of gas thanks to larger deliveries from other countries and progress in energy efficiency and gas storage. However, this will require a further, considerable reduction in gas consumption - especially among households. The effects of gas savings partly resemble those of rationing if firms cut production for economic reasons or halt it altogether. Economic output is likely to decline markedly in the fourth quarter overall, with this situation likely to apply to the first quarter of next year, too. From today's perspective, there is no reason to fear a slump in the magnitude of the adverse scenario outlined in the June projection.² The outlook is extremely uncertain, however.

Industry

In July, industrial output fell distinctly on the month in seasonally adjusted terms despite an easing of material shortages (-1%).³ It remained unchanged when compared with the second quarter, however. High energy costs weighed on the energy-intensive sectors, with output in the chemical industries dropping sharply, following the pattern established at the beginning

Drop in industrial output in July

¹ In addition to these three standard recession criteria, underutilisation of aggregate capacity can also be cited; see Deutsche Bundesbank (2019a and 2019b). By contrast, the term "technical recession" is used if real gross domestic product (GDP) drops in two consecutive quarters, irrespective of the depth and breadth of the decline.

² In the adverse scenario, in addition to a permanent stoppage of Russian energy supplies, other unfavourable assumptions were made which have not materialised so far; see Deutsche Bundesbank (2022). The relief measures recently announced by the Federal Government are also likely to mitigate the expected decline in GDP somewhat.

³ Seasonal adjustment here and in the remainder of this text also includes adjustment for calendar variations, provided they can be verified and quantified.

Economic conditions in Germany*

Seasonally and calendar adjusted

Orders received (volume); 2015 = 100				
	Industry			
		of which:		Main con-
Period	Total	Domestic	Foreign	struction
2021 Q4	109.2	105.3	112.2	128.5
2022 Q1	112.3	103.4	119.1	127.5
Q2	106.1	102.3	108.9	110.1
May	106.1	101.4	109.7	112.4
June	105.8	102.6	108.2	106.2
July	104.6	98.0	109.6	
	Output; 201	5 = 100		
	Industry			
		of which:		
		Inter-		
	Total	mediate	Capital	Con-
2024 04		goods	goods	struction
2021 Q4 2022 Q1	96.8 96.6	101.3 102.3	91.6 89.8	113.6 117.0
Q2	95.9	102.3	89.5	117.0
May	95.7	100.6	89.5	113.0
June	96.9	101.1	91.5	112.0
July	95.9	100.5	90.8	113.6
	Foreign trad	e; € billion		Memo
				item: Current
				account
				balance
	Exports	Imports	Balance	in € billion
2021 Q4	357.27	326.53	30.76	58.85
2022 Q1 Q2	366.08 389.44	344.17 379.61	21.91 9.83	48.05 29.30
May	128.64	127.71	0.93	8.18
June	134.08	127.86	6.22	10.83
July	131.37	125.98	5.39	8.35
	Labour mark	cet		
			Un-	
	Employ-	Vacan-	employ-	Un-
	ment	cies1	ment '	employ- ment rate
	Number in t	housands		%
2021 Q4	45,216	800	2,421	5.3
2022 Q1	45,411	848	2,324	5.1
Q2	45,544	867	2,336	5.1
June	45,571	868	2,424	5.3
July Aug.	45,594	857 856	2,469 2,497	5.4 5.5
3	Prices; 2015	_ 100		
	riices, 2013	Producer		Harmon
		prices of	Con-	Harmon- ised con-
	Import	industrial	struction	sumer
2024 2 1	prices	products	prices ²	prices
2021 Q4	120.8	125.7	132.2	111.1
2022 Q1 Q2	130.4 139.3	136.2 146.9	138.1 147.9	114.2 117.5
June	140.8	148.3		117.9
July	142.9	156.2		118.7
Aug.				119.4

^{*} 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.

of the year. The production of intermediate goods was slightly lower overall. There was also a significant inter-industry decline in the production of consumer goods, with furniture manufacturers and the pharmaceutical industry suffering a particularly severe impact. By contrast, the production of capital goods was up markedly, with considerable increases recorded for computer equipment, electronic and optical products and for other transport equipment. The production of motor vehicles and motor vehicle parts was distinctly higher than in the second quarter, although data from the German Association of the Automotive industry (VDA) suggest that the timing of the school holidays played a role here. These figures show a sharp fall in the number of passenger cars manufactured in August, which stood roughly at the level of the second quarter on an average of the two holiday months.

In July, industrial new orders maintained their persistent downward trend since the beginning of the year, falling distinctly on both the month and the quarter. Domestic orders dropped steeply. By contrast, export orders rose slightly overall. New orders from non-euro area countries increased sharply, while those from euro area countries declined steeply. Orders of intermediate goods were up markedly. Demand for capital goods fell somewhat, though motor vehicle orders still provided support. Excluding motor vehicles, new orders for capital goods sank sharply. Orders for consumer goods were the lowest they had been since February 2021, with lower demand for pharmaceutical products being the main contributing factor. Overall, new orders have now fallen significantly from their peak levels in the summer of 2021, although in July they were still around 4% above the pre-pandemic level in the fourth guarter of 2019. Notwithstanding the burdens and potential production constraints caused by high energy prices, the orders that have now accumulated are likely to at least serve as a certain buffer against the slowing demand - as long as there are no significant cancellations. There are no indications of these so far. Order

Industrial new orders continue to decline on back of falling domestic demand

Deutsche Bundesbank

Moderate rise in employment

books continued to rise in June as well, reaching a new peak.

Decline in industrial sales. exports and imports

In July, nominal industrial sales declined somewhat on the month in seasonally adjusted terms, but were still well above their level of the second quarter, in which they had grown substantially. There was a slight quarter-onquarter rise after price adjustment, too. From a regional perspective, growth in nominal sales abroad was significantly stronger than in Germany, with sales in euro area countries and non-euro area countries alike up steeply. Broken down by sector, capital goods producers, in particular, contributed to the increase in industrial sales. The mechanical engineering and automotive sectors sold significantly more products. Sales of intermediate goods rose slightly, while sales figures for consumer goods fell significantly. The pharmaceutical industry recorded a severe drop in sales – particularly in Germany, where sales contracted by more than one-third compared with the second quarter. In July, nominal exports of goods fell clearly on the month in seasonally adjusted terms, but were still higher than in the second guarter. After price adjustment, however, they were down substantially on the month and distinctly lower than in the previous quarter. Exports to non-euro area countries decreased significantly more sharply than exports to the euro area. Nominal imports of goods declined markedly in July compared with the previous month and were also down slightly on the second quarter. With import prices for energy rising sharply, the decline in imports was considerable in real terms on both the month and quarter.

Construction

Construction output still robust amid sharp decline in demand

In July, seasonally adjusted construction output rose markedly on the month (+11/2%) and was slightly above its level of the second quarter $(+\frac{1}{2}\%)$. The finishing trades were the key factor here, whereas output in the main construction sector saw a marked deceleration. This could signal a cooling-off in the construction sector.

The massive rise in construction costs and prices and higher financing costs are likely to have dampened demand substantially. New orders in the main construction sector fell exceptionally sharply in the second quarter compared with the previous quarter (-131/2%). The decline was broadly based across all sectors. The order books are still well filled, however. This is indicated by the reach of the order books, calculated by the ifo Institute, which remained high in a long-term comparison despite a renewed slight decline in August.

Labour market

The labour market is showing resilience in the face of the deteriorating economic outlook. Employment grew moderately in July after the pace had slowed down significantly in the second quarter. In July, the seasonally adjusted number of persons in work overall went up by 23,000 on the month. The filling of jobs subject to social security contributions, which have already been exceeding their pre-pandemic level since the second quarter of 2021, is a driver of the ongoing slightly positive development in employment. In addition, exclusively low-paid employment, reduced considerably during the pandemic and depressed up to now, recovered somewhat in the second quarter. This was partly due to renewed demand for labour in the trade and accommodation and food service sectors. The use of cyclical shorttime working continued to decline throughout the reporting period. In recent months, the number of new registrations for short-time work was as low as it was pre-pandemic. Leading indicators, such as enterprises' hiring intentions, remained mostly in slightly positive territory.

Registered unemployment continued to rise in August, albeit only slightly. In seasonally adjusted terms, the number of unemployed persons increased by 28,000 to 2.50 million. The unemployment rate went up by 0.1 percentage point to 5.5%. Ukrainian refugees have been

Unemployment rose further. albeit only

slightly

included in the German social security system since June of this year. They receive mainly basic benefits in accordance with the Second Book of the Social Security Code (SGBII) and depending on availability are thus registered as unemployed. This explains the rise in the unemployment rate by a total of 0.5 percentage point over the past three months.4 Unemployment could potentially continue to increase over the coming months. The IAB unemployment barometer remained almost unchanged in negative territory in August. The subdued labour market developments in the face of a difficult economic environment come on top of further burdens related to the integration of refugees into the labour market.

both for imports and domestic products, posted a slight fall recently.

Following the temporary slowdown in June due to the relief package, consumer price inflation already intensified again in July and remained strong in August. In August, the Harmonised Index of Consumer Prices (HICP) rose by 8.8% on the year, just over 0.3 percentage point more than in July.⁵ Prices of unprocessed food, in particular, drove this new surge in prices. In addition, the strong price dynamics continued for processed food as well as for industrial goods and services. Consumer prices for energy remained at their high levels.

correspondingly higher inflation rate. By con-

trast, measures announced in the third relief

package, such as the gas levy or the brake on

electricity prices, will probably not feed through

to consumer prices until the beginning of next

year. The inflation rate is likely to move into

double-digit territory over the next few months

overall.

Inflation rate up again in August

Prices

Temporary surge in gas prices

The European energy crisis escalated further in recent weeks. Because deliveries from Russia via the Nord Stream 1 pipeline were initially cut back and have now been terminated altogether, gas prices rose sharply and temporarily soared to an all-time high of €314 per megawatt hour at the end of August. Although prices went back down significantly in September, the cost of a megawatt hour was still more than 200% higher than in the previous year. In addition, as in some other European countries as well, the wholesale electricity price climbed upward in step with the price for gas. By contrast, the price of Brent crude oil was trending downwards slightly, reaching US\$90 per barrel at the end of the reporting period.

According to preliminary information, following the expiry of the €9 ticket and the fuel rebate on 1 September 2022, prices soared for both public transport and for petrol and diesel.

This will lead to further price increases in energy and services in the current month and a

Inflation still high at upstream stages and in sales Owing to sustained price pressure on the European gas and electricity markets, the exceptionally high price increases seen in the past few months continued at the upstream stages of the economy. In July, annual inflation for imports was 29% and for domestic products 37%. The energy component continued to be the key driving force. In domestic sales, price dynamics for energy and for capital goods and consumer goods clearly accelerated again. By contrast, intermediate goods price inflation,

⁴ According to the Federal Employment Agency, unemployment went up slightly in August, even without the refugee effect. On an average of the months from June to August, unemployment excluding refugees also remained largely unchanged, according to the Federal Employment Agency. See Statistik der Bundesagentur für Arbeit (2022), p. 13.

⁵ In August, the national consumer price index rose by 7.9% on the year, up from 7.5%.

Public finances⁶

Statutory health insurance scheme

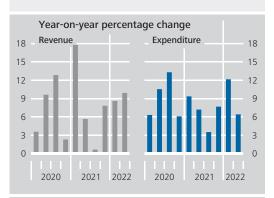
SHI in Q2: result close to balance and thus significantly better than in previous vear The statutory health insurance (SHI) scheme (comprising the health insurance institutions and the health fund) achieved a close-to-balance result in the second quarter of 2022. This was a clear improvement on the previous year: in the second quarter of 2021, the SHI scheme recorded a deficit of €2½ billion. The more favourable result is mainly due to additional central government funds. These are intended to largely offset the mainly structural funding gap in order to stabilise the additional contribution rates. In 2021, reserves covered the remaining funding gap.

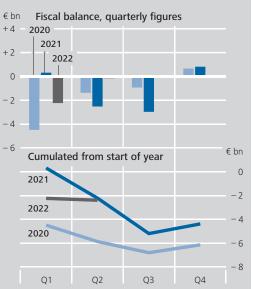
Revenue grew strongly – mainly due to additional central government funds Revenue rose sharply by 10% on the year, mainly owing to higher central government payments. Central government provided a supplementary grant of €3½ billion. On top of this, the health fund received more money for its pandemic-related special expenditure from central government. Contribution receipts increased by 4½%. Average supplementary contribution rates — which were up slightly by 0.1 percentage point — contributed only marginally to this.

Expenditure rose significantly: more pandemic-related expenditure and a considerable increase in expenditure on benefits

SHI scheme expenditure rose by 61/2%. The health fund incurred €7 billion for pandemicrelated benefits. This was €1½ billion more on the year. In addition to coronavirus tests for the general public (€3½ billion), the fund paid for financial assistance to hospitals (€2½ billion) and vaccine costs (€1 billion). Expenditure on benefits by health insurance institutions climbed by 41/2%. Spending on hospital treatment, a particularly large expenditure item, rose by 4%.7 Growth in pharmaceuticals remained strong (+7%). Expenditure on remedies and therapeutic appliances as well as medical treatments increased somewhat more strongly than expenditure on benefits. Administrative expenditure grew by just under 4%.

Finances of the statutory health insurance scheme*





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

Deutsche Bundesbank

For 2022 as a whole, the conclusions of the group of SHI estimators in the fourth quarter of 2021 suggested the SHI scheme would see a deficit of €2 billion. This was to arise in the health fund and be financed from its reserves. Health insurance institutions' expenditure was to increase by 4½%. If the additional contribu-

2022: official SHI estimators expected deficit, ...

6 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.

7 When combined with financial assistance from the health fund, payments to hospitals thus increased by 51/2%.

tion rates and the regular central government grant had remained unchanged, this would have resulted in an additional funding gap of €14 billion. Central government was to close this by means of an additional grant of the corresponding amount.

... but as things now stand, a surplus is expected As things stand today, the outturn for the SHI scheme could be significantly more favourable and a marked surplus could emerge. To date, contribution receipts have grown much more strongly than expected by the group of estimators. Furthermore, the actual average supplementary contribution rate is just under 0.1 percentage point higher than anticipated. Uncertainties related to the Ukraine war are unlikely to have much impact on SHI finances. In the event of higher unemployment or short-time work, the Federal Employment Agency contributes to compensatory benefits. These largely make up for shortfalls in employees' contributions. The development of expenditure on benefits has so far been in line with the estimate in the fourth quarter of 2021.

High structural deficit and increasing expenditure pressure

The underlying funding pressure for the statutory health insurance scheme will not diminish next year. In the last few years, central government legislators significantly expanded benefits, irrespective of the pandemic. So far, the health insurance institutions have financed this mainly from their reserves and special grants from central government. This has resulted, however, in a large structural funding gap. Central government intends to close this gap next year mainly by taking temporary measures once again, planning an additional grant of €2 billion and a loan of €1 billion by 2026. Any SHI reserves still available according to the government estimate (around €7 billion in total) are to be dissolved. In addition, there will be a mix of savings on the benefits side, especially in the pharmaceuticals sector. Separately, central government expects a 0.3 percentage point higher additional contribution rate (corresponding to additional revenue of €4½ billion). However, it will not be until October that the group of statutory health insurance estimators will determine the relevant funding gap, from which the Ministry of Health will ultimately derive the necessary increase in the supplementary contribution rate. However, the government's choice to mainly use temporary measures merely delays fundamentally necessary action. Without a major reform which also dampens expenditure growth, significantly higher additional contribution rates are set to continue from 2024 onwards.

Public long-term care insurance scheme

The public long-term care insurance scheme posted a surplus of €½ billion in its core budget in the second quarter of 2022.8 At the same time last year, it had posted a deficit of €½ billion. This improved result is mainly due to additional central government funds. Moreover, pandemic-related expenditure was lower than a year ago.

Q2: small surplus due to additional central government funds

Revenue saw a very steep rise of 181/2%. Since the beginning of the year, the long-term care insurance scheme has been receiving a regular central government grant of €1 billion per annum in order to partly cover the burdens arising from the most recent expansion of benefits. Originally, the grant was to be paid in four egual instalments. In the second guarter, however, central government brought payments forward from the second half of the year, the upshot being that the long-term care insurance scheme has already received the full grant. In addition, there was a special grant of just over €1 billion for pandemic-related special burdens in order to avoid a further increase in the general contribution rate. At the beginning of the year, benefit reforms meant the contribution rate for childless persons rose by 0.1 percent-

Additional central government funds greatly boosted revenue

8 The developments outlined here and in the remainder of the text exclude the provident fund. Since 2015, this fund has been receiving transfers from the core area corresponding to the receipts of 0.1 percentage point of the contribution rate. Assets accumulated in this way are to be depleted again in the 2030s to dampen the expected contribution rate rise.

age point to 3.4%. Excluding the higher central government funds and the rise in the contribution rate, revenue grew by just under 4%. Employees' contributions in particular rose sharply.

Strong rise in expenditure despite decline in pandemic-related expenses

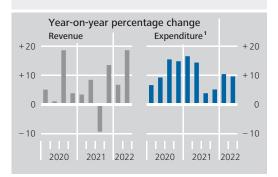
Expenditure grew by 91/2%. Pandemic-related special payments to long-term care institutions and for coronavirus tests9 fell by 15% to €1½ billion. Other expenditure, however, grew much more strongly. This was due to an exceptionally sharp rise in spending on inpatient care (+25%). A strong rise was part of the plan: since the beginning of the year, the long-term care insurance scheme has been taking on a greater share of the costs as the length of time spent by care recipients in long-term care homes increases. 10 Additional expenditure of €2½ billion was planned for this purpose. However, the results for the first half of the year point to a markedly higher burden. Cash benefits continued to grow strongly by 8%, with benefit rates unchanged.

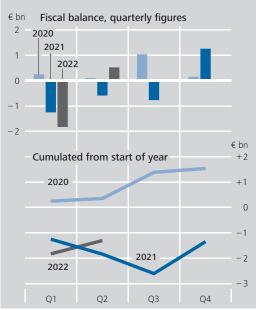
2022: with central government loans, the deficit could be as high as in 2021 Overall, the long-term care insurance scheme could well end up in deficit this year. This deficit could be as high as in 2021 (€1½ billion). A higher deficit was anticipated for a time, given the stronger than expected growth in expenditure on benefits. However, central government will grant a loan of €1 billion in the third quarter that is not due for repayment until the end of 2023. Contribution receipts are also likely to continue to grow significantly. This counteracts the higher than expected increase in expenditure. Coronavirus-related special expenditure expired in the middle of the year and, after deducting compensatory payments, cost €1 billion.

2023: contribution rate increase foreseeable

While this means a significant burden is lifted next year, the remaining financing gap, the redemption payments to central government and the reduced reserves are likely to require a higher contribution rate.

Finances of the public long-term care insurance scheme*





Source: Federal Ministry of Health. * Preliminary quarterly figures. The final annual figures differ from the total of the reported preliminary quarterly figures as the latter are not revised retroactively. 1 Including transfers to the long-term care provides the

Deutsche Bundesbank

- 9 The long-term care insurance scheme reimbursed non-residential and (partially) residential long-term care facilities for coronavirus testing costs (€½ billion). In addition, it paid financial compensation to institutions for other pandemic-related additional expenditure. Finally, it compensated them for revenue shortfalls caused by the non-utilisation of long-term care services on account of the pandemic, for instance because no new long-term care patients could be accepted.
- **10** The co-contribution rate of long-term care recipients drops to 30% after a three-year period of residence. The limitation on residents' co-contribution does not apply to fees for accommodation, food and investment.

Securities markets

Bond market

Net redemptions of debt securities in July 2022 At €148.7 billion, gross issuance in the German bond market in July 2022 was higher than in June (€137.2 billion). After taking account of increased redemptions and changes in issuers' holdings of their own debt securities, the outstanding volume of domestic bonds declined by €13.0 billion, following net issuance of €12.7 billion in June. Foreign debt securities worth €10.9 billion were redeemed in the German market, which meant that the outstanding volume of domestic and foreign debt instruments in Germany declined by €23.9 billion on balance.

Net public sector redemptions The public sector redeemed its own bonds in the amount of €17.0 billion net in the reporting month. Central government, in particular, reduced its debt in net terms (-€10.6 billion). On balance, it primarily redeemed ten-year Federal

Sales and purchases of debt securities

€ billion

	2021	2022	
Item	July	June	July
Sales			
Domestic debt securities ¹ of which:	3.1	12.7	- 13.0
Bank debt securities Public debt securities	- 9.2 8.6	5.5 8.8	- 7.0 - 17.0
Foreign debt securities ²	10.1	10.8	- 10.9
Purchases			
Residents Credit institutions ³ Deutsche	31.0 - 5.5	17.2 8.5	- 12.9 10.7
Bundesbank Other sectors ⁴ of which: Domestic debt	25.1 11.4	- 2.3 11.1	- 13.7 - 9.9
securities	0.6	13.6	- 0.3
Non-residents ²	- 17.8	6.3	- 11.0
Total sales/purchases	13.2	23.5	- 23.9

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

bonds (Bunds: -€17.4 billion), while issuing two-year Treasury notes (Schätze) and five-year Federal notes (Bobls) worth a net €5.2 billion and €2.9 billion, respectively. State and local governments redeemed bonds with a net value of €6.5 billion.

German credit institutions scaled back their capital market debt by €7.0 billion net in July. On balance, redemptions primarily involved debt securities issued by specialised credit institutions (-€7.0 billion), but also involved public Pfandbriefe (-€2.4 billion). At the same time, the outstanding volume of other bank debt securities that can be structured flexibly and mortgage Pfandbriefe increased by €1.3 billion and €1.1 billion, respectively.

Fall in credit institutions' capital market debt

Domestic enterprises placed debt securities worth €11.0 billion net in the market in the month under review. This was entirely attributable to other financial intermediaries, which primarily issued paper with a maturity of over one year.

Net issuance by enterprises

In July, domestic credit institutions were the only actors on the buyers' side. They acquired bonds worth €10.7 billion net, with interest focused solely on domestic securities. The Bundesbank pared back its bond portfolio by €13.7 billion on balance. Foreign investors, meanwhile, sold German debt securities for €11.0 billion net. Domestic non-banks also sold bonds worth €9.9 billion, the majority of which were foreign paper.

Purchases of debt securities

Equity market

In the reporting month, domestic enterprises placed €1.4 billion worth of new shares in the German equity market. The outstanding volume of foreign shares in the German market shrank by €3.3 billion over the same period. Domestic non-banks were dominant on the buyers' side of the market, adding shares worth €1.9 billion net to their portfolios. By contrast, domestic credit institutions and non-resident

Net issuance of German equities investors sold bonds worth €2.1 billion net and €1.8 billion net, respectively.

Mutual funds

Muted inflows to mutual funds

In July, domestic mutual funds recorded inflows of €2.8 billion. On balance, these funds were channelled exclusively into specialised funds (€3.8 billion) reserved for institutional investors. Among the asset classes, the chief beneficiaries of the new funds were open-end real estate funds (€1.8 billion) and mixed securities funds (€1.7 billion). Foreign mutual funds recorded outflows totalling €1.5 billion in the German market. On balance, domestic non-banks were the main purchasers of mutual fund shares in the month under review (€1.9 billion). Domestic credit institutions purchased mutual fund shares for €1.2 billion net, while foreign investors reduced their fund portfolio in Germany by €1.8 billion.

Balance of payments

Current account surplus down sharply

Germany's current account posted a surplus of €5.0 billion in July 2022, down €9.3 billion on the previous month's level. This was primarily caused by the shift into a deficit in invisible current transactions, which comprise services as well as primary and secondary income. There was also a smaller surplus in goods trading.

Goods account surplus declines

In July, the surplus in the goods account declined by €3.1 billion on the month to €8.3 billion because receipts recorded a sharper decrease than expenditure.

Decrease in invisible current transactions balance, mainly due to lower payments from abroad

Invisible current transactions shifted from a surplus of €2.9 billion in June into a deficit of €3.3 billion in the reporting month, largely because the deficit in the services account expanded by €3.9 billion to €7.4 billion. Telecommunications, computer and information services and other business services made a considerable contribution to the lower overall receipts. In addition, expenditure rose, also due to higher

Major items of the balance of payments

€ billion

	2021	2022	
Item	July	June	Julyp
Current account Goods Receipts Expenditure Memo item:	+ 20.7 + 18.6 113.9 95.2	+ 14.3 + 11.4 133.3 121.9	+ 5.0 + 8.3 125.6 117.3
Foreign trade ¹ Exports Imports 2. Services Receipts	+ 17.8 115.1 97.3 - 2.5 27.4	+ 7.6 135.9 128.2 - 3.5 32.9	+ 4.9 127.6 122.7 - 7.4 30.9
Expenditure 3. Primary income Receipts Expenditure 4. Secondary income	30.0 + 9.9 18.9 9.0 - 5.4	36.5 + 12.1 21.6 9.5 - 5.6	38.3 + 10.7 19.5 8.8 - 6.7
II. Capital account	- 0.6	+ 0.3	- 2.1
III. Financial account (increase: +) 1. Direct investment Domestic investment	+ 5.3 + 11.3	+ 47.6 + 11.2	- 21.0 + 13.8
abroad Foreign investment	+ 8.6	+ 15.4	- 0.3
in the reporting country 2. Portfolio investment Domestic investment	+ 36.1	+ 4.2 + 2.0	- 14.1 - 1.9
in foreign securities Shares ² Investment fund	+ 19.8 + 4.6	+ 7.0 - 2.4	- 16.5 - 4.0
shares ³ Short-term debt securities ⁴	+ 5.1	- 1.4 + 0.5	1.51.6
Long-term debt securities ⁵	+ 2.8 + 7.3	+ 0.5 + 10.3	- 9.3
Foreign investment in domestic securities Shares ² Investment fund shares	- 16.3 + 2.3 - 0.8	+ 5.0 - 1.5 + 0.3	- 14.6 - 1.8 - 1.8
Short-term debt securities ⁴ Long-term debt	- 3.7	+ 7.5	- 5.8
securities ⁵ 3. Financial derivatives ⁶ 4. Other investment ⁷	- 14.1 + 2.2 - 44.3	- 1.3 + 4.2 + 29.8	- 5.2 + 3.4 - 35.8
Monetary financial institutions ⁸ of which:	+ 26.7	+ 2.1	+ 6.5
Short-term Enterprises and	+ 39.2	+ 5.4	- 2.1
households ⁹ General government Bundesbank	- 10.5 + 0.2 - 60.7	- 6.0 - 4.7 + 38.4	- 6.6 + 0.8 - 36.6
5. Reserve assets	+ 0.1	+ 0.4	- 0.5
IV. Errors and omissions ¹⁰	- 14.7	+ 33.0	- 23.9

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

Deutsche Bundesbank

expenditure on transport services and charges for the use of intellectual property. On top of this, net receipts in primary income dropped by €1.3 billion to €10.7 billion. Although expenditure fell, receipts decreased more sharply. Lower payments to residents of dividends for portfolio investment and income on investment fund shares as well as from direct investment played a role in this. In the secondary income account, the deficit grew by €1.1 billion to €6.7 billion. In this case, too, payments from abroad, in particular, fell compared with the previous month, mainly as a result of lower general government revenue from current taxes on income and wealth.

main reason for this was that foreign companies reduced their direct investment in Germany by €14.1 billion, scaling back their equity capital by €2.2 billion. In addition, they reduced the volume of intra-group loans granted to business units in Germany by €11.9 billion. Conversely, German enterprises withdrew €0.3 billion worth of direct investment funds from abroad. Although they raised their equity cap-

ital by €4.5 billion, intra-group lending was

posits and other investments - registered net

capital imports amounting to €35.8 billion in

July (following net capital exports of €29.8 bil-

lion in June). The Bundesbank's net external

claims went down by €36.6 billion, chiefly due

to the decrease in TARGET2 claims (€50.4 bil-

lion). At the same time, however, the Bundes-

bank's external liabilities also declined as resi-

dents from other euro area countries withdrew

their deposits with the Bundesbank and liabil-

ities from the distribution of euro banknotes in

circulation within the Eurosystem shrank as

well. Monetary financial institutions (excluding the Bundesbank) recorded net capital exports

(€6.5 billion). General government likewise re-

corded outflows of funds (€0.8 billion). By con-

trast, transactions by enterprises and house-

holds resulted in net capital imports of €6.6 bil-

lion.

dominated by repayments (€4.9 billion).

Direct investment records capital outflows

Portfolio investment sees net capital imports

In July 2022, the financial markets were characterised by high inflation rates, with the economic outlook deteriorating at the same time. Germany's cross-border portfolio investment generated net capital imports of €1.9 billion (June: net capital exports of €2.0 billion). Domestic investors sold foreign securities worth €16.5 billion net. On balance, they parted with securities in all asset classes, i.e. bonds (€9.3 billion), shares (€4.0 billion), money market paper (€1.6 billion) and mutual fund shares (€1.5 billion). For their part, non-resident investors reduced their holdings of German securities (€14.6 billion). These, too, covered all asset classes. Specifically, non-residents sold German money market paper (€5.8 billion), bonds (€5.2 billion), shares and mutual fund shares (€1.8 billion each).

Other statistically recorded investment – which Net capital imports in other comprises loans and trade credits (where these investment do not constitute direct investment), bank de-

Financial derivatives In July, transactions in financial derivatives recorded outflows (€3.4 billion).

Direct investment recorded net capital exports of €13.8 billion in July (June: €11.2 billion). The The Bundesbank's reserve assets fell – at trans- Reserve assets action values – by €0.5 billion in July.

List of references

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

Deutsche Bundesbank (2019a), Commentaries, Monthly Report, September 2019, pp. 5-13.

Deutsche Bundesbank (2019b), Commentaries, Monthly Report, October 2019, pp. 5-12.

Statistik der Bundesagentur für Arbeit (2022), Berichte: Blickpunkt Arbeitsmarkt – Monatsbericht zum Arbeits- und Ausbildungsmarkt, Nuremberg, August 2022.

Deutsche Bundesbank Monthly Report September 2022 16

Negative interest rate policy period and pandemic as reflected in the Bank Lending Survey

The Eurosystem's Bank Lending Survey (BLS) is a key source of information for assessing banks' lending policies and developments in loan demand. BLS data on loan supply and demand provide a snapshot of the financing situation for non-financial corporations and households in both Germany and the euro area. Ad hoc questions, furthermore, are a way of quickly evaluating the impact of monetary policy measures on the financing situation and of thus gaining timely feedback on key questions for monetary policy transmission.

This article illustrates the role played by the BLS from 2014 to the present day, a horizon that covers the negative interest rate policy (NIRP) period, the coronavirus pandemic and, more recently, the high inflation rates and Russia's attack on Ukraine. During this very challenging period, the BLS has, for example, provided information on how the monetary policy measures during the NIRP period had a supportive effect on banks' lending policies. It has shown that the increased credit risk during the pandemic led to banks tightening their lending policies. BLS data provided insights into how it was possible to moderate these tightenings by means of accommodative monetary policy measures and what effects the government support for corporate financing had during the pandemic-induced lockdowns. More recently, the BLS has given indications of how the high inflation and Russia's war on Ukraine have changed loan supply and demand. These and other insights from the BLS served as key inputs in the ECB Governing Council's monetary policy decision-making process and in the economic policy debate at the national level.

Looking ahead, findings from the BLS will continue to make an important contribution to monetary policy design in a setting of persistently disrupted supply chains and highly elevated inflation rates. One important question for monetary policymakers is how the banks will respond to the increase in credit risk brought about by the war against Ukraine and its extensive macroeconomic fallout, while the effects of the normalisation of monetary policy will also be of particular interest.

Introduction

Monetary policy challenges during the NIRP period and pandemic The last decade represented a very challenging period for the Eurosystem's monetary policy. The spell of low inflation saw a very significant lowering of monetary policy interest rates - even into negative territory in the case of the deposit facility rate - and the ECB Governing Council took a raft of non-standard monetary policy measures. Further monetary policy challenges have materialised recently in the shape of the pandemic, Russia's war on Ukraine and the high levels of inflation. During these periods, it was crucial from a monetary policy perspective that the financing of the private non-financial sector should remain secure and that monetary policy transmission should not be disrupted by funding obstacles. A material role in the ongoing monitoring and assessment of the financing situation was played by the Eurosystem's BLS.

BLS data allow timely assessment of financing situation ... The BLS has proven to be a valuable tool for assessing, in a timely manner, banks' lending policies and the developments in loan demand in Germany and the euro area. The interplay between loan supply and demand, as indicated by BLS data, provides a snapshot of the financing situation in both the euro area and Germany. Ad hoc questions, furthermore, are a way of quickly evaluating the impact of monetary policy measures on the financing situation, say, and of thus gaining timely feedback on key questions for monetary policy transmission.

... by shedding light on the interplay of loan demand, ... The BLS regularly gives information on developments in loan demand in the previous quarter and provides an outlook for expected demand in the next three months. The factors for loan demand surveyed in the BLS shed light on the purpose of and forces driving loan demand, and can be interpreted to understand how monetary policy has affected loan demand, for example. Other key information includes, for instance, whether enterprises are primarily looking to finance fixed investment, how important the current interest rate level is for demand developments, and whether it is mainly

liquidity bottlenecks that need to be bridged in crisis situations.

The BLS focuses mainly on banks' lending policies, however. Banks surveyed under the BLS are also asked to report on current changes to their lending policies, adjustments they are planning for the near future, and the various reasons for adjustments. Banks' plans to adjust their lending policies have proven to be a good leading indicator for explaining later developments. A tightening of lending policies – such as during the financial crisis - can be explained either by bank-side factors, i.e. constraints on banks' balance sheets or their financing, or the reason may lie with the borrowers - a tightening of policies may be triggered, for example, by increased credit risk resulting from a deterioration in the macroeconomic situation. Increasing competition in the banking sector, meanwhile, can have an easing effect on lending policies.

... the impact of monetary policy measures

... lendina

policies and ...

Ad hoc questions in the BLS provide timely indications of how individual monetary policy measures are reflected in banks' lending policies and whether they affect loan volumes. They are also used to collect information on how the measures affect banks' profitability and financing situations. The BLS thus plays a crucial role in identifying isolated effects of various monetary policy measures on individual indicators. BLS data can also feed into an overall assessment of the desired effects of monetary policy measures in conjunction with any side effects.

This article outlines how BLS data on loan demand, lending policies, the impact of monetary policy measures and banks' financing situations have evolved since 2014 in Germany and the euro area.¹ It begins by looking at the NIRP period up to the onset of the pandemic, before zooming in on the pandemic from the begin-

Developments in the BLS during the NIRP period, the pandemic and the war against Ukraine

¹ For further information on how the BLS is conducted and evaluated, see the box on pp. 20 f.; further details on the ad hoc questions included in the BLS can be found in the box on p. 23.

ning of 2020 as a subset of the NIRP period. The third period under observation begins with the war against Ukraine in the first quarter of 2022 and extends up to the present day.

NIRP period and pandemic reflected in results of the BLS BLS banks' lending policies were characterised by easing measures during the NIRP period up to the onset of the pandemic, as demand for bank loans steadily increased. BLS data indicate that banks' financing conditions improved, partly as a result of monetary policy measures taken to tackle the too-low inflation rate. At the same time, however, the negative interest rate on the deposit facility and the Eurosystem's expanded asset purchase programme (APP) each had a negative impact on balance on banks' profitability, according to BLS data. Taken in isolation, the pandemic then led to banks tightening their lending policies in response to the increased credit risk. This coincided with a sharp uptick in demand for bank loans. Government-guaranteed loans and monetary policy measures succeeded in mitigating the tense financing situation for enterprises. This period saw banks make broad use of the third series of targeted longer-term refinancing operations (TLTRO III) as a low-cost source of funding. Against the backdrop of the war against Ukraine and increased macroeconomic risks, the BLS data show that the period of tightening lending policies that began during the pandemic continued. Given the high inflation rates, it is currently in the interest of monetary policy for lending policies to be tightened.

NIRP period up to the onset of the pandemic

Inflation target persistently undershot during the NIRP period The NIRP period in the euro area began in June 2014 when the interest rate on the deposit facility was lowered into negative territory. In an effort to return inflation from a very low level to rates below, but close to, 2% in the medium term,² the ECB Governing Council took a raft of accommodative measures, implementing reductions in key interest rates, new refinancing

operations (TLTROs) and purchase programmes to ease monetary and financial conditions³ and enhance the functioning of the monetary policy transmission mechanism.⁴ By including ad hoc questions in the BLS, it was possible to assess, in a timely manner, how each of the Eurosystem's non-standard measures were affecting lending.

Three series of TLTROs have been conducted since 2014.5 These measures were intended to stimulate bank lending to non-financial corporations and households (excluding loans for house purchase) in order to invigorate demand and thus bolster inflation. Before these operations were implemented, the BLS was showing that lending policies had been tightened and loan demand in the euro area as a whole had fallen during the European sovereign debt crisis. The TLTROs offered the banks favourable financing conditions plus a set of incentives that rewarded lending to these sectors with an additional interest discount, provided certain conditions were satisfied. Alongside the TLTROs, asset purchases under the APP6 commenced in 2015, and the latter programme was expanded in 2016 to include the corporate sector purchase programme (CSPP).7 In addition, the initial reduction of the deposit facility rate into negative territory was followed by four further reductions that took the rate down to -0.50%.

Accommodative monetary policy measures: TLTROs, APP, negative deposit facility rate

- **2** See, for example, European Central Bank (2016a). This was the inflation target until the new monetary policy strategy was adopted in 2021.
- 3 See European Central Bank (2015).
- 4 See European Central Bank (2014).
- **5** The first TLTRO series ran from September 2014 to June 2016, the second from June 2016 to March 2017, and the third from September 2019 to December 2021. Details can notably be found in European Central Bank (2014, 2016b, 2019a).
- **6** See European Central Bank (2015). The covered bond purchase programme (CBPP3) and the asset-backed securities purchase programme (ABSPP) were continued under the APP. In addition, subject to certain conditions, there were purchases of bonds issued by euro area central governments, agencies and European institutions under the public sector purchase programme (PSPP).
- 7 See European Central Bank (2016a).

Conducting and evaluating the Bank Lending Survey

The Bank Lending Survey (BLS) aims to provide a more comprehensive understanding of the monetary policy transmission process via the banking sector, thereby supporting monetary policy decisions. At present, 33 banks in Germany and a total of 153 euro area banks participate in the survey, which the Eurosystem has conducted in the euro area since 2003. The samples are representative.1 The survey regularly asks high-level representatives of participating banks for up-to-date information on their lending policies and for an assessment of institutionspecific credit demand. For lending policy, a distinction is made between credit standards as the minimum requirement for loan approval and the credit terms and conditions as laid down in the loan contract. In addition, BLS banks provide information on the factors they believe are driving developments in credit demand and lending policy. All data are collected separately for loans to enterprises² and loans to households. Loans to enterprises are broken down by enterprise size, while loans to households are split into loans to households for house purchase and consumer credit and other lending.3 Participant banks are asked, first, about the developments they have seen over the past three months and, second, about the changes they expect to take place over the next three months. In addition to the regular questionnaire, ad hoc questions are also used to gather assessments of non-standard monetary policy measures or special topics with short-term relevance, for example.

Current lending policy and demand are assessed – as is the case, in principle, for all other questions – as quarterly changes (excluding seasonal fluctuations in demand). Here, five possible responses⁴ are given in the form of trend statements. In all euro

area countries, the individual responses given by the banks participating in the survey are aggregated on a question-by-question basis to national results.⁵ Net percentages⁶ are calculated for each question in the regular questionnaire. The survey re-

- 1 The banks in the German sample are mapped to the following banking groups: big banks, regional banks, Landesbanken, savings banks, credit cooperatives, private mortgage banks and banks with special, development and other central support tasks. To obtain an approximately representative sample of the German banking sector as a whole, the share of the banks in the sample for each banking group is based on the banking group's respective share in the German banking sector's overall lending volume.
- **2** Enterprises are understood to be non-financial corporations for the purposes of the BLS.
- **3** According to the compilation guide that accompanies the BLS questionnaire, this category includes not only traditional loans granted for personal consumption but also overdrafts and credit card loans as well as loans to sole proprietors and partnerships (not quasicorporations) and to non-profit institutions serving households.
- 4 For supply-related questions, the scale comprises the following possible answers: "tightened considerably", "tightened somewhat", "remained basically unchanged", "eased somewhat" and "eased considerably". For demand-related questions, the range comprises "increased considerably", "increased somewhat", "remained basically unchanged", "decreased somewhat" and "decreased considerably".
- **5** When aggregating responses at the national level, the data of all banks in a country's sample are weighted equally. Two countries additionally calculate aggregates by weighting banks' responses with their respective share of the loan portfolio of the country in question.
- 6 For supply-related questions, the net percentage refers to the difference between the sum of the percentages for "tightened considerably" and "tightened somewhat" and the sum of the percentages for "eased somewhat" and "eased considerably" (as a percentage of responses given). Positive net percentages thus indicate tightened standards, while negative values indicate a loosening of standards. For demand-related questions, the net percentage refers to the difference between the sum of the percentages for "increased considerably" and "increased somewhat" and the sum of the percentages for "decreased somewhat" and "decreased considerably". Positive net percentages thus indicate increased demand, while negative values indicate decreased demand. In addition to net percentages, averages for responses across all banks and diffusion indices are also calculated. The latter are calculated much like net percentages, the difference being that the "somewhat" answers are only given a weight of 0.5.

sults for Germany are regularly published and analysed by the Bundesbank. For the ad hoc questions, too, net percentages are calculated and published wherever possible, or alternative aggregation measures are applied on a question-by-question basis. Data provided by all participating euro area institutions are included in the euro area aggregate calculated by the European Central Bank (ECB).⁷

The standard questionnaire was revised and expanded again in 2022 following a major reform in 2015.8 Extensions to the questionnaire must always be carefully considered, as potential information gains from a more nuanced line of questioning invariably entail greater effort on the part of the respondent banks. This time around, the changes primarily consisted of a more comprehensive survey of explanatory factors, the aim of which is to yield valuable additional information for monetary policy makers.

 For loans to enterprises, the question on explanatory factors is broken down further for credit terms and conditions as a whole as well as for lending margins as a constituent part of these from the April 2022 survey round onwards (reference period: Q1 2022). As was already the case for credit standards for loans to enterprises, the factors consist of four headings under which the respective sub-factors are summarised: first, "Cost of funds and balance sheet constraints", broken down into "Your bank's capital and the costs related to your bank's capital position", "Your bank's ability to access market financing (e.g. money or bond market financing, incl. true-sale securitisation" and "Your bank's liquidity position"; second, "Pressure from competition", subdivided into "Competition from other banks", "Competition from non-banks" and "Competition from market financing"; third, "Perception of risk",

split into "General economic situation and outlook", "Industry or firm-specific situation and outlook/borrower's creditworthiness" and "Risk related to the collateral demanded"; and fourth, "Your bank's risk tolerance".

- For the credit standards on loans to households for house purchase as well as consumer credit and other lending, this more detailed breakdown has also been introduced for the previously aggregated factor "Cost of funds and balance sheet constraints" from the April 2022 survey round onwards.
- Since this round, factors influencing the development of demand for loans to enterprises have additionally been sorted by enterprise size.
- Also since the April 2022 round, changes in the rejection rate of enterprises' loan applications have been broken down by enterprise size. As already explained in the compilation guide,⁹ it is now also explicitly stated in the question that the response should cover both formal and informal loan applications.

The questionnaire (standard questions), including the ad hoc questions of the given survey round as well as the compilation guide, can be found on the Bundesbank's website at https://www.bundesbank.de/en/tasks/monetary-policy/economic-analyses/-/bank-lending-survey-for-germany-618070.

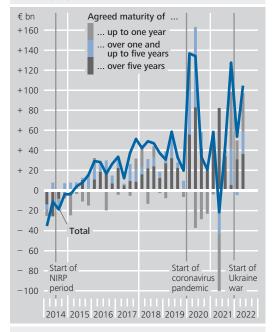
⁷ Survey results for the euro area can be found on the website of the ECB at https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/index.en.

⁸ The ad hoc questions did not feature in this reform concept as they are already revised and adjusted regularly.

⁹ See https://www.bundesbank.de/resource/blob/602650/eb4f03f4741d8086e4fbfe92773fbb1e/mL/bank-lending-survey-fragebogen-erlaeuterungen-data.pdf (in German only).

Loans to non-financial corporations in the euro area*

3-month accumulated flows, end-of-quarter data, seasonally adjusted



Source: ECB. * Non-financial corporations and quasi-corporations. Aggregate adjusted for loan sales and securitisation as well as for positions arising from notional cash pooling services provided by MFIs.

Deutsche Bundesbank

Loan demand

Demand for loans to enterprises increasing steadily during the NIRP period In keeping with monetary policymakers' intentions, the historically low level of interest rates supported demand for bank loans, as indicated in the balance sheet statistics data (see the above chart) and in the results of the BLS (see the chart on p. 24). Banks' assessments of developments in demand as part of the BLS can indicate how loans actually evolve in a particular quarter before the data from the balance sheet statistics become available. This is because BLS data are already available at the beginning of the following quarter, while balance sheet statistics data are only normally published around four weeks after the end of the respective reporting month.

According to the BLS, demand for bank loans in Germany, and also in the euro area as a whole, increased almost without interruption during the NIRP period up to the onset of the pandemic.⁸ Enterprises were mainly interested in taking out long-dated⁹ loans as a way of locking in the low interest rates for the long term. These funds were channelled primarily into fixed investment, which is a form of investment that normally takes place when the economy is in good shape. Rising fixed investment helped shore up inflation, as intended by the ECB Governing Council. BLS responses showed that bank loan demand was being dampened, however, by firms tapping their internal financing options, which were broader on account of the generally upbeat state of the economy.

Similarly, households in Germany and the euro area as a whole also took advantage of the negative interest rate environment to take out more bank loans. The surveyed banks mainly put this down to the low level of interest rates as well as increased consumer confidence. Borrowers' assessment that prospects were good in the housing market also drove demand for loans for house purchase to a considerable extent. Demand for consumer credit and other lending is also likely to have been supported by the positive economic developments and the good outlook in the labour market over this period. Above all, consumers spent more money on durable consumer goods than before. By contrast, household demand among the surveyed banks was dampened by households' use of their own savings. The surveyed banks in Germany reported a temporary dampening of demand for loans for house purchase in 2016. This was because the German Act Implementing the Mortgage Credit Directive and Amending Accounting Rules (Gesetz zur Um-

Loan demand from households also increased during the NIRP period

⁸ The BLS compilation guide explains that, for the purposes of the BLS, demand refers to nominal gross demand compared with the previous quarter, apart from normal seasonal fluctuations. It refers to the bank loan financing need of enterprises and households, independent of whether this need will result in a loan or not. Loan requests made in parallel with multiple BLS institutions may significantly increase loan demand as recorded in the BLS and thus overstate actual demand developments. Information on the reasons given for changes in loan demand is fraught with uncertainty because bank managers can only indirectly assess the key reasons for borrowers' decisions.

⁹ Loans with an original maturity of more than one year, according to the BLS compilation guide.

Ad hoc questions in the Bank Lending Survey

In addition to the regular standard questions, the Bank Lending Survey questionnaire contains a number of ad hoc guestions that are used to obtain timely information on current issues relevant to monetary policy. The content and frequency of the ad hoc questions can be adjusted as required. In recent years, for example, questions have been asked on topics such as banks' financing situations, non-standard monetary policy measures, the effects of non-performing loans on lending policies, and government-guaranteed assistance loans during the coronavirus pandemic. At present, seven sets of questions are asked alternately on a quarterly, semi-annual or annual basis. The responses to the ad hoc questions provide the Eurosystem with information at points in time for which there are not yet sufficient data available from

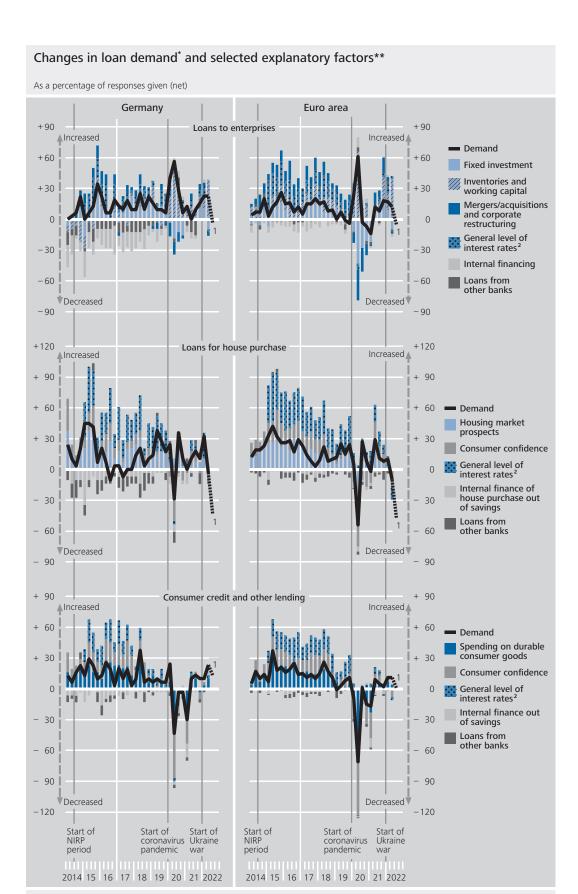
other sources to allow for a more in-depth empirical analysis.

Overview of ad hoc questions

Question	Asked from to (reference period) ¹	Frequency
Banks' financing situation	Since Q4 2009	Quarterly
Regulatory measures	Since H1 2011	Semi-annually until 2019, annually thereafter
Level of credit standards	2014 to 2019	Annually
Targeted longer-term refinancing operations	Q3 2014 to Q2 2017; since H2 2019	Quarterly/semi-annually
Eurosystem expanded asset purchase programme	Since Q4 2014/Q1 2015	Semi-annually
Negative deposit facility rate	Since Q4 2015/Q1 2016	Semi-annually
Impact of non-performing loans on lending policies	Since H1 2018	Semi-annually
Lending policies in individual economic sectors	Since H1 2020	Semi-annually
Government-guaranteed assistance loans during the pandemic	2020 to 2021	Semi-annually

1 In the January round of the survey, information was collected for the following reference periods: Q4 of the previous year (quarterly questions), H2 of the previous year (semi-annual questions), and the entire previous year (annual questions). The same applies to the April, July and October rounds of the survey. In addition, most questions ask about expectations relating to the following quarter, half year, or year.

Deutsche Bundesbank



^{*} Difference between the sum of the percentages of banks responding "increased considerably" and "increased somewhat" and the sum of the percentages of banks responding "decreased somewhat" and "decreased considerably". ** Difference between the sum of the percentages of banks responding "contributed considerably to higher demand" and "contributed somewhat to higher demand" and the sum of the percentages of banks responding "contributed somewhat to lower demand" and "contributed considerably to lower demand". 1 Expectations for Q3 2022. 2 Surveyed since Q1 2015.

Deutsche Bundesbank

setzung der Wohnimmobilienkreditrichtlinie und zur Änderung handelsrechtlicher Vorschriften) entered into force in March 2016, which led some of the potential borrowers to refrain from making loan requests owing to banks' higher requirements.

Lending policies

Credit standards the key indicator for lending policy

Credit standards are the key indicator for the lending behaviour of the banks surveyed under the BLS. These are the bank-specific minimum requirements potential borrowers need to meet in order to be granted a loan. 10 The BLS banks furthermore provide information on the terms and conditions of the loan actually approved as laid down in the loan contract. These generally consist of the agreed spread over the relevant reference interest rate (margin), the size of the loan, the access conditions and other terms and conditions in the form of non-interest rate charges (i.e. fees), collateral or guarantees which the respective borrower needs to provide (including compensating balances), loan covenants and the agreed loan maturity. There is no summary measure for the respective level of credit standards and credit terms and conditions. The BLS addresses this challenge by surveying quarter-on-quarter changes in lending policy. To compare levels at different points in time, the changes can be summed up (cumulated)11 over a longer period of time. Developments in credit standards - and also in BLS demand – are of particular relevance to monetary policy, as they are a leading indicator for the future path of loans.12

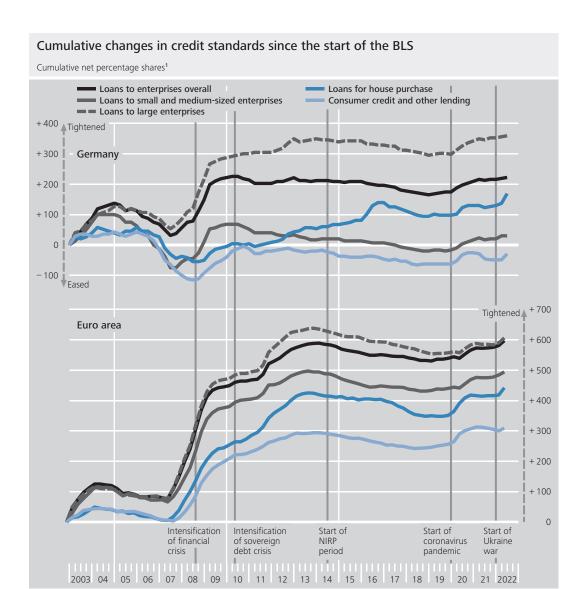
Credit standards eased more strongly in euro area than in Germany during the NIRP period Having massively tightened their credit standards following the onset of the financial crisis in 2007, the institutions surveyed under the BLS then adjusted them only moderately over several years (see the chart on p. 26). During the NIRP period, the credit standards for loans to enterprises and for consumer credit and other lending to households were then repeatedly eased slightly until the end of 2018. These adjustments were consistent with the aim of the

accommodative monetary policy, which was to increase inflation by stimulating consumption and credit growth. The favourable financing situation for enterprises and households contributed to a steady increase in loan demand, according to BLS banks' assessment. The BLS banks in the euro area as a whole eased their lending policies more significantly than those in Germany. Banks in the euro area thus reversed some of the tightening that had been ongoing until 2014, while German banks had not tightened their credit standards during this period. Survey participants mainly put their easing down to the tense competitive situation with rival institutions from the banking and nonbanking sectors (see the chart on p. 27). In addition, the BLS banks in the euro area explicitly reported that the APP was having an expansionary effect on their credit standards for loans to enterprises and on their loan volumes¹³ (see the chart on p. 38). Moreover, the banks participating in the TLTROs in Germany and in the euro area alike reported that they had used the funds primarily for lending to enterprises and households, consistent with the monetary policy purpose of the measure. This

10 Credit standards are established prior to the actual loan negotiation on the terms and conditions and the actual loan approval/rejection decision. They define the types of loan a bank considers desirable and undesirable, the designated sectoral or geographic priorities, the collateral deemed acceptable and unacceptable, etc. Credit standards specify the required borrower characteristics (e.g. balance sheet conditions, income situation, age, employment status) under which a loan can be obtained.

11 This method does, however, have some weaknesses and should therefore only be regarded as a rough measure. The level of credit standards prevailing when the survey was launched in 2003 is unknown. Ideally, cumulation should be measured against a benchmark with a "neutral" level which, however, it is impossible to identify. Comparisons between individual banks or credit segments are out of the question since it cannot be assumed that the respective starting levels were identical. Between 2014 and 2019, one ad hoc guestion was asked each year on the current level of credit standards relative to certain periods in the past. However, this question was removed again because it became increasingly difficult over time to assess the level. See Deutsche Bundesbank (2014) for a discussion of the cumulation method and a presentation of the results of the ad hoc question on the level of credit standards.

- ${\bf 12}$ See the box on the BLS's role as a lead of lending on pp. 28 ff.
- **13** The impact of the APP on loan volumes has been surveyed since the fourth quarter of 2017/first quarter of 2018.



1 Difference between the sum of the percentages of banks responding "tightened considerably" and "tightened somewhat" and the sum of the percentages of banks responding "eased somewhat" and "eased considerably", summated from Q1 2003 to the respective point in time.

Deutsche Bundesbank

suggests that the TLTROs, too, have had a volume-enhancing effect, even if the banks reported that the TLTRO funds had often been used to replace other sources of funding. 14 The BLS has thus provided timely indications that the monetary policy measures had a desired accommodative effect on the financing conditions of enterprises and households.

A regulatory one-off effect meant that in Germany, unlike in the euro area as a whole, the competition-induced period of easing credit standards for loans for house purchase did not set in until 2017. As a result of the implementation of the Mortgage Credit Directive into Germany.

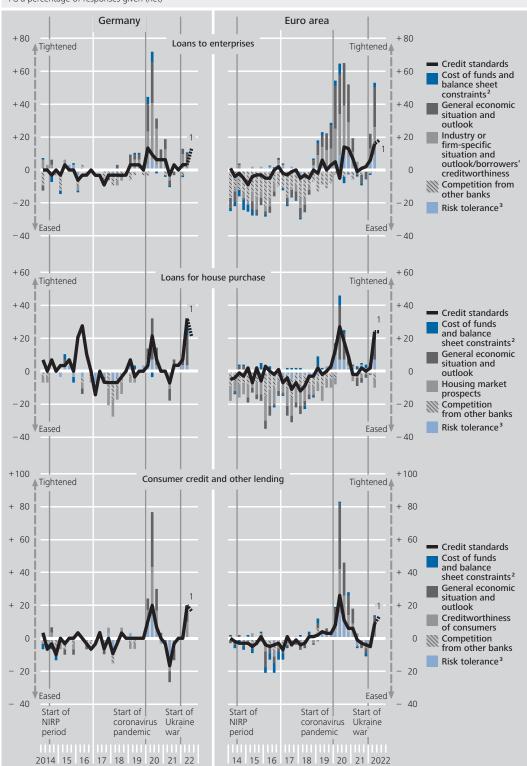
man law, 2016 saw a large proportion of the German institutions surveyed under the BLS tighten their credit standards over multiple quarters. The surveyed institutions reported that the provisions under this legislation increased the inspection and documentation requirements for loans granted for house purchase.¹⁵

¹⁴ The question of how the TLTROs affected loan volumes was not asked until 2019 (TLTRO III).

¹⁵ The provisions of the legislation govern matters including consumer protection information and a requirement under supervisory and civil law to conduct a credit assessment. These provisions are supplemented by a differentiated system of sanctions under civil law in the event of a breach of this obligation. See also Deutsche Bundesbank (2016).

Changes in credit standards* and selected explanatory factors**

As a percentage of responses given (net)



^{*} Difference between the sum of the percentages of banks responding "tightened considerably" and "tightened somewhat" and the sum of the percentages of banks responding "eased somewhat" and "eased considerably", ** Difference between the sum of the percentages of banks responding "contributed considerably to tightening of credit standards" and "contributed somewhat to tightening of credit standards" and the sum of the percentage of banks responding "contributed somewhat to easing of credit standards" and "contributed considerably to easing of credit standards". 1 Expectations for Q3 2022. 2 Average of the following factors: costs related to a bank's capital position, access to money or bond market financing, and liquidity position. Since Q1 2022, the factor "Cost of funds and balance sheet constraints" has been subdivided into the aforementioned separate factors for loans to households. 3 Surveyed since Q1 2015.

Deutsche Bundesbank

The Bank Lending Survey as a lead of lending

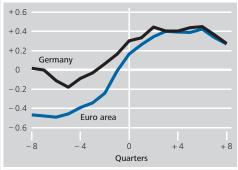
In the Bank Lending Survey (BLS), banks are asked about any changes in the credit standards they use for lending as well as their assessment of changes in loan demand. Both of these questions relate to the BLS reference period of the three months preceding the survey and can therefore be used for explaining lending during this time frame. In addition, the reported changes can also act as a lead of future loan developments. For example, in response to an easing of credit standards, it is likely that more loans will also be granted in the subsequent months and quarters, all other things being equal. Early information on future loan developments is, in turn, of great interest for monetary policy, for instance in the context of economic forecasting. Thus, on the basis of the time series available from 2003 onwards, this box conducts a statistical analysis for Germany and the euro area to determine whether the data on changes in credit standards and loan demand collected by the BLS are a systematic lead of changes in the aggregate loan volume.

Quarterly BLS data and the MFI balance sheet statistics for the period from the first quarter of 2003 to the first guarter of 2022 are used for the analysis. In order to take account of the influence of both loan supply and loan demand, the BLS data are used to construct a combined "BLS lending indicator" that describes net changes in the credit environment. This is represented by the sum of the net share of banks reporting an easing of their credit standards¹ and the net share of banks reporting a rise in loan demand. A positive value of the indicator signals an improvement in the credit environment, whilst a negative value signals a deterioration. Based on this calculation method, the lending indicator's informative content with regard to actual loan growth is examined here. The quarterly growth rate² of the loan volume according to the balance sheet statistics - for the market segments of loans to non-financial corporations and loans for house purchase, respectively – is used as the measure of loan growth.

A first measure of a potential leading indicator property is the cross-correlation, i.e. a simple correlation coefficient between the BLS lending indicator for a given quarter and the loan growth of a previous quarter (negative time interval in quarters) or a subsequent quarter (positive time interval in quarters). For the segment of loans to enterprises, the resulting series of cross-

Cross-correlation* between BLS lending indicator and growth in loans to non-financial corporations

Correlation coefficient

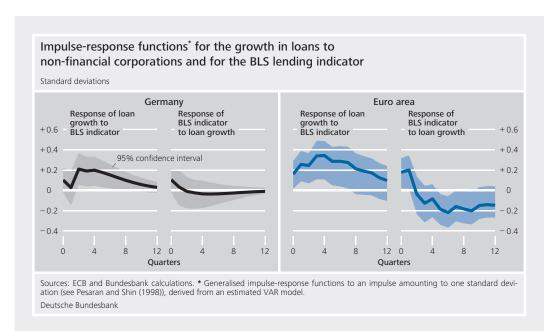


Sources: ECB and Bundesbank calculations. * Correlation between current BLS data and lag or lead of loan growth.

Deutsche Bundesbank

¹ The variable "change in credit standards" typically measures the net share of banks reporting a tightening of their lending policies. It is therefore factored into this calculation with its sign reversed.

² For the purpose of this analysis, the difference between the logarithmic index of transaction-based changes (index of notional stocks) and its value from the previous quarter is used, as this approximates the rate of loan growth.



correlations, with time intervals varying from -8 to +8 quarters, exhibits an S-shaped curve for both Germany and the euro area (see the chart on p. 28): an improvement in the credit environment during the reference quarter subsequently results in a higher rate of growth (positive correlation for positive time intervals in quarters). In line with the cyclical pattern of economic developments, and thus also of lending, an above-average rate of loan growth is followed by a deterioration in the credit environment after a certain period of time (negative correlation for negative time intervals in quarters).³

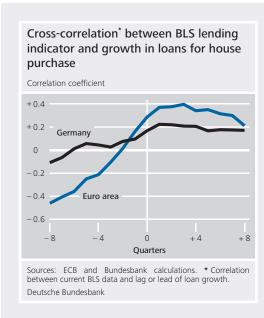
This means that there is evidence that the BLS lending indicator is both a lead and a lag of loan growth. The BLS data thus reflect, at least in part, cyclical developments in lending, which can also be gleaned from the data on loan growth themselves. However, as the information from the BLS is already available a few weeks before publication of the latest data on loan volumes for the respective quarter, the BLS lending indicator may be used as a lead of current loan growth in any case.

In order to determine whether the BLS lending indicator has any informative content of

its own beyond the information that can be obtained from loan growth itself, a further analytical step is needed. This step ascertains the leading indicator property of the BLS lending indicator based on its ability to predict future loan growth. The concept of "Granger causality" is used for this purpose.4 One variable "Granger-causes" another if it has statistically significant predictive ability for the subsequent values of this target variable even after controlling for the target variable's lagged influence on itself. In this case analysed here, the BLS lending indicator would have Granger causality for loan growth if its present value were correlated with future values of loan growth even once the correlation of loan growth with itself over time had been factored out. The Granger causality concept is used, in particular, in what is known as the vector autoregressive (VAR) model framework. This is a system of equations in which each observed variable is determined simultaneously by lags of all these variables and one random error for each. The parameters of this model can be estimated using statistical

³ This cycle continues accordingly, with deteriorations in the credit environment subsequently being followed by lower growth rates again, etc.

⁴ See Granger (1969).



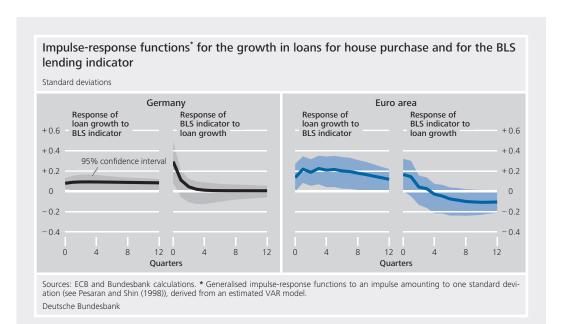
methods (least squares method). Provided that the number of lags has been determined correctly, the model describes all correlation relationships between all of the variables involved at any given point in time. From the estimated VAR model, it is possible to calculate what are known as impulse-response functions. These depict the isolated relationship between a change in one of the variables and the subsequent values of all variables. In addition to the fact that it is thus possible to adjust the crosscorrelation between the variables, the estimated model also allows conclusions to be made regarding the statistical significance of any potential leading indicator property.

For both Germany and the euro area, it is confirmed that the BLS lending indicator is a lead. For Germany, the estimated impulse-response function shows that loan growth exhibits a statistically significant response to a rise in the lending indicator, in that it is higher over a period of around two to seven quarters compared with a scenario in which the lending indicator does not change (see the chart on p. 29). By contrast, the lending indicator does not respond significantly to an increase in loan growth. For the euro area, the lending indicator is a

statistically significant lead of loan growth over a period of zero to seven quarters (see the chart on p. 29). After a short positive effect, the lending indicator shows a statistically significant negative response to a rise in loan growth after five to seven guarters. This means that the cyclical pattern in the cross-correlation between the two variables is demonstrated for the euro area in this analysis, too. However, the response of the lending indicator is somewhat weaker than that of loan growth. Furthermore, the business cycle is not the sole determinant of the response of loan growth to the lending indicator. This is also supported by extended model specifications (not shown here), which exclude the influence of cyclical factors and continue to demonstrate that the BLS lending indicator is a lead.

In the segment of loans for house purchase, the cross-correlation coefficients for Germany show a weak development overall, even when they are positive at positive time intervals in quarters for loan growth relative to the BLS lending indicator (see the adjacent chart). For the euro area, the S-shaped curve is more pronounced and is similar to that of the correlation coefficients for loans to enterprises.

On the basis of a VAR model for the growth of housing loans and the associated BLS lending indicator, it is revealed that the lead of BLS information for Germany is statistically significant (at the 5% level) only for a very short period of up to one quarter (see the chart on p. 31). However, the confidence interval is very close to the zero line. The opposite response of the lending indicator is likewise very short-lived. For time intervals greater than or equal to one quarter, it is virtually zero. For the euro area, the lead of the lending indicator is more pronounced and, up to a period of ten quarters, is statistically significant above zero



(see the above chart). By contrast, the opposite response of the lending indicator to a rise in loan growth is only significant at the time when the change occurs, but does not persist beyond that.

The results show that the lending indicators constructed from the BLS data on credit standards and loan demand are leads of loan growth in the respective market segments. More in-depth analyses, which are not presented here for reasons of space, suggest that the leading indicator properties differ across market segments: in the case of loans to enterprises, the lead is driven mainly by the BLS credit standards; in the case of loans for house purchase, the influence of the BLS loan demand predominates. However, owing to the purely statistical nature of the analyses carried out here, these results do not yet allow any conclusions to be drawn regarding the significance of loan supply and loan demand for aggregate lending in each credit segment. In order to make such an assessment, further analyses within the framework of a structural model are required.

When economic activity weakened as of 2019, Germany and the euro area as a whole saw the first instances of credit standards being tightened, above all for loans to enterprises. In addition to the general economic situation, sector and firm-specific factors played a part in the surveyed institutions assessing that credit risk had risen and increasing the requirements for borrowers. Responses to the BLS indicate that this period also saw an increase in the share¹⁶ of rejected informal loan requests and formal loan applications from both enterprises and households.

NIRP period mainly saw competitioninduced margin cuts in low-risk lending business The accommodative effect that monetary policy had on banks' lending policies was also reflected in credit terms and conditions, with margins being narrowed in all the loan segments surveyed under the BLS in the NIRP period up to the onset of the pandemic (see the chart on p. 34). For the purposes of the BLS, the loan margin is understood to mean the spread that a bank includes in the lending rate over a relevant market reference rate.17 The margin can either be adjusted actively by the banks changing the lending rate, or it can change passively, i.e. without any adjustments on the part of the banks, as a result of moves in the market reference rate. Banks saw reason to actively narrow their margins at the start of the NIRP period given the tense competitive situation in both the German and the euro area-wide banking sector. Credit institutions in the euro area sample reported furthermore that both the TLTROs and the APP had exerted an easing effect on their credit terms and conditions, especially at the beginning of the NIRP period. They noted that the negative interest rate on the deposit facility had also had an easing effect, resulting in lending rates being lowered and margins narrowed. Banks reduced their margins more for average loans than for riskier loans. By narrowing their margins predominantly in lower-risk business, it seems that banks were looking to expand their lending without, if possible, increasing the average probability of default in their credit portfolio.

This information from the BLS provided indications that the monetary policy measures were having the desired effect. The mounting pressure on banks' interest rate margins gave them an incentive to increase lending as a way of offsetting this pressure.18 In corporate lending business, the NIRP period saw not only margins but also the other terms and conditions become more customer-friendly. Credit institutions made concessions to their customers mainly in terms of the agreed covenants, but also with regard to non-interest rate charges, loan amounts and maturities, and the required collateral. The year 2019 then saw margins widening for the first time, even though the lending rates for loans to enterprises and to households for house purchase were still on the decline. Banks attributed this to changes in the cost of funds and/or balance sheet constraints. One reason for this (predominantly passive) widening of margins could have been the non-standard monetary policy measures, which lowered banks' funding costs (see the section below on the financing situation). At the same time, the market reference rates (money market rate) fell as well, faster than lending rates. In this way, the margin may have widened temporarily.

This passive widening of margins is one example of how the monetary policy interest rate cuts and non-standard measures had an impact on banks' profitability. In this context there were both positive and negative effects on earnings (see the charts on pp. 38 ff.). The differentiated responses regarding the effects on earnings are a prime indication that banks' response behaviour in the BLS is not essentially interest-driven. According to the BLS data, banks participated in the TLTROs primarily because of the attractive conditions. Both the participating German institutions and the banks

Positive and negative earnings effects of non-standard monetary policy measures

¹⁶ As a percentage of volumes.

¹⁷ The relevant market reference rate depends on the characteristics of the loan in question. Depending on the loan's maturity, the market reference rate could be EURIBOR, LIBOR or €STR or, for fixed rate loans, the interest rate swap of a corresponding maturity.

¹⁸ See Deutsche Bundesbank (2020b).

in the euro area as a whole reported a positive impact on their profitability, as the preferential conditions of the TLTROs relieved the burden on their interest expenditure. However, unlike the euro area banks, the German sample showed greater interest only as of the second series of TLTROs, which had more attractive conditions than the first. At that time, the already prolonged period of negative interest rates exerted increasing pressure on banks' net interest margin. The APP also contributed to this pressure. Since the ad hoc question on this subject was introduced, the German BLS banks have reported on a broad basis that the pressure on their net interest margin has had a negative impact on their profitability. In 2015 the surveyed banks in the euro area as a whole still reported, on balance, that the APP had had a neutral impact on their profitability overall. This was because the negative effect on their net interest margins was offset by capital gains resulting from price gains on bonds. However, according to BLS data, the negative impact of the APP on banks' profitability subsequently outweighed the positive effects in an increasing number of euro area countries. According to the surveyed banks¹⁹ in Germany and in the euro area as a whole, the negative deposit facility rate also contributed significantly to a decline in their net interest income. Until the start of the pandemic in the second quarter of 2020, just under 90% of BLS banks in Germany and 70% of banks in the euro area sample reported slight or significant negative effects on balance. By contrast, the two-tier system for remunerating excess liquidity holdings had a positive impact on earnings. This had been adopted by the ECB Governing Council in September 2019 to support the bank-based transmission of monetary policy.20 Under the two-tier system, a portion of banks' excess liquidity was exempted from negative interest rates as of October 2019.21

All in all, the BLS data on loan supply and demand developments provide no indications that lending was constrained in the euro area or in Germany during the NIRP period prior to the pandemic. While banks did report a steady

increase in demand for loans, they also cited fiercer competition, which contributed to the easing of lending policies.

Banks' financing situation

Banks in both Germany and the euro area as a whole reported an improvement in their financing terms and conditions, especially in the first two years of the NIRP period (see the chart on p. 40).²² Access to short-term customer deposits improved in particular, while access to longerterm deposits deteriorated.²³ This is likely to be connected to the fact that the narrow interest rate spread between the two deposit categories increasingly reduced the incentive for customers to invest their savings over longer periods. According to BLS data, market access for medium to long-term debt securities became easier. Data on current bond yields confirm this assessment. The TLTROs and the APP also contributed to improving the market financing conditions and strengthening the liquidity position at BLS institutions in the German and euro area samples (see the chart on p. 38). This is because the participating banks were able to finance themselves more cheaply via the TLTROs than in the market. Banks were also able to secure liquidity by selling bonds to the central bank under the APP. The APP also had a

Improved financing terms and conditions at banks, especially at the beginning of the NIRP period

On the whole, BLS did not point to restricted lending during the negative interest rate period

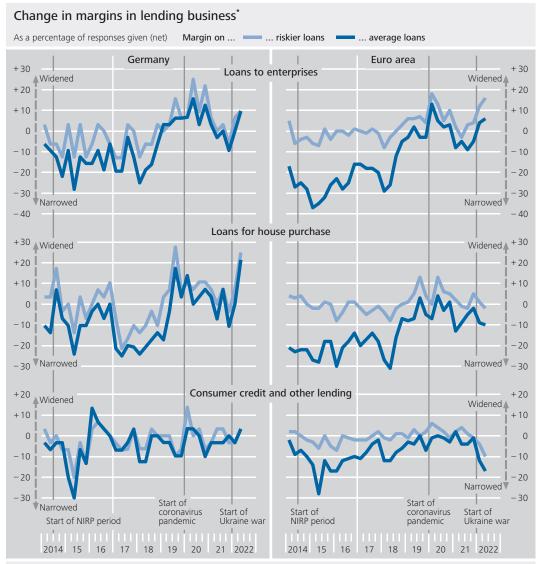
¹⁹ Banks are asked to consider in all sub-questions both direct and indirect effects that might occur, even if the bank in question does not possess surplus liquidity.

²⁰ See European Central Bank (2019b).

²¹ Since the fourth quarter of 2019/first quarter of 2020, banks are to take into account the net impact of the effects of the negative deposit rate, including the two-tier system, while also assessing the effects of the two-tier system in isolation

²² Questions are asked about the following credit categories: retail funding (short-term deposits up to one year, long-term deposits over one year including other retail funding instruments), interbank unsecured money market (very short-term money market up to one week, short-term money market over one week), wholesale debt securities (short-term as well as medium to long-term debt securities), securitisation (of loans to enterprises and loans for house purchase), and the ability to transfer credit risk off the balance sheet.

²³ The reported volumes in the balance sheet statistics confirm this. According to this, sight deposits were built up during this period, while the volume of savings and time deposits declined overall.



* Difference between the sum of the percentages of banks responding "widened considerably" and "widened somewhat" and the sum of the percentages of banks responding "narrowed somewhat" and "narrowed considerably" (widened margin = tightening, narrowed margin = easing).

Deutsche Bundesbank

downward impact on the general level of interest rates, especially in the longer-term segment.²⁴

Pandemic

The coronavirus pandemic caused a historic decline in global economic output, including in Germany and the euro area. Economic activity also dwindled as a result of measures taken by public authorities, enterprises and consumers in Germany and abroad to contain the pandemic.²⁵ This situation caused supply chains around the world to stall. Amid an inflation

rate that was still too low, monetary policy-makers were now focused on the risk of financial system disruptions and temporary funding shortages for enterprises and households.²⁶ In order to support further the provision of credit to households and firms with favourable financing terms and conditions in the face of economic disruption and heightened uncertainty²⁷ thereby avoiding further downward pressure on inflation from the financing side, the ECB Governing Council adopted a raft of monetary

Risk of disruptions in the financial system and funding shortages among enterprises during the pandemic

²⁴ See Deutsche Bundesbank (2018).

²⁵ See Deutsche Bundesbank (2020a).

²⁶ See European Central Bank (2020b).

²⁷ See European Central Bank (2020c).

policy measures.²⁸ The terms of TLTRO III were made considerably more attractive, 29 with participating banks being able to secure an interest rate on borrowed funds of as low as -1% over a period of two years, provided that they met certain lending requirements.30 Furthermore, temporary purchases under the pandemic emergency purchase programme (PEPP) were made between March 2020 and March 2022 alongside the APP.31 At the same time, additional longer-term refinancing operations (LTROs) were conducted temporarily to provide immediate liquidity support to the euro area financial system. Moreover, at the beginning of the pandemic, government guarantees were introduced in many euro area countries, especially for new loans to enterprises.32

No broad-based supply-side restrictions on lending during pandemic As a result, according to BLS data there were no broad-based supply-side restrictions on lending during the pandemic. Sectors particularly hard hit by the pandemic where banks believed credit risk to be significantly raised were largely able to obtain liquidity through government-guaranteed assistance loans. According to the BLS, the expansionary monetary policy measures during the pandemic also played a key role in providing the real economy with favourable financing opportunities.

Loan demand

Initially strong demand for bridging loans to enterprises during the pandemic, ... According to BLS data, the high liquidity needs initially led to a sharp rise in demand for bank loans to enterprises in both Germany and the euro area as a whole at the beginning of the pandemic (see the chart on p. 24). This demand came primarily from small and medium-sized enterprises.³³ Especially in the first year of the pandemic, enterprises needed significant bridging loans, which banks reported in the BLS under the heading "inventories and working capital". According to the responses to an ad hoc question in the BLS, enterprises covered acute liquidity needs for the most part with government-guaranteed loans, which they also used to build up precautionary liquidity buffers.

The BLS indicated that these loans recorded a strong increase in the first half of 2020. During this period, demand growth in Germany for loans without government guarantees was significantly lower. According to BLS data, demand in the euro area for loans without government guarantees actually declined. Enterprises also used bank loans for refinancing, debt restructuring and renegotiation purposes. In some cases, existing loans were replaced with government-guaranteed loans. According to the BLS, uncertainty about the future course of the pandemic led to a scaling back of fixed investment as well as mergers, acquisitions and restructuring, which, all other things being equal, dampened loan demand.

In the second half of 2020, BLS data show that the demand for loans to enterprises declined overall in the euro area. Unlike in Germany, where the need for bank loans, mainly to bridge financing bottlenecks, continued to increase in a weakened form, the need for loans in the euro area fell primarily due to a scaling back of fixed investment. According to BLS data, during the remainder of the pandemic demand for government-quaranteed loans initially declined in Germany and, from 2021, also in the euro area. In the second year of the pandemic, the need for funds for fixed investment gradually rebounded. Banks' expectations for the respective following quarter revealed considerable uncertainty during this period, as demand in the BLS was regularly expected to be higher than it subsequently turned out to be. It appears that, at the beginning of the pan-

... recovery of demand for loans for fixed investment in second year of the pandemic

²⁸ See European Central Bank (2020a).

²⁹ The improvements in the terms and conditions of TLTRO III were published in European Central Bank (2020b, 2020c, 2020d).

³⁰ See European Central Bank (2020c).

³¹ See European Central Bank (2020a). The impact of the PEPP has been taken into account in the BLS since the fourth quarter of 2019/first quarter of 2020.

³² In Germany, for example, the KfW granted "express loans" with full risk assumption by the KfW as well as assistance loans with partial risk assumption; see Kreditanstalt für Wiederaufbau (2020).

³³ According to the BLS compilation guide, the distinction between large firms and SMEs is based on annual net turnover. An enterprise is classified as large if its net annual turnover exceeds €50 million.

demic, enterprises increased liquidity buffers to such an extent that their demand for bank loans increased only relatively sluggishly in 2021.

Demand for loans to households plummeted at the start of the pandemic Household demand for loans in both Germany and the euro area moved in the opposite direction to that of enterprises. In the second quarter of 2020, demand for loans for house purchase as well as for consumer credit and other lending declined significantly, which the surveyed BLS banks attributed to a collapse in consumer confidence. In many cases, durable consumer goods were no longer purchased because retail outlets were largely closed on account of the lockdown. Demand for loans for house purchase rebounded as of the third quarter of 2020. Despite the pandemic, borrowers' perceptions of the housing market outlook remained favourable and thus, just like the low general level of interest rates, buoyed loan demand. Demand for loans for house purchases was dampened by the use of savings in the acquisition of real estate. In the case of consumer credit and other lending, the second lockdown at the beginning of 2021 had a similar impact to the first, with demand for loans collapsing again after having stabilised somewhat for a while. Demand did not recover on a lasting basis until the second quarter of 2021 amid subsiding infection rates and the easing of containment measures. According to BLS data, the propensity to purchase and consumer confidence rebounded.

Lending policies

Tightening of lending policies during the pandemic

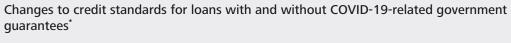
The first pandemic year of 2020 was characterised in the euro area and in Germany by restrictive adjustments to lending policies in all lines of business covered by the BLS (see the chart on p. 27). However, the cumulated changes in credit standards show that these tightening measures fell well short of those during the financial crisis of 2008-09 (see the chart on p. 26). The financial crisis had emerged from the financial system itself and had severely im-

paired banks' supply of credit. In the BLS, this was evidenced at the time by the high importance attributed to bank-side factors in explaining the changes in credit standards. By contrast, the BLS has shown that the impact of the pandemic took place primarily via increased borrower-side risks. For loans to enterprises, the surveyed institutions tightened their credit standards in particular for loans to sectors that were especially affected by the pandemic containment measures. In 2020, these included, in particular, the wholesale and retail trade, the services sector, manufacturing and commercial real estate.34 The restrictive impact of the general economic situation and the economic outlook, which in 2020 had initially also been a factor in the tightening, quickly receded as a result of government support measures during the pandemic.

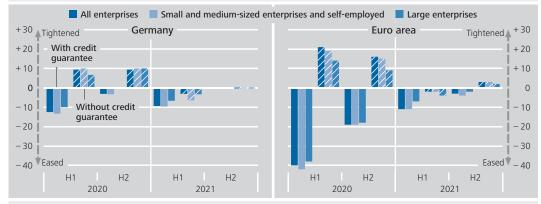
In the case of loans issued with government guarantees during the pandemic, the government assumed a large part of the credit risk associated with lending for the banks. It thus shielded banks from credit risk, which had risen sharply, especially in sectors particularly affected by the pandemic. Accordingly, the BLS showed that the surveyed banks eased their credit standards for loans with COVID-19-related government guarantees in the first half of 2020 compared with the second half of 2019, before such pandemic-related assistance loans had been introduced (see the chart on p. 37). On balance, euro area banks also eased the credit terms and conditions for governmentguaranteed loans to enterprises, especially in the first year of the pandemic. By contrast, the banks in the German sample barely adjusted the credit terms and conditions for these loans. The easing of the credit standards for guaranteed loans continued in a weakened form until mid-2021. By contrast, the BLS banks reported that the standards and terms and conditions for loans without government guarantees were

Ad hoc question on governmentguaranteed loans to enterprises during the pandemic

34 See the data on the ad hoc question asked since the first half of 2020 on changes in credit standards, credit terms and conditions and credit demand in the main economic sectors in the past and next six months.



As a percentage of responses given (net)



* Difference between the sum of the percentages of banks responding "tightened considerably" and "tightened somewhat" and the sum of the percentages of banks responding "eased considerably" and "eased somewhat".

Deutsche Bundesbank

tightened in both Germany and the euro area. This was broadly in line with the data provided by banks on overall lending policy, which cover all new lending.

area. ually dissipated. Lending rates nevertheless ided subsequently reached new historical lows.³⁵ over

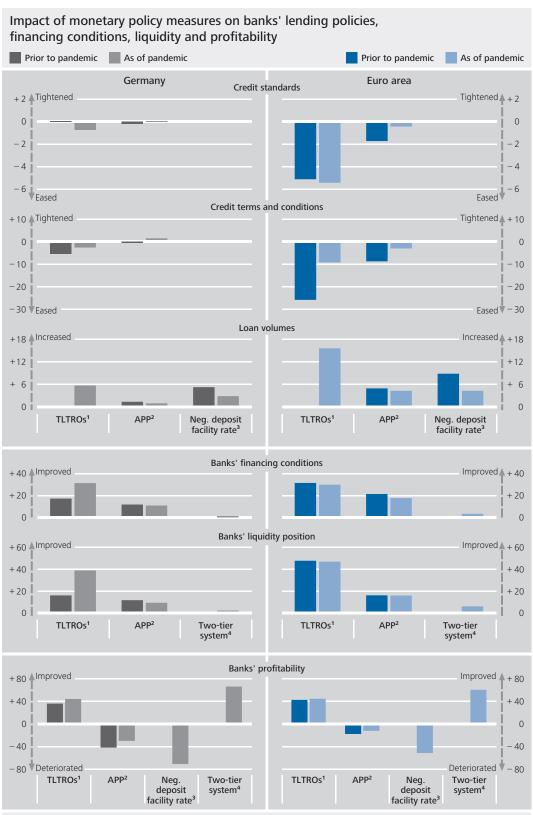
Lending policy for households also tightened

Increased
expansionary
impact of monetary policy
measures

As intended
negative interestry policy
etary policy
fect on lend
and helped
favourable so
p. 38). On ba

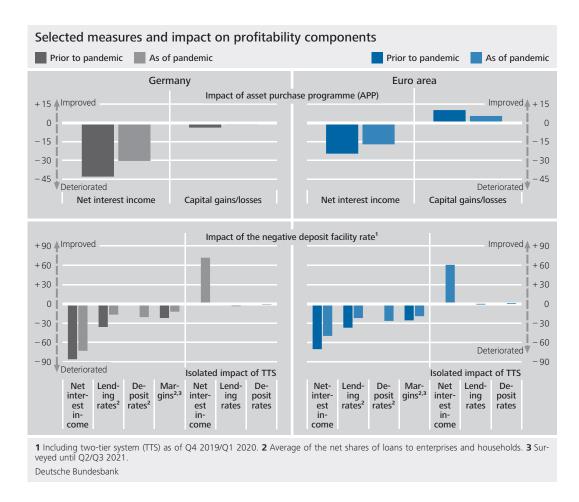
As intended by monetary policymakers, the negative interest rates and non-standard monetary policy measures had an expansionary effect on lending policies during the pandemic and helped to provide the real economy with favourable sources of funding (see the chart on p. 38). On balance, the TLTROs and the purchase programmes including the PEPP continued to have an easing effect on credit standards at banks in the euro area sample, but not in the German one. However, as a result of participation in the TLTRO III, German banks did ease their credit terms and conditions and expand their lending, especially to enterprises at which the operations were principally aimed. The APP and the PEPP also continued to have an easing impact on credit terms and conditions and loan volumes in the euro area sample, while once again, this effect failed to materialise in the German sample. The negative deposit facility rate, including the two-tier system, continued to contribute to the decline in lending rates, though to a somewhat lesser extent as of 2021, according to the banks. This suggests that the effect on lending rates of the last cut in the deposit facility rate of 18 September 2019 gradBanks in Germany, as in the euro area, also tightened their credit standards for loans to households at the beginning of the coronavirus pandemic. The share of rejected loan applications increased markedly. The tightening was justified by the banks mainly on the grounds of the deteriorating outlook for the economy, but also due to the uncertain housing market situation and the reduced creditworthiness of many potential borrowers. Credit terms and conditions were also made more restrictive. For loans for house purchase, banks restricted the loan-to-value ratio more sharply than before, and for consumer credit and other lending they mainly restricted the loan amounts. From the end of 2020, no further significant tightening occurred in either of these credit segments. In the course of 2021, banks in Germany partially reversed the tightening of the standards and terms and conditions for consumer credit and other lending. In their assessment, the general economic situation improved again as a result

³⁵ According to the MFI interest rate statistics, the aggregate interest rate on loans to non-financial corporations reached a historic low in March 2021 in both the euro area and Germany. The interest rate on loans for house purchase reached their lows in the euro area in August 2021 and in Germany in December 2020.



1 Prior to pandemic: average of the shares of banks that reported an easing/increase/improvement in response to the questions on TL-TRO I and II that were asked from Q3 2014 to Q2 2017. As of pandemic: average of the net shares of TLTRO III from Q4 2019/Q1 2020 to Q4 2021/Q1 2022, including expectations for Q2/Q3 2022. 2 Prior to pandemic: average of the net shares from Q4 2014/Q1 2015 to Q2/Q3 2019. As of pandemic: average of the net shares from Q4 2019/Q1 2020 to Q4 2021/Q1 2022, including expectations for Q2/Q3 2022. 3 Prior to pandemic: average of the net shares from Q4 2015/Q1 2016 to Q2/Q3 2019. As of pandemic: average of the net shares from Q4 2015/Q1 2016 to Q2/Q3 2019. As of pandemic: average of the net shares from Q4 2019/Q1 2020. As of Q4 2019/Q1 2020 including two-tier system (TTS). The impact on credit standards and on terms and conditions was not covered in this question. 4 Two-tier system for remunerating excess reserve holdings. Taken into account in the BLS as of Q4 2019/Q1 2020. Average of the net shares from Q4 2019/Q1 2020 to Q4 2021/Q1 2022, including expectations for Q2/Q3 2022.

Deutsche Bundesbank



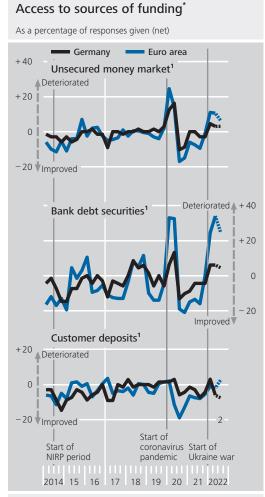
of the pandemic-related restrictions gradually ending. In the euro area, by contrast, banks largely retained their stricter lending policy.

Continued positive and negative earnings effects of non-standard monetary policy measures

The economic turmoil triggered by the pandemic and heightened uncertainty prompted the ECB Governing Council to make TLTRO III considerably more attractive. According to BLS data, TLTRO III led to a significant improvement in banks' profitability. The participation rate in TLTRO III among BLS banks rose sharply in June 2020 to over 70%. According to BLS banks in Germany and the euro area, they participated mainly because of the favourable conditions. As part of these operations, banks were able to obtain liquidity for three years at very favourable conditions. At the same time, the banks reported that the APP and the PEPP, when viewed in isolation, continued to exert pressure on the net interest margin and net interest income³⁶ (see the charts on pp. 38 f.). However, as the APP and the PEPP again enabled the surveyed euro area banks to make capital gains during the pandemic, the negative impact of the programmes on profitability declined somewhat during this period. On balance, this was not the case for German institutions, meaning that their profitability, when viewed in isolation, was still significantly affected by the APP according to the BLS. There is empirical evidence that the APP led banks in euro area countries with higher risk premia to tend to invest more in riskier securities.37 Yields on these securities are likely to have fallen comparatively more sharply in the wake of the APP, thus contributing to a shift in banks' portfolios towards riskier assets. The dampening impact of the negative deposit facility rate on banks' net interest income decreased somewhat as a result of the introduction of the two-tier system, particularly in the euro area sample, but also in the case of banks in Germany. However, this

³⁶ Since the fourth quarter of 2019/first quarter of 2020, the impact of the APP on net interest income has been surveyed instead of the net interest margin.

³⁷ See Albertazzi et al. (2021) and Altavilla et al. (2015).



* Difference between the sum of the percentages of banks responding "deteriorated considerably" and "deteriorated somewhat" and the sum of the percentages of banks responding "improved somewhat" and "improved considerably". 1 Calculated for the following maturities: money market (up to one week and over one week), bank debt securities (short-term as well as medium to long-term), customer deposits (up to one year and over one year as well as other retail funding instruments). 2 Expectations for Q3 2022.

Deutsche Bundesbank

impact remained relevant for around half of the euro area banks surveyed. This, too, had a negative effect on institutions' profitability.³⁸

Banks' financing situation

With the pandemic and the high degree of uncertainty about its economic impact, banks in Germany and the euro area initially made gloomier assessments of their financing situation (see the chart above). According to BLS data, the issuance of debt securities became more difficult, especially in the medium to longer-term segment. Yields rose significantly.

According to BLS data, access to securitisation and the ability to transfer credit risk off the balance sheet also deteriorated. However, banks reported that access to customer deposits remained good during the first phase of the pandemic. From the second half of 2020 onwards, the situation generally eased again and, according to BLS data, there were improvements in relation to all sources of funding surveyed.

According to BLS data, the non-standard monetary policy measures contributed to the easing of banks' financing situation (see the chart on p. 38). As of the fourth operation in June 2020, financing via TLTRO III became significantly cheaper than market financing. As more BLS banks both in Germany and the euro area then participated in the operations, more institutions also reported that their financial situation, in particular their liquidity position, improved as a result of their participation. The APP's positive impact on banks' financing conditions and liquidity position, which had waned over time until the second quarter of 2020, also intensified temporarily. In addition, the two-tier system for negative interest in the deposit facility likewise contributed somewhat to the improvement in the liquidity position.

... with monetary policy measures subsequently contributing to a gradual easing

War on Ukraine

Since the start of the Ukraine war in February 2022, the prices of many commodities, and especially energy, have risen steeply, driving consumer prices in the euro area up sharply. The ongoing disruptions to international supply chains were another contributory factor.³⁹ As a result, the rate of inflation has risen noticeably, and inflationary pressures have intensified across many sectors. The Governing Council of the ECB therefore decided in June 2022 that net purchases under the APP would be con-

Inflation significantly higher since the start of the Ukraine war

39 See Deutsche Bundesbank (2022).

³⁸ The impact of the negative deposit rate on profitability has been surveyed since the fourth quarter of 2019/first quarter of 2020.

cluded as of 1 July 2022.40 Net purchases under the PEPP had been discontinued back on 31 March 2022, as planned. 41 This paved the way for the first policy rate hike since 2011, in line with the previously communicated timeline for monetary policy normalisation.⁴² On 21 July 2022, the Governing Council of the ECB decided to raise key interest rates by 50 basis points in response to the updated assessment of inflation risks. It also approved the Transmission Protection Instrument (TPI), which is intended to support the effective transmission of monetary policy.43 As the inflation rate remained significantly too high and is expected to remain above the target for an extended period of time, the Governing Council decided to raise the key interest rates by a further 75 basis points on 8 September 2022. Over the next several meetings, the Governing Council said it expected to raise interest rates further. It also decided to suspend the two-tier system for the remuneration of excess reserves. The Governing Council intends to continue reinvesting the principal payments from maturing securities purchased under the APP and the PEPP. It will ensure that the phasing out of TLTROs III does not hamper the smooth transmission of monetary policy.44

Loan demand

In view of high uncertainty and unstable supply chains, demand for loans to enterprises continues to rise

According to BLS data, demand for loans to enterprises in Germany picked up more strongly again in the first half of 2022 (see the chart on p. 24). In the euro area, it had already risen fairly strongly in the fourth quarter of 2021, meaning that the increase in demand did not accelerate any further there. Higher demand was driven mainly by the increased need for funding for inventories and working capital. Many enterprises have probably expanded their inventories in the face of unstable supply chains and the heightened uncertainty as a result of the war on Ukraine. Demand for funding for fixed investment, too, continued to increase in the first quarter, which was reflected in higher demand for long-term loans. However, increasing uncertainty meant that the fixed investment factor had a dampening effect on demand for loans to enterprises again in the second quarter of 2022, much like at the beginning of the pandemic. Looking to the third quarter, banks in Germany and the euro area as a whole are not expecting demand to rise any further.

Demand for loans for house purchase increased significantly more strongly in Germany in the first guarter of 2022 than banks had expected. Because the Governing Council of the ECB announced in December 2021 that net purchases under the PEPP would be discontinued in March 2022,45 rising interest rates were expected. This could have triggered anticipatory effects among borrowers. In the euro area, too, demand for loans for house purchase initially continued to expand. In the second quarter of 2022, it then dropped again for the first time since the start of the pandemic. Banks attributed this mainly to lower consumer confidence. In line with the monetary policy objective of price stability, the recent significant increase in the general interest rate level, especially in the longer-term segment, no longer drove up demand. However, this factor had no significant impact on demand for consumer credit and other lending, which continued to expand throughout the first half of 2022. For the third quarter, banks in Germany and the euro area expect a slump in demand for loans to households for house purchase and a much smaller increase in demand for consumer credit and other lending.

Lending policies

Despite the high degree of uncertainty surrounding the economic consequences of the war on Ukraine, banks in the German BLS samHouseholds' demand for loans rose significantly in the first half of 2022 due to still low interest rates

⁴⁰ See European Central Bank (2022b).

⁴¹ See European Central Bank (2021).

⁴² See, for example, European Central Bank (2022a).

⁴³ See European Central Bank (2022c).

⁴⁴ See European Central Bank (2022d).

⁴⁵ See European Central Bank (2021).

Further tightening of credit standards since the start of the war on Ukraine ple tightened their credit standards for loans to enterprises only marginally in the first half of 2022 (see the chart on p. 27). As banks had not notably eased credit standards following the tightening at the start of the pandemic, standards were probably already comparatively tight when the war on Ukraine broke out. Banks also made credit terms and conditions somewhat more restrictive. By contrast, lending policies were tightened significantly in the euro area in the second quarter of 2022. In both Germany and the euro area, banks justified the recent tightening with their view that credit risk has risen.

Effects of non-standard monetary policy measures are likely to weaken further For the third quarter, banks in both samples are planning to tighten their credit standards further. In the past, banks' plans to adjust their credit standards in the following quarter have proved to be a good indicator of what has actually happened. This is true of Germany and the euro area and applies to all credit segments. With the inflation rate high, monetary policy's intention is certainly for lending policies to be tightened. According to the surveyed BLS banks in the euro area and in Germany, the expansionary effects of non-standard monetary policy measures on their lending policy and loan volume are likely to become ever smaller. In fact, euro area banks for the first time actually expect the purchase programmes to have restrictive effects on credit standards and terms and conditions for loans to enterprises and on the terms and conditions for consumer credit and other lending.

Credit standards for loans for house purchase considerably tighter In the first two quarters of 2022, the banks surveyed in Germany and the euro area as a whole also set stricter standards for loans for house purchase. In the second quarter of 2022, credit standards in Germany were tightened more than ever before since the introduction of the BLS in 2003. In this credit segment, too, the tightening seen during the pandemic had been reversed only marginally in the meantime. The share of rejected loan applications rose considerably in both Germany and the euro area as a whole. According to the banks, all three factors

which contribute to their risk assessment according to the BLS questionnaire had a restrictive impact: the general economic situation and outlook, housing market prospects and borrowers' creditworthiness. For the third quarter, banks in both Germany and the euro area are planning to further tighten their credit standards. Credit standards for consumer credit and other lending were also tightened in the second quarter, something that is likely to continue in the coming quarter.

The discontinuation of net purchases under the PEPP and the APP and the gradual phasing-out of the TLTROs are also reducing the impact of these measures on banks' profitability. This is likewise reflected in banks' responses in the BLS. Banks participating in the TLTROs continue to benefit from the favourable interest rate on the funds raised. However, the third series ended with the allocation of the tenth operation in December 2021, meaning that repayments are gradually due and the amount of outstanding funds is coming down. On the other hand, the surveyed banks also said in the April round⁴⁶ that they expected the negative impact of the purchase programmes and the negative deposit rate on their profitability to wane in the second and third quarters of 2022. One factor here is likely to have been that a first interest rate hike was expected in July.

Impact of non-standard monetary policy measures on profitability likely to decline

Banks' financing situation

Since the outbreak of the war on Ukraine in the first quarter of 2022, euro area banks, in particular, describe their financing situation as having deteriorated (see the chart on p. 40). By contrast, the situation in Germany has clouded over much less thus far. According to BLS data, issuing debt securities, in particular, has become more difficult, especially in the medium

Bank funding has deteriorated since the outbreak of the war

⁴⁶ The ad hoc questions on the TLTROs, the APP and the negative deposit rate are asked every six months, most recently in the April 2022 round. See the overview on p. xx. Banks' expectations as described in the April round refer to the second and third quarters of 2022.

to longer-term segment, but so has access to the short-term money market. Since the beginning of 2022, data on bond yields and money market rates have shown a clearly upward trend. This is because the sharp rise in the rate of inflation and the incipient monetary policy normalisation have led to expectations of interest rate increases, causing the general interest rate level to rise in anticipation. According to BLS data, access to securitisation and the ability to transfer credit risk off the balance sheet also declined. However, according to the banks, access to customer deposits remained broadly unchanged. Looking to the third guarter, euro area banks expect a continued deterioration in their access to market funding.

The impact of monetary policy measures on bank funding is likely to weaken

In the April round, banks said that they expected the effects of TLTROs and the APP to weaken their market financing conditions and liquidity position during the second and third quarters of 2022. In the euro area, the surveyed banks even for the first time expected the APP to have a negative impact on their liquidity position and financing conditions in the second and third quarters of the year. This assessment by banks is likely related, first, to the discontinuation of net asset purchases under the PEPP in March 2022. Second, the surveyed banks are likely to have anticipated in the spring that the Eurosystem would gradually reduce its net purchases under the APP or discontinue them altogether. The reduction in the degree of expansiveness intended by monetary policymakers is therefore likely to be achieved with the expiry of the non-standard measures.

Conclusions

The Bank Lending Survey is the central source of information for assessing banks' lending policies and demand for loans in Germany and the euro area. Its findings were valuable for monetary policy decision-making, especially during the NIRP period and the pandemic. Its flexible design means that the BLS allows information

to be obtained quickly in a rapidly changing environment.

The BLS does not suggest that lending was restricted during the NIRP period before the pandemic. While banks reported a steady increase in demand for loans they also described fiercer competition, which, like monetary policy measures, contributed to the easing of lending policies. During the pandemic, there were likewise no broad-based supply-side restrictions on lending. Sectors particularly hard hit by the pandemic where banks believed credit risk to be significantly raised were largely able to obtain liquidity through government-guaranteed assistance loans. Furthermore, the negative interest rates and non-standard monetary policy measures had an expansionary effect on lending policies during the pandemic - as intended – and helped to provide the real economy with favourable sources of funding.

According to the BLS, nothing to suggest supply-side restrictions on lending during the NIRP period and pandemic

In addition, the information obtained from ad hoc questions in the BLS helps to answer questions relevant to monetary policy transmission. It was thus possible to gauge the impact of non-standard monetary policy measures using banks' responses before enough statistical data were available for a more in-depth empirical analysis. For instance, banks' responses suggest that the negative effects of the APP and the negative deposit rate on profitability did not result in a curb on lending. On the contrary, the results of the BLS indicate that these measures had an expansionary impact on loan volume in the euro area as a whole, as intended by monetary policy. During the NIRP period, the Governing Council of the ECB implemented farreaching measures to combat inflation, which was too low during this period. Reports from the participating institutions suggest that TLTRO III operations, in particular, in which German banks also participated actively during the pandemic, are likely to have brought about an expansion in lending. At the same time, banks participated in these operations primarily because they were profitable.

Non-standard monetary policy measures had different effects on profitability and lending

BLS indispensable for monetary policy decisionmaking BLS data allow for a more in-depth observation of credit supply against backdrop of currently complex economic situation Even in the current macroeconomic situation, which is characterised by much uncertainty, the BLS helps to identify the challenges in terms of the supply of loans in a timely manner. One important question for monetary policymakers is, for instance, how banks will respond to the increase in credit risk brought about by the war against Ukraine and its extensive macroeconomic fallout. The effects of monetary policy normalisation are also of central interest. The exit from non-standard monetary policy measures and rising monetary policy interest rates

will have an impact on banks' financing conditions. With inflation rates high, a contractionary effect on lending policy is currently desirable from a monetary policy perspective. Timely information from the BLS on how the financing situation is developing is of particular significance in this situation. As the BLS data on credit standards and demand for loans are a leading indicator of future developments in lending, this information can help to identify early on where potential difficulties could arise in providing the economy with credit.

List of references

Albertazzi, U., B. Becker and M. Boucinha (2021), Portfolio rebalancing and the transmission of large-scale asset purchase programs: Evidence from the euro area, Journal of Financial Intermediation, Vol. 48.

Altavilla, C., G. Carboni and R. Motto (2015), Asset purchase programmes and financial markets: lessons from the euro area, ECB Working Paper, No 1864.

Deutsche Bundesbank (2022), The current economic situation in Germany, Monthly Report, May 2022, pp. 5-10.

Deutsche Bundesbank (2020a), The current economic situation in Germany, Monthly Report, August 2020, pp. 5-11.

Deutsche Bundesbank (2020b), Developments in the German banking system during the negative interest rate policy period, Monthly Report, October 2020, pp. 15-39.

Deutsche Bundesbank (2018), The market for Federal securities: holder structure and the main drivers of yield movements, Monthly Report, July 2018, pp. 15-38.

Deutsche Bundesbank (2016), Implementation of the EU Mortgage Credit Directive in Germany as reflected in the Bank Lending Survey, balance sheet statistics and interest rate statistics, Monthly Report, November 2016, pp. 36-37.

Deutsche Bundesbank (2014), The level of credit standards in the Bank Lending Survey, Monthly Report, August 2014, pp. 44-47.

