

Monthly Report – July 2024

Vol. 76 No 7

This is an automatically generated document.
The published version can be found at publikationen.bundesbank.de.

Table of Content

- Commentary: Economic conditions** 4
- 1 Gradual recovery in German economy 5
- 2 Improvement in industrial activity suffers a setback 7
- 3 Service providers likely to have buoyed economic output 9
- 4 Labour market resilient, but not gaining any ground 10
- 5 Energy commodity prices slightly higher of late 12
- 6 Inflation rate somewhat lower again in June 13
- List of references 15

- The global disinflation process and its costs** 16
- 1 The background to the recent surge in inflation 18
- 2 Monetary policy response and past experiences of disinflation 22
- 3 Lessons from the past 26
- The macroeconomic impact of monetary policy tightening in the euro area 35
- 4 The current disinflation process: a soft landing? 39
- 5 Possible reasons for the relatively painless disinflation process thus far 42
- Background to the mild disinflation process in the United States 44
- 6 Implications for the “last mile” of disinflation 50
- 7 List of references 53

- Developments in loans to enterprises in Germany since the start of the monetary policy tightening cycle** 59
- 1 Stocktake 62
- 2 Developments in lending and macroeconomic environment 64
- 3 Loan dynamics increased on the back of one-off factors up to October 2022 66
- 4 Subsequent phase of weakening loan dynamics 69

Interaction between credit risk, bank credit supply policy and loan negotiations	72
5 Conclusion and outlook	86
Loan forecasts	88
Analysis of loans to non-financial corporations in Germany using a macro-financial Bayesian VAR model	92
The quantitative importance of loan supply and loan demand for loan growth	98
List of references	101
The EU banking package	104
1 Introduction	106
2 Basel III-related new legislation	108
3 Impact of the Basel III finalisation on German institutions	122
4 Other changes	125
5 Conclusion	130
List of references	131

Commentary: Economic conditions

1 Gradual recovery in German economy

German economic output probably grew somewhat more slowly in the second quarter than expected. Real gross domestic product (GDP) is likely to have increased only slightly in the second quarter of 2024. Temporary hopes that industrial activity would soon pick up were distinctly dampened when data for May was published. There was a significant fall in industrial production and the signs of stabilisation in new orders sparked by April's strong order growth tailed off markedly. The industrial sector is therefore likely to have slowed economic activity in the second quarter. Higher financing costs continued to weigh on investment and thus on domestic demand for industrial goods and construction work. For this reason – as well as due to a counter-effect following the mild weather in the first quarter – construction output, too, is likely to have fallen in the second quarter. By contrast, the recovery in the services sector probably continued, as indicated, for example, by survey results from the ifo Institute and S&P Global. Private consumption is likely to have buoyed demand for services. Overall, available indicators suggest that private consumption increased slightly in the second quarter.

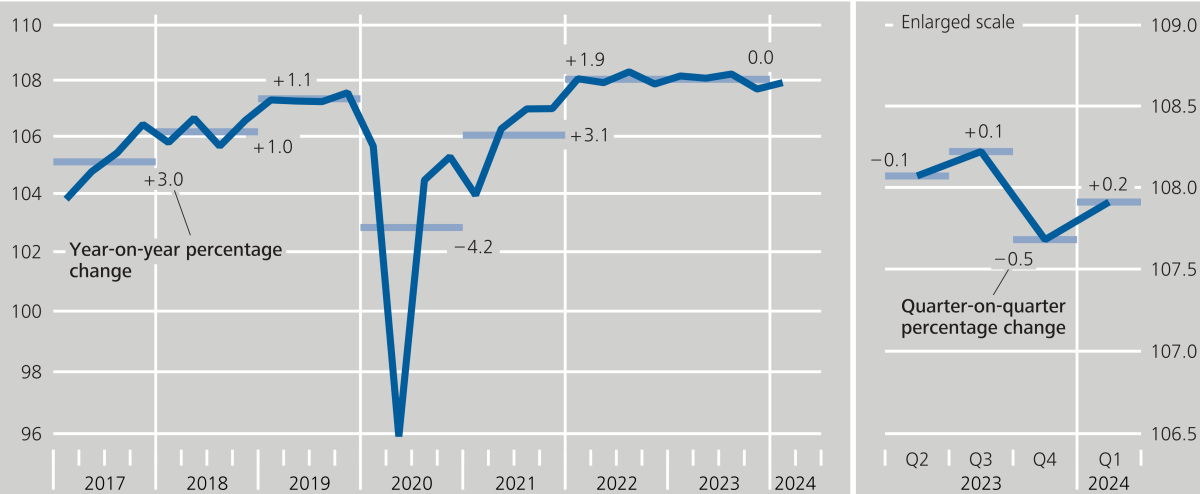
Economic activity is likely to strengthen somewhat in the third quarter. Private consumption will probably pick up a little more momentum. This is likely to be supported, in particular, by the favourable framework conditions of strongly rising wages, subsiding inflation and a robust labour market. Furthermore, in spite of the disappointing June results, pessimism among retailers and service providers declined markedly overall in the second quarter according to the ifo Institute's Business Climate Index. This is also true for the manufacturing sector. However, the recent dip in industrial new orders suggests that the spell of weak demand has not yet been fully overcome and that industrial activity is likely to improve only slowly. As things currently stand, GDP growth in the third quarter, too, could therefore fall short of the expectations expressed in the Bundesbank's June forecast for Germany.¹⁾

¹ See Deutsche Bundesbank (2024).

Gross domestic product in Germany

Chart 1.1

2015 = 100, adjusted for price, seasonal and calendar effects, log scale



Source of unadjusted figures: Federal Statistical Office.
Deutsche Bundesbank

2 Improvement in industrial activity suffers a setback

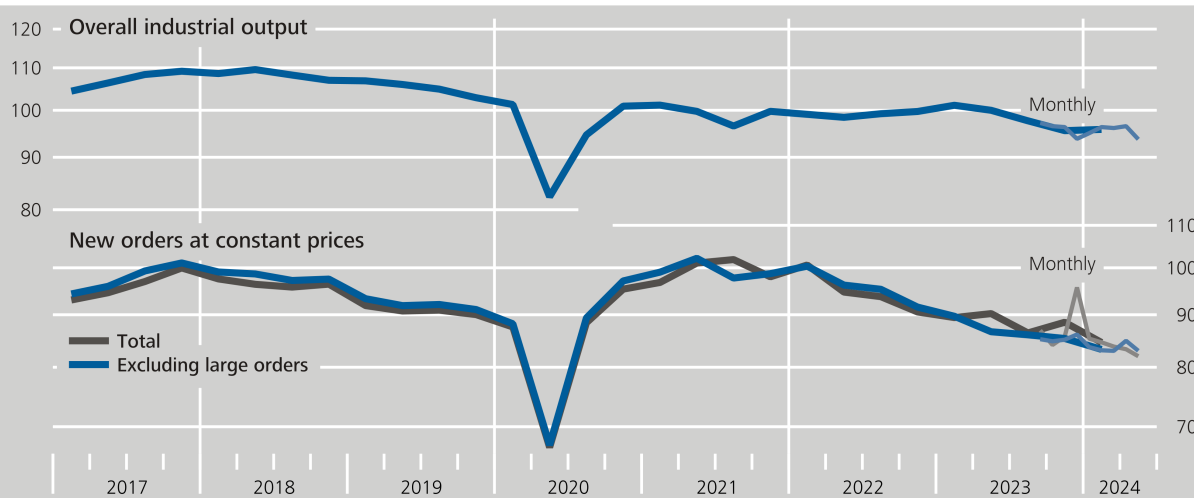
Temporary hopes of an end to the weakness in the industrial sector were not realised, as industrial output declined sharply in May. Compared with the previous month, industrial output declined sharply in seasonally adjusted terms²⁾ and fell back to the interim low of December 2023. The level of output averaged across April and May was thus also markedly lower than that of the first quarter. This decline was fairly broadly based across sectors, with two major exceptions: manufacturers of motor vehicles and motor vehicle parts, which expanded their production substantially. According to the German Association of the Automotive Industry (VDA), this is likely to have continued in June. In addition, production in energy-intensive sectors was a bright spot. Following a sharp increase at the beginning of the year, it was again slightly higher when averaged over April and May than the average for the previous quarter. Even so, the level of production in energy-intensive industries remained significantly below the levels seen before Russia launched its war of aggression against Ukraine.

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

German industrial output and industrial orders

Chart 1.2

2021 = 100, quarterly data, calendar and seasonally adjusted, log scale



Source of unadjusted figures: Federal Statistical Office.
Deutsche Bundesbank

Signs of stabilisation in industrial demand that emerged in April have weakened, but are still in place. New orders in Germany's industrial sector declined markedly in May compared with the previous month. Averaged over April and May, they were significantly below the average of the first quarter. Core – i.e. excluding volatile large orders – industrial new orders lost hold of the strong growth they had seen in April. While significantly more orders from the euro area were the main reason for the strong increase in April, the fall-off in May was attributable to considerably fewer orders from non-euro-area countries. Thanks to a strong April, industrial new orders excluding large orders still rose moderately when averaged over April and May compared with the previous quarter. Thus, while the signs of a stabilisation in demand have weakened, they are still in place. Survey data paint a similar picture. Despite a dampening of business sentiment in June, overall pessimism declined markedly in the second quarter compared with the previous quarter. This applies, in particular, to business expectations as surveyed by the ifo Institute, but also to ifo data on production plans and export expectations.

3 Service providers likely to have buoyed economic output

The upturn in the services sector is likely to have continued and was probably increasingly buoyed by private consumption. While production data for the services sector (excluding trade) are currently only available up to March, they are indicative of favourable starting conditions for the second quarter.³⁾ Furthermore, the sentiment indicators now available for the entire second quarter suggest that service providers continued to ramp up their activity. According to surveys conducted by the ifo Institute, service providers were markedly more satisfied with their business situation than previously. In addition, the corresponding S&P Global Purchasing Managers' Index was consistently above the expansion threshold. Private consumption is likely to have buoyed the expansion of activity by service providers. Real sales in the accommodation and food services sector, which are thus far only available up to April, still point to rather hesitant consumer behaviour in this sector. However, price and seasonally adjusted retail sales in April were significantly higher than the average of the previous quarter. The data on private vehicle registrations already available for the entire second quarter also indicate a slight increase, thanks to a sharp rise in June. According to ifo Institute surveys, retailers, but also enterprises in the accommodation and food services sector, assessed their business situation to have improved in the second quarter compared to the previous three-month period. This could signal that consumers' precautionary motives are gradually becoming less important and that they were already expanding their consumption expenditure somewhat, given rising real incomes and a robust labour market. This is also indicated by the GfK consumer climate index, which recovered in the second quarter. It shows, for the quarter as a whole, that the economic outlook and, in particular, income expectations improved. However, the propensity to save declined only slightly, and the propensity to purchase also increased only a little.

3 Even if services production in the second quarter remained constant at the level seen at the end of the first quarter, there would again have been a quarter-on-quarter increase, as its level at the end of the first quarter exceeded the quarterly average. Production in the services sector thus started the second quarter with a statistical carry-over effect.

4 Labour market resilient, but not gaining any ground

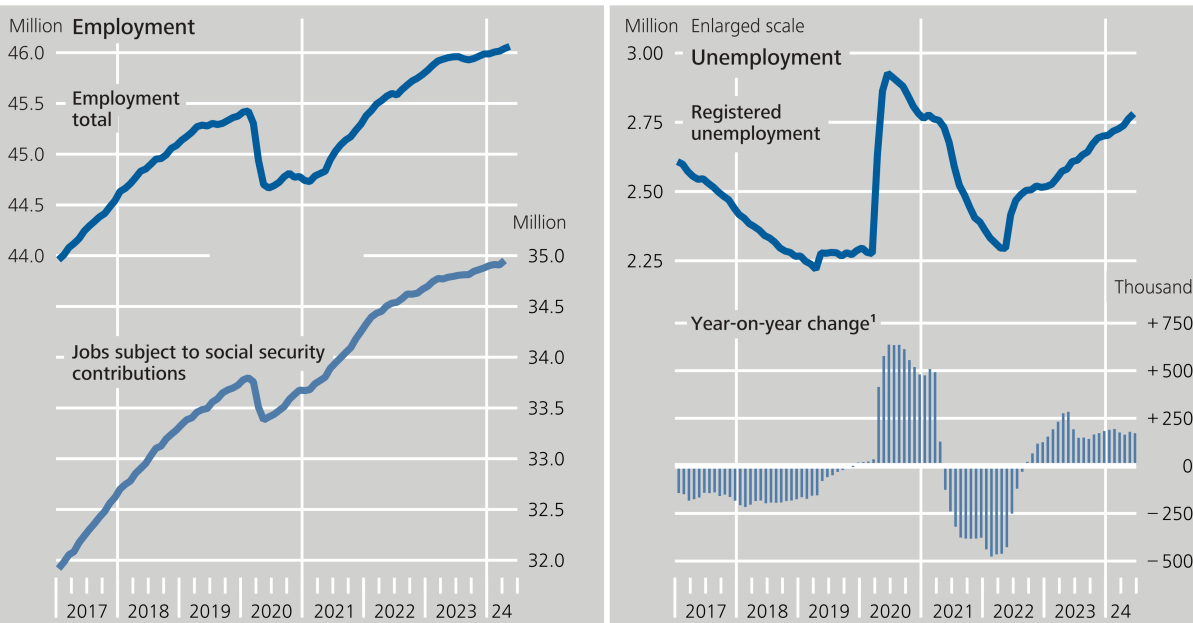
The weak economy, combined with strong immigration, currently means that both employment and unemployment in Germany are rising slightly. On the one hand, the weak economic stimulus has not yet been sufficient to keep employment in the manufacturing and construction sectors – or in temporary agency work – constant. On the other hand, employment continues to rise in most services sectors. In particular, areas of basic public services such as healthcare and long-term care, education, energy and water supply, and also the public sector, recruited noticeably more staff. Across all sectors, the number of persons in employment increased by 20,000 in May in seasonally adjusted terms. Employment subject to social security contributions also rose by this amount averaged over March and April.⁴⁾ On the other hand, the proportion of employees subject to social security contributions who are on short-time work increased further. In April, 0.7 % of them received short-time working benefits, the vast majority of whom were in the manufacturing sector.

⁴ These are the most recent data available. March (-4,000 people) and April (+44,000 people) should be considered together because of the Easter holidays falling early this year, as the spring rebound in 2024 probably only started after the Easter holidays at the beginning of April.

Labour market in Germany

Chart 1.3

Seasonally adjusted, monthly data



Sources of unadjusted figures: Federal Statistical Office and Federal Employment Agency. ¹ Not seasonally adjusted.
Deutsche Bundesbank

Leading indicators of employment suggest that current developments will continue over the next few months. The ifo Institute's employment barometer remains negative for manufacturing and construction, but has recently stabilised. The employment barometer of the Institute for Employment Research (IAB) for the economy as a whole continues to indicate a slight increase in employment. However, the number of job vacancies reported to the Federal Employment Agency is down significantly. In particular, the reporting of new vacancies is low.

Unemployment in June rose almost as much as in May. In seasonally adjusted terms, 2.78 million persons were registered as unemployed, which was 18,000 more than in May. The unemployment rate went up slightly to 6.0%. Most recently, unemployment covered by the statutory unemployment insurance scheme, which is sensitive to cyclical conditions, rose in particular. Compared with the previous year, unemployment was up by 172,000 people. However, total underemployment, which also includes persons engaged in labour market policy measures, rose less sharply as the number of persons receiving assistance fell. The IAB's unemployment barometer recovered somewhat after the significant decline in May, but remains below the neutral threshold. This suggests a somewhat slower rise in unemployment over the next few months.

5 Energy commodity prices slightly higher of late

Energy commodity prices have risen slightly of late. Crude oil prices, in particular, have picked up somewhat in recent weeks. As this report went to press, a barrel of Brent crude oil cost US\$88, just over 6 % more than in May. This is likely to have been mainly due to new production cutbacks by some OPEC countries and their partners, as well as renewed tensions at times in the Middle East. European wholesale natural gas prices also increased marginally. Concerns about Russian gas supplies to Europe and strong Asian demand for liquefied natural gas propped up prices.

6 Inflation rate somewhat lower again in June

At the upstream stages of the economy, the positive price trend for non-energy products continued. For energy, there was a decline in both producer prices in June and import prices in May, the last months for which the respective data are available. However, for non-energy products sold domestically, producer prices recently rose at a similar rate to previous months. This increase was again somewhat sharper than in the preceding month. By contrast, price dynamics for imports excluding energy declined somewhat. Overall, industrial producer prices were just shy of 2 % below their previous year's level, and import prices were barely below their level of the previous year.

The inflation rate was somewhat lower again in June. The Harmonised Index of Consumer Prices (HICP) rose by only 0.1 % on the month in seasonally adjusted terms, after 0.2 % in May. Lower consumer prices for energy once again had a dampening effect. By contrast, food prices, especially for unprocessed foods, rose significantly. Prices for non-energy industrial goods also edged up slightly once again. By contrast, price dynamics for services declined markedly.⁵⁾ Looking at the year-on-year figure, headline inflation fell considerably, from 2.8 % in May to 2.5 % in June.⁶⁾ The core rate (HICP excluding energy and food) decreased a little less sharply, from 3.5 % to 3.3 %. It thus remains well above the headline rate.

The inflation rate is likely to fluctuate over the coming months, but is unlikely to show any further downward tendencies. This is partly due to the high volatility in oil prices last year, the impact of which is now leading to a base effect in consumer prices. Services inflation is likely to come down only slowly over the next few months, given the continued strong wage growth.

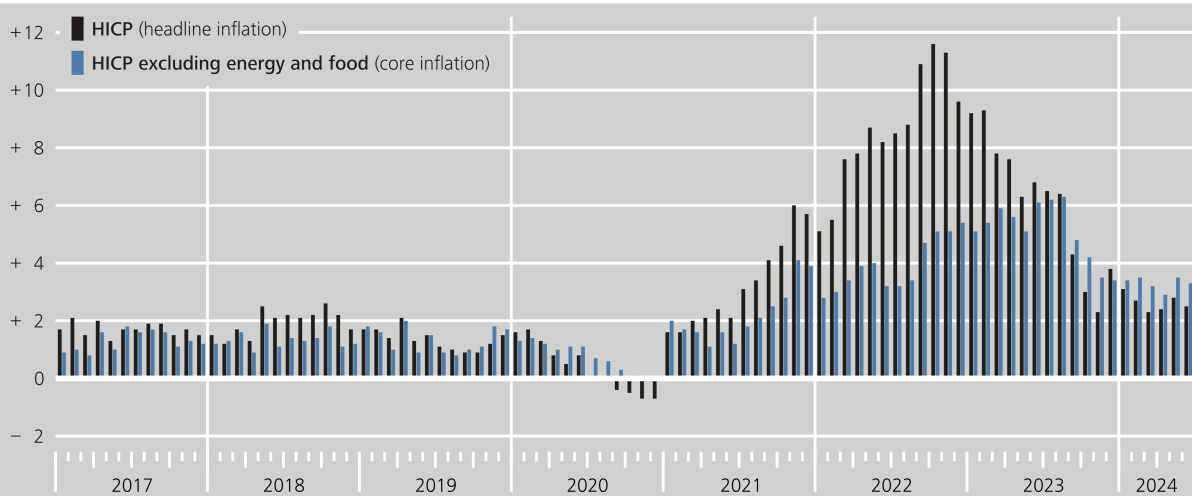
5 By contrast, prices for accommodation services rose extremely sharply in June, probably due to Germany hosting the men's European Football Championship.

6 Annual inflation according to the national consumer price index (CPI) fell from 2.4 % to 2.2 %.

Headline and core inflation in Germany

Chart 1.4

Year-on-year percentage change, monthly data



Sources: Federal Statistical Office and Eurostat.
Deutsche Bundesbank

List of references

Deutsche Bundesbank (2024), Forecast for Germany: German economy slowly regaining its footing – outlook up to 2026, Monthly Report, June 2024.

The global disinflation process and its costs

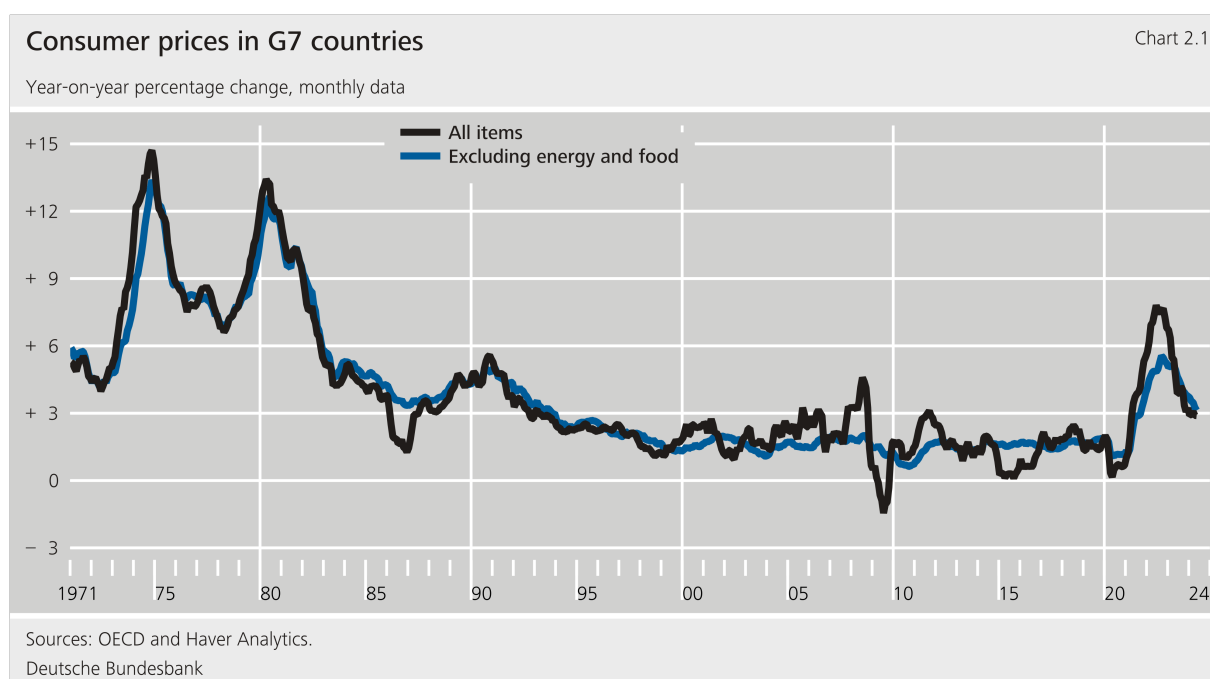
Following the exceptionally strong rise in consumer prices in recent years, the global economy appears to be heading towards a “soft landing”. Inflation is on the decline worldwide. While double-digit inflation rates were not uncommon in 2022, price stability targets have recently come back within reach in many places. Against this backdrop, a number of central banks have already started lowering their key interest rates again. At the same time, economic activity is broadly robust despite monetary policy remaining tight. It has even strengthened somewhat this year.

Compared with previous episodes of disinflation, this has allowed inflation to be curbed fairly quickly and painlessly. This is partly the result of monetary policy tightening. Estimates and simulations for the euro area suggest that the rise in interest rates has caused inflation to slow down markedly. That said, other factors have also made significant contributions to disinflation. Falling commodity prices and subsiding supply-side disruptions have supported economic activity at the same time. However, severe economic slumps have largely been avoided for other reasons, too. Savings and orders that were accumulated during the coronavirus pandemic, loose fiscal policy, and industrial policy initiatives have boosted demand for goods, services and labour in many places.

However, some of these economically favourable factors are making it difficult to achieve inflation targets. Labour markets continue to be tight, wage growth remains brisk and inflation is still strong, especially in the services sector. Inflationary risks predominate on the supply side, too. This suggests that monetary policy should be data-dependent, in line with the ECB Governing Council's communication.

1 The background to the recent surge in inflation

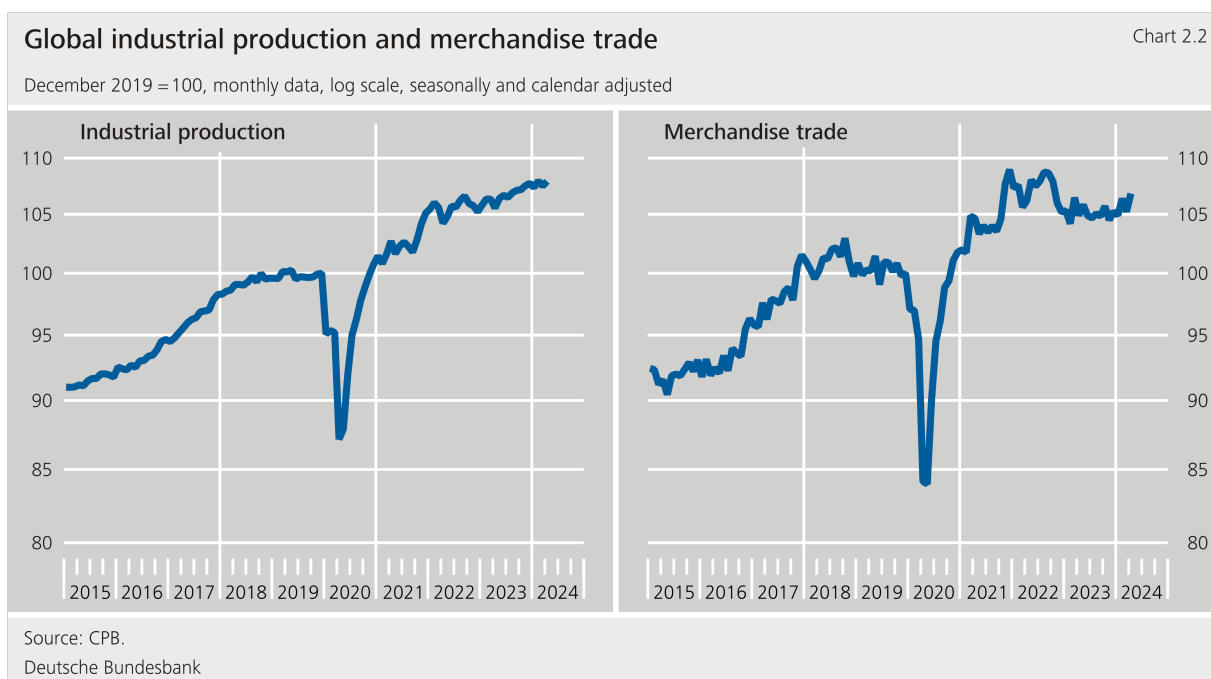
The current global disinflation process follows the sharp rise in inflation rates observed from the beginning of 2021. As the coronavirus pandemic subsided and, later, in the wake of Russia's war of aggression against Ukraine, inflation picked up sharply in many places. In the group of advanced economies, the annual rate of change in the consumer price index (CPI) had risen to 8.6 % by October 2022. Two years earlier, it had stood at just 0.7 %. In some major economies, inflation rates even peaked in double-digits during the course of 2022. The last time that similarly high rates had been recorded was back in the 1980s (see Chart 2.1). Consumer price inflation increased significantly in emerging market economies, too.



The remarkable rise in inflation rates worldwide was initially driven by the unexpectedly rapid recovery in global demand for goods.¹⁾ In order to halt the

¹ See Deutsche Bundesbank (2021a) for an analysis of global economic developments during the coronavirus pandemic.

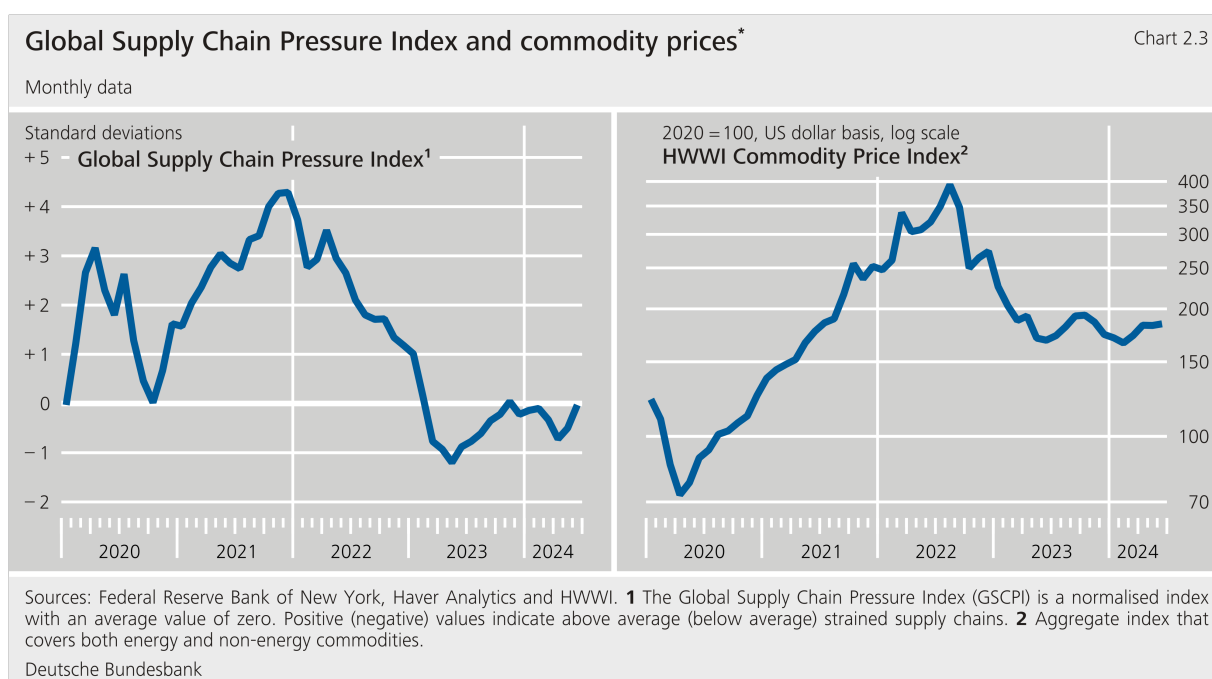
downturn in the global economy following the outbreak of the coronavirus pandemic and to avoid a protracted period of economic weakness, policymakers around the world took extensive monetary and fiscal support measures. Many of these support measures were aimed at bolstering aggregate demand. For instance, some countries, including the United States, significantly increased unemployment benefits or offset their citizens' income losses through one-off payments. Other countries, particularly in Europe, introduced or expanded labour market policies such as short-time work to safeguard jobs and income.²⁾ At the same time, consumption of contact-intensive services (such as visits to restaurants or hairdressers) was severely restricted due to public health measures taken to contain the spread of the pandemic. Instead, households increasingly purchased goods. As a result of this shift in demand, global industrial production rose considerably and global trade experienced a rapid and strong recovery (see Chart 2.2).



The shift in demand towards goods exacerbated pandemic-related supply and production bottlenecks and led to price increases at various levels of the value chain. Many enterprises were unable to quickly adjust their production to rapidly rising demand. In addition, interruptions to production caused by the pandemic exacerbated supply bottlenecks. Cross-border supply chains proved to be especially vulnerable. This was due not least to China, whose strict zero-COVID policy led to repeated closures of

² See International Monetary Fund (2021) for a summary of key fiscal measures in selected economies.

businesses and ports.³⁾ Bottlenecks in shipping also contributed significantly to a shortage of key industrial intermediate inputs. At times, some regions of the world lacked containers to transport goods, while, elsewhere, ships were queuing up at ports. One reason for this was the heterogeneous economic developments across regions due to local waves of infection and differing policy responses. All of this was accompanied by supply disruptions, sharply rising commodity prices, higher transport costs and mounting producer prices. Indicators of supply chain disruptions, such as the Global Supply Chain Pressure Index compiled by the Federal Reserve Bank of New York, reached new highs (see Chart 2.3, left-hand side). In this environment of sharply rising production costs and high demand, enterprises in the manufacturing sector, in particular, were also able to significantly increase their mark-ups.⁴⁾ Overall, consumer price inflation increased considerably.



The rise in commodity prices as a result of Russia’s war of aggression against Ukraine intensified the already high global price pressures further. Numerous commodity prices – especially for energy and food – rose again sharply following the outbreak of war (see Chart 2.3, right-hand side). This was attributable primarily to the high degree of uncertainty surrounding future energy supplies from Russia and the

3 For a discussion of the impact of Chinese supply chain shocks on economic activity, see Deutsche Bundesbank (2021b, 2024a) and European Central Bank (2023a).

4 See European Commission (2023) and OECD (2023).

limited availability of alternative suppliers, at least in the short term. While Russian gas deliveries to Europe were gradually cut, EU Member States tried to meet their ongoing needs by making purchases from other countries and increasing their gas storage levels. As a result, gas prices rose sharply in 2022, especially in Europe, but also in other regions.⁵⁾

Finally, the recovery in demand for services contributed to inflation. Once pandemic-related restrictions were lifted, the previously highly elevated demand for goods gradually abated again. There was now a marked amount of pent-up demand, particularly with respect to service consumption, which had been heavily affected by measures taken to contain the pandemic. Service prices rose significantly, causing the increase in consumer prices to become even more broadly based.

At the same time, labour market conditions, which had already been tight in many places before the crisis, intensified and wage growth increased. Greater demand for labour was faced with a labour supply that was, to some extent, subdued as a result of the pandemic.⁶⁾ The number of job vacancies rose sharply in many places. In the United States during the winter of 2022, for instance, there were two job vacancies for every unemployed person. This strengthened the bargaining power of workers who had suffered sizeable real income losses due to unexpectedly strong inflation. Accordingly, wage growth picked up to a considerable degree.

5 For more information on the driving forces behind European gas prices, see Deutsche Bundesbank (2023a).

6 See Doornik et al. (2023).

2 Monetary policy response and past experiences of disinflation

At the beginning of the recent period of high inflation, central banks faced the challenge of reliably identifying the drivers of inflation in a timely manner. Some economists cited supply shortages caused by the pandemic and, later, Russia's war of aggression against Ukraine as the main reason for the sharp rise in consumer prices.⁷⁾ Others highlighted the role of the extensive monetary and fiscal policy support measures that stimulated demand.⁸⁾ In retrospect, an econometric analysis for the United States and the euro area suggests that both supply-side and demand-side factors were important.⁹⁾ In the United States, however, demand played a much greater role.¹⁰⁾ In the euro area, by contrast, a larger contribution was attributed to supply-side influences (see Chart 2.4).¹¹⁾

7 See, for example, Stiglitz and Regmi (2023).

8 See Summers (2021) and Furman (2022).

9 For a detailed description of the estimation approach, see Eickmeier and Hofmann (2022). Aggregate factors are estimated using a principle component analysis and are decomposed into supply and demand through sign restrictions on the factor loadings of inflation and real economic activity. The estimation for the United States covers 202 variables in the period from the first quarter of 1970 to the first quarter of 2024. The estimation for the euro area covers 83 variables in the period from the first quarter of 2001 to the first quarter of 2024.

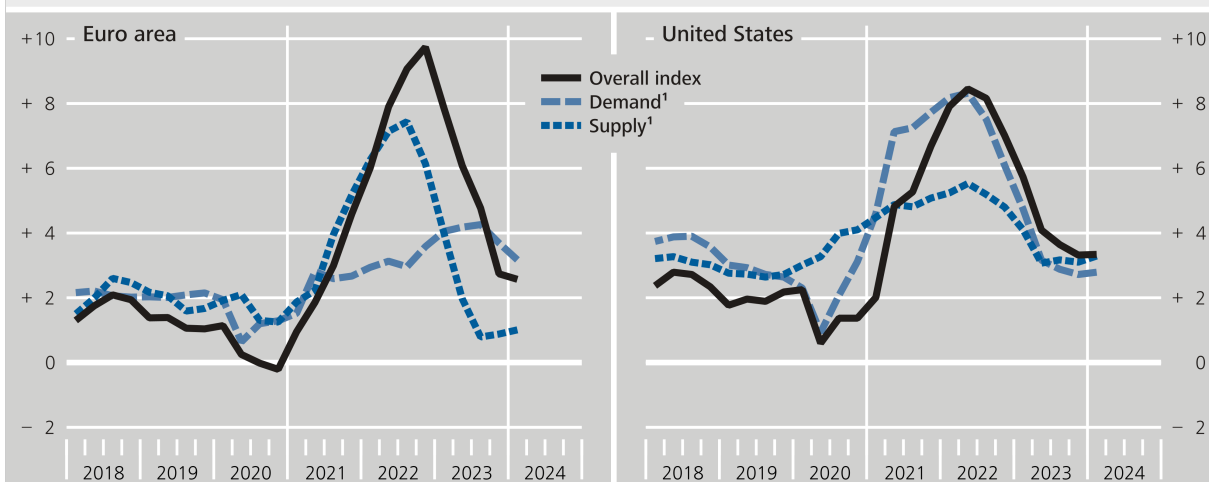
10 A recent study by Giannone and Primiceri (2024) also suggests that demand-side influences play a major role in the euro area.

11 Another econometric analysis using a structural vector autoregressive model points in a similar direction. According to this, domestic factors – including strong demand – were the dominant driver of the rise in inflation in the United States. In the euro area, just over half of the rise is explained by external factors. See Deutsche Bundesbank (2022a).

Determinants of consumer prices in the euro area and the United States

Chart 2.4

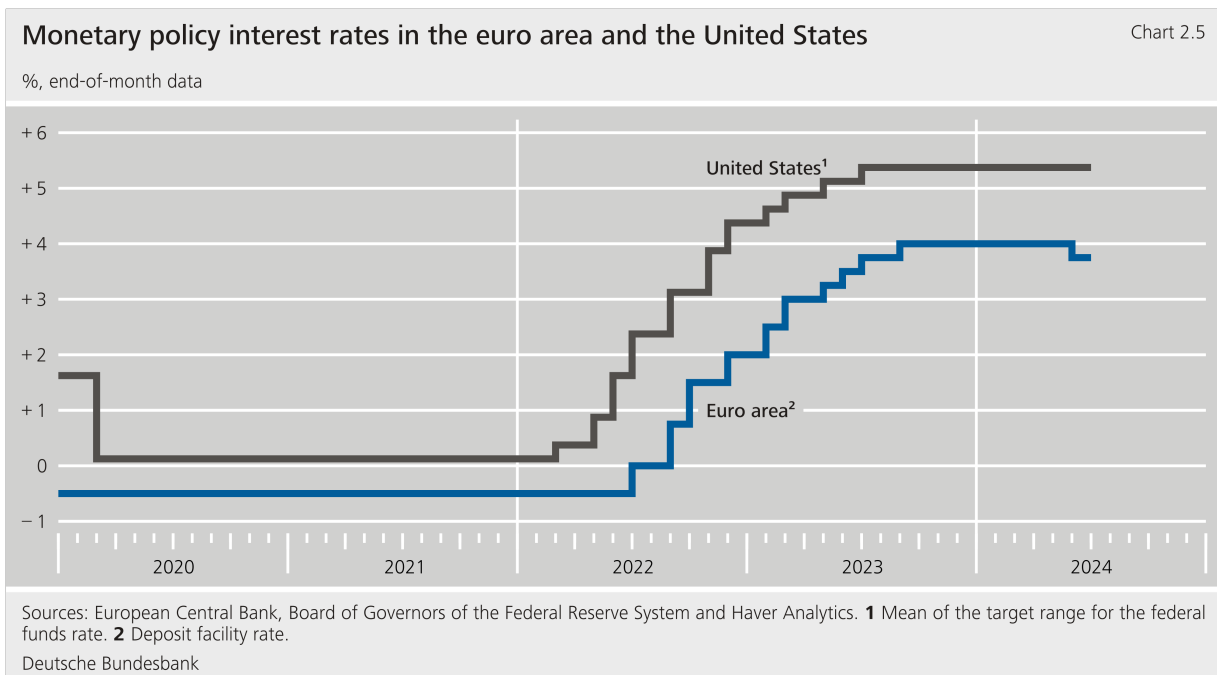
Year-on-year percentage changes, quarterly data



Sources: Eickmeier and Hofmann (2022) and Bundesbank calculations. ¹ Consumer price inflation that would have occurred if inflation had been driven only by demand-related or supply-related factors, respectively.

Deutsche Bundesbank

Central banks responded to the high rates of inflation with substantial tightening measures, in some cases after initial hesitation. Up until the start of 2022, the central banks in advanced economies, in particular, largely refrained from tightening their monetary policies despite the considerable spike in inflation. One likely factor behind this was the fact that the rise in prices was, in many places, attributed to temporary supply shocks. However, demand also appeared to be broadly robust. Furthermore, the inflationary impact of supply-side shortages proved more persistent than originally thought in many cases. As the risks of deanchoring inflation expectations and of inflation spreading to labour markets increased, central banks in advanced economies responded with substantial interest rate hikes. At this point in time, inflation rates in most advanced economies were already well above their targets. The Federal Reserve System's Federal Open Market Committee raised monetary policy interest rates in the United States by no less than 5.25 percentage points over one-and-a-half years. In the euro area, the deposit facility rate rose from -0.5 % in June 2022 to 4 % in September 2023 (see Chart 2.5).



Thus far, economies have proved resilient to the substantial tightening of monetary policy. Concerns about widespread recessions and a sharp rise in the unemployment rate have not materialised.¹²⁾ In fact, aggregate output in advanced economies continued to grow overall up to the end of the period under review. Most emerging market economies proved resilient, too.

At the same time, inflation rates have declined significantly since the end of 2022. The decline in inflation seen across countries was similarly synchronous to the previous increase, albeit less steep at the end of the period under review. In the group of advanced economies, the annual rate of the CPI had fallen to 2.8 % by June 2024, according to provisional data. Compared with its peak in 2022, this represented a drop of almost 6 percentage points. The normalisation of energy prices played a key role in this regard. In the case of core components, i.e. excluding energy and food, price pressures proved more persistent. This holds especially true for some services. Although the CPI core inflation rate in advanced economies declined by 2.6 percentage points from its peak, at 3.2 % most recently, it remains markedly above levels that would be compatible with the objective of price stability over the medium term. The

¹² For example, in October 2022, the International Monetary Fund expected GDP declines in the following year in countries that collectively account for more than one-third of the global economy. Economic activity was also expected to be weak for major advanced economies and China. See International Monetary Fund (2022).

disinflation process – i.e. the reduction in inflation – is therefore not yet complete from the perspective of central banks' mandates.

Many observers now consider a soft landing – a return to price stability without any major disruptions to the real economy – to be likely. Like a number of central banks worldwide, the Eurosystem has now started lowering its monetary policy interest rates again. Nevertheless, monetary policy remains a challenge. The inflation rates targeted by monetary policymakers are still being exceeded in many places, and in some of these there has recently been a lack of progress with regard to achieving these targets. Given how comparatively robust economic developments have been thus far, the question therefore arises as to whether the tightening of monetary policy is continuing to have a dampening effect.

3 Lessons from the past

Inflationary episodes and subsequent periods of disinflation are not uncommon. In the past, too, periods of low and declining inflation were repeatedly interrupted by inflationary surges, which were also often due to the interplay between unexpected developments on the supply side and the demand side. Especially in the 1970s and 1980s, this translated into sharp rises in energy prices.¹³⁾ In some cases, households and enterprises adjusted their inflation expectations following these developments. This is one reason why it was not always possible to curb high inflation quickly. Attempts to contain inflation over the long term by means of income policies and price controls were unsuccessful.¹⁴⁾ Successful disinflation periods were generally linked to a tightening of monetary policy.¹⁵⁾

Identifying disinflation episodes using a statistical procedure allows for comparisons between countries and over time. A common dating method is based on a paper by Ball (1994). This identifies phases in which underlying inflation declined significantly.¹⁶⁾ Amongst a large sample of 46 advanced and emerging market economies, there have been almost 230 completed episodes of disinflation since the 1960s according to this method. Among the G20 economies, there were no less than 55 episodes, three of which were in Germany (see Chart 2.6). These include the curbing of inflation following the energy price shocks of the 1970s and early 1980s. Germany also experienced disinflation after the end of the reunification boom. Global median inflation rates fell by 5 percentage points during periods of disinflation. This almost always took several years, however. It is also worth noting that, even in the past, disinflation periods often took place in many regions at the same time.

¹³ For a historical contextualisation of the rise in energy prices in 2021 and 2022, see Deutsche Bundesbank (2022b).

¹⁴ See Neely (2022) and Nelson (2022).

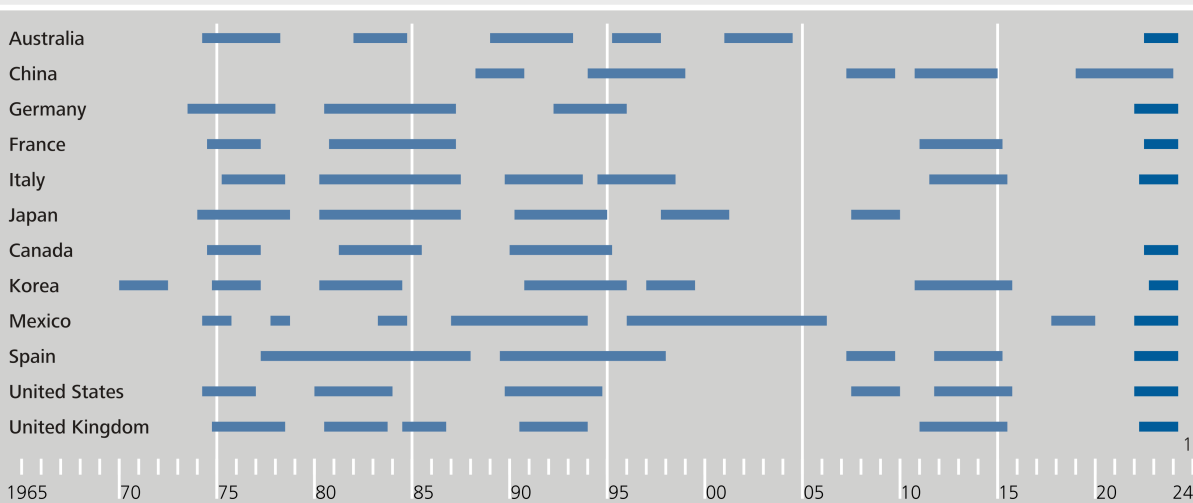
¹⁵ See Ari et al. (2023).

¹⁶ Underlying inflation is approximated using a centred moving average of the annualised quarterly percentage change in the seasonally adjusted consumer price index over nine quarters. If this measure falls by at least 2 percentage points between successive local highs and lows, the intervening period is considered to be an episode of disinflation. See Ball (1994).

Disinflation episodes in G20 economies*

Chart 2.6

Quarterly data



Sources: OECD and Bundesbank calculations. * Dated using the approach by Ball (1994). 1 Current episodes are ongoing.
Deutsche Bundesbank

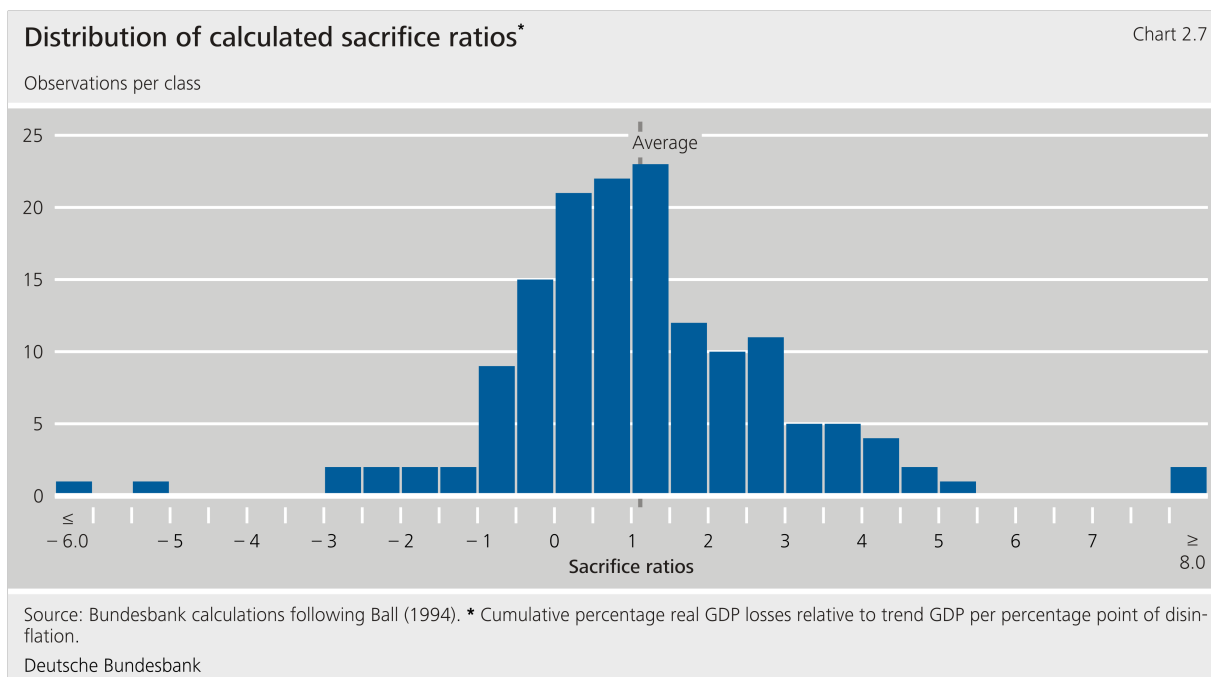
Declines in high rates of inflation have generally been accompanied by considerable drops in economic activity. In these cases, real gross domestic product (GDP) fell behind its trend. The ground lost due to such setbacks and bouts of weaker growth was often not regained quickly.¹⁷⁾ A popular measure of the economic cost of disinflation – known as the sacrifice ratio – is the ratio of GDP losses, measured as the sum of the percentage deviations of GDP from its trend, to the decline in underlying consumer price inflation. On average for the disinflation episodes under consideration, the sacrifice ratio has a value of around 1.¹⁸⁾ This means that each reduction of 1 percentage point in the inflation rate was accompanied by an average loss of GDP of 1 %. In advanced economies, the sacrifice ratio has tended to be somewhat higher.¹⁹⁾ Applied to the current situation, the reduction in the (in some cases, double-digit)

¹⁷ As is customary in the literature, the calculation of disinflation costs also factors in GDP losses in the year following the end of the disinflation process. This takes into account any possible late-term effects of combating inflation. See Ball (1994). The approach, however, does not account for the possibility that the previous surge in inflation may have been the result of exaggerations with above average GDP growth rates. This could distort the trend estimate upwards. In this case, GDP losses would tend to be overstated.

¹⁸ This is consistent with estimates from the relevant literature. See, for example, Ball (1994), Katayama et al. (2019) and Cecchetti et al. (2023).

¹⁹ See also Mazumder (2014).

inflation rates should therefore have been widely accompanied by recessions.²⁰⁾ However, there have also been examples of relatively painless disinflation processes in the past (see Chart 2.7).²¹⁾



Both the successes in combating inflation and the associated drops in economic activity are likely to have been, not least, the result of monetary policy tightening. Especially in recent decades, central banks have preferred to raise monetary policy interest rates in order to do so.²²⁾ Interest rate hikes affect household and corporate

20 In fact, just over two-thirds of the disinflation episodes were accompanied by recessions, which were dated using the algorithm from Bry and Boschan (1971). In line with this, Cecchetti et al. (2023) found that all past disinflation episodes in the United States coincided with the recessions identified by the National Bureau of Economic Research.

21 Among the most popular explanations in the literature for the heterogeneity of disinflation costs are differences in the strategies, transparency and independence of central banks, in the wage negotiation process and in the openness of economies. Empirically, however, only a few indicators show a robust correlation with the sacrifice ratios. What is relatively certain is that short but significant disinflation periods incurred fairly low costs. This is often interpreted as a sign that an especially decisive and rapid fight to curb inflation can increase the credibility of the central bank. See also Ball (1994), Katayama et al. (2019) and Magkonis and Zekente (2020).

22 Previously, operational monetary policy in many places was geared towards controlling the monetary base, central bank reserves of the banking system or the exchange rate. In addition to open market operations, changes in minimum reserve requirements and foreign exchange market interventions, for example, were also used. See Bindseil (2004).

expectations, longer-term interest rates, asset prices and exchange rates via various channels and have a dampening effect on lending and aggregate demand. This dampening of demand, together with expectation effects, curbs wages, producer prices and, ultimately, consumer prices.²³⁾

Estimates show the effectiveness of monetary policy interest rate steps in the euro area and the United States.²⁴⁾ Vector autoregressive models²⁵⁾ can be used to estimate the dynamic relationships between short-term interest rates, price-adjusted and seasonally adjusted GDP as well as its key expenditure components, and consumer price inflation.²⁶⁾ In this context, the impact of monetary policy is derived based on assumptions about the timing of the transmission process.²⁷⁾ An unexpected rise of 100 basis points in the short-term interest rate in the past was estimated to dampen the euro area inflation rate at its peak by just over 1 percentage point. Euro area GDP was pushed down by almost 2 % and did not start slowly catching up with the previous trend until two-and-a-half years after tightening had begun.²⁸⁾ The decline in investment, and especially housing investment, was particularly pronounced. In Germany, too, these are considered to be sensitive to interest rates (see the supplementary information on the impact of monetary policy tightening on housing investment in Germany). In the United States, the inflation-dampening and real economic effects were qualitatively similar, but less pronounced than in the euro area (see Chart 2.8).²⁹⁾

23 See Deutsche Bundesbank (2023b), p. 39, for a schematic representation of the monetary policy transmission process.

24 See Ramey (2016) for an overview of the literature and a discussion of various methodological approaches for the United States.

25 Both models are estimated using Bayesian methods for the period from the first quarter of 1999 to the final quarter of 2023.

26 In addition to GDP, private consumption, gross fixed capital formation, investment in machinery and equipment and housing investment – each seasonally and price-adjusted – are entered in the model as logarithmic levels. Also included is the annualised quarterly change in the seasonally adjusted consumer price indicator relevant for the respective monetary policy. This is the HICP for the euro area and the private consumption deflator for the United States. The interest rate used for the United States is the yield on government bonds with a residual maturity of one year, and the rate used for the euro area is a one-year interbank interest rate (EURIBOR).

27 The recursive identification scheme used here assumes that GDP and its expenditure components as well as inflation respond to a monetary policy shock, i.e. an unexpected change in the short-term interest rate, with a time lag of one quarter. By contrast, monetary policy responds immediately to unexpected changes in real economic activity and inflation. See also Peersman and Smets (2003).

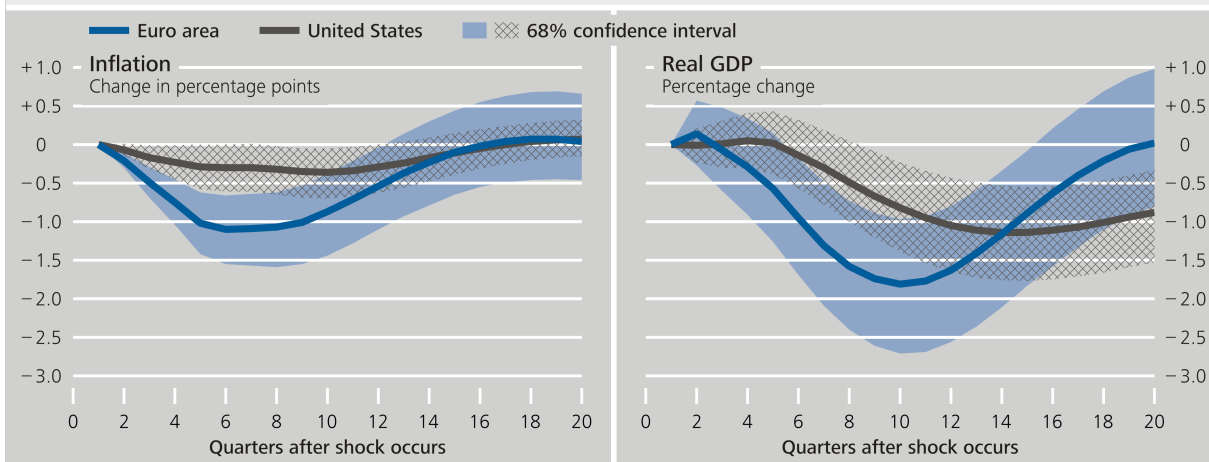
28 These results are broadly consistent with similar estimates from the ECB, which indicate that euro area GDP declines by up to 1.25 % three years after an interest rate hike of 100 basis points. See also Lane (2023).

29 The impact of monetary policy also differs across the euro area, as demonstrated by previous analyses that used a multi-country model. According to these analyses, the dampening effects of an interest rate hike on the real economy tend to be stronger in Germany than in France, Italy or Spain, for example. By contrast, there is relatively little drag on consumer price inflation in Germany. See Deutsche Bundesbank (2023b) and Mandler et al. (2022).

Macroeconomic responses to monetary policy shocks*

Chart 2.8

Responses to an unexpected rise in the short-term interest rate by 100 basis points



Source: Bundesbank calculations. * Impulse responses derived from structural BVAR models with recursive shock identification. Both models were estimated for the period between Q1 1999 and Q4 2023. Alongside short-term interest rates and the variables depicted here, data on key GDP expenditure components were also included.

Deutsche Bundesbank

On the impact of monetary policy tightening on housing investment in Germany

Price-adjusted housing investment in Germany at the end of 2023 was around 10 % below its peak in 2020. Previously, housing investment had risen steadily during the protracted upswing in the residential real estate market.^[1] The decline in investment coincided with the tightening of monetary policy in the euro area from July 2022. Housing investment is considered to be particularly interest rate-sensitive, partly because it is largely financed on credit.^[2] It is therefore not surprising that the tightening of monetary policy was an instrumental factor in the latest decline in housing investment.

A structural vector autoregressive model allows the development of housing investment to be decomposed into the contributions of its driving factors. The model incorporates the annual rates of change in housing investment, construction prices and land prices relating to residential real estate.^[3] The latter two variables can be seen as components of housing prices.^[4] In addition, the model comprises the monetary policy interest rate and the annual rates of change in real GDP and in the Harmonised Index of Consumer Prices (HICP) for the euro area.^[5]

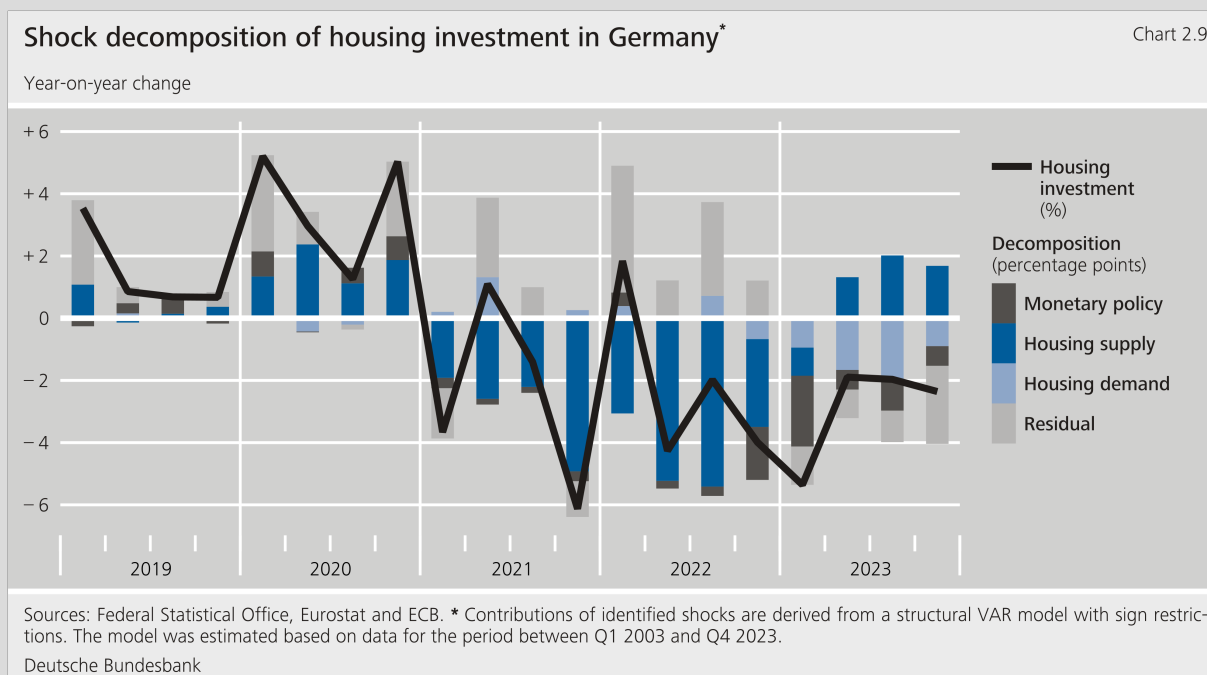
The model distinguishes between various drivers of housing investment by means of sign restrictions on the impulse responses. The focus is on housing-specific supply and demand shocks as well as monetary policy shocks. Unfavourable housing supply shocks are assumed to increase consumer, construction and land prices and dampen housing investment. Monetary policy shocks are unexpected policy interest rate changes that deviate from the usual response to macroeconomic conditions. Unexpected monetary policy tightening dampens consumer price inflation and real GDP in the euro area, as well as housing investment in Germany. However, a monetary policy shock drives construction and land prices in different directions. As with other asset prices, the price of land falls in response to a restrictive monetary policy shock.^[6] Construction prices, on the other hand, rise due to the higher cost of capital tied up in ongoing construction projects.^[7] Housing-specific demand shocks are defined as influences that push construction and land prices as well as housing investment in the same direction.^[8]

Table 2.1: Assumptions on the identification of shocks¹

Variable affected	Housing supply	Housing demand	Monetary policy
Construction prices (Germany)	+	-	+
Land prices (Germany)	+	-	-
Housing investment (Germany)	-	-	-
Shadow rate (euro area)	.	.	+
GDP (euro area)	.	.	-
HICP (euro area)	+	.	-

¹ Assumptions on the impact of adverse supply, demand and monetary policy shocks immediately after they occur. Construction and land prices as well as housing investment refer to Germany; the remaining variables refer to the euro area. A minus sign indicates a negative impact; a plus sign indicates a positive impact. For cells with a dot, the direction of the effect is not determined beforehand.

According to the results, particularly unfavourable supply shocks have dampened housing investment since 2021. Housing investment had increased up to the end of 2020, partly owing to the favourable monetary policy stance and favourable supply conditions. The beneficial effects of housing demand shocks unfolded until 2022. The supply-side barriers that dampened housing investment from the beginning of 2021 likely relate to labour shortages, material shortages and the energy crisis.



Restrictive monetary policy shocks diminished housing investment further from 2022 onwards, exerting their strongest negative effect as early as the 2022-23 winter half-year (October-March). In the first quarter of 2023, this effect alone meant that the annual growth rate of housing investment was down by around 2 percentage points. It appears that this effect expired towards the end of 2023. Meanwhile, demand for housing deteriorated unexpectedly in the second half of 2023.^[9] By contrast, the supply side supported housing investment from mid-2023.

According to the results, the restrictive monetary policy stance was thus swiftly and markedly transmitted to housing investment in Germany. However, the tightening effect is now likely to have peaked already.

-
1. See Deutsche Bundesbank (2021c).
 2. Erceg and Levin (2006) show for the United States that investment in durable goods, such as residential property, exhibits a particularly strong and swift reaction to monetary policy shocks. Likewise, calculations based on the Bundesbank's macroeconomic model suggest that housing investment in Germany has the strongest reaction of all GDP expenditure components within the first year following an interest rate change. For more information on the Bundesbank's macroeconomic model, see Haertel et al. (2022).
 3. The model's empirical estimation is based on the period from the first quarter of 2003 to the fourth quarter of 2023.
 4. See Deutsche Bundesbank (2020a, 2020b). The decomposition of housing prices into construction and land prices follows the approach used by Davis and Heathcote (2007) as well as Kajuth (2021).
 5. In the calculations, the monetary policy interest rate corresponds to an estimated shadow rate; see Geiger and Schupp (2018). The shadow rate estimates the monetary policy stance during the period from 2012 to 2022, when short-term rates were close to zero and quantitative easing measures were also being implemented.
 6. See Davis and Heathcote (2007) as well as Kajuth (2021).
 7. See Christiano et al. (2005) and Mishkin (2007). This assumption, like all the others, refers only to the quarter in which the shock occurs. It does not contravene the possible dampening effect of monetary policy on construction prices in subsequent periods. An alternative recursive identification strategy, which does not assume a direction of impact, also results in the interest rate hike having an immediate positive effect on construction prices. It also shows that construction prices do not begin to decline until some time after the shock.
 8. The type of shock identification selected is one of several options. For this analysis, however, it has the advantage that the contributions of unexpected monetary policy shocks can be distinguished from the other demand-side influences on housing investment. It also allows comparisons of these contributions with those of supply shocks to housing investment developments.
 9. The at times high contributions of the residuals reflect, for example, the estimation uncertainty regarding the extent to which the shocks impact housing investment overall.

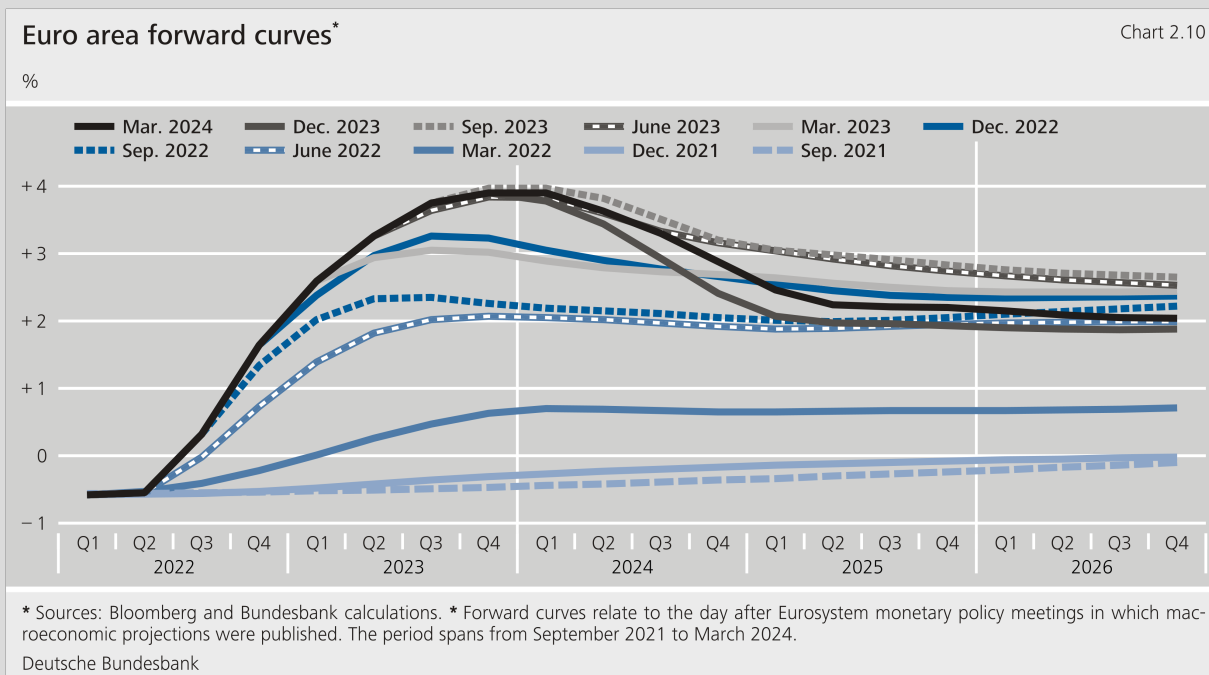
If historical experiences were applied to the most recent cycle of monetary policy tightening, substantial macroeconomic losses should have been expected in the euro area in addition to a significant decline in the rate of inflation. This is also the outcome of simulations using a variety of macroeconomic models. These simulations show that, compared with an unchanged monetary policy, the inflation rate would have been markedly and persistently contained. However, real GDP growth in 2023 alone would also have been around 4 percentage points lower than in a scenario without monetary policy tightening (see the supplementary information on the macroeconomic impact of monetary policy tightening in the euro area). The same is likely to apply to other regions of the world, where, in some cases, the monetary policy reins were tightened to an even greater extent.³⁰⁾

30 The credibility of monetary policy and its impact on inflation expectations are likely to have played a crucial role in determining the degree of tightening required. If inflation expectations were aligned with past developments, inflation processes would be more persistent and would require a stronger monetary policy response. The costs of disinflation would then be correspondingly higher. See Tetlow (2022) and International Monetary Fund (2023).

The macroeconomic impact of monetary policy tightening in the euro area

The ECB Governing Council responded to the exceptionally strong rise in inflation in the euro area with what has thus far been its most significant interest rate hiking cycle since the introduction of the euro. From July 2022 to September 2023, the ECB Governing Council raised its key interest rates by a total of 4.5 percentage points. From a monetary policy perspective, this was necessary in order to put an end to the very high dynamics of inflation, which reached double-digits for a time. Following its peak in October 2022, the rate of inflation then fell again significantly. Tighter monetary policy is likely to have played a role in this and thus paved the way for inflation to return to its target of 2 % over the medium term.

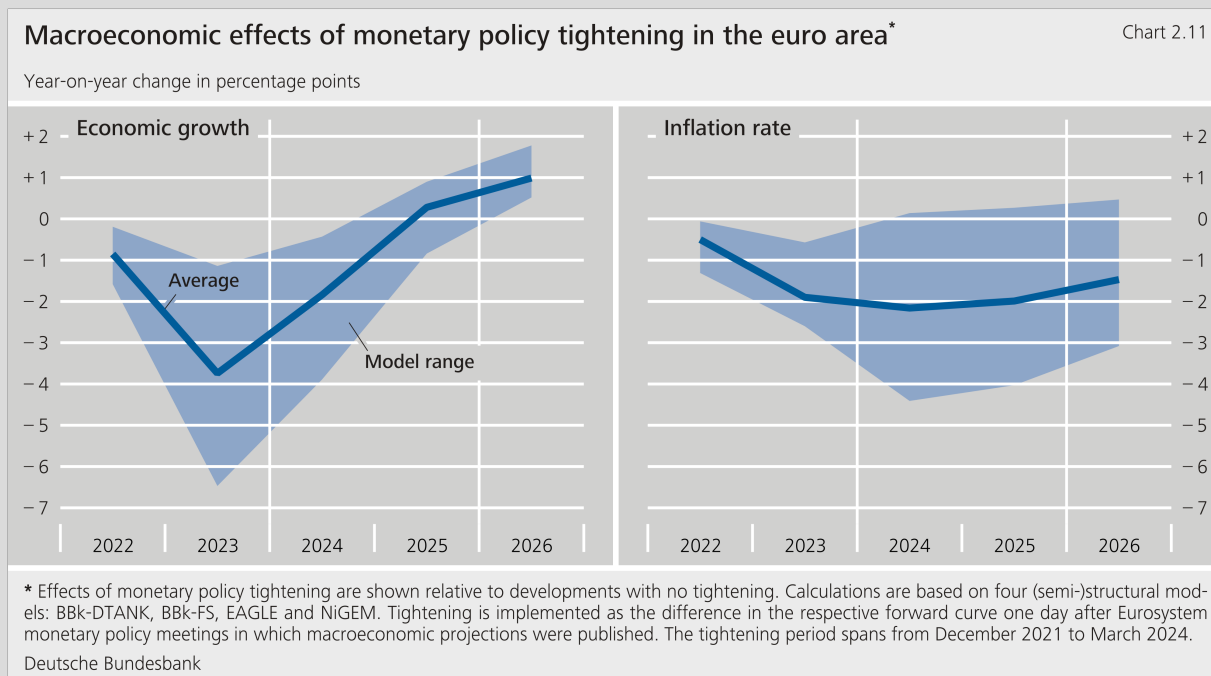
The macroeconomic impact of a change in interest rates depends crucially on the associated changes in interest rate expectations. Due to arbitrage conditions, there is a close connection between short-term key interest rates and long-term capital market rates. The latter, in turn, are an important determinant of aggregate demand and thus also price developments. An increase in key interest rates lowers the rate of inflation by dampening aggregate demand. In this context, the overall monetary policy stance is not determined by the immediate interest rate step alone. It depends largely on the impact on expected short-term interest rates, summarised by the forward curve.^[1] All else being equal, if further interest rate hikes are expected, this will shift the forward curve upwards. This expectation effect pushes up long-term interest rates, thereby amplifying the restrictive monetary policy effect of the current level of key interest rates. ^[2] Chart 2.10 depicts the evolution of various forward curves for the euro area since December 2021, when the tightening cycle began.^[3]



In order to estimate the macroeconomic effects of monetary policy tightening, we utilise a variety of macroeconomic models. Three requirements need to be taken into account here. First, both financial market variables and macroeconomic developments are influenced by a variety of factors. The impact of monetary policy decisions must therefore be isolated from these factors.^[4] Second, when assessing monetary policy decisions, anticipation of future monetary policy measures must be taken into account. Due to these two requirements, we do not use any time series models, but instead only (semi-)structural macroeconomic models.^[5] The effects of changes in the forward curves over time are first quantified separately and then the cumulative result is reported. Finally, there is considerable uncertainty with regard to the relative strength of individual transmission channels and time lags in monetary policy. For this reason, we use a variety of models to assess the range of outcomes: three structural DSGE models (BBk-DTANK, BBk-FS and EAGLE) and a large semi-structural model (NiGEM).^[6]

According to the models, the dampening effect of monetary policy tightening on euro area economic growth reached its maximum in 2023. The strongest impact on inflation follows with a certain time lag. The tightening of monetary policy weighed considerably on economic developments (see Chart 2.11, left-hand side). Based on the model average, macroeconomic growth last year was around 4 percentage points lower than if monetary policy had remained unchanged. Thereafter, the dampening effect on economic activity is likely to gradually fade. Falling demand caused inflation to decline. The dampening effect on inflation emerges with a time lag, but is more

persistent (see Chart 2.11, right-hand side). According to the model calculations, from 2022 to 2025, the cumulative decline in GDP growth amounts to around 6 percentage points and the cumulative decline in inflation amounts to around 7 percentage points.^[7]



Based on the model analyses, monetary policy tightening contributed to the decline in the high rates of inflation. However, there are substantial differences in the model outcomes in some cases. For the impact on GDP, the range of simulation results spans up to 5 percentage points. Model uncertainty is only marginally lower for the impact on inflation. These differences are related to the characteristics of the models used, which stress the different transmission channels to varying degrees. There are also differences in how they model expectation formation. In addition, it should be noted that the models have been calibrated or estimated using historical data. If transmission mechanisms have changed in recent times, this would also have an impact on the quantitative effects. In any case, the model simulations highlight the important contribution of monetary policy to reducing high rates of inflation.

Model overview

- **BBk-DTANK:** Based on Gerke et al. (2022), a New Keynesian DSGE model with heterogeneous agents and financial market frictions. The variant of the model used here contains estimated deviations from rational expectations. In addition, the estimation period was extended to the fourth quarter of 2019.

- **BBk-FS:** Based on Kühl (2018), a New Keynesian DSGE model with a detailed financial sector and financial market frictions. This model reflects the bank-based financing structure in the euro area. In the model, banks are the main financial intermediaries and pass household savings on to non-financial corporations.
- **EAGLE:** A large, calibrated and microfounded DSGE model (see Gomes et al. (2012) for documentation of the basic version). The EAGLE6 variant of the model used for the simulations comprises six country/regional blocks: Germany, France, Italy, Spain, the rest of the euro area and the rest of the world.
- **NiGEM:** Macroeconomic model of the National Institute of Economic and Social Research (see Hantzsche et al. (2018)). This is a large multi-country model that includes most OECD countries as well as major emerging market economies. International linkages are modelled through foreign trade and the interest rate-exchange rate nexus.

-
1. In principle, the monetary policy stance is measured by the spread between key interest rates and the natural rate of interest. The natural interest rate is typically dependent on structural factors and is not influenced by monetary policy.
 2. If key interest rates were tightened and the forward curve remained (more or less) constant, the monetary policy stance would be hardly affected.
 3. In December 2021, the ECB Governing Council announced that it would normalise its monetary policy stance, initially by reducing net purchases under the asset purchase programme (APP) and the pandemic emergency purchase programme (PEPP). The first interest rate step was taken in July 2022. The reference forward curve prior to the tightening of monetary policy is from September 2021.
 4. Only the effects of Eurosystem interest rate tightening are quantified. This factors out other restrictive monetary policy impulses such as a tightening of TLTRO III conditions or an early unwinding of the central bank balance sheet. Previous findings suggest that the latter has a rather small macroeconomic effect; see Deutsche Bundesbank (2023c).
 5. Time series models likewise allow monetary policy to be considered in isolation. In most cases, however, they are only able to measure the effects of unexpected changes in interest rates. This would not fully reflect the monetary policy effects and would thus tend to underestimate the macroeconomic effects of tightening.
 6. Like many structural models in the literature, the BBk-FS and EAGLE models overstate the effect of anticipated interest rate paths (the “forward guidance puzzle”; see Del Negro et al. (2023)). For the quantification, those models therefore assume that 30% of agents form their expectations based not on the forward curve, but instead on the (counterfactual) model-endogenous monetary policy rule. This approach, as well as the selection of 30%, is based on Coenen et al. (2022).
 7. This is in line with the estimates in European Central Bank (2023b).

4 The current disinflation process: a soft landing?

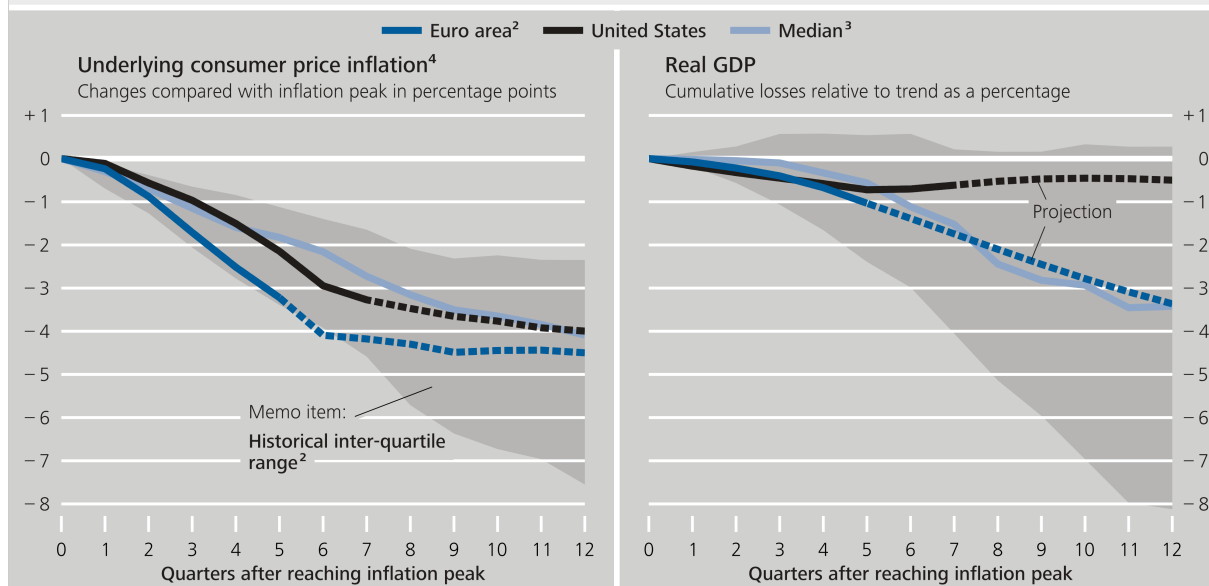
The current disinflation process initially progressed at a rapid pace in the euro area and other advanced economies. Inflation rates around the world have declined considerably since the peak of the inflation surge in 2022, and price stability appears to be within reach again in many places. Compared with past experiences, initial successes in combating inflation were achieved relatively quickly. This holds particularly true for the euro area.³¹⁾ Only in a few past episodes did underlying inflation ease at a similarly rapid pace. However, the most recent episode had also been preceded by an exceptionally rapid rise in inflation. The current disinflation process began earlier in the United States, but so far has progressed somewhat more gradually than in the euro area (see Chart 2.12, left-hand side).

31 For this analysis, it was assumed that the disinflation process in the euro area began in the final quarter of 2022. In the three preceding quarters, the inflation rate used for dating had hardly changed.

Consumer prices and economic activity in disinflation episodes*

Chart 2.12

Current episode including projections¹



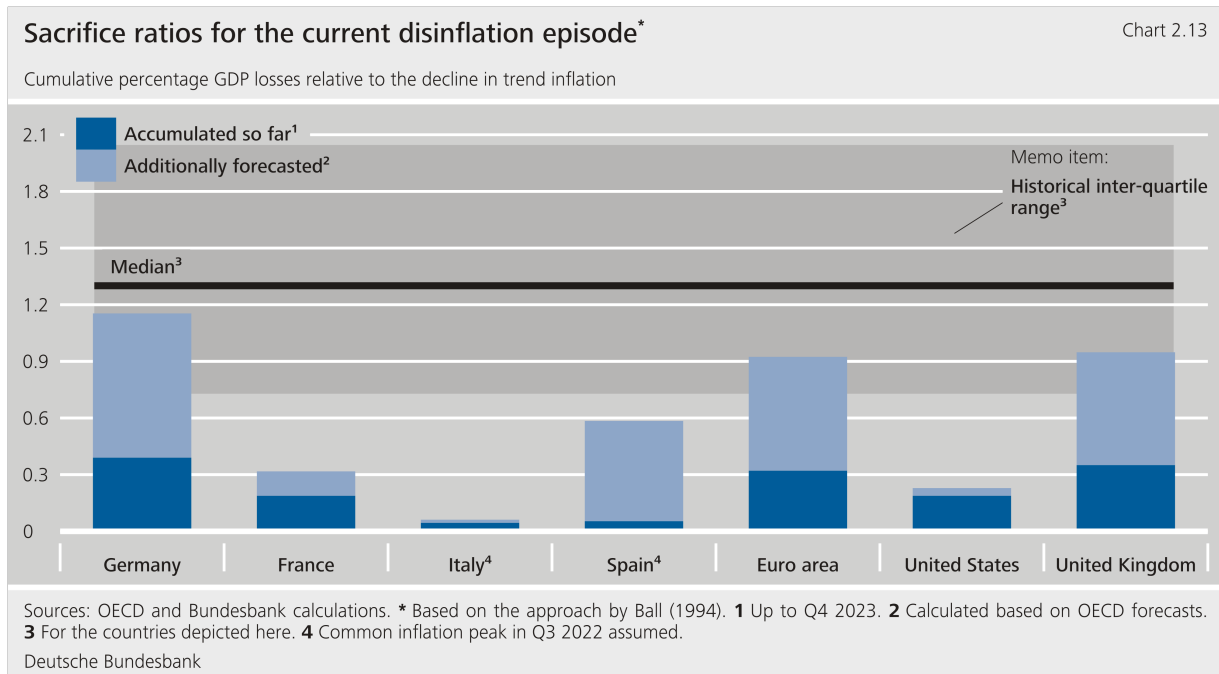
Sources: OECD and Bundesbank calculations. * Dating based on the approach by Ball (1994). ¹ According to OECD forecasts. ² Inflation peak in the euro area dated to Q3 2022. ³ Based on 229 disinflation episodes worldwide since the 1960s. ⁴ Approximated using a centred moving average of the annualised quarterly inflation rate over nine quarters.

Deutsche Bundesbank

At the same time, drops in economic activity have so far been moderate. The remarkably rapid tightening of monetary policy after an initial lag would have led one to expect a considerable slowdown in the real economy. Indeed, economic growth in the euro area was very subdued, especially last year. Measured against the previous path of growth, there were distinct real GDP losses. However, these were no larger than in previous periods of disinflation. This is already remarkable given the above average decline in inflation. It becomes even more noteworthy when one takes into account the extraordinary additional burdens arising from the extreme increases in energy prices, the high level of uncertainty caused by the Russian war of aggression against Ukraine, and weak foreign demand. In the United States, where these factors were less significant, macroeconomic activity was only slightly below its trend (see Chart 2.12, right-hand side).

Overall, the disinflation process has been relatively painless thus far. For almost all major advanced economies, the sacrifice ratios calculated for the current disinflation episode were markedly below their historical median by the end of 2023. Admittedly, this snapshot may paint an overly favourable picture, as further GDP losses could be

incurred before price stability returns.³²⁾ This is indicated, for example, by the latest OECD forecasts.³³⁾ Yet, even if the growth outlook, which is moderate in some cases, is factored into the calculation, the sacrifice ratios remain rather low. Even for Germany, which was hit hard by the energy crisis and weak industrial activity, the ratio has remained within historical norms. Much lower values are calculated for the other major euro area members. Disinflation costs in those countries appear to be as mild as in the United States (see Chart 2.13).



32 This is mainly due to the fact that, in many places, the level of real GDP remained below its previous trend up to the end of the period under review. Even during a macroeconomic recovery, further losses would therefore accumulate until the gap has been closed.

33 See OECD (2024).

5 Possible reasons for the relatively painless disinflation process thus far

Diminishing supply-side disruptions facilitated rapid disinflation and reduced macroeconomic costs. Not only did various disruptions to macroeconomic production processes contribute to the global surge in inflation in 2021 and 2022, but they also benefited the disinflation process later on as they dwindled away. Lockdowns and pandemic-related supply chain disruptions no longer posed a major obstacle to global production, at the latest when China abandoned its zero-COVID policy at the end of 2022. The shift in demand back to services also mitigated bottlenecks in the supply of intermediate inputs and on transport routes. The intertwining of supply chains was smooth once again, which boosted global production. At the same time, this curbed price pressures at upstream stages. The decline in energy commodity prices from their highs at the outbreak of the Russian war of aggression against Ukraine had a similar effect. Many non-energy commodities also dropped significantly in price. Overall, therefore, producer prices for goods in advanced economies declined for the most part over the course of last year.

The normalisation of energy and food prices also exerted a direct significant drag on consumer price inflation over the past two years. While the contribution to annual CPI inflation made by these two components together for the aggregate of advanced economies reached a notional peak of 4.2 percentage points in 2022, it was down to only 0.3 percentage point in October 2023.³⁴⁾ In the euro area, their contribution fell from 7.2 percentage points to 0 percentage point. Since then, the progress of disinflation has been largely dependent on further declines in core inflation.

Economic activity is being supported by a number of factors that are likely to make the return to price stability more difficult rather than easier. In recent years, many economies appeared to react less strongly to interest rate hikes. The macroeconomic importance of interest rate-sensitive investment declined, and financing was increasingly provided in the form of longer-term loan agreements with fixed

³⁴ The significant role played by energy and food price shocks in recent inflation developments both in Germany and around the world is also underscored by a model-based decomposition. This takes account of factors including the direct and indirect effects of changes in commodity prices. See Deutsche Bundesbank (2024b) and Bernanke and Blanchard (2024).

conditions. An uptick in the natural rate of interest may also have reduced the degree of monetary policy restriction. Moreover, fiscal policy remained rather expansionary, and normalisation following the COVID-19 pandemic also bolstered economic activity. Against this backdrop, a large part of the expenditure components of real GDP and, above all, employment developed much more robustly than in prior periods of disinflation in the United States and also elsewhere (see the supplementary information on the background to the mild disinflation process in the United States). However, this also entails risks to the further disinflation process.

Background to the mild disinflation process in the United States

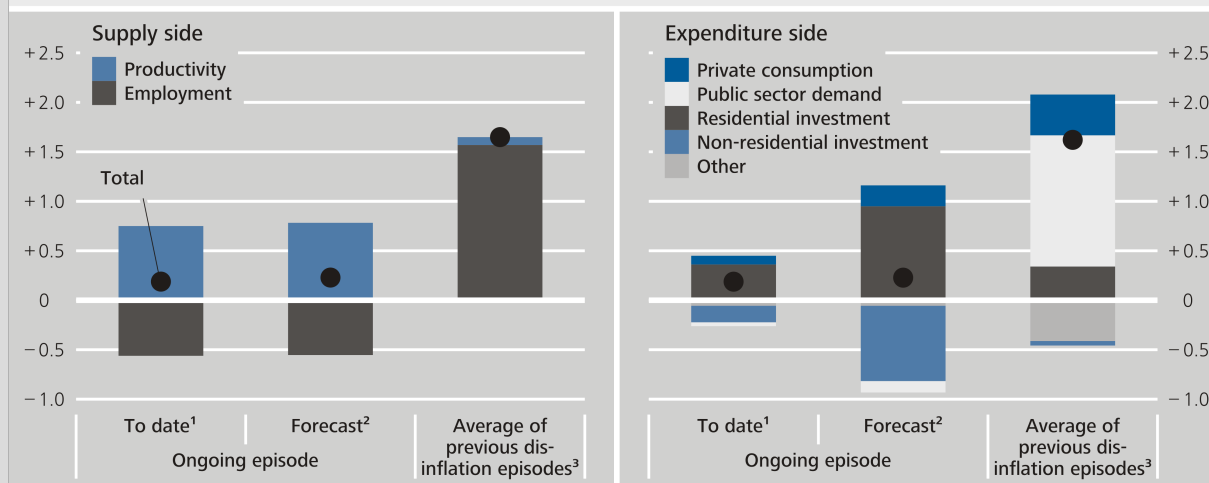
Among the major industrial nations, the United States stands out in the current disinflation process with its particularly robust economy. Its economic upswing paused only briefly in the first half of 2022. In 2023 as a whole, US economic output grew by as much as 2.5 % in price-adjusted terms. Since then, expansion has continued at somewhat more moderate rates. Despite its exceptionally tight monetary policy, the US economy steered well clear of a recession. This was unlike almost every previous phase of disinflation since the 1970s.^[1] The sacrifice ratio, which expresses GDP losses relative to the decline in inflation, has thus far been significantly below its historical average.^[2] Many economic observers – including the OECD – are currently predicting that the return to price stability will succeed without major losses being incurred.^[3]

Decisive contributions to the soft monetary policy landing thus far have been made by robust labour markets. Statistically decomposing economic dynamics into their components can help in gaining a better understanding of the United States' remarkable economic resilience in the current disinflation process.^[4] Labour market developments stand out in particular. As in virtually all advanced economies, employment in the United States rose throughout the period under review. Employment growth was even stronger than usual under calm economic circumstances. Taken in isolation, this supported macroeconomic activity and dampened the costs of disinflation. There are no signs of a significant deterioration in labour market conditions in the near future, either. In this respect, the current disinflation process clearly distinguishes itself from historical patterns. The higher sacrifice ratios in the past were accompanied by considerably reduced labour input. Labour productivity developments, by contrast, have been somewhat more subdued since the spring of 2022 than typical during previous phases of disinflation (see Chart 2.14, left-hand side). However, this analysis does not take account of the fact that labour productivity had previously risen sharply within the context of the COVID-19 pandemic.

Contributions to sacrifice ratios for the United States*

Chart 2.14

Contributions to cumulative percentage real GDP losses in relation to the decline in trend inflation



Sources: OECD and Bundesbank calculations. * Based on the approach by Ball (1994). **1** Q1 2022 to Q4 2023. **2** Calculated based on OECD forecasts. **3** Average across five disinflation episodes since 1974.
Deutsche Bundesbank

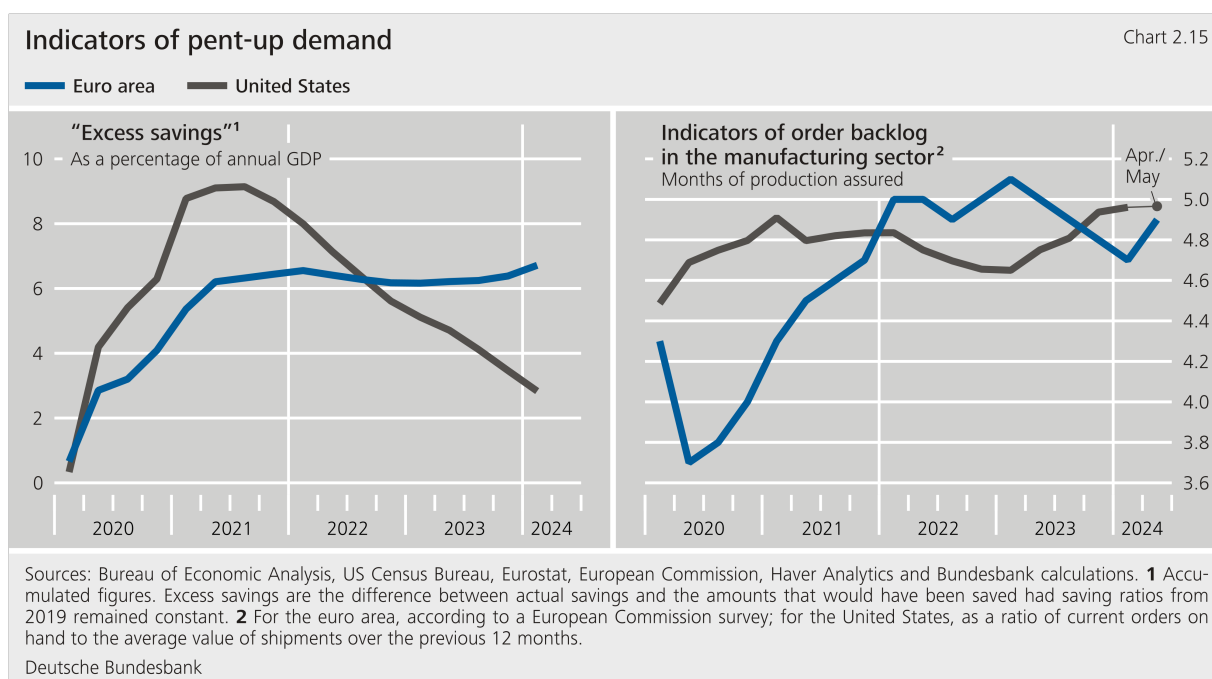
Broad-based strength of demand likewise supported the economy. Only residential investment has declined over the past two years to a similar extent as in previous disinflation phases. The exceptionally rapid tightening of monetary policy is likely to have been an important factor here. By contrast, private consumption in the United States has recently grown broadly in line with its trend, partly because households made heavy use of the savings that they had built up during the pandemic.^[5] Public sector demand continued to expand as well. Together with buoyant private consumption, this kept the sacrifice ratio low. According to current forecasts, this is unlikely to change significantly in the near future. In earlier episodes in which the United States successfully kept high inflation rates at bay, a large part of the drop in activity was attributable to private and public consumption expenditure. Private non-residential investment, by contrast, did not play a major role in the past either. Over the last two years, growth in this type of investment has even been exceptionally buoyant and, by calculation, depressed the sacrifice ratio (see Chart 2.14, right-hand side). This may also have been attributable to fiscal policy incentives.^[6]

However, the good economic and labour market situation also slowed the disinflation process. Last year, the disinflation process faltered to a more pronounced degree in the United States than in other advanced economies. Since mid-2023, the annual CPI inflation rate has barely declined. Consumer prices, particularly in the services sector, continue to rise exceptionally sharply. Against this backdrop, members of the Federal Reserve's Open Market Committee recently revised their inflation

projections for 2024 and 2025 upwards again. In line with this, they also announced that interest rates would be cut only more slowly.^[7] If persistently high consumer price inflation calls for monetary policy to remain tighter for even longer, this could also cloud the economic outlook.

-
1. Only between the end of 2011 and mid-2015 did inflation also decline markedly without having a significant impact on the economy. However, as unemployment decreased only slowly following the global financial crisis, the US Federal Reserve refrained from raising interest rates at that time.
 2. As in the main article, the dating of disinflation phases and the calculation of sacrifice ratios are conducted following Ball (1994).
 3. See OECD (2024).
 4. For a similar analysis in the context of economic upturns, see Deutsche Bundesbank (2013).
 5. In other advanced economies, the reduction of these excess savings is proceeding slowly at best. See de Soyres et al. (2023).
 6. This applies, for example, to the Inflation Reduction Act and the CHIPS and Science Act. For a discussion of the effects on construction investment in selected sectors, see Deutsche Bundesbank (2023d).
 7. In December 2023, the members of the Federal Reserve System's Open Market Committee still expected that inflation, as measured by the private consumption deflator, would continue to decline significantly. They projected median inflation rates of 2.4 % for the final quarter of 2024 and 2.1 % for the final quarter of 2025. By June 2024, these forecasts had been revised upwards to 2.6 % and 2.3 %, respectively. Most recently, a key interest rate of 4.1 % was considered appropriate for the end of 2025. Just six months earlier, the expectation was that interest rates would be cut to 3.6 %. See Federal Open Market Committee (2023 and 2024).

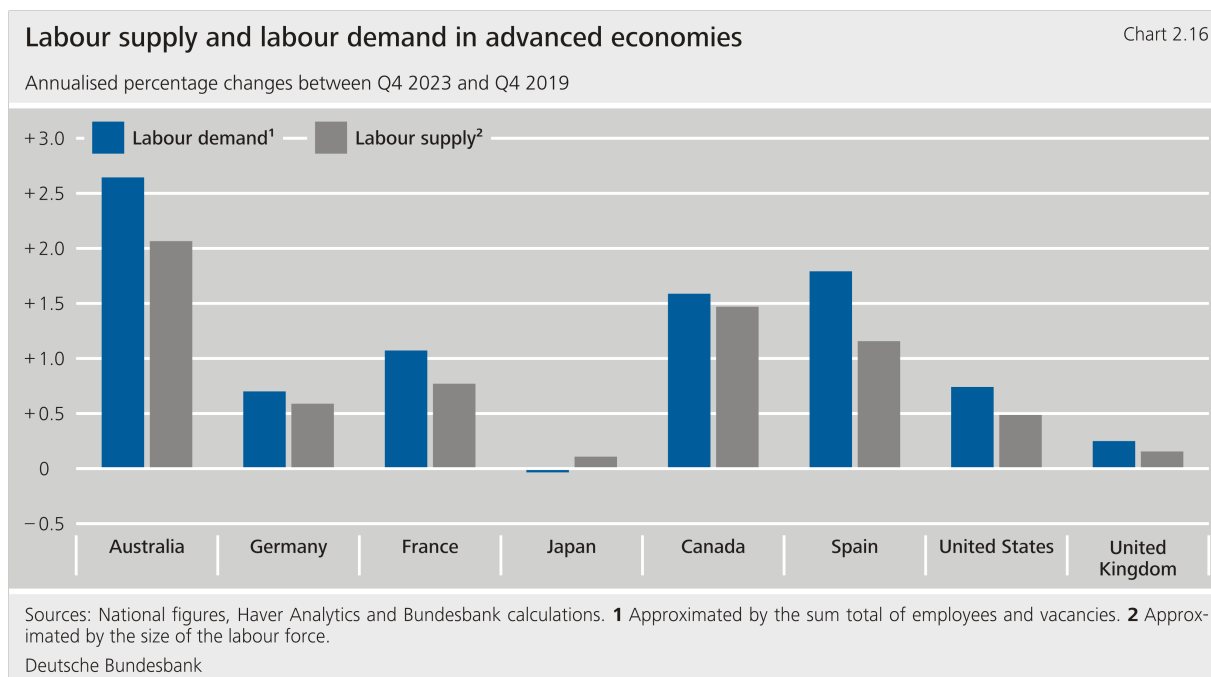
Pent-up demand from the pandemic is likely to have bolstered economic activity during the period under review. In 2020, pandemic-related production losses and supply disruptions occurred while a variety of government measures stimulated demand.³⁵⁾ This led to many households accumulating involuntary savings. Meanwhile, the order books of industrial firms filled up (see Chart 2.15). High inflation and the increase in borrowing costs as monetary policy was tightened only partially reduced pent-up demand. The remaining excess demand in advanced economies mitigated the drag from the tightening of monetary policy.



The unusually robust labour market development could also be partly due to experience gained from the pandemic. Since then, demand for labour in the major advanced economies has risen sharply. This was reflected not only in continued employment growth, but also in the number of vacancies surging on a widespread basis and remaining elevated until the end of the reporting period. Many enterprises had experienced great difficulty in filling vacancies after pandemic-related containment measures were lifted. This experience, combined with the prospect of a labour shortage due to demographic factors, is likely to have prompted firms to hire new employees. In fact, labour supply has been failing to keep pace with labour demand on

35 See Deutsche Bundesbank (2021a).

a widespread basis for several years now (see Chart 2.16).³⁶⁾ In the United States, in particular, this was due in part to the labour force participation rate remaining slightly subdued.³⁷⁾ In Europe, by contrast, the tendency to shorten working hours exacerbated labour shortages.³⁸⁾ Overall, labour markets in advanced economies remain very tight despite a certain degree of easing.



A relatively loose fiscal policy and industrial policy initiatives mitigated the drag caused by deteriorating financing conditions. According to analyses by the International Monetary Fund, half of all advanced and emerging market economies loosened their fiscal policies in 2023. Even in 2022, this figure was one-third despite inflation rates being even higher.³⁹⁾ Many of these measures supported the global economy directly through higher government demand. Public funds were also increasingly spent on investment and production incentives for future technologies and key industries.⁴⁰⁾ Private investment in these sectors, which had already been rising, was further stimulated by this.

³⁶ For an analysis of the background to robust labour markets, see also Doornik et al. (2023).

³⁷ For a discussion of possible causes, see Abraham and Rendell (2023).

³⁸ See Acre et al. (2023).

³⁹ See International Monetary Fund (2024a).

⁴⁰ For a discussion of such measures to promote the semiconductor industry, see Deutsche Bundesbank (2023d). In addition, there were further measures to promote green technologies in the United States, but also in Europe; see, for example, Franco-German Council of Economic Experts (2023).

Longer-term changes in the investment behaviour and financing structures of households and enterprises may have weakened or slowed down the real economic impact of interest rate hikes. For several decades now, the importance of physical investment in buildings and equipment has been on a general decline in many advanced economies. It is increasingly being replaced by investment in information and communication technologies and intellectual property products.⁴¹⁾ Intangible assets of this nature are eligible as collateral for credit operations only to a limited extent and are characterised by rapid amortisation. They should therefore be less sensitive to interest rate changes.⁴²⁾ The real economy may therefore have been less affected by the sharp monetary policy tightening of recent years than historical relationships would suggest. The tendency to take on longer-term debt at fixed conditions increases transmission lags. Many households, but also enterprises, were thus able to lock in the favourable financing conditions from the low interest rate period following the global financial crisis for years.⁴³⁾ As a result, the rise in interest rates is only gradually becoming apparent as a cost factor as existing liabilities are rolled over and new borrowing occurs. This is likely to have markedly slowed the drag on both investment and private consumption.⁴⁴⁾

Ultimately, the monetary policy stance may have been less restrictive than assumed by many. The impact of monetary policy is determined by more than just the level of market interest rates that it affects. Another important aspect is where these rates stand relative to their equilibrium value, which is associated with price stability and normal aggregate capacity utilisation.⁴⁵⁾ There are indications for a number of advanced economies that this natural interest rate may have risen since the pandemic.⁴⁶⁾ This also applies to the euro area.⁴⁷⁾ Such an increase in equilibrium interest rates could have lessened the tightening impulse from higher policy rates. However, these assessments are subject to a high degree of uncertainty. Additionally, from a longer-term perspective, estimated equilibrium rates remain extraordinarily low.

41 The trend towards digitalisation reflected here, amongst other things, is an important driver of aggregate productivity gains. For more information, see Deutsche Bundesbank (2023e).

42 For empirical analyses that confirm this hypothesis, see, for example, Caggese and Pérez-Orive (2022), Döttling and Ratnovski (2023) and David and Gourio (2024).

43 See Ampudia et al. (2023).

44 For an analysis of the implications for the housing market and private consumption, see International Monetary Fund (2024b).

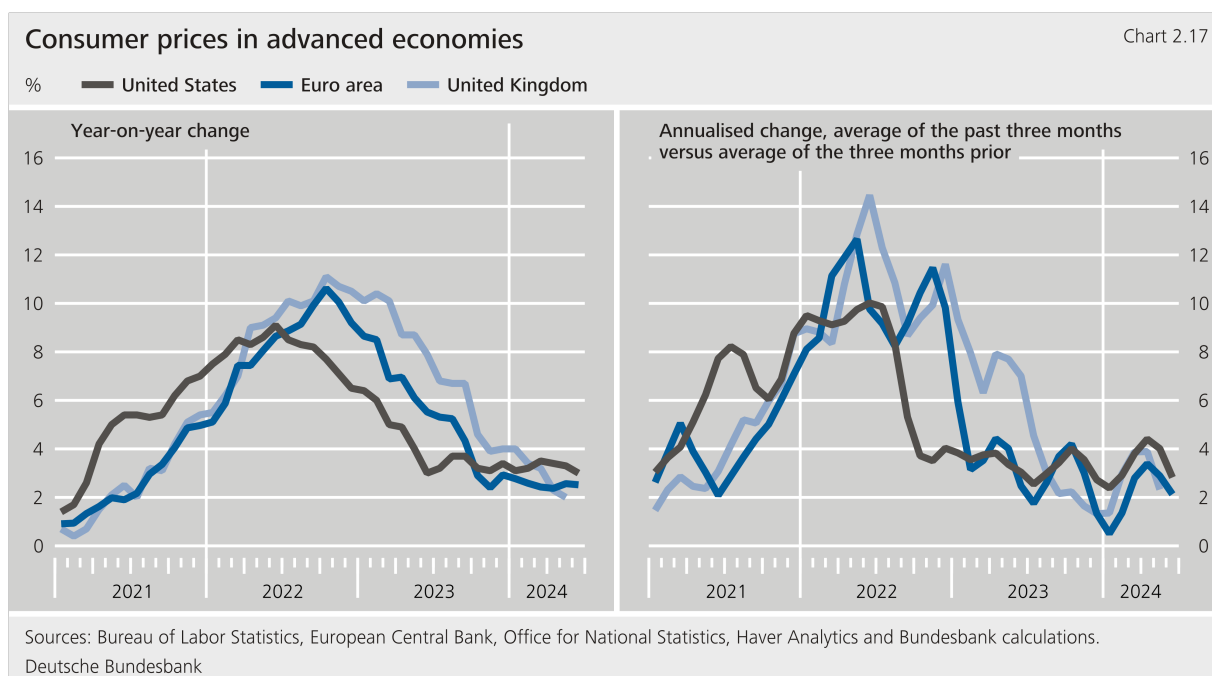
45 See Deutsche Bundesbank (2017).

46 See Benigno et al. (2024).

47 See Brand et al. (2024).

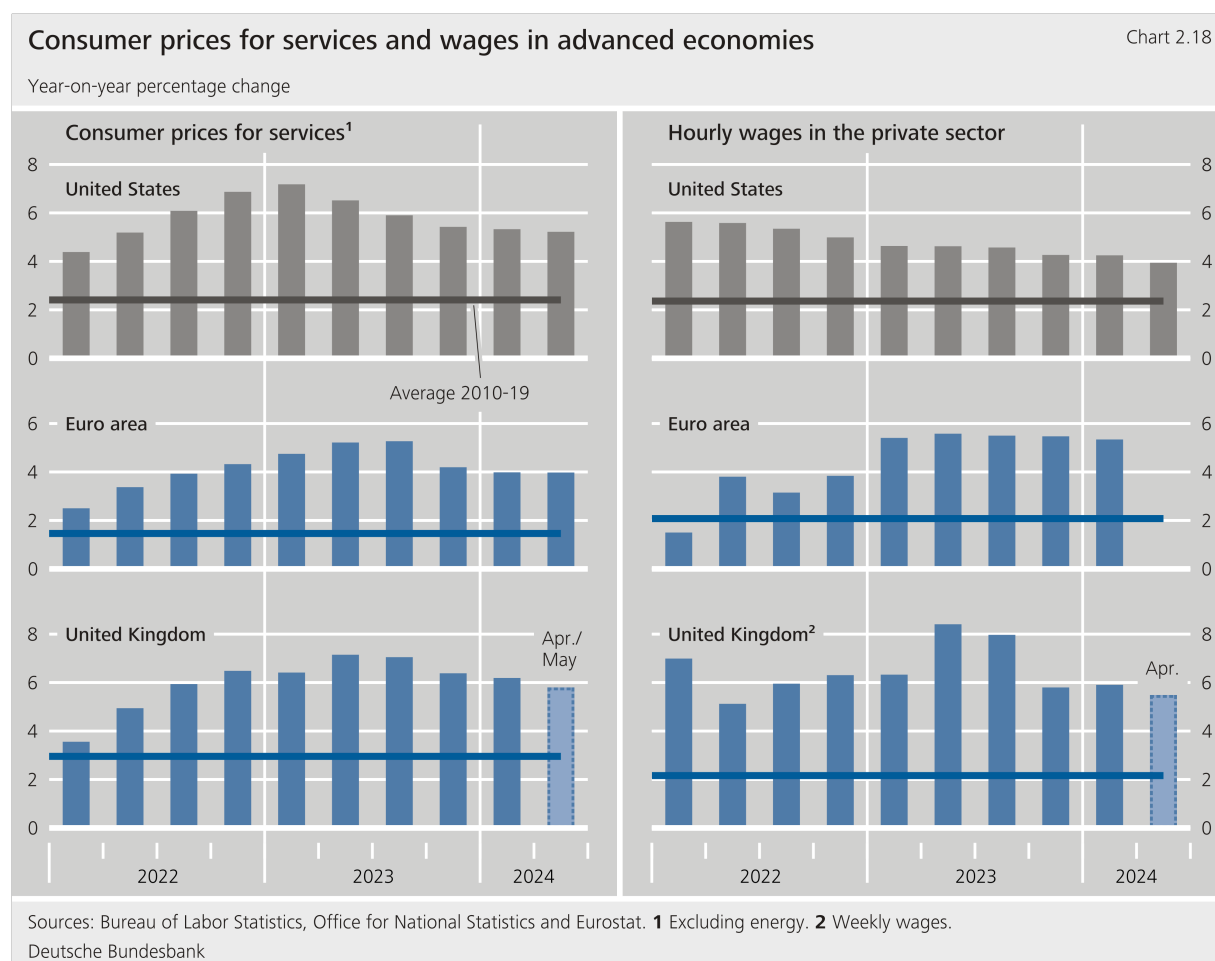
6 Implications for the “last mile” of disinflation

Since the start of 2024, there have been at most minor successes in the fight against inflation in some places. The analyses presented suggest that the falling inflation rates in the current disinflation process were not just the result of monetary policy. Diminishing supply-side disruptions also played an important role. Other factors slowed and obscured the transmission of the rise in interest rates to the real economy. Owing to this combination of factors, recessions were avoided in most countries. The robust economy is reducing the pressure on firms and workers to show restraint in terms of pricing and wage demands. As a result, consumer price inflation in some cases even intensified again in seasonally adjusted terms at the quarterly and monthly level at the start of 2024 (see Chart 2.17).



In particular, the inflation of services prices is proving extraordinarily persistent. Consumer price inflation for services in June 2024 remained at just over 4% in the euro area and even exceeded 5% in the United States. In other countries, too, disinflation in

the services sector is slower than has been typical in the past.⁴⁸⁾ A key factor in this is likely to be the persistently strong wage growth, which is particularly significant in the labour-intensive services sector (see Chart 2.18). In addition, productivity growth is exceptionally subdued, especially in the euro area. The high wage growth is therefore being transmitted almost entirely to unit labour costs. In view of the labour markets remaining very tight and the real wage losses that have been incurred, wage dynamics are expected to ease off only slowly. This is likely to make it more difficult to achieve a swift return to price stability.



A stronger economic recovery could delay a further decline in inflation rates.
According to surveys of purchasing managers, business conditions have improved

48 This is confirmed by analyses by the Bank for International Settlements; see Amatyakul et al. (2024).

markedly worldwide since the start of 2024. In advanced economies, this was concentrated in the services sector and seems to be driven largely by growing demand. Accordingly, producer price inflation remained high in the services sector.⁴⁹⁾

Relief provided by the supply side appears to have largely petered out. Indicators of supply chain disruptions, such as the Global Supply Chain Pressure Index compiled by the Federal Reserve Bank of New York, reached their lows in mid-2023. The same happened to many commodity prices. Since then, they have tended to start edging upwards again. They are therefore unlikely to make any significant contribution to further disinflation. Instead, geopolitical conflicts pose significant supply-side upside risks to consumer prices. This applies first and foremost to the tense situation in the Middle East.

Potential further interest rate cuts should therefore be carefully considered in light of incoming data. At its June 2024 monetary policy meeting, the ECB Governing Council decided to lower the three Eurosystem key interest rates by 25 basis points each given the successes made in the fight against inflation. The central banks of other major advanced and emerging market economies had already begun cutting interest rates at that time. In the United States, too, members of the Federal Open Market Committee are signalling an interest rate reversal. However, the still too strong inflation, uncertainty about the actual degree of monetary policy restriction and various upside risks call for a data-dependent approach. This is in line with the ECB Governing Council's communication following its monetary policy meeting in early June.⁵⁰⁾

⁴⁹ See Deutsche Bundesbank (2024c).

⁵⁰ See European Central Bank (2024).

7 List of references

Abraham K. and L. Rendell (2023), Where are the missing workers?, *Brooking Papers on Economic Activity*, BPEA Conference Drafts, Spring 2023.

Acre, A., A. Consolo, A. D. da Silva and M. Mohr (2023), More jobs but fewer working hours, *The ECB Blog*, entry dated 7 June 2023.

Amatyakul, P. D. Igan and M. Lombardi (2024), Sectoral price dynamics in the last mile of post-Covid-19 disinflation, *BIS Quarterly Review*, March 2024, pp. 45-57.