European Central Bank (2022a), Monetary policy decisions, press release of 10 March 2022.

European Central Bank (2022b), Monetary policy decisions, press release of 9 June 2022.

European Central Bank (2022c), Monetary policy decisions, press release of 21 July 2022.

45

European Central Bank (2022d), Monetary policy decisions, press release of 8 September 2022.

European Central Bank (2021), Monetary policy decisions, press release of 16 December 2021.

European Central Bank (2020a), Monetary policy decisions, press release of 12 March 2020.

European Central Bank (2020b), ECB announces easing of conditions for targeted longer-term refinancing operations (TLTRO III), press release of 12 March 2020.

European Central Bank (2020c), ECB recalibrates targeted lending operations to further support real economy, press release of 30 April 2020.

European Central Bank (2020d), ECB prolongs support via targeted lending operations for banks that lend to the real economy, press release of 10 December 2020.

European Central Bank (2019a), ECB announces details of new targeted longer-term refinancing operations (TLTRO III), press releases of 6 June 2019.

European Central Bank (2019b), Monetary policy decisions, press release of 12 September 2019.

European Central Bank (2016a), ECB adds corporate sector purchase programme (CSPP) to the asset purchase programme (APP) and announces changes to APP, press release of 10 March 2016.

European Central Bank (2016b), ECB announces new series of targeted longer-term refinancing operations (TLTRO II), press release of 10 March 2016.

European Central Bank (2015), ECB announces expanded asset purchase programme, press release of 22 January 2015.

European Central Bank (2014), ECB announces further details of the targeted longer-term refinancing operations, press release of 3 July 2014.

Granger, C.W.J. (1969), Investigating causal relations by econometric models and cross-spectral methods, Econometrica, 37(3), pp. 424-438.

Kreditanstalt für Wiederaufbau (2020), Gemeinsame Presseerklärung von DK und KfW: Große Aufgabe für die deutsche Kreditwirtschaft, press release of 18 March 2020, https://www.kfw.de/%C3%9Cber-die-KfW/Newsroom/Aktuelles/Pressemitteilungen-Details_573376.html

Pesaran, M. H. and Y. Shin (1998), Generalized impulse response analysis in linear multivariate models, Economics Letters, 58, pp. 17-29.

Deutsche Bundesbank Monthly Report September 2022 46

Productivity effects of reallocation in the corporate sector during the COVID-19 crisis

The COVID-19 crisis had highly heterogeneous effects on economic sectors and firms in Germany. As a result, it may have increased the reallocation of jobs. This could reinforce productivity growth if employees increasingly moved from less productive firms to more efficient ones in the same or another sector.

With regard to shifts in employment weights between the various sectors of the German economy, there have been hardly any productivity-enhancing effects over the past two years. However, this does not mean that the reallocation of jobs between sectors was weak. Instead, there were reductions in employment not only in sectors with below-average productivity, such as accommodation and food service activities, but also in highly productive sectors, such as manufacturing. At the same time, in addition to the highly productive information and communication sector, sectors that are less productive in arithmetical terms, such as human health and social work activities, also saw sharp rises in employment.

Productivity growth nevertheless benefited from job fluctuations within sectors. This counteracted the sharp decline in aggregate productivity, but was only able to absorb it in part. This is consistent with the fact that larger, and generally more productive, firms suffered smaller production losses than other firms as a result of the pandemic. Also for this reason, more productive firms hired considerably more new employees, or dismissed considerably fewer existing employees, over the course of 2020.

However, the estimated relationship between productivity and changes in employment at the firm level during the most recent recession was not especially pronounced in comparison with the precrisis period. Accordingly, there was no strengthening of the productivity-enhancing reallocation of jobs in Germany in 2020. By contrast, the number of business start-ups rose sharply last year, particularly in knowledge-intensive services sectors. This could bolster productivity growth over the medium term. This likewise holds true of the strong growth in corporate investment in hardware and software prompted by the pandemic over the past two years.

Even though the effects of government support measures were not investigated explicitly, it can be assumed that they played a role in the moderate impact of job reallocation on productivity. On the one hand, these measures were successful in mitigating the impact of the COVID-19 crisis on firms with sustainable business models as well as in preventing insolvencies. On the other hand, however, government assistance may have potentially prevented greater productivity-enhancing reallocation effects via the employment channel.

Corporate fluctuations and productivity effects during the COVID-19 crisis

Crisis affected different areas of the corporate sector to varying degrees ... The coronavirus pandemic not only reduced economic activity, but also caused shifts in market shares, employment, and medium-term earnings prospects between firms in Germany. Although extensive government support measures helped to mitigate the declines in firms' turnover, the economy experienced a massive collapse in 2020. The magnitude of these economic losses varied very considerably between different areas of the economy. This was evident, for example, in the dispersion of output growth across sectors and industries. This reflected the differences in how severely the various segments of the corporate sector were impacted by the diverse and, in some cases, sweeping restrictions and behavioural adjustments affecting households and firms. For example, economic activity in contact-intensive industries, in which working-from-home solutions or other physical distancing measures were difficult to implement, came almost to a complete standstill at times. This held especially true for accommodation and food service activities, personal service activities and entertainment, parts of the travel sector, as well as some segments of the stationary retail trade sector. By contrast, there were booms in industries

Source: Federal Statistical Office. **1** Measured as the weighted standard deviation of the annual growth rate at a quarterly frequency. Weights based on nominal gross value added or nominal turnover in the previous year. **2** Dispersion of growth rates across 17 sectors calculated on the basis of national accounts data. **3** 205 four-digit branches. **4** 35 four-digit branches.

Deutsche Bundesbank

such as online retail trade and shipping services as well as in the demand for certain IT services and pharmaceutical products. Moreover, the manufacturing sector was also hit hard by the COVID-19 crisis. While production fell sharply at the beginning of the pandemic due to temporary closures resulting from a lack of demand and intermediate input deliveries, it suffered from wide-ranging supply chain issues during the subsequent recovery.

In principle, firms that had already gone digital prior to the pandemic or that had larger financial buffers were better able to respond to the challenges presented by the pandemic. For this reason, too, the pandemic-related effects on firms – even on those from the same sector – were, in some cases, very heterogeneous. These changes triggered by the pandemic, which also emerged in many other countries, were sometimes referred to as a "reallocation shock".1 In Germany, fluctuations in the corporate sector had declined sharply over the past two decades. This concerned, in particular, the number of corporate insolvencies, business closures, and start-ups. The COVID-19 crisis may therefore have interrupted this trend.

... and thus may have increased job reallocation in the corporate

The reallocation of economic resources and growth opportunities may have an impact on labour productivity in the corporate sector. If employment shares among firms shift from less efficient firms to more productive ones, this bolsters productivity growth.² First, this process may occur amongst incumbents, both within and across sectors. Second, some firms exit the market, while new ones enter. Young and innovative firms typically see rapid growth, build up their staff, and can thus reinforce future productivity growth. By contrast, firms that are no longer profitable dismiss their workers, who

Shifts in labour input among firms and sectors potentially enhance productivity

¹ See Anayi et al. (2021) and Barrero et al. (2021a).

² See Decker et al. (2017), Bartelsman et al. (2013) and Modery et al. (2021) for studies on the role of job reallocation for productivity irrespective of the economic cycle. In principle, job reallocation among firms also occurs in noncrisis times. However, employment reallocation and its impact on productivity may vary depending on the economic cycle (see, for example, Foster et al. (2016)).

are then free to engage in more efficient activities with other firms.³

Cleansing effect of coronavirus shock

Recessions are usually associated with losses of jobs and income. However, in the sense of Schumpeterian "creative destruction", the COVID-19 crisis could have been a time of increased productivity-enhancing job reallocation.4 In the literature, this is referred to as a "cleansing effect" triggered by recessions. However, a priori, it is unclear whether economic crises actually reinforce the productivityenhancing reallocation process.5 This is because, especially during recessions, reallocation can be disrupted by other factors, such as financial market friction or government intervention.6 In addition, even productive firms may reduce job creation during economic crises, for instance if they take on a "wait-andsee" attitude.7 This article analyses the role of job reallocation for labour productivity growth in the German corporate sector since the coronavirus pandemic.8 Productivity effects resulting from the reallocation of capital are not investigated here.

Shifts in labour input measured in hours worked due to short-time working temporary in some cases

Labour productivity is calculated as the ratio of gross value added to labour input. Depending on how labour input is measured, labour productivity has developed very differently over the past two years. In terms of hours worked, it grew by just under 1% in each of these years. If the number of employed persons is instead used to measure labour input, it decreased by around 3% in 2020 and increased by 2.5% in 2021. The different results produced by these two measures are due to the extensive use of short-time working, which allowed firms to drastically cut back their working hours without reducing their numbers of staff. Hourly productivity is considered to be the more accurate measure for analysing productivity growth since it also factors in changes in average working hours. Nevertheless, in the following, labour productivity refers to the number of employed persons. First, this ensures consistency with the firm-level data used for analytical purposes, as these data typically contain infor-

Labour productivity*

2019 = 100, seasonally and calendar-adjusted data, log scale



Sources: Federal Statistical Office and Bundesbank calculations.

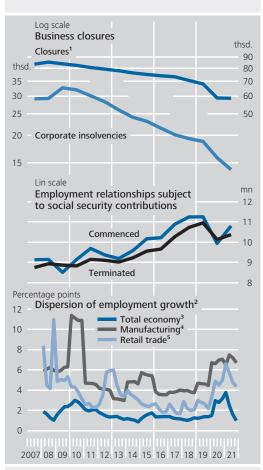
* Gross valued added chain-linked to previous-year prices.

Deutsche Bundesbank

mation on employees and not hours worked. Second, changes in the number of employed persons are a better indicator of more persistent adjustments in labour input.

- **3** Furthermore, the pandemic affected innovation in certain business areas, for example in the medical and pharmaceuticals sector. This means that the productivity of incumbents may have also changed as a result of shifting profit opportunities.
- 4 See Schumpeter (1934).
- **5** For studies that find evidence of the cleansing effect of recessions, see, inter alia, Caballero and Hammour (1994), Foster et al. (2016) and Osotimehin and Pappadà (2017). Cleansing effects are not necessarily optimal for welfare, as they are usually accompanied by (temporary) unemployment and fluctuations in consumption.
- **6** See, inter alia, Barlevy (2003), Boeri and Bruecker (2011), Foster et al. (2016) and Kozeniauskas et al. (2022). This does not mean that support measures are fundamentally inefficient. For example, in a frictional market, measures such as short-time working can also enhance efficiency (see Giupponi and Landais (2019)). In this context, frictions in the labour market may be due to political factors (for example, employment protection) or result from the structure of the market (for example, search frictions).
- 7 Recessions may therefore also have a dampening effect on productivity (see, inter alia, Caballero and Hammour (2005), Kehrig (2015) and Haltiwanger et al. (2021)). Furthermore, recessions can have a lasting negative impact on productivity growth, for example if innovation activities are weakened during the recession (see, for example, Anzoatequi et al. (2019)).
- **8** Here, reallocation is determined by the changes in the number of employed persons in sectors, industries or firms. The reallocation of jobs therefore only accounts for filled positions and not vacant positions.

Indicators of employment reallocation*



Sources: Federal Statistical Office and Federal Employment Agency. 1 Closures of corporate head offices with greater economic significance. 2 Weighted standard deviation of the annual growth rate in the number of employed persons or employees at a quarterly frequency. Weights based on the number of employed persons or employees in the previous year. 3 Dispersion of annual growth rates across 17 sectors calculated on the basis of national accounts data. 4 205 four-digit industries. 5 35 four-digit industries.

Deutsche Bundesbank

that started, but also those that had been terminated, fell considerably. The reallocation of workers was therefore not particularly pronounced in the first year of the pandemic. 10 Nevertheless, productivity-enhancing reallocation effects arise when comparatively productive industries or firms add jobs or less productive industries or firms destroy jobs more sharply, thereby shifting employment weightings towards more productive activities. It is therefore particularly important to know whether firms, industries or sectors have added or destroyed jobs to varying degrees.

According to indicators on the dispersion of employment growth, the reallocation of jobs has increased significantly over the past two years, at least compared with previous years. 11 This applies both to the intersectoral dispersion of employment growth in Germany as a whole and to interindustry employment growth within individual sectors. Owing to the sharp decline in closures and the initially only moderate change in the number of start-ups, shifts between incumbents were the main reason for this. In this respect, the COVID-19 crisis did not trigger a comprehensive reallocation shock in the corporate sector in Germany, unlike else-

... but intersectoral and intrasectoral employment shifts increased

Indicators of the reallocation of jobs

Fluctuations in corporate sector in 2020 only small on the whole ...

One fundamental question that arises here is whether the COVID-19 crisis was a reallocation shock in Germany, too. One reason to believe that this is not the case is that some indicators used to measure fluctuations in the corporate sector fell sharply, especially in the first year of the pandemic. This applies primarily to the number of corporate insolvencies and business closures.⁹ The number of start-ups initially dropped, too. Moreover, not only the number of jobs subject to social security contributions

- **9** Data on start-ups and closures are based on the Federal Statistical Office's business registration statistics. Corporate head offices with greater economic significance are considered here. These encompass undertakings managed or established by a legal person, partnership or natural person. In the case of a natural person, this is predicated on them being (or having been) entered in the commercial register, having (had) an entry in a skilled trades register, or employing (or having employed) at least one person.
- 10 See also Schmidt (2021). The reallocation of workers also includes employees changing firms without jobs being either created or destroyed. These transfers can, in principle, also be productivity-enhancing even without employment weightings being shifted because, for instance, the employees' skill sets are a better fit to the new firms' needs.
- **11** A comprehensive analysis of job reallocation requires extensive corporate data covering job creation and destruction by firms in all sectors; see, for example, Foster et al. (2016) and Bachmann et al. (2021). For reasons of data availability, this is not possible here.

where.¹² Nevertheless, the increase in the dispersion of employment growth across sectors and industries shows the potential for productivity-enhancing reallocation effects during the pandemic.

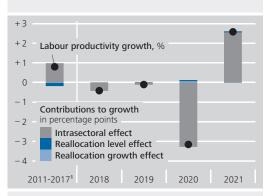
Impact of the reallocation of jobs between sectors

Sector shifts in the workforce during the pandemic hardly productivityenhancing ...

Sector labour productivity growth can be decomposed into three components. The first is based on the shift of jobs between sectors with different levels of productivity, the second on reallocation between sectors with different rates of productivity growth, and the third on productivity growth that would result absent shifts in jobs across sectors. The first two components can therefore be used to identify the productivity effect resulting from reallocation between 20 sectors which are distinguished in the national accounts. 13 The reallocation level effect is positive if employment shifts from less productive to more productive sectors. However, this effect was basically zero in 2020 and 2021. Moreover, hardly any changes can be seen in this component of productivity growth compared with the pre-crisis years of 2018 and 2019.14 The reallocation growth effect, which measures the contribution to growth of shifts in employees between sectors with different productivity dynamics, likewise did not contribute to productivity growth during the pandemic. Overall, productivity growth has thus hardly increased in the past two years owing to job shifts towards more productive or dynamic sectors.

... because sectors with aboveaverage productivity destroyed jobs and sectors with below-average productivity created jobs as well This finding may be surprising given the increased employment shifts between sectors. It results from the fact that, during the pandemic, jobs were destroyed not only in sectors with below-average productivity, such as the accommodation and food service activities sector, but also in highly productive sectors, such as manufacturing. The percentage decline in employment in 2020 was significantly smaller in manufacturing than in the accommodation and food

Components of aggregate labour productivity growth*



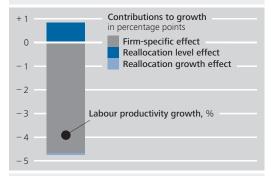
Sources: Federal Statistical Office and Bundesbank calculations. * Annual growth rates of real gross value added per person employed. Decomposition based on data for 20 sectors. 1 Average annual change.

Deutsche Bundesbank

service activities sector. However, employment was reduced more strongly here in terms of the number of persons. At the same time, in addition to the highly productive information and communication sector, less productive sectors in arithmetical terms, such as human health and social work activities, also saw sharp rises in employment.

- 12 In Germany, the fluctuations in the dispersion measures were not exceptionally high by historical standards. The dispersion of sector employment growth was more pronounced in the early 1990s. The dispersion of intrasectoral employment growth was likewise higher in the past. For studies that link a reallocation shock to the pandemic in the United States and the United Kingdom, see Anayi et al. (2021) and Barrero et al. (2021a).
- 13 The decomposition of growth follows the OECD's standardised approach; see OECD (2018). In the literature, there are different methods of performing this type of decomposition. The OECD approach corresponds to a firm-level growth decomposition. However, it can lead to distortions caused by adding chained volume data. For an alternative approach, see, for example, Deutsche Bundesbank (2021a). This delivers overall similar results for the reallocation effect over the past two years.
- 14 By contrast, calculations of hourly productivity indicate a significant, positive contribution of the reallocation level effect for 2020. This is likely to be due, amongst other things, to the fact that some sectors that were severely affected by the pandemic and display a relatively low level of productivity saw an extremely sharp decline in hours worked. In the accommodation and food service activities sector, for example, the number of hours worked fell by around 23%, while the number of persons employed in the sector fell by 8%. In 2021, the reallocation level effect calculated on an hourly basis roughly corresponds to the effect obtained for productivity measured in persons.

Components of sector labour productivity growth in 2020*



Sources: Bundesbank Online Panel Firms (BOP-F, Wave 5) and Bundesbank calculations. * Change in labour productivity approximated. Calculations following Bloom et al. (2020) based on data for 2,072 firms and using weighting factors. Sector results aggregated with employment weightings.

Deutsche Bundesbank

Intrasectoral effects key to productivity growth during the pandemic According to the decomposition, labour productivity growth in Germany during the pandemic was shaped by the contribution of the intrasectoral effect (the third component of the decomposition). Sector-specific developments are key to this component.15 These include changes in total factor productivity (TFP) or capital intensity in a given sector. In addition, job reallocation - namely between firms in the same sector - can also matter for this component. This is plausible inasmuch as the fluctuation of employees within sectors is associated with comparatively low frictions owing to industry-specific human capital, whilst at the same time the dispersion of productivity levels of firms even within narrowly defined industries is extremely high.16

Effects of the reallocation of jobs within sectors

The relationship between job reallocation and labour productivity between incumbent firms within sectors can be analysed using German firm-level data. To this end, the Bundesbank online survey of firms (Bundesbank Online Panel – Firms, BOP-F) was used.¹⁷ The fifth wave of the survey in May 2021 contains data on changes in turnover, sales price, employees and average production costs in 2020 com-

pared with 2019. From this, the change in firms' labour productivity in 2020 can be approximated and sector productivity growth can be broken down into the contributions of a firm-specific effect and a reallocation effect. 18 The firm-specific effect measures the sector productivity growth that, given the composition of employment, would result from changes in the average productivity of firms in the sector, for example due to changes in TFP or capital intensity. The reallocation effect is, in turn, again the sum of the level effect and growth effect. These effects are caused by within-sector changes in the employment shares of firms with different productivity levels or different productivity dynamics. The growth decomposition shows that the firm-specific effect in 2020 was strongly negative, at -4.7 percentage points. This means that average productivity (in terms of number of employees) across firms fell sharply during the pandemic. This is due, in particular, to the use of shorttime working, which enabled firms to retain employees despite high turnover losses. However, this was somewhat counteracted by the shift in the employment weights of individual firms. The positive reallocation level effect shows that more productive firms gained in importance, while producers with less-than-

15 The intrasectoral effect measures productivity growth within sectors on the assumption of no changes in the employment structure in the economy. The effect is calculated as the weighted sum of productivity growth in the sectors under review.

16 See Syverson (2011). An analysis based on large firmlevel datasets for nine European countries concludes that intrasectoral job reallocation between incumbents was a key factor in sector productivity growth between 2007 and 2016; see Modery et al. (2021).

17 The BOP-F is a firm-level survey dataset. Since June 2020, the Bundesbank's Research Centre and Research Data and Service Centre have been conducting the survey in cooperation with forsa, an external market research company. The survey consists of recurring key questions on firms' economic situation and their expectations as well as special modules that vary from quarter to quarter and often address topical issues.

18 The analysis is based on a sample size of around 2,000 firms. For these firms, weighting factors were applied in order to measure aggregate developments. The calculation of labour productivity follows the analyses for the United Kingdom published in Bloom et al. (2020). The growth decomposition chosen corresponds to that for sector data. See Foster et al. (2008) for such a decomposition using firm-level data.

Intrasectoral reallocation strengthened productivity in 2020 ... average productivity lost out. By contrast, the reallocation growth effect was virtually irrelevant. The overall reallocation effect therefore dampened the decline in labour productivity by just under 1 percentage point. Aggregate labour productivity, however, still fell by almost 4%.

... yet only partially offset the firm-specific decline in productivity Given the small sample size of just over 2,000 firms, these results based on the BOP-F are somewhat uncertain. Nevertheless, in terms of the magnitude of the decline in productivity, they are roughly in line with those of the national accounts. The results suggest that in 2020 reallocation effects among firms in the same sector increased labour productivity growth (measured in terms of number of employees) in Germany. However, this failed to offset the larger firm-specific losses in efficiency.

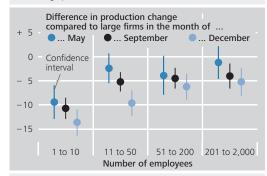
Heterogeneous output developments among firms in the same sector

Large firms came through pandemic much better than small firms in the same sector

The COVID-19 crisis had an uneven impact on firms of different sizes within sectors, too. This is shown by further estimations based on Waves 1, 3 and 4 of the BOP-F survey data for 2020.19 According to these estimations, even if, in particular, industry-specific effects are taken into account, output developments of smaller firms were significantly weaker than those of large enterprises because of the COVID-19 crisis. Conversely, larger firms weathered the 2020 recession significantly better than smaller firms in the same sector. If, in addition, one takes into account that larger firms are more productive on average, the results are consistent with the positive intrasectoral reallocation effects shown above.20 Larger firms tend to be more highly digitalised and were therefore able to implement remote working, for instance, more quickly and more efficiently, thereby minimising turnover losses (see the box on pp. 54 f.).²¹ In addition, they usually have greater financial means to cushion periods of slumping

Production changes in 2020 due to the coronavirus crisis*

Percentage points



Sources: Bundesbank Online Panel Firms (BOP-F, Waves 1, 3 and 4) and Bundesbank calculations. * Weighted regressions controlling for sector fixed effects. Robust standard errors. Regressions are based on data for more than 10,000 (May), more than 12,000 (September) or more than 15,000 (December) firms. Deutsche Bundesbank

turnover growth.²² This is also likely to have had an impact on firms' decisions to create and destroy jobs.

The effects of job reallocation between incumbent firms in the same sector over time

In addition, intrasectoral reallocation effects between incumbents can be analysed using an alternative dataset, the Bundesbank's JANIS dataset, which is available for several years up to 2020. Based on this dataset, the relationship between employment growth and firms' labour productivity during the pandemic can be contrasted with that prior to the crisis. For

Evaluations of an alternative firm-level dataset show a positive intrasectoral reallocation effect for 2020, too ...

19 The regressions are based on the following question about changes in production due to the unexpected COVID-19 crisis: "Your production/business activity has decreased (increased) as a result of the coronavirus pandemic. How large was the decrease (increase) in your production/business activity as a result of the coronavirus pandemic in the month of May (Wave 1), September (Wave 3) or December (Wave 4) compared with a "normal" situation, e.g. in May (September or December) 2019?

20 See OECD (2014).

21 See European Investment Bank (2022), Kaus et al. (2020) and Comin et al. (2022).

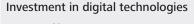
22 See, for example, Chodorow-Reich et al. (2022). Dett-mann et al. (2021) also find that firms in Germany with a better profitability in pre-crisis years were less affected by the pandemic.

Digitalisation in the German corporate sector since the onset of the coronavirus pandemic

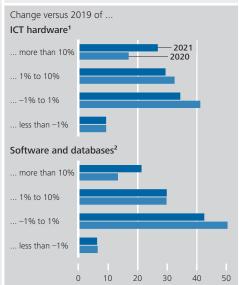
One possible positive consequence of the coronavirus pandemic is often said to be a digitalisation boost in the corporate sector.1 Faced with the measures taken to contain the pandemic and mandatory business closures, many firms made greater use of remote work and online distribution channels.2 This may also have necessitated additional investment in the required digital technologies. However, the national accounts indicators available for the corporate sector as a whole do not, to date, suggest that digitalisation in Germany has accelerated. National accounts data show gross fixed capital formation in software and databases as well as in information and communication technology (ICT) in 2020 to have been below the average of the previous five years.3 Some other macroeconomic

indicators which focus on the use of information technology (IT) goods or the internal generation of proprietary digital solutions through the increased use of IT human capital provide a more optimistic assessment.⁴ Nonetheless, in a European comparison, Germany currently only occupies a mid-table position in terms of digitalisation according to the broad-based DESI index.

The latest Bundesbank Online Panel – Firms (BOP-F) provides data on digitalisation, broken down by category of firm, for the period from April to June 2022. These data suggest that digitalisation has accelerated in some areas of the corporate sector since the pandemic,⁵ with roughly half of firms investing significantly more in ICT and hardware as well as software and databases in 2020 than in the year preceding the crisis. One-sixth and one-seventh of firms reported increasing their investment in, respectively, hardware and software by more than 10%. Investment growth was particularly pronounced in some services sectors, such as the financial and insurance sector, as well as in education, health and social services. In 2021, the share of firms with higher invest-



Percentage of firms



Source: Bundesbank Online Panel – Firms (BOP-F). 1 Percentage of firms that responded to the question "By what percentage did your enterprise's investment expenditure on ICT hardware (e.g. notebooks or monitors) change in 2020 and 2021 compared to 2019?" 2 Percentage of firms that responded to the question "By what percentage did your enterprise's investment expenditure on software and databases change in 2020 and 2021 compared to 2019?"

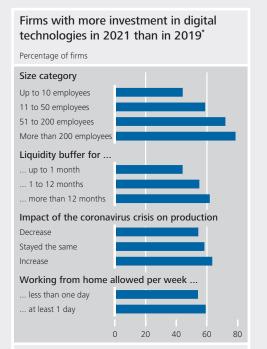
Deutsche Bundesbank

- 1 See, for example, D'Adamo et al. (2021) and OECD (2020).
- **2** See Deutsche Bundesbank (2021c) and German Economic Institute (2021).
- **3** The figure for investment in software and databases was below average in 2021, too. Data on investment in ICT are not yet available for 2021.
- 4 According to the European Commission's Digital Economy and Society Index (DESI), the percentage of ICT specialists in the German workforce rose from 4% in 2019 to 4.7% in 2020.
- **5** Other survey results among German enterprises yield similar results overall. See, for example, European Investment Bank (2022) and Bellmann et al. (2021). According to the results of the European Investment Bank's Investment Survey, the push for digitalisation may even have been somewhat greater in Germany than the EU average.

ment in hardware and software continued to grow, and investment volumes also increased. At the firm level, investment in the two years is closely correlated. This could therefore be more than just a temporary digitalisation boost in these firms.

However, the results of the BOP-F suggest that digital technologies did not spread at the same pace in all firms. A breakdown of the survey results by size category shows that large firms, in particular, ramped up their investment in digital technologies. Around four-fifths of large firms (with more than 200 employees) reported increasing investment in hardware and software. By contrast, this was the case for only around two-fifths of micro-firms (with up to ten employees). In addition, firms with liquidity bottlenecks and those experiencing a decline in production during the coronavirus pandemic reported significantly weaker growth in investment in digital technologies. In 2021, those firms that had made greater use of remote working arrangements since the onset of the coronavirus pandemic, in particular, upped their investment in digital goods. All in all, the recent surge in digitalisation increased the digital advantage of large firms, which tend to be more highly digitalised.

The results of the Bundesbank's BOP-F paint a mixed picture in terms of productivity effects. On the one hand, they corroborate the optimistic assessment that the surge in digitalisation witnessed by the corporate sector since the onset of the coronavirus pandemic, which is at least somewhat more than just short term, could, on balance, strengthen future productivity growth. It is unclear in all this how persistent the increase in digital uptake and the associated changes in firms' working processes will prove.⁶ On the other hand, large, productive firms, in particular, reported higher in-



Source: Bundesbank Online Panel – Firms (BOP-F). * Increase in investment defined as growth in investment of more than 1%. Mean of responses for ICT hardware, and software and databases. The information on working from home (wave 4), the impact of the coronavirus pandemic (wave 4) and firms' liquidity buffer (waves 9-11) are available only for a subset of the sample of waves 15-17 (investment in digital technologies). Deutsche Bundesbank

vestment in digital technologies, while digitalisation in smaller, less productive firms barely accelerated. The uneven progress in digitalisation thus deepened the digital divide in the German corporate sector. Owing to the slowdown in technology diffusion in recent years suggested by studies, aggregate productivity gains could therefore be somewhat smaller than would have been expected were additional investment in digital technologies distributed more evenly.8

⁶ See Barrero et al. (2021b) and Bick et al. (2022).

⁷ See Rückert et al. (2021).

⁸ See Akcigit and Ates (forthcoming) and Andrews et al. (2016).

Relationship between employment growth and previous year's labour productivity in manufacturing and the retail trade*

Item	2008-09	2011-2019	2020
Previous year's labour productivity ¹	3.58a (0.64)	6.13 ^a (0.62)	3.55 ^a (1.21)
Number of observations Number of firms	12,614 7,131	54,324 9,620	4,863 4,863
R ²	0.04	0.06	0.07

Sources: JANIS and Bundesbank calculations. * Table shows estimation coefficients for the relationship between employment growth (%) and the labour productivity of corporations in manufacturing and the retail trade lagged by one year. The estimation equation controls for industry and year fixed effects and for firm age and size. Estimates weighted on the basis of extrapolation factors. a Significant at the 1% level. 1 Deviation of log labour productivity from the industry-specific mean.

Deutsche Bundesbank

2020, the JANIS dataset shows a positive relationship between the level of firms' labour productivity in the pre-crisis year of 2019 and employment growth in the crisis year of 2020, taking industry-specific effects into account.²³ This implies that those firms that were among the more productive before the crisis added more jobs (or reduced fewer jobs) in 2020 than those that were already less efficient before the crisis. The results are consistent with those of the BOP-F, as they indicate a positive intrasectoral reallocation level effect.

For a comparison over time, the above estimation is carried out for different time periods. Specifically, the relationship between employment growth and the previous year's level of labour productivity at the firm level is estimated, taking into account other factors. A Changes in the estimated relationship over time indicate changes in the magnitude of productivity-enhancing reallocation, as they show the extent to which more productive firms add more jobs than less productive firms. As the dataset best covers manufacturing and retail trade corporations, the analysis is confined to these areas.

A comparison of the relationship estimated for 2020 with that for the years of the economic and financial crisis shows that the effects were

roughly the same in both economic downturns. In particular, firms with a high level of productivity in the previous year added jobs at an accelerated pace during the two crises. The gap to the change in employment of low-productivity firms was, in each case, nearly 4 percentage points.²⁵ However, the estimated effect over the 2011 to 2019 period, i.e. between the crises, was on average markedly

... was not particularly pronounced, however, and therefore does not indicate a strong cleansing effect

23 The JANIS dataset contains annual financial statements of German non-financial corporations which are sent to the Bundesbank for credit assessment purposes, as well as financial statements from public sources (see Becker et al. (2022)). This is a non-representative sample of firms in which the coverage of individual sectors in part varies considerably. In addition, the number of employees is not necessarily part of the annual financial statements submitted to the Bundesbank and is therefore reported only by some of the firms. In manufacturing and retail trade, the firmlevel data needed for the analysis are available for a larger number of corporations. In order to approximate as closely as possible the aggregated effects for the sectors under review, the regressions are weighted using weighting factors for turnover size classes and industries. 24 The regression model contains industry-specific effects;

24 The regression model contains industry-specific effects; the variation across firms within industries is therefore used to identify the effect of interest. Labour productivity is defined as value added per employee and enters the model as a deviation from the annual industry-specific mean. Value added is price adjusted using sector deflators. In addition, the regressions take into account firm size (total assets) in the previous year, firm age and year fixed effects. The estimated model follows Foster et al. (2016) and Andrews et al. (2021).

25 For this calculation, firms whose productivity level was one standard deviation above the industry-specific mean in the year prior to the crisis were compared with firms whose productivity level was one standard deviation below the mean

... which, compared with precrisis years ...

... on account of more start-

ups in the

knowledgebased services

other thinas

sector, amongst

larger. Over that period, the mean difference in growth rates between high-productivity and low-productivity firms amounted to 6.5 percentage points. Although estimation uncertainty is quite high, especially for the effect calculated for 2020, the results do suggest that productivity-enhancing employment reallocation in the COVID-19 crisis did not increase compared with non-crisis years.²⁶ A cleansing effect is therefore not apparent on the basis of this analysis. The extensive government support measures may have been a contributing factor here. These may have protected some less productive firms from having had to reduce the workforce by more.27 By contrast, financial market frictions are unlikely to have significantly impaired job reallocation during the pandemic.

Reallocation through firm entry

Number of startups rose exceptionally sharply in 2021 ... According to the German Council of Economic Experts, around 20% to 25% of job creation and job destruction in Germany is attributable to business start-ups and closures.²⁸ Newly established, innovative firms make an important contribution to productivity growth, job creation and economic structural change in the medium term. Following the recession-induced decline in business registrations in 2020, a strong countermovement was seen last year, with the number of start-ups rising by 9.7% on the year. On an average of 2020 and 2021, the number of business start-ups exceeded the average pre-crisis level of 2018 and 2019 by 1.7%. Start-ups therefore not only withstood the headwinds of the pandemic, but even increased markedly. Even so, on account of the typically low initial number of people employed at such firms, fluctuations in the number of start-ups during the pandemic are likely to have had little impact on productivity, on balance. In the medium term, though, the increased number of start-ups could strengthen productivity (see the box on pp. 58 ff.).

The sector structure of business start-ups over the past two years also improved the outlook for productivity growth. It reflects the accelerated structural shift towards knowledge-based services triggered by the pandemic. For example, there was a sharp increase in the number of start-ups in the information and communication sector, primarily on the back of the growth seen in information technology services in 2021, which was more than 20% up on the pre-crisis year 2019. In addition, the number of start-ups in the field of scientific and technical activities (particularly consultancy firms) as well as in financial and insurance activities climbed steeply. These, too, are comparatively productive sectors.²⁹ At the same time, however, startup figures in some less productive sectors in arithmetical terms also rose considerably as a result of the pandemic, with higher numbers being registered in sectors including retail trade, transporting (partly due to the sharp increase in express services) as well as human health and social work activities. By contrast, business registrations in other less knowledgeintensive, less productive sectors, such as construction and accommodation and food service activities, decreased significantly compared with the year before the onset of the crisis.

Reallocation through corporate insolvencies or closures

Corporate insolvencies declined sharply in both 2020 and 2021, falling by -15.5% and -11.7%,

26 Regressions for the United States and a panel of European countries also show that the reallocation effects in the economic and financial crisis were positive but not particularly pronounced (see Foster et al. (2016) and Bartelsman et al. (2019)).

27 See Boeri and Bruecker (2011). Additional data are needed to evaluate the possible effects of the support measures on allocative efficiency in Germany. Analyses for other European countries conclude that firms with lower productivity tended to take greater recourse to government support measures. See Kozeniauskas et al. (2022) and Bighelli et al. (2022).

28 See German Council of Economic Experts (2019).

29 The number of start-ups in the likewise relatively productive industrial sector declined, just as it had in the precrisis years.

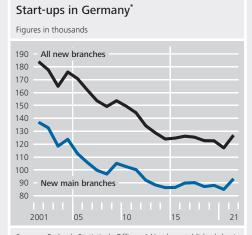
The role of start-ups during the COVID-19 crisis for economic activity in Germany

Start-ups play an important role in the growth dynamics of the corporate sector. Young firms do more than just create new jobs.1 They can also make important contributions to productivity growth by bringing innovative products to market, strengthening competition and boosting the productivityenhancing reallocation process in the corporate sector.² These effects usually materialise only after a certain period of time, as newly established enterprises tend to initially employ a fairly small number of employees and cease operations again relatively often. However, those start-ups that succeed in surviving in the market sometimes grow quickly and can thereby exert relevant macroeconomic effects.3

The number of start-ups established annually in Germany has declined sharply over the past two decades. More than 132,000 head offices were registered as businesses in 2002, compared with just over 86,000 in 2014. This corresponds to a decline of 35%. Even though registrations stabilised in subsequent years, on an average of the period

from 2015 to 2019, the number of enterprises founded – around 88,000 head offices per year – was still relatively small. The 2020 recession pushed firm births down to just under 85,000 (a decline of 3.5% on the year). In the following year, however, they rose sharply, increasing by almost 10% to more than 93,000. On an average of the period from 2020 to 2021, then, the number of start-ups exceeded pre-pandemic levels.

But this does not yet constitute a trend reversal. Countermovements in the number of start-ups have already previously been observed in individual years without business registrations then remaining at a higher level in the long run. In addition, there are structural reasons for declining firm births reasons on which the pandemic is unlikely to have had much of an impact. They have also led to declines in other countries in recent years. One of these reasons is demographic change, something that is also affecting Germany.4 In ageing populations, the generally lower level of creativity, higher average risk aversion, a shrinking labour force and usually more unfavourable growth prospects serve as barriers to establishing a start-up. Another reason could be the slower diffusion of knowledge from frontier firms to other firms in an industry that has been observed over the past two decades.⁵ A decline in knowledge diffusion tends to be as-



Source: Federal Statistical Office. * Newly established businesses of greater economic significance according to the business registration statistics.

Deutsche Bundesbank

- 1 See, for example, Haltiwanger et al. (2013).
- **2** See, for example, Aghion et al. (2004), Acemoglu et al. (2018) and Haltiwanger et al. (2016).
- 3 See Haltiwanger et al. (2016).
- 4 See Ouimet and Zarutskie (2014), Liang et al. (2018), Emes et al. (2018), Röhe and Stähler (2020), Peters and Walsh (2021) and Hopenhayn et al. (2022).
- **5** See Akcigit and Ates (forthcoming); Andrews et al. (2016); Calvino et al. (2020).

sociated with shifts in the structure of markets and digital technologies. It makes it more difficult for young firms to catch up with market leaders, thereby reducing incentives to start a business.

The resilience of start-ups in Germany during the pandemic may have prevented worse losses in value added, and it could support labour productivity in the medium term.⁶ That is because, had the short-term drop in firm entry at the start of the pandemic not been rapidly counterbalanced, labour productivity would probably have been lower over the next few years. Following a study by Gourio et al. (2016) for the United States, the role of firm births for economic activity in Germany can be roughly estimated. Data from the Federal Statistical Office and State Statistical Offices on startups, gross domestic product (GDP) and em-

and labour productivity*

Percentage deviation from baseline

Change in labour productivity following a one-off increase in the number of start-ups by 15%¹

+0.3

+0.2

+0.1

90% confidence interval

Estimated relationship between start-ups

Sources: Federal Statistical Office and State Statistical Offices, OECD and Bundesbank calculations. * Impulse response estimated using local projections (Jorda, 2005). Standard errors clustered at the district level. 1 This corresponds to one standard deviation of the change in the number of start-ups. Deutsche Bundesbank

Years

6 A sharp decline in firm births can amplify losses in value added during crises and also slow the economic recovery. See Clementi and Palazzo (2016).

7 See Jordà (2005) and Gourio et al. (2016). The estimation equation is as follows: $y_{l,t+k} = \gamma^k g_{l,t} + \, \delta^k x_{l,t} +$ $\alpha_l^k + \alpha_{rt}^k + \varepsilon_{lt}^k$ where l denotes a NUTS 3 region (or district), r a NUTS 2 region (usually a government region) and t a year. $y_{l,t+k}$ is the dependent variable (GDP, employment or labour productivity) at time t + k, and $g_{l,t}$ represents the log change in the number of startups. $x_{l,t}$ contains control variables for the years t and t-1; these comprise the dependent variable as well as the population, GDP, participation rate, building land prices and the value added share of the manufacturing sector in district l. With the exception of the local participation rate obtained from the OECD, all data are from the Federal Statistical Office and State Statistical Offices. α_l^k and α_{rt}^k are fixed district and government region-year effects. Fixed district effects take account of time-constant, unobserved differences between districts. Fixed government region-year effects take account of unobserved annual shocks at the NUTS 2 level. They reflect regional demand or supply shocks, for example. As only nominal GDP information is available at the district level, they also control for unobserved price developments at the government region level. One assumption on which the analysis is based is that price developments of districts within government regions are similar and any differences are largely captured by the other control variables. The estimates are calculated using data from 2010 to 2019. The first and last percentile of the growth in the number of startups are winsorised.

8 See also German Council of Economic Experts (2019) for an analysis with regional data on this issue.

ployed persons at the district level are used for this purpose. In addition to the establishment of main branches of enterprises, the establishment of dependent and independent branches is also taken into account, as they can also be important for the local economy. An estimation model based on local projections shows how local GDP and local labour productivity change after an increase in the number of local startups. Various other determinants are also taken into account in the estimation framework.

The estimated effect of an increase in the number of start-ups on GDP in the first two years is close to zero and statistically insignificant. Only thereafter is there a significant positive relationship. This finding reflects the lagged, but distinct, effect of firm entry on economic activity. By contrast, the estimated impact of the increase in the number of start-ups on local employment is

consistently small and statistically insignificant. This could be related to the fact that start-ups tend to recruit employees from other firms or to hire displaced employees before they register as unemployed or leave the labour market. This supports the hypothesis that start-ups promote the reallocation process in the corporate sector. The picture for labour productivity thus resembles the one for GDP. A significant positive effect is observed from the third year and ranges from 0.1% to 0.2%. Taken in isolation, the decline in firm births in 2020 would therefore lead to one-off losses in labour productivity growth of less than 0.1 percentage point three years later. While this effect is manageable, it is also not negligible when compared with the average growth in real gross value added per employed person in Germany of around 0.6% between 2011 and 2019. That said, the results suggest that the subsequent strong rebound in the

number of start-ups in 2021 more or less offsets this effect with a one-year lag.⁹

9 These back-of-an-envelope calculations do not take into account the sectoral structure of the start-ups.

Insolvencies down sharply in 2020 and 2021 ... respectively, on the year.30 Government support measures and the temporary suspension of the obligation to file for insolvency contributed substantially to this.31 The subsequent implications for productivity growth depend on the types of firms that were protected from insolvency. Overall, preserving generally profitable firms which became distressed through external shocks as a result of the pandemic is likely to have a positive impact on aggregate productivity, as this shields productive jobs and productive capital. In particular, intangible knowledge capital pertaining to, for example, production and demand, corporate culture or relationships with customers and financial institutions would otherwise be lost, for the most part.³² If, on the other hand, it was mostly firms with low levels of productivity that benefited from the support measures – firms that would otherwise have closed were it not for the outbreak of the pandemic - the impact on aggregate productivity would be unambiguously negative.

Evaluations show that insolvencies, particularly among micro firms, fell sharply during the pandemic.³³ These tended to be firms with belowaverage productivity. There is evidence that these firms benefited in part from free-rider effects.³⁴ This means that some of these firms that benefited from support measures had already been experiencing financing problems before the pandemic and might have filed for insolvency in 2020 in the absence of these measures. However, owing to the small size of

... particularly among micro firms

³⁰ Since the financial and economic crisis, insolvency figures had been continually declining (on an annual average of almost 6% between 2011 and 2019). During the crisis year of 2009, by contrast, they rose by 11.6%.

³¹ See Deutsche Bundesbank (2021b).

³² Guerrieri et al. (2022) show, furthermore, in a theoretical framework, that an increase in firm exits resulting from an asymmetric negative shock such as the coronavirus pandemic can amplify a recession.

³³ See Deutsche Bundesbank (2021b) and Creditreform (2019, 2020 and 2021).

³⁴ See Dörr et al. (2022).

these firms, the impact on aggregate productivity growth is likely to be modest.³⁵

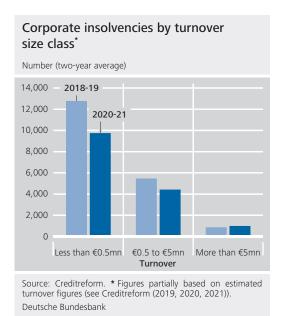
Steep decline in closures in accommodation and food service activities sector and retail trade

Many firms that close down are not involved in insolvency proceedings. Furthermore, such proceedings do not necessarily mean that a firm will exit the market. With regard to reallocation effects, then, closures are of particular significance. But in business deregistrations, too, a sharp decline, of -13.6%, was seen in 2020, and in 2021, the number of business closures remained at the low level of the previous year. Business closures decreased in almost all sectors. However, accommodation and food service activities and trade alone accounted for half of the decline in business deregistrations, in numerical terms. Firms in these sectors were heavily affected by the measures taken to contain the coronavirus pandemic, and therefore also benefited disproportionately from support measures. In this regard, these sectors in particular might see further firms exit the market with a lag once government support has been fully phased out, which means that certain productivity-enhancing effects might still materialise.

Conclusion

Intrasectoral reallocation counteracted productivity decline

The coronavirus pandemic had a highly heterogeneous impact on the different parts of Germany's corporate sector, as evidenced by the large dispersion in the growth of value added and turnover over the past two years. The dispersion of employment growth was not quite as pronounced, but still increased on the years prior to the pandemic. However, the intersectoral shifts in employment shares did not produce any noteworthy productivity effects. Analyses based on firm-level microdata, on the other hand, suggest that the intrasectoral reallocation of jobs between firms bolstered productivity growth during the pandemic. Even so, labour productivity per person employed declined overall.



Compared with the pre-crisis period, these productivity-enhancing reallocation effects were not particularly pronounced. This is consistent with the sharp decline in the number of corporate insolvencies and business closures observed over the past two years among micro firms, which are usually more vulnerable to crises and tend to be less productive. Furthermore, business closures decreased steeply above all in the accommodation and food service activities and retail trade sectors, which were hit hard by the pandemic and have low levels of productivity. Viewed overall, then, the pandemic did not trigger a pronounced cleansing effect in Germany.

Government support measures are likely to have played an important role in this regard. Whilst a conclusive assessment of the productivity effects produced by these measures is still pending, it can be said that this assistance for firms was granted according to how they had been affected by the pandemic and their financing requirements, whilst aspects such as the firms' profitability were of secondary import-

Government assistance counteracted productivityenhancing reallocation effects

No cleansing effect from the

recession

³⁵ Studies for France and Italy find no evidence to suggest that the coronavirus pandemic led to a broad-based increase in the number of zombie firms or a disproportionate take-up of support measures by zombie firms. See Cros et al. (2021) and Pelosi et al. (2021).

ance.³⁶ The aim of the measures was to support those firms that had run into difficulties through external shocks as a result of the pandemic – an aim which seems to have largely been achieved. As a result, productive capital is likely to have been preserved and systemic risk

averted. That said, the government assistance measures may have partially hampered stronger productivity-enhancing reallocation effects.

36 See Dörr et al. (2022).

List of references

Acemoglu, D., U. Akcigit, H. Alp, N. Bloom and W. Kerr (2018), Innovation, reallocation and growth, American Economic Review, Vol. 108(11), pp. 3450-3491.

Aghion, P., R. Blundell, R. Griffith, P. Howitt and S. Prantl (2004), Entry and productivity growth: Evidence from microlevel panel data, Journal of the European Economic Association, Vol. 2(2-3), pp. 265-276.

Akcigit, U. and S. Ates (forthcoming), What happened to U. S. business dynamism?, Journal of Political Economy.

Anayi, L., J. M. Barrero, N. Bloom, P. Bunn, S. Davis, J. Leather, B. Meyer, E. Mihaylov, P. Mizen and G. Thwaites (2021), Labour market reallocation in the wake of Covid-19, VOXEU column of 13 August 2021.

Andrews, D., A. Charlton and A. Moore (2021), COVID-19, productivity and reallocation: Timely evidence from three OECD countries, OECD Economics Department Working Paper, No 1676.

Andrews, D., C. Criscuolo and P. Gal (2016), The best versus the rest: The global productivity slow-down, divergence across firms and the role of public policy, OECD Productivity Working Papers, No 2016-15.

Anzoategui, D., D. Comin, M. Gertler and J. Martinez (2019), Endogenous technology adoption and R&D as sources of business cycle persistence, American Economic Journal: Macroeconomics, Vol. 11(3), pp. 67-110.

Bachmann, R., C. Bayer, C. Merkl, S. Seth, H. Stüber and F. Wellschmied (2021), Worker churn in the cross section and over time: New evidence from Germany, Journal of Monetary Economics, Vol. 117(C), pp. 781-797.

Barlevy, G. (2003), Credit market frictions and the allocation of resources over the business cycle, Journal of Monetary Economics, Vol. 50(8), pp. 1795-1818.

Barrero, J. M., N. Bloom, S. J. Davis and B. H. Meyer (2021a), COVID-19 is a persistent reallocation shock, AEA Papers and Proceedings, Vol. 111, pp. 287-291.

Barrero, J. M., N. Bloom and S. J. Davis (2021b), Why working from home will stick, NBER Working Paper, No 28731.

Bartelsman, E., P. Lopez-Garcia and G. Presidente (2019), Labour reallocation in recession and recovery: Evidence for Europe, National Institute Economic Review, Vol. 247(1), pp. R32-R39.

Becker, T., E. Biewen, S. Schultz and M. Weisbecker (2022), Individual financial statements of non-financial firms (JANIS) 1997-2021, Deutsche Bundesbank Data Report 2022-10 – Metadata Version 9.

Bellmann, L., P. Bourgeon, C. Gathmann, C. Kagerl, D. Marguerit, L. Martin, L. Pohlan and D. Roth (2021), Digitalisation in companies: The COVID-19 pandemic as a push factor, Wirtschaftsdienst, Vol. 101, pp. 713-718.

Bick, A., A. Blandin and K. Mertens (2022), Work from home before and after the COVID-19 outbreak, Federal Reserve Bank of St. Louis, Working Papers, No 2022-008A.

Bighelli, T., T. Lalinsky and J. Vanhala (2022), Covid-19 pandemic, state aid and firm productivity, Bank of Finland Research Discussion Paper, No 1/2022.

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

Boeri, T. and H. Bruecker (2011), Short-time work benefits revisited: some lessons from the Great Recession, Economic Policy, Vol. 26(68), pp. 699-765.

Caballero, R. J. and M. L. Hammour (2005), The cost of recessions revisited: A reverse-liquidationist view, The Review of Economic Studies, Vol. 72(2), pp. 313-341.

Caballero, R. J. and M. L. Hammour (1994), The cleansing effect of recessions, American Economic Review, Vol. 84(5), pp. 1350-1368.

Calvino, F., C. Criscuolo and R. Verlhac (2020), Declining business dynamism: structural and policy determinants, OECD Science, Technology and Innovation Policy Papers, No 94.

Chodorow-Reich, G., O. Darmouni, S. Luck and M. Plosser (2022), Bank liquidity provision across the firm size distribution, Journal of Financial Economics, Vol. 144, pp. 908-932.

Clementi, G. L. and B. Palazzo (2016), Entry, exit, firm dynamics, and aggregate fluctuations, American Economic Journal, Vol. 8(3), pp. 1-41.

Comin, D.A., M. Cruz, X. Cirera, K.M. Lee and J. Torres (2022), Technology and resilience, NBER Working Paper, No 29644.

Creditreform (2021), Insolvenzen in Deutschland, Jahr 2021, Creditreform Wirtschaftsforschung, December 2021.

Creditreform (2020), Insolvenzen in Deutschland, Jahr 2020, Creditreform Wirtschaftsforschung, December 2020.

Creditreform (2019), Insolvenzen in Deutschland, Jahr 2019, Creditreform Wirtschaftsforschung, December 2019.

Cros, M., A. Epaulard and P. Martin (2021), Will Schumpeter catch Covid-19?, CEPR Discussion Paper, No DP15834.

D'Adamo, G., M. Bianchi and L. Granelli (2021), Digitalisation and beyond: The COVID-19 pandemic and productivity growth in G20 countries, European Economy Economic Briefs 067, Directorate General for Economic and Financial Affairs (DG ECFIN), European Commission.

Decker, R.A., J. Haltiwanger, R.S. Jarmin and J. Miranda (2017), Declining dynamism, allocative efficiency, and the productivity slowdown, American Economic Review, Vol. 107(5), pp. 322-326.

Dettmann, E., A. Diegmann, M. Mertens, S. Müller, V. Plümpe, U. Leber and B. Schwengler (2021), Die deutsche Wirtschaft in der Pandemie. IAB Research Report, No 11/2021.

Deutsche Bundesbank (2021a), The slowdown in euro area productivity growth, Monthly Report, January 2021, pp. 15 ff.

Deutsche Bundesbank (2021b), Corporate insolvencies in Germany during the coronavirus crisis, Monthly Report, December 2021, pp. 47 ff.

Deutsche Bundesbank (2021c), Remote working and its impact on labour productivity, Monthly Report, October 2021, pp. 58 f.

Dörr, J. O., G. Licht and S. Murmann (2022), Small firms and the COVID-19 insolvency gap, Small Business Economics, Vol. 58, pp. 887-917.

Emes, J., T. Jackson and S. Globerman (2018), Small business entry rates, demography, and productivity performance in selected developed countries, in S. Globerman and J. Clemens, Demographics and entrepreneurship: Mitigating the effects of an aging population, Chapter 3, pp. 77-109.

European Investment Bank (2022), Digitalisation in Europe 2021-2022: Evidence from the EIB Investment Survey.

Foster, L., C. Grim and J. Haltiwanger (2016), Reallocation in the Great Recession: Cleansing or not?, Journal of Labor Economics, Vol. 34(S1), pp. 293-331.

Foster, L., J. Haltiwanger and C. Syverson (2008), Reallocation, firm turnover, and efficiency: Selection on productivity or profitability?, American Economic Review, Vol. 98(1), pp. 394-425.

German Council of Economic Experts (2019), Dealing with structural change, Annual Report 2019/20.

German Economic Institute (2021), Die Effekte der Corona-Pandemie auf den Onlinehandel in Deutschland, IW-Kurzbericht, No 87/2021.

Gourio, F., T. Messer and M. Siemer (2016), Firm entry and macroeconomic dynamics: A state-level analysis, American Economic Review, Vol. 106(5), pp. 214-218.

Guerrieri, V., G. Lorenzoni, L. Straub and I. Werning (2022), Macroeconomic implications of COVID-19: Can negative supply shocks cause demand shortages?, American Economic Review, Vol. 112(5), pp. 1437-1474.

Haltiwanger, J. C., H. R. Hyatt, E. McEntarfer and M. Staiger (2021), Cyclical worker flows: Cleansing versus sullying, NBER Working Paper, No 28802.

Haltiwanger, J., R. S. Jarmin, R. Kulick and J. Miranda (2016), High growth young firms: Contribution to job, output, and productivity growth, in Measuring entrepreneurial businesses: Current knowledge and challenges, National Bureau of Economic Research, pp. 11-62.

Haltiwanger, J., R.S. Jarmin and J. Miranda (2013), Who creates jobs? Small versus large versus young, The Review of Economics and Statistics, Vol. 95(2), pp. 347-361.

Hopenhayn, H., J. Neira and R. Singhania (2022), From population growth to firm demographics: Implications for concentration, entrepreneurship and the labor share, Econometrica, Vol. 90(4), pp. 1879-1914.

Jordà, Ò. (2005), Estimation and inference of impulse responses by local projections, American Economic Review, Vol. 95(1), pp. 161-182.

Kaus, W., V. Slavtchev and M. Zimmermann (2020), Intangible capital and productivity: Firm-level evidence from German manufacturing, IWH Discussion Papers, No 1/2020.

Kehrig, M. (2015), The cyclical nature of the productivity distribution, mimeo.

Kozeniauskas, N., P. Moreira and C. Santos (2022), On the cleansing effect of recessions and government policy: Evidence from Covid-19, European Economic Review, Vol. 144(C), pp. 1-23.

Liang, J., H. Wang and E. Lazear (2018), Demographics and entrepreneurship, Journal of Political Economy, Vol. 126(S1), pp. 140-196.

Modery, W., M.T. Valderrama, P. Lopez-Garcia et al. (2021), Key factors behind productivity trends in EU countries, ECB Occasional Paper Series, No 268.

OECD (2020), Digital transformation in the age of COVID-19: Building resilience and bridging divides, Digital Economy Outlook 2020 Supplement.

OECD (2018), OECD compendium of productivity indicators 2018, OECD Publishing.

OECD (2014), Entrepreneurship at a glance 2014, OECD Publishing.

Osotimehin, S. and F. Pappadà (2017), Credit frictions and the cleansing effect of recessions, The Economic Journal, Vol. 127(602), pp. 1153-1187.

Ouimet, P. and R. Zarutskie (2014), Who works for startups? The relation between firm age, employee age, and growth, Journal of Financial Economics, Vol. 112(3), pp. 386-407.

Pelosi, M., G. Rodano and E. Sette (2021), Zombie firms and the take-up of support measures during Covid-19, Banca d'Italia Occasional Papers, No 650.

Peters, M. and C. Walsh (2021), Population growth and firm dynamics, NBER Working Papers, No 29424.

Röhe, O. and N. Stähler (2020), Demographics and the decline in firm entry: Lessons from a lifecycle model, Deutsche Bundesbank Discussion Paper No 15/2020.

Rückert, D., R. Veugelers, A. Virginie and C. Weiss (2021), COVID-19 and the corporate digital divide, in The Great Reset: 2021 European Public Investment Outlook, F. Cerniglia, F. Saraceno and A. Watt (eds.), Cambridge: Open Book Publishers.

Schmidt, J. (2021), Arbeitskräftefluktuation im Jahr 2020: Pandemie hinterlässt Spuren, IW-Kurzbericht, No 82/2021.

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

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

The performance of German credit institutions in 2021

German credit institutions recorded a strong improvement in performance in 2021 compared with the year before. Profit for the financial year before tax went up by \leq 12.8 billion and, at \leq 27.1 billion, hit almost double the previous year's figure, taking it well above the long-term average of \leq 18.0 billion for the first time since 2017.

Three-quarters of the increase was the result of a year-on-year reduction in net valuation charges of just over 70%. Against the backdrop of a strong macroeconomic recovery and the absence of the credit defaults initially feared at the beginning of the coronavirus pandemic, German banks scaled back risk provisioning significantly in comparison with 2020 and also released some of the risk provisions that they had formed that year. An increase in operating income of around 5% was another key contributor to the improvement in profit for the year before tax, though this rise was only slightly more than half as significant as the decline in net valuation charges. Meanwhile, the profit for the financial year before tax was weighed down by an increase in banks' general administrative spending of around 6% as against 2020. Despite higher operating income, this led to a slight deterioration in cost efficiency: the cost/income ratio of German credit institutions rose by 0.6 percentage point to 72.9% in the reporting year.

Net commission income proved to be the main driver of growth in operating income in 2021. Climbing by around 18%, it also further built up its role as the second most important source of income for German credit institutions. Net interest income, which remains the most important source of income, recorded a slight increase of 1.4% for the first time since 2018. Nevertheless, its share in operating income declined again in the reporting year. That said, the renewed decline in interest income was more than offset for the institutions by a more pronounced reduction in interest expenditure. In addition, up by around 40%, the trading result also fed into the increase in operating income, whereas the other operating result deteriorated by more than two-thirds on the year. The trading result and other operating result remained only of minor importance as sources of income, however.

In the current year, Russia's war of aggression on Ukraine, in particular, is acting as a drag on macroeconomic developments in Germany and around the globe. With this comes an increased likelihood of credit defaults among both non-financial corporations and households, which could take a toll on the profitability of German credit institutions. Furthermore, against the backdrop of significantly higher inflation expectations, the European Central Bank (ECB) has adjusted its monetary policy stance and taken first steps to bring the era of negative interest rates to an end. Although the rising interest rate level could weigh on German banks' profitability in the short term, the earnings-enhancing effects of monetary policy normalisation are likely to bolster the performance of German institutions in the medium term.

Business environment and structural developments in the German banking sector

In 2021, German credit institutions once again faced a challenging market environment that was still characterised by the effects of the coronavirus pandemic and the ongoing negative interest rate environment. However, the feared defaults on loans did not materialise. A strong macroeconomic recovery overall, combined with extensive monetary and fiscal policy measures, helped the German banking system to close the reporting year in better shape than expected and continue to perform its functions unimpaired.¹

Macroeconomic setting

Business environment still feeling strain of coronavirus pandemic Following the sharp slump in the previous year, economic output in Germany rose steeply in 2021. Despite growth of 2.9%, however, gross domestic product (GDP) nevertheless remained significantly below the pre-crisis level of 2019.² Industry, in particular, suffered from bottlenecks in the supply of intermediate goods, preventing it from fully realising growth potential. By contrast, private consumption and the services sector were able to rebound strongly in some cases during the second and third quarters of 2021, once coronavirus protection measures were lifted. Extensive containment measures in response to infection rates in the fourth quarter led to severe setbacks to both, though.³

Extensive fiscal policy and regulatory measures again prevented macroeconomic downward spiral in 2021

Against this backdrop, German fiscal policy again made a vital contribution to stabilisation in 2021. The economy and households received considerable support in the shape of measures such as transfers to enterprises and short-time working benefits.⁴ The stabilisation measures introduced by bank regulators in 2020⁵ were also initially kept in place in the reporting year, though their appropriateness was the subject of ongoing review over the course of the year. For example, the recommendation that banks limit dividends, and the flexibility granted by

supervisory authorities regarding general payment moratoria both ended.⁶ The aforementioned measures had a hand in preventing the defaults on loans that had been feared in the early days of the pandemic and enabling banks' lending to the real economy to go on unhindered.⁷

Like the fiscal policy and bank regulatory measures, monetary policy, too, continued to be influenced by the coronavirus pandemic in 2021. As the Governing Council of the ECB expected inflation rates of below 2% in the medium term, it maintained its very expansionary monetary policy stance. The key interest rates were left unchanged at their historically low levels8 and the asset purchase programme (APP) was continued.9 The emergency monetary policy measures introduced to combat the effects of the coronavirus pandemic were also kept in place. The aim was still primarily to provide banks with liquidity and, ultimately, to ensure the supply of credit to the real economy. Additional targeted longer-term refinancing operations (TLTRO-III), which German credit institutions made large-scale use of, 10 gave banks access to liquidity at particularly favourable conditions¹¹ in order to support lending to the

Monetary policy still very accommodative; emergency monetary policy measures to counter the effects of the coronavirus pandemic

- 1 See Deutsche Bundesbank (2022a), p. 30 and Deutsche Bundesbank (2021a), p. 7.
- 2 See Deutsche Bundesbank (2022a), p. 16.
- **3** See Deutsche Bundesbank (2022b), p. 8, Deutsche Bundesbank (2021b), p. 7, Deutsche Bundesbank (2021c), p. 8 and Deutsche Bundesbank (2021d), pp. 7 f.
- 4 See Deutsche Bundesbank (2022a), pp. 26 f.
- **5** For a detailed list of the measures taken by bank regulators and supervisors in response to the coronavirus pandemic, see Deutsche Bundesbank (2021e), p. 92.
- 6 See Deutsche Bundesbank (2022a), p. 30.
- 7 See Deutsche Bundesbank (2022a), p. 30.
- **8** The main refinancing rate was 0%, while the interest rates on the marginal lending facility and the deposit facility stood at 0.25% and -0.5%, respectively.
- 9 See Deutsche Bundesbank (2022a), p. 20.
- 10 See Deutsche Bundesbank (2022a), p. 20.
- 11 In ideal circumstances, i.e. provided eligible net lending between October 2020 and December 2021 reached the lending performance threshold, banks could benefit from an interest rate of up to -1.0% when borrowing under TLTRO-III; see https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr201210_1~e8e95af01c.en.html for details. In such cases, the interest income per euro that credit institutions were able to generate by recourse to TLTRO-III would have exceeded interest expenditure incurred through use of the deposit facility with its likewise negative interest rate of up to -0.5%.

Monetary and fiscal policy

measures, as

economy. The aim of the pandemic emergency purchase programme (PEPP) was to counter the pandemic-related risks to monetary policy transmission.¹²

Equity and bond markets initially on road to recovery; dampened toward the end of the year, partly due to higher inflation expectations The monetary policy, fiscal policy and banking regulatory measures not only supported the German banking system, but also had a positive impact on the equity and bond markets. In the first two quarters of 2021, German stock markets temporarily hit historical highs owing to firmer prospects of a macroeconomic recovery and higher corporate earnings expectations. In the fourth quarter of 2021, however, the upturn in the equity markets came to a halt, and the picture was predominantly one of moderate price losses on the previous quarter. This was due to rising inflationary risks and the resulting market expectations of imminent monetary policy tightening. In the fourth of the previous quarters are given by the previous quarters.

In the bond markets, hopes of the economic recovery continuing led yields on ten-year Federal bonds (Bunds) to rise somewhat, reaching roughly the level recorded at the start of 2020. From then, they moved sideways under the influence of changing assessments of the pandemic situation, only surging from the end of the fourth quarter of 2021 due to rising inflationary pressure coupled with market expectations of monetary policy tightening. This put the yields on ten-year Bunds back in positive territory for the first time since the second quarter of 2019.15 At the close of 2021, the yield curve derived from the yields on Federal securities was considerably steeper in the short and medium-term maturity segments than it had been at the beginning of the year.¹⁶

Balance sheet and structural developments in the German banking sector

Growth in the aggregate of German credit institutions' annual average total assets¹⁷ was down by just under two-thirds compared with 2020. At 2.8%, the growth rate of average

total assets in 2021 was close to its long-term average of 2.0%.

However, when looking at individual categories of banks, there were greater disparities than in 2020. While 2020 saw aggregate annual average total assets rise across all categories of banks, big banks, in particular, recorded a decline of 10.5% in 2021. By contrast, savings banks and credit cooperatives registered slightly higher growth rates in 2021 than in the previous year, at 7.7% each. In both cases, lending and deposit business is likely to have been the main driver of this, having grown somewhat more strongly in the reporting year than in 2020.18 However, regional banks and other commercial banks recorded the highest yearon-year growth in their balance sheet (+26.3%), with just over two-thirds of the total increase attributable to a single institution that expanded its presence in Germany after Brexit.¹⁹

well as the persistent negative interest rate environment, continued to drive balance sheet growth, albeit at a slower pace savings slightly expreviending ten the newhat than in other

According to data from the monthly balance sheet statistics, the assets and liabilities sides of the aggregated bank balance sheet followed a similar growth pattern to 2020 in the reporting year, albeit developing at a slower pace in some cases. With regard to the assets side of the aggregated bank balance sheet, German banks' balances with the central bank once again constituted the most significant growth item. On an annual average for 2021, a sharp

Central bank balances once again the most significant growth item on the assets side of the aggregated bank balance sheet

¹² See Deutsche Bundesbank (2022a), pp. 20 ff.

¹³ See Deutsche Bundesbank (2021c), pp. 52 f. and Deutsche Bundesbank (2021d), p. 44.

¹⁴ See Deutsche Bundesbank (2022b), p. 38 and Deutsche Bundesbank (2021b), p. 42.

¹⁵ See Deutsche Bundesbank (2022b), pp. 40 f. and Deutsche Bundesbank (2021b), pp. 45 f.

¹⁶ See Deutsche Bundesbank (2022b), p. 41.

¹⁷ The figure for total assets was determined on the basis of the rules contained in the German Commercial Code (Handelsgesetzbuch).

¹⁸ According to data from the monthly balance sheet statistics, savings banks saw slightly higher growth in lending to domestic non-banks in 2021 than in 2020 – a 0.2 percentage point rise taking it to +4.9%; credit cooperatives recorded growth of +6.6%, which was 0.6 percentage point higher than in the previous year. At +7.0% in each case, both categories of banks saw domestic non-banks' deposits grow roughly 0.6 percentage point more strongly than in the previous year.

¹⁹ See the box on p. 71 f.

increase here resulted in a new historical high of around €1,000 billion in total. At +43.0%, the percentage growth was slightly below the level of the previous year, but the absolute increase of €307 billion again exceeded the 2020 figure by a significant margin of around €90 billion.²⁰ Chiefly responsible for the increase in balances with the central bank were the Eurosystem's asset purchase programmes (public sector purchase programme (PSPP) and PEPP) and German banks' extensive use of TLTRO-III.²¹

Lending the second major driver of growth on the assets side of the aggregated bank balance sheet; pace of growth slower than in the previous year, though

As in 2020, lending continued to be a significant factor in driving growth on the assets side of the aggregated bank balance sheet in the reporting year. However, with an increase of €114 billion in total (previous year: €144 billion), the contribution made by loans to domestic non-banks only amounted to slightly more than one-third of total growth, compared with balances with the central bank. Loan growth in 2021 was one percentage point lower than in 2020, averaging 3.2%. This is likely to have been mainly due to the decline in short-term loans to enterprises and households, which were down by an annual average of 5.8%. The second quarter of 2021, in particular, saw increased repayments of short-term loans to enterprises, some of which had been taken out as a precautionary measure intended to safeguard liquidity during the coronavirus pandemic. The upturn in overall economic activity as well as the disbursement of government transfers to firms particularly hard-hit by the coronavirus pandemic meant firms' financing needs lessened in the second quarter of 2021.²² Besides this, reduced consumer lending also played into the decline. In the first and fourth quarters of 2021, especially, the restrictions on economic and social life as a result of the pandemic had a dampening effect here.²³

Distinct growth was recorded, meanwhile, for medium and long-term loans to domestic non-financial corporations and households. Even so, the 5.1% increase was slightly shy of the 20-year peak of 5.3% reached in 2020. As in the

previous year, housing loans were the main driver of this development. At 7.1%, their growth in the reporting year even outstripped the 20-year historical high of the previous year by one percentage point.

Comparing the categories of banks, savings banks and credit cooperatives recorded the highest growth rates for housing loans, at +7.7% and +8.8%, respectively. In addition, savings banks and credit cooperatives together accounted for just under two-thirds of the absolute increase in housing loans.

As before, this growth was the product of factors on both the supply and demand side. In particular, robust activity in the construction sector and a continuation of favourable financing costs, but also the sharp rise in prices for construction work and residential property, are likely to have buoyed the persistently brisk demand for housing loans.²⁴

Greater demand also drove considerable growth in medium and long-term loans to non-financial corporations. The overall economic recovery in the third quarter of 2021 led to an increase in financing needs, especially in domestically oriented sectors such as construction and real estate. In addition, funding needs for refinancing, debt restructuring and renegotiation remained at elevated levels.²⁵

On the supply side, too, banks continued to have a heightened interest in lending business, as obtaining the particularly attractive interest rate on TLTRO-III operations was contingent upon hitting specific lending performance thresholds for the relevant reporting dates.²⁶

Bundesbank (2021d), p. 8.

²⁰ The cited figures do not include the cash holdings of German credit institutions.

²¹ See Deutsche Bundesbank (2021b), p. 32.

²² See Deutsche Bundesbank (2021c), p. 8.

²³ See Deutsche Bundesbank (2022b), p. 37 and Deutsche Bundesbank (2021d), p. 36.

²⁴ See Deutsche Bundesbank (2021c), p. 43 and Deutsche Bundesbank (2021d), p. 36.

²⁵ See Deutsche Bundesbank (2021b), p. 8 and pp. 38 f. 26 See Deutsche Bundesbank (2022b), p. 8 and Deutsche

Interpreting profitability components broken down by category of banks in the context of Brexit

The balance sheet and profit and loss statistics of banks, or monetary financial institutions (MFIs), ¹ are broken down by category of banks. This makes it easier not only to identify and compare trends but also to better take account of the specifics and particularities of the individual categories.

The Bundesbank considers a variety of criteria when assigning individual banks to a particular category of banks,² and it also reviews these assignments annually.³

Brexit has seen the German banking sector face major structural changes in recent years, and these will continue to shape developments in the years to come: so that they might still be able to provide services in the European Union, large and international banks have taken steps from 2019 onwards such as relocating large parts of their business out of the United Kingdom to existing or newly founded institutions established in the European Union, including in Germany. "Brexit banks" is the catch-all used here to refer to these institutions.⁴ The resulting business policy, structural and organisational adjustments concern the "Regional banks and other commercial banks" category, in particular, but also, to some extent, the "Branches of foreign banks" and "Foreign banks" categories (the latter of which is a memo item).

The business models of the Brexit banks differ, in some cases considerably, from those of other banks based in Germany. For example, the business relocated to these institutions stems predominantly from capital market business. This income is reflected mainly in net commission income and the trading result. In addition, some Brexit banks primarily conduct Europe-wide business that is not linked to the German market and thus only partially reflects the profitability of local business. Whilst other German banks also operate business models that cover all of Europe, the scale of these is especially great for some large Brexit banks.

Looking at current profitability components by category of banks, Brexit banks are becoming

increasingly important, especially among regional banks and other commercial banks. Owing to their size and the ongoing expansion of their total assets, this effect is also likely to be observed to an ever-greater extent over the next few years. The significant improvement in the net commission income and trading result of regional banks and other commercial banks by around 40% and around 130% respectively in 2021 was due chiefly to the growth of a few major Brexit banks. However, the rise in administrative spending for regional banks and other commercial banks compared with 2020 was also due in large part to Brexit banks' expanded business volume.

The increasing importance of Brexit banks needs to be taken into account when interpreting the profitability components considered in this article, with a specific focus on regional banks and other commercial banks.

- 1 MFIs pursuant to Regulation (EU) 2021/379 of the European Central Bank (ECB/2021/2), Article 2(1) (OJ L 73, 3 March 2021, pp. 16-85).
- 2 Factors taken into consideration include business structure, type of business activity predominantly conducted (e.g. universal versus specialised bank), size of the bank, legal form, banking association membership, presence of a bank office network, operations abroad (via branches and subsidiaries), degree or scope of the bank's investment in other enterprises (participating interests, etc.), and ownership structure of the bank being assigned.
- **3** For more information on how the categories of banks are broken down, see the section "Categories of banks" under "Explanatory notes" (https://www.bundesbank.de/resource/blob/821484/e6e28e6c018a a7d06a5999f77e1f07ef/mL/erlaeuterungen-data.pdf).
- 4 It is not possible to clearly distinguish business relocations and changes to business models caused by Brexit from business policy decisions triggered by other factors. In addition, Brexit banks sometimes differ considerably in terms of their business models and the extent of their relocation activities. However, in the case of the institutions analysed here, Brexit was initially the main factor behind any changes. For the purposes of this box, this distinction is enough to highlight difficulties in interpreting profitability components given the business relocations and changes to business models within the affected categories of banks.
- **5** In 2021, Brexit banks accounted for just over 80% of the increase in the annual average total assets of regional banks and other commercial banks.

However, according to the Bank Lending Survey, neither lending to non-financial corporations nor to households saw any significant easing in credit standards and credit terms and conditions.²⁷ Private housing loans was the only area where credit standards and credit terms and conditions eased in the second quarter of 2021, though they were soon tightened again in the third quarter. This was due to an elevated level of credit risk according to banks' assessments and a reduced tolerance for risk.²⁸

Looked at in aggregate terms, the annual average balance sheet equity³² of German banks rose by 1.6% to €536 billion in 2021. Increases – in some cases substantial ones – were recorded by all categories of banks³³ except for big banks (-19.8%) and mortgage banks (-6.2%).³⁴ Regional banks and other commercial banks posted the highest growth rate (+16.0%). A significant portion of that growth was attributable to institutions that strengthened their presence in Germany in the wake of Brexit. Credit cooperatives and savings banks augmented their balance sheet equity by 6.4% and 3.7%, respectively, on an average for 2021.

Balance sheet equity increased slightly on aggregate

Another sharp rise in German banks' deposit holdings due to pandemic On the liabilities side of the aggregated bank balance sheet, pandemic-related uncertainty regarding future economic developments as well as restricted consumption options sent the volume of domestic households' and non-financial corporations' deposits soaring again. However, the increase weakened significantly over the course of 2021, mainly as a result of changes in household investment behaviour, meaning that only slight growth was seen towards the end of the year.²⁹ With average interest rates particularly on overnight deposits having fallen further over the course of the year and inflation rates having increased, households are likely to have become more acutely aware of the real costs involved in holding money.30

Overall, at 4.4%, the annual average increase in deposits held by domestic non-banks³¹ at German credit institutions in 2021 was around 0.5 percentage point lower than in the previous year. However, the total volume of €3,953 billion meant that a new historical high was reached. As in 2020, growth was concentrated on sight deposits, though at 9.6% their growth rate in the reporting year was just over one percentage point lower than in the previous year. By contrast, time and savings deposits were further scaled back.

Unlike in the previous year, developments in the deposit business varied widely across the different categories of banks. In the reporting year, larger growth was almost exclusively the preserve of savings banks, credit cooperatives and big banks. Overall, the consolidation process in the German banking sector continued at an accelerated pace in 2021. The total number of credit institutions decreased by 4.2%, following a year-on-year decline of only 2.2%. This was due, in particular, to mergers among credit cooperatives and departures of branches of foreign banks as a result of Brexit.³⁵

Consolidation process in German banking sector continued at accelerated pace

- 27 See Deutsche Bundesbank (2021b), pp. 38 f.
- 28 See Deutsche Bundesbank (2021b), p. 38.
- **29** See Deutsche Bundesbank (2022b), p. 34 and Deutsche Bundesbank (2021d), p. 35.
- 30 See Deutsche Bundesbank (2022b), pp. 34 f.
- **31** The deposits of domestic non-banks comprise sight deposits, time deposits and savings deposits as well as savings bonds held by domestic households, non-financial corporations, other financial corporations, general government and non-profit institutions.
- **32** Including the fund for general banking risks pursuant to Section 340g of the German Commercial Code.
- **33** Regional banks and other commercial banks, branches of foreign banks, Landesbanken, savings banks, credit cooperatives, building and loan associations as well as banks with special, development and other central support tasks.
- 34 When interpreting the data on the equity base, it should be borne in mind that the amounts transferred from the profit for the respective financial year do not increase balance sheet equity until the year after the annual accounts are adopted, while withdrawals from equity items are to be deducted at the latest when the annual accounts are prepared. Furthermore, as the data on the equity base are calculated as annual average values, the decline shown here for the big banks does not reflect losses actually observed in 2021, but rather a decline in equity capital already recorded in 2020 as a result of restructuring measures taken in 2019. For more details, see Deutsche Bundesbank (2020), pp. 95 ff.
- **35** Branches of UK institutions that had not yet ceased making use of EU passport arrangements by the end of 2020, despite Brexit entering into force on 1 January 2021, were not counted as departures until 2021. See Deutsche Bundesbank (2022c), p. 2.

Structural data on German credit institutions

End of year

	Number of	institutions	1	Number of	branches1		Number of e	employees ²	
Category of banks	2019	2020	2021	2019	2020	2021	2019	2020	2021
All categories of banks	1,553	1,519	1,456	26,620	24,060	21,697	560,895	551,976	540,365
Commercial banks Big banks	274 4	270 3	261 3	7,601 6,219	6,453 5,146	5,199 4,037	³ 153,250	³ 151,600	³ 146,900
Regional banks and other commercial banks	153	151	151	1,215	1,142	1,013			
Branches of foreign banks	117	116	107	167	165	149			
Landesbanken	6	6	6	236	210	179	28,150	27,150	27,150
Savings banks	380	377	371	8,971	8,318	7,732	205,000	200,700	194,950
Credit cooperatives	844	818	771	8,471	7,765	7,297	4 140,650	4 138,150	4 135,500
Mortgage banks	10	10	9	38	37	32			
Building and loan associations	19	18	18	1,278	1,259	1,239	5 12,850	5 12,500	5 12,900
Banks with special, development and other central support tasks	20	20	20	25	18	19	6 20,995	6 21,876	6 22,965

1 Source: Bank office statistics, in Deutsche Bundesbank, Banking statistics, tables contained in the Statistical Series, IV. Structural figures, multi-office banks, p. 104. The term "credit institution" is used as in the Banking Act, resulting in divergences from data in "Balance sheet statistics" and "Statistics on the banks' profit and loss accounts". 2 Number of full-time and part-time employees excluding the Bundesbank. Sources: Data provided by associations and Bundesbank calculations. 3 Employees in private banking, including mortgage banks established under private law. 4 Only employees whose primary occupation is in banking. 5 Only office-based employees. 6 Employees at public mortgage banks (mortgage banks established under public law), banks with special tasks established under public law and DZ Bank

Deutsche Bundesbank

The number of branches in Germany also fell again significantly, recording a decline of almost 10%. In addition to the impact of digitalisation on distribution channels as a result of greater use of online banking,36 this was also due to cost-cutting measures undertaken in the challenging business environment. Big banks, in particular, reduced their number of branches as part of extensive restructuring, but savings banks and credit cooperatives also scaled back their branch networks further.37

return on equity and their return on assets substantially. The aggregate profit for the financial year before tax almost doubled compared with 2020.

The main driver of this development was a sharp decline in net valuation charges compared with the previous year. German credit institutions significantly reduced their risk provisioning against the backdrop of low credit defaults and an improved macroeconomic envir-

Performance, profitability and cost efficiency

Generally speaking, the performance of German credit institutions improved considerably in 2021 compared with the previous year. On account of higher results for the financial year before tax, almost all of the categories of banks considered in the statistics on banks' profit and loss accounts³⁸ were able to increase both their

36 Not least the restrictions on public life connected to the coronavirus pandemic are likely to have accelerated digitalisation and contributed to the greater use of online banking. See Deutsche Bundesbank (2022c), p. 8.

37 See Deutsche Bundesbank (2022c), pp. 8 f.

38 Statistics on banks' profit and loss accounts are compiled on an annual basis. This involves the evaluation of the profits and losses calculated from the annual accounts (individual accounts prepared in accordance with the German Commercial Code), which the banks must submit to the Bundesbank pursuant to Section 26 of the German Banking Act (Kreditwesengesetz). As the annual accounts apply to the whole institution (but not to the group), the charges and income of foreign branches are also recorded. See also the box on p. 75.

Significant improvement in performance overall

onment. A comparatively strong rise in income from operating business also contributed significantly to the improvement in profitability. Compared with net valuation charges, however, this increase played a less significant role in the growth in the profit for the financial year before tax.

Profitability was negatively affected by a sharp rise in administrative spending, which was attributable to staff costs and other administrative spending in equal measure. Nevertheless, measured by the cost/income ratio, German banks' cost efficiency deteriorated only marginally on account of operating income, which also went up.

Return on equity and return on assets

Return on equity almost doubled; considerable year-on-year improvement in profitability Overall, the return on equity (profit for the financial year before tax in relation to the annual average balance sheet equity) almost doubled in 2021. Furthermore, a rise of 2.3 percentage points to 5.1% put it only slightly below the long-term average of 5.2%. This indicates a significant improvement in profitability, chiefly attributable to the increase in the profit for the financial year before tax driven by net valuation charges.

Return on equity improved across almost all categories of banks, although extent of improvement varies considerably

Apart from building and loan associations, 39 all categories of banks under review⁴⁰ improved their return on equity. However, when comparing categories of banks, the extent of this improvement varies considerably. For example, Landesbanken more than tripled their return on equity in 2021 compared with the previous year owing to a sharp rise in the profit for the financial year. At 4.1%, their return on equity was also well above the long-term average of 1.4%. By contrast, savings banks (+0.9 percentage point) and credit cooperatives (+1.1 percentage point) recorded relatively small rises in their return on equity. In both cases, strong growth in balance sheet equity counteracted the positive effect on their return on equity

arising from the increase in profit for the financial year before tax. For savings banks, growth in equity capital reduced the increase in their return on equity by 20%; for credit cooperatives, this increase was narrowed by as much as one-third. With levels of 6.3% and 8.4%, respectively, savings banks and credit cooperatives were nonetheless still among the categories with the highest return on equity in the reporting year, although both categories of banks also fell clearly short of their long-term averages (savings banks: 10.1%; credit cooperatives: 10.5%) in 2021. Regional banks and other commercial banks were almost on par with savings banks in the year under review. Despite the strong growth in balance sheet equity, they improved their return on equity by 1.9 percentage point, raising it to 6.0% and thereby reaching the level of their long-term average. The increasing influence of Brexit banks on the category of regional banks and other commercial banks' profit for the financial year is likely to have played a major role in this development. However, it was big banks that achieved the largest improvement in their return on equity, posting an increase of 4.8 percentage points and thereby having a substantial impact on positive overall development. That said, big banks' return on equity remained in negative territory at -2.3%.41

In general, the return on assets (the ratio of profit for the financial year before tax to annual average total assets) moved in parallel with the return on equity. With a rise of 0.13 percentage point, the return on assets almost doubled in 2021, driven by the profit for the financial year before tax. Furthermore, at 0.29%, it reached a level above its long-term average of 0.22% again for the first time since 2018.

Return on assets likewise up significantly overall

³⁹ Building and loan associations' return on equity fell by 0.3 percentage point to 1.4%.

⁴⁰ Big banks, regional banks and other commercial banks, branches of foreign banks, Landesbanken, savings banks, credit cooperatives, mortgage banks, as well as banks with special, development and other central support tasks.

⁴¹ The sharp decline in balance sheet equity (see footnote 34 on p. 72 for more details) on the year slowed down the improvement in the return on equity in 2021, as in 2020.

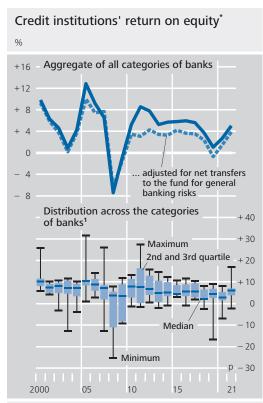
Methodological notes

The results from the profit and loss accounts are based on the published annual reports of the individual institutions in accordance with the provisions set forth in the German Commercial Code (Handelsgesetzbuch) and the Regulation on the Accounting of Credit Institutions (Verordnung über die Rechnungslegung der Kreditinstitute). In terms of their conception, structure and definitions, they differ from the International Financial Reporting Standards (IFRS)1 for publicly traded banking groups. This means that - from a methodological viewpoint – business performance and certain balance sheet or individual profit and loss items are not comparable across the national and international accounting frameworks. For reasons of comparability within Germany, it is advisable to consider the individual accounts when analysing financial performance. The figures for balance sheet capital (total equity), total assets and other stock variables are not obtained from the annual reports but are taken as annual average values on the basis of the monthly balance sheet statistics reported for the institution as a whole.

The reporting group for statistics on banks' profit and loss accounts includes all banks which are monetary financial institutions (MFIs) that conform to the definition of a credit institution under the Capital Requirements Regulation (CRR) as set forth in Article 4(1) number 1 of Regulation (EU) No 575/2013 and are domiciled in Germany. Branches of foreign banks that are exempted from the provisions of Section 53 of the German Banking Act (*Kreditwesengesetz*, or KWG), banks in liquidation and banks with a financial year of less than 12 months (truncated financial year) are not included in this performance analysis.

At the launch of monetary union in 1999, the reporting group relevant for calculating the money supply and for monetary analysis was uniformly defined by the European Central Bank (ECB) for the euro area as a whole and designated as the MFI sector. Unlike the population of banks used for the Bundesbank's analysis up to that point, building and loan associations are also included. Except where another time period is explicitly mentioned, the calculations with regard to the longer-term average cover the years since the launch of monetary union, i.e. from 1999 to 2021.

¹ IFRS-based financial statements are of relevance, for instance, to matters of macroprudential analysis and oversight, concentrating on systemically important banks and their international business activities (including their foreign subsidiaries). For details, see Deutsche Bundesbank (2013).



* Profit or loss for the financial year before tax as a percentage of average equity. 1 Interpretation guide: The minimum (maximum) represents the respective category of bank with the smallest (largest) value.

Deutsche Bundesbank

Year-on-year balance sheet growth had no notable impact on the increase in the return on assets overall. In individual categories of banks, however, its effect on the change in the return on assets was significant. High balance sheet growth at regional banks and other commercial banks driven by Brexit banks had a particularly strong impact. The positive impact of the rise in the profit for the financial year on the return on assets was halved in this case by balance sheet growth. The remaining growth of 0.11 percentage point was nevertheless sufficient to reach a level of 0.41%, which was well above the long-term average of 0.32%. In the reporting year, savings banks raised their return on assets by 0.06 percentage point to 0.54%, but were thus still below the long-term average of 0.62%. Together with credit cooperatives, which reached a level of 0.70% following an increase of 0.08 percentage point in 2021, savings banks ranked once again among the categories of banks with the highest return on assets. Unlike savings banks, however, credit cooperatives' return on assets was slightly above their long-term average of 0.67%. Comparatively strong balance sheet growth – mainly caused by the renewed strong expansion in deposit and lending business – also curbed the increase in savings banks and credit cooperatives' return on assets significantly. In both cases, balance sheet growth reduced the increase in the return on assets – attributable to the rise in the profit for the financial year – by just over one-third.

Profit for the financial year

The profit for the financial year before tax went up by a total of €12.8 billion in 2021 compared with the previous year. At €27.1 billion, it was almost twice the previous year's figure, mainly owing to the sharp reduction in net valuation charges and thus, for the first time since 2017, was both well above the long-term average of €18.0 billion and above the average of €25.4 billion for the years following the financial crisis (2010 to 2018).

Profit for the financial year before tax almost doubled compared with 2020, mainly owing to sharp drop in net valuation charges

Unlike in 2020, all of the categories of banks⁴² under review were able to substantially increase their annual result before tax, except for building and loan associations.⁴³ In absolute terms, the largest growth was recorded by the big banks, whose annual result rose by €4.5 billion. Nevertheless, they were the only category of banks to end the reporting year with a loss before tax, though, at €1.5 billion, this figure amounted to only one-quarter of the shortfall incurred in 2020. By contrast, savings banks and credit cooperatives again recorded the largest profits for the financial year before tax across all categories of banks. At €8.2 billion and €7.7 billion respectively, together they

Sharp rise in profit for the financial year before tax in almost all categories of banks

⁴² Big banks, regional banks and other commercial banks, branches of foreign banks, Landesbanken, savings banks, credit cooperatives, mortgage banks, as well as banks with special, development and other central support tasks.

⁴³ In 2021, building and loan associations' profit for the financial year declined by around 14% to the low level of €0.2 billion, which was well below the long-term average of €0.7 billion.

Return on equity of individual categories of banks*

0/6

Category of banks	2017		2018		2019		2020		2021p	
All categories of banks	5.63	(4.08)	3.73	(2.41)	1.07	(- 0.41)	2.71	(1.12)	5.05	(3.23)
Commercial banks of which:	3.95	(2.79)	2.07	(1.54)	- 7.70	(- 8.99)	- 1.56	(- 2.95)	2.68	(1.45)
Big banks Regional banks and	2.88	(2.30)	1.14	(1.24)	- 16.63	(- 17.58)	- 7.08	(- 8.22)	- 2.26	(- 2.13)
other commercial banks	5.31	(3.33)	3.30	(1.89)	4.44	(2.69)	4.10	(2.46)	6.04	(3.88)
Landesbanken	1.85	(0.98)	- 2.45	(- 3.89)	2.03	(1.55)	1.29	(0.84)	4.05	(2.28)
Savings banks	9.44	(6.72)	7.19	(4.83)	6.86	(4.83)	5.36	(3.36)	6.28	(4.22)
Credit cooperatives	10.11	(7.05)	8.19	(5.50)	9.17	(6.57)	7.31	(4.98)	8.39	(6.21)
Mortgage banks	5.49	(3.56)	2.09	(0.88)	5.31	(3.75)	8.06	(1.40)	16.91	(5.73)
Building and loan associations	9.18	(7.74)	2.21	(1.02)	3.83	(2.95)	1.66	(0.86)	1.41	(0.50)

^{*} Profit or loss for the financial year before tax (in brackets: after tax) as a percentage of equity as shown in the balance sheet (including the fund for general banking risks, but excluding participation rights capital).

Deutsche Bundesbank

generated almost 60% of the aggregate profit for the 2021 financial year. However, despite sharp increases of €1.4 billion each, savings banks and credit cooperatives recorded the lowest growth rates (savings banks: +21.3%; credit cooperatives: +22.2%) of all categories of banks.⁴⁴ Regional banks and other commercial banks recorded a sharp rise of €2.3 billion (+70.6%) – the growing significance of Brexit banks had an impact here, too.

Net valuation charges⁴⁵ decreased by €9.7 billion in the year under review to around one-quarter of their figure for the previous year. Totalling €3.6 billion, they were not only well below their long-term average of €13.5 billion, but rather the decline in 2021 also more than offset the doubling of net valuation charges seen in the previous year due to the pandemic and made a major contribution to the increase in profit for the financial year before tax in 2021.

German credit institutions significantly scaled back their risk provisioning compared with the previous year and released some of the risk provisions they had formed in 2020 during the reporting year. For example, depreciation of and value adjustments to loans and advances, and provisions for contingent liabilities and for commitments halved and, at €7.0 billion, were well below the long-term average of €17.4 billion in the year under review. At the same time,

Sharp reduction in net valuation charges responsible for three-quarters of overall increase in aggregate net profit for the financial year

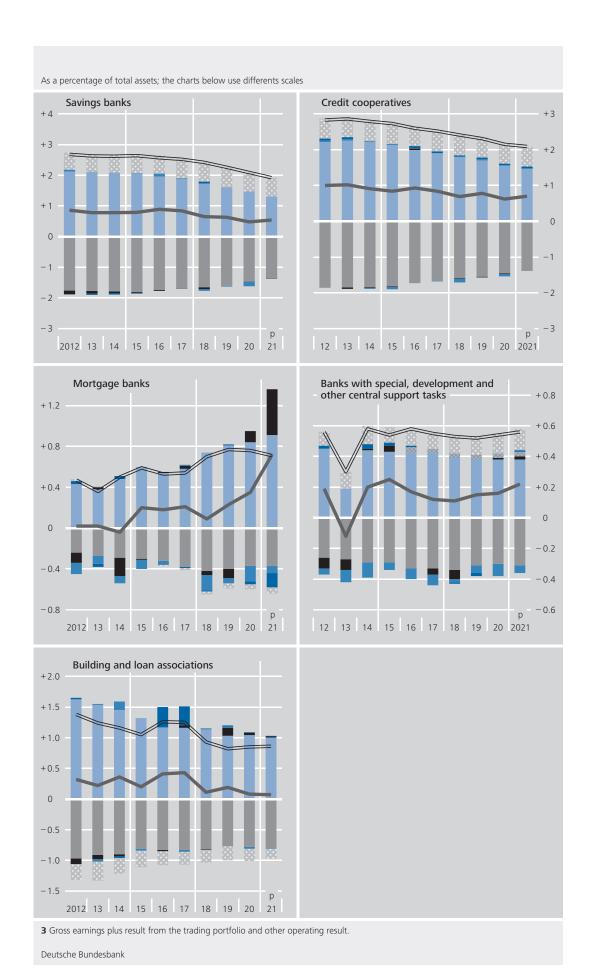
⁴⁴ Apart from the branches of foreign banks, which increased their low level of profit for the financial year almost sevenfold to €0.3 billion, Landesbanken recorded the largest growth rate in profit for the financial year before tax (+218.2%), primarily on the back of significantly higher operating income.

⁴⁵ Net valuation charges comprise the effects of value adjustments, write-ups and write-downs on accounts receivable and securities in the liquidity reserve. In addition, income and charges in connection with transfers from and to loan-loss provisions are taken into account, as are transfers and releases relating to undisclosed reserves pursuant to Section 340f of the German Commercial Code. However, due to the cross-offsetting option permissible under the German Commercial Code, the annual accounts do not show the extent to which undisclosed reserves have been formed or released.

Return on assets and its components by category of banks* As a percentage of total assets; the charts below use different scales All categories of banks +1.8 Net interest income Net commission income +1.2 Other operating result +0.6 Result from the trading portfolio 0 General administrative spending, total¹ Result from the valuation of assets² -0.6 Other and extraordinary result -1.2 = Operating income³ Profit or loss for the financial year before tax -1.8 2012 13 14 15 16 17 18 19 20 21 Big banks Regional banks and other commercial banks +1.8 +3 +1.2 +2 +0.6 0 -0.6-1.2 - 1.8 -2.4 р 2012 13 14 15 16 17 18 19 20 12 13 14 15 16 17 18 19 20 2021 Branches of foreign banks Landesbanken +2.0+1.0 + 1.5 +0.5 +1.0 0 +0.5 0 1.0 -0.5 -1.0 -1.5 р 2012 13 14 15 16 17 18 19 20 21 12 13 14 15 16 17 18 19 20 2021

Deutsche Bundesbank

^{*} Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. 1 Including depreciation of and value adjustments to tangible and intangible assets. 2 Net valuation charges excluding investment in tangible and financial fixed assets.



Major income and cost items for individual categories of banks in 2021^p

As a percentage of operating income

ltem	All cat- egories of banks	Big banks	Regional banks and other commer- cial banks	Landes- banken	Savings banks	Credit coope- ratives	Mort- gage banks	Building and loan asso- ciations	Banks with special, develop- ment and other central support tasks
Net interest income	65.1	57.5	53.7	70.7	68.1	70.6	129.2	116.9	68.4
Net commission income	30.0	41.1	32.8	16.1	31.7	26.6	- 8.8	- 18.2	24.4
Result from the trading portfolio	3.9	7.3	5.8	10.7	0.0	0.0	0.0	0.0	6.2
Other operating result	0.9	- 5.9	7.7	2.5	0.1	2.8	- 20.4	1.2	1.1
Operating income	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
General administrative spending of which:	- 72.9	- 99.2	- 60.6	- 70.6	- 70.8	- 65.9	- 52.5	- 93.6	- 55.5
Staff costs	- 37.0	- 42.9	- 29.0	- 34.3	- 43.2	- 37.5	- 24.6	- 35.1	- 27.1
Other administrative spending	- 35.9	- 56.3	- 31.6	- 36.2	- 27.5	- 28.4	- 27.9	- 58.5	- 28.3
Result from the valuation of assets	- 2.8	- 2.5	- 6.4	- 0.6	- 0.6	- 0.1	- 9.5	- 0.7	- 9.7
Other and extraordinary result	- 2.8	- 4.0	- 11.2	- 8.1	- 0.6	- 0.5	63.5	2.5	3.7

Deutsche Bundesbank

income from value readjustments to loans and advances, and provisions for contingent liabilities and for commitments doubled on the year to €3.4 billion. This item had still been declining in 2020. In absolute terms, at €7.9 billion, the decrease in the depreciation of and value adjustments to loans and advances, and provisions for contingent liabilities and for commitments accounted for just over 80% of the total decline in net valuation charges.

There were several reasons for this development. For example, the high number of defaults on loans feared at the beginning of the coronavirus pandemic did not materialise, not least due to extensive fiscal and monetary policy measures. ⁴⁶ Furthermore, given the more favourable macroeconomic situation overall and with the share of non-performing loans in the total credit volume declining up to the third quarter of 2021, German banks still assessed credit risk to be low. ⁴⁷

The reduction in net valuation charges was generally observed across all categories of banks, albeit to varying degrees. In particular, savings banks and credit cooperatives – which together generated more than half of the aggregate profit for the financial year before tax in 2021 – but also big banks reduced their net valuation charges by around 90% or more on the year. In contrast to the overall development, however, a relatively large share of the drop in net valuation charges at savings banks and credit cooperatives was also attributable to higher income from value readjustments to loans and advances, and provisions for contingent liabilities and for commitments. Meanwhile, at around 40%, regional banks and other commercial banks decreased their net valuation charges to a comparatively moderate degree, even though they had made the larg-

All categories of banks reduced their net valuation charges on a large scale

⁴⁶ See Deutsche Bundesbank (2022a), p. 30.

⁴⁷ See Deutsche Bundesbank (2022a), pp. 30 f. and Deutsche Bundesbank (2021a), p. 41.

Growth in oper-

across categor-

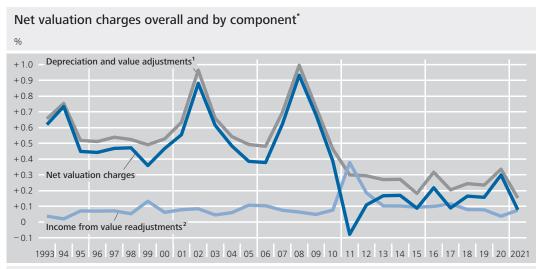
ies of banks significantly more

heterogeneous

in the reporting year than in

2020

ating income



* Relative to the annual average lending portfolio. 1 In respect of loans and advances, and provisions for contingent liabilities and for commitments. 2 In respect of loans and advances, and provisions for contingent liabilities and for commitments.

Deutsche Bundesbank

est contribution in absolute terms to the increase in net valuation charges in 2020.

German credit institutions' operating business proved robust in 2021 despite the prolonged negative interest rate environment and the coronavirus pandemic. Operating income⁴⁸ expanded relatively sharply on the year by €5.8 billion (+4.8%). Thus, both the absolute and percentage increase were more than three times the level recorded in 2020. Furthermore, operating income in 2021 was the second major driver of the increase in the aggregate profit for the financial year before tax; none-theless, the decline in net valuation charges was almost twice as significant.

major driver of increase in profit for the financial year before tax behind net valuation charges

Growth in operating income

chiefly driven by

net commission

Operating income second

The expansion in operating income in 2021 was primarily caused by strong growth in net commission income. Increases in net interest income and the trading result also had a positive impact on operating income. Taken together, however, these increases were just sufficient to offset the decline in the other operating result. In line with this, the shares of the individual sources of income in total operating income shifted slightly. With a share of around two-thirds of operating income, net interest in-

come was again the most important source of income for German banks in 2021. However, its

share in operating income fell again compared

with 2020. By contrast, net commission income built up its role as the second most important source of income, accounting for 30% of operating income. The trading result and other operating result remained only of minor importance overall.

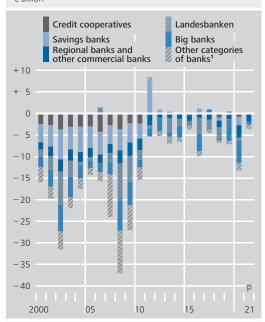
After all categories of banks except for savings banks had recorded increases in their operating income in 2020, the picture was much more mixed in 2021. For example, growth in operating income was observed particularly at regional banks and other commercial banks and at credit cooperatives. Due to the growing importance of Brexit banks, regional banks and other commercial banks recorded the largest growth, both in absolute terms (+€4.2 billion) and in relative terms (+19.5%), driven primarily by net commission income and the trading result. Credit cooperatives came in second with an increase of +€1.0 billion; they benefited chiefly from net commission income, followed by net interest income.

In 2021, it was mainly big banks and once more savings banks that recorded declines in their operating income (-€0.6 billion and -€0.2 billion, respectively). In the case of savings banks,

⁴⁸ Sum of net interest income, net commission income, result from the trading portfolio and other operating result.

Credit institutions' risk provisioning (result from the valuation of assets)*

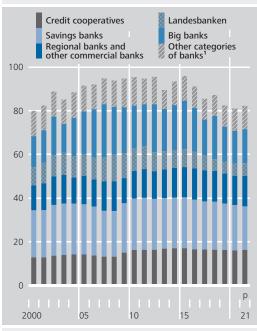
€ billion



* Net valuation charges excluding investment in tangible and financial fixed assets. Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. 1 Branches of foreign banks, mortgage banks, banks with special, development and other central support tasks, and building and loan associations. Deutsche Bundesbank

Net interest income generated by credit institutions*

€ billion



* Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. 1 Branches of foreign banks, mortgage banks, banks with special, development and other central support tasks, and building and loan associations.

Deutsche Bundesbank

a relatively steep drop in net interest income outstripped the increase in net commission income. By contrast, big banks saw a sharp decrease in the other operating result outweigh their otherwise positive growth in net interest income and commission income.

German credit institutions' net interest income rose slightly in the year under review for the first time since 2018 and, at €82.2 billion, was €1.2 billion (+1.4%) higher than in the previous year. This was mainly due to higher current income from shares and other variable-yield securities, as well as from participating interests, which are likewise included in net interest income. By contrast, net interest income in the narrower sense, i.e. the contribution to earnings by interest-related business, improved only slightly despite increased lending. Looking at the categories of banks, the rise in net interest income was generally broad-based: with the exception of savings banks and building and loan associations, all of the categories of banks under review⁴⁹ recorded higher net interest income than in 2020. The largest individual contributions to the growth in total net interest income were made by big banks as well as regional banks and other commercial banks, accounting for €0.5 billion each. Landesbanken and credit cooperatives also made significant contributions to the overall expansion, each recording a rise in net interest income of €0.3 billion on the year. Conversely, with a drop of €0.9 billion (-4.2%), savings banks were the only category of banks to record a significant decline in net interest income.50

Overall, the increase in net interest income in 2021 was achieved on the back of parallel developments in interest income and interest expenditure. Thus, interest income in the broader

Net interest income rose again slightly for the first time since 2018, but interest income continued to fall

⁴⁹ Big banks, regional banks and other commercial banks, branches of foreign banks, Landesbanken, credit cooperatives, mortgage banks, as well as banks with special, development and other central support tasks.

⁵⁰ At €0.02 billion, the decline in net interest income among building and loan associations was very small and had virtually no impact on the overall change.

Fall in interest income more than offset overall by lower interest expenditure in 2021 sense⁵¹ fell by €9.1 billion on the year in 2021, while interest expenditure dropped by €10.2 billion over the same period. Unlike in previous years, German credit institutions were able to more than offset the decline in interest income by lowering interest expenditure in the reporting year. Moreover, this development was observed not only at the aggregate level, but also across all categories of banks⁵² except savings banks and building and loan associations.

In the reporting year, the persistent negative interest rate environment led to lower interest income for German credit institutions, not only as a result of the negative remuneration of excess liquidity in the Eurosystem's deposit facility.53 In fact, interest rates for lending dropped again, according to data from the MFI interest rate statistics. Alongside interest rates on loans to enterprises, this particularly related to interest rates in the high-volume business of lending to households. As a consequence, even the high growth in the volume of lending business - especially in the granting of new housing loans - was unable to halt the decline in interest income. However, in 2021, German banks made greater use of instruments to lower their interest expenditure than they had in the previous year. This included the near full utilisation of exemption allowances, introduced at the end of 2019, for the negative deposit facility rate as well as the further expanded use of refinancing operations with the Eurosystem at sometimes negative rates (in particular TLTRO-III).54 Moreover, further extensive changes to terms and conditions for customer deposit business (including the increased passing on of negative interest rates)55 contributed to the decrease in interest expenditure. 56

Interest margins fell to new lows despite rise in net interest income Although German credit institutions managed to slightly improve their net interest income in 2021 as against the previous year, the interest margin (net interest income in the broader sense in relation to annual average total assets) fell by 0.01 percentage point to the new low of 0.87% in the reporting year. The dampening effect of balance sheet growth on the interest

margin proved to be twice as large as the positive effect that the increase in net interest income had on the interest margin. In the case of savings banks and credit cooperatives, whose business models are shaped by interest-related business in particular, the declines seen in interest margins of 0.16 percentage point and 0.09 percentage point respectively were, in fact, largely driven by strong balance sheet growth. At the same time, interest income in the narrower sense decreased again in both categories of banks despite the strong expansion of lending. Nevertheless, savings banks and credit cooperatives continued to record the highest interest margins among all categories of banks under review in 2021, at 1.31% and 1.47% respectively, even though these were new lows in both cases.

Net commission income increased by €5.8 billion (+17.9%) on the year to €37.9 billion. Both the absolute increase and the growth rate were more than six times higher in the reporting year

Net commission income significantly better overall and across the board

- **51** Interest income in the narrower sense plus current income from variable-yield securities, participating interests and shares in affiliated enterprises as well as income from profit pooling, profit transfer agreements and partial profit transfer agreements.
- **52** Big banks, regional banks and other commercial banks, branches of foreign banks, Landesbanken, credit cooperatives, mortgage banks, as well as banks with special, development and other central support tasks.
- 53 In its Annual Report for 2021, the Bundesbank reported interest income from negatively remunerated deposits by German banks in the deposit facility amounting to €4.8 billion (previous year: €2.7 billion). This figure already takes into account the deposit facility's two-tier remuneration system. The sharp rise, which is likely to have been reflected in higher interest expenditure at German banks, was due to a 73% increase in negatively remunerated holdings in the deposit facility. See Deutsche Bundesbank (2022a), pp. 71ff.
- **54** In 2021, German credit institutions made greater use of TLTRO-III than in 2020, using it to generate interest income of €4.0 billion (previous year: €1.8 billion), as outlined in the Bundesbank's Annual Report for 2021. See Deutsche Bundesbank (2022a), pp. 71 ff.
- **55** According to the MFI interest rate statistics, the average interest rate on new overnight deposits from non-financial corporations was -0.09% in December 2020. In December of the reporting year, this figure had already reached -0.14%. The average interest rate on new overnight deposits from retail customers was virtually zero in December 2020, moving into negative territory for the first time in February 2021, and standing at -0.01% in December 2021. **56** For an assessment of the extent to which changes to terms and conditions in deposit business lowered interest expenditure in 2021, see the box on pp. 84f.

Change in German banks' interest expenditure caused by adjustments to terms and conditions in deposit business with non-banks in the 2021 calendar year

In terms of content and methodology, the following analysis is based on the box entitled "Change in German banks' interest expenditure caused by adjustments to terms and conditions in deposit business with non-banks in the 2020 calendar year", which was included in the September 2021 Monthly Report as part of the article on the performance of German credit institutions in 2020. In the context of the negative interest rate environment prevailing since 2014, this box will estimate the amount by which German banks used adjustments to terms and conditions in deposit business to lower their interest expenditure during calendar year 2021 compared with the previous year. All deposits held by non-banks (non-MFIs) are included in the analysis. Other effects of negative interest rates on banks' interest expenditure and interest income as well as on all other income and expenditure items are disregarded, however. The following analysis therefore does not allow a conclusive assessment of the overall effect of negative interest rates on banks' profitability.1

The table on p. 85 summarises the results of the calculations. Compared with 2020, interest expenditure in deposit business is likely to have fallen by an estimated €1.6 billion in 2021. The decline was almost 20% larger than in the previous year (-€1.3 billion), with residents' deposit business again accounting for the lion's share of the reduction, at around €1.4 billion. Interest expenditure in business with non-resident depositors dropped by just under €0.2 billion on the year.

In 2021, the decline in interest expenditure was greater than in 2020 in almost all deposit categories. As in the previous year, German banks reduced their interest expenditure on sight deposits and time deposits in particular during the reporting year. At €0.6 billion, the fall in interest expenditure on sight deposits was up by a relatively moderate amount (around 10%) on the previous year's figure, while the decrease in interest expenditure on time deposits, at just over €0.8 billion, was around 40% higher than in 2020. Only in the case of savings deposits and long-term time deposits held by non-financial corporations and non-resident depositors did interest expenditure decline more slowly than in the previous year.

Once again, the introduction and/or expansion of negative deposit rates also had an impact on overall developments. Around half of the total reduction in interest expenditure was achieved through (increasingly) negative average interest rates on deposits. In addition to the increase in the negative average interest rate on short-term time deposits, in 2021 this was probably partly due, in particular, to the interest on households' sight deposits. The latter had moved closer and closer to the zero mark up until January 2021, but remained in positive territory. From February 2021 onwards, however, consistently negative average interest rates on households' sight deposits were observed for the first time, and these expanded over the course of the year.

¹ For further methodological notes, see Deutsche Bundesbank (2021e), pp. 107 f.

Change in interest expenditure* in existing deposit business with the non-financial sector in 2021 vs. 2020 and 2020 vs. 2019

€ million

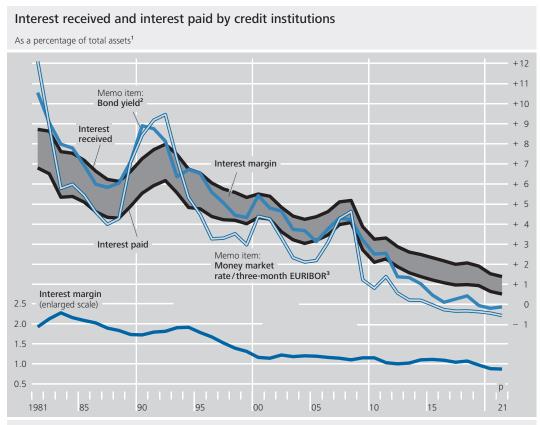
	Residents				Non- residents	Total	
Deposit category	Households	Non- financial corpor- ations	Other non- financial sector	Total change in interest expenditure	Depositors, total	Change in interest expenditure	of which: Introduction or expan- sion of negative deposit interest
Deposits repayable on demand 2020 2021	- 149.25 1 - 158.50	1 - 235.27 1 - 279.16	1 - 117.43 1 - 117.88		1 - 66.23 1 - 72.04	- 568.17 - 627.58	1 - 418.92 1 - 469.08
Savings deposits ² 2020 2021	- 16 - 11:		- 0.85 - 0.36	- 167.11 - 114.16	- 1.94 - 1.49	- 169.04 - 115.66	
Fixed-term deposits Maturity < 2 years 2020 2021 Maturity > 2 years 2020 2021		1 - 72.33 1 - 104.57 - 31.33 - 29.57	1 - 115.55 1 - 112.37 - 119.09 - 236.21	188.26240.54377.24494.54	1 - 63.20 1 - 123.66 36.59 36.54	251.46364.19340.65458.00	1 - 228.91 1 - 340.60
Total 2020 2021				- 1,234.55 - 1,404.78	- 94.77 - 160.65	- 1,329.32 - 1,565.43	- 647.83 - 809.68

^{*} Negative values indicate a decrease in interest expenditure. 1 Reduction in interest expenditure in deposit business as a result of negative average interest rates. 2 Households' and non-financial corporations' holdings of savings deposits are reported only jointly in the MFI interest rate statistics.

Deutsche Bundesbank

The fall of around €1.6 billion in interest expenditure in deposit business also more than offset the net interest expenditure caused by the negative interest rates on the deposit facility in the 2021 calendar year, to a greater extent than in 2020. Net interest expenditure is calculated as interest expenditure from remuneration of excess liquidity less interest income from participation in the negatively remunerated targeted longer-term refinancing operations (TLTRO-III). It fell by around 20% to €0.8 billion in the 2021 calendar year.²

² See Deutsche Bundesbank (2022a), pp. 71 ff. According to data in the Bundesbank's Annual Report for 2021, German banks are likely to have incurred interest expenses of €4.8 billion from the negative remuneration of the balances in the deposit facility (previous year: €2.7 billion). This figure already takes into account the deposit facility's two-tier remuneration system. In the same period, German credit institutions generated interest income of €4.0 billion from participation in TLTRO-III (previous year: €1.8 billion). At €0.8 billion on balance, German banks' direct net interest expenditure incurred through negative interest rates on the deposit facility is thus likely to be 20% lower in 2021 than in the previous year (2020: €1.0 billion).



1 Up to end-1998, as a percentage of the average volume of business. 2 Average yield on domestic bearer debt securities. 3 Up to end-1998, money market rate for three-month funds in Frankfurt am Main.

Deutsche Bundesbank

than in 2020. The role of net commission income as the second most important source of income after net interest income thus continued to grow. In addition, net commission income in 2021 was well above the long-term average of €28.6 billion. The main drivers of growth across all categories of banks were strong growth in securities and deposit business with customers, in payments, in brokerage business and in asset management, but also in fees for services.

In contrast to the previous year, developments in 2021 were very consistent when comparing the categories of banks. With the exception of branches of foreign banks and mortgage banks, all categories of banks⁵⁷ substantially increased their net commission income. Regional banks and other commercial banks, in particular, recorded high growth rates (+41.4%). Although this category of banks only generated a little less than one-quarter of total net commission income, it accounted for just over 40% of

the overall increase in net commission income. Brexit banks once again proved to be the major driver of this development, as their business models are geared more towards commission-based activities than those of most other banks in Germany.

By contrast, the savings banks and credit cooperatives made disproportionately small contributions to the increase in aggregate net commission income, with comparatively minor improvements in their individual net commission income (+6.7% and +8.5%, respectively). Savings banks generated just under onequarter of total net commission income, but contributed only around 10% to the overall increase. Credit cooperatives contributed around 8% to the overall increase, although their share

⁵⁷ Big banks, regional banks and other commercial banks, Landesbanken, savings banks, credit cooperatives, building and loan associations as well as banks with special, development and other central support tasks.

in aggregate net commission income came to about 16%.

Overall, commission margin rose to highest level since start of the negative interest rate phase in 2014 and was well above the long-term average

Following its decline in 2020, the commission margin (net commission income in relation to annual average total assets) rose by 0.05 percentage point to 0.40% in the reporting year, outstripping the long-term average of 0.35%. Growth in annual average total assets again had a dampening effect on the commission margin in the reporting year, but unlike in the previous year, the positive effect of the sharp rise in net commission income was the dominant factor.

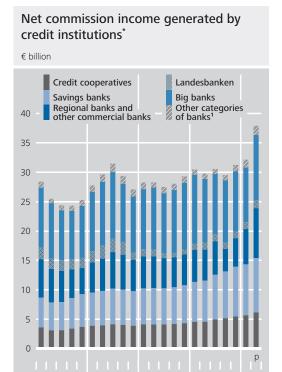
Developments in commission margin heterogeneous across categories of banks, however

A comparison of the various categories of banks, however, revealed mixed developments. Commission margins were seen to increase, in particular, at big banks (+0.11 percentage point) and regional banks and other commercial banks (+0.07 percentage point). Just under half of the sharp increase in the case of big banks was attributable to annual average total assets declining steeply. By contrast, the strong balance sheet growth at regional banks and other commercial banks ate up around two-thirds of the increase in the commission margin due to the higher net commission income.

At savings banks and credit cooperatives, balance sheet growth likewise had a dampening effect on the increase in the commission margin. Despite higher net commission income, the commission margin of credit cooperatives remained unchanged at the previous year's level; savings banks recorded a slight decline in the commission margin of 0.01 percentage point.

Trading result again strongly improved, primarily due to a sharp rise at regional banks and other commercial banks

The net result from the trading portfolio rose by €1.4 billion (+40.3%) on the year in 2021 and, at €4.9 billion, was well above the long-term average of €3.6 billion. As a result, the share of operating income accounted for by the trading result also grew to just under 4% (previous year: just under 3%). In addition, the trading result in the reporting year was more than four times as large as the other operating

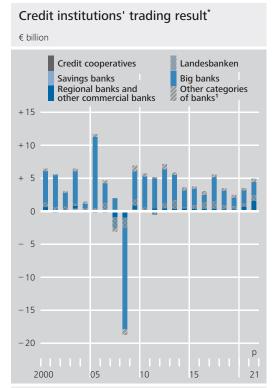


* Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. 1 Branches of foreign banks, mortgage banks, banks with special, development and other central support tasks, and building and loan associations.

Deutsche Bundesbank

result, after both had been at the same level in 2020.

As in previous years, the trading result was still primarily relevant for big banks, regional banks and other commercial banks as well as Landesbanken. While the trading result of the big banks stayed at the previous year's level, regional banks and other commercial banks proved to be the main drivers of overall growth in the reporting year. Owing to business relocations in the wake of Brexit, they more than doubled their trading result for the second time in a row, boosting it by €0.9 billion to €1.5 billion. They also generated the second-highest trading result after the big banks and were thus still ahead of the Landesbanken, which likewise almost doubled their result from the previous year, at €0.9 billion. Together, these three categories of banks generated just under 90% of the overall trading result.

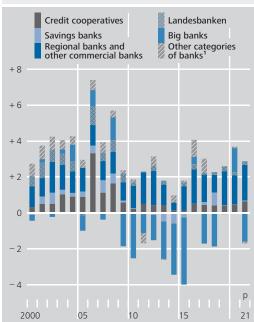


* Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. 1 Branches of foreign banks, mortgage banks, banks with special, development and other central support tasks, and building and loan associations.

Deutsche Bundesbank

Credit institutions' other operating result*

€ billion



* Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. 1 Branches of foreign banks, mortgage banks, banks with special, development and other central support tasks, and building and loan associations.

Deutsche Bundesbank

The other operating result⁵⁸ declined by more than two-thirds (-€2.5 billion) to €1.2 billion in 2021. The share of operating income accounted for by the other operating result thus fell to below 1% in the reporting year. This decline was attributable almost exclusively to big banks, whose other operating result was down by €2.9 billion year on year. This was chiefly due to net expenditure arising from the marking-up of provisions for pensions and other post-employment benefit obligations.

Other operating result down by more than two-thirds year on year

Unlike in 2019 and 2020, the balance in the other and extraordinary account⁵⁹ in the reporting year was only of minor importance for the increase in the aggregate profit for the financial year. Despite a significant improvement of almost 40% (in absolute terms: +€2.3 billion), in 2021 the balance in the other and extraordinary account made a comparatively small contribution to growth in aggregate profit for the financial year. The improvement was also driven mainly by a higher valuation of participating interests at one institution belonging to the big banks category.

Balance of other and extraordinary items in reporting year of lesser importance for development of profit for financial year before tax

General administrative spending⁶⁰ climbed significantly by €5.0 billion (+5.7%) to €92.0 billion in 2021. Looking at profit for the financial year before tax, this strong increase thus ate up

58 Summary item used to record income and charges from operating business that have no connection to net interest income, net commission income or the trading result. It includes leasing expenses and income, the gross result for transactions in goods and subsidiary transactions, depreciation of assets leased, other operating charges and income, and other taxes as well as withdrawals from and transfers to the fund required by the building and loan association rules (only for building and loan associations).

59 The other and extraordinary account includes depreciation of and value adjustments to participating interests, shares in affiliated enterprises and securities treated as fixed assets; income from value readjustments to participating interests, shares in affiliated enterprises and securities treated as fixed assets; charges and income from loss transfers; extraordinary charges and income as well as profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement.

60 General administrative spending encompasses staff costs and other administrative spending. Other administrative spending includes, for example, investment in product development, information technology, and digitalisation. In addition, other administrative spending also comprises depreciation of and value adjustments to tangible and intangible assets.

Breakdown of extraordinary result

€ million

Item	2019	2020	2021p
Other and extraordinary result	- 16,133	- 5,822	- 3,554
Income (total)	4,201	4,247	5,713
Value readjustments to participating interests, shares in affiliated enterprises, and securities treated as fixed assets	1,609	1,350	2,145
from loss transfers	734	590	1,220
Extraordinary income	1,858	2,307	2,348
Charges (total)	- 20,334	- 10,069	- 9,267
Depreciation of and value adjustments to participating interests, shares in affiliated enterprises, and securities treated as fixed assets	- 12,158	- 2,839	- 1,494
from loss transfers	- 908	- 328	- 318
Extraordinary charges	- 3,152	- 3,972	- 3,585
Profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement	- 4,116	- 2,930	- 3,870

Deutsche Bundesbank

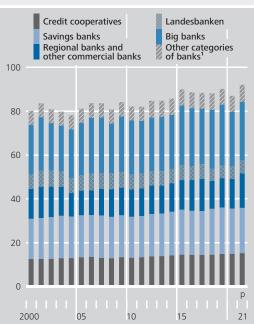
Increase in general administrative spending largely overshadowed improvement in operating income

around 84% of the improvement in operating income. In particular, disproportionately large increases in the general administrative spending of big banks (+ \in 1.9 billion) and regional banks and other commercial banks (+ \in 2.2 billion) led to the sharp overall increase. Together, these two categories of banks accounted for around 80% of the overall rise in general administrative spending. By contrast, credit cooperatives recorded only a slight increase (+ \in 0.3 billion), while savings banks' spending stagnated.

Increased staff costs and higher other administrative spending made equal contributions to the overall rise in general administrative spending. The share of total general administrative spending accounted for by staff costs remained

Credit institutions' administrative spending*

€ billion

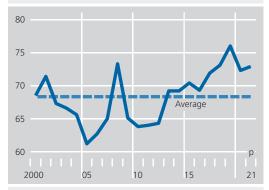


* Where credit institutions have been reassigned to a different category of banks, this is taken into account as of the date of reclassification. 1 Branches of foreign banks, mortgage banks, banks with special, development and other central support tasks, and building and loan associations.

Deutsche Bundesbank

Ratio of credit institutions' administrative spending to operating income*





* Sum of net interest income, net commission income, result from the trading portfolio and other operating result. Deutsche Bundesbank

Cost/income ratios by category of banks

		ministrative : to operating	
Category of banks	2019	2020	2021p
All categories of banks	76.0	72.3	72.9
Commercial banks	84.9	77.7	79.9
Big banks	100.9	90.3	99.2
Regional banks and other commercial banks	64.4	62.4	60.6
Branches of foreign banks	54.4	53.2	46.2
Landesbanken	78.5	75.9	70.6
Savings banks	71.4	70.1	70.8
Credit cooperatives	67.2	67.2	65.9
Mortgage banks	51.2	49.0	52.5
Building and loan associations	94.6	91.4	93.6
Banks with special, development and other central support tasks	59.7	56.2	55.5

1 Sum of net interest income and net commission income plus result from the trading portfolio and other operating result. Deutsche Bundesbank

stable year on year at just under 51%.61 Amongst other things, higher social security contributions and restructuring expenses for early retirement schemes or severance payments led to the increase in staff costs. The increase in other administrative spending was primarily attributable to IT and digitalisation costs. However,

higher expenditure in connection with the European bank levy and the statutory deposit guarantee fund also had an impact on other administrative spending. In addition, intangible assets were amortised heavily in some cases.

Cost efficiency

Measured by the cost/income ratio in its broad definition (administrative spending relative to operating income), German credit institutions' cost efficiency deteriorated slightly in 2021. Despite higher operating income, the rise in administrative spending led to a year-on-year increase in the cost/income ratio of 0.6 percentage point to 72.9%. The cost/income ratio thus remained well above the long-term average of 68.2%.

Cost efficiency slightly worse overall year on

In a comparison of the categories of banks, big banks recorded the largest deterioration in the cost/income ratio, with an increase of 8.9 percentage points compared with the previous year. Here, the sharp rise in administrative spending was responsible for around threequarters of the increase; around one-quarter was caused by the decline in operating income. At 99.2%, the big banks also continued to record the highest cost/income ratio across all categories of banks. Savings banks' cost/income ratio deteriorated by 0.7 percentage point, even though their administrative spending remained virtually unchanged as against 2020. In their case, the change in the cost/ income ratio in the reporting year was caused almost exclusively by the decline in operating income. By contrast, credit cooperatives improved their cost/income ratio by 1.3 percentage points in 2021, as their operating income rose more than their administrative spending.

Higher staff costs and other administrative spending contributed equally to overall increase in general administrative spending

61 Comparing the categories of banks under analysis, the share of staff costs at savings banks (around 61%) and at credit cooperatives (around 57%) remained above average in the reporting year owing to their heavily staff-based business model with many branches nationwide. At big banks, by contrast, staff costs accounted for a share of around 43%.

Estimation of the effect of an interest rate reversal on the interest margin of German credit institutions

Given the current interest rate reversal, the following is an estimation of the impact of an interest rate hike on the interest margin of German banks. It does not, however, include a comprehensive quantification of the overall effect on banks' profitability; for example, derivative interest rate hedges are not taken into account. Nor does it include an assessment of any need for write-downs that may arise from price losses on securities held for banks' own accounts.

For the purposes of the estimation, an interest rate shock in the form of an unexpected parallel shift in the yield curve by +2% is assumed. This is consistent with the Basel interest rate shock scenario, which banking supervisors regularly use to measure banks' interest rate risk.1 The central data for the analysis consists of the balance sheet and maturity structure of each institution as approximated using the monthly balance sheet statistics as at the reporting date of 31 December 2021.2 This is then used to calculate the change in an institution's interest margin in the first, second and third years after the interest rate increase. A constant balance sheet structure is assumed here. If a transaction expires within the three-year observation period, it is fully replaced by a similar transaction – under new conditions – in the same month it expired. Furthermore, as per the empirical evidence, it is assumed that banks pass on the interest rate increase in lending business in full, but pass it on only partially in deposit business with non-banks.3

The effect of relief arising from the cessation of negative remuneration on banks' central bank balances is not modelled. Therefore, the results are only suitable for

interpreting interest rate increases above the zero lower bound on interest rates reached by the policy rate as a result of the monetary policy decisions of 21 July 2022. When classifying the results, it should also be borne in mind that interest rate increases are anticipated by the markets and banks, which can lead to a steeper, flatter or humped yield curve. Compared with the unexpected parallel shift, a steeper curve is likely to generally mitigate the negative impact on earnings, while a flatter curve could amplify said impact. On the whole, however, the present assessment is likely to be considered conservative.

The chart on p. 92 summarises the results of the analysis by showing the change in the interest margin from its baseline as at 31 December 2021.⁴

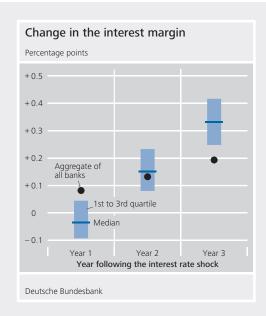
Overall, the majority of institutions would suffer only small reductions in the interest margin in the short term. In the medium term, however, an interest rate reversal should have a marked positive impact on the interest margin of German banks across the board, as the proportion of higher-yielding claims in the banking book is likely to gradually increase and rising market interest rates are liable to only partially be passed on to depositors.

¹ See Deutsche Bundesbank (2017), p. 49.

² See the chapter on monthly balance sheet statistics in Deutsche Bundesbank (2022e).

³ See Busch and Memmel (2021).

⁴ Here, the balance sheet value as at 31 December 2021 is used instead of the annual average total assets when calculating the interest margin. The reason for this is that the change in net interest income was estimated for a balance sheet structure that had remained constant since the end of 2021.



benefit from an interest rate increase. Just over 90% of institutions would see positive effects in the second year after the interest rate hike (almost all institutions in the third year). The increase in the aggregate interest margin of all banks would amount to around 0.13 percentage point in the second year after the interest rate shock (0.19 percentage point in the third year).

According to the results of the analysis, the short-term impact on the interest margin of individual banks is nevertheless heterogeneous. Although the interest margin of the aggregate of German banks already rises by around 0.08 percentage point in the first year after the interest rate hike, interest margins actually fall at around 60% of institutions. For just under 30% of institutions, the decline in the interest margin would be stronger than the decline in the aggregate interest margin in the business environment of 2020, which was shaped by the coronavirus pandemic.5 A significant decline in the interest margin of more than 0.20 percentage point⁶ would be expected at only around 1% of institutions.

The heterogeneity of the short-term impact of an interest rate reversal is also evident at the bank category level. The analysis shows less than 5% of commercial banks and one-third of Landesbanken experiencing falling interest margins in the first year, compared with three-quarters of credit cooperatives and two-thirds of savings banks, along with around half of the remaining institutions.

In the medium term, however, the interest margin of German institutions is likely to

⁵ In 2020, the aggregate interest margin fell by 0.09 percentage point on the year.

⁶ This corresponds to just under one-quarter of the annual average interest margin in 2021.

Outlook

Business environment increasingly challenging for German credit institutions

This year, numerous developments are having an impact on the business environment for German credit institutions. Uncertainty surrounding the economic setting is increasing for now. The elimination of most coronavirus mitigation measures lent a strong boost to service providers, which had been hit particularly hard by them, and to the attendant consumption expenditure.62 However, economic developments are increasingly being affected by the impact of the Russian war of aggression on Ukraine. The main adverse factors here are high commodity prices, severe trade restrictions due, amongst other things, to sanctions and countermeasures, and potential energy shortages.63 If the economic environment deteriorates further, this could also weigh on the profitability of German banks, through higher credit losses for example. Additionally, high inflation and the level of uncertainty, particularly with regard to the energy supply, are major burdens on enterprises and households⁶⁴ and could ultimately increase counterparty credit risk by way of reduced debt servicing capacity.

Furthermore, the ECB has changed its monetary policy stance in view of already high inflation rates and further increases in inflation expectations. Net purchases under the PEPP and the APP were discontinued at the end of March 2022 and end of June 2022 respectively, and

the interest rate reversal commenced with the ECB changes interest rate decision of 21 July 2022. However, the continued reinvestment of freed up funds from the purchase programmes is intended to ensure, amongst other things, that banks have sufficient liquidity. Although the rising interest rate level could weigh on German banks' profitability in the short term, the earningsenhancing effects of monetary policy normalisation are likely to bolster the performance of German institutions in the medium term.65

monetary policy stance: discontinuation of net purchases under APP and PEPP and exit from negative interest rates

The profitability of German institutions will probably also continue to be affected by structural changes in future. Besides investment in digitalisation, investments made with climate considerations in mind will increasingly pose a major challenge for the sector. The ECB's climate stress test showed that German banks are likely to cope with transition risks, but even though German institutions performed comparatively well, climate risks need to be addressed in more depth overall. The extent to which climate-related investment also offers growth opportunities for banks thus remains to be seen.

challenges of digitalisation and climate action

62 However, it is currently difficult to gauge the extent to which new waves of coronavirus will make it necessary to reinstate protective measures in the autumn and winter of this year.

63 See Deutsche Bundesbank (2022d), p. 5.

64 See Deutsche Bundesbank (2022d), p. 5.

65 The box on pp. 91 f. estimates the effect of the interest rate reversal on the interest margin of German banks.

List of references

Busch, R. and C. Memmel (2021), Why are bank rates on deposits so low?, Credit and Capital Markets, Vol. 54(4), pp. 641-668.

Deutsche Bundesbank (2022a), Annual Report, 2021.

Deutsche Bundesbank (2022b), Monthly Report, February 2022.

Deutsche Bundesbank (2022c), Bank office report 2021, Development of the bank office network in 2021.

Deutsche Bundesbank (2022d), Monthly Report, July 2022.

Deutsche Bundesbank (2022e), Banking statistics guidelines, Special Statistical Publication No 1, January 2022.

Deutsche Bundesbank (2021a), Financial Stability Review, 2021.

Deutsche Bundesbank (2021b), Monthly Report, November 2021.

Deutsche Bundesbank (2021c), Monthly Report, August 2021.

Deutsche Bundesbank (2021d), Monthly Report, May 2021.

Deutsche Bundesbank (2021e), Monthly Report, September 2021.

Deutsche Bundesbank (2020), Monthly Report, September 2020.

Deutsche Bundesbank (2017), Monthly Report, October 2017.

Deutsche Bundesbank (2013), Financial Stability Review, 2013.

Major components of credit institutions' profit and loss accounts by category of banks*

As a percentage of total assetso

As a percentage of	or total asse	130								
		Commercia	al banks							
			of which:							Banks with special,
Financial year	All cat- egories of banks	Total	Big banks ¹	Regional banks and other commer- cial banks ¹	Landes- banken1	Savings banks ¹	Credit coopera- tives	Mort- gage banks ¹	Building and loan associa- tions	develop- ment and other central support tasks
	Interest red	ceived ²								
2015	2.33	1.66	1.33	2.71	3.04	2.90	2.84	4.07	3.18	2.21
2016	2.17	1.58	1.30	2.37	2.81	2.64	2.55	4.01	2.89	2.15
2017	2.00	1.54	1.26	2.25	2.74	2.42	2.33	3.35	2.63	1.78
2018 2019	2.07 1.91	1.82 1.58	1.62 1.41	2.45	3.10 3.23	2.17 2.03	2.13	2.99 2.80	2.42	1.67 1.52
2019	1.53	1.13	0.92	1.74	2.79	1.78	1.77	2.80	2.34	1.52
2021	1.39	0.97	0.90	1.21	2.95	1.58	1.63	2.35	1.92	0.93
	Interest pa	id								
2015	1.22	0.67	0.52	1.14	2.29	0.84	0.71	3.47	1.85	1.76
2016	1.08	0.61	0.52	0.85	2.04	0.68	0.55	3.47	1.73	1.73
2017 2018	0.97	0.66 0.82	0.58	0.89	2.02	0.56	0.43	2.78	1.47	1.36
2018	0.99 0.94	0.82	0.77 0.76	0.98 0.73	2.43 2.61	0.44 0.42	0.33	2.25 1.99	1.29 1.32	1.28 1.13
2020	0.65	0.40	0.70	0.52	2.17	0.30	0.21	1.65	1.07	0.77
2021	0.52	0.22	0.27	0.20	2.30	0.27	0.16	1.43	0.91	0.55
	Excess of in	nterest recei	ved over inte	erest paid =	net interest	income (inte	erest margin)			
2015	1.11	0.99	0.81	1.56	0.76	2.06	2.14	0.60	1.32	0.45
2016	1.09	0.97	0.78	1.52	0.77	1.96	1.99	0.54	1.16	0.42
2017 2018	1.04	0.87 1.00	0.68 0.84	1.36 1.47	0.73 0.67	1.87 1.73	1.90 1.80	0.58 0.74	1.16 1.13	0.42 0.39
2019	0.97	0.84	0.65	1.47	0.62	1.61	1.70	0.74	1.03	0.39
2020	0.88	0.73	0.55	1.23	0.62	1.47	1.56	0.84	1.04	0.38
2021	0.87	0.75	0.63	1.01	0.65	1.31	1.47	0.91	1.00	0.38
	Excess of c	ommissions	received over	er commissio	ons paid = n	et commissi	on income (commission	margin)	
2015	0.35	0.47	0.43	0.62	0.09	0.60	0.57	0.00	- 0.27	0.11
2016	0.36	0.45	0.42	0.56	0.12	0.60	0.55	- 0.01	- 0.23	0.10
2017 2018	0.37	0.45 0.43	0.43 0.45	0.54 0.40	0.13	0.64 0.63	0.57 0.57	- 0.02 - 0.03	- 0.21 - 0.21	0.10
2018	0.36	0.43	0.45	0.40	0.13	0.63	0.57	- 0.03 - 0.05	- 0.21 - 0.23	0.11
2020	0.35	0.39	0.34	0.55	0.14	0.62	0.57	- 0.05	- 0.20	0.12
2021	0.40	0.49	0.45	0.62	0.15	0.61	0.55	- 0.06	- 0.16	0.14

^{*} The figures for the most recent date should be regarded as provisional in all cases. Of Excluding the total assets of the foreign branches of savings banks; excluding the total assets of the foreign branches of regional institutions of credit cooperatives until 2015; from 2016, excluding the total assets of the foreign branches of mortgage banks; from 2021, excluding the total assets of the foreign branches of banks with special, development and other central support tasks. For footnotes 1 and 2, see p. 96.

Deutsche Bundesbank

Major components of credit institutions' profit and loss accounts by category of banks* (cont'd)

As a percentage of total assets^o

75 a percentage	or total asset									
		Commercia	al banks							
			of which:							Banks with special,
Financial year	All cat- egories of banks	Total	Big banks ¹	Regional banks and other commer- cial banks ¹	Landes- banken ¹	Savings banks ¹	Credit coopera- tives	Mort- gage banks ¹	Building and loan associa- tions	develop- ment and other central support tasks
	General ad	ministrative	spending							
2015				4.50	0.60	4.04	4.00	0.20	0.04	0.22
2015	1.05	1.11	0.99	1.53	0.63	1.81	1.82	0.30	0.81	0.32
2016 2017	1.06 1.07	1.14 1.14	1.02 1.06	1.49 1.41	0.66 0.71	1.74 1.69	1.73 1.66	0.32 0.38	0.83	0.33 0.33
2017	1.07	1.14	1.15	1.32	0.69	1.65	1.59	0.38	0.83	0.33
2019	1.06	1.16	1.12	1.32	0.66	1.61	1.55	0.40	0.77	0.34
2020	0.95	0.98	0.91	1.24	0.62	1.47	1.45	0.37	0.78	0.30
2021	0.97	1.07	1.09	1.14	0.65	1.36	1.37	0.37	0.80	0.31
	Result from	n the trading	portfolio							
2015	0.04	0.08	0.09	0.04	0.05	0.00	0.00	0.00	0.00	0.03
2016	0.04	0.04	0.04	0.04	0.11	0.00	0.00	0.00	0.00	0.04
2017	0.07	0.12	0.15	0.03	0.11	0.00	0.00	0.00	0.00	0.03
2018	0.04	0.07	0.09	0.03	0.08	0.00	0.00	0.00	0.00	0.03
2019	0.03	0.04	0.05	0.02	0.05	0.00	0.00	0.00	0.00	0.03
2020 2021	0.04	0.07 0.09	0.07	0.06	0.05 0.10	0.00	0.00	0.00	0.00	0.03
2021	0.05	0.09	0.08	0.11	0.10	0.00	0.00	0.00	0.00	0.03
	Operating	result before	the valuati	on of assets						
2015	0.44	0.36	0.20	0.84	0.28	0.82	0.91	0.29	0.23	0.26
2016	0.47	0.39	0.23	0.83	0.38	0.83	0.87	0.21	0.43	0.25
2017	0.42	0.30	0.13	0.67	0.27	0.83	0.86	0.16	0.42	0.23
2018	0.40	0.31	0.16	0.68	0.21	0.77	0.81	0.28	0.11	0.18
2019	0.33	0.21	- 0.01	0.73	0.18	0.65	0.76	0.38	0.04	0.21
2020	0.36	0.28	0.10	0.75	0.20	0.62	0.71	0.39	0.07	0.23
2021	0.36	0.27	0.01	0.74	0.27	0.56	0.71	0.34	0.05	0.25
	Result from	n the valuation	on of assets							
2015	- 0.04	- 0.03	0.00	- 0.14	- 0.10	0.01	- 0.06	- 0.09	- 0.03	- 0.03
2016	- 0.10	- 0.14	- 0.16	- 0.10	-0.38	0.09	0.01	- 0.04	0.01	- 0.07
2017	- 0.04	- 0.02	0.03	- 0.12	- 0.24	0.02	- 0.02	0.01	- 0.03	- 0.07
2018	- 0.08	-0.06	- 0.02	- 0.16	- 0.33	- 0.06	-0.10	- 0.15	0.01	- 0.02
2019	- 0.08	- 0.16	- 0.19	- 0.10	- 0.04	- 0.02	0.04	- 0.05	0.02	- 0.05
2020	- 0.14	- 0.21	- 0.19	- 0.26	- 0.07	- 0.14	- 0.07	- 0.15	- 0.03	- 0.08
2021	- 0.04	- 0.06	- 0.03	- 0.12	- 0.01	- 0.01	0.00	- 0.07	- 0.01	- 0.05

For footnotes * and °, see p. 95. 1 From 2018, DB Privat- und Firmenkundenbank AG allocated to the category "Big banks", merger with Deutsche Bank AG in 2020. From 2018, HSH Nordbank allocated to the category "Regional banks and other commercial banks" and Landesbank Berlin allocated to the category "Savings banks". DSK Hyp AG (formerly SEB AG) allocated to the category "Mortgage banks". Wüstenrot Bank Aktiengesellschaft Pfandbriefbank allocated to the category "Regional banks and other commercial banks". 2 Interest received plus current income and profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement.

Deutsche Bundesbank

Major components of credit institutions' profit and loss accounts by category of banks $^{\! \star}$ (cont'd)

As a percentage of total assetso

As a percentage of	of total asset	50								
		Commercia	of which:							Banks with special,
Financial year	All cat- egories of banks	Total	Big banks1	Regional banks and other commer- cial banks ¹	Landes- banken ¹	Savings banks ¹	Credit coopera- tives	Mort- gage banks1	Building and loan associa- tions	develop- ment and other central support tasks
	Operating	result								
2015	0.40	0.33	0.21	0.70	0.18	0.83	0.85	0.20	0.20	0.23
2016	0.37	0.25	0.08	0.73	0.00	0.92	0.88	0.17	0.44	0.18
2017	0.37	0.28	0.16	0.55	0.03	0.85	0.84	0.17	0.40	0.15
2018 2019	0.32 0.26	0.25	0.14	0.51 0.63	- 0.12 0.14	0.71 0.62	0.71 0.80	0.14	0.11	0.17 0.16
2019	0.26	0.05 0.07	- 0.20 - 0.09	0.63	0.14	0.62	0.80	0.32	0.06 0.04	0.16
2020	0.22	0.07	- 0.02	0.43	0.13	0.46	0.03	0.24	0.04	0.13
2021	0.52	0.21	0.02	0.02	0.20	0.55	0.71	0.27	0.03	0.20
	Other and	extraordinar	y result							
2015	- 0.09	- 0.19	- 0.11	- 0.45	- 0.01	- 0.03	- 0.02	- 0.01	0.00	- 0.01
2016	- 0.03	- 0.06	0.04	- 0.36	- 0.05	- 0.03	0.04	0.01	- 0.02	0.00
2017	- 0.04	- 0.10	- 0.05	- 0.23	0.07	- 0.01	0.00	0.03	0.04	- 0.04
2018	- 0.08	- 0.14	- 0.09	- 0.28	- 0.01	- 0.06	- 0.02	- 0.04	- 0.01	- 0.06
2019 2020	- 0.19 - 0.06	- 0.43 - 0.14	- 0.50 - 0.12	- 0.31 - 0.18	- 0.05 - 0.07	0.00 - 0.01	- 0.02 - 0.02	- 0.09 0.11	0.13 0.04	0.00
2020	- 0.04	- 0.10	- 0.04	- 0.21	- 0.07	- 0.01	- 0.01	0.45	0.04	0.01
2021	0.04	0.10	0.04	0.21	0.07	0.01	0.01	0.45	0.02	0.02
	Profit or los	ss (–) for the	financial ye	ar before tax	(
2015	0.31	0.14	0.10	0.25	0.17	0.79	0.84	0.20	0.20	0.21
2016	0.33	0.19	0.12	0.37	- 0.06	0.89	0.93	0.18	0.41	0.17
2017	0.33	0.18	0.12	0.32	0.10	0.84	0.84	0.21	0.43	0.12
2018	0.23	0.10	0.05	0.23	- 0.13	0.65	0.69	0.09	0.11	0.11
2019 2020	0.07 0.16	- 0.39 - 0.07	- 0.71 - 0.22	0.32	0.10	0.63 0.48	0.78 0.62	0.23 0.35	0.19	0.15 0.16
2020	0.16	0.11	- 0.22 - 0.06	0.30	0.06	0.48	0.62	0.35	0.08	0.16
2021	0.23	0.11	0.00	0.41	0.19	0.54	0.70	0.72	0.07	0.22
	Profit or los	ss (–) for the	financial ye	ar after tax						
2015	0.21	0.09	0.06	0.16	0.10	0.54	0.57	0.17	0.16	0.17
2016	0.24	0.13	0.09	0.26	- 0.11	0.63	0.67	0.14	0.34	0.17
2017	0.24	0.13	0.09	0.20	0.05	0.60	0.58	0.13	0.37	0.13
2018	0.15	0.08	0.05	0.13	- 0.20	0.44	0.47	0.04	0.05	0.09
2019	- 0.03	- 0.45	- 0.75	0.20	0.07	0.44	0.56	0.16	0.15	0.12
2020 2021	0.06 0.18	- 0.13 0.06	- 0.25 - 0.06	0.18 0.26	0.04	0.30 0.36	0.42 0.52	0.06 0.24	0.04	0.12 0.14
2021	0.10	0.00	0.00	0.20	0.11	0.50	0.32	0.24	0.02	0.14

For footnotes * and °, see p. 95. For footnote 1, see p. 96. Deutsche Bundesbank

Credit institutions' profit and loss accounts*

			Interest busi	ness		Commission	s business				
	Number of reporting institutions	Total assets1	Net interest income (col. 4 less col. 5)	Interest received ²	Interest paid	Net com- mission income (col. 7 less col. 8)	Com- missions received	Com- missions paid	Result from the trading portfolio	Other operating result	Operating income ³ (col. 3 plus col. 6 plus col. 9 plus col. 10)
Financial year	1	2	3	4	5	6	7	8	9	10	11
		C Is illian									
		€ billion									
2014	1,715	8,452.6	93.4	210.8	117.4	29.3	42.6	13.3	3.6	- 2.5	123.8
2015	1,679	8,605.6	95.9	200.9	105.0	30.5	44.5	14.1	3.7	- 2.2	127.9
2016	1,611	8,355.0	91.1	181.5	90.4	29.7	43.2	13.5	3.0	4.1	128.0
2017	1,538	8,251.2	85.5	165.4	79.9	30.6	44.2	13.6	5.6	1.3	122.9
2018	1,484	8,118.3	87.2	167.8	80.6	29.5	43.1	13.6	3.5	0.4	120.6
2019	1,440	8,532.7	82.5	162.8	80.4	31.2	45.8	14.5	2.5	2.5	118.7
2020	1,408	9,206.9	81.1	140.5	59.4	32.1	46.7	14.5	3.5	3.7	120.4
2021	1,358	9,468.6	82.2	131.4	49.2	37.9	53.6	15.7	4.9	1.2	126.2
	Year-on-year	percentage cl	nange								
2015	- 2.1	1.8	2.7	- 4.7	- 10.6	4.0	4.5	5.5	3.0	11.1	3.3
2016	- 4.1	- 2.9	- 4.9	- 9.6	- 13.9	- 2.3	- 3.0	- 4.4	- 18.4		0.1
2017	- 4.5	- 1.2	- 6.2	- 8.9	- 11.6	2.7	2.3	1.3	82.9	- 67.9	- 4.0
2018	- 3.5	- 1.6	2.0	1.4	0.8	-3.4	- 2.4	- 0.2	- 37.7	- 70.1	- 1.9
2019	- 3.0	5.1	- 5.4	- 3.0	- 0.3	5.8	6.1	6.8	- 28.8	545.6	- 1.6
2020	- 2.2	7.9	- 1.7	- 13.7	- 26.0	2.9	2.0	0.2	42.3	46.6	1.5
2021	- 3.6	2.8	1.4	- 6.5	- 17.2	17.9	14.9	8.2	40.3	- 68.4	4.8
	As a percent	age of total as	sets								
2014			1.10	2.49	1.39	0.35	0.50	0.16	0.04	- 0.03	1.47
2015			1.11	2.33	1.22	0.35	0.52	0.16	0.04	- 0.03	1.49
2016			1.09	2.17	1.08	0.36	0.52	0.16	0.04	0.05	1.53
2017			1.04	2.00	0.97	0.37	0.54	0.17	0.07	0.02	1.49
2018			1.07	2.07	0.99	0.36	0.53	0.17	0.04	0.00	1.49
2019	·		0.97	1.91	0.94	0.37	0.54	0.17	0.03	0.03	1.39
2020			0.88	1.53	0.65	0.35	0.51	0.16	0.04	0.04	1.31
2021	·	·	0.87	1.39	0.52	0.40	0.57	0.17	0.05	0.01	1.33
	· ·										

^{*} The figures for the most recent date should be regarded as provisional in all cases. 1 Excluding the total assets of the foreign branches of savings banks; excluding the total assets of the foreign branches of regional institutions of credit Deutsche Bundesbank

cooperatives until 2015; from 2016, excluding the total assets of the foreign branches of mortgage banks; from 2021, excluding the total assets of the foreign branches of banks with special, development and other central support tasks.

General admi	nistrative spend	ing		Result			- 4			
Total (col. 13 plus col. 14)	Staff costs	Total other ad- ministrative spending ⁴	Operating result before the valuation of assets (col. 11 less col. 12)	from the valuation of assets (other than tangible or financial fixed assets)	Operating result (col. 15 plus col. 16)	Other and extra- ordinary result	Profit or loss (–) for the financial year before tax (col. 17 plus col. 18)	Taxes on income and earnings	Profit or loss (–) for the financial year after tax (col. 19 less col. 20)	
12	13	14	15	16	17	18	19	20	21	Financial year
									€ billion	
85.8	44.0	41.8	38.1	- 6.6	31.5	- 6.5	25.0	7.6	17.4	2014
90.0	46.0	44.0	37.9	- 3.5	34.4	- 7.8	26.6	8.4	18.1	2015
88.7	44.6	44.0	39.4	- 8.8	30.6	- 2.8	27.8	7.9	19.9	2016
88.4	44.6	43.8	34.5	- 3.6	30.9	- 3.4	27.5	7.5	20.0	2017
88.1	44.3	43.9	32.4	- 6.8	25.7	- 6.8	18.9	6.7	12.2	2018
90.2	44.4	45.7	28.5	- 6.7	21.8	- 16.1	5.6	7.8	- 2.2	2019
87.0	44.2	42.8	33.4	- 13.3	20.1	- 5.8	14.3	8.4	5.9	2020
92.0	46.8	45.3	34.2	- 3.6	30.6	- 3.6	27.1	9.7	17.3	2021
							Year	-on-year perce	ntage change	
5.0	4.7	5.3	- 0.6	46.9	9.0	- 19.7	6.3	11.2	4.1	2015
- 1.5	- 3.1	0.1	4.0	- 150.3	- 10.9	63.9	4.6	- 6.7	9.9	2016
- 0.3	- 0.1	- 0.5	- 12.2	58.7	1.0	- 20.8	- 1.0	- 4.3	0.4	2017
- 0.3	- 0.6	0.1	- 6.0	- 86.9	- 16.9	- 101.0	- 31.5	- 11.2	- 39.1	2018
2.3	0.4	4.3	- 12.2	0.7	- 15.2	- 136.2	- 70.1	16.6		2019
- 3.5	- 0.5	- 6.4	17.2	- 97.7	- 7.6	63.9	153.3	7.5		2020
5.7	5.8	5.7	2.4	73.2	52.4	39.0	89.6	16.1	194.0	2021
							As	a percentage	of total assets	
1.01	0.52	0.49	0.45	- 0.08	0.37	- 0.08	0.30	0.09	0.21	2014
1.05	0.53	0.51	0.44	- 0.04	0.40	- 0.09	0.31	0.10	0.21	2015
1.06	0.53	0.53	0.47	- 0.10	0.37	- 0.03	0.33	0.09	0.24	2016
1.07	0.54	0.53	0.42	- 0.04	0.37	- 0.04	0.33	0.09	0.24	2017
1.09	0.55	0.54	0.40	- 0.08	0.32	- 0.08	0.23	0.08	0.15	2018
1.06	0.52	0.54	0.33	- 0.08	0.26	- 0.19	0.07	0.09	- 0.03	2019
0.95	0.48	0.47	0.36	- 0.14	0.22	- 0.06	0.16	0.09	0.06	2020
	0.49	0.48	0.36	- 0.04	0.32	- 0.04	0.29	0.10	0.18	2021

2 Interest received plus current income and profits transferred under profit pooling, a profit transfer agreement or a partial profit transfer agreement. 3 Net interest and commission income plus result from the trading portfolio and other

operating result. 4 Including depreciation of and value adjustments to tangible and intangible assets, but excluding depreciation of and value adjustments to assets leased ("broad" definition).

Profit and loss accounts by category of banks*

		€ million									
			Interest busi	ness		Commissions	s business				
Financial	Number of reporting institutions	reporting Total assets ¹	Net interest income (col. 4 less col. 5)	Interest received ²	Interest paid	Net com- mission income (col. 7 less col. 8)	Com- missions received	Com- missions paid	Result from the trading portfolio	Other operating result	Operating income ³ (col. 3 plus col. 6 plus col. 9 plus col. 10)
-manciai /ear	1	2	3	4	5	6	7	8	9	10	11
	All categorie	s of hanks									
2016 2017 2018 2019 2020 2021	1,611 1,538 1,484 1,440 1,408 1,358	8,355,020 8,251,175 8,118,298 8,532,738 9,206,853 9,468,587	91,146 85,486 87,202 82,453 81,074 82,227	181,543 165,387 167,777 162,805 140,502 131,409	90,397 79,901 80,575 80,352 59,428 49,182	29,746 30,559 29,522 31,244 32,137 37,904	43,201 44,190 43,124 45,765 46,684 53,644	13,455 13,631 13,602 14,521 14,547 15,740	3,046 5,572 3,470 2,469 3,513 4,927	4,065 1,304 390 2,518 3,691 1,165	128,00 122,92 120,58 118,68 120,41 126,22
	Commercial	banks									
2016 2017 2018 2019 2020 2021	171 172 167 165 164 166	3,580,912 3,532,639 3,404,697 3,591,261 3,966,453 3,995,423	34,768 30,887 34,140 30,191 28,807 29,933	56,451 54,373 62,134 56,720 44,739 38,899	21,683 23,486 27,994 26,529 15,932 8,966	16,204 16,027 14,514 15,154 15,439 19,719	23,873 23,832 22,145 23,252 23,385 28,398	7,669 7,805 7,631 8,098 7,946 8,679	1,429 4,074 2,462 1,560 2,670 3,512	2,427 - 83 - 779 1,959 3,074 501	54,82 50,90 50,33 48,86 49,99 53,66
	Big banks	,									
2016 2017 2018 2019 2020 2021	4 4 4 4 3 3	2,575,072 2,400,315 2,346,111 2,475,076 2,748,655 2,461,038	20,126 16,369 19,751 16,126 15,052 15,568	33,572 30,216 37,924 34,920 25,257 22,111	13,446 13,847 18,173 18,794 10,205 6,543	10,817 10,205 10,573 10,154 9,311 11,124	13,510 12,929 13,478 13,650 12,495 14,085	2,693 2,724 2,905 3,496 3,184 2,961	1,069 3,701 2,196 1,302 2,000 1,985	405 - 1,712 - 1,866 - 32 1,341 - 1,595	32,41 28,56 30,65 27,55 27,70 27,08
	Regional b	anks and othe	er commercial	banks ⁷							
2016 2017 2018 2019 2020 2021	148 149 145 142 139	942,665 1,048,189 962,520 1,013,378 1,094,301 1,382,623	14,369 14,237 14,149 13,784 13,435 13,949	22,343 23,545 23,562 21,153 19,073 16,741	7,974 9,308 9,413 7,369 5,638 2,792	5,286 5,712 3,827 4,864 6,015 8,506	10,245 10,779 8,543 9,456 10,759 14,175	4,959 5,067 4,716 4,592 4,744 5,669	340 350 261 252 660 1,515	1,916 1,516 986 1,892 1,605 1,987	21,91 21,81 19,22 20,79 21,71 25,95
	Branches of	of foreign ban	ks								
2016 2017 2018 2019 2020 2021	19 19 18 19 22 24	63,175 84,135 96,066 102,807 123,497 151,762	273 281 240 281 320 416	536 612 648 647 409 47	263 331 408 366 89 - 369	101 110 114 136 113 89	118 124 124 146 131 138	17 14 10 10 18 49	20 23 5 6 10 12	106 113 101 99 128 109	50 52 46 52 57 62
	Landesbanke	_{2N} 7									
2016 2017 2018 2019 2020 2021	9 8 6 6 6	975,957 940,293 803,978 862,346 898,328 898,065	7,558 6,833 5,365 5,327 5,559 5,826	27,464 25,797 24,895 27,818 25,055 26,496	19,906 18,964 19,530 22,491 19,496 20,670	1,216 1,238 1,074 1,226 1,147 1,326	2,810 2,867 2,408 2,617 2,692 3,118	1,594 1,629 1,334 1,391 1,545 1,792	1,026 1,059 634 466 456 886	289 114 160 280 179 204	10,08 9,24 7,23 7,29 7,34 8,24

For footnotes * and 1-7, see pp. 102 f. Deutsche Bundesbank

General ad Fotal (col. 13 blus col. 14)	Iministrative s Staff costs	Total other administrative spending4	Operating result before the valuation of assets (col. 11 less col. 12)	Result from the valuation of assets (other than tan- gible or financial fixed assets)	Operating result (col. 15 plus col. 16)	Other and extra- ordinary result	Profit or loss (–) for the financial year before tax (col. 17 plus col. 18)	Taxes on income and earnings5	Profit or loss (–) for the financial year after tax (col. 19 less col. 20)	With- drawals from or transfers to (-) reserves and par- ticipation rights capital ⁶	Balance sheet profit or loss (–) (col. 21 plus col. 22)	
12	13	14	15	16	17	18	19	20	21	22	23	Financia year
88,653 88,389 88,135 90,191 87,023 92,019	44,615 44,563 44,282 44,447 44,210 46,763	44,038 43,826 43,853 45,744 42,813 45,256	39,350 34,532 32,449 28,493 33,392 34,204	- 8,754 - 3,619 - 6,763 - 6,719 - 13,282 - 3,562	30,596 30,913 25,686 21,774 20,110 30,642	- 2,812 - 3,398 - 6,831 - 16,133 - 5,822 - 3,554	27,784 27,515 18,855 5,641 14,288 27,088	7,875 7,536 6,692 7,806 8,388 9,741	19,909 19,979 12,163 - 2,165 5,900 17,347		4,514 3,202 - 953 5,058 4,588 8,819	2016 2017 2018 2019 2020 2021
40,723 40,400 39,899 41,481 38,867 42,887	17,379 17,160 16,558 16,933 16,909 19,260	23,344 23,240 23,341 24,548 21,958 23,627	14,105 10,505 10,438 7,383 11,123 10,778	- 5,130 - 540 - 1,992 - 5,743 - 8,336 - 2,338	8,975 9,965 8,446 1,640 2,787 8,440	- 2,248 - 3,536 - 4,918 - 15,611 - 5,412 - 3,994	6,727 6,429 3,528 - 13,971 - 2,625 4,446	1,954 1,885 906 2,356 2,334 2,033	4,773 4,544 2,622 -16,327 - 4,959 2,413	Comm 148 - 4,064 - 4,264 18,097 6,467 2,206	4,921 480 - 1,642 1,770 1,508 4,619	2016 2017 2018 2019 2020 2021
										В	ig banks ⁷	
26,378 25,324 26,944 27,806 25,003 26,866	11,134 10,489 10,660 10,807 10,532 11,614	15,244 14,835 16,284 16,999 14,471 15,252	6,039 3,239 3,710 - 256 2,701 216	- 4,021 666 - 382 - 4,723 - 5,270 - 665	2,018 3,905 3,328 - 4,979 - 2,569 - 449	1,127 - 1,126 - 2,179 - 12,479 - 3,415 - 1,080	3,145 2,779 1,149 - 17,458 - 5,984 - 1,529	864 559 - 97 988 960 - 84	2,281 2,220 1,246 - 18,446 - 6,944 - 1,445	1,918 - 433 22 21,922 7,344 2,659	4,199 1,787 1,268 3,476 400 1,214	2016 2017 2018 2019 2020 2021
								Regional b	anks and oth	ner commerci	ial banks ⁷	
14,065 14,795 12,702 13,391 13,560 15,732	6,121 6,538 5,781 5,998 6,251 7,531	7,944 8,257 6,921 7,393 7,309 8,201	7,846 7,020 6,521 7,401 8,155 10,225	9881,2521,5749972,8461,658	6,858 5,768 4,947 6,404 5,309 8,567	3,3752,4052,7393,1311,9972,917	3,483 3,363 2,208 3,273 3,312 5,650	1,022 1,257 945 1,294 1,329 2,018	2,461 2,106 1,263 1,979 1,983 3,632	1,7503,6124,2583,794884442	711 - 1,506 - 2,995 - 1,815 1,099 3,190	2016 2017 2018 2019 2020 2021
									Bra	nches of fore	ign banks	
280 281 253 284 304 289	124 133 117 128 126 115	156 148 136 156 178 174	220 246 207 238 267 337	- 121 46 - 36 - 23 - 220 - 15	99 292 171 215 47 322	- 5 0 - 1 0 3	99 287 171 214 47 325	68 69 58 74 45 99	31 218 113 140 2 226	- 20 - 19 - 28 - 31 - 7 - 11	11 199 85 109 9 215	2016 2017 2018 2019 2020 2021
										Lan	desbanken ⁷	
6,412 6,699 5,538 5,729 5,574 5,815	2,889 3,083 2,789 2,805 2,773 2,828	3,523 3,616 2,749 2,924 2,801 2,987	3,677 2,545 1,695 1,570 1,767 2,427	- 3,725- 2,257- 2,625- 337- 643- 50	- 48 288 - 930 1,233 1,124 2,377	- 499 656 - 91 - 410 - 586 - 665	- 547 944 - 1,021 823 538 1,712	505 443 603 196 185 748	- 1,052 501 - 1,624 627 353 964	182 - 741 - 128 - 575 - 527 - 1,154	- 870 - 240 - 1,752 52 - 174 - 190	2016 2017 2018 2019 2020 2021

Profit and loss accounts by category of banks* (cont'd)

		€ million									
			Interest busin	ness		Commissions	s business				
Financial	Number of reporting institutions	Total assets1	Net interest income (col. 4 less col. 5)	Interest received ²	Interest paid	Net com- mission income (col. 7 less col. 8)	Com- missions received	Com- missions paid	Result from the trading portfolio	Other operating result	Operating income ³ (col. 3 plus col. 6 plus col. 9 plus col. 10)
year	1	2	3	4	5	6	7	8	9	10	11
	Savings bank	_{'S} 7									
2016 2017 2018 2019 2020 2021	403 390 386 380 377 371	1,154,475 1,179,915 1,267,726 1,315,579 1,407,118 1,516,119	22,667 22,018 21,949 21,217 20,741 19,880	30,520 28,577 27,541 26,758 24,986 23,964	7,853 6,559 5,592 5,541 4,245 4,084	6,975 7,590 7,965 8,458 8,660 9,239	7,423 8,069 8,778 9,405 9,646 10,307	448 479 813 947 986 1,068	10 6 1 10 5	7 169 718 17 8 41	29,659 29,783 30,633 29,702 29,414 29,171
	Credit coope	ratives									
2016 2017 2018 2019 2020 2021	972 915 875 841 814 770	832,181 868,255 911,385 957,859 1,029,671 1,108,885	16,578 16,475 16,375 16,251 16,027 16,327	21,180 20,250 19,424 19,151 18,239 18,121	4,602 3,775 3,049 2,900 2,212 1,794	4,577 4,957 5,160 5,456 5,663 6,146	5,601 6,071 6,318 6,718 6,955 7,512	1,024 1,114 1,158 1,262 1,292 1,366	10 10 4 6 10 11	495 437 408 407 474 640	21,660 21,879 21,947 22,120 22,174 23,124
	Mortgage ba	ınks7									
2016 2017 2018 2019 2020 2021	15 13 11 10 10	289,800 236,414 233,165 234,978 241,909 232,447	1,565 1,360 1,732 1,908 2,024 2,121	11,623 7,921 6,975 6,576 6,020 5,452	10,058 6,561 5,243 4,668 3,996 3,331	- 43 - 48 - 80 - 109 - 123 - 144	176 158 97 116 109 122	219 206 177 225 232 266	0 0 6 0 0	14 - 35 - 27 15 - 72 - 335	1,536 1,277 1,631 1,814 1,829 1,642
	Ruilding and	loan associati	ons								
2016 2017 2018 2019 2020 2021	20 20 20 20 19 18	215,668 227,924 233,865 237,363 242,190 249,553	2,503 2,634 2,653 2,438 2,520 2,505	6,233 5,995 5,661 5,566 5,103 4,785	3,730 3,361 3,008 3,128 2,583 2,280	- 503 - 481 - 500 - 548 - 493 - 389	1,260 1,226 1,295 1,309 1,270 1,295	1,763 1,707 1,795 1,857 1,763 1,684	0 0 0 0 0	717 701 14 52 30 26	2,717 2,854 2,167 1,942 2,057 2,142
	Banks with s	pecial, develor	oment and oth	ner central sup	port tasks						
2016 2017 2018 2019 2020 2021	21 20 19 19 19	1,306,027 1,265,735 1,263,482 1,333,352 1,421,184 1,468,095	5,507 5,279 4,988 5,121 5,396 5,635	28,072 22,474 21,147 20,216 16,360 13,692	22,565 17,195 16,159 15,095 10,964 8,057	1,320 1,276 1,389 1,607 1,844 2,007	2,058 1,967 2,083 2,348 2,627 2,892	738 691 694 741 783 885	571 423 363 427 372 507	116 1 - 104 - 212 - 2 88	7,514 6,979 6,636 6,943 7,610 8,237
	Memo item:	Banks majorit	y-owned by fo	reign banks ⁸							
2016 2017 2018 2019 2020 2021	34 34 33 32 33 33	762,620 765,500 763,177 849,008 973,433 1,194,952	8,950 8,801 9,252 9,683 9,348 9,257	13,098 12,037 12,327 12,911 11,326 10,344	4,148 3,236 3,075 3,228 1,978 1,087	3,157 3,589 3,042 3,520 4,639 6,025	5,057 5,218 4,711 5,338 6,755 8,808	1,900 1,629 1,669 1,818 2,116 2,783	718 812 436 546 539 973	402 891 - 340 1,184 650 254	13,227 14,093 12,390 14,933 15,176 16,509

^{*} The figures for the most recent date should be regarded as provisional in all cases. 1 Excluding the total assets of the foreign branches of savings banks; excluding the total assets of the foreign branches of mortgage banks; from 2021, excluding the total assets of the foreign branches of banks with special, development and other central support tasks. 2 Interest received plus current income and profits transferred under profit pooling, a profit transfer agreement or a partial Deutsche Bundesbank

profit transfer agreement. **3** Net interest and commission income plus result from the trading portfolio and other operating result. **4** Including depreciation of and value adjustments to tangible and intangible assets, but excluding depreciation of and value adjustments to assets leased ("broad" definition). **5** In part, including taxes paid by legally dependent building and loan associations affiliated to Landesbanken. **6** Including profit or loss brought forward and withdrawals from or

General ad Fotal (col. 13 blus col. 14)	Iministrative : Staff costs	Total other administrative spending4	Operating result before the valuation of assets (col. 11 less col. 12)	Result from the valuation of assets (other than tan- gible or financial fixed assets)	Operating result (col. 15 plus col. 16)	Other and extra- ordinary result	Profit or loss (–) for the financial year before tax (col. 17 plus col. 18)	Taxes on income and earnings	Profit or loss (–) for the financial year after tax (col. 19 less col. 20)	With-drawals from or transfers to (–) reserves and participation rights capital6	Balance sheet profit or loss (–) (col. 21 plus col. 22)	Standal I
12	13	14	15	16	17	18	19	20	21	22	23	Financial year
												,
										Sav	rings banks ⁷	
20,110 19,991 20,930 21,211 20,630 20,640	12,587 12,646 13,012 13,079 12,832 12,610	7,523 7,345 7,918 8,132 7,798 8,030	9,549 9,792 9,703 8,491 8,784 8,531	1,062 283 - 704 - 296 - 1,960 - 186	10,611 10,075 8,999 8,195 6,824 8,345	 386 153 786 41 88 171 	10,225 9,922 8,213 8,236 6,736 8,174	2,939 2,861 2,694 2,437 2,513 2,679	7,286 7,061 5,519 5,799 4,223 5,495	- 5,728 - 5,517 - 4,070 - 4,390 - 2,923 - 4,162	1,558 1,544 1,449 1,409 1,300 1,333	2016 2017 2018 2019 2020 2021
										Credit o	cooperatives	
14,423 14,382 14,520 14,858 14,899 15,242	8,649 8,583 8,564 8,518 8,533 8,674	5,774 5,799 5,956 6,340 6,366 6,568	7,237 7,497 7,427 7,262 7,275 7,882	103 - 186 - 926 419 - 745 - 17	7,340 7,311 6,501 7,681 6,530 7,865	361 - 33 - 172 - 174 - 192 - 123	7,701 7,278 6,329 7,507 6,338 7,742	2,104 2,199 2,078 2,124 2,020 2,012	5,597 5,079 4,251 5,383 4,318 5,730	- 4,246 - 3,774 - 2,978 - 4,154 - 3,119 - 4,457	1,351 1,305 1,273 1,229 1,199 1,273	2016 2017 2018 2019 2020 2021
										Morto	gage banks ⁷	
937 897 975 929 896 862	410 411 449 428 405 404	527 486 526 501 491 458	599 380 656 885 933 780	- 113 32 - 341 - 125 - 357 - 156	486 412 315 760 576 624	39 75 - 95 - 217 271 1,043	525 487 220 543 847 1,667	127 171 128 160 700 1,102	398 316 92 383 147 565	- 1,138 - 722 - 795 - 229 19	- 740 - 406 - 703 154 166 731	2016 2017 2018 2019 2020 2021
									Build	ng and loan	associations	
1,798 1,891 1,921 1,838 1,880 2,005	692 719 696 647 661 752	1,106 1,172 1,225 1,191 1,219 1,253	919 963 246 104 177 137	22 - 61 22 49 - 82 - 16	941 902 268 153 95 121	- 51 89 - 14 303 108 53	890 991 254 456 203 174	160 155 137 105 98 113	730 836 117 351 105 61	- 548 - 622 13 - 139 95 26	182 214 130 212 200 87	2016 2017 2018 2019 2020 2021
						E	Banks with sp	ecial, develor	ment and of	her central su	upport tasks	
4,250 4,129 4,352 4,145 4,277 4,568	2,009 1,961 2,214 2,037 2,097 2,235	2,241 2,168 2,138 2,108 2,180 2,333	3,264 2,850 2,284 2,798 3,333 3,669	9738901976861,159799	2,291 1,960 2,087 2,112 2,174 2,870	- 28- 496- 755- 6577303	2,263 1,464 1,332 2,047 2,251 3,173	86 - 178 146 428 538 1,054	2,177 1,642 1,186 1,619 1,713 2,119	- 4,065 - 1,337 - 894 - 1,387 - 1,324 - 1,153	- 1,888 305 292 232 389 966	2016 2017 2018 2019 2020 2021
							Me	emo item: Bai	nks majority-	owned by for	eign banks ⁸	
9,072 8,817 8,717 9,612 9,525 11,274	4,329 4,070 4,064 4,611 4,585 5,718	4,743 4,747 4,653 5,001 4,940 5,556	4,155 5,276 3,673 5,321 5,651 5,235	- 1,012 - 590 - 994 - 164 - 1,866 - 565	3,143 4,686 2,679 5,157 3,785 4,670	- 1,604 - 1,819 - 992 - 1,952 - 1,256 - 496	1,539 2,867 1,687 3,205 2,529 4,174	636 808 586 1,189 1,175 2,326	903 2,059 1,101 2,016 1,354 1,848	2,646 - 565 - 518 2,664 853 630	3,549 1,494 583 4,680 2,207 2,478	2016 2017 2018 2019 2020 2021

transfers to the fund for general banking risks. **7** From 2018, DB Privat- und Firmenkundenbank AG allocated to the category "Big banks", merger with Deutsche Bank AG in 2020. From 2018, HSH Nordbank allocated to the category "Regional banks and other commercial banks" and Landesbank Berlin allocated to the category "Savings banks". DSK Hyp AG (formerly SEB AG) allocated to the category

"Mortgage banks". Wüstenrot Bank Aktiengesellschaft Pfandbriefbank allocated to the category "Regional banks and other commercial banks". **8** Separate presentation of the (legally independent) banks majority-owned by foreign banks and included in other categories of banks.

Credit institutions' charge and income items*

		Charges, € billion												
							General administrative spending							
				Commis-	Net loss from the trading			Staff costs						
Financial year	Number of report- ing insti- tutions	Total				Gross loss on trans- actions in goods and sub- sidiary trans- actions				Social security costs and costs relating to pensions and other benefits				
			Interest paid				Total	Total	Wages and salaries	Total	of which: Pensions			
2013	1,748	285.8	138.7	12.6	0.3	0.0	81.1	43.8	35.2	8.6	2.9	37.4		
2014	1,715	262.8	117.4	13.3	0.4	0.0	82.0	44.0	35.3	8.7	3.2	38.0		
2015	1,679	256.6	105.0	14.1	0.5	0.0	86.0	46.0	36.4	9.6	3.7	39.9		
2016	1,611	240.9	90.4	13.5	0.2	0.0	84.4	44.6	36.1	8.6	2.7	39.8		
2017	1,538	224.1	79.9	13.6	0.0	0.0	84.0	44.6	35.6	8.9	2.9	39.4		
2018	1,484	226.9	80.6	13.6	0.0	0.0	83.6	44.3	34.6	9.7	3.9	39.4		
2019	1,440	242.0	80.4	14.5	0.1	0.0	84.8	44.4	34.9	9.6	3.6	40.3		
2020	1,408	211.0	59.4	14.5	0.1	0.0	82.6	44.2	34.7	9.5	3.6	38.3		
2021	1,358	203.7	49.2	15.7	0.0	0.0	87.1	46.8	36.4	10.3	4.4	40.4		

	Income, € billion											
		Interest received	1		Current income							
Financial year	Total	Total	from lending and money market trans- actions	from debt se- curities and Debt Register claims	Total	from shares and other variable yield securities	from parti- cipating inter- ests ²	from shares in affiliated en- terprises	Profits transferred under profit pooling, a profit trans- fer agreement or a partial profit transfer agreement			
2013	300.4	213.6	184.9	28.7	10.0	6.0	1.0	3.0	4.6			
2014	280.2	196.4	170.2	26.1	11.3	6.3	1.1	4.0	3.1			
2015	274.7	183.1	160.1	22.9	15.0	6.7	1.8	6.5	2.8			
2016	260.8	166.8	147.1	19.7	10.0	5.8	1.3	2.9	4.7			
2017	244.1	151.0	134.4	16.5	11.0	6.9	1.1	3.0	3.4			
2018	239.1	152.4	136.9	15.5	10.0	5.3	1.1	3.5	5.4			
2019	239.8	152.2	137.5	14.7	7.6	4.8	1.1	1.7	3.0			
2020	216.9	131.4	119.1	12.3	6.0	3.5	0.6	1.9	3.2			
2021	221.1	121.6	111.6	10.0	7.1	4.0	1.3	1.7	2.7			

^{*} The figures for the most recent date should be regarded as provisional in all cases. 1 Spending item does not include depreciation of and value adjustments to tangible and intangible assets, shown net of depreciation of assets leased ("nar-Deutsche Bundesbank

row" definition). All other tables are based on a broad definition of "other administrative spending". $\bf 2$ Including amounts paid up on cooperative society shares.

Depreciation of and value adjustments to tangible and intangible assets			Depreciation	Depreciation						
Total	of which: Assets leased	Other operating charges	of and value adjustments to loans and advances, and provi- sions for contingent liabilities and for commit- ments	of and value adjustments to partici- pating inter- ests, shares in affiliated enterprises and securities treated as fixed assets	Charges incurred from loss transfers	Extra- ordinary charges	Taxes on income and earnings	Other taxes	Profits trans- ferred under profit pooling, a profit transfer agreement or a partial profit trans- fer agree- ment	Financial year
5.5	1.9	16.8	10.6	3.6	0.7	3.4	7.4	0.2	4.9	2013
5.5	1.8	16.4	10.5	3.5	0.6	1.5	7.6	0.2	3.9	2014
5.9	1.8	17.9	7.2	3.6	1.2	2.5	8.4	0.3	4.1	2015
6.6	2.3	13.8	12.7	3.7	0.9	1.8	7.9	0.3	4.7	2016
7.0	2.6	14.8	8.3	1.5	0.6	2.3	7.5	0.3	4.3	2017
7.4	2.9	15.2	10.0	1.7	0.5	1.7	6.7	0.2	5.7	2018
9.2	3.7	14.7	10.0	12.2	0.9	3.2	7.8	0.3	4.1	2019
8.5	4.0	12.2	14.9	2.8	0.3	4.0	8.4	0.2	2.9	2020
9.4	4.5	16.0	7.0	1.5	0.3	3.6	9.7	0.3	3.9	2021

					Other operating income				
Commissions received	Net profit from the trading portfolio	Gross profit on trans- actions in goods and subsidiary transactions	Value readjustments to loans and advances, and provisions for contingent liabilities and for commitments	Value readjustments to participat- ing interests, shares in affiliated enterprises and securities treated as fixed assets	Total	of which: from leasing business	Extraordinary income	Income from loss transfers	Financial year
40.6	6.2	0.2	4.0	1.5	17.9	4.7	0.9	0.9	2013
42.6	4.0	0.2	4.0	1.7	15.7	4.5	0.8	0.4	2014
44.5	4.2	0.2	3.8	1.9	17.6	4.7	0.5	1.1	2015
43.2	3.3	0.2	4.0	3.4	20.3	5.5	4.9	0.0	2016
44.2	5.6	0.2	4.7	3.1	18.8	6.0	1.6	0.6	2017
43.1	3.5	0.2	3.3	0.9	18.5	6.3	1.2	0.7	2018
45.8	2.5	0.2	3.3	1.6	21.0	8.4	1.9	0.7	2019
46.7	3.6	0.2	1.6	1.4	20.0	9.1	2.3	0.6	2020
53.6	4.9	0.2	3.4	2.1	21.7	10.5	2.3	1.2	2021

Deutsche Bundesbank Monthly Report September 2022 106

The role of the International Monetary Fund in preventing and managing crises

As a global financial institution, the International Monetary Fund (IMF) plays a key role in shaping international monetary cooperation. It contributes to the stability of the global monetary and financial system by working with its member countries, providing either policy advice or, if required, financial assistance to help prevent and manage economic and financial crises.

In order to be prepared for future developments, the IMF continually reviews its policies. It often faces high expectations in an environment that is in constant flux and shaped by politics. At the same time, it is confronted with the challenge of how to meet these expectations within the framework of its mandate.

This article outlines the IMF's key tasks in crisis prevention and management. In addition, it discusses the organisation's financial resources and Germany's membership, the 70th anniversary of which was this year.

As the fourth largest member of the IMF, Germany is actively committed to international monetary cooperation and supports the IMF in its work, with the Bundesbank discharging its legally mandated tasks. Besides exercising the financial rights and obligations arising from Germany's membership, these tasks also include the Bundesbank's involvement in Germany's representation in the IMF.

Major waypoints

Founding conference held in 1944, Germany joins in 1952, ...

The IMF was established as an international financial organisation in 1944 at the United Nations conference in Bretton Woods, New Hampshire, United States, a gathering of delegates from 45 nations. It began its operations in 1946, after a sufficient number of countries had ratified the IMF Articles of Agreement, thereby accepting the IMF's objectives, the rules for international monetary cooperation and the new international monetary system, as well as the resulting obligations. Germany joined the IMF 70 years ago, on 14 August 1952.1

... creation of new reserve assets in 1960s At the end of the 1960s, there were concerns that the fixed exchange rate regime in place at that time would no longer be able to function properly in the event of a global shortage of reserve assets. As a result, the IMF was empowered to create what are known as special drawing rights (SDRs) as a reserve asset and allocate them to its members (see the box on pp. 109 ff.).

End of fixed exchange rate regime in 1970s One of the biggest changes to occur was the comprehensive reform of the international monetary system in the 1970s. This involved the transition from a monetary system of fixed exchange rates against the US dollar, which was pegged to gold, to a system of monetary cooperation without a gold peg and in which members were free to choose their own exchange rate regimes. However, they remained obliged to work with the IMF to safeguard orderly exchange rate arrangements and support a stable exchange rate regime.

Numerous other countries joined IMF, ...

Germany joined the IMF in 1952 as its 53rd member. Over the years, membership has grown to 190, making the IMF a truly global institution. This is one of the main reasons why the IMF is able to play an effective role in promoting international monetary cooperation. At the same time, global stability is strengthened by the fact that many countries have accepted the rules enshrined in the IMF Articles of Agree-

ment and the rights and obligations that come with membership.

The substantial expansion of IMF membership has also brought with it a sharply growing number of members classified as developing or low-income countries,2 which are confronted with economic policy challenges that, in part, differ in nature from those faced by advanced economies, for example. Low-income countries currently make up more than one-third of IMF members. Their increasing importance is shaping the IMF's role and policies, as reflected in, amongst other things, the establishment of trust funds providing concessional financing for this group of countries. Resources for these trust funds are mobilised from members on a voluntary basis and are managed separately from the IMF's own resources (see also the box on pp. 126 ff.).

income countries

... includina

many low-

Financial crises – such as the Asian crisis at the end of the 1990s, the global financial crisis of 2008 and the European debt crisis of the early 2010s – as well as various regional debt crises pose constant challenges to the IMF. Within the scope of its mandate, it provides its members with assistance in addressing these challenges in the form of tried and tested, modified or new instruments. The IMF responded swiftly and decisively to the COVID-19 pandemic, too, significantly stepping up financial assistance to support its members. In addition, it is grappling with the far-reaching economic fallout of the Russian war of aggression against Ukraine due to the global disruptions it has caused, which are placing heavy burdens on many, especially poorer, countries. As a global institution, it is an

Financial crises in 1990s and 2000s ...

¹ To mark the 60th anniversary of Germany's IMF membership, various important aspects of the work of the IMF and Germany's membership were discussed in the September 2012 Monthly Report; see Deutsche Bundesbank (2012). Now, ten years later, this article takes a fresh look at the IMF and its work.

² The term "low-income countries" is used here to refer to member countries that are classified by the IMF as eligible for access to concessional financing. The IMF's most recent review of eligibility determined that 69 countries may access this financing; see International Monetary Fund (2020a)

Special drawing rights and their use

In the 1960s, concerns increasingly emerged about the future functioning of the international monetary system due to a possible global shortage of reserve assets. There were fears that such a shortage could occur, in particular, in the event of an insufficient US current account deficit in the Bretton Woods global gold-dollar-based monetary system of fixed exchange rates (1944-73). It was assumed that in such a situation countries would no longer be able to generate enough US dollars through their foreign trade to finance imports and the shortage of foreign exchange would subsequently force them to take restrictive measures. These are considered harmful to global economic prosperity. 1 In order to address these feared risks to the international monetary system and to the global economy, the International Monetary Fund (IMF) was, with the first amendment to its Articles of Agreement in 1969, granted the right to create special drawing rights (SDRs) as a reserve instrument and to allocate them to its members. SDRs can only be allocated to all member countries at the same time.2 The allocations are distributed to individual members in proportion to their quota, which is reviewed on a regular basis.3

SDRs are not a currency in the usual sense, as they cannot be used as a general means of payment. A country may exchange them for currencies classified as freely usable by the IMF⁴ and they can be used to carry out transactions with the IMF.

Since SDRs were introduced, the concerns about a global shortage of reserve assets have proved largely unfounded.⁵ Moreover, with flexible exchange rates, for which many countries opted after the end of the Bretton Woods global monetary system,⁶

interventions to stabilise the exchange rate were no longer an economic policy priority. The long-term and global need to supplement existing reserve assets, as defined in the IMF's Articles of Agreement as a condition for new SDR allocations, has consequently been established only rarely and to a limited extent.⁷ New SDR allocations were made only in connection with the global financial crisis as of 2008 and most recently during the COVID-19 pandemic. These allocations to 190 members at last count were significantly higher than previous ones (2009: SDR 161.2 billion; 2021: SDR 456.6 billion). The focus was placed for all practical purposes on efforts to provide additional financial assistance to low-income

- 1 For an SDR allocation, the IMF's Articles of Agreement require that there is a long-term global need to supplement existing reserve assets and that an allocation does not contribute to excess demand and inflation in the world. The IMF's Articles of Agreement also provide for the possibility of cancelling SDRs based on these considerations. See International Monetary Fund (2016), Art. XVIII Section 1(a).
- 2 Through an amendment to the IMF's Articles of Agreement in 1998, an exceptional "equity allocation" of SDRs was agreed to those countries that had joined the IMF after previous allocations and had therefore not yet received any SDRs.
- **3** Each member country receives a quota expressed in SDRs. The quota reflects the member's relative position in the world economy. It determines the capital contribution a country is obliged to make to the IMF and the share it receives in an SDR allocation, as well as determining the member's voting power within the IMF.
- 4 These are currently five currencies which are simultaneously part of the basket of currencies on which the value or exchange rate of the SDR is based: US dollar, euro, renminbi, yen, and pound sterling. The IMF regularly reviews the composition and weighting of the currencies in the SDR basket of currencies.
- **5** See, for example, Bordo and McCauley (2017), p. 7, James (1996), p. 173, and Hauptmann (1977), p. 35. **6** The reform of the international monetary system was formalised by the second amendment to the IMF's

Articles of Agreement in 1978 and leaves members free to choose their exchange rate regime.

7 The first SDR allocation of SDR 9.3 billion was made from 1970 to 1972 to the 115 member states at that time. A second allocation of SDR 12.1 billion was made from 1979 to 1982 to then around 140 members. A cancellation of SDRs, which the IMF's Articles of Agreement also allow for, has not occurred so far.

countries and emerging market economies, which were hit particularly hard by the crisis. In so doing, the de facto expansion of the purpose of SDRs as defined in the IMF Articles of Agreement towards a development and emergency financing instrument for a section of its membership was conceded.

The fact that the SDR allocation in August 2021 was coupled to the financing needs of low-income countries during the crisis is because SDRs can be used flexibly. From an economic point of view, an SDR allocation8 is comparable to granting members an overdraft facility.9 Unlike IMF financial assistance, there are no economic policy conditions or fixed repayment schedules when making use of allocated SDRs. While the extent to which individual countries use allocated SDRs can be traced retrospectively via IMF statistics, information on the type of use is based on voluntary disclosure by member countries. 10 The value of SDR transactions must be reported to the IMF or the transactions are brokered by the IMF; it is not necessary to explain their purpose. In addition, SDR allocations can give rise to financial transactions without an exchange of SDRs being observable: following a new SDR allocation, for example, a country can retain its SDR holdings and reduce existing foreign exchange reserves instead; other countries will use an SDR allocation as collateral in order to expand the monetary financing of government by the central bank.

The information available so far, however, can be used for an initial assessment of the SDR allocation carried out in 2021: how many and which countries reduced their SDR holdings following the allocation and presumably also used them to finance the balance of payments?¹¹ In the first nine months following the allocation, only a

limited number of IMF member countries already significantly reduced their newly allocated SDRs, i.e. exchanged them or used them for payments to the IMF. Up to April 2022, a total of 38 low-income and emerging market economies reduced their SDR holdings by at least 50% of the newly allocated SDRs.¹² Countries in this group share a number of common features. One particularly striking aspect is the overrepresentation of emerging market economies with high risks to their debt sustainability and with a loss of market access, along with countries suffering acute debt crises. Well over half of the emerging market economies in the group fall into one of these categories. Of the low-income countries, more than 60% are exposed to high debt risk or find themselves in an acute debt crisis. However, the strong use of SDRs by countries with unsustainable external debt potentially conflicts with the general recommendations of the IMF, which advise members not to use the policy space pro-

8 Each SDR allocation involves the transfer of the SDR holdings and an equivalent liability to the IMF. This is because SDRs can be cancelled by the IMF and must be returned if a country leaves the IMF. Therefore, although an SDR allocation increases a country's gross foreign reserves, net foreign reserves remain unchanged. However, in the net international reserves statistics the SDR liability is treated as a long-term liability item and is therefore not taken into account in some cases.

- **9** A country's SDR holdings decline when it uses SDRs. If a member's SDR holdings are below its allocations, the IMF charges interest on the difference at the SDR interest rate. If SDR holdings are greater than allocations, the country receives the SDR interest rate on the difference from the IMF. The SDR interest rate is based on the money market rates of the five currencies in the SDR basket (US dollar, euro, renminbi, yen, and pound sterling) and currently stands at 1.566% (as at 1 September 2022).
- **10** The IMF collects and summarises this information as part of its bilateral surveillance. See International Monetary Fund (2022e).
- 11 It is also conceivable that a country exchanges SDRs in order to optimise the composition of its own reserve assets in terms of interest income or exchange rate risk.
- **12** Countries usually drew on funds quickly following the allocation at the end of August 2021, in the subsequent months in most cases. 26 of the 38 countries have already used at least 90% of their SDR allocation.

vided by the allocation to delay any debt restructuring needed, not to pursue unsustainable macroeconomic policies or postpone necessary macroeconomic adjustments and reforms. ¹³ Like the requirement that IMF loans should be utilised as efficiently as possible, these recommendations make sense as, in economic terms, levels of SDR holdings below allocations bear similarities to an external foreign currency debt with a variable interest rate and without a fixed maturity.

and the use of SDR holdings results in an interest burden; this may place additional strain on low-income countries that would benefit more from concessional financing and grants.

A more comprehensive assessment of the SDR allocation of August 2021 will be possible once the IMF has presented its own evaluations. A critical view of SDR allocations would be warranted, in particular, if countries postpone necessary reforms in the face of the sudden availability of liquidity. It should also be noted that it is not possible to allocate SDRs in a targeted manner

13 See International Monetary Fund (2021a).

important part of the multilateral world economic order. Its contribution to rules-based cross-country cooperation in the global monetary system is vital for prosperity.

... required IMF

The global economic situation, the international monetary system and the IMF's policies have changed in many ways since it was established. The mandate and core elements of the institutional structure, as well as the special characteristics of the IMF as a monetary institution, have remained largely unchanged. This offers the IMF numerous, albeit not unlimited, ways in which to support its members. Over time, the IMF has continually refined and enhanced its policies, particularly in the areas of economic policy advice and surveillance, as well as in the way that financial assistance is provided and structured. This, as well as the IMF's financial resources and the role of Germany and the Bundesbank in the IMF, will be discussed in the following sections of this article on the basis of selected factors.

The IMF's economic policy advice

As a multilateral institution, the IMF is a stabilising force for the global economy. It is often called upon to respond quickly to sudden challenges in member countries and to support them within the framework of its mandate. One of the IMF's most important tasks is crisis prevention through economic and financial policy surveillance. Compared with the financial assistance it provides, this task is often less firmly in the public eye.

Since the establishment of the IMF, the global monetary and financial system has been constantly changing and evolving. The IMF has repeatedly responded to these changes by modifying its policies and strategic direction. Over the past decade, the world economic environment and international challenges have undergone further transformation: the increasing dangers of climate change have become more

... in a changing global monetary and financial system

IMF as a stabilising element ... of a policy focus and require a global, cooperative solution. Digitalisation efforts have progressed, private crypto tokens have emerged and many central banks are working to develop central bank digital currencies. Emerging market economies have continued to catch up economically, albeit unevenly. Despite a slight decline since the 2008 financial crisis, crossborder capital flows remain large. These can trigger positive effects in recipient countries, impacting on growth, economic development and stability, for example, but they also entail risks. Abrupt capital outflows can pose a threat to macroeconomic stability and the stability of the financial system, especially in emerging market economies with limited resilience. Moreover, the increasing debt held by many countries has reached worrying levels in the last few years. The COVID-19 pandemic and, most recently, the Russian war of aggression against Ukraine have shown how global economic disruptions and burdens can emerge and existing vulnerabilities can be exacerbated in a very short space of time.

Crisis prevention: the IMF's core task

Crisis prevention through regular bilateral surveillance, ... The IMF's surveillance activities are carried out with the overarching objective of promoting the development and stability of the international monetary and financial system, thereby preventing crises. In this context, the IMF benefits from its role and experience as a global institution. Under the IMF Articles of Agreement, all 190 members are required to undergo regular, usually annual, Article IV consultations³ in which their economic policies are assessed for compliance with the objectives outlined in the Articles. Based on an in-depth analysis of a country's economic developments and policies, the IMF prepares a report containing economic policy recommendations. The rationale behind this "bilateral surveillance" is that the economic policies of one country may have an impact on other members. The best way to promote global stability is therefore to ensure that all members pursue a stability-oriented economic policy at home and, in doing so, contribute to the stability of the international economic and financial system.

In addition to this regular surveillance for all members, the IMF pays particular attention to the economic policies of those countries that have agreed on a credit programme for the purpose of resolving balance of payments problems. In such cases, the IMF assesses the implementation of agreed reforms. This intensified level of surveillance may continue following the completion of a credit programme (post-programme monitoring). Separately from the provision of financial assistance, too, the IMF has tools with which it can more closely monitor countries' economic policies on an advisory or programme basis. These tools include Staff Monitored Programs (SMPs), the Policy Coordination Instrument (PCI), the Policy Support Instrument (PSI) and the Debt Sustainability Framework (DSF) developed specifically for low-income countries, which analyses the debt sustainability of these countries.

... which can be stepped up as required

Targeted analyses of the financial system

These bilateral surveillance measures and non-financial programmes are complemented by targeted analyses of the financial system. In response to the Asian crisis, the IMF introduced the Financial Sector Assessment Program (FSAP) in 1999. The IMF and the World Bank conduct comprehensive and in-depth analyses of members' financial sectors, review the application of international regulatory and supervisory standards and make recommendations. In doing so, the IMF makes an important contribution to identifying and mitigating risks in the financial sector and to making national financial systems resilient and sustainable. Members with sys-

Particular focus on financial sector

³ Named after Article IV of the IMF Articles of Agreement, in which surveillance of members is specified as a task to be conducted by the IMF.

temically important financial sectors - one of them being Germany – are required to undergo the FSAP every five years. Germany was recently assessed and the final report published in mid-July 2022 (see the box on p. 132). In order to improve the coordination of surveillance, it was also decided that FSAP findings would be integrated to a greater extent into the annual Article IV consultations. In 2021, the FSAP instrument was reviewed and refined, amongst other things with regard to new macroeconomic risks related to climate change and digitalisation. The review also focused on improving the analysis of links between banks and financial institutions that are not part of the banking sector.

Multilateral surveillance

Complementary multilateral surveillance of global risks and spillovers, ... Bilateral surveillance is accompanied by multilateral surveillance. The latter's aim is to identify global risks or risks that could spill over from one member to other countries or to the global economy and to recommend containment measures. To this end, the IMF analyses and assesses global macroeconomic and financial sector developments.

... inter alia via flagship reports

Key instruments for multilateral surveillance are the World Economic Outlook, which provides detailed analyses of the global economic situation; the Global Financial Stability Report, which focuses on imbalances and vulnerabilities within the global financial system; the Fiscal Monitor, which examines the state of members' public finances; and the External Sector Report, which assesses the external positions of the world's largest economies.4 In addition, the IMF has been collaborating with the Financial Stability Board (FSB) to conduct an Early Warning Exercise (EWE) every six months since 2009. This is designed to identify at an early stage risks and undesirable developments that are low-probability but high-impact to the global economy.

Periodic surveillance review

The IMF periodically reviews the framework and focal points of its surveillance and, if necessary, modifies them to keep up with changes in the global economy. The last major change came in the form of the Integrated Surveillance Decision (ISD) in 2012. After the global financial crisis revealed weaknesses in surveillance, various tasks - and not least bilateral and multilateral surveillance – became better coordinated. For example, surveillance prior to the ISD focused heavily on members' exchange rate policies and neglected other policy areas (fiscal, monetary or financial stability policies) that could have a negative impact on other countries. An important objective of the ISD was to better identify and assess spillovers between economies. This concerns, for example, the impact of monetary policy decisions by major central banks on emerging market economies. In multilateral surveillance, from then onwards greater focus was placed on issues that require coordinated policy action in order to ensure global stability. Financial system analysis was also ramped up considerably once again.

In addition to assessing and refining the surveillance framework, the IMF periodically reviews surveillance practices. As part of the last review of this kind in 2021, the Comprehensive Surveillance Review, several innovations were introduced to improve the quality of surveillance. The Article IV consultations are to focus on a small number of topics that are considered particularly important. Cross-country analyses are also planned for topics that affect multiple countries at the same time. However, this approach entails the risks of analyses on core macroeconomic issues being conducted to only a limited extent and of analyses potentially lacking the breadth necessary to provide sound advice.

Overall, surveillance is to be focused more heavily on potential risks and developments

improved in wake of global financial crisis

Surveillance expanded and

Surveillance practices are regularly reviewed ...

... and modified as required

that are difficult to assess – i.e. on possible deviations from the assumed baseline scenario – and to devote more attention to climate change (see the box on pp. 115 f.) or digitalisation. A more detailed analysis of distributional issues is also planned.

Issues relating to international capital flows

Role of international capital flows and evolution of Institutional View International capital flows have always played a prominent role in the context of the IMF's economic policy advice. While the IMF had long advocated a progressive opening-up of crossborder capital flows, a reassessment of the overall advantageousness of the free movement of capital began following the Asian crisis and intensified in the wake of the global financial crisis. The IMF subsequently developed the Institutional View on the Liberalization and Management of Capital Flows (Institutional View for short) as the basis for its policy advice. The balanced approach of the Institutional View attempts to combine the advantages of capital account liberalisation with protection against the disadvantages of volatile capital flows, e.g. by employing capital flow management measures (see the box on pp. 118 f.).

Financial assistance from the IMF

IMF financial assistance is used to tackle crises While the IMF's surveillance is crucial for crisis preparedness and prevention, traditional IMF financial assistance helps countries tackle crises that express themselves in the form of temporarily limited access to funds in a globally accepted currency. According to the IMF Articles of Agreement, the purpose of temporary liquidity assistance is to help countries address such balance of payments problems without resorting to measures destructive of national or international prosperity, such as import restrictions, to remedy them. Liquidity assistance is financed using the IMF's own resources. The IMF can use resources from the trust funds it

administers for concessional financing to low-income countries (see the box on pp. 126 ff. for more information on the IMF's financial resources). The main objective of IMF programmes providing concessional financing to low-income countries is to achieve sustained progress in correcting balance of payments imbalances. Development policy considerations play a role in this type of financial assistance, although the long-term general development objectives of this group of countries fall outside the IMF's mandate – responsibility for rendering assistance in that regard rests with the World Bank and other multilateral development banks as well as the United Nations.

Under the IMF Articles of Agreement, financial assistance is provided against adequate safeguards. These include, in particular, economic policy adjustment programmes agreed between a given country and the IMF. These contain necessary modifications to monetary, fiscal and exchange rate policies and structural reforms to address the causes of balance of payments problems. The IMF's financial assistance creates breathing room for these adjustment measures to be implemented. Successfully implemented programmes usually result in the country returning to a sustainable external position, winning trust on the financial markets and being able to repay the IMF in a timely manner.

Programme efficiency and catalytic effect

The special structure of the IMF as a monetary institution and fund, as well as its financing mechanism,⁶ require that financial assistance to countries be provided only temporarily and to a limited extent and that it be repaid in a timely

Programme efficiency ...

⁵ See International Monetary Fund (2016), Article I(v). **6** See International Monetary Fund (2018), pp. 22 ff., section 2.2: The IMF's Financing Mechanism.

The International Monetary Fund and climate change

Climate change is one of the greatest global issues of our time and presents major economic policy challenges for all countries. With its near-universal membership, the International Monetary Fund (IMF) can make a valuable contribution to tackling climate change and its repercussions, particularly in the context of its economic surveillance.

Recent years have seen the IMF steadily scale up its engagement on macro-critical aspects of climate change. These efforts have yielded a number of initiatives, including analyses and recommendations on energy price subsidies as well as the IMF's proposal to implement an international carbon price floor (ICPF), which could accelerate global emissions reductions, besides offering an alternative to carbon border adjustment mechanisms (CBAMs).1 In addition, the IMF's analytical work involves examining the measures taken by individual members to mitigate carbon emissions and adapt to climate change, as well as the climaterelated risks to financial stability.

To be even better placed to meet the challenges posed by climate change, the IMF presented a new climate change strategy in July 2021.2 This strategy aims to comprehensively and systematically integrate macro-critical aspects of climate change into all areas of the IMF's economic surveillance.3 One aspect is a plan to analyse and evaluate the emissions mitigation policies of the 20 largest emitters in three-year cycles as part of Article IV consultations. Another is the intention to assess country-specific climate vulnerabilities, adaptation policies, and financing needs to build resilience. In addition to Article IV consultations, analyses of specific challenges - such as the fiscal

impact of recurring natural disasters – are planned for the countries particularly vulnerable to climate change as part of the Climate Macroeconomic Assessment Program (CMAP). Assessments of the impact of climate change on the financial sector and potential financial stability risks will be expanded as part of Financial Sector Assessment Programs (FSAPs). Cross-border issues will be addressed in the context of multilateral surveillance. This would include, for example, comparative analyses of the efficiency of various emissions reduction measures, such as a carbon tax or emissions trading systems. One key issue in this regard concerns how tax incentives and subsidies for fossil fuels can be scaled back or eliminated without leading to economic or social disruptions.

The structural challenges posed by climate change can confront countries with longerterm balance of payments problems. Against this backdrop, the IMF Executive Board decided in April 2022 to set up the Resilience and Sustainability Facility (RSF) as well as the IMF-administered Resilience and Sustainability Trust (RST), which will finance the financial support provided under the RSF. This expands the IMF's toolkit to include programmes with financial support provided at concessional terms (i.e. with lower interest rates) with long repayment periods. Access will be targeted at lowincome countries and economically vulnerable middle-income countries. The idea be-

¹ See International Monetary Fund (2022a).

² See International Monetary Fund (2021b).

³ A climate change-related policy challenge is considered macro-critical if it has the potential to impact on a country's internal and external economic stability by changing trade flows, asset prices, fiscal developments or exchange rates. See International Monetary Fund (2022b).

hind RSF programmes is to support these member countries in addressing structural challenges such as climate change or pandemics. Unlike traditional IMF assistance, the aim here is to counter prospective balance of payments problems. However, RSF programmes will only be able to cover a small part of the financing needs arising as a result of climate change and its mitigation. The primary objective of RSF programmes, which the IMF coordinates with the World Bank, is to support reforms that are conducive to strengthening countries' resilience and to mobilise private and public investment in climate change and pandemic preparedness.4

With its enhanced economic policy advice, technical assistance and training, as well as RSF financial support, the IMF now has a set of tools it can deploy to help mitigate climate change and its repercussions, within

the scope of its mandate. The Fund is currently engaged in building up the expertise needed to successfully implement the new climate change strategy. At the same time, there are various aspects of climate change, like the development of climate scenarios or implementation of specific projects, which fall outside the IMF's institutional role and responsibilities. This makes it crucial for the IMF to cooperate closely with other global organisations like the World Bank as a means of coordinating activities and leveraging synergies.

4 See International Monetary Fund (2022c).

manner.7 Debt sustainability and sufficient capacity to repay are key prerequisites for the approval of IMF financial assistance. The aim of programme-based financial assistance is to support countries in carrying out reforms and policies that are conducive to overcoming balance of payments problems and achieving external sustainability, accompanied by solid growth.8 The aim of successfully implemented programmes is also to avoid long-term, riskbearing exposures and to limit credit augmentation risk for the IMF.9 In this context, programme efficiency refers to when these objectives are achieved with as little use of funds and as little risk as possible. This requires striking a balance between economic policy adjustments and IMF financing.

One other important concept is the "catalytic effect" of IMF arrangements. The catalytic effect of an IMF arrangement arises from the fact that the economic policy adjustment programme agreed with the IMF strengthens con-

fidence in the economic policy and stability of the country concerned, thus mobilising (additional) financial resources from private investors, partner countries or other donors. A catalytic effect is an essential prerequisite for successful crisis management. In this way, the balance of payments can be stabilised on a lasting basis while at the same time minimising repayment obligations to the IMF as a preferred creditor.¹⁰

... and catalytic effect of IMF financial assistance ...

⁷ See International Monetary Fund (1992), p. 8: "Finally, the IMF has a financial function to fulfil, which consists of providing resources to members on a temporary basis" and International Monetary Fund (2016).

⁸ See International Monetary Fund (2020b), Guidelines on Conditionality.

⁹ See Deutsche Bundesbank (2005, 2012).

¹⁰ Repayments to the IMF are protected by its preferred creditor status. This status is not enshrined in law but is nonetheless politically supported and internationally recognised. It means that the IMF's repayment claims are senior to the claims of all other (foreign currency) creditors. Being in arrears to the IMF is problematic for a country, as this usually results in that country being excluded from external financing. See also Deutsche Bundesbank (2012).

... are key prerequisites for financial integrity of the IMF Adequate programme efficiency and the unfolding catalytic effect of financial assistance are essential for a country to meet its financial obligations to the IMF on time and under its own economic power. This is ultimately the basis for the IMF's financial integrity.¹¹

Assistance without programme conditionality increasing

Significant changes in the size and structure of financial assistance over time

The size and design of IMF financial assistance have changed considerably over time. For example, over the past ten years, a trend has been observed in favour of newly created, precautionary credit facilities and more flexible emergency assistance not tied to the conditionality of an IMF programme. Programme-based financial assistance, by contrast, has become relatively less important. In addition, the IMF significantly expanded the size and number of its financial assistance arrangements during the COVID-19 pandemic. The recipients were mostly low-income countries that received programme-based financial assistance and emergency financial assistance from trust funds managed by the IMF.

Crisis response during the COVID-19 pandemic

IMF responds to COVID-19 pandemic with a strong expansion of its financial assistance The IMF responded swiftly and decisively to the COVID-19 pandemic, significantly stepping up financial assistance to support its members. Between March 2020 and the end of 2021, almost one in two members of the IMF - 90 countries – received assistance totalling around SDR 123 billion.¹² One unique feature here is that the IMF responded by providing a broad range of emergency assistance¹³ that did not require programme arrangements subject to economic policy conditionality. A total of 76 countries have drawn on such emergency assistance. In addition, the IMF granted almost SDR 690 million to 31 low-income countries to finance IMF repayments due during the pandemic. These grants were drawn from the Catastrophe Containment and Relief Trust (CCRT)¹⁴ managed by the IMF.

Emergency assistance has provided rapid support to many member countries. This helped to cushion considerable balance of payments burdens in developing and emerging market economies at the beginning of the pandemic in particular. However, IMF resources, which were paid out as direct budget support, often contributed to the funding of burgeoning budget deficits and, given the lack of conditionality, could also be used to support unsustainable fiscal or exchange rate policies. The majority of the countries applying for emergency assistance in 2020 and 2021 received the maximum amount possible, with the access limits temporarily increased as a result of the crisis. 15

assistance provided rapid and extensive support, especially for low-income countries

Emergency

The COVID-19 pandemic is the first crisis to which the IMF has responded with a broad-based provision of emergency assistance. In total, 76 countries were supported by emergency assistance between March 2020 and the end of 2021, in contrast to just 16 countries that had used such financial assistance in the

Low conditionality of emergency assistance ...

- 11 See Deutsche Bundesbank (2012).
- **12** See International Monetary Fund (2022f). This corresponds to around US\$160 billion (exchange rate on 1 September 2022). Only SDR amounts are shown below. For details on SDRs, see the box on pp. 109 ff.
- 13 Emergency assistance is envisaged in the event of acute balance of payments needs if an adjustment programme is either not necessary (balance of payments disruption is purely temporary and manageable without economic policy adjustment) or not possible (for example, in the event of insufficient administrative capacity or, as was the case with travel restrictions at the beginning of the pandemic, where programme negotiations are made difficult). Emergency assistance may include preliminary measures, but does not impose any ex post conditionality on the recipient countries. The assistance can therefore be negotiated relatively quickly between the IMF and member countries and, after approval by the Executive Board, paid out in full over the short term. Emergency assistance comprises the Rapid Financing Instrument (RFI) and the Rapid Credit Facility (RFF)
- 14 The CCRT allows the IMF to provide debt service grants to the poorest and most vulnerable countries in the event of natural disasters or public health emergencies. CCRT grants were established in 2015 during the Ebola virus outbreak and modified in March 2020 in response to the coronavirus pandemic.
- **15** Only around one-quarter of the applications remained due to various considerations, for example with regard to repayment risks below the maximum possible level.