Ampudia, M., F. De Fiore, E. Kharroubi and C. Manea (2023), Private debt, monetary policy tightening and aggregate demand, *BIS Bulletin No 70*, 24 February 2023.

Ari, A., C. Mulas-Granados, V. Mylonas, L. Ratnovski and W. Zhao (2023), One Hundred Inflation Shocks: Seven Stylized Facts, *International Monetary Fund Working Paper WP /23/190*.

Ball, L., What determines the sacrifice ratio?, in N. G. Mankiw (ed., 1994), *Monetary policy*, The University of Chicago Press, pp. 155-193.

Benigno, G., B. Hofmann, G. N. Barrau and D. Sandri (2024), Quo vadis, r^* ? The natural rate of interest after the pandemic, *BIS Quarterly Review*, March 2024, pp. 17-30.

Bernanke, B. and O. Blanchard, Analysing the Inflation Burst in Eleven Economies, in B. English, K. Forbes and A. Ubide (eds., 2024), *Monetary Policy Responses to the Post-Pandemic Inflation*, CEPR Press, pp. 291-304.

Bindseil, U. (2004), The operational target of monetary policy and the rise and fall of reserve position doctrine, *ECB Working Paper No 372*, June 2004.

Brand, K., N. Lisack and F. Mazelis (2024), Estimates of the natural interest rate for the euro area: an update, *ECB Economic Bulletin*, Issue 1/2024, pp. 72-76.

Bry, G. and C. Boschan (1971), *Cyclical Analysis of Time Series: Selected Procedures and Computer Programs*, National Bureau of Economic Research, New York.

Caggese, A. and A. Pérez-Orive (2022), How stimulative are low real interest rates for intangible capital?, *European Economic Review*, Vol. 142, pp. 1-31.

Cecchetti, S. G., M. E. Feroli, P. Hooper, F. S. Mishkin and K. L. Schoenholtz (2023), Managing disinflations, CEPR Discussion Paper DP18068, CEPR Press.

Christiano, L., M. Eichenbaum and C. Evans (2005), Nominal rigidities and the dynamic effects of a shock to monetary policy, *Journal of Political Economy*, Vol. 113 (1), pp. 1-45.

Coenen, G., J. Hutchinson, C. Montes-Galdón, R. Motto and A. Saint Guilhem (eds.) (2022), Rate forward guidance in an environment of large central bank balance sheets: a Eurosystem stock-taking assessment, ECB Occasional Paper Series No 290.

David, J. and F. Gourio (2023), The Rise of Intangible Investment and the Transmission of Monetary Policy, Chicago Fed Letter Number 482, August 2023.

Davis, M. and J. Heathcote (2007), The price and quantity of residential land in the United States, *Journal of Monetary Economics*, Vol. 54 (8), pp. 2595-2620.

De Soyres, F., D. Moore and J. Ortiz (2023), An update on Excess Savings in Selected Advanced Economies, FEDS Notes, 15 December 2023.

Del Negro, M., M. P. Giannoni and C. Patterson (2023), The forward guidance puzzle, *Journal of Political Economy Macroeconomics*, Vol. 1 (1), pp. 43-79.

Deutsche Bundesbank (2024a), The impact of Chinese supply chain shocks on manufacturing in Germany, Monthly Report, January 2024, pp. 17 f.

Deutsche Bundesbank (2024b), Recent inflation developments in the light of a stylised macro model, Monthly Report, February 2024, pp. 51 f.

Deutsche Bundesbank (2024c), Drivers of the recent recovery of sentiment in the advanced economies, Monthly Report, May 2024.

Deutsche Bundesbank (2023a), Factors driving European gas prices, Monthly Report, November 2023, pp. 20-21.

Deutsche Bundesbank (2023b), Heterogeneous impact of monetary policy in the euro area?, Monthly Report, September 2023, pp. 37-60.

Deutsche Bundesbank (2023c), Model-based recommendations for monetary policy decision-making, Monthly Report, December 2023, pp. 37-54.

Deutsche Bundesbank (2023d), The construction boom in the US semiconductor industry, Monthly Report, August 2023, pp. 15 f.

Deutsche Bundesbank (2023e), The impact of digitalisation on labour productivity growth, Monthly Report, March 2023, pp. 43-65.

Deutsche Bundesbank (2022a), High inflation rates in the euro area and the United States: similarities and differences, Monthly Report, August 2022, pp. 14-15.

Deutsche Bundesbank (2022b), The recent energy price shock in a historical comparison, Monthly Report, November 2022, pp. 15 f.

Deutsche Bundesbank (2021a), The global economy during the coronavirus pandemic, Monthly Report, October 2021, pp. 43-64.

Deutsche Bundesbank (2021b), The role of the disruption of Chinese supply chains in production slumps in the United States and the EU in spring 2020, Monthly Report, October 2021, pp. 52 ff.

Deutsche Bundesbank (2021c), Housing prices in Germany in 2020, Monthly Report, February 2021, pp. 60-62.

Deutsche Bundesbank (2020a), Two models for estimating residential property prices in Germany, Monthly Report, October 2020, pp. 73-74.

Deutsche Bundesbank (2020b), The protracted rise in residential property prices in Germany from a macroeconomic perspective: transmission channels and fundamental determinants, Monthly Report, October 2020, pp. 67-85.

Deutsche Bundesbank (2017), The natural rate of interest, Monthly Report, October 2017, pp. 27-42.

Deutsche Bundesbank (2013), Is private consumption in the United States following its typical cyclical pattern?, Monthly Report, April 2013, pp. 23 ff.

Döttling, R. and L. Ratnovski (2023), Monetary policy and intangible investment, Journal of Monetary Economics, Vol. 134, pp. 53-72.

Doornik, B., D. Igan and E. Kharroubi (2023), Labour markets: what explains the resilience?, BIS Quarterly Review, December 2023, pp. 77-93.

Eickmeier and Hofmann (2022), What drives inflation? Disentangling demand and supply factors, Deutsche Bundesbank Discussion Paper No 46/2022.

Erceg, C. and A. Levin (2006), Optimal monetary policy with durable consumption goods, Journal of Monetary Economics, Vol. 53, pp. 1341-1359.

European Central Bank (2024), Monetary policy decisions, press release, 6 June 2024.

European Central Bank (2023a), The EU's Open Strategic Autonomy from a central banking perspective: Challenges to the monetary policy landscape from a changing geopolitical environment, Occasional Paper No 311.

European Central Bank (2023b), A model-based assessment of the macroeconomic impact of the ECB's monetary policy tightening since December 2021, Economic Bulletin, Issue 3/2023, pp. 70-77.

European Commission (2023), Profit margins and their role in euro area inflation, European Economic Forecast, Spring 2023, pp. 29-31.

Federal Open Market Committee (2024), FOMC Projections materials, 12 June 2024.

Federal Open Market Committee (2023), FOMC Projections materials, 13 December 2023.

Franco-German Council of Economic Experts (2023), The Inflation Reduction Act: How should the EU react?, Joint statement, September 2023.

Furman, J. (2022), This Inflation Is Demand-Driven and Persistent, Project Syndicate, 22 April.

Geiger, F. and F. Schupp (2018), With a little help from my friends: Survey-based derivation of euro area short rate expectations at the effective lower bound, Deutsche Bundesbank Discussion Paper No 27/2018.

Gerke, R., D. Kienzler and A. Scheer (2022), On the macroeconomic effects of reinvestments in asset purchase programmes, Deutsche Bundesbank Discussion Paper No 47/2022.

Giannone, D. and G. E. Primiceri (2024), The drivers of post-pandemic inflation, ECB Forum on Central Banking, 1-3 July 2024.

Gomes, S., P. Jacquinet and M. Pisani (2012), The EAGLE. A Model for Policy Analysis of Macroeconomic Interdependence in the Euro Area, Economic Modelling, Vol. 29 (5), pp. 1686-1714.

Haertel, T., B. Hamburg and V. Kusin (2022), The macroeconometric model of the Bundesbank revisited, Deutsche Bundesbank Technical Paper No 01/2022.

Hantzsche, A., M. Lopresto and G. Young (2018), Using NiGEM in Uncertain Times: Introduction and Overview of NiGEM, National Institute Economic Review, Vol. 244 (1), pp. R1-R14.

International Monetary Fund (2024a), Fiscal Monitor: Fiscal Policy in the Great Election Year, April 2024.

International Monetary Fund (2024b), Feeling the Pinch? Tracing the Effects of Monetary Policy Through Housing Markets, World Economic Outlook, April 2024, pp. 43-63.

International Monetary Fund (2023), Managing Expectations: Inflation and monetary policy, World Economic Outlook, October 2023, pp. 49-69.

International Monetary Fund (2022), World Economic Outlook: Countering the Cost-of-Living Crisis, November 2022.

International Monetary Fund (2021), Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic, October 2021.

Kajuth, F. (2021), Land leverage and the housing market: Evidence from Germany, Journal of Housing Economics, Vol. 51 (C), 101746.

Katayama, H., N. Ponomareva and M. Sharma (2019), What determines the sacrifice ratio? A Bayesian Model Averaging approach, Oxford Bulletin of Economics and Statistics, Vol. 81 (5), pp. 960-988.

Kühl, M. (2018), The Effects of Government Bond Purchases on Leverage Constraints of Banks and Non-Financial Firms, International Journal of Central Banking, Vol. 14 (4), pp. 93-161.

Lane, P. R. (2023), The euro area hiking cycle: an interim assessment, Dow Lecture at the National Institute of Economic and Social Research, London, 16 February 2023.

Magkonis, G. and K.-M. Zekente (2020), Inflation-output trade-off: Old measures, new determinants?, Journal of Macroeconomics, Vol. 65, pp. 1-16.

Mandler, M., M. Scharnagl and U. Volz (2022), Heterogeneity in euro area monetary policy transmission: evidence from a large multicounty BVAR model, Journal of Money, Credit and Banking, Vol. 54 (2-3), pp. 627-649.

Mazumder, S. (2014), Determinants of the sacrifice ratio: Evidence from OECD and non-OECD countries, Economic Modelling, Vol. 40, pp. 117-135.

Mishkin, F. (2007), Housing and the monetary transmission mechanism, NBER Working Paper 13518.

Neely, C. J. (2022), Why Price Controls Should Stay in the History Books, Regional Economist, Federal Reserve Bank of St. Louis, 24 March 2022.

Nelson, E. (2022), How Did It Happen?: The Great Inflation of the 1970s and Lessons for Today, Finance and Economics Discussion Series 2022-037, Board of Governors of the Federal Reserve System.

OECD (2024), General assessment of the macroeconomic situation, OECD Economic Outlook May 2024, pp. 9-52.

OECD (2023), The contribution of unit profits to domestic inflationary pressures, OECD Economic Outlook June 2023, pp. 26-30.

Peersman, G. and F. Smets, The monetary transmission mechanism in the Euro area: more evidence from VAR analysis, in I. Angeloni, A. Kashyap and B. Mojon (eds., 2003), Monetary policy transmission in the Euro area, Cambridge University Press, pp. 36-55.

Ramey, V. A., Macroeconomic Shocks and Their Propagation, in J. B. Taylor and H. Uhlig (eds., 2016), Handbook of Macroeconomics, Vol. 2, Elsevier, North Holland, pp. 71-162.

Stiglitz, J. E. and I. Regmi (2023), The causes of and responses to today's inflation, Industrial and Corporate Change, Vol. 32, pp. 336-385.

Summers, L. H. (2021), The Biden stimulus is admirably ambitious. But it brings some big risks too, Washington Post, 4 February.

Tetlow, R. J. (2022), How large is the output cost of disinflation?, Finance and Economics Discussion Series 2022-79, Board of Governors of the Federal Reserve System, Washington.

Developments in loans to enterprises in Germany since the start of the monetary policy tightening cycle

Over the past few years, growth in loans granted by German banks to domestic non-financial corporations has been characterised by unusually strong ups and downs. Although monetary policy responded to the inflationary surge that began in 2021 with substantial tightening, loan growth initially accelerated further to just under 14 % by October 2022. From the fourth quarter of 2022, however, net lending declined sharply; most recently, credit growth was close to zero. This development was reflected across all categories of banks, maturities and economic sectors.

This article presents model-based analyses to establish whether such developments in lending were out of the ordinary when viewed alongside economic and interest rate developments, and examines the role played by loan supply and loan demand factors.

It is apparent that the government support loans granted to selected energy suppliers in 2022 were a key factor in the initially observed increase in loan growth. In addition, the sharp rise in input and storage costs in 2022 increased the need for short-term financing across the corporate sector.

The downturn in net lending began at the end of that year. Bundesbank models suggest that the decline in loan growth and the current stagnation are mainly attributable to the adverse macro environment, which was characterised in particular by a slowdown in economic activity, high inflation rates and rising interest rates. Banks responded to the rapid, steep rise in financial market interest rates by raising lending rates accordingly. Additionally, they tightened their lending policies in view of the increased credit risk on the corporate side. However, in our models, there is no sign of a conspicuous restriction of credit supply based on purely bank-related factors. This result is consistent with the continued stability of the German banking system.

The adverse macro environment and heightened uncertainty about the economic and geopolitical outlook, for their part, dampened private investment. This reduced the financing needs of non-financial corporations for equipment and buildings. Moreover, many enterprises already had sufficient internal financing at their disposal, not least as a result of high profits in recent years. Although the decline in loan demand caused by these factors was relatively strong, it was largely in line with historical patterns overall.

The Bundesbank's current forecast for loans to non-financial corporations anticipates a gradual recovery over the course of 2024. The German economy, which is slowly regaining momentum according to the Bundesbank's June Forecast for Germany, plus the gradual reversal of interest rate hikes by monetary policymakers currently anticipated in the financial markets, should bolster loan growth. Major bank-side restrictions on lending are not expected at present. However, the projected credit

growth rate is rising only slowly, as enterprises tend to use their remaining internal funds first during an economic upturn. In addition, the initially still difficult investment environment is dampening loan demand.

1 Stocktake

The strong and rapid rise in euro area inflation, which began in 2021, required a decisive monetary policy response. The euro area has been hit by various supply and demand shocks in recent years. Increased demand for goods, also bolstered by extensive economic policy measures, coincided with pandemic-related production and supply bottlenecks. This drove commodity prices, transport costs, and producer and consumer prices up sharply. The further rise in commodity prices brought about by the Russian war of aggression against Ukraine exacerbated the already high price pressures. Finally, the normalisation of demand for services following the lifting of mobility and contact restrictions contributed to the price increase.¹⁾ Euro area inflation reached a record high of 10.6 % in October 2022. In order to ensure price stability over the medium term, the ECB Governing Council decided at the end of 2021 to move away from the low interest rate environment of previous years and tighten monetary policy. It ended its purchase programmes and raised key interest rates by a total of 450 basis points in rapid steps between July 2022 and September 2023. Having held key interest rates steady for nine months following this period, the Governing Council lowered them by 25 basis points in June 2024. At the same time, it stressed the data dependence of its future monetary policy path.

Weaker economic activity and higher interest rates weighed increasingly on net lending²⁾ in Germany. The dampening of loan dynamics was intentional on the part of monetary policymakers.³⁾ A significant degree of monetary policy impulses are typically transmitted via the banking system. Banks' own increased financing costs are passed through to their customers in the form of higher lending rates. As a result, loan demand on the part of non-financial corporations⁴⁾ and households is lower. They invest less, and economic growth weakens. This leads, with a certain time lag, to a weakening of inflationary pressures.

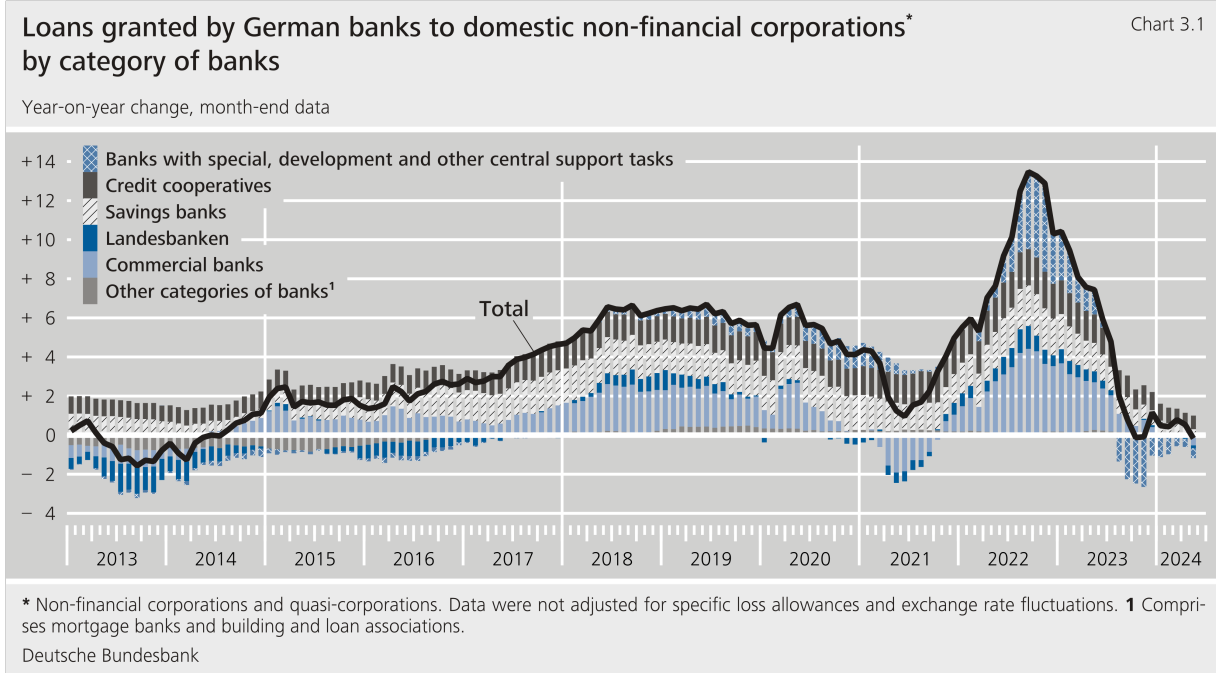
1 See Deutsche Bundesbank (2024a).

2 The term "lending" is used synonymously with "net lending" in this article.

3 For a more detailed explanation, see Deutsche Bundesbank (2023a).

4 The term "non-financial corporations" comprises both non-financial corporations and quasi-corporations; it is used synonymously with "enterprises" in this article.

At the start of the monetary policy tightening cycle, however, growth in corporate lending picked up significantly, declining steeply only from the end of 2022. The annual growth rate of loans issued by banks in Germany to domestic non-financial corporations accelerated significantly between 2014 and 2019, reaching 5% at the end of 2019.⁵⁾ After a brief slowdown due to the coronavirus pandemic, loan growth picked up again, reaching its highest level since 1992, at just under 14%, in October 2022 (see Chart 3.1). Only then was the changed macro environment reflected in loans to enterprises: their annual rate of growth declined rapidly and has been hovering around 0% since the fourth quarter of 2023. Such strong ups and downs in the rate of loan growth had only previously been observed during German reunification and the global financial crisis in 2008.



5 See Deutsche Bundesbank (2020).

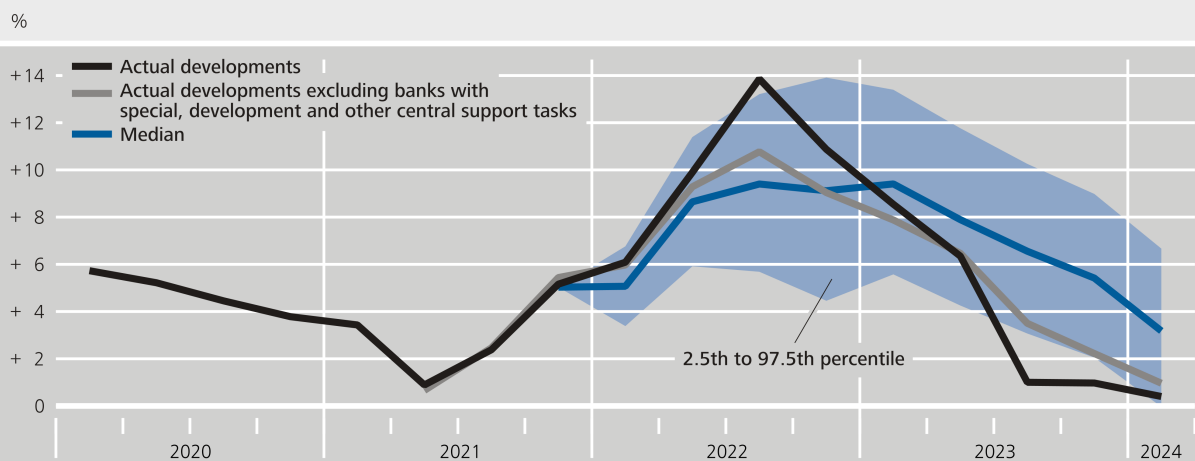
2 Developments in lending and macroeconomic environment

Empirical models can be used to analyse the extent to which the ups and downs of loan growth line up with economic and interest rate developments. The steep upward and downward movement of loan growth and the current weak lending dynamics raise the question of whether lending to non-financial corporations reacted more strongly to the changed macro environment than would have been expected in view of past correlations. To answer this question, actual loan growth since the start of the interest rate tightening period can be compared with hypothetical developments derived from model relationships. Chart 3.2 presents the outcome of such an exercise on the basis of a forecasting model that describes loan developments using the investment ratio, the yield spread between long-term corporate and government bonds, the lending rate and the development of credit standards set by banks. As outlined in the [supplementary information on loan forecasts](#) at the end of this article, the model is initially estimated for the period up to the end of 2021. Loan developments are subsequently forecast for the period from the beginning of 2022 to the current end using the estimated model relationships and the actual development of the macro environment.

On balance, although loan growth was relatively weak from mid-2023 onwards, it remained broadly in line with the estimated historical pattern. Chart 3.2 compares the actual growth in loans to enterprises (black line) with hypothetical developments (blue line) calculated on the basis of the forecast simulation described above since the start of the interest rate tightening cycle. The results of the forecast simulation are naturally subject to great uncertainty, and this is depicted by a forecast range. Generally speaking, actual loan developments progress largely in line with this uncertainty band. That said, the individual fluctuations in actual loan developments are more substantial than projected by the model: for instance, actual loan growth in 2022 is greater to begin with, lying slightly above the uncertainty band in the second quarter of the year. The decline in growth from autumn 2022 onwards is also steeper than forecast; in the third and fourth quarters of 2023, actual growth is below the uncertainty band. However, the ups and downs in loan growth were significantly amplified by aid loans from the KfW (*Kreditanstalt für Wiederaufbau*) to selected energy suppliers (see the [following chapter](#)). Adjusting the loan series for this one-off factor, actual loan growth as a whole remains within the uncertainty band (grey line).

Conditional forecast of the annual growth rate of loans to non-financial corporations in Germany*

Chart 3.2



* Simulated forecast distribution on the basis of the Bayesian vector autoregressive (VAR) model, estimation period: Q1 1991 to Q4 2021; forecast period: Q1 2022 to Q1 2024. Simulations are based on actual developments in the investment ratio, the yield spread, the lending rate and the BLS standards. Estimated levels are converted into annual rates.

Deutsche Bundesbank

A second empirical model also reinforces the assessment that lending to enterprises has, on the whole, followed the historical pattern over the past two years. The forecasting model used above forms the basis of the Bundesbank’s regularly produced loan forecasts. It focuses on forecasting quality and is therefore parsimonious. By comparison, the macro-financial Bayesian VAR model described in the [second supplementary information](#) section at the end of the article comprises a larger number of monetary, financial and real economic data. It can thus be used for analyses of a greater number of questions, including the identification of different economic shocks and their effects. In the simulation described above, this larger model produces comparable results, reinforcing the conclusion that loans to enterprises have largely developed in line with historical patterns over the past two years and that lending dynamics are not unusually weak at the current end.

3 Loan dynamics increased on the back of one-off factors up to October 2022

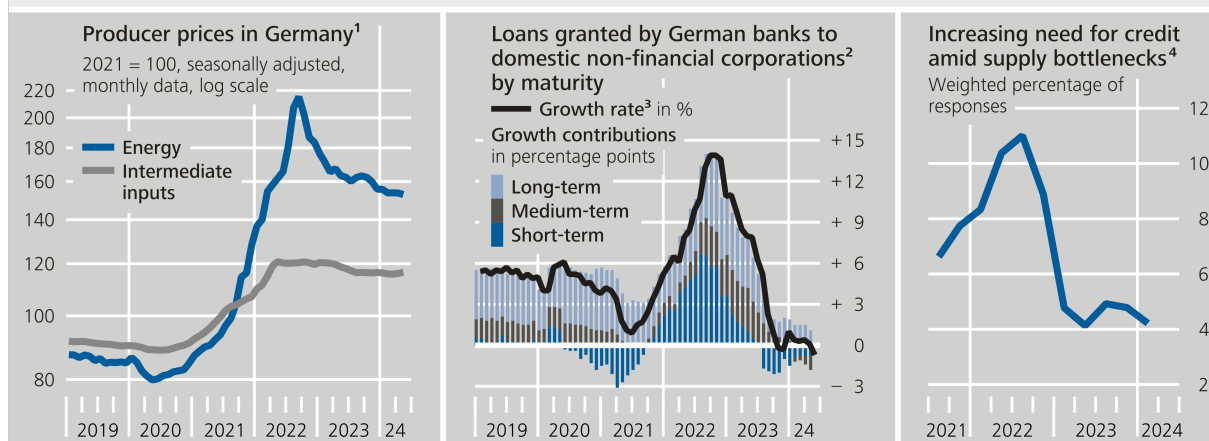
Sharply higher commodity prices as well as input and storage costs heightened the German corporate sector's borrowing needs. A surprisingly strong recovery in demand for goods exacerbated pandemic-related supply and production bottlenecks. As a result, commodity prices, transport and material costs rose sharply. German enterprises were hit particularly hard by these developments. In addition, the unavailability of key intermediate products and materials caused disruptions in production and sales. This led to an increase in storage costs for unfinished products. On balance, demand for short-term loans to finance inventories and working capital rose sharply.⁶⁾ An evaluation of individual firm data from the Bundesbank's representative survey of German firms (Bundesbank Online Panel Firms (BOP-F))⁷⁾ also illustrates the relationship between supply bottlenecks and lending: the share of firms that anticipate both decreased access to necessary intermediate inputs in the next year and an increase in their need for credit financing rose significantly up to mid-2022 (see Chart 3.3).

⁶ This is also in line with the data provided by banks in the Bank Lending Survey (BLS); see Chart 3.10.

⁷ For information on the structure of the BOP-F survey, see Boddin et al. (2023).

Factors influencing developments in short-term loans

Chart 3.3



1 Producer prices of industrial products in domestic sales. **2** Non-financial corporations and quasi-corporations. **3** Year-on-year change; month-end data. Adjusted for loan sales and securitisations as well as for positions arising from notional cash pooling services provided by MFIs. **4** Bundesbank calculations based on the Bundesbank Online Panel Firms (BOP-F). Firms that anticipate both an increase in their need for credit financing as well as decreased access to intermediate inputs in the next year.

Deutsche Bundesbank

Extensive government aid loans to energy suppliers were another key factor in the steep rise in loan growth in the 2022 summer half-year. Sharply higher gas and electricity prices, combined with hedging transactions and other commitments, caused considerable financial difficulties for some energy suppliers. In order to safeguard the energy supply in Germany, the KfW granted exceptionally high loans to a number of selected companies in the energy sector on behalf of the Federal Government.⁸⁾ Looking at all loans to enterprises on aggregate, this is evidenced by the steep increase in the contribution made by the category of banks “Banks with special, development and other central support tasks,” to which the KfW belongs, to the annual growth rate of loans to enterprises; this category’s contribution to growth rose by 4½ percentage points in 2022 (see Chart 3.1). In November 2022, it accounted for around one-third of the growth rate of all loans to enterprises.

The after-effects of the extensive fiscal policy support measures taken in the early stages of both the coronavirus pandemic and of a highly expansionary monetary policy also boosted lending in 2022.⁹⁾ The empirical macro-model described in the

⁸ These funds were mainly needed for replacement gas purchases and to fulfil short-term margin call requirements in energy trading. The loans were also used to finance gas procurement, ensuring that gas storage facilities were filled to a specific level. See Kreditanstalt für Wiederaufbau (2023).

⁹ See also Deutsche Bundesbank (2023b).

supplementary information on the macro-financial Bayesian VAR model at the end of this article decomposes the fluctuations in credit growth around a long-term equilibrium into the contributions made by economically interpretable exogenous impulses, i.e. structural shocks. The analysis attributes the acceleration of credit growth from the end of 2021 onwards to what are, from the perspective of the model, unexpectedly strong developments in macroeconomic demand (positive aggregate demand shocks) and an unusually accommodative monetary policy (expansionary monetary policy shocks) following the first few quarters of the coronavirus pandemic (Chart 3.17 in this supplementary information). Other structural economic shocks, by contrast, played no major role in loan developments. The aggregate demand shocks are, at least in part, likely to reflect the extensive pandemic-related fiscal policy support measures taken as well as, later on, the expansionary effect of pent-up demand during the pandemic. The model results suggest that the decline in credit growth from mid-2022 onwards is partly due to the gradual end of the supportive effect of the demand shocks and the tightening of monetary policy over the course of 2022.

The monetary policy tightening initiated at the end of 2021 likewise boosted demand for bank loans in the short term. In December 2021, the Governing Council of the ECB decided to discontinue net asset purchases in response to the rapid and strong rise in inflation in the euro area. This change in monetary policy led to a significant rise in capital market interest rates. By contrast, the monetary policy impulse affected banks' lending rates with a certain time lag, as was to be expected based on historical patterns.¹⁰⁾ The fact that interest rates responded at different speeds was an incentive for enterprises with access to the capital market to increasingly finance themselves via loans rather than debt securities. In addition, loan demand was strengthened by the fact that, to secure interest rates, some enterprises took out still relatively cheap medium and long-term bank loans earlier than planned in anticipation of a rise in lending rates.

¹⁰ For more detailed information, see Deutsche Bundesbank (2023c).

4 Subsequent phase of weakening loan dynamics

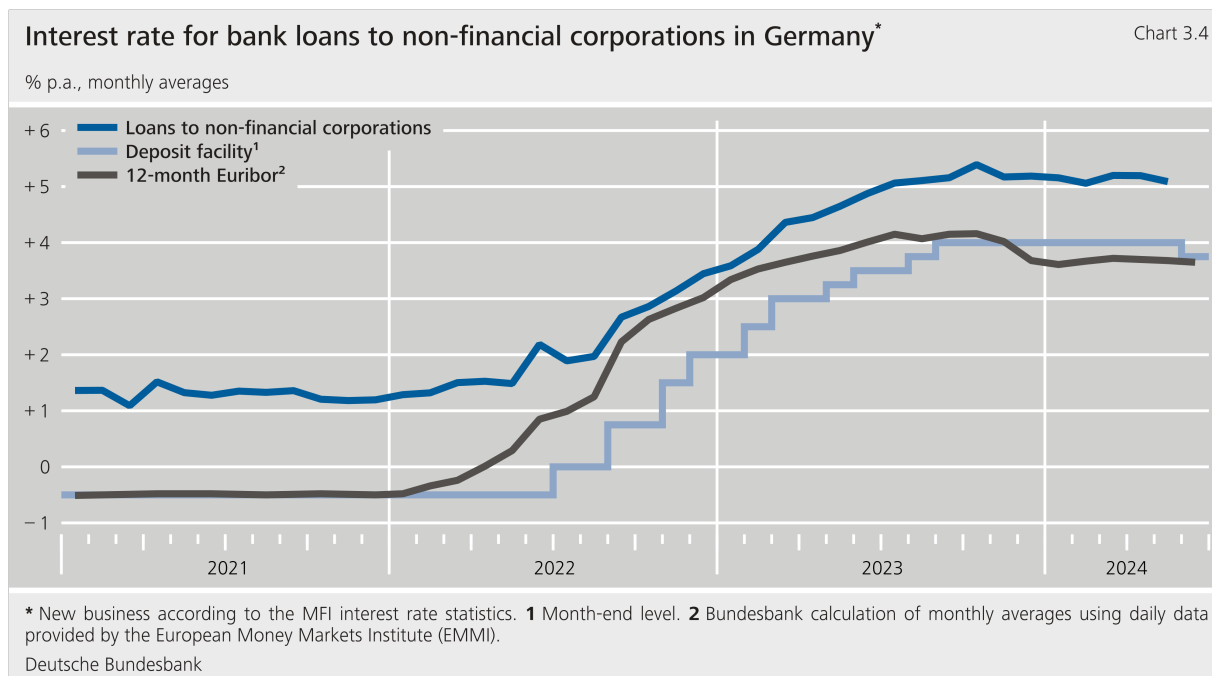
The interplay of tighter lending conditions and a decline in loan demand drove the slowdown in loan dynamics in the corporate sector observed from autumn 2022 onwards. Banks responded to the slowdown in economic activity and the turnaround in monetary policy interest rates resulting from the acceleration in inflation by gradually tightening their lending conditions. Enterprises, for their part, demanded fewer loans. However, given the sharp decline in loan growth and the relatively weak loan dynamics compared with the model forecast, the question arises as to whether this is driven more by loan supply or loan demand. A strong tightening in loan supply carries the risk that weak lending and the economic downturn could inadvertently be mutually reinforcing. Overly weak loan demand could also trigger such a macro-financial feedback loop if it is based on excessive corporate debt, and if investment that is, in fact, profitable is put on hold. This chapter explores the question based on various statistics and model results.

4.1 Higher lending rates and tighter lending conditions

Given the sharp rise in key monetary policy interest rates, it was to be expected that banks would raise their lending rates and tighten their lending conditions – and that is in line with monetary policymakers’ intentions. The question is, however, whether banks’ reaction was mainly due to the more adverse macro environment or whether it was notably reinforced by purely bank-related factors, such as capital or liquidity constraints. The latter could trigger major feedback effects between the financial system and developments in the real economy, which would dampen the economic slowdown further. Such a development would go beyond the usual intended effects of monetary policy and would therefore be undesirable.

The rise of interest rates in the financial markets led banks to increase lending rates on loans to enterprises significantly – but within the expected range. After the ECB started raising its key policy rates in July 2022, interest rates in the money and capital markets continued to rise with each upward revision of rate hike expectations, with corresponding repercussions for banks’ financing costs. The banks, in turn, responded by tightening lending rates (see Chart 3.4). Empirical models based on historical relationships show that changes in market interest rates are generally almost fully

reflected in lending rates on loans to enterprises, albeit with a certain delay.¹¹⁾ Although interest rates in the financial markets began to decline somewhat again in November 2023, the aggregate lending rate broadly remained at its high level until May 2024, thus continuing to have a dampening effect on lending.

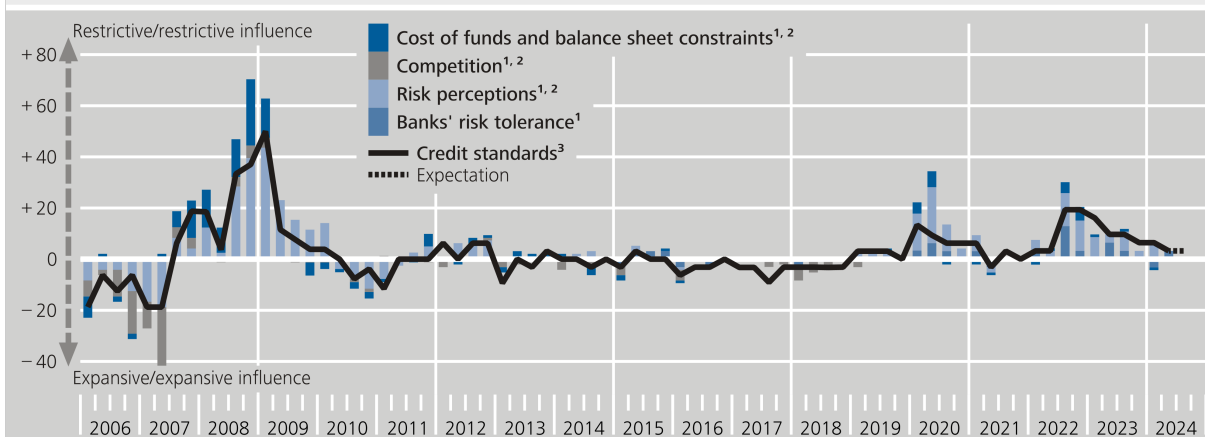


The data collected in the Bank Lending Survey (BLS) suggest that banks also made their lending conditions more restrictive. Since the first quarter of 2022, the banks questioned in the BLS have continuously tightened their credit standards for loans to enterprises, i.e. their internal loan approval criteria (see Chart 3.5). The intensity of the tightening has eased somewhat since the second half of 2023. While the scale of the overall tightening was considerable, it was much less pronounced than the restrictive adjustments made during the global financial crisis. In addition, banks applied stricter standards to their credit terms and conditions, for example by increasing margins or imposing more stringent collateral requirements.

11 See Deutsche Bundesbank (2023c).

Germany: change in credit standards for loans to enterprises and contributing factors* Chart 3.5

As a percentage of all responses received (net)



* According to the Bank Lending Survey, partly Bundesbank calculations. **1** Difference between the sum of the responses "contributed somewhat/considerably to tightening of credit standards" and the sum of the responses "contributed somewhat/considerably to easing of credit standards". **2** Mean of the individual associated factors. **3** Difference between the sum of the responses "tightened somewhat/considerably" and the sum of the responses "eased somewhat/considerably".

Deutsche Bundesbank

According to BLS data, the main reason for the tightening of credit standards was the increase in credit risk on the corporate side. In particular, respondents to the survey stated that the economic situation and outlook had deteriorated, in their assessment. Furthermore, they noted that industry-specific and enterprise-specific factors and a deterioration in borrowers' creditworthiness had contributed to the tightening (see the supplementary information entitled "Interaction between credit risk, bank credit supply policy and loan negotiations"). In addition, the surveyed banks reported a decline in their risk tolerance. By contrast, bank-related factors affecting the cost of funds and balance sheet constraints for banks contributed only marginally to the tightening of credit standards for loans to enterprises overall, according to the surveyed bank managers.

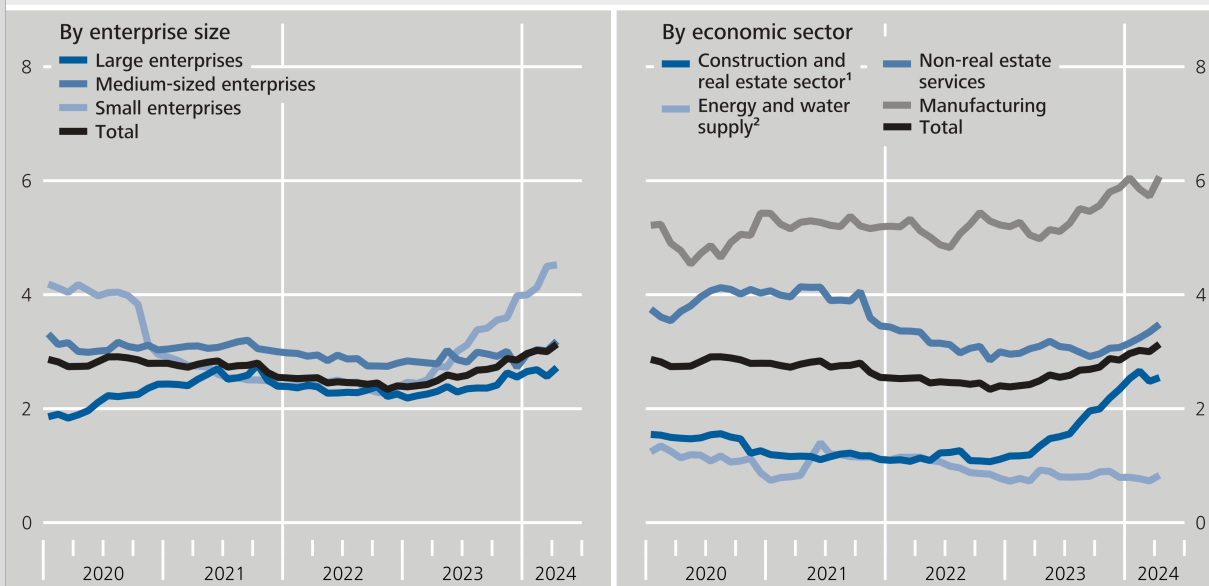
Interaction between credit risk, bank credit supply policy and loan negotiations

Disaggregated data illustrate that the deteriorated macro environment has led to a particularly pronounced increase in credit risk for construction firms and real estate firms as well as for smaller enterprises. Data from the analytical credit dataset (AnaCredit), the BLS and the Bundesbank's BOP-F survey suggest that, during the period of monetary policy tightening, banks adjusted their lending policy depending on the borrowers' economic sector and firm size. As regards credit risk, according to AnaCredit the average probability of default of firms in the construction and real estate sectors as well as of smaller enterprises, weighted across all credit claims in the respective segments, rose more sharply in 2023 than the probability of default of all firms (see Chart 3.6). However, compared to the average of all firms, it does not appear to be exceptionally high thus far. In the construction and real estate sectors, the increased credit risk can be explained in terms of the turnaround in the real estate market, which, in both sectors, led to an above-average deterioration in gross value added and to a rise in the number of corporate insolvencies. Small businesses are likely to be less able to circumvent the currently adverse business environment owing to the less diversified nature of their sources of income and a deterioration in access to capital markets.

Credit risk of German banks' loans to domestic non-financial corporations*

Chart 3.6

Probability of default (%)



Source: Bundesbank calculations based on AnaCredit. * Average probability of default across all borrowers in the respective category weighted by credit claims. ¹ The real estate sector comprises housing enterprises and other real estate activities. ² Including refuse disposal and mining and quarrying.

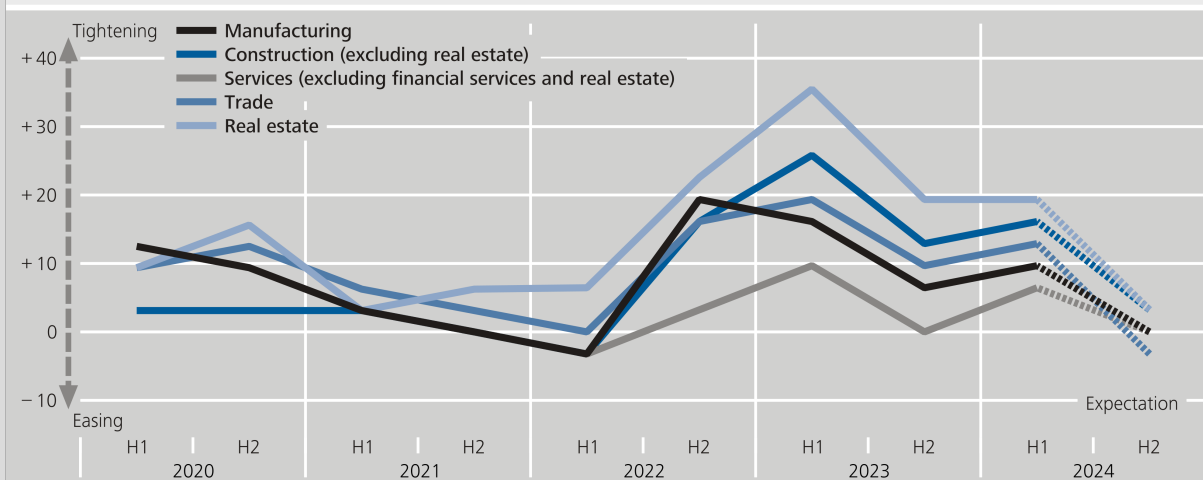
Deutsche Bundesbank

Banks reflected the elevated credit risk in part by tightening their lending policies. Empirical models based on historical interrelationships show that, as from June 2023, banks raised their lending rates somewhat more steeply than would have been expected based on the models. This is probably because banks increased their risk premia against a backdrop of weak economic growth and an uncertain corporate outlook. In addition, the BLS banks cited industry-specific and firm-specific factors as additional reasons for tightening their credit standards. The surveyed banks reported tightening their credit standards more strongly for, in particular, construction firms and real estate firms since mid-2022 than for those in other economic sectors (see Chart 3.7). For small and medium-sized enterprises, however, the BLS banks did not report an unusually severe tightening of credit standards.

Germany: Changes in credit standards across the main economic sectors*

Chart 3.7

As a percentage of all responses received (net)



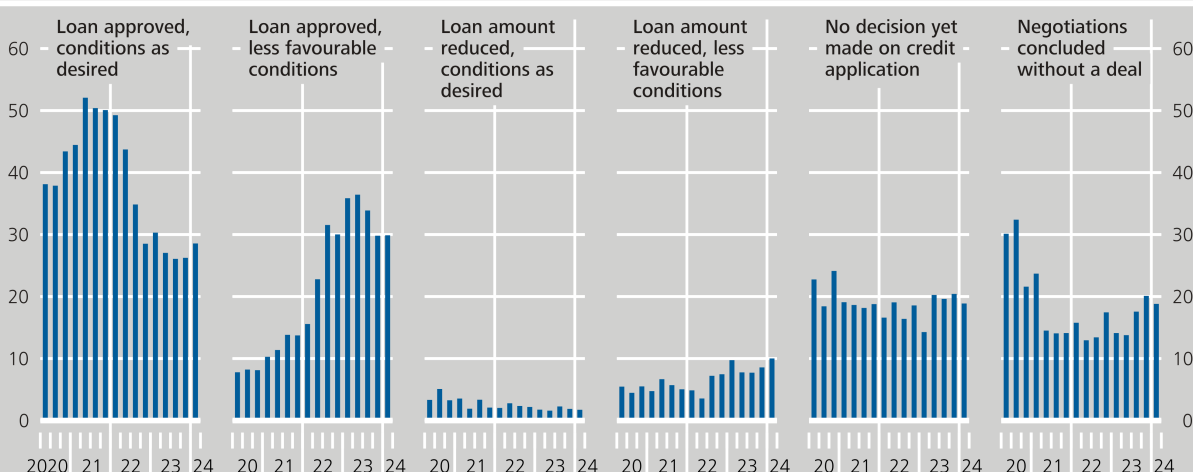
* According to the Bank Lending Survey. 1 Difference between the sum of the percentages of banks responding "tightened somewhat" and "tightened significantly" and the sum of the percentages of banks responding "eased somewhat" and "eased considerably".
Deutsche Bundesbank

Mirroring the BLS, firms responding to the Bundesbank's BOP-F survey have reported a deterioration in loan negotiations since the beginning of the period of monetary policy tightening. For the entire corporate sector, the BOP-F survey shows that the share of firms that have received loans either at reduced amounts or at less favourable conditions, or whose loan negotiations ended without a deal, has gone up since the beginning of the period of monetary policy tightening (see Chart 3.8).^[1] For ease of comparison, it makes sense to merge the six possible responses from which firms can choose when assessing their loan negotiations into a single indicator. For each loan category, the indicator is calculated by the sum of the number of weighted responses "Loan approved, conditions as desired" multiplied by + 1, the number of weighted responses "Loan approved but for a loan amount reduced and/or less favourable conditions" multiplied by -0.5, and the number of weighted responses "Loan negotiations concluded without a deal" multiplied by - 1.^[2]

Outcome of loan negotiations*

Chart 3.8

Percentage of responses,¹ weighted results



Source: Bundesbank Online Panel Firms (BOP-F). * Question: What was the outcome of these negotiations? Please select all answers that apply. ¹ Since multiple responses were possible, the percentages of responses do not necessarily add up to 100.

Deutsche Bundesbank

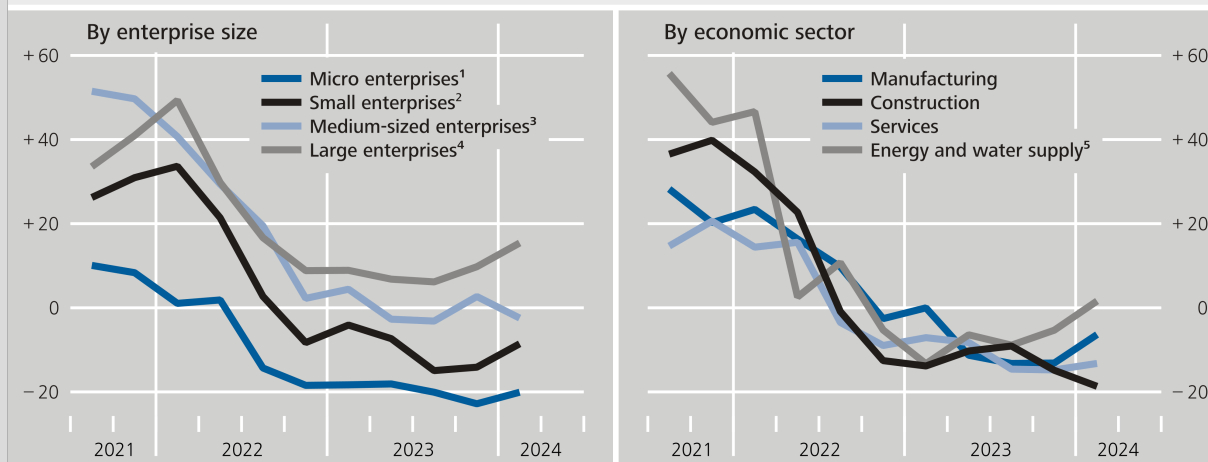
In the BOP-F survey, construction firms^[3] assessed the results of their loan negotiations as being increasingly worse, including in comparison with other economic sectors. Whereas, according to the loan negotiation indicator, the construction sector's bargaining position was better than average at the end of 2021, it has increasingly deteriorated since then (see Chart 3.9). Most recently, the indicator value was below the average of all economic sectors.

On the other hand, data from the BOP-F survey do not suggest that the tightening of the credit supply has hit micro and small enterprises disproportionately hard. Since the beginning of the period of monetary policy tightening, the loan negotiation indicator for firms in each of the individual size classes has shown a fundamentally similar trajectory, albeit at different levels (see Chart 3.9). This suggests that, for structural reasons, loan negotiations for micro and small enterprises lead to results that are, in their view, less favourable than for medium-sized or large enterprises. During the period of monetary policy tightening, the levels of loan negotiation indicators calculated by enterprise size shifted markedly downward. On balance, however, a disproportionately strong tightening of banks' lending to micro and small enterprises cannot be inferred from the indicator.

Loan negotiation indicator*

Chart 3.9

Percentages of weighted responses



Sources: Bundesbank Online Panel Firms (BOP-F) and Bundesbank calculations. * Calculated on the basis of the assessment of loan negotiations with banks. **1** Enterprises with up to 10 employees. **2** Enterprises with more than 10 and up to 50 employees. **3** Enterprises with more than 50 and up to 200 employees. **4** Enterprises with more than 200 employees. **5** Including refuse disposal and mining and quarrying.

Deutsche Bundesbank

1. The share of firms that negotiated loans in the survey quarter has remained relatively stable at just under 15 % since the beginning of the period of monetary policy tightening.
2. The weighted responses of firms whose loan negotiations had not yet been concluded at the time of the survey are entered into the indicator with a factor of zero. For the purpose of calculating the indicator value, the sum of the individual weighted responses, multiplied by the relevant factors, is reported per quarter and loan category as a percentage of the weighted number of firms that negotiated loans in the respective quarter.
3. Separate data on firms providing residential and other real estate services are not collected in the BOP-F survey.

Enterprises did not perceive this tightening of loan supply as exceptionally strong. In the corresponding surveys conducted by the ifo Institute and the Bundesbank (BOP-F), enterprises have noted a significant deterioration in the financing environment. However, the financing environment is not considered to be noticeably difficult when compared with previous periods and other obstacles to business activity (such as a shortage of skilled workers or insufficient demand).

The banks surveyed as part of the BLS do not regard balance sheet constraints on the part of banks as currently playing a major role in lending to enterprises, which is consistent with the overall sound health of the German banking sector. Before the start of the monetary policy tightening cycle, there was little indication that banks' balance sheet constraints played a relevant role in lending.¹²⁾ Looking at developments since the start of the tightening, there is scant evidence to date that this assessment has changed. The German banking system's liquidity situation remains favourable and the sector's CET1 ratio has continued to rise in trend terms.¹³⁾ All in all, banks' net interest income has likewise increased so far. That said, value adjustments were made on the securities held as a result of the rise in interest rates, weighing on profitability in 2022.¹⁴⁾ At the same time, only a moderate amount of credit risk has materialised so far. Although the share of non-performing loans to enterprises on German banks' books has risen since mid-2022, it remains at a very low level.¹⁵⁾ Overall, the current situation in the banking system in Germany can be seen as stable with no indications of significant restrictions in the supply of loans due to bank-related factors.

Empirical models also provide no evidence of significant restrictive loan supply shocks beyond the impact of the weakened macro environment. The last two items of supplementary information at the end of the article present two empirical macro models that allow the identification of loan supply shocks. The first approach uses the medium-sized macro model already described in [Chapter 2](#), which applies monetary, financial and real economic data to identify various economic shocks relevant to lending (see the [supplementary information on the macro-financial Bayesian VAR model](#)). The second model examines lending in a smaller model framework, using the BLS banks' assessment of loan supply and loan demand to identify the shocks (see the [supplementary information on the quantitative importance of loan supply and loan demand](#)). The models thus use different information but both come to the conclusion

12 See Deutsche Bundesbank (2022a).

13 See Deutsche Bundesbank (2023d).

14 These adjustments were only partly reflected in banks' profitability and capital levels. Banks absorbed a significant part of the value adjustments by reducing hidden reserves or accumulating unrealised losses so that they did not have an impact on profit or equity capital. See Deutsche Bundesbank (2023d, 2023e).

15 See Deutsche Bundesbank (2023d).

that purely bank-related factors were not a major factor in the sharp slowdown in loan growth from autumn 2022 onwards and during the subsequent period of very low growth.

Rather, the model-based decomposition of loan growth suggests that the sharp decline in loan supply and loan demand from autumn 2022 onwards is mainly attributable to the weakened macro environment. Using observations from the BLS and other relevant variables, the model presented in the [supplementary information on the quantitative importance of loan supply and loan demand](#) decomposes loan growth into the impact of the macro environment and additional loan supply or loan demand effects. The model results suggest that the sharp decline in loan growth from the fourth quarter of 2022 onwards can be explained mainly by the deterioration in the macroeconomic environment (see Chart 3.18 in this supplementary information). The model also identifies consistently negative loan demand shocks from the end of 2020; their size and thus their quantitative significance for credit growth are relatively small, however.

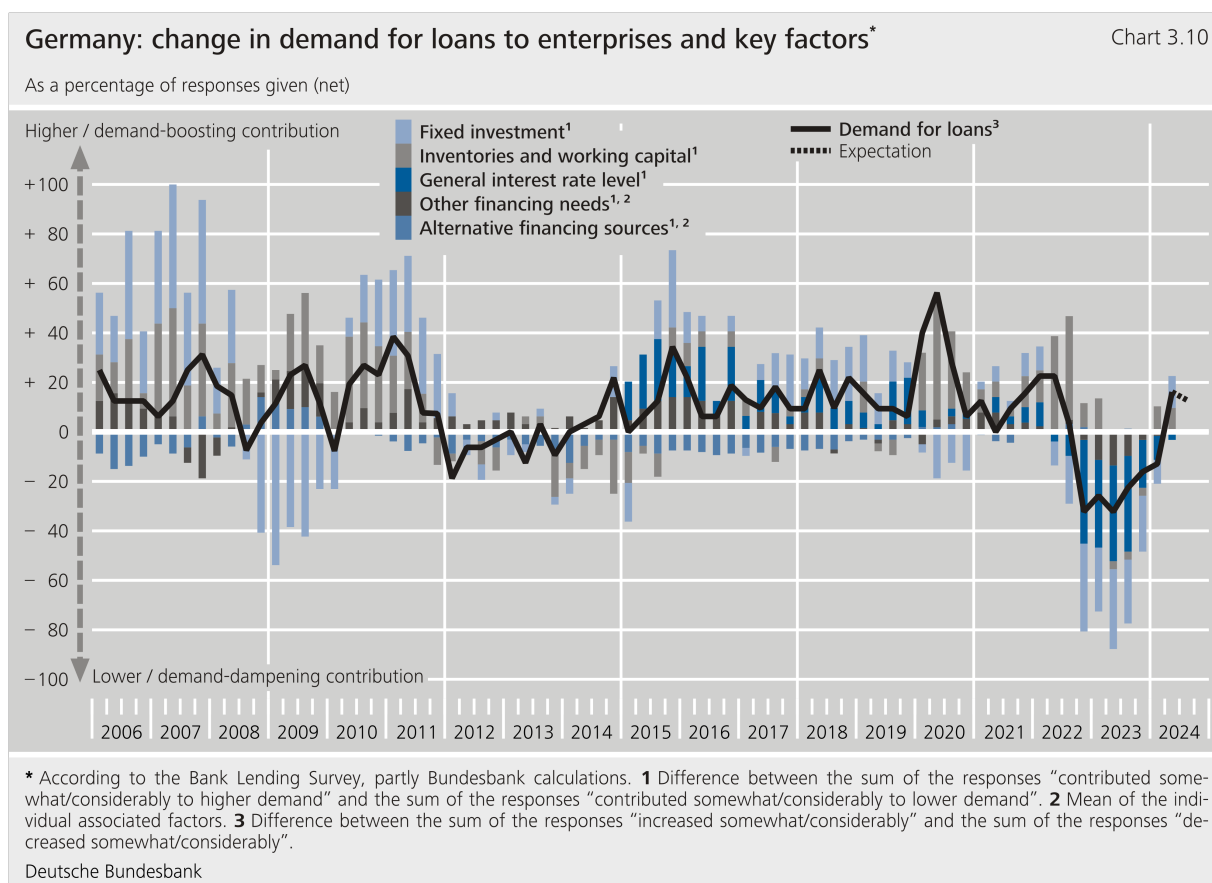
4.2 Weakening of loan demand, mainly due to the deterioration in the macro environment

The weakness of loan demand resulted from the interplay of several factors. The fact that the model presented in the [supplementary information on the quantitative importance of loan supply and loan demand](#) points to the existence of negative loan demand shocks is consistent with the forecast simulations presented in [Chapter 2](#), showing that loan dynamics were relatively weak from mid-2023 onwards. The following section describes the individual factors that have dampened enterprises' demand for loans. We will first demonstrate the importance of macroeconomic developments for the corporate sector as a whole. Second, we will examine the role of alternative financing options in the corporate sector and take a look at enterprises and their economic conditions at the disaggregated level. On the whole, it is clear that the decline in loan demand was also largely driven by the weakened macro environment.