The Institutional View of the International Monetary Fund

International capital flows have always played a prominent role in the context of the International Monetary Fund's (IMF) economic policy advisory activities. Although the Fund's mandate includes the removal of restrictions on international payments for current account transactions, it does not cover rules for international capital flows. However, the IMF is authorised to monitor capital flows and provide countries with advice as part of its Article IV consultations. While the IMF had long advocated a progressive liberalisation of cross-border capital flows, in part under the influence of the Washington Consensus, 1 a reassessment of the overall advantageousness of free capital movements began following the Asian crisis at the end of the 1990s and intensified in the wake of the global financial crisis of 2008-09. This was due to considerable economic problems arising in dealing with large and volatile capital flows, particularly in emerging market economies.

The IMF subsequently adopted the Institutional View on the Liberalization and Management of Capital Flows (Institutional View) to serve as a guideline for its recommendations to its members on issues relating to capital flows. The Institutional View attempts to strike a balance, against the backdrop of past experience and academic research, between preserving the benefits of capital account liberalisation and employing capital flow management measures (CFMs). The fundamental principles of the Institutional View state that free capital flows are desirable as they can be advantageous to a country, but that they may also lead to the emergence of risks to macroeconomic and financial stability, especially in the case of large and sudden capital outflows. In order to counter such threats,

member countries can adopt temporary and targeted CFMs, which should complement but not act as a substitute for necessary macroeconomic adjustments.

In the spring of 2022, the first systematic review of the Institutional View was concluded by the IMF's Executive Board. The review was also used to integrate the IMF's work on the Integrated Policy Framework (IPF) into the Institutional View. The IPF is a coherent analytical framework for analysing and assessing the interactions between monetary policy, exchange rate policy, foreign exchange market interventions, macroprudential measures and CFMs. It is designed to enable model-based countryspecific recommendations to be made on how a country can respond to volatile international capital flows. The aim of this is to support developing and emerging market economies, in particular, in designing an appropriate policy mix.

The review of the Institutional View confirmed its core principles, but also clarified or expanded some of its statements. Generally, it was stressed that each country's starting conditions, the nature of economic shocks and existing frictions play a major role in determining its optimal policy mix for

¹ The Washington Consensus describes a package of measures that was presented by John Williamson in Washington D.C. in 1989 and was promoted as a model for the reform efforts of developing and emerging market economies. Its main features were the implementation of reforms designed to open up and liberalise the domestic economy and to make fiscal expenditure policy stability-oriented. The mixed success of the recommended reforms, policy recommendations that were perceived as simplistic and the associated neglect of social issues gave rise to substantial criticism over time. The IMF has since expanded and improved its analytical approach and strategy for economic policy measures in the fields of surveillance and lending. See Irving and Ward (2021).

managing risks from capital flows. The main area in which the Institutional View was expanded is based on a finding from the IPF that the use of pre-emptive measures in the case of stability-jeopardising capital inflows can help reduce financial stability risks. By contrast, pre-emptive measures are still not considered to be effective in addressing capital outflows.² By reviewing and expanding the basis for its economic policy recommendations, the IMF is responding to new developments in the area of capital flows as well as to criticism and suggestions from the world of research and the public.

The IMF will continue to refine the Institutional View in line with new challenges and insights from academic research. Some significant areas have not yet been covered by the analysis, but are set to be incorporated in future revisions. These include advancing digitalisation and the potential impact of

private or public digital currencies on the volume and structure of capital flows. Changes in cross-border investment that occur, for example, as a result of climate change and the policy measures taken in response will also be paid greater attention. Finally, there are plans to examine the distribution effects of CFMs with a social policy objective, which have been analysed very little to date. One example of these are the capital flows for the acquisition of real estate by non-residents and the potential undesirable effects on housing prices.

2 Furthermore, the Institutional View was, amongst other things, worded more precisely to clarify the measures it does not cover. These are CFMs that countries introduce for security reasons, to tackle money laundering and terrorist financing, in compliance with Basel standards for the financial sector or in response to international tax agreements to combat tax evasion. The IMF does not consider the appropriateness of or advise on these measures.

eleven years prior – that is, since the introduction of the emergency instruments in their current form. ¹⁶ Economic policy conditionality, which can be imposed in the form of prior actions, played a minor role in emergency assistance during the pandemic.

... may delay economic adjustments, ...

The normally low use of emergency finance instruments and their relatively low access limits reflect fundamental thinking behind IMF financial assistance. For example, a key risk of emergency assistance is that the necessary economic policy adjustments and corrections of balance of payments imbalances are delayed. In the event of a loss of market access and uncertainty about debt sustainability, excessive recourse to emergency finance assistance by countries with impending debt problems can also lead to a delay in debt restructuring, which experience has shown ultimately goes hand in hand with higher costs for the countries concerned.¹⁷

IMF emergency assistance has enabled priority expenditure to combat the pandemic that would otherwise have been impossible or limited. In this way, it has also helped stabilise the balance of payments. Various countries receiving emergency assistance make commitments to achieving transparency concerning specific forms of expenditure and certain tenders. This has a positive impact. The implementation of such commitments can help to ensure sound budgetary management and contain corruption risks associated with short-term increases in spending during the COVID-19 pandemic, thus helping demonstrate that emergency assistance is being put to appropriate use.

... while nevertheless enabling priority expenditure to combat pandemic

¹⁶ The previous corresponding instruments (Emergency Natural Disaster Assistance, ENDA, and Emergency Post-Conflict Assistance, EPCA) were also used only in isolated cases and to a comparatively small extent.

¹⁷ See International Monetary Fund (2013).

Considerable rise in outstand-ing amounts

In 2020, the granting of temporarily increased emergency financial assistance to a broad group of countries led to an increase in IMF claims of almost 50% and to a doubling of the outstanding amounts of the Poverty Reduction and Growth Trust (PRGT), one of the trust funds managed by the IMF for the purposes of granting concessional financing loans to low-income countries (see the box on pp. 126 ff.). The previous record high of 2004 was clearly exceeded at the end of 2020. This sharp increase is particularly true for countries with high risks to the sustainability of their (external) public debt. With regard to the IMF's own resources, the volume of outstanding IMF credit amounted to around SDR 93 billion at the end of 2020, close to the level of the previous historical peak in 2012.18

More countries with precautionary arrangements, ...

During the COVID-19 pandemic, the IMF concluded precautionary arrangements with five member countries on access to non-concessional financial assistance, which can be drawn down if necessary. At the beginning of the pandemic, the IMF had two such precautionary financing facilities: the Flexible Credit Line (FCL) for countries with sound policies and the Precautionary and Liquidity Line (PLL) in the case of acute or potential balance of payments needs of countries with largely sound economic policies. 19 As such arrangements can also be applied for by larger emerging market economies and allow access to substantial financial resources, these precautionary facilities account for more than half of the amount of financial assistance granted between March 2020 and the end of 2021. In addition, the IMF created another precautionary instrument in the second guarter of 2020, the Short-term Liquidity Line (SLL). There has been little use of SLL in practice; it was used for the first and only time in May 2022 by only one country and for only a few months.

... which may entail risks due to large volumes One hope relating to precautionary arrangements is that they will counteract contagion effects. However, large-scale precautionary arrangements may harbour unique financial risks for the IMF if the funds are actually drawn

upon. After the funds have been drawn upon, the usual IMF safeguard in the form of economic policy conditionality is largely eliminated.20 Moreover, market participants can interpret the drawdown of funds as a negative signal regarding the country's economic soundness. Consequently, there are important conditions for protecting the benefits of precautionary arrangements, on the one hand, and for mitigating risk for the IMF, on the other: the imposition of conditionality for exceptional access and the avoidance of long-term use in the event of deteriorating fundamentals. Accordingly, purely temporary use or a gradual reduction in the size of a country's precautionary arrangement until it expires can be seen as a sign of economic strength and would be consistent with the temporary nature of IMF financial assistance.

Demand for adjustment programmes declining

When looking only at traditional IMF financial assistance for the support of an adjustment programme (i.e. not the emergency and precautionary facilities described above), conspicuous developments become visible. In general, over the past 40 years, it has usually been the case that programme requests have been submitted by countries that have already used IMF financial assistance in the recent past and then faced renewed balance of payments problems (see the chart on p. 122). This was particularly true for low-income countries which experienced persistent balance of payments difficulties. In the case of programme arrangements with emerging market economies, it can also be observed that some countries made use of IMF financing regularly and at comparatively

Relatively few new countries with adjustment programmes

¹⁸ This could be traced back to the effects of the global financial crisis and the sovereign debt crisis in the euro area. Thanks to early repayments, the IMF's exposure to euro area countries, which had been extremely high, quickly declined before coming to an end in the second quarter of 2022.

¹⁹ See International Monetary Fund (2017).

²⁰ See Deutsche Bundesbank (2012).

tight intervals. In general, the IMF sees this as a clear indication of the insufficient success of the previous IMF programmes. An incomplete implementation of programme conditionality or a departure from stability-oriented economic policies before or relatively shortly after the end of the programme often play a role in this.21 This is problematic for the IMF in a number of ways. On the one hand, confidence in the economic policy seal of approval of IMF programmes can suffer if programmes fail to achieve their objectives in a sustainable manner. This also reduces the likelihood of programmes having a catalytic effect. On the other hand, the IMF may, as a result, be required to make available new financial resources in order to avoid jeopardising the repayments to the IMF from the failed programme. It is therefore important to implement sufficiently ambitious adjustment measures under the programme to overcome the country's balance of payments problems and to enable the programme to succeed. The higher the level of IMF financial assistance for a country, the more extensive the adjustment under the programme will have to be in order to sufficiently improve the balance of payments situation and thus ensure the capacity to repay.

Shift to instruments without adjustment programmes ... Although the IMF's response to the COVID-19 pandemic was novel, the focus on financial assistance not tied to IMF programme conditionality observed in 2020 and the increase in exposure to low-income countries continued to follow trends that had been observed for some time. The relative importance of traditional instruments with comprehensive adjustment programmes has declined over time (see the chart on p. 123).

... has been observable for some time, ...

At the beginning of the 1980s, IMF-supported adjustment programmes were the IMF's most widely used instrument for providing balance of payments assistance to member countries.²² In the mid-1980s, the toolkit was expanded especially for low-income countries in order to include concessional instruments, which are currently financed out of the PRGT.²³ Following

the global financial and economic crisis, since 2009 the IMF has expanded its toolkit to include new precautionary financing facilities²⁴ and newly designed, more flexible emergency assistance.25 The proportions of the various instruments through which the IMF provides balance of payments assistance have shifted over the past four decades. Since the mid-1980s, IMF concessional programmes have become increasingly important. This is likely to be due to the increasing share of low-income countries in its membership. Accordingly, the share of traditional, non-concessional adjustment programmes has declined. Since the introduction of new precautionary financing facilities and flexible emergency assistance from 2009 onwards, this development has continued, reaching a preliminary peak in response to the COVID-19 pandemic.

Demand for the IMF's traditional adjustment programmes has declined in parts of its membership, probably because countries have become more resilient or other sources of funding have made the IMF less attractive. Some members have stepped up their crisis preparedness, and countries in South-East Asia, in particular, have applied for virtually no financial assistance from the IMF for many years. In the past decade, global financing conditions for many emerging market economies have also been rather favourable by historical standards. By contrast, the use of Regional Financing Arrangements (RFAs), which were created or expanded in part after regional crises, remains

... likely due to lower demand and attractive alternatives on

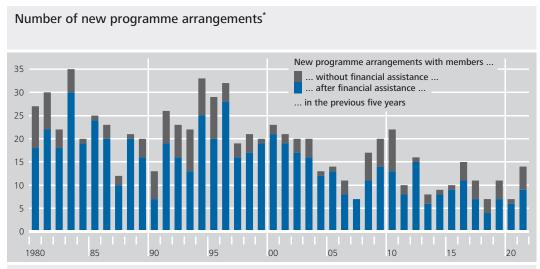
²¹ See International Monetary Fund (2019).

²² There have been a number of past IMF financing facilities with special purposes and designs. These are described in more detail in Deutsche Bundesbank (2013), but will not be expanded on any further.

²³ The practice of concessional lending to low-income countries had already begun in 1976 and has been stepped up from 1986 using stand-alone facilities. See Deutsche Bundesbank (2013).

²⁴ While precautionary lending facilities existed before 2009, such as the Contingent Credit Line (CCL) or the Short-term Liquidity Facility (SLF), these were never used. See Deutsche Bundesbank (2013).

²⁵ Prior to 2009, there were IMF instruments that were somewhat similar to the current emergency instruments, such as the Compensatory Financing Facility (CFF) or the ENDA and EPCA.



Sources: IMF and Bundesbank calculations. * Financial instruments included: Extended Credit Facility (ECF), Extended Fund Facility (EFF), Stand-By Arrangement (SBA), Standby Credit Facility (SCF).

Deutsche Bundesbank

very limited. For low-income countries, a larger supply of loans from bilateral creditors outside the Paris Club²⁶ is also likely to be a relevant factor, with China's claims on low and mediumincome countries reported to the World Bank rising by around 100% - or US\$80 billion - between 2013 and 2018.27 Together with lower debt service to traditional creditors following previous debt restructuring initiatives, this could have led to the somewhat lower number of programme requests to the IMF in the 2010s, despite a continuous increase in debt risk over this period. At the same time, one other explanation of the decline in the share of IMFsupported adjustment programmes may be that the IMF's expanded range of new precautionary financing facilities and more flexible emergency assistance on offer since 2009 has led to some crowding-out. An applicant country with balance of payments problems might regard emergency assistance without being tied to a macroeconomic adjustment programme as an attractive option. Precautionary financing facilities with particularly strict conditionality should, if they are consistently observed, hardly be able to compete with the regular adjustment programmes.²⁸ By contrast, precautionary facilities with a limited conditionality are likely to provide some competition if countries wish to avoid a comprehensive adjustment programme.29

Risks associated with lending on the rise

Another issue relevant when assessing IMF financial assistance is risk in cases where the IMF has pledged particularly high commitments to individual member countries. Finding an appropriate response to balance of payments crises that arise as a result of large capital outflows combined with uncertainty about the sustainability of public debt poses a major challenge for the IMF. Even short-term stabilisation to ward off defaults regularly requires the deployment of significant funds. Yet, at the same time, the potential for economic policy adjustment is often severely restricted (by time, social and political constraints). If, in these cases, an IMF commitment fails to produce a catalytic ef-

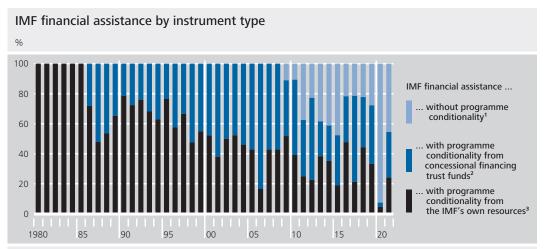
Particularly high IMF financial assistance is a risk factor

²⁶ The Paris Club is an informal body of creditor countries that becomes involved in coordinated debt restructuring negotiations when countries that are indebted to foreign governments face payment difficulties and ask for their debt service to be adjusted.

²⁷ These figures are likely to significantly understate China's actual lending to emerging market economies. In a detailed study, researchers from the Kiel Institute for the World Economy concluded that around half of China's international lending to developing and emerging market economies does not appear in official statistics. See Horn et al. (2019).

²⁸ So far, arrangements have been concluded with five countries, of which only one country has actually drawn on funds.

²⁹ Such an arrangement has so far been concluded with three countries, two of which have actually used funds.



Sources: IMF and Bundesbank calculations. 1 Flexible Credit Line (FCL), Precautionary and Liquidity Line (PLL), formerly Precautionary Credit Line (PCL), Rapid Credit Facility (RCF), Rapid Financing Instrument (RFI). 2 Standby Credit Facility (SCF), Extended Credit Facility (ECF), formerly Structural Adjustment Facility (SAF), Enhanced Structural Adjustment Facility (ESAF), Exogenous Shocks Facility (ESF). 3 Stand-By Arrangement (SBA), Extended Fund Facility (EFF).

Deutsche Bundesbank

fect (for example, a rapid restoration of market confidence or the use of extensive support from partner countries), the IMF is likely to face considerable risks. In recognition of this, the IMF has established tailored conditionality for financial assistance in excess of certain thresholds.³⁰ These criteria are designed to help ensure that deep-seated solvency problems are not treated as pure liquidity crises and that the ability to make repayments to the IMF is maintained. Moreover, a credible commitment by the IMF can reduce the threat of moral hazard on the part of those members anticipating IMF financial assistance.³¹

Concentration risk due to high individual commitments

High individual commitments entail considerable financial risks for the IMF. In mid-2022, for example, only three countries had liabilities to the IMF in excess of the threshold for exceptional access. Yet, with a total of more than SDR 50 billion, these three countries' liabilities accounted for over half of outstanding IMF credit.

Appropriate access limits important for programmes to succeed

High levels of outstanding IMF credit can also weaken the catalytic effect of an assistance programme. Having an elevated level of liabilities to a preferred creditor, such as the IMF, may make it more difficult for a country to regain market access and thus diminish the prospects for success of an IMF-supported adjust-

ment programme. Empirical evidence indeed suggests that this holds true.32 In the case of conventional IMF lending programmes over the period from 1990 to 2018, for instance, it was virtually impossible to demonstrate a positive catalytic effect of IMF financial assistance once the amount of financing exceeded 5% of the country's gross domestic product. Unlike the average arrangements over this period, these programme arrangements show no positive impact on private capital flows, in particular. Instead, there is a danger that the IMF may have crowded out private capital, as its preferred creditor status means that private investors have to expect higher losses in the event of a default.

In practice, however, there are difficulties in consistently applying the criteria for exceptional access. For example, when requesting IMF financial assistance, solvency analyses are subject to considerable uncertainty, as is a country's political willingness to make economic policy adjustments. If the country in question rules out early debt restructuring or at

Criteria for exceptional access under pressure in practice

³⁰ See International Monetary Fund (2015). In 2021, the access limits for low-income countries were abolished, thus also allowing exceptional access to the PRGT's lower-interest funds. Under certain conditions, this enables the IMF to provide more funds to low-income countries.

³¹ See Dreher (2004) and Lee (2008).

³² See Krahnke (2020).

least extending maturities, the IMF may come under pressure to apply its criteria with greater flexibility. Recently, it has been increasingly argued that exceptional access can also be justified in cases where sufficient capacity (usually private bondholders' claims) remains after the programme has been concluded to enable debt sustainability to be established at a later point in time by means of debt restructuring. Such an argument, however, runs the risk of scaring off private creditors entirely and eliminating the positive signalling effect of IMF financial assistance. This is likely to be the case in precisely those situations where it is uncertain whether the necessary reforms and adjustment measures will be implemented.

on well-functioning international cooperation on debt issues.

The creditor structure of highly indebted countries has become considerably more heterogeneous in recent years. Non-Paris Club countries have significantly expanded their bilateral lending to low to medium-income countries over the past decade. In response to these challenges, in 2020 the Group of Twenty (G20) created an effective coordination framework for the participation of all bilateral public creditors. The temporary Debt Service Suspension Initiative (DSSI)³⁴ for the 77 poorest countries was then succeeded by the permanent Common Framework.³⁵

... given increasingly heterogeneous creditor structure

Rising risk of overindebtedness amplifies challenges Overindebtedness risks, especially in low-income countries, have increased steeply in recent years. From the beginning of the 2000s up to around early 2013, the IMF classed the debt sustainability of these countries as increasingly robust, partly as a result of international debt relief initiatives. However, the picture has deteriorated sharply in recent years. Overall, the IMF currently regards just over 50 low-income countries as being at high risk of a debt crisis, which has already materialised in some cases.

Financial assistance not always a success

International cooperation on debt issues key ...

If doubts about debt sustainability are especially high or where arrears have already occurred in the past, before making a financial commitment the IMF has to ascertain whether creditors will agree to debt restructuring or whether the conditions for IMF financial assistance will be met in the event of arrears to private or public creditors.33 The desired catalytic effect of IMF financial assistance can only be achieved if the risks to sustainability can be lastingly reduced. By contrast, stalled negotiations on debt relief for private or public creditors, on the one hand, and an insufficiently ambitious economic policy adjustment, on the other, will hinder the arrangement of credible IMF programmes. Thus, in order to ensure the programmes are efficient, the IMF is dependent

Both the above-mentioned shift toward financial assistance not tied to the conditionality of an IMF programme and the emergence of cases involving exceptional access imply that the track record of IMF financial assistance has not always been successful in recent years. In view of the simultaneous rise in the number of overindebtedness crises in emerging and lowincome countries, the arrangement of conventional IMF programmes is currently a crucial challenge. Ultimately, the IMF can only provide its members with the best possible support through sufficiently ambitious adjustment programmes and ensuring debt sustainability, which, if necessary, must also involve debt restructuring. In order to safeguard its soundness even in the event of financial risk materialising, effective risk management at the IMF, including the formation of reserves, is key.

³³ See International Monetary Fund (2013).

³⁴ By deferring interest and principal payments in 2020, the financial scope of the beneficiary countries was extended until the end of 2021 in order to invest in health protection, for example. In total, the participating creditor countries deferred US\$12.9 billion.

³⁵ The Common Framework for Debt Treatment beyond the DSSI, endorsed by the G20, provides a framework for coordinated debt restructuring. Restructuring is conditional on the country concerned being eligible under the DSSI and signing an IMF-supported adjustment programme. A further aim is to ensure the adequate participation of private creditors in debt restructurings.

The IMF's financial resources and risk management

The IMF's financial resources are regularly assessed and adjusted if necessary

At regular intervals, usually every five years, the IMF conducts general quota reviews, which assess the Fund's own resources (quotas) and the quota structure, adjusting them if necessary. The last decision to increase IMF quotas was made under the 14th General Review of Quotas in 2010.36 The guotas were doubled to SDR 477 billion. As a result of this quota increase, the quota shares of IMF members also changed. These are key in determining, amongst other things, the voting shares in the IMF. The share of developing and emerging market economies has risen relatively sharply. This shift in the quota structure takes account of the growing role of developing and emerging market economies in the global economy and has strengthened the representation of these countries in the IMF as a whole. The 15th General Review of Quotas was concluded in February 2020, after the finalisation date had been postponed several times in the absence of an agreement, without a quota increase. The 16th General Review of Quotas is currently underway and scheduled for completion by 15 December 2023.

Commitment to quota-based IMF

The International Monetary and Financial Committee (IMFC)³⁷ has repeatedly declared its commitment to a quota-based and adequately funded IMF. Notwithstanding the IMF's comfortable resources, a moderate increase in quotas and a shift in the quota structure could be considered in order to strengthen the voting rights of those countries whose role in the global economy has grown since the last adjustment.

Credit lines increase IMF resources Credit lines from some member countries to the IMF are a safety mechanism in the event that quota resources prove insufficient in a crisis situation. This option is specifically provided for in the IMF's Articles of Agreement and secures additional funds for loans to members. The current credit lines are divided into the permanent multilateral New Arrangements to Borrow (NAB), and the temporary Bilateral Borrowing Agreements (BBAs). The IMF's additional resources available from the NAB and BBAs amount to just under SDR 500 billion (see also the box on pp. 126 ff.). Irrespective of the source of funding (quota resources or borrowing), the IMF is jointly and severally liable in the event of possible defaults, which limits the risk for NAB and BBA lenders.

The NAB constitute the first possibility for expanding IMF resources. Once it has become clear that the IMF will need to supplement its resources to address a threat to the international monetary system, 38 lenders and the Executive Board may decide to activate the NAB in part or in full for a maximum of six months.39 When drawing on credit lines under the NAB, the IMF follows the principle of burden-sharing and uses the resources provided by different lenders as evenly as possible. 38 member countries or their central banks, including the Bundesbank for Germany, currently participate in the NAB. Two other members have announced their future participation. The total NAB amount to SDR 361 billion. They have been in place since 1998 and extended several times; the last extension took place in 2021 for a further five years until December 2025.

If additional funds are required, NAB should be activated first ...

³⁶ This decision entered into force in January 2016.

³⁷ The IMFC is the IMF's policy advisory committee. At its biannual meetings, the 24 members from the ranks of finance ministers and central bank governors, representing all 190 member countries, discuss global economic developments and IMF policy issues, including the IMF management's Global Policy Agenda, and formulate a joint assessment, which is usually published in a communiqué.

^{38 &}quot;As the Fund is a quota-based institution, the credit arrangements provided for under the terms of this decision shall only be drawn upon when quota resources need to be supplemented in order to forestall or cope with an impairment of the international monetary system." Executive Board decision on the NAB; see International Monetary Fund (2020b)

³⁹ This requires a majority of (voting) NAB participants which together account for 85% of the total NAB as well as approval by the Executive Board. The activation process is initiated by a proposal to this effect from IMF management. Once an activation period has expired, it is possible to agree further activation periods in the same way.

The International Monetary Fund's financial resources: size and distribution of contributions

Financial assistance provided by the International Monetary Fund (IMF) is funded through contributions from its member countries. This means that it is not dependent on funding from the financial markets. Financial assistance is paid out either in special drawing rights (SDRs) or in one of the five currencies that also form the currency basket for the daily calculation of the SDR value: US dollar, euro, renminbi, yen and pound sterling.¹

IMF financial assistance to member countries can be divided into two categories: non-concessional financing, which can be used by all members, and concessional financing, i.e. lending at lower interest rates. The latter is only available to lowincome countries. Non-concessional financing is funded primarily from the mandatory capital contributions of all IMF members, the quota subscriptions.² 25% of these capital contributions³ are paid in SDRs or one of the five aforementioned basket currencies, which the IMF considers to be freely usable. The IMF can make direct use of this part of members' quota subscriptions. In order to be able to mobilise the remainder of the subscriptions, which are paid in a member's own currency, the IMF has a special financing mechanism (Financial Transactions Plan - FTP)4 that currently includes around 50 countries considered to have a strong reserve position. Issuers of one of the five SDR basket currencies can provide the necessary funds in their own currency – Germany, for example, in euro. Other countries have to make use of their reserve assets. In either case, the contributing countries receive a claim on the IMF in return, which they can record as a reserve asset.

If, in a crisis situation, the quota resources, which amount to around SDR 477 billion, are insufficient to provide financial assistance, the IMF can borrow additional resources from its members on the basis of the IMF Articles of Agreement. Numerous members or their central banks have concluded borrowing arrangements with the IMF for this purpose. These borrowing arrangements can take two forms: multilateral New Arrangements to Borrow (NAB), which were established in 1998 and have a volume of around SDR 361 billion, and temporary Bilateral Borrowing Agreements (BBAs), which were agreed in 2020 and amount to around SDR 138 billion. At present, 38 and 42 countries provide the IMF with credit lines under the NAB and BBAs, respectively.

The following overview shows the contributions from the 20 largest IMF members to the funding of the IMF's non-concessional lending.⁵ Germany's contributions are made by the Bundesbank.

- 1 At present (as at 1 September 2022), the value of special drawing rights is SDR 1/EUR 1.30139.
- **2** Each IMF member receives a quota, expressed in SDR, that reflects the country's relative position in the world economy. This quota determines the country's mandatory capital contribution to the IMF, the country's share of SDR allocations and its voting power in the IMF.
- **3** Contributions are due, for example, when a country joins the IMF or following a decision to change the quota level or quota shares.
- ${\bf 4}$ The FTP is adopted by the IMF Executive Board, usually every six months.
- 5 In addition to the countries listed in the table, 14 other countries or their central banks participate in the NAB and have agreed a BBA with the IMF: Austria, Chile, Denmark, Finland, Luxembourg, Malaysia, New Zealand, Norway, Philippines, Poland, Singapore, South Africa, Sweden and Thailand. Five other creditors participate exclusively in the NAB: Cyprus, Hong Kong, Israel, Kuwait and Portugal. Nine other countries have signed a BBA only: Algeria, Brunei Darussalam, Czech Republic, Estonia, Lithuania, Malta, Peru, Slovakia and Slovenia.

Contributions of the 20 largest IMF members

				NAB conti	ribution		BBA contribution				
	Quota			(as at 1 Au	ugust 202	2)	(as at 1 Au	ugust 202	2)3		
20 largest IMF members ¹	SDR million	%	FTP participation ²	SDR million	As a percentage of member's quota	NAB creditor	SDR million	As a percentage of member's quota	BBA creditor		
United States Japan China Germany France United	82,994 30,821 30,483 26,634 20,155	17.43 6.47 6.40 5.59 4.23	Yes Yes Yes	56,405 67,017 31,721 25,780 18,958	217 104 97	Government Government Government Central bank Government	19,511 16,017 13,810 10,449	53 52	Government Central bank Central bank Government		
Kingdom Italy India Russia	20,155 15,070 13,114 12,904	4.23 3.16 2.75 2.71	Yes Yes Yes	18,958 13,797 8,882 8,882	92 68 69	Government Government Government	3,954 7,813 2,945 2,945	52 22 23	Government Central bank Central bank Central bank		
Brazil Canada Saudi Arabia Spain	11,042 11,024 9,993 9,536	2.32 2.31 2.10 2.00	Yes Yes Yes	8,882 7,747 11,305 6,810	80 70 113 71	Government Government Government	2,945 3,532 4,878 4,944	27 32 49 52	Government Government Government		
Mexico Netherlands South Korea Australia	8,913 8,737 8,583 6,572	1.87 1.83 1.80 1.38	Yes Yes	5,075 9,190 6,690 4,441	57 105 78 68	Government Government Government	3,252 4,529 4,878 1,986		Central bank Central bank Government Government		
Belgium Switzerland Turkey	6,411 5,771 4,659	1.35 1.21 0.98	Yes	7,989 11,081 –		Government Central bank	3,325 2,903 1,626		Central bank Central bank Central bank		
All IMF members of which:	4 476,272	100	51 countries	360,804	5 75.8	38 countries	138,298	5 29.0	42 countries		
EU countries	124,733	26.19	18 EU countries	102,004	6 81.8	14 EU countries	57,648	6 46.2	18 EU countries		

1 Largest as determined by the size of their IMF quota. 2 Latest data on FTP published by the IMF (31 July 2021). 3 BBA contributions not denominated in SDR converted at SDR rate as at 1 August 2022. 4 As not all member countries have yet paid in their quota contributions in full, the current quota total is slightly lower than the amount agreed in the 14th General Review of Quotas. 5 Total contributions in relation to IMF quotas. 6 EU countries' contributions in relation to their quotas.

Deutsche Bundesbank

The funding of concessional lending is based on voluntary rather than mandatory financial contributions, with members providing loans or subsidies to trust funds administered by the IMF. The largest IMF trust fund in terms of resources is the Poverty Reduction and Growth Trust (PRGT). The PRGT provides financial assistance to low-income IMF members to support economic policy adjustment programmes or help in emergency situations. The Poverty Reduction and Growth - Heavily Indebted Poor Countries Trust (PRG-HIPC Trust) serves a similar purpose. It helps finance the HIPC Initiative, which provides highly indebted, lowincome countries with support for debt restructuring. In emergency situations, such as a pandemic or natural disaster, the Catastrophe Containment and Relief Trust (CCRT) can furnish the poorest IMF members with grants to service debt owed to the IMF and the PRGT.

In April 2022, the IMF decided to set up a further trust fund. The Resilience and Sustainability Trust (RST) is scheduled to become operational in autumn 2022. Financial assistance from the RST is designed to support countries implementing reforms to address long-term challenges, such as climate change (see the box on pp. 115 f.). Funding requirements for the RST are expected to total SDR 33 billion.

The table on p. 128 shows the voluntary contributions from the 20 largest IMF mem-

Voluntary contributions to IMF trust funds*

	Current PRGT	loans	PRGT subsidies ²	PRG-HIPC Trust subsidies ²	CCRT subsidies ²
20 largest IMF members ¹	SDR million	As a per- centage of member's quota	SDR million	SDR million	SDR million
United States Japan China Germany France United Kingdom Italy India Russia Brazil Canada Saudi Arabia Spain Mexico Netherlands South Korea Australia Belgium Switzerland	8,200 2,600 2,436 4,000 5,328 2,200 1,000 1,500 1,605 1,500 1,000 500 1,050 1,550	9 9 20 26 15 - 9 14 5 17 - 17 12 8 16 26	604 700 138 316 392 543 259 81 115 0 290 119 79 43 227 91 73 107	350 165 26 145 147 87 72 23 38 12 52 34 29 49 78 18 24 39	2 123 6 90 37 172 3 0 0 0 2 1 5 21 1 0 1 21
Turkey All contributing IMF members of which: EU countries	37,719 14,591	3 8 4 12	30 6,832 1,886	3,023 636	1 826 194

^{*} See International Monetary Fund (2022g). 1 Largest as determined by the size of their IMF quota. 2 Direct subsidies only; amounts lent to the IMF by members and from which investment income earned is provided as a subsidy are not taken into account here. 3 Total contributions in relation to IMF quotas. 4 EU countries' contributions in relation to their quotas.

Deutsche Bundesbank

ber countries to the aforementioned trust funds;⁶ the total volume of contributions will increase as further commitments are made. Unlike the contributions to the IMF itself, which are made by the Bundesbank, Germany's voluntary contributions to trust funds administered by the IMF are financed from the Federal budget.

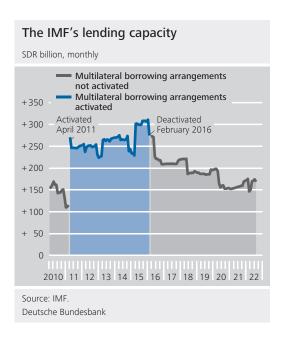
⁶ Contributions to the RST are omitted here, as the RST is not yet operational and not all pledges have yet been secured. Germany has pledged €6.3 billion from the Federal budget to the RST.

... and only then the BBAs

As the second "emergency reserve" after quota resources and the NAB, temporary BBAs were concluded directly between member countries and the IMF. They are broadly standardised between lenders in terms of form and modalities. Lenders have a say in potential activation, similar to the NAB. In total, SDR 138 billion is available through BBAs. These credit lines can be used by the IMF if additional resources are needed beyond the NAB funds. If BBAs are used by the IMF, funds are drawn as evenly as possible from the respective member countries, as with the NAB. 42 members or their central banks have currently signed a BBA, including the Bundesbank. The current BBAs run until the end of 2023 and, after approval by the lenders, can be extended by a maximum of one year.

The Fund's financial resources are sufficient – even in times of crisis

The IMF thus currently has a total of just under SDR 1 trillion at its disposal for non-concessional lending.40 Measured against historical highs, this is more than five times the amount of lending commitments and just over ten times the amount actually disbursed by the Fund. On an ongoing basis, the IMF calculates its one-year Forward Commitment Capacity (FCC), which indicates the amount of resources available for new lending over the next 12 months.41 If the FCC is deemed to have fallen too low, the Fund may partially or fully activate the multilateral credit lines and, if necessary, bilateral credit lines as well. The chart above illustrates that the IMF's lending capacity has been sufficient at all times over the past decade, taking into account the credit lines which were only activated during a limited period. The multilateral credit lines were activated between April 2011 and February 2016 in the wake of the global financial crisis and the ensuing financial assistance. There was no need to activate the additionally available bilateral credit lines. Since then, quota resources have always proved sufficient, even during the coronavirus pandemic. The IMF has an FCC of around SDR 170 billion (as at the end of August 2022) and is thus comfortably equipped to fulfil new requests for financial assistance solely from quota subscriptions.



The IMF's risk management

Given the heightened financial risks caused by the lending activity of recent years, effective risk management by the IMF has become all the more important. The Fund's risk management spans a variety of components. For example, in response to requests for financial arrangements, it scrutinises the sustainability of the relevant countries' sovereign debt as well as the governance and control structures of their central banks (safeguard assessments). The aim of these assessments is to ensure that the borrower is able to properly manage Fund resources and repay them on schedule. Moreover, the IMF has a number of instruments at its disposal to limit risks even before an agreed programme is started. These span volume limits on financial assistance (access limits); disbursement in tranches based on programme pro-

Risk management already starts with programme design, ...

⁴⁰ Excluding resources from the trust funds administered by the IMF for the purposes of granting concessional financial assistance.

⁴¹ The FCC is calculated as follows: uncommitted usable resources (quota resources – credit outstanding – undrawn balances under GRA lending commitments) + IMF holdings of SDRs + member repurchases one-year forward – repayment on IMF borrowing one-year forward (e.g. from a previous credit line activation) – prudential balance of 20%. Available borrowing under activated multilateral or bilateral credit lines is factored into the uncommitted usable resources.

gress; programme design, including conditionality on economic policies and reforms; and criteria for exceptional access. The Fund's de facto preferred creditor status helps to ensure that its loans will be repaid after programmes have come to an end. Post-programme monitoring also provides it with an instrument for monitoring the capacity to repay even after programmes have been completed.

ened financial risk and limited risk reserves. With their high hidden valuation reserves, they play a key part in maintaining confidence in the financial integrity of the IMF. This is important in order to protect the Fund's special financing mechanism and for IMF members to be able to book their financial contributions to the IMF as reserve assets on their balance sheets.

... includes a process for managing arrears ...

Being in arrears to the IMF represents a serious breach of membership obligations and poses a particular challenge for the IMF's financing mechanism, which is based on the reserve assets characteristics of financial contributions by members. In the past, this has only occurred in isolated, albeit sometimes very drawn-out, cases. Arrears can lead to escalating sanctions, including a withdrawal of membership rights. The IMF has the option of employing what is known as the cooperative arrears strategy to resolve such cases, which enables the members concerned, in consultation with the Fund, to provide evidence of their cooperation with the IMF through implementing reforms and remaining current with the IMF on new payment obligations falling due. This is intended to help mobilise external assistance and ultimately clear the arrears. Improved cooperation with the Fund makes it possible to gradually lift any restrictions on membership rights.

... and the formation of financial reserves Financially, the Fund buffers against credit risk by forming reserves, the size of which is based on existing and expected repayment claims (precautionary balances). These reserves are essentially derived from IMF budget surpluses. In recent years, they were expanded significantly to SDR 21 billion as a result of income from more sizeable loans. However, they are still below the target level. If a member is at imminent risk of falling into arrears, the Fund can form additional reserves. However, an ultimate loss of IMF credit can only occur if a defaulting member withdraws from the Fund and fails to pay its liabilities. The Fund's gold holdings provide an important additional buffer in the IMF's balance sheet, especially in times of height-

Germany and the IMF

The large expansion of IMF membership and the growth in the global economy have been accompanied by a significant rise in the IMF's financial strength. While the quota total based on the mandatory capital subscriptions of members has grown by around a factor of 55 from 1952 to the present day, Germany's subscription as measured by quota resources has risen by a factor of 81. This reflects periods of comparatively strong growth in the German economy and the country's global economic integration. Germany's quota thus stands at 5.6% at present, compared with 3.8% when it joined the Fund. This also forms the basis for the country's voting power in the IMF, which is currently 5.3%.

Germany's financial contributions to the Fund already go well beyond the size of its quota owing to commitments made under the NAB and through bilateral credit lines. For example, the financing share made up by the Bundesbank's commitments to the IMF alone stands at just under 6.8%. When the voluntary funds transferred from Germany's Federal budget to trusts administered by the IMF are factored in, the divergence between financial contributions and voting power is even wider. However, the same is true of some other European countries, along with Japan and China.

High financial commitment from Germany Rights and obligations of the Bundesbank

The Bundesbank has a legal mandate⁴² to exercise the financial rights and obligations arising from Germany's membership of the IMF and is involved in representing the country within the IMF. Accordingly, it makes the financial contributions to the Fund set out in the IMF's Articles of Agreement. Germany's voluntary financial contributions to IMF-administered trust funds for providing financial assistance to specific groups of countries, often motivated partly by development policy considerations, are made by the Federal Government and approved via the Federal budget.

Participation in SDR system

Germany participates in the IMF's SDR system and in SDR allocations and exchange transactions in accordance with the procedures established by the Fund; these are executed by the Bundesbank (for more on the SDR system, see pp. 109 ff.). In agreements with the IMF, the Bundesbank and a number of other governments and central banks have agreed to voluntarily execute SDR exchanges requested by other members against their own currency or another freely usable currency. As such exchanges via balance sheets may also have monetary policy implications, the Eurosystem has agreed limits for SDR holdings resulting from voluntary purchases and sales of SDRs. Over the past few years, however, in practice the Bundesbank has actually received only a relatively small number of requests from other members for SDR exchanges via the IMF. Even the very large SDR allocation in 2021 has not changed this so far. The Bundesbank aims to keep its own SDR holdings close to the size of the SDR allocation. This minimises exchange rate and interest rate risk to the Bundesbank's balance sheet.43

Germany benefits from IMF membership Throughout its 70-year membership, Germany has never needed to request financial assistance from the IMF, but has nonetheless benefited in other ways from its membership. Notable examples include Germany's involvement in international monetary cooperation within the framework of the IMF, the benefits of the Fund's key contribution to the functioning of the international monetary system and its stability, and

the Fund's advisory activities regarding economic policy and the financial sector. Like all members, Germany is subject to bilateral surveillance by the IMF. Most recently, the Fund provided advisory services to Germany in the form of an Article IV consultation and an FSAP, which concluded in July 2022; the results were published by the Fund (see p. 132 for details).

The Bundesbank's tasks in the context of Germany's membership of the IMF are not limited to the exercise of financial rights and obligations, which are also reflected in the Bundesbank's balance sheet and explained in its Annual Report. In accordance with the IMF Act, the Bundesbank also has to be involved in Germany's political positioning when decisions are taken in IMF bodies, working in close cooperation with the Federal Ministry of Finance. This is also reflected in the country's representation at the IMF. The President of the Bundesbank is traditionally the deputy to the Federal Minister of Finance as a member of the IMFC and is Germany's member of the Board of Governors, the highest decision-making body of the IMF. In addition, the Bundesbank, like the Federal Ministry of Finance, seconds its own staff to the German Executive Director's Office at the IMF as temporary advisers and, in alternation with the Federal Ministry of Finance, staffs the positions of the Executive Director and his or her deputy. Under the IMF Act, Germany's representatives in the IMF are to act on the instructions of the Federal Ministry of Finance, which are devised in close cooperation with the Bundesbank. From the Bundesbank's point of view, its close and trusting cooperation with the Federal Ministry of Finance based on the provisions set out in the IMF Act of 1978 has proven its worth over a great many years and has supported Germany's successful participation in international monetary cooperation

The Bundesbank's other tasks in the IMF context

with and within the IMF.

⁴² Act on the Articles of Agreement of the International Monetary Fund as amended in 1976 (IMF Act; *Gesetz zu dem Übereinkommen über den Internationalen Währungsfonds in der Fassung von 1976*) of 9 January 1978. **43** See Deutsche Bundesbank (2021).

Article IV consultation and Financial Sector Assessment Program with Germany in 2022

In accordance with Article IV of the IMF's Articles of Agreement, the International Monetary Fund (IMF) regularly examines its member countries' economic developments and economic policies. This forms part of the IMF's economic and financial policy surveillance and is intended to help prevent crises (for a description of the IMF's surveillance, see the section entitled "The IMF's economic policy advice", starting on p. 111). Article IV consultations with Germany take place on an annual basis, with this year's occurring in the first half of 2022. IMF representatives held numerous discussions with Federal ministries, the Bundesbank and other public authorities, trade unions, economic research institutions, associations, and financial and non-financial enterprises. In its concluding statement and detailed consultation report, the IMF commended the authorities for their timely and overall well-designed policy response to the pandemic and the spillovers from Russia's war of aggression against Ukraine. It expects Germany's economic recovery to be slower than anticipated at the beginning of the year, noting that the greatest downside risk to growth is a shut-off of Russian gas supplies. It therefore recommends topping up energy reserves, transitioning to renewable energy and setting incentives to reduce energy consumption. The IMF considers additional supply bottlenecks and the impact of the sanctions imposed in response to Russia's invasion of Ukraine to be further risks to the German economy. Any fiscal support measures that are required should be temporary and targeted in order to avoid additional inflationary pressures. Moreover, the IMF notes that there is fiscal space and suggests that it be used to enhance growth potential and resilience to risks to growth in

the medium term. The consultation report was discussed at a meeting of the IMF's Executive Board on 18 July 2022, then published together with the report prepared under the Financial Sector Assessment Program (FSAP).1

The FSAP assesses national financial sectors and examines financial stability and the quality of the regulatory framework. For Germany, which is deemed to have a systemically important financial sector, the FSAP is carried out every five years. The assessments began last year and consisted of numerous discussions with representatives from the German supervisory authorities and the financial sector as well as comprehensive analyses. The current FSAP indicates a resilient financial system with high capital and liquidity buffers in the banking system and robust public and private sector balance sheets. The IMF also commends the decisive use of macroprudential instruments and the enhancement of microprudential frameworks since the last FSAP review in 2016. According to the IMF, low bank profitability and a potential price correction in residential real estate could be sources of vulnerability. In this context, the IMF underlines the urgency of activating borrower-based measures. Given the downside risks to the real economy, the IMF recommends monitoring the fulfilment of capital and liquidity requirements closely so as to be able to respond quickly to changes in the stability situation.

List of references

Bordo, M.D. and R.N. McCauley (2017), Triffin: dilemma or myth, BIS Working Papers, No 684.

Deutsche Bundesbank (2021), Allocation of special drawing rights by the International Monetary Fund, Annual Report 2021, pp. 17 f.

Deutsche Bundesbank (2013), Weltweite Organisationen und Gremien im Bereich von Währung und Wirtschaft, March 2013.

Deutsche Bundesbank (2012), The International Monetary Fund in a changed global environment, Monthly Report, September 2012, pp. 61-74.

Deutsche Bundesbank, Potential financial risks faced by the International Monetary Fund, Monthly Report, September 2005, pp. 75-89.

Dreher, A. (2004), Does the IMF Cause Moral Hazard? A Critical Review of the Evidence, SSRN, https://papers.csrn.com/sol3/papers.cfm?abstract_id=505782

Hauptmann, R. (1977), Das Geld der Welt.

Horn, S., C. Reinhart and C. Trebesch (2019), China's Overseas Lending, Kiel Institute for the World Economy, Working Paper, No 2132.

International Monetary Fund (2022a), Proposal for an International Carbon Price Floor Among Large Emitters, Staff Climate Note, No 2021/001.

International Monetary Fund (2022b), Guidance Note for Surveillance under Article IV Consultations.

International Monetary Fund (2022c), Mobilizing Private Climate Financing in Emerging Market and Developing Economies, Staff Climate Note, No 2022/007.

International Monetary Fund (2022d), Germany: 2022 Article IV Consultation – press release; staff report; and statement by the Executive Director for Germany.

International Monetary Fund (2022e), Tracker on the Use of Allocated SDRs, https://www.imf.org/en/Topics/special-drawing-right/SDR-Tracker

International Monetary Fund (2022f), COVID-19 Financial Assistance and Debt Service Relief, https://www.imf.org/en/Topics/imf-and-covid19/COVID-Lending-Tracker

International Monetary Fund (2022g), 2022 Review of Adequacy of Poverty Reduction and Growth Trust Finances.

International Monetary Fund (2021a), Guidance note for Fund staff on the treatment and use of SDR allocations, 07/2021.

International Monetary Fund (2021b), IMF Strategy to Help Members Address Climate Change Related Policy Challenges – Priorities, Modes of Delivery, and Budget Implications.

International Monetary Fund (2020a), Eligibility to Use the Fund's Facilities for Concessional Financing, 2020.

International Monetary Fund (2020b), Selected Decisions and Selected Documents of the International Monetary Fund, 41st edition.

International Monetary Fund (2019), 2018 Review of Program Design and Conditionality, 05/2019.

International Monetary Fund (2018), International Monetary Fund: IMF Financial Operations.

International Monetary Fund (2017), Adequacy of the Global Financial Safety Net – Review of the Flexible Credit Line and Precautionary and Liquidity Line, and Proposals for Toolkit Reform; IMF Policy Paper, 06/2017.

International Monetary Fund (2016), International Monetary Fund: Articles of Agreement.

International Monetary Fund (2015), The Fund's lending framework and sovereign debt – further considerations, 04/2015.

International Monetary Fund (2013), Sovereign Debt Restructuring – Recent Developments and Implications for the Fund's Legal and Policy Framework, 04/2013.

International Monetary Fund (1992), Manuel Guitán: The Unique Nature of the Responsibilities of the International Monetary Fund; IMF Pamphlet Series, No 46.

Irving, D. and O. Ward (2021), What is the "Washington Consensus?", Peterson Institute of International Economics, What is the "Washington Consensus?".

James, H. (1996), International Monetary Cooperation since Bretton Woods.

Krahnke, T. (2020), Doing more with less: The catalytic function of IMF lending and the role of program size, Deutsche Bundesbank discussion paper, No 18/2020.

Lee, J. and K. Shin (2008), IMF bailouts and moral hazard, Journal of International Money and Finance, Vol. 27, Issue 5, 09/2008, pp. 816 ff.

Statistical Section

Contents

1.	Monetary developments and interest rates
2.	External transactions and positions
3.	General economic indicators
ı	. Overall monetary survey in the euro area
	The money stock and its counterparts
	Consolidated balance sheet of monetary financial institutions (MFIs)
	I. Consolidated financial statement of the Eurosystem Assets Liabilities
	V. Banks Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany
1.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany
1. 2.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany Principal assets and liabilities of banks (MFIs) in Germany, by category of banks Assets and liabilities of banks (MFIs) in Germany vis-à-vis residents
]. 3.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany
1. 2. 3. 4.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany
1. 2. 3. 4. 5.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany
). 3. 4. 5.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany
1. 2. 3. 4. 5.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany
1. 2. 3. 4. 5.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany Principal assets and liabilities of banks (MFIs) in Germany, by category of banks Assets and liabilities of banks (MFIs) in Germany vis-à-vis residents Lending by banks (MFIs) in Germany to domestic non-banks (non-MFIs) Lending by banks (MFIs) in Germany to domestic enterprises and households, housing loans, sectors of economic activity Deposits of domestic non-banks (non-MFIs) at banks (MFIs) in Germany Deposits of domestic households and non-profit institutions at banks (MFIs) in Germany
1. 2. 3. 4. 5. 6.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany
1. 2. 3. 4. 5. 7. 3.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany Principal assets and liabilities of banks (MFIs) in Germany, by category of banks Assets and liabilities of banks (MFIs) in Germany vis-à-vis residents Lending by banks (MFIs) in Germany to domestic non-banks (non-MFIs) Lending by banks (MFIs) in Germany to domestic enterprises and households, housing loans, sectors of economic activity
1. 2. 3. 5. 7. 3.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany
1. 2. 3. 4. 5. 6. 7. 8. 1. 2.	Assets and liabilities of monetary financial institutions (excluding the Deutsche Bundesbank) in Germany

• \	/. Minimum reserves	
	Reserve maintenance in the euro area	42 42
• \	/I. Interest rates	
2. 3.	ECB interest rates / basic rates of interest Eurosystem monetary policy operations allotted through tenders Money market rates, by month Interest rates and volumes for outstanding amounts and new business of German banks (MFIs)	43 43 43 44
• \	/II. Insurance corporations and pension funds	
	AssetsLiabilities	48 49
• \	/III. Capital market	
2. 3. 4. 5.	Sales and purchases of debt securities and shares in Germany	50 51 52 52 53 53
	X. Financial accounts	
1. 2. 3. 4.	Acquisition of financial assets and external financing of non-financial corporations Financial assets and liabilities of non-financial corporations Acquisition of financial assets and external financing of households Financial assets and liabilities of households	54 55 56 57
• >	K. Public finances in Germany	
1.	General government: revenue, expenditure and deficit/surplus as shown in the national accounts	58 58
3. 1	3 7 1	59 50
4. 5.		59 60
6.		60

7.	Central, state and local government: individual taxes	61
8.	German statutory pension insurance scheme: budgetary development and assets	61
9.	Federal Employment Agency: budgetary development	62
10.	Statutory health insurance scheme: budgetary development	62
11.	Statutory long-term care insurance scheme: budgetary development	63
12.	Central government: borrowing in the market	63
13.	General government: debt by creditor	63
14.	Maastricht debt by instrument	64
15.	Maastricht debt of central government by instrument and category	65
\	KI. Economic conditions in Germany	
1.	Origin and use of domestic product, distribution of national income	66
2.	Output in the production sector	67
3.	Orders received by industry	68
4.	Orders received by construction	69
5.	Retail trade turnover	69
6.	Labour market	70
7.	Prices	71
8.	Households' income	72
9.	Negotiated pay rates (overall economy)	72
10.	Assets, equity and liabilities of listed non-financial groups	73
11.	Revenues and operating income of listed non-financial groups	74
• >	KII. External sector	
1.	Major items of the balance of payments of the euro area	75
2.	.]	76
3.	Foreign trade (special trade) of the Federal Republic of Germany, by country and	
	group of countries	77
4.	Services and primary income of the Federal Republic of Germany	78
5.	Secondary income and Capital account of the Federal Republic of Germany	78
6.	Financial account of the Federal Republic of Germany	79
7.	External position of the Bundesbank	80
8.	External positions of enterprises	81
	ECB's euro foreign exchange reference rates of selected currencies	82
10.	Euro area countries and irrevocable euro conversion rates in the third stage of Economic and Monetary Union	ดา
1 1	·	82
11.	Effective exchange rates of the euro and indicators of the German economy's price	83

I. Key economic data for the euro area

1. Monetary developments and interest rates

	Money stock in v	arious definitions 1	1,2		Determinants of	the money stock 1		Interest rates				
			M3 3									
	M1	M2		3-month moving average (centred)	MFI lending, total	MFI lending to enterprises and households	Monetary capital formation 4	€STR 5,7	3 month EURIBOR 6,7	Yield on Euro- pean govern- ment bonds outstanding 8		
Period	Annual percentag	ge change						% p.a. as a mont	hly average			
2020 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	6.2	4.4	- 0.6	- 0.58	- 0.53	0.8		
Mar.	8.8	6.6	6.2	6.2	6.1	4.4	- 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	7.9	6.1	5.8	5.9	6.2	5.1	0.0	- 0.59	- 0.39	1.7		
June	7.2	5.9	5.7	5.7	6.3	5.4	- 0.0	- 0.58	- 0.24	2.2		
July	6.7	5.9	5.5		5.9	5.4	- 0.2	- 0.51	0.04	1.9		
Aug.								- 0.09	0.40	1.8		

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

Short-Term Rate. **6** Euro interbank offered rate. **7** See also footnotes to Table VI.4, p. 43°. **8** GDP-weighted yield on ten-year government bonds. Countries included: DE, FR, NL, BE, AT, FI, IE, PT, ES, IT, GR, SK, CY, SI.

2. External transactions and positions *

	Selected items of	of the euro area b	alance of payme	·	Euro exchange rates 1						
	Current account	t .	Financial accour	nt						Effective exch	ange rate 3
	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	00
2020 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	95.2
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	94.3
May	+ 15,929	+ 26,704	+ 42,495	+ 14,517	+ 90,512	- 6,940	- 56,916	+ 1,323	1.2146	100.8	94.3
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	93.4
Aug.	+ 21,055	+ 15,432	+ 37,205	+ 42,728	+ 34,827	+ 1,635	- 164,067	+ 122,082	1.1772	99.3	93.1
Sep.	+ 32,820	+ 20,817	+ 5,229	+ 21,333	+ 16,126	+ 4,116	- 37,749	+ 1,404	1.1770	99.4	93.2
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.	- 3,951	- 2,020	- 38,979	+ 29,796	+ 12,647	+ 12,756	- 93,510	- 667	1.0819	95.2	89.9
May	- 19,363	+ 2,105	+ 13,141	+ 42,127	+ 52,785	- 2,734	- 80,224	+ 1,188	1.0579	95.6	90.3
June	+ 3,241	+ 4,262	+ 33,802	- 2,153	- 17,081	- 9,894	+ 61,127	+ 1,802	1.0566	95.9	90.5
July Aug.									1.0179 1.0128	94.1 93.6	р 89.0 р 88.7

^{*} Source: ECB, according to the international standards of the International Monetary Fund's Balance of Payments Manual (sixth edition). 1 Monthly averages, see also Tables XII.10 and 11, pp. 82•/ 83•. 2 Including employee stock options. 3 Bundesbank

calculation. Against the currencies of the EER-19 group. **4** Based on consumer price indices.

I. Key economic data for the euro area

3. General economic indicators

Period	Euro area	Belgium	Germany	Estonia	Finland	France	Greece	Ireland	Italy	Latvia
renou		lomestic pro	,	ESTOTIIA	Fillialiu	riance	Greece	ITEIATIU	Italy	Latvia
2019	Annual percentage	ge change 2.1	1.1	3.7	1.2	1.8	1.8	5.4	0.5	2.5
2020 2021	- 6.1 5.2	- 5.7 6.2	- 3.7 2.6	- 0.6 8.0	- 2.2 3.0	- 7.8 6.8	- 9.0 8.3	6.2 13.6	- 9.0 6.6	- 3.8 4.5
2021 Q1 Q2	- 0.8 14.4	0.0 15.1	- 2.3 10.6	2.5 13.9	- 1.5 7.5	1.6 19.0	- 0.8 15.0	11.4 19.5	0.3 17.9	- 0.9 10.6
Q3 Q4	3.7 4.6	5.0 5.6	1.8 1.2	8.4 7.4	3.1 3.1	3.7 4.7	11.8 7.4	10.4 13.8	3.8 5.8	5.0 3.1
2022 Q1 Q2	5.4 4.1	4.8 3.2	3.9 1.8	4.5 0.6	4.3 3.0	4.8 4.2	9.0 7.8	10.8 11.1	6.0 4.4	6.7 3.0
	Industrial pi									
2019	- 0.7	4.8	- 3.2 - 9.6	7.1	1.6	0.5	- 0.7	7.0	- 1.1 - 11.4	0.8
2020 2021	- 7.7 8.0	- 3.8 16.8	- 9.6 4.7	- 2.8 6.8	- 3.2 4.0	- 10.9 5.9	- 2.1 10.2	14.5 16.4	- 11.4 12.2	- 1.8 6.5
2021 Q1 Q2	5.0 23.7	8.4 29.8	- 0.3 20.3	- 0.2 15.0	- 0.0 4.3	2.1 22.4	4.7 15.6	40.6 33.2	10.4 32.6	3.7 12.6
Q3 Q4	5.9 0.2	19.4 11.2	2.5 - 1.2	7.2 5.7	4.5 7.3	2.6 - 0.4	9.7 11.3	27.6 - 18.2	4.9 4.6	6.3 3.5
2022 Q1 Q2	- 0.3 0.4	6.4 - 5.1	- 1.2 p - 1.1	4.2 2.9	3.1 6.7	0.1 0.1	4.7 2.9	- 15.0 - 7.3	1.4 2.0	4.0 3.6
	Capacity uti	lisation in ind of full capacity	dustry ³							
2019 2020	82.2 74.5	81.2 75.6	84.6 77.3	72.6 67.6	81.0 76.9	84.5 73.8	71.5 71.0	77.3 68.7	77.4 53.4	76.3 72.0
2021 2021 Q2	81.4 80.8	80.1 79.5	84.8 85.0	78.1 77.2	81.2 82.1	81.1 80.2	75.6 74.3	78.2 73.5	76.4 75.4	75.2 74.5
Q3 Q4	83.0 82.7	80.9 81.1	86.1 85.8	78.2 83.0	81.8 82.5	82.9 82.0	77.8 77.4	80.8 81.6	77.5 77.7	76.1 77.1
2022 Q1 Q2	82.4 82.5	80.0 80.1	85.9 85.1	72.5 70.6	81.3 80.7	82.7 82.2	76.8 76.6	78.9 82.6	78.6 78.6	74.6 75.4
Q3	82.4 Standardise		85.0 nent rate 4	74.9	81.2	82.2	74.6	79.7	78.7	76.4
	As a percentage	of civilian labour fo	orce							
2019 2020 2021	7.5 7.8 e 7.7	5.4 5.6 e 6.3	3.0 3.6 3.6	4.5 7.0 e 6.2	6.7 7.8 e 7.7	8.2 7.8 e 7.9	17.3 16.3 e 14.8	5.0 5.6 e 6.3	10.0 9.2 e 9.5	6.3 8.1 e 7.6
2022 Mar.	6.8	5.4	2.9	5.5	6.5	7.4	12.8	5.0	8.3	6.7
Apr. May June	6.7 6.7 6.7	5.6 5.8 5.9	2.9 2.9 2.9	5.5 5.8 5.9	6.2 6.1 6.8	7.5 7.6 7.6	12.5 12.5 12.3	4.5 4.2 4.3	8.2 8.0 8.0	6.6 6.5 6.4
July Aug.	6.6	5.9	2.9	5.8	7.1	7.5	11.4	4.2 4.3	7.9	6.5
	Harmonised Annual percentag		nsumer Price	s		,				
2019 2020	1.2 0.3	0.4	5 0.4	- 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 2022 Mar.	2.6 7.4	3.2 9.3	5 3.2 7.6	4.5 14.8	2.1 5.8	2.1 5.1	0.6 8.0	2.4 6.9	1.9 6.8	3.2 11.5
Apr.	7.4 8.1	9.3 9.9	7.8 8.7	19.1 20.1	5.8 7.1	5.4 5.8	9.1 10.5	7.3 8.3	6.3 7.3	13.1 16.8
May June	8.6	10.5	8.2	22.0	8.1	6.5	11.6	9.6	8.5	19.2
July Aug.	e 8.9 9.1	10.4 10.5	8.5 8.8	23.2 e 25.2	8.0 7.9	6.8 6.6	11.3 11.2	9.6 9.0	e 8.4 9.0	21.3 21.4
	As a percentage	of GDP	ancial balanc	e ⁶						
2019 2020 2021	- 0.7 - 7.1 - 5.1		1.5 - 4.3 - 3.7	- 5.6	- 0.9 - 5.5 - 2.6	- 8.9	1.1 - 10.2 - 7.4	- 51	- 9.6	- 0.6 - 4.5 - 7.3
	1	vernment dek	•	•		1				. '
2019 2020 2021	83.8 97.2 95.6	112.8	68.0	8.6 19.0 18.1	69.0	97.4 114.6 112.9	206.3	58.4	155.3	36.7 43.3 44.8

I. Key economic data for the euro area

		Ι	1						Т					I
Lithua	ania	Luxembourg	Malta		Netherlands	Austria		Portugal	Slov	akia	Slovenia	Spain	Cyprus	Period
											Real	gross domest Annual pe	tic product ¹ ercentage change	
	4.6 - 0.1 5.0	- 2.3 - 0.8 5.1		5.9 8.3 0.3	- 3.9 4.9	_	1.5 6.7 4.6	2.7 - 8.4 4.9	.	- 2.6 - 4.4 3.0	3.5 - 4.3 8.2	2.1 - 10.8 5.1	5.3 - 5.0 5.5	2019 2020 2021
	1.6 8.3 4.8	4.1 10.7 2.0	10	0.1 6.3 4.0	- 2.2 10.2 5.4		5.4 13.2 5.2	- 5.3 16.0 4.5		0.2 9.6 1.3	1.5 16.1 5.0	- 4.5 17.8 3.4	- 2.1 13.0 5.3	2021 Q1 Q2 Q3
	5.2 4.8 1.8	4.0 2.9 1.6		1.7 8.1 8.9	6.2 6.7 5.3		6.1 10.2 6.0	5.8 11.1 7.2		1.4 3.1 1.8	10.4 9.6 8.2	5.5 6.4 6.0	6.4 6.2 5.8	Q4 2022 Q1 Q2
													oroduction ² 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	_ _	0.0 5.9 11.2	- 2.2 - 7.3 3.5	1	0.5 - 9.1 10.4	2.8 - 6.4 10.0	0.5 - 9.8 7.5	4.4 - 7.3 6.4	2019 2020 2021
	13.3 25.0 17.8	5.1 24.0 3.6	1-	8.5 4.3 0.1	- 0.8 10.0 6.8		3.0 24.2 9.0	- 0.6 24.3 - 3.8		6.5 35.8 0.9	3.4 24.3 6.3	2.5 27.2 1.9	1.2 21.2 4.5	2021 Q1 Q2 Q3
	23.9 23.5	3.0 0.2	- :	5.4 2.0	4.4 1.9		10.3 11.3	- 1.7 - 2.9	1	3.9 - 1.7	7.7 4.0	1.8 1.7	1.0 3.8	Q4 2022 Q1
ı	8.8	- 1.6	-	5.2	4.8		9.8	1.9	1	- 4.8	1.8 Capacit	ty utilisation	in industry ³ ge of full capacity	Q2
	77.3 73.0	80.0 72.5		7.4	84.1 78.3		86.6 79.5	78.0 74.9		87.2 79.5	84.3 78.5	80.3 74.4	63.7 51.5	2019 2020
	76.7 76.7	82.0 83.6	7	6.8 7.9	82.4 81.8		87.1 86.3	79.2 78.7	-	82.2 82.5	84.5 84.2	77.8 77.4	51.3 48.8	2021 2021 Q2
	77.6 78.3	83.7 81.8	7.	8.4 5.2	83.8 83.6		89.6 88.5	78.9 80.2		81.9 82.1	85.9 85.3	77.5 79.2	50.1 55.6	Q3 Q4
	77.9 77.7 78.8	81.9 79.9 81.4	6	2.9 4.6 7.6	84.0 84.3 83.9		88.4 88.9 87.9	81.8 82.5 81.6		82.8 83.9 83.5	86.1 85.3 84.7	78.8 80.0 78.9	55.4 58.2 58.2	2022 Q1 Q2 Q3
•		•	•	Ċ				'	•		Standardis	sed unemploy a percentage of civ		
e	6.3 8.6 7.1	5.6 6.8 e 5.4		3.6 4.4 3.4	3.4 3.9 e 4.2	e	4.5 5.4 6.2	6.5 6.9 e 6.6	1	5.8 6.7 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
	6.1 5.4	4.4 4.2	1	3.0	3.3 3.2		4.3 4.4	5.8 5.9		6.3 6.3	4.1 4.4	13.2 12.9	6.5 6.8	2022 Mar.
	5.4 5.4	4.2 4.2 4.2		3.0 2.9	3.2 3.3 3.4		4.7 4.2	6.0 6.0	1	6.3 6.2	4.4 4.5 4.4	12.6 12.6	6.9 7.4	Apr. May June
	5.2 	4.3		2.9			4.6 	5.9		6.2 	4.2	12.6 	8.0	July Aug.
												-	ercentage change	
	2.2 1.1 4.6	1.6 0.0 3.5	I .	1.5 0.8 0.7	2.7 1.1 2.8		1.5 1.4 2.8	0.3 - 0.1 0.9	1	2.8 2.0 2.8	1.7 - 0.3 2.0	0.8 - 0.3 3.0	0.5 - 1.1 2.3	2019 2020 2021
	15.6	7.9		4.5	11.7		6.6	5.5		9.6	6.0	9.8	6.2	2022 Mar.
	16.6 18.5 20.5	9.0 9.1 10.3		5.4 5.8 6.1	11.2 10.2 9.9		7.1 7.7 8.7	7.4 8.1 9.0		10.9 11.8 12.6	7.4 8.7 10.8	8.3 8.5 10.0	8.6 8.8 9.0	Apr. May June
	20.9 21.1	9.3		6.8 7.0	11.6 13.7	e	9.4 9.2	9.4 9.3	.	12.8 13.4	11.7 11.5	10.7	10.6 9.6	July Aug.
•		•	-	٠				•	•		'	ment financ	ial balance ⁶ ercentage of GDP	
	0.5 - 7.3 - 1.0	- 3.4		0.6 9.5 8.0	1.7 - 3.7 - 2.5	_ _	0.6 8.0 5.9	0.1 - 5.8 - 2.8	1	- 1.3 - 5.5 - 6.2	0.4 - 7.8 - 5.2	- 10.3	- 5.8	2019 2020 2021
=				•					-		Ge	neral govern	ment debt 6 ercentage of GDP	
	35.9 46.6 44.3	24.8	5	0.7 3.4 7.0	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	91.1 115.0	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.

II. Overall monetary survey in the euro area

- 1. The money stock and its counterparts *
- a) Euro area 1

€ billion

	I. Lending to r		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	ılds	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 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. Feb. Mar.	133.3 99.8 176.0	30.1 33.8 100.7	4.3 9.0 8.5	103.2 66.0 75.3	94.1 72.7 74.0	_ _ _	38.8 14.7 5.9	162.4 28.9 – 6.7	123.6 43.6 – 0.7	- 36.2 - 1.2 12.2	- 9.2 - 5.7 - 9.0	0.1 - 0.5 - 0.3	- 16.0 - 2.4 1.2	- 11.1 7.4 20.3
Apr. May June	55.9 124.9 94.5	13.3 48.3 37.2	8.6 15.2 0.8	42.6 76.6 57.3	29.0 77.6 58.6	-	11.4 2.6 9.2	104.5 24.5 - 74.4	115.9 21.8 – 83.6	- 36.9 - 23.5 26.8	- 23.9 - 1.2 - 6.1	- 0.1 - 0.2 - 0.4	- 7.5 - 15.1 - 4.2	- 5.4 - 6.9 37.6
July Aug. Sep.	112.9 35.0 107.4	56.0 - 16.7 72.9	8.1 - 7.8 3.7	56.8 51.7 34.4	50.3 60.9 43.2	- - -	4.2 4.7 40.1	74.3 141.2 – 58.2	78.6 146.0 – 18.1	3.1 - 5.9 16.6	- 4.7 - 7.3 - 4.5	- 0.6 - 0.4 - 0.4	9.3 - 7.0 8.3	- 0.8 8.9 13.2
Oct. Nov. Dec.	80.6 156.1 53.0	68.3 89.3 27.9	21.4 - 3.6 20.3	12.3 66.8 25.1	18.5 67.5 22.6	- - -	16.4 26.3 51.4	192.3 15.0 – 203.4	208.7 41.3 – 151.9	11.4 - 7.0 4.4	- 10.7 - 10.6 18.0	- 0.7 - 0.7 - 0.8	16.8 1.8 – 25.0	6.0 2.5 12.2
2022 Jan. Feb. Mar.	166.4 109.5 158.3	91.4 43.1 113.0	- 10.3 2.0 26.4	75.0 66.5 45.3	64.7 73.8 36.0	- -	1.6 14.5 1.9	136.3 82.6 – 20.6	137.9 97.1 – 22.5	- 18.2 - 21.2 - 0.3	- 14.7 - 12.6 2.8	- 0.1 - 0.4 - 0.7	9.5 - 3.6 - 21.8	- 12.9 - 4.6 19.4
Apr. May June	111.4 104.4 117.7	96.3 62.4 84.8	20.1 - 19.0 - 9.1	15.1 41.9 32.8	5.1 49.4 33.7	_ _	79.4 55.7 80.9	- 58.2 39.4 - 45.9	21.2 95.0 – 126.8	5.3 - 13.4 23.7	- 10.6 3.0 - 4.7	- 0.1 - 3.2 - 0.5	- 1.7 - 18.5 1.2	17.7 5.4 27.6
July	33.7	62.6	- 0.4	- 28.9	- 28.7	-	23.9	53.1	77.1	- 7.1	- 10.2	- 0.4	- 14.4	17.9

b) German contribution

	I. Lending to non-banks (non-MFIs) in the euro area						II. Net claims on non-euro area residents				III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
			Enterprises and 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 Dec.	-	0.9	7.5	3.6	- 8.4	- 4.6	- 10	7.2	- 35.1	72.1	- 7.5	- 1.3	- 0.3	- 7.1	1.2
2021 Jan. Feb. Mar.	2	0.1 9.8 4.1	12.1 18.8 35.8	3.1 4.6 1.8	18.1 11.1 18.3	18.1 13.4 19.5	2	11.7 26.3 51.9	79.7 7.0 1.9	38.0 - 19.3 63.9	- 11.4 0.8 3.5	- 2.9 - 1.8 - 3.5	- 0.6 - 0.3 - 0.3	- 1.6 4.3 7.1	- 6.4 - 1.4 0.2
Apr. May June	3	1.4 3.4 0.0	0.5 16.8 8.7	2.4 3.2 2.4	10.8 16.6 21.4	7.0 18.9 22.3	- 3	57.3 55.0 66.1	25.3 - 10.9 - 5.3	- 42.0 24.1 30.8	9.3 - 10.3 3.2	- 2.4 - 2.8 - 3.4	- 0.3 - 0.1 - 0.2	6.4 - 7.3 - 7.3	5.6 0.0 14.1
July Aug. Sep.	2	2.9 8.5 3.1	22.4 16.6 16.7	2.2 1.6 5.4	20.4 11.9 16.4	18.4 15.7 16.5	- 1	12.8 8.0 12.2	- 14.6 18.2 - 0.7	- 57.4 36.2 91.5	5.1 2.0 3.8	- 1.8 - 0.5 - 2.2	- 0.3 - 0.2 - 0.2	4.3 0.9 2.6	2.8 1.9 3.6
Oct. Nov. Dec.	5	7.8 4.0 2.8	34.7 28.5 10.9	7.2 3.4 6.8	3.0 25.4 2.0	- 0.6 28.0 4.7	- 5	7.0 9.0 2.9	47.6 - 4.2 - 47.1	0.7 54.8 75.8	18.6 5.0 – 2.3	1.4 - 0.6 9.1	- 0.2 - 0.2 - 0.2	15.6 4.7 – 13.2	1.8 1.1 2.0
2022 Jan. Feb. Mar.	3	0.4 2.7 7.0	31.0 27.6 23.3	1.4 3.4 4.1	9.4 5.2 13.7	7.5 7.2 12.9	1	1.9 6.0 4.2	72.2 21.9 – 22.2	- 39.7 5.9 22.0	- 4.0 5.1 6.1	- 1.1 - 1.3 - 2.0	- 0.8 - 0.2 - 0.2	12.6 7.0 4.1	- 14.8 - 0.4 4.2
Apr. May June	3	9.0 9.1 2.6	18.9 28.5 25.5	2.7 3.5 – 4.1	0.1 10.6 7.1	- 4.5 13.5 4.8	- 2	9.1 9.8 2.4	- 13.0 - 0.9 - 9.4	- 32.1 28.9 13.0	4.4 2.0 3.8	- 2.7 - 2.4 - 3.1	- 0.2 - 0.1 - 0.2	3.2 2.0 - 3.8	4.1 2.5 10.8
July	1	8.3	30.7	10.7	- 12.4	- 13.4	4	4.2	5.7	- 38.5	9.0	- 2.0	- 0.2	7.3	3.9

^{*} The data in this table are based on the consolidated balance sheet of monetary financial institutions (MFIs) (Table II.2); statistical breaks have been eliminated from the flow figures (see also the "Notes on the figures" in the "Explanatory notes" of the Statistical Series Banking Statistics). 1 Source: ECB. 2 Excluding MFIs' portfolios. 3 After

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

II. Overall monetary survey in the euro area

a) Euro area 1

	V. Other fac	tors	VI. Money st	ock M3 (balan	3 (balance I plus II less III less IV less V)										
				Money stock	: M2							Debt secur-]		
		of which: Intra-			Money stock	: M1						ities with maturities			
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 5,6	Repo transac- tions	Money market fund shares (net) 2,7,8	of up to 2 years (incl. money market paper) (net) 2,7	Period		
- 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	2020 Dec.		
78.3	33.2	0.0	69.1	32.3	44.5	2.6	41.9	- 30.6	18.4	29.9	18.5	5.7	2021 Jan.		
30.4	5.2	0.0	52.6	65.4	71.8	7.3	64.5	- 18.0	11.6	2.8	- 30.7	13.1	Feb.		
19.6	73.2	0.0	83.2	101.6	82.6	10.5	72.2	7.3	11.7	– 18.6	- 4.7	– 13.3	Mar.		
- 32.3	14.2	0.0	94.5	69.1	88.9	8.5	80.4	- 27.9	8.1	15.3	8.9	6.8	Apr.		
- 8.5	48.9	0.0	110.1	115.6	116.7	13.2	103.5	- 11.7	10.7	- 4.1	- 8.9	8.1	May		
16.8	- 4.3	0.0	74.0	88.1	119.7	10.5	109.2	- 33.9	2.3	- 10.8	- 8.4	– 4.6	June		
0.4	- 55.8	0.0	151.2	113.5	103.3	14.6	88.6	10.5	- 0.3	17.4	22.6	7.4	July		
26.6	- 10.6	0.0	28.3	33.4	32.4	1.7	30.7	- 2.5	3.6	- 12.3	5.3	- 6.2	Aug.		
6.5	- 0.8	0.0	31.1	60.4	76.0	5.3	70.8	- 16.5	0.8	12.7	– 31.1	2.9	Sep.		
- 2.4	- 75.0	0.0	129.3	84.7	70.5	6.8	63.7	19.2	- 5.0	13.2	31.5	0.8	Oct.		
- 48.5	84.9	0.0	95.9	83.7	102.7	6.0	96.7	- 19.7	0.7	- 4.4	26.2	- 5.0	Nov.		
- 44.5	- 20.1	0.0	87.6	114.4	104.0	20.6	83.3	6.9	3.6	- 41.8	– 6.7	- 4.0	Dec.		
68.1	91.1	0.0	- 23.8	- 23.9	- 51.4	1.0	- 52.3	14.9	12.6	63.5	- 23.2	6.2	2022 Jan.		
44.6	31.7	0.0	39.4	69.8	76.7	9.1	67.5	- 14.8	8.0	9.4	- 37.2	- 2.1	Feb.		
13.7	52.0	0.0	102.4	113.2	93.1	22.5	70.6	16.0	4.0	– 21.8	- 3.4	1.5	Mar.		
- 22.1	- 71.7	0.0	94.1	57.7	52.3	11.2	41.1	3.1	2.4	28.8	21.9	13.4	Apr.		
- 28.9	43.5	0.0	54.7	64.7	71.2	7.8	63.4	- 18.4	12.0	4.4	- 11.5	- 4.1	May		
69.6	51.3	0.0	72.2	76.8	50.2	6.6	43.6	23.5	3.1	– 35.5	- 1.4	13.3	June		
- 31.1	- 90.7	0.0	128.6	114.3	59.6	10.1	49.5	49.6	5.2	27.0	- 2.6	0.2			

b) German contribution

V. Other factors							VI. Money stock M3 (balance I plus II less IV less V) 10													
IV. De- posits of central gov- ernments		Total		of which:				Components of the money stock												
				Intra- Eurosystem liability/ claim related to banknote issue 9,11	Currency in circu- lation	Total		Overnight deposits	Deposits with an agreed maturity of up to 2 years		Deposits at agreed notice of up to 3 months 6		Repo transac- tions		Money market fund shares (net) 7,8		maturities with maturities of up to 2 years (incl. money market paper)(net) 7		Period	
	-	22.9	-	73.4	2.4	5.6	-	4.3	- 5.8	_	1.7		1.3		3.1		0.1	-	1.3	2020 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	<u> </u>	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
l	-	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.
l	-	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	1	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 14.9	 - -	32.9 30.3 37.5	3.4 3.4 3.7	2.3 2.7 0.5		3.7 15.1 29.0	- 3.4 22.5 19.6	-	10.4 7.4 7.5	- - -	0.4 1.2 1.6	-	2.0 0.4 0.6		0.2 0.2 0.0	-	0.6 0.7 2.9	Apr. May June
	-	38.2		56.7	- 5.3	10.6		35.0	6.1		23.6	-	1.7		4.3		0.1		2.5	July

of paper issued by euro area MFIs. **9** Including national banknotes still in circulation. **10** The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates and are therefore not comparable with the erstwhile German money stocks M1, M2 or M3. **11** The

difference between the volume of euro banknotes actually issued by the Bundesbank and the amount disclosed in accordance with the accounting regime chosen by the Eurosystem (see also footnote 2 on banknote circulation in Table III.2).

- II. Overall monetary survey in the euro area
- 2. Consolidated balance sheet of monetary financial institutions (MFIs) *

		Assets									
		Lending to non									
			Enterprises and	households			General govern	ment			
	Total					Shares and				Claims on non-	
End of month	assets or liabilities	Total	Total	Loans	Debt securities 2	other equities	Total	Loans	Debt securities 3	euro area residents	Other assets
	Euro area (Total	Louis	Securities	equines	Total	Louis	Securities :	residents	assets
2020 June	30,406.4	19,761.9	14,451.9	11,982.0	1,653.7	816.1	5,310.0	1,005.3	4,304.7	6,297.2	4,347.3
July Aug.	30,598.6 30,434.9	19,912.2 19,985.0	14,334.1 14,355.1	12,013.7 12,019.1	1,506.0 1,525.0	814.5 811.0	5,578.1 5,629.9	1,006.0 997.8	4,572.1 4,632.1	6,291.1 6,241.9	4,395.3 4,208.0
Sep.	30,522.8	20,084.9	14,349.5	12,019.2	1,520.4	809.9	5,735.4	998.7	4,736.8	6,238.1	4,199.8
Oct. Nov.	30,687.0 30,749.4	20,162.5 20,292.0	14,376.6 14,457.7	12,054.8 12,090.4	1,520.5 1,542.2	801.3 825.0	5,785.9 5,834.4	1,004.2 1,003.4	4,781.7 4,831.0	6,337.4 6,331.0	4,187.0 4,126.4
Dec. 2021 Jan.	30,438.8 30,643.8	20,266.1 20,387.8	14,438.3 14,466.2	12,042.9 12,067.8	1,532.2 1,535.8	863.2 862.6	5,827.8 5,921.6	990.2 999.4	4,837.6 4,922.1	6,108.9 6,299.8	4,063.8 3,956.2
Feb. Mar.	30,546.3 30,827.0	20,463.6 20,653.7	14,500.5 14,576.8	12,090.1 12,185.3	1,541.1 1,512.6	869.3 879.0	5,963.1 6,076.9	992.4 993.3	4,970.6 5,083.5	6,300.7 6,360.7	3,782.0 3,812.6
Apr. May	30,752.9 30,890.4	20,667.2 20,788.2	14,566.6 14,612.8	12,169.2 12,198.6	1,509.7 1,521.6	887.7 892.6	6,100.6 6,175.5	1,007.2 1,006.2	5,093.4 5,169.2	6,396.3 6,434.1	3,689.5 3,668.1
June	30,991.0	20,890.7	14,652.8	12,234.6	1,530.0	888.3	6,237.8	1,004.8	5,233.1	6,400.0	3,700.3
July 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. Oct.	31,473.8 31,776.6	21,133.9 21,201.6	14,757.6 14,817.7	12,331.3 12,379.4	1,534.9 1,548.1	891.4 890.2	6,376.3 6,384.0	993.6 987.7	5,382.7 5,396.3	6,620.6 6,823.1	3,719.3 3,751.9
Nov. Dec.	32,190.9 31,777.4	21,381.2 21,384.3	14,911.2 14,917.1	12,478.0 12,462.9	1,542.2 1,567.2	890.9 887.0	6,470.0 6,467.3	985.8 988.5	5,484.2 5,478.8	6,915.2 6,738.8	3,894.5 3,654.3
2022 Jan. Feb.	32,404.8 32,588.9	21,564.2 21,620.0	15,039.2 15,066.6	12,602.1 12,637.1	1,553.2 1,553.6	884.0 876.0	6,525.0 6,553.3	999.2 991.8	5,525.8 5,561.5	6,909.7 7,007.2	3,931.0 3,961.7
Mar.	32,936.3	21,736.6	15,175.6	12,722.1	1,587.3	866.1	6,561.0	1,001.4	5,559.6	6,994.9	4,204.8
Apr. May	33,589.0 33,498.1	21,762.8 21,812.1	15,252.9 15,300.7	12,804.8 12,875.1	1,597.5 1,568.0	850.5 857.5	6,509.9 6,511.4	1,011.3 1,003.9	5,498.6 5,507.5	7,082.8 7,032.1	4,743.4 4,653.9
June July	33,885.5 33,874.0	21,883.5 21,986.3	15,371.1 15,453.2	12,971.9 13,043.0	1,568.7 1,581.4	830.6 828.7	6,512.4 6,533.1	1,003.0 1,003.0	5,509.3 5,530.2	7,063.4 7,207.7	4,938.6 4,680.0
,		ntribution (-,,	, , ,		.,	,,,,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,	,,,,,,
2020 June	7,225.3	4,692.6	3,641.6	3,164.7	220.4	256.6	1,051.0	291.5	759.6	1,304.2	1,228.5
July	7,267.6	4,718.8	3,634.9	3,175.5	202.7	256.7	1,083.9	293.4	790.5	1,282.9	1,265.8
Aug. Sep.	7,167.3 7,236.4	4,723.0 4,749.2	3,642.2 3,647.1	3,180.7 3,184.0	202.9 204.9	258.6 258.1	1,080.8 1,102.1	287.4 289.7	793.3 812.4	1,268.8 1,293.8	1,175.5 1,193.4
Oct. Nov.	7,257.1 7,240.5	4,801.4 4,841.7	3,670.3 3,688.6	3,200.4 3,213.7	210.7 214.3	259.3 260.6	1,131.1 1,153.1	292.0 290.2	839.1 862.9	1,278.8 1,261.9	1,176.8 1,136.9
Dec. 2021 Jan.	7,172.5 7,220.7	4,839.4 4,865.5	3,695.5 3,705.9	3,216.4 3,224.4	214.7 216.4	264.5 265.1	1,143.9 1,159.6	286.4 286.5	857.4 873.1	1,224.1 1,307.6	1,109.1 1,047.6
Feb. Mar.	7,182.0 7,233.5	4,885.0 4,939.8	3,703.3 3,724.3 3,761.1	3,238.8 3,273.4	217.4 217.3	268.1 270.4	1,160.7 1,178.7	283.8 282.6	877.0 896.1	1,305.0 1,315.4	991.9 978.3
Apr.	7,228.4	4,946.1	3,760.5	3,270.3	217.6	272.6	1,185.6	285.7	899.9	1,333.6	948.6
May June	7,228.0 7,277.1	4,977.5 5,009.8	3,777.2 3,786.4	3,283.3 3,290.4	219.5 220.8	274.4 275.2	1,200.3 1,223.4	283.4 282.3	916.9 941.1	1,329.8 1,325.1	920.7 942.1
July Aug.	7,362.7 7,395.2	5,062.4 5,087.3	3,808.5 3,824.6	3,310.2 3,325.1	221.9 221.4	276.4 278.1	1,253.9 1,262.8	284.4 280.8	969.5 982.0	1,317.4 1,336.0	982.9 971.9
Sep.	7,398.6	5,110.8 5,147.0	3,840.8	3,336.4	224.7	279.7	1,270.1	280.7	989.4	1,335.1	952.6
Nov.	7,575.0	5,210.7	3,904.2	3,389.9	229.0	285.3	1,306.4	280.7	1,025.7	1,396.4	967.9
2022 Jan.	7,787.0	5,243.9	3,944.7	3,422.9	235.8	286.0	1,299.2	279.9	1,019.3	1,433.6	1,109.5
Feb. Mar.	7,997.7	5,280.7	3,990.2	3,445.2 3,464.4	238.0 240.6	285.3 285.2	1,290.6	277.8 278.6	1,012.0	1,464.4 1,447.5	1,269.5
Apr. May	8,259.4 8,228.4	5,278.9 5,304.5	4,008.0 4,034.5	3,481.9 3,506.0	240.1 240.8	286.1 287.7	1,270.9 1,270.0	283.2 280.3	987.7 989.7	1,464.0 1,445.0	1,516.5 1,479.0
June July	8,413.5 8,289.3	5,322.6 5,375.1	4,058.9 4,096.3	3,537.6 3,560.3	237.8 252.7	283.5 283.3	1,263.7 1,278.8	282.5 283.6	981.2 995.2	1,466.1 1,483.0	1,624.8 1,431.3
Aug. Sep. Oct. Nov. Dec. 2022 Jan. Feb. Mar. Apr. May	7,395.2 7,398.6 7,461.0 7,575.0 7,475.8 7,787.0 7,871.3 7,997.7 8,259.4 8,228.4	5,087.3 5,110.8 5,147.0 5,210.7 5,212.1 5,243.9 5,262.9 5,280.7 5,278.9 5,304.5	3,840.8 3,874.5 3,904.2 3,914.7 3,948.7 3,968.5 3,990.2 4,008.0 4,034.5	3,325.1 3,336.4 3,363.5 3,389.9 3,393.2 3,422.9 3,445.2 3,464.4 3,481.9 3,506.0	221.4 224.7 228.6 229.0 237.0 235.8 238.0 240.6 240.1 240.8	278.1 279.7 282.4 285.3 284.5 286.0 285.3 285.2 286.1 287.7	1,262.8 1,270.1 1,272.5 1,306.4 1,297.4 1,299.2 1,294.3 1,290.6 1,270.9	280.8 280.7 284.4 280.7 278.0 279.9 277.8 278.6 283.2 280.3	989.4 988.0 1,025.7 1,019.5 1,019.5 1,016.5 1,012.0 987.7 989.7 981.2	1,336.0 1,335.1 1,385.2 1,396.4 1,355.9 1,433.6 1,464.4 1,447.5 1,464.0 1,445.0	971.9 952.6 928.8 967.9 907.8 1,109.5 1,144.0 1,269.5 1,516.5 1,479.0

^{*} Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and national central banks (the Eurosystem). 1 Source: ECB. 2 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 $^{\bullet}$). Excluding MFIs' cash in hand (in euro). The German contribution includes the volume of

iabilities										
	Deposits of non-	banks (non-MFIs) i	n the euro area							
			Enterprises and h	nouseholds						
					With agreed maturities of			At agreed notice of 6		
Currency n circulation 4	Total	of which: in euro ⁵	Total	Overnight	up to 1 year	over 1 year and up to 2 years	over 2 years	up to 3 months	over 3 months	End o
								Euro area	a (€ billion) ¹	
1,306.6	14,478.2	13,208.9	13,310.8	8,066.5	763.6	186.8	1,877.8	2,375.5	40.6	2020
1,320.9	14,592.9	13,276.6	13,363.7	8,090.1	783.2	186.3	1,882.5	2,381.1	40.4	
1,326.8	14,668.1	13,304.3	13,391.2	8,117.1	767.8	184.4	1,892.0	2,390.0	40.0	
1,330.3	14,758.4	13,361.0	13,467.6	8,175.8	781.0	195.4	1,883.6	2,392.0	39.8	
1,338.1	14,814.8	13,431.7	13,545.6	8,266.0	783.3	181.9	1,880.4	2,394.6	39.4	
1,349.9	14,813.0	13,527.2	13,621.6	8,358.3	756.5	179.6	1,885.7	2,402.5	39.0	
1,370.7	14,772.9	13,620.6	13,728.8	8,459.6	772.0	176.9	1,877.6	2,404.2	38.5	
1,373.3	14,873.9	13,631.3	13,752.9	8,505.4	743.9	173.8	1,870.6	2,421.0	38.1	2021
1,380.6	14,957.8	13,678.6	13,807.8	8,569.6	733.7	169.2	1,865.1	2,432.5	37.7	
1,391.1	15,076.4	13,757.0	13,913.7	8,654.9	753.5	164.3	1,858.8	2,444.8	37.4	
1,399.6	15,061.0	13,775.4	13,936.1	8,727.0	731.8	159.5	1,827.5	2,453.0	37.3	
1,412.8	15,147.4	13,870.8	14,018.1	8,811.2	724.4	155.5	1,826.2	2,463.6	37.1	
1,423.2	15,241.8	13,943.4	14,091.4	8,917.7	698.2	150.4	1,822.0	2,466.2	36.8	
1,437.6	15,335.4	14,017.3	14,185.7	9,006.8	705.9	153.6	1,817.0	2,466.2	36.3	
1,439.2	15,386.3	14,039.3	14,196.7	9,030.0	707.3	151.2	1,809.9	2,462.4	35.9	
1,444.5	15,442.5	14,075.3	14,239.8	9,093.0	701.2	140.0	1,806.7	2,463.3	35.6	
1,450.3	15,504.6	14,139.4	14,312.3	9,166.1	709.0	148.0	1,795.5	2,458.8	34.9	
1,456.3	15,518.4	14,188.5	14,345.4	9,224.1	697.5	143.3	1,786.3	2,459.8	34.3	
1,477.0	15,579.6	14,310.0	14,464.4	9,316.4	714.5	131.3	1,805.2	2,463.5	33.6	
1,477.9	15,636.8	14,276.9	14,469.0	9,294.6	707.9	135.3	1,820.2	2,478.2	32.9	2022
1,487.0	15,731.6	14,323.8	14,506.2	9,356.8	688.6	134.3	1,807.7	2,486.2	32.7	
1,509.6	15,840.4	14,415.6	14,599.9	9,439.8	703.7	123.5	1,809.7	2,491.1	32.2	
1,520.7	15,875.9	14,464.1	14,653.8	9,493.4	709.6	123.5	1,801.9	2,493.3	32.1	
1,528.5	15,893.3	14,510.6	14,683.8	9,539.3	686.6	120.3	1,803.0	2,505.6	29.0	
1,535.1	16,040.7	14,573.9	14,750.6	9,583.2	705.9	123.4	1,800.2	2,509.4	28.5	
1,545.2	16,121.2	14,675.1	14,874.3	9,667.1	745.6	126.4	1,792.3	2,514.8	28.1	
							Germa	an contributi	on (€ billion)	
296.5	4,132.2	3,873.6	3,711.6	2,408.7	152.1	29.6	559.0	532.6	29.7	2020
300.4	4,170.7	3,880.3	3,716.8	2,409.9	163.5	30.0	552.8	531.5	29.2	
301.3	4,202.4	3,889.9	3,720.2	2,419.2	159.3	30.1	551.3	531.6	28.8	
301.9	4,235.6	3,905.7	3,745.0	2,445.3	160.3	30.3	549.2	531.5	28.4	
303.6	4,245.3	3,935.3	3,781.4	2,476.4	165.4	30.5	549.7	531.5	28.0	
306.6	4,260.2	3,961.8	3,804.4	2,507.7	157.7	30.6	549.0	531.8	27.6	
312.2	4,228.5	3,954.1	3,801.5	2,500.9	160.3	31.0	548.8	533.1	27.3	
313.1	4,218.7	3,980.7	3,829.7	2,541.7	147.0	31.0	548.5	534.8	26.8	2021
314.6	4,245.1	3,990.0	3,837.4	2,555.8	141.0	31.1	547.0	536.0	26.4	
317.3	4,264.3	4,011.8	3,863.4	2,579.8	145.1	31.7	544.6	536.1	26.1	
319.9	4,262.2	4,013.0	3,874.5	2,594.4	143.0	31.9	542.5	536.8	25.8	
322.8	4,308.8	4,040.3	3,895.1	2,613.5	146.0	32.2	540.4	537.4	25.7	
325.1	4,311.0	4,035.3	3,890.5	2,619.4	139.3	31.9	537.5	537.0	25.5	
328.8	4,313.9	4,047.3	3,911.3	2,645.8	136.0	31.4	536.0	536.7	25.2	
329.0	4,333.1	4,065.2	3,923.1	2,659.1	135.6	31.3	535.7	536.4	25.0	
329.8	4,340.5	4,064.1	3,919.8	2,662.1	132.2	31.2	533.6	535.8	24.8	
331.4	4,354.3	4,080.9	3,950.3	2,681.4	143.0	31.1	534.8	535.5	24.6	
332.6	4,390.5	4,107.1	3,968.0	2,710.9	132.5	30.3	534.6	535.5	24.3	
337.1	4,425.2	4,113.0	3,968.5	2,691.5	141.2	30.1	544.6	537.0	24.1	
337.9	4,418.1	4,139.2	4,006.8	2,737.3	135.4	29.7	543.6	537.4	23.4	2022
340.1	4,444.1	4,161.0	4,017.1	2,752.3	132.4	29.4	542.3	537.7	23.1	
344.3	4,441.6	4,159.0	4,014.6	2,755.3	130.7	29.3	540.4	536.0	22.9	
346.7	4,445.6	4,158.1	4,019.8	2,754.8	140.0	29.4	537.7	535.1	22.7	
349.4	4,478.3	4,170.7	4,016.7	2,769.9	125.8	29.7	534.8	533.9	22.6	
349.9	4,517.1	4,194.6	4,031.6	2,787.1	127.8	30.1	531.9	532.3	22.4	
360.5	4,507.6	4,222.3			1		1	530.6		

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

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

- II. Overall monetary survey in the euro area
- 2. Consolidated balance sheet of monetary financial institutions (MFIs) * (cont'd)

	Liabilities (co	nt'd)											
	Deposits of r	non-banks (nor	n-MFIs) in the	euro area (cor	ıt'd)								
	General gove	ernment							Repo transac			Debt securiti	es
		Other genera	al government						with non-bar in the euro a				
]		
				With agreed			At agreed no	tice of 2			Money		
	Central				over 1 year and					of which: Enterprises	market fund		of which: Denom-
End of month	govern- ment	Total	Overnight	up to 1 year	up to 2 years	over 2 years	up to 3 months	over 3 months	Total	and households	shares (net) 3	Total	inated in euro
	Euro area	a (€ billion) 1										
2020 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 Aug.	787.6 828.4	441.5 448.5	264.3 273.6	80.1 79.5	23.2 22.1	51.0 50.3	19.4 19.6	3.5 3.5	271.8 266.9	271.6 266.7	586.4 587.0	2,055.1 2,036.6	1,434.5 1,425.3
Sep.	848.8	442.1 437.6	274.8	74.4	20.8	49.1 47.0	19.5 19.5	3.4 3.4	237.7	237.5 242.9	595.2 609.3	2,059.6 2,043.2	1,431.0 1,418.6
Oct. Nov.	831.5 733.0	458.4	277.4 307.1	69.6 64.6	20.8 17.8	46.1	19.4	3.3	243.1 246.4	246.4	610.3	2,025.2	1,406.4
Dec. 2021 Jan.	604.8 683.2	439.3 437.8	294.7 294.4	60.3 58.9	17.2 17.4	44.8 44.1	19.0 19.2	3.3 3.8	221.4 251.6	221.3 251.5	625.9 644.4	1,995.5 1,990.9	1,386.3 1,369.7
Feb. Mar.	713.6 733.1	436.4 429.6	296.4 295.4	54.3 52.1	19.0 16.4	43.9 43.2	19.2 18.9	3.7 3.7	254.6 236.5	254.5 236.5	613.7 609.1	2,004.4 2,005.5	1,369.6 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 June	692.4 709.2	436.9 441.2	308.3 314.0	47.7 46.6	15.9 16.3	42.4 42.0	19.1 18.8	3.5 3.5	246.7 236.5	246.7 236.5	608.4 600.0	1,980.7 1,984.2	1,339.4 1,332.5
July Aug.	709.6 736.1	440.1 453.5	313.9 329.1	45.6 43.9	16.6 17.0	42.0 42.0	18.6 18.0	3.5 3.4	253.9 241.7	253.9 241.7	622.6 627.9	1,999.3 1,988.5	1,334.0 1,334.0
Sep.	742.6	460.1	334.6	46.3	16.6	41.3	18.1	3.3	257.3	257.2	596.8	2,011.7	1,343.3
Oct. Nov.	740.3 691.5	451.9 481.6	323.3 349.8	48.1 50.3	18.0 19.1	41.6 41.7	17.7 17.5	3.3 3.3	270.3 266.4	270.3 266.4	628.3 654.5	2,031.7 2,040.2	1,353.1 1,352.7
Dec. 2022 Jan.	646.7 710.9	468.4 456.9	337.4 307.3	49.7 67.4	19.4 19.6	41.1 41.2	17.6 17.6	3.2 3.8	224.7 288.5	223.5 288.3	647.7 624.5	2,016.3 2,043.2	1,345.8 1,348.9
Feb.	755.5	469.9	314.1	73.5	19.8	41.3	17.6	3.7	297.9	297.7	587.2	2,037.0	1,355.6
Mar. Apr.	769.6 747.6	470.9 474.5	304.7 306.7	82.5 83.4	20.5 21.2	42.4 42.6	17.3 17.2	3.4 3.4	276.2 306.2	276.0 306.0	583.8 605.8	2,022.7 2,063.6	1,356.7 1,358.0
May June	718.7 788.4	490.8 501.8	316.7 325.2	88.4 90.9	22.3 22.9	43.3 43.3	16.8 16.2	3.3 3.2	308.8 274.0	308.7 273.8	594.4 593.0	2,031.6 2,065.2	1,334.5 1,359.4
July	757.2	489.7	302.8	100.4	24.2	42.9	16.2	3.3	302.1	302.0	590.4	2,060.4	1,358.9
	German	contributi	on (€ billio	on)									
2020 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 Aug.	208.5 229.5	245.3 252.8	109.6 118.7	71.4 71.3	18.3 17.4	43.2 42.4	2.5 2.6	0.3 0.3	2.1 1.7	2.0 1.5	1.6 1.9	523.3 517.9	293.3 291.1
Sep.	244.7	245.8 239.1	119.4 119.1	66.0	16.5	41.1	2.5 2.5	0.3 0.3	1.3	1.1 1.3	2.0 2.7	525.3 519.9	296.1 296.2
Oct. Nov.	224.8 212.1	243.7	131.6	61.7 57.3	16.6 14.0	39.0 38.0	2.5	0.2	1.4 9.1	9.1	2.4	515.5	296.1
Dec. 2021 Jan.	189.2 148.9	237.8 240.1	131.9 136.5	52.8 51.6	13.5 13.5	36.8 35.8	2.5 2.4	0.2 0.2	12.2 8.4	12.2 8.4	2.5 2.4	503.3 503.3	290.1 284.6
Feb. Mar.	164.3 161.9	243.4 239.0	142.8 144.4	47.3 44.9	15.2 12.7	35.5 34.4	2.5 2.4	0.2 0.2	6.0 11.0	6.0 11.0	2.4 2.9	510.0 523.3	288.4 289.8
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 June	173.3 179.3	240.3 241.2	150.8 152.9	41.0 39.9	12.5 13.0	33.4 32.8	2.4 2.4	0.2 0.2	9.2 9.0	9.2 9.0	2.2 2.3	518.0 515.5	293.2 294.6
July Aug.	167.3 168.1	235.3 241.8	148.0 155.7	38.9 37.3	13.3 13.9	32.5 32.4	2.4 2.4	0.2 0.2	9.6 9.7	9.6 9.7	2.2 2.2	518.3 522.4	295.1 303.1
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. Nov. Dec.	171.3 178.4 206.2	232.7 244.1 250.5	142.7 155.2 161.9	40.9 38.8 39.1	14.8 16.1 16.4	31.8 31.6 30.7	2.3 2.2 2.3	0.2 0.2 0.2	10.8 6.1 5.8	10.8 6.1 4.8	2.1 1.8 2.1	547.9 556.5 547.6	316.4 324.8 316.3
2022 Jan. Feb.	168.1 170.6	243.3 256.3	139.1 147.8	54.6 59.2	16.5 16.3	30.7 30.6	2.2 2.2	0.2 0.2	4.7 5.8	4.7 5.8	2.2 2.3	562.8 572.5	325.1 338.8
Mar. Apr.	170.6 167.6	256.4 258.2	137.6 137.6	68.8 70.0	17.0 17.6	30.7 30.6	2.2	0.1	6.3 4.4	6.3 4.4	2.4	581.5 596.5	354.8 357.3
May June	190.1 205.0 166.9	271.4 280.5 270.4	144.2 147.7 128.3	75.3 80.5 89.0	18.5 19.0 20.2	31.1 31.0 30.5	2.2 2.2 2.2	0.2 0.1 0.1	4.8 5.4 9.8	4.8 5.4 9.8	2.4 2.3 2.4	596.8 604.2 613.8	359.0 362.6 369.1
July	100.9	270.4	128.3	09.0	20.2	30.5	2.2	0.1	9.8	9.8	2.4	013.8	309.1

^{*} 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. 109). **9** For the German contribution, the difference between the volume of euro banknotes

								Memo item:					
ssued (net) ³	ı					Other liabilit	y items		gregates 7 German contri rency in circula				
Nith maturit								excludes cur	ency in circuit		1		
up to I year 4	over 1 year and up to 2 years	over 2 years	Liabilities to non- euro area residents 5	Capital and reserves 6	Excess of inter-MFI liabilities	Total 8	of which: Intra- Eurosystem- liability/ claim related to banknote issue 9	M1 10	M2 11	M3 12	Monetary capital forma- tion 13	Monetary liabilities of central govern- ments (Post Office, Treasury) 14	End of month
										Eu	ıro area (€	billion) 1	1
- 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	2020 Jur
- 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	Jul
- 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	Au
- 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	Se
- 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	O(
- 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	No
- 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	De
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 Ja
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	Fe
- 0.7	16.9	1,989.3	4,944.3	2,967.6	15.9	3,580.6	0.0	10,490.3	13,964.5	14,699.1	6,899.9	173.1	M
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	A
14.8	15.9	1,950.0	4,995.9	2,968.5	53.4	3,476.5	0.0	10,684.4	14,134.6	14,887.1	6,827.9	176.1	M
10.6	16.1	1,957.6	4,964.4	2,979.9	57.4	3,503.6	0.0	10,811.2	14,231.7	14,971.2	6,841.7	180.3	Ju
16.9	17.1	1,965.4	5,051.0	3,024.8	38.9	3,550.3	0.0	10,915.0	14,345.5	15,122.6	6,888.9	180.9	Ju
11.9	16.3	1,960.4	5,201.1	3,024.5	29.8	3,499.0	0.0	10,956.6	14,380.6	15,153.0	6,876.1	182.3	A
14.0	17.9	1,979.8	5,226.5	2,997.6	16.1	3,480.9	0.0	11,035.4	14,444.9	15,191.8	6,864.3	187.4	S
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	6,874.4	188.2	
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	
8.9 16.0 25.6	18.0 18.2 5.5	1,989.4 2,009.0 2,005.9	5,379.3 5,554.2 5,642.2	3,024.0 2,999.5 2,995.1	54.2 62.3 55.1	3,374.7 3,717.8 3,755.6	0.0 0.0 0.0	11,299.6 11,252.2 11,331.1	14,721.8 14,701.7 14,772.9	15,502.3 15,483.6 15,523.1	6,896.4 6,906.6 6,886.3	195.0 196.0 195.0	2022 Ja F
26.5	6.2	1,990.1	5,628.5	3,006.5	81.3	3,987.3	0.0	11,425.6	14,887.8	15,627.4	6,884.3	195.1	Λ
32.1	15.7	2,015.8	5,764.8	2,986.1	67.7	4,398.2	0.0	11,494.1	14,966.3	15,745.3	6,881.8	197.2	Δ
28.1	15.2	1,988.3	5,815.0	2,924.5	79.5	4,322.4	0.0	11,559.6	15,023.5	15,791.7	6,791.4	199.0	Ν
43.7	14.4	2,007.1	5,737.7	2,916.7	76.5	4,646.7	0.0	11,618.4	15,111.6	15,877.3	6,799.1	199.4	Ji
60.3	- 1.6	2,001.7	5,879.5	2,979.9	60.8	4,334.4		11,688.6	15,240.2	16,021.7	6,848.2	197.5	Ji
											ntribution		
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	2020 Ju
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	Ju
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	A
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	S
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	C
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	N
9.0 7.8 7.4	6.6 6.8 7.5	487.7 488.7 495.1	985.7 1,026.4 1,007.6	787.5 778.3 756.3	- 1,192.0 - 1,113.3 - 1,095.7	1,844.9 1,796.5 1,750.3	473.1 474.2 476.5	2,632.8 2,678.2 2,698.6	3,426.1 3,458.5 3,471.7	3,456.4 3,483.9 3,494.9	1,888.4 1,878.3 1,860.6	0.0 0.0 0.0	2021 Ja F
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	л
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	Д
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	N
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	J
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	J
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	#
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	S
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	
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	
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	2022 J
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	
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	
14.8 14.6	7.3 7.1	559.5 574.8	1,299.3 1,284.0	781.2 769.2 748.6	- 1,172.3 - 1,190.8 - 1,168.1 - 1,199.2	2,076.2 2,325.6	520.0 523.3	2,892.9 2,892.4 2,914.0	3,677.0 3,686.8	3,707.8 3,715.1	1,934.7 1,935.2 1,911.8	0.0	N A
14.9 18.7 21.2	7.3 6.6 6.8	574.6 578.9 585.8	1,307.0 1,317.0 1,287.5	743.1	- 1,199.2 - 1,255.4 - 1,189.6	2,289.8 2,479.8 2,277.2	526.8 530.5 525.2	2,934.8	3,699.5 3,726.6 3,757.1	3,728.9 3,759.7 3,797.3	1,907.5	0.0 0.0 0.0	۱ ر ر

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

 \in billion; period averages of daily positions

		a averages or o)									
	Liquidity-provi	iding factors				Liquidity-abso	rbing factors					
		Monetary poli	cy operations o	f the Eurosyste	m						Credit	
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	institutions' current account balances (including minimum reserves) 7	Base money 8
	Eurosyste	m ²										
2020 Aug. Sep.	865.9	1.3	1,593.2	0.0	3,323.6	413.2	0.0	1,381.2	712.9	651.0	2,625.7	4,420.1
Oct. Nov. 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. Feb.	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
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. May	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 Aug.	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. May	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
June	934.2	0.5	2,198.8	0.0	4,939.1	681.3	0.0	1,591.5	624.1	1,129.1	4,046.1	6,319.0
July Aug.	943.7	1.0	2,149.4	0.0	4,958.8 ·	678.7	0.0	1,604.0	667.6	1,158.0 ·	3,943.3	6,226.0
	Deutsche	Bundesbar	nk									
2020 Aug. Sep.	212.1	0.8	284.0	0.0	692.0	136.0	0.0	336.4	239.6	- 298.0	774.8	1,247.3
Oct. Nov. 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. Feb.	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. May	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 Aug.	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. May	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
July Aug.	231.7	0.3	409.1	0.0	1,084.3	185.8	0.0	390.3	214.9	- 175.4	1,109.7	1,685.8

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

Liquidi	ty-prov	iding fact	ors						Liquidi	ty-abso	rbing fac	tors							
	, ,			icy operatio	ons o	f the Euro	osyste	m									1		
Net as in gold and fo curren	l reign	Main refinanc operatio		Longer- term refinancin operation		Margina lending facility	ıl	Other liquidity- providing operations 3	Depos facility		Other liquidity absorbi operatio	ng	Bankno in circulat		Central government deposits	Other factors (net) 6	Credit institutions' current account balances (including minimum reserves) 7	Base money 8	Reserve maintenance period ending in 1
																	Eu	rosystem ²	
-	5.4	+	0.5	+ 19	1.7	±	0.0	+ 155.4	+	57.2	±	0.0	+	15.5	+ 41.7	- 52.1	+ 279.8	+ 352.6	2020 Aug. Sep.
-+	1.5 0.7	± -	0.0 0.8	+ 11 + 4	4.6 6.6	± ±	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		8.2	±	0.0	+ 98.2	+	51.5	±	0.0	+	25.5	-116.7	+ 90.7	+ 68.7	+ 145.7	2021 Jan. Feb.
-	13.7 18.2	+ -	0.1	+ 26	0.2	± ±	0.0	+ 112.2 + 126.3	+ +	11.1 78.4	± ±	0.0	+ +	4.0 14.3	+ 65.5 + 48.7	- 110.5 - 34.5	+ 128.3 + 263.4	+ 143.4 + 356.1	Mar. Apr.
_	6.9	_	0.1		2.4	±	0.0	+ 141.3		30.1	±	0.0		18.1	- 57.8	+ 25.7	+ 170.6	+ 218.7	May June
+	11.9	_	0.1	l .	9.0	±	0.0	+ 151.8	+	30.1	±	0.0	+	20.0	+ 65.6	+ 75.4	+ 61.4	+ 111.6	July
+	5.0	+	0.1	+ 1	7.2	±	0.0	+ 134.4	+	30.0	_ ±	0.0	+	14.1	- 16.6	+ 55.9	+ 73.1	+ 117.3	Aug. 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	Oct. 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	May June
+	9.5	+	0.5	- 4	9.4	±	0.0	+ 19.7	-	2.6	±	0.0	+	12.5	+ 43.5	+ 28.9	- 102.8	- 93.0	July Aug.
																D	eutsche Bu	ındesbank	
-	10.0	+	0.3	+ 4	8.9	+	0.0	+ 36.1	+	27.9	±	0.0	+	5.0	+ 34.6	- 59.9	+ 67.6	+ 100.5	2020 Aug. Sep.
+ +	0.0 0.9	-	0.1 0.4		5.5 4.4	- +	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	Oct. 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. Feb.
-	3.0	-	0.0	-	0.1	-	0.0	+ 25.6	-	1.4	±	0.0	+	1.0	- 16.7	- 45.2	+ 84.8	+ 84.4	Mar.
-	7.3	-	0.1	+ 6	6.3	+	0.0	+ 28.8	+	25.5	±	0.0	+	3.4	+ 14.7	- 2.4	+ 46.0	+ 74.9	Apr. May
-	3.7	+	0.0	l .	3.2	+	0.0	+ 38.6	+	5.5	±	0.0	+	5.1	- 0.1	- 1.5	+ 37.9	+ 48.5	June
+	3.1		0.0		3.8	_	0.0	+ 34.2	_	4.3	± .	0.0	+	5.2	+ 19.4	+ 31.1	- 0.5	+ 0.4	July Aug.
+	1.6	+	0.1	+	2.4	+	0.0	+ 32.3	+	6.5	_ ±	0.0	+	3.0	- 2.5	+ 29.9	- 0.9	+ 8.6	Sep. Oct.
+ +	1.3 1.0	+ -	0.0		2.4 1.2	- -	0.0	+ 27.8 + 37.3	+	6.4 2.1	± ±	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		8.6 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. May
+	6.6	+	0.1	l .	0.6	_	0.0	+ 18.7	-	7.7	± .	0.0	+	3.0	+ 0.2	+ 6.0	+ 24.1	+ 19.4	June
+	1.3	+	0.2	- 1	1.1	_	0.0	- 3.1	-	4.1	±	0.0	+	2.4	+ 18.0	+ 7.7	- 37.7	– 39.5	July Aug.

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 ts 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

	€ DIIIION								
			Claims on non-eur	o area residents der	nominated		Claims on non-euro a	area	
			in foreign currency				residents denominate	ed in euro	
					Balances with				
					banks, security	Claims on			l l
					investments, external loans	euro area residents		Balances with banks,	Claims arising from
As at	<u> </u>	l ₋			and other	denominated		security	the credit
reporting date	Total assets	Gold and gold receivables	Total	Receivables from the IMF	external assets	in foreign currency	Total	investments and loans	facility under ERM II
date			10101	TOTAL CARE TAXA	433013	carrency	10141	and round	2
	Eurosystem 1								
2022 Feb. 11 18		559.4 559.4	497.1 498.9	219.3 219.3	277.8 279.5	25.8 24.1	10.1 10.0	10.1 10.0	_
25		559.4	499.2	219.3	279.8	24.0	10.2	10.2	-
Mar. 4		559.4	498.2	219.3	278.9	25.4	10.4	10.4	-
11 18		559.4 559.5	498.9 498.4	219.4 219.3	279.5 279.0	24.7 24.6	10.4 10.6	10.4 10.6	-
25		559.5	498.7	220.4	278.4	24.9	12.4	12.4	-
Apr. 1		604.5	500.2	222.0	278.1	26.4	11.3	11.3	-
8 15		604.5 604.5	498.6 500.0	220.2 220.2	278.4 279.8	25.8 25.3	10.0 10.0	10.0 10.0	
22 29		604.5 604.5	499.3 499.3	220.3 220.2	279.0 279.0	26.6 27.1	10.1 10.4	10.1 10.4	-
May 6		604.5	501.1	220.2	280.8	25.9	10.4	10.4	_ [
13	8,810.3	604.5	500.2	220.2	279.9	27.2	10.2	10.2	-
20 27		604.3 604.3	500.4 500.3	220.2 220.2	280.1 280.0	27.1 26.7	10.4 10.6	10.4 10.6	-
June 3	1	604.3	500.8	220.2	280.6	26.2	10.1	10.1	_
10	8,820.9	604.3	501.3	220.2	281.1	26.8	10.8	10.8	-
17 24		604.3 604.3	503.8 502.6	220.2 220.2	283.6 282.4	25.0 26.6	11.2 12.1	11.2 12.1	-
July 1		604.3	519.3	225.9	293.4	26.9	11.6	11.6	_
. 8 15	8,774.4 8,765.7	604.3 604.3	519.0 519.5	226.6 226.6	292.4 292.9	27.5 27.0	10.3 10.3	10.3 10.3	-
22		604.3	520.3	226.6	293.7	26.3	10.3	10.3	-
29		604.3	521.1	226.6	294.5	25.7	10.3	10.3	-
Aug. 5 12		604.3 604.3	520.5 520.7	226.6 226.6	293.9 294.1	26.8 26.6	9.8 9.9	9.8 9.9	-
19	8,750.7	604.3	521.4	226.6	294.7	26.5	9.9	9.9	-
26	1	604.3	523.4	227.1	296.3	25.4	10.0	10.0	-
Sep. 2	8,756.8	604.3	523.8	227.6	296.2	25.3	10.4	10.4	-
	Deutsche Bu	ndesbank							
2022 Feb. 11	2,934.4	173.8	88.9	55.1	33.7	0.0	-	-	-
18 25		173.8 173.8	89.0 89.0	55.1 55.1	33.9 33.9	0.0 0.0	_ _	_ _	-
Mar. 4		173.8	89.0	55.1	33.9	0.1		_	_
11	2,933.8	173.8	88.5	55.1	33.3	0.0	-	_	-
18 25		173.8 173.8	88.4 89.4	55.1 55.6	33.3 33.7	0.0 0.0	0.0	0.0	-
Apr. 1	2,972.8	187.8	90.0	56.0	34.0	0.0	-	-	-
8 15		187.8 187.8	89.8 89.8	56.0 56.0	33.7 33.7	0.0 0.0	_ _	_	-
22	2,945.6	187.7	89.9	56.1	33.8	0.0	-	-	-
29		187.7	90.1	56.1	34.0	0.0	=	-	-
May 6 13		187.7 187.7	90.3 90.3	56.1 56.1	34.2 34.2	0.0 0.0	_ _	_	-
20	2,975.2	187.6	90.3	56.1	34.2	0.0	- -	-	-
27		187.6	90.3	56.1	34.3	0.0		-	-
June 3 10		187.6 187.6	90.2 90.5	56.1 56.1	34.1 34.4	0.0 0.0	0.4	0.4	_ [
17 24	2,999.7	187.6 187.6	90.9 91.1	56.1 56.1	34.8 35.1	0.0 0.0	0.9 1.8	0.9 1.8	-
July 1	1	187.6	93.6	57.7	35.1	0.0	1.5	1.5	l I
. 8	2,950.0	187.6	93.4	57.7	35.8	0.0	-	-	- - - -
15 22		187.6 187.6	93.3 93.4	57.7 57.7	35.7 35.7	0.0 0.0	_ _	_	_ [
29	2,964.1	187.6	93.1	57.6	35.5	0.0	0.1	0.1	-
Aug. 5		187.6	93.1	57.6	35.5	0.0	-	-	-
12 19		187.6 187.6	92.9 93.1	57.7 57.7	35.2 35.5	0.0 0.0	_ _	_	
26	3,060.0	187.6	93.5	57.7	35.9	0.0	-	-	- -
Sep. 2	3,042.0	187.6	93.2	57.9	35.4	0.0	-	-	-

^{*} 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 ed denominated		lit institutions	related to mo	onetary policy	operations			Securities of e	euro area reside	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		
2,201.8 2,201.8 2,201.9	0.2 0.3 0.4	2,201.5 2,201.5 2,201.5	- - -	- -	0.1 - -	=	27.9 27.3 27.6	4,990.8 5,008.3 5,011.1	4,820.2 4,836.9 4,839.4	170.7 171.5 171.6	22.1 22.1 22.1	316.8 316.0 315.7	2022 Feb.	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 2,199.6	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	- - - - -	- - - - -	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	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 2,198.9	- - - -	- - -	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	- - - -	- - -	- - - -	- - - -	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 2,125.5 2,125.6 2,125.8	1.5 1.0 0.9 1.0 1.1	2,124.6 2,124.6 2,124.6 2,124.6 2,124.7	- - - - -	- - - -	0.0 - 0.0 0.0	- - - -	34.5 28.4 28.8 27.6 30.8	5,129.1 5,123.0 5,119.3 5,123.3 5,125.6	4,963.5 4,956.9 4,953.9 4,956.7 4,958.9	165.6 166.1 165.4 166.6 166.8	21.7 21.7 21.7 21.7 21.7	315.4 314.6 309.4 309.1 299.2	July	1 8 15 22 29
2,125.6 2,125.6 2,125.5 2,125.5	0.9 0.9 0.8 0.7	2,124.7 2,124.7 2,124.7 2,124.7	- - - -	- - -	0.0 - 0.0	- - - -	15.2 15.5 13.2 12.9	5,117.9 5,119.7 5,123.8 5,123.1	4,952.2 4,953.4 4,956.7 4,955.5	165.7 166.4 167.2 167.6	21.7 21.7 21.7 21.7	304.2 303.7 304.4 303.8	Aug.	5 12 19 26
2,129.3	3.9	2,125.4	-	-	0.0	-	14.8	5,122.4	4,956.5	165.9	21.7	304.9	Sep.	2
										De	utsche Bu	ndesbank		
421.9 421.8 421.8	0.2 0.2 0.2	421.7 421.7 421.7	- - -	- -	0.1 0.0 0.0	=	4.6 4.3 4.8	1,053.7 1,057.5 1,057.2	1,053.7 1,057.5 1,057.2	- - -	4.4 4.4 4.4	1,187.1 1,181.4 1,172.7	2022 Feb.	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
420.3 420.2 420.3 420.3 420.4	0.1 0.0 0.1 0.1 0.3	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	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
404.2 403.8 403.8 403.9 404.0	0.7 0.3 0.3 0.4 0.4	403.6 403.6 403.6 403.6 403.6	- - - - -	- - - - -	0.0 0.0 0.0 0.0 0.0	- - - -	4.2 4.2 5.6 5.2 0.6	1,091.1 1,078.6 1,079.4 1,075.7 1,077.2	1,091.1 1,078.6 1,079.4 1,075.7 1,077.2	- - - -	4.4 4.4 4.4 4.4	1,226.4 1,178.0 1,172.7 1,171.1 1,197.1	July	1 8 15 22 29
403.7 403.8 403.8 403.7	0.1 0.2 0.2 0.1	403.6 403.6 403.6 403.6	- - - -	- - - -	0.0 0.0 0.0 0.0	- - -	0.3 0.2 0.1 0.1	1,077.7 1,078.5 1,079.1 1,076.1	1,077.7 1,078.5 1,079.1 1,076.1	- - - -	4.4 4.4 4.4 4.4	1,231.8 1,257.4 1,260.5 1,294.4	Aug.	. 5 12 19 26

III. Consolidated financial statement of the Eurosystem

2. Liabilities *

€ billion

	€ DIIIION												
					edit institutions denomin		0				Liabilities to other euro a denominated		
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
	Eurosysten			,	,								
2022 Feb. 11 18 25	8,651.8 8,667.9 8,671.3	1,542.3 1,543.5 1,546.5	4,679.4 4,637.1 4,636.9	4,069.3 3,876.6 3,875.5	607.4 757.9 759.0	- - -	- - -	2.8 2.6 2.5	50.2 49.4 46.3	- -	765.1 832.0 842.8	616.4 690.4 667.9	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 15 22 29	8,788.8 8,774.4 8,765.7 8,768.3 8,764.5	1,603.6 1,606.4 1,608.7 1,606.8 1,600.9	4,591.8 4,642.8 4,622.9 4,605.1 4,568.6	3,853.3 3,914.7 3,910.3 3,904.4 3,855.5	736.3 726.0 710.3 698.5 711.1	- - - - -	- - - -	2.1 2.1 2.3 2.2 2.1	71.0 55.9 49.8 50.9 60.5	- - - - -	835.0 819.9 835.3 843.5 844.2	647.3 627.7 646.0 656.8 641.9	187.7 192.2 189.3 186.7 202.2
Aug. 5 12 19 26	8,746.0 8,747.8 8,750.7 8,750.0	1,595.8 1,591.9 1,584.0 1,578.0	4,625.6 4,642.2 4,598.5 4,572.8	3,959.7 3,975.0 3,941.0 3,922.3	664.1 665.5 655.6 648.6	- - - -	- - -	1.8 1.7 1.8 1.8	53.0 52.9 49.4 47.9	- - - -	744.3 738.6 784.5 813.3	546.8 543.6 583.8 595.6	197.5 194.9 200.7 217.7
Sep. 2	8,756.8	1,575.5	4,707.9	4,035.2	670.7	-	-	2.0	51.5	-	692.8	504.8	187.9
	Deutsche I	Bundesbaı	nk										
2022 Feb. 11 18 25 Mar. 4 11 18 25	2,934.4 2,932.3 2,923.7 2,939.9 2,933.8 2,961.2 2,925.4	375.4 375.9 378.0 379.1 383.3 385.2 385.9	1,335.5 1,324.7 1,304.6 1,315.2 1,322.8 1,299.4 1,301.1	1,179.8 1,100.4 1,071.0 1,078.3 1,084.0 1,167.3 1,082.0	153.4 222.1 231.4 234.8 236.7 130.0 217.1	- - - - - -	- - - - -	2.3 2.1 2.1 2.1 2.1 2.1 2.1	19.7 17.6 16.4 20.0 16.9 17.7 17.0	- - - - - -	227.4 252.2 266.5 243.7 238.3 274.4 252.5	185.0 214.2 201.2 174.0 181.8 224.3 200.0	42.4 38.0 65.2 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 2.1 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 15 22 29	3,013.1 2,950.0 2,946.9 2,941.3 2,964.1	389.1 390.6 391.6 389.4 388.3	1,322.5 1,303.6 1,280.1 1,295.5 1,285.6	1,106.4 1,087.8 1,077.7 1,080.1 1,076.5	214.0 213.8 200.3 213.4 207.1	- - - - -	- - - -	2.1 2.0 2.1 2.0 2.0	24.8 21.9 19.1 21.0 22.2	- - - -	277.5 255.1 275.6 253.9 245.3	218.1 186.8 212.4 195.1 175.5	59.5 68.3 63.2 58.8 69.8
Aug. 5 12 19 26	2,998.7 3,024.8 3,028.6 3,060.0	383.3 379.7 373.2 370.7	1,317.4 1,340.9 1,317.7 1,348.4	1,091.8 1,116.0 1,101.0 1,133.9	223.7 223.2 214.9 212.7	- - - -	- - - -	1.8 1.7 1.7 1.8	20.4 23.0 19.8 22.3	- - - -	231.9 232.2 262.1 253.3	164.9 161.9 183.1 153.5	67.0 70.2 79.0 99.8
Sep. 2	3,042.0	382.4	1,381.1	1,148.7	230.5	-	-	1.8	22.8	-	218.4	140.3	78.2

^{*} 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 nor residents denon foreign currency	ninated in							
Liabilities to non-euro area residents denominated in euro	Liabilities to euro area residents in foreign currency	Total	Deposits, balances and other liabilities	Liabilities arising from the credit facility under ERM II	Counterpart of special drawing rights allocated by the IMF	Other liabilities 2	Intra- Eurosystem liability related to euro banknote issue 1	Revaluation accounts	Capital and reserves	As at reporting date
									Eurosystem ³	
431.1 420.4 415.6	13.1 13.2 13.0	3.3 3.3 3.5	3.3 3.3 3.5	- - -	178.8 178.8 178.8	323.5 325.4 323.1	- - -	554.9 554.9 554.9	110.0 109.9 109.9	2022 Feb. 11 18 25
447.2 444.2 458.3 427.4	13.2 12.8 12.3 11.7	3.7 3.8 4.2 5.2	3.7 3.8 4.2 5.2	- - - -	178.8 178.8 178.8 178.8	323.1 320.6 322.1 320.8	- - -	554.9 554.9 554.9 554.9	112.7 115.7 115.7 115.7	Mar. 4 11 18 25
452.5 423.9 398.7 395.8 411.9	12.5 11.0 12.1 11.7 11.5	5.4 5.4 5.0 5.4 5.6	5.4 5.4 5.0 5.4 5.6	- - - -	180.2 180.2 180.2 180.2 180.2	319.1 312.5 316.0 322.1 318.3	- - - -	598.9 598.9 598.9 598.9 598.9	115.9 115.9 115.9 115.9 115.9	Apr. 1 8 15 22 29
446.1 425.3 437.2 426.4	11.6 11.7 11.3 11.1	5.7 5.7 5.6 5.6	5.7 5.7 5.6 5.6	- - - -	180.2 180.2 180.2 180.2	323.6 323.4 321.3 320.5	- - - -	598.9 598.9 598.9 598.9	116.0 116.0 116.0 116.0	May 6 13 20 27
409.9 403.3 422.3 410.6	11.4 11.7 11.1 10.9	5.5 5.6 6.2 6.9	5.5 5.6 6.2 6.9	- - - -	180.2 180.2 180.2 180.2	320.6 320.1 322.9 323.7	- - -	598.9 598.9 598.9 598.9	114.9 114.9 114.9 114.9	June 3 10 17 24
434.0 396.5 397.2 412.1 442.2	11.5 11.4 11.5 11.3 11.5	6.2 6.1 5.9 6.0 5.7	6.2 6.1 5.9 6.0 5.7	- - - -	184.9 184.9 184.9 184.9 184.9	327.5 327.0 326.2 324.3 322.7	- - - -	608.5 608.5 608.5 608.5 608.5	114.8 114.8 114.8 114.8 114.8	July 1 8 15 22 29
476.1 473.7 484.8 489.8	11.3 11.1 11.4 11.4	5.9 5.8 6.2 6.7	5.9 5.8 6.2 6.7	- - - -	184.9 184.9 184.9 184.9	325.6 323.3 323.7 321.8	- - - -	608.5 608.5 608.5 608.5	114.8 114.8 114.8 114.8	Aug. 5 12 19 26
478.6	11.3	6.4	6.4	-	184.9	324.7	-	608.5	114.8	Sep. 2
									Bundesbank	
204.3 189.5 185.8	0.4 0.4 0.4	0.2 0.4 0.4	0.2 0.4 0.4	- - -	46.5 46.5 46.5	37.5 37.6 37.7	511.1 511.1 511.1	170.7 170.7 170.7	5.7 5.7 5.7	2022 Feb. 11 18 25
206.4 197.4 208.8 192.6	0.4 0.3 0.3 0.3	0.4 - 0.0 - 0.0 0.4	0.4 - 0.0 - 0.0 0.4	- - - -	46.5 46.5 46.5 46.5	37.7 37.8 38.3 38.6	514.2 514.2 514.2 514.2	170.7 170.7 170.7 170.7	5.7 5.7 5.7 5.7	Mar. 4 11 18 25
198.0 186.5 181.2 179.2 194.5	0.7 0.7 0.7 0.7 0.7	0.5 0.3 0.2 0.2 0.2	0.5 0.3 0.2 0.2 0.2	- - - -	46.8 46.8 46.8 46.8 46.8	37.4 37.6 37.7 38.2 38.4	520.0 520.0 520.0 520.0 523.3	185.0 185.0 185.0 185.0 185.0	5.7 5.7 5.7 5.7 5.7	Apr. 1 8 15 22 29
220.6 200.8 206.0 196.4	0.7 0.5 0.5 0.5	0.2 0.2 0.1 0.1	0.2 0.2 0.1 0.1	- - - -	46.8 46.8 46.8 46.8	38.6 38.8 39.0 39.2	523.3 523.3 523.3 523.3	185.0 185.0 185.0 185.0	5.7 5.7 5.7 5.7	May 6 13 20 27
185.8 180.9 189.8 175.9	0.5 0.5 0.5 0.5	- 0.0 0.3 0.7 0.9	- 0.0 0.3 0.7 0.9	- - - -	46.8 46.8 46.8 46.8	39.3 39.5 40.3 40.5	526.8 526.8 526.8 526.8	185.0 185.0 185.0 185.0	5.7 5.7 5.7 5.7	June 3 10 17 24
187.7 166.1 167.6 168.5 214.6	0.6 0.6 0.6 0.4 0.4	0.1 0.1 - 0.0 0.2 - 0.0	0.1 0.1 - 0.0 0.2 - 0.0	- - - -	48.0 48.0 48.0 48.0 48.0	39.6 41.0 40.9 41.2 41.7	530.5 530.5 530.5 530.5 525.2	187.1 187.1 187.1 187.1 187.1	5.7 5.7 5.7 5.7 5.7	July 1 8 15 22 29
237.4 240.8 247.3 256.2	0.4 0.4 0.4 0.4	0.1 - 0.0 0.3 0.8	0.1 - 0.0 0.3 0.8	- - - -	48.0 48.0 48.0 48.0	41.8 41.8 41.9 41.9	525.2 525.2 525.2 525.2	187.1 187.1 187.1 187.1	5.7 5.7 5.7 5.7	Aug. 5 12 19 26
240.0	0.4	0.2	0.2	-	48.0	42.4	513.5	187.1	5.7	Sep. 2

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.

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

€ billion

	€ DIIIION		Lending to b	anks (MFIs) in	the euro area					Lending to n	on-banks (nor	n-MFIs) in the	
					he home coun	itrv	to banks in o	ther Member St	ates			s in the home	country
												Enterprises a	
												holds	
	Balance sheet	Cash				Securities issued			Securities issued				
Period	total 1	in hand	Total	Total	Loans	by banks	Total	Loans	by banks	Total	Total	Total	Loans
2012	0.226.6	10.3	2 200 0	1 012 2 1	1,363.8	449.4	105.0	l 222.2	l 172.7	3,688.6	_	of year o	
2012 2013 2014	8,226.6 7,528.9 7,802.3	19.2 18.7 19.2	2,309.0 2,145.0 2,022.8	1,813.2 1,654.8 1,530.5	1,239.1 1,147.2	415.7 383.3	495.9 490.2 492.3	322.2 324.6 333.9	173.7 165.6 158.4	3,594.3 3,654.5	3,289.4 3,202.1 3,239.4	2,695.5 2,616.3 2,661.2	2,435.7 2,354.0 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 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	10,258.0	50.0	3,122.7	2,592.6	2,326.2	266.4	530.1	397.8	132.3	4,460.3	3,949.5	3,567.4	3,244.7
June	10,428.9	51.8	3,096.5	2,570.9	2,306.2	264.7	525.6	394.1	131.5	4,494.4	3,969.5	3,589.6	3,268.8
July	10,267.9	42.3	3,086.0	2,557.4	2,291.5	266.0	528.6	396.8	131.8	4,528.5	4,008.3	3,628.0	3,293.6
2013	- 703.6	- 0.5	- 257.1	- 249.2	- 216.5	- 32.7	- 7.9	1.6	- 9.5	13.6	16.6	ا 23.6 ا	hanges ³
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 Nov.	12.0	- 0.6	29.0	35.8	37.2	- 1.4	- 6.8	- 6.1	- 0.8	18.6	11.3	11.2	11.5
Dec.	- 141.5	1.8	- 59.5	- 53.6	- 51.2	- 2.4	- 5.9	- 5.8	- 0.2	- 18.3	- 13.3	4.2	2.7
2021 Jan.	207.1	- 2.6	170.2	131.4	128.6	2.9	38.8	41.1	- 2.2	17.4	7.9	6.8	5.3
Feb.	- 2.3	0.7	30.3	19.2	18.2	1.1	11.0	12.2	- 1.2	15.9	15.5	15.7	13.4
Mar.	100.0	0.2	78.0	90.0	83.7	6.3	– 12.0	– 11.5	- 0.5	34.3	29.7	28.8	27.0
Apr.	21.2	- 0.8	33.6	23.0	24.6	- 1.6	10.6	10.5	0.2	- 8.8	- 5.2	- 0.1	- 1.1
May	10.7	0.8	38.9	44.1	44.4	- 0.3	- 5.2	- 5.5	0.3	10.4	16.0	15.7	13.0
June	5.3	0.9	– 17.1	– 16.3	– 15.8	- 0.5	- 0.8	- 0.2	- 0.6	7.3	- 0.5	7.6	6.7
July	26.3	0.2	- 15.0	- 19.5	- 17.5	- 2.0	4.5	4.4	0.1	17.3	16.4	15.6	15.3
Aug.	- 3.9	0.2	6.7	9.3	10.3	- 1.0	- 2.6	- 1.7	- 0.9	13.2	11.2	14.7	13.4
Sep.	3.0	0.4	0.1	14.4	13.9	0.5	- 14.4	- 15.6	1.3	19.8	13.0	9.4	8.8
Oct.	70.4	0.5	27.7	17.3	17.6	- 0.3	10.5	11.4	- 1.0	19.2	20.6	28.0	24.1
Nov.	95.5	0.3	26.6	29.2	32.2	- 3.0	- 2.5	- 2.1	- 0.5	30.6	25.2	22.1	21.0
Dec.	- 326.2	1.6	- 218.7	- 186.4	- 183.6	- 2.8	- 32.2	- 31.2	- 1.0	- 0.9	4.7	9.4	9.1
2022 Jan.	340.3	- 1.9	238.6	189.0	186.9	2.1	49.6	49.7	- 0.1	28.1	15.4	16.2	14.9
Feb.	128.5	- 0.0	52.7	41.4	39.7	1.7	11.3	9.1	- 2.2	20.4	15.8	21.3	20.9
Mar.	119.7	2.2	- 15.5	- 18.4	- 17.2	- 1.2	2.9	3.0	- 0.1	31.4	27.6	22.2	22.6
Apr.	283.1	1.0	41.6	30.8	30.8	0.0	10.8	10.6	0.2	7.5	12.8	19.7	19.4
May	1.1	- 1.0	12.4	15.3	12.8	2.5	- 2.9	- 1.5	- 1.3	27.4	21.2	21.6	21.3
June	178.6	1.7	- 28.2	- 22.2	- 20.6	- 1.6	- 6.0	- 5.3	- 0.6	32.9	19.9	22.0	23.7
July	- 165.9	- 9.5	- 10.7	- 13.5	– 14.5	1.0	2.7	2.6	0.1	31.0	36.7	36.6	23.1

 $^{^\}star$ 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

												euro area
	n-euro area	Claims on no residents				nber States	in other Men	to non-banks				
1				ernment	General gove	nd	Enterprises a households			rnment	General gove	
Other assets 1	of which: Loans	Total	Securities	Loans	Total	of which: Loans	Total	Total	Securities 2	Loans	Total	Securities
										ıth	ar or mor	End of ye
849.7	745.0 690.5 805.0	970.3 921.2 1,050.1	93.7 96.9 113.2	30.4 27.8 31.9	124.1 124.6 145.0	158.1 144.6 142.7	275.1 267.6 270.0	399.2 392.3 415.0	243.7 246.6 250.4	350.3 339.2 327.9	594.0 585.8 578.2	259.8 262.3 276.4
905.6 844.1 668.9 650.2	746.3 802.3 745.3 778.5	1,006.5 1,058.2 991.9 1,033.2	112.1 108.2 99.3 90.6	29.4 28.5 29.8 28.6	141.5 136.7 129.1 119.2	146.4 159.5 158.3 176.5	276.0 281.7 271.8 286.7	417.5 418.4 401.0 405.8	250.6 226.7 197.6 170.5	324.5 312.2 284.3 263.4	575.1 538.9 481.9 433.9	287.4 293.6 308.7 297.2
981.5 2 1,090.3 2 888.3 2	777.5 751.2 853.3	1,035.8 1,003.2 1,094.2	93.2 112.7 99.0	29.4 29.7 28.4	122.6 142.3 127.4	199.0 222.2 244.0	312.6 327.5 362.7	435.2 469.8 490.1	161.6 160.5 146.5	254.7 252.3 245.1	416.2 412.8 391.6	303.8 303.9 321.2
1,119.7 1,090.3	793.4 792.3 751.2	1,049.9 1,048.0 1,003.2	119.3 120.1 112.7	30.2 29.1 29.7	149.5 149.2 142.3	219.6 222.5 222.2	318.6 325.6 327.5	468.2 474.8 469.8	173.2 173.8 160.5	257.3 256.7 252.3	430.5 430.5 412.8	302.5 302.2 303.9
1,029.5 974.4 960.1	834.6 843.9 855.5	1,087.5 1,093.8 1,105.7	118.9 115.2 115.5	28.7 28.8 28.9	147.6 144.0 144.4	224.5 227.0 232.3	330.8 334.5 339.4	478.4 478.5 483.8	160.7 162.9 165.1	253.3 250.6 249.3	414.0 413.4 414.4	304.9 307.1 309.1
930.3 902.3 922.5	876.2 862.4 864.8	1,122.5 1,108.3 1,111.0	109.4 105.7 113.5	30.3 28.4 28.8	139.7 134.1 142.3	232.3 231.9 231.8	339.8 339.1 339.4	479.5 473.2 481.7	158.9 158.9 152.3	251.0 250.6 249.1	409.9 409.5 401.4	310.2 313.5 313.8
964.3 954.2 934.8 910.9	849.1 839.7 840.8 889.6	1,097.1 1,084.8 1,087.9 1,134.6	109.2 109.6 110.3 103.2	28.6 28.3 27.9 30.3	137.8 137.9 138.2 133.4	236.6 238.8 241.7 244.3	344.2 346.1 352.5 356.0	482.0 484.0 490.7 489.5	150.8 150.9 154.1 145.4	251.3 248.0 248.3 249.7	402.2 398.9 402.4 395.1	314.2 315.4 316.0 319.9
950.0 888.3 1,090.8	892.4 853.3 925.2	1,134.0 1,137.3 1,094.2 1,171.3	105.2 105.6 99.0 96.5	28.5 28.4 28.5	134.1 127.4 125.0	249.6 244.0 260.4	361.6 362.7 377.7	495.7 490.1 502.7	148.8 146.5 143.6	247.8 245.1 246.9	396.5 391.6 390.6	320.9 321.2 322.4
1,125.9 1,249.9 1,496.5	939.6 921.9 926.0	1,190.1 1,169.2 1,174.5	97.2 101.9 94.4	28.6 29.0 32.2	125.8 130.9 126.7	262.7 259.4 257.8	381.4 379.5 378.8	507.2 510.4 505.4	140.0 144.8 136.4	244.7 245.2 246.5	384.8 390.0 382.9	322.8 322.3 322.5
1,458.8 1,603.8	917.3 925.1 941.4	1,166.1 1,182.4 1,199.8	95.7 103.6 103.0	31.4 33.2 33.4	127.1 136.8 136.4	260.7 268.4 266.0	383.7 388.1 383.8	510.9 524.9 520.2	137.7 135.0 134.5	244.5 244.9 245.8	382.1 379.9 380.3	322.7 320.9 334.4
.		•	,			•		•			3	Changes
- 420.8 2 194.0 2 - 150.1 2 - 51.4 2 - 173.1 2 14.8 330.3 2	- 47.2 72.0 - 101.0 55.0 - 6.7 18.9 - 33.3	- 38.8 83.6 - 88.3 51.4 - 12.3 29.0 - 32.1	3.1 13.8 - 2.8 - 3.3 - 8.9 - 9.9	- 2.6 0.9 - 1.0 - 0.9 0.1 - 1.5 0.0	0.5 14.6 - 3.7 - 4.2 - 8.7 - 11.4 1.7	9.3 - 4.0 1.8 14.6 4.0 18.6 26.9	- 3.4 0.4 4.4 8.2 - 3.4 18.2 29.5	- 3.0 15.1 0.7 4.0 - 12.2 6.8 31.3	3.9 2.9 0.3 - 23.3 - 28.5 - 27.0 - 9.1	- 10.9 - 15.1 - 4.2 - 12.1 - 22.8 - 19.1 - 8.6	7.0 - 12.3 - 3.9 - 35.4 - 51.3 - 46.2 - 17.7	2.0 15.5 11.5 7.8 13.7 - 9.8 7.3
108.8 - 203.7 - 41.4	- 8.2 84.9 6.6	- 9.7 71.7 6.4	0.7 - 13.2 0.8	- 0.4 - 1.1 - 1.1	0.3 - 14.3 - 0.3	20.9 22.6 3.6	30.6 35.5 7.6	31.0 21.1 7.3	- 0.7 - 13.1 0.7	- 1.7 - 6.1 - 0.5	- 2.4 - 19.1 0.2	0.2 17.8 - 0.3
- 29.3 - 62.3 - 55.4	- 34.4 83.6 8.9	- 36.3 84.4 6.3	- 7.4 6.3 - 3.4	0.6 - 0.9 0.1	- 6.9 5.3 - 3.4	0.3 3.2 2.4	1.9 4.1 3.7	- 4.9 9.5 0.3	- 13.2 0.2 2.3	- 4.4 0.9 - 2.4	- 17.5 1.1 - 0.2	1.5 1.5 2.3
- 28.0	3.3 29.0 - 11.4	2.8 26.0 - 11.4	0.3 - 6.0 - 3.6	0.1 1.5 - 1.9	0.4 - 4.5 - 5.5	4.9 0.7 0.3	4.2 0.9 - 0.1	4.6 - 3.6 - 5.6	2.2 - 6.7 0.7	- 1.3 1.7 - 0.3	0.9 - 5.0 0.4	1.9 1.0 2.7
19.9 38.7 - 10.8 - 17.4	- 5.3 - 16.5 - 10.0 - 1.5	- 5.7 - 15.0 - 13.1 0.1	7.7 - 4.5 0.4 0.9	0.4 - 0.2 - 0.3 - 0.4	8.2 - 4.7 0.1 0.5	- 0.6 4.8 2.2 2.9	- 0.4 5.6 1.8 6.3	7.8 1.0 1.9 6.8	- 6.7 - 1.5 0.1 3.2	- 1.4 2.3 - 3.5 0.3	- 8.1 0.7 - 3.4 3.6	0.8 0.4 1.2 0.6
- 24.6 42.4	49.5 - 3.6 - 41.0	47.6 - 4.5 - 45.9	- 7.2 2.2 - 6.3	2.3 - 1.6 - 0.1	- 4.8 0.6 - 6.5	2.6 4.4 – 5.3	3.5 4.8 0.9	- 1.4 5.5 - 5.6	- 8.7 4.0 - 2.2	1.2 - 0.9 - 2.6	- 7.4 3.0 - 4.7	3.9 1.1 0.3
3.3 34.9	66.7 15.8 – 19.2	72.3 20.6 – 22.2	- 2.2 0.8 5.1	0.2 0.1 0.4	- 2.1 0.9 5.5	16.0 2.5 – 3.3	14.8 3.7 – 1.7	12.7 4.6 3.8	- 2.6 - 3.4 5.0	1.8 - 2.1 0.5	- 0.8 - 5.5 5.5	1.3 0.5 - 0.4
- 36.6 182.3	- 14.2 - 2.0 - 18.2 16.5	- 13.8 - 1.0 - 10.0 17.2	- 6.9 1.7 8.1 - 1.2	3.2 - 0.8 1.9 0.1	- 3.7 0.8 10.0 - 1.1	- 2.7 3.3 6.1 - 2.4	- 1.6 5.4 3.0 - 4.6	- 5.3 6.2 13.0 - 5.7	- 8.2 1.6 - 2.5 - 0.8	1.4 - 2.0 0.4 0.9	- 6.8 - 0.4 - 2.1	0.2 0.3 - 1.7 13.5

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

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

	llior	

			Deposits of banks (MFIs) n the euro area		Deposits of n	ion-banks (noi	n-MFIs) in the	euro area					
		in the euro a				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:		
Period	sheet total 1	Total	home country	Member States	Total	Total	Overnight	Total	up to 2 years	Total	up to 3 months	Total	Overnight
renou	totai	iotai	country	States	iotai	iotai	Overnight	Total	2 years	iotai		of year o	
2012	8,226.6	1,371.0	1,135.9	235.1	3,091.4	2,985.2	1,294.9	1,072.8	320.0	617.6	528.4	77.3	31.2
2013 2014	7,528.9 7,802.3	1,345.4 1,324.0	1,140.3 1,112.3	205.1 211.7	3,130.5 3,197.7	3,031.5 3,107.4	1,405.3 1,514.3	1,016.2 985.4	293.7 298.1	610.1 607.7	532.4 531.3	81.3 79.7	33.8 34.4
2015	7,665.2	1,267.8	1,065.9	201.9	3,307.1	3,215.1	1,670.2	948.4	291.5	596.4	534.5	80.8	35.3
2016 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 2019	7,776.0 8,311.0	1,213.8 1,242.8	1,021.8 1,010.4	192.0 232.4	3,642.8 3,778.1	3,527.0 3,649.8	2,075.5 2,230.9	872.9 843.7	267.2 261.7	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 Oct.	9,172.2 9,124.3	1,628.6 1,536.3	1,338.6 1,264.9	289.9 271.4	4,129.9 4,015.2	3,931.8 3,827.0	2,649.3 2,473.1	721.3 794.2	203.9 249.1	561.2 559.7	537.1 531.7	153.8 140.8	70.7 69.6
Nov.	9,096.0	1,515.4	1,245.5	269.9	4,035.0	3,846.2	2,508.7	778.0	235.3	559.6	532.0	140.2	69.0
Dec. 2021 Jan.	8,943.3 9,150.4	1,493.2 1,560.0	1,237.0 1,262.3	256.3 297.7	4,021.6 4,044.0	3,836.7 3,855.8	2,508.4 2,536.8	767.8 757.4	227.1 219.4	560.5 561.6	533.2 534.8	135.1 138.4	57.0 65.8
Feb. Mar.	9,148.1 9,261.9	1,584.4 1,634.1	1,261.7 1,336.6	322.7 297.6	4,053.2 4,068.3	3,865.2 3,876.2	2,552.4 2,569.2	750.1 744.7	214.1 212.3	562.6 562.3	536.1 536.2	137.7 142.2	68.2 71.0
Apr.	9,269.2	1,659.9	1,344.1	315.8	4,079.3	3,886.3	2,588.3	735.3	205.8	562.7	536.9	143.0	70.2
May June	9,277.1 9,293.7	1,661.1 1,670.8	1,353.0 1,357.4	308.1 313.4	4,103.8 4,088.4	3,909.2 3,890.3	2,614.0 2,605.4	732.0 722.3	205.0 198.1	563.2 562.6	537.5 537.1	146.4 151.3	70.4 76.7
July	9,321.9	1,682.5	1,362.0	320.4	4,110.8	3,918.9	2,638.6	718.3	196.7	562.0	536.8	146.4	74.0
Aug. 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. Nov.	9,395.0 9,495.5	1,690.9 1,718.6	1,364.7 1,374.9	326.2 343.8	4,140.0 4,154.1	3,942.6 3,956.1	2,657.0 2,678.9	725.5 717.4	206.4 200.2	560.1 559.8	535.6 535.5	151.4 151.4	78.1 82.5
Dec.	9,172.2	1,628.6	1,338.6	289.9	4,129.9	3,931.8	2,649.3	721.3	203.9	561.2	537.1	153.8	70.7
2022 Jan. 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 10,258.0	1,766.8 1,765.9	1,384.4 1,393.7	382.3 372.2	4,223.7 4,236.1	4,003.6 4,013.3	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 97.1
June July	10,428.9 10,267.9	1,744.4 1,772.1	1,384.7 1,383.3	359.7 388.9	4,235.0 4,267.5	4,008.2 4,041.3	2,708.8 2,722.8	744.7 765.5	238.3 259.2	554.7 552.9	532.4 530.7	180.5 179.4	102.7 99.0
July	10,207.5	1,772.1	1,505.5	300.3	4,207.5	1,041.5	2,722.0	703.5	255.2	332.3	330.7	,	hanges 4
2013	- 703.6	- 106.2	- 73.9	- 32.3	39.1	47.8	111.5	- 56.3	- 26.6	- 7.3	4.0	2.6	3.3
2014 2015	206.8 - 191.4	- 28.4 - 62.1	- 32.2 - 50.3	3.9 - 11.9	62.7 104.1	71.6 104.8	106.0 153.2	- 32.1 - 37.0	3.1 - 10.1	- 2.4 - 11.3	- 2.4 4.2	- 2.5 - 0.4	- 0.0 - 0.3
2016 2017	184.3 8.0	- 31.6 30.6	- 2.2 14.8	- 29.4 15.8	105.7 124.2	105.2 107.7	124.3 145.8	- 11.1 - 32.5	1.4 - 15.3	- 8.0 - 5.6	2.4 1.5	2.7 16.4	1.9 5.8
2018	101.8	- 20.1	- 25.7	5.6	112.4	114.7	137.7	- 18.8	- 6.5	- 4.3	1.2	- 4.3	2.3
2019 2020	483.4 769.5	12.6 340.0	- 10.0 317.0	22.6 23.0	132.1 244.9	120.0 188.4	154.1 277.6	- 30.6 - 74.7	- 6.6 - 34.9	- 3.4 - 14.5	- 0.6 - 7.2	10.6 18.7	8.7 1.8
2021	207.2	133.4	103.4	30.0	107.3	96.2	141.4	- 45.8	- 23.3	0.6	3.9	16.6	13.6
2020 Nov. Dec.	12.0 - 141.5	8.2 - 25.2	8.4 - 7.9	- 0.1 - 17.3	25.6 - 12.3	20.2 - 8.7	36.4 0.3	- 16.0 - 10.0	- 13.6 - 8.0	- 0.1 1.0	0.3 1.3	4.1 - 4.8	3.9 - 11.8
2021 Jan. Feb.	207.1 - 2.3	66.0 24.4	25.3 - 0.7	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	21.2 10.7	27.6 0.6	8.3 9.1	19.3 - 8.5	12.5 24.9	11.2 23.2	20.1 26.0	- 9.4 - 3.2	- 6.5 - 0.7	0.4 0.5	0.7 0.6	1.2 3.5	- 0.6 0.3
June	5.3	8.2	3.7	4.4	- 16.6	- 19.8	- 9.4	- 9.8	- 7.1	- 0.6	- 0.4	4.5	6.1
July Aug.	26.3 - 3.9	14.4 3.9	7.4 3.7	7.0 0.2	22.3 7.8	28.6 6.5	33.2 9.9	- 4.1 - 2.8	- 1.4 - 2.6	- 0.6 - 0.5	- 0.3 - 0.3	- 4.9 0.9	- 3.1 0.2
Sep. Oct.	3.0 70.4	- 19.5 24.1	- 11.7 11.2	- 7.8 12.9	- 7.3 31.1	- 8.9 29.1	- 6.5 16.8	- 1.6 12.9	0.4 12.1	- 0.8 - 0.6	- 0.6 - 0.4	0.7 2.5	2.7
Nov.	95.5	26.4	9.6	16.7	12.9	12.5	21.1	- 8.4	- 6.2	- 0.3	- 0.1	- 0.3	4.2
Dec. 2022 Jan.	- 326.2 340.3	- 90.4 93.8	- 36.3 23.2	- 54.1 70.6	- 24.3 64.3	- 24.3 47.0	- 29.6 36.5	3.9 10.9	3.7 11.9	1.4 - 0.4	1.6 0.3	2.4 12.6	- 11.9 15.3
Feb. Mar.	128.5 119.7	19.3 - 6.6	6.1	13.2 - 4.5	14.2	14.6	13.4 - 9.7	1.1 7.3	1.6 9.2	0.1	0.3 - 1.6	2.2	3.5 9.3
Apr.	283.1	25.1	15.6	9.5	8.0	11.0	7.5	4.1	7.2	- 0.6	- 0.4	- 3.1	- 6.6
May June	1.1 178.6	0.7 - 24.2	9.8 - 9.7	- 9.1 - 14.5	13.6 - 2.8	10.6 - 6.6	18.9 - 10.7	- 6.9 5.9	- 5.0 8.5	- 1.3 - 1.8	- 1.2 - 1.6	1.0 4.1	3.9 5.6
July	- 165.9	26.0	- 1.6	27.6	31.3	32.3	14.3	19.9	20.2	- 1.8		- 1.6	- 3.7

 $^{^{\}star}$ 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

																Dobt	ocuriti	es issued	13		Т				
in othe	r Mem	ber Stat	es 2					Depo	sits of							Debt	securiti	133000	, ,						
									al gove	nment	S	Liabiliti	es												
With a	greed	of whic		At agr	eed no	of whi	ich:			of wh dome centra gover	stic al	arising from repos v non-ba in the	with	Money marke fund shares				of which with maturing of up t	ties	Liabilities to non- euro area	Capit	tal	Other		
Total		2 years		Total		3 mon	iths	Total		ment		euro ai	ea	issued	3	Total		2 years		residents	reser	ves	Liabili		Period
End (-	ar or		ith																					
	42.3 44.0 42.0		14.7 16.9 15.9		3.8 3.5 3.3		2.8 2.7 2.7		28.9 17.6 10.6		25.9 16.0 10.5		80.4 6.7 3.4		7.3 4.1 3.5	1,	233.1 115.2 077.6		56.9 39.0 39.6	611.4 479.5 535.3	1	487.3 503.0 535.4	1,	344.7 944.5 125.6	2012 2013 2014
	42.2 43.9 63.2 56.7		16.0 15.8 19.7 15.8		3.3 3.1 2.9 2.8 2.7		2.8 2.6 2.6 2.5		11.3 8.6 9.4 11.3		9.6 7.9 8.7 10.5		2.5 2.2 3.3 0.8		3.5 2.4 2.1 2.4	1,	017.7 030.3 994.5 034.0		48.3 47.2 37.8 31.9	526.2 643.4 603.4 575.9		569.3 591.5 686.0 695.6		971.1 906.3 658.8 610.7	2015 2016 2017 2018
	59.0 75.6 80.7	;	16.5 30.6 22.8		2.7 2.6 2.4		2.4 2.3 2.2		12.0 49.8 44.2		11.2 48.6 43.5		1.5 9.4 2.2		1.9 2.5 2.3	1,	063.2 056.9 110.8		32.3 21.2 27.5	559.4 617.6 757.2		728.6 710.8 732.3	1,	935.6 031.3 809.0	2019 2020 2021
	68.6 68.7 75.6	;	25.0 24.3 30.6		2.6 2.6 2.6		2.3 2.3 2.3		47.3 48.5 49.8		46.6 47.6 48.6		1.4 9.1 9.4		2.7 2.5 2.5	1,	075.1 070.0 056.9		24.6 23.3 21.2	687.8 696.7 617.6	1	712.4 713.1 710.8	1,	093.3 054.3 031.3	2020 Oct. Nov. Dec.
	70.0 67.0 68.7		23.7 20.5 22.0		2.6 2.5 2.5		2.3 2.3 2.3		49.7 50.3 49.9		48.3 48.2 48.9		6.3 4.5 6.7		2.5 2.5 2.9	1,	058.8 068.3 090.4		19.7 19.6 21.5	790.8 803.5 833.7	1	708.3 702.4 712.0		979.7 929.4 913.8	2021 Jan. Feb. Mar.
	70.3 73.5 72.0		23.2 26.7 25.9		2.5 2.5 2.5		2.3 2.3 2.3		50.0 48.2 46.9		48.6 46.6 45.6		5.1 6.0 4.5		2.9 2.3 2.3	1, 1,	091.8 087.7 084.6		21.0 23.5 23.8	839.1 854.7 836.9		705.9 702.7 725.4		885.3 858.8 880.7	Apr. May June
	69.9 70.7		22.9 24.0		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, 1,	087.2 089.9		23.5 25.5	800.0 790.7		719.2 725.0		913.9 898.4	July Aug.
	69.2 70.9 66.4		22.4 23.4 17.4		2.5 2.4 2.4		2.2 2.2 2.2		46.6 46.1 46.6		45.2 45.5		7.3 7.4 4.2		2.2 2.2 2.1	1, 1,	100.5 118.0 123.9		25.1 24.6 26.0	840.1 866.7 883.1		735.9 729.5 736.5		862.6 840.3 872.8	Sep. Oct. Nov.
	80.7 78.1 76.8	:	22.8 20.3 19.8		2.4 2.4 2.4		2.2 2.2 2.2		44.2 48.9 46.4		43.5 45.5 42.8		2.2 3.0 2.4		2.3 2.3 2.4	1, 1,	110.8 126.9 141.1		27.5 25.3 26.2	757.2 907.4 945.9		732.3 721.2 717.7	1, 1,	809.0 036.0 080.0	Dec. 2022 Jan. Feb.
	75.9 79.8 76.8	;	19.0 22.5 19.9		2.4 2.4 2.3		2.2 2.2 2.1		44.5 44.6 46.6		42.1 42.2 42.8		2.8 2.3 1.9		2.5 2.3 2.5	1,	148.9 161.1 164.1		25.9 26.3 27.7	926.4 939.2 958.5		736.8 734.6 732.3	1,	195.6 438.9 396.8	Mar. Apr. May
	75.5 78.1		19.1 23.2		2.3		2.1 2.1		46.2 46.8		43.0 44.0		2.0 4.2		2.5 2.5	1,	164.7 177.1		32.2 35.9	945.7 926.6		752.0 744.5	1,	582.6 373.3	June July
Chan	_	4																							
-	0.5 2.3	_	1.2	_ _	0.3	-	0.1	-	11.3	-	10.0	-	4.1 3.4	-	3.2 0.6	-	104.9 63.7	-	17.6 0.2	- 134.1 35.9	1	18.9 26.1		417.1 178.3	2013 2014
-	0.1 1.1 10.8 6.4	_	0.0 0.0 4.2 4.1	- - -	0.0 0.3 0.1 0.1	- - -	0.1 0.1 0.0 0.1	- - -	0.4 2.2 0.0 2.1	- - -	1.9 1.2 0.0 2.1	- - -	1.0 0.3 1.1 2.6	- - -	0.0 1.1 0.3 0.3	-	86.8 8.6 3.3 30.0	- - -	7.7 1.3 8.5 5.9	- 30.3 116.1 - 16.1 - 36.0		28.0 26.4 34.1 7.4	-	143.2 39.5 162.3 10.3	2015 2016 2017 2018
	2.0 17.0 3.1	_	0.6 14.3 8.0	_ _ _	0.1 0.1 0.2	- - -	0.1 0.1 0.1	_	1.4 37.8 5.5	_	1.4 37.3 5.0	_	5.6 3.6 7.9	-	0.5 0.6 0.3		22.3 11.8 40.6	-	0.1 9.3 6.9	- 47.9 61.6 124.9	- 1	30.0 1.5 16.6		329.1 108.5 207.9	2019 2020 2021
	0.2 7.0	-	0.6 6.3	-	0.0	-	0.0		1.2 1.3		1.0 1.0		3.3 0.3	<u> </u>	0.2	-	0.9	-	1.2 1.9	12.6		3.3 0.7	-	39.9 23.2	2020 Nov. Dec.
-	7.0 3.1 1.5	_ _	6.9 3.2 1.3	_ _	0.0 0.0 0.0	_	0.0 0.0 0.0	- -	0.1 0.6 0.4	-	0.2 0.2 0.8	 - 	3.0 1.8 2.1	 -	0.0 0.0 0.5		2.8 8.9 15.7	 -	0.5 0.1 1.7	173.2 12.2 24.0	-	3.7 6.2 7.1	- - -	49.8 48.9 10.8	2021 Jan. Feb. Mar.
_	1.8 3.2 1.6	_	1.3 3.5 0.9	_ _ _	0.0 0.0 0.0	- -	0.0 0.0 0.0	 - -	0.1 1.8 1.3	- -	0.4 1.9 1.0	 - -	2.2 0.9 1.5	 - -	0.1 0.1 0.1	-	7.3 2.7 7.7	-	0.4 2.5 0.2	11.1 17.0 - 22.7	-	3.7 2.8 20.9	-	31.3 27.1 24.6	Apr. May June
_	1.8 0.7	-	2.7 1.0	- - -	0.0 0.0	- - -	0.0 0.0	-	1.4 0.3	-	1.3 0.2	_	1.5 1.4	 - -	0.1 0.0		2.3 2.2	-	0.2 2.0	- 37.2 - 9.9	-	5.4 5.6	-	28.5 14.9	July Aug.
_	1.9 1.5 4.5	_	1.6 0.9 6.1	_ _ _	0.0 0.0 0.0	- - -	0.0 0.0 0.0	-	0.8 0.5 0.7		0.0 0.4	- - -	0.1 0.1 3.2	- - -	0.0 0.1 0.1		7.0 17.3 1.7	-	0.5 0.5 1.4	45.5 27.1 11.7	-	10.0 6.4 5.9	-	32.4 22.8 40.3	Sep. Oct. Nov.
-	14.3 2.7 1.3	_ _	5.4 2.6 0.5	_ _	0.0 0.0 0.0	 - -	0.0 0.0 0.0	_	2.4 4.7 2.5	- -	2.0 2.0 2.7	_	2.0 0.7 0.5	_	0.2 0.0 0.1	-	14.2 13.4 15.0	-	1.4 2.3 1.0	- 127.3 146.6 39.4	-	4.6 18.3 3.2	_	63.4 39.8 44.2	Dec. 2022 Jan. Feb.
_	1.0 3.6 2.9	-	0.8 3.2 2.5	- - -	0.0 0.0 0.0	- - -	0.0 0.0 0.0	-	2.0 0.1 2.0	_	0.6 0.0 0.6	 - -	0.3 0.5 0.4	-	0.2 0.3 0.2		6.9 3.4 6.4	_	0.3 0.2 1.4	- 20.7 0.4 23.9	-	19.0 5.8 1.0		118.4 252.8 42.4	Mar. Apr. May
-	1.5 2.1	-	1.0 3.8	_ _	0.0	-	0.0	-	0.4 0.6		1.1		0.1 2.1	-	0.0	-	4.8 14.3		4.3 5.5	- 6.3 - 19.2		17.6 9.5		199.0 211.0	June July

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

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

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

-	1- :1	llin	

	€ billion													
				Lending to b	anks (MFIs)		Lending to no	on-banks (non	-MFIs)					
					of which:			of which:						
								Loans						
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	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											
2022 Feb. Mar.	1,442 1,442	9,905.7 10,025.3	1,142.6 1,137.0	2,675.9 2,666.8	2,203.3 2,194.2	470.7 471.4	4,750.0 4,760.3	453.5 441.8	3,587.6 3,604.5		0.3	694.2 700.1	94.9 94.6	1,242.3 1,366.5
Apr.	1,441	10,333.5	1,252.2	2,589.8	2,116.4	471.2	4,780.9	454.6	3,627.3		0.4	682.1	94.6	1,615.9
May June	1,439 1,432	10,321.7 10,491.7	1,173.6 1,143.9	2,675.5 2,695.5	2,199.3 2,222.0	473.8 470.5	4,801.0 4,835.6	458.6 467.9	3,640.1 3,657.7		0.3 0.3	685.3 692.3	94.5 94.9	1,577.1 1,721.8
July	1,425	10,330.6	1,127.2	2,702.9	2,227.8	471.4	4,874.5	464.5	3,690.2		0.3	703.3	96.2	1,529.8
	Commerc	cial banks	6											
2022 June	249	4,752.2	620.5	1,179.2	1,100.9	78.0	1,521.7	300.9	994.0		0.3	217.7	31.8	1,399.0
July	246	4,583.0	617.8	1,165.6	1,085.7	79.6	1,542.2	299.3	1,004.3		0.2	230.6	31.6	1,225.7
	Big bar													
2022 June July	3	2,419.2 2,319.7	186.5 184.2	573.9 569.0	544.6 539.1	29.3 29.9	702.5 721.4	137.7 140.3	451.2 454.2		0.0	109.9 123.9	26.3 26.3	930.0 818.7
July	1		nd other			29.9	721.4	140.5	454.2		0.0	123.9	20.5	010.7
2022 June	139	1,878.8	280.5	443.2	395.7	47.1	690.4	117.7	466.6		0.2	101.7	4.8	459.9
July	136	1,814.4	288.8	436.4	388.2	48.0	687.9	113.2	470.3		0.1	100.4	4.6	396.7
	Branch	es of fore	ign banks											
2022 June	107	454.3	153.5	162.2	160.5	1.6	128.8	45.6	76.1		0.0	6.2	0.7	9.1
July	107	448.8	144.8	160.1	158.5	1.6	133.0	45.9	79.8		0.0	6.3	0.7	10.3
	Landesba	anken												
2022 June	6	916.0	108.7	251.0	200.6	50.2	428.5	51.7	334.0		0.0	38.6	8.1	119.7
July	6	915.2	111.4	254.2	204.2	49.7	429.6	48.9	338.5		0.0	37.6	9.4	110.8
2022 June	Savings b	1,566.8	169.4	165.2	10.2	1150	1 1041	F1.6.1	06451		- 1	1774	1 1 1	22.0.1
July	364	1,575.9	168.4 164.5	165.2 170.0	49.2 53.7	115.9 116.0	1,194.1 1,202.1	51.6 52.0	964.5 971.2		_	177.4 178.4	15.3 15.3	23.8 24.0
,	1	operative				,	, .,						,	
2022 June	768	1,158.5	66.8	186.6	71.6	114.6	858.3	32.6	701.8		0.0	123.8	19.2	27.5
July	764	1,166.6	66.1	191.0	76.2	114.2	862.7	31.9	706.9		0.0	123.8	19.4	27.4
	Mortgag	e banks												
2022 June	9	231.9	12.3	17.7	11.2	6.1	196.6	2.5	178.1		-	15.9	0.1	5.2
July	9	233.2	13.5	16.6	10.2	6.1	197.6	2.3	179.4		-	15.8	0.1	5.4
	1 -	-	associatio											
2022 June July	18 18	260.3 260.0	3.8 3.6	45.6 45.1			206.7 207.5	1.2 1.3	181.2 182.0		•	24.3 24.2	0.3 0.3	3.9 3.6
July	1	•	ا مند developr ,			, ,	, ,	1.5	182.0		.	24.2	0.5	3.0
2022 June	18	1,606.0	•			• •		27.4	304.0		0.0	94.6	20.1	142.6
July	18								307.8		0.0			132.8
	Memo ite	em: Fore	eign banks	8			'	,	,			'		
2022 June	140	2,224.1	325.5	607.6	575.5	31.8	614.8	134.2	382.5		0.2	94.3	3.6	672.6
July	141	2,192.9	336.3	603.4	570.9		654.9	153.2	389.7		0.2	107.1	3.6	594.7
	of whice	h: Banks	majority-c	-	foreign ba	anks ⁹								
2022 June	33	1,769.8	172.0	445.4	415.0				306.4		0.2		2.9	663.5
July	34	1,744.0	191.5	443.3	412.5	30.6	521.9	107.3	309.8		0.1	100.8	2.9	584.4

^{*} Assets and liabilities of monetary financial institutions (MFIs) in Germany. The assets and liabilities of foreign branches, of money market funds (which are also classified as MFIs) and of the Bundesbank are not included. For the definitions of the respective items, see the footnotes to Table IV.3. 1 Owing to the Act Modernising Accounting Law (Gesetz zur Modernisierung des Bilanzrechts) of 25 May 2009, derivative financial instruments in the trading portfolio (trading portfolio derivatives) within the meaning of

Section 340e (3) sentence 1 of the German Commercial Code (Handelsgesetzbuch) read in conjunction with Section 35 (1) number 1a of the Credit Institution Accounting Regulation (Verordnung über die Rechnungslegung der Kreditinstitute) are classified under "Other assets and liabilities" as of the December 2010 reporting date. Trading portfolio derivatives are listed separately in the Statistical Series Banking statistics, in Tables I.1 to I.3. 2 For building and loan associations: including deposits under savings

Deposits of	eposits of banks (MFIs) Deposits of non-banks (non-MFIs)									Capital				
	of which:			of which:								including published		
					Time deposi	its 2		Savings dep	osits 4]	reserves, 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	pation rights capital, funds for general banking risks	Other liabi- lities 1	End of month
											All cat	tegories d	of banks	
2,500.1 2,481.6	780.9 770.4	1,719.2 1,711.2	4,399.0 4,395.3	2,899.0 2,895.6	257.2 260.1	652.0 650.7	60.1 50.7	566.7 564.8	543.1 541.5	24.1 24.1	1,233.5 1,255.4	569.5 576.7	1,203.6 1,316.3	2022 Feb. Mar.
2,498.2	741.2	1,756.9	4,431.3	2,907.0	287.1	649.5	62.5	563.7	540.5	23.9	1,263.1	578.7	1,562.2	Apr.
2,521.3 2,484.9	783.2 772.6	1,738.1 1,712.3	4,438.7 4,439.4	2,941.4 2,937.1	263.1 272.0	648.0 645.8	62.5 62.8	562.3 560.4	539.3 537.6	24.0 24.0	1,261.9 1,273.7	579.5 585.7	1,520.4 1,708.0	May June
2,490.7	743.1	1,747.6	4,476.6	2,950.6	296.0	647.2	65.6	558.6	535.9	24.2	1,274.3	586.4	1,502.6	July
											Co	mmercia	l banks 6	
1,289.6	578.1	711.5	1,754.4	1,249.1	156.6	237.3	61.8	101.6	98.1	9.7	181.4	l .	1,328.6	2022 June
1,283.1	553.1	729.9	1,763.7	1,253.0	162.5	237.4	64.4	101.3	97.9	9.5	181.5	197.7	1,156.9	July
520.9	208.2	312.7	830.9	587.5	79.1	76.7	25.3	86.4	83.6	1.1	134.1		oanks ⁷ 861.8	2022 June
510.5	196.9	313.5	845.0	594.8	86.0	77.0	31.9	86.2		1.1	135.0	l .	757.6	July
								•	•		other co			
508.9	219.6	289.3	754.4	537.3	56.5	137.2	36.5	14.8	14.2	8.5	46.9	112.3	456.3	2022 June
517.5	215.7	301.8	751.2	536.3	56.1	135.8	32.5	14.7	14.1	8.3		110.7	388.9	July
		_		_		_	_	_	_	В	ranches c		_	
259.7	150.3	109.4	169.1	124.3	21.0	23.4	-	0.4	0.4	0.1	0.5	14.6	10.5	2022 June
255.1	140.6	114.6	167.5	121.9	20.5	24.6	-	0.4	0.4	0.1	0.4	•	sbanken	July
285.3	57.4	227.8	277.0	158.1	43.1	70.2	0.7	5.6	5.6	0.0	185.3	43.1	125.4	2022 June
288.1	52.0	236.1	286.8	152.9	57.4	70.8	0.7	5.6	5.5	0.0	184.8	l	l .	July
												Savin	gs banks	
207.4	5.7	201.7	1,157.3	846.5	12.3	14.1	-	274.4	259.0	10.1	15.7	136.2	50.2	2022 June
207.4	2.6	204.8	1,166.7	854.8	14.1	14.0	-	273.4	258.0	10.3	•	137.2	•	July
177.0		1 4745			20.0	17.6		170.4	1745			redit coop		2022 1
177.0 177.8	2.5 1.5	174.5 176.3	838.9 846.4	610.0 617.9	29.0 28.8	17.6 17.8	_	178.4 177.8	174.5 174.0	4.0 4.1	8.9 8.9	100.2 100.6	33.5 32.9	2022 June July
												•	ge banks	
61.7	3.9	57.7	53.3	2.5	4.4	46.5	-	-	-		100.3	10.3	6.2	2022 June
62.0	3.8	58.2	53.8	2.5	4.9	46.5	-	-	-		100.8	10.4	6.2	July
										Buil	ding and	loan asso	ociations	
39.7	3.5	36.2	193.7	3.9	1.6	187.7	-	0.5	0.5	0.1		12.2	10.1	2022 June
39.8	3.1	36.7	193.6	3.9	1.6			0.5		•	4.6 other cen		•	July
424.3	121.4	302.9	164.7	67.1	25.1			. •	ievelopiii I –	ent and t	777.6			2022 June
432.5									_		777.0			July
•	•	•								M	lemo iten	າ: Foreigr	banks ⁸	
724.6		346.8	693.2	517.6	54.7	97.9	10.6	20.4		2.6	44.3		675.3	2022 June
742.4	363.5	378.8	715.9	528.6	65.1	99.3				,			•	July
											wned by	. •		
464.9 487.3		237.4		393.3 406.7	33.7	74.6		20.0 19.9		2.5				2022 June
487.3	223.0	264.3	548.5	406.7	44.6	74.7	34.1	19.9	19.7	2.5	44.2	80.3	583.8	July

and loan contracts (see Table IV.12). **3** Included in time deposits. **4** Excluding deposits under savings and loan contracts (see also footnote 2). **5** Including subordinated negotiable bearer debt securities; excluding non-negotiable bearer debt securities. **6** Commercial banks comprise the sub-groups "Big banks", "Regional banks and other commercial banks" and "Branches of foreign banks". **7** Deutsche Bank AG (Presdner 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 *

	lı∩r
bil	

			Lending to d	omestic banks	s (MFIs)				Lending to d	omestic non-l	oanks (non-M	FIs)	
Period	Cash in hand (euro area banknotes and coins)	Credit balances with the Bundes- bank	Total	Credit balances and loans	Bills	Negotiable money market paper issued by banks	Securities issued by banks	Memo item: Fiduciary loans	Total	Loans	Bills	Treasury bills and negotiable money mar- ket paper issued by non-banks	Securities issued by non- banks 1
											En	d of year o	
2012 2013 2014	18.5 18.5 18.9	134.3 85.6 81.3	1,655.0 1,545.6 1,425.9	1,229.1 1,153.1 1,065.6	0.0 0.0	2.4 1.7 2.1	423.5 390.8 358.2	2.4 2.2 1.7	3,220.4 3,131.6 3,167.3	2,785.5 2,692.6 2,712.2	0.6 0.5 0.4	2.2 1.2 0.7	432.1 437.2 454.0
2015	19.2	155.0	1,346.6	1,062.6	0.0	1.7	282.2	1.7	3,233.9	2,764.0	0.4	0.4	469.0
2016	25.8	284.0	1,364.9	1,099.8	0.0	0.8	264.3	2.0	3,274.3	2,823.8	0.3	0.4	449.8
2017	31.9	392.5	1,407.5	1,163.4	0.0	0.7	243.4	1.9	3,332.6	2,894.0	0.4	0.7	437.5
2018	40.4	416.1	1,323.5	1,083.8	0.0	0.8	239.0	5.9	3,394.5	2,990.2	0.2	0.2	403.9
2019	43.2	476.6	1,254.7	1,016.2	0.0	0.7	237.9	4.5	3,521.5	3,119.2	0.3	3.3	398.7
2020	47.2	792.9	1,367.9	1,119.7	0.0	0.7	247.5	8.8	3,647.0	3,245.1	0.2	4.0	397.7
2021	49.4	905.0	1,409.6	1,163.7		0.5	245.3	10.3	3,798.1	3,392.4	0.3	2.6	402.8
2021 Feb.	45.0	929.2	1,382.3	1,130.2	0.0	1.0	251.1	9.6	3,669.3	3,261.7	0.2	7.4	400.0
Mar.	45.5	983.4	1,419.4	1,160.8	0.0	0.9	257.7	9.8	3,699.1	3,287.5	0.2	6.7	404.7
Apr.	44.7	1,062.1	1,362.4	1,105.7	0.0	0.9	255.8	9.8	3,693.9	3,287.5	0.2	5.6	400.5
May	45.4	1,044.7	1,423.6	1,167.3	0.0	0.9	255.4	10.1	3,709.6	3,300.2	0.1	4.6	404.7
June	46.1	1,042.8	1,409.7	1,153.8	0.0	0.8	255.1	10.3	3,709.2	3,305.7	0.2	5.8	397.6
July	46.3	1,059.2	1,372.0	1,118.1	0.0	0.8	253.2	10.3	3,725.3	3,322.9	0.2	6.1	396.2
Aug.	46.5	1,015.2	1,425.2	1,172.4	0.0	0.8	252.1	10.3	3,736.4	3,332.8	0.1	5.7	397.8
Sep.	47.1	1,054.9	1,399.9	1,147.7	0.0	0.7	251.5	10.3	3,749.8	3,341.9	0.1	4.4	403.3
Oct.	47.6	1,052.4	1,419.3	1,167.7	0.0	0.7	250.9	10.3	3,770.2	3,366.9	0.2	5.0	398.0
Nov.	47.9	1,068.7	1,432.2	1,183.6	-	0.7	248.0	10.0	3,794.0	3,386.4	0.2	5.6	401.9
Dec.	49.4	905.0	1,409.6	1,163.7	-	0.5	245.3	10.3	3,798.1	3,392.4	0.3	2.6	402.8
2022 Jan.	47.4	1,066.0	1,439.2	1,191.8	-	0.7	246.7	10.1	3,812.8	3,409.0	0.2	3.1	400.5
Feb.	47.2	1,094.0	1,453.6	1,204.6	-	0.3	248.7	10.0	3,826.5	3,426.0	0.2	5.0	395.3
Mar.	49.5	1,086.3	1,442.6	1,195.1	-	0.3	247.3	10.0	3,853.8	3,449.0	0.2	3.3	401.3
Apr.	50.4	1,200.5	1,360.3	1,112.8	-	0.6	246.9	9.9	3,866.6	3,470.0	0.2	3.5	392.9
May	49.4	1,122.8	1,452.7	1,202.9	-	0.7	249.1	9.9	3,886.7	3,488.9	0.2	3.2	394.4
June	51.1	1,090.9	1,462.8	1,214.8	-	0.8	247.2	9.8	3,906.6	3,513.4	0.2	3.7	389.3
July	41.6	1,084.2	1,454.9	1,206.8	-	0.8	247.2	9.8	3,945.1	3,539.1	0.2	3.6	402.3 Changes *
2013	+ 0.0	- 48.8	- 204.1	- 170.6	+ 0.0 + 0.0	- 0.7	- 32.7	- 0.2	+ 4.4	+ 0.3	- 0.1	- 0.6	+ 4.8
2014	+ 0.4	- 4.3	- 119.3	- 87.1		+ 0.4	- 32.6	+ 0.1	+ 36.7	+ 20.6	- 0.1	- 0.6	+ 16.8
2015 2016 2017 2018 2019	+ 0.4 + 0.3 + 6.5 + 6.1 + 8.5 + 2.8	+ 73.7 + 129.1 + 108.4 + 24.0 + 59.7	- 80.7 + 48.1 + 50.3 - 81.0 - 63.0	- 4.3 + 66.9 + 70.4 - 76.6 - 61.1	- 0.0 - 0.0 - 0.0 + 0.0 - 0.0	- 0.4 - 0.9 + 0.0 + 0.1 - 0.2	- 75.9 - 17.9 - 20.1 - 4.4 - 1.6	- 0.1 + 0.4 - 0.1 + 3.8 - 1.4	+ 68.9 + 43.7 + 57.0 + 71.5 + 126.7	+ 54.1 + 62.8 + 70.2 + 105.4 + 129.1	- 0.0 - 0.1 + 0.0 - 0.1 + 0.1	- 0.3 - 0.1 + 0.4 - 0.5 + 3.1	+ 15.1 - 18.9 - 13.6 - 33.2 - 5.5
2020	+ 4.1	+ 316.4	+ 201.2	+ 191.6	- 0.0	+ 0.0	+ 9.6	+ 4.3	+ 123.2	+ 123.6	- 0.1	+ 0.7	- 1.0
2021	+ 2.2	+ 111.8	+ 44.1	+ 46.3	- 0.0	- 0.2	- 2.0	+ 1.5	+ 152.2	+ 147.8	+ 0.0	- 2.2	+ 6.6
2021 Feb.	+ 0.3	- 79.9	+ 98.9	+ 97.8	-	+ 0.3	+ 0.8	+ 0.4	+ 15.3	+ 11.0	- 0.0	+ 0.7	+ 3.6
Mar.	+ 0.6	+ 54.3	+ 37.1	+ 30.6	-	- 0.1	+ 6.6	+ 0.2	+ 29.7	+ 25.6	- 0.0	- 1.4	+ 5.4
Apr.	- 0.8	+ 78.7	- 56.7	- 54.9	- 0.0	- 0.1	- 1.7	+ 0.0	- 5.2	+ 0.0	- 0.0	- 1.1	- 4.1
May	+ 0.8	- 17.5	+ 61.2	+ 61.6	-	+ 0.0	- 0.4	+ 0.4	+ 15.6	+ 12.5	- 0.0	- 1.1	+ 4.2
June	+ 0.6	- 1.9	- 13.6	- 13.3	- 0.0	- 0.1	- 0.3	+ 0.1	- 0.4	+ 5.5	+ 0.0	+ 1.3	- 7.1
July Aug. Sep.	+ 0.2 + 0.2 + 0.6	+ 15.3 - 43.8 + 39.7	- 35.1 + 53.4 - 26.2	- 33.1 + 54.4 - 25.5	- + 0.0	- 0.0 + 0.1 - 0.1	- 1.9 - 1.1 - 0.6	+ 0.1 - 0.0 - 0.0	+ 16.1 + 10.9 + 13.5	+ 17.2 + 9.7 + 9.2	+ 0.0 - 0.0 + 0.0	+ 0.3 - 0.5 - 1.2	- 1.4 + 1.7 + 5.4
Oct.	+ 0.5	- 2.4	+ 19.5	+ 20.0	+ 0.0	- 0.0	- 0.5	- 0.1	+ 20.5	+ 25.1	+ 0.0	+ 0.6	- 5.2
Nov.	+ 0.3	+ 16.6	+ 12.9	+ 15.9	- 0.0	- 0.0	- 2.9	- 0.3	+ 25.5	+ 20.4	+ 0.0	+ 0.6	+ 4.5
Dec.	+ 1.6	- 163.6	- 22.4	- 19.6	-	- 0.1	- 2.7	+ 0.3	+ 4.3	+ 6.2	+ 0.1	- 3.0	+ 0.9
2022 Jan.	- 2.0	+ 161.0	+ 27.8	+ 26.3	-	+ 0.1	+ 1.4	- 0.3	+ 14.7	+ 16.6	- 0.1	+ 0.5	- 2.3
Feb.	- 0.2	+ 28.0	+ 13.1	+ 11.5	-	- 0.4	+ 2.0	- 0.1	+ 15.1	+ 18.4	+ 0.0	+ 1.9	- 5.2
Mar.	+ 2.3	- 7.8	- 10.9	- 9.5	-	- 0.0	- 1.4	- 0.0	+ 27.3	+ 23.0	- 0.0	- 1.7	+ 6.0
Apr.	+ 0.9	+ 114.2	- 82.3	- 82.3	-	+ 0.3	- 0.4	- 0.0	+ 13.1	+ 21.3	+ 0.0	+ 0.2	- 8.4
May	- 1.0	- 77.7	+ 92.4	+ 90.0	-	+ 0.1	+ 2.3	- 0.0	+ 20.1	+ 18.9	- 0.1	- 0.3	+ 1.5
June	+ 1.7	- 31.9	+ 10.1	+ 11.9	-	+ 0.1	- 1.9	- 0.1	+ 19.9	+ 24.5	- 0.0	+ 0.5	- 5.1
July	- 9.5	- 6.8	- 7.5	- 7.6	-	+ 0.1	- 0.0	- 0.1	+ 36.2	+ 23.5	+ 0.0	- 0.1	+ 12.8

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

1 Excluding debt securities arising from the exchange of

			Deposits of	domestic bar	nks (MFIs) 3			Deposits of	domestic no	n-banks (non	-MFIs)			
		Partici- pating interests												
Equalisa- tion claims 2	Memo item: Fiduciary loans	in domestic banks and enterprises	Total	Sight deposits	Time deposits	Redis- counted bills 5	Memo item: Fiduciary loans	Total	Sight de- posits	Time deposits 6	Savings de- posits 7	Bank savings bonds 8	Memo item: Fiduciary loans	Period
	ear or mo		Total			Biii3	louris	Total	posits		posits	bonus	Iouris	renou
=	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 19.1 19.1 18.0 17.3	89.6 91.0 88.1 90.9 90.4	1,065.6 1,032.9 1,048.2 1,020.9 1,010.2	131.1 129.5 110.7 105.5 107.2	934.5 903.3 937.4 915.4 902.9	0.0 0.1 0.0 0.0 0.0	6.1 5.6 5.1 4.7 4.4	3,224.7 3,326.7 3,420.9 3,537.6 3,661.0	1,673.7 1,798.2 1,941.0 2,080.1 2,236.3	898.4 889.6 853.2 841.5 816.2	596.5 588.5 582.9 578.6 575.2	56.1 50.4 43.7 37.3 33.2	29.3 28.8 30.0 33.9 32.5	2015 2016 2017 2018 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
	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	2021 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
-	26.1	78.8	1,384.7	147.1	1,237.6	0.0	16.9	4,051.8	2,714.4	758.8	554.8	23.8	33.4	June
Changes		80.3	1,383.3	134.3	1,249.0	0.0	16.6	4,086.4	2,729.0	780.4	553.0	24.1	33.0	July
-	- 3.3	+ 2.4	- 79.4	- 24.1	- 55.3	+ 0.0	- 3.4	+ 40.2	+ 118.4	- 53.9	- 7.4	- 17.0	- 1.7	2013
-	- 1.9	+ 2.0	- 29.0	+ 2.2	- 31.2		- 0.6	+ 69.7	+ 107.9	- 25.3	- 2.4	- 10.6	- 2.0	2014
- - - -	- 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	+ 0.0 + 0.0 - 0.0 + 0.0 + 0.0	- 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	- 3.3	+ 313.4	+ 23.2	+ 290.2	- 0.0	+ 8.2	+ 221.6	+ 273.7	- 32.7	- 14.5	- 4.9	+ 1.9	2020
	+ 2.3	+ 1.0	+ 105.2	- 7.4	+ 112.6	+ 0.0	+ 3.3	+ 95.3	+ 144.3	- 46.2	+ 0.7	- 3.5	- 0.2	2021
-	+ 0.3	+ 0.1	- 1.2	- 2.4	+ 1.2	- 0.0	+ 0.6	+ 9.1	+ 15.4	- 7.0	+ 1.0	- 0.4	- 0.0	2021 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 - 0.1	- 0.0 - 0.1 + 0.2	+ 16.7 + 9.4 - 9.0	+ 3.0 + 2.2 + 4.4	+ 13.7 + 7.2 - 13.4	- 0.0 - 0.0	+ 0.2 + 0.3 - 0.2	+ 13.0 + 10.1 - 5.0	+ 9.5 + 18.8 - 9.9	+ 4.2 - 7.3 + 6.7	- 0.6 - 1.3 - 1.8	- 0.1 + 0.0 - 0.0	+ 0.0 - 0.2 - 0.1	Apr. May June
-	- 0.2	+ 1.5	- 1.6	- 12.8	+ 11.2	-	- 0.3	+ 33.9	+ 14.7	+ 20.7	- 1.8	+ 0.3	- 0.5	July

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 *

	lior

		Lending to	foreign bank	s (MFIs)					Lending to	foreign non-l	banks (non-N	1FIs)		
	Cash in hand (non- euro area		Credit balar	nces and loar	Medium	Negotiable money market		Memo		Loans and b	oills	Medium	Treasury bills and negotiable money market	
Period	banknotes and coins)	Total	Total	Short- term	and long- term	paper issued by banks	Securities issued by banks	item: Fiduciary Ioans	Total	Total	Short- term	and long- term	paper issued by non-banks	Securities issued by non-banks
												End	of year o	r month *
2012	0.8	1,046.0	813.5	545.5	268.1	5.4	227.0	2.6	729.0	442.2	105.1	337.1	9.0	277.8
2013	0.2	1,019.7	782.4	546.6	235.8	7.2	230.1	2.5	701.0	404.9	100.3	304.6	8.2	287.8
2014	0.2	1,125.2	884.8	618.7	266.1	7.9	232.5	1.1	735.1	415.2	94.4	320.8	6.5	313.5
2015	0.3	1,066.9	830.7	555.9	274.7	1.2	235.0	1.0	751.5	424.3	83.8	340.5	7.5	319.7
2016	0.3	1,055.9	820.6	519.8	300.7	0.5	234.9	1.0	756.2	451.6	90.1	361.4	5.0	299.6
2017	0.3	963.8	738.2	441.0	297.2	0.7	225.0	2.3	723.9	442.2	93.3	348.9	4.2	277.5
2018	0.2	1,014.1	771.9	503.8	268.1	1.0	241.3	3.0	762.0	489.6	99.9	389.7	4.3	268.1
2019	0.2	1,064.2	814.0	532.7	281.3	1.8	248.5	3.7	795.3	513.1	111.0	402.1	7.7	274.5
2020	0.2	1,024.3	784.8	532.1	252.8	2.6	236.8	4.0	822.8	523.0	125.4	397.5	11.3	288.5
2021	0.3	1,100.7	877.5	614.7	262.7	0.4	222.8	3.5	871.2	572.2	151.5	420.7	8.0	290.9
2021 Feb.	0.6	1,146.4	912.7	659.6	253.1	2.2	231.5	3.8	853.6	548.2	150.4	397.7	14.7	290.7
Mar.	0.2	1,140.4	908.0	646.7	261.3	2.3	230.1	3.8	864.8	559.3	153.3	406.1	11.9	293.5
Apr.	0.2	1,172.3	943.1	680.7	262.3	2.3	227.0	3.9	855.5	555.5	152.6	402.9	13.0	287.0
May	0.2	1,157.2	928.1	669.8	258.3	2.4	226.8	3.9	846.1	550.1	147.3	402.8	11.9	284.2
June	0.4	1,159.3	930.3	666.6	263.7	2.5	226.4	3.9	855.1	551.6	146.7	404.9	10.5	293.0
July	0.4	1,139.3	910.4	651.3	259.1	1.9	227.0	3.8	867.2	565.0	158.4	406.6	13.1	289.2
Aug.	0.4	1,125.9	899.8	647.9	251.8	1.6	224.5	3.7	867.4	566.7	158.7	407.9	15.3	285.5
Sep.	0.3	1,113.1	885.7	634.6	251.1	1.1	226.3	3.6	876.0	569.3	156.6	412.7	15.1	291.6
Oct.	0.3	1,166.7	940.5	672.2	268.2	0.9	225.3	3.5	878.0	579.6	164.1	415.5	17.7	280.6
Nov.	0.3	1,164.8	940.3	674.7	265.6	0.8	223.7	3.4	888.2	585.6	164.4	421.2	14.3	288.3
Dec.	0.3	1,100.7	877.5	614.7	262.7	0.4	222.8	3.5	871.2	572.2	151.5	420.7	8.0	290.9
2022 Jan.	0.3	1,200.2	977.7	714.1	263.6	1.2	221.3	3.5	911.6	610.7	187.0	423.7	10.3	290.7
Feb.	0.5	1,222.3	998.7	734.3	264.4	1.6	222.0	3.6	923.5	615.2	191.4	423.7	9.4	298.9
Mar.	0.5	1,224.2	999.2	729.8	269.4	1.0	224.1	3.6	906.5	597.4	171.8	425.6	10.3	298.9
Apr.	0.6	1,229.5	1,003.6	734.1	269.6	1.6	224.3	3.6	914.4	612.0	180.9	431.1	13.1	289.2
May	0.6	1,222.8	996.5	730.7	265.8	1.7	224.7	3.6	914.3	609.9	182.1	427.9	13.5	290.9
June	0.6	1,232.7	1,007.2	742.2	265.0	2.2	223.3	3.6	929.1	612.4	181.1	431.2	13.7	303.0
July	0.6	1,248.0	1,021.1	748.0	273.1	2.7	224.2	3.5	929.4	615.7	177.0	438.7	12.7	301.0
2012	0.5	1 22.7	26.0	1.2	25.6	1 . 10	l		1 24.2	1 22.1	I 50	1 272		Changes *
2013	- 0.5	- 22.7	- 26.9	- 1.3	- 25.6	+ 1.8	+ 2.4	- 0.0	- 21.2	- 33.1	- 5.8	- 27.2	- 0.7	+ 12.6
2014	- 0.0	+ 86.1	+ 80.1	+ 63.2	+ 16.8	+ 0.7	+ 5.3	- 0.6	+ 5.7	- 10.2	- 12.8	+ 2.7	- 1.8	+ 17.7
2015	+ 0.1	- 91.8	- 86.0	- 82.2	- 3.8	- 6.7	+ 0.8	- 0.1	- 6.1	- 9.2	- 6.5	- 2.7	+ 1.1	+ 2.0
2016	+ 0.0	- 25.5	- 14.5	- 38.2	+ 23.7	- 0.7	- 10.3	- 0.0	+ 17.4	+ 28.9	+ 10.1	+ 18.8	- 3.0	- 8.5
2017	+ 0.0	- 57.2	- 48.7	- 61.5	+ 12.8	+ 0.0	- 8.5	+ 0.6	- 4.7	+ 13.0	+ 8.6	+ 4.4	+ 0.7	- 18.4
2018	+ 0.0	+ 49.6	+ 34.0	+ 57.7	- 23.7	+ 0.2	+ 15.3	+ 0.7	+ 18.3	+ 28.3	+ 3.2	+ 25.2	- 0.4	- 9.7
2019	- 0.0	- 4.1	- 11.3	- 21.9	+ 10.7	+ 0.8	+ 6.3	+ 0.7	+ 26.8	+ 19.9	+ 12.7	+ 7.3	+ 3.0	+ 3.8
2020	- 0.0	- 32.0	- 22.4	- 6.6	- 15.8	+ 0.9	- 10.5	+ 0.3	+ 34.4	+ 14.7	+ 9.0	+ 5.7	+ 3.6	+ 16.1
2021	+ 0.0	+ 52.8	+ 71.1	+ 68.9	+ 2.2	- 2.5	- 15.8	- 0.5	+ 37.8	+ 39.7	+ 29.8	+ 9.9	- 3.2	+ 1.4
2021 Feb.	+ 0.3	+ 11.1	+ 14.7	+ 14.0	+ 0.7	- 0.4	- 3.2	- 0.1	+ 6.3	+ 9.0	+ 7.5	+ 1.5	+ 0.7	- 3.5
Mar.	- 0.3	- 11.7	- 10.1	- 15.8	+ 5.6	+ 0.1	- 1.7	+ 0.0	+ 3.9	+ 4.9	+ 0.7	+ 4.1	- 2.8	+ 1.8
Apr.	- 0.0	+ 37.7	+ 40.7	+ 36.8	+ 3.9	- 0.1	- 2.9	+ 0.1	- 4.0	+ 0.6	+ 0.7	- 0.0	+ 1.1	- 5.6
May	+ 0.0	- 14.9	- 14.6	- 11.5	- 3.1	- 0.1	- 0.3	+ 0.0	- 7.7	- 4.2	- 4.4	+ 0.2	- 0.9	- 2.6
June	+ 0.2	- 4.1	- 3.7	- 6.3	+ 2.6	+ 0.1	- 0.5	- 0.0	+ 4.9	- 1.8	- 1.7	- 0.2	- 1.5	+ 8.2
July	+ 0.0	- 21.8	- 20.5	- 15.7	- 4.8	- 0.6	- 0.7	- 0.1	+ 12.9	+ 13.0	+ 11.7	+ 1.4	+ 2.6	- 2.8
Aug.	- 0.0	- 13.9	- 11.2	- 3.6	- 7.6	- 0.2	- 2.5	- 0.1	- 0.1	+ 1.4	+ 0.3	+ 1.1	+ 2.2	- 3.8
Sep.	- 0.1	- 18.7	- 19.8	- 17.0	- 2.9	- 0.6	+ 1.7	- 0.1	+ 10.0	+ 4.6	+ 1.2	+ 3.4	- 0.2	+ 5.6
Oct.	+ 0.0	+ 54.3	+ 55.5	+ 38.3	+ 17.3	- 0.1	- 1.1	- 0.1	+ 1.5	+ 9.9	+ 7.6	+ 2.3	+ 2.6	- 11.0
Nov.	- 0.0	- 5.7	- 3.9	+ 0.2	- 4.0	- 0.1	- 1.8	- 0.1	+ 5.4	+ 1.8	+ 1.1	+ 0.7	- 3.4	+ 7.1
Dec.	- 0.0	- 65.7	- 64.3	- 60.9	- 3.5	- 0.5	- 0.9	+ 0.0	- 17.8	- 14.0	- 12.7	- 1.4	- 6.3	+ 2.5
2022 Jan.	+ 0.1	+ 95.8	+ 96.6	+ 97.4	- 0.8	+ 0.8	- 1.7	+ 0.1	+ 37.7	+ 36.2	+ 34.8	+ 1.4	+ 2.3	- 0.7
Feb.	+ 0.2	+ 23.2	+ 22.1	+ 20.8	+ 1.2	+ 0.4	+ 0.7	+ 0.0	+ 12.7	+ 5.2	+ 4.6	+ 0.5	- 0.8	+ 8.4
Mar.	- 0.0	- 0.0	- 1.5	- 5.8	+ 4.3	- 0.6	+ 2.1	+ 0.0	- 18.3	- 18.9	- 20.1	+ 1.2	+ 0.8	- 0.2
Apr.	+ 0.1	- 9.7	- 10.2	- 4.6	- 5.6	+ 0.6	- 0.1	+ 0.0	- 1.7	+ 6.8	+ 6.8	+ 0.0	+ 2.8	- 11.3
May	+ 0.0	- 1.1	- 1.8	- 0.1	- 1.7	+ 0.1	+ 0.5	+ 0.0	+ 3.7	+ 1.1	+ 2.2	- 1.1	+ 0.4	+ 2.2
June	+ 0.0	- 15.4	- 14.4	- 10.3	- 4.1	+ 0.5	- 1.6	+ 0.0	+ 9.7	- 1.7	- 2.3	+ 0.6	+ 0.2	+ 11.2
July	- 0.0	l	l .	l .	+ 5.6	+ 0.5	+ 0.7	- 0.1	- 4.7	- 0.7	- 5.3	+ 4.6	- 1.1	- 2.9

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

		Deposits of	foreign bank	s (MFIs)				Deposits of	foreign non-	banks (non-N	1FIs)			
	Partici- pating interests			Time depos savings bon	its (including ds)	bank					its (including osits and bar ds)			
Memo item: Fiduciary loans	in foreign banks and enter- prises	Total	Sight deposits	Total	Short- term	Medium and long- term	Memo item: Fiduciary loans	Total	Sight deposits	Total	Short- term	Medium and long- term	Memo item: Fiduciary loans	Period
	ear or mo		иерозиз	Total	term	term	100113	Total	черозиз	Total	term	term	100113	renou
32.6 30.8 14.0		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	30.5 28.7 24.3 22.1	611.9 696.1 659.0 643.1	323.4 374.4 389.6 370.6	288.5 321.6 269.4 272.5	203.8 234.2 182.4 185.6	84.7 87.5 87.0 86.8	0.1 0.0 0.0 0.0	201.1 206.2 241.2 231.5	102.6 100.3 109.4 110.2	98.5 105.9 131.8 121.3	49.3 55.2 68.1 63.7	49.2 50.8 63.8 57.6	0.7 0.7 0.3 0.1	2015 2016 2017 2018
11.5 11.3 11.1	21.3 17.2 16.6	680.6 761.2 914.6	339.3 428.8 456.0	341.2 332.5 458.6	243.2 205.1 301.5	98.0 127.3 157.2	- 0.0	229.8 258.5 288.2	112.3 133.3 141.9	117.4 125.2 146.2	60.5 65.6 68.7	57.0 59.7 77.6	0.1 0.1 0.1	2019 2020 2021
11.3 11.3	16.5 16.6	987.8 991.5	520.0 520.2	467.7 471.3	318.0 319.5	149.7 151.8	- -	283.4 288.9	145.2 147.8	138.3 141.1	71.5 73.7	66.8 67.4	0.1 0.1	2021 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 11.0	15.7 15.7 15.9	1,113.7 1,127.5 1,100.2	600.6 640.4 625.5	513.2 487.1 474.7	381.7 351.4 340.6	131.4 135.7 134.1	0.0 0.0 0.0	384.6 382.0 387.6	201.5 217.1 222.7	183.2 164.9 164.9	102.6 85.0 82.5	80.6 79.9 82.4	0.1 0.2 0.3	Apr. May June
10.6		1,107.4	608.8	498.6	359.0	139.6	0.0	390.2	221.6	168.6	87.5	81.1	0.3	July
Changes		- 174.0	1 75.0		l – 83.1	- 15.4	- 0.0	1 . 125		1		- 3.0	- 0.2	2013
- 1.8 + 0.1	- 3.8	+ 76.3	- 75.6 + 47.8	- 98.4 + 28.5	+ 39.0	- 10.5	- 0.0	+ 13.5 - 43.6	+ 9.6 - 8.3	+ 3.9 - 35.3	+ 6.9 - 30.7	- 4.6	+ 0.2	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	- 0.0 - 0.0 ± 0.0 - 0.0 - 0.0	- 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
- 0.0 + 0.1	- 0.0 - 0.0	+ 32.7 - 1.8	+ 12.2 - 2.6	+ 20.5 + 0.8	+ 19.3 - 1.1	+ 1.2 + 1.9	- -	+ 3.4 + 3.2	+ 0.0 + 1.6	+ 3.4 + 1.6	+ 2.0 + 1.3	+ 1.4 + 0.3	- 0.0 + 0.0	2021 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	- 0.1 + 0.0 + 0.1	- 13.2 + 18.7 - 21.2	- 39.6 + 42.5 - 5.8	+ 26.4 - 23.8 - 15.4	+ 27.6 - 28.6 - 13.0	- 1.1 + 4.8 - 2.4	- - -	+ 19.2 - 1.1 + 3.5	- 0.6 + 16.4 + 4.7	+ 19.8 - 17.5 - 1.2	+ 19.1 - 16.9 - 3.4	+ 0.6 - 0.5 + 2.2	+ 0.1 + 0.0	Apr. May June
- 0.5	- 0.1	- 0.3	- 20.0	+ 19.7	+ 16.2	+ 3.5	+ 0.0	+ 0.1	- 2.2	+ 2.3	+ 4.0	- 1.8	- 0.0	July

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

€ billion

	Lending to dom		Short-term len	ding						Medium- and I	ong-term
	non-banks, tota			to enterprises	and households		to general gove	ernment			to enter-
Period	including negotiable money market paper, securities equalisation	equalisation		Total	Loans and bills	Negotiable money market	Total	Loans	Treasury bills	Total	Total
	claims	claims	Total	Total	DIIIS	paper	Total	Loans		Total Ind of year	Total
2012	3,220.4	2,786.1	376.1	316.8	316.3	0.5	59.3	57.6	 1.7	2,844.3	2,310.9
2013	3,131.6	2,693.2	269.1	217.7	217.0	0.6	51.4	50.8	0.6	2,862.6	2,328.6
2014	3,167.3	2,712.6	257.5	212.7	212.1	0.6	44.8	44.7	0.1	2,909.8	2,376.8
2015	3,233.9	2,764.4	255.5	207.8	207.6	0.2	47.8	47.5	0.2	2,978.3	2,451.4
2016	3,274.3	2,824.2	248.6	205.7	205.4	0.3	42.9	42.8	0.1	3,025.8	2,530.0
2017	3,332.6	2,894.4	241.7	210.9	210.6	0.3	30.7	30.3	0.4	3,090.9	2,640.0
2018	3,394.5	2,990.4	249.5	228.0	227.6	0.4	21.5	21.7	- 0.2	3,145.0	2,732.8
2019	3,521.5	3,119.5	260.4	238.8	238.4	0.4	21.6	18.7	2.9	3,261.1	2,866.9
2020	3,647.0	3,245.3	243.3	221.6	221.2	0.4	21.6	18.0	3.6	3,403.8	3,013.0
2021	3,798.1	3,392.7	249.7	232.2	231.9	0.3	17.5	15.2	2.3	3,548.4	3,174.6
2021 Feb.	3,669.3	3,261.9	249.5	224.2	223.6	0.6	25.3	18.5	6.8	3,419.7	3,031.9
Mar.	3,699.1	3,287.7	261.3	236.6	236.0	0.6	24.7	18.6	6.1	3,437.8	3,048.6
Apr.	3,693.9	3,287.7	248.6	223.5	222.8	0.7	25.1	20.2	4.9	3,445.2	3,061.5
May	3,709.6	3,300.4	248.7	225.4	224.6	0.8	23.3	19.5	3.8	3,460.9	3,075.1
June	3,709.2	3,305.8	250.7	225.8	225.0	0.8	24.9	19.9	5.1	3,458.5	3,082.5
July	3,725.3	3,323.0	248.2	221.0	220.2	0.8	27.2	21.9	5.3	3,477.1	3,102.5
Aug.	3,736.4	3,332.9	245.0	221.1	220.4	0.7	23.9	18.9	4.9	3,491.5	3,116.8
Sep.	3,749.8	3,342.1	247.8	224.5	223.8	0.7	23.4	19.6	3.7	3,501.9	3,123.2
Oct.	3,770.2	3,367.1	256.5	232.5	231.9	0.6	24.0	19.5	4.4	3,513.7	3,142.9
Nov.	3,794.0	3,386.5	255.6	232.9	232.3	0.6	22.7	17.7	5.0	3,538.4	3,164.9
Dec.	3,798.1	3,392.7	249.7	232.2	231.9	0.3	17.5	15.2	2.3	3,548.4	3,174.6
2022 Jan.	3,812.8	3,409.2	262.6	242.3	241.7	0.6	20.3	17.8	2.5	3,550.2	3,180.4
Feb.	3,826.5	3,426.2	267.4	246.9	246.1	0.8	20.5	16.3	4.2	3,559.1	3,195.3
Mar.	3,853.8	3,449.2	273.6	254.8	254.0	0.8	18.9	16.3	2.5	3,580.1	3,209.5
Apr.	3,866.6	3,470.2	277.5	257.9	257.0	0.9	19.6	17.1	2.5	3,589.1	3,226.2
May	3,886.7	3,489.1	280.1	262.5	261.5	1.0	17.6	15.4	2.2	3,606.6	3,242.6
June	3,906.6	3,513.5	290.8	271.4	270.5	0.9	19.5	16.6	2.8	3,615.7	3,255.8
July	3,945.1	3,539.3	291.4	271.8	270.9	0.8	19.6	16.8	2.8	3,653.8	3,293.6
											Changes *
2013	+ 4.4	+ 0.1	- 13.8	- 5.8	- 6.3	+ 0.5	- 8.0	- 7.0	- 1.1	+ 18.2	+ 17.6
2014	+ 36.7	+ 20.5	- 11.6	- 4.5	- 4.5	- 0.0	- 7.1	- 6.5	- 0.6	+ 48.3	+ 52.5
2015	+ 68.9	+ 54.1	+ 1.6	- 1.3	- 0.9	- 0.4	+ 2.9	+ 2.8	+ 0.1	+ 67.2	+ 73.9
2016	+ 43.7	+ 62.7	- 5.2	- 0.3	- 0.4	+ 0.1	- 4.9	- 4.8	- 0.2	+ 48.9	+ 79.8
2017	+ 57.0	+ 70.2	- 6.5	+ 5.6	+ 5.6	+ 0.0	- 12.1	- 12.4	+ 0.3	+ 63.5	+ 103.4
2018	+ 71.5	+ 105.3	+ 6.6	+ 15.8	+ 15.7	+ 0.1	- 9.2	- 8.6	- 0.6	+ 65.0	+ 102.0
2019	+ 126.7	+ 129.1	+ 11.7	+ 11.6	+ 11.6	+ 0.0	+ 0.1	- 3.0	+ 3.1	+ 115.0	+ 132.8
2020	+ 123.2	+ 123.6	- 19.6	- 19.8	- 19.8	- 0.0	+ 0.2	- 0.5	+ 0.7	+ 142.8	+ 145.6
2021	+ 152.2	+ 147.8	+ 8.8	+ 13.8	+ 13.8	- 0.1	- 4.9	- 2.8	- 2.1	+ 143.4	+ 157.9
2021 Feb.	+ 15.3	+ 10.9	+ 1.8	+ 2.3	+ 2.3	+ 0.0	- 0.5	- 1.2	+ 0.7	+ 13.5	+ 13.3
Mar.	+ 29.7	+ 25.6	+ 11.2	+ 12.5	+ 12.5	- 0.0	- 1.3	+ 0.0	- 1.4	+ 18.5	+ 16.3
Apr.	- 5.2	- 0.0	- 12.8	- 13.1	- 13.2	+ 0.1	+ 0.3	+ 1.6	- 1.2	+ 7.5	+ 13.0
May	+ 15.6	+ 12.5	+ 0.1	+ 1.8	+ 1.7	+ 0.1	- 1.8	- 0.6	- 1.2	+ 15.5	+ 13.4
June	- 0.4	+ 5.5	+ 2.0	+ 0.3	+ 0.4	- 0.1	+ 1.7	+ 0.4	+ 1.3	- 2.4	+ 7.3
July	+ 16.1	+ 17.2	- 2.0	- 4.2	- 4.3	+ 0.0	+ 2.3	+ 2.0	+ 0.3	+ 18.1	+ 19.5
Aug.	+ 10.9	+ 9.7	- 3.2	+ 0.1	+ 0.2	- 0.1	- 3.3	- 2.9	- 0.4	+ 14.1	+ 14.2
Sep.	+ 13.5	+ 9.3	+ 3.3	+ 3.7	+ 3.8	- 0.0	- 0.5	+ 0.7	- 1.2	+ 10.2	+ 6.2
Oct.	+ 20.5	+ 25.1	+ 8.7	+ 8.1	+ 8.2	- 0.1	+ 0.5	- 0.2	+ 0.7	+ 11.8	+ 19.8
Nov.	+ 25.5	+ 20.5	+ 1.2	+ 2.4	+ 2.4	+ 0.0	- 1.2	- 1.8	+ 0.6	+ 24.4	+ 19.9
Dec.	+ 4.3	+ 6.3	- 5.8	- 0.6	- 0.3	- 0.3	- 5.2	- 2.5	- 2.7	+ 10.1	+ 9.8
2022 Jan.	+ 14.7	+ 16.5	+ 12.9	+ 10.1	+ 9.8	+ 0.3	+ 2.8	+ 2.6	+ 0.2	+ 1.8	+ 5.8
Feb.	+ 15.1	+ 18.4		+ 6.0	+ 5.8	+ 0.2	+ 0.2	- 1.5	+ 1.7	+ 9.0	+ 14.9
Mar.	+ 27.3	+ 23.0		+ 7.9	+ 7.9	- 0.0	- 1.6	+ 0.1	- 1.7	+ 21.0	+ 14.2
Apr.	+ 13.1	+ 21.4	+ 3.9	+ 3.1	+ 3.0	+ 0.1	+ 0.7	+ 0.7	+ 0.0	+ 9.3	+ 17.0
May	+ 20.1	+ 18.8	+ 2.6	+ 4.6	+ 4.5	+ 0.0	- 2.0	- 1.7	- 0.3	+ 17.5	+ 16.4
June	+ 19.9	+ 24.5	+ 10.8	+ 8.9	+ 9.0	- 0.1	+ 1.9	+ 1.3	+ 0.6	+ 9.1	+ 13.2
July	+ 36.2			1	+ 0.1	1	+ 0.1	+ 0.2	- 0.1	+ 35.9	+ 35.7