4.2.1 Factors underlying the slowdown in demand

The BLS provides a good overview of the drivers of loan demand: the surveyed banks attribute the decline in loan demand from autumn 2022 onwards mainly to the dwindling willingness to invest and the rise in interest rates. Furthermore, there was evidence from several banks surveyed in the BLS that uncertainty about the economic outlook in Germany and geopolitics in general also dampened enterprises'

demand for loans.¹⁶⁾ BLS banks believe that the weakening of loan demand in the current tightening cycle is far more pronounced than during the global financial crisis and than in 2012 and 2013, when loan dynamics cooled in the wake of the sovereign debt crisis (see Chart 3.10).



The declining willingness to invest should be viewed against the backdrop of the effects of the deteriorating macro environment, which are hitting the corporate sector in Germany comparatively hard.¹⁷⁾ The sharp rise in energy costs and weak foreign demand weighed on industrial output throughout the euro area, but in Germany the energy price shock hit the industry-based economy with its high dependence on imported energy commodities particularly hard. The weakness in global trade was also felt more strongly in Germany owing to firms’ strong focus on exports. Heightened geopolitical tensions also exacerbated enterprises’ uncertainty with regard to future energy supplies and their cost, as well as to disruptions to

¹⁶ See European Central Bank (2024).

¹⁷ See Deutsche Bundesbank (2023f).

international trade links. There was also uncertainty about the challenges the green and digital transformations and demographic change pose to enterprises and policymakers.

Moreover, the strong rise in the interest rate level also led to a postponement of investment on aggregate. In December 2023, the enterprises surveyed by the ifo Institute reported that they had reduced their originally planned investments by 8.4 % on average over the past one and a half years due to the higher interest rate level.¹⁸⁾ However, these adjustments were not evenly distributed across the corporate sector: rather, it emerged that 80 % of the surveyed enterprises did not adjust their investment plans at all. By contrast, enterprises that chose to adjust their investment plans typically reduced them on a larger scale. The results of the Bundesbank BOP-F survey are consistent with this. According to this survey, around 15 % of the enterprises surveyed reduced their spending on innovation by 50 % or more in 2022 and 2023 as a result of the ECB's interest rate hikes. In addition, the responses suggest that the effect increased the more debt an enterprise had outstanding (see Chart 3.11). More highly indebted enterprises also disproportionately chose to put their investments on hold.¹⁹⁾ This can be explained by the higher debt service and, as a consequence, the increasing relevance of interest rate changes in the event of new borrowing or interest rate adjustments.

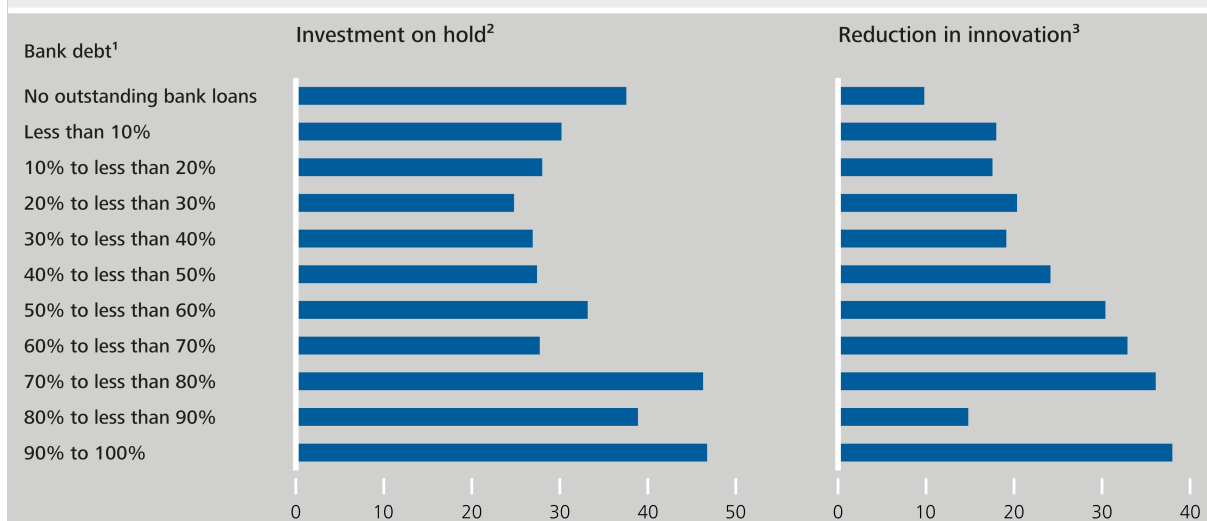
¹⁸ See Best et al. (2024).

¹⁹ However, the number of more highly indebted enterprises is not high: only just over 3 % of the enterprises questioned in the BOP-F survey reported that the residual debt of all bank loans outstanding at the time of the survey amounted to 70 % or more of their total assets in the fourth quarter of 2023. Just over 50 % of the enterprises surveyed reported that they currently have no bank loans on their balance sheets.

Postponement of investment and innovation by level of corporate debt

Chart 3.11

Percentage of weighted responses



Source: Bundesbank calculations based on the BOP-F survey in Q4 2023. **1** Corporate debt calculated as the ratio of remaining debt on all outstanding bank loans to total assets. **2** Answer: The firm carried out no investment in Germany in 2023. **3** Answer: The ECB's interest rate increases led to the firm reducing its actual expenditure on all innovation activities in 2022 and 2023 by 50% or more.

Deutsche Bundesbank

Demand for bank loans was also weakened by the fact that firms were, on aggregate, able to resort to significant liquidity buffers as alternative financing. The non-financial corporate sector entered the tightening period with sufficient liquidity buffers, not least as a result of extensive government coronavirus aid. A significant portion of these buffers are still available at present. In addition, non-financial corporations were able to generate large profits on aggregate in 2022 and probably also in 2023. They managed to expand their profit margins in an environment of strong demand – which was in part driven by catch-up effects after the pandemic – and supply-side restrictions such as supply bottlenecks. Parts of the corporate sector generated a turnover increase that went well beyond the lagged increase in employee compensation.²⁰⁾ In isolation, these profits strengthened the internal financing options of the enterprises concerned. Since the beginning of 2022, these have, on aggregate, been largely sufficient to finance the rather weak investment in recent years (see Chart 3.12).

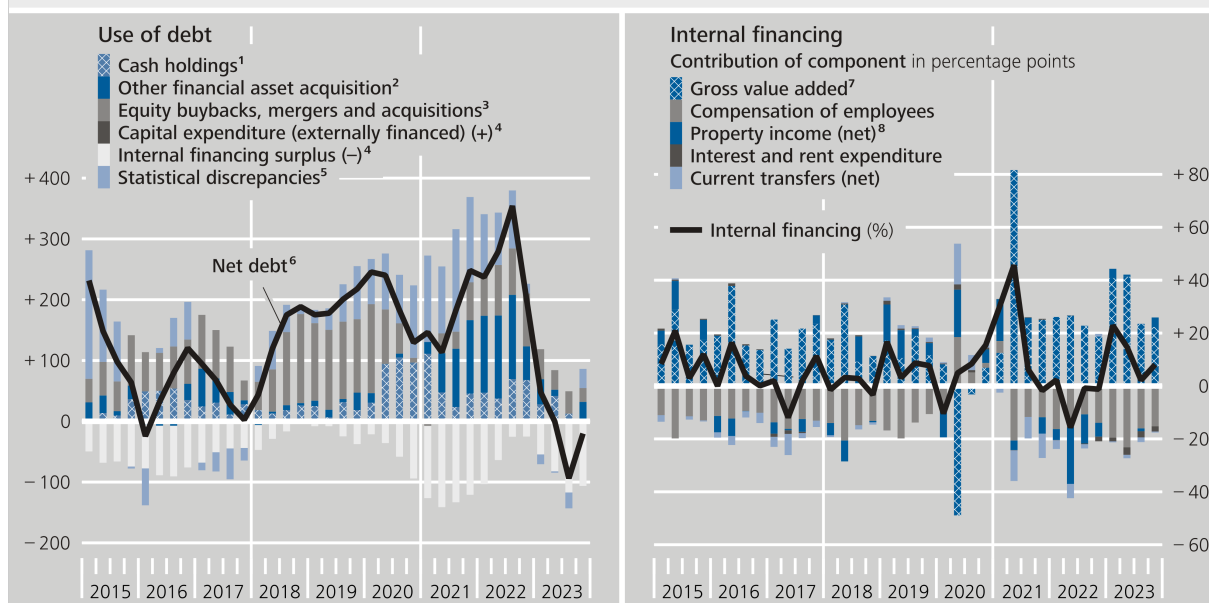
²⁰ See Deutsche Bundesbank (2023g).

Non-financial corporations in Germany: Use of debt and internal financing

Chart 3.12

€ billion; sum of the preceding four quarters

Year-on-year change



Sources: ECB and Bundesbank calculations. **1** Cash and deposits. **2** Financial asset acquisition excluding cash, deposits, intra-sectoral loans, equity and other claims. **3** Net acquisition of equity minus net issuance of equity. **4** According to the national accounts, net lending/borrowing (saving and capital transfers less investment and net acquisition of non-produced assets) is broken down, with the opposite sign, into debt-financed capital expenditure (+) and net internal financing surpluses (-). **5** Net lending/borrowing according to the national accounts minus net financial asset acquisition. **6** External financing minus net issuance of equity, intra-sectoral loans and other claims. **7** At factor cost. **8** Excluding interest and rent expenditure.

Deutsche Bundesbank

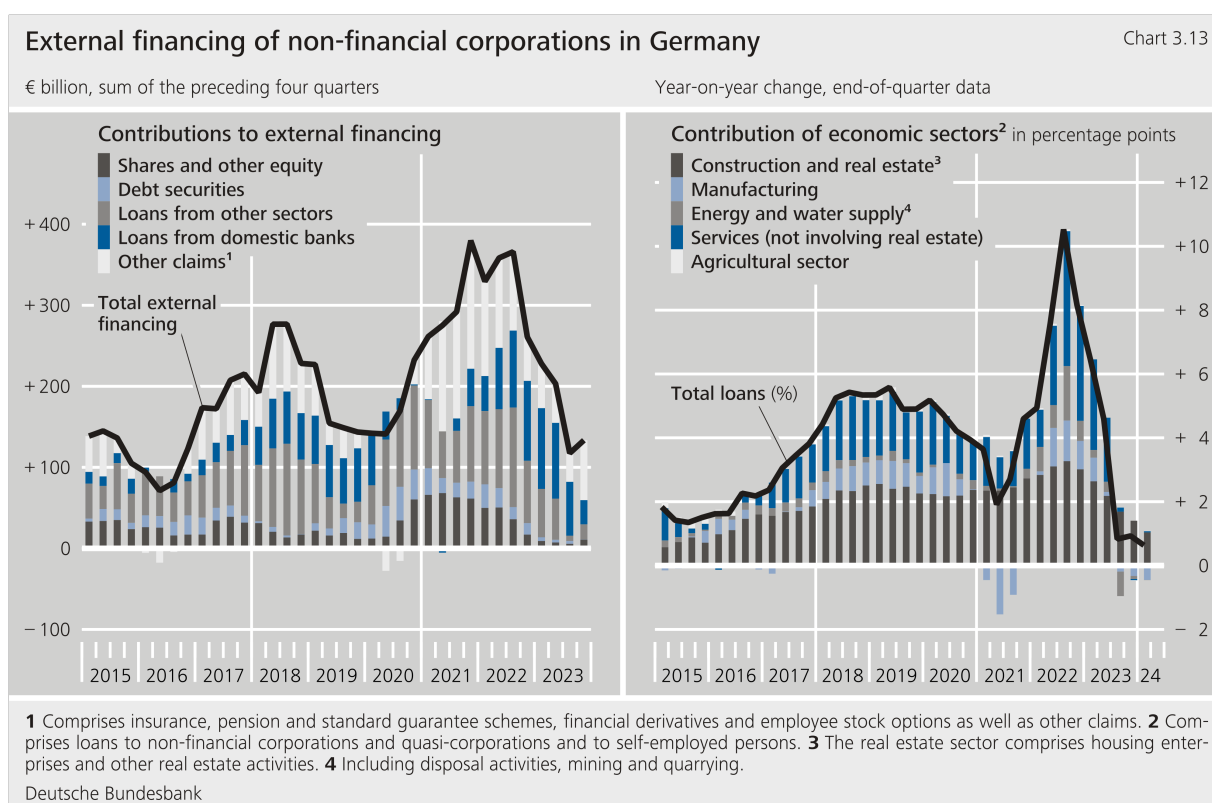
Furthermore, the repayment of short-term loans granted in large volumes during the energy crisis in 2022 also dampened lending.²¹⁾ As tensions in the energy markets subsided, the need for government support for selected energy suppliers steadily declined. A large proportion of the loans granted were repaid in a timely manner, with the last of this energy support assistance being repaid by the end of the first quarter of 2024.²²⁾ In addition, global supply chain problems have eased since mid-2022 and input and storage costs have again declined. The need for short-term funding normalised across the corporate sector as a result, leading to above-average short-term loan redemptions in 2023.

²¹ The net lending considered in this article reflects the balance of newly granted loans and loan redemptions.

²² See Kreditanstalt für Wiederaufbau (2024).

4.2.2 Broad-based decline in demand despite heterogeneity in the corporate sector

The identification of the deteriorated macro environment as the main driver of loan weakness fits with the broad-based decline in lending. Since the end of 2022, banks' net lending has weakened across all categories of banks, loan maturities and economic sectors (see Charts 3.1, 3.3 and 3.13). Although there were individual loan categories in which the decline was less pronounced, the general downward trend affected all categories. A similar picture emerges for enterprises' overall external financing: from the end of 2022, German enterprises not only took out fewer loans from German banks, but they also significantly reduced their borrowing via loans from other sectors as well as debt securities, shares and other equity.



Although loan demand weakened broadly, a disaggregated view of loan data shows that individual economic sectors were affected in quite different ways. Loans to the manufacturing sector declined particularly sharply, especially for the manufacture of machinery and equipment and chemicals industry sectors. This is in line with the slowdown in industrial activity in Germany.

By contrast, the changed interest rate environment hit nominal demand for loans in the construction and real estate sector²³⁾ less substantially than expected. The sharp rise in construction and funding costs triggered a cyclical turnaround in the real estate market after an upswing of many years; the annual growth rate of real private construction investment fell into negative territory in 2021 and remained there until the end of 2023. In line with this, BLS banks have observed an above-average decline in demand for loans among construction and real estate firms since mid-2022. However, the negative impact of the interest rate reversal on loan demand in the construction and real estate sector was offset by a sharp rise in construction costs. For example, the increase in material and labour costs in the construction sector was particularly strong during this period, even compared with the costs relevant to other gross fixed capital formation. This can be seen in the gap between real and nominal construction investment growth (see Chart 3.14). The sharp rise in prices kept nominal construction investment at a relatively high level until 2023, which was reflected in the nominal loan volumes demanded by the sector. As a result, the volume of loans to the construction and real estate sector fell less sharply than in other sectors of the economy.²⁴⁾

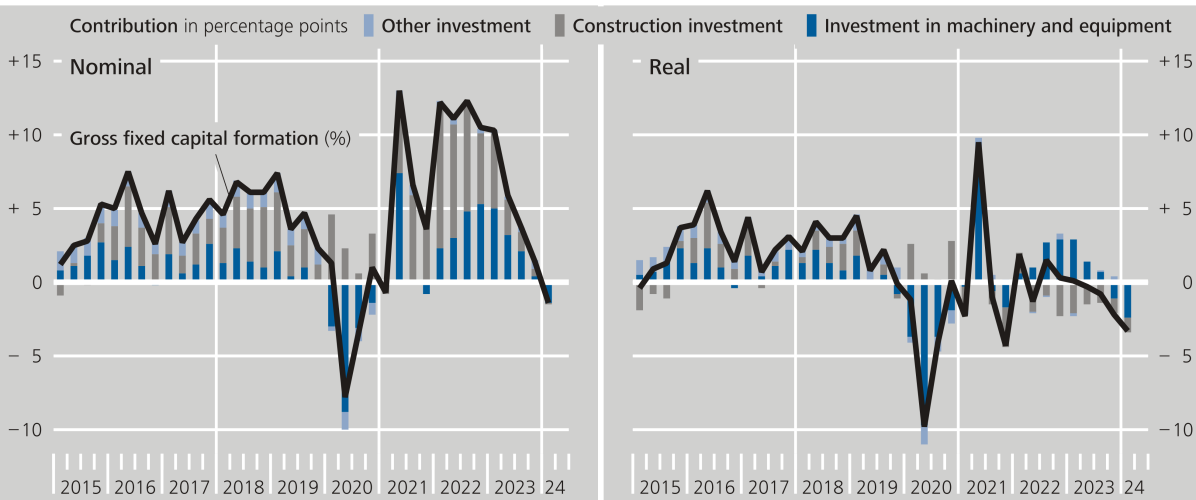
23 In this article, the construction and real estate sector refers to the following economic sectors: construction, housing enterprises and other real estate activities.

24 The slower decline in lending to the construction and real estate sector also supported developments in other loan sub-categories. For example, the lending business of savings banks and credit unions benefited from the fact that they traditionally have a strong presence in this business segment. At the same time, its business structure means that the construction and real estate sector is predominantly funded over the long term. This contributed to long-term lending declining less sharply during the period of interest rate tightening than in the shorter segments.

Gross fixed capital formation in the private sector* in Germany

Chart 3.14

Year-on-year change



Sources: Federal Statistical Office and Bundesbank calculations. * Non-government sectors.
Deutsche Bundesbank

5 Conclusion and outlook

Despite the interest rate reversal, loan growth accelerated in 2022 due to government aid loans to energy suppliers and other one-off factors. Although monetary policy responded to the inflationary surge with substantial tightening, lending to non-financial corporations initially continued to pick up strongly until October 2022. One key factor was the government support loans granted to selected energy suppliers in 2022 as a result of Russia's war against Ukraine. In addition, the sharp rise in input and storage costs in 2022 increased the need for short-term funding across the corporate sector. Further positive impulses came in the aftermath of fiscal and monetary policy support measures from the coronavirus pandemic.

In line with the deteriorated economic environment and the monetary policy-induced rise in interest rates, the downturn in net lending began at the end of 2022. Model-based analyses indicate that the decline in loan supply and loan demand was mainly due to the adverse macro environment and was generally consistent with historical patterns. In particular, persistently weak private investment and high funding costs were the main factors behind the weakening of loan demand. Other factors were the – on aggregate – sufficient supply of internal financing in the corporate sector and heightened uncertainty with regard to potential geopolitical conflicts and how structural problems are dealt with in Germany, which dampened firms' willingness to invest. The significant tightening of lending conditions can be explained by the rapid and strong rise in interest rates and the cyclically induced increase in credit risk on the corporate side. The German banking system remains in a stable state. Model results also provide no evidence of a significant reduction in the supply of loans beyond the impact of the adverse macro environment due to bank-related factors affecting cost of funds and bank-related balance sheet constraints.

A gradual rebound in lending is expected over the course of this year. In recent months, banks' net lending to firms has largely stagnated. New lending business, i.e. newly concluded loan agreements, excluding redemptions, recently saw slightly stronger lending. The banks surveyed in the BLS observed – for the first time since 2022 – an increase in demand for loans to enterprises in the second quarter of 2024, which they expect to continue in the third quarter. Our current forecast for loans to enterprises also expects a recovery starting from the second half of 2024; however, the projected increase in the annual growth rate is slow (see the [supplementary information on loan forecasts](#)).

The projected gradual increase in lending is based on the assumption of a gradual improvement in the macro environment. After around two years of economic weakness, the German economy is slowly regaining momentum.²⁵⁾ The expected increase in foreign demand should stimulate the export industry. Private consumption is likely to recover. In addition, the current Forecast for Germany is based on the assumption that a gradual reversal of interest rate hikes will have a positive impact on firms' financing environment. Nevertheless, tangible growth impulses from private investment are not expected until 2026. It is therefore to be assumed that net lending will only rise again slowly. In addition, the currently elevated uncertainty amongst enterprises with regard to future underlying economic conditions and structural change is likely to persist for the time being.

Empirical analyses suggest that demand for loans will not rise immediately as the economy improves. In the past, loan growth mostly lagged behind GDP growth and investment by between two and six quarters.²⁶⁾ This lag can be explained by the role of internal financing: in the economic upturn, enterprises can initially cover their funding needs from internally generated funds. Therefore, there is often a delay before they begin to apply for loans. As German enterprises still have significant internal financing resources on aggregate, loan growth is likely to pick up only gradually, even in the economic upswing.

The robust financial situation in the German banking sector currently does not suggest that major bank-related restrictions will dampen the recovery in lending. Should the economic environment brighten up, this would also have a positive impact on future credit risk developments. Credit risks currently appear to be significant only in certain areas of commercial real estate financing. In addition, according to financial accounts data, the German corporate sector's debt situation can still be assessed as sound. A falling interest rate level would gradually improve the credit risk situation in commercial real estate in particular.

²⁵ See Deutsche Bundesbank (2024b).

²⁶ See Deutsche Bundesbank (2015, 2011).

Loan forecasts

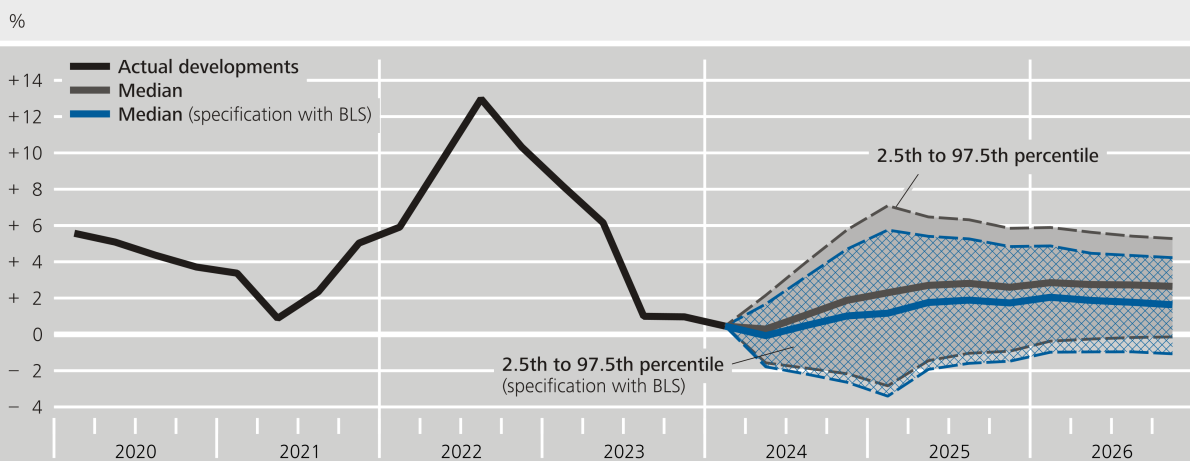
Forecasts of future loan developments

In order to allow a broader assessment of lending dynamics, the Bundesbank regularly conducts loan forecasts for the coming quarters. These forecasts are based on two different variants of a parsimonious Bayesian vector autoregressive (BVAR) model in levels using the approach in Giannone et al. (2015)^[1] and focusing on forecast performance. In addition to loans to non-financial corporations, the first model variant includes the investment ratio (defined as the ratio of private fixed investment to GDP), the yield spread between long-term corporate and government bonds, and the long-term interest rate on loans to enterprises. The second model variant additionally includes the cumulative BLS standards in the model.^[2] The BVAR is specified with four lags. Both the selection of the model variables and the determination of the lag structure were carried out using a forecast evaluation.

The model parameters are estimated up to the available data end, currently the first quarter of 2024. Forecasts are then conducted for the following quarters for each point in time. These are based on the Bundesbank's forecast of economic activity in Germany, which is published every June and December.^[3] All projections in this article are made using data available on 21 May 2024. Chart 3.15 shows the loan forecasts based on these data. The grey and blue paths represent the two model variants used here, with and without taking account of BLS standards. Both estimation variants suggest a slow recovery in lending dynamics from the second half of 2024 onwards. However, the projected increase in loan growth is gradual, with annual growth rates ranging from 2 % to 3 % for medium forecast horizons (in 2025). At the same time, the very broad uncertainty bands in some cases reflect the considerable uncertainty associated with the forecasts. Overall, however, they are in line with current expectations regarding the economic outlook.^[4]

Conditional forecast of annual growth rate of loans to non-financial corporations in Germany*

Chart 3.15



* Forecast distribution on the basis of the BVAR model, estimation period: Q1 1991 to Q1 2024; forecast period: Q2 2024 to Q4 2026. The forecasts are based on the projected developments in the investment ratio, the yield spread, the lending rate and the BLS standards. Estimated levels are converted into annual rates.
Deutsche Bundesbank

Forecast of hypothetical loan developments

The forecasting model can also be used for hypothetical simulations, i.e. for simulations of loan developments derived from model relationships. Chapter 2 of the main article compares the loan growth observed since the beginning of 2022 with hypothetical loan developments calculated on the basis of the variant of the forecasting model which also includes BLS standards. To this end, the model described above is estimated for the period from the beginning of 1991 to the end of 2021. For the period from the beginning of 2022, loan developments are then forecast based on historical relationships between the model variables and the actual development of the explanatory variables up to the current data end. The forecasts are therefore conditional on the realisations of the investment ratio, the yield spread, the lending rate and the BLS standards. In order to show the uncertainty associated with the forecast, the uncertainty band (2.5th to 97.5th percentile) is shown alongside the median.

This reveals that actual loan growth over the period under review was broadly in line with the model forecast, although there were some deviations in individual quarters. In Chart 3.2 in Chapter 2, the black line represents actual credit growth. The blue line shows the median distribution of the conditional forecasts.^[5] The shaded area

depicts the dispersion of the simulated forecast distribution and reflects the uncertainty associated with the forecasts. The grey line represents the loan growth rate adjusted for KfW aid loans.^[6] As these loans were very large in volume and mostly had fairly short terms, they temporarily led to the fairly large ups and downs in actual lending. As a short-term government support measure, they were exogenous in nature and thus represented a one-off effect on lending. Adjusted for this one-off effect, loan growth remained within the uncertainty band throughout the simulation period and was therefore compatible with the model relationships prevailing before 2022.

-
1. For a description of the approach, see Giannone et al. (2015).
 2. The data for the BLS credit standards are only available from the fourth quarter of 2002. In order to allow a longer estimation period from 1991 onwards, the BLS standards are extended backwards using information on firm insolvencies, see Deutsche Bundesbank (2022b).
 3. See Deutsche Bundesbank (2024b). For the calculation of conditional forecasts, see Bańbura et al. (2015).
 4. See Deutsche Bundesbank (2024b).
 5. To better illustrate this, the forecasts of loan levels are then converted into annual growth rates.
 6. See the supplementary information in [Chapter 3](#).

Analysis of loans to non-financial corporations in Germany using a macro-financial Bayesian VAR model

Developments in loans to non-financial corporations in Germany are investigated using a vector autoregressive (VAR) model that describes the interaction of a number of real economic and financial variables. The model contains quarterly observations of ten variables: it comprises real gross domestic product (GDP) in Germany and the rest of the euro area, the Harmonised Index of Consumer Prices (HICP) in Germany and the rest of the euro area, loans to non-financial corporations in Germany, the lending rate (new business), the German contribution to M3, and the yield on German government bonds with a residual maturity of five years. In order to capture both standard and non-standard monetary policy measures, the shadow interest rate of Geiger and Schupp (2018) is used as monetary policy indicator and extended into the past or present with the interest rate on overnight loans in the interbank market (EONIA or €STR). To control for possible spillover effects from US monetary policy, the model also contains the yields of US Treasuries with a residual maturity of five years.^[1] All variables enter the model with five lags, interest rates as decimal numbers, and the other variables in log levels.^[2]

Comparing the distribution of the conditional simulation with actual loan growth provides indications as to whether loan growth has deviated noticeably during the simulation period from the estimated relationships in the model. In addition to the actual annual growth rate of loans to enterprises, Chart 3.16 also shows selected percentiles of the probability distribution of conditional simulations of the loan growth rate, starting in the first quarter of 2022. These simulations are based on the model parameters estimated for the period from the beginning of 1999 to the end of 2021 and are conditional on actual developments in real GDP and HICP in Germany and the rest of the euro area, government bond yields and the monetary policy indicator up to the end of the first quarter of 2024.^[3]

At the end of 2023 and the beginning of 2024, loan growth does not deviate much from the simulations after having exceeded them markedly in 2022. Actual loan growth clearly exceeds the simulation from the second to the fourth quarter of 2022 and then drops to the lower end of the simulated distribution.^[4] In the last two quarters, it is close to the 25th percentile of the simulated distribution. Both the

upward and downward deviation can be partly attributed to KfW's special loans and their subsequent repayment. According to the analysis, the dynamics of loans to enterprises in Germany do not appear unusual overall conditional on the macroeconomic environment.^[5]

Identifying structural economic shocks allows the fluctuations in loan growth to be decomposed into their economically interpretable determinants. Comparing the actual loan growth rate with the conditional simulations does not allow direct conclusions to be made as to which economic determinants cause observed deviations, as the simulations are based on the reduced form of the VAR model. Fluctuations in loans to enterprises around their long-term trend are the result of structural shocks that can be interpreted economically. These are contained as linear combinations in the residuals of the VAR model and can be identified using additional assumptions. In the present analysis, identification is based on sign restrictions, i.e. on theoretically substantiated assumptions about the sign with which certain variables react to structural shocks.^[6] Five structural shocks are identified: an aggregate demand shock, an aggregate supply shock, a loan supply shock, a monetary policy shock and a money demand shock. The identification assumptions are based on those in Deutsche Bundesbank (2023b) and are summarised in Table 3.1. The analysis takes into account the fact that the Eurosystem's monetary policy responds to economic developments in the euro area as a whole and not only in Germany. In order to sufficiently capture the Eurosystem's monetary policy response function, the model includes real GDP and the HICP not only of Germany but also of the rest of the euro area.^[7] When identifying the monetary policy shock, it is assumed that, following an increase in the monetary policy interest rate, real GDP and HICP will fall not only in Germany but also in the rest of the euro area.^[8] For the other shocks, the variables for the rest of the euro area are not subject to any restrictions. Whether or not the other shocks are specific to Germany or impact the euro area as a whole thus remains undetermined by the analysis. For this analysis, the estimation period is extended until the first quarter of 2024.

The model attributes the acceleration of loan growth from the end of 2021 and its subsequent decline to the impact of aggregate demand shocks and monetary policy shocks. Chart 3.17 shows the decomposition of the deviations of the loan growth rate from a hypothetical scenario in which no shocks would have occurred from 2019 onwards into the contributions of the identified structural shocks. "Other" summarises the contributions of the remaining five unidentified and thus uninterpretable shocks.^[9] In the phase of accelerating loan growth from mid-2021 onwards, loan growth is positively impacted by aggregate demand shocks and expansionary monetary policy shocks.^[10] According to the analysis, the decline in loan growth from mid-2022 onwards is partly due to the expiry of the supportive effect of these shocks. The results do not provide any evidence to suggest that loan supply shocks have a significant role in loan growth over the period under review. Unlike the results for the euro area in

Deutsche Bundesbank (2023a), money demand shocks were likewise not a major factor during the COVID-19 pandemic in Germany.^[11]

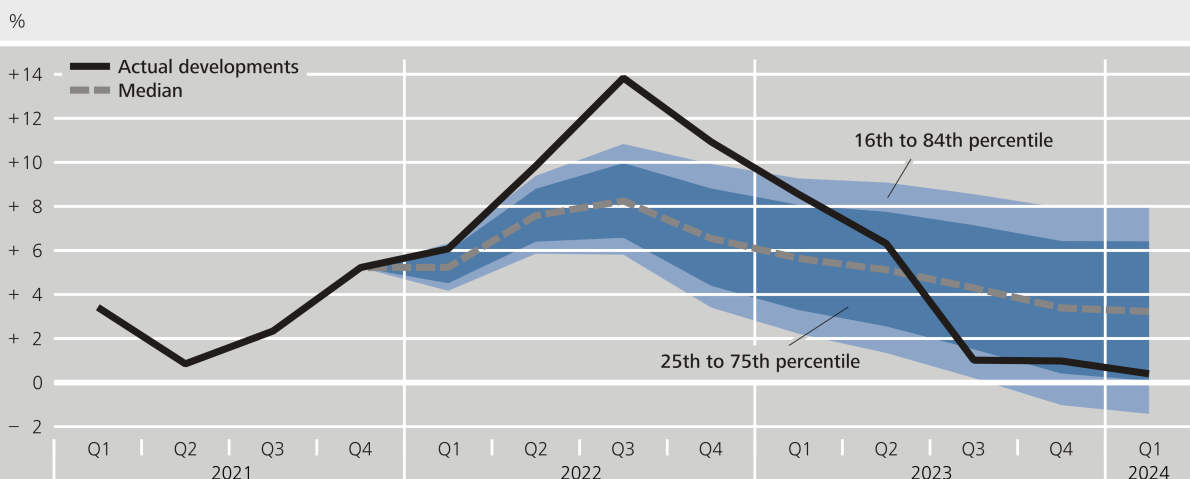
Table 3.1: Sign restrictions for shock identification

Variable	Shock				
	Aggregate demand	Aggregate supply	Loan supply	Monetary policy	Money demand
Germany					
Real GDP	+	-	+	-	-
HICP	+	+	.	-	-
Loans	+	.	+	-	.
Lending rate	+	.	-	+	.
Government bond yield	+
Money supply (M3)	+	.	+	-	+
Euro area					
Shadow interest rate/money market interest rate	+	+	+	+	-
Real GDP (excluding Germany)	.	.	.	-	.
HICP (excluding Germany)	.	.	.	-	.
Other					
US Treasury yield

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

Conditional forecast of the annual growth rate of loans to non-financial corporations*

Chart 3.16

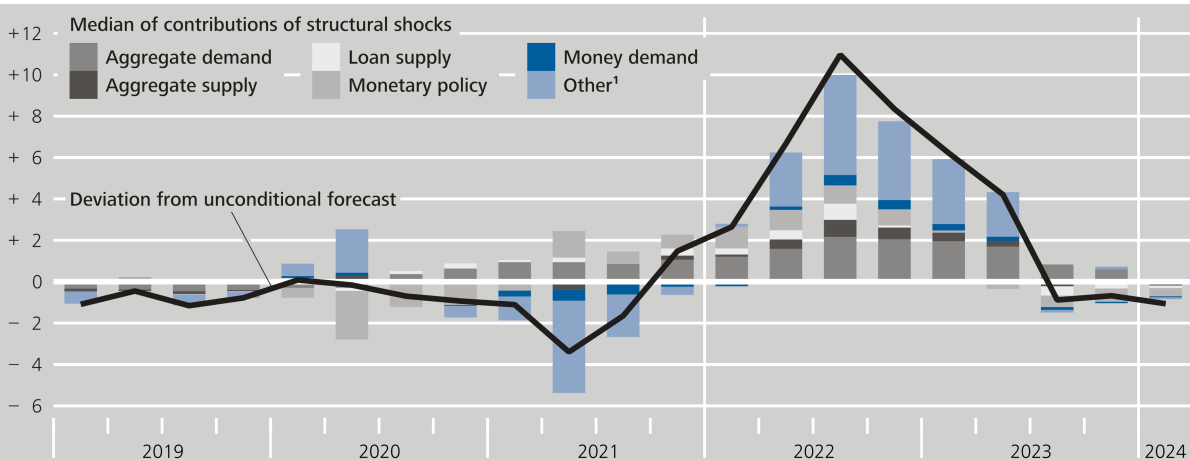


* Simulated a posteriori distribution on the basis of the Bayesian VAR model. Simulations are based on actual developments in real GDP and HICP in Germany and in the euro area, the monetary policy indicator and government bond yields in the euro area and the United States.
Deutsche Bundesbank

Shock decomposition of the annual growth rate of loans to non-financial corporations

Chart 3.17

Percentage points; quarterly data



¹ Sum of contributions of the unidentified shocks.

Deutsche Bundesbank

-
1. The model is broadly similar to that used in Deutsche Bundesbank (2020), but additionally contains the German contribution to M3 to allow a comparison of the role of money demand shocks during the COVID-19 pandemic with the results for the euro area in Deutsche Bundesbank (2023a).
 2. The estimation is conducted using the Bayesian approach of Giannone et al. (2015). Modelling of the increased variance during the COVID-19 pandemic follows Lenza and Primiceri (2022).
 3. The simulation approach follows Bańbura et al. (2015).
 4. Compared with the simulation in Chart 3.2, the distribution of the simulations is wider, especially towards the end of the simulation period. This is due, amongst other factors, to the increased estimation uncertainty associated with the larger number of variables.
 5. However, episodes with relatively high inflation rates, as in the simulation period, play only a comparatively small role in the estimation period. This could lead to the model not correctly reflecting the relationships between the variables in a regime with elevated inflation rates and a significant role of supply-side shocks.
 6. See Arias et al. (2018).
 7. See Mandler and Scharnagl (2020).
 8. It is also assumed that the coefficients of GDP and HICP are positive in the monetary policy indicator equation, i.e. that the Eurosystem responds to an increase in GDP or the price level with a more restrictive monetary policy. See Arias et al. (2019).
 9. The analysis provides statistical distributions of the contributions of the shocks and the deviation of the actual loan growth rate from the hypothetical model simulation without shocks (unconditional forecast). The chart represents the median of each of these distributions. A difference between the black line, the median of the difference in the unconditional forecast and the sum of the median contributions of the shocks can be explained by the fact that the median of a sum is not necessarily equal to the sum of the medians of the summands.
 10. The estimated model equation for the monetary policy indicator would have required a much more expansionary monetary policy in response to the sharp decline in GDP during the COVID-19 pandemic in the first quarter of 2020 than was actually the case. A monetary policy easing as predicted by the model would probably not have been feasible at all, owing to the effective lower bound and limits on potential monetary policy purchase programmes. The model therefore diagnoses a restrictive monetary policy shock at this point in time, followed by a somewhat less pronounced expansionary monetary policy shock in the second quarter, when GDP partially recovered. In the shock decomposition, the effect of the first, restrictive monetary policy shock prevails throughout 2020. For more information, see footnote 35 in Deutsche Bundesbank (2023a).
 11. This also applies to the decomposition of the other variables, in particular M3. By contrast, the results pertaining to the role of aggregate demand shocks and monetary policy shocks are similar to those for the euro area in Deutsche Bundesbank (2023a).

The quantitative importance of loan supply and loan demand for loan growth

A model-based analysis is necessary in order to identify loan supply and demand as drivers of loan growth. The approach described below merges information on the dynamics of loan volumes from the balance sheet statistics of the monetary financial institutions (MFIs) with data on average interest rates for (new) loans from the MFI interest rate statistics as well as with BLS data.^[1] The analysis also takes into account the macroeconomic environment (including monetary policy), which has a bearing on developments in the loan market. This model can be used to show the observed annual growth rate of loans to non-financial corporations as the sum of all unexpected changes in loan supply and demand in the past – i.e. shocks – as well as the development of exogenous variables and an unidentified residual component. Unlike in the supplementary information on the macro-financial Bayesian VAR model, this approach specifically aims to map the unexpected changes in loan growth to one of the two sides of the market.

The VAR model presented here focuses on the relationships between loan growth, the lending rate, the change in credit standards according to the BLS (BLS standards) and the change in loan demand according to the BLS (BLS demand). It also takes into account the effects of various exogenous variables, namely the rates of change in gross domestic product and the consumer price index, as well as a short-term money market rate (three-month EURIBOR). These variables capture the effects of the macroeconomic environment on the loan market. These effects can influence the identification of unexpected changes in loan supply and demand, which means that they should be excluded as far as possible from a model that is, nonetheless, parsimoniously parametrised. The coefficients and residuals are estimated using the ordinary least squares (OLS) method over the period from the first quarter of 2003 to the first quarter of 2024.^[2]

The residuals of the loan growth equation are decomposed into supply and demand effects as well as into an unidentified remainder component. This is done by defining a combination of zero and sign restrictions that parts of the residuals must meet in order to be attributed to the shock in question; see Table 3.2. The restrictions reflect the definition of loan supply and demand, supplemented by the assumed response of

the BLS variables. As a case in point, a tightening of the BLS standards is identified as a loan supply shock only if it exceeds the level expected according to the model and coincides with an unexpected decline in loan growth and a rise in the lending rate. The four endogenous variables of the model can now be represented as a linear combination of all shocks that occurred up to the respective point in time and exogenous influences; see Chart 3.18. “Macroeconomic environment” refers here to the universe of exogenous effects. These include the contribution made by government assistance loans to energy suppliers in 2022, which initially biased aggregated loan growth upwards and then, at end-2023/early 2024, downwards. The contribution of the unidentified shocks shown in the chart reflects the effects of the residual components that do not correspond to the schema described above.

According to the model decomposition, after the peak economic impact of the coronavirus pandemic, both the increase in loan growth up to mid-2022 and the subsequent decline were mainly driven by the macroeconomic environment, which, in the specification chosen, also includes monetary policy. In addition, unexpected changes in loan growth mainly reflect particularly weak loan demand. This weakness is likely to have been driven in part by factors that cannot be adequately factored into this small model. They include, amongst other things, the repayment of loans taken out by firms during the pandemic to bridge delays in incoming payments or for precautionary reasons. However, firms’ uncertainty about the longer-term consequences of the war in Ukraine, particularly regarding energy prices, is also likely to have contributed to the relatively persistent dampening effect on loan demand.

Unexpected loan supply restrictions on loans to enterprises cannot be identified for Germany. According to the model results, loan supply shocks supported loan growth, especially during the first phase of the coronavirus pandemic. The contribution of loan supply shocks is also positive rather than negative for the subsequent phase of initially rising and subsequently falling inflation rates, even though the positive contributions shown in the chart are not statistically significant throughout. The decomposition for the period considered here does not provide any evidence of significant dampening loan supply effects, which would have been caused, for example, by bank-related factors.

Table 3.2 Identifying zero and sign restrictions

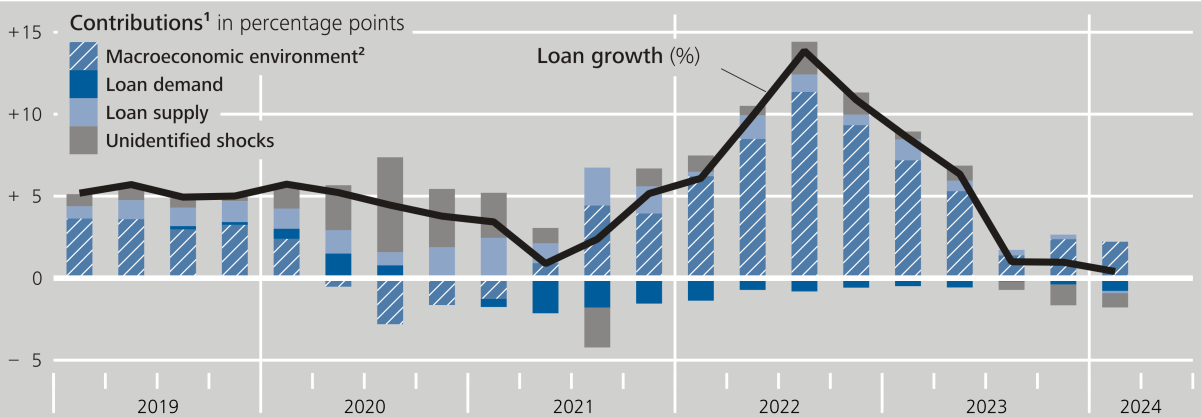
Variable	Shock	
	Loan supply	Loan demand
Loan growth	-	+
Lending rate	+	+
BLS standards	+	0
BLS demand	0	+

The restrictions apply to the period in which the shock occurs. A positive value of the “BLS standards” variable reflects a net tightening of credit standards.

BLS-based historical decomposition of the growth rate of loans to non-financial corporations in Germany

Chart 3.18

Year-on-year percentage change



1 Contributions from a VAR model for the annualised quarterly (log) change in stocks of loans, the lending rate, BLS standards and BLS demand (given exogenous GDP growth, inflation and short-term interest rates). **2** Contribution of the exogenous variables and KfW loans which were excluded from total lending when estimating the model.

Deutsche Bundesbank

1. The modelling follows the procedure outlined in Deutsche Bundesbank (2023h).
2. For the estimation, loan growth was adjusted for the contribution of KfW loans to non-financial corporations in Germany, as these represent a distorting one-off effect starting from the second half of 2022, in the wake of the energy crisis. In addition, the peak economic impact of the coronavirus pandemic in 2020 was excluded by disregarding the five observations from the first quarter of 2020 to the first quarter of 2021 when calculating the coefficient estimators and the covariance matrix; see Schorfheide and Song (2021).

List of references

Arias, J., D. Caldara and J. Rubio-Ramírez (2019), The systematic component of monetary policy in SVARs: An agnostic identification procedure, *Journal of Monetary Economics*, Vol. 101, pp. 1-13.

Arias, J., J. Rubio-Ramírez and D. Waggoner (2018), Inference based on structural vector autoregressions with sign and zero restrictions: Theory and applications, *Econometrica*, Vol. 86(2), pp. 685-720.

Bañbura, M., D. Giannone and M. Lenza (2015), Conditional forecasts and scenario analysis with vector autoregressions for large cross-sections, *International Journal of Forecasting*, Vol. 31(2015), pp. 739-756.

Best, L., B. Born and M. Menkhoff (2024), Wie passen Unternehmen ihre Investitionen an die gestiegenen Zinsen an?, *ifo Schnelldienst digital*, No 3/2024, 7 March 2024.

Boddin, D., M. Köhler and P. Smietanka (2023), Bundesbank Online Panel – Firms (BOP-F), Data Report 2023-07, Deutsche Bundesbank, Research Data and Service Centre.

Deutsche Bundesbank (2024a), The global disinflation process and its costs, Monthly Report, July 2024.

Deutsche Bundesbank (2024b), Forecast for Germany: German economy slowly regaining its footing – outlook up to 2026, Monthly Report, June 2024.

Deutsche Bundesbank (2023a), From the monetary pillar to the monetary and financial analysis, *Monthly Report*, January 2023, pp. 15-51.

Deutsche Bundesbank (2023b), BVAR model for estimating the effects of macroeconomic shocks on growth in gross domestic product, loans and the money supply and on the inflation rate, *Monthly Report*, January 2023, pp. 25-28.

Deutsche Bundesbank (2023c), Developments in bank interest rates in Germany during the period of monetary policy tightening, *Monthly Report*, June 2023, pp. 39-62.

Deutsche Bundesbank (2023d), *Financial Stability Review 2023*.

Deutsche Bundesbank (2023e), The performance of German credit institutions in 2022, Monthly Report, September 2023, pp. 87-125.

Deutsche Bundesbank (2023f), Germany as a business location: selected aspects of current dependencies and medium-term challenges, Monthly Report, September 2023, pp. 15-35.

Deutsche Bundesbank (2023g), German enterprises' profitability and financing during the 2022 energy crisis, Monthly Report, December 2023, pp. 55-71.

Deutsche Bundesbank (2023h), Identifying loan supply and loan demand using the Bank Lending Survey, Monthly Report, January 2023, pp. 41-43.

Deutsche Bundesbank (2022a), Monetary policy in a prolonged period of low interest rates – a discussion of the concept of the reversal rate, Monthly Report, March 2022, pp. 17-36.

Deutsche Bundesbank (2022b), The macroeconomic model of the Bundesbank revisited, Deutsche Bundesbank, Technical Paper, No 01/2022.

Deutsche Bundesbank (2020), The upswing in loans to enterprises in Germany between 2014 and 2019, Monthly Report, January 2020, pp. 13-44.

Deutsche Bundesbank (2015), Results of a wavelet analysis examining the relationship between lending to non-financial corporations and real economic activity in Germany, France, Italy and Spain, Monthly Report, September 2015, pp. 20-22.

Deutsche Bundesbank (2011), German banks' lending to the domestic private sector since summer 2009, Monthly Report, September 2011, pp. 59-78.

European Central Bank (2024), The euro area bank lending survey – First quarter of 2024.

Geiger, F. and F. Schupp (2018), With a little help from my friends: Survey-based derivation of euro area short rate expectations at the effective lower bound, Deutsche Bundesbank Discussion Paper No 27/2018.

Giannone, D., M. Lenza and G. Primiceri (2015), Prior selection for vector autoregressions, Review of Economics and Statistics, 97(2), pp. 436-451.

Kreditanstalt für Wiederaufbau (2024), KfW promotional business volume in the first quarter of 2024: return to normality after years of crisis, press release of 8 May 2024.

Kreditanstalt für Wiederaufbau (2023), Financial Report 2022.

Lenza, M. and G. Primiceri (2022), How to estimate a vector autoregression after March 2020, *Journal of Applied Econometrics*, Vol. 37, No 4, pp. 688-699.

Mandler, M. and M. Scharnagl (2020), Bank loan supply shocks and alternative financing of non-financial corporations in the euro area, *The Manchester School*, Vol. 88 (S. 1), pp. 126-150.

Schorfheide, F. and D. Song (2021), Real-time forecasting with a (standard) mixed-frequency VAR during a pandemic, National Bureau of Economic Research, Working Paper, No w29535.

The EU banking package

EU legislators have adopted a new legislative package to strengthen banking regulation. Published in the Official Journal of the European Union on 19 June 2024, this package is made up of the revised Capital Requirements Regulation (CRR) and the revised Capital Requirements Directive (CRD), and largely comprises the final elements of the global Basel III standards. It is sometimes referred to as the banking package or CRR III/CRD VI.

The bulk of the Basel III standards from 2010 have already been implemented in the EU. These have increased financial stability, strengthened banks' resilience and laid the foundations for the stable financing of the real economy. The final elements now complete the Basel framework by adjusting the methodology used in the calculation of capital requirements.

Besides implementing global standards, the banking package contains a number of other new features. One is that it incorporates environmental, social and governance (ESG) risks into banking regulation. Furthermore, it lays down clear rules for third-country banks operating in the EU, strengthens banking supervision, and tightens governance requirements.

The new regulations contained in the CRR are directly applicable and must be complied with by banks in the EU as of 1 January 2025. The amended CRD first has to be transposed into national law and is applicable as of 11 January 2026. Implementation work has been underway in Germany since the end of 2023.

1 Introduction

The banking package, as it is known, was published in the Official Journal of the European Union on 19 June 2024 and entered into force 20 days later. It is made up of the revised Capital Requirements Regulation (CRR) and the revised Capital Requirements Directive (CRD).¹⁾ As of 1 January 2025, banks in the EU will have to comply with the new CRR (CRR III) rules. The revised CRD (CRD VI), meanwhile, first has to be transposed into national law and is applicable as of 11 January 2026.

The main topic covered by the banking package is the implementation of the finalised Basel III standards adopted by the Basel Committee on Banking Supervision (BCBS) in December 2017.²⁾ These finalised standards form part of a package of measures addressing the weaknesses in the banking system that came to light during the 2007-09 financial crisis. The BCBS's first action came in 2010, when it laid down stricter capital rules (definition of capital, capital ratios, introduction of buffers), agreed on uniform liquidity standards and introduced a leverage ratio.³⁾ These standards were implemented into EU law back in 2013.⁴⁾⁵⁾ The second package of measures, from 2017, aimed to reduce unwarranted variability in RWA calculations across banks.

To achieve this goal, the standardised approaches used to calculate RWAs were revised and the scope given to individual banks to use their own internal model approaches was curtailed. These measures are complemented by the introduction of an output floor requirement for the calculation of RWAs. This limits banks further in the extent to which they can model their own risks and capital requirements.

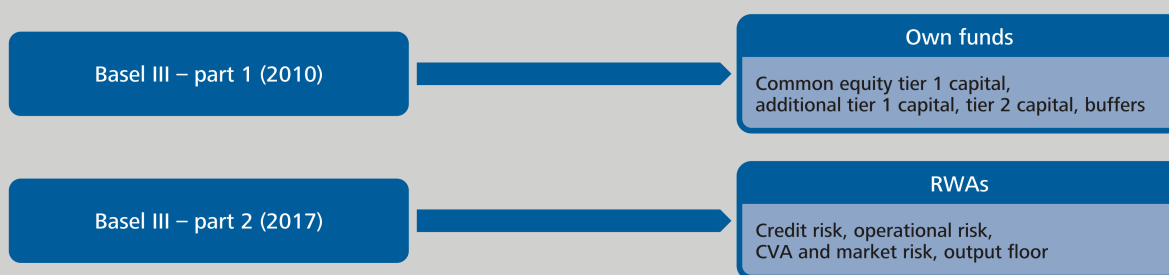
1 See Directive (EU) 2024/1619 and Regulation (EU) 2024/1623 of 19 June 2024.

2 See Basel Committee on Banking Supervision (2017).

3 See Basel Committee on Banking Supervision (2010).

4 See Directive 2013/36/EU of 26 June 2013 and Regulation (EU) No 575/2013 of 26 June 2013.

5 Banks in the EU that are categorised as global systemically important banks (G-SIBs) have been required since January 2021 to comply with a higher leverage ratio. This measure likewise forms part of the finalised Basel III standards. Its implementation was brought forward, however.



Besides implementing the finalised Basel III standards, the banking package contains other measures that can be regarded as a response to political challenges of the current era. These include the United Kingdom’s withdrawal from the EU (Brexit) as well the adoption of the European Commission’s Strategy for Financing the Transition to a Sustainable Economy.⁶⁾ In response to Brexit, EU legislators decided to subject banks established outside the EU to more harmonised and, in some parts, stricter supervision and regulatory treatment. Financing the transition to a sustainable economy is to be achieved, in part, by banks actively managing their sustainability (ESG) risks and this being monitored by the supervisory authorities.

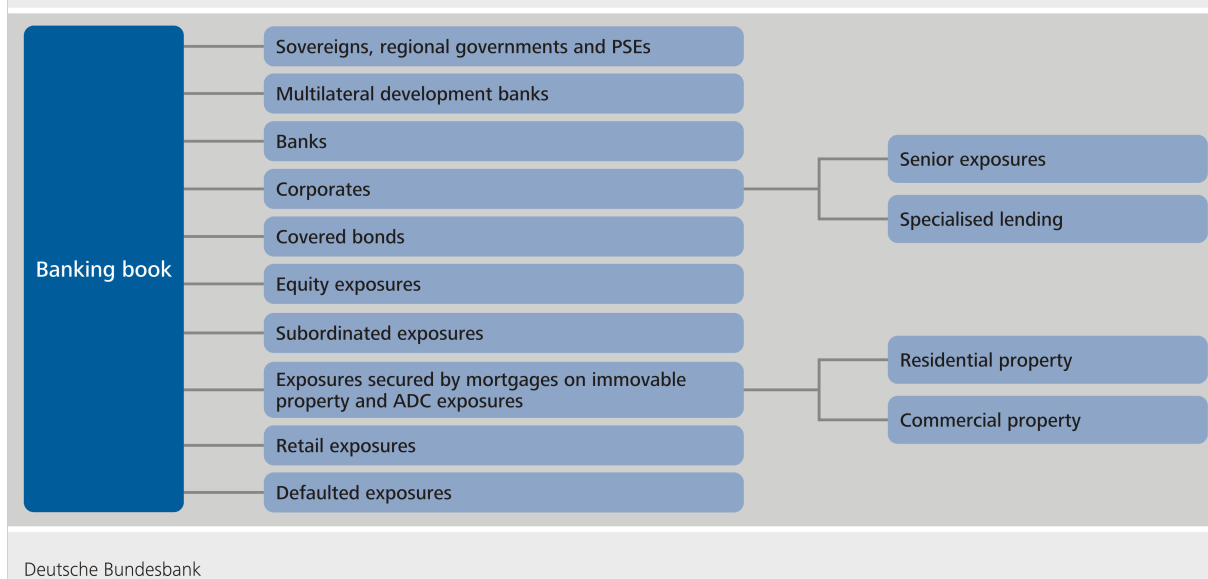
The individual components of the banking package are presented below. Part one discusses new legislation that originated from implementation of the finalised Basel III standards. Part two then presents the measures adopted in the context of political circumstances and issues of global relevance (such as climate change).