^{*} 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.

ending										Ι.														1
	nd hou	seholds								to ge	neral gov													-
oans												Loans												
Гotal		Mediur term	n-	Long	-	Securi	itios	Memo item: Fiduciar loans	у	Total		Total		Mediu term	m-	Long- term		Secur- ities 1		Equal- isation claims 2		Memo item: Fiduciar loans	у	Period
	f yea	ar or r	nont			Securi	illes	104115		Total		Total		term		term		itles i		Claiiiis 2		104115		Period
2,1 2,1	19.5 36.9 72.7		249.7 248.0 251.7		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
2,3 2,3 2,4	32.4 06.5 99.5 99.4 26.4		256.0 264.1 273.5 282.6 301.3		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
	71.8		310.5 314.5		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
	87.7 02.4		309.7 314.5		2,478.1 2,487.9		244.2 246.1		22.8 23.1		387.8 389.3		232.0 230.7		15.4 15.2		216.6 215.5		155.8 158.6		-		1.1 1.1	2021
2,8	13.9 25.1 31.8		313.6 311.7 310.0		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	
2,8	51.4 64.5 70.0		310.7 311.5 310.1		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	
2,9	85.5 06.5 15.7		313.5 315.6 314.5		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	
2,9	20.6 35.4 50.1		312.8 313.8 316.1		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
2,9	66.8 83.1 98.2		317.3 319.7 322.2		2,649.5 2,663.4 2,675.9		259.4 259.5 257.6		24.9 25.1 25.0		362.9 364.0 360.0		229.5 229.1 228.2		13.7 13.7 13.6		215.8 215.4 214.6		133.5 134.9 131.7		-		1.0 1.0 1.0	
	22.5		327.7		2,694.9		271.0		24.9		360.2		229.0		13.5		215.5		131.2	l	-		1.0	
Chang +	ges * 17.7	l –	0.1	+	17.8	۱ -	0.1	l -	2.5	+	0.6	l –	4.3	-	0.7	l –	3.6	+	4.9	1	- 1	l –	0.8	2013
+	39.9 59.0	+	5.6	+	34.3 54.6	+	12.5	_ _	1.8	<u>-</u>	4.1	-	8.5 6.9	-	5.1	-	3.4	+	4.3		-	-+	0.2	2014
+ + + 1	75.1 87.6 08.7 26.0	+ + + +	9.7 9.4 19.3 18.9	+ + + +	65.4 78.2 89.4 107.2	+ + - +	4.7 15.8 6.7 6.8	- + -	0.9 0.1 0.9 0.8	- - -	30.9 39.9 37.1 17.8	- - -	7.3 10.6 10.5 5.5	- - -	4.0 1.3 2.7 2.6	- - -	3.3 9.3 7.8 2.9	- - -	23.6 29.4 26.6 12.3			- - - +	0.4 0.1 0.0 0.1	2016 2017 2018 2019
+ 1	45.0 40.1	++	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	-	1.7 11.3		_	_ _	0.4	2020 2021
	11.1 14.4	++	1.8 4.7	++	9.3 9.7	+ +	2.1 1.9	+	0.3 0.3	+ +	0.2 2.1	-	1.3 1.4	+	0.1 0.2	 -	1.4 1.2	+ +	1.5 3.5		-	_ _	0.0	2021
	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	
	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	
	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	
++	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
++	17.0 16.4 15.1	+ + +	1.5 2.5 2.5	+ + + +	15.6 13.9 12.6	- + -	0.0 0.1 1.9	+ + -	0.2 0.3 0.1	- + -	7.7 1.1 4.1	+ -	0.6 0.4 0.9	+ - -	0.0 0.0 0.0	+ -	0.6 0.3 0.8	- + -	8.4 1.4 3.2		-	- - -	0.0 0.0 0.0	
	22.5	+	4.4		18.1	+	13.2	_	0.1	- +	0.2	+	0.9	_	0.0	+	0.8		0.5		_	_	0.0	

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

	€ billion														
	Lending to	domestic ent	erprises and	households (excluding ho	ldings of neg	otiable mon	ey market pa	per and excl	uding securit	ies portfolios) 1			
		of which:													
			Housing loa	ins		Lending to	enterprises a	nd self-emplo	oyed persons				1		_
Period	Total	Mortgage loans, total	Total	Mortgage loans secured by residen- tial real estate	Other housing loans	Total	of which: Housing loans	Manufac- turing	Electricity, gas and water supply; refuse disposal, mining and quarrying	Construc-	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	Financia interme ation (exclud MFIs) a insuran com- panies	edi- ling and
	Lending	, total										End of	year or	quarte	er *
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	17	76.0
2021 June Sep.	3,056.8 3,093.7	1,634.6 1,653.1	1,619.5 1,648.9	1,316.7 1,337.4	302.8 311.4	1,654.3 1,666.9	461.4 467.9	142.5 143.9	122.1 122.2	85.7 87.7	135.5 136.7	56.0 56.2	57.9 56.3		82.6 82.6
Dec.	3,147.5	1,591.4	1,678.2 1,701.0	1,373.0 1,391.9	305.2 309.0	1,701.5	477.2 485.1	146.1	128.3	98.0		55.9	55.6		86.3 93.2
2022 Mar. June	3,204.0 3,268.7	1,613.7 1,636.4				1,742.4 1,784.8		150.9 160.2	134.3 132.6	101.3 104.4		56.3 57.0	54.9 56.4		00.2
	Short-term	lending -													
2020	221.2	-	8.0	1	8.0	192.1	1	29.0		16.0			•		31.6
2021 June Sep.	225.0 223.8	_	7.8 7.8	-	7.8 7.8	195.9 193.7	4.5 4.4	28.8 30.4	5.5 5.1	16.7 17.1	35.6	4.2 4.0	4.1	3	34.4 34.1
Dec. 2022 Mar.	231.8 254.0	_	6.9 7.0	_	6.9 7.0	202.7 224.1	4.4	31.6 36.5	9.1 14.0	18.0 19.5	l .	3.3 3.6	3.9 4.1		35.0 38.0
June	270.5	_	7.0		7.0	239.5	4.6			20.1		3.9			42.2
2020	Medium-te	rm lending					105						150		_
2020 2021 June	310.5 310.0	_	38.5 39.7	_	38.5 39.7	230.4 232.8	18.5 19.8	30.2 27.7	5.4 5.0	14.8 15.3	l .	4.8	15.0 14.1		51.4 51.2
Sep.	310.1	-	40.2	-	40.2	233.3	20.2	27.8	5.2	15.8	19.3	4.5	12.3	5	51.7
Dec. 2022 Mar.	314.5 316.1	- -	40.5 40.8	_	40.5 40.8	239.5 242.2	20.6 21.0	28.3 28.9	5.4 5.6	19.3 20.0	l .	4.3	12.3 11.7		52.0 53.1
June	322.2	-	42.0		42.0	249.2									53.7
2020	Long-term		1 510 1	1 205 1	1 2240	1 201 0	1 420.2		1112	I 510	. 70.4	17.0			
2020 2021 June	2,461.4 2,521.8	1,601.8 1,634.6	1,519.1 1,572.0	1,285.1 1,316.7	234.0 255.3	1,201.0 1,225.5	1	87.5 86.0	111.2 111.6	51.8 53.7	79.4 81.3	47.0 47.3	-		93.0 97.0
Sep. Dec.	2,559.9 2,601.2	1,653.1 1,591.4	1,600.9 1,630.9	1,337.4 1,373.0	263.5 257.8	1,240.0 1,259.3	443.4 452.2	85.6 86.2	111.9 113.8	54.9 60.8	81.8	47.7 48.3	39.9 39.4	9	96.8 99.3
2022 Mar.	2,633.9	1,613.7	1,653.1	1,391.9	261.2	1,276.0		85.5	114.8	61.8	84.0	48.4	39.2	10	02.1
June	2,675.9		1,682.3	1,412.8	269.5	1,296.0	467.7	86.5	115.2	63.4	88.9				04.4
	Lending,	_						_					e during		
2021 Q2 Q3	+ 17.9 + 37.1	+ 20.9 + 18.5	+ 30.7 + 29.1	+ 21.0 + 19.7	+ 9.7 + 9.4	- 3.2 + 12.7	+ 6.3	- 6.7 + 1.4		+ 1.1 + 2.0	+ 0.5	+ 0.6 + 0.1	- 2.2 - 1.7	+	0.0 1.0
Q4 2022 Q1	+ 54.1 + 57.9	+ 18.0 + 17.9	+ 28.6 + 22.0	1	+ 9.7 + 5.3	+ 34.9 + 42.0		l	+ 5.9 + 6.3	+ 1.5 + 3.2		- 0.2 + 0.4	l		3.7 8.9
Q2		+ 17.9 + 22.2		+ 16.6 + 20.5		+ 42.0 + 42.7		+ 4.8				+ 0.4 + 0.7		+ +	7.1
2024 02	Short-term					11.6		1 46				. 04			
2021 Q2 Q3	- 11.1 - 0.3	-	- 0.1	-	- 0.2 - 0.1	- 11.6 - 1.3	- 0.1	+ 1.7	- 0.4	- 0.1 + 0.4	+ 0.6	- 0.2	- 0.3	-	0.2
Q4 2022 Q1	+ 10.3 + 23.5	_	- 0.2 + 0.1	1	- 0.2 + 0.1	+ 10.5 + 22.7	+ 0.0 + 0.1	l	l	+ 1.0 + 1.6		- 0.6 + 0.3	- 0.2 + 0.2		1.0
Q2	+ 16.6		+ 0.0	_	+ 0.0							+ 0.3			4.2
2024 02	Medium-te	rm lending					1 . 07	1 15							
2021 Q2 Q3	- 4.5 - 0.4	_	+ 0.8 + 0.6	-	+ 0.8 + 0.6	- 0.1	+ 0.4		+ 0.2	+ 0.5	- 0.6	+ 0.0	- 1.8	+	0.7
Q4 2022 Q1	+ 6.8 + 1.7	_	+ 0.4 + 0.3	1	+ 0.4 + 0.3	+ 8.0 + 2.7		l	l	+ 3.5 + 0.7	l .		l		0.5
Q2	+ 6.4				+ 1.2										0.9
2021 02	Long-term		l , 20.2	I . 310	I . 041	l , 13.0	I . 01	I 0.7	I . 01	I , 11	I . 07	I . 03	I . 03	1 .	, [
2021 Q2 Q3	+ 33.6 + 37.8	+ 18.5	+ 28.6	+ 19.7	+ 8.9	+ 14.1	+ 6.0	- 0.4		+ 1.1	+ 0.5			+	0.6
Q4 2022 Q1	+ 37.0 + 32.7	+ 18.0 + 17.9	+ 28.4 + 21.5	+ 18.9 + 16.6	+ 9.5 + 4.9	+ 16.4 + 16.5		+ 0.6	l	l	l .	+ 0.6 + 0.1	- 0.5 - 0.6		3.4
Q2	+ 42.0														2.1

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

										Lendina to	emr	ployees and	other	individa	ıals				Lending		stitutio	ns	
Services s	ector (inclu	ıdina tl	he professi	ions))	Mem	o items:	:	\neg	zenanig to	T	proyects and		lending				†	.о р	5116 111		5	
50,110055	of whi		ne protess	.01157	<u> </u>	I I	io iterno		\neg				O LITE	ic.i.d.i.i.g	of which	n:		┪					
Total	Housir enterp	ng	Holding companie	ļ	Other real estate activities	Lend to se empl perso	lf- oyed	Lendin to craf enterp	ť	Total		lousing pans	Total		Instalme loans 3	ent	Debit balances on wage, salary and pension accounts		Total		of wh Housii Ioans		Period
End of	year or	r qua	rter *																L	.end	ing,	total	
843	3.7	286.6	53	3.8	204.1	ı	464.0	I	47.9	1,353	.4	1,118.3		235.2	1.	77.4	6.	7		16.2	l	4.0	2020
872		296.9		3.2	208.6		473.6		48.7	1,386		1,154.0		232.4		74.8	6.			16.2		4.1	2021 Jur
881 890		304.0 308.6		7.5 3.8	210.5 207.9		478.3 483.8		48.9 48.3	1,410 1,429		1,176.6 1,196.6		233.9 232.7		76.4 34.1	7. 6.			16.3 16.7		4.3 4.4	Sep Dec
906		315.6	66	5.2	209.8		489.1		49.1	1,444		1,211.4		233.5		34.4	7.	1		16.8		4.4	2022 Ma
920).4	322.8	68	3.0	211.5	1	494.9	1	49.4	1,467	.0 [1,232.4		234.6	18	34.6	7.	3		16.9 -Short	l term le	4.5	Jun
61	1.9	15.7	9	9.6	10.5	1	20.9	I	3.7	28.	.6	3.4		25.2		1.3	6.	7		0.6		0.0	2020
	7.1	16.0		1.5	10.4		21.0		4.1	28		3.4		25.2		1.4	6.			0.5		0.0	2021 Jun
	3.3 5.5	16.9 14.5		3.0	9.8 10.0		20.5 19.7		4.3 3.8	29 28		3.4 2.5		26.2 26.1		1.5 1.4	7. 6.			0.5 0.5		0.0	Sep Dec
69	9.2 0.5	15.3 15.9	14	1.0 3.7	10.5		20.3 20.8		4.4 4.5	29. 30.	.2	2.5 2.5		26.7 27.9		1.6 1.7	7.	1 3		0.7 0.7		0.0	2022 Ma
/(J.5	15.91	13	0.7	11.1	'	20.6	'	4.5	30.	.5	2.5		27.9		1.7	, ,	2	Me		ı term le		Jun
89	9.6	20.4	11	1.8	24.5	1	32.0	I	3.5	79.	.6	20.0		59.6		56.1		-		0.5		0.0	2020
	5.7	22.2		1.4	26.4		31.3		3.4	76.		19.8		56.9		53.1		-		0.5		0.0	2021 Jun
	5.7 7.0	23.2 23.1		5.2	27.4 27.1		31.1 30.0		3.4 3.3	76. 74.		20.0 19.8		56.3 54.6		52.4 50.6		-		0.6 0.6		0.1 0.1	Sep Dec
	5.8 9.8	22.8 24.1	15	7.1	27.2 26.6		30.0 29.9		3.2 3.2	73. 72.		19.7 19.8		53.7 52.7		49.6 48.6		-		0.5 0.5		0.1 0.1	2022 Mai Jun
33	7.0	24.11	17	. 1	20.0		25.5	'	3.2	72.	.5	15.01		32.7		+O.0 [-'			term le		3011
692	2.3	250.5	32	2.4	169.1		411.1	l	40.7	1,245	.3	1,094.9		150.4	12	20.0		-		15.1		4.0	2020
709 721		258.7 263.9		2.3	171.8 173.3		421.3 426.7		41.1 41.2	1,281 1,304		1,130.8 1,153.3		150.3 151.4		20.3		-		15.2 15.3		4.1 4.2	2021 Jun Sep
728		271.1		5.6	170.8		434.1		41.3	1,326		1,174.3		152.0		32.1		-		15.6		4.3	Dec
740 750		277.5 282.8		7.3	172.1 173.8		438.8 444.2		41.4 41.7	1,342 1,364		1,189.2 1,210.1		153.1 154.1		33.2 34.4		-		15.6 15.7		4.4 4.4	2022 Mai Jun
	e durino									,		,							L		ing,		
•	3.7 +	3.2).9	+ 4.3	+	5.8	+	0.4	+ 21.	3	+ 21.1	+	0.2	_	0.4	- 0.	1 I	_	0.2	,ر + ا	0.0	2021 Q2
+ 9	9.4 +	6.5 7.3	- ().8 1.2	+ 1.7	+	4.2 5.2	+	0.2	+ 24	.3	+ 22.7 + 19.6	+	1.6 0.7	+	1.1	+ 0.	5	+	0.1	+ +	0.1	Q3 Q4
	1.9 +	6.7		2.4	+ 1.7		5.0		0.7	+ 15.	- 1	+ 14.9	+	0.7	+	0.5	+ 0.	- 1	+	0.4	+	0.0	
	1.4 +	7.4	+ 1	1.6			5.8		0.4		.2		+	1.4	+	0.4			+	0.1	+ .	0.0	Q2
(0.8 -	0.5	l (0.8	+ 0.2	+	0.5	+	0.2	+ 0.	.6	+ 0.0	+	0.6	+	0.1	- 0.	1	_	Short- 0.1	term le +	ending 0.0	2021 Q2
- 2	2.7 +	0.9	- 1	1.2	- 0.6	-	0.5	+	0.2	+ 1.	.0	+ 0.0	+	1.0	+	0.1	+ 0.	5	-	0.0	+	0.0	Q3
	3.4 – 3.6 +	1.1 0.8		2.5	+ 0.5	1	0.6 0.6		0.5		.3 .6	- 0.2 + 0.0	+	0.1 0.6	+	0.0	- 0. + 0.	2	+	0.1	+ +	0.0	Q4 2022 Q1
	1.4 +	0.6		0.3	+ 0.6		0.4		0.1		1	- 0.1		1.2		0.1		3	+	0.0		0.0	Q2
																			Me		term le		
+ ().8 +).8 +	0.3	- (0.0	+ 1.2	-	0.2	-	0.2	- 0.	.9	+ 0.1 + 0.2	_ _ _	1.0 0.6	_	0.7		-	+	0.1	++	0.0	2021 Q2 Q3
	1.7 +	1.3		1.4	- 0.4	1	0.4	-	0.1		- 1	- 0.1		1.1	-	1.3		-	+	0.0	+	0.0	Q4
	0.3 - 3.0 +	0.3 1.3).2 .6	+ 0.1 - 0.6		0.1 0.1	_	0.1 0.0		.0 .9	- 0.1 + 0.1	_	0.9 1.0	_	0.9 1.1		-	+	0.1 0.0	_	0.0	2022 Q1 Q2
											_			_							term le	,	
	3.8 + 1.3 +	3.4 4.7		0.1	+ 2.9 + 1.3	+	5.5 4.9	+ +	0.3	+ 21 + 23		+ 21.0 + 22.5	+	0.6 1.2	++	0.6 1.7		-	+	0.0 0.1	+ +	0.0 0.1	2021 Q2 Q3
	3.6 +	7.2		0.4	+ 2.7	+	6.2	+	0.1	+ 20	.4	+ 19.9	+	0.5	+	1.2		-	+	0.3	+	0.1	Q4
	1.5 +).0 +	6.3 5.5		0.3	+ 1.1 + 1.8		4.5 5.4		0.1	+ 16. + 22.		+ 15.0 + 20.8	+	1.2 1.3	+	1.3		-	+	0.0	++	0.0	2022 Q1 Q2

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 *

bil	

			Time deposit	5 1,2						Memo item:		
				for up	for more than	for up	for more		Bank		Subordinated liabilities (excluding negotiable	Liabilities
Period	Deposits, total	Sight deposits	Total	including 1 year	Total	including 2 years	than 2 years	Savings deposits 3	savings bonds 4	Fiduciary loans	debt securities)	arising from repos
	Domestic	non-bank	s, total								End of year	r or month *
2019	3,661.0	2,236.3	816.2	1	613.5	52.7	560.8	575.2	33.2	32.5	14.7	0.2
2020 2021 2021 Aug.	3,885.2 3,976.3 3,971.0	2,513.0 2,654.6 2,656.0	783.3 736.0 727.8	188.9 161.0 151.2	594.4 574.9 576.7	47.9 49.7 48.1	546.5 525.2 528.5	560.6 561.2 561.5	28.3 24.5 25.6	34.4 34.2 34.3	14.4 17.1 14.3	0.1 1.3 1.5
Sep.	3,960.3	2,647.9	726.1	152.7	573.5	47.8	525.7	560.7	25.5	34.1	14.4	1.6
Oct. Nov.	3,989.1 4,002.4	2,664.3 2,685.9	739.3 731.8	163.6 157.1	575.7 574.7	49.1 49.9	526.6 524.8	560.1 559.9	25.3 24.8	33.9 33.6	15.3 15.3	1.4 0.9
Dec. 2022 Jan.	3,976.3 4,025.9	2,654.6 2,690.9	736.0 750.0	161.0 175.9	574.9 574.1	49.7 49.5	525.2 524.6	561.2 560.8	24.5 24.2	34.2 33.9	17.1 17.1	1.3
Feb. Mar.	4,037.8 4,033.7	2,704.5 2,695.6	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. May	4,046.7 4,056.8	2,705.6 2,724.3	759.4 752.1	189.8 183.3	569.6 568.7	50.1 51.2	519.5 517.5	557.9 556.6	23.8 23.8	33.8 33.6	17.3 17.1	1.1 0.8
June	4,051.8	2,714.4	758.8	194.7	564.1	49.0	515.1	554.8	23.8	33.4	17.2	0.7
July	4,086.4	2,729.0	780.4	213.7	566.7	50.9	515.8	553.0	24.1	33.0	17.3	Changes *
2020	+ 221.6	+ 273.7	- 32.7	- 15.0 - 27.3	- 17.7 - 18.9	- 4.8	- 12.9 - 20.5	- 14.5	- 4.9 - 3.5	+ 1.9	- 0.3	- 0.1
2021 2021 Aug. Sep.	+ 95.3 + 6.4 - 6.7	+ 144.3 + 10.0 - 5.4	- 46.2 - 2.9 - 0.3	- 27.3 - 4.2 + 2.1	- 18.9 + 1.3 - 2.4	+ 1.5 + 0.4 - 0.6	- 20.5 + 0.9 - 1.8	+ 0.7 - 0.5 - 0.8	- 3.5 - 0.2 - 0.2	- 0.2 - 0.2 - 0.2	+ 2.7 - + 0.1	+ 1.2 - 0.0 + 0.2
Oct.	+ 28.8	+ 16.4	+ 13.2	+ 11.0	+ 2.2	+ 1.3	+ 0.9	- 0.6	- 0.2	- 0.2	+ 1.0	- 0.2
Nov. Dec.	+ 13.3 - 25.9	+ 21.5 - 31.2	- 7.6 + 4.1	- 6.4 + 3.9	- 1.2 + 0.2	+ 0.8 - 0.2	- 2.0 + 0.4	- 0.2 + 1.4	- 0.3 - 0.2	- 0.3 + 0.6	+ 0.0 + 1.8	- 0.6 + 0.4
2022 Jan. Feb.	+ 49.6 + 11.9	+ 36.3 + 13.6	+ 14.1 - 1.6	+ 15.0 - 0.4	- 0.9 - 1.2	- 0.2 - 0.8	- 0.7 - 0.3	- 0.4 + 0.1	- 0.4 - 0.2	- 0.3 - 0.2	- 0.0 + 0.1	- 0.2 + 0.2
Mar. Apr.	- 4.1 + 13.0	- 9.0 + 9.5	+ 6.6 + 4.2	+ 7.9 + 6.4	- 1.3 - 2.2	+ 0.5 + 0.8	- 1.8 - 3.0	- 1.8 - 0.6	+ 0.0	+ 0.0	+ 0.0 + 0.1	+ 0.3 - 0.5
May June	+ 10.1 - 5.0	+ 18.8 - 9.9	- 7.3 + 6.7	- 6.5 + 11.3	- 0.9 - 4.6	+ 1.1 - 2.2	- 2.0 - 2.5	- 1.3 - 1.8	+ 0.0	- 0.2 - 0.1	- 0.1 + 0.1	- 0.3 - 0.2 - 0.1
July	+ 33.9	+ 14.7	+ 20.7	+ 18.5	+ 2.2	+ 1.6	+ 0.6	- 1.8	+ 0.3	- 0.5	+ 0.1	+ 0.5
	Domestic	governme	ent								End of year	r or month *
2019 2020	237.1 229.5	74.7 80.1	154.9 143.0	76.0 59.6	78.9 83.5	26.1	52.8 62.6	3.4	4.1	24.7 25.4	2.2	0.2
2020 2021 2021 Aug.	229.5 210.1 207.9	80.1 82.4 84.1	121.9 117.9	42.0 38.8	79.9 79.0	20.9 23.8 21.2	56.1 57.9	2.7 2.5 2.6	3.7 3.3 3.4	25.4 25.8 25.3	2.1 2.0 2.0	1.0
Sep.	210.8	84.8	120.1	42.2	78.0	20.8	57.2	2.5	3.4	25.2	2.0	-
Oct. Nov.	213.9 213.7	85.2 86.1	122.9 121.8	43.5 41.4	79.5 80.4	22.2 23.5	57.3 56.9	2.5 2.5	3.3 3.3	25.2 25.1	2.0 2.0	-
Dec. 2022 Jan.	210.1 233.5	82.4 88.5	121.9 139.2	42.0 59.2	79.9 80.0	23.8 24.0	56.1 56.0	2.5 2.5	3.3 3.3	25.8 25.5	2.0 2.0	1.0
Feb. Mar.	237.9 241.0	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. May	243.7 255.6	86.2 91.4	151.8 158.4	70.8 76.1	80.9 82.2	25.0 25.9	55.9 56.3	2.4 2.4	3.4 3.4	25.6 25.6	2.0 2.0	-
June July	254.9 258.3	84.8 78.0	164.2 174.5	84.6 93.0	79.7 81.6	23.3 24.6	56.3 57.0	2.4 2.4	3.5 3.4	25.4 25.4		-
July	236.3	76.0	174.5	95.0	81.0	24.0	37.0	2.4	3.4	25.4	1.9	Changes *
2020	- 6.9 - 17.9	+ 5.7 + 3.4	- 11.6 - 20.8	- 16.5 - 17.7	+ 4.8 - 3.0	- 5.3 + 2.9	+ 10.1 - 6.0	- 0.6 - 0.2	- 0.4 - 0.4	+ 0.7 + 0.4	- 0.1 - 0.0	- 0.2
2021 2021 Aug. Sep.	- 17.9 - 3.9 + 4.3	+ 3.4 - 2.5 + 1.8	- 20.8 - 1.4 + 2.6	- 17.7 - 2.8 + 3.2	- 3.0 + 1.4 - 0.7	+ 2.9 + 0.5 - 0.4	+ 0.8 - 0.3	+ 0.0 - 0.1	- 0.4 - 0.0 - 0.0	+ 0.4 + 0.0 - 0.1	- 0.0 - 0.0 - 0.0	+ 1.0
Oct.	+ 3.1	+ 0.4	+ 2.9	+ 1.3	+ 1.6	+ 1.4	+ 0.2	- 0.0	- 0.0	+ 0.0	- 0.0	-
Nov. Dec.	- 0.1 - 3.6	+ 0.9 - 3.7	- 1.0 + 0.0	- 2.1 + 0.6	+ 1.1 - 0.6	+ 1.3 + 0.3	- 0.3 - 0.8	- 0.0 + 0.0	+ 0.0 - 0.0	- 0.1 + 0.7	+ 0.0 + 0.0	+ 1.0
2022 Jan. Feb.	+ 23.4 + 4.3	+ 6.1 + 2.9	+ 17.4 + 1.4	+ 17.3 + 1.7	+ 0.1 - 0.3	+ 0.2 - 0.2	- 0.1 - 0.1	- 0.0 - 0.0	- 0.0	- 0.3 + 0.0	- 0.0 + 0.0	- 1.0 -
Mar. Apr.	+ 3.2 + 2.7	- 6.2 + 1.0	+ 9.4 + 1.7	+ 8.7 + 1.1	+ 0.7 + 0.6	+ 0.6 + 0.6	+ 0.1	- 0.0 - 0.0	+ 0.1 + 0.0	- 0.0 + 0.1	- 0.0 + 0.0	
May June	+ 11.5 - 0.7	+ 5.2 - 6.6	+ 6.2 + 5.9	+ 5.2 + 8.5	+ 1.0 - 2.6	+ 0.9 - 2.6	+ 0.1 - 0.0	- 0.0 - 0.0	+ 0.1 + 0.0	- 0.0 - 0.2	- 0.0 - 0.0	-
July	+ 3.5		+ 10.3							- 0.0		-

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

¹ Including subordinated liabilities and liabilities arising from registered debt securities.
2 Including deposits under savings and loan contracts (see Table IV.12). 3 Excluding deposits under savings and loan contracts (see also footnote 2).

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

	llior

	CBIIION		Time deposits	; 1,2						Memo item:		
					for more tha	n 1 year 2		1			Subordinated	
				for up		for up]			liabilities (excluding	
Period	Deposits, total	Sight deposits	Total	to and including 1 year	Total	to and including 2 years	for more than 2 years	Savings deposits 3	Bank savings bonds 4	Fiduciary loans	negotiable debt securities)	Liabilities arising from repos
	Domestic	enterprise	s and hou	seholds							End of year	or month *
2019	3,423.9	2,161.6	661.4	126.7	534.7	26.6	508.0	571.8	29.1	7.8	12.6	0.0
2020 2021 2021 Aug. Sep.	3,655.7 3,766.2 3,763.1 3,749.4	2,432.9 2,572.2 2,571.9 2,563.1	640.3 614.1 610.0 606.0	129.3 119.0 112.3 110.5	511.0 495.0 497.6 495.5	27.0 25.9 27.0 27.0	483.9 469.2 470.7 468.5	557.9 558.7 559.0 558.2	24.6 21.2 22.3 22.1	9.0 8.4 9.1 8.9	12.3 15.1 12.3 12.4	0.1 0.3 1.5 1.6
Oct. Nov. Dec.	3,775.1 3,788.6 3,766.2	2,579.2 2,599.8 2,572.2	616.4 610.0 614.1	120.2 115.7 119.0	496.2 494.3 495.0	27.0 26.3 25.9	469.3 467.9 469.2	557.6 557.4 558.7	22.0 21.4 21.2	8.7 8.5 8.4	13.4 13.3 15.1	1.4 0.9 0.3
2022 Jan. Feb. Mar.	3,792.4 3,799.9 3,792.7	2,602.4 2,613.1 2,610.4	610.8 607.8 605.1	116.6 114.5 113.7	494.1 493.3 491.4	25.5 24.9 24.8	468.6 468.3 466.6	558.3 558.4 556.6	20.8 20.6 20.5	8.4 8.2 8.2	15.0 15.1 15.2	1.1 1.2 1.6
Apr. May June	3,802.9 3,801.2 3,796.9	2,619.4 2,632.9 2,629.7	607.6 593.7 594.5	119.0 107.2 110.1	488.6 486.5 484.4	25.1 25.3 25.6	463.6 461.2 458.8	555.5 554.2 552.4	20.4 20.4 20.3	8.2 8.0 8.0	15.2 15.1 15.2	1.1 0.8 0.7
July	3,828.1	2,650.9	605.9	120.7	485.2	26.3	458.9	550.6	20.7	7.6	15.4	Changes *
2020	+ 228.5	+ 268.0	- 21.1 - 25.5	+ 1.5	- 22.6 - 15.9	+ 0.5	- 23.0	- 13.9	- 4.6	+ 1.2	- 0.2	+ 0.1
2021 2021 Aug. Sep.	+ 113.2 + 10.3 - 11.0	+ 140.9 + 12.4 - 7.2	- 1.5 - 2.9	- 9.6 - 1.5 - 1.1	- 0.0 - 1.7	- 1.4 - 0.1 - 0.2	- 14.5 + 0.1 - 1.5	+ 0.9 - 0.5 - 0.8	- 3.1 - 0.2 - 0.1	- 0.6 - 0.2 - 0.2	+ 2.8 + 0.0 + 0.1	+ 0.2 - 0.0 + 0.2
Oct. Nov.	+ 25.7 + 13.5	+ 16.0 + 20.6 - 27.5	+ 10.3 - 6.6	+ 9.7 - 4.3	+ 0.7	- 0.0 - 0.6 - 0.5	+ 0.7	- 0.6 - 0.2	- 0.2 - 0.3 - 0.2	- 0.2 - 0.2 - 0.1	+ 1.0	- 0.2 - 0.6 - 0.6
Dec. 2022 Jan.	- 22.3 + 26.2	+ 30.2	+ 4.1	+ 3.3 - 2.3	+ 0.8 - 1.0	- 0.4	+ 1.2 - 0.6	+ 1.3 - 0.4	- 0.4	+ 0.0	+ 1.8 - 0.0	+ 0.8
Feb. Mar.	+ 7.5 - 7.4	+ 10.7 - 2.7	- 3.0 - 2.8	- 2.1 - 0.8	- 0.9 - 2.0	- 0.6 - 0.1	- 0.3 - 1.9	+ 0.1 - 1.8	- 0.2 - 0.1	- 0.2 + 0.0	+ 0.0 + 0.0	+ 0.2 + 0.3
Apr. May June	+ 10.3 - 1.4 - 4.2	+ 8.5 + 13.5 - 3.2	+ 2.5 - 13.6 + 0.8	+ 5.3 - 11.7 + 2.9	- 2.8 - 1.9 - 2.1	+ 0.2 + 0.2 + 0.4	- 3.0 - 2.1 - 2.4	- 0.6 - 1.3 - 1.8	- 0.1 - 0.0 - 0.0	- 0.1 - 0.2 + 0.0	+ 0.1 - 0.1 + 0.1	- 0.5 - 0.2 - 0.1
July	+ 30.4	+ 21.5	+ 10.4	+ 10.1	+ 0.3	+ 0.4	- 0.1	- 1.8	+ 0.4	- 0.5	+ 0.2	+ 0.5
	of which:	Domestic	enterprise	es							End of year	or month *
2019 2020	1,031.5 1,116.1	614.4 719.1	399.7 381.7	81.1 89.2	318.6 292.5	15.5 15.0	303.1 277.5	6.7 5.8	10.7 9.4	2.4	10.1 9.7	0.0
2020 2021 2021 Aug.	1,116.1 1,142.7 1,148.4	765.1 775.4	364.3 358.9	87.4 79.9	276.9 279.0	15.8 15.3	261.1 263.7	5.3 5.7	8.0 8.5	2.3 2.3 2.3	12.2 9.5	0.1 0.3 1.5
Sep.	1,141.4	772.1 779.7	355.1 366.3	78.1 88.4	277.0 277.9	15.5 15.6	261.5 262.3	5.7 5.7	8.5 8.4	2.3 2.3	9.6	1.6
Oct. Nov. Dec.	1,160.1 1,166.2 1,142.7	791.7 791.7 765.1	361.1 364.3	84.3 87.4	276.7 276.9	15.5 15.8	261.3 261.1	5.7 5.5 5.3	8.0 8.0	2.3 2.3 2.3	10.6 10.5 12.2	1.4 0.9 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. Mar.	1,165.1 1,171.9	793.2 802.1	359.0 356.9	83.4 82.7	275.6 274.2	15.4 15.5	260.2 258.7	5.2 5.2	7.8 7.8	2.2 2.3	12.2 12.3	1.2 1.6
Apr. May	1,165.3 1,165.6	792.4 806.0	360.0 346.7	88.0 76.4	272.0 270.4	16.0 16.3	256.1 254.1	5.2 5.1	7.7 7.7	2.3 2.3	12.4 12.3	1.1 0.8
June July	1,158.9 1,168.8	798.2 797.0	347.9 358.8	78.6 88.5	269.3 270.3	16.9 17.5	252.3 252.8	5.1 5.1	7.7 7.9	2.3 1.9	12.4 12.5	0.7
,		•	•		•	•	•	•	•	•	•	Changes *
2020 2021	+ 81.0 + 28.5	+ 101.2 + 47.1	- 18.0 - 16.8	+ 7.0 - 1.2	- 25.0 - 15.7	- 0.4 + 0.5	- 24.6 - 16.2	- 0.8 - 0.5	- 1.3 - 1.3	- 0.0 + 0.0	- 0.5 + 2.6	+ 0.1 + 0.2
2021 Aug. Sep.	+ 14.6 - 5.4	+ 15.4 - 2.5	- 0.8 - 2.9	- 0.8 - 1.1	+ 0.0 - 1.8	- 0.1 - 0.1	+ 0.1 - 1.6	- 0.0 + 0.0	- 0.1 - 0.0	+ 0.0 + 0.0	- 0.0 + 0.0	- 0.0 + 0.2
Oct. Nov.	+ 18.7 + 6.1	+ 7.7 + 11.9	+ 11.1 - 5.4	+ 10.2 - 3.9	+ 0.8 - 1.5	+ 0.1	+ 0.7 - 1.4	- 0.1	- 0.0 - 0.2	- 0.0 + 0.0	+ 1.0 - 0.0	- 0.2 - 0.6
Dec.	- 23.4	- 26.5	+ 3.3	+ 3.1	+ 0.2	+ 0.3	- 0.1	- 0.2	- 0.0	+ 0.0	+ 1.8	- 0.6
2022 Jan. Feb. Mar.	+ 27.8 - 5.3 + 6.6	+ 30.8 - 2.6 + 8.8	- 2.6 - 2.7 - 2.2	- 2.1 - 1.9 - 0.7	- 0.5 - 0.7 - 1.5	+ 0.1 - 0.5 + 0.0	- 0.7 - 0.3 - 1.6	- 0.2 + 0.0 + 0.0	- 0.2 - 0.0 + 0.0	+ 0.0 - 0.1 + 0.0	- 0.1 + 0.0 + 0.0	+ 0.8 + 0.2 + 0.3
Apr.	- 6.6	- 9.6	+ 3.2	+ 5.4	- 2.2	+ 0.4	- 2.6	- 0.0	- 0.1	+ 0.0	+ 0.1	- 0.5
May June	- 0.5 - 6.7	+ 12.6 - 7.8	- 13.0 + 1.2	- 11.7 + 2.2	- 1.4 - 1.1	+ 0.3 + 0.6	- 1.7 - 1.7	- 0.0 - 0.0	+ 0.0 - 0.0	- 0.0 + 0.1	- 0.1 + 0.1	- 0.2 - 0.1
July	+ 9.2	- 0.9	+ 10.0	+ 9.3	+ 0.7	+ 0.4	+ 0.3	+ 0.0	+ 0.2	- 0.4	+ 0.2	+ 0.5

 $^{{\}bf 4} \ {\bf Including} \ {\bf liabilities} \ {\bf arising} \ {\bf from} \ {\bf non-negotiable} \ {\bf bearer} \ {\bf debt} \ {\bf securities}.$

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

	€ 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 persons	Employees	Other individuals	Domestic non-profit institu- tions	Total	Total	Self- employed persons	Employees	Other individuals
										End	d of year o	r month *
2019	2,392.4	1,547.2	1,507.9	266.3	1,081.6	160.1	39.3	261.7	248.3	20.8	190.2	37.3
2020 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
2022 Feb. Mar.	2,634.8 2,620.8	1,819.9 1,808.3	1,774.2 1,761.9	310.4 303.6	1,299.6 1,296.3	164.3 162.0	45.7 46.4	248.8 248.3	236.9 236.3	18.4 18.6	183.4 182.9	35.1 34.9
Apr. May June	2,637.6 2,635.6 2,638.0	1,827.0 1,827.0 1,831.5	1,780.5 1,780.3 1,784.9	309.6 311.6 308.1	1,308.1 1,308.0 1,316.2	162.8 160.8 160.7	46.4 46.7 46.6	247.6 247.0 246.6	235.9 235.0 234.4	18.6 18.6 19.0	182.5 181.8 181.0	34.9 34.6 34.4
July	2,659.3	1,853.9	1,807.6	317.0	1,328.2	162.4	46.3	247.1	234.8	19.3	181.0	34.4
											(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
2022 Feb. Mar.	+ 12.8 - 14.0	+ 13.3 - 11.6	+ 12.4 - 12.4	- 0.5 - 6.8	+ 14.0 - 3.3	- 1.1 - 2.3	+ 0.9 + 0.8	- 0.4 - 0.5	- 0.6 - 0.5	+ 0.1 + 0.2	- 0.6 - 0.5	- 0.2 - 0.2
Apr. May June	+ 16.8 - 0.9 + 2.4	+ 18.2 + 1.0 + 4.5	+ 18.2 + 0.8 + 4.6	+ 6.0 + 2.0 - 3.5	+ 11.4 - 0.2 + 8.2	+ 0.8 - 1.1 - 0.1	+ 0.0 + 0.2 - 0.1	- 0.7 - 0.6 - 0.3	- 0.4 - 0.9 - 0.6	+ 0.0 - + 0.4	- 0.4 - 0.6 - 0.9	+ 0.0 - 0.3 - 0.1
July	+ 21.3	+ 22.4	+ 22.7	+ 8.9	+ 12.5	+ 1.2	- 0.3	+ 0.4	+ 0.3	+ 0.3	+ 0.1	- 0.1

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

Subsequent revisions, which appear in the following Monthly Report, are not specially marked. 1 Including subordinated liabilities and liabilities arising from

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

€ billion

	Deposits												
		Federal Gove	ernment and it	s special fund	_S 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 2	Memo item: Fiduciary loans	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 loans
											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
2022 Feb. Mar.	237.9 241.0	42.8 42.1	4.7 4.9	2.1 1.2	36.0 36.0	0.1 0.1	11.7 11.7	59.7 61.7	26.3 23.5	21.2 26.1	11.6 11.6	0.5 0.5	13.8 13.8
Apr. May June	243.7 255.6 254.9	42.2 42.8 43.0	5.1 5.6 5.5	1.1 1.1 4.4	36.0 36.0 33.1	0.1 0.1 0.1	11.7 11.7 11.6	60.7 62.0 62.8	21.9 21.1 18.0	26.9 29.0 33.0	11.4 11.4 11.3	0.5 0.5 0.5	13.8 13.9 13.8
July	258.3	44.0	5.7	4.2	34.0	0.1	11.5	65.7	17.2	36.8	11.2	0.5	13.9
												(Changes *
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
2022 Feb. Mar.	+ 4.3 + 3.2	- 2.7 - 0.6	+ 0.2 + 0.2	- 2.9 - 0.9	- 0.0 + 0.0	- 0.0 - 0.0	+ 0.0 + 0.0	+ 0.5 + 1.9	- 0.8 - 2.9	+ 1.0 + 4.8	+ 0.3 - 0.0	- 0.0 - 0.0	+ 0.0 - 0.0
Apr. May June July	+ 2.7 + 11.5 - 0.7 + 3.5	+ 0.0 + 0.6 + 0.2 + 1.1	+ 0.2 + 0.6 - 0.2 + 0.2	- 0.1 + 0.0 + 3.3 - 0.1	+ 0.0 + 0.0 - 2.9 + 1.0	- 0.0 - 0.0 + 0.0	+ 0.0 - 0.0 - 0.1 - 0.1	- 1.0 + 1.3 + 0.8 + 2.8	- 1.6 - 0.8 - 3.1 - 0.8	+ 0.8 + 2.0 + 4.0 + 3.8	- 0.3 + 0.1 - 0.1 - 0.1	- 0.0 - 0.0 - 0.0 - 0.0	+ 0.0 + 0.0 - 0.0 + 0.1

^{*} 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 d	epos	sits 3					Men	no item:					
	by	maturity																			٦	
			more	than 1 y	year 2																	
					of which	h:												Subordina liabilities				
Domestic non-profit institu-	incl	to and luding			up to ar includin		more tha	n			Domes		Domestic non-profit institu-	:	Bank savings		ciary	(excluding negotiable debt	:	Liabilities arising		
tions	1 y	/ear	Total		2 years		2 years		Total		househ	olds	tions		bonds 4	loan	S	securities)	5	from repos	4	Period
End of	year o	or mont	th *																			
13	.3	45.6		216.1		11.2	20	4.9	565	5.1	!	558.1] 7	7.0	18.4		5.4	1	2.4	-	-	2019
13 12		40.1 31.7		218.5 218.1		12.0 10.1		6.5 8.0	552 553			545.7 547.2		5.3	15.1 13.2		6.7 6.1		2.7 2.8		:	2020 2021
11 11		31.1 31.1		217.6 217.2		9.5 9.3		8.2 7.9	553 551			547.2 545.5		5.0	12.8 12.8		6.0 6.0		2.9 2.9		-	2022 Feb. Mar.
11 12		31.0 30.9		216.6 216.1		9.1 9.0		7.5 7.2	550 549			544.4 543.1		5.9	12.7 12.6		5.9 5.7		2.9 2.8		-	Apr. May
12		31.5		215.1		8.7	20	6.4	547	7.3	!	541.4		5.9	12.6		5.7		2.9	-	-	June
12	.3	32.3		214.8		8.8	20	6.1	545	5.5	!	539.7	5	5.7	12.8		5.6		2.9	-	-	July
Change	s *																				-	
+ 0		3.5	+ -	2.4 0.2	+ -	0.9 1.9		1.6 1.6		3.0 1.4	- +	12.3 1.5).7).1	- 3.3 - 1.9		+ 1.3 - 0.6	+ +	0.2 0.2		:	2020 2021
+ 0		9.2	-	0.1 0.5	-	0.1 0.2		0.0 0.3		0.1 1.8	+	0.1 1.7).0).1	- 0.2 - 0.1		- 0.1 + 0.0	+ +	0.0		-	2022 Feb. Mar.
- 0		0.1	-	0.5	-	0.2		0.3		0.6	-	0.6		0.0	- 0.1		- 0.1	+	0.0		-	Apr.
+ 0 + 0		- 0.1 + 0.6	_	0.5 1.0	_	0.1 0.3		0.4 0.7		1.3 1.8	_	1.3 1.7).0).1	- 0.0 - 0.0		- 0.2 - 0.0	-+	0.0		-	May June
+ 0	.1 +	+ 0.8	-	0.3	+	0.0	-	0.4	_ ·	1.8	-	1.7	- 0).1	+ 0.2		- 0.1	+	0.0	-	-	July

registered debt securities. $\bf 2$ Including deposits under savings and loan contracts (see Table IV.12). $\bf 3$ Excluding deposits under savings and loan contracts (see also

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

]
		government as purpose associ				Social security	y funds					
		Time deposits	; 3					Time deposits	i]
Total	Sight deposits	for up to and including 1 year	for more than 1 year	Savings deposits and bank savings bonds ^{2,4}	Memo item: Fiduciary loans	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 loans	Period
End of ye	ar or mon	th *										
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 70.9	43.2 48.5	8.0 6.0	12.4 12.0	4.9 4.4	0.0 0.0	66.0 48.3	10.9 8.0	32.9 19.0	21.4 20.5	0.8 0.8		2020 2021
68.8 67.4	45.4 43.3	7.0 7.5	12.0 12.2	4.3 4.4	0.0 0.0	66.6 69.8	15.0 13.6	30.7 34.9	20.1 20.5	0.8 0.8	=	2022 Feb. Mar.
67.5 72.4 70.1	43.1 47.9 45.2	7.6 7.0 7.2	12.4 13.1 13.2	4.4 4.4 4.4	0.0 0.0 0.0	73.4 78.4 78.9	16.1 16.8 16.0	35.3 39.0 40.0	21.1 21.7 22.0	0.9 0.9 0.9	- - -	Apr. May June
67.0	41.2	7.7	13.7	4.4	0.0	81.6	13.9	44.3	22.6	0.7	-	July
Changes '	*											
+ 3.5 + 2.8	+ 5.9 + 5.6	- 0.6 - 2.0	- 1.3 - 0.2	- 0.5 - 0.5	- 0.0	- 40.8 - 16.8	+ 0.2 - 2.2	- 15.9 - 13.9	- 24.8 - 0.6	- 0.3 + 0.1	-	2020 2021
+ 4.0 - 1.4	+ 3.6 - 2.1	+ 0.6 + 0.5	- 0.1 + 0.2	- 0.0 + 0.1	=	+ 2.5 + 3.3	- 0.0 - 1.5	+ 3.1 + 4.3	- 0.5 + 0.5	- 0.0 + 0.0	=	2022 Feb. Mar.
+ 0.1 + 6.0 - 2.3 - 3.1	- 0.2 + 4.8 - 2.6 - 4.0	+ 0.1 + 0.8 + 0.2 + 0.5	+ 0.3 + 0.4 + 0.1 + 0.5	- 0.0 + 0.0 + 0.0	- - -	+ 3.6 + 3.6 + 0.6 + 2.7	+ 2.6 + 0.7 - 0.7 - 2.1	+ 0.4 + 2.4 + 1.0 + 4.3	+ 0.6 + 0.5 + 0.3 + 0.6	+ 0.0 - 0.0 - 0.0 - 0.1	- - -	Apr. May June July

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).

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

€ billion

Period

2019 2020 2021 2022 Mar. Apr. May June July

2020 2021 2022 Mar.

	€ DIIIIOTI												
	Savings depos	sits 1								Bank savings	bonds, 3 sold t	to	
		of residents					of non-resid	lents			domestic non	-banks	
			at 3 months notice		at more thar months' not				Memo item:			of which: With	
				of which: Special savings		of which: Special savings		of which: At 3 months'	Interest credited on savings	non-banks,		maturities of more than	foreign
od	Total	Total	Total	facilities 2	Total	facilities 2	Total	notice	deposits	total	Total	2 years	non-banks
	End of ye	ar or mon	th *										
9	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
) I	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
2 Mar.	564.8	559.0	536.2	265.0	22.9	13.9	5.8	5.3	0.1	24.1	23.9	19.0	0.2
Apr. May June	563.7 562.3 560.4	557.9 556.6 554.8	535.3 534.0 532.4	262.0 262.2 259.4	22.7 22.5 22.4	13.7 13.5 13.4	5.7 5.7 5.6	5.3 5.2 5.2	0.1 0.1 0.1	23.9 24.0 24.0	23.8 23.8 23.8	18.9 18.8 18.8	0.1 0.1 0.1
July	558.6	553.0	530.7	259.5	22.2	13.3	5.6	5.2	0.1	24.2	24.1	18.9	0.1
	Changes ⁷	•	•		•	•		,		•	•		·
) I	- 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
2 Mar.	- 1.9	- 1.8	- 1.6	- 1.5	- 0.2	- 0.2	- 0.1	- 0.0		+ 0.0	+ 0.0	- 0.0	- 0.0
Apr. May June	- 0.7 - 1.4 - 1.8	- 0.6 - 1.3 - 1.8	- 0.4 - 1.2 - 1.6	- 3.1 + 0.2 - 2.8	- 0.2 - 0.1 - 0.2	- 0.2 - 0.2 - 0.1	- 0.0 - 0.1 - 0.0	- 0.0 - 0.1 - 0.0		- 0.1 + 0.0 - 0.0	- 0.1 + 0.0 - 0.0	- 0.1 - 0.0 - 0.0	- 0.0 - -
July	- 1.9	- 1.8	- 1.7	+ 0.2	- 0.2	- 0.0	- 0.0	- 0.0		+ 0.3	+ 0.3	+ 0.1	-

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

1 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 l	oearer debt s	ecurities and	money mar	ket paper						Non-negot			
		of which:									bearer deb securities a	nd		
						with matur	ities of				money mar 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:		
od	Total	Floating rate bonds 1	Zero coupon bonds 1,2	Foreign currency bonds 3,4	Certifi- cates of deposit	Total	of which: without a nominal quarantee 5	Total	of which: without a nominal quarantee 5	more than 2 years	Total	maturities of more than 2 years	negotiable debt securities	non- negotiable debt securities
	End of y						1 3		Junior			_ ,		
9	1,140.7	123.5		367.7	96.7	117.7	2.6	23.6	4.2	999.4	0.9	0.7	31.5	0.4
10 11	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
2 Mar.	1,219.8	100.5	14.2	337.0	105.8	114.7	2.9	17.8	4.4	1,087.4	0.6	0.5	35.6	0.1
Apr. May June	1,227.1 1,226.2 1,237.2	100.1 98.3 99.0	14.3 15.0 16.2	344.7 339.3 353.3	104.2 100.2 113.3	113.1 109.3 124.4	3.0 2.4 2.3	15.2 16.2 16.8	4.5 4.5 4.1	1,098.8 1,100.7 1,096.1	0.5 0.4 0.8	0.4 0.4 0.8	36.0 35.7 36.4	0.1 0.1 0.1
July	1,237.8	98.0	16.2	344.8	105.0	115.4	2.1	17.7	4.1	1,104.7	1.0	0.9	36.5	0.1
	Changes	*												
!0 !1	- 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
2 Mar.	+ 20.8	- 2.0	+ 0.3	+ 6.9	+ 13.4	+ 13.6	- 0.1	+ 0.2	- 0.2	+ 7.0	+ 0.1	+ 0.1	+ 1.2	-
Apr. May June	+ 7.3 - 1.0 + 11.1	- 0.4 - 1.8 + 0.6	+ 0.0 + 0.4 + 1.3	+ 7.7 - 5.4 + 14.1	- 1.5 - 4.1 + 13.2	- 1.6 - 3.8 + 15.1	+ 0.1 - 0.6 - 0.0	- 2.6 + 0.9 + 0.6	+ 0.1 + 0.1 - 0.4	+ 11.4 + 1.9 - 4.7	- 0.1 - 0.0 + 0.4	- 0.1 - 0.0 + 0.4	+ 0.4 - 0.3 + 0.7	- - -
July	+ 1.8	+ 0.3	- 0.0	- 8.5	- 8.3	- 9.0	- 0.2	+ 0.9	- 0.0	+ 9.8	+ 0.1	+ 0.1	+ 0.1	-

^{*} 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).

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

€ billion

			Lending to	banks (MF	ls)	Lending to	non-banks	(non-MFIs)		Deposits of	f banks	Deposits of				
			Credit			Building lo	ans		Secur-	(1011 13) 0		bariks (rioi	1-1011 13)			Memo
End of year/month	Num- ber of associ- ations	Balance sheet total 1	bal- ances and loans (ex- cluding building loans) 2	Building loans 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 7	Bearer debt secur- ities out- stand- ing	Capital (includ- ing pub- lished re- serves) 8	item: New con- tracts entered into in year or month 9
	All bu	ıilding a	nd loan	associat	ions											
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 May June	18 18	260.1 260.3	34.7 34.3	0.0 0.0	15.4 15.1	10.1 10.1	132.6 133.2	38.7 39.0	24.6 24.3	3.0 3.0	36.4 36.7	184.8 184.3	9.2 9.5	4.6 4.5	12.2 12.2	7.6 8.0
July	18	260.0	33.7	0.0	15.0	10.3	133.6	39.4	24.2	2.9	36.8	184.0	9.5	4.6	12.1	8.7
July				oan asso			155.0	33.4	24.2	2.5	30.0	104.0	3.3	4.0	12.1	0,
2022 May	10	183.5		-	6.9	7.4	103.3		10.8		33.5	119.9		4.6	8.3	4.5
June	10	183.6	19.2	-	6.7	7.4	103.7	33.1	10.5	1.7	33.5	119.6	9.0	4.5	8.3	5.0
July	10	183.5	18.7	-	6.7	7.5	104.0	33.5	10.4	1.7	33.8	119.4	9.0	4.6	8.2	5.6
	Public	c bullain	ig and id	an asso	ciations											
2022 May June	8 8	76.6 76.7	15.2 15.1	0.0 0.0	8.5 8.4	2.7 2.7	29.3 29.5	5.9 5.9	13.8 13.8	1.3	2.9 3.2	64.8 64.7	0.5 0.5	-	3.9 3.9	3.1 3.0
July	8	76.6	15.0	0.0	8.3	2.8	29.6	5.9	13.8	1.3	3.0	64.6	0.5	-	3.9	3.2

Trends in building and loan association business

€ billio

	€ billion															
	Changes in			Capital pro	mised	Capital disb	ursed					Disburser		Interest an		
	under savi loan contr						Allocation	5				commitm	ing at	repayment received o	n	
		Interest	Repay- ments of				Deposits u savings an loan contr	d	Loans und savings an loan contr	d	Newly	end of pe	erioa	building lo	ans II	
Period	Amounts paid into savings and loan accounts 10	credited on deposits under savings and loan con-	deposits under cancelled savings and loan con- tracts	Total	of which: Net alloca- tions 12	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	granted 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 13
renou						TOTAL	Total	IUdiis	Total	104115	IUdiis	TOtal	tracts	Total	quarter	Ceiveu 13
	All buil	ding and	d loan as	sociatio	ns											
2021 2022 May June	27.7 2.6 2.2	2.0 0.1 0.1	9.1 0.8 0.8	52.3 4.9 4.7	27.7 2.7 2.8	47.1 4.3 4.6	18.3 1.7 2.0	4.0 0.3 0.4	4.2 0.4 0.4	3.4 0.3 0.3	24.7 2.2 2.1	18.6 20.0 19.5	6.3 6.7 6.7	6.1 0.5 0.4	4.9 0.8	0.1 0.0 0.0
July	2.2	0.1	0.8	4.0	2.5	4.1	1.7	0.3	0.5	0.4	1.9	18.8	6.6	0.4		0.0
	Private	bullaing	and lo	an assoc	iations											
2022 May June	1.6 1.4	0.0 0.1	0.4 0.4	3.4 3.6	1.6 2.1	3.2 3.4	1.2 1.5	0.3 0.3	0.3 0.3	0.2 0.2	1.7 1.6	14.2 14.0	3.5 3.6	0.4 0.3	0.5	0.0 0.0
July	1.4 Public l	0.1 Duilding	_{0.5} and loa	2.8 n associ	1.7 ations	3.1	1.2	0.3	0.3	0.3	1.5	13.4	3.5	0.3		0.0
2022 May June	1.0 0.8	0.0 0.0	0.5 0.4	1.5 1.1	1.0 0.7	1.1 1.2	0.5 0.5	0.1 0.1	0.1 0.1	0.1 0.1	0.5 0.5	5.8 5.5	3.3 3.1	0.1 0.1	0.3	0.0 0.0
July	0.8	0.0	0.4	1.2	0.8	1.0	0.5	0.1	0.1	0.1	0.4	5.4	3.0	0.1		0.0

^{*} Excluding assets and liabilities and/or transactions of foreign branches. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. 1 See Table IV.2, footnote 1. 2 Including claims on building and loan associations, claims arising from registered debt securities and central bank credit balances. 3 Loans under savings and loan contracts and interim and bridging loans. 4 Including money market paper and small amounts of other securities issued by banks. 5 Including equalisation claims 6 Including liabilities to building and loan associations. 7 Including small amounts of savings deposits. 8 Including participation rights capital and fund for general banking

risks. **9** Total amount covered by the contracts; only contracts newly entered into, for which the contract fee has been fully paid. Increases in the sum contracted count as new contracts. **10** For disbursements of deposits under savings and loan contracts arising from the allocation of contracts see "Capital disbursed". **11** Including housing bonuses credited. **12** Only allocations accepted by the beneficiaries; including allocations applied to settlement of interim and bridging loans. **13** The amounts already credited to the accounts of savers or borrowers are also included in "Amounts paid into savings and loan accounts" and "Interest and repayments received on building loans".

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

bil	

	Number of			Lending to	banks (MFIs)			Lending to	o non-banks	(non-MFIs)			Other assets	7
	Cormon				Credit bala	nces and loa	ns			Loans					
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	Total	German banks	Foreign banks	Money market paper, secur- ities 2,3	Total	Total	to German non- banks	to foreign non- banks	Money market paper, secur- ities 2	Total	of which: Derivative financial instruments in the trading portfolio
Tenou		branche		Total	Total	burnes	buriks	rues =/-	Total	Total	During	burnes		d of year o	·
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 2021	50 51	206 207	1,552.2 1,504.5	376.7 471.2	364.0 457.8	213.2 297.9	150.8 159.9	12.7 13.4	504.8 497.2	409.6 418.8	14.3 12.9	395.3 405.9	95.2 78.4	670.7 536.1	523.6 404.5
2021 Sep.	50	205	1,518.6	452.9	439.1	279.3	159.8	13.8	485.2	404.4	13.1	391.3	80.8	580.5	415.3
Oct. 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	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. May June	50 50 51	208 208 211	1,784.0 1,759.2 1,741.0	556.5 551.2 516.8	542.2 537.3 502.8	370.7 369.0 338.8	171.5 168.3 164.0	14.3 13.9 13.9	552.8 554.0 553.5	474.5 477.6 480.7	13.3 13.1 12.1	461.2 464.5 468.6	78.3 76.4 72.8	674.7 653.9 670.7	529.5 514.9 524.4
	'			,	'		'		'	,	'		'	,	' ' Changes *
2020	- 2	+ 9	+104.2	- 20.3	- 15.5	- 2.8	- 12.7	- 4.8	+ 0.2	- 1.0	- 5.4	+ 4.4	+ 1.2	+ 164.2	+ 179.6
2021 2021 Oct.	+ 1 + 2	+ 1 + 2	- 48.4 + 33.7	+ 87.3 + 42.6	+ 87.1 + 42.5	+ 84.9 + 31.0	+ 2.2 + 11.5	+ 0.3 + 0.1	-26.2 +13.0	- 6.5 + 13.4	- 1.3 + 0.2	- 5.1 + 13.2	- 19.7 - 0.3	- 136.9 - 21.2	- 128.1 - 12.6
Nov. Dec.	- 2 + 1	- 3 + 3	+ 43.0 - 90.4	- 2.3 - 24.0	- 2.5 - 23.2	- 3.7 - 8.6	+ 1.2 - 14.6	+ 0.2 - 0.8	+ 4.4 - 9.2	+ 5.0 - 7.0	- 0.2 - 0.1	+ 5.2 - 6.8	- 0.6 - 2.2	+ 33.0 - 57.3	+ 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. May June	- - + 1	- - + 3	+106.5 - 24.0 - 19.9	- 13.1 - 3.4 - 36.9	- 13.1 - 3.0 - 36.9	+ 1.0 - 1.6 - 30.2	- 14.2 - 1.5 - 6.6	+ 0.1 - 0.4 + 0.0	- 1.3 + 6.5 - 8.4	+ 0.7 + 7.8 - 4.0	- 0.1 - 0.3 - 1.0	+ 0.8 + 8.1 - 3.1	- 2.0 - 1.3 - 4.4	+ 102.0 - 19.9 + 15.1	+ 104.5 - 13.4 + 7.4
	Foreign	subsidia	ries										End	d of year o	or month *
2019	15	41	235.2	52.5	46.7	18.3	28.4	5.7	139.0	116.1	14.4	101.7	22.9	43.7	0.0
2020 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 23.2	44.9 55.7	0.0 0.0
2021 Sep.	13	36	244.6	51.9	47.1	21.9	25.2	4.8	138.5	114.5	12.2	102.3	24.0	54.1	0.0
Oct. 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. May June	12 12 12	35 35 35	253.6 256.5 258.0	49.4 48.5 50.3	44.1 43.6 44.6	21.5 19.6 21.5	22.6 24.1 23.1	5.3 4.9 5.7	145.3 147.7 148.9	121.6 123.9 125.1	12.8 13.2 13.1	108.8 110.8 112.0	23.7 23.8 23.8	58.8 60.2 58.8	0.0 0.0 0.0
															Changes *
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 - 0.5	- 1.3 - 0.5	+ 2.1 - 0.0	+ 2.4 - 2.1	+ 1.2 + 10.8	± 0.0 ± 0.0
2021 Oct.	- 1	- 1	+ 1.5	- 0.9	- 1.1	+ 2.4	- 3.6	+ 0.2	- 0.0	+ 0.9	+ 0.3	+ 0.5	- 0.9	+ 2.5	± 0.0
Nov. Dec.	-	-	- 0.2 - 1.4	+ 1.3 - 2.3	+ 0.3 - 2.4	- 0.4 - 3.2	+ 0.6 + 0.8	+ 1.0 + 0.1	- 0.6 + 0.9	- 0.6 + 0.8	+ 0.1 + 0.0	- 0.7 + 0.7	+ 0.0 + 0.1	- 0.9 - 0.0	± 0.0 ± 0.0
2022 Jan. Feb.	-	_ _	- 1.9 + 0.8	- 5.0 + 0.4	- 3.9 + 0.6	- 0.7 + 1.0	- 3.0 - 0.4	- 1.4 - 0.2	+ 0.7 + 0.1	+ 0.8 + 0.3	+ 0.0 + 0.0	+ 0.8 + 0.3	- 0.1 - 0.2	+ 2.6 + 0.3	± 0.0 ± 0.0
Mar. Apr.	-	_	+ 3.2 + 1.4	- 0.5 + 2.0	- 0.7 + 2.1	- 0.5 + 1.0	- 0.2 + 1.1	+ 0.2 - 0.1	+ 2.6 + 0.5	+ 1.8 + 0.6	+ 0.2 - 0.1	+ 1.6 + 0.6	+ 0.8	+ 1.1	± 0.0 ± 0.0
May June			+ 4.0	- 0.3 + 0.8	- 0.1 + 0.2	- 1.9 + 2.0	+ 1.9 - 1.8	- 0.3 + 0.6	+ 2.9 + 0.3	+ 2.8	+ 0.3	+ 2.5 + 0.3	+ 0.1 + 0.0	+ 1.4	± 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

41°

IV. Banks

Deposits													Othor	liabilities	6.7		1
Deposits	of banks (M	IFIs)		of non-banks	(non-MFIs)								Other	liabilities	, 0,7		1
					German no	n-banks	4				1						
Total	Total	German banks	Foreign banks	Total	Total	Short	term	Mediun and longter		Foreign non-banks	Money market paper and debt securities outstand- ing 5	Working capital and own funds	Total		of whice Derivat financia instrum in the trading portfoli	ive al nents	Period
End of ye	ear or mo	nth *											F	oreig	n braı	nches	
894.1	613.6	453.2	160.4	280.5	12.	⁷	10.1	1	2.7	267.8	94.6	1	1	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	11.1 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
937.3	618.3	432.9	185.4	319.0	9.0	5	7.8		1.8	309.4	81.1	51.6		448.6		414.2	2021 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.)	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	9.8 9.8 10.7	3	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 1,059.1 1,035.8	655.6 633.0 630.0	453.6 437.3 447.9	202.0 195.7 182.1	420.1 426.1 405.8	10.! 10.! 10.:	5	8.7 8.7 8.9		1.8 1.7 1.8	409.7 415.6 395.1	88.6 90.4 84.1	53.3 52.9 53.4		566.4 556.8 567.7		526.8 512.4 521.9	Apr. May June
Changes	*																
- 9.2 + 71.1	- 13.3 + 43.1	- 21.4 + 31.0	+ 8.1 + 12.0	+ 4.1 + 28.1	- 1.0 - 3.0		0.3 3.9	- +	1.4 0.3	+ 5.1 + 31.7	- 28.1 + 0.1	- 3.5 + 1.4	+ -	157.6 130.8	+ -	162.0 119.7	2020 2021
+ 46.0 + 3.4 - 37.8	+ 36.8 - 0.4 - 17.3	+ 36.3 - 9.6 + 3.0	+ 0.5 + 9.2 - 20.3	+ 9.2 + 3.9 - 20.5	- 0.0 - 0.1 - 0.8	-	0.6 0.1 0.8	- + -	0.0 0.0 0.0	+ 9.8 + 4.0 - 19.7	+ 2.9 - 2.4 - 17.5	+ 0.1 + 0.3 - 0.7	- + -	14.8 38.6 34.5	- + -	12.9 34.6 32.5	2021 Oct. 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	3 +	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 - 10.4 - 26.9	- 11.0 - 16.5 - 6.4	- 9.2 - 12.5 + 10.6	- 1.8 - 4.1 - 17.0	- 4.2 + 6.2 - 20.5	- 0.3 - 0.0 + 0.3) +	0.3 0.0 0.2	+ - +	0.1 0.0 0.1	- 4.0 + 6.2 - 20.7	+ 5.3 + 2.7 - 8.0	+ 0.9 - 0.4 + 0.5	+ - +	108.8 13.3 10.9	+ - +	108.0 14.4 9.5	Apr. May June
End of ye	ar or mo	nth *											For	eign s	ubsid	liaries	
165.7	68.7	36.6	32.1	97.0	6.0	5	3.9	ı	2.7	90.4	16.0	22.1	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	6.1 7.1		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	2020 2021
175.4	61.5	30.0	31.5	113.9	6.0	1	4.2		2.4	107.3	18.4	20.7		30.0		0.0	2021 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.: 7.: 7.!	1	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.
187.8 190.9 190.7	70.6 70.3 68.9	36.1 36.3 35.9	34.4 34.1 33.0	117.2 120.5 121.7	7.: 7.: 7.	2	4.8 4.8 5.1		2.4 2.4 2.3	110.0 113.3 114.3	15.5 15.3 16.0			30.3 30.2 31.0		0.0 0.0 0.0	Apr. May June
Changes	*	-	-	- '		-		-	,	-	-	-	-	,	-		
+ 1.4 + 12.1	- 7.3 + 3.2	- 2.5 - 1.1	- 4.8 + 4.3	+ 8.7 + 8.9	+ 0.0		0.3 0.6	-	0.3 0.1	+ 8.7 + 8.3	+ 0.6 - 0.3	- 1.8 + 0.1	- +	1.0 0.2	± ±	0.0	2020 2021
+ 2.3 - 1.0 + 0.9	+ 2.3 - 1.6 + 1.5	+ 2.7 - 1.6 + 1.9	- 0.4 + 0.1 - 0.3	- 0.0 + 0.6 - 0.6	+ 0.1 + 0.1 + 0.1	3 + 1 +	0.3 0.1 0.3	+ + -	0.0 0.0 0.0	- 0.3 + 0.4 - 0.9	- 0.5 - 0.4 - 1.2	- 0.3 - 0.0 - 0.0	+ + -	0.1 1.2 1.2	± ± ±	0.0 0.0 0.0	2021 Oct. Nov. Dec.
+ 0.4 + 1.5 + 2.8	+ 0.4 + 1.6 + 0.1	+ 0.2 + 0.5 + 0.5	+ 0.2 + 1.1 - 0.5	+ 0.0 - 0.1 + 2.7	- 0.1 + 0.2 + 0.0	- 2 +	0.1 0.2 0.1	+ - -	0.0 0.0 0.0	+ 0.1 - 0.4 + 2.7	- 0.5 - 0.1 - 0.1	- 0.5 - 0.1 + 0.1	- - +	1.2 0.5 0.4	± ± ±	0.0 0.0 0.0	2022 Jan. Feb. Mar.
+ 1.6 + 3.8 - 1.5	+ 3.1 + 0.1	+ 1.9 + 0.1 - 0.4	+ 1.2 - 0.0 - 1.6	- 1.5 + 3.7 + 0.4	- 0.2 - 0.0 + 0.2	2 –	0.2 0.0 0.3	- + -	0.0 0.0 0.1	- 1.2 + 3.8 + 0.2	- 0.2 - 0.2 + 0.7	+ 0.1 + 0.2	- + +	0.1 0.1 0.4	± ± ±	0.0 0.0 0.0	Apr. May

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.

V. Minimum reserves

1. Reserve maintenance in the euro area

€ billion

Maintenance period beginning in 1	Reserve base 2	Required reserves before deduction of lump-sum allowance ³	Required reserves after deduction of lump-sum allowance 4	Current accounts 5	Excess reserves 6	Deficiencies 7
2015 2016 2017 2018 2019	11,375.0 11,918.5 12,415.8 12,775.2 13,485.4	119.2 124.2	113.3 118.8 123.8 127.4 134.5	557.1 919.0 1,275.2 1,332.1 1,623.7	443.8 800.3 1,151.4 1,204.8 1,489.3	0.0 0.0 0.0 0.0 0.0 0.0
2020 2021 2022 July p	14,590.4 15,576.6 16,174.7	145.9 155.8 161.7	145.5 155.4 161.4	3,029.4 3,812.3	2,883.9 3,656.9	0.0 0.1
Aug. Sep. p	16,174.7				 	

2. Reserve maintenance in Germany

€ billion

Maintenance period beginning in 1	Reserve base ²	German share of euro area reserve base as a percentage	Required reserves before deduction of lump-sum allowance ³	Required reserves after deduction of lump-sum allowance 4	Current accounts 5	Excess reserves 6	Deficiencies ⁷
2015	3,137,353	27.6	31,374	31,202	174,361	143,159	0
2016	3,371,095	28.3	33,711	33,546	301,989	268,443	0
2017	3,456,192	27.8	34,562	34,404	424,547	390,143	2
2018	3,563,306	27.9	35,633	35,479	453,686	418,206	1
2019	3,728,027	27.6	37,280	37,131	486,477	449,346	0
2020	4,020,792	27.6	40,208	40,062	878,013	837,951	1
2021	4,260,398	27.4	42,604	42,464	1,048,819	1,006,355	0
2022 July P	4,437,392	27.4	44,374	44,236			
Aug.		·		:			·
Sep. P	4,448,025		44,480	44,344			

a) Required reserves of individual categories of banks

€ billion

Maintenance period beginning in 1	Big banks	Regional banks and other commercial banks	Branches of foreign banks	Landesbanken and savings banks	Credit cooperatives	Mortgage banks	Banks with special, development and other central support tasks
2015	6,105	5,199	2,012	10,432	5,649	226	1,578
2016	6,384	5,390	2,812	10,905	5,960	236	1,859
2017	6,366	5,678	3,110	11,163	6,256	132	1,699
2018	7,384	4,910	3,094	11,715	6,624	95	1,658
2019	7,684	5,494	2,765	12,273	7,028	109	1,778
2020	8,151	6,371	3,019	12,912	7,547	111	2,028
2021	9,113	6,713	2,943	13,682	8,028	109	1,876
2022 July Aug. Sep.			:				

b) Reserve base by subcategories of liabilities

€ billion

Maintenance period beginning in 1	Liabilities (excluding savings deposits, deposits with build- ing and loan associations and repos) to non-MFIs with agreed maturities of up to 2 years	Liabilities (excluding repos and deposits with building and loan associations) with agreed maturities of up to 2 years to MFIs that are resident in euro area countries but not subject to minimum reserve requirements		Savings deposits with agreed periods of notice of up to 2 years	Liabilities arising from bearer debt securities issued with agreed maturities of up to 2 years and bearer money market paper after deduction of a standard amount for bearer debt certificates or deduction of such paper held by the reporting institution
2015 2016	2,063,317	1,879	375,891	592,110	104,146
2016	2,203,100	1,595 628	447,524	585,099 581,416	133,776
2017	2,338,161 2,458,423	1,162	415,084 414,463	581,416 576,627	120,894 112,621
2019	2,627,478	1,102	410,338	577,760	111,183
		·	· ·		· 1
2020	2,923,462	1,607	436,696	560,770	105,880
2021	3,079,722	9,030	508,139	561,608	101,907
2022 July					.
Aug.					.
Sep.			.		

¹ The reserve maintenance period starts on the settlement day of the main refinancing operation immediately following the meeting of the Governing Council of the ECB for which the discussion on the monetary policy stance is scheduled. 2 Article 5 of the Regulation (EU) 2021/378 of the European Central Bank on the application of minimum reserve requirements (excluding liabilities to which a reserve ratio of 0% applies, pursuant to Article 6(1)(a)). 3 Amount after applying the reserve ratio to the reserve base. The reserve ratio for liabilities with agreed maturities of up to two years was 2%

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

VI. Interest rates

1. ECB interest rates / basic rates of interest

% per annum

ECB interest rates										Basic rates of inte	rest		
		Main refi					Main refi operation				Basic rate of		Basic rate of
Applicable from	Deposit facility	Fixed rate	Minimum bid rate	Mar- ginal lending facility	Applicable from	Deposit facility	Fixed rate	Minimum bid rate	Mar- ginal lending facility	Applicable from	interest as per Civil Code 1	Applicable from	interest as per Civil Code 1
2005 Dec. 6	1.25	-	2.25	3.25	2011 Apr. 13	0.50	1.25	-	2.00	2002 Jan. 1	2.57	2009 Jan. 1	1.62
2006 Mar. 8	1.50	_	2.50	3.50	July 13 Nov. 9	0.75 0.50	1.50 1.25	_	2.25 2.00	July 1	2.47	July 1	0.12
June 15	1.75	-	2.75	3.75	Dec. 14	0.25	1.00	-	1.75	2003 Jan. 1	1.97	2011 July 1	0.37
Aug. 9 Oct. 11	2.00 2.25	_	3.00 3.25	4.00 4.25	2012 July 11	0.00	0.75	_	1.50	July 1	1.22	2012 Jan. 1	0.12
Dec. 13	2.50	-	3.50	4.50	'					2004 Jan. 1	1.14		
2007 Mar. 14	2.75	-	3.75	4.75	2013 May 8 Nov. 13	0.00 0.00	0.50 0.25	_	1.00 0.75	July 1	1.13	2013 Jan. 1 July 1	- 0.13 - 0.38
June 13	3.00	-	4.00	5.00	2014 June 11	-0.10	0.15	_	0.40	2005 Jan. 1 July 1	1.21 1.17	2014 Jan. 1	- 0.63
2008 July 9	3.25 2.75	-	4.25 3.75	5.25 4.75	Sep. 10	-0.20	0.05	-	0.30	2006 Jan. 1	1.37	July 1	- 0.73
Oct. 8 Oct. 9 Nov. 12	3.25 2.75	3.75 3.25	3./5	4.75 4.25 3.75	2015 Dec. 9	-0.30	0.05	-	0.30	July 1	1.95	2015 Jan. 1	- 0.83
Dec. 10	2.00	2.50		3.00	2016 Mar. 16	-0.40	0.00	-	0.25	2007 Jan. 1 July 1	2.70 3.19	2016 July 1	- 0.88
2009 Jan. 21	1.00	2.00		3.00	2019 Sep. 18	-0.50	0.00	_	0.25	1			
Mar. 11 Apr. 8	0.50 0.25	1.50 1.25	_	2.50 2.25	2022 Jul. 27	0.00	0.50	_	0.75	2008 Jan. 1 July 1	3.32 3.19		
May 13	0.25	1.00	-	1.75	Sep. 14	0.75	1.25		1.50				

¹ Pursuant to Section 247 of the Civil Code.

2. Eurosystem monetary policy operations allotted through tenders *

				Fixed rate tenders	Variable rate tenders			
	Bid amoui	nt	Allotment amount	Fixed rate	Minimum bid rate	Marginal rate 1	Weighted average rate	
Date of Settlement	€ milli	on		% per annum				Running for days
Main refina	ancing or	erations						
2022 Aug. Aug. Aug. Aug. Aug. Sep. Sep.	3 10 17 24 31 7	864 907 823 744 3 869 3 680 3 926	864 907 823 744 3 869 3 680 3 926	0,50 0,50 0,50 0,50 0,50 0,50 1,25	-		- - - - -	7 7 7 7 7 7
		ng operatio						.
2022 Jul. Sep.	28	173 725	173 725	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 *

% per annum

Monthly average 2022 Feb. Mar. Apr. May June July Aug.

		EURIBOR 2	EURIBOR 2							
€STR 1	EONIA 1	One-week funds	One-month funds	Three-month funds	Six-month funds	Twelve-month funds				
- 0.577		- 0.57	- 0.55	- 0.53	- 0.48	- 0.34 - 0.24				
- 0.579		- 0.57	- 0.54	- 0.50	- 0.42	- 0.24				
- 0.584		- 0.57	- 0.54	- 0.45	- 0.31	0.01				
- 0.585		- 0.57	- 0.55	- 0.39	- 0.14	0.29				
- 0.582		- 0.57	- 0.53	- 0.24	0.16	0.85				
- 0.511		- 0.46	- 0.31	0.04	0.47	0.99				
- 0.085		- 0.07	0.02	0.40	0.84	1.25				

^{*} Averages are Bundesbank calculations. Neither the Deutsche Bundesbank nor anyone else can be held liable for any irregularity or inaccuracy of the EONIA or the EURIBOR.

1 Euro overnight index average: weighted average overnight rate for interbank operations; calculated by the European Central Bank from January 4th 1999 until September 30th 2019 based on real turnover according to the act/360 method. Since

October 1st 2019 calculated as Euro Short-Term Rate (€STR) + 8.5 basis points spread. 2 Euro interbank offered rate: unweighted average rate calculated by Reuters since 30 December 1998 according to the act/360 method. Administrator for EONIA and EURIBOR: European Money Markets Institute (EMMI)

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

End of

month 2021 July

Aug.

Sep

Oct

Dec.

Feb. Mar.

June

July

2022 Jan

VI. Interest rates

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

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 ² € million	Effective interest rate 1 % p.a.	Volume ² € million				Volume 2 € million			
0.23 0.22 0.23	45,300 44,901 44,268	0.94 0.93 0.93	219,790 219,708 219,587	- 0.23 - 0.26 - 0.28	69,514 68,741 69,338	0.82 0.81 0.78	20,96 21,05 21,22			
0.23 0.22 0.18	43,497 42,503 41,979	0.92 0.91 0.91	219,456 219,058 220,289	- 0.29 - 0.30 - 0.37	75,404 70,830 75,038	0.77 0.76 0.74	22,44 22,79 22,96			
0.18 0.18 0.17	41,157 40,586 40,201	0.90 0.90 0.89	220,225 220,056 219,655	- 0.31 - 0.30 - 0.28	72,404 71,560 68,341	0.73 0.71 0.74	23,01 23,68 24,01			
0.18 0.19 0.19	39,503 39,659 39,682	0.88 0.87 0.87	219,264 218,855 218,128	- 0.27 - 0.20 - 0.10	73,001 65,198 66,308	0.73 0.73 0.78	23,43 23,33 23,39			
0.24	40,392	0.86	217,955	0.04	72,141	0.86	24,12			

Housing loans to households 3 Loans to households for consumption and other purposes 4,5 with a maturity of over 1 year and over 1 year and up to 1 year 6 over 5 years up to 1 year 6 over 5 years up to 5 years up to 5 years Effective Effective Effective Effective Effective Effective interest rate 1 % p.a. Volume 2 interest rate 1 % p.a. interest rate 1 Volume 2 interest rate Volume 2 interest rate Volume 2 Volume 2 interest rate 1 Volume 2 € million % p.a. € million € million € million € million % p.a % p.a. € million % p.a 325 291 1 92 4 642 153 26 996 1 83 1 410 004 6 53 44 338 3 33 81 734 3 34 1.94 1.94 4,581 4,521 1.52 1.52 44,785 45,750 3.32 3.32 325,890 325,265 27,041 1,418,884 6.60 81,447 27,117 1.80 1,427,271 6.67 3.32 81,133 1 436 840 44 700 326 197 1 97 4.623 1 52 27.324 1 79 6 59 3.32 80 768 3.30 3,680 3,547 1,446,574 1,454,553 44,871 44,914 3.30 3.28 79,066 78,679 2.02 1.52 26,755 1.75 327,421 6.60 3.32 3,690 1,457,059 44.473 3.27 328.346 2.02 1.52 26.583 1.74 6.69 3.32 78.019 2.02 2.10 3,559 3,620 1.52 1.53 1.73 1.71 1,464,103 1,473,852 6.61 6.59 44,903 46,226 3.32 3.33 77,521 77,518 3.26 3.25 328,991 328,996 26,670 2.08 2.15 2.19 1.71 45,715 3.25 3,636 3,584 3.33 329.959 1.54 26.766 1.483.015 6.52 77.073 1.55 1.58 1.70 1.70 1,492,093 1,500,141 46,567 47,810 3.25 3.27 330,295 330,379 3,573 26,899 6.59 76,324 3.36 2.28 3.715 1.70 27.244 1.70 1.508.698 6.58 46.834 3.39 76.737 3.27 332.993

up to 1 year 6		over 1 year and up to 5 years	5	over 5 years		
Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 Volume 2 € million		
1.94	148,978	1.64	194,327	1.65	808,937	
1.94	148,766	1.63	196,065	1.64	811,706	
1.97	149,784	1.64	194,697	1.63	811,174	
1.92	158,326	1.63	197,964	1.62	813,714	
1.91	156,340	1.58	203,103	1.61	819,855	
1.82	161,611	1.56	202,457	1.59	822,730	
1.81	166,574	1.57	202,813	1.58	824,650	
1.80	172,663	1.56	202,563	1.58	830,564	
1.90	179,074	1.58	204,001	1.57	832,210	
1.91	180,007	1.58	206,200	1.57	838,405	
1.87	184,783	1.62	208,824	1.58	842,912	
1.94	189,986	1.65	213,733	1.64	846,768	
2.07	195,328	1.69	218,423	1.66	854,34	

End of month

2021 July Aug. Sep. Oct. Nov. Dec.

2022 Jan. Feb. Mar. Apr. May June July

* 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). • The statistics on outstanding amounts are collected at the end of the month. • The effective interest rates are calculated either as

annualised agreed interest rates or as narrowly defined effective rates. Both calculation methods cover all interest payments on deposits and loans but not any other related charges which may occur for enquiries, administration, preparation of the documents, guarantees and credit insurance. 2 Data based on monthly balance sheet statistics. 3 Secured and unsecured loans for home purchase, including building and home improvements; including loans granted by building and loan associations and interim credits as well as transmitted loans granted by the reporting agents in their own name and for their own account. 4 Loans for consumption are defined as loans granted for the purpose of personal use in the consumption of goods and services. 5 For the purpose of these statistics, other loans are loans granted for other purposes such as business, debt consolidation, education, etc. 6 Including overdrafts (see also footnotes 12 to 14 on p. 47).

VI. Interest rates

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

Households'	Households' deposits												
		with an agree	ed maturity of					redeemable at notice 8 of					
Overnight		up to 1 year		over 1 year ar	nd up to 2 years	over 2 years		up to 3 mont	hs	over 3 months			
Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million					Volume ² € million			
- 0.01 - 0.01 - 0.01	1,800,235 1,797,331 1,791,879	0.02 0.02 - 0.01	2,414 2,315 2,254	0.28 0.25 0.26	0.25 278		695 558 513	0.08 0.08 0.08	536,463 536,145 535,555	0.16 0.16 0.15	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 - 0.02	1,826,796 1,827,315 1,831,910	0.14 0.14 0.17	1,974 2,052 2,490	0.39 0.52 0.71	292 574 357	0.46 0.66 0.80	694 1,023 891	0.07 0.07 0.08	534,800 533,590 531,943	0.13 0.14 0.14	22,686 22,562 22,408		
- 0.00	1,854,419	0.31	3,227	0.83	776	0.72	1,178	0.07	530,302	0.15	22,255		

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

Non-financial corporations' deposits											
		with an agreed maturity of									
Overnight		up to 1 year		over 1 year and up to	2 years	ver 2 years					
Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume 7 € million				Volume 7 € million				
- 0.12 - 0.13 - 0.12	581,879 589,698 590,408	- 0.48 - 0.50 - 0.50	57,334 47,074 48,685	- 0.22 - 0.17 x	322 174 x .	0.09 0.07 0.11	168 699 333				
- 0.13 - 0.13 - 0.14	598,979 604,607 585,718	- 0.51 - 0.52 - 0.58	70,382 47,155 43,578	- 0.21 - 0.16 - 0.07	214 619 836	0.19 0.25 0.19	1,102 732 1,004				
- 0.14 - 0.14 - 0.15	596,648 594,874 607,552	- 0.50 - 0.48 - 0.50	38,323 30,745 42,187	- 0.18 0.03 0.09	311 234 417	0.28 0.63 1.09	1,033 1,123 1,069				
- 0.15 - 0.15 - 0.15	600,726 609,181 600,646	- 0.49 - 0.44 - 0.36	42,722 41,476 43,089	0.37 0.44 0.91	633 1,240 687	1.12 1.35 2.27	182 513 742				
- 0.07	604,779	- 0.11	26,039	1.15	678	1.90	1,466				

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

July

Loans to household:	s											
Loans for consumption 4 with an initial rate fixation of												
Total (including charges)	Total		of which: Renegotiated l	oans 9	floating rate o up to 1 year 9			over 1 year and up to 5 years				
Annual percentage rate of charge 10 % p.a.	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million		
5.55 5.54 5.54	5.47 5.44 5.46	9,279 8,696 8,474	6.30 6.29 6.28	1,924 1,747 1,669	7.15 7.54 7.59	386 340 323	4.26 4.30 4.29	3,014 2,828 2,783	5.98 5.89 5.94	5,880 5,528 5,368		
5.58 5.46 5.35	5.50 5.43 5.36	8,375 8,076 6,927	6.30 6.17 6.04	1,660 1,524 1,221	7.55 7.24 6.75	345 408 465	4.34 4.34 4.31	2,677 2,691 2,445	5.95 5.88 5.84	5,353 4,976 4,017		
5.53 5.41 5.34	5.54 5.45 5.38	8,604 8,372 10,208	6.19 6.14 6.24	1,862 1,641 1,935	7.29 7.31 7.28	383 378 397	4.29 4.28 4.08	2,643 2,652 3,481	6.01 5.90 5.97	5,578 5,343 6,330		
5.70 5.81 5.99	5.64 5.77 5.95	8,523 9,788 9,509	6.35 6.51 6.79	1,682 1,924 1,926	7.93 8.04 8.50	316 332 307	4.46 4.56 4.66	2,654 3,067 3,054	6.08 6.24 6.46	5,553 6,390 6,149		
6.15	6.12	9,067	6.97	1,771	8.76	314	4.80	2,968	6.65	5,785		

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

For footnotes * and 1 to 6, see p. 44°. For footnote x see p. 47°. + For deposits with an agreed maturity and all loans excluding revolving loans and overdrafts, credit card debt: new business covers all new agreements between households or non-financial corporations and the bank. The interest rates are calculated as volume-weighted average rates of all new agreements concluded during the reporting month. For overnight deposits, deposits redeemable at notice, revolving loans and overdrafts, credit card debt: new business is collected in the same way as outstanding amounts for the sake of simplicity. This means that all outstanding deposit and lending business at

the end of the month has to be incorporated in the calculation of average rates of interest. **7** Estimated. The volume of new business is extrapolated to form the underlying total using a grossing-up procedure. **8** Including non-financial corporations' deposits; including fidelity and growth premiums. **9** Excluding overdrafts. **10** Annual percentage rate of charge, which contains other related charges which may occur for enquiries, administration, preparation of the documents, guarantees and credit insurance

VI. Interest rates

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

		11.7											
	Loans to househo	ias (cont.a)											
	Loans to households for other purposes 5 with an initial rate fixation of												
	Total		of which: Renegotiated loa	ins 9	floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years				
Reporting period	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million			
	Loans to ho	useholds											
2021 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 June	2.03 2.32 2.39	4,980 4,277 5,035	1.70 2.03 1.96	1,170 913 1,196	1.82 1.84 1.81	1,829 1,387 1,990	2.33 2.89 3.04	760 628 717	2.10 2.46 2.68	2,391 2,262 2,328			
July	2.62	4,604	1.97	1,195	2.06	1,980	3.24	629	2.97	1,995			
	of which:	Loans to sole	e proprietors										
2021 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 June	2.13 2.40 2.50	3,210 2,886 3,461		: : :	1.92 2.00 2.06	1,079 928 1,239	2.42 2.95 3.13	577 493 538	2.16 2.48 2.62	1,554 1,465 1,684			
July	2.76	2,994	-	.	2.21	1,252	3.36	474	3.08	1,268			

	Loans to households (cont'd)												
	Housing loans ³ with an initial rate fixation of												
ırs	over 10 years	over 5 year and up to 10 years		d	over 1 year an up to 5 years	r	floating rate o up to 1 year 9	loans 9	of which: Renegotiated		Total	Total (including charges)	
e 1 Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Annual percentage rate of charge 10 % p.a.	Erhebungs- zeitraum
												Total loans	
28 10,922 27 10,946	1.34 1.28 1.27	9,216 7,975 7,631	1.14 1.10 1.09	1,649 1,514 1,451	1.32 1.37 1.33	2,686 2,324 2,204	1.76 1.78 1.80	3,808 3,095 2,986	1.36 1.32 1.33	25,121 22,735 22,232	1.31 1.27 1.26	1.36 1.31 1.31	2021 July Aug. Sep.
33 10,759 34 11,194	1.29 1.33 1.34	8,013 8,171 8,614	1.10 1.15 1.16	1,613 1,564 1,661	1.33 1.43 1.39	2,353 2,022 2,383	1.79 1.83 1.80	3,683 3,079 3,446	1.29 1.31 1.27	22,630 22,516 23,851	1.28 1.32 1.32	1.32 1.36 1.37	Oct. Nov. Dec.
18 13,100 71 15,770	1.37 1.48 1.71	8,661 9,322 11,809	1.19 1.29 1.50	1,706 1,606 1,987	1.35 1.45 1.65	2,527 2,270 2,704	1.83 1.86 1.93	4,969 4,706 6,216	1.33 1.43 1.63	25,085 26,299 32,270	1.35 1.45 1.65	1.39 1.49 1.69	2022 Jan. Feb. Mar.
12 12,041 77 10,208	2.04 2.42 2.77	10,907 8,659	2.12 2.46	1,834 1,663	2.10 2.45	2,491 2,461	2.10 2.19	4,758 3,897	2.20 2.46	27,272 22,990	2.25 2.57	2.29 2.62	May June
04 8,626	3.04	8,023	2.73	1,592	2.64	2,814	2.33	3,828	4			1	July
									. 11			of which: C	
25 4,479 24 4,706	1.33 1.25 1.24	3,442 3,299	1.03 1.03	665 664	1.21 1.13	821 802	1.67 1.67			9,407 9,471	1.21 1.20		Aug. Sep.
29 4,605 31 4,971	1.25 1.29 1.31	3,670 3,784	1.08 1.09	685 727	1.22 1.22	708 783	1.72 1.70			9,668 10,265	1.23 1.25		Nov. Dec.
5,652 7,019	1.33 1.43 1.64	4,366 5,637	1.24 1.46	826 974	1.28 1.54	749 936	1.74 1.80			11,593 14,566	1.37 1.57		Feb. Mar.
5,361 57 4,573	1.96 2.34 2.67 2.91	5,030 4,073	2.11 2.41	856 774	2.08 2.37	839 865	1.96 2.08			12,086 10,285	2.20 2.49	:	May June
.32 .2 .3 .4 .6 .9	2 2 2 3 3 3 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2	3,906 3,442 3,299 3,569 3,670 3,784 4,087 4,366 5,637 4,658 5,030	2.46 2.73 1.08 1.03 1.02 1.08 1.09 1.13 1.24 1.46 1.77 2.11	1,663 1,592 749 665 664 746 685 727 861 826 974 831 856	2.45 2.64 1.15 1.21 1.13 1.16 1.22 1.22 1.22 1.18 1.28 1.54 1.71 2.08	2,461 2,814 934 821 802 874 708 783 942 749 936 804 839	2.19 2.33 1.66 1.67 1.67 1.70 1.72 1.70 1.75 1.74 1.80 1.88 1.96		2.46 2.48	22,990 21,054 ed loans 10,467 9,407 9,471 9,766 9,668 10,265 11,005 11,593 14,566 11,672 12,086	2.57 2.80 Collateralised 1.25 1.21 1.20 1.23 1.25 1.28 1.37 1.57 1.86 2.20		June July 2021 July Aug. Sep. Oct. Nov. Dec. 2022 Jan. Feb. Mar. Apr. May

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

VI. Interest rates

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

	Loans to househo	lds (cont'd)				Loans to non-financial corporations					
			of which:						of which:		
	Revolving loans 12 and overdrafts 13 Credit card debt 1		Revolving loans and overdrafts 1		Extended credit card debt		Revolving loans and overdrafts 1 Credit card debt	3	Revolving loans 12 and overdrafts 13		
g	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume 2 € million	
y Ig. p.	7.11 7.12 7.19	35,046 35,662 36,720	6.90 6.99 7.06	27,102 27,343 28,404	15.54 15.58 15.53	3,987 4,039 4,098	2.75 2.79 2.79	73,098 72,942 74,750	2.76 2.80 2.81	72,788 72,622 74,389	
t. ov. c.	7.10 7.01 7.11	35,633 36,013 36,163	6.94 6.90 6.93	27,535 27,565 28,124	15.02 15.01 14.94	4,109 4,153 4,165	2.81 2.77 2.73	75,550 76,312 76,261	2.83 2.79 2.75	75,182 75,909 75,914	
n. b. ar.	7.20 7.08 7.14	36,030 36,335 37,360	6.97 6.95 7.02	28,433 28,225 29,314	14.97 14.96 14.94	4,110 4,103 4,076	2.61 2.62 2.71	81,598 85,173 87,104	2.62 2.63 2.72	81,290 84,843 86,709	
or. ay ne	7.00 6.96 7.01	36,819 37,636 38,876	6.91 6.98 7.02	28,444 28,730 30,004	14.96 14.89 14.84	4,100 4,143 4,192	2.65 2.63 2.66	88,202 89,402 93,301	2.66 2.65 2.67	87,834 88,972 92,870	
V	7.04	37.549	6.98	28.881	14.80	4.246	2.68	93.917	2.69	93.515	

	Revolving loans 13 and overdrafts 13 Credit card debt 1		Revolving loans and overdrafts 1		Extended credit card debt		Revolving loans 12 and overdrafts 13 Credit card debt 14		
Reporting period			Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume ² € million	Effective interest rate 1 % p.a.	Volume ² € million	
2021 July Aug. Sep.	7.11 7.12 7.19	35,046 35,662 36,720	6.90 6.99 7.06	27,102 27,343 28,404	15.54 15.58 15.53	3,987 4,039 4,098	2.75 2.79 2.79	73,098 72,942 74,750	
Oct. Nov. Dec.	7.10 35,633 7.01 36,013 7.11 36,163		6.94 6.90 6.93	27,535 27,565 28,124	15.02 15.01 14.94	4,109 4,153 4,165	2.81 2.77 2.73	75,550 76,312 76,261	
2022 Jan. Feb. Mar.	7.20 7.08 7.14	36,030 36,335 37,360	6.97 6.95 7.02	28,433 28,225 29,314	14.97 14.96 14.94	4,110 4,103 4,076	2.61 2.62 2.71	81,598 85,173 87,104	
Apr. May June	7.00 6.96 7.01	36,819 37,636 38,876	6.91 6.98 7.02	28,444 28,730 30,004	14.96 14.89 14.84	4,100 4,143 4,192	2.65 2.63 2.66	88,202 89,402 93,301	
July	7.04 37,549		6.98	28,881	14.80	4,246	2.68	93,917	
	Loans to non-fina	ncial corporations	(cont'd)						

	Loans to n	Loans to non-financial corporations (cont'd)														
			of which:		Loans up t	o €1 millior	15 with an	initial rate	fixation of		Loans over €1 million 15 with an initial rate fixation of					
	Total		Renegotiat	ted	floating rate or over 1 year a up to 1 year 9 up to 5 years				over 5 yea	rs	floating ra up to 1 ye		over 1 yea up to 5 ye		over 5 yea	ırs
Reporting period	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million
	Total lo	ans														
2021 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 June	1.53 1.49 2.19	74,483 78,588 123,645	1.51 1.73 1.58	19,771 18,948 28,803	1.82 1.82 1.88	9,033 9,416 10,561	2.63 2.82 2.97	1,388 1,358 1,465	2.19 2.31 2.59	1,883 1,703 1,483	1.31 1.17 2.16	47,761 53,228 94,434	1.79 2.65 2.35	3,673 3,419 4,558	1.91 2.16 2.43	10,745 9,464 11,144
July	1.89	80,852	1.76	22,525	1.95	10,056	3.12	1,435	2.91	1,400	1.66	53,249	2.43	3,997	2.50	10,715
	of w	hich: Co	llateralis	sed loan	S 11											
2021 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 June	1.72 2.02 1.90	9,355 9,121 13,721			1.92 1.95 1.89	325 385 490	2.15 2.43 2.69	113 114 127	1.93 2.20 2.43	481 461 458	1.53 1.81 1.49	5,242 5,246 8,720	1.68 3.02 2.72	817 726 1,076	2.07 2.14 2.72	2,377 2,189 2,850
July	2.00	11,739	.		2.03	487	2.84	102	2.67	398	1.64	7,081	2.99	1,130	2.41	2,541

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 a funds are horrowed and repaid (c) the loan may be used repeated 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. 13 Overdrafts are defined as debit balances

on current accounts. They include all bank overdrafts regardless of whether they are within or beyond the limits agreed between customers and the bank. 14 Including convenience and extended credit card debt. Convenience credit is defined as the credit granted at an interest rate of 0% in the period between payment transactions effected with the card during one billing cycle and the date at which the debt balances from this specific billing cycle become due. 15 The amount category refers to the single loan transaction considered as new business. x Dominated by the business of one or two banks. Therefore, the value cannot be published due to confidentiality.

VII. Insurance corporations and pension funds

1. Assets

€ billion

	C 21111011									
		Currency				Investment				
End of year/quarter	Total	and deposits 1	Debt securities	Loans 2	Shares and other equity	fund shares/units	Financial derivatives	Technical reserves 3	Non-financial assets	Remaining assets
yeanquarter		orporations ⁴		Louis	other equity	Shares/anies	denvatives	reserves -	433653	ussets
2019 Q3	2,492.5	333.0	468.5	357.2	398.2	768.3	4.6	58.8	38.0	66.0
Q4 2020 Q1	2,473.9 2,426.8	317.5 318.2	448.2 452.0	355.6 364.1	407.3 383.1	778.3 738.2	3.6 4.5	64.9 68.5	39.8 38.6	58.8 59.6
Q2	2,517.5	317.0	460.5	371.9	409.4	788.7	4.3	68.5	38.7	58.5
Q3 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 68.1	39.0 38.2	58.0 58.7
2021 Q1 Q2	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 Q4	2,633.2 2,649.9	271.8 261.4	471.3 468.7	358.3 355.1	464.4 472.9	882.1 903.3	3.3 3.2	87.9 85.1	38.4 40.8	55.8 59.4
2022 Q1	2,541.0	244.9	441.0	333.9	469.7	860.3	2.7	87.8	41.1	59.6
	Life insur	ance								·
2019 Q3 Q4	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 13.7	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 13.6	20.3 20.6	18.5 17.6
Q4 2021 Q1	1,395.8	183.5 170.4	242.7	229.9 219.6	70.2 74.3	616.5 614.3	3.3 2.1	14.3 14.2	20.8 21.5	14.5 13.2
Q2	1,361.2 1,371.7	164.4	231.5 231.3	219.4	78.0	627.2	2.0	14.1	21.5	13.8
Q3 Q4	1,386.6 1,400.8	159.1 152.4	232.2 232.7	214.8 211.8	87.7 93.5	642.8 658.0	1.9 1.7	13.4 14.6	20.8 21.9	13.8 14.3
2022 Q1	1,312.9	137.6	211.8	193.6	99.9	619.4	0.9	13.9	22.1	13.8
2010.02	Non-life i		1252	70.0	00.61	100.4		20.0	11.3	
2019 Q3 Q4	682.6 673.5	116.9 111.2	135.3 130.4	79.9 79.6	80.6 83.6	189.4 193.3	0.4 0.4	38.8 36.2	11.3 12.2	30.0 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
Q2 Q3	720.3 727.5	103.3 98.8	140.4 140.2	83.5 83.8	90.6 93.9	221.6 223.3	0.4 0.4	40.4 46.6	12.8 12.9	27.3 27.8
Q4 2022 Q1	732.4 721.4	94.7 91.9	139.9 134.1	84.8 81.0	97.8 98.9	227.8 224.6	0.3 0.2	44.7 46.0	14.0 14.0	28.4 30.7
2022 Q.	Reinsurar	•	.5	01.0	30.3	220	0.2			, , ,
2019 Q3	459.9	10.8	90.7	52.1	259.6	15.3	1.0	9.6	5.9	15.0
Q4 2020 Q1	475.2 461.7	11.5 15.7	90.2 89.8	58.3 63.7	262.6 241.0	14.5 13.3	0.8 1.9	15.1 15.9	6.6 6.3	15.6 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	488.5	12.3	96.7	56.3	270.2	14.3	1.0	16.3	4.7	16.9
2021 Q1 Q2	497.3 499.4	13.9 12.8	95.8 94.8	58.5 58.4	274.7 280.9	15.4 15.6	1.4 1.0	17.7 18.1	4.7 4.6	15.3 13.1
Q3 Q4	519.0 516.7	13.9 14.3	98.9 96.1	59.6 58.6	282.7 281.6	16.1 17.5	1.0 1.1	28.0 25.9	4.7 4.9	14.2 16.6
2022 Q1	506.6	15.5	95.1	59.3	271.0	16.3	1.6	27.9	5.0	15.0
	Pension fun									
2019 Q3 Q4	726.5 735.8	85.6 85.2	80.7 79.6	31.0 31.1	36.5 38.7	415.5 421.1	_ _	8.6 8.8	46.7 48.9	22.0 22.3
2020 Q1 7	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
Q2 Q3	638.5	91.1	59.6	50.2	10.1	394.7	0.2	11.6	18.5	2.5
Q4 2021 Q1	662.9 664.3	88.9 86.2	60.6 58.7	49.5 48.6	10.3 10.8	419.5 427.9	0.2 0.2	11.9 12.1	18.8 17.6	3.1 2.3
Q2 Q3	683.2 689.8	85.0 82.9	60.2 60.4	49.3 48.8	11.3 11.8	445.1 453.6	0.1 0.1	12.1 12.2	17.8 17.8	2.3 2.2
Q4	709.8	82.1	60.0	48.7	11.3	473.5	0.1	12.4	18.4	3.2
2022 Q1	687.7	76.4	56.9	46.3	12.1	462.6	0.0	12.9	18.4	2.1

Sources: The calculations for the insurance sectors are based on supervisory data according to Solvency I and II and for pension funds on IORP supervisory data and own data collections as of 2020 Q1. Until 2019 Q4 these are compiled using Solvency I supervisory data, supplemented by voluntary reports and own calculations. 1 Accounts receivable to monetary financial institutions, including registered bonds, borrowers' note loans and registered Pfandbriefe. For pension funds as of 2020 Q1 fair values, previously book values. 2 Including deposits retained on assumed reinsurance as well as registered bonds, borrowers' note loans and registered Pfandbriefe. For pension funds

as of 2020 Q1 fair values, previously book values. **3** Including reinsurance recoverables and claims of pension funds on pension managers. **4** Valuation of listed securities at the corresponding consistent price from the ESCB's securities database. **5** Not including the reinsurance business conducted by primary insurers, which is included there. **6** The term "pension funds" refers to the institutional sector "pension funds" of the European System of Accounts. Pension funds thus comprise company pension schemes and occupational pension schemes for the self-employed. Social security funds are not included. **7** Change in data sources.

VII. Insurance corporations and pension funds

2. Liabilities

€ billion

	C Simon									
					Technical reserves					
End of		Debt securities		Shares and		Life/ pension		Financial	Remaining	
year/quarter	Total	issued	Loans 1	other equity	Total 2	entitlements 3	Non-life	derivatives	liabilities	Net worth 4
	Insurance co									.
2019 Q3 Q4	2,492.5 2,473.9	31.7 31.7	69.3 75.8	488.5 515.3	1,769.4 1,714.9	1,543.0 1,499.6	226.4 215.3	2.2 1.9	131.5 134.4	-
2020 Q1 Q2	2,426.8 2,517.5	31.8 33.1	82.4 82.2	464.3 505.3	1,721.8 1,767.6	1,483.2 1,527.7	238.6 239.9	2.4 1.9	124.1 127.3	-
Q3 Q4	2,547.1	34.3 36.6	80.0 79.7	515.7	1,767.6 1,785.5 1,799.0	1,549.1	236.4 219.8	1.7	129.9 130.2	-
2021 Q1	2,587.4 2,575.3	34.8	81.4	540.4 551.7	1,778.7 1,793.7 1,793.7	1,579.2 1,541.3	237.4	1.6 2.5	126.2	
Q2 Q3	2,591.4 2,633.2	33.0 35.4	81.3 82.8	558.9 567.3	1,818.0	1,556.4 1,569.1	237.3 248.9	2.2 2.5	122.2 127.0	-
Q4 2022 Q1	2,649.9 2,541.0	36.1 34.4	82.0 82.2	579.7 563.8	1,821.1 1,728.4	1,578.4 1,474.6	242.7 253.8	2.5 4.0	128.6 128.3	-
2022 Q1	Life insur		02.2	303.8	1,720.4	1,474.0	255.8	4.0	120.3	' -
2019 Q3	1,350.1	3.7	15.6	116.0	1,171.9	1,171.9	-	0.6	42.4	ı -
Q4 2020 Q1	1,325.2 1,295.7	3.6 3.6	19.1 19.3	127.6 114.2	1,129.7 1,117.8	1,129.7 1,117.8	-	0.5 0.6	44.7 40.3	-
Q2 Q3	1,347.1 1,369.2	3.8 3.9	19.2 19.5	129.8 136.8	1,150.3 1,164.7	1,150.3 1,164.7	- -	0.5 0.5	43.4 43.7	-
Q4	1,395.8	3.9	20.7	142.8	1,185.6	1,185.6		0.5	42.2	-
2021 Q1 Q2	1,361.2 1,371.7	3.3 3.3	19.9 20.4	143.1 144.2	1,154.3 1,164.9	1,154.3 1,164.9	_	1.0 1.0	39.6 37.9	-
Q3 Q4	1,386.6 1,400.8	3.3 3.3	19.3 20.7	148.1 148.2	1,176.4 1,185.5	1,176.4 1,185.5	-	1.1 0.9	38.4 42.2	-
2022 Q1	1,312.9	3.2	19.9	142.8	1,103.6	1,103.6	-	1.4	42.1	-
	Non-life i	_								.
2019 Q3 Q4	682.6 673.5	1.2 1.2	9.1 9.3	149.7 153.7	471.9 457.2	354.8 349.4	117.1 107.8	0.1 0.1	50.6 52.0	-
2020 Q1 Q2	669.3 685.4	1.3 1.3	9.8 9.5	141.9 149.3	468.2 478.1	344.4 355.6	123.8 122.5	0.1 0.1	48.0 47.1	-
Q3 Q4	693.0 703.1	1.2 1.3	9.6 9.7	151.9 157.9	482.1 482.9	362.3 368.7	119.8 114.2	0.1 0.0	48.1 51.2	-
2021 Q1	716.8	1.2	10.6	162.8	491.6	362.6	129.0	0.1	50.5	-
Q2 Q3	720.3 727.5	1.2 1.2	10.5 10.5	166.4 169.2	493.6 499.0	366.3 367.9	127.3 131.2	0.1 0.2	48.4 47.5	-
Q4 2022 Q1	732.4 721.4	1.4 1.3	10.8 11.8	176.2 174.1	493.0 483.8	367.6 347.2	125.4 136.6	0.2 0.3	50.9 50.1	-
2022 Q1	Reinsurar		11.0	1711	405.0	347.2	150.0	0.5	30.1	'
2019 Q3	459.9	26.8	44.7	222.8	125.6	16.3	109.3	1.5	38.5	ı -
Q4 2020 Q1	475.2 461.7	26.9 26.9	47.4 53.3	234.0 208.1	128.0 135.9	20.6 21.0	107.5 114.9	1.3 1.7	37.7 35.8	-
Q2 Q3	485.0 485.0	28.1 29.2	53.5 50.9	226.2 227.0	139.1 138.7	21.8 22.1	117.4 116.6	1.3 1.0	36.8 38.1	-
Q4	488.5	31.4	49.3	239.6	130.4	24.8	105.6	1.0	36.7	-
2021 Q1 Q2	497.3 499.4	30.2 28.5	50.9 50.4	245.8 248.3	132.8 135.2	24.4 25.2	108.4 110.0	1.4 1.1	36.2 35.9	-
Q3 Q4	519.0 516.7	30.9 31.4	53.0 50.5	250.1 255.3	142.7 142.6	24.9 25.3	117.8 117.3	1.3 1.4	41.1 35.5	-
2022 Q1	506.6	30.0	50.4	246.8	140.9	23.8	117.2	2.3	36.1	-
	Pension fun									
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 Q2	601.0 626.0	- -	1.6 1.6	22.6 25.6	497.5 507.3	496.9 506.7	_	0.3 0.3	8.8 8.9	70.3 82.4
Q3 Q4	638.5 662.9	- -	1.6 1.6	27.3 28.4	511.4 528.5	510.8 527.9	-	0.3 0.3	8.9 9.0	88.9 95.1
2021 Q1	664.3	_	1.6	28.8	529.3	528.1	_	0.3	8.6	95.8
Q2 Q3	683.2 689.8	- -	1.8 1.8	31.1 31.5	536.5 541.1	534.8 538.9	_	0.2 0.2	9.3 9.3	104.3 106.0
Q4 2022 Q1	709.8 687.7	- -	1.9 1.4	31.8 28.7	560.5 555.1	557.6 552.3	-	0.1 0.1	9.2 7.3	106.4 95.0
4.	337.7	1	1.7	20.7	333.1	332.3		0.1	7.5	33.0

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

	€ million										
	Debt securities										
		Sales					Purchases				
		Domestic debt	securities 1				Residents				
	Sales = total		Bank	Corporate	Public debt	Foreign debt		Credit in- stitutions including building			
Period	pur- chases	Total	debt securities	bonds (non-MFIs) 2	secur- ities	secur- ities 3	Total 4	and loan associations 5	Deutsche Bundesbank	Other sectors 6	Non- residents 7
2010 2011 2012 2013 2014 2015 2016	146,620 33,649 51,813 - 15,971 64,775 33,024 71,380	- 1,212 13,575 - 21,419 - 101,616 - 31,962 - 36,010 27,429	- 7,621 - 46,796 - 98,820 - 117,187 - 47,404 - 65,778 19,177	24,044 850 - 8,701 153 - 1,330 26,762 18,265	- 17,635 59,521 86,103 15,415 16,776 3,006 - 10,012	147,831 20,075 73,231 85,645 96,737 69,034 43,951	92,682 - 23,876 - 3,767 16,409 50,408 116,493 164,148	- 103,271 - 94,793 - 42,017 - 25,778 - 12,124 - 66,330 - 58,012	22,967 36,805 - 3,573 - 12,708 - 11,951 121,164 187,500	172,986 34,112 41,823 54,895 74,483 61,659 34,660	53,938 57,525 55,581 - 32,379 14,366 - 83,471 - 92,768
2017 2018 2019	54,840 64,682 136,117	11,563 16,630 68,536	1,096 33,251 29,254	7,112 12,433 32,505	3,356 - 29,055 6,778	43,277 48,052 67,581	137,907 93,103 59,013	- 71,454 - 24,417 8,059	161,012 67,328 2,408	48,349 50,192 48,546	- 83,067 - 28,421 77,104
2020 2021	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
2021 Aug. Sep.	27,503 27,619	34,709 17,160	6,868 12,855	1,227 8,183	26,615 - 3,878	- 7,206 10,460	11,907 32,908	- 5,337 6,387	17,312 17,663	- 68 8,858	15,596 - 5,289
Oct. Nov. Dec.	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
2022 Jan. Feb. Mar.	49,962 32,181 62,964	25,410 27,557 43,608	9,976 10,598 23,278	6,559 3,056 7,972	8,876 13,902 12,358	24,552 4,624 19,356	40,530 25,329 46,555	- 2,870 8,057 6,811	14,990 14,793 10,709	28,409 2,478 29,035	9,432 6,852 16,409
Apr. May June	- 17,423 23,669 23,509	- 2,212 23,911 12,731	- 3,140 4,066 5,517	707 4,901 – 1,563	222 14,944 8,777	- 15,211 - 242 10,778	- 2,285 25,954 17,236	- 16,927 5,485 8,471	13,068 14,400 – 2,289	1,574 6,069 11,054	- 15,138 - 2,285 6,273
July	- 23,915	- 12,981	- 7,006	11,035	- 17,011	- 10,934	- 12,882	10,710	- 13,670	- 9,922	- 11,033

€ million

	Shares							
	Situres	Sales		Purchases				
	Sales			Residents				
Period	total purchases	Domestic shares 8	Foreign shares 9	Total 10	Credit insti- tutions 5	Other sectors 11	Non- residents 12	
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2021 Aug. Sep. Oct. Nov.	37,767 25,833 15,061 20,187 43,501 44,165 30,896 51,571 54,883 46,021 83,859 125,541 11,293 13,516 10,042 6,393	20,049 21,713 5,120 10,106 18,778 7,668 4,409 15,570 16,188 9,076 17,771 49,066 4,667 4,660 5,498 2,367	17,718 4,120 9,941 10,081 24,723 36,497 26,487 36,001 38,695 36,945 66,088 76,475 6,626 8,855 4,544	36,406 40,804 11,405 17,336 43,950 34,437 31,037 49,913 83,107 33,675 115,960 124,105 11,585 15,099	7,340 670 10,259 11,991 17,203 - 5,421 - 5,143 7,031 - 11,184 - 1,119 27 10,869 204 3,374 1,401	29,066 40,134 4,146 5,345 26,747 39,858 36,180 42,882 94,291 34,794 115,933 113,236 11,381 11,725 13,659 12,930		1,360 14,971 656 2,851 449 9,728 141 1,658 28,224 12,346 32,101 1,436 291 1,583 5,018 9,235
Dec. 2022 Jan. Feb. Mar. Apr. May June	13,692 6,155 - 5,455 9,478 6,207 3,197 - 25,843	10,698 396 628 359 150 1,411 894	2,995 5,760 - 6,084 9,119 6,056 1,786 - 26,737	6,987 9,711 - 4,539 14,188 9,419 3,880 - 24,422	- 1,848 2,076 - 1,599 - 1,736 477 1,600 - 3,308	8,835 7,635 - 2,940 15,924 8,942 2,280 - 21,114	- - - -	6,705 3,556 916 4,710 3,212 684 1,421
July	- 1,920	1,374	- 3,294	- 159	- 2,051	1,892	_	1,761

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

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

2. Sales of debt securities issued by residents *

€ million, nominal value

	C Trimion, Floriniar 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 2016 3 2017 3 2018 2019	1,359,422 1,206,483 1,047,822 1,148,091	852,045 717,002 619,199 703,416 783,977	35,840 29,059 30,339 38,658 38,984	13,376 7,621 8,933 5,673 9,587	581,410 511,222 438,463 534,552 607,900	221,417 169,103 141,466 124,530	106,675 73,371 66,290 91,179	400,701 416,108 362,332 353,496 407,197
2019 2020 6 2021	1,285,541 1,870,084 1,658,004	778,411 795,271	39,548 41,866	18,327 17,293	643,380 648,996	127,504 77,156 87,116	94,367 184,206 139,775	907,466 722,958
2021 Nov.	129,342	59,684	2,153	1,000	47,873	8,658	10,898	58,759
Dec.	83,511	37,389	2,675	1,707	28,987	4,020	5,058	41,064
2022 Jan.	136,055	69,043	11,165	1,510	50,426	5,942	13,257	53,754
Feb.	123,858	67,336	5,174	1,364	54,198	6,600	9,451	47,071
Mar.	168,436	85,551	5,602	875	72,212	6,862	16,473	66,412
Apr.	129,238	68,828	3,091	140	59,957	5,640	8,317	52,093
May	139,081	71,010	3,777	1,809	60,594	4,830	15,238	52,833
June	141,105	74,361	5,924	770	62,377	5,290	12,335	54,408
July	148,625	72,487	5,291	348	59,203	7,645	21,763	54,375
		ecurities with ma						
2011	368,039	153,309	13,142	8,500	72,985	58,684	41,299	173,431
2012	421,018	177,086	23,374	6,482	74,386	72,845	44,042	199,888
2013	372,805	151,797	16,482	10,007	60,662	64,646	45,244	175,765
2014	420,006	157,720	17,678	8,904	61,674	69,462	56,249	206,037
2015	414,593	179,150	25,337	9,199	62,237	82,379	68,704	166,742
2016 3	375,859	173,900	24,741	5,841	78,859	64,460	47,818	154,144
2017 3	357,506	170,357	22,395	6,447	94,852	46,663	44,891	142,257
2018	375,906	173,995	30,934	4,460	100,539	38,061	69,150	132,760
2019	396,617	174,390	26,832	6,541	96,673	44,346	69,682	152,544
2020 6	658,521	165,097	28,500	7,427	90,839	38,330	77,439	415,985
2021	486,335	171,799	30,767	6,336	97,816	36,880	64,234	250,303
2021 Nov.	29,324	9,512	1,705	500	4,165	3,142	5,667	14,145
Dec.	15,792	4,714	1,625	1,150	1,258	680	1,259	9,820
2022 Jan.	50,594	25,812	9,165	1,510	12,587	2,550	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
June	37,845	7,517	2,676	500	2,342	1,999	4,128	26,200
July	47,135	12,838	2,626	250	8,760	1,201	13,373	20,925
	Net sales 5							
2011	22,518	- 54,582	1,657	- 44,290	32,904	- 44,852	- 3,189	80,289
2012	- 85,298	- 100,198	- 4,177	- 41,660	- 3,259	- 51,099	- 6,401	21,298
2013	- 140,017	- 125,932	- 17,364	- 37,778	- 4,027	- 66,760	1,394	- 15,479
2014	- 34,020	- 56,899	- 6,313	- 23,856	- 862	- 25,869	10,497	12,383
2015	- 65,147	- 77,273	9,271	- 9,754	- 2,758	- 74,028	25,300	- 13,174
2016 3	21,951	10,792	2,176	- 12,979	16,266	5,327	18,177	- 7,020
2017 3	2,669	5,954	6,389	- 4,697	18,788	- 14,525	6,828	- 10,114
2018	2,758	26,648	19,814	- 6,564	18,850	- 5,453	9,738	- 33,630
2019	59,719	28,750	13,098	- 3,728	26,263	- 6,885	30,449	519
2020 6	473,795	28,147	8,661	8,816	22,067	- 11,398	49,536	396,113
2021	210,231	52,578	17,821	7,471	22,973	4,314	35,531	122,123
2021 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.	10,728	12,636	6,459	- 397	5,370	1,203	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	24,352	3,706	685	1,774	1,967	- 721	3,607	17,039
June	8,820	3,351	1,834	150	1,840	- 474	- 411	5,880
July	9,336	9,581	1,183	4,070	7,083	390	11,189	- 10,945

^{*} 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. $\bf 6$ 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

			Bank de	ebt 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 securities
2011 2012 2013 2014		3,370,721 3,285,422 3,145,329 3,111,308	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	600,640 1 548,109 481,273 455,274	247,585 1 220,456 221,851 232,342	1,607,226 1 1,650,617 1,635,138 1,647,520
2015 20161 20171 2018 2019	2	3,046,162 3,068,111 3,090,708 3,091,303 3,149,373		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	257,612 275,789 2 302,543 12 313,527 2 342,325	1,634,377 1,627,358 1,617,244 1,583,616 1,584,136
2020 4 2021	2	3,545,200 3,781,975	2	1,174,817 1,250,777	183,980 202,385	55,959 63,496	687,710 731,068	2 247,169 253,828	2 379,342 414,791	1,991,040 2,116,406
2021 Nov. Dec.		3,805,409 3,781,975		1,262,369 1,250,777	200,532 202,385	63,672 63,496	741,009 731,068	257,157 253,828	420,551 414,791	2,122,489 2,116,406
2022 Jan. Feb. Mar.		3,794,503 3,806,369 3,851,741		1,267,762 1,277,560 1,302,963	209,367 212,228 213,413	63,110 63,984 64,234	739,737 746,531 769,133	255,548 254,817 256,183	420,868 416,767 424,622	2,105,873 2,112,042 2,124,156
Apr. May June		3,852,799 3,870,240 3,888,933		1,311,863 1,309,630 1,319,854	214,466 214,981 216,989	63,960 65,720 65,910	776,664 773,798 781,469	256,773 255,131 255,486	424,076 427,180 427,460	2,116,860 2,133,430 2,141,620
July		3,884,328		1,318,305	218,402	61,866	781,242	256,796	439,071	2,126,952
	Break	down by	remai	ning perio	d to maturity ³				Position a	t end-July 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		1 210 489 710 048 584 714 368 951 302 721 248 629 118 076 340 699		465 953 312 167 224 186 124 570 85 728 62 215 13 415 30 070	56 868 57 951 47 653 31 907 10 641 8 975 3 388 1 018	23 352 15 864 9 829 5 898 2 417 4 057 360 89	315 674 179 206 113 815 65 912 51 385 38 523 7 547 9 181	70 059 59 146 52 890 20 853 21 285 10 659 2 121 19 783	81 251 81 305 63 280 40 728 29 638 35 887 13 220 93 762	663 285 316 576 297 248 203 653 187 355 150 527 91 441 216 867

^{*} 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

			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 of legal form	reduction of capital and liquidation	Memo item: Share circulation at market values (market capita- lisation) level at end of period under review ²
2011	177,167	2,570	6,390	552	462	- 552	- 762	- 3,532	924,214
2012	178,617	1,449	3,046	129	570	- 478	594	- 2,411	1,150,188
2013	171,741	- 6,879	2,971	718	476	- 1,432	- 619	- 8,992	1,432,658
2014	177,097	5,356	5,332	1,265	1,714	- 465	- 1,044	- 1,446	1,478,063
2015	177,416	319	4,634	397	599	- 1,394	- 1,385	- 2,535	1,614,442
2016	176,355	- 1,062	3,272	319	337	- 953	- 2,165	- 1,865	1,676,397
2017	178,828	2,471	3,894	776	533	- 457	- 661	- 1,615	1,933,733
2018	180,187	1,357	3,670	716	82	- 1,055	- 1,111	- 946	1,634,155
2019 34	183,461	1,673	2,411	2,419	542	- 858	- 65	- 2,775	1,950,224
2020 4	181,881	- 2,872	1,877	219	178	- 2,051	- 460	- 2,635	1,963,588
2021	186,580	4,152	9,561	672	35	- 326	- 212	- 5,578	2,301,942
2021 Nov.	188,352	- 109	85	_	6	- 5	- 1	- 194	2,198,231
Dec.	186,580	- 2,595	524	16	-	- 201	- 106	- 2,827	2,301,942
2022 Jan.	186,830	250	341	0	2	- 9	- 23	- 61	2,211,900
Feb.	186,737	- 110	64	9	40	- 11	- 76	- 137	2,060,901
Mar.	186,993	256	260	91	-	- 0	- 25	- 70	2,076,514
Apr.	186,971	25	47	1	-	- 0	- 4	- 19	2,007,353
May	187,056	84	215	42	0	- 0	- 0	- 172	2,004,018
June	187,396	340	138	29	328	-	- 108	- 47	1,744,789
July	186,233	- 1,194	120	39	-	_ 1	- 25	- 1,326	1,847,025

^{*} 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. ${\bf 3}$ Methodological changes since October 2019. ${\bf 4}$ Changes due to statistical adjustments.

5. Yields and indices on German securities

	Yields o	n debt	securities	outsta	ınding issued l	y residents 1				Price indices 2,3			
			Public del	ot secu	urities		Bank debt secu	rities		Debt securities		Shares	
					Listed Federal secur	ties							
	Total		Total		Total	With a residual maturity of 9 to 10 years 4	Total	With a residual maturity of more than 9 years and up to 10 years	Corporate bonds (non- MFIs)	German bond index (REX)	iBoxx € Germany price index	CDAX share price index	German share index (DAX)
Period	% per a	ınnum								Average daily rate	End-1998 = 100	End-1987 = 100	End-1987 = 1,000
2010 2011 2012 2013 2014		2.5 2.6 1.4 1.4 1.0		2.4 2.4 1.3 1.3	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 3.0	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 5,898.35 7,612.39 9,552.16 9,805.55
2015 2016 2017 2018 2019	_	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
2020 2021	-	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
2022 Mar.		0.6		0.3	0.2	0.3	0.8	1.0	2.1	138.06	102.90	583.63	14,414.75
Apr. May June		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 12,783.77
July Aug.		1.5 1.5		1.2 1.1	1.0 1.0	1.1 1.0	1.9 1.9	2.0 1.9	3.7 3.3	137.14 131.87	100.13 94.89	519.98 493.47	13,484.05 12,834.96

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

Perio 2010 2011	
2012 2013 2014 2015	
2016 2017 2018 2019	
2020 2021	
2022	Jan. Feb. Mar.

Apr. May

July

	Sales							Purchases					
	Open-end o	lomestic mut	ual funds 1 (sales receipts)			Residents					
		Mutual fund general pub	ds open to th olic	ne					Credit institu including bui and loan ass	ilding	Other secto	are 3	
			of which:						and loan ass	ociations 2	Other secto	13.5	1
Sales = :otal our- 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
106,190	84,906	13.381	- 148	8,683	1.897	71.345	21,284	102,591	3,873	6,290	98.718	14,994	3,598
46,512	45,221	- 1,340	- 379	- 2,037	1,562	46,561	1,290	39,474	- 7,576	- 694	47,050	1,984	7,03
111,236 123,736	89,942 91,337	2,084 9,184	- 1,036 - 574	97 5,596	3,450 3,376	87,859 82,153	21,293 32,400	114,676 117,028	- 3,062 771	- 1,562 100	117,738 116,257	22,855 32,300	- 3,43 6,71
140,233 181,889	97,711 146,136	3,998 30,420	- 473 318	862 22,345	1,000 3,636	93,713 115,716	42,521 35,753	144,075 174.018	819 7,362	- 1,745 494	143,256 166,656	44,266 35,259	- 3,84 7,87
156,985	119,369	21,301	- 342	11,131	7,384	98.068	37,615	163,934	2,877	- 3.172	161,057	40.787	- 6,94
153,756 132.033	94,921 103,694	29,560 15,279	- 235 377	21,970 4,166	4,406 6,168	65,361 88,415	58,834 28,339	156,282 138,713	4,938 2,979	1,048 - 2,306	151,344 135,734	57,786 30,645	- 2,52 - 6,68
176,254	122,546	17,032	- 447	5,097	10,580	105,514	53,708	180,772	2,719	- 812	178,053	54,520	- 4,51
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	1,86 - 2,76
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	63 - 28 - 2,56
11,416 5,606 3,171	9,302 5,058 4,539	2,398 1,045 – 191	- 288 251 - 8	1,900 380 - 428	676 381 389	6,904 4,013 4,730	2,113 548 - 1,368	10,952 4,981 2,907	154 - 132 - 1,186	393 - 434 - 72	10,798 5,113 4,093	1,720 982 - 1,296	46 62 26
1,267	2,810	- 965	76	- 1.427	386	3,775	- 1.543	3.037	1,176	74	1,861	- 1,617	- 1.7

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)

	lion

				2020	2021				2022
tem	2019	2020	2021	Q4	Q1	Q2	Q3	Q4	Q1
Acquisition of financial assets									
Currency and deposits	17.93	96.81	40.12	3.69	21.81	- 25.36	19.57	24.11	14.8
Debt securities	- 2.37	2.99	• 3.11	- 0.20	- 1.53	1.90	1.58	1.16	0.6
Short-term debt securities Long-term debt securities Memo item:	- 1.29 - 1.08	1.27 1.72	2.27 0.85	- 0.18 - 0.02	0.12 - 1.65	0.77 1.13	0.26 1.32	1.12 0.05	0.3 0.2
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	0.3 0.1 0.4 - 0.2 0.2
Loans Short-term loans Long-term loans	- 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	5.3 - 2.7 8.0
Memo item:			11.99	3.55	3.5/	- 1.5/		8.08	8.0
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	7.8 2.4 5.4 0.0 - 2.4
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 12.08 0.01 0.72 29.32 3.83 - 0.47 4.31	36.54 29.62 4.92 5.32 - 0.41 - 1.61 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	46.1 44.0 6.0 5.5 0.4 0.1 37.9 2.0 - 1.2 3.2
Insurance technical reserves	1.81	2.76	2.87	0.80	0.78	0.80	0.61	0.68	- 0.1
Financial derivatives	- 0.62	- 27.52	15.95	- - 11.28	13.93	2.31	0.45	0.73	18.6
Other accounts receivable	- 64.82	48.81	81.88	50.68	19.72	_ 6.81	11.76	57.21	2.6
Total	66.15	224.57	346.24	65.38	100.28	15.72	74.37	155.88	88.1
External financing	•	•	•	•	•				•
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	10.9 3.8 7.1
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	5.6 0.7 5.3 - 0.0 0.7 5.3
Loans Short-term loans Long-term loans	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	39.2 34.8 4.4
Memo item: 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	39.2 2.4 36.9 - 0.0 - 0.0
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	3.1 12.9 5.5 5.1 0.1 1.9 - 12.7 2.9
Insurance technical reserves	7.55	5.84	5.84	1.46	1.46	1.46	1.46	1.46	1.4
er and a second of the second	- 1.38	0.54	14.32	1.26	1.27	8.20	3.93	0.93	0.3
Financial derivatives and employee stock options	150							•	

¹ Including unlisted shares.

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

				2020	2021				2022
em	2019	2020	2021	Q4	Q1	Q2	Q3	Q4	Q1
Financial assets									
Currency and deposits	578.6	717.6	721.9	717.6	713.7	693.5	706.4	721.9	726
Debt securities Short-term debt securities Long-term debt securities	49.6 3.7 45.9	51.5 4.8 46.7	54.6 7.4 47.2	51.5 4.8 46.7	49.9 5.0 44.9	51.9 5.9 46.0	53.5 6.2 47.3	54.6 7.4 47.2	53 7 45
Memo item: Debt securities of domestic sectors Non-financial corporations Financial corporations General government Debt securities of the rest of the world	21.1 5.0 13.6 2.6 28.4	22.1 4.7 13.4 4.0 29.4	23.3 5.3 14.5 3.5 31.3	22.1 4.7 13.4 4.0 29.4	21.4 4.7 12.9 3.8 28.5	22.3 5.3 13.4 3.6 29.6	24.0 5.9 14.0 4.1 29.5	23.3 5.3 14.5 3.5 31.3	23 5 14 3
Loans Short-term loans Long-term loans	731.9 568.5 163.5	725.0 566.1 158.8	778.0 605.1 172.9	725.0 566.1 158.8	726.4 562.7 163.7	732.4 570.5 161.9	746.9 582.7 164.2	778.0 605.1 172.9	784 603 181
Memo item: Loans to domestic sectors Non-financial corporations Financial corporations General government Loans to the rest of the world	414.5 339.9 67.3 7.3 317.4	413.3 327.6 77.8 7.9 311.7	422.8 334.7 80.2 7.9 355.2	413.3 327.6 77.8 7.9 311.7	406.9 325.9 73.1 7.9 319.5	406.8 322.5 76.3 7.9 325.6	406.8 321.3 77.6 7.9 340.1	422.8 334.7 80.2 7.9 355.2	430 337 85 7 354
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	2,439.7 2,249.7 342.0 332.9 9.0 52.2 1,855.5 190.0 3.2 186.8	2,534.2 2,329.5 307.0 298.9 8.1 68.1 1,954.4 204.7 7.0 197.7	2,889.9 2,649.7 393.0 384.9 8.0 73.5 2,183.2 240.2 7.6 232.6	2,534.2 2,329.5 307.0 298.9 8.1 68.1 1,954.4 204.7 7.0 197.7	2,701.1 2,488.7 359.4 350.9 8.5 72.5 2,056.8 212.4 6.5 205.9	2,788.2 2,564.1 383.5 375.0 8.5 70.2 2,110.3 224.1 6.3 217.8	2,844.7 2,617.3 371.5 361.7 9.8 72.6 2,173.2 227.5 5.9 221.6	2,889.9 2,649.7 393.0 384.9 8.0 73.5 2,183.2 240.2 7.6 232.6	2,815 2,583 350 342 7 69 2,164 232 6
Insurance technical reserves	59.2	62.1	64.8	62.1	62.8	63.6	64.1	64.8	64
Financial derivatives	31.6	31.1	26.0	31.1	30.9	52.0	106.6	26.0	147
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
Total	5,141.7	5,357.5	5,985.5	5,357.5	5,629.7	5,717.8	5,908.6	5,985.5	6,088
iabilities									
Debt securities Short-term securities Long-term securities Memo item: Debt securities of domestic sectors Non-financial corporations	204.7 11.9 192.9 77.7 5.0	238.3 7.1 231.2 96.0 4.7	252.3 9.6 242.7 100.6 5.3	238.3 7.1 231.2 96.0 4.7	239.5 5.9 233.6 95.6 4.7	249.3 7.2 242.1 99.5 5.3	256.1 10.6 245.5 99.7 5.9	252.3 9.6 242.7 100.6 5.3	245 13 23° 98
Financial corporations General government Households Debt securities of the rest of the world	57.8 0.6 14.4 127.0	78.1 0.4 12.8 142.3	83.2 0.4 11.8 151.7	78.1 0.4 12.8 142.3	78.0 0.5 12.5 143.9	81.2 0.5 12.5 149.8	81.2 0.5 12.1 156.4	83.2 0.4 11.8 151.7	8° (1° 146
Loans Short-term loans Long-term loans Memo item:	2,178.5 831.3 1,347.2	813.1 1,438.4	2,353.2 864.2 1,489.0	813.1 1,438.4	842.6 1,449.6	2,278.4 834.7 1,443.6	847.8 1,454.1	2,353.2 864.2 1,489.0	900 1,49
Loans from domestic sectors Non-financial corporations Financial corporations General government Loans from the rest of the world	1,357.9 339.9 967.7 50.4 820.6	1,385.9 327.6 970.9 87.4 865.7	1,452.3 334.7 1,016.2 101.5 900.9	1,385.9 327.6 970.9 87.4 865.7	1,425.0 325.9 1,009.5 89.6 867.2	1,408.8 322.5 991.5 94.7 869.6	1,416.4 321.3 997.8 97.3 885.5	1,452.3 334.7 1,016.2 101.5 900.9	1,499 33 1,050 10 900
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	3,096.8 734.1 332.9 158.0 51.8 191.3 958.6 1,404.2	3,260.9 739.9 298.9 171.9 56.3 212.8 995.6 1,525.5	3,689.0 924.8 384.9 210.2 69.9 259.7 1,126.3 1,637.9	3,260.9 739.9 298.9 171.9 56.3 212.8 995.6 1,525.5	3,522.5 848.8 350.9 193.0 67.3 237.6 1,081.5 1,592.3	3,640.3 896.1 375.0 202.9 71.8 246.3 1,125.8 1,618.4	3,645.9 882.4 361.7 196.9 70.6 253.2 1,119.2 1,644.2	3,689.0 924.8 384.9 210.2 69.9 259.7 1,126.3 1,637.9	3,39 84 34 19 7 23 98 1,56
Insurance technical reserves	277.3	283.1	289.0	283.1	284.6	286.1	287.5	289.0	29
Financial derivatives and employee stock options	68.8	83.3	47.7	83.3	57.2	76.5	128.7	47.7	136
		1,285.7	1,538.3	1,285.7	1,388.4	1,375.8	1,454.9	1,538.3	1,58

¹ Including unlisted shares.

IX. Financial accounts

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

€	billid	on

Acquisition of financial assets Currency and deposits Currency Deposits Transferable deposits Time deposits Savings deposits (including savings certificates)	2019 146.74 35.26 111.49 111.01 5.95	2020 213.23 61.86	2021	Q4	Q1	Q2	Q3	Q4	2022 Q1
Acquisition of financial assets Currency and deposits Currency Deposits Transferable deposits Time deposits	146.74 35.26 111.49 111.01	213.23 61.86		Q4	QI	Q2	Q3	Q4	Q1
Currency and deposits Currency Deposits Transferable deposits Time deposits	35.26 111.49 111.01	61.86	145.52						
Currency Deposits Transferable deposits Time deposits	35.26 111.49 111.01	61.86	145.52						
Deposits Transferable deposits Time deposits	111.49 111.01		F0 70	75.28	48.30	53.09	12.09	32.05	9.29
Transferable deposits Time deposits		151.36	59.79 85.74	16.47 58.82	12.66 35.64	16.45 36.63	14.97 - 2.87	15.70 16.34	13.4° - 4.1°
	5.95	165.34	90.84	56.20	34.10	37.70	2.69	16.35	- 0.9
J	- 5.47	1.29 - 15.26	- 4.97 - 0.13	2.52 0.10	0.06 1.48	- 1.06 - 0.01	- 3.76 - 1.81	- 0.21 0.20	- 1.13 - 2.0
Debt securities	- 1.86	- 5.94	' - 5.89	- 3.18	- 2.66	 - 1.30	' – 1.32	• - 0.62	• 2.7
Short-term debt securities	- 0.53	0.08	0.31	- 0.16	0.16	0.22	- 0.10	0.03	- 0.0
Long-term debt securities	- 1.34	- 6.02	- 6.20	- 3.03	- 2.82	- 1.52	- 1.22	- 0.64	2.8
Memo item: Debt securities of domestic sectors	- 2.93	- 2.56	- 3.70	- 1.79	- 1.07	- 1.26	- 0.99	- 0.39	2.2
Non-financial corporations	0.21	- 1.32	- 0.83	- 0.62	- 0.28	- 0.13	- 0.25	- 0.16	0.08
Financial corporations	- 2.23	- 1.26	- 2.57	- 1.02	- 0.67	- 1.02	- 0.66	- 0.23	2.34
General government	- 0.92	0.02	- 0.30	- 0.15	- 0.12	- 0.11	- 0.08	0.00	- 0.10
Debt securities of the rest of the world	1.07	- 3.38	- 2.19	- 1.39	- 1.59	- 0.04	- 0.33	- 0.23	0.53
Equity and investment fund shares Equity	49.20 18.92	90.18 48.53	136.53 31.74	21.48 7.73	28.09 2.60	31.66 7.28	34.68 7.57	42.10 14.30	30.5 7.7
Listed shares of domestic sectors	6.61	16.05	14.21	- 0.35	3.39	2.20	2.34	6.29	2.7
Non-financial corporations	3.52	11.92	12.64	0.33	3.12	1.58	1.82	6.12	1.9
Financial corporations	3.09	4.14	1.58	- 0.68	0.27	0.62	0.52	0.17	0.7
Listed shares of the rest of the world	7.45	23.28	10.86	6.44	- 1.72	3.54	3.77	5.26	3.4
Other equity 1 Investment fund shares	4.86 30.28	9.19 41.65	6.68 104.79	1.64 13.75	0.92 25.50	1.54 24.38	1.46 27.11	2.76 27.80	1.6 22.7
Money market fund shares	- 0.32	0.09	0.18	- 0.29	0.09	- 0.07	- 0.01	0.18	- 0.0
Non-MMF investment fund shares	30.60	41.56	104.61	14.04	25.41	24.46	27.12	27.62	22.74
Non-life insurance technical reserves and provision for calls under standardised guarantees	17.95	18.34	20.31	1.73	5.40	5.58	3.73	5.60	5.67
Life insurance and annuity entitlements	37.76	47.65	51.92	13.04	16.40	11.14	13.30	11.07	13.1
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	20.3
Short-term loans	1.02	- 5.61	0.86	- 1.12	0.47	0.79	1.21	- 1.61	0.6
Long-term loans Memo item:	81.55	89.52	97.78	26.27	16.26	26.74	29.47	25.31	19.6
Mortgage loans	68.58	85.69	100.36	25.51	18.69	26.54	29.34	25.78	19.2
Consumer loans	14.42	- 4.29	- 0.89	- 0.66	- 1.14	- 0.09	2.38	- 2.04	0.2
Entrepreneurial loans	- 0.43	2.51	- 0.82	0.29	- 0.82	1.08	- 1.04	- 0.04	0.9
Memo item:	72.44	02 17	04.22	22.27	1400	27.10	20.20	22.01	20.7
Loans from monetary financial institutions Loans from financial corporations other than MFIs	73.41 9.16	83.17 0.75	94.32 4.32	22.37 2.78	14.85 1.89	27.19 0.34	28.38 2.30	23.91 - 0.21	20.7 - 0.3
Loans from general government and rest of the world	- 0.00		0.00			0.00	0.00	0.00	0.0
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	- 0.9
Total	83.30	83.93	99.54	24.77	16.74	27.54	30.93	24.33	19.4

 $^{{\}bf 1}$ 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)

				2020	2021				2022
				2020	2021				2022
Item	2019	2020	2021	Q4	Q1	Q2	Q3	Q4	Q1
Financial assets									
Currency and deposits	2,647.4	2,860.3	3,005.1	2,860.3	2,908.7	2,961.8	2,973.1	3,005.1	3,014.
Currency	262.6	324.4	384.2	324.4	337.1	353.6	368.5	384.2	397
Deposits Transferable deposits	2,384.8 1,509.1	2,535.8 1,674.1	2,620.9 1,764.4	2,535.8 1,674.1	2,571.6 1,708.3	2,608.3 1,746.0	2,604.6 1,748.1	2,620.9 1,764.4	2,616 1,763
Time deposits	301.6	302.8	297.7	302.8	302.9	301.9	297.9	297.7	296
Savings deposits (including savings certificates)	574.2		558.8	558.9	560.4	560.4	558.6	558.8	
Debt securities	121.4	113.3	109.6	113.3	112.8	111.6	110.1	109.6	109
Short-term debt securities	1.6	1.6	1.8	1.6	1.7	1.9	1.8	1.8	1
Long-term debt securities Memo item:	119.8	111.7	107.8	111.7	111.0	109.7	108.3	107.8	107
Debt securities of domestic sectors	81.5	76.7	75.3	76.7	77.3	76.5	75.3	75.3	75
Non-financial corporations	12.4	10.9	9.8	10.9	10.5	10.5	10.2	9.8	9.
Financial corporations	66.6	63.3	63.2	63.3	64.4	63.7	62.9	63.2	63
General government	2.5	2.6	2.2	2.6	2.4	2.3	2.2	2.2	2
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
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
Equity	708.0	806.4	969.1	806.4	868.6	904.8	923.8	969.1	926
Listed shares of domestic sectors Non-financial corporations	223.9 182.3	243.3 204.0	296.0 250.4	243.3 204.0	271.7 228.2	280.0 236.9	287.1 244.3	296.0 250.4	271 224
Financial corporations	41.6	39.2	45.6	39.2	43.4	43.1	42.7	45.6	46
Listed shares of the rest of the world	136.3	180.6	249.3	180.6	199.5	216.5	223.3	249.3	240
Other equity 1	347.8	382.6	423.8	382.6	397.4	408.2	413.4	423.8	414
Investment fund shares	680.3	734.6	932.5	734.6	790.7	841.5	870.5	932.5	913
Money market fund shares Non-MMF investment fund shares	2.3 678.0	2.3 732.2	2.5 930.0	2.3 732.2	2.4 788.3	2.3 839.2	2.3 868.2	2.5 930.0	910
Non-life insurance technical reserves and provision for calls under standardised guarantees	393.8	412.2	432.5	412.2	417.6	423.2	426.9	432.5	438.
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.
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
Financial derivatives and employee stock options	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
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
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
Short-term loans	59.0	53.2	53.0	53.2	53.6	54.4	55.6	53.0	53
Long-term loans	1,778.9	1,871.3	1,970.5	1,871.3	1,886.0	1,915.1	1,944.9	1,970.5	1,987
Memo item:	1 250 7	1 440 3	1 5 40 5	1 440 2	1 464 0	1 402 0	1 [22.0	1 [40 [1 565
Mortgage loans Consumer loans	1,358.7 231.4	1,448.2 226.1	1,548.5 224.5	1,448.2 226.1	1,464.8 224.6	1,493.8 224.4	1,523.0 226.7	1,548.5 224.5	1,565 224
Entrepreneurial loans	247.7	250.2	250.5	250.2	250.2	251.2	250.8	250.5	251
Memo item:	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
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 0.0	99.9 0.0	99.8 0.0	102.2 0.0	104.4 0.0	103.2 0.0	100
Financial derivatives	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
		1,943.9	2,042.6	1,943.9	1,960.2	1,989.0	2,020.3	2,042.6	2,061.
Total	1,857.7								

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

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

	General	Central	State	Local	Social security	General	Central	State	Local	Social security	
	government	government	government	government	funds	government	government	government	government	funds	_
Period	€ billion					As a percentage	of GDP				_
	Deficit/surp	lus¹									
2016 2017 2018 2019 p	+ 36.4 + 43.7 + 65.6 + 53.2	+ 13.7 + 7.9 + 21.0 + 21.4	+ 7.7 + 13.9 + 12.0 + 14.0	+ 6.3 + 10.7 + 16.7 + 8.6	+ 8.7 + 11.1 + 16.0 + 9.2	+ 1.2 + 1.3 + 1.9 + 1.5	+ 0.4 + 0.2 + 0.6 + 0.6	+ 0.2 + 0.4 + 0.4 + 0.4	+ 0.2 + 0.3 + 0.5 + 0.2	+ +	0.3 0.3 0.5 0.3
2020 p 2021 p	– 147.6 – 134.3	- 87.4 - 145.9	- 30.9 + 2.8	+ 5.5 + 4.6	- 34.8 + 4.3	- 4.3 - 3.7	- 2.6 - 4.1	- 0.9 + 0.1	+ 0.2 + 0.1		1.0 0.1
2020 H1 P H2 P	- 48.6 - 98.9	- 27.3 - 60.1	- 9.4 - 21.4	+ 0.5 + 5.1	- 12.4 - 22.4	- 2.9 - 5.6	- 1.6 - 3.4	- 0.6 - 1.2	+ 0.0 + 0.3		0.8 1.3
2021 H1 p H2 p	- 75.6 - 58.6	- 60.7 - 85.2	- 4.0 + 6.8	+ 1.5 + 3.1	- 12.4 + 16.7	- 4.3 - 3.1	- 3.5 - 4.6	- 0.2 + 0.4	+ 0.1 + 0.2		0.7 0.9
2022 H1 pe	- 13.0	- 42.8	+ 16.6	+ 5.7	+ 7.4	- 0.7	- 2.3	+ 0.9	+ 0.3	+	0.4
	Debt level ²								End of yea	ar or quart	ter
2016 2017 2018 2019 p	2,161.5 2,111.4 2,062.6 2,045.7	1,365.6 1,349.9 1,322.9 1,299.7	642.3 614.9 600.8 609.8	166.2 162.7 155.1 152.9	1.2 0.8 0.7 0.7	69.0 64.6 61.3 58.9	41.3 39.3	20.5 18.8 17.9 17.6	5.3 5.0 4.6 4.4		0.0 0.0 0.0 0.0
2020 p 2021 p	2,314.1 2,475.8	1,512.9 1,666.4	660.6 669.0	154.1 154.7	7.4 0.3	68.0 68.7	44.4 46.3	19.4 18.6	4.5 4.3		0.2
2020 Q1 P Q2 P Q3 P Q4 P	2,090.1 2,259.6 2,333.1 2,314.1	1,327.5 1,473.7 1,536.7 1,512.9	623.1 645.1 655.6 660.6	153.4 153.6 154.7 154.1	0.8 1.0 4.6 7.4	59.9 66.0 68.5 68.0		17.9 18.8 19.2 19.4	4.4 4.5 4.5 4.5		0.0 0.0 0.1 0.2
2021 Q1 P Q2 P Q3 P Q4 P	2,345.0 2,398.8 2,432.5 2,475.8	1,538.6 1,588.7 1,616.7 1,666.4	665.6 669.6 674.8 669.0	154.2 155.5 155.1 154.7	16.2 21.2 24.2 0.3	69.0 68.7 68.6 68.7	45.2 45.5 45.6 46.3	19.6 19.2 19.0 18.6	4.5 4.5 4.4 4.3		0.5 0.6 0.7 0.0
2022 Q1 p	2,482.5	1,671.2	668.0	157.2	3.1	67.5	45.5	18.2	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								
		of which:				of which:							
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 1
	€ billion												
2016 2017 2018 2019 p	1,426.7 1,486.9 1,557.2 1,615.8	773.3 808.1	549.5 572.6	163.3 164.2 176.6 183.4	1,390.4 1,443.3 1,491.6 1,562.6	754.5 784.8 805.6 845.6	250.6 260.3	162.5 169.5 176.4 187.2	68.1 71.6 78.5 84.4	37.3 33.8 31.2 27.4	127.2 132.9 139.7 144.8	+ 43.7 + 65.6	1,329.5 1,387.7
2020 p 2021 p	1,569.1 1,711.7	783.1 887.6	608.1 633.7	177.8 190.5				209.4 227.2	93.2 93.4	21.5 20.8	203.4 271.3		
	As a perc	entage of	GDP										
2016 2017 2018 2019 p	45.5 45.5 46.3 46.5	23.7 24.0	16.8 17.0		44.4 44.2 44.3 45.0	24.1 24.0 23.9 24.3	7.7 7.7 7.7 7.9	5.2 5.2 5.2 5.4	2.2 2.2 2.3 2.4	1.2 1.0 0.9 0.8	4.1 4.1 4.1 4.2	+ 1.2 + 1.3 + 1.9 + 1.5	40.7
2020 p 2021 p	46.1 47.5	23.0 24.6		5.2 5.3	50.4 51.3	26.6 26.1		6.1 6.3	2.7 2.6	0.6 0.6	6.0 7.5	- 4.3 - 3.7	41.1 42.4
	Percentag	ge growth	rates										
2016 2017 2018 2019 p	+ 4.5 + 4.2 + 4.7 + 3.8	+ 4.8 + 4.6 + 4.5 + 3.2	+ 4.8	+ 2.9 + 0.5 + 7.6 + 3.8	+ 4.1 + 3.8 + 3.3 + 4.8	+ 4.5 + 4.0 + 2.6 + 5.0	+ 4.1	+ 6.2 + 4.3 + 4.1 + 6.1	+ 5.6 + 5.1 + 9.7 + 7.5	- 11.7 - 9.3 - 7.8 - 12.2	+ 4.9 + 4.5 + 5.1 + 3.7		+ 4.7 + 4.7 + 4.4 + 3.7
2020 p 2021 p	- 2.9 + 9.1	- 6.1 + 13.3	+ 1.7 + 4.2	- 3.0 + 7.1	+ 9.9 + 7.5	+ 7.0 + 3.8	+ 4.0 + 3.6	+ 11.8 + 8.5	+ 10.4 + 0.2	- 21.5 - 3.4	+ 40.5 + 33.4	:	- 2.9 + 9.3

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

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,	total
	Revenue			Expenditur	e											
		of which:			of which:	3										
Period	Total 4	Taxes	Finan- cial transac- tions 5	Total 4	Person- nel expend- iture	Current grants	Interest	Fixed asset forma- tion	Finan- cial transac- tions 5	Deficit/ surplus	Rev- enue 6	Expend- iture	Deficit/ surplus	Rev- enue	Expend- iture	Deficit/ surplus
2015 P 2016 P 2017 P 2018 P 2019 P 2020 P 2021 P 2019 Q1 P Q2 P Q3 P	829.8 862.3 900.3 951.8 1,010.3 946.9 1,101.6 240.9 256.3 245.3	673.3 705.8 734.5 776.3 799.4 739.9 833.3 192.7 201.7 194.7 210.6	10.4 9.0 7.9 6.2 11.2 13.9 24.9 2.5 2.0 3.4	804.3 844.5 869.4 905.6 975.5 1,108.0 1,240.4 227.7 236.1 236.7 272.2	244.1 251.3 261.6 272.5 285.9 299.5 310.6 68.3 70.1 70.9 76.1	302.7 321.6 327.9 338.0 349.7 422.8 530.9 88.5 87.0 86.2 87.5	49.8 43.4 42.0 39.2 33.6 25.9 21.0 11.5 12.2 4.5 5.1	46.4 49.0 52.3 55.8 62.9 69.2 69.5 10.2 13.0 16.4 22.5	12.5 11.8 13.8 16.1 16.8 59.9 26.2 3.3 2.6 3.1 7.7	+ 25.5 + 17.8 + 30.8 + 46.2 + 34.8 - 161.1 - 138.9 + 13.2 + 20.1 + 8.6 - 3.1	575.0 601.8 631.5 656.2 685.0 719.5 769.2 163.3 169.9 168.8 181.9	573.1 594.8 622.0 642.5 676.7 747.8 775.2 166.4 170.3 172.6	+ 1.9 + 7.1 + 9.5 + 13.6 + 8.3 - 28.3 - 6.0 - 3.1 + 1.5 - 1.5 + 9.3	1,301.1 1,355.1 1,417.5 1,490.7 1,573.8 1,518.8 1,698.3 374.3 396.1 384.0 420.7	1,273.6 1,330.2 1,377.2 1,430.9 1,530.8 1,708.1 1,843.2 364.1 374.5 376.9 414.5	+ 27.4 + 24.9 + 40.3 + 59.8 + 43.0 - 189.3 - 144.9 + 10.2 + 21.6 + 7.1 + 6.2
Q4 p 2020 Q1 p Q2 p Q3 p Q4 p 2021 Q1 p Q2 p Q3 p Q4 p	269.1 244.8 211.9 227.8 259.3 237.1 270.6 270.9 328.0	210.6 197.5 158.0 181.4 202.0 185.3 195.7 210.7 237.8	2.5 2.7 4.0 4.5 4.3 7.5 7.4 6.1	272.2 236.4 271.8 282.3 315.4 297.0 300.8 290.2 342.9	76.1 72.9 72.2 72.4 81.4 75.5 74.8 75.8 84.1	90.5 119.1 102.0 109.1 130.8 126.8 117.5 148.1	5.1 11.9 8.6 1.4 5.9 7.3 10.7 – 0.4 3.1	12.5 12.0 15.4 18.3 22.8 11.1 15.2 16.5 26.4	7.7 2.6 3.4 34.3 19.6 14.6 10.5 10.4 – 9.4	- 3.1 + 8.4 - 59.8 - 54.5 - 56.1 - 59.9 - 30.2 - 19.3 - 14.9	181.9 168.3 175.9 181.1 186.0 182.4 185.9 183.4 197.3	172.6 175.7 187.0 195.0 189.6 196.3 197.0 191.9	+ 9.3 - 7.4 - 11.1 - 13.9 - 3.5 - 13.9 - 11.1 - 8.6 + 6.9	420.7 380.0 354.5 370.1 410.6 381.5 417.7 413.5 487.7	414.5 379.1 425.4 438.5 470.2 455.3 459.0 441.4 495.7	+ 6.2 + 0.9 - 70.9 - 68.4 - 59.6 - 73.8 - 41.2 - 27.8 - 8.0
2022 Q1 P	277.4	213.9	5.0	278.4	79.6	116.3	5.5	11.9	7.0	- 1.0	193.8	199.8	- 6.0	429.4	436.5	7.1

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	2,3		Local government 3			
Period	Revenue 1	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus	
2015 p	338.3	326.5	+ 11.8	355.1	350.6	+ 4.5	232.7	229.1	+ 3.6	
2016 P	344.7	338.4	+ 6.2	381.1	372.4	+ 8.8	248.9	243.1	+ 5.8	
2017 P	357.8	352.8	+ 5.0	397.7	385.8	+ 11.8	260.3	249.1	+ 11.2	
2018 p	374.4	363.5	+ 10.9	420.5	400.1	+ 20.4	271.8	261.5	+ 10.2	
2019 P	382.5	369.2	+ 13.3	437.2	419.6	+ 17.6	284.2	278.1	+ 6.1	
2020 p	341.4	472.1	- 130.7	456.4	489.4	- 33.0	297.0	294.6	+ 2.4	
2021 p	370.3	585.9	- 215.6	513.1	508.9	+ 4.2	309.9	304.8	+ 5.1	
2019 Q1 P	84.7	86.1	- 1.4	105.7	96.7	+ 8.9	58.2	63.2	- 4.9	
Q2 p	97.7	90.3	+ 7.4	106.0	100.2	+ 5.8	70.6	65.9	+ 4.7	
Q3 p	93.2	91.3	+ 1.9	107.9	102.6	+ 5.2	69.1	69.2	- 0.1	
Q4 P	106.9	101.5	+ 5.4	115.5	118.4	- 2.9	84.5	78.4	+ 6.0	
2020 Q1 P	92.3	90.4	+ 1.9	105.6	99.7	+ 5.9	57.9	67.7	- 9.8	
Q2 p	70.8	114.8	- 44.0	108.2	128.0	- 19.8	69.4	69.4	+ 0.1	
Q3 p	83.7	105.4	- 21.7	112.9	113.7	- 0.8	67.5	72.6	- 5.1	
Q4 p	94.5	161.5	- 67.0	127.4	146.3	- 18.9	100.3	83.5	+ 16.8	
2021 Q1 p	75.0	127.5	- 52.5	113.7	120.7	- 7.1	61.1	69.7	- 8.6	
Q2 p	86.4	123.5	- 37.1	122.8	122.0	+ 0.8	74.6	71.7	+ 2.9	
Q3 p	93.9	128.7	- 34.7	125.9	120.2	+ 5.7	74.6	74.9	- 0.3	
Q4 p	115.1	206.3	- 91.2	145.6	144.5	+ 1.2	97.6	87.0	+ 10.6	
2022 Q1 p	94.7	114.0	- 19.3	134.6	122.7	+ 11.9	68.4	73.8	- 5.4	

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.

5. Central, state and local government: tax revenue

€ million

		Central and state gove	ernment and European	Union				
Period	Total	Total		State government 1	European Union 2	Local government 3	Balance of untransferred tax shares 4	Memo item: Amounts deducted in the Federal budget 5
2015	673,276	580,485	308,849	240,698	30,938	93,003	- 212	27,241
2016	705,797	606,965	316,854	260,837	29,273	98,648	+ 186	27,836
2017	734,540	629,458	336,730	271,046	21,682	105,158	- 76	27,368
2018	776,314	665,005	349,134	287,282	28,589	111,308	+ 1	26,775
2019	799,416	684,491	355,050	298,519	30,921	114,902	+ 23	25,998
2020	739,911	632,268	313,381	286,065	32,822	107,916	- 274	30,266
2021	833,337	706,978	342,988	325,768	38,222	125,000	+ 1,359	29,321
2020 Q1	198,375	168,123	83,086	75,420	9,617	18,875	+ 11,377	6,855
Q2	158,161	135,185	68,653	59,557	6,974	25,107	- 2,131	6,997
Q3	182,202	156,397	78,502	72,613	5,282	25,234	+ 571	9,705
Q4	201,173	172,564	83,140	78,475	10,949	38,700	- 10,090	6,709
2021 Q1	189,316	159,271	72,814	73,137	13,320	19,882	+ 10,163	7,438
Q2	191,931	163,158	81,129	74,024	8,005	29,609	- 835	
Q3	211,364	180,378	87,603	84,312	8,464	29,726	+ 1,260	
Q4	240,726	204,171	101,442	94,295	8,433	45,784	- 9,229	
2022 Q1	224,006	189,158	92,112	87,240	9,806	24,772	+ 10,077	7,261
Q2		190,982	94,153	86,852	9,977			11,576
2021 July		56,166	28,274	25,940	1,952			3,141
2022 July		56,770	27,314	26,153	3,303	Ι.	Ι.	3,156

Sources: Federal Ministry of Finance, Federal Statistical Office and Bundesbank calculations. 1 Before deducting or adding supplementary central government transfers, regionalisation funds (local public transport), compensation for the transfer of motor vehicle tax to central government and consolidation assistance, which central government remits to state government. See the last column for the volume of these amounts which are deducted from tax revenue in the Federal budget. 2 Customs duties and shares in VAT and gross national income accruing to the EU from central

government tax revenue. **3** Including local government taxes in the city states Berlin, Bremen and Hamburg. Including revenue from offshore wind farms. **4** Difference between local government's share in the joint taxes received by the state government cash offices in the period in question (see Table X. 6) and the amounts passed on to local government in the same period. **5** Volume of the positions mentioned under footnote 1.

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

€ million

		l .										I		
		Joint taxes								l l				
		Income taxes	2				Value added	taxes (VAT)	7					Memo item:
Period	Total 1	Total	Wage tax 3	Assessed income tax 4	Corpora- tion tax 5	Invest- ment income tax 6	Total	Domestic VAT	Import VAT	Local business tax trans- fers 8	Central govern- ment taxes 9	State govern- ment taxes 9	EU customs duties	Local govern- ment share in joint taxes
2015 2016 2017 2018 2019	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
2020 2021	682,376 760,953		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
2020 Q1 Q2 Q3 Q4	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		1,139 1,149 1,212 1,234	13,251 11,175 11,910 13,770
2021 Q1 Q2 Q3 Q4	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	7,813	1,076 1,281 1,292 1,473	12,703 12,085 13,532 15,656
2022 Q1 Q2	203,130 204,740	96,245 101,822	56,206 60,363	20,915 17,194	11,178 11,246	7,946 13,019	73,584 67,763	54,234 46,755	19,350 21,008	615 1,521	22,252 24,441	8,975 7,564	1,459 1,630	13,972 13,758
2021 July	60,023	24,906	19,450	495	656	4,306	23,919	15,231	8,689	977	7,054	2,747	420	3,858
2022 July	60,179	25,436	17,708	204	308	7,216	23,610	16,034	7,575	1,212	7,113	2,287	521	3,409

Source: Federal Ministry of Finance and Bundesbank calculations. 1 This total, unlike that in Table X. 5, does not include the receipts from the equalisation of burdens levies, local business tax (less local business tax transfers to central and state government), real property taxes and other local government taxes, or the balance of untransferred tax shares. 2 Respective percentage share of central, state and local government in revenue: wage tax and assessed income tax 42.5:42.5:15, corporation tax and non-assessed taxes on earnings 50:50:-, final withholding tax on interest income and capital gains, non-assessed taxes on earnings 44:44:12. 3 After deducting child benefits and subsidies for supplementary private pension

plans. **4** After deducting employee refunds and research grants. **5** After deducting research grants. **6** Final withholding tax on interest income and capital gains, non-assessed taxes on earnings. **7** The allocation of revenue to central, state and local government, which is adjusted at more regular intervals, is regulated in Section 1 of the Revenue Adjustment Act. Respective percentage share of central, state and local government in revenue for 2021: 45.1:51.2:3.7. The EU share is deducted from central government's share. **8** Respective percentage share of central and state government for 2021: 41.4:58.6. **9** For the breakdown, see Table X. 7.

7. Central, state and local government: individual taxes

€ million

	Central gov	ernment tax	es 1						State gover	nment taxes	5 1		Local gover	nment taxes	5
									Tax on the acqui-		Betting			of which:	
		Soli-			Motor				sition of	Inherit-	and			Local	Real
Period	Energy tax	darity surcharge	Tobacco	Insurance tax	vehicle tax	Electri- city tax	Alcohol tax	Other	land and buildings	ance tax	lottery tax	Other	Total	business tax 2	property taxes
renou	tux	Jarcharge	tux	tux	tux	city tax	tux	Other	buildings	tux	tux	Other	Total	tux	tuxes
2015	39,594	15,930	14,921	12,419	8,805	6,593	2,070	3,872	11,249	6,290		1,088	60,396	45,752	13,215
2016	40,091	16,855	14,186	12,763	8,952	6,569	2,070	2,955		7,006	1,809	1,119	65,319	50,103	13,654
2017	41,022	17,953	14,399	13,269	8,948	6,944	2,094	-4,695	13,139	6,114	1,837	1,115	68,522	52,899	13,966
2018	40,882	18,927	14,339	13,779	9,047	6,858	2,133	2,622	14,083	6,813	1,894	1,122	71,817	55,904	14,203
2019	40,683	19,646	14,257	14,136	9,372	6,689	2,118	2,648	15,789	6,987	1,975	1,099	71,661	55,527	14,439
2020	37,635	18,676	14,651	14,553	9,526	6,561	2,238	1,792	16,055	8,600	2,044	1,076	61,489	45,471	14,676
2021	37,120	11,028	14,733	14,980	9,546	6,691	2,089	1,984	18,335	9,824	2,333	1,121	77,335	61,251	14,985
2020 Q1	4,966	4,930	2,413	6,766	2,634	1,708	562	537	4,525	1,981	542	358	17,245	13,391	3,403
Q2	8,117	4,235	3,772	2,606	2,426	1,585	455	328	3,566	2,154	425	181	12,971	8,842	3,895
Q3	9,985	4,365	3,978	2,817	2,366	1,499	506	414	3,730	2,262	509	283	14,690	10,242	4,095
Q4	14,566	5,145	4,487	2,365	2,101	1,768	715	513	4,234	2,203	567	254	16,584	12,997	3,283
2021 Q1	4,126	3,171	2,585	6,776	2,567	1,692	395	400	4,716	2,110	578	353	17,594	13,798	3,503
Q2	8,717	2,546	4,053	2,843	2,469	1,640	528	413	4,231	2,374	538	255	17,904	13,692	4,034
Q3	9,532	2,338	3,636	2,911	2,381	1,618	514	538	4,571	2,457	516	269	18,643	14,215	4,133
Q4	14,745	2,972	4,458	2,449	2,130	1,741	651	633	4,816	2,884	700	244	23,194	19,546	3,316
2022 Q1	4,452	2,840	2,372	7,175	2,594	1,785	531	503	5,061	2,827	701	385	21,492	17,454	3,577
Q2	9,092	3,518	3,648	2,872	2,433	1,722	505	651	4,406	2,238	661	259			
2021 July	2,870	463	1,247	774	881	517	152	150	1,554	962	142	89			.
2022 July	2,831	535	1,183	815	837	500	183	230	1,318	674	205	90			.

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 3	Payments from central govern- ment	Total	Pension payments	Pen- sioners' health insurance	Deficit surplu		Total	Deposits 5	Securities	Equity interests, mort- gages and other loans 6	Real estate	Memo item: Adminis- trative assets
2015	276.129	194,486	80,464	277.717	236,634	16.705	_	1,588	35,556	32,795	2,506	167	88	4,228
2016	286,399	202,249	83,154	288,641	246,118	17,387	_	2,242	34,094	31,524	2,315	203	52	4,147
2017	299,826	211,424	87,502	299,297	255,261	18,028	+	529	35,366	33,740	1,335	238	53	4,032
2018	312,788	221,572	90,408	308,356	263,338	18,588	+	4,432	40,345	38,314	1,713	262	56	4,008
2019	327,298	232,014	94,467	325,436	277,282	20,960	+	1,861	42,963	40,531	2,074	303	56	3,974
2020	335,185	235,988	98,447	339,072	289,284	21,865	-	3,887	39,880	38,196	1,286	344	55	3,901
2021	348,679	245,185	102,772	347,486	296,343	22,734	+	1,192	42,014	40,320	1,241	400	52	3,807
2019 Q1	77,984	54,393	23,426	78,630	67,328	5,087	-	646	39,432	37,637	1,474	263	57	4,001
Q2	81,410	57,837	23,408	80,804	69,011	5,205	+	605	40,232	38,639	1,272	264	57	3,996
Q3	80,305	56,637	23,481	82,716	70,633	5,330	-	2,411	38,386	36,876	1,183	271	56	3,995
Q4	86,756	63,133	23,413	82,849	70,674	5,333	+	3,907	42,945	40,539	2,074	276	56	3,987
2020 Q1	80,578	55,999	24,436	82,622	70,829	5,346	-	2,045	40,840	38,636	1,848	300	56	3,966
Q2	82,098	57,515	24,413	82,875	70,889	5,346	-	777	39,779	37,975	1,446	304	55	3,949
Q3	82,689	58,109	24,418	86,497	74,054	5,591	-	3,808	36,898	35,197	1,333	313	55	3,925
Q4	88,978	64,375	24,412	86,605	73,879	5,576	+	2,373	39,847	38,186	1,286	321	55	3,916
2021 Q1	83,066	57,351	25,542	86,048	73,799	5,600	-	2,982	36,888	35,326	1,166	342	54	3,887
Q2	86,386	60,666	25,545	86,486	73,905	5,679	-	100	36,941	35,554	988	345	53	3,871
Q3	85,535	59,941	25,468	87,123	74,453	5,718	-	1,588	36,041	34,670	973	345	53	3,840
Q4	92,818	67,211	25,415	87,385	74,556	5,730	+	5,432	41,974	40,310	1,241	370	52	3,835
2022 Q1	86,684	60,599	25,937	86,841	74,568	5,734	-	157	41,784	39,952	1,367	399	65	3,783
Q2	90,040	63,978	25,879	87,138	74,644	5,756	+	2,903	44,425	42,441	1,513	406	65	3,761

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.

9. Federal Employment Agency: budgetary development*

€ million

	Revenue				Expenditure								D (1)
		of which:			of which:								Deficit- offsetting
Period	Total 1	Contri- butions	Insolvency compen- sation levy	Government funds	Total	Unemploy- ment benefit 2	Short-time working benefits 3	Job promotion 4	Re- integration payment	Insolvency benefit payment	Adminis- trative expend- iture 5	Deficit/ surplus	grant or loan from central govern- ment
2015 2016 2017 2018 2019	35,159 36,352 37,819 39,335 35,285	29,941 31,186 32,501 34,172 29,851	1,333 1,114 882 622 638	- - - -	31,439 30,889 31,867 33,107 33,154	14,846 14,435 14,055 13,757 15,009	771 749 769 761 772	6,295 7,035 7,043 6,951 7,302		654 595 687 588 842	5,597 5,314 6,444 8,129 6,252	+ 3,720 + 5,463 + 5,952 + 6,228 + 2,131	- - - - -
2020 2021	33,678 35,830	28,236 29,571	630 1,302	- -	61,013 57,570	20,617 19,460	22,719 21,003	7,384 7,475		1,214 493	6,076 6,080	- 27,335 - 21,739	6,913 16,935
2019 Q1 Q2 Q3 Q4	8,369 8,685 8,650 9,581		148 156 162 172	- - - -	8,597 8,136 7,829 8,592	3,969 3,673 3,682 3,685	403 204 68 98	1,818 1,832 1,711 1,941		179 243 190 230	1,450 1,475 1,510 1,816	- 228 + 549 + 821 + 989	- - - -
2020 Q1 Q2 Q3 Q4	8,123 7,906 8,350 9,299	6,851 6,691 6,934 7,760	153 151 153 174	- - - -	9,301 17,005 18,619 16,088	4,469 4,869 5,737 5,543	392 7,977 8,637 5,712	1,934 1,793 1,701 1,957		235 254 472 251	1,470 1,407 1,414 1,785	- 1,179 - 9,099 - 10,269 - 6,789	- - - 6,913
2021 Q1 Q2 Q3 Q4	8,228 8,830 8,791 9,982		289 324 330 359	- - - -	18,260 16,720 12,042 10,547	5,956 5,029 4,447 4,028	8,006 7,495 3,631 1,871	1,935 1,912 1,744 1,884		184 108 91 110	1,391 1,452 1,452 1,785	- 10,033 - 7,890 - 3,251 - 565	- - - 16,935
2022 Q1 Q2	8,827 9,327	7,374 7,857	251 262	- -	10,685 9,457	4,424 4,091	2,087 1,215	1,821 1,794]	135 147	1,412 1,450	- 1,858 - 130	- -

Source: Federal Employment Agency. * Including transfers to the civil servants' pension fund. 1 Excluding central government deficit-offsetting grant or loan. 2 Unemployment benefit in case of unemployment. 3 Including seasonal short-time working benefits and restructuring short-time working benefits, restructuring measures and refunds of social contributions. 4 Vocational training, measures to 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

€ million

	Revenue 1			Expenditure 1									
		of which:			of which:								
Period	Total	Contri- butions 2	Central govern- ment funds 3	Total	Hospital treatment	Pharma- ceuticals	Medical treatment	Dental treatment 4	Remedies and therapeutic appliances	Sickness benefits	Adminis- trative expend- iture 5	Defic surpl	
2015 2016 2017 2018 2019	210,147 223,692 233,814 242,360 251,295	195,774 206,830 216,227 224,912 233,125	11,500 14,000 14,500 14,500 14,500	213,727 222,936 230,773 239,706 252,440	67,979 70,450 72,303 74,506 77,551	34,576 35,981 37,389 38,327 40,635	35,712 37,300 38,792 39,968 41,541	13,488 13,790 14,070 14,490 15,010	13,674 14,256 14,776 15,965 17,656	11,227 11,677 12,281 13,090 14,402	10,482 11,032 10,912 11,564 11,136	+	3,580 757 3,041 2,654 1,145
2020 2021	269,158 289,270	237,588 249,734	27,940 36,977	275,268 294,602	78,531 82,748	42,906 46,199	44,131 45,075	14,967 16,335	18,133 20,163	15,956 16,612	11,864 11,735	 -	6,110 5,332
2019 Q1 Q2 Q3 Q4	59,809 62,121 62,143 67,094	55,622 57,858 57,763 61,884	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
2020 Q1 Q2 Q3 Q4	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
2021 Q1 Q2 Q3 Q4	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
2022 Q1 Q2	79,253 79,112	62,142 64,611	17,049 14,280	81,493 79,269	20,550 21,080	11,891 12,053	11,847 12,085	4,286 4,249	5,216 5,335		3,510 2,958		2,240 158

Source: Federal Ministry of Health. 1 The final annual figures generally differ from the total of the reported provisional quarterly figures as the latter are not revised subsequently. Excluding revenue and expenditure as part of the risk structure compensation scheme. 2 Including contributions from subsidised low-paid part-time employ-

ment. 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.

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

€ million

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

Source: Federal Ministry of Health. * The final annual figures generally differ from the total of the reported provisional quarterly figures as the latter are not revised subsequently. 1 Including transfers to the long-term care provident fund. 2 Since 2005, including special contributions for childless persons (0.25% of income subject to 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

€ million

	Total	new borro	wing	1	of w			
					Chan in mo mark	oney	Char in m marl	oney
Period	Gross	2	Net		loans	5	depo	osits 3
2015	+	167,655	-	16,386	-	5,884	_	1,916
2016	+	182,486	-	11,331	-	2,332	-	16,791
2017	+	171,906	+	4,531	+	11,823	+	2,897
2018	+	167,231	-	16,248	-	91	-	1,670
2019	+	185,070	+	63	-	8,044	-	914
2020	+	456,828	+	217,904	+	24,181	-	3,399
2019 Q1	+	56,654	+	3,281	_	2,172	_	1,199
Q2	+	48,545	+	5,491	_	279	+	7,227
Q3	+	48,053	+	4,030	+	176	-	5,093
Q4	+	31,817	-	12,738	-	5,768	-	1,849
2020 Q1	+	65,656	+	31,296	+	9,236	+	1,698
Q2	+	185,560	+	126,585	+	31,212	-	7,314
Q3	+	159,067	+	80,783	-	6,080	+	588
Q4	+	46,545	-	20,760	-	10,187	+	1,629
2021 Q1	+	109,953	+	42,045	_	11,737	-	4,708
Q2	+	146,852	+	57,601	+	3,463	+	1,576

Source: Federal Republic of Germany – Finance Agency.

1 Including the Financial Market Stabilisation Fund, the Investment and Repayment Fund and the Restructuring Fund for Credit Institutions.

2 After deducting repurchases.

3 Excluding the central account balance with the Deutsche Bundesbank.

13. General government: debt by creditor*

€ million

Period (end of year or quarter) 2015 2016 2017 2018 2019 2020 **p** 2021 **p** 2019 Q1 Q2 Q3 Q4 2020 Q1 **P** 02 **p** Q3 **p** Q4 **p** 2021 Q1 **P** Q2 **p** Q3 **p** Q4 **p** 2022 Q1 **p**

	Banking sys	tem	Domestic non	-banks	
Total	Bundes- bank	Domestic MFIs pe	Other do- mestic fi- nancial cor- porations pe	Other domestic creditors 1	Foreign creditors pe
2,177,231	85,952	607,446	217,604	52,453	1,213,77
2,161,540	205,391	585,446	211,797	48,631	1,110,27
2,111,360	319,159	538,801	180,145	45,109	1,028,14
2,062,629	364,731	495,374	186,399	44,129	971,99
2,045,744	366,562	464,612	183,741	48,740	982,08
2,314,090	522,392	492,545	191,497	53,629	1,054,02
2,475,776	716,004	493,773	191,386	46,195	1,028,41
2,072,772	359,884	483,567	185,767	44,244	999,30
2,063,198	361,032	475,693	184,077	43,358	999,03
2,080,195	358,813	473,766	185,300	49,755	1,012,56
2,045,744	366,562	464,612	183,741	48,740	982,08
2,090,099	371,076	481,651	186,021	49,824	1,001,52
2,259,576	424,141	546,446	186,616	49,949	1,052,42
2,333,149	468,723	517,114	189,832	51,775	1,105,70
2,314,090	522,392	492,545	191,497	53,629	1,054,02
2,345,044	561,443	476,087	190,467	52,141	1,064,90
2,398,790	620,472	477,542	190,219	44,004	1,066,55
2,432,545	669,659	481,474	191,940	45,707	1,043,76
2,475,776	716,004	493,773	191,386	46,195	1,028,41
2,482,516	737,978	470,276	193,266	44,405	1,036,59

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

14. Maastricht debt by instrument

mil	

	CITIMION		Dabt cognition by aria	inal maturity	Loons by original mate	with	Mama itami 2	
			Debt securities by orig	<u> </u>	Loans by original matu	Inty	Memo item: 2	
Period (end of year or quarter)	Total	Currency and deposits 1	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 gove	ernment						
2015	2,177,231	13,949	65,676	1,499,010	90,350	508,246		
2016 2017	2,161,540 2,111,360	15,491 14,298	69,715 48,789	1,483,871 1,484,462	96,254 87,799	496,208 476,012] :	:
2018	2,062,629	14,680	52,572	1,456,160	77,296	461,919		
2019 Q1 Q2	2,072,772 2,063,198	15,512 12,719	64,218 56,256	1,460,634 1,463,027	72,005 75,284	460,402 455,911		
Q3	2,080,195	17,438	62,602	1,465,529	79,918	454,709		
Q4 2020 Q1 p	2,045,744 2,090,099	14,449 11,410	49,180	1,458,540	69,289 85,137	454,286 450,418		
Q2 p	2,259,576	13,120	70,912 122,225	1,472,222 1,533,857	142,708	447,666	:	:
Q3 p Q4 p	2,333,149 2,314,090	11,886 14,486	180,445 163,401	1,582,574 1,593,586	111,480 94,288	446,764 448,330	:	:
2021 Q1 P	2,345,044	12,200	180,788	1,637,903	69,739	444,414		
Q2 p Q3 p	2,398,790 2,432,545	12,901 13,319	175,436 183,243	1,690,507 1,712,600	76,438 79,614	443,508 443,770		.
Q4 p	2,475,776	17,743	183,990	1,731,270	101,870	440,902		
2022 Q1 p	2,482,516	15,655	172,294	1,776,631	75,228	442,708	Ι .	ا. ا
	Central gove							
2015 2016	1,371,933 1,365,579	13,949 15,491	49,512 55,208	1,138,951 1,123,853	45,256 50,004	124,265 121,022	1,062 556	13,667 8,567
2017	1,349,945	14,298	36,297	1,131,896	47,761	119,693	1,131	10,618
2018 2019 Q1	1,322,905 1,324,377	14,680 15,512	42,246 50,032	1,107,140 1,102,604	42,057 39,185	116,782 117,044	933 809	9,975 11,583
Q2 Q3	1,320,239	12,719	42,752	1,109,057	38,950	116,761	835	13,862
Q3 Q4	1,327,958 1,299,726	17,438 14,449	48,934 38,480	1,105,439 1,101,866	39,067 28,617	117,080 116,314	704 605	13,849 10,301
2020 Q1 P	1,327,548	11,410	56,680	1,103,934	38,714	116,809	605	8,125
Q2 p Q3 p	1,473,720 1,536,666	13,120 11,886	109,221 166,564	1,139,510 1,178,687	95,489 62,933	116,381 116,596	585 605	7,037 11,731
Q4 P	1,512,917	14,486	154,498	1,180,683	46,811	116,439	609	14,545
2021 Q1 p Q2 p	1,538,572 1,588,734	12,200 12,901	167,484 165,373	1,212,495 1,259,206	29,838 35,008	116,553 116,247	632 631	22,956 29,479
Q3 p	1,616,738	13,319	170,961	1,280,586	35,984	115,888	677	31,417
Q4 p 2022 Q1 p	1,666,432 1,671,160	17,743 15,655	176,427 155,117	1,300,416 1,340,340	56,836 40,788	115,010 119,260	656 534	7,975 10,488
2022 4	State govern			.,,,,,,,,,,,	10,700		. 331	
2015	659 521	l -	16,169	l 362 376	23,349	257,627	15,867	2,348
2016 2017	659,521 642,291 614,926	-	14,515	362,376 361,996	20,482 19,628	245,298	11,273	1,694 2,046
2017	600,776	_	12,543 10,332	354,688 351,994	18,864	228,067 219,587	14,038 14,035	1,891
2019 Q1	612,478	-	14,190	361,293	19,374	217,621	15,229	2,004
Q2 Q3	610,700 620,694	_	13,508 13,671	357,571 363,723	24,784 29,765	214,838 213,535	17,631 17,755	1,887 1,957
Q4	609,828	-	10,703	360,495	25,768	212,862	14,934	1,826
2020 Q1 p Q2 p	623,096 645,075	_	14,234 13,006	372,021 398,404	28,582 28,298	208,260 205,368	12,297 11,070	1,783 2,085
Q3 p Q4 p	655,581 660,572	_	13,882 8,904	408,310 417,307	29,662 30,371	203,728 203,991	11,717 11,946	2,090 1,411
2021 Q1 p	665,620	_	13,305	430,103	23,404	198,808	11,023	2,018
Q2 p Q3 p	669,596 674,769	_	10,064	436,434 437,437	25,197 26,603	197,901 198,446	12,637 11,555	2,073 2,151
Q4 p	668,951	_	12,284 7,564	436,157	29,084	196,146	12,305	1,684
2022 Q1 p	667,953	-	17,178	441,837	16,981	191,956	11,661	1,970
	Local govern	iment						
2015 2016	163,439 166,174	-	-	2,047 2,404	27,474 27,002	133,918 136,768	2,143 1,819	463 431
2017	162,745			3,082	24,572	135,091	1,881	466
2018	155,127	_	1	3,046	20,425	131,655	1,884	497
2019 Q1 Q2	153,387 152,014] =	1 -	2,960 2,961	18,857 18,814	131,570 130,239	2,139 2,016	498 525
Q3 Q4	151,489 152,891	_		3,016 2,996	18,574 19,079	129,899 130,816	2,065 1,856	555 532
2020 Q1 P	153,423	-	_	3,128	19,734	130.560	1.825	508
Q2 p Q3 p	153,556 154,685	_	_	3,094 2,961	19,718 20,596	130,744 131,128	2,085 2,107	350 339
Q4 p	154,054	-	=	3,366	18,137	132,551	1,406	330
2021 Q1 p Q2 p	154,202 155,485		_	3,121 3,121	17,429 18,467	133,652 133,897	2,020 2,090	345 348
Q3 p	155,050	Ξ	-	3,000	18,077	133,973	2,156	344
Q4 p 2022 Q1 p	154,717 157,227	_	- -	3,171 3,054	17,203 18,201	134,343 135,972	1,695 1,973	348 363
2022 Q1 P	131,421	-	-	3,034	10,201	133,312	1,373	1 505

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 1	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	1,502	-	-	-	537	965	91	2,685
2016	1,232	-	-	-	562	670	89	3,044
2017	807	-	-	-	262	545	15	3,934
2018	690	-	-	-	388	302	16	4,506
2019 Q1	723	-	-	-	453	270	16	4,110
Q2	742	-	-	-	557	185	16	4,224
Q3	594	-	-	-	391	203	16	4,179
Q4	711	-	-	-	375	336	16	4,753
2020 Q1 P	775	-	-	-	287	488	16	4,328
Q2 P	980	-	-	-	581	399	16	4,284
Q3 P	4,602	-	-	-	4,210	392	3,956	4,226
Q4 P	7,439	-	-	-	7,128	311	6,931	4,606
2021 Q1 P	16,179	-	-	-	15,985	194	15,853	4,209
Q2 P	21,194	-	-	-	20,995	199	20,860	4,318
Q3 P	24,248	-	-	-	24,053	195	23,872	4,348
Q4 P	333	-	-	-	111	222	–	4,650
2022 Q1 P	3,064	_	_	_	2,863	201	2,720	4,067

Source: Bundesbank calculations based on data from the Federal Statistical Office and the Federal Republic of Germany – Finance Agency. 1 Particularly liabilities resulting from coins in circulation. 2 Besides direct loan relationships, claims and debt

vis-à-vis other government subsectors also comprise securities holdings purchased on the market. No entry for general government as debt and claims are consolidated between different government subsectors.

15. Maastricht debt of central government by instrument and category

€ million

		Currency and	deposits 2	Debt securitie	s								
			of which: 3		of which: 3								
Period (end of year or quarter)	Total 1	Total 1	Federal day bond	Total 1	Federal bonds (Bunds)	Federal notes (Bobls)	Inflation- linked Federal bonds (Bunds) 4	Inflation- linked Federal notes (Bobls) 4	Capital indexation of inflation- linked securities	Federal Treasury notes (Schätze) 5	Treasury discount paper (Bubills) 6	Federal savings notes	Loans 1
2007 2008 2009	987,909 1,019,905 1,086,173	6,675 12,466 9,981	3,174 2,495	917,584 928,754 1,013,072	564,137 571,913 577,798	173,949 164,514 166,471	10,019 12,017 16,982	3,444 7,522 7,748	506 1,336 1,369	102,083 105,684 113,637	37,385 40,795 104,409	10,287 9,649 9,471	63,650 78,685 63,121
2010 2011 2012 2013 2014	1,337,160 1,346,869 1,390,377 1,392,735 1,398,472	10,890 10,429 9,742 10,582 12,146	1,975 2,154 1,725 1,397 1,187	1,084,019 1,121,331 1,177,168 1,192,025 1,206,203	602,624 615,200 631,425 643,200 653,823	185,586 199,284 217,586 234,759 244,633	25,958 29,313 35,350 41,105 48,692	9,948 14,927 16,769 10,613 14,553	2,396 3,961 5,374 4,730 5,368	126,220 130,648 117,719 110,029 103,445	85,867 58,297 56,222 50,004 27,951	8,704 8,208 6,818 4,488 2,375	242,251 215,109 203,467 190,127 180,123
2015 2016 2017 2018 2019	1,371,933 1,365,579 1,349,945 1,322,905 1,299,726	13,949 15,491 14,298 14,680 14,449	1,070 1,010 966 921	1,188,463 1,179,062 1,168,193 1,149,386 1,140,346	663,296 670,245 693,687 710,513 719,747	232,387 221,551 203,899 182,847 174,719	59,942 51,879 58,365 64,647 69,805	14,553 14,585 14,490 – –	5,607 3,602 4,720 5,139 6,021	96,389 95,727 91,013 86,009 89,230	18,536 23,609 10,037 12,949 13,487	1,305 737 289 48	169,521 171,026 167,455 158,839 144,931
2020 p 2021 p	1,512,917 1,666,432	14,486 17,743		1,335,181 1,476,843	808,300 909,276	183,046 195,654	58,279 65,390	- -	3,692 6,722	98,543 103,936	113,141 153,978		163,250 171,846
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	902 852 822 -	1,152,636 1,151,809 1,154,373 1,140,346	709,008 720,904 711,482 719,747	178,900 173,313 183,268 174,719	66,531 68,110 69,088 69,805	- - - -	4,191 5,691 5,639 6,021	89,782 91,024 90,416 89,230	18,288 15,042 18,100 13,487	31 19 –	156,229 155,711 156,147 144,931
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		1,160,614 1,248,731 1,345,251 1,335,181	721,343 774,587 796,338 808,300	182,095 178,329 191,388 183,046	71,028 56,061 57,144 58,279	- - - -	5,310 3,752 3,737 3,692	91,084 95,622 99,276 98,543	23,572 79,987 127,478 113,141		155,524 211,869 179,529 163,250
2021 Q1 P Q2 P Q3 P Q4 P	1,538,572 1,588,734 1,616,738 1,666,432	12,200 12,901 13,319 17,743		1,379,979 1,424,579 1,451,547 1,476,843	821,254 873,345 884,358 909,276	194,571 189,048 203,353 195,654	60,687 62,569 63,851 65,390	- - - -	3,857 5,056 5,456 6,722	103,910 104,997 105,398 103,936	134,800 139,451 146,533 153,978		146,392 151,255 151,872 171,846
2022 Q1 p	1,671,160	15,655		1,495,458	930,351	209,424	67,776	_	7,809	108,702	140,427		160,048

Sources: Federal Republic of Germany – Finance Agency, Federal Statistical Office, and Bundesbank calculations. **1** Comprises all of central government, i.e. all off-budget entities in addition to the core budget, including the government-owned bad bank FMS Wertmanagement and liabilities attributed to central government from an economic perspective under the European System of Accounts (ESA)

2010. 2 Particularly liabilities resulting from coins in circulation. 3 Issuances by the Federal Republic of Germany. Excluding issuers' holdings of own securities but including those held by other government entities. 4 Excluding inflation-induced indexation of capital. 5 Including medium-term notes issued by the Treuhand agency (expired in 2011). 6 Including Federal Treasury financing papers (expired in 2014).

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

							2020	2021				2022	
	2019	2020	2021	2019	2020	2021	4.Vj.	1.Vj.	2.Vj.	3.Vj.	4.Vj.	1.Vj.	2.Vj.
Item	Index 20	15=100		Annual p	ercentage	change							
At constant prices, chained													
Origin of domestic product Production sector	ı	I	ı	I	ı	I	ı	ı	ı	ı		I	ı
(excluding construction) Construction Wholesale/retail trade, transport and	108.2 100.1	100.4 102.1	104.9 100.7	- 1.1 - 3.6	- 7.2 2.0	4.5 - 1.4	0.6 7.2	- 0.9 - 5.5	20.2 4.1	2.6 2.3	- 1.1 - 6.1	0.9 3.9	- 0.6 - 3.9
storage, hotel and restaurant services Information and communication Financial and insurance activities Real estate activities Business services ¹ Public services, education and health Other services	109.3 120.7 95.4 101.7 110.7 106.6 103.1	101.0 120.8 98.9 102.2 105.1 105.4 91.2	103.9 125.2 99.1 103.1 109.8 107.6 91.5	3.4 3.9 1.7 0.3 0.1 1.5 1.8	- 7.5 0.1 3.6 0.4 - 5.0 - 1.1 -11.6	2.8 3.6 0.3 0.9 4.4 2.0 0.4	- 5.5 1.2 1.9 0.4 - 4.1 - 2.0 -17.2	- 6.8 0.9 0.8 - 0.2 - 4.7 - 1.1	11.5 7.0 - 0.2 3.1 13.0 8.6 9.0	3.2 3.9 - 0.1 0.2 6.5 - 0.2 1.5	4.1 2.9 0.6 0.7 4.4 1.6 4.3	9.3 3.5 4.9 1.8 5.9 2.4 7.6	5.9 4.0 4.8 1.0 3.8 1.5 7.3
Gross value added	107.0	102.8	105.6	0.8	- 3.9	2.7	- 1.6	- 2.7	10.7	2.2	1.2	3.6	2.0
Gross domestic product 2	107.1	103.2	105.9	1.1	- 3.7	2.6	- 1.2	- 2.3	10.6	1.8	1.2	3.9	1.8
II. Use of domestic product Private consumption 3 Government consumption Machinery and equipment Premises Other investment 4 Changes in inventories 5,6	107.2 109.4 113.2 108.6 120.3	101.1 113.8 100.8 112.9 116.3	101.5 118.1 104.3 112.9 117.6	1.6 2.6 1.0 1.0 6.1 – 0.1	- 5.7 4.0 -11.0 3.9 - 3.3 - 0.3	0.4 3.8 3.5 0.0 1.0	- 5.7 5.8 - 2.5 6.7 - 3.2 - 0.9	- 8.7 3.4 1.1 - 2.0 - 2.0 0.5	6.5 8.5 20.8 4.4 4.1 – 0.4	1.4 2.1 - 2.1 0.6 1.6 1.0	3.1 1.4 - 2.6 - 3.2 0.7 0.9	8.8 4.4 0.6 3.0 1.7 – 0.3	7.2 1.9 0.6 – 3.9 1.8 0.3
Domestic demand Net exports 6 Exports Imports	109.4 111.3 117.6	106.1 101.0 107.6	108.1 110.8 117.3	1.7 - 0.6 1.3 2.9	- 3.0 - 0.8 - 9.3 - 8.5	1.9 0.8 9.7 9.0	- 2.5 1.2 - 2.6 - 5.7	- 3.6 1.1 - 0.2 - 2.9	7.1 3.8 28.2 20.6	2.3 - 0.3 7.4 9.3	2.4 - 1.0 7.2 11.1	5.7 - 1.5 3.4 7.5	4.1 - 2.1 1.9 7.2
Gross domestic product 2	107.1	103.2	105.9	1.1	- 3.7	2.6	- 1.2	- 2.3	10.6	1.8	1.2	3.9	1.8
At current prices (€ billion) III. Use of domestic product Private consumption ³ Government consumption	1,805.5 703.2	1,713.5 748.0	797.5	3.0 5.1	- 5.1 6.4	3.5 6.6	- 5.7 7.6	- 7.0 6.3	8.3 7.9	5.3 6.2	7.9 6.1	14.2 9.4	14.3 7.0
Machinery and equipment Premises Other investment 4 Changes in inventories 5	241.2 363.5 137.7 25.9	217.5 384.8 133.8 16.1	229.4 416.7 137.7 55.1	2.4 5.2 7.6	- 9.8 5.9 - 2.8	5.5 8.3 2.9	- 1.5 7.3 - 2.6	2.5 - 0.1 - 0.6	22.6 9.5 5.8	- 0.3 12.8 3.4	0.2 10.3 2.9	6.0 18.2 5.6	7.2 14.2 5.0
Domestic use Net exports	3,276.9 196.3	3,213.8 191.7	3,410.2 191.6	3.7	- 1.9	6.1	- 1.8	- 1.9	9.3	7.8	9.4	13.0	12.8
Exports Imports	1,621.0 1,424.6	1,464.8 1,273.1	1,693.9 1,502.4	1.8 2.7	- 9.6 -10.6	15.6 18.0	- 3.2 - 7.3	0.8 - 2.1	33.3 30.0	15.1 20.3	17.1 26.7	15.1 26.6	15.8 28.4
Gross domestic product 2	3,473.3	3,405.4	3,601.8	3.2	- 2.0	5.8	- 0.2	- 0.6	11.5	6.3	6.3	8.6	7.8
IV. Prices (2015=100) Private consumption Gross domestic product Terms of trade	105.1 107.1 100.8	105.7 109.1 102.8	109.0 112.4 100.1	1.3 2.1 0.7	0.6 1.8 2.0	3.1 3.1 – 2.6	- 0.0 1.0 1.1	1.8 1.7 0.2	1.7 0.9 - 3.5	3.8 4.4 – 2.7	4.7 5.0 – 4.2	4.9 4.6 – 5.4	6.6 5.9 – 5.2
V. Distribution of national income Compensation of employees Entrepreneurial and property income	1,856.2 752.1	1,853.9 717.7	1,918.0 825.4	4.6 – 1.7	- 0.1 - 4.6	3.5 15.0	0.5 5.6	- 0.7 7.3	5.1 39.9	4.7 9.7	4.6 10.5	6.6 2.5	5.6 – 3.0
National income	2,608.2	2,571.6	2,743.4	2.7	- 1.4	6.7	1.8	1.8	13.4	6.2	6.1	5.3	3.1
Memo item: Gross national income	3,590.1	3,505.7	3,729.5	3.2	- 2.4	6.4	- 0.3	- 0.1	11.9	7.3	6.9	8.9	7.2

Source: Federal Statistical Office; figures computed in August 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 institu-

tions 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 v	vorking-day	ariations •									
		of which:										
				Industry								
					of which: by	main industrial	grouping		of which: by	economic sector	<u></u>	
	Production sector, total	Construc- tion	Energy	Total	Inter- mediate goods	Capital goods	Durable goods	Non- durable goods	Manu- facture of basic metals and fabricated metal products	Manu- facture of computers, electronic and optical products and electrical equipment	Macinery and equipment	Motor vehicels, trailers and semi- trailers
	2015 = 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	109 112		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	95.0 98.4	116. 114.		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 Q2 Q3 Q4	99.0 96.9 101.5	118 119 124	4 80.6	97.0 94.2 97.9	105.3 102.3 98.9	90.2 85.1 95.1	103.0 101.9 108.7	96.5 101.6 102.8	101.6 97.9 95.9	108.7 109.0 109.5	95.4 94.7 102.2	74.8 61.7 74.3
2022 Q1 Q2 ×	96.0 97.6	98. 114.		95.6 95.8	103.2 101.7	87.4 89.3	104.0 104.7	100.9 99.8	98.7 97.9	109.9 110.4	90.5 93.5	73.2 74.5
2021 July 2 Aug. 2 Sep.	100.4 90.1 100.1	123. 112. 121.	7 80.2	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. Nov. Dec.	102.1 105.8 96.5	123 127 123	4 93.1	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. Feb. Mar.	90.1 94.9 103.0	82. 97. 116.	1 94.5	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 × June ×	96.3 96.1 100.4	114. 113. 117.	1 89.0 0 80.6	93.8 94.3 99.2	101.5 101.0 102.6	85.6 87.2 95.1	105.1 102.6 106.3	98.5 98.5 102.4	97.3 97.3 99.2	107.5 108.6 115.1	88.9 90.9 100.7	70.7 73.2 79.6
July 2,x,p	99.3	122		1	1	90.9	l .	100.0	97.8	115.6	94.1	
	Annual pe	ercentage	change									
2018 2019	+ 0.9 - 2.3	+ 0.		+ 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	- 7.7 + 3.6	+ 3. - 1.		- 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 Q2 Q3 Q4	+ 16.9 + 2.3 - 1.8	+ 1. + 0. - 4.	8 + 2.2	+ 21.0 + 2.6 - 1.5	+ 23.0 + 8.4 + 0.7	+ 25.0 - 2.9 - 4.9	+ 22.1 + 4.0 + 2.1	+ 4.9 + 3.7 + 3.8	+ 28.9 + 9.2 + 0.4	+ 23.1 + 12.3 + 4.0	+ 17.3 + 9.3 + 3.7	+ 57.9 - 21.9 - 19.4
2022 Q1 Q2 ×	- 0.4 - 1.4	+ 4.	2 + 3.1	- 1.5 - 1.3	+ 0.7 - 0.8 - 3.4	- 4.6 - 1.0	+ 2.1 + 3.2 + 1.7	+ 3.8 + 5.5 + 3.4	+ 0.4 - 1.5 - 3.6	+ 4.0 + 2.4 + 1.5	+ 3.7 - 0.8 - 2.0	- 13.7 - 0.4
2021 July 2 Aug. 2	+ 5.7 + 1.8 - 0.6	+ 3.	9 – 0.5	+ 6.5 + 2.6	+ 13.2 + 7.4	+ 1.7 - 2.7 - 7.2	+ 10.2	+ 3.6 + 4.9	+ 17.2 + 6.4	+ 16.2 + 11.6	+ 13.2 + 9.8	- 13.5 - 24.0 - 28.4
Sep. Oct. Nov.	- 1.1 - 1.9	± 0. - 0. - 2. - 10.	6 + 0.8 3 + 1.4	- 1.4 - 2.1	+ 4.9 + 1.8 + 0.3	- 5.8 - 6.3	+ 2.1 + 3.9 + 0.1	+ 2.7 + 3.3 + 6.1	+ 4.4 + 2.5 + 0.3	+ 9.3 + 5.7 + 1.8	+ 5.3 + 6.6 + 3.0	- 23.6 - 20.5
Dec. 2022 Jan. Feb.	+ 1.2 + 2.7	+ 9.	4 + 0.8 7 + 8.9	± 0.0 + 1.1	- 0.1 - 0.3 + 1.8	- 1.3 - 2.0	+ 2.4 + 1.2 + 6.3	+ 1.8 + 4.6 + 8.4	- 1.9 - 0.4 + 0.9	+ 4.7 + 2.8 + 3.3	+ 1.7 + 1.2 + 0.7	- 12.3 - 8.0 - 6.9
Mar. Apr. × May ×	- 4.5 - 2.5 - 1.7	- 3. - 1. - 3.	7 + 2.4 6 - 1.0	- 5.1 - 3.0 - 1.5	- 3.6 - 2.9 - 4.1	- 9.5 - 6.8 - 0.2	+ 2.3 + 3.2 + 2.3	+ 3.9 + 7.9 + 1.9	- 4.5 - 3.8 - 3.1	+ 1.2 + 0.3 + 1.4	- 3.5 - 5.8 - 2.0	- 24.4 - 13.1 + 2.5
June x July 2,x,p	- 0.1 - 1.1	- 3. - 1.		+ 0.5	- 3.3 - 3.3	+ 4.0	- 0.5 - 1.6	+ 0.9	- 4.1 - 3.5	+ 2.9 + 5.4	+ 1.8	+ 11.2 + 1.6

Source of the unadjusted figures: Federal Statistical Office. * For explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Tabels III.1.a to III.1.c o Using JDemetra+ 2.2.2 (X13). 1 Share of gross value added at factor cost of the production sector in the base year 2015. 2 Influenced by a change in holiday dates. x Provisional;

estimated and adjusted in advance by the Federal Statistical Office to the results of the Quarterly Production Survey and the Quarterly Survey in the specialised construction industry, respectively.

3. Orders received by industry *

Adjusted for working-day variations •

	Adjusted for v	vorking-day va	riations •									
			of which:									
									of which:			
	Industry		Intermediate of	goods	Capital goods		Consumer go	ods	Durable goods	S	Non-durable o	oods
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	2015 = 100	Annual percentage change
	Total											
2018 2019	110.5 104.9	+ 1.7 - 5.1	111.5 103.5	+ 1.9 - 7.2	110.0 105.4	+ 1.4 - 4.2		+ 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	1	- 1.1 + 11.0	124.4 146.5	+ 0.9 + 17.8	99.6 107.9	- 2.1 + 8.3
2021 July Aug. Sep.	128.1 106.4 122.6	+ 33.0 + 16.5 + 17.7	127.9 115.6 124.2	+ 35.5 + 28.7 + 22.1	128.5 100.1 122.6	+ 33.3 + 10.6 + 17.0		+ 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.	117.2 125.3 123.7	+ 7.4 + 10.2 + 13.9	124.9 132.9 120.2	+ 15.3 + 16.6 + 18.2	112.2 120.8 126.9	+ 2.7 + 6.1 + 11.7	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	+ 19.7 + 15.4 + 8.2	143.7 136.7 152.7	+ 19.2 + 16.3 + 13.3	124.1 122.6 131.4	+ 20.8 + 14.0 + 3.4	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 June	125.1 123.9 129.5 124.1	+ 6.5 + 8.8 + 2.3 - 3.1	143.5 139.3 143.2 143.6	+ 13.5 + 13.2 + 12.2 + 12.3	111.9 113.5 120.1 112.5	- 0.9 + 4.7 - 4.2 - 12.5	1	+ 26.3 + 14.9 + 4.2 - 5.4	185.7 178.2 171.3 147.8	+ 14.2 + 13.4 + 13.2 - 2.1	123.7 115.4 126.5 111.3	+ 33.3 + 15.9 + 0.6 - 6.9
July p	Ĭ	domestic	•	+ 12.3	112.5	- 12.5	120.4	_ 5.4	147.6	_ 2.1	111.5	- 0.9
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	- 3.2 + 10.2	105.5 114.8	- 9.2 + 8.8	95.4 105.6	- 0.8 + 10.7
2021 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	106.0	+ 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	1	+ 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		+ 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 June July p	124.8 123.2 126.8 123.5	+ 12.6 + 9.7 - 0.7 - 4.0	139.8 136.5 138.1 143.4	+ 19.3 + 15.0 + 10.4 + 13.7	110.5 112.6 117.1 108.6	+ 3.7 + 3.7 - 10.3 - 17.8	1	+ 32.2 + 17.6 + 2.7 - 9.4	134.0 141.8 135.2 124.2	+ 4.5 + 16.7 + 15.5 + 7.1	135.6 110.6 124.6 105.0	+ 45.0 + 17.9 - 1.3 - 14.7
July P	From abro		145.4	15.7	100.0	17.0	103.5] 3.4	124.2	7.1	105.0	14.7
2018 2019	113.0 107.6	+ 2.9 - 4.8	114.6 108.3	+ 2.4 - 5.5	112.0 106.9	+ 2.8 - 4.6		+ 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	- 8.1 + 23.6	102.0 130.1	- 5.8 + 27.5	95.9 118.1	- 10.3 + 23.1	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 July Aug. Sep.	127.7 107.9 132.1	+ 31.4 + 15.5 + 22.5	129.9 120.1 131.1	+ 36.3 + 31.3 + 20.7	126.3 101.1 133.7	+ 30.6 + 9.2 + 26.0	115.2 122.4	+ 19.7 + 6.9 + 2.8	179.1 155.2 165.7	+ 34.7 + 15.5 + 1.5	116.7 102.4 108.5	+ 13.4 + 3.2 + 3.4
Oct. Nov. Dec.	118.5 129.8 127.1	+ 5.2 + 10.8 + 9.2	126.8 139.5 129.7	+ 15.3 + 21.5 + 19.1	113.5 125.0 126.4	+ 0.1 + 5.5 + 4.8	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.	138.1 132.0 142.1	+ 20.7 + 16.1 + 7.8	150.1 141.6 157.6	+ 17.4 + 15.4 + 13.0	132.6 126.5 132.9	+ 23.6 + 15.9 + 3.9	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 June	125.3 124.4 131.6	+ 2.3 + 8.0 + 4.6	147.5 142.4 148.7	+ 8.1 + 11.3 + 14.2	112.8 114.0 121.9	- 3.3 + 5.4 - 0.4	140.6 145.6	+ 22.3 + 13.4 + 5.3	227.3 207.5 200.3	+ 19.5 + 11.6 + 12.0	114.6 119.1 127.9	+ 24.2 + 14.4 + 2.2
July P	124.5	- 2.5	143.9	+ 10.8	114.8	9.1	128.5	- 2.6	166.8	- 6.9	116.2	- 0.4

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

4. Orders received by construction *

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

Zeit 2018 2019 2020 2021 2021 June July Aug. Sep. Oct. Nov. Dec.