⁶ See European Commission (2021).

2 Basel III-related new legislation

2.1 Standardised approach for credit risk

The standardised approach for credit risk (SA-CR) is a methodology used for calculating the minimum capital requirements for credit risk in a bank's banking book, with the minimum capital requirements being determined based on prudential requirements. The revised SA-CR introduced more granular risk weights as a way of making the standard more risk-sensitive overall. Furthermore, the calibration was adjusted to the losses experienced during the financial crisis years, and efforts were made to achieve greater consistency with internal model approaches. One reason why this is important is that banks that use the internal ratings-based (IRB) approach to calculate their minimum capital requirements for credit risk in the banking book will also be required, going forward, to use the SA-CR to determine the RWA output floor (see the section entitled "Output floor: lower limit for capital requirements"). Another reason for updating the SA-CR is to reduce the reliance on external ratings, or to ensure that banks perform due diligence upfront to ensure the appropriateness of those ratings.



The manner in which capital requirements for interbank exposures are determined will change in terms of the importance and use of external ratings. Two techniques will be available for calculating these capital requirements: the External Credit Risk Assessment (ECRA) approach and the Standardised Credit Risk Assessment (SCRA) approach. As part of the implementation of the finalised Basel III standards, EU legislators agreed to continue to permit the use of external ratings provided these do not incorporate assumptions of government support. This measure aims to mitigate the nexus between banks and sovereigns and send the appropriate signal to market participants.^{7) 8)} The SCRA is intended for exposures without an external rating. Under this approach, the lending bank, with due regard for the prudential capital metrics and having performed due diligence, is required to assign the obligor bank to one of three risk weight buckets (grades), which indicates the appropriate risk weight to be applied. The risk weights used here range from 40 % (grade A) to 150 % (grade C). A risk weight of 30 % is also possible, subject to certain conditions (i.e. the leverage ratio meets or exceeds 5 % and the CET1 ratio meets or exceeds 14 %).

⁷ The option to determine the risk weight of an unrated exposure based on the external rating applicable to the central government of the country in which the borrowing bank is established has been deleted.

⁸ Capital requirements for public borrowers, i.e. central governments, regional governments, local authorities and public sector entities, have not been changed, however. It therefore remains possible to assign a zero weighting to these exposures.

The option of using external ratings has been retained in the corporate exposure class as well. Risk weights will be made more risk-sensitive.⁹⁾ As hitherto, a flat 100 % risk weight will be assigned in the absence of an external rating. Specialised lending exposures are subdivided into three subcategories: object finance, project finance, and commodity finance. If certain conditions are met, unrated project finance exposures and, on a transitional basis, unrated object finance exposures as well, can be given privileged treatment.¹⁰⁾ EU legislators likewise decided to leave the supporting factor for small and medium-sized enterprises (the “SME SF”), which already exists in the EU, unchanged.¹¹⁾ The new 85 % risk weight envisaged in the Basel standards for SMEs that cannot be assigned to the retail exposure class was not (additionally) implemented.

Subordinated debt and equity exposures will be grouped in separate exposure classes. The risk weights have been increased to take into account the greater risk of loss compared with senior loan exposures. In future, risk weights can be as high as 400 % for certain exposures (speculative equity exposures, for example). CRR III grandfathers what it calls strategic equity holdings – that is to say, equity investments that a bank has already been holding for at least six years and over which it can exercise a certain degree of control and influence continue to be exempt from the adjustment of risk weights. Furthermore, exemptions (still) apply to equity exposures to institutions covered by the same institutional protection scheme.¹²⁾ In general, subordinated debt exposures will receive a risk weight of 150 %.

In the retail exposure class,¹³⁾ a distinction will be made in future between normal exposures used to finance a retail customer and revolving exposures that result from payment transactions (such as credit card payments). The latter are assigned a more favourable risk weight of 45 % (instead of 75 %) if the banks can demonstrate regular repayments and thus a lower risk of loss.

Far-reaching changes will be made concerning real estate exposures. Overall, this exposure class will be rendered more granular, thus making the capital requirement more risk-sensitive. In the first step, a distinction is made between exposures secured by a residential property and those where a commercial property is

9 Inter alia, by means of a new 75 % risk weight for exposures rated BBB-.

10 In these cases, the risk weight is 80 % instead of 100 % or 130 %. The privileged treatment of object finance exposures represents a deviation from the Basel standard.

11 The SME SF applies to banks that use the IRB and SA-CR approaches. The risk weights for SME corporate exposures can be multiplied by a factor of 0.7625 up to an amount of € 1.5 million and by a factor of 0.85 for amounts of € 1.5 million and above.

12 The risk weight for these exposures remains at 100 % and has not been raised.

13 The criteria for assigning an exposure to the retail exposure class are set out in Article 123 of CRR.

used as collateral. In the second step, banks are required to assess whether the mortgage loan can be repaid out of the borrower's income ("classic" real estate exposure) or whether repayment is materially dependent on cash flows generated by the property (for example, rental income). CRR III continues to permit the use of the loan-splitting approach to calculate the capital requirement for "classic" real estate exposures. In this approach, the exposure is divided into a secured portion (loan-to-value ratio (LTV) of up to 55 %) and an unsecured portion (LTV above 55 %). The secured portion is assigned a flat risk weight of 20 % (secured by a residential property) or 60 % (secured by a commercial property), while the unsecured portion is assigned the obligor's risk weight (for example, 75 % for a retail obligor in a residential property exposure). The weighted average of the two portions is then the risk weight of the entire exposure. In future, exposures where repayment depends materially on the cash flows generated by the property will be subject to higher capital requirements because experience has shown that these have a higher risk of loss given default (LGD). CRR III introduces a new procedure for determining the risk weights for these exposures (the "whole loan" approach). This provides for individual ranges to which the total claim is assigned depending on the loan-to-value ratio. The higher the LTV, the higher the risk weights and thus the higher the capital requirements. Real estate exposures of this kind may, however, be subject to the same rules as "classic" real estate exposures if the national loss rates from real estate lending overall do not exceed certain ceilings, based on what is known as the hard test. The national competent authority (in Germany, the Federal Financial Supervisory Authority (BaFin)) conducts hard tests annually to assess whether this condition has been met. In addition, CRR III introduces a third category of mortgage loans. This category contains loans to companies and special-purpose vehicles (SPVs) financing land acquisition, development and construction (ADC) exposures. ADC exposures are normally risk-weighted at 150 %, regardless of the obligor's creditworthiness. If certain conditions are met, ADC exposures to residential properties may be risk-weighted at 100 %.¹⁴⁾

Moreover, CRR III amends the definition of "value" for immovable property collateral and eliminates the distinction between market value and mortgage lending value. Banks have to ensure that the value of a property is not based on possible future price increases, but is sustainable in the long term. This measure is intended to help ensure that the value of the collateral contains no speculative elements. EU legislators did, however, decide that, subject to certain conditions,

¹⁴ For example, where legally binding pre-sale or pre-lease contracts amount to a significant portion of total contracts or substantial equity at risk.

increases in the value of immovable property would be permitted during the life of a loan, as long as these do not exceed the average value measured over the previous years.¹⁵⁾

Another new measure is the introduction of a risk weight multiplier for unhedged foreign currency exposures. These are exposures denominated in a currency which is different from the currency of the obligor's source of income. This risk weight multiplier is applicable to exposures to natural persons assigned to the retail and residential real estate exposure classes. The idea behind it is to cover the risk of default that could arise if the currency in which the loan is denominated appreciates significantly.

Off-balance-sheet items will also be affected by changes to the SA-CR. These changes will affect unconditionally cancellable commitments (UCCs), for example. In future, 10 % of the committed but undrawn amount of such commitments will be recognised as an exposure and have to be backed by capital. Exempting these exposures from the capital requirement has proven unwarranted in practice. Unlike the Basel standard, however, CRR III allows this arrangement to be phased in up until the end of 2032.

The supervisory haircuts applied when counting financial collateral have also been updated to reflect newer market data and will have to be applied in future by all SA-CR banks that use the financial collateral comprehensive method. Institutions are no longer permitted to use their own haircut estimates as part of the financial collateral comprehensive method.

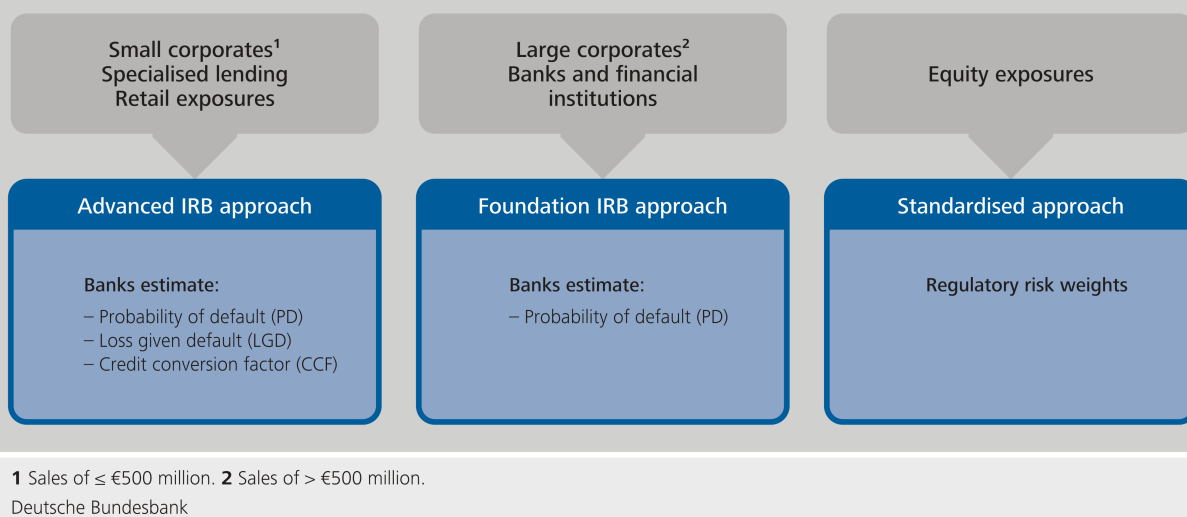
2.2 Internal ratings-based (IRB) approach

Banks that have received supervisory approval to use the IRB approach may estimate some of the parameters for calculating capital requirements for credit risk themselves. There are two different methods: the foundation IRB approach (F-IRB) and the advanced IRB approach (A-IRB). Banks using the F-IRB approach are allowed to provide their own estimates of the probability of default (PD), while the other risk parameters are specified by supervisors. Under the A-IRB approach, banks also provide their own estimates of loss given default (LGD) and the credit conversion factor (CCF) for off-balance-sheet exposures.

¹⁵ The horizon for calculating this average value is six years for residential property and eight years for commercial immovable property.

Internal ratings-based (IRB) approaches and application by exposure class

Chart 4.3



CRR III contains some changes aimed at limiting the unwanted variability in RWA calculations. The BCBS had found that banks were arriving at different results when determining capital requirements for the same risks,¹⁶⁾ resulting in a lack of transparency and comparability of capital requirements. This could be because of insufficient data for estimating the parameters or overly aggressive modelling.

To address this, the scope of application was adjusted and parameter estimates were limited, making the foundation IRB approach and SA-CR more meaningful. In future, it will not be permitted to use either the foundation or the advanced IRB approach to calculate the capital requirements for equity exposures. These must then be treated using the SA-CR. Under CRR III, portfolios in types of exposures that exhibit only low levels of default over time (“low-default portfolios”) may only be treated using the foundation IRB approach. These include exposures to large corporates (i.e. with annual sales of more than € 500 million) and to banks and financial sector entities. The reason given for this measure is that reliable estimates of LGD are only possible when there is sufficient data on defaults. A separate exposure class is introduced for exposures to regional governments, local authorities and public sector entities. The advanced IRB approach is still permitted for these. Exposures in the retail, specialised

¹⁶ See Deutsche Bundesbank (2018).

lending, and central governments and central banks exposure classes can likewise continue to be treated using the advanced IRB approach. However, input floors will apply in future for the risk parameters. This measure is intended to prevent capital requirements falling below a certain level and risks being underestimated. However, this comes at the price of reduced risk sensitivity and an incentive for banks to potentially take on greater risks given the same capital requirements. EU legislators have adopted the minimum values set by the BCBS. Going forward, the existing input floor for PD of 0.03 % will go up to 0.05 %. ¹⁷⁾ The input floors for the credit conversion factors are based on the regulatory values applied in the SA-CR. They have to be at least 50 % of these values. When calculating the input floors for LGD, a distinction must be made between secured and unsecured exposures. The values are based on the exposure class for unsecured exposures, and on the type of collateral for secured exposures. ¹⁸⁾

The regulatory LGD and conversion factor values in the foundation IRB approach have also been adjusted, which will result in slightly reduced capital requirements in future. Other changes relate to the scaling factor of 1.06 previously contained in the risk weight function. This no longer applies in CRR III, meaning that the capital requirements will be around 6 % lower in future, all other things being equal.

Upon application of CRR III, banks will also be allowed to decide anew which exposure classes to use the IRB approach for and which to use the SA-CR for. Previously, the IRB approach had to be “rolled out” to all exposure classes subject to supervisory approval. There were only exemptions for certain exposures (“partial use”). Partial use rules are still in place but will relate in future to the individual exposure classes for which banks have received approval to use the IRB approach. In addition to the regular procedure for reverting to less sophisticated approaches, CRR III sets out a simplified procedure. Banks have three years to apply. The 92 % coverage ratio for the IRB approach that previously applied in Germany will also no longer apply in this form in future. However, the exemptions for use of the SA-CR will largely remain in place. These include, for example, immaterial exposures within an exposure class for which a bank actually has approval to use the IRB approach, or exposures to central governments and central banks within the EU. In these cases, banks may use the SA-CR.

¹⁷ A PD input floor of 0.03 % will continue to apply for exposures to regional governments, local authorities and public sector entities, whilst a future PD input floor of 0.1 % will apply for qualifying revolving retail exposures.

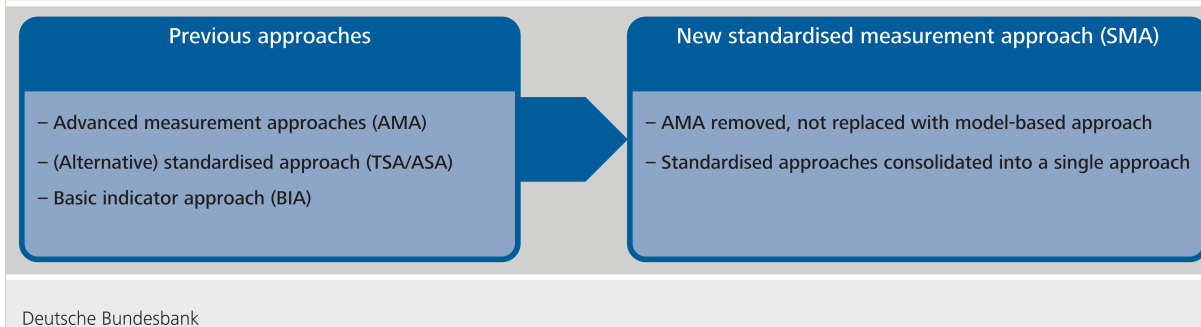
¹⁸ CRR III sets out a transitional period until the end of 2029 for the newly introduced input floors for specialised lending. They will increase from 50 % to 100 % of the final input floors up to that point.

2.3 Operational risk

There are currently three approaches to calculating capital requirements for operational risk. Two of these, the basic indicator approach and the standardised approach, are standardised procedures that use the credit institution's average gross income over the past three years as the basis for the calculation. Multiplying this average income by a regulatory percentage yields the capital requirements. The third approach, the advanced measurement approach (AMA), is an internal method that allows institutions to use their own estimates and assumptions. As regulation was reviewed in the wake of the financial crisis, however, it became clear that gross income was not a suitable indicator of a bank's operational risk. The BCBS also found that – much like with credit risk – there are large differences in the calculation of RWAs. This is because no uniform methodology for applying the AMA has become established among banks and supervisors. In addition, there were doubts as to whether an internal method, in the sense of greater risk sensitivity in this area, could create real added value.

As a result, the BCBS agreed to completely overhaul the calculation of the capital requirements. The three previous approaches were replaced by a new standardised measurement approach (SMA). While the SMA is similar to the basic indicator approach in how the calculations are made, it does not use gross income but something called the business indicator (BI) as the relevant variable. This is made up of three components:

- Interest, leases and dividend component: net interest income including income from leases and dividends;
- Services component: maximum of fee and commission income and fee and commission expense as well as maximum of other operating income and other operating expenses;
- Financial component: net profit and loss on the trading book and the banking book.



Also new in the revised framework is that positive values of all components feed into the calculation. This means that a negative net trading result, for example, also increases the basis for the calculation. Another new rule is that banks are divided into three categories according to their size. Larger banks are assumed to be exposed to higher levels of operational risk, and therefore also have to apply a higher percentage to calculate their capital requirements (18 % instead of the 12 % used by smaller banks). Finally, the calculation also includes a loss component, the internal loss multiplier (ILM). This is intended to further increase risk sensitivity and at the same time to give banks a stronger incentive to avoid operational risk. If a bank's losses are higher than average over the long term, the capital requirements increase. If they are lower than average, the capital requirements can be reduced by up to just under one-half.

EU legislators have incorporated the SMA, as adopted by the BCBS, into CRR III. Since the BCBS left its members free to choose whether or not to include the loss component and because, during the negotiations on CRR III, the dominant view was that historical operational losses are not a reliable basis on which to estimate future losses, the loss component was not implemented. However, large banks in the EU are required to record their operational losses and report them to supervisors.

2.4 Credit valuation adjustment (CVA) risk and market risk measurement approaches

CVA risk arises when the counterparty's credit quality is jeopardised and its creditworthiness may deteriorate. This risk assessment focuses on over-the-counter (OTC) derivatives. These harbour not only market risk, but also credit risk. If, for example, the credit quality of the derivative counterparty worsens, this negatively

affects the value of the derivative. The higher the price of the derivative, the greater the absolute loss in value. In order to measure this interplay between market risk and credit risk, two identical portfolios are considered, with only one assumed to exhibit potentially changing credit quality. The resulting difference in value is termed the credit valuation adjustment (CVA). Banks have to measure their CVA risk and calculate the relevant capital requirements. Aside from a change in counterparty credit quality (credit risk), CVA risk is also caused by a change in the absolute price of the derivative (market risk) or by a combination of both.

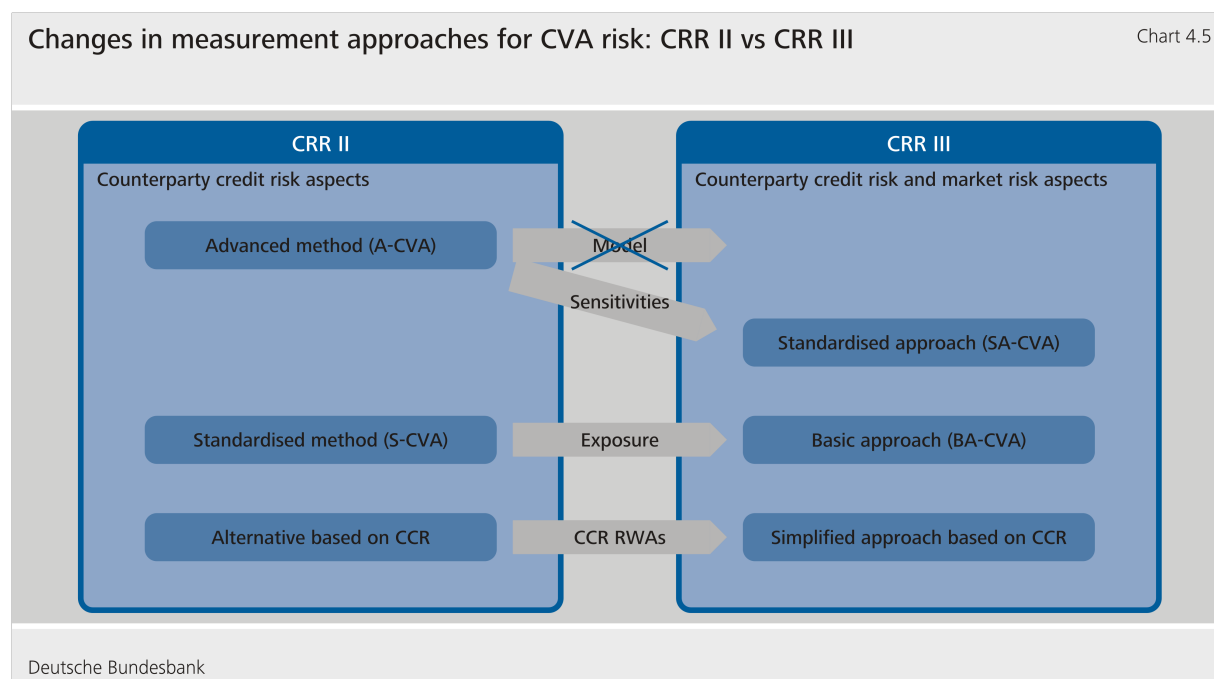
As banks incurred significant CVA losses during the financial crisis, CVA risk was included in the Basel III framework. In the EU, therefore, there is already a capital requirement for OTC derivatives. If a materiality threshold is exceeded, capital requirements for CVA risk also apply to securities financing transactions (SFTs). There are EU exemptions, however. For example, this rule does not apply to OTC derivatives transacted with EU Member States (public sector entities) and non-financial corporations. This derogation is a deviation from the Basel framework. EU legislators decided to keep this rule in CRR III as well. However, in future, banks will have to report their hypothetical CVA capital requirements for exempted transactions to supervisors.

The finalised Basel III framework revised the calculation approaches. As with operational risk, regulators decided to no longer allow internal models for calculating CVA requirements. Instead, there will be a new standardised approach (SA-CVA) that will lead to more methodological consistency with the Fundamental Review of the Trading Book (FRTB). This approach (SA-CVA) corresponds to a variance-covariance approach with correlations specified by supervisors and is intended for banks with more sophisticated derivatives portfolios. Use of this approach is therefore subject to supervisory approval. The new standardised approach also ensures that the market risk as well as the credit risk of derivatives are hedged.

In order to take the principle of proportionality into account, two further calculation methods are also introduced in CRR III. The basic approach (BA-CVA) is a method for calculating CVA capital requirements that may be used without supervisory approval. It is much simpler than the standardised approach and uses data already intended for calculating counterparty credit risk, which means banks have access to them without having to go to any extra effort. However, this approach does not hedge the market risk of derivatives.

The third approach is the simplified approach. It is intended for banks that have a comparatively small OTC derivatives portfolio. CRR III includes a threshold for this, which also applies for use of the original exposure method for counterparty credit risk (threshold for original exposure method: volume of derivatives business does not

exceed 5 % of the institution's total assets and € 100 million).¹⁹⁾ However, implementation of this is stricter than in the Basel standard.²⁰⁾ The capital requirements for CVA risk under this approach correspond to the capital requirements for counterparty credit risk. Supervisors can withdraw approval to use this approach, however, if CVA risk contributes materially to the bank's overall risk.



As regards market risk measurement approaches, the banking package also introduces the simplified standardised approach, the alternative standardised approach and the alternative internal model approach for capital purposes. Among the changes from CRR II, CRR III introduces new rules on the boundary of the trading book and the reclassification of positions. Moreover, it also defines requirements for internal risk transfers between the non-trading book and the trading book. At the same time, the European Commission is empowered to adopt a delegated act allowing it to delay the entry into force of the market risk rules by up to two years and, initially, to adjust the level of the capital requirements.²¹⁾

¹⁹ Threshold for simplified approach based on CCR: the volume of derivatives business does not exceed 5 % of the bank's total assets and € 100 million.

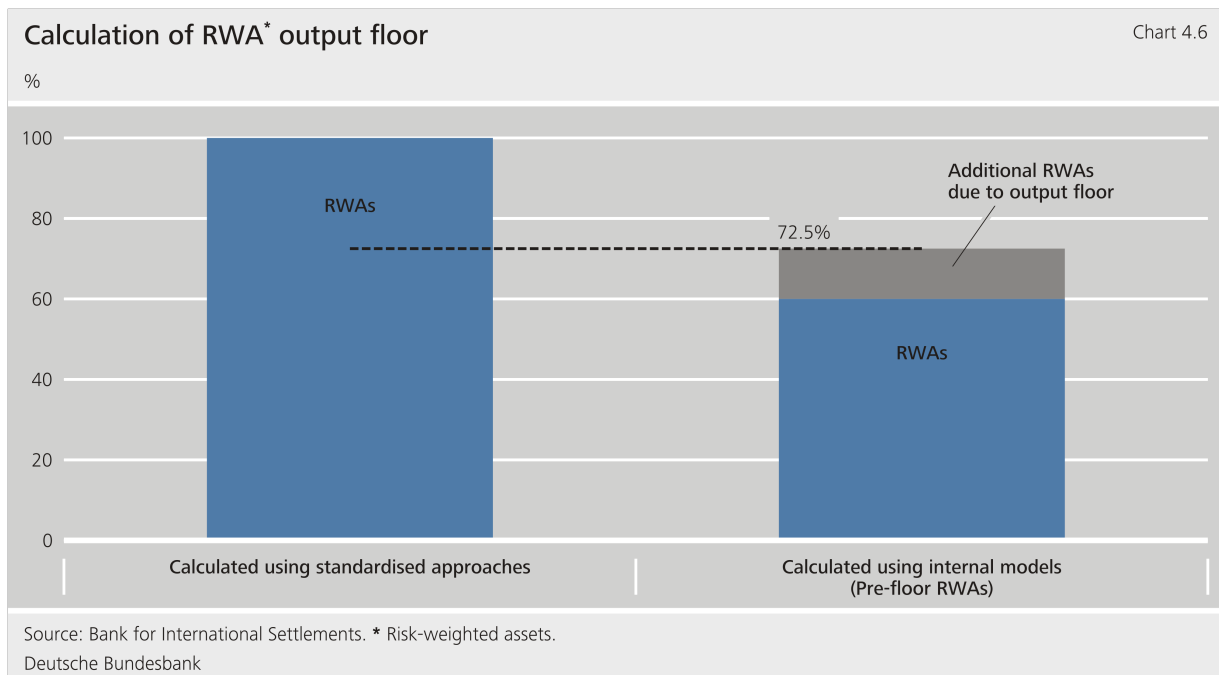
²⁰ The Basel standard stipulates that credit institutions with an OTC derivatives portfolio of less than or equal to € 100 billion may apply the simplified method.

²¹ On 18 June 2024, the European Commission announced a one-year delay to application of the market risk framework to 1 January 2026. However, the exact design of the delegated act was not yet known as this Monthly Report went to press. See European Commission (2024).

2.5 Output floor: lower limit for capital requirements

The use of internal models to determine RWAs generally results in lower capital requirements than the use of regulatory standardised approaches. The gap between capital requirements is especially pronounced for lower-risk portfolios. In addition, when applying internal models of different banks to identical portfolios, there is strong dispersion in the resulting capital requirements. This leads to a lack of comparability for capital requirements and runs counter to the objective of creating a level playing field and an internationally harmonised set of rules.

Against this backdrop, there are differing views internationally on the benefits of using internal models to calculate capital requirements. While some jurisdictions, including the EU, generally consider their use to be beneficial as they increase risk sensitivity, other jurisdictions, including the United States for example, have less confidence in banks' own estimates. This led to lengthy and complicated deliberations during the negotiations on finalising the Basel III package. The upshot was that the BCBS agreed to continue to permit the use of internal models. However, the maximum possible reduction in capital requirements compared with use of the standardised approaches was limited. This means that RWAs cannot fall below a certain value when using internal models. This threshold is also referred to as the output floor. The output floor is measured as a percentage (72.5 %) of RWAs calculated using the standardised approaches. Banks that use internal models must therefore additionally calculate RWAs using the standardised approaches, multiply them by 72.5 % and, if necessary, increase their RWAs to that level if their model-based RWAs and thus the capital requirements are lower. The potential reduction in capital requirements compared with the use of standardised approaches is thus capped at 27.5 %.



EU legislators incorporated this rule into CRR III and CRD VI. However, there will be some idiosyncrasies in the calculation of additional capital add-ons, such as the existing capital buffers and Pillar 2 add-ons. In addition to the minimum capital requirement of 8 % of RWAs, there are further capital requirements for banks depending on their economic situation (e.g. the systemic risk buffer and the countercyclical capital buffer), their size and complexity (e.g. the buffers for other systemically important institutions (O-SIIs) and global systemically important institutions (G-SIIs)), and their individual risk situation (e.g. Pillar 2 add-on). Some of these add-ons may also address risks arising from the use of internal models. This is true of the systemic risk buffer and the Pillar 2 add-on, for instance. As the risk of potentially insufficient capital requirements based on models will already be limited by the output floor in future and a double capital requirement should be avoided, these add-ons are initially being reviewed by banking supervisors. An automatic increase which would arise from the RWA increase given a binding output floor cannot take place until this review. The same applies to the capital add-ons for O-SIIs and G-SIIs, as an RWA increase gives the size component a greater weight in the calculation.

Another idiosyncrasy is the level of application of the RWA output floor for banking groups in the EU. In the EU, capital requirements also apply at the single entity level. In other words, subsidiaries of banking groups must comply with the requirements, just the same as the parent institution. Accordingly, the output floor will likewise have to be complied with at the single entity level. Going forward, however, EU Member States will

be able to decide for themselves whether banking groups within their national borders need to comply with the output floor only at the highest level of consolidation. This rule will not apply across borders, though, because in a crisis situation a transfer of capital across national borders does not seem sufficiently safe.

In addition to these permanent idiosyncrasies in the implementation of the output floor, CRR III includes a number of temporary derogations from the Basel standard.

One is that the output floor will be phased in from 1 January 2025 to 31 December 2029. It will therefore only come into full force (72.5 %) two years after the international implementation deadline. Another is that CRR III provides for various reduced requirements for the calculation of RWAs under the standardised approaches. However, these only apply to those banks that are required to calculate the output floor.²²⁾ They include the following, in particular:

- a lower risk weight for certain corporate exposures for which no credit assessment by an ECAI is available under the SA-CR (65 % instead of 100 %), for a transitional period up to 31 December 2032;
- a lower risk weight for certain exposures secured by mortgages on residential property (10 % on the secured portion instead of 20 %), for a transitional period up to 31 December 2032;
- a lower risk weight when calculating capital requirements for counterparty credit risk, for a transitional period up to 31 December 2029;
- a lower risk weight for certain securitisation positions, for a transitional period up to 31 December 2032.

22 Until the full introduction, the potential RWA increase will additionally be limited to 25 % for banks in accordance with the Basel standard.

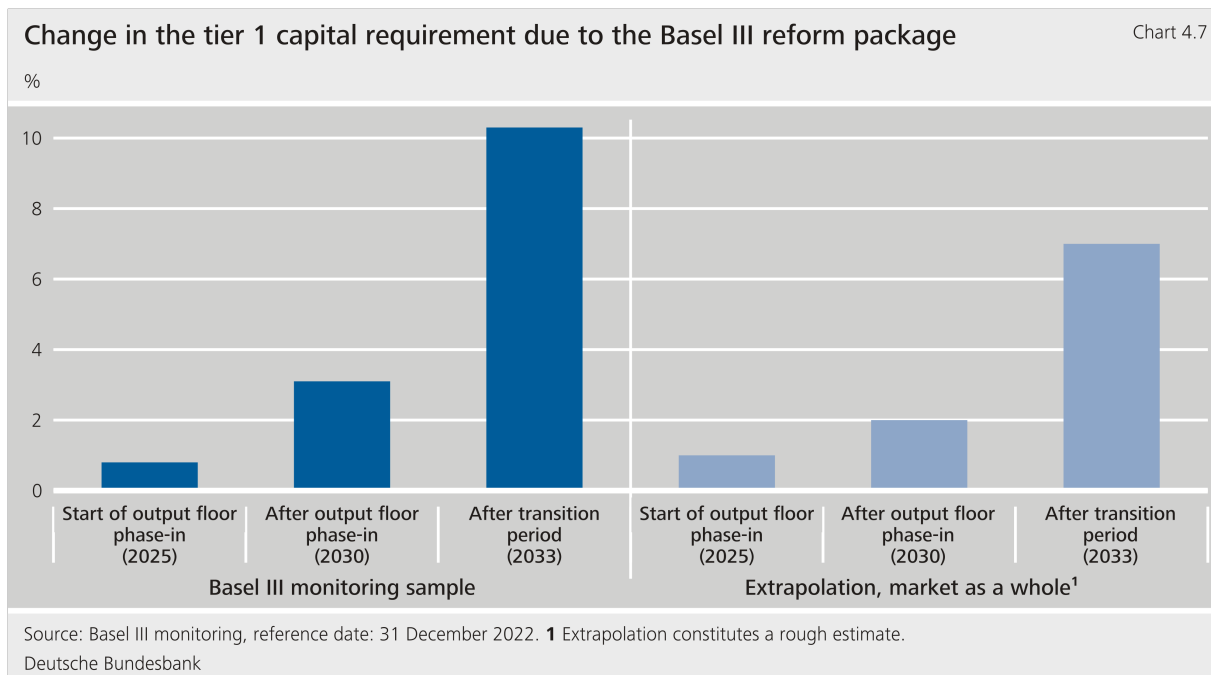
3 Impact of the Basel III finalisation on German institutions

Since 2011, the BCBS, in cooperation with national supervisory authorities, has been conducting a comprehensive global data collection initiative to assess the impact of the new standards on banks' capital requirements. 40 German banks are also participating in the initiative, primarily larger banks that use the IRB approach for credit risk. Once the transitional arrangements stipulated in the legislation come to an end in 2033, the EU implementation of the Basel III finalisation will lead to an increase of around 10.3 %²³⁾ in capital requirements²⁴⁾ in this sample. During the transitional period, a large part of this increase will thus be cushioned by the transitional arrangements. In 2030, the additional capital requirement will still be only around 3.1 %. However, as this sample is dominated by larger banks, the results cannot be extrapolated one-to-one to the German banking market as a whole. The Bundesbank estimates that the total capital requirement of all German banks could rise by around 2 % in 2030 and by 7 % in 2033. This corresponds to around € 25 billion up to 2033. This is manageable for the German banking market, as it is equipped with sufficient capital over and above the minimum requirement.²⁵⁾

²³ The reference date for the data collection is 31 December 2022.

²⁴ Tier 1 capital.

²⁵ Approximately € 160 billion in additional common equity tier 1 capital is available in the German banking market.



Compared with a strict implementation of the requirements in the Basel III finalisation, these effects are significantly smaller. One-to-one implementation would have led to an increase of 18.5 % in minimum requirements in the sample and an extrapolated 15 % for the German market as a whole.

In the EU, the output floor will be phased in from 2025, starting at 50 %. Initially, it will not be binding for any of the German banks in the sample. The transitional arrangements referred to in the section on the output floor are intended to mitigate the impact of the output floor on the capital requirement of banks using internal models. In particular, the relief for non-externally rated corporate positions is of particular importance here. Banks that apply the SA-CR will benefit most from EU-specific CVA exemptions, which were already included in CRR II and are maintained in the new legislation.

Table 4.1 – Changes in the tier 1 capital requirement due to EU implementation
 (%), reference date: 31 December 2022

Sample	2025 Output floor of 50 %	2030 Output floor of 72.5 %	2033 Output floor of 72.5 %
	0.8	3.1	10.3
of which			
IRB banks	0.5	3.5	13.0
SA-CR banks	1.8	1.8	1.8

4 Other changes

4.1 Sustainability risks in banking regulation

Both climate change and the transition to a sustainable and, in particular, climate-neutral economy are presenting the European banking system with major challenges.²⁶⁾ For this reason, sustainability risks, especially ESG risks,²⁷⁾ play a pivotal role not only in the public perception but also in the supervisory debate and, with the new provisions, are now being more closely integrated into the CRD and the CRR;

Table 4.2 – Changes in the area of ESG risks

New obligations for credit institutions			
Obligation to prepare prudential plans <i>Article 76(2) of CRD VI</i>	Introduction of ESG reporting <i>Article 430(1)(h) of CRR III</i>	Disclosure requirements regarding ESG risks for all institutions <i>Article 449a of CRR III</i>	Inclusion of ESG risks in the valuation of collateral <i>Article 207(4)(d) of CRR III</i>
New supervisory powers			
Integration of ESG risks into the Supervisory Review and Evaluation Process (SREP) <i>Article 98 of CRD VI</i>	Power to require institutions to make adjustments to prudential plans <i>Article 104(1)(m) of CRD VI</i>	Use of systemic risk buffer for climate-related risks <i>Article 133 of CRR III</i>	
EBA mandates			
Report on any risk discrepancies between assets subject to ESG factors and other assets <i>Article 501c of CRR III</i>	Guidelines on ESG risk management and prudential plans <i>Article 87a(5) of CRD VI</i>	Guidelines on banks' climate stress testing <i>Article 87a(5) of CRD VI</i>	Modification of Supervisory Review and Evaluation Process (SREP) to take account of ESG risks <i>Article 98 of CRD VI</i>

²⁶ See Deutsche Bundesbank (2023).

²⁷ The importance of ESG risks is also underlined by the fact that they are now defined for the first time in the CRR (Article 4(1) (52d)).

The changes to the CRR mainly concern disclosure and supervisory reporting.

The aim is to ensure that supervisory authorities have at their disposal data that are sufficiently granular, comprehensive and comparable to ensure effective supervision. ESG-related disclosure requirements will be extended to all institutions. Until now, they were only applicable to large, publicly traded banks. In addition, the requirements will be specified in more detail and expanded. For example, institutions must disclose information on ESG risks, distinguishing environmental, social and governance risks, and physical risks as well as transition risks for environmental risks. ²⁸⁾ Moreover, banks must disclose how they integrate the identified ESG risks in their business strategy and processes, governance and risk management.

The new ESG-related provisions in CRD VI can be broken down into two categories: new obligations for banks and additional powers for supervisory authorities. In addition, they envisage various new mandates for the EBA (see Table 4.2).

In future, banks will have to take ESG risks into account in their internal capital planning and in their regular strategy review, considering the short, medium and long term. Another new element is the obligation for management bodies to set out specific plans outlining the ESG risks their bank is exposed to and how it will address them. These also include risks arising from the transition towards a climate-neutral economy, such as policy measures that could drive up costs in certain sectors and thus increase default risk for the banks financing them. Furthermore, a bank's remuneration rules and practices must be aligned with its ESG strategy. This applies, in particular, to the level of variable remuneration.

In line with banks' new obligations, supervisory authorities can demand a reduction in the exposure to ESG risks on a case-by-case basis. In addition, they can require institutions to adjust the targets, measures and actions in the above-mentioned plans.

²⁸ Transition risks are defined as risks arising from the transition to a low-emission economy. Physical risks, on the other hand, comprise damage resulting from extreme weather events or the gradual change in climate (see Deutsche Bundesbank (2023)).

4.2 Crypto-assets

The revised CRR and CRD introduce provisions on the prudential treatment of crypto-asset exposures for the first time. In December 2022, the BCBS adopted a global standard on this subject,²⁹⁾ which has now been incorporated into the legislative text in the form of transitional arrangements.

Within this framework, crypto-assets are broken down into three groups for the purposes of calculating capital requirements. These are based in part on some of the crypto-asset categories introduced by the Markets in Crypto-Assets Regulation (MiCAR).³⁰⁾ For the riskiest group of crypto-assets, the total permissible holdings are limited to 1 % of a bank's tier 1 capital. In addition, CRR III and CRD VI contain relevant definitions and reporting and disclosure requirements, as well as requirements for banks' risk management and supervisory processes. The European Commission has until mid-2025 to submit a separate legislative proposal addressing the other elements of the Basel standard (for example, specific liquidity requirements).

4.3 Harmonised framework for the supervision of third-country branches

At present, supervising branches of banks established outside the European Economic Area (EEA) is largely a national matter.³¹⁾ As a result, national requirements for third-country branches range from minimal rules to broadly similar treatment to any other (subsidiary) institution. CRD VI now establishes a single framework for the supervision of third-country branches. The rules of the framework are structured as minimum requirements. This means that Member States will be able to impose stricter requirements on third-country branches and maintain their existing framework (in whole or in part), provided that their national requirements are aligned with those applicable to a credit institution as defined in the CRR. As a general rule, a bank domiciled in a third country that operates within a Member State of the EEA may do so only via a third-country branch authorised by the competent supervisory authority.

²⁹ See Basel Committee on Banking Supervision (2022).

³⁰ See Regulation (EU) 2023/1114 of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 (text with EEA relevance).

³¹ One of the few caveats can be found in Article 47(1) of CRD, which stipulates that third-country branches may not be given more favourable treatment than that accorded to EEA institutions.

Unlike in the case of subsidiaries, however, this authorisation applies only to the Member State in which the branch is authorised. The provision of cross-border services by a third-country branch within the EEA is not permitted. Exemptions from these principles exist for intra-group transactions both between the third-country institution and its branches and among the branches themselves, as well as for interbank transactions. Reverse solicitation is also permitted, provided that it is at the own exclusive initiative of the client.

4.4 Supervisory powers and fines

Supervisory powers will be expanded in some areas and new notification requirements will be introduced. For example, a bank will be obliged to notify the competent authority if it acquires material holdings in financial or non-financial sector entities. A holding is considered to be material if it exceeds 15 % of the eligible capital of the proposed acquirer. In future, banks and entities defined as (mixed) financial holding companies, as well as entities within the same group, will also have to notify the competent authority in advance of material transfers of assets and liabilities. In addition, the competent authorities must be notified of far-reaching business decisions such as mergers or divisions.

Periodic penalty payments are another new element in the legislation. The competent authorities are now authorised to impose periodic penalty payments per day of breach for infringements of rules resulting from the CRR and CRD or of decisions taken by a competent authority on the basis of those rules. This is to ensure that banks return to compliance with supervisory requirements as quickly as possible. In future, there will be a uniform definition of total annual net turnover, which will be used as the basis for calculating the maximum amount of administrative penalties and periodic penalty payments that can be imposed on a legal person. The maximum amount for periodic penalty payments that can be imposed on a natural person per day of breach is € 50,000.

4.5 Governance

The new rules introduced by CRD VI will also strengthen the governance requirements for banks. Among other elements, with regard to suitability

assessments they introduce an ex ante suitability notification for “large firms”.³²⁾ In future, large firms will be required to notify the competent authority if they intend to appoint members of the management body in its management function or the chair of the management body in its supervisory function at least 30 working days before the prospective member takes up the position and submit the documents necessary for the suitability assessment.

The new legislation introduces a suitability assessment by the competent supervisory authorities for the heads of internal control functions³³⁾ and the chief financial officers (CFO) of large institutions. If supervisors do not consider such candidates to be suitable for the position, they have the power to prevent them from taking up the position, remove them from the position or require additional measures to ensure their suitability. Another important innovation is the inclusion of direct reporting lines from the heads of internal control functions to the institution's management body in its supervisory function and the requirement that they can be removed from their function in the future and with the prior approval of the management body in its supervisory function.

³² Large firms are defined as large entities and large subsidiaries, as well as parent financial holding companies and parent mixed financial holding companies that have large institutions within their group. In accordance with Article 4(1) No 146 of Regulation (EU) 575/2013, inter alia institutions with total assets of at least € 30 billion are categorised as large institutions.

³³ The internal control functions comprise the risk control and compliance functions as well as internal audit.

5 Conclusion

The implementation of global standards will further strengthen the resilience of global financial markets. By adopting CRR III and CRD VI, the EU has sent an important signal to the global financial supervisory community. Moreover, banking regulation will thus be adapted to the challenges of today and supervisors will be given new powers to better monitor new risks.

German banks have sufficient capital. The Bundesbank therefore does not expect that banks will need to raise additional capital in order to fulfil the new requirements. Nor does it see the financing of the real economy as being jeopardised by the implementation of the new rules.³⁴⁾ This is partly thanks to the long phase-in period up to December 2032.

³⁴ See Deutsche Bundesbank (2022).

List of references

Basel Committee on Banking Supervision (2022), Prudential treatment of cryptoasset exposures.

Basel Committee on Banking Supervision (2017), Basel III: Finalising post-crisis reforms.

Basel Committee on Banking Supervision (2010), Basel III: A global regulatory framework for more resilient banks and banking systems.

Deutsche Bundesbank (2023), Sustainability risks in banking supervision, Monthly Report, April 2023, pp. 75-95.

Deutsche Bundesbank (2022), Basel III reform package: Bundesbank sees no impediments to SME funding.

Deutsche Bundesbank (2018), Finalising Basel III, Monthly Report, January 2018, pp. 73-89.

European Commission (2024), Keynote speech by Commissioner McGuinness at the European Financial Integration 2024 joint conference of the European Commission and the European Central Bank.

European Commission (2021), Strategy for Financing the Transition to a Sustainable Economy.

European Council and European Parliament (2024), Regulation (EU) No 2024/1623.

European Council and European Parliament (2024), Regulation (EU) No 2024/1619.

Statistical Section

■ Contents

■ I. Key economic data for the euro area

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

■ II. Overall monetary survey in the euro area

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

■ III. Consolidated financial statement of the Eurosystem

1. Assets	16*
2. Liabilities	18*

■ IV. Banks

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

■ V. Minimum reserves

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

■ VI. Interest rates

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

■ VII. Insurance corporations and pension funds

1. Assets	48•
2. Liabilities	49•

■ VIII. Capital market

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

■ IX. Financial accounts

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

■ X. Public finances in Germany

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

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

■ XI. Economic conditions in Germany

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

■ XII. External sector

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

I. Key economic data for the euro area

1. Monetary developments and interest rates

Period	Money stock in various definitions 1,2					Determinants of the money stock 1				Interest rates		
	M1	M2	M3 3		MFI lending, total	MFI lending to enterprises and households	Monetary capital formation 4	€STR 5,6	Yield on European government bonds outstanding 7			
			3-month moving average (centred)									
	Annual percentage change								% p.a. as a monthly average			
2022 Oct.	3.5	5.0	4.9	5.1	5.1	5.3	-0.4	0.66	3.0			
Nov.	2.1	4.5	4.6	4.4	4.8	5.2	0.2	1.37	2.7			
Dec.	0.2	3.4	3.8	3.8	3.9	4.4	0.9	1.57	2.8			
2023 Jan.	-1.3	2.5	3.0	3.1	3.0	3.7	1.6	1.90	2.9			
Feb.	-3.1	1.7	2.5	2.5	2.6	3.3	2.1	2.28	3.0			
Mar.	-4.7	1.0	2.0	2.0	2.0	2.9	2.5	2.57	3.1			
Apr.	-5.7	0.5	1.4	1.5	1.4	2.4	2.6	2.90	3.0			
May	-7.0	-0.1	0.9	0.9	0.9	2.3	3.4	3.08	3.0			
June	-8.0	-0.6	0.5	0.4	0.4	1.6	3.6	3.24	3.0			
July	-9.1	-1.4	-0.4	-0.4	0.1	1.3	4.1	3.40	3.1			
Aug.	-10.4	-2.4	-1.3	-0.9	-0.1	0.7	4.5	3.64	3.2			
Sep.	-9.9	-2.2	-1.2	-1.2	-0.4	0.4	4.9	3.75	3.3			
Oct.	-10.0	-2.2	-1.0	-1.0	-0.5	0.4	5.5	3.90	3.5			
Nov.	-9.5	-1.9	-0.9	-0.6	-0.7	0.2	5.3	3.90	3.3			
Dec.	-8.5	-0.9	0.1	-0.2	-0.4	0.4	4.8	3.90	2.7			
2024 Jan.	-8.6	-1.1	0.1	0.2	-0.4	0.4	5.2	3.90	2.8			
Feb.	-7.8	-0.6	0.4	0.5	-0.3	0.8	5.1	3.91	2.9			
Mar.	-6.6	-0.2	0.9	0.9	-0.2	0.8	5.2	3.91	2.9			
Apr.	-5.9	0.1	1.3	1.3	0.0	0.8	5.1	3.91	3.0			
May	-4.9	0.7	1.6	...	-0.1	0.5	4.7	3.91	3.0			
June	...	...	...	...	...	...	...	3.75	3.1

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

Short-Term Rate. 6 See also footnotes to Table VI.3, p. 43*. 7 GDP-weighted yield on ten-year government bonds. Countries included: DE, FR, NL, BE, AT, FI, IE, PT, ES, IT, GR, SK, CY, SI.

2. External transactions and positions *

Period	Selected items of the euro area balance of payments r								Euro exchange rates 1		
	Current account		Financial account						Reference rate vis-à-vis the US dollar	Effective exchange rate 3	
	Balance	of which: Goods	Balance	Direct investment	Portfolio investment	Financial derivatives 2	Other investment	Reserve assets		Nominal	Real 4
	€ million								EUR 1 = USD ...	Q1 1999 = 100	
2022 Oct.	- 12,064	- 10,351	+ 13,389	- 15,148	- 15,008	+ 11,982	+ 27,637	+ 3,926	0.9826	94.5	91.3
Nov.	+ 11,675	+ 5,514	- 22,018	- 32,401	- 32,225	+ 3,494	+ 38,596	+ 518	1.0201	95.7	92.3
Dec.	+ 30,757	+ 9,240	+ 63,792	+ 79,964	+ 52,268	- 16,673	- 56,575	+ 4,808	1.0589	96.8	92.6
2023 Jan.	- 16,127	- 14,473	+ 1,049	- 14,373	+ 22,276	- 5,068	+ 6,861	- 8,646	1.0769	97.1	92.8
Feb.	+ 14,206	+ 20,610	- 10,152	+ 34,568	- 39,111	+ 8,732	- 2,988	- 11,354	1.0715	97.0	93.1
Mar.	+ 30,270	+ 38,987	+ 68,146	+ 9,148	- 92,070	- 3,321	+ 152,937	+ 1,453	1.0706	97.3	93.3
Apr.	+ 8,277	+ 7,348	- 6,231	- 29,333	+ 67,239	- 1,507	- 40,769	- 1,863	1.0968	98.4	94.2
May	- 10,717	+ 15,447	- 18,078	- 58,134	+ 43,581	+ 7,018	- 11,903	+ 1,360	1.0868	98.0	93.6
June	+ 32,406	+ 32,585	+ 75,618	+ 82,370	- 42,091	- 10,329	+ 43,283	+ 2,385	1.0840	98.2	93.8
July	+ 25,549	+ 21,945	+ 39,707	- 29,594	+ 51,761	- 8,097	+ 25,239	+ 398	1.1058	99.2	95.0
Aug.	+ 25,057	+ 21,746	+ 10,921	+ 1,863	- 6,851	+ 3,823	+ 10,784	+ 1,301	1.0909	99.0	95.0
Sep.	+ 32,885	+ 28,144	+ 43,576	+ 17,411	- 57,369	+ 3,176	+ 84,232	- 3,874	1.0684	98.5	94.6
Oct.	+ 14,816	+ 14,159	+ 44,847	+ 3,358	- 12,005	+ 17,054	+ 32,902	+ 3,538	1.0563	98.0	94.1
Nov.	+ 32,629	+ 33,319	+ 28,445	+ 1,836	+ 19,914	+ 1,072	+ 4,246	+ 1,376	1.0808	98.7	94.6
Dec.	+ 40,473	+ 28,842	+ 47,040	- 13,043	- 48,162	+ 4,853	+ 101,916	+ 1,476	1.0903	98.2	94.0
2024 Jan.	+ 26,745	+ 26,779	+ 39,945	+ 9,663	- 19,839	+ 11,982	+ 37,318	+ 821	1.0905	98.4	94.4
Feb.	+ 35,523	+ 36,897	+ 14,865	+ 49,381	- 13,543	+ 11,358	- 33,197	+ 866	1.0795	98.1	94.1
Mar.	+ 43,103	+ 38,121	+ 57,195	+ 9,244	+ 17,800	- 11,891	+ 42,574	- 532	1.0872	98.8	94.8
Apr.	+ 34,443	+ 33,149	+ 17,344	+ 35,148	- 22,191	+ 7,309	- 3,726	+ 804	1.0728	98.6	P 94.5
May	...	...	...	...	...	...	...	...	1.0812	98.9	P 94.8
June	...	...	...	...	...	...	...	...	1.0759	98.5	P 94.4

see also Tables XII. 9 and 11, pp. 82*/ 83*. 2 Including employee stock options. 3 Bundesbank calculation. Vis-à-vis the currencies of the extended EER group of

trading partners (fixed composition). 4 Based on consumer price indices.

I. Key economic data for the euro area

3. General economic indicators

Period	Euro area	Belgium	Germany	Estonia	Finland	France	Greece	Ireland	Italy	Croatia	Latvia
Real gross domestic product ¹											
Annual percentage change											
2021	6.1	6.9	3.2	7.2	2.8	6.9	8.4	16.2	8.3	13.0	6.7
2022	3.5	3.0	1.8	0.5	1.3	2.6	5.6	8.6	4.0	7.0	3.0
2023	0.4	1.4	- 0.2	- 3.0	- 1.2	0.9	2.0	- 5.5	0.9	3.1	- 0.3
2022 Q4	1.9	1.4	0.2	- 4.2	- 1.2	0.4	3.7	8.8	1.6	3.3	1.3
2023 Q1	1.3	1.7	0.5	- 3.9	0.2	1.3	2.1	- 0.2	2.5	2.9	0.7
Q2	0.5	1.3	- 0.3	- 2.7	- 1.0	0.9	3.0	- 3.9	0.4	3.8	- 0.6
Q3	0.1	1.3	- 0.5	- 2.8	- 2.1	0.5	1.9	- 8.4	0.4	1.4	- 0.6
Q4	0.2	1.2	- 0.4	- 2.6	- 1.6	1.0	1.1	- 9.1	0.5	4.4	- 0.5
2024 Q1	0.5	1.3	- 0.9	- 2.3	- 1.6	1.1	1.9	- 4.7	0.7	3.9	0.1
Industrial production ²											
Annual percentage change											
2021	8.8	16.8	4.6	12.8	4.3	5.5	10.4	28.3	12.3	6.3	6.6
2022	2.2	- 0.7	- 0.3	- 2.3	4.0	0.0	2.5	18.9	0.3	1.6	0.8
2023	- 2.2	- 5.4	- 1.9	- 8.8	- 2.4	0.6	2.3	- 7.2	- 2.0	- 0.1	- 3.6
2022 Q4	1.9	- 0.2	- 0.7	- 10.4	- 0.4	- 1.2	- 1.6	29.8	- 2.3	- 1.4	- 1.2
2023 Q1	0.8	- 2.9	0.9	- 7.9	0.3	- 0.9	2.3	7.8	- 0.7	- 1.7	- 4.3
Q2	- 0.9	- 4.3	- 0.4	- 12.9	- 3.8	1.2	1.2	4.2	- 3.5	0.1	- 7.4
Q3	- 4.8	- 6.9	- 3.5	- 9.8	- 2.8	0.5	- 0.2	- 21.6	- 2.5	- 0.4	- 2.4
Q4	- 4.0	- 7.4	- 4.5	- 4.3	- 3.3	1.7	6.0	- 12.8	- 1.5	1.6	- 0.1
2024 Q1	- 4.7	- 6.5	^p - 5.5	- 7.0	- 3.2	0.3	3.6	- 19.4	- 3.5	- 4.0	- 0.2
Capacity utilisation in industry ³											
As a percentage of full capacity											
2021	81.5	80.1	84.9	78.1	81.2	81.1	75.6	78.0	77.0	75.0	75.3
2022	82.2	79.1	85.2	71.7	80.9	81.8	75.9	79.8	79.0	77.0	75.0
2023	80.6	75.7	83.4	67.3	76.6	81.2	75.2	...	77.5	77.2	72.8
2023 Q1	81.5	76.7	84.6	71.4	79.0	81.0	74.8	79.2	78.2	77.5	72.7
Q2	81.3	77.2	84.2	70.8	76.4	82.0	73.7	...	78.0	78.3	73.7
Q3	80.1	75.0	82.9	62.5	77.4	80.6	76.3	...	77.4	78.2	72.6
Q4	79.6	73.9	81.9	64.6	73.6	81.3	75.9	...	76.5	74.8	72.3
2024 Q1	79.2	74.0	81.3	65.7	73.3	80.9	73.5	...	75.5	76.0	71.4
Q2	78.9	74.5	80.3	66.0	74.6	80.6	81.1	...	76.0	74.3	73.0
Standardised unemployment rate ⁴											
As a percentage of civilian labour force											
2021	7.8	^e 6.3	^p 3.6	^e 6.2	^e 7.7	^e 7.9	^e 14.8	^e 6.3	^e 9.5	^e 7.6	^e 7.6
2022	6.7	^e 5.5	^p 3.1	^e 5.6	^e 6.8	^e 7.3	^e 12.5	^e 4.5	^e 8.1	^e 6.8	^e 6.9
2023	6.6	^e 5.5	^p 3.0	^e 6.4	^e 7.2	^e 7.3	^e 11.1	^e 4.3	^e 7.7	^e 6.1	^e 6.5
2024 Jan.	6.5	5.6	3.2	7.4	7.8	7.5	11.3	4.6	7.2	5.6	6.9
Feb.	6.5	5.7	3.2	7.5	7.7	7.4	11.5	4.1	7.3	5.5	6.9
Mar.	6.5	5.7	3.3	7.6	8.4	7.4	10.7	4.0	7.1	5.5	6.9
Apr.	6.4	5.8	3.3	7.5	8.3	7.3	10.7	4.0	6.8	5.4	6.8
May	6.4	5.9	3.3	7.4	8.2	7.4	10.6	4.0	6.8	5.3	6.7
June	...	...	...	...	...	...	...	4.2	...	...	...
Harmonised Index of Consumer Prices											
Annual percentage change											
2021	2.6	3.2	⁵ 3.2	4.5	2.1	2.1	0.6	2.4	1.9	2.7	3.2
2022	8.4	10.3	8.7	19.4	7.2	5.9	9.3	8.1	8.7	10.7	17.2
2023	⁶ 5.4	2.3	6.0	9.1	4.3	5.7	4.2	5.2	5.9	8.4	9.1
2024 Jan.	2.8	1.5	3.1	5.0	1.1	3.4	3.2	2.7	0.9	4.8	1.1
Feb.	2.6	3.6	2.7	4.4	1.1	3.2	3.1	2.3	0.8	4.8	0.6
Mar.	2.4	3.8	2.3	4.1	0.6	2.4	3.4	1.7	1.2	4.9	1.0
Apr.	2.4	4.9	2.4	3.1	0.6	2.4	3.2	1.6	0.9	4.7	1.1
May	2.6	4.9	2.8	3.1	0.4	2.6	2.4	2.0	0.8	4.3	0.0
June	2.5	5.4	2.5	2.8	0.5	2.5	2.5	1.5	0.9	3.5	1.5
General government financial balance ⁷											
As a percentage of GDP											
2021	- 5.2	- 5.4	- 3.6	- 2.5	- 2.8	- 6.6	- 7.0	- 1.5	- 8.7	- 2.5	- 7.2
2022	- 3.7	- 3.6	- 2.5	- 1.0	- 0.4	- 4.8	- 2.5	1.7	- 8.6	0.1	- 4.6
2023	- 3.6	- 4.4	- 2.4	- 3.4	- 2.7	- 5.5	- 1.6	1.7	- 7.4	- 0.7	- 2.2
General government debt ⁷											
As a percentage of GDP											
2021	94.8	107.9	69.0	17.8	72.6	113.0	195.0	54.4	147.1	77.5	44.4
2022	90.8	104.3	66.1	18.5	73.5	111.9	172.7	44.4	140.5	67.8	41.8
2023	88.6	105.2	63.6	19.6	75.8	110.6	161.9	43.7	137.3	63.0	43.6

Sources: Eurostat, European Commission, European Central Bank, Federal Statistical Office, Bundesbank calculations. Latest data are partly based on press reports and are

provisional. ¹ Euro area: quarterly data seasonally and calendar adjusted. ² Manufacturing, mining and energy: adjusted for working-day variations. ³ Manufacturing:

I. Key economic data for the euro area

Lithuania	Luxembourg	Malta	Netherlands	Austria	Portugal	Slovakia	Slovenia	Spain	Cyprus	Period
Real gross domestic product 1										
Annual percentage change										
6.3	7.2	12.5	6.3	4.2	5.7	4.8	8.2	6.4	9.9	2021
2.4	1.4	8.1	5.0	4.8	6.8	1.9	2.5	5.8	5.1	2022
- 0.3	- 1.1	5.7	0.1	- 0.8	2.3	1.6	1.6	2.5	2.5	2023
0.1	- 2.3	7.0	3.8	1.7	3.1	1.3	- 0.2	3.8	2.3	2022 Q4
- 2.4	- 1.3	6.3	1.9	2.2	2.7	0.2	1.1	4.5	3.0	2023 Q1
0.8	- 0.4	5.0	- 0.3	- 1.7	2.1	1.8	1.7	2.1	2.2	Q2
0.3	- 1.9	7.2	- 0.7	- 2.0	2.0	2.0	1.3	1.5	2.6	Q3
- 0.2	- 0.8	4.4	- 0.5	- 1.5	2.2	2.2	2.2	2.0	2.1	Q4
3.0	- 0.4	4.6	- 0.6	- 1.2	1.5	2.7	2.1	2.5	3.5	2024 Q1
Industrial production 2										
Annual percentage change										
20.1	8.4	- 0.9	5.0	11.3	3.9	- 10.6	10.2	7.8	6.0	2021
9.3	- 1.3	1.5	2.6	6.5	0.6	- 4.3	1.2	3.0	2.6	2022
- 5.2	- 5.7	7.3	- 0.0	- 1.3	- 3.1	0.2	- 5.6	- 1.1	2.2	2023
- 3.1	- 3.3	8.0	1.3	2.7	0.8	- 9.4	- 5.7	0.7	1.4	2022 Q4
- 11.7	- 4.4	15.9	3.1	1.0	1.4	- 2.4	- 3.4	0.7	0.3	2023 Q1
0.1	- 6.9	7.8	- 0.6	- 1.1	- 5.2	0.3	- 4.1	- 2.1	1.3	Q2
- 5.5	- 7.7	2.0	- 0.7	0.0	- 4.9	1.1	- 10.1	- 1.8	2.8	Q3
- 3.2	- 3.8	4.5	- 1.8	- 4.9	- 3.5	2.1	- 5.1	- 1.2	4.0	Q4
- 0.8	- 4.3	- 2.8	- 2.5	- 6.9	1.2	1.3	- 3.0	1.3	4.1	2024 Q1
Capacity utilisation in industry 3										
As a percentage of full capacity										
76.7	82.0	76.8	82.4	87.1	79.1	82.2	84.5	77.8	51.2	2021
77.8	80.7	64.7	83.7	87.7	81.9	83.3	84.9	78.7	58.2	2022
68.4	73.1	68.1	81.9	85.3	81.7	82.1	83.1	76.9	61.6	2023
68.0	74.3	65.7	83.0	87.0	81.5	80.2	83.3	77.1	59.5	2023 Q1
69.0	75.5	53.3	82.5	86.3	83.5	84.0	83.9	76.3	61.2	Q2
68.2	72.0	69.4	81.3	84.6	80.9	83.0	82.9	76.2	62.6	Q3
68.5	70.5	84.1	80.9	83.3	80.9	81.0	82.4	77.8	63.3	Q4
70.6	74.8	75.6	78.8	84.0	81.0	80.1	80.6	77.2	65.1	2024 Q1
70.1	75.3	76.4	79.6	83.3	81.2	77.6	80.8	77.7	63.9	Q2
Standardised unemployment rate 4										
As a percentage of civilian labour force										
e	e	e	e	e	e	e	e	e	e	2021
7.2	5.4	3.8	4.2	6.2	6.8	6.9	4.8	15.0	7.5	2021
e	e	e	e	e	e	e	e	e	e	2022
5.9	4.6	3.5	3.6	4.8	6.2	6.2	4.0	13.0	6.8	2022
e	e	e	e	e	e	e	e	e	e	2023
6.9	5.2	3.1	3.5	5.1	6.5	5.9	3.7	12.2	6.1	2023
7.4	5.6	3.0	3.6	5.0	6.6	5.6	3.3	11.9	5.9	2024 Jan.
7.5	5.6	3.0	3.7	4.7	6.6	5.6	3.3	11.8	5.4	Feb.
7.5	5.6	3.1	3.6	4.9	6.5	5.6	3.3	11.7	4.9	Mar.
7.5	5.6	3.1	3.7	4.8	6.4	5.6	3.3	11.7	4.4	Apr.
7.7	5.7	3.2	3.6	5.0	6.5	5.5	3.2	11.7	4.1	May
...	...	...	...	...	...	...	...	...	...	June
Harmonised Index of Consumer Prices										
Annual percentage change										
4.6	3.5	0.7	2.8	2.8	0.9	2.8	2.0	3.0	2.3	2021
18.9	8.2	6.1	11.6	8.6	8.1	12.1	9.3	8.3	8.1	2022
8.7	2.9	5.6	4.1	7.7	5.3	11.0	7.2	3.4	3.9	2023
1.1	3.0	3.7	3.1	4.3	2.5	4.4	3.4	3.5	2.1	2024 Jan.
1.1	3.2	3.0	2.7	4.0	2.3	3.8	3.4	2.9	2.1	Feb.
0.4	3.2	2.7	3.1	4.1	2.6	2.7	3.4	3.3	1.6	Mar.
0.4	3.0	2.4	2.6	3.4	2.3	2.4	3.0	3.4	2.1	Apr.
0.9	3.2	2.3	2.7	3.3	3.8	2.6	2.5	3.8	3.0	May
1.0	2.8	2.2	3.4	3.1	3.1	2.4	1.6	3.6	3.0	June
General government financial balance 7										
As a percentage of GDP										
- 1.1	0.5	- 7.6	- 2.2	- 5.8	- 2.9	- 5.2	- 4.6	- 6.7	- 1.8	2021
- 0.6	- 0.3	- 5.5	- 0.1	- 3.3	- 0.3	- 1.7	- 3.0	- 4.7	2.7	2022
- 0.8	- 1.3	- 4.9	- 0.3	- 2.7	1.2	- 4.9	- 2.5	- 3.6	3.1	2023
General government debt 7										
As a percentage of GDP										
43.4	24.5	53.9	51.7	82.5	124.5	61.1	74.4	116.8	99.3	2021
38.1	24.7	51.6	50.1	78.4	112.4	57.7	72.5	111.6	85.6	2022
38.3	25.7	50.4	46.5	77.8	99.1	56.0	69.2	107.7	77.3	2023

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

added tax between July and December 2020. 6 Including Croatia from 2023 onwards.
7 According to Maastricht Treaty definition.

II. Overall monetary survey in the euro area

1. The money stock and its counterparts *

a) Euro area ¹

€ billion

Period	I. Lending to non-banks (non-MFIs) in the euro area					II. Net claims on non-euro area residents			III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
	Total	Enterprises and households		General government		Total	Claims on non-euro area residents	Liabilities to non-euro area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) ²	Capital and reserves ³
		Total	of which: Securities	Total	of which: Securities								
2022 Oct.	- 12.6	- 0.1	- 6.2	- 12.5	- 9.7	- 1.2	169.1	170.3	- 13.3	- 14.7	0.1	10.4	- 9.2
Nov.	93.8	84.8	31.8	9.0	14.3	15.1	- 40.3	- 55.3	31.6	1.4	0.2	34.0	- 3.9
Dec.	- 121.1	- 87.9	- 0.5	- 33.1	- 41.3	2.5	- 254.6	- 257.1	50.9	11.0	0.1	0.7	39.1
2023 Jan.	- 9.9	- 0.4	- 15.9	- 9.5	- 4.1	12.5	127.9	115.4	28.0	- 6.4	2.2	57.3	- 25.1
Feb.	7.9	- 12.9	3.3	20.8	29.8	6.8	- 1.4	- 8.2	15.5	- 1.1	1.6	10.3	4.7
Mar.	29.9	37.1	11.7	- 7.2	- 9.7	74.4	111.8	37.3	27.9	10.3	1.3	5.8	10.6
Apr.	- 5.6	27.9	29.5	- 33.5	- 29.3	- 21.2	- 21.7	- 0.5	10.5	9.4	1.4	3.9	- 4.2
May	- 0.2	45.5	33.2	- 45.7	- 50.0	4.4	22.2	17.8	37.6	- 0.5	2.4	27.1	8.6
June	5.1	- 9.1	- 12.3	14.3	21.1	109.5	13.5	- 96.1	43.9	1.2	2.8	26.8	13.1
July	- 45.5	7.0	5.2	- 52.5	- 52.1	37.0	109.0	72.0	33.7	0.9	2.9	18.9	11.1
Aug.	- 56.2	- 67.0	- 12.2	10.7	13.4	31.4	61.8	30.4	20.9	- 2.4	4.0	9.3	9.9
Sep.	36.9	33.5	- 1.6	3.5	2.6	62.7	- 106.7	- 169.4	43.2	15.3	5.0	11.2	11.8
Oct.	- 33.7	6.0	- 10.4	- 39.7	- 39.3	54.6	49.4	- 5.2	29.4	- 9.3	4.7	26.3	7.7
Nov.	38.1	46.9	- 1.1	- 8.8	- 4.8	59.0	51.3	- 7.7	16.6	- 4.7	5.6	22.6	- 6.8
Dec.	- 58.8	- 47.2	2.7	- 11.6	- 20.5	26.4	- 100.2	- 126.5	24.9	12.5	5.9	4.5	2.0
2024 Jan.	- 8.8	- 1.5	25.7	- 7.3	- 7.0	118.0	111.8	- 6.3	56.8	- 3.6	7.0	61.3	- 7.8
Feb.	38.9	38.2	6.8	0.7	11.2	- 15.6	98.2	113.8	5.4	0.8	4.8	15.8	- 16.0
Mar.	56.1	48.1	4.1	8.0	8.3	64.2	96.6	32.4	38.9	5.0	3.0	34.4	- 3.5
Apr.	32.1	23.6	1.1	8.5	4.4	45.3	7.5	- 37.7	6.8	- 7.4	2.5	19.7	- 7.9
May	- 24.1	- 6.6	- 1.8	- 17.5	- 14.9	43.1	73.9	30.8	9.0	2.3	1.8	- 0.5	5.5

b) German contribution

Period	I. Lending to non-banks (non-MFIs) in the euro area					II. Net claims on non-euro area residents			III. Monetary capital formation at monetary financial institutions (MFIs) in the euro area				
	Total	Enterprises and households		General government		Total	Claims on non-euro area residents	Liabilities to non-euro area residents	Total	Deposits with an agreed maturity of over 2 years	Deposits at agreed notice of over 3 months	Debt securities with maturities of over 2 years (net) ²	Capital and reserves ³
		Total	of which: Securities	Total	of which: Securities								
2022 Oct.	12.8	10.5	- 0.2	2.3	1.9	45.1	20.4	- 24.7	- 7.6	- 1.2	0.2	3.2	- 9.8
Nov.	25.4	26.2	1.4	- 0.9	0.8	38.0	8.9	- 29.1	9.8	1.9	0.2	7.1	0.6
Dec.	- 28.8	- 19.6	- 2.4	- 9.3	- 8.2	- 37.1	- 71.9	- 34.8	- 0.5	- 3.7	0.4	- 1.9	4.8
2023 Jan.	27.5	16.9	- 0.2	10.7	8.9	63.0	29.8	- 33.3	- 14.3	2.7	1.0	3.1	- 21.0
Feb.	9.2	8.3	- 0.2	0.9	1.8	58.4	- 2.0	- 60.3	3.3	0.6	1.2	- 2.1	3.5
Mar.	4.8	8.1	6.4	- 3.4	- 3.7	- 12.4	10.5	23.0	15.5	6.0	1.6	4.4	3.5
Apr.	- 3.7	13.0	1.2	- 16.7	- 20.2	62.7	- 15.2	- 77.9	5.0	2.0	1.5	- 3.0	4.5
May	5.0	11.3	- 1.3	- 6.3	- 4.7	9.6	16.5	6.9	16.9	2.7	2.2	6.1	5.8
June	1.5	- 1.9	4.1	3.4	5.4	7.6	- 6.6	- 14.3	9.7	- 0.9	2.7	- 0.3	8.2
July	5.1	6.8	- 1.1	- 1.7	- 4.7	34.0	8.3	- 25.7	24.9	- 0.3	3.0	10.2	12.0
Aug.	- 6.8	- 5.0	- 6.1	- 1.8	0.3	25.7	- 5.3	- 31.0	6.6	- 2.7	2.7	0.2	6.4
Sep.	- 8.2	1.7	0.8	- 9.9	- 13.3	- 0.1	- 2.8	- 2.7	21.1	0.1	2.9	11.6	6.4
Oct.	- 2.0	0.1	- 0.2	- 2.1	- 5.2	16.2	4.9	- 11.3	11.8	- 0.1	3.0	5.9	3.0
Nov.	12.2	13.1	- 1.1	- 0.8	1.8	13.7	- 3.4	- 17.1	10.6	3.7	3.4	1.0	2.4
Dec.	- 18.0	- 11.1	2.5	- 6.9	- 5.1	- 17.4	- 10.6	6.8	8.8	3.2	2.5	1.7	1.4
2024 Jan.	11.1	2.0	- 0.5	9.1	6.7	74.5	20.7	- 53.7	- 1.8	- 0.1	2.5	12.7	- 17.0
Feb.	10.6	20.2	6.8	- 9.6	- 7.6	- 17.0	40.0	57.1	- 6.9	- 1.6	2.4	7.7	- 15.3
Mar.	8.3	4.3	0.5	4.0	2.0	6.6	4.2	- 2.4	- 5.3	1.7	1.7	2.4	- 11.1
Apr.	- 13.5	- 3.7	- 3.9	- 9.8	- 13.1	41.3	4.2	- 37.1	16.0	2.0	0.9	11.2	1.9
May	5.4	14.4	5.7	- 9.0	- 7.7	17.6	35.3	17.6	19.0	2.7	0.5	5.5	10.4

* The data in this table are based on the consolidated balance sheet of monetary financial institutions (MFIs) (Table II.2); statistical breaks have been eliminated from the flow figures (see also the "Notes on the figures" in the "Explanatory notes" of the Statistical Series Banking Statistics). ¹ Source: ECB. ² Excluding MFIs' portfolios. ³ After

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

II. Overall monetary survey in the euro area

a) Euro area ¹

IV. De- posits of central gov- ernments	V. Other factors			VI. Money stock M3 (balance I plus II less III less IV less V)										Period
	Total 4	of which: Intra- Eurosysteem liability/ claim related to banknote issue	Total	Money stock M2							Repo transac- tions	Money market fund shares (net) 2,7,8	Debt secur- ities with maturities of up to 2 years (incl. money market paper) (net) 2,7	
				Total	Money stock M1			Deposits with an agreed maturity of up to 2 years 5	Deposits at agreed notice of up to 3 months 5,6					
					Total	Currency in cir- culation	Overnight deposits 5							
- 5.2	66.2	0.0	- 57.9	- 77.1	- 157.5	- 0.4	- 157.1	85.4	- 5.0	4.3	36.7	- 25.5	2022 Oct.	
- 10.2	1.1	0.0	70.1	20.9	- 30.6	- 3.5	- 27.1	58.8	- 7.3	27.4	22.3	16.4	Nov.	
- 84.6	- 64.2	0.0	2.7	12.5	- 61.6	11.6	- 73.2	60.8	13.3	- 46.5	2.8	10.4	Dec.	
- 38.8	129.3	0.0	- 133.7	- 149.8	- 232.0	- 13.3	- 218.7	76.0	6.1	35.0	6.8	- 8.1	2023 Jan.	
20.3	21.2	0.0	- 42.0	- 63.4	- 135.7	- 3.5	- 132.1	72.2	0.0	- 2.2	- 6.4	29.8	Feb.	
31.3	30.7	0.0	16.9	10.2	- 103.9	3.9	- 107.8	119.6	- 5.5	- 25.7	20.6	9.4	Mar.	
- 27.2	- 10.5	0.0	- 0.8	- 17.9	- 52.1	4.1	- 56.3	45.6	- 11.4	6.7	11.5	0.2	Apr.	
- 104.4	81.2	0.0	- 30.4	- 44.9	- 94.3	1.7	- 96.0	52.9	- 3.5	29.6	1.5	4.2	May	
24.5	44.7	0.0	6.6	22.3	- 60.9	3.1	- 64.0	94.4	- 11.2	- 11.2	- 6.2	- 3.7	June	
- 29.1	1.4	0.0	0.3	- 28.3	- 91.0	3.0	- 94.1	73.3	- 10.6	4.1	10.6	- 0.9	July	
- 20.0	5.3	0.0	- 43.4	- 45.1	- 101.9	- 7.6	- 94.2	81.1	- 24.3	4.4	8.4	0.8	Aug.	
35.1	- 14.6	0.0	46.5	44.6	- 11.6	- 3.1	- 8.5	79.8	- 23.6	- 5.8	- 0.7	- 2.1	Sep.	
- 28.5	55.8	0.0	- 44.9	- 87.9	- 169.1	- 4.4	- 164.8	102.9	- 21.7	25.2	18.8	8.4	Oct.	
- 48.4	45.4	0.0	76.2	54.4	18.3	- 2.9	21.3	48.8	- 12.7	22.3	16.9	- 10.2	Nov.	
14.4	-223.3	0.0	166.9	166.2	71.7	13.8	57.9	75.8	18.7	- 27.1	14.4	- 2.1	Dec.	
18.9	155.4	0.0	- 132.5	- 181.6	- 238.2	- 17.1	- 221.1	61.0	- 4.4	27.2	30.8	1.8	2024 Jan.	
9.1	5.4	0.0	1.2	15.0	- 31.1	- 0.9	- 30.3	55.8	- 9.6	5.2	- 11.4	- 5.4	Feb.	
- 26.8	- 25.9	0.0	121.6	103.7	57.9	5.2	52.7	46.7	- 0.8	23.9	15.7	- 9.2	Mar.	
- 23.9	35.6	0.0	25.4	- 24.0	- 18.6	2.5	- 21.0	- 2.0	- 3.4	6.5	22.6	6.0	Apr.	
- 24.3	2.5	0.0	36.4	63.2	47.2	2.8	44.3	10.1	5.9	- 3.6	- 19.8	- 8.0	May	

b) German contribution

IV. De- posits of central gov- ernments	V. Other factors			VI. Money stock M3 (balance I plus II less III less IV less V) ¹⁰										Period
	Total	of which: Intra- Eurosysteem liability/ claim related to banknote issue 9,11	Currency in cir- culation	Components of the money stock										
				Total	Overnight deposits	Deposits with an agreed maturity of up to 2 years	Deposits at agreed notice of up to 3 months 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				
											Total			
5.1	65.9	0.1	0.1	- 5.4	- 32.1	36.8	- 3.3	- 0.2	0.1	- 6.7	2022 Oct.			
22.6	13.6	- 0.0	0.3	17.3	12.6	4.3	- 5.5	3.2	0.0	2.7	Nov.			
- 16.3	- 24.6	2.1	2.4	- 24.6	- 37.6	19.0	- 4.1	- 2.0	0.1	0.0	Dec.			
- 42.9	147.9	2.3	5.1	- 0.2	- 37.1	38.4	- 6.5	- 0.1	- 0.2	5.4	2023 Jan.			
12.9	50.9	1.1	0.7	0.4	- 33.2	32.6	- 8.0	1.3	- 0.1	7.8	Feb.			
27.1	- 34.8	2.3	0.9	- 15.5	- 45.7	31.8	- 10.4	- 0.2	0.3	8.7	Mar.			
- 39.0	86.7	1.9	0.7	6.3	- 11.7	25.3	- 10.2	0.7	0.2	1.9	Apr.			
- 11.8	2.8	2.6	0.9	6.7	- 6.2	18.4	- 10.3	- 0.2	- 0.1	5.1	May			
- 9.8	8.4	1.7	1.1	0.8	- 29.2	36.7	- 10.0	- 0.3	- 0.0	3.6	June			
- 6.4	20.0	1.6	1.3	0.7	- 21.8	31.5	- 10.3	0.3	0.3	0.8	July			
7.4	- 1.5	2.9	- 1.9	6.4	- 21.1	30.4	- 11.2	1.1	0.1	7.1	Aug.			
- 11.6	- 12.1	3.6	- 1.7	- 5.7	- 13.3	17.8	- 8.6	- 1.0	0.1	0.7	Sep.			
- 2.4	2.9	1.5	- 0.5	1.9	- 31.2	38.8	- 9.4	0.8	- 0.1	3.0	Oct.			
- 9.5	13.9	1.1	- 0.4	11.1	- 9.4	11.7	- 10.5	1.1	0.1	0.8	Nov.			
7.7	- 62.1	2.4	2.8	10.2	- 6.6	25.1	- 5.0	- 1.2	0.1	2.2	Dec.			
- 6.7	108.3	- 7.4	3.7	- 14.3	- 47.5	37.6	- 9.1	3.0	0.1	1.4	2024 Jan.			
- 2.3	0.0	2.4	- 0.6	2.7	- 18.3	27.1	- 7.4	1.0	0.0	0.3	Feb.			
2.0	- 2.1	2.9	0.7	20.3	2.8	24.9	- 5.8	- 1.5	0.2	0.3	Mar.			
- 2.9	23.7	1.8	1.5	- 9.1	- 4.4	6.1	- 5.5	- 0.3	0.2	5.2	Apr.			
3.5	- 25.9	2.4	0.4	26.3	27.2	5.0	- 4.1	- 0.3	0.1	1.7	May			

of paper issued by euro area MFIs. ⁹ Including national banknotes still in circulation. ¹⁰ The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates and are therefore not comparable with the erstwhile German money stocks M1, M2 or M3. ¹¹ The

difference between the volume of euro banknotes actually issued by the Bundesbank and the amount disclosed in accordance with the accounting regime chosen by the Eurosystem (see also footnote 2 on banknote circulation in Table III.2).

II. Overall monetary survey in the euro area

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

End of month	Total assets or liabilities	Assets									
		Lending to non-banks (non-MFIs) in the euro area									
		Total	Enterprises and households				General government				Claims on non-euro area residents	Other assets
Total	Loans		Debt securities 2	Shares and other equities	Total	Loans	Debt securities 3				
Euro area (€ billion) ¹											
2022 Apr.	33,569.7	21,763.8	15,253.7	12,805.3	1,597.3	851.1	6,510.1	1,011.3	5,498.8	7,063.0	4,742.9
May	33,482.1	21,815.9	15,304.1	12,878.2	1,567.8	858.1	6,511.7	1,003.9	5,507.8	7,013.2	4,653.1
June	33,885.7	21,885.6	15,373.2	12,973.4	1,568.7	831.1	6,512.4	1,003.0	5,509.4	7,064.5	4,935.5
July	33,877.3	21,984.3	15,451.1	13,043.7	1,578.2	829.2	6,533.1	1,003.0	5,530.1	7,216.9	4,676.2
Aug.	34,342.9	21,872.4	15,459.5	13,080.1	1,553.7	825.7	6,413.0	996.9	5,416.1	7,301.6	5,168.9
Sep.	34,619.4	21,901.4	15,558.0	13,191.3	1,544.9	821.7	6,343.4	998.1	5,345.2	7,241.7	5,476.3
Oct.	34,548.3	21,890.7	15,552.2	13,190.1	1,532.8	829.3	6,338.6	995.2	5,343.3	7,334.6	5,322.9
Nov.	34,224.5	22,011.6	15,627.3	13,228.2	1,559.0	840.1	6,384.3	990.3	5,394.1	7,206.4	5,006.5
Dec.	33,866.7	21,792.5	15,515.2	13,123.9	1,556.0	835.4	6,277.3	999.1	5,278.2	6,873.4	5,200.8
2023 Jan.	33,815.3	21,883.8	15,553.4	13,173.2	1,544.6	835.6	6,330.3	1,000.3	5,330.0	6,983.9	4,947.6
Feb.	34,097.1	21,862.6	15,545.4	13,159.9	1,541.0	844.6	6,317.2	991.3	5,325.9	7,001.6	5,232.9
Mar.	33,934.8	21,919.3	15,573.5	13,173.8	1,552.3	847.4	6,345.7	995.4	5,350.4	7,099.4	4,916.1
Apr.	33,944.5	21,908.6	15,601.1	13,168.5	1,566.4	866.2	6,307.6	991.1	5,316.5	7,038.3	4,997.6
May	34,136.9	21,919.4	15,651.0	13,186.0	1,595.6	869.4	6,268.4	995.4	5,273.0	7,150.8	5,066.8
June	34,048.4	21,915.1	15,637.2	13,182.3	1,584.4	870.4	6,277.9	988.5	5,289.4	7,065.9	5,067.3
July	34,186.7	21,866.8	15,642.2	13,180.8	1,586.3	875.1	6,224.6	988.2	5,236.4	7,153.2	5,166.6
Aug.	34,238.9	21,811.6	15,573.8	13,123.8	1,576.8	873.2	6,237.8	986.1	5,251.7	7,251.4	5,175.9
Sep.	34,381.2	21,796.4	15,601.8	13,156.3	1,574.6	870.9	6,194.7	987.3	5,207.4	7,195.5	5,389.3
Oct.	34,345.9	21,755.0	15,598.6	13,167.0	1,555.6	876.0	6,156.4	984.1	5,172.3	7,262.4	5,328.4
Nov.	34,141.5	21,851.5	15,660.3	13,220.8	1,558.5	881.0	6,191.3	980.8	5,210.4	7,251.7	5,038.3
Dec.	33,768.3	21,858.4	15,626.8	13,177.4	1,552.1	897.3	6,231.6	989.4	5,242.2	7,143.2	4,766.7
2024 Jan.	33,833.6	21,825.7	15,622.8	13,145.8	1,569.4	907.5	6,202.9	987.6	5,215.3	7,293.2	4,714.7
Feb.	34,006.3	21,839.7	15,653.7	13,167.9	1,569.7	916.2	6,185.9	977.4	5,208.5	7,382.6	4,784.1
Mar.	34,222.6	21,914.2	15,704.4	13,208.5	1,567.2	928.6	6,209.9	976.9	5,232.9	7,546.0	4,762.5
Apr.	34,405.0	21,918.4	15,721.9	13,231.2	1,562.4	928.3	6,196.5	980.4	5,216.1	7,598.3	4,888.2
May	34,369.5	21,895.5	15,720.9	13,232.4	1,559.0	929.5	6,174.6	977.7	5,196.9	7,641.5	4,832.5
German contribution (€ billion)											
2022 Apr.	8,259.4	5,278.9	4,008.0	3,481.9	240.1	286.1	1,270.9	283.2	987.7	1,464.0	1,516.5
May	8,228.4	5,304.5	4,034.5	3,506.0	240.8	287.7	1,270.0	280.3	989.7	1,445.0	1,479.0
June	8,413.5	5,322.6	4,058.9	3,537.6	237.8	283.5	1,263.7	282.5	981.2	1,466.1	1,624.8
July	8,287.9	5,375.0	4,096.1	3,560.3	252.7	283.2	1,278.8	283.6	995.2	1,481.5	1,431.4
Aug.	8,546.0	5,364.5	4,132.0	3,600.0	249.1	282.9	1,232.5	281.5	951.0	1,492.4	1,689.0
Sep.	8,857.6	5,356.3	4,153.9	3,624.8	246.1	283.0	1,202.4	284.3	918.1	1,502.4	1,998.8
Oct.	8,826.7	5,366.0	4,163.6	3,634.6	245.9	283.1	1,202.4	284.8	917.5	1,509.0	1,951.8
Nov.	8,653.9	5,402.0	4,189.2	3,656.3	249.8	283.1	1,212.8	283.4	929.4	1,502.4	1,749.6
Dec.	8,626.1	5,345.2	4,165.8	3,636.7	245.9	283.2	1,179.4	283.2	896.1	1,417.3	1,863.7
2023 Jan.	8,561.4	5,377.1	4,178.3	3,652.7	245.9	279.7	1,198.8	285.0	913.9	1,443.8	1,740.5
Feb.	8,712.0	5,371.7	4,186.6	3,662.2	243.6	280.9	1,185.1	284.0	901.1	1,443.9	1,896.4
Mar.	8,573.5	5,388.1	4,193.6	3,661.9	252.1	279.6	1,194.5	284.2	910.3	1,457.2	1,728.2
Apr.	8,559.3	5,383.7	4,206.2	3,672.7	252.4	281.1	1,177.5	287.7	889.8	1,435.7	1,739.8
May	8,614.3	5,389.9	4,217.4	3,685.4	252.1	279.9	1,172.6	286.1	886.4	1,468.3	1,756.1
June	8,647.9	5,387.4	4,215.9	3,679.0	255.5	281.4	1,171.5	284.2	887.4	1,433.5	1,826.9
July	8,779.6	5,390.2	4,222.0	3,685.7	255.6	280.6	1,168.3	287.2	881.1	1,439.0	1,950.5
Aug.	8,776.6	5,383.7	4,215.6	3,685.5	249.4	280.6	1,168.1	285.0	883.0	1,442.2	1,950.7
Sep.	8,834.2	5,362.1	4,216.4	3,686.3	248.5	281.5	1,145.8	288.4	857.4	1,446.5	2,025.5
Oct.	8,844.5	5,360.6	4,215.5	3,685.5	247.9	282.1	1,145.1	291.6	853.5	1,461.4	2,022.6
Nov.	8,661.3	5,385.7	4,228.0	3,697.3	248.4	282.3	1,157.8	289.7	868.1	1,446.0	1,829.6
Dec.	8,491.7	5,384.9	4,217.3	3,682.2	247.9	287.2	1,167.6	287.1	880.5	1,432.1	1,674.6
2024 Jan.	8,532.9	5,390.7	4,218.3	3,682.5	246.2	289.6	1,172.4	289.5	882.9	1,463.2	1,679.1
Feb.	8,600.8	5,391.4	4,236.7	3,694.8	250.2	291.7	1,154.7	287.7	867.0	1,502.2	1,707.2
Mar.	8,586.9	5,404.4	4,241.0	3,697.7	246.0	297.3	1,163.4	289.8	873.7	1,524.9	1,657.5
Apr.	8,673.8	5,380.1	4,235.7	3,697.3	244.1	294.3	1,144.4	293.1	851.3	1,544.0	1,749.8
May	8,654.1	5,383.0	4,248.9	3,704.9	246.6	297.4	1,134.1	291.8	842.3	1,573.4	1,697.7

* Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and national central banks (the Eurosystem). ¹ Source: ECB. ² Including money market paper of

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

II. Overall monetary survey in the euro area

Liabilities												
Currency in circulation ⁴	Deposits of non-banks (non-MFIs) in the euro area										End of month	
	Total	of which: in euro ⁵	Enterprises and households					At agreed notice of ⁶		3 months		over 3 months
			Total	Overnight	With agreed maturities of		over 2 years					
					up to 1 year	over 1 year and up to 2 years						
Euro area (€ billion) ¹												
1,520.7	15,933.5	14,522.8	14,712.1	9,555.8	705.4	123.5	1,802.0	2,494.3	31.0	2022 Apr.		
1,528.5	15,949.6	14,569.6	14,740.8	9,597.9	684.9	120.2	1,803.2	2,506.6	27.9	May		
1,535.1	16,099.7	14,633.8	14,810.3	9,643.8	704.8	123.4	1,800.3	2,510.4	27.5	June		
1,543.7	16,183.5	14,738.8	14,937.4	9,735.4	741.0	127.1	1,791.0	2,515.8	27.1	July		
1,539.1	16,161.1	14,793.6	14,985.4	9,754.1	781.5	125.9	1,770.0	2,526.0	28.0	Aug.		
1,537.7	16,198.7	14,785.5	15,036.4	9,688.0	913.3	125.5	1,756.3	2,525.7	27.6	Sep.		
1,537.2	16,095.0	14,708.1	14,936.4	9,507.1	992.6	130.1	1,741.6	2,522.9	42.1	Oct.		
1,533.7	16,084.4	14,722.6	14,917.3	9,441.8	1,042.2	134.2	1,740.7	2,516.0	42.3	Nov.		
1,545.3	15,996.8	14,766.2	14,929.6	9,373.7	1,099.5	133.9	1,750.1	2,530.0	42.4	Dec.		
1,533.4	15,876.1	14,667.2	14,844.5	9,206.0	1,165.1	146.4	1,746.7	2,532.0	48.2	2023 Jan.		
1,529.9	15,842.9	14,625.3	14,773.4	9,061.7	1,225.3	157.6	1,747.0	2,531.8	49.9	Feb.		
1,533.8	15,891.9	14,649.7	14,788.7	8,967.7	1,313.9	174.0	1,756.9	2,524.8	51.4	Mar.		
1,537.9	15,848.9	14,650.2	14,784.8	8,918.2	1,346.2	187.9	1,765.8	2,513.9	52.8	Apr.		
1,539.7	15,718.0	14,618.0	14,756.7	8,834.7	1,387.5	200.1	1,768.2	2,511.0	55.2	May		
1,542.7	15,760.5	14,649.9	14,755.8	8,755.6	1,455.8	218.3	1,768.4	2,499.8	58.0	June		
1,545.9	15,696.0	14,619.8	14,725.4	8,662.9	1,512.2	231.6	1,768.5	2,489.2	60.9	July		
1,538.3	15,646.8	14,595.4	14,694.0	8,578.0	1,579.2	240.9	1,765.9	2,465.1	65.0	Aug.		
1,535.2	15,756.0	14,654.7	14,766.5	8,569.2	1,647.6	255.2	1,782.7	2,441.7	70.1	Sep.		
1,530.8	15,636.6	14,576.9	14,702.2	8,421.3	1,736.5	275.6	1,773.4	2,420.5	74.9	Oct.		
1,527.9	15,648.3	14,645.5	14,759.2	8,426.3	1,776.1	286.2	1,782.0	2,408.0	80.6	Nov.		
1,541.7	15,822.6	14,816.0	14,927.5	8,489.3	1,826.8	302.1	1,795.3	2,427.3	86.7	Dec.		
1,524.1	15,687.2	14,668.3	14,801.5	8,295.5	1,879.2	317.0	1,793.6	2,423.4	92.8	2024 Jan.		
1,523.2	15,709.3	14,689.3	14,792.0	8,241.0	1,924.1	325.3	1,790.1	2,413.7	97.8	Feb.		
1,528.4	15,792.0	14,786.0	14,897.9	8,297.0	1,964.2	327.5	1,795.6	2,412.7	100.9	Mar.		
1,530.9	15,779.5	14,757.1	14,898.9	8,292.0	1,977.6	328.2	1,788.1	2,409.6	103.5	Apr.		
1,533.7	15,826.3	14,819.8	14,960.7	8,321.8	1,999.0	329.1	1,789.7	2,415.8	105.3	May		
German contribution (€ billion)												
346.7	4,445.6	4,158.1	4,019.8	2,754.8	140.0	29.4	537.7	535.1	22.7	2022 Apr.		
349.4	4,478.3	4,170.7	4,016.7	2,769.9	125.8	29.7	534.8	533.9	22.6	May		
349.9	4,517.1	4,194.6	4,031.6	2,787.1	127.8	30.1	531.9	532.3	22.4	June		
359.0	4,507.6	4,222.4	4,070.3	2,813.6	142.1	31.0	530.6	530.6	22.3	July		
371.5	4,552.6	4,289.4	4,135.2	2,870.1	153.3	30.6	530.7	528.3	22.2	Aug.		
371.8	4,541.5	4,267.4	4,135.1	2,834.9	193.7	30.9	530.3	523.0	22.2	Sep.		
371.8	4,546.8	4,270.2	4,140.4	2,804.0	233.2	31.6	529.3	519.8	22.4	Oct.		
371.5	4,578.7	4,283.7	4,146.3	2,806.0	240.1	32.1	531.0	514.4	22.6	Nov.		
374.0	4,534.2	4,260.8	4,119.2	2,764.3	260.2	34.1	527.1	510.4	23.0	Dec.		
368.9	4,489.3	4,257.7	4,126.0	2,749.9	286.6	36.9	529.6	499.1	24.0	2023 Jan.		
368.1	4,496.6	4,250.9	4,106.5	2,706.5	314.2	39.1	530.3	491.2	25.2	Feb.		
369.0	4,505.7	4,236.8	4,090.4	2,667.4	336.4	42.4	536.3	481.0	26.8	Mar.		
369.8	4,473.0	4,248.0	4,104.2	2,660.3	360.2	46.1	538.3	471.0	28.3	Apr.		
370.7	4,469.7	4,256.0	4,103.8	2,647.5	373.8	50.3	540.9	460.8	30.5	May		
371.7	4,460.3	4,259.3	4,096.2	2,616.5	400.5	54.1	541.0	450.9	33.2	June		
373.1	4,455.4	4,259.2	4,106.1	2,603.8	426.9	57.6	540.8	440.7	36.2	July		
371.2	4,460.4	4,259.8	4,101.7	2,577.8	455.8	61.5	538.1	429.6	38.9	Aug.		
369.4	4,448.9	4,258.5	4,104.2	2,568.6	468.0	66.2	538.5	421.1	41.8	Sep.		
369.0	4,447.4	4,259.3	4,129.3	2,553.2	507.9	73.1	538.5	411.7	44.8	Oct.		
368.6	4,454.3	4,281.0	4,149.1	2,561.8	515.9	79.5	542.6	401.2	48.3	Nov.		
371.4	4,470.1	4,290.9	4,150.5	2,539.8	532.4	84.0	547.3	396.2	50.8	Dec.		
375.1	4,448.1	4,271.5	4,150.1	2,502.4	569.5	89.5	548.1	387.2	53.4	2024 Jan.		
374.5	4,447.8	4,273.8	4,147.4	2,481.0	590.5	94.7	545.6	379.8	55.8	Feb.		
375.2	4,475.1	4,300.5	4,166.8	2,483.2	607.5	97.0	547.6	374.1	57.4	Mar.		
376.6	4,471.9	4,300.6	4,182.7	2,486.3	620.9	98.9	549.6	368.6	58.4	Apr.		
377.0	4,506.1	4,331.1	4,203.7	2,501.1	626.2	100.7	552.3	364.5	58.9	May		

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

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

II. Overall monetary survey in the euro area

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

Liabilities (cont'd)													
Deposits of non-banks (non-MFIs) in the euro area (cont'd)													
End of month	General government							Repo transactions with non-banks in the euro area		Money market fund shares (net) ³	Debt securities		
	Other general government							Total	of which: Enterprises and households		Total	of which: Denominated in euro	
	Central government	Total	Overnight	With agreed maturities of			At agreed notice of 2						
				up to 1 year	over 1 year and up to 2 years	over 2 years	up to 3 months						over 3 months
Euro area (€ billion) ¹													
2022 Apr.	745.8	475.6	307.8	83.4	21.2	42.6	17.2	3.4	310.1	309.9	604.0	2,073.5	1,362.4
May	717.1	491.8	317.7	88.4	22.3	43.3	16.8	3.3	313.0	312.9	593.9	2,037.7	1,337.4
June	786.9	502.5	326.0	90.9	22.9	43.3	16.2	3.2	281.2	281.1	592.9	2,068.9	1,360.7
July	755.9	490.3	303.3	100.4	24.2	42.9	16.2	3.3	306.0	305.9	590.8	2,090.6	1,360.7
Aug.	675.5	500.1	309.7	104.6	24.0	42.5	16.1	3.2	283.8	283.7	597.5	2,113.5	1,375.1
Sep.	683.2	479.1	282.0	111.2	24.5	42.3	16.0	3.2	264.8	264.7	589.1	2,153.5	1,415.1
Oct.	678.1	480.5	287.5	109.2	24.3	41.5	14.7	3.2	268.2	268.2	625.8	2,129.7	1,415.7
Nov.	668.3	498.9	306.5	109.2	25.1	40.8	14.2	3.2	294.8	294.8	648.0	2,159.0	1,441.3
Dec.	583.5	483.7	296.2	103.6	27.2	40.2	13.5	3.0	247.7	247.7	650.9	2,166.2	1,474.6
2023 Jan.	550.6	480.9	283.2	113.2	27.5	40.6	12.8	3.7	283.3	283.3	657.7	2,204.8	1,510.1
Feb.	570.9	498.6	297.5	115.2	28.7	40.3	13.2	3.7	281.6	281.5	651.3	2,259.2	1,531.4
Mar.	602.4	500.8	288.6	125.8	28.4	39.6	14.7	3.7	255.3	255.2	672.0	2,257.0	1,551.1
Apr.	575.3	488.8	278.5	123.3	29.7	39.4	14.2	3.7	261.7	261.3	683.4	2,253.1	1,561.0
May	470.7	490.6	277.9	126.7	29.3	39.4	13.8	3.6	291.9	287.8	685.0	2,298.9	1,589.9
June	495.1	509.5	288.6	134.7	29.4	39.3	13.8	3.6	280.4	280.3	678.8	2,312.7	1,600.2
July	466.0	504.6	281.7	137.7	28.4	39.4	13.9	3.6	284.1	283.4	689.4	2,402.1	1,645.9
Aug.	446.0	506.9	283.2	138.6	28.0	39.6	13.8	3.5	288.9	288.9	698.0	2,419.3	1,655.7
Sep.	481.2	508.2	285.3	136.7	29.3	39.7	13.8	3.4	281.7	281.7	697.3	2,442.9	1,668.7
Oct.	452.7	481.7	266.6	131.0	28.5	39.2	13.1	3.3	306.8	306.6	716.2	2,501.6	1,704.8
Nov.	404.4	484.6	274.9	127.5	27.2	38.9	13.0	3.2	328.5	328.4	733.2	2,497.5	1,704.9
Dec.	418.8	476.3	265.6	128.4	28.4	38.6	12.4	3.1	320.5	320.5	746.5	2,490.7	1,706.5
2024 Jan.	437.3	448.4	238.5	127.8	28.4	37.5	12.2	4.0	345.4	343.4	777.5	2,534.9	1,737.0
Feb.	446.3	470.9	260.7	130.6	26.1	38.1	11.7	3.8	348.0	347.2	766.2	2,545.8	1,756.7
Mar.	419.6	474.5	258.7	135.5	26.9	37.7	12.0	3.7	372.0	371.2	781.9	2,569.9	1,767.7
Apr.	442.7	437.9	232.4	129.8	22.6	37.7	11.8	3.7	378.6	372.2	804.7	2,600.7	1,782.4
May	418.5	447.2	244.3	127.8	22.2	37.8	11.6	3.6	374.8	366.0	784.9	2,585.2	1,778.1
German contribution (€ billion)													
2022 Apr.	167.6	258.2	137.6	70.0	17.6	30.6	2.2	0.2	4.4	4.4	2.2	596.5	357.3
May	190.1	271.4	144.2	75.3	18.5	31.1	2.2	0.2	4.8	4.8	2.4	596.8	359.0
June	205.0	280.5	147.7	80.5	19.0	31.0	2.2	0.1	5.4	5.4	2.3	604.2	362.6
July	166.8	270.4	128.3	89.0	20.2	30.6	2.2	0.1	9.8	9.8	2.4	613.8	369.1
Aug.	142.7	274.6	129.4	92.2	20.4	30.4	2.2	0.1	8.0	8.0	2.3	625.7	384.5
Sep.	147.4	259.1	109.0	96.6	20.8	30.3	2.2	0.1	5.4	5.4	2.4	640.0	395.3
Oct.	152.5	253.9	108.1	93.1	20.5	30.1	2.1	0.1	5.2	5.2	2.5	633.9	398.1
Nov.	175.5	256.9	114.7	88.9	21.5	29.8	1.9	0.1	8.3	8.3	2.5	634.2	402.6
Dec.	159.2	255.8	117.3	83.2	23.9	29.6	1.8	0.1	6.3	6.3	2.6	631.2	409.3
2023 Jan.	116.4	246.9	99.4	92.2	23.8	29.8	1.6	0.1	6.1	6.1	2.4	639.6	417.9
Feb.	129.3	260.8	110.3	94.6	24.6	29.7	1.5	0.1	7.5	7.5	2.3	651.5	427.1
Mar.	156.4	258.8	102.2	101.4	24.1	29.6	1.4	0.1	7.2	7.2	2.6	658.0	440.3
Apr.	117.4	251.4	97.3	97.8	25.4	29.5	1.3	0.1	7.9	7.9	2.7	654.9	446.8
May	105.6	260.2	104.8	99.5	25.0	29.7	1.2	0.1	7.7	7.7	2.6	670.6	458.1
June	95.9	268.2	106.1	106.5	24.9	29.5	1.1	0.1	7.3	7.3	2.6	671.6	452.8
July	89.5	259.9	96.6	109.1	23.7	29.5	0.9	0.1	7.6	7.6	2.9	679.9	457.6
Aug.	96.8	261.9	100.9	107.1	23.3	29.6	0.9	0.1	8.7	8.7	3.0	688.8	469.0
Sep.	85.2	259.5	97.5	107.0	24.5	29.6	0.8	0.1	7.8	7.8	3.0	705.6	470.0
Oct.	82.8	235.3	81.6	99.3	24.1	29.4	0.7	0.1	8.5	8.5	2.9	713.0	476.3
Nov.	73.3	231.8	81.2	97.7	22.7	29.2	0.7	0.1	9.6	9.6	3.0	706.2	471.0
Dec.	81.1	238.6	84.9	100.3	23.9	28.6	0.7	0.1	8.4	8.4	3.2	699.9	476.8
2024 Jan.	74.4	223.6	75.5	95.6	24.0	28.7	0.7	0.1	11.4	11.4	3.3	717.4	486.5
Feb.	72.0	228.4	78.6	98.8	21.6	28.6	0.6	0.1	12.4	12.4	3.3	727.1	494.5
Mar.	74.0	234.4	79.3	103.5	22.5	28.3	0.6	0.1	11.0	10.9	3.5	727.8	501.4
Apr.	71.2	218.0	72.0	97.9	19.3	28.2	0.6	0.1	10.6	10.6	3.7	737.0	505.8
May	74.7	227.7	83.8	96.1	18.9	28.2	0.6	0.1	10.3	10.3	3.8	738.5	508.7

* Monetary financial institutions (MFIs) comprise banks (including building and loan associations), money market funds, and the European Central Bank and national central banks (the Eurosystem). **1** Source: ECB. **2** In Germany, only savings deposits. **3** Excluding holdings of MFIs; for the German contribution, excluding German MFIs' portfolios of securities issued by MFIs in the euro area. **4** In Germany, bank debt securities with maturities of up to one year are classed as money market paper.

5 Excluding liabilities arising from securities issued. **6** After deduction of inter-MFI participations. **7** The German contributions to the Eurosystem's monetary aggregates should on no account be interpreted as national monetary aggregates and are therefore not comparable with the erstwhile German money stocks M1, M2 or M3. **8** Including DEM banknotes still in circulation (see also footnote 4 on p. 10*). **9** For the German contribution, the difference between the volume of euro banknotes

II. Overall monetary survey in the euro area

issued (net) ³								Memo item:					Monetary liabilities of central governments (Post Office, Treasury) ¹⁴	End of month
With maturities of			Liabilities to non-euro area residents ⁵	Capital and reserves ⁶	Excess of inter-MFI liabilities	Other liability items		Monetary aggregates ⁷ (from 2002 German contribution excludes currency in circulation)			Monetary capital formation ¹³			
up to 1 year ⁴	over 1 year and up to 2 years	over 2 years				Total ⁸	of which: Intra-Eurosystem-liability/claim related to banknote issue ⁹	M1 ¹⁰	M2 ¹¹	M3 ¹²				
Euro area (€ billion) ¹														
39.0	16.2	2,018.2	5,747.9	2,979.2	–	2.1	4,402.9	0.0	11,557.8	15,026.8	15,811.5	6,876.5	197.5	2022 Apr.
34.0	15.6	1,988.1	5,795.4	2,915.9		16.2	4,332.0	0.0	11,619.4	15,082.6	15,856.6	6,781.6	199.3	May
47.8	14.4	2,006.6	5,719.5	2,905.3		26.4	4,656.6	0.0	11,680.1	15,173.2	15,943.0	6,786.4	199.6	June
15.1	16.4	2,059.1	5,863.1	2,970.9		8.3	4,320.5	0.0	11,762.6	15,311.3	16,066.2	6,894.3	204.2	July
16.7	19.0	2,077.8	5,915.0	2,890.6		34.5	4,807.9	0.0	11,776.2	15,378.0	16,137.5	6,812.1	197.0	Aug.
34.9	19.5	2,099.1	5,899.0	2,845.2		16.9	5,114.7	0.0	11,681.6	15,419.9	16,180.2	6,773.7	196.2	Sep.
3.8	24.0	2,102.0	6,038.8	2,819.4		38.2	4,996.0	0.0	11,505.4	15,322.1	16,100.0	6,749.8	196.4	Oct.
23.7	22.8	2,112.5	5,881.3	2,857.4		66.3	4,699.5	0.0	11,459.9	15,323.0	16,151.7	6,796.8	200.1	Nov.
31.7	23.2	2,111.2	5,553.5	2,820.5		58.0	4,827.9	0.0	11,381.7	15,315.5	16,131.8	6,767.5	192.7	Dec.
17.6	27.8	2,159.4	5,636.6	2,862.7		86.0	4,674.6	0.0	11,192.9	15,211.1	16,042.8	6,861.4	191.6	2023 Jan.
47.0	30.4	2,181.8	5,670.8	2,811.6		79.8	4,970.0	0.0	11,060.3	15,153.2	16,008.8	6,834.3	192.2	Feb.
54.0	30.4	2,172.6	5,657.4	2,893.9		82.5	4,691.0	0.0	10,949.5	15,154.1	16,013.5	6,918.2	182.5	Mar.
50.1	32.9	2,170.0	5,633.4	2,886.1		110.4	4,729.6	0.0	10,894.5	15,132.7	16,007.4	6,917.8	182.9	Apr.
56.0	32.8	2,210.1	5,722.1	2,908.9		155.5	4,817.0	0.0	10,807.7	15,099.1	15,990.6	6,985.4	178.5	May
49.8	33.0	2,229.9	5,584.4	2,886.3		147.2	4,855.3	0.0	10,742.3	15,116.8	15,989.8	6,985.6	178.0	June
47.0	34.0	2,321.1	5,594.1	2,909.1		102.5	4,963.5	0.0	10,648.3	15,083.9	15,984.3	7,102.6	180.5	July
50.1	33.3	2,335.8	5,656.5	2,928.1		122.1	4,940.9	0.0	10,553.8	15,042.0	15,946.1	7,138.0	176.9	Aug.
45.1	36.4	2,361.4	5,541.0	2,889.0		113.5	5,124.6	0.0	10,547.2	15,094.2	16,001.0	7,146.4	180.3	Sep.
54.5	36.6	2,410.5	5,511.8	2,922.3		121.7	5,098.1	0.0	10,375.9	15,003.5	15,954.5	7,223.6	179.6	Oct.
45.2	35.9	2,416.4	5,446.4	2,951.3		165.3	4,843.2	0.0	10,387.7	15,047.8	16,020.2	7,272.5	180.8	Nov.
46.0	34.8	2,409.9	5,299.3	3,018.4		56.1	4,472.4	0.0	10,446.0	15,199.4	16,192.2	7,351.9	177.4	Dec.
40.6	36.1	2,458.2	5,334.6	2,998.2		105.8	4,526.0	0.0	10,212.3	15,026.4	16,060.2	7,384.2	180.3	2024 Jan.
33.7	36.3	2,475.8	5,447.5	2,960.5		99.1	4,606.7	0.0	10,181.6	15,039.0	16,057.8	7,366.1	182.7	Feb.
22.5	40.1	2,507.3	5,482.7	3,025.3		106.6	4,563.9	0.0	10,239.5	15,142.8	16,181.3	7,470.5	179.9	Mar.
28.3	39.5	2,532.9	5,462.7	3,030.8		107.5	4,709.6	0.0	10,222.5	15,122.1	16,209.6	7,496.7	187.4	Apr.
17.4	42.5	2,525.4	5,464.8	3,033.1		103.8	4,662.9	0.0	10,266.6	15,192.0	16,252.4	7,494.8	186.8	May
German contribution (€ billion)														
14.6	7.1	574.8	1,284.0	769.2	–	1,168.1	2,325.6	523.3	2,892.4	3,686.8	3,715.1	1,935.2	0.0	2022 Apr.
14.9	7.3	574.6	1,307.0	748.6	–	1,199.2	2,289.8	526.8	2,914.0	3,699.5	3,728.9	1,911.8	0.0	May
18.7	6.6	578.9	1,317.0	743.1	–	1,255.4	2,479.8	530.5	2,934.8	3,726.6	3,759.7	1,907.5	0.0	June
21.2	6.8	585.8	1,287.5	779.7	–	1,189.6	2,276.7	525.2	2,941.9	3,757.1	3,797.3	1,949.2	0.0	July
21.8	7.6	596.2	1,349.3	739.6	–	1,271.6	2,540.1	513.5	2,999.5	3,826.5	3,866.3	1,919.1	0.0	Aug.
27.5	8.1	604.3	1,385.2	711.9	–	1,281.1	2,858.3	516.8	2,944.0	3,811.2	3,854.6	1,899.2	0.0	Sep.
19.1	9.7	605.0	1,355.1	693.8	–	1,215.2	2,804.7	516.8	2,912.1	3,812.3	3,848.8	1,880.8	0.0	Oct.
20.8	11.2	602.2	1,310.2	714.6	–	1,191.2	2,596.7	516.8	2,920.8	3,819.7	3,862.5	1,900.3	0.0	Nov.
20.2	11.7	599.3	1,265.7	690.1	–	1,230.4	2,726.5	518.9	2,881.6	3,795.1	3,835.9	1,869.2	0.0	Dec.
24.0	13.1	602.4	1,226.5	689.1	–	1,117.5	2,625.9	521.2	2,849.3	3,789.5	3,835.2	1,874.9	0.0	2023 Jan.
29.3	15.8	606.4	1,171.8	668.4	–	1,073.2	2,787.2	522.2	2,816.8	3,782.0	3,836.8	1,860.1	0.0	Feb.
36.2	17.5	604.3	1,188.0	700.6	–	1,129.7	2,641.2	524.5	2,769.6	3,756.4	3,819.8	1,897.7	0.0	Mar.
37.0	18.5	599.4	1,107.1	704.2	–	1,028.5	2,637.8	526.4	2,757.6	3,759.4	3,825.5	1,899.8	0.0	Apr.
41.2	19.5	609.9	1,122.5	715.6	–	1,036.9	2,662.4	529.0	2,752.3	3,762.8	3,833.9	1,926.7	0.0	May
44.6	19.2	607.9	1,099.9	709.8	–	1,026.8	2,723.1	530.7	2,722.6	3,760.6	3,834.2	1,921.6	0.0	June
44.5	19.9	615.4	1,070.7	724.0	–	996.4	2,835.7	532.2	2,700.4	3,759.3	3,834.2	1,946.1	0.0	July
51.0	20.6	617.2	1,044.4	734.2	–	998.8	2,835.9	535.1	2,678.7	3,756.9	3,840.1	1,958.1	0.0	Aug.
48.5	22.6	634.5	1,048.4	722.8	–	1,000.9	2,898.6	538.7	2,666.2	3,753.7	3,835.5	1,967.4	0.0	Sep.
49.7	24.4	639.0	1,035.9	735.9	–	998.0	2,898.7	540.2	2,634.8	3,751.7	3,837.2	1,987.9	0.0	Oct.
49.6	23.6	633.1	1,012.0	753.5	–	983.0	2,705.7	541.3	2,643.0	3,760.7	3,846.5	2,006.8	0.0	Nov.
45.9	25.0	629.0	1,016.2	778.6	–	1,034.8	2,550.2	543.7	2,624.7	3,762.2	3,844.6	2,034.5	0.0	Dec.
46.9	25.6	645.0	967.8	758.4	–	959.8	2,586.3	536.2	2,577.9	3,744.3	3,831.5	2,032.8	0.0	2024 Jan.
46.4	26.4	654.4	1,024.7	731.1	–	992.0	2,646.3	538.6	2,559.6	3,745.7	3,834.2	2,015.6	0.0	Feb.
45.7	26.7	655.4	1,022.6	744.6	–	988.1	2,590.4	541.5	2,562.4	3,767.6	3,854.5	2,033.5	0.0	Mar.
40.9	26.3	667.9	987.7	747.2	–	960.2	2,676.0	543.3	2,558.3	3,764.4	3,846.0	2,053.2	0.0	Apr.
39.6	25.9	673.0	1,001.9	756.4	–	986.5	2,623.5	545.7	2,584.9	3,791.9	3,871.5	2,068.9	0.0	May

actually issued by the Bundesbank and the amount disclosed in accordance with the accounting regime chosen by the Eurosystem (see also footnote 2 on banknote circulation in Table III.2). **10** Overnight deposits (excluding central governments' deposits), and (for the euro area) currency in circulation, central governments' overnight monetary liabilities, which are not included in the consolidated balance sheet. **11** M1 plus deposits with agreed maturities of up to two years and at agreed

notice of up to three months (excluding central governments' deposits) and (for the euro area) central governments' monetary liabilities with such maturities. **12** M2 plus repo transactions, money market fund shares, money market paper and debt securities up to two years. **13** Deposits with agreed maturities of over two years and at agreed notice of over three months, debt securities with maturities of over two years, capital and reserves. **14** Non-existent in Germany.