> Feb. Mar.

May June

		Breakdown	by type o	f construction	1							Breakdown	by client 1	ı	
		Structural e	ngineering)											
Total		Total		Residential construction	า	Industrial construction	า	Public secto construction		Civil engineering		Industrial cl	ients	Public sector 2	
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	Annua percen age change
135.0	+ 10.3	131.7	+ 7.0	137.1	+ 11.4	128.7	+ 4.2	125.2	+ 2.7	138.9	+ 14.2	136.1	+ 13.6	132.6	+ 6.
146.2	+ 8.3	145.3	+ 10.3	150.4	+ 9.7	142.5	+ 10.7	138.8	+ 10.9	147.2	+ 6.0	148.1	+ 8.8	141.3	+ 6.
145.6	- 0.4	144. <u>2</u>	- 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
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
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	154.4	- 21
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.
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.
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.
158.7	+ 11.4	168.8	+ 11.7	169.1	- 7.2	171.7	+ 35.1	157.2	+ 13.9	146.9	+ 10.8	171.6	+ 21.3	137.5	+ 15.
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.
185.3	+ 24.3	205.7	+ 41.1	196.2	+ 3.5	173.7	+ 50.3	356.7	+213.4	161.5	+ 5.6	186.9	+ 38.2	176.7	+ 25.
142.8	+ 6.9	145.4	+ 4.1	165.7	+ 13.7	134.0	- 8.1	121.0	+ 24.2	139.9	+ 10.6	149.1	- 1.0	121.7	+ 14.
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.
209.5	+ 32.7	208.8	+ 32.9	219.4	+ 25.1	201.7	+ 42.4	200.5	+ 29.6	210.3	+ 32.3	217.4	+ 44.0	194.5	+ 25.
164.2	+ 2.5	157.6	- 0.4	178.1	- 3.8	142.5	+ 2.2	146.2	+ 4.5	171.9	+ 5.9	153.9	+ 3.9	167.6	+ 5.
175.9	+ 10.6	172.4	+ 5.8	182.1	- 1.1	163.4	+ 11.4	173.9	+ 12.8	180.0	+ 16.7	170.8	+ 13.3	178.0	+ 16.
175.2	+ 6.4	166.3	+ 0.7	177.9	+ 0.2	153.3	- 4.4	176.5	+ 23.8	185.6	+ 13.2	177.5	+ 6.5	171.0	+ 10.

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 •

					of which:											
					In stores by	enterprise	es main prod	uct range								
	Total				Food, bever tobacco 1	ages,	Textiles, clothing, foodwear a leather goo		Information and communica equipment		Constructio and flooring materials, household appliances, furniture		Retail sale of pharmaceut and medica goods, cost and toilet articles	ical I	Retail sale v mail order h or via interr as well as other retail	nouses net
	At current prices		At 2015 pri	ces	At current p	rices										
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	110.7	+ 2.9	107.5	+ 1.6	109.6	+ 3.5	105.6	- 2.3	107.1	+ 0.8	103.0	± 0.0	112.5	+ 4.5	127.7	+ 6.0
2019	114.9	+ 3.8	110.9	+ 3.2	112.1	+ 2.3	106.7	+ 1.0	108.9	+ 1.7	107.1	+ 4.0	118.7	+ 5.5	138.4	+ 8.4
2020	121.4	+ 5.7	115.9	+ 4.5	121.2	+ 8.1	81.9	- 23.2	106.9	- 1.8	117.1	+ 9.3	125.5	+ 5.7	169.0	+ 22.1
2021 3	125.0	+ 3.0	116.9	+ 0.9	122.0	+ 0.7	78.1	- 4.6	95.4	- 10.8	110.3	- 5.8	135.4	+ 7.9	191.4	+ 13.3
2021 July	126.4	+ 2.8	118.4	+ 0.7	120.8	+ 1.3	104.0	+ 5.9	102.1	- 6.4	121.4	- 3.4	136.4	+ 10.0	161.3	+ 3.1
Aug.	123.3	+ 2.3	115.6	+ 0.4	115.2	- 4.8	100.5	+ 9.7	101.8	- 2.4	116.8	- 0.4	132.8	+ 10.7	169.6	+ 9.1
Sep.	121.3	+ 1.5	113.0	- 0.7	112.5	- 1.1	100.1	- 0.7	100.6	- 3.7	113.1	- 4.2	132.1	+ 7.1	171.6	+ 6.5
Oct.	130.5	+ 0.9	120.9	- 1.7	119.6	- 2.3	114.4	+ 4.8	108.5	- 10.6	124.4	- 4.4	143.3	+ 10.1	192.4	+ 5.4
Nov.	138.3	+ 1.0	128.2	- 1.8	121.2	- 1.9	104.5	+ 15.5	132.8	- 14.4	128.1	- 9.0	144.1	+ 7.1	233.4	+ 2.1
Dec.	144.9	+ 4.4	133.8	+ 1.1	138.6	- 1.0	98.7	+ 41.8	143.0	+ 5.7	124.0	+ 3.5	150.0	+ 4.5	218.8	- 0.3
2022 Jan.	118.2	+ 14.0	108.6	+ 10.1	113.4	- 1.9	70.5	+263.4	103.6	+ 65.0	105.1	+ 76.0	135.4	+ 5.8	183.7	- 1.7
Feb.	116.2	+ 10.8	105.8	+ 6.8	111.8	- 1.9	71.2	+219.3	90.5	+ 43.4	109.2	+ 54.5	129.3	+ 0.3	171.7	- 3.7
Mar.	136.1	+ 5.2	121.2	- 0.8	130.2	- 1.4	90.4	+ 54.0	96.0	+ 8.7	132.9	+ 10.2	143.0	+ 5.1	193.7	- 6.3
Apr.	130.1	+ 7.4	114.6	+ 0.9	124.8	+ 0.5	98.3	+151.4	89.8	+ 29.6	127.4	+ 19.2	137.6	+ 4.6	182.4	- 5.7
May	132.3	+ 5.4	114.9	- 2.2	125.7	- 1.1	107.3	+ 72.5	85.0	+ 14.4	127.4	+ 12.4	138.5	+ 7.6	183.0	- 8.4
June	129.9	- 0.2	112.3	- 8.0	125.4	+ 2.3	104.0	- 8.0	90.2	- 7.8	118.4	- 5.3	140.6	+ 6.2	174.3	- 5.4
July	134.5	+ 6.4	115.7	- 2.3	129.2	+ 7.0	103.8	- 0.2	97.2	- 4.8	121.6	+ 0.2	149.3	+ 9.5	181.1	+ 12.3

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.

6. Labour market *

	Employment	: 1	Employment	subject to so	ocial contribu	itions 2			Short-time w	orkers 3	Unemploym	nent 4		
			Total		of which:					of which:		of which:		
Period	Thou- sands	Annual percentage change	Thou-sands	Annual percentage change	Production sector	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 % 4,5	Vacan- cies, thou- sands 4,6
2017	44,251	+ 1.4	32,234	+ 2.3	9,146	21,980	868	4,742	114	24	2,533	7 855	5.7	731
2018 2019 2020 2021	44,866 45,276 44,914 44,980	+ 1.4 + 0.9 - 0.8 + 0.1	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 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	45,239 45,386 45,565 45,133 44,723 44,809 44,993 44,514 44,812 45,157 45,437 45,173	+ 1.0 + 0.8 + 0.7 + 0.5 - 1.1 - 1.3 - 1.3 - 1.4 + 0.2 + 0.8 + 1.0 + 1.5	33,388 33,548 33,924 33,642 33,415 33,424 33,836 33,768 33,718 33,929 34,374 9 34,244 9 34,400	+ 1.8 + 1.5 + 1.4 + 1.3 + 0.1 - 0.4 - 0.3 - 0.2 + 0.9 + 1.5 + 1.6 9 + 2.0 9 + 2.0	9,455 9,491 9,551 9,439 9,387 9,359 9,395 9,294 9,322 9,347 9,415 9 9,349 9 9,372	22,932 23,049 23,388 23,284 23,171 23,518 23,376 23,446 23,606 23,982 9 23,944 9 24,055	750 753 738 686 640 640 676 665 697 719 727 9 715 9 718	4,615 4,598 4,522 4,458 4,235 4,273 4,194 4,051 4,066 4,161 4,125 9 4,061 9 4,109	51 66 161 1,219 5,399 2,705 2,433 3,473 2,164 935 835	43 58 105 949 5,388 2,691 2,361 3,157 2,143 915 762 9 792 9 343	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 1,024 920 802 874 777	8 4.9 5.0 4.8 5.2 6.0 6.3 5.9 6.3 5.9 5.5 5.5 5.1 5.3	795 794 729 683 593 583 595 586 658 774 804 818
2019 Apr. May June July Aug. Sep. Oct. Nov. Dec. 2020 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec. 2021 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec. 2022 Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec. 2022 Jan. Feb. Mar. Apr. May June July Aug. Aug.	45,143 45,268 45,306 45,314 45,523 45,523 45,627 45,469 45,169 45,077 44,808 44,672 44,688 44,672 44,688 44,690 45,076 45,030 44,873 44,486 44,567 44,486 44,567 44,567 44,567 44,567 44,567 44,567 44,567 44,567 44,567 45,347 45,348 45,111 45,157 45,370 45,370 45,370 45,370 45,370 45,370 45,370 45,370 45,370 45,370 45,573 45,573 45,573	+ 1.1 + 1.0 + 0.9 + 0.9 + 0.7 + 0.8 + 0.8 + 0.7 + 0.6 + 0.6 + 0.2 - 0.7 - 1.3 - 1.4 - 1.4 - 1.4 - 1.3 - 1.5 - 1.5 - 1.5 - 1.5 - 1.5 - 1.1 + 0.8 + 0.8 + 0.8 + 0.8 + 0.8 + 1.0 + 1.1 + 1.5 + 1.5	33,383 33,433 33,407 33,610 33,938 33,610 33,968 33,740 33,624 33,624 33,430 33,323 33,233 33,432 33,233 33,432 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,862 33,792 33,792 33,636 34,436 34,243 34,243 34,243 34,369 34,449 34,243 34,369 34,449 34,243 34,369 34,449 34,243 34,369 34,449 34,243 34,369 34,449 34,243 34,369 34,449 34,243 34,369 34,449 34,449 34	+ 1.8 + 1.8 + 1.6 + 1.6 + 1.4 + 1.5 + 1.4 + 1.4 + 1.4 + 1.3 + 1.1 - 0.3 - 0.3 - 0.4 - 0.4 - 0.3 - 0.2 - 0.3 - 0.3 - 0.4 - 1.5 + 1.5 + 1.5 + 1.6 + 1.5 + 1.6 + 1.5 + 1.6 + 1.9 - 0.9 - 0.9	9,457 9,462 9,455 9,450 9,505 9,583 9,567 9,432 9,427 9,440 9,396 9,367 9,355 9,322 9,421 9,410 9,400 9,327 9,281 9,324 9,326 9,324 9,326 9,324 9,326 9,324 9,326 9,324 9,326 9,327 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,432 9,367 9,376 9,376	22,925 22,968 22,968 22,968 22,901 23,101 23,341 23,325 23,278 23,290 23,141 23,083 23,084 23,024 23,218 23,454 23,530 23,559 23,478 23,343 23,347 23,343 23,397 23,461 23,504 23,559 23,468 23,903 23,965 24,037 23,980 23,990 23,990 23,990 23,990 23,990 23,990 23,990 23,990 24,0037 9 24,0037 9 24,0037 9 24,0037	753 749 750 757 757 757 757 757 757 757 759 689 683 675 643 624 656 666 666 666 666 667 662 685 685 716 722 726 724 739 708 711 719 9 720 9 713 9 719 9 723	4,607 4,627 4,646 4,568 4,517 4,510 4,532 4,531 4,471 4,206 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,260 4,166 4,134 4,026 4,026 4,032 4,032 4,032 4,032 4,032 4,033 4,133 4,113 4,113 4,123 4,049 9 4,067 9 4,068 9 4,069 9 4,069 9 4,160 9 4,069 9 4 4,069 9 4 4,069 9 4 4,069 9 4 4,069 9 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	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 3,766 3,766 3,016 2,583 2,342 1,568 1,568 1,568 1,568 1,088 857 859 957 1,123 1,087	40 45 43 47 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 3,294 3,358 2,676 3,294 3,358 8,358 1,548 1,548 1,068 838 839 762 772 847 803 9 725 9 450 9 321 9 259	8 2,229 2,236 2,216 2,275 2,319 2,234 2,204 2,180 2,227 2,426 2,336 2,335 2,644 2,813 2,853 2,910 2,955 2,847 2,760 2,699 2,707 2,901 2,904 2,827 2,771 2,687 2,614 2,590 2,578 2,465 2,377 2,317 2,330 2,462 2,428 2,362 2,309 2,260 2,363 2,470 2,5547	795 772 766 825 848 808 795 800 838 985 971 925 1,093 1,172 1,197 1,258 1,302 1,238 1,183 1,152 1,166 1,298 1,270 961 1,020 961 1,020 961 1,020 961 804 864 814 789 803 903 803 903 884 835 800 771 761 801	8 4.9 5.0 5.1 4.9 5.3 5.3 5.1 5.8 6.1 5.8 6.1 6.2 6.3 6.2 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3 6.3	796 792 798 799 795 787 764 736 688 690 691 626 584 570 573 584 591 602 601 581 566 583 609 629 654 693 774 779 799 808 794 792 822 839 852 852 865 877 881 887

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** Unadjusted figures estimated by the Federal Employment Agency. In 2020 and 2021, the estimated values for Germany deviated from the final data by a maximum of 0.1% for employees subject to social contributions, by a maximum of 0.9% for persons solely in jobs exempt from social contributions, and by a maximum of 28,1% for cyclically induced short-time work. **10** Initial preliminary estimate by the Federal Statistical Office. **11** From May 2022, calculated on the basis of new labour force figures.

7. Prices

F	Harmonised Ind	ex of Consi	umer Prices										HWWI	
		of which:							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-			Actual	Memo item: Consumer	Con-	products sold on	producer prices of				
,	Total	Food 1,2	energy industrial	Energy 1	Services 1	rents for	price index (national	struction price index	the domestic market 3	agri- cultural	Evports	Imports	Enorgy E	Other raw
	2015 = 100	F000 1,2	goods 1	Ellergy 1	Services 1	housing	concept)	index	market 3	products 3	EXPORTS	imports	Energy 5 2020 = 100	materials 6
													2020 = 100	
- 1	Index level	_	_	_		_	_		_	_	_	_		
2018 2019	104.0 105.5	106.7 108.4	103.0 104.2	102.3 103.7	104.2 105.7	104.6 106.1	103.8 105.3	110.2 115.3	103.7 104.8	109.0 111.5	101.9 102.4	102.7 101.7	174.1 150.2	99.9 98.7
	7 105.8 7 109.2	7 110.9 7 114.1	7 104.1 7 106.7	7 99.0 7 109.0	7 106.9 7 109.0	107.6 109.0	7 105.8 7 109.1	7 117.0 7 127.0	103.8 114.7	108.0 8 117.5	101.7 107.4	97.3 110.4	100.0 220.7	100.0 137.6
Nov. 7	7 105.8 7 104.7	7 110.2 7 110.3	7 103.9 7 104.0	7 96.0	7 107.6 7 105.5	108.0 108.1	7 105.9 7 105.0	7 116.0	103.7 103.9	103.8 103.9	101.4 101.8	97.1 97.6	103.3 109.5	104.9 107.1
Dec. 7 2021 Jan.	7 105.3 106.8	7 109.9 112.3	7 103.4 105.1	7 97.4 102.6	7 106.9 106.9	108.2 108.4	7 105.5 106.3		104.7 106.2	104.2 106.8	101.9 102.8	98.2 100.1	121.8 141.6	112.3 120.6
Feb. Mar.	107.4 107.9	113.0 113.1	105.5 105.7	104.1 106.2	107.3 107.6	108.5 108.6	107.0 107.5	121.2	106.9 107.9	108.9 114.0	103.3 104.1	101.8 103.6	146.0 150.3	124.7 130.4
Apr. May	108.4 108.7	114.5 114.2	105.8 106.3	106.1 106.7	108.3 108.7	108.7 108.9	108.2 108.7	125.1	108.8 110.4	115.9 118.5	104.9 105.6	105.0 106.8	154.1 168.3	134.3 144.9
June July 7	109.1 7 109.7	114.1 7 114.4	106.5 7 106.4	107.6 7 109.0	109.1 7 110.2	108.9 109.1	109.1 7 110.1		111.8 113.9	117.7 117.2	106.4 107.7	108.5 110.9	183.0 204.8	142.3 141.9
Aug. 7	7 109.8 7 110.1	7 114.4 7 114.4	7 106.5 7 107.6	7 109.4 7 110.1	7 110.3 7 109.9	109.2 109.3	7 110.1 7 110.1	7 129.4	115.6 118.3	118.7 8 117.4	108.5 109.5	112.4 113.9	217.6 256.1	138.9 136.3
Oct.	7 110.7 7 111.0	7 114.5 7 114.9	7 108.0 7 108.4	7 114.6 7 116.7	7 110.0 7 109.5	109.5 109.5	7 110.7 7 110.5	7 132.2	122.8 123.8	120.7 125.6	111.0 111.9	118.2 121.7	352.7 304.4	143.0 143.0
Dec. 7	7 111.3	7 115.7	7 108.6	7 115.0	7 110.3	109.6	7 111.1	132.2	130.0	127.2	113.0	121.8	352.9	148.3
2022 Jan. Feb.	112.3 113.3	117.2 118.2	108.4 109.1 110.4	123.7 127.4 146.1	109.8 110.2 110.6	109.9 110.0	111.5 112.5 115.3	138.1	132.8 134.6	129.2 133.4	115.0 116.1	127.0 128.6	327.8 336.0 504.2	157.0 166.5 185.4
Mar. Apr.	116.1 116.9	119.1 122.2	111.3	142.7	111.7	110.2 110.4	116.2		141.2 145.2	153.6 162.3	120.7 121.7	135.9 138.3	407.8	184.8
May June	118.2 118.1	124.2 125.4	112.3 112.5	146.7 147.8	112.0 111.0	110.6 110.8	117.3 117.4	147.9	147.5 148.4	160.7 157.6	122.4 123.5	139.5 140.9	366.8 389.3	178.9 169.6
July Aug.	119.0 119.5	127.6 129.1	112.6 113.0	147.8 148.6	112.1 112.2	110.9 111.1	118.4 118.8		156.3 	156.4 	126.0	142.9	449.8 534.2	158.0 159.4
1	Annual per	centage	change	j										
2018 2019	+ 1.9 + 1.4	+ 2.6 + 1.6	+ 0.8 + 1.1	+ 4.9 + 1.4	+ 1.6 + 1.5	+ 1.6 + 1.5	+ 1.8 + 1.4	+ 4.7 + 4.7	+ 2.6 + 1.1	+ 0.4 + 2.3	+ 1.2 + 0.5	+ 2.6 - 1.0	+ 25.4 - 13.7	+ 0.3 - 1.2
2020 7	7 + 0.4	7 + 2.3	7 - 0.1	7 - 4.5	7 + 1.2	+ 1.4	7 + 0.5	7 + 1.4	- 1.0	- 3.1	- 0.7	- 4.3	- 33.4	+ 1.3
2021	7 + 3.2	7 + 2.9	7 + 2.5	7 +10.1	7 + 2.0	+ 1.3	7 + 3.1	7 + 8.6	+ 10.5	8 + 8.8	+ 5.6	+ 13.5	+ 120.7	+ 37.6
	7 – 0.5 7 – 0.7	7 + 1.5 7 + 1.2	7 - 1.0 7 - 1.1	7 – 6.6 7 – 7.4	7 + 0.7 7 + 0.6	+ 1.3 + 1.3	7 - 0.2 7 - 0.3	7 - 0.3	- 0.7 - 0.5	- 5.9 - 7.2	- 1.0 - 0.6	- 3.9 - 3.8	- 29.1 - 28.0	+ 7.0 + 8.4
Dec. 7	7 - 0.7	7 + 0.6	7 - 1.6	7 - 6.0	7 + 0.8	+ 1.3	7 - 0.3	0.5	+ 0.2	- 8.9	- 0.6	- 3.4	- 20.8	+ 11.1
2021 Jan. Feb. Mar.	+ 1.6 + 1.6 + 2.0	+ 2.0 + 1.6 + 1.9	+ 1.1 + 1.2 + 0.5	- 2.2 + 0.2 + 4.5	+ 2.5 + 2.0 + 2.0	+ 1.3 + 1.3 + 1.2	+ 1.0 + 1.3 + 1.7	+ 2.9	+ 0.9 + 1.9 + 3.7	- 5.7 - 4.6 + 0.3	+ 0.1 + 0.7 + 2.2	- 1.2 + 1.4 + 6.9	- 2.2 + 15.9 + 79.1	+ 17.7 + 24.6 + 36.1
Apr.	+ 2.1	+ 2.0	+ 0.4	+ 7.6	+ 1.5	+ 1.2	+ 2.0		+ 5.2	+ 2.8	+ 3.3	+ 10.3	+ 128.3	+ 45.0
May June	+ 2.4 + 2.1	+ 1.5 + 1.2	+ 0.9 + 1.6	+ 9.5 + 9.0	+ 1.9 + 0.9	+ 1.3 + 1.2	+ 2.5 + 2.3	+ 5.7	+ 7.2 + 8.5	+ 8.6 + 7.0	+ 4.2 + 5.0	+ 11.8 + 12.9	+ 127.4 + 113.0	+ 56.0 + 51.2
	7 + 3.1 7 + 3.4	7 + 3.8 7 + 3.9	7 + 3.8 7 + 3.8	7 +11.2 7 +12.1	7 + 0.7 7 + 1.2	+ 1.3 + 1.3	7 + 3.8 7 + 3.9	7 + 11.8	+ 10.4 + 12.0	+ 9.0 + 13.3	+ 6.3 + 7.2	+ 15.0 + 16.5	+ 126.0 + 127.1	+ 48.1 + 41.2
Sep. 7		7 + 4.1 7 + 3.9	7 + 3.9 7 + 3.9	7 +13.6 7 +18.1	7 + 1.8 7 + 2.2	+ 1.4 + 1.4	7 + 4.1 7 + 4.5		+ 14.2 + 18.4	8 + 13.4 + 16.3	+ 8.1 + 9.5	+ 17.7 + 21.7	+ 163.7 + 241.4	+ 31.7 + 36.3
Nov. 7	7 + 6.0 7 + 5.7	7 + 4.2 7 + 5.3	7 + 4.2 7 + 5.0	7 +21.6 7 +18.1	7 + 3.8 7 + 3.2	+ 1.3 + 1.3	7 + 5.2 7 + 5.3	7 + 14.0	+ 19.2 + 24.2	+ 20.9 + 22.1	+ 9.9 + 10.9	+ 24.7 + 24.0	+ 178.0 + 189.7	+ 33.5 + 32.1
2022 Jan. Feb.	+ 5.1 + 5.5	+ 4.4 + 4.6	+ 3.1 + 3.4	+20.6 +22.4	+ 2.7 + 2.7	+ 1.4 + 1.4	+ 4.9 + 5.1	+ 13.9	+ 25.0 + 25.9	+ 21.0 + 22.5	+ 11.9 + 12.4	+ 26.9 + 26.3	+ 131.5 + 130.1	+ 30.2 + 33.5
Mar. Apr.	+ 7.6 + 7.8	+ 5.3	+ 4.4	+37.6 +34.5	+ 2.8	+ 1.5	+ 7.3 + 7.4		+ 30.9 + 33.5	+ 34.7 + 40.0	+ 15.9 + 16.0	+ 31.2 + 31.7	+ 235.5 + 164.6	+ 42.2 + 37.6
May June	F 7.0							. 10.3						
	+ 8.7 + 8.2	+ 8.8 + 9.9	+ 5.6 + 5.6	+37.5 +37.4	+ 3.0 + 1.7	+ 1.6 + 1.7	+ 7.9 + 7.6	+ 18.2	+ 33.6 + 32.7	+ 35.6 + 33.9	+ 15.9 + 16.1	+ 30.6 + 29.9	+ 117.9 + 112.7	+ 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.

8. Households' income *

	Gross wages salaries 1	and	Net wages a salaries 2	nd	Monetary soo benefits rece		Mass income	4	Disposable in	come 5	Saving 6		Saving ratio 7
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	1,285.5 1,337.4	4.2 4.0	863.3 896.3	4.0 3.8	410.5 426.2	4.2 3.8	1,273.8 1,322.5	4.0 3.8	1,782.3 1,841.5	2.8 3.3	179.4 187.8	5.1 4.7	10.1 10.2
2017 2018 2019	1,395.4 1,462.7 1,524.4	4.3 4.8 4.2	932.5 976.1 1,022.0	4.0 4.7 4.7	441.8 455.2 476.7	3.6 3.0 4.7	1,374.3 1,431.3 1,498.7	3.9 4.1 4.7	1,905.2 1,976.6 2,023.6	3.5 3.7 2.4	202.8 223.2 218.2	8.0 10.1 – 2.3	10.6 11.3 10.8
2020 2021	1,514.9 1,570.6	- 0.6 3.7	1,020.0 1,062.6	- 0.2 4.2	524.6 532.8	10.0 1.6	1,544.6 1,595.4	3.1 3.3	2,050.1 2,089.9	1.3 1.9	336.6 316.0	54.3 - 6.1	16.4 15.1
2021 Q1	362.0	- 1.2	244.5	- 0.7	137.8	8.8	382.3	2.5	522.1	- 0.2	115.7	34.9	22.2
Q2 Q3 Q4	377.1 393.0 438.5	5.8 5.1 4.9	250.7 271.6 295.8	6.8 5.5 5.0	134.9 131.2 129.0	2.2 - 1.8 - 2.6	385.6 402.8 424.8	5.2 3.0 2.6	514.9 520.4 532.5	3.5 1.7 2.7	84.8 54.4 61.2	- 15.3 - 21.2 - 25.0	16.5 10.4 11.5
2022 Q1	388.6	7.3	261.4	6.9	134.3	- 2.5	395.8	3.5	541.2	3.7	77.2	- 33.3	14.3
Q2	400.2	6.1	265.4	5.9	129.7	- 3.9	395.1	2.5	546.9	6.2	55.4	- 34.6	10.1

Source: Federal Statistical Office; figures computed in August 2022. * Households including non-profit institutions serving households. 1 Residence concept. 2 After deducting the wage tax payable on gross wages and salaries and employees' contributions to the social security funds. 3 Social security benefits in cash from the social security funds, central, state and local government and foreign countries, pension payments (net), private funded social benefits, less social contributions on social benefits, consumption-related taxes and public charges. 4 Net wages and salaries plus

monetary social benefits received. **5** Mass income plus operating surplus, mixed income, property income (net), other current transfers received, income of non-profit institutions serving households, less taxes (excluding wage tax and consumption-related taxes) and other current transfers paid. Including the increase in claims on company pension funds. **6** Including the increase in claims on company pension funds. **7** Saving as a percentage of disposable income.

9. Negotiated pay rates (overall economy)

	Index of negotiat	ed wages 1								
			On a monthly bas	sis						
	On an hourly bas	is	Total		Total excluding one-off payments	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	97.6	2.8	97.2	2.9
2015 2016 2017 2018 2019	100.0 102.2 104.5 107.6 110.7	2.3 2.2 2.2 3.0 2.9	100.0 102.2 104.5 107.5 110.6	2.3 2.2 2.2 3.0 2.8	100.0 102.2 104.5 107.5 110.1	2.3 2.2 2.3 2.8 2.5	100.0 102.3 104.7 107.6 110.2	2.4 2.3 2.4 2.8 2.4	100.0 102.5 105.1 108.4 111.7	2.9 2.5 2.6 3.2 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	111.6 115.3	- 0.1 3.3
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	107.4 111.2 115.1 127.2	- 0.0 5.4 4.0 3.7
2022 Q1 Q2	110.7 109.8	4.4 1.9	110.6 109.7	4.4 1.9	107.7 109.0	1.6 2.1	115.2 116.3	1.6 2.1	113.3 116.0	5.5 4.3
2022 Jan. Feb. Mar.	108.4 110.4 113.4	2.2 4.2 6.9	108.3 110.3 113.3	2.2 4.1 6.9	107.7 107.8 107.8	1.5 1.6 1.6	115.2 115.2 115.3	1.6 1.6 1.6		
Apr. May June	109.3 111.1 108.8	2.1 4.2 – 0.4	109.2 111.0 108.7	2.0 4.2 – 0.4	109.1 109.1 108.9	1.9 2.2 2.1	116.1 116.4 116.4	2.0 2.2 2.2	·	
July	144.0	3.4	143.9	3.4	139.8	3.2	116.6	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 August 2022.

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

End of year/half

	End of yea	r/half														
		Assets								Equity and	liabilities					
			of which:				of which:				Liabilities					
												Long-term		Short-term	1	
															of which:	
	Total	Non- current	Intangible	Tangible	Financial	Current	Inven-	Trade receiv-					of which: Financial		Financial	Trade
Period	assets	assets	assets	assets	assets	assets	tories	ables	Cash 1	Equity	Total	Total	debt	Total	debt	payables
20103	I .	billion)	540.8	l 610.0	1 200 5	l 10522	I 240 F	1 2247	172.6	l 700 o l	1 700 2 1	025.7	l гго 7	072.4	l 2575 l	205.0
2018 ³	2,589.0	1,536.7	586.3	610.8	288.5	1,052.3	249.5	234.7	172.6	789.8	1,799.2	925.7	558.7	873.4	257.5	205.0
2019	2,800.6	1,769.7		737.1	333.4	1,030.9	257.5	237.6	168.4	821.0	1,979.6	1,091.2	676.3	888.4	289.8	207.6
2020	2,850.0	1,797.3	607.5	733.1	335.1	1,052.7	243.6	225.9	240.5	811.5	2,038.5	1,181.5	746.3	857.0	304.4	196.1
2021 p	3,292.0	1,971.6	680.1	773.9	368.6	1,320.4	272.1	338.2	269.6	994.4	2,297.6	1,206.9	772.1	1,090.7	310.4	238.0
2020 H1	2,891.4	1,800.9	625.0	734.0	319.7	1,090.5	257.6	216.4	220.7	793.7	2,097.7	1,183.8	754.2	913.9	335.5	179.7
H2	2,850.0	1,797.3	607.5	733.1	335.1	1,052.7	243.6	225.9	240.5	811.5	2,038.5	1,181.5	746.3	857.0	304.4	196.1
2021 H1	3,017.6	1,877.0	649.3	745.0	343.7	1,140.6	256.2	273.2	240.8	906.9	2,110.7	1,178.6	751.9	932.1	297.4	206.9
H2 p	3,292.0	1,971.6	680.1	773.9	368.6	1,320.4	272.1	338.2	269.6	994.4	2,297.6	1,206.9	772.1	1,090.7	310.4	238.0
20183	As a perce 100.0	ntage of to 59.4	tal assets 20.9	23.6	11.1	40.6	9.6	9.1	6.7	30.5	69.5	35.8	21.6	33.7	10.0	7.9
2019	100.0	63.2	20.9	26.3	11.9	36.8	9.2	8.5	6.0	29.3	70.7	39.0	24.2	31.7	10.4	7.4
2020	100.0	63.1	21.3	25.7	11.8	36.9	8.6	7.9	8.4	28.5	71.5	41.5	26.2	30.1	10.7	6.9
2021 p	100.0	59.9	20.7	23.5	11.2	40.1	8.3	10.3	8.2	30.2	69.8	36.7	23.5	33.1	9.4	7.2
2020 H1	100.0	62.3	21.6	25.4	11.1	37.7	8.9	7.5	7.6	27.5	72.6	40.9	26.1	31.6	11.6	6.2
H2	100.0	63.1	21.3	25.7	11.8	36.9	8.6	7.9	8.4	28.5	71.5	41.5	26.2	30.1	10.7	6.9
2021 H1	100.0	62.2	21.5	24.7	11.4	37.8	8.5	9.1	8.0	30.1	70.0	39.1	24.9	30.9	9.9	6.9
H2 p	100.0	59.9	20.7	23.5	11.2	40.1	8.3	10.3	8.2	30.2	69.8	36.7	23.5	33.1	9.4	7.2
20402			focus or	•					420.2			760.0	1424	7522		452.5
20183	2,149.3	1,215.4	388.1	472.9	277.5	933.9	234.5	188.6	139.2	636.7	1,512.6	760.2	442.4	752.3	236.2	152.5
2019	2,302.9	1,396.4	419.6	565.4	319.7	906.5	243.8	188.5	136.8	662.2	1,640.7	887.5	523.8	753.2	257.5	158.0
2020	2,265.0	1,354.9	399.0	543.5	320.0	910.1	228.7	179.5	187.9	636.2	1,628.7	904.7	536.9	724.0	267.3	149.8
2021 p	2,626.3	1,479.3	441.7	573.9	347.4	1,147.0	254.4	281.7	212.3	764.7	1,861.6	918.5	548.5	943.1	274.9	184.0
2020 H1	2,304.8	1,351.9	406.4	547.1	303.3	952.9	243.9	171.5	171.3	614.6	1,690.2	912.1	548.4	778.0	294.6	137.0
H2	2,265.0	1,354.9	399.0	543.5	320.0	910.1	228.7	179.5	187.9	636.2	1,628.7	904.7	536.9	724.0	267.3	149.8
2021 H1	2,392.8	1,398.3	416.6	551.0	322.5	994.6	240.6	221.9	192.4	703.5	1,689.4	892.3	532.0	797.1	261.3	162.1
H2 P	2,626.3	1,479.3	441.7	573.9	347.4	1,147.0	254.4	281.7	212.3	764.7	1,861.6	918.5	548.5	943.1	274.9	184.0
		ntage of to														
2018 3	100.0	56.6	18.1	22.0	12.9	43.5	10.9	8.8	6.5	29.6	70.4	35.4	20.6	35.0	11.0	7.1
2019	100.0	60.6	18.2	24.6	13.9	39.4	10.6	8.2	5.9	28.8	71.3	38.5	22.7	32.7	11.2	6.9
2020	100.0	59.8	17.6	24.0	14.1	40.2	10.1	7.9	8.3	28.1	71.9	39.9	23.7	32.0	11.8	6.6
2021 p	100.0	56.3	16.8	21.9	13.2	43.7	9.7	10.7	8.1	29.1	70.9	35.0	20.9	35.9	10.5	7.0
2020 H1	100.0	58.7	17.6	23.7	13.2	41.3	10.6	7.4	7.4	26.7	73.3	39.6	23.8	33.8	12.8	6.0
H2	100.0	59.8	17.6	24.0	14.1	40.2	10.1	7.9	8.3	28.1	71.9	39.9	23.7	32.0	11.8	6.6
2021 H1	100.0	58.4	17.4	23.0	13.5	41.6	10.1	9.3	8.0	29.4	70.6	37.3	22.2	33.3	10.9	6.8
H2 P	100.0	56.3	16.8	21.9	13.2	43.7	9.7	10.7	8.1	29.1	70.9	35.0	20.9	35.9	10.5	7.0
	Groups	with a	focus or	the ser	vices se	ctor (€ b	illion)									
2018 3	439.7	321.3	152.7	137.9	11.0	118.3	14.9	46.1	33.3	153.1	286.6	165.5	116.3	121.1	21.3	52.5
2019	497.7	373.3	166.7	171.8	13.7	124.4	13.7	49.1	31.6	158.8	338.9	203.8	152.6	135.1	32.3	49.6
2020	585.0	442.4	208.5	189.6	15.1	142.6	14.9	46.4	52.6	175.3	409.7	276.7	209.4	133.0	37.1	46.3
2021 p	665.7	492.2	238.5	200.0	21.3	173.5	17.7	56.5	57.3	229.7	436.0	288.4	223.6	147.6	35.5	53.9
2020 H1	586.6	449.0	218.7	186.8	16.3	137.6	13.7	44.9	49.4	179.1	407.6	271.7	205.7	135.9	40.9	42.6
H2	585.0	442.4	208.5	189.6	15.1	142.6	14.9	46.4	52.6	175.3	409.7	276.7	209.4	133.0	37.1	46.3
2021 H1	624.7	478.7	232.6	194.1	21.2	146.1	15.5	51.4	48.4	203.4	421.3	286.4	219.9	135.0	36.1	44.8
H2 p	665.7	492.2	238.5	200.0	21.3	173.5	17.7	56.5	57.3	229.7	436.0	288.4	223.6	147.6	35.5	53.9
20103		ntage of to		1 21.4		1 26.0		10.5	7.6	1 2401		27.6	1 26.5	27.6	1 401	11.0
2018 ³	100.0	73.1	34.7	31.4	2.5	26.9	3.4	10.5	7.6	34.8	65.2	37.6	26.5	27.6	4.8	11.9
2019	100.0	75.0	33.5	34.5	2.8	25.0	2.8	9.9	6.4	31.9	68.1	41.0	30.7	27.2	6.5	
2020	100.0	75.6	35.6	32.4	2.6	24.4	2.6	7.9	9.0	30.0	70.0	47.3	35.8	22.7	6.3	7.9
2021 p	100.0	73.9	35.8	30.0	3.2	26.1	2.7	8.5	8.6	34.5	65.5	43.3	33.6	22.2	5.3	8.1
2020 H1	100.0	76.5	37.3	31.9	2.8	23.5	2.3	7.7	8.4	30.5	69.5	46.3	35.1	23.2	7.0	7.3
H2	100.0	75.6	35.6	32.4	2.6	24.4	2.6	7.9	9.0	30.0	70.0	47.3	35.8	22.7	6.3	7.9
2021 H1	100.0	76.6	37.2	31.1	3.4	23.4	2.5	8.2	7.8	32.6	67.4	45.8	35.2	21.6	5.8	7.2
H2 P	100.0	73.9	35.8	30.0	3.2	26.1	2.7	8.5	8.6	34.5	65.5	43.3	33.6	22.2	5.3	8.1

^{*} Non-financial groups admitted to the Prime Standard segment of the Frankfurt Stock Exchange which publish IFRS consolidated financial statements on a quarterly or half-yearly basis and make a noteworthy contribution to value added in Germany. Ex-

cluding groups engaged in real estate activities. **1** Including cash equivalents. **2** Including groups in agriculture and forestry. **3** From H1 2018 or 2018 onwards: significant changes in IFRS standards, impairing comparability with previous periods.

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

								ation and a				Operating	incomo (ER	IT) as a per	contago of	rovonuos
			Operating	income	Sation (EDI	104 -) 43 6	Distributio		-5			Operating	income (Lb	Distributio		evenues
			before dep	preciation	Weighted		First		Third	Operating		Weighted		First		Third
	Revenues		(EBITDA 1		average		quartile	Median	quartile	income (El	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	%	%	%
2014	1,564.3	1.0	198.7	5.0	12.7	0.5	5.9	10.3	17.4	109.3	8.6	7.0	0.5	1.9	6.2	11.1
2014	1,633.9	6.9	195.9	- 1.1	12.7	- 1.0	6.3	10.5	17.4	91.5	- 16.4	5.6	- 1.5	1.8	6.7	11.3
2016	1,624.3	- 0.4	214.4	7.8	13.2	1.0	6.7	11.4	17.9	111.7	9.0	6.9	0.5	2.6	6.7	12.0
2017	1,719.3	5.1	243.4	14.6	14.2	1.2	7.0	11.0	18.0	141.9	33.3	8.3	1.8	2.5	6.8	12.1
20186	1,706.8	0.7	232.8	- 0.9	13.6	- 0.2	6.1	10.6	17.8	129.2	- 6.3	7.6	- 0.6	2.1	6.5	11.9
2019	1,764.6	2.6	233.6	0.4	13.2	- 0.3	6.9	12.2	19.2	105.5	- 17.9	6.0	- 1.5	1.6	5.8	11.8
2020	1,632.8	- 8.8	213.6	- 7.7	13.1	0.2	6.5	11.5	17.9	52.1	- 41.0	3.2	- 2.1	- 0.8	4.9	10.5
2021 p	1,994.7	20.4	297.9	37.8	14.9	1.9	7.8	13.4	19.9	161.7	212.8	8.1	5.0	2.9	8.2	12.2
2017 H1	843.9	6.7	125.7	14.6	14.9	1.0	5.7	10.1	17.1	78.4	29.6	9.3	1.6	1.8	5.8	11.6
H2	878.5	3.5	117.4	14.6	13.4	1.3	6.9	12.0	19.2	63.0	38.2	7.2	1.8	3.2	7.4	12.4
2018 H1 6	848.2	- 0.1	120.8	- 2.1	14.2	- 0.3	5.1	10.6	18.2	72.7	- 5.3	8.6	- 0.5	1.7	6.4	12.5
H2	869.4	1.4	114.4	0.5	13.2	- 0.1	6.3	11.2	18.0	58.0	- 7.6	6.7	- 0.6	2.1	6.8	12.5
2019 H1	861.3	2.7	112.3	- 4.0	13.0	- 0.9	6.5	11.8	18.6	53.4	- 23.3	6.2	- 2.1	1.5	5.7	11.7
H2	903.7	2.4	121.3	4.8	13.4	0.3	6.6	11.8	20.0	52.0	- 11.4	5.8	- 0.9	0.8	6.1	12.5
2020 H1	744.5	- 14.4	78.2	- 34.1	10.5	- 3.0	4.8	9.9	16.7	7.9	- 88.0	1.1	- 5.3	- 2.1	3.5	8.8
H2	888.4	- 3.3	135.4	17.1	15.2	2.8	7.6	13.2	19.8	44.2	8.7	5.0	0.7	1.7	6.5	11.6
2021 H1	920.0	20.3	151.5	87.2	16.5	5.9	7.4	12.6	19.5	84.5	73.3	9.2	8.3	2.3	7.8	12.2
H2 p	1,075.6	20.4	146.6	8.2	13.6	- 1.5	8.4	13.2	20.8	77.2		7.2	2.2	2.9	7.8	13.4
			, ,		duction	,										' '
2014	1,220.0	1.0	152.2	5.9	12.5	0.6	5.8	10.1	15.5	85.2	9.8	7.0	0.6	1.7	6.0	10.6
2015	1,309.7	7.0	149.0	- 2.6	11.4	- 1.1	6.3	10.5	16.3	69.1	- 19.7	5.3	- 1.8	2.2	6.6	10.4
2016	1,295.9	- 0.8	161.9	6.3	12.5	0.8	6.5	10.6	16.0	84.8	4.2	6.5	0.3	2.8	6.3	10.5
2017	1,395.9	5.5	187.5	16.6	13.4	1.3	7.1	11.0	15.8	112.5	40.6	8.1	2.0	3.2	6.7	10.4
2018 6	1,367.7	1.0	175.7	- 1.5	12.9	- 0.3	6.9	10.7	16.0	100.7	- 7.1	7.4	- 0.6	2.8	6.9	11.4
2019	1,410.9	2.0	168.1	- 4.4	11.9	- 0.8	6.9	11.3	16.6	76.3	- 23.8	5.4	- 1.8	1.4	5.7	10.1
2020	1,285.2	- 9.4	143.6	- 8.6	11.2	0.1	5.7	10.6	16.5	29.1	- 48.1	2.3	- 2.3	- 0.7	4.3	9.8
2021 p	1,585.8	22.4	209.0	46.0	13.2	2.1	7.9	12.8	17.9	118.8	326.0	7.5	5.4	2.8	7.8	11.1
2017 H1	695.1	7.3	101.5	18.7	14.6	1.4	6.0	10.1	16.1	66.3	37.3	9.5	2.1	2.3	5.8	10.8
H2	701.4	3.7	86.0	14.2	12.3	1.1	7.0	11.7	16.9	46.2	45.5	6.6	1.9	3.6	7.2	10.8
2018 H1 6	681.9	- 0.1	94.9	- 3.4	13.9	- 0.5	7.0	10.9	16.7	60.0	- 5.9	8.8	- 0.6	2.9	6.8	11.5
H2	695.4	2.1	83.1	0.7	12.0	- 0.2	6.2	11.1	16.2	42.1	- 8.7	6.1	- 0.7	2.0	6.4	11.4
2019 H1	689.9	2.4	83.3	- 8.8	12.1	- 1.5	7.1	10.9	16.1	41.9	- 26.8	6.1	- 2.4	1.8	6.0	9.5
H2	721.0	1.7	84.8	0.3	11.8	- 0.2	6.1	10.8	16.9	34.4	- 19.7	4.8	- 1.3	0.6	5.2	11.1
2020 H1	580.6	- 16.0	49.0	- 42.4	8.4	- 3.8	4.4	8.8	14.9	0.2	- 101.7	0.0	- 6.2	- 2.1	3.1	7.8
H2	704.6	- 3.0	94.6	25.4	13.4	3.4	7.0	12.1	18.6	28.9	19.7	4.1	1.1	0.3	6.0	10.5
2021 H1	731.9	24.0	111.2	126.9	15.2	6.9	8.2	12.6	18.6	66.7	81.1	9.1	9.3	2.9	7.9	12.1
H2 p	854.2	21.1	97.9	3.9	11.5	- 1.9	7.8	12.4	17.5	52.1		6.1	2.1	2.7	7.0	11.5
.12 1		,			vices se	, ,	, ,.5	121	17.5	32.1	01.1	0.1	2.1	ı'	,	' '''
2014	344.2	0.8	46.5	1.8	13.5	0.1	6.0	12.3	22.6	24.1	4.3	7.0	0.2	2.6	6.3	13.7
2015	324.1	6.1	46.9	4.0	14.5	- 0.3	5.9	11.1	22.1	22.3	- 3.8	6.9	- 0.7	1.3	6.7	13.9
2016	328.4	1.3	52.5	12.8	16.0	1.6	6.8	13.4	25.1	26.9	24.4	8.2	1.5	2.3	8.2	15.3
2017	323.4	3.5	55.9	8.3	17.3	0.8	6.8	11.5	23.0	29.4	11.4	9.1	0.6	2.1	7.2	15.1
2018 6	339.2	- 0.6	57.1	1.3	16.8	0.3	5.5	10.5	24.7	28.5	- 3.5	8.4	- 0.3	1.4	5.8	16.6
2019	353.7	4.8	65.4	15.2	18.5	1.7	6.9	13.7	24.5	29.2	2.8	8.3	- 0.2	2.4	6.2	16.2
2020	347.6	- 6.1	70.0	- 5.4	20.1	0.1	6.9	13.3	22.1	23.0	- 22.1	6.6	- 1.4	- 1.2	6.5	12.2
2021 p	408.9	13.0	88.8	21.6	21.7	1.6	7.6	15.0	24.0	42.8	79.7	10.5	3.9	3.0	9.2	15.6
2017 H1	148.8	4.6	24.2	0.4	16.2	- 0.6	5.2	9.8		12.1	0.3	8.2	- 0.3	1.2	5.6	14.5
H2	177.1	2.5	31.5	15.6	17.8	2.0	6.6	12.5	24.6	16.8	21.6	9.5	1.5	2.9	7.8	17.9
2018 H1 6	166.3	0.2	25.9	2.8	15.6	0.4	3.8	9.5	22.7	12.6	- 1.9	7.6	- 0.2	- 0.9	4.7	15.3
H2	174.0	- 1.3	31.3	- 0.0	18.0	0.2	6.7	11.3	25.6	15.9	- 4.6	9.1	- 0.3	2.2	7.0	17.8
2019 H1	171.4	4.0	29.0	13.1	16.9	1.4	5.7	12.3	24.4	11.6	- 7.5	6.7	- 0.9	0.0	4.9	14.5
H2	182.7	5.5	36.5	16.9	20.0	1.9	7.1	15.1	24.4	17.7	10.9	9.7	0.5	1.8	8.2	16.3
2020 H1	163.9	- 8.1	29.2	- 9.4	17.8	- 0.3	5.6	10.8	21.2	7.7	- 36.4	4.7	- 2.1	- 2.2	4.3	10.9
H2	183.8	- 4.2	40.8	- 2.2	22.2	0.4	8.9	14.7	23.3	15.3	- 12.8	8.3	- 0.9	2.6	7.5	13.3
2021 H1	188.1	7.7	40.3	26.1	21.5	3.1	6.9	12.6	24.5	17.8	119.9	9.5	4.8	0.9	6.9	13.6
H2 p	221.4	17.9	48.7	18.2	22.0	0.1	9.4	16.5	24.7	25.1	59.1	11.3	3.0	3.8	9.5	17.7

^{*} Non-financial groups admitted to the Prime Standard segment of the Frankfurt Stock Exchange which publish IFRS consolidated financial statements on a quarterly or half-yearly basis and make a noteworthy contribution to value added in Germany. Excluding groups engaged in real estate activities. 1 Earnings before interest, taxes, depreciation and amortisation. 2 Quantile data are based on the groups' unweighted return on sales. 3 Annual figures do not always match the sum of the two half-year 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 *

€ million

€ million				I					
				2021		2022			
Item	2019	2020	2021	Q3	Q4	Q1	April r	May r	June P
I. Current Account	+ 277,849	+ 216,998	+ 301,548	+ 90,723	+ 44,291	+ 996	- 3,951	- 19,363	+ 3,241
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	233,602 235,622 – 2,020	256,436 254,331 + 2,105	261,635 257,373 + 4,262
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	93,287 80,613 + 12,674	97,246 84,338 + 12,908	104,991 88,580 + 16,411
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	69,815 72,499 – 2,684	68,589 92,297 – 23,709	74,691 77,725 – 3,034
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	12,191 24,112 – 11,921	14,300 24,967 – 10,667	11,757 26,155 – 14,398
II. Capital account	- 26,857	- 3,086	+ 41,311	+ 13,895	+ 12,929	+ 7,339	+ 2,459	+ 2,159	+ 3,455
III. Financial account 1	+ 244,341	+ 194,663	+ 341,940	+ 83,183	+ 27,229	+ 13,932	- 38,979	+ 13,141	+ 33,802
Direct investment By resident units abroad	+ 86,091	- 200,794	+ 292,022	+ 106,894	+ 52,634	+ 25,982	+ 29,796	+ 42,127	- 2,153
the euro area By non-resident units of the euro area	+ 46,496	- 137,138 + 63,654	+ 148,889 - 143,130	+ 44,551 - 62,341	- 16,014 - 68,646	+ 48,447 + 22,465	+ 48,514 + 18,718	+ 26,111 - 16,015	– 19,339 – 17,187
Portfolio investment By resident units abroad the euro area	- 104,930 + 423,918	+ 538,328 + 686,807	+ 427,270 + 772,132	+ 55,965 + 126,214	+ 118,239 + 140,645	- 32,612 - 20,994	+ 12,647 - 52,025	+ 52,785 - 45,207	- 17,081 - 13,488
Equity and investment fund shares Short-term	+ 58,261	+ 319,347	+ 352,979	+ 44,352	+ 24,505	- 18,689	- 5,012	- 36,687	- 35,463
debt securities Long-term	+ 6,565	+ 121,088	+ 116,846	- 8,476	+ 82,623	- 59,212	- 50,590	- 4,475	+ 4,915
debt securities	+ 359,093	+ 246,368	+ 302,307	+ 90,339	+ 33,517	+ 56,906	+ 3,577	- 4,045	+ 17,060
By non-resident units of the euro area Equity and	+ 528,848	+ 148,479	+ 344,863	+ 70,250	+ 22,405	+ 11,617	- 64,672	- 97,991	+ 3,592
investment fund shares Short-term	+ 283,968 - 26.090	+ 163,535	+ 519,946	+ 129,618	+ 145,570	- 63,928	+ 1,851	- 48,122 - 22.971	- 12,158
debt securities Long-term debt securities	- 26,090 + 270,967	+ 112,497 - 127,553	+ 40,042 - 215,125	+ 13,859 - 73,227	- 81,475 - 41,690	+ 81,563	- 23,123 - 43,400	- 22,971 - 26,899	- 14,702 + 30,452
Financial derivatives and employee stock options	+ 7,673	+ 29,703	+ 69,667	+ 24,062	+ 44,615	- 5,314	+ 12,756	- 2,734	- 9,894
4. Other investment Eurosystem General government MFIs 2 Enterprises and households	+ 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	- 93,510 + 57,915 - 24,119 - 114,431 - 12,874	- 80,224 - 33,473 - 2,659 - 22,739 - 21,353	+ 61,127 - 27,252 - 4,459 + 82,644 + 10,193
5. Reserve assets	+ 5,998	+ 13,026	+ 130,180	+ 123,148	+ 2,887	- 359	- 667	+ 1,188	+ 1,802
IV. Net errors and omissions	- 6,652	- 19,252	- 918	- 21,436	- 29,991	+ 5,597	- 37,487	+ 30,345	+ 27,106

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

² Excluding the Eurosystem.

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

€ million

	€ milli																			
	Curre	nt Account													Finan	cial account	3			
			Good	S	_															
					of wh								Baland				of whi		Errors	
Zeit	Total		Total			ementary items 1	Service	es	Primai incom		Secon incom		capita accou		Total		Reserv assets	e	and omiss	ions 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	+	147,298	+	160,829	-	6,209	_	25,255	+	51,306	-	39,582	+	1,219	+	92,757	+	1,613	-	55,760
2011 2012	+ +	167,340 195.712	+ +	162,970 199,531	_	9,357 11,388	-	29,930 30,774	+	69,087 65,658	_	34,787 38,703	+	419 413	++	120,857 151,417	+ +	2,836 1,297	-	46,902 43,882
2013 2014	+ +	184,352 210,906	++	203,802 219,629	-	12,523 14,296	- -	39,321 25,303	++	63,284 57,752	- -	43,413 41,172	- +	563 2,936	+++	226,014 240,258	+	838 2,564	++	42,224 26,416
2014		260,286		248,394	_	15,405	_	18,516	, T	69,262	_	38,854		48		234,392	_	2,213	_	25,845
2016	+	266,689	++	252,409	-	19,921	_	20,987	+	76,199	-	40,931	+	2,142	+	261,123	+	1,686	-	7,708
2017 2018	+ +	255,814 267,729	++	255,077 221,983	-	13,613 22,985	-	23,994 15,806	+	76,404 111,890	-	51,673 50,338	+	2,936 580	++	276,697 246,928	+	1,269 392	+	23,819 21,381
2019	+	262,903	+	215,456	-	30,887	-	18,100	+	115,359	-	49,811	-	887	+	186,317	-	544	-	75,700
2020	+	238,741	+	189,963	-	7,246	+	2,725	+	98,780	-	52,727	-	5,829	+	216,515	-	51	-	16,397
2021	+	264,981	+	192,150	+	3,091	+	314	+	126,606	-	54,090	-	1,376	+	314,750	+	31,892	+	51,145
2019 Q3 Q4	+ +	64,013 68,030	+	57,726 49,432	-	7,447 11,400	-	11,912 3,126	+	30,937 35,102	- -	12,738 13,378	+ -	235 1,412	+ +	19,657 83,477	-	349 576	+	44,590 16,860
2020 Q1 Q2	+ +	62,570 37,621	++	52,090 28,076	-	2,656 1,806	- +	2,238 5,190	+	27,396 13,563	-	14,679 9,209	- +	608 55	++	33,152 25,747	++	133 243	-	28,810 11,929
Q3	+	62,788	+	55,716	-	695	-	5,827	+	23,501	-	10,601	-	1,493	+	65,414	-	1,276	+	4,118
Q4	+	75,762	+	54,082	-	2,089	+	5,599	+	34,320	-	18,238	-	3,783	+	92,203	+	848	+	20,223
2021 Q1 Q2	+ +	75,009 63,932	++	57,190 47,133	+	1,200 194	++	3,281 6,401	+	31,814 18,624	-	17,276 8,225	-	331 1,788	++	106,919 84,594	++	385 58	++	32,241 22,450
Q3	+	61,165	+	49,076	-	34	-	8,160	+	34,277	-	14,029	+	1,745	+	36,922	+	31,199	-	25,987
Q4	+	64,875	+	38,751	+	2,119	-	1,208	+	41,892	-	14,560	-	1,002	+	86,314	+	250	+	22,441
2022 Q1 Q2	+ +	52,344 22,934	++	34,305 24,817	++	3,802 8,139	_	2,468 7,257	++	36,895 16,717	_	16,388 11,343	-	1,865 3,775	++	94,003 55,875	+	2,200 597	++	43,524 36,715
2020 Feb. Mar.	+ +	21,309 25,331	++	19,874 18,185	-	1,884 133	 -	1,316 62	+	7,135 10,080	-	4,383 2,872	-	101 706	++	15,791 13,542	+	750 1,514	-	5,418 11,083
Apr.	+	10,787	+	4,530	<u>'</u>	102	+	1,675	+	9,003	_	4,421	+	110		11,487	+	950	+	589
May	+	6,134	+	8,575	+	87	+	1,110	+	23	-	3,573	-	9	+	2,095	+	33	-	4,029
June	+	20,700	+	14,971	-	1,791	+	2,406	+	4,538	-	1,214	-	47	+	12,165	-	740	-	8,489
July Aug.	+ +	20,883 16,852	+ +	20,319 13,976	- +	330 38	_	2,709 2,543	+	7,024 8,850	_	3,751 3,432	- +	1,005 412	++	14,644 30,512	_	611 611	+	5,234 13,248
Sep.	+	25,053	+	21,421	<u>-</u>	404	_	575	+	7,627	-	3,419	-	900	+	20,258	-	53	<u>-</u>	3,895
Oct.	+	24,773	+	20,389	-	415	+	782	+	8,128	_	4,527	-	1,386	+	25,983	+	140	+	2,596
Nov. Dec.	+ +	22,799 28,191	++	18,384 15,308	+	164 1,838	++	2,120 2,697	+ +	9,835 16,356	-	7,541 6,171	-	2,266 132	++	23,695 42,524	+ +	89 618	++	3,162 14,466
2021 Jan.	+	20,394	+	14,733	+	301	+	896	+	11,006	_	6,241	_	458	+	22,458	+	743	+	2,522
Feb.	+	20,814	+	18,248	+	44	+	1,159	+	9,016	-	7,609	-	1,461	+	52,644	+	102	+	33,291
Mar.	†	33,801	+	24,208	+	855	+	1,227	+	11,792	_	3,427	†	1,588	+	31,817	_	460	_	3,572
Apr. May	+ +	23,029 15,757	+	15,866 14,492	+	83 160	++	3,051 2,344	+	7,812 644	_	3,701 1,724	_	700 375	++	35,418 14,146	+	251 211	+	13,090 1,235
June	+	25,147	+	16,775	-	117	+	1,005	+	10,167	-	2,800	-	713	+	35,029	+	98	+	10,595
July	+	20,669	+	18,645	-	451	-	2,511	+	9,907	-	5,372	-	626	+	5,325	+	102	-	14,718
Aug. Sep.	+ +	16,987 23,509	++	12,859 17,573	+	645 229	- -	3,543 2,105	+	11,922 12,447	-	4,251 4,406	++	493 1,877	+	20,653 10,944	+	31,254 158	+	3,173 14,442
Oct.	+	19,141	+	15,259	+	1,117	_	2,802	+	11,783	_	5,099	+	416	+	21,714	+	261	+	2,157
Nov. Dec.	+ +	21,329 24,405	++	14,820 8,672	++	893 109	+	71 1,523	++	12,021 18,088	- -	5,582 3,878	<u>-</u>	1,153 265	+++	48,411 16,190	+	963 974	+	28,235 7,951
2022 Jan. Feb.	+ +	12,519 21,057	++	5,831 15,649	+	1,230 2,346	+	338 414	+	13,100 10,415	_	6,074 5,421	-	104 1,297	++	55,703 28,963	+	309 1,161	++	43,288 9,203
Mar.	+	18,768	+	12,824	+	225	-	2,543	+	13,380	-	4,893	-	464	+	9,337	+	730	-	8,967
Apr. May	+	8,985 375	++	4,343 9,094	++	2,759 4,324	- -	1,170 2,569	+	10,496 5,854	<u>-</u>	4,684 1,046	-	1,272 2,772	++	6,877 1,400	++	83 161	- +	836 4,547
June	+	14,324	+	11,380	+	1,056	_	3,519	+	12,075	_	5,612	+	269	+	47,597	+	353	+	33,005
July p	+	4,998	+	8,330	+	168	_	7,401	+	10,735	-	6,666	-	2,116	-	21,040	-	484	-	23,921

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 *

€ million										
					2022					
Group of countries/country		2019	2020	2021	Feb.	Mar.	Apr.	May	June	July
All countries 1 I. European countries	Exports	1,328,152	1,206,928	1,375,658	123,762	138,453	122,593	133,410	135,873	127,599
	Imports	1,104,141	1,026,502	1,203,174	112,437	130,495	121,874	131,031	128,249	122,741
	Balance	+ 224,010	+ 180,427	+ 172,484	+ 11,324	+ 7,958	+ 720	+ 2,378	+ 7,623	+ 4,858
	Exports	902,831	824,921	945,989	85,724	93,773	84,301	90,411	92,164	86,841
1. EU Member States (27)	Imports	747,692	682,477	803,848	76,695	85,995	79,036	83,746	82,910	80,925
	Balance	+ 155,140	+ 142,444	+ 142,141	+ 9,029	+ 7,777	+ 5,266	+ 6,665	+ 9,254	+ 5,915
	Exports	698,257	635,741	747,249	68,386	75,367	67,913	72,870	74,565	70,060
Euro area (19)	Imports	593,251	546,655	638,563	59,193	64,787	59,332	64,870	64,433	60,671
	Balance	+ 105,006	+ 89,087	+ 108,686	+ 9,193	+ 10,580	+ 8,580	+ 8,000	+ 10,131	+ 9,389
	Exports	492,308	441,853	518,917	47,587	52,101	47,599	51,088	51,885	49,340
countries of which:	Imports	409,863	371,211	438,606	41,211	44,897	41,205	44,688	44,363	41,694
	Balance	+ 82,445	+ 70,643	+ 80,311	+ 6,376	+ 7,204	+ 6,393	+ 6,400	+ 7,522	+ 7,646
Austria	Exports	66,076	60,118	71,910	6,563	7,623	7,212	7,167	7,621	7,606
	Imports	44,059	40,454	47,543	4,470	4,929	4,792	5,177	4,928	5,285
	Balance	+ 22,017	+ 19,663	+ 24,367	+ 2,093	+ 2,694	+ 2,420	+ 1,990	+ 2,692	+ 2,321
Belgium and Luxembourg	Exports Imports Balance	52,006 46,322 + 5,683	48,824 39,584 + 9,240	57,418 55,336 + 2,082	5,421 4,776 + 645	6,071 5,614 + 457	5,280 4,980 + 300	5,955 5,916 + 39	5,794 5,746 + 48	5,89 ² 5,719 + 175
France	Exports	106,564	90,910	102,125	9,200	10,196	9,088	9,751	10,213	9,504
	Imports	66,199	56,364	62,049	5,563	6,291	5,549	5,873	6,493	5,577
	Balance	+ 40,364	+ 34,546	+ 40,076	+ 3,637	+ 3,905	+ 3,538	+ 3,878	+ 3,721	+ 3,927
Italy	Exports	67,887	60,634	75,308	7,105	7,848	7,322	7,526	7,432	7,119
	Imports	57,100	53,906	65,373	6,061	6,566	5,911	6,508	6,450	6,161
	Balance	+ 10,786	+ 6,728	+ 9,935	+ 1,044	+ 1,282	+ 1,410	+ 1,018	+ 982	+ 958
Netherlands	Exports	91,528	84,579	100,451	9,152	9,324	8,832	9,163	9,455	9,183
	Imports	97,816	87,024	105,489	9,523	10,729	10,143	10,657	10,829	10,314
	Balance	– 6,288	– 2,445	- 5,039	– 371	– 1,405	– 1,311	– 1,495	– 1,374	– 1,130
Spain	Exports	44,218	37,618	43,692	3,974	4,212	3,853	4,344	4,047	3,945
	Imports	33,126	31,281	34,257	3,424	3,413	2,982	3,382	3,173	2,894
	Balance	+ 11,092	+ 6,337	+ 9,434	+ 550	+ 799	+ 870	+ 962	+ 873	+ 1,051
Other EU Member States	Exports Imports Balance	205,949 183,387 + 22,561	193,888 175,444 + 18,444	228,332 199,957 + 28,375	20,799 17,982 + 2,818	23,266 19,890 + 3,376	20,314 18,127 + 2,187	21,781 20,182 + 1,600	22,679 20,071 + 2,609	20,720 18,977 + 1,743
Other European countries	Exports	204,575	189,180	198,740	17,338	18,406	16,389	17,541	17,599	16,780
	Imports	154,441	135,822	165,284	17,502	21,208	19,703	18,876	18,476	20,255
	Balance	+ 50,134	+ 53,358	+ 33,455	– 164	– 2,802	- 3,314	– 1,334	– 877	- 3,474
of which: Switzerland	Exports Imports Balance	56,345 45,824 + 10,521	56,265 45,556 + 10,708	60,617 48,885 + 11,732	5,388 4,496 + 892	6,468 5,215 + 1,252	5,369 4,795 + 574	6,061 4,720 + 1,341	5,928 4,531 + 1,397	5,765 4,535 + 1,230
United Kingdom	Exports	79,166	67,086	65,348	5,838	6,562	6,121	5,962	6,051	5,809
	Imports	38,397	35,018	32,177	2,553	3,659	3,488	3,369	2,845	3,045
	Balance	+ 40,770	+ 32,068	+ 33,171	+ 3,285	+ 2,903	+ 2,633	+ 2,593	+ 3,206	+ 2,764
II. Non-European countries	Exports Imports Balance	421,728 355,390 + 66,338	380,292 343,270 + 37,022	427,496 398,448 + 29,048	37,804 35,671 + 2,133	44,335 44,399 – 65	37,879 42,719 - 4,840	42,528 47,132 - 4,604	43,208 45,167 – 1,960	40,252 41,653 - 1,401
1. Africa	Exports	23,627	20,086	23,111	1,918	2,291	1,907	2,227	2,304	2,113
	Imports	24,475	18,758	26,037	2,152	3,187	2,925	2,928	3,134	2,852
	Balance	– 848	+ 1,328	– 2,926	– 234	– 896	– 1,018	– 701	– 829	– 739
2. America	Exports	165,602	141,375	167,737	14,880	18,321	16,357	18,245	18,941	17,220
	Imports	100,007	94,005	101,274	8,380	10,925	9,737	10,937	11,808	10,534
	Balance	+ 65,595	+ 47,370	+ 66,463	+ 6,500	+ 7,395	+ 6,621	+ 7,308	+ 7,133	+ 6,686
of which: United States	Exports Imports Balance	118,680 71,334 + 47,346	103,476 67,694 + 35,782	122,038 72,131 + 49,907	10,938 6,097 + 4,842	13,816 7,560 + 6,256	11,908 6,739 + 5,169	13,428 7,833 + 5,595	14,300 8,397 + 5,903	12,422 7,575 + 4,846
3. Asia	Exports	221,278	208,146	224,993	19,914	22,426	18,433	20,805	20,951	19,775
	Imports	227,036	226,646	266,954	24,732	29,579	29,442	32,509	29,440	27,493
	Balance	- 5,759	- 18,500	– 41,961	– 4,818	- 7,153	– 11,009	- 11,704	- 8,489	– 7,718
of which: Middle East	Exports Imports Balance	28,663 7,460 + 21,202	25,882 6,721 + 19,161	26,112 7,506 + 18,606	2,200 701 + 1,499	2,516 734 + 1,782	1,979 959 + 1,020	2,214 1,042 + 1,172	2,454 1,057 + 1,397	2,347 1,091 + 1,256
Japan	Exports	20,662	17,396	18,238	1,736	1,916	1,612	1,680	1,642	1,580
	Imports	23,904	21,427	23,485	1,930	2,110	2,082	2,220	2,078	1,943
	Balance	- 3,243	- 4,032	- 5,247	- 195	– 194	- 470	- 540	- 435	- 363
People's Republic of China ²	Exports Imports Balance	95,984 110,054 - 14,070	95,840 117,373 - 21,533	103,690 142,388 - 38,698	9,062 13,541 - 4,479	10,437 16,685 - 6,248	8,248 16,717 - 8,469	9,205 17,191 – 7,986	9,098 16,275 – 7,177	8,893 14,568 – 5,675
New industrial countries and emerging markets of Asia 3	Exports	54,164	50,590	55,241	4,985	5,429	4,782	5,431	5,570	5,074
	Imports	51,748	48,222	55,399	5,033	5,530	5,329	7,283	5,699	5,303
	Balance	+ 2,416	+ 2,368	- 158	– 49	– 101	- 547	– 1,852	– 129	- 229
4. Oceania and polar regions	Exports	11,221	10,685	11,655	1,092	1,297	1,182	1,251	1,011	1,143
	Imports	3,872	3,861	4,183	407	708	616	757	785	774
	Balance	+ 7,349	+ 6,824	+ 7,472	+ 685	+ 589	+ 566	+ 494	+ 226	+ 369

^{*} 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

	Servic	es															Prima	ry income				
			of wh	nich:																		
Zeit	Total		Trans	port	Trave	.l 1	Finan service		the u	ectual	cation	uter and nation	Other busine service		Gouve goods service			ensation ployees	Inve	stment me	Other prima incom	
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	<u>-</u> -	9,392 12,067	- -	14,678 21,924	++	10,239 8,737	++	17,546 31,878	<u>-</u>	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 Q4	+	5,599	-	2,902	-	98	+	2,713	+	4,880	-	928	-	1,007	+	668	+	1,067	+	29,998	+	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 Q2	-	2,468 7,257	 -	5,551 1,607	- -	4,636 12,055	++	2,301 2,874	++	7,619 6,058	<u>-</u>	3,220 1,919	- -	1,746 2,799	++	949 1,012	++	1,233 320	+	36,924 20,189	-	1,262 3,791
2021 Sep.	-	2,105	-	861	-	5,532	+	753	+	3,543	-	552	-	469	+	353	-	8	+	12,871	-	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 June	- -	1,170 2,569 3,519	- - -	805 576 226	- - -	2,247 3,777 6,032	+ + + +	912 847 1,115	+ + +	2,189 1,854 2,015	- - +	1,203 718 1	 - -	726 1,049 1,024	+ + +	307 325 381	+ + +	68 102 150	+ - +	11,054 3,546 12,681	- - -	625 2,410 756
July p	-	7,401	-	951	-	5,781	+	498	+	1,206	-	1,399	-	1,401	+	346	-	75	+	11,320	-	510

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.

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

€ million

	Second	lary incom	e												Capital	account				
			Genera	ıl governm	ent				All sec	tors exclud	ing ge	neral goverr	nment :	2						
					of whi	ch:					of wh	ich:								
Zeit	Total		Total		Curren interna coope		Curren taxes of incom- etc.		Total		betwee reside non-r	nal transfers een ent and esident eholds 3	of wh Worke remitt	ers'	Total		Non-pro non-fina assets		Capital transfers	
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 Q4	-	18,238	-	13,375	-	4,391	+	1,752	-	4,863	+	1,482	+	1,477	-	3,783	+	295	-	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 Q2	-	16,388 11,343	- -	10,040 5,179	- -	2,369 2,495	++	2,410 7,315	- -	6,348 6,164	+	1,603	++	1,598 1,598	- -	1,865 3,775	- -	1,885 3,027	+	20 748
2021 Sep.	-	4,406	-	2,512	-	240	+	1,077	-	1,894			+	514	+	1,877	+	2,440	-	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 June	- - -	4,684 1,046 5,612	- + -	2,757 1,349 3,772	 - -	420 488 1,587	+ + + +	1,117 4,973 1,225	- - -	1,928 2,396 1,840	+ + +	534 534 535	+ + +	533 533 533	- - +	1,272 2,772 269	- - +	790 2,363 126	- - +	482 409 142
July p	-	6,666	-	4,710	-	1,782	+	434	-	1,955	+	535	+	533	-	2,116	-	1,618	-	498

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

 $^{{\}bf 3}$ Includes, inter alia, taxes on leasing, production and imports transferred to the EU as well as subsidies received from the EU.

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

Lenet domestic investment abroad (increases +) 1. Direct investment (investment) 1. Dir					2021	2022				
1. Direct invisiment	em	2019	2020	2021	Q4	Q1	Q2	May	June	July P
Equily of which: Reinvestment of earnings 1		+ 251,072	+ 739,081	+ 844,810	+ 276,086	+ 204,882	+ 114,464	+ 29,810	+ 69,220	– 49 <u>,</u> 3
Equily of which: Reinvestment of earnings 1 Pobli historyments Pobli historyment Pobli historyments Pobli historyment Pobli historyments Pob										
Forwherts: Reinvestment of earnings 1										
Debt instruments		110,137	+ 30,170	+ 113,012	11,550	25,100	7 24,413	- 0,751	7 3,300	` ~
2. Portfolio investment	5					'				
Shares 2										- 4 - 16
Investment fund shares 3										
debt securities + 7,424 + 3,852 - 6,256 - 10,366 + 1,329 - 2,152 - 4,594 + 463 - 10,015 -	Investment fund shares 3								2,505	
debt securities	debt securities	+ 7,424	+ 3,852	- 6,256	- 10,366	+ 1,329	- 2,152	- 4,594	+ 463	- 1
## 4. Other investment 7	debt securities	+ 60,157	+ 60,089	+ 68,292	- 353	+ 47,202	- 2,523	+ 4,351	+ 10,315	- 9
4. Other investment 7		+ 24.544	+ 96.276	+ 60.977	+ 18.916	+ 10.566	+ 10.694	- 894	+ 4.187	+ 3
Short-term	, ,									
Long-term	MFIs 8	+ 9,256	- 4,522	+ 112,866	- 15,065	+ 139,954	- 19,411	- 593	- 15,282	+ 5
Enterprises and households 9	Short-term	- 8,901	+ 3,526	+ 99,548	- 26,717	+ 131,275	- 7,349	+ 2,500	- 11,918	- 4
Short-term	Enterprises and									
Long-term								.,555		
General government										
Short-term	3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				'				
Long-term Bundesbank	=									
5. Reserve assets										
1. Net foreign investment in the reporting country (increase: +) 1. Direct investment 1. Equity	Bundesbank	- 70,915	+ 243,112	+ 123,394	+ 145,592	- 91,650	+ 47,675	+ 24,695	+ 58,799	- 52
Teporting country (increase: +)	5. Reserve assets	- 544	- 51	+ 31,892	+ 250	+ 2,200	+ 597	+ 161	+ 353	-
Equity of which: Reinvestment of earnings 1 Pebt instruments Pebt instrume	2	+ 64,756	+ 522,566	+ 530,060	+ 189,772	+ 110,879	+ 58,590	+ 28,410	+ 21,623	- 28,
of which: Reinvestment of earnings 1 — 492 + 1,880 + 4,787 + 1,952 + 3,284 + 1,347 - 513 + 986 - Debt instruments										
Reinvestment of earnings 1		+ 23,492	+ 43,862	+ 36,972	+ 9,840	+ 4,684	+ 5,410	+ 3,335	+ 1,390	- 2
Debt instruments		_ 492	1 990	, 1797	1 052	. 2 294	1 2/17	_ 512	, 986	- 2
2. Portfolio investment Shares 2 - 7,275 - 15,982 - 3,703 - 7,583 - 9,199 - 5,940 - 690 - 1,534 - 2,811 - 8,507 - 4,519 - 5,027 - 6,073 - 5,244 - 7,004 - 7,004 - 7,046 - 7,04	3									
Investment fund shares 3								,		
Short-term 4 debt securities Long-term 5 debt securities 3. Other investment 7 — 64,237 — 79,090 — 70,040 — 70,	Shares 2	- 7,275	- 15,982	- 3,703	- 7,583	- 9,199	- 5,940	- 690	- 1,534	- 1
Long-term 5 debt securities				_,						
3. Other investment 7	Long-term 5									- 5
MFIs 8										- 5
Short-term										
Long-term										
households 9 + 43,978 + 39,313 + 120,200 + 89,278 - 14,909 + 39,341 + 4,273 + 10,027 + 10,027 + 10,027 + 10,027 + 10,027 + 10,027 + 10,028 + 10,028 + 10,028 + 10,028 + 10,028 + 10,027 + 10,028	Long-term									
Short-term	•	+ 43,978	+ 39,313	+ 120,200	+ 89,278	- 14,909	+ 39,341	+ 4,273	+ 10,027	+ 14
General government + 1,620 - 7,817 - 4,537 - 246 - 641 - 641 + 37 - 611 + Short-term + 1,424 - 7,664 - 2,186 - 661 + 2,078 - 760 + 17 - 617 + Long-term + 196 - 153 - 2,351 + 416 - 2,719 + 119 + 19 + 6 +										
Short-term										
Long-term + 196 - 153 - 2,351 + 416 - 2,719 + 119 + 19 + 6 +	=									
							1			
35,021 T 110,371 T 220,730 T 202,040 T 10,347 T 13,341 T 20,414 T	3									
	pulinconglik	99,021	+ 110,341	+ 220,790	+ 202,048	- 201,172	10,347	15,541	7 20,414	- 10

¹ Estimated on the basis of the figures on the level of direct investment stocks abroad and in the Federal Republic of Germany (see Statistical series, direct investment statistics). 2 Including participation certificates. 3 Including reinvestment of earnings. 4 Short-term: original maturity up to one year. 5 Up to and including 2012 without accrued interest. Long-term: original maturity of more than one year or unlimited.

⁶ Balance of transactions arising from options and financial futures contracts as well as employee stock options. 7 Includes in particular loans, trade credits as well as currency and deposits. 8 Excluding Bundesbank. 9 Includes the following sectors: financial corporations (excluding monetary financial institutions) as well as non-financial corporations, households and non-profit institutions serving households.

7. External position of the Bundesbank *

€ million

	External asset	c										
	External asset		_				Oth i					
		Reserve assets	s				Other investme					
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	8	35,688
2002	103,948	85,002	36,208	1,888	6,384	40,522	18,780	4,995	166	66,278		37,670
2003 2004	95,394 93,110	76,680 71,335	36,533 35,495	1,540 1,512	6,069 5,036	32,538 29,292	18,259 21,110	4,474 7,851	454 665	83,329 95,014	1	2,065 1,904
2005 2006	130,268 104,389	86,181 84,765	47,924 53,114	1,601 1,525	2,948 1,486	33,708 28,640	43,184 18,696	29,886 5,399	902 928	115,377 134,697		14,891 80,308
2007 2008	179,492 230,775	92,545 99,185	62,433 68,194	1,469 1,576	949 1,709	27,694 27,705	84,420 129,020	71,046 115,650	2,527 2,570	176,569 237,893		2,923 7,118
2009	323,286	125,541	83,939	13,263	2,705	25,634	190,288	177,935	7,458	247,645		75,641
2010 2011	524,695 714,662	162,100 184,603	115,403 132,874	14,104 14,118	4,636 8,178	27,957 29,433	337,921 475,994	325,553 463,311	24,674 54,065	273,241 333,730		51,454 80,932
2012	921,002	188,630	137,513	13,583	8,760	28,774	668,672	655,670	63,700	424,999	49	6,003
2013 2014	721,741 678,804	143,753 158,745	94,876 107,475	12,837 14,261	7,961 6,364	28,080 30,646	523,153 473,274	510,201 460,846	54,834 46,784	401,524 396,314		20,217 32,490
2015	800,709	159,532	105,792	15,185	5,132	33,423	596,638	584,210	44,539	481,787		8,921
2016 2017	990,450 1,142,845	175,765 166,842	119,253 117,347	14,938 13,987	6,581 4,294	34,993 31,215	767,128 923,765	754,263 906,941	47,557 52,238	592,723 668,527	47	7,727 74,318
2018 2019	1,209,982 1,160,971	173,138 199,295	121,445 146,562	14,378 14,642	5,518 6,051	31,796 32,039	980,560 909,645	966,190 895,219	56,284 52,031	770,519 663,320		89,462 97,651
2020 2021	1,429,236 1,592,822	219,127 261,387	166,904 173,821	14,014 46,491	8,143 8,426	30,066 32,649	1,152,757 1,276,150	1,136,002 1,260,673	57,353 55,285	781,339 1,009,488		17,898 33,334
2020 Mar.	1,218,815	213,722	158,677	14,812	5,965	34,268	952,781	935,126	52,312	617,919	60	00,896
Apr.	1,214,851	226,903	170,359	14,935	6,857	34,753	934,333	918,814	53,615	616,319		8,532
May June	1,209,328 1,294,167	223,125 226,135	167,780 170,728	14,650 14,603	6,787 6,955	33,908 33,849	931,521 1,012,982	916,145 995,083	54,682 55,050	612,403 618,825		96,925 75,342
July Aug.	1,323,691 1,358,137	233,547 230,309	180,400 177,973	14,179 14,129	7,465 7,423	31,503 30,784	1,034,282 1,071,521	1,019,214 1,056,231	55,862 56,307	599,189 600,390		24,503 57,747
Sep.	1,414,933	227,150	173,979	14,129	7,423	31,246	1,131,686	1,115,189	56,097	649,781		55,151
Oct.	1,346,367 1,347,202	227,767 212,286	174,433 159,737	14,346 14,193	7,656 7,535	31,332 30,820	1,061,498 1,078,270	1,047,327 1,060,263	57,102 56,647	619,445 625,921		26,922 21,282
Nov. Dec.	1,429,236	219,127	166,904	14,193	8,143	30,066	1,152,757	1,136,002	57,353	781,339		17,898
2021 Jan. Feb.	1,348,921 1,328,303	219,860 210,619	166,494 157,313	14,115 14,119	8,061 8,047	31,190 31,140	1,072,140 1,060,378	1,054,994 1,043,746	56,921 57,306	638,042 616,473		1,830
Mar.	1,364,046	209,400	155,323	14,367	7,966	31,744	1,098,486	1,081,989	56,160	647,647		6,400
Apr. May	1,307,161 1,370,231	210,799 221,201	158,143 168,678	14,085 14,037	7,836 7,809	30,735 30,677	1,041,472 1,093,721	1,024,734 1,076,918	54,890 55,309	604,863 621,827)2,299 18,404
June	1,384,834	213,600	159,995	14,326	8,094	31,184	1,115,447	1,101,897	55,787	670,632		4,202
July	1,319,694	219,775	165,984	14,345	8,104	31,343	1,042,015	1,024,970	57,903	657,905		51,789
Aug. Sep.	1,360,722 1,431,909	250,742 246,908	165,757 160,943	45,091 45,606	8,174 8,267	31,720 32,092	1,053,653 1,130,558	1,037,259 1,115,126	56,327 54,443	699,773 746,128		50,949 35,781
Oct.	1,388,160	250,340	164,602	45,719	8,449	31,570	1,083,141	1,066,604	54,678	735,595		2,564
Nov. Dec.	1,456,861 1,592,822	258,815 261,387	170,460 173,821	46,375 46,491	8,405 8,426	33,575 32,649	1,142,719 1,276,150	1,127,545 1,260,673	55,327 55,285	773,217 1,009,488		33,644 33,334
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		1,805
Feb. Mar.	1,491,552 1,516,744	273,726 277,782	184,255 187,779	46,854 47,375	8,711 8,663	33,905 33,965	1,164,098 1,184,501	1,149,722 1,169,952	53,729 54,462	774,786 808,690		16,766 08,055
Apr.	1,491,558	288,953	196,274	48,617	8,799	35,263	1,148,681	1,135,400	53,923	790,221		1,337
May June	1,505,419 1,566,099	278,174 281,157	186,481 187,573	48,031 48,712	8,681 8,948	34,980 35,923	1,173,376 1,232,176	1,159,716 1,216,530	53,869 52,767	805,179 826,280		00,240 89,819
July Aug.	1,514,570 1,590,572	280,910 280,160	185,950 184,794	49,465 49,614	9,086 9,300	36,409 36,451	1,179,431 1,258,187	1,166,155 1,245,014	54,229 52,225	810,881 842,576)3,689 17,996

^{*} 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

8. External positions of enterprises *

€ million

	€ million					realization :		_											
	Claims on no	on-residents						Liabilities to	non-resident										
			Claims on fo	oreign non-ba	inks					Liabilities to	non-banks	I							
					from trade of	redits						from trade of	redits						
End of		Balances with		from		Credit	Advance		Loans from		from		Credit	Advance					
reporting period	Total	foreign banks	Total	financial operations	Total	terms granted	payments effected	Total	foreign banks	Total	financial operations	Total	terms used	payments received					
	Rest of t	he world																	
2018	933,849	234,970	698,880	466,225	232,654	217,969	14,686	1,232,594	146,575	1,086,019	879,752	206,267	135,214	71,053					
2019	963,967	227,688	736,279	502,594	233,685	217,370	16,314	1,305,705	167,656	1,138,048	927,650	210,399	134,768	75,630					
2020	1,021,200	248,779	772,421	544,059	228,362	211,891	16,471	1,394,364	171,998	1,222,366	1,012,503	209,863	129,098	80,766					
2021	1,152,509	260,321	892,188	604,424	287,764	270,847	16,917	1,548,984	218,886	1,330,098	1,066,016	264,082	175,351	88,730					
2022 Feb.	1,197,848	268,435	929,412	620,512	308,901	280,714	28,187	1,567,699	214,946	1,352,753	1,072,422	280,331	180,331	99,999					
Mar.	1,215,926	280,049	935,878	614,010	321,868	293,304	28,564	1,575,472	200,446	1,375,026	1,081,713	293,313	193,098	100,215					
Apr.	1,266,969	290,472	976,498	651,264	325,234	296,190	29,044	1,629,738	212,997	1,416,741	1,123,694	293,047	189,904	103,142					
May	1,258,386	278,294	980,092	649,343	330,749	301,007	29,741	1,619,688	207,553	1,412,135	1,114,726	297,409	193,823	103,586					
June	1,271,963	256,426	1,015,537	669,832	345,705	315,398	30,307	1,641,340	192,674	1,448,666	1,134,510	314,156	210,108	104,048					
July p	1,277,391	263,896		670,651	342,844	312,852	29,992	1,649,018			1,123,812		207,761	105,492					
	EU Mem	ber State	s (27 exc	l. GB)															
2018	544,009	177,064	366,944	274,402	92,542	84,191	8,351	801,772	88,161	713,611	631,814	81,798	61,161	20,637					
2019	572,324	176,847	395,476	304,605	90,871	82,120	8,752	836,863	91,122	745,740	660,385	85,355	62,692	22,664					
2020	609,449	187,703	421,746	332,983	88,763	79,780	8,983	884,904	95,716	789,188	702,991	86,197	61,357	24,841					
2021	660,768	198,911	461,857	350,591	111,266	102,689	8,578	978,060	153,424	824,636	713,878	110,758	84,237	26,521					
2022 Feb.	681,358	211,676	469,682	348,920	120,762	108,053	12,709	973,954	142,276	831,677	716,073	115,604	84,901	30,703					
Mar.	699,393	215,782	483,611	355,742	127,869	115,140	12,729	981,025	136,454	844,571	725,830	118,742	88,163	30,579					
Apr.	728,052	231,393	496,659	365,832	130,827	118,000	12,827	996,555	136,904	859,651	740,339	119,311	87,983	31,328					
May	722,157	220,735	501,423	366,255	135,167	122,235	12,933	999,363	134,322	865,041	740,291	124,749	93,032	31,717					
June	721,354	201,319	520,035	377,912	142,123	128,838	13,285	1,008,127	131,237	876,890	742,665	134,224	102,643	31,581					
July p	731,081	212,348	518,733	376,491	142,242	129,009	13,233	1,022,030	147,798	874,231	740,636	133,596	101,414	32,181					
	Extra-EU	Member	States (2	27 incl. G	B)														
2018	389,841	57,905	331,935	191,823	140,112	133,777	6,335	430,822	58,415	372,408	247,939	124,469	74,053	50,416					
2019	391,643	50,841	340,803	197,989	142,814	135,251	7,563	468,842	76,534	392,308	267,265	125,043	72,077	52,967					
2020	411,751	61,076	350,675	211,076	139,599	132,112	7,487	509,460	76,282	433,178	309,512	123,666	67,741	55,925					
2021	491,741	61,410	430,331	253,833	176,498	168,158	8,340	570,924	65,462	505,463	352,138	153,324	91,115	62,210					
2022 Feb.	516,490	56,759	459,731	271,591	188,139	172,661	15,478	593,744	72,670	521,074	356,349	164,725	95,429	69,297					
Mar.	516,534	64,267	452,267	258,268	193,999	178,164	15,835	594,446	63,991	530,455	355,883	174,572	104,935	69,636					
Apr.	538,918	59,079	479,839	285,432	194,407	178,190	16,217	633,183	76,093	557,090	383,355	173,735	101,921	71,814					
May	536,228	57,559	478,669	283,088	195,581	178,773	16,809	620,325	73,231	547,095	374,435	172,660	100,791	71,868					
June	550,609	55,106	495,502	291,920	203,582	186,560	17,022	633,213	61,437	571,776	391,845	179,931	107,465	72,466					
July p	546,310	51,548	494,762	294,160	200,602	183,843	16,760	626,989	64,154	562,835	383,177	179,658	106,347	73,311					
	Euro are	a (19)																	
2018	467,428	156,887	310,542	238,963	71,579	64,295	7,283	735,094	68,959	666,136	601,205	64,931	49,138	15,792					
2019	493,062	158,102	334,960	264,834	70,127	62,531	7,595	761,144	70,561	690,584	624,607	65,977	48,775	17,202					
2020	522,933	166,846	356,087	287,662	68,425	60,750	7,674	799,046	74,101	724,945	658,931	66,014	47,100	18,914					
2021	553,838	176,279	377,560	289,330	88,230	80,844	7,386	896,256	131,735	764,521	675,868	88,653	68,232	20,421					
2022 Feb.	583,733	192,153	391,581	295,971	95,610	84,169	11,441	893,089	121,854	771,235	679,362	91,874	67,627	24,247					
Mar.	596,153	195,325	400,828	299,564	101,264	89,818	11,446	897,685	116,893	780,793	686,158	94,635	70,651	23,984					
Apr.	628,773	213,684	415,090	310,796	104,294	92,824	11,470	914,122	116,900	797,222	701,576	95,646	71,124	24,522					
May	622,482	203,996	418,485	310,720	107,765	96,127	11,638	914,240	112,775	801,465	701,507	99,958	75,219	24,740					
June	616,656	185,782	430,873	315,885	114,988	103,025	11,963	923,861	111,967	811,894	702,692	109,202	84,715	24,487					
July P	620,654	194,736	425,918	310,283	115,635	103,723	11,904	937,477	128,445	809,032	699,947	109,085	84,102	24,983					
	Extra-Eu	ro area (1	19)																
2018	466,421	78,083	388,338	227,262	161,076	153,673	7,403	497,500	77,617	419,883	278,548	141,336	86,075	55,260					
2019	470,905	69,586	401,319	237,761	163,558	154,839	8,719	544,560	97,096	447,465	303,043	144,422	85,993	58,428					
2020	498,267	81,933	416,334	256,397	159,937	151,141	8,796	595,318	97,897	497,421	353,572	143,849	81,997	61,852					
2021	598,671	84,042	514,629	315,094	199,535	190,003	9,532	652,728	87,151	565,577	390,148	175,429	107,119	68,309					
2022 Feb.	614,115	76,283	537,832	324,541	213,291	196,545	16,746	674,609	93,092	581,516	393,060	188,456	112,704	75,752					
Mar.	619,773	84,723	535,050	314,445	220,604	203,486	17,118	677,787	83,553	594,234	395,555	198,679	122,447	76,231					
Apr.	638,196	76,788	561,408	340,468	220,940	203,366	17,574	715,616	96,097	619,519	422,118	197,400	118,780	78,620					
May	635,904	74,297	561,607	338,623	222,984	204,881	18,103	705,448	94,778	610,670	413,220	197,451	118,605	78,846					
June	655,307	70,643	584,664	353,947	230,717	212,373	18,344	717,479	80,707	636,772	431,818	204,954	125,393	79,561					
July p	656,737	69,159	587,578	360,368	227,210	209,122	18,088	717,473	83,508	628,034	423,866	204,168	123,659	80,509					

^{*} 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 ...

	LON 1 = currency	Gilles III								
Yearly or monthly	Australia	Canada	China	Denmark	Japan	Norway	Sweden	Switzerland	United Kingdom	United States
average	AUD	CAD	CNY	DKK	JPY	NOK	SEK	CHF	GBP	USD
2010	1,4423	1.3651	8.9712	7.4473	116.24	8.0043	9.5373	1.3803	0.85784	1.3257
2011	1.3484	1.3761	8.9960	7.4506	110.96	7.7934	9.0298	1.2326	0.86788	1.3920
2012	1.2407	1.2842	8.1052	7.4437	102.49	7.4751	8.7041	1.2053	0.81087	1.2848
2013	1.3777	1.3684	8.1646	7.4579	129.66	7.8067	8.6515	1.2311	0.84926	1.3281
2014	1.4719	1.4661	8.1857	7.4548	140.31	8.3544	9.0985	1.2146	0.80612	1.3285
2015	1.4777	1.4186	6.9733	7.4587	134.31	8.9496	9.3535	1.0679	0.72584	1.1095
2016	1.4883	1.4659	7.3522	7.4452	120.20	9.2906	9.4689	1.0902	0.81948	1.1069
2017	1.4732	1.4647	7.6290	7.4386	126.71	9.3270	9.6351	1.1117	0.87667	1.1297
2018	1.5797	1.5294	7.8081	7.4532	130.40	9.5975	10.2583	1.1550	0.88471	1.1810
2019	1.6109	1.4855	7.7355	7.4661	122.01	9.8511	10.5891	1.1124	0.87777	1.1195
2020	1.6549	1.5300	7.8747	7.4542	121.85	10.7228	10.4848	1.0705	0.88970	1.1422
2021	1.5749	1.4826	7.6282	7.4370	129.88	10.1633	10.1465	1.0811	0.85960	1.1827
2021 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
July	1.4856	1.3180	6.8538	7.4426	139.17	10.1823	10.5752	0.9876	0.84955	1.0179
Aug.	1.4550	1.3078	6.8884	7.4393	136.85	9.8309	10.5021	0.9690	0.84499	1.0128
-	•	•	, ,		,			-		

^{*} 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.

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 *

Q1 1999 = 100

	Effective e		of the euro vi	s-à-vis the curre	ncies of the	group	Indicators o	f the German	economy's pri	ce competitiven	ess		
	EER-19 1				EER-42 2		Based on th	e deflators of	total sales 3 vi	s-à-vis	Based on co	nsumer price in	dices vis-à-vis
							26 selected	industrial cou	ntries 4				
			based on	In real terms based on				of which:					
		In real terms based on	the deflators of gross	unit labour costs of		In real terms based on			Non-		26 selected		
Period	Nominal	consumer price indices	domestic product 3	national economy 3	Nominal	consumer price indices	Total	Euro area countries	euro area countries	37 countries 5	industrial countries 4	37 countries 5	60 countries 6
1999	96.2	96.2	96.1	96.2	96.6	96.0	97.9	99.6	95.9	97.7	98.3	98.1	97.8
2000 2001 2002 2003 2004	87.1 87.6 89.8 100.4 104.2	86.9 87.2 90.2 101.4 105.2	86.2 86.7 89.8 100.8 103.8	85.6 84.5 88.0 99.0 102.2	88.1 90.2 94.5 106.4 110.9	86.2 86.9 90.5 101.6 105.4	92.0 91.7 92.4 95.9 96.2	97.5 96.6 95.7 94.8 93.6	85.5 86.1 88.5 97.6 100.0	91.2 90.5 91.1 95.3 95.6	93.1 93.0 93.5 97.0 98.5	92.3 91.7 92.2 96.7 98.2	91.2 91.0 91.9 96.8 98.4
2005 2006 2007 2008 2009	102.8 102.8 106.3 110.1 111.6	103.9 103.9 106.8 109.7 110.6	101.8 101.2 103.3 105.5 106.7	100.5 99.3 101.0 104.8 108.5	109.0 109.1 112.7 117.4 120.5	102.9 102.3 104.5 106.9 108.0	94.8 93.6 94.5 94.9 95.2	92.0 90.4 89.6 88.4 89.2	98.8 98.2 102.0 105.1 104.7	93.3 91.6 92.0 91.3 92.0	98.4 98.6 100.9 102.4 101.9	97.1 96.7 98.3 98.4 98.6	96.7 96.0 97.3 97.5 97.9
2010 2011 2012 2013 2014	104.4 104.2 98.5 102.0 102.3	102.9 101.9 96.7 99.8 99.1	98.5 96.7 91.1 94.1 94.0	100.9 99.3 93.6 96.5 96.6	111.9 112.7 107.5 112.2 114.5	99.0 98.5 93.7 96.8 97.1	92.5 92.1 90.1 92.3 92.9	88.7 88.5 88.3 88.8 89.6	98.2 97.6 92.5 97.5 97.7	88.2 87.4 84.7 86.6 87.4	98.8 98.2 95.9 98.1 98.2	94.3 93.5 90.5 92.3 92.5	92.5 91.9 88.9 90.9 91.5
2015 2016 2017 2018 2019	92.5 95.2 97.4 99.9 98.1	89.5 91.4 93.4 95.5 93.1	85.5 87.8 88.9 90.5 88.7	86.0 P 87.3 P 88.0 P 89.6 P 87.1	106.1 110.1 112.4 117.3 115.4	88.6 90.6 91.8 95.0 92.4	89.8 90.7 91.9 93.2 92.2	90.3 90.7 90.9 91.0 91.2	88.9 90.4 93.3 96.4 93.5	83.6 84.9 85.7 86.7 85.8	94.4 95.0 96.3 97.7 96.4	87.8 88.8 89.9 91.2 89.9	86.9 88.1 88.9 90.8 89.4
2020 2021	99.6 99.6	93.5 93.4	89.4 p 88.6	p 87.7 p 86.1	119.4 120.8	93.9 94.2	92.4 93.5	91.5 92.0	93.6 95.7	86.5 86.9	96.4 97.4	90.1 90.7	90.2 91.0
2020 Mar.	98.8	93.0			117.8	93.1					96.3	90.0	89.9
Apr. May June	98.1 98.3 99.7	92.5 92.6 93.8	88.6	p 87.5	117.5 117.5 119.1	93.0 92.9 94.0	92.0	91.9	91.9	86.4	96.1 96.3 97.0	90.0 90.2 90.8	90.2 90.2 90.8
July Aug. Sep.	100.4 101.5 101.5	94.4 94.8 94.9	90.3	p 88.5	120.3 122.4 122.4	94.7 95.8 95.7	92.4	91.0	94.2	86.6	96.0 97.0 96.8	90.0 90.7 90.6	90.2 91.2 91.1
Oct. Nov. Dec.	101.3 100.6 101.8	94.8 94.3 95.2	90.5	p 87.9	122.4 121.6 122.9	95.7 95.1 96.0	93.1	91.4	95.6	86.9	96.7 96.5 97.0	90.5 90.1 90.5	91.0 90.5 90.9
2021 Jan. Feb. Mar.	101.3 100.6 100.3	95.2 94.5 94.1	90.0	p 88.0	122.4 121.5 121.2	96.0 95.1 94.8	93.6	91.9	96.1	87.2	98.0 97.9 97.7	91.4 91.2 91.1	91.7 91.5 91.4
Apr. May June	100.6 100.8 100.2	94.3 94.3 93.7	89.3	p 86.4	121.9 122.3 121.5	95.2 95.2 94.6	93.6	91.7	96.3	86.9	97.8 98.1 97.9	91.2 91.3 91.1	91.6 91.8 91.5
July Aug. Sep.	99.7 99.3 99.4	93.4 93.1 93.2	p 88.7	р 85.7	120.8 120.4 120.4	94.2 93.8 93.8	93.6	92.0	95.8	86.9	97.7 97.4 97.3	91.0 90.7 90.7	91.2 90.9 90.8
Oct. Nov. Dec.	98.4 97.6 97.1	92.4 91.7 91.2	p 86.5	p 84.3	119.5 118.8 119.0	93.1 92.6 92.4	93.4	92.5	94.7	86.4	96.7 96.2 95.8	90.0 89.5 89.0	90.2 89.8 89.5
2022 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	p 92.3 p 92.7 p 92.8	93.0	92.3	93.9	85.8	96.0 96.1 96.3	89.0 89.1 89.5	p 89.5 p 89.5 p 90.0
Apr. May June	95.2 95.6 95.9	89.9 90.3 90.5			116.4 116.2 116.5	p 90.4p 90.3p 90.3	p 92.5	p 92.2	93.0	р 85.3	96.1 96.6 95.7	88.9 89.6 88.8	p 88.8 p 89.3 p 88.4
July Aug.	94.1 93.6	p 89.0 p 88.7			114.6 114.1	p 89.0 p 88.7					p 94.9 p 94.4	p 88.0 p 87.6	p 87.6 p 87.3

^{*} 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 Lathuania) 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.

Deutsche Bundesbank Monthly Report September 2022 84°

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

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

August 2022

- The current economic situation in Germany

September 2022

- Negative interest rate policy period and pandemic as reflected in the Bank Lending Survey
- Productivity effects of reallocation in the corporate sector during the COVID-19 crisis
- The performance of German credit institutions in 2021
- The role of the International Monetary Fund in preventing and managing crises

Statistical Series*

Banks

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

Corporate financial statements

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

Economic activity and prices

 Seasonally adjusted business statistics, monthly

Exchange rates

Exchange rate statistics, monthly

External sector

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

Macroeconomic accounting systems

- Financial accounts, June

Money and capital markets

- Capital market indicators, monthly
- Investment funds statistics, monthly
- Securities issues statistics, monthly

Special Statistical Publications

- 1 Banking statistics guidelines, January 2022^{1,2}
- 2 Banking statistics, customer classification, January 2022²

3 Aufbau der bankstatistischen Tabellen, July 2013^{1,2}

18/2022

Time inconsistency and overdraft use: Evidence from transaction data and behavioral measurement experiments

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

19/2022

The impact of German public support transfers on firm finance – Evidence from the Covid-19 crisis

Special Publications

20/2022

Makro-ökonometrisches Mehr-Länder-Modell, November 1996¹

Foreign exchange interventions and their impact on expectations: Evidence from the USD/ ILS options market

Europäische Organisationen und Gremien im Bereich von Währung und Wirtschaft, May 1997¹

21/2022

Die Zahlungsbilanz der ehemaligen DDR 1975 bis 1989, August 1999¹

Monetary policy and endogenous financial crises

The market for German Federal securities, May 2000 22/2022

The augmented bank balance-sheet channel of monetary policy

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

23/2022

Pulling ourselves up by our bootstraps: the greenhouse gas value of products, enterprises and industries

Bundesbank Act, September 2002

24/2022

CDS market structure and bond spreads

Die Europäische Union: Grundlagen und Politikbereiche außerhalb der Wirtschafts- und Währungsunion, April 2005¹

Die Deutsche Bundesbank – Aufgabenfelder, rechtlicher Rahmen, Geschichte, April 2006¹

25/2022

Carbon pricing, border adjustment and climate clubs: An assessment with EMuSe

European economic and monetary union, April 2008

26/2022

Spending effects of child-related fiscal transfers

Weltweite Organisationen und Gremien im Bereich von Währung und Wirtschaft, March 2013¹

27/2022 The impact of weight shifts on inflation: Evi-

dence for the euro area HICP

Discussion Papers^o

28/2022

17/2022

Smart or smash? The effect of financial sanctions on trade in goods and services

Would households understand average inflation targeting?

For footnotes, see p. 88°.

29/2022

Information transmission between banks and the market for corporate control

30/2022

Loan pricing in internal capital markets and the impact of the two-tier system – Finance groups in Germany

31/2022

A review of some recent developments in the modelling and seasonal adjustment of infra-monthly time series

32/2022

New facts on consumer price rigidity in the euro area

33/2022

Going below zero – How do banks react?

34/2022

Global monetary and financial spillovers: Evidence from a new measure of Bundesbank policy shocks

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 2008¹
- 2a Solvency Regulation and Liquidity Regulation, February 2008²

^{*} The Statistical Series replace the Statistical Supplements and, in part, the Special Statistical Publications; they will be provided exclusively on the Bundesbank's website under Publications/Statistics.

o Discussion papers published from 2000 are available online.

¹ Publication available in German only.

² Available only as a download.