II. Overall monetary survey in the euro area

3. Banking systems liquidity position * Stocks

€ billion; period averages of daily positions

Reserve maintenance period ending in ¹	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current account balances (including minimum reserves) ⁷	Base money ⁸
	Net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations ⁴	Banknotes in circulation ⁵	Central government deposits	Other factors (net) ⁶		
		Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations ³							
Eurosystem ²												
2022 June	934.2	0.5	2,198.8	0.0	4,939.1	681.3	0.0	1,591.5	624.1	1,129.1	4,046.1	6,319.0
July	943.7	1.0	2,149.4	0.0	4,958.8	678.7	0.0	1,604.0	667.6	1,158.0	3,943.3	6,226.0
Aug.	950.1	1.7	2,124.9	0.0	4,954.8	707.0	0.0	1,585.3	553.9	1,249.2	3,936.1	6,228.5
Sep.	.	.	.	.	.	.	.	.	.	.	.	.
Oct.	.	.	.	.	.	.	.	.	.	.	.	.
Nov.	955.8	4.0	2,118.8	0.0	4,948.3	4,490.0	0.0	1,563.7	536.7	1,104.4	332.0	6,385.7
Dec.	960.4	1.9	1,947.1	0.0	4,946.1	4,521.5	0.0	1,560.8	492.5	1,066.9	213.8	6,296.2
2023 Jan.	.	.	.	.	.	.	.	.	.	.	.	.
Feb.	940.4	1.2	1,303.3	0.1	4,942.1	4,051.6	0.0	1,565.6	372.8	1,001.6	195.6	5,812.7
Mar.	916.8	0.9	1,233.3	0.0	4,939.0	4,103.0	0.0	1,553.9	380.2	861.8	191.1	5,848.0
Apr.	.	.	.	.	.	.	.	.	.	.	.	.
May	945.0	1.4	1,117.7	0.1	4,905.6	3,996.1	0.0	1,559.8	360.6	870.5	182.7	5,738.6
June	948.2	1.6	1,100.5	0.1	4,884.1	4,126.4	0.0	1,563.7	256.4	806.6	181.6	5,871.7
July	.	.	.	.	.	.	.	.	.	.	.	.
Aug.	927.8	10.9	682.0	0.1	4,853.0	3,704.4	0.0	1,567.0	254.4	770.5	177.4	5,448.9
Sep.	924.3	5.6	601.0	0.1	4,811.2	3,647.4	0.0	1,564.2	222.5	733.8	174.3	5,386.0
Oct.	931.2	8.1	515.4	0.1	4,767.9	3,577.4	0.0	1,554.7	222.7	693.3	174.6	5,306.7
Nov.	.	.	.	.	.	.	.	.	.	.	.	.
Dec.	933.3	7.3	495.9	0.0	4,715.0	3,548.8	0.0	1,551.1	194.1	685.3	172.0	5,271.9
2024 Jan.	958.3	7.9	396.2	0.1	4,686.8	3,487.4	0.0	1,556.7	168.4	666.3	170.5	5,214.6
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	966.5	4.8	397.3	0.0	4,646.4	3,490.9	0.0	1,543.2	168.5	643.8	168.6	5,202.7
Apr.	1,002.8	2.8	249.4	0.0	4,599.5	3,337.9	0.0	1,546.1	137.8	664.3	168.4	5,052.3
May	.	.	.	.	.	.	.	.	.	.	.	.
June	1,031.7	2.5	149.1	0.0	4,550.7	3,214.0	0.0	1,551.5	119.5	682.3	166.7	4,932.1
Deutsche Bundesbank												
2022 June	230.4	0.1	420.2	0.0	1,087.4	189.9	0.0	388.0	196.9	-183.1	1,147.4	1,725.3
July	231.7	0.3	409.1	0.0	1,084.3	185.8	0.0	390.3	214.9	-175.4	1,109.7	1,685.8
Aug.	.	.	.	.	.	.	.	.	.	.	.	.
Sep.	232.1	0.3	403.6	0.0	1,076.8	228.5	0.0	379.5	157.9	-161.8	1,108.8	1,716.8
Oct.	.	.	.	.	.	.	.	.	.	.	.	.
Nov.	231.7	0.8	400.5	0.0	1,071.5	1,304.0	0.0	379.0	127.2	-231.4	125.9	1,808.8
Dec.	232.4	0.5	352.5	0.0	1,079.2	1,346.6	0.0	378.8	121.0	-242.4	60.5	1,785.9
2023 Jan.	.	.	.	.	.	.	.	.	.	.	.	.
Feb.	229.8	0.4	231.9	0.1	1,076.8	1,234.6	0.0	377.2	77.8	-205.4	54.8	1,666.7
Mar.	228.9	0.4	212.8	0.0	1,077.0	1,263.7	0.0	374.5	69.2	-242.5	54.2	1,692.4
Apr.	.	.	.	.	.	.	.	.	.	.	.	.
May	239.2	0.7	200.2	0.1	1,066.1	1,228.0	0.0	375.7	73.4	-221.1	50.1	1,653.9
June	241.7	0.7	198.9	0.1	1,056.8	1,256.3	0.0	377.2	54.7	-241.8	52.0	1,685.4
July	.	.	.	.	.	.	.	.	.	.	.	.
Aug.	236.2	1.5	142.4	0.1	1,048.8	1,175.5	0.0	377.5	49.9	-222.5	48.4	1,601.5
Sep.	234.5	0.8	131.2	0.1	1,041.3	1,177.8	0.0	377.3	40.1	-235.4	48.0	1,603.1
Oct.	235.7	1.3	96.3	0.0	1,024.0	1,151.1	0.0	374.9	28.7	-245.4	47.9	1,574.0
Nov.	.	.	.	.	.	.	.	.	.	.	.	.
Dec.	236.8	0.7	89.2	0.0	1,016.7	1,171.3	0.0	373.5	18.9	-267.7	47.3	1,592.1
2024 Jan.	243.9	0.9	69.5	0.1	1,005.8	1,127.3	0.0	379.3	19.8	-253.3	47.0	1,553.6
Feb.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	246.5	0.7	69.3	0.0	996.7	1,164.4	0.0	379.2	16.3	-293.4	46.7	1,590.3
Apr.	257.8	0.7	40.4	0.0	983.5	1,122.4	0.0	379.4	17.1	-282.5	45.9	1,547.7
May	.	.	.	.	.	.	.	.	.	.	.	.
June	265.9	0.6	21.3	0.0	970.0	1,102.8	0.0	380.9	13.5	-285.8	46.3	1,530.0

Discrepancies may arise from rounding. * The banking system's liquidity position is defined as the current account holdings in euro of euro area credit institutions with the Eurosystem. Amounts are derived from the consolidated financial statement of the Eurosystem and the financial statement of the Bundesbank. ¹ Figures are daily averages for the reserve maintenance period ending in the month indicated. Following the changeover in the frequency of Governing Council monetary policy meetings to a six-week cycle, a reserve maintenance period no longer ends in every month. No figures

are available in such cases. ² Source: ECB. ³ Includes liquidity provided under the Eurosystem's asset purchase programmes. ⁴ From August 2009 includes liquidity absorbed as a result of the Eurosystem's foreign exchange swap operations. ⁵ From 2002 euro banknotes and other banknotes which have been issued by the national central banks of the Eurosystem and which are still in circulation. In accordance with the accounting procedure chosen by the Eurosystem for the issue of euro banknotes, a share of 8% of the total value of the euro banknotes in circulation is

II. Overall monetary survey in the euro area

Flows

Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current account balances (including minimum reserves) ⁷	Base money ⁸	Reserve maintenance period ending in ¹
Net assets in gold and foreign currency	Monetary policy operations of the Eurosystem				Deposit facility	Other liquidity-absorbing operations ⁴	Banknotes in circulation ⁵	Central government deposits	Other factors (net) ⁶			
	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations ³								
Eurosystem ²												
+ 21.0	+ 0.1	- 1.0	± 0.0	+ 49.9	- 33.6	± 0.0	+ 15.6	- 43.7	+ 12.4	+ 118.8	+ 100.9	2022 June
+ 9.5	+ 0.5	- 49.4	± 0.0	+ 19.7	- 2.6	± 0.0	+ 12.5	+ 43.5	+ 28.9	- 102.8	- 93.0	July
+ 6.4	+ 0.7	- 24.5	± 0.0	- 4.0	+ 28.3	± 0.0	- 18.7	-113.7	+ 91.2	- 7.2	+ 2.5	Aug.
+ 5.7	+ 2.3	- 6.1	± 0.0	- 6.5	+3,783.0	± 0.0	- 21.6	- 17.2	- 144.8	-3,604.1	+ 157.2	Oct.
+ 4.6	- 2.1	- 171.7	± 0.0	- 2.2	+ 31.5	± 0.0	- 2.9	- 44.2	- 37.5	- 118.2	- 89.5	Nov.
												Dec.
- 20.0	- 0.7	- 643.8	+ 0.1	- 4.0	- 469.9	± 0.0	+ 4.8	-119.7	- 65.3	- 18.2	- 483.5	2023 Jan.
- 23.6	- 0.3	- 70.0	- 0.1	- 3.1	+ 51.4	± 0.0	- 11.7	+ 7.4	- 139.8	- 4.5	+ 35.3	Feb.
												Mar.
+ 28.2	+ 0.5	- 115.6	+ 0.1	- 33.4	- 106.9	± 0.0	+ 5.9	- 19.6	+ 8.7	- 8.4	- 109.4	Apr.
+ 3.2	+ 0.2	- 17.2	± 0.0	- 21.5	+ 130.3	± 0.0	+ 3.9	-104.2	- 63.9	- 1.1	+ 133.1	May
												June
- 20.4	+ 9.3	- 418.5	± 0.0	- 31.1	- 422.0	± 0.0	+ 3.3	- 2.0	- 36.1	- 4.2	- 422.8	July
- 3.5	- 5.3	- 81.0	± 0.0	- 41.8	- 57.0	± 0.0	- 2.8	- 31.9	- 36.7	- 3.1	- 62.9	Aug.
												Sept.
+ 6.9	+ 2.5	- 85.6	± 0.0	- 43.3	- 70.0	± 0.0	- 9.5	+ 0.2	- 40.5	+ 0.3	- 79.3	Oct.
+ 2.1	- 0.8	- 19.5	- 0.1	- 52.9	- 28.6	± 0.0	- 3.6	- 28.6	- 8.0	- 2.6	- 34.8	Nov.
												Dec.
+ 25.0	+ 0.6	- 99.7	+ 0.1	- 28.2	- 61.4	± 0.0	+ 5.6	- 25.7	- 19.0	- 1.5	- 57.3	2024 Jan.
+ 8.2	- 3.1	+ 1.1	- 0.1	- 40.4	+ 3.5	± 0.0	- 13.5	+ 0.1	- 22.5	- 1.9	- 11.9	Feb.
												Mar.
+ 36.3	- 2.0	- 147.9	± 0.0	- 46.9	- 153.0	± 0.0	+ 2.9	- 30.7	+ 20.5	- 0.2	- 150.4	Apr.
+ 28.9	- 0.3	- 100.3	± 0.0	- 48.8	- 123.9	± 0.0	+ 5.4	- 18.3	+ 18.0	- 1.7	- 120.2	May
												June
Deutsche Bundesbank												
+ 6.6	+ 0.1	- 0.6	- 0.0	+ 18.7	- 7.7	± 0.0	+ 3.0	+ 0.2	+ 6.0	+ 24.1	+ 19.4	2022 June
+ 1.3	+ 0.2	- 11.1	- 0.0	- 3.1	- 4.1	± 0.0	+ 2.4	+ 18.0	+ 7.7	- 37.7	- 39.5	July
+ 0.4	+ 0.0	- 5.5	- 0.0	- 7.5	+ 42.7	± 0.0	- 10.8	- 57.1	+ 13.5	- 0.9	+ 31.0	Aug.
												Sept.
- 0.5	+ 0.5	- 3.1	+ 0.0	- 5.3	+1,075.5	± 0.0	- 0.6	- 30.7	- 69.6	- 982.9	+ 92.0	Oct.
+ 0.7	- 0.4	- 48.0	+ 0.0	+ 7.7	+ 42.7	± 0.0	- 0.1	- 6.2	- 11.0	- 65.4	- 22.9	Nov.
												Dec.
- 2.5	- 0.1	- 120.6	+ 0.1	- 2.4	- 112.0	± 0.0	- 1.6	- 43.2	+ 37.0	- 5.6	- 119.3	2023 Jan.
- 1.0	+ 0.0	- 19.1	- 0.0	+ 0.2	+ 29.1	± 0.0	- 2.7	- 8.6	- 37.1	- 0.7	+ 25.7	Feb.
												Mar.
+ 10.3	+ 0.2	- 12.7	+ 0.0	- 11.0	- 35.7	± 0.0	+ 1.2	+ 4.1	+ 21.4	- 4.1	- 38.5	Apr.
+ 2.6	+ 0.1	- 1.3	+ 0.0	- 9.3	+ 28.3	± 0.0	+ 1.4	- 18.7	- 20.7	+ 1.9	+ 31.5	May
												June
- 5.6	+ 0.8	- 56.5	- 0.0	- 8.0	- 80.8	± 0.0	+ 0.4	- 4.7	+ 19.3	- 3.5	- 83.9	July
- 1.7	- 0.7	- 11.2	+ 0.0	- 7.5	+ 2.3	± 0.0	- 0.2	- 9.8	- 13.0	- 0.4	+ 1.6	Aug.
												Sept.
+ 1.2	+ 0.5	- 35.0	- 0.0	- 17.3	- 26.7	± 0.0	- 2.4	- 11.5	- 9.9	- 0.0	- 29.1	Oct.
+ 1.1	- 0.6	- 7.1	- 0.0	- 7.3	+ 20.1	± 0.0	- 1.4	- 9.8	- 22.3	- 0.7	+ 18.1	Nov.
												Dec.
+ 7.1	+ 0.2	- 19.7	+ 0.0	- 10.9	- 44.0	± 0.0	+ 5.8	+ 0.9	+ 14.3	- 0.3	- 38.5	2024 Jan.
+ 2.6	- 0.2	- 0.2	- 0.0	- 9.0	+ 37.2	± 0.0	- 0.2	- 3.5	- 40.1	- 0.3	+ 36.7	Feb.
												Mar.
+ 11.3	+ 0.0	- 28.9	- 0.0	- 13.3	- 42.0	± 0.0	+ 0.3	+ 0.7	+ 10.9	- 0.8	- 42.6	Apr.
+ 8.1	- 0.1	- 19.2	- 0.0	- 13.4	- 19.6	± 0.0	+ 1.5	- 3.5	- 3.2	+ 0.4	- 17.7	May
												June

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

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

III. Consolidated financial statement of the Eurosystem

1. Assets *

€ billion

As at reporting date	Total assets	Gold and gold receivables	Claims on non-euro area residents denominated in foreign currency			Claims on euro area residents denominated in foreign currency	Claims on non-euro area residents denominated in euro			
			Total	Receivables from the IMF	Balances with banks, security investments, external loans and other external assets		Total	Balances with banks, security investments and loans	Claims arising from the credit facility under ERM II	
Eurosystem ¹										
2023 Dec. 15	6,987.4	613.3	507.6	234.1	273.5	14.2	15.0	15.0	–	–
22	6,899.2	613.3	507.9	233.7	274.2	15.4	14.9	14.9	–	–
29	6,935.5	649.1	499.6	229.0	270.6	13.9	20.1	20.1	–	–
2024 Jan. 5	6,919.8	649.1	499.9	229.5	270.5	13.3	15.3	15.3	–	–
12	6,923.7	649.1	498.7	229.2	269.5	15.0	15.7	15.7	–	–
19	6,889.3	649.1	498.8	229.1	269.6	14.5	15.2	15.2	–	–
26	6,887.6	649.1	499.1	229.6	269.5	14.9	15.8	15.8	–	–
Feb. 2	6,865.4	649.1	499.5	230.0	269.5	14.7	16.0	16.0	–	–
9	6,861.4	649.1	499.6	229.9	269.7	14.7	15.0	15.0	–	–
16	6,842.7	649.1	500.4	229.9	270.5	14.5	15.4	15.4	–	–
23	6,830.9	649.1	500.8	229.9	270.9	14.6	16.1	16.1	–	–
Mar. 1	6,820.0	649.1	501.3	229.8	271.5	13.8	15.1	15.1	–	–
8	6,813.2	649.1	499.9	229.6	270.3	15.1	15.4	15.4	–	–
15	6,815.6	649.1	501.4	229.6	271.8	13.9	15.6	15.6	–	–
22	6,810.0	649.1	498.2	229.1	269.1	15.7	15.7	15.7	–	–
29	6,619.7	711.2	504.7	231.5	273.2	15.1	15.9	15.9	–	–
Apr. 5	6,585.3	711.2	506.1	231.5	274.7	14.1	15.7	15.7	–	–
12	6,596.7	711.2	505.5	231.4	274.1	14.9	16.6	16.6	–	–
19	6,593.2	711.1	505.4	231.3	274.1	14.8	16.2	16.2	–	–
26	6,598.9	711.1	505.0	231.7	273.3	15.3	16.4	16.4	–	–
May 3	6,582.1	711.1	505.6	231.6	273.9	15.1	16.6	16.6	–	–
10	6,581.0	711.1	505.4	232.1	273.2	15.3	16.3	16.3	–	–
17	6,562.4	711.1	505.7	232.2	273.5	15.1	17.0	17.0	–	–
24	6,577.7	711.1	506.6	232.2	274.4	14.6	17.7	17.7	–	–
31	6,560.7	711.1	506.7	232.6	274.2	13.8	16.8	16.8	–	–
June 7	6,541.6	711.1	507.3	232.6	274.8	14.3	17.2	17.2	–	–
14	6,534.5	711.1	507.1	232.4	274.7	14.6	16.5	16.5	–	–
21	6,536.8	711.1	506.1	232.4	273.8	15.5	17.1	17.1	–	–
28	6,522.0	757.5	510.2	232.4	277.8	14.1	17.0	17.0	–	–
July 5	6,497.7	757.5	510.2	232.4	277.8	15.0	16.9	16.9	–	–
Deutsche Bundesbank										
2023 Dec. 15	2,512.8	190.2	92.9	58.9	34.0	0.0	–	–	–	–
22	2,490.5	190.2	92.6	58.7	33.9	0.0	–	–	–	–
29	2,536.2	201.3	90.9	57.5	33.4	0.0	5.2	5.2	–	–
2024 Jan. 5	2,501.5	201.3	90.4	58.0	32.3	0.0	0.4	0.4	–	–
12	2,513.7	201.3	90.0	57.7	32.3	0.0	0.6	0.6	–	–
19	2,483.0	201.3	90.3	57.7	32.6	0.0	0.1	0.1	–	–
26	2,497.5	201.3	90.5	57.8	32.8	0.0	0.5	0.5	–	–
Feb. 2	2,512.4	201.3	90.9	57.9	33.0	0.0	0.7	0.7	–	–
9	2,508.1	201.3	91.2	57.9	33.3	0.0	0.9	0.9	–	–
16	2,518.7	201.3	91.6	57.8	33.9	0.0	1.4	1.4	–	–
23	2,500.9	201.3	92.3	57.6	34.7	0.0	1.9	1.9	–	–
Mar. 1	2,504.7	201.3	92.2	57.5	34.6	0.0	0.9	0.9	–	–
8	2,496.1	201.3	91.8	57.5	34.3	0.0	1.2	1.2	–	–
15	2,481.0	201.3	91.8	57.5	34.3	0.0	1.3	1.3	–	–
22	2,478.2	201.3	91.5	57.5	34.0	0.0	1.1	1.1	–	–
29	2,447.7	220.6	92.2	57.8	34.3	0.0	0.8	0.8	–	–
Apr. 5	2,448.6	220.6	91.9	57.8	34.1	0.0	0.8	0.8	–	–
12	2,439.1	220.6	91.9	57.8	34.1	0.0	1.2	1.2	–	–
19	2,423.9	220.5	92.6	57.8	34.8	0.0	0.8	0.8	–	–
26	2,413.4	220.5	92.1	57.8	34.4	0.0	0.4	0.4	–	–
May 3	2,446.6	220.5	92.1	57.9	34.2	0.0	1.0	1.0	–	–
10	2,458.4	220.5	92.1	57.9	34.2	0.0	0.6	0.6	–	–
17	2,442.2	220.5	91.5	57.9	33.6	0.0	1.2	1.2	–	–
24	2,461.4	220.5	91.7	57.9	33.8	0.0	1.7	1.7	–	–
31	2,425.5	220.5	92.0	58.2	33.8	0.0	1.0	1.0	–	–
June 7	2,439.1	220.5	92.2	58.2	34.0	0.0	0.9	0.9	–	–
14	2,420.5	220.5	92.4	58.2	34.2	0.0	0.1	0.1	–	–
21	2,436.8	220.5	92.4	58.2	34.2	0.0	0.4	0.4	–	–
28	2,447.3	234.9	93.3	58.2	35.1	0.0	0.4	0.4	–	–
July 5	2,466.7	234.9	93.2	58.1	35.1	0.0	0.4	0.4	–	–

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

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

III. Consolidated financial statement of the Eurosystem

Lending to euro area credit institutions related to monetary policy operations denominated in euro							Other claims on euro area credit institutions denomi- nated in euro	Securities of euro area residents in euro			General government debt deno- minated in euro	Other assets	As at reporting date	
Total	Main re- financing opera- tions	Longer- term re- financing opera- tions	Fine- tuning reverse opera- tions	Structural reverse opera- tions	Marginal lending facility	Credits related to margin calls		Total	Securities held for monetary policy purposes	Other securities				
Eurosystem ¹														
502.7	6.5	496.0	-	-	0.3	-	27.0	4,905.7	4,701.4	204.3	21.0	380.9	2023 Dec.	15
404.8	8.4	396.2	-	-	0.2	-	33.5	4,904.0	4,701.3	202.7	21.0	384.5		22
410.3	14.1	396.2	-	-	0.0	-	28.7	4,899.0	4,694.3	204.6	20.9	393.9		29
403.6	7.4	396.2	-	-	-	-	32.0	4,895.2	4,691.0	204.2	20.9	390.5	2024 Jan.	5
402.2	6.0	396.2	-	-	-	-	28.5	4,897.7	4,693.3	204.4	20.9	395.9		12
402.1	5.9	396.2	-	-	-	-	25.0	4,877.2	4,671.2	206.0	20.9	386.5		19
401.8	5.6	396.2	-	-	-	-	24.0	4,880.9	4,673.4	207.5	20.9	381.1		26
403.3	6.4	396.9	-	-	-	-	30.4	4,866.7	4,661.9	204.9	20.9	364.8	Feb.	2
401.7	4.7	396.9	-	-	-	-	21.0	4,866.2	4,663.9	202.3	20.9	373.2		9
401.3	4.3	396.9	-	-	0.0	-	20.4	4,848.7	4,646.7	202.0	20.9	372.0		16
401.5	4.5	396.9	-	-	0.0	-	26.6	4,847.3	4,644.6	202.7	20.9	354.1		23
403.4	5.3	398.0	-	-	0.0	-	37.2	4,830.7	4,628.7	202.0	20.9	348.5	Mar.	1
401.6	3.6	398.0	-	-	-	-	23.7	4,832.7	4,630.1	202.5	20.9	354.8		8
400.4	2.4	398.0	-	-	-	-	27.9	4,829.7	4,624.7	204.9	20.9	356.8		15
400.0	2.0	398.0	-	-	-	-	35.1	4,824.3	4,618.1	206.2	20.9	350.9		22
156.2	5.9	150.3	-	-	-	-	34.4	4,802.6	4,595.0	207.6	20.8	358.7		29
152.5	2.2	150.3	-	-	-	-	23.0	4,789.3	4,579.4	209.9	20.8	352.5	Apr.	5
151.7	1.4	150.3	-	-	-	-	21.7	4,795.6	4,582.8	212.8	20.8	358.6		12
151.9	1.6	150.3	-	-	0.0	-	24.5	4,786.6	4,571.4	215.1	20.8	361.8		19
154.8	4.5	150.3	-	-	0.0	-	26.7	4,788.5	4,572.6	215.9	20.8	360.2		26
151.4	2.0	149.4	-	-	-	-	27.1	4,777.4	4,562.2	215.2	20.8	356.8	May	3
151.1	1.7	149.4	-	-	-	-	21.7	4,782.2	4,566.6	215.6	20.8	357.0		10
150.6	1.2	149.4	-	-	-	-	20.0	4,763.2	4,547.2	216.0	20.8	358.7		17
150.8	1.3	149.4	-	-	-	-	26.2	4,765.5	4,548.2	217.4	20.8	364.3		24
152.0	4.9	147.1	-	-	-	-	35.4	4,740.1	4,522.4	217.7	20.8	363.9		31
149.5	2.3	147.1	-	-	-	-	28.0	4,739.7	4,521.4	218.3	20.8	353.7	June	7
149.3	2.2	147.1	-	-	-	-	26.9	4,732.4	4,513.3	219.1	20.8	355.8		14
151.4	4.3	147.1	-	-	-	-	33.9	4,729.6	4,510.5	219.1	20.8	351.2		21
95.0	11.1	83.8	-	-	0.1	-	32.5	4,714.7	4,496.0	218.7	20.8	360.1		28
90.6	6.7	83.8	-	-	0.1	-	28.4	4,707.1	4,489.0	218.1	20.8	351.2	July	5
Deutsche Bundesbank														
89.6	0.2	89.1	-	-	0.3	-	10.4	1,010.5	1,010.5	-	4.4	1,114.8	2023 Dec.	15
70.4	0.7	69.5	-	-	0.2	-	10.4	1,010.2	1,010.2	-	4.4	1,112.2		22
72.3	2.7	69.5	-	-	-	-	5.8	1,009.1	1,009.1	-	4.4	1,147.2		29
69.9	0.4	69.5	-	-	-	-	9.6	1,005.6	1,005.6	-	4.4	1,119.9	2024 Jan.	5
69.7	0.1	69.5	-	-	-	-	12.1	1,006.1	1,006.1	-	4.4	1,129.5		12
70.1	0.6	69.5	-	-	-	-	8.7	1,001.6	1,001.6	-	4.4	1,106.5		19
70.2	0.7	69.5	-	-	-	-	8.6	1,002.2	1,002.2	-	4.4	1,119.6		26
70.1	0.8	69.3	-	-	-	-	9.2	1,002.2	1,002.2	-	4.4	1,133.5	Feb.	2
69.7	0.4	69.3	-	-	-	-	7.4	1,002.3	1,002.3	-	4.4	1,130.8		9
69.9	0.5	69.3	-	-	0.0	-	5.5	994.2	994.2	-	4.4	1,150.3		16
70.1	0.7	69.3	-	-	0.0	-	9.2	992.7	992.7	-	4.4	1,129.0		23
70.4	1.1	69.3	-	-	0.0	-	10.8	993.3	993.3	-	4.4	1,131.4	Mar.	1
69.9	0.6	69.3	-	-	-	-	10.1	994.0	994.0	-	4.4	1,123.4		8
69.8	0.4	69.3	-	-	-	-	10.1	989.1	989.1	-	4.4	1,113.2		15
69.8	0.5	69.3	-	-	-	-	11.9	987.7	987.7	-	4.4	1,110.4		22
22.8	1.6	21.2	-	-	-	-	13.0	987.0	987.0	-	4.4	1,107.0		29
21.7	0.5	21.2	-	-	-	-	8.8	974.4	974.4	-	4.4	1,125.9	Apr.	5
21.6	0.4	21.2	-	-	-	-	9.1	975.0	975.0	-	4.4	1,115.2		12
21.6	0.4	21.2	-	-	0.0	-	9.9	973.4	973.4	-	4.4	1,100.7		19
22.3	1.1	21.2	-	-	0.0	-	11.6	974.8	974.8	-	4.4	1,087.3		26
21.8	0.5	21.3	-	-	-	-	11.7	975.7	975.7	-	4.4	1,119.3	May	3
21.6	0.3	21.3	-	-	-	-	8.4	977.3	977.3	-	4.4	1,133.4		10
21.6	0.3	21.3	-	-	-	-	7.0	964.3	964.3	-	4.4	1,131.7		17
21.7	0.4	21.3	-	-	-	-	11.1	965.0	965.0	-	4.4	1,145.3		24
22.4	1.1	21.3	-	-	-	-	11.2	965.8	965.8	-	4.4	1,108.2		31
21.7	0.4	21.3	-	-	-	-	11.0	965.1	965.1	-	4.4	1,123.3	June	7
21.7	0.4	21.3	-	-	-	-	11.3	957.2	957.2	-	4.4	1,112.9		14
21.7	0.4	21.3	-	-	-	-	11.3	955.5	955.5	-	4.4	1,130.6		21
14.5	1.5	13.0	-	-	-	-	10.4	955.5	955.5	-	4.4	1,133.9		28
13.7	0.6	13.0	-	-	0.1	-	9.9	953.3	953.3	-	4.4	1,156.9	July	5

III. Consolidated financial statement of the Eurosystem

2. Liabilities *

€ billion

As at reporting date	Total liabilities	Banknotes in circulation ¹	Liabilities to euro area credit institutions related to monetary policy operations denominated in euro						Other liabilities to euro area credit institutions denominated in euro	Debt certificates issued	Liabilities to other euro area residents denominated in euro		
			Total	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls			Total	General government	Other liabilities
Eurosystem ³													
2023 Dec. 15	6,987.4	1,556.6	3,725.2	191.5	3,533.7	–	–	0.0	36.2	–	259.8	177.5	82.3
22	6,899.2	1,565.1	3,649.6	204.0	3,445.6	–	–	0.0	40.1	–	232.5	145.0	87.5
29	6,935.5	1,567.7	3,508.9	174.0	3,334.8	–	–	0.0	58.9	–	303.9	212.8	91.1
2024 Jan. 5	6,919.8	1,561.6	3,679.9	139.7	3,540.1	–	–	0.0	40.0	–	239.9	158.8	81.1
12	6,923.7	1,553.6	3,703.5	136.3	3,567.2	–	–	0.0	37.5	–	239.2	161.6	77.6
19	6,889.3	1,548.8	3,666.6	162.3	3,504.3	–	–	0.0	35.7	–	259.9	181.5	78.5
26	6,887.6	1,545.5	3,678.6	174.2	3,504.3	–	–	0.0	36.3	–	257.0	178.9	78.0
Feb. 2	6,865.4	1,545.2	3,676.9	167.8	3,509.1	–	–	0.0	33.8	–	239.2	162.3	76.9
9	6,861.4	1,544.3	3,655.9	153.8	3,502.0	–	–	0.0	33.7	–	257.6	182.7	74.9
16	6,842.7	1,543.3	3,640.2	153.9	3,486.2	–	–	0.0	32.0	–	264.3	187.4	76.9
23	6,830.9	1,541.7	3,678.6	154.5	3,524.0	–	–	0.0	31.7	–	231.0	155.4	75.6
Mar. 1	6,820.0	1,542.7	3,657.1	163.1	3,493.9	–	–	0.0	33.3	–	228.4	150.6	77.8
8	6,813.2	1,543.4	3,662.1	198.0	3,464.1	–	–	0.0	33.1	–	229.9	148.2	81.6
15	6,815.6	1,542.9	3,660.0	156.3	3,503.8	–	–	0.0	35.1	–	234.2	149.3	84.9
22	6,810.0	1,543.8	3,675.2	150.7	3,524.5	–	–	0.0	35.6	–	212.3	135.2	77.1
29	6,619.7	1,550.3	3,379.5	169.7	3,209.8	–	–	0.0	37.5	–	226.1	142.6	83.6
Apr. 5	6,585.3	1,547.8	3,392.0	161.7	3,230.3	–	–	0.0	33.3	–	219.1	140.7	78.3
12	6,596.7	1,546.4	3,416.7	185.5	3,231.2	–	–	0.0	31.3	–	205.3	127.0	78.3
19	6,593.2	1,546.2	3,415.2	170.0	3,245.2	–	–	0.0	31.9	–	201.1	119.4	81.7
26	6,598.9	1,548.6	3,416.3	153.7	3,262.6	–	–	0.0	32.1	–	204.7	123.9	80.8
May 3	6,582.1	1,553.2	3,391.0	153.2	3,237.9	–	–	0.0	32.9	–	197.5	118.3	79.3
10	6,581.0	1,553.3	3,399.0	152.6	3,246.3	–	–	0.0	31.9	–	194.3	115.1	79.2
17	6,562.4	1,552.9	3,376.8	152.0	3,224.8	–	–	0.0	32.4	–	195.9	117.3	78.6
24	6,577.7	1,551.2	3,372.8	151.9	3,220.9	–	–	0.0	33.7	–	201.7	120.2	81.5
31	6,560.7	1,553.4	3,322.2	168.7	3,153.5	–	–	0.0	36.3	–	210.6	131.8	78.8
June 7	6,541.6	1,553.8	3,350.0	196.9	3,153.1	–	–	–	33.4	–	199.9	106.1	93.9
14	6,534.5	1,554.2	3,351.7	173.7	3,177.9	–	–	–	32.9	–	185.9	107.6	78.3
21	6,536.8	1,555.7	3,345.0	152.3	3,192.8	–	–	–	33.3	–	188.6	111.8	76.8
28	6,522.0	1,559.9	3,237.5	170.2	3,067.3	–	–	–	36.1	–	205.1	125.7	79.4
July 5	6,497.7	1,562.2	3,255.2	160.8	3,094.3	–	–	–	33.7	–	193.3	115.9	77.4
Deutsche Bundesbank													
2023 Dec. 15	2,512.8	376.2	1,191.5	59.6	1,131.9	–	–	0.0	5.7	–	45.3	31.1	14.2
22	2,490.5	378.9	1,173.8	54.2	1,119.6	–	–	0.0	6.6	–	35.1	18.5	16.6
29	2,536.2	377.0	1,109.9	53.0	1,056.8	–	–	0.0	14.5	–	44.4	26.0	18.5
2024 Jan. 5	2,501.5	381.5	1,189.7	38.5	1,151.2	–	–	0.0	8.9	–	37.4	22.5	14.9
12	2,513.7	379.6	1,200.0	37.1	1,162.9	–	–	0.0	8.9	–	30.4	17.2	13.2
19	2,483.0	378.8	1,174.7	39.0	1,135.7	–	–	0.0	6.6	–	29.6	17.4	12.2
26	2,497.5	377.8	1,182.8	51.5	1,131.2	–	–	0.0	7.2	–	28.5	15.6	12.9
Feb. 2	2,512.4	379.1	1,206.7	46.2	1,160.5	–	–	0.0	5.5	–	29.5	17.2	12.4
9	2,508.1	379.8	1,203.6	41.9	1,161.6	–	–	0.0	5.8	–	29.3	17.3	12.0
16	2,518.7	379.8	1,214.8	40.4	1,174.4	–	–	0.0	5.2	–	31.9	20.6	11.3
23	2,500.9	379.4	1,221.1	40.6	1,180.5	–	–	0.0	5.2	–	26.0	15.2	10.8
Mar. 1	2,504.7	378.1	1,225.2	43.1	1,182.1	–	–	0.0	5.2	–	27.5	16.2	11.3
8	2,496.1	379.0	1,219.4	60.4	1,159.0	–	–	0.0	5.3	–	25.1	13.1	12.0
15	2,481.0	379.0	1,204.6	45.3	1,159.3	–	–	0.0	6.7	–	26.6	15.1	11.5
22	2,478.2	379.6	1,198.2	40.0	1,158.1	–	–	0.0	6.7	–	26.0	15.1	10.9
29	2,447.7	379.8	1,141.0	45.0	1,095.9	–	–	0.0	8.3	–	29.1	16.0	13.1
Apr. 5	2,448.6	379.2	1,154.1	40.4	1,113.7	–	–	0.0	6.8	–	29.2	18.0	11.3
12	2,439.1	379.3	1,146.2	58.0	1,088.1	–	–	0.0	5.4	–	31.8	20.1	11.6
19	2,423.9	379.6	1,131.7	43.8	1,087.8	–	–	0.0	5.1	–	28.2	15.5	12.7
26	2,413.4	380.5	1,119.4	40.6	1,078.8	–	–	0.0	5.4	–	31.0	19.9	11.1
May 3	2,446.6	380.8	1,160.5	41.9	1,118.6	–	–	0.0	5.4	–	23.8	11.9	11.9
10	2,458.4	381.6	1,171.6	39.5	1,132.0	–	–	0.0	4.9	–	22.9	12.0	10.9
17	2,442.2	382.2	1,151.9	38.5	1,113.4	–	–	0.0	4.6	–	23.3	11.7	11.6
24	2,461.4	381.5	1,169.8	38.3	1,131.4	–	–	0.0	4.6	–	24.3	11.7	12.6
31	2,425.5	380.6	1,122.8	43.4	1,079.5	–	–	0.0	5.5	–	29.5	16.9	12.6
June 7	2,439.1	380.9	1,149.7	63.1	1,086.6	–	–	–	5.1	–	22.9	11.8	11.2
14	2,420.5	381.3	1,122.6	44.6	1,078.0	–	–	–	4.9	–	23.0	11.3	11.7
21	2,436.8	381.8	1,138.0	40.7	1,097.4	–	–	–	5.1	–	25.7	14.2	11.5
28	2,447.3	382.2	1,124.4	45.5	1,078.9	–	–	–	6.1	–	25.2	11.8	13.4
July 5	2,466.7	383.4	1,157.9	41.1	1,116.8	–	–	–	4.5	–	24.4	12.5	11.9

* 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 quarter. 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 monthly basis. The counterpart of this adjustment is disclosed as an "Intra-Eurosystem liability related to

III. Consolidated financial statement of the Eurosystem

Liabilities to non-euro area residents denominated in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents denominated in foreign currency			Counterpart of special drawing rights allocated by the IMF	Other liabilities ²	Intra-Eurosystem liability related to euro banknote issue ¹	Revaluation accounts	Capital and reserves	As at reporting date
		Total	Deposits, balances and other liabilities	Liabilities arising from the credit facility under ERM II						
Eurosystem ³										
232.7	17.3	4.2	4.2	–	180.7	250.2	–	604.2	120.2	2023 Dec. 15
229.7	18.0	4.5	4.5	–	180.7	254.6	–	604.2	120.2	22
281.9	16.4	4.5	4.5	–	177.1	260.9	–	635.1	120.2	29
193.7	17.6	3.5	3.5	–	177.1	251.1	–	635.1	120.3	2024 Jan. 5
186.3	17.9	3.4	3.4	–	177.1	249.8	–	635.0	120.3	12
186.5	17.2	2.3	2.3	–	177.1	239.9	–	635.0	120.3	19
185.9	17.0	1.8	1.8	–	177.1	233.3	–	634.8	120.3	26
192.5	17.3	1.7	1.7	–	177.1	226.7	–	634.9	120.1	Feb. 2
189.9	17.6	2.3	2.3	–	177.1	228.0	–	634.9	120.1	9
187.0	17.5	2.9	2.9	–	177.1	235.8	–	634.9	107.6	16
190.6	17.4	3.7	3.7	–	177.1	218.9	–	634.9	105.2	23
197.2	16.8	4.4	4.4	–	177.1	222.8	–	634.9	105.3	Mar. 1
191.6	17.0	3.6	3.6	–	177.1	215.2	–	634.9	105.3	8
189.1	17.1	3.9	3.9	–	177.1	215.9	–	634.9	105.3	15
188.1	16.4	4.9	4.9	–	177.1	216.4	–	634.9	105.3	22
199.5	15.9	6.4	6.4	–	178.5	221.8	–	702.9	101.1	29
180.9	16.2	5.2	5.2	–	178.5	208.4	–	702.9	101.1	Apr. 5
183.7	16.6	5.7	5.7	–	178.5	208.4	–	702.9	101.1	12
184.4	15.6	6.6	6.6	–	178.5	210.7	–	702.9	100.0	19
183.6	15.5	7.2	7.2	–	178.5	209.6	–	702.9	99.9	26
196.6	15.6	6.4	6.4	–	178.5	207.5	–	702.9	99.9	May 3
194.5	14.7	6.6	6.6	–	178.5	205.4	–	702.9	99.7	10
195.7	14.9	6.4	6.4	–	178.5	206.3	–	702.9	99.7	17
203.6	15.0	6.8	6.8	–	178.5	211.8	–	702.9	99.7	24
218.9	13.8	6.7	6.7	–	178.5	217.6	–	702.9	99.7	31
195.6	14.6	6.7	6.7	–	178.5	206.4	–	702.9	99.7	June 7
202.7	15.0	6.7	6.7	–	178.5	204.4	–	702.9	99.7	14
206.0	15.3	5.0	5.0	–	178.5	206.7	–	702.9	99.7	21
221.8	15.0	5.3	5.3	–	179.0	212.1	–	750.4	99.7	28
200.8	15.8	5.7	5.7	–	179.0	201.9	–	750.4	99.7	July 5
Deutsche Bundesbank										
76.2	0.0	0.0	0.0	–	46.6	37.1	541.3	187.4	5.5	2023 Dec. 15
77.9	0.0	0.0	0.0	–	46.6	37.2	541.3	187.4	5.5	22
161.0	0.0	0.0	0.0	–	45.7	37.3	543.7	197.1	5.5	29
75.6	0.0	0.0	0.0	–	45.7	23.2	536.7	197.1	5.5	2024 Jan. 5
71.2	0.0	0.0	0.0	–	45.7	38.5	536.7	197.1	5.5	12
69.4	0.0	0.1	0.1	–	45.7	38.6	536.7	197.1	5.5	19
71.7	0.0	0.1	0.1	–	45.7	39.1	541.9	197.1	5.5	26
68.7	0.0	–0.0	–0.0	–	45.7	38.3	536.2	197.1	5.5	Feb. 2
65.9	0.0	0.5	0.5	–	45.7	38.5	536.2	197.1	5.5	9
61.9	0.0	1.0	1.0	–	45.7	39.5	536.2	197.1	5.5	16
63.9	0.0	1.5	1.5	–	45.7	21.5	536.2	197.1	3.2	23
61.4	0.0	1.3	1.3	–	45.7	21.4	538.6	197.1	3.2	Mar. 1
60.6	0.0	0.7	0.7	–	45.7	21.4	538.6	197.1	3.2	8
57.3	0.0	0.7	0.7	–	45.7	21.6	538.6	197.1	3.2	15
60.9	0.0	0.5	0.5	–	45.7	21.8	538.6	197.1	3.2	22
61.2	0.0	0.4	0.4	–	46.1	20.5	541.5	216.6	3.2	29
50.9	0.0	0.4	0.4	–	46.1	20.6	541.5	216.6	3.2	Apr. 5
47.7	0.0	0.4	0.4	–	46.1	20.9	541.5	216.6	3.2	12
50.0	0.0	1.1	1.1	–	46.1	20.9	541.5	216.6	3.2	19
48.0	0.0	0.7	0.7	–	46.1	21.0	541.5	216.6	3.2	26
46.0	0.0	0.5	0.5	–	46.1	20.4	543.3	216.6	3.2	May 3
47.3	0.0	0.5	0.5	–	46.1	20.5	543.3	216.6	3.2	10
49.0	0.0	0.2	0.2	–	46.1	21.9	543.3	216.6	3.2	17
50.1	0.0	0.4	0.4	–	46.1	21.5	543.3	216.6	3.2	24
53.6	0.0	0.4	0.4	–	46.1	21.5	545.7	216.6	3.2	31
46.8	0.0	0.4	0.4	–	46.1	21.7	545.7	216.6	3.2	June 7
55.0	0.0	0.5	0.5	–	46.1	21.9	545.7	216.6	3.2	14
52.5	0.0	0.2	0.2	–	46.1	22.0	545.7	216.6	3.2	21
61.5	0.0	0.6	0.6	–	46.2	19.5	547.3	231.1	3.2	28
49.0	0.0	0.6	0.6	–	46.2	19.2	547.3	231.1	3.2	July 5

euro banknote issue". The remaining 92% of the value of the euro banknotes in circulation is allocated, likewise on a monthly basis, to the NCBs, with each NCB showing in its balance sheet the share of the euro banknotes issued corresponding to its paid-up share in the ECB's capital. The difference between the value of the euro

banknotes allocated to the NCB according to the aforementioned accounting procedure and the value of euro banknotes put into circulation is also disclosed as an "Intra-Eurosystem claim/liability related to banknote issue". ² For the Deutsche Bundesbank: including DEM banknotes still in circulation. ³ Source: ECB.

IV. Banks

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

€ billion

End of month	Number of reporting institutions	Balance sheet total ¹	Cash in hand and credit balances with central banks	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)					Participating interests	Other assets ¹
				Total	of which:		Total	of which:			Securities issued by non-banks		
					Balances and loans	Securities issued by banks		Loans	Bills				
							for up to and including 1 year	for more than 1 year					
All categories of banks													
2023 Dec.	1,334	10,397.8	71.2	3,447.6	2,963.8	479.9	5,004.5	453.0	3,824.2	0.1	714.1	97.3	1,777.1
2024 Jan.	1,335	10,534.7	89.9	3,537.5	3,042.7	491.0	5,033.8	476.4	3,822.3	0.1	719.0	96.8	1,776.6
Feb.	1,334	10,669.6	64.3	3,622.7	3,122.5	496.3	5,056.1	485.2	3,829.4	0.1	726.6	96.2	1,830.3
Mar.	1,333	10,597.2	65.1	3,580.4	3,074.4	502.4	5,068.9	480.5	3,829.3	0.1	743.3	96.5	1,786.4
Apr.	1,330	10,690.1	63.1	3,575.2	3,068.4	503.7	5,078.4	493.8	3,832.7	0.1	733.6	97.0	1,876.4
May	1,330	10,674.3	61.0	3,599.6	3,088.9	507.2	5,088.1	495.0	3,838.3	0.1	737.5	97.2	1,828.4
Commercial banks ⁶													
2024 Apr.	239	4,988.8	22.6	1,715.0	1,620.0	94.4	1,674.5	332.0	1,056.2	0.1	274.9	30.3	1,546.5
May	239	4,957.4	21.9	1,724.2	1,626.5	97.1	1,677.3	334.1	1,057.9	0.1	276.6	30.5	1,503.5
Big banks ⁷													
2024 Apr.	3	2,505.5	9.8	714.6	675.2	39.5	769.1	163.8	448.7	0.0	152.0	24.5	987.5
May	3	2,466.0	9.8	716.4	676.0	40.4	769.4	164.8	449.4	0.0	150.7	24.8	945.7
Regional banks and other commercial banks													
2024 Apr.	127	1,986.3	9.3	685.7	633.8	51.5	746.9	120.2	507.9	0.1	112.9	4.9	539.6
May	127	2,005.9	8.9	702.8	649.3	53.2	750.9	122.6	509.1	0.1	115.8	4.8	538.4
Branches of foreign banks													
2024 Apr.	109	497.1	3.5	314.7	311.1	3.4	158.5	48.0	99.7	–	9.9	0.9	19.5
May	109	485.4	3.2	305.0	301.3	3.5	157.0	46.7	99.5	–	10.1	0.9	19.4
Landesbanken													
2024 Apr.	6	894.6	2.2	336.1	279.0	56.7	431.5	47.1	344.2	0.0	37.5	9.6	115.2
May	6	900.7	2.5	341.9	284.8	56.8	434.3	46.6	345.0	0.0	38.5	9.6	112.4
Savings banks													
2024 Apr.	352	1,552.2	20.4	269.3	148.5	120.8	1,220.1	54.4	997.8	–	167.8	16.7	25.8
May	352	1,555.5	19.3	273.4	153.0	120.3	1,220.1	54.1	998.0	–	167.8	16.7	26.0
Credit cooperatives													
2024 Apr.	694	1,176.3	12.8	215.6	104.4	110.9	895.8	35.0	742.9	0.0	117.9	20.5	31.7
May	694	1,182.8	11.6	220.9	109.6	111.0	898.1	34.9	745.3	0.0	117.8	20.5	31.7
Mortgage banks													
2024 Apr.	7	223.4	0.1	19.3	12.0	7.3	198.4	2.9	182.0	–	13.5	0.1	5.4
May	7	222.1	0.1	18.7	11.3	7.4	197.7	2.7	181.4	–	13.5	0.1	5.5
Building and loan associations													
2024 Apr.	14	258.1	0.2	39.8	24.2	15.6	214.3	1.2	192.0	.	21.1	0.2	3.7
May	14	258.6	0.4	39.8	24.2	15.7	214.4	1.2	192.4	.	20.7	0.2	3.7
Banks with special, development and other central support tasks													
2024 Apr.	18	1,596.6	4.9	980.1	880.2	98.0	443.9	21.2	317.5	–	101.0	19.6	148.1
May	18	1,597.2	5.1	980.6	879.5	98.9	446.3	21.2	318.3	0.0	102.4	19.6	145.6
Memo item: Foreign banks ⁸													
2024 Apr.	140	2,439.1	10.0	867.1	826.3	40.1	739.9	159.4	435.5	0.1	136.2	2.7	819.3
May	140	2,420.6	9.4	865.3	822.9	41.7	741.9	159.2	436.6	0.1	139.4	2.8	801.2
of which: Banks majority-owned by foreign banks ⁹													
2024 Apr.	31	1,942.0	6.5	552.3	515.3	36.7	581.4	111.4	335.9	0.1	126.2	1.9	799.9
May	31	1,935.1	6.2	560.3	521.6	38.3	584.9	112.4	337.1	0.1	129.3	1.9	781.8

* Assets and liabilities of monetary financial institutions (MFIs) in Germany. The assets and liabilities of foreign branches, of money market funds (which are also classified as MFIs) and of the Bundesbank are not included. For the definitions of the respective items, see the footnotes to Table IV.3. **1** Owing to the Act Modernising Accounting Law (Gesetz zur Modernisierung des Bilanzrechts) of 25 May 2009, derivative financial instruments in the trading portfolio (trading portfolio derivatives) within the meaning of

Section 340e (3) sentence 1 of the German Commercial Code (Handelsgesetzbuch) read in conjunction with Section 35 (1) number 1a of the Credit Institution Accounting Regulation (Verordnung über die Rechnungslegung der Kreditinstitute) are classified under "Other assets and liabilities" as of the December 2010 reporting date. Trading portfolio derivatives are listed separately in the Statistical Series Banking statistics, in Tables I.1 to I.3. **2** For building and loan associations: including deposits under savings

IV. Banks

Deposits of banks (MFIs)			Deposits of non-banks (non-MFIs)						Bearer debt securities outstanding ⁵	Bank savings bonds	Capital including published reserves, participation rights capital, funds for general banking risks	Other liabilities ¹	End of month	
Total	of which:		Total	of which:			Memo item: Liabilities arising from repos ³	Savings deposits ⁴						
	Sight deposits	Time deposits		Sight deposits	Time deposits ²			Total						of which: At 3 months' notice
					for up to and including 1 year	for more than 1 year ²								
All categories of banks														
2,023.8	607.5	1,416.3	4,609.7	2,717.1	615.3	683.6	66.0	450.5	399.1	143.2	1,365.0	611.8	1,787.5	2023 Dec.
2,105.4	675.4	1,430.0	4,625.9	2,697.1	647.0	685.4	88.1	444.0	390.0	152.5	1,379.1	611.0	1,813.2	2024 Jan.
2,160.6	695.9	1,464.7	4,639.5	2,690.2	668.5	683.4	97.3	439.0	382.6	158.4	1,386.3	610.9	1,872.3	Feb.
2,124.4	661.5	1,462.9	4,647.7	2,672.0	692.5	686.5	79.1	434.9	376.8	161.8	1,400.3	615.4	1,809.3	Mar.
2,124.0	685.4	1,438.5	4,659.1	2,682.6	695.3	685.0	90.9	430.2	371.3	166.0	1,393.5	619.0	1,894.5	Apr.
2,122.4	712.2	1,410.2	4,684.0	2,709.0	692.6	687.4	87.4	426.7	367.2	168.3	1,395.6	626.0	1,846.3	May
Commercial banks ⁶														
1,143.9	525.7	618.1	1,923.7	1,176.8	361.7	246.5	89.2	86.5	56.9	52.2	218.4	214.9	1,488.0	2024 Apr.
1,147.9	552.0	595.9	1,928.8	1,181.9	360.9	248.2	85.3	86.1	55.9	51.7	219.0	219.2	1,442.6	May
Big banks ⁷														
436.4	197.3	239.1	880.0	524.1	202.8	70.9	46.6	78.4	49.6	3.9	164.0	80.1	944.9	2024 Apr.
439.8	192.8	247.0	880.9	528.0	200.1	70.9	44.7	78.1	48.8	3.9	164.2	83.6	897.5	May
Regional banks and other commercial banks														
471.3	216.7	254.7	821.8	508.3	105.3	152.1	42.6	7.9	7.0	48.3	52.8	117.5	522.9	2024 Apr.
483.2	246.7	236.5	828.3	509.4	109.7	153.7	40.5	7.7	6.9	47.8	53.2	118.1	523.2	May
Branches of foreign banks														
236.1	111.8	124.3	221.8	144.5	53.6	23.5	0.0	0.2	0.2	0.1	1.6	17.4	20.2	2024 Apr.
225.0	112.5	112.5	219.6	144.6	51.1	23.6	0.0	0.2	0.2	0.1	1.5	17.4	21.9	May
Landesbanken														
209.5	31.7	177.8	292.7	140.3	77.6	68.3	0.8	4.3	4.3	2.1	228.2	44.2	120.1	2024 Apr.
209.2	37.8	171.4	301.0	153.9	72.4	68.2	0.9	4.3	4.3	2.1	228.9	44.2	117.4	May
Savings banks														
156.9	5.0	151.9	1,166.3	758.4	96.0	19.8	–	205.7	186.9	86.4	23.9	141.9	63.2	2024 Apr.
153.5	3.2	150.4	1,172.0	762.1	97.4	20.2	–	203.6	184.9	88.7	23.4	143.3	63.2	May
Credit cooperatives														
156.3	2.7	153.6	861.7	531.1	129.7	42.7	–	133.3	122.8	24.8	9.1	106.3	43.0	2024 Apr.
156.7	2.6	154.1	867.1	534.0	132.0	43.4	–	132.3	121.7	25.4	9.0	107.7	42.3	May
Mortgage banks														
43.0	3.4	39.6	54.7	2.1	6.1	46.6	0.5	–	–	–	109.0	9.2	7.4	2024 Apr.
42.4	3.3	39.1	54.6	2.3	5.8	46.5	0.4	–	–	–	108.5	9.2	7.4	May
Building and loan associations														
37.3	2.5	34.7	192.5	4.0	2.8	185.2	–	0.4	0.4	0.1	7.5	13.1	7.8	2024 Apr.
37.5	2.8	34.7	192.5	4.1	2.9	185.0	–	0.4	0.4	0.1	7.5	13.1	7.9	May
Banks with special, development and other central support tasks														
377.1	114.3	262.8	167.5	69.9	21.3	75.9	0.3	–	–	–	797.5	89.4	165.1	2024 Apr.
375.1	110.5	264.6	168.0	70.6	21.1	76.0	0.9	–	–	–	799.2	89.4	165.4	May
Memo item: Foreign banks ⁸														
680.0	337.3	342.7	799.7	499.9	157.9	106.9	48.7	8.0	7.6	27.0	51.6	102.8	804.9	2024 Apr.
679.9	363.2	316.7	797.8	501.4	153.4	108.0	47.0	7.8	7.4	27.2	51.1	103.5	788.3	May
of which: Banks majority-owned by foreign banks ⁹														
443.9	225.5	218.4	577.9	355.4	104.3	83.4	48.7	7.7	7.4	27.0	50.0	85.5	784.7	2024 Apr.
454.9	250.6	204.2	578.3	356.8	102.3	84.4	47.0	7.6	7.2	27.2	49.5	86.1	766.4	May

and loan contracts (see Table IV.12). **3** Included in time deposits. **4** Excluding deposits under savings and loan contracts (see also footnote 2). **5** Including subordinated negotiable bearer debt securities; excluding non-negotiable bearer debt securities. **6** Commercial banks comprise the sub-groups "Big banks", "Regional banks and other commercial banks" and "Branches of foreign banks". **7** Deutsche Bank AG, Dresdner Bank AG (up to Nov. 2009), Commerzbank AG, UniCredit Bank AG (formerly Bayerische Hypo- und Vereinsbank AG), Deutsche Postbank AG (from December 2004 up to April

2018) and DB Privat- und Firmenkundenbank AG (from May 2018) (see the explanatory notes in the Statistical Series Banking statistics, Table I.3, banking group "Big banks"). **8** Sum of the banks majority-owned by foreign banks and included in other categories of banks and the category "Branches (with dependent legal status) of foreign banks". **9** Separate presentation of the banks majority-owned by foreign banks included in other banking categories.

IV. Banks

Equalisation claims ²	Memo item: Fiduciary loans	Participating interests in domestic banks and enterprises	Deposits of domestic banks (MFIs) ³					Deposits of domestic non-banks (non-MFIs)					Period	
			Total	Sight deposits ⁴	Time deposits ⁴	Redis-counted bills ⁵	Memo item: Fiduciary loans	Total	Sight deposits ⁶	Time deposits ⁶	Savings deposits ⁷	Bank savings bonds ⁸		Memo item: Fiduciary loans
End of year or month *														
-	26.5	94.3	1,111.9	127.8	984.0	0.0	11.7	3,118.2	1,517.8	926.7	607.8	66.0	30.9	2014
-	20.4	89.6	1,065.6	131.1	934.5	0.0	6.1	3,224.7	1,673.7	898.4	596.5	56.1	29.3	2015
-	19.1	91.0	1,032.9	129.5	903.3	0.1	5.6	3,326.7	1,798.2	889.6	588.5	50.4	28.8	2016
-	19.1	88.1	1,048.2	110.7	937.4	0.0	5.1	3,420.9	1,941.0	853.2	582.9	43.7	30.0	2017
-	18.0	90.9	1,020.9	105.5	915.4	0.0	4.7	3,537.6	2,080.1	841.5	578.6	37.3	33.9	2018
-	17.3	90.4	1,010.2	107.2	902.9	0.0	4.4	3,661.0	2,236.3	816.2	575.2	33.2	32.5	2019
-	23.5	78.3	1,236.7	125.0	1,111.6	0.0	13.1	3,885.2	2,513.0	783.3	560.6	28.3	34.4	2020
-	25.7	79.2	1,338.4	117.2	1,221.3	0.0	16.4	3,976.3	2,654.6	736.0	561.2	24.5	34.2	2021
-	25.6	80.3	1,231.6	136.9	1,094.7	0.0	15.7	4,162.0	2,720.6	873.5	533.2	34.6	35.9	2022
-	23.8	80.3	1,099.9	137.9	962.0	0.0	13.5	4,229.0	2,540.8	1,100.1	445.9	142.2	50.1	2023
-	25.6	80.3	1,231.6	136.9	1,094.7	0.0	15.7	4,162.0	2,720.6	873.5	533.2	34.6	35.9	2022 Dec.
-	25.6	80.0	1,231.2	142.6	1,088.7	0.0	15.6	4,199.7	2,722.8	913.5	522.7	40.6	36.9	2023 Jan.
-	25.6	80.2	1,226.0	140.7	1,085.3	0.0	15.6	4,197.1	2,687.7	947.9	516.0	45.5	37.2	Feb.
-	24.6	80.3	1,210.4	137.0	1,073.4	0.0	15.2	4,167.4	2,639.8	968.6	507.2	51.7	36.4	Mar.
-	24.7	80.9	1,227.7	140.8	1,086.9	0.0	15.2	4,167.3	2,632.0	978.5	498.6	58.3	36.5	Apr.
-	24.7	81.1	1,229.8	137.8	1,092.0	0.0	15.1	4,172.9	2,623.9	993.0	490.6	65.4	36.6	May
-	24.4	81.2	1,149.6	134.0	1,015.6	0.0	14.6	4,176.3	2,600.9	1,020.0	483.3	72.1	36.5	June
-	24.4	81.0	1,159.8	134.8	1,025.0	0.0	14.6	4,180.2	2,582.2	1,042.9	475.9	79.1	36.7	July
-	24.4	80.3	1,162.1	138.5	1,023.7	0.0	14.5	4,188.4	2,568.4	1,061.7	467.5	90.7	36.9	Aug.
-	24.2	80.4	1,112.7	137.4	975.3	0.0	14.1	4,189.3	2,558.0	1,072.5	461.8	97.0	37.1	Sep.
-	24.1	80.3	1,132.1	136.7	995.4	0.0	14.0	4,198.0	2,544.5	1,086.5	455.4	111.6	37.3	Oct.
-	24.0	80.6	1,136.6	140.0	996.7	0.0	14.0	4,217.3	2,552.9	1,085.6	448.3	130.5	37.6	Nov.
-	23.8	80.3	1,099.9	137.9	962.0	0.0	13.5	4,229.0	2,540.8	1,100.1	445.9	142.2	50.1	Dec.
-	23.7	80.3	1,125.8	155.3	970.5	0.0	13.4	4,216.3	2,496.8	1,128.7	439.4	151.4	54.5	2024 Jan.
-	23.7	80.1	1,134.8	161.4	973.4	0.0	13.3	4,213.6	2,478.3	1,143.5	434.4	157.3	57.5	Feb.
-	23.5	80.3	1,083.4	159.4	924.0	0.0	12.8	4,239.0	2,479.2	1,168.8	430.3	160.7	60.2	Mar.
-	23.4	80.8	1,094.3	160.6	933.8	0.0	12.7	4,239.6	2,475.4	1,173.6	425.8	164.8	63.7	Apr.
-	23.5	81.0	1,088.4	158.0	930.5	0.0	12.7	4,263.3	2,497.0	1,176.9	422.2	167.2	66.9	May
Changes *														
-	- 2.1	- 4.3	- 46.6	+ 3.3	- 50.0	+ 0.0	- 1.3	+ 106.5	+ 156.2	- 28.3	- 11.3	- 10.1	- 1.6	2015
-	- 1.3	+ 1.5	- 1.7	+ 0.3	- 2.0	+ 0.0	- 0.5	+ 104.7	+ 124.5	- 6.9	- 7.9	- 5.0	- 0.5	2016
-	- 0.0	- 1.6	+ 11.0	- 18.4	+ 29.4	- 0.0	- 0.5	+ 103.1	+ 142.8	- 27.5	- 5.6	- 6.7	+ 0.4	2017
-	- 1.0	+ 3.1	- 25.0	- 3.1	- 21.9	+ 0.0	- 0.4	+ 117.7	+ 139.3	- 10.8	- 4.3	- 6.5	+ 3.9	2018
-	- 0.7	+ 0.1	- 8.6	+ 1.6	- 10.2	+ 0.0	- 0.3	+ 122.5	+ 155.8	- 25.7	- 3.4	- 4.1	- 1.4	2019
-	+ 5.7	- 3.3	+ 313.4	+ 23.2	+ 290.2	- 0.0	+ 8.2	+ 221.6	+ 273.7	- 32.7	- 14.5	- 4.9	+ 1.9	2020
-	+ 2.3	+ 1.0	+ 105.2	- 7.4	+ 112.6	+ 0.0	+ 3.3	+ 95.3	+ 144.3	- 46.2	+ 0.7	- 3.5	- 0.2	2021
-	- 0.1	+ 1.7	- 104.6	+ 8.8	- 113.4	- 0.0	- 0.6	+ 191.8	+ 65.8	+ 143.4	- 27.5	+ 10.1	+ 1.7	2022
-	- 1.2	+ 0.6	- 139.9	- 8.9	- 131.0	± 0.0	- 2.3	+ 76.6	- 172.0	+ 226.4	- 82.3	+ 104.5	+ 3.5	2023
-	- 0.3	+ 0.1	- 113.2	- 8.5	- 104.7	- 0.0	- 0.4	- 43.4	- 47.1	+ 4.2	- 3.7	+ 3.2	+ 1.1	2022 Dec.
-	- 0.0	- 0.4	- 0.3	+ 5.8	- 6.1	+ 0.0	- 0.1	+ 37.6	- 2.9	+ 40.0	- 5.5	+ 6.0	+ 1.0	2023 Jan.
-	- 0.0	+ 0.2	- 5.2	- 1.9	- 3.4	-	- 0.0	- 2.5	- 35.0	+ 34.4	- 6.7	+ 4.8	+ 0.4	Feb.
-	- 0.3	+ 0.1	- 15.2	- 3.7	- 11.5	-	- 0.4	- 29.6	- 47.3	+ 20.2	- 8.7	+ 6.2	- 0.1	Mar.
-	+ 0.0	+ 1.1	+ 17.3	+ 3.8	+ 13.5	- 0.0	- 0.0	- 0.1	- 7.9	+ 9.8	- 8.6	+ 6.6	+ 0.0	Apr.
-	+ 0.0	+ 0.2	+ 2.1	- 3.0	+ 5.0	- 0.0	- 0.1	+ 5.6	- 7.9	+ 14.5	- 8.0	+ 7.1	+ 0.1	May
-	- 0.4	+ 0.1	- 79.7	- 3.7	- 76.0	+ 0.0	- 0.5	+ 2.3	- 23.0	+ 26.0	- 7.3	+ 6.7	- 0.1	June
-	+ 0.0	- 0.1	+ 10.2	+ 0.8	+ 9.4	-	- 0.0	+ 3.8	- 18.7	+ 22.8	- 7.3	+ 7.0	+ 0.2	July
-	+ 0.1	- 0.8	+ 3.1	+ 3.9	- 0.8	+ 0.0	- 0.1	+ 8.2	- 13.2	+ 21.3	- 8.5	+ 8.5	+ 0.2	Aug.
-	- 0.2	+ 0.1	- 49.4	- 1.1	- 48.3	- 0.0	- 0.4	+ 0.9	- 10.5	+ 10.7	- 5.7	+ 6.3	+ 0.2	Sep.
-	- 0.1	- 0.1	+ 19.9	- 0.7	+ 20.6	- 0.0	- 0.1	+ 8.7	- 13.4	+ 14.0	- 6.4	+ 14.6	+ 0.3	Oct.
-	- 0.1	+ 0.3	+ 4.6	+ 3.3	+ 1.3	+ 0.0	- 0.0	+ 19.3	+ 8.5	- 1.0	- 7.1	+ 18.8	+ 0.3	Nov.
-	- 0.2	- 0.2	- 47.3	- 12.5	- 34.8	- 0.0	- 0.5	+ 22.3	- 0.7	+ 13.7	- 2.5	+ 11.8	+ 1.2	Dec.
-	- 0.1	- 0.1	+ 26.0	+ 17.4	+ 8.6	+ 0.0	- 0.1	- 12.7	- 44.1	+ 28.7	- 6.5	+ 9.2	+ 4.4	2024 Jan.
-	- 0.0	- 0.2	+ 8.9	+ 6.1	+ 2.9	- 0.0	- 0.1	- 2.8	- 18.4	+ 14.8	- 5.0	+ 5.9	+ 3.0	Feb.
-	- 0.2	+ 0.3	- 51.4	- 1.9	- 49.5	-	- 0.5	+ 25.5	+ 0.9	+ 25.3	- 4.1	+ 3.4	+ 2.6	Mar.
-	- 0.1	+ 0.4	+ 11.0	+ 1.2	+ 9.8	-	- 0.1	+ 0.6	- 3.8	+ 4.8	- 4.6	+ 4.2	+ 3.5	Apr.
-	+ 0.0	+ 0.2	- 5.3	- 2.6	- 2.7	-	- 0.1	+ 23.7	+ 21.7	+ 3.1	- 3.5	+ 2.4	+ 3.2	May

including subordinated liabilities. **4** Including liabilities arising from monetary policy operations with the Bundesbank. **5** Own acceptances and promissory notes outstanding. **6** Since the inclusion of building and loan associations in January 1999,

including deposits under savings and loan contracts (see Table IV.12). **7** Excluding deposits under savings and loan contracts (see also footnote 8). **8** Including liabilities arising from non-negotiable bearer debt securities.

IV. Banks

Memo item: Fiduciary loans	Participating interests in foreign banks and enterprises	Deposits of foreign banks (MFIs)						Deposits of foreign non-banks (non-MFIs)						Period
		Total	Sight deposits	Time deposits (including bank savings bonds)			Memo item: Fiduciary loans	Total	Sight deposits	Time deposits (including savings deposits and bank savings bonds)			Memo item: Fiduciary loans	
				Total	Short-term	Medium and long-term				Total	Short-term	Medium and long-term		
End of year or month *														
14.0	35.6	609.2	277.1	332.1	242.7	89.4	0.1	221.0	113.0	107.9	47.8	60.1	0.7	2014
13.1	30.5	611.9	323.4	288.5	203.8	84.7	0.1	201.1	102.6	98.5	49.3	49.2	0.7	2015
13.1	28.7	696.1	374.4	321.6	234.2	87.5	0.0	206.2	100.3	105.9	55.2	50.8	0.7	2016
12.1	24.3	659.0	389.6	269.4	182.4	87.0	0.0	241.2	109.4	131.8	68.1	63.8	0.3	2017
11.8	22.1	643.1	370.6	272.5	185.6	86.8	0.0	231.5	110.2	121.3	63.7	57.6	0.1	2018
11.5	21.3	680.6	339.3	341.2	243.2	98.0	-	229.8	112.3	117.4	60.5	57.0	0.1	2019
11.3	17.2	761.2	428.8	332.5	205.1	127.3	-	258.5	133.3	125.2	65.6	59.7	0.1	2020
11.1	16.6	914.6	456.0	458.6	301.5	157.2	0.0	288.2	141.9	146.2	68.7	77.6	0.1	2021
10.4	15.7	998.4	480.0	518.4	376.4	141.9	-	370.3	196.0	174.3	84.4	89.8	0.1	2022
10.7	16.7	923.8	469.5	454.3	288.1	166.2	-	380.6	176.2	204.4	104.9	99.5	1.1	2023
10.4	15.7	998.4	480.0	518.4	376.4	141.9	-	370.3	196.0	174.3	84.4	89.8	0.1	2022 Dec.
10.4	15.6	1,089.4	601.2	488.3	344.5	143.8	-	405.1	213.5	191.5	101.9	89.6	0.2	2023 Jan.
10.4	15.8	1,086.8	600.1	486.7	345.1	141.6	-	418.4	218.4	200.0	109.9	90.1	0.2	Feb.
10.4	15.9	1,060.0	576.0	484.0	329.3	154.7	-	412.5	216.8	195.7	98.9	96.9	0.3	Mar.
10.4	15.9	1,042.6	540.6	502.0	343.8	158.2	-	423.3	208.8	214.6	116.6	97.9	0.3	Apr.
10.4	16.1	1,059.1	596.1	462.9	299.9	163.0	0.0	436.0	219.3	216.7	116.7	100.0	0.3	May
10.2	16.0	1,025.8	565.0	460.8	302.6	158.2	0.0	411.5	205.6	205.9	107.3	98.6	0.4	June
10.2	16.1	1,052.4	582.3	470.1	311.1	159.0	0.0	411.0	204.0	207.0	107.9	99.1	0.3	July
10.2	16.1	1,021.8	566.5	455.3	294.3	161.1	-	407.7	198.5	209.2	112.0	97.2	0.3	Aug.
10.2	16.1	1,006.0	536.9	469.1	293.9	175.2	-	403.9	206.3	197.6	100.2	97.4	0.4	Sep.
10.2	16.6	1,021.8	558.9	462.9	288.0	174.9	-	423.2	207.0	216.2	117.4	98.8	0.3	Oct.
10.4	16.4	1,003.7	538.0	465.7	291.0	174.6	-	412.5	206.3	206.3	107.1	99.2	0.3	Nov.
10.7	16.7	923.8	469.5	454.3	288.1	166.2	-	380.6	176.2	204.4	104.9	99.5	1.1	Dec.
10.7	16.4	979.5	520.1	459.5	284.6	174.9	-	409.6	200.3	209.3	110.6	98.6	0.7	2024 Jan.
10.7	15.9	1,025.8	534.6	491.2	311.3	179.9	0.0	425.9	211.9	214.1	117.4	96.6	2.0	Feb.
10.7	15.9	1,041.0	502.1	538.9	370.9	168.1	0.0	408.7	192.8	215.9	118.1	97.7	2.6	Mar.
10.8	16.1	1,029.6	524.9	504.8	329.8	175.0	0.0	419.4	207.2	212.3	114.6	97.7	3.2	Apr.
10.8	16.0	1,034.0	554.2	479.7	315.8	163.9	0.0	420.7	212.0	208.7	109.3	99.4	4.0	May
Changes *														
- 0.6	- 6.1	- 15.4	+ 40.6	- 56.0	- 48.6	- 7.4	- 0.0	- 26.5	- 13.9	- 12.6	+ 0.3	- 13.0	- 0.0	2015
- 0.1	- 1.5	+ 82.7	+ 51.0	+ 31.7	+ 27.0	+ 4.7	- 0.0	+ 3.5	- 3.1	+ 6.7	+ 5.9	+ 0.8	- 0.0	2016
- 1.0	- 4.1	- 15.5	+ 25.2	- 40.8	- 43.2	+ 2.4	± 0.0	+ 31.8	+ 11.0	+ 20.8	+ 15.6	+ 5.2	- 0.4	2017
- 0.2	- 2.2	- 23.9	- 23.4	- 0.4	+ 2.1	- 2.6	- 0.0	- 11.9	- 0.2	- 11.8	- 5.7	- 6.0	- 0.2	2018
- 0.3	- 0.9	- 9.5	- 49.4	+ 39.8	+ 28.0	+ 11.8	- 0.0	- 0.8	+ 2.1	- 2.9	- 1.8	- 1.1	- 0.0	2019
- 0.2	- 3.9	+ 83.8	+ 87.8	- 4.1	- 34.7	+ 30.6	-	+ 23.6	+ 13.8	+ 9.8	+ 7.1	+ 2.8	+ 0.0	2020
- 0.2	- 0.8	+ 136.6	+ 19.8	+ 116.8	+ 89.2	+ 27.6	+ 0.0	+ 22.7	+ 6.4	+ 16.3	+ 0.0	+ 16.3	- 0.0	2021
- 0.7	- 1.0	+ 85.8	+ 29.1	+ 56.7	+ 69.6	- 13.0	-	+ 68.2	+ 49.0	+ 19.2	+ 13.9	+ 5.3	+ 0.0	2022
+ 0.2	+ 1.1	- 66.1	- 4.6	- 61.4	- 86.9	+ 25.4	± 0.0	+ 11.6	- 18.3	+ 29.9	+ 20.9	+ 9.0	+ 0.1	2023
- 0.2	- 0.0	- 145.0	-128.3	- 16.7	- 6.9	- 9.8	-	- 40.7	- 37.2	- 3.5	- 6.2	+ 2.7	- 0.0	2022 Dec.
- 0.0	- 0.1	+ 93.8	+122.3	- 28.4	- 30.8	+ 2.4	-	+ 35.9	+ 18.1	+ 17.8	+ 17.9	- 0.1	+ 0.0	2023 Jan.
+ 0.0	+ 0.2	- 7.0	- 3.5	- 3.5	- 0.9	- 2.6	-	+ 11.6	+ 4.1	+ 7.5	+ 7.2	+ 0.3	+ 0.1	Feb.
+ 0.0	+ 0.2	- 21.8	- 21.5	- 0.3	- 13.9	+ 13.6	-	- 3.9	- 0.8	- 3.1	- 10.0	+ 7.0	+ 0.1	Mar.
+ 0.0	+ 0.0	- 15.3	- 34.3	+ 19.0	+ 15.2	+ 3.8	-	+ 11.7	- 7.7	+ 19.3	+ 18.1	+ 1.2	- 0.0	Apr.
+ 0.0	+ 0.2	+ 10.1	+ 52.6	- 42.5	- 46.3	+ 3.8	+ 0.0	+ 9.2	+ 9.5	- 0.3	- 1.2	+ 0.9	- 0.0	May
- 0.2	- 0.0	- 26.4	- 26.1	- 0.3	+ 3.9	- 4.2	-	- 23.1	- 13.1	- 9.9	- 8.7	- 1.2	+ 0.1	June
- 0.0	+ 0.1	+ 27.3	+ 17.2	+ 10.1	+ 9.0	+ 1.1	-	+ 0.4	- 1.3	+ 1.7	+ 1.1	+ 0.6	- 0.0	July
+ 0.0	- 0.0	- 32.6	- 16.4	- 16.2	- 17.9	+ 1.7	- 0.0	- 4.3	- 5.9	+ 1.6	+ 3.6	- 2.0	- 0.0	Aug.
- 0.0	- 0.0	- 21.0	- 32.3	+ 11.4	- 2.2	+ 13.5	-	- 5.7	+ 7.1	- 12.8	- 12.8	+ 0.0	+ 0.0	Sep.
+ 0.0	+ 0.5	+ 17.0	+ 22.8	- 5.8	- 5.6	- 0.2	-	+ 19.6	+ 0.9	+ 18.7	+ 17.3	+ 1.4	- 0.1	Oct.
+ 0.2	- 0.1	- 12.9	- 18.4	+ 5.5	+ 4.9	+ 0.6	-	- 8.6	+ 0.6	- 9.2	- 9.8	+ 0.6	- 0.0	Nov.
+ 0.3	+ 0.3	- 77.4	- 67.0	- 10.4	- 2.3	- 8.2	-	- 31.3	- 29.7	- 1.5	- 1.8	+ 0.3	- 0.0	Dec.
+ 0.0	- 0.4	+ 51.4	+ 48.7	+ 2.8	- 5.2	+ 8.0	-	+ 27.8	+ 23.6	+ 4.3	+ 5.3	- 1.0	- 0.4	2024 Jan.
+ 0.0	- 0.4	+ 46.4	+ 14.5	+ 31.9	+ 26.7	+ 5.2	+ 0.0	+ 16.4	+ 11.5	+ 4.9	+ 6.8	- 1.9	+ 1.4	Feb.
+ 0.0	- 0.0	+ 15.1	- 32.4	+ 47.6	+ 59.5	- 11.9	-	- 17.3	- 19.1	+ 1.8	+ 0.7	+ 1.1	+ 0.5	Mar.
+ 0.0	+ 0.1	- 13.1	+ 22.2	- 35.3	- 41.9	+ 6.6	-	+ 10.1	+ 14.1	- 4.0	- 4.3	+ 0.3	+ 0.7	Apr.
- 0.0	- 0.0	+ 7.1	+ 30.5	- 23.5	- 12.9	- 10.6	-	+ 2.3	+ 5.3	- 3.0	- 4.8	+ 1.8	+ 0.8	May

IV. Banks

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

€ billion

Period	Lending to domestic non-banks, total		Short-term lending						Medium- and long-term			
	including negotiable money market paper, securities, equalisation claims	excluding negotiable money market paper, securities, equalisation claims	Total	to enterprises and households			to general government			Total	to enter-	
				Total	Loans and bills	Negotiable money market paper	Total	Loans	Treasury bills			Total
	End of year or month *											
2014	3,167.3	2,712.6	257.5	212.7	212.1	0.6	44.8	44.7	0.1	2,909.8	2,376.8	
2015	3,233.9	2,764.4	255.5	207.8	207.6	0.2	47.8	47.5	0.2	2,978.3	2,451.4	
2016	3,274.3	2,824.2	248.6	205.7	205.4	0.3	42.9	42.8	0.1	3,025.8	2,530.0	
2017	3,332.6	2,894.4	241.7	210.9	210.6	0.3	30.7	30.3	0.4	3,090.9	2,640.0	
2018	3,394.5	2,990.4	249.5	228.0	227.6	0.4	21.5	21.7	-0.2	3,145.0	2,732.8	
2019	3,521.5	3,119.5	260.4	238.8	238.4	0.4	21.6	18.7	2.9	3,261.1	2,866.9	
2020	3,647.0	3,245.3	243.3	221.6	221.2	0.4	21.6	18.0	3.6	3,403.8	3,013.0	
2021	3,798.1	3,392.7	249.7	232.2	231.9	0.3	17.5	15.2	2.3	3,548.4	3,174.6	
2022	4,015.6	3,613.3	296.4	279.8	279.4	0.4	16.7	14.3	2.3	3,719.2	3,359.9	
2023	4,044.1	3,649.9	279.0	264.2	264.0	0.3	14.8	14.2	0.6	3,765.1	3,401.1	
2022 Dec.	4,015.6	3,613.3	296.4	279.8	279.4	0.4	16.7	14.3	2.3	3,719.2	3,359.9	
2023 Jan.	4,016.2	3,622.5	303.2	282.5	281.9	0.5	20.7	17.0	3.8	3,713.1	3,360.2	
Feb.	4,030.2	3,629.5	297.8	279.9	279.2	0.7	18.0	15.8	2.2	3,732.4	3,371.2	
Mar.	4,030.5	3,634.8	305.0	285.1	284.4	0.7	19.9	16.3	3.6	3,725.5	3,369.3	
Apr.	4,032.5	3,641.3	304.1	283.3	282.8	0.6	20.8	18.2	2.6	3,728.4	3,374.4	
May	4,039.0	3,650.6	299.7	281.0	280.2	0.8	18.7	17.4	1.3	3,739.3	3,388.0	
June	4,042.1	3,645.7	300.3	280.5	279.6	0.9	19.8	17.8	2.0	3,741.8	3,388.7	
July	4,048.7	3,653.9	299.4	277.4	276.6	0.9	21.9	19.6	2.3	3,749.3	3,395.5	
Aug.	4,046.7	3,650.0	289.5	270.8	270.1	0.7	18.6	16.8	1.8	3,757.2	3,398.6	
Sep.	4,048.1	3,653.6	297.2	275.5	274.8	0.6	21.7	19.0	2.7	3,751.0	3,395.8	
Oct.	4,051.9	3,656.7	293.6	270.9	270.3	0.6	22.7	20.3	2.4	3,758.3	3,401.0	
Nov.	4,057.9	3,661.3	291.1	272.0	271.4	0.7	19.0	16.6	2.4	3,766.9	3,402.1	
Dec.	4,044.1	3,649.9	279.0	264.2	264.0	0.3	14.8	14.2	0.6	3,765.1	3,401.1	
2024 Jan.	4,048.3	3,649.5	281.0	263.3	262.7	0.6	17.7	16.8	0.8	3,767.3	3,401.5	
Feb.	4,055.7	3,654.0	281.5	267.3	266.8	0.5	14.2	14.1	0.0	3,774.3	3,404.7	
Mar.	4,061.0	3,658.5	289.2	273.3	272.6	0.7	15.9	16.1	-0.2	3,771.8	3,403.2	
Apr.	4,062.1	3,661.8	289.3	270.4	269.6	0.8	18.9	18.0	0.9	3,772.8	3,406.5	
May	4,069.5	3,666.1	288.4	271.4	270.5	0.9	17.0	16.7	0.3	3,781.1	3,410.7	
	Changes *											
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	
2022	+ 216.7	+ 220.0	+ 47.6	+ 48.5	+ 48.5	+ 0.0	- 0.9	- 0.9	+ 0.0	+ 169.1	+ 184.8	
2023	+ 30.9	+ 38.9	- 15.3	- 14.5	- 14.4	- 0.1	- 0.8	+ 0.9	- 1.7	+ 46.2	+ 42.3	
2022 Dec.	- 9.6	- 11.7	- 13.9	- 12.8	- 12.7	- 0.0	- 1.1	- 0.2	- 0.9	+ 4.2	+ 1.8	
2023 Jan.	+ 0.6	+ 9.2	+ 6.7	+ 2.6	+ 2.4	+ 0.2	+ 4.1	+ 2.6	+ 1.4	- 6.1	+ 0.3	
Feb.	+ 13.3	+ 6.3	- 6.0	- 3.2	- 3.3	+ 0.1	- 2.8	- 1.2	- 1.6	+ 19.3	+ 11.0	
Mar.	+ 0.9	+ 6.0	+ 7.6	+ 5.7	+ 5.7	- 0.0	+ 1.9	+ 0.5	+ 1.4	- 6.7	- 1.8	
Apr.	+ 2.1	+ 6.5	- 0.9	- 1.7	- 1.7	- 0.1	+ 0.9	+ 1.9	- 1.1	+ 3.0	+ 5.1	
May	+ 6.5	+ 9.4	- 4.4	- 2.3	- 2.6	+ 0.3	- 2.1	- 0.8	- 1.2	+ 10.9	+ 13.6	
June	+ 4.4	- 3.7	+ 1.7	+ 0.6	+ 0.6	+ 0.0	+ 1.1	+ 0.4	+ 0.7	+ 2.7	+ 0.9	
July	+ 6.6	+ 8.3	- 1.0	- 3.1	- 3.1	- 0.0	+ 2.1	+ 1.9	+ 0.2	+ 7.5	+ 6.9	
Aug.	- 1.9	- 4.0	- 9.9	- 6.6	- 6.5	- 0.2	- 3.3	- 2.8	- 0.5	+ 8.0	+ 3.1	
Sep.	+ 1.3	+ 3.7	+ 7.7	+ 4.6	+ 4.7	- 0.1	+ 3.1	+ 2.1	+ 0.9	- 6.4	- 2.9	
Oct.	+ 3.7	+ 3.0	- 3.5	- 4.6	- 4.5	- 0.1	+ 1.0	+ 1.3	- 0.3	+ 7.2	+ 5.2	
Nov.	+ 6.1	+ 4.7	- 2.3	+ 1.4	+ 1.3	+ 0.1	- 3.7	- 3.7	+ 0.0	+ 8.4	+ 3.8	
Dec.	- 12.7	- 10.3	- 11.0	- 7.8	- 7.4	- 0.4	- 3.2	- 1.3	- 1.8	- 1.7	- 2.9	
2024 Jan.	+ 4.0	- 0.5	+ 1.9	- 0.9	- 1.2	+ 0.3	+ 2.8	+ 2.6	+ 0.2	+ 2.1	+ 0.3	
Feb.	+ 6.7	+ 3.7	+ 0.4	+ 3.9	+ 4.0	- 0.1	- 3.5	- 2.7	- 0.8	+ 6.3	+ 2.7	
Mar.	+ 5.3	+ 4.4	+ 6.6	+ 4.8	+ 4.7	+ 0.2	+ 1.7	+ 2.0	- 0.2	- 1.3	- 0.3	
Apr.	+ 1.1	+ 3.3	+ 0.1	- 2.8	- 3.0	+ 0.2	+ 3.0	+ 1.9	+ 1.1	+ 1.0	+ 3.4	
May	+ 7.4	+ 4.3	- 0.9	+ 1.0	+ 0.9	+ 0.0	- 1.9	- 1.3	- 0.6	+ 8.3	+ 4.3	

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

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

IV. Banks

lending													Period
prises and households					to general government								
Loans			Securities	Memo item: Fiduciary loans	Loans			Securities 1	Equalisation claims 2	Memo item: Fiduciary loans			
Total	Medium-term	Long-term			Total	Medium-term	Long-term						
End of year or month *													
2,172.7	251.7	1,921.0	204.2	24.4	532.9	283.1	33.5	249.6	249.8	–	2.1	2014	
2,232.4	256.0	1,976.3	219.0	18.3	527.0	277.0	27.9	249.0	250.0	–	2.1	2015	
2,306.5	264.1	2,042.4	223.4	17.3	495.8	269.4	23.9	245.5	226.4	–	1.8	2016	
2,399.5	273.5	2,125.9	240.6	17.4	450.9	254.0	22.5	231.5	196.9	–	1.7	2017	
2,499.4	282.6	2,216.8	233.4	16.5	412.1	241.7	19.7	222.0	170.4	–	1.4	2018	
2,626.4	301.3	2,325.1	240.5	15.7	394.2	235.9	17.2	218.8	158.2	–	1.5	2019	
2,771.8	310.5	2,461.4	241.1	22.4	390.8	234.3	15.7	218.6	156.6	–	1.1	2020	
2,915.7	314.5	2,601.2	258.9	24.7	373.8	229.9	14.3	215.6	143.9	–	1.0	2021	
3,085.9	348.7	2,737.1	274.0	24.6	359.3	233.7	14.1	219.6	125.6	–	1.0	2022	
3,131.7	361.0	2,770.7	269.4	22.8	364.0	240.0	14.1	225.9	124.0	–	1.0	2023	
3,085.9	348.7	2,737.1	274.0	24.6	359.3	233.7	14.1	219.6	125.6	–	1.0	2022 Dec.	
3,090.3	349.9	2,740.4	269.9	24.6	352.9	233.4	13.8	219.5	119.5	–	1.0	2023 Jan.	
3,102.0	355.3	2,746.7	269.2	24.5	361.2	232.5	13.7	218.8	128.7	–	1.1	Feb.	
3,101.5	354.8	2,746.7	267.8	23.6	356.2	232.6	13.6	219.0	123.6	–	1.0	Mar.	
3,107.6	355.6	2,752.0	266.8	23.6	354.0	232.7	13.9	218.8	121.2	–	1.0	Apr.	
3,120.7	360.8	2,760.0	267.2	23.7	351.4	232.4	13.6	218.8	119.0	–	1.0	May	
3,117.4	360.0	2,757.5	271.3	23.3	353.1	230.9	13.4	217.6	122.2	–	1.0	June	
3,125.3	362.1	2,763.3	270.2	23.4	353.8	232.4	13.5	218.9	121.4	–	1.0	July	
3,130.4	362.8	2,767.6	268.2	23.4	358.6	232.6	13.8	218.8	126.0	–	1.0	Aug.	
3,126.8	359.5	2,767.3	269.0	23.2	355.1	233.0	13.7	219.4	122.1	–	1.0	Sep.	
3,131.2	360.7	2,770.5	269.8	23.1	357.3	234.8	13.8	221.0	122.4	–	1.0	Oct.	
3,135.5	361.4	2,774.1	268.7	23.0	362.7	237.8	14.1	223.8	124.8	–	1.0	Nov.	
3,131.7	361.0	2,770.7	269.4	22.8	364.0	240.0	14.1	225.9	124.0	–	1.0	Dec.	
3,130.5	359.5	2,771.0	271.0	22.7	365.8	239.4	13.8	225.6	126.4	–	1.0	2024 Jan.	
3,132.4	357.0	2,775.4	272.3	22.7	369.6	240.7	14.1	226.6	128.9	–	1.0	Feb.	
3,128.6	354.1	2,774.5	274.6	22.5	368.7	241.1	14.3	226.8	127.5	–	1.0	Mar.	
3,132.3	353.4	2,779.0	274.2	22.4	366.3	241.9	14.3	227.5	124.4	–	1.0	Apr.	
3,135.9	353.3	2,782.6	274.8	22.4	370.4	242.9	14.5	228.4	127.5	–	1.0	May	
Changes *													
+ 59.0	+ 4.5	+ 54.6	+ 14.8	– 2.1	– 6.6	– 6.9	– 4.8	– 2.0	+ 0.2	–	+ 0.0	2015	
+ 75.1	+ 9.7	+ 65.4	+ 4.7	– 0.9	– 30.9	– 7.3	– 4.0	– 3.3	– 23.6	–	– 0.4	2016	
+ 87.6	+ 9.4	+ 78.2	+ 15.8	+ 0.1	– 39.9	– 10.6	– 1.3	– 9.3	– 29.4	–	– 0.1	2017	
+ 108.7	+ 19.3	+ 89.4	– 6.7	– 0.9	– 37.1	– 10.5	– 2.7	– 7.8	– 26.6	–	– 0.0	2018	
+ 126.0	+ 18.9	+ 107.2	+ 6.8	– 0.8	– 17.8	– 5.5	– 2.6	– 2.9	– 12.3	–	+ 0.1	2019	
+ 145.0	+ 9.4	+ 135.5	+ 0.6	+ 6.1	– 2.8	– 1.1	– 1.5	+ 0.4	– 1.7	–	– 0.4	2020	
+ 140.1	+ 5.6	+ 134.5	+ 17.8	+ 2.3	– 14.6	– 3.3	– 1.3	– 2.0	– 11.3	–	– 0.0	2021	
+ 169.9	+ 33.5	+ 136.4	+ 14.9	– 0.1	– 15.7	+ 2.5	– 0.7	+ 3.3	– 18.2	–	– 0.0	2022	
+ 46.9	+ 11.0	+ 35.9	– 4.7	– 1.1	+ 3.9	+ 5.5	± 0.0	+ 5.5	– 1.5	–	– 0.0	2023	
+ 0.3	+ 4.0	– 3.7	+ 1.6	– 0.3	+ 2.4	+ 1.0	+ 0.2	+ 0.9	+ 1.4	–	– 0.0	2022 Dec.	
+ 4.4	+ 1.2	+ 3.3	– 4.2	+ 0.0	– 6.4	– 0.3	– 0.3	– 0.0	– 6.1	–	– 0.0	2023 Jan.	
+ 11.7	+ 5.4	+ 6.4	– 0.7	– 0.1	+ 8.3	– 0.9	– 0.1	– 0.7	+ 9.2	–	+ 0.1	Feb.	
– 0.4	– 0.5	+ 0.0	– 1.4	– 0.3	– 4.8	+ 0.3	– 0.0	+ 0.3	– 5.1	–	– 0.0	Mar.	
+ 6.1	+ 0.8	+ 5.3	– 1.0	+ 0.0	– 2.1	+ 0.1	+ 0.3	– 0.2	– 2.3	–	+ 0.0	Apr.	
+ 13.2	+ 5.2	+ 8.0	+ 0.4	+ 0.1	– 2.7	– 0.4	– 0.3	– 0.0	– 2.3	–	– 0.0	May	
– 3.2	– 1.3	– 2.0	+ 4.1	– 0.3	+ 1.8	– 1.5	– 0.2	– 1.2	+ 3.2	–	– 0.0	June	
+ 8.0	+ 1.8	+ 6.2	– 1.1	+ 0.0	+ 0.7	+ 1.5	+ 0.2	+ 1.3	– 0.8	–	– 0.0	July	
+ 5.1	+ 0.8	+ 4.3	– 2.0	+ 0.1	+ 4.8	+ 0.2	+ 0.3	– 0.1	+ 4.6	–	– 0.0	Aug.	
– 3.6	– 3.3	– 0.2	+ 0.7	– 0.2	– 3.5	+ 0.4	– 0.2	+ 0.6	– 3.9	–	– 0.0	Sep.	
+ 4.4	+ 1.1	+ 3.2	+ 0.8	– 0.1	+ 2.1	+ 1.8	+ 0.2	+ 1.6	+ 0.3	–	– 0.0	Oct.	
+ 4.8	+ 0.2	+ 4.6	– 1.1	– 0.1	+ 4.7	+ 2.2	+ 0.2	+ 2.0	+ 2.4	–	+ 0.0	Nov.	
– 3.5	– 0.4	– 3.2	+ 0.7	– 0.2	+ 1.1	+ 2.0	+ 0.1	+ 1.9	– 0.9	–	– 0.0	Dec.	
– 1.3	– 1.4	+ 0.1	+ 1.6	– 0.1	+ 1.8	– 0.6	– 0.3	– 0.3	+ 2.4	–	+ 0.0	2024 Jan.	
+ 1.4	– 2.5	+ 4.0	+ 1.3	–	+ 3.5	+ 1.0	+ 0.3	+ 0.7	+ 2.5	–	– 0.0	Feb.	
– 2.6	– 2.5	– 0.1	+ 2.3	– 0.2	– 1.0	+ 0.4	+ 0.2	+ 0.2	– 1.4	–	+ 0.0	Mar.	
+ 3.7	– 0.8	+ 4.5	– 0.4	– 0.1	– 2.4	+ 0.7	+ 0.0	+ 0.7	– 3.1	–	+ 0.0	Apr.	
+ 3.8	– 0.1	+ 3.8	+ 0.5	+ 0.0	+ 4.0	+ 0.9	+ 0.1	+ 0.8	+ 3.1	–	+ 0.0	May	

IV. Banks

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

billion €

Lending to domestic enterprises and households (excluding holdings of negotiable money market paper and excluding securities portfolios) 1														
Period	of which:													
	Total	Mortgage loans, total	Housing loans			Lending to enterprises and self-employed persons								
			Total	Mortgage loans secured by residential real estate	Other housing loans	Total	of which: Housing loans	Manufacturing	Electricity, gas and water supply; refuse disposal, mining and quarrying	Construction	Wholesale and retail trade; repair of motor vehicles and motor-cycles	Agriculture, forestry, fishing and aquaculture	Transportation and storage; post and telecommunications	Financial intermediation (excluding MFIs) and insurance companies
Lending, total														
End of year or quarter *														
2021	3,147.5	1,591.4	1,678.2	1,373.0	305.2	1,701.5	477.2	146.1	128.3	98.0	140.4	55.9	55.6	186.3
2023 Q1	3,385.9	1,687.3	1,779.0	1,457.3	321.7	1,872.4	512.9	162.8	138.1	110.9	157.5	56.1	63.1	222.8
Q2	3,397.0	1,701.4	1,787.6	1,471.4	316.3	1,879.4	517.7	162.6	137.7	112.5	159.2	56.3	61.9	221.5
Q3	3,401.6	1,735.7	1,797.1	1,505.7	291.5	1,878.2	522.3	160.0	134.7	113.3	159.5	56.4	61.3	223.0
Q4	3,395.7	1,740.5	1,801.7	1,512.0	289.7	1,872.8	525.7	154.6	136.1	113.3	160.2	56.0	61.5	218.1
2024 Q1	3,401.2	1,753.5	1,802.8	1,524.4	278.5	1,879.2	527.2	155.3	138.3	113.5	159.4	56.3	58.7	219.4
Short-term lending														
2021	231.8	.	6.9	.	6.9	202.7	4.4	31.6	9.1	18.0	36.4	3.3	3.9	35.0
2023 Q1	284.4	.	7.6	.	7.6	253.6	5.3	43.4	8.1	21.9	46.5	3.4	3.7	54.0
Q2	279.6	.	7.6	.	7.6	248.9	5.4	42.3	7.7	22.6	46.8	3.8	3.6	50.4
Q3	274.8	.	7.5	.	7.5	244.4	5.4	40.4	5.6	22.6	47.2	3.8	3.8	51.3
Q4	264.0	.	7.4	.	7.4	233.9	5.3	37.2	5.1	22.2	46.8	3.5	4.5	47.2
2024 Q1	272.6	.	7.6	.	7.6	243.4	5.6	39.7	6.2	23.1	48.0	4.0	4.6	48.2
Medium-term lending														
2021	314.5	.	40.5	.	40.5	239.5	20.6	28.3	5.4	19.3	20.8	4.3	12.3	52.0
2023 Q1	354.8	.	42.8	.	42.8	283.5	23.7	32.5	9.2	22.4	24.8	4.1	21.0	59.3
Q2	360.0	.	42.8	.	42.8	289.3	24.1	34.0	8.0	22.8	26.9	4.1	19.1	61.3
Q3	359.5	.	42.8	.	42.8	289.2	24.5	34.7	5.8	23.0	26.9	4.1	18.2	62.5
Q4	361.0	.	41.9	.	41.9	291.2	24.3	34.0	6.0	23.1	28.2	4.2	18.6	61.3
2024 Q1	354.1	.	40.8	.	40.8	285.1	24.1	32.9	5.8	22.5	27.3	4.1	15.6	61.6
Long-term lending														
2021	2,601.2	1,591.4	1,630.9	1,373.0	257.8	1,259.3	452.2	86.2	113.8	60.8	83.2	48.3	39.4	99.3
2023 Q1	2,746.7	1,687.3	1,728.6	1,457.3	271.3	1,335.3	483.9	86.9	120.8	66.6	86.1	48.6	38.4	109.5
Q2	2,757.5	1,701.4	1,737.2	1,471.4	265.9	1,341.2	488.2	86.3	122.1	67.1	85.5	48.5	39.2	109.7
Q3	2,767.3	1,735.7	1,746.8	1,505.7	241.2	1,344.7	492.4	85.0	123.3	67.7	85.3	48.5	39.2	109.1
Q4	2,770.7	1,740.5	1,752.5	1,512.0	240.5	1,347.7	496.1	83.4	125.1	68.0	85.2	48.3	38.5	109.7
2024 Q1	2,774.5	1,753.5	1,754.4	1,524.4	230.1	1,350.7	497.5	82.8	126.3	68.0	84.1	48.1	38.5	109.7
Lending, total														
Change during quarter *														
2023 Q1	+ 20.4	+ 11.3	+ 4.8	+ 8.6	- 3.8	+ 19.9	+ 3.5	+ 2.8	+ 0.4	+ 2.1	+ 2.1	- 0.2	- 2.1	+ 10.6
Q2	+ 12.4	+ 11.5	+ 9.1	+ 11.5	- 2.4	+ 8.2	+ 5.3	- 0.1	- 0.4	+ 1.6	+ 1.7	+ 0.2	- 0.9	- 0.2
Q3	+ 4.7	+ 10.9	+ 9.2	+ 11.2	- 2.0	- 1.4	+ 4.2	- 2.5	- 2.9	+ 0.8	+ 0.3	+ 0.1	- 0.6	+ 1.3
Q4	- 4.9	+ 5.6	+ 4.8	+ 7.0	- 2.2	- 4.6	+ 3.4	- 5.5	+ 1.3	+ 0.1	+ 0.7	- 0.5	+ 0.7	- 4.9
2024 Q1	+ 4.9	+ 6.5	+ 1.9	+ 7.7	- 5.8	+ 5.8	+ 2.2	+ 0.7	+ 1.9	+ 0.3	- 1.0	+ 0.3	- 2.7	+ 1.3
Short-term lending														
2023 Q1	+ 4.7	.	+ 0.2	.	+ 0.2	+ 4.7	+ 0.3	+ 1.8	- 4.0	+ 1.1	+ 1.9	+ 0.2	- 0.1	+ 3.9
Q2	- 3.7	.	- 0.0	.	- 0.0	- 3.6	+ 0.1	- 1.1	- 0.5	+ 0.8	+ 0.2	+ 0.3	- 0.0	- 2.4
Q3	- 4.8	.	- 0.1	.	- 0.1	- 4.7	- 0.0	- 1.9	- 2.1	- 0.0	+ 0.4	+ 0.0	+ 0.2	+ 0.9
Q4	- 10.6	.	- 0.2	.	- 0.2	- 10.2	- 0.1	- 3.1	- 0.7	- 0.4	- 0.2	- 0.2	+ 0.7	- 4.1
2024 Q1	+ 7.4	.	+ 0.2	.	+ 0.2	+ 8.4	+ 0.2	+ 2.4	+ 1.1	+ 0.9	+ 0.1	+ 0.5	+ 0.1	+ 1.0
Medium-term lending														
2023 Q1	+ 6.1	.	- 0.5	.	- 0.5	+ 7.6	+ 0.3	+ 1.2	+ 2.7	+ 0.2	+ 0.5	- 0.1	- 2.0	+ 3.0
Q2	+ 4.7	.	- 0.0	.	- 0.0	+ 5.4	+ 0.4	+ 1.6	- 1.3	+ 0.4	+ 2.0	- 0.0	- 1.6	+ 2.1
Q3	- 0.8	.	- 0.2	.	- 0.2	- 0.5	+ 0.2	+ 0.7	- 2.1	+ 0.2	+ 0.1	+ 0.1	- 0.9	+ 1.1
Q4	+ 1.0	.	- 0.8	.	- 0.8	+ 1.7	- 0.3	- 0.7	+ 0.2	+ 0.0	+ 1.0	+ 0.0	+ 0.4	- 1.3
2024 Q1	- 6.5	.	- 1.2	.	- 1.2	- 5.7	- 0.4	- 1.1	- 0.2	- 0.6	- 0.8	- 0.0	- 2.9	+ 0.4
Long-term lending														
2023 Q1	+ 9.6	+ 11.3	+ 5.1	+ 8.6	- 3.5	+ 7.6	+ 2.9	- 0.3	+ 1.7	+ 0.8	- 0.2	- 0.3	- 0.0	+ 3.7
Q2	+ 11.3	+ 11.5	+ 9.1	+ 11.5	- 2.4	+ 6.4	+ 4.8	- 0.6	+ 1.3	+ 0.5	- 0.5	- 0.1	+ 0.8	+ 0.1
Q3	+ 10.3	+ 10.9	+ 9.5	+ 11.2	- 1.7	+ 3.8	+ 4.0	- 1.3	+ 1.3	+ 0.6	- 0.2	+ 0.1	+ 0.0	- 0.6
Q4	+ 4.7	+ 5.6	+ 5.7	+ 7.0	- 1.3	+ 3.9	+ 3.8	- 1.6	+ 1.8	+ 0.5	- 0.1	- 0.3	- 0.3	+ 0.6
2024 Q1	+ 4.0	+ 6.5	+ 2.9	+ 7.7	- 4.7	+ 3.1	+ 2.4	- 0.6	+ 1.0	+ 0.0	- 0.3	- 0.1	+ 0.2	- 0.2

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

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

IV. Banks

						Lending to employees and other individuals					Lending to non-profit institutions				
Services sector (including the professions)				Memo items:		Other lending									
Total	of which:			Lending to self-employed persons ²	Lending to craft enterprises	Total	Housing loans	Total	of which:		Total	of which: Housing loans	Period		
	Housing enterprises	Holding companies	Other real estate activities						Instalment loans ³	Debit balances on wage, salary and pension accounts					
End of year or quarter *													Lending, total		
890.8	308.6	63.8	207.9	483.8	48.3	1,429.3	1,196.6	232.7	184.1	6.9	16.7	4.4	2021		
961.2	336.3	78.6	220.4	503.4	54.2	1,496.2	1,261.4	234.7	185.5	7.3	17.4	4.7	2023 Q1		
967.7	340.4	78.1	220.8	504.3	55.0	1,500.1	1,265.2	234.9	186.0	7.3	17.5	4.7	Q2		
970.0	344.0	76.3	222.5	505.0	54.6	1,505.9	1,270.1	235.7	186.9	7.3	17.5	4.7	Q3		
973.0	346.8	75.8	223.7	504.8	54.3	1,505.7	1,271.3	234.4	185.6	7.1	17.2	4.7	Q4		
978.2	348.4	78.2	222.6	505.4	55.0	1,505.1	1,271.0	234.1	186.1	7.0	17.0	4.6	2024 Q1		
													Short-term lending		
65.5	14.5	13.0	10.0	19.7	3.8	28.6	2.5	26.1	1.4	6.9	0.5	0.0	2021		
72.5	16.5	14.9	11.6	21.0	5.3	30.2	2.3	27.9	2.1	7.3	0.6	-	2023 Q1		
71.7	16.5	14.2	11.0	21.0	6.7	30.1	2.2	27.9	2.3	7.3	0.6	-	Q2		
69.7	16.2	13.2	11.6	20.6	6.5	29.9	2.1	27.8	2.2	7.3	0.6	-	Q3		
67.4	16.0	12.6	11.3	20.6	5.7	29.5	2.1	27.5	2.2	7.1	0.6	0.0	Q4		
69.7	15.1	14.5	11.4	20.9	6.9	28.8	2.0	26.8	1.9	7.0	0.5	0.0	2024 Q1		
													Medium-term lending		
97.0	23.1	15.2	27.1	30.0	3.3	74.4	19.8	54.6	50.6	.	0.6	0.1	2021		
110.3	25.3	21.4	29.0	30.3	6.4	70.8	19.0	51.8	47.3	.	0.5	0.1	2023 Q1		
113.1	25.9	22.0	29.5	30.9	6.2	70.1	18.6	51.5	46.9	.	0.6	0.1	Q2		
113.9	26.5	20.8	30.9	31.1	6.2	69.7	18.2	51.5	46.9	.	0.6	0.1	Q3		
115.9	26.0	21.4	32.2	31.2	6.4	69.4	17.5	51.8	47.1	.	0.4	0.1	Q4		
115.3	25.9	21.1	31.7	31.0	6.1	68.6	16.7	51.9	47.0	.	0.4	0.1	2024 Q1		
													Long-term lending		
728.4	271.1	35.6	170.8	434.1	41.3	1,326.3	1,174.3	152.0	132.1	.	15.6	4.3	2021		
778.4	294.6	42.4	179.7	452.1	42.5	1,395.1	1,240.1	155.1	136.1	.	16.3	4.6	2023 Q1		
782.8	298.0	41.9	180.3	452.3	42.1	1,399.9	1,244.4	155.5	136.8	.	16.3	4.6	Q2		
786.5	301.3	42.3	180.0	453.3	41.9	1,406.3	1,249.8	156.4	137.8	.	16.4	4.6	Q3		
789.7	304.8	41.8	180.1	453.0	42.3	1,406.8	1,251.7	155.1	136.3	.	16.2	4.6	Q4		
793.2	307.3	42.6	179.5	453.5	41.9	1,407.7	1,252.3	155.4	137.2	.	16.0	4.6	2024 Q1		
Change during quarter *													Lending, total		
+ 4.1	+ 2.5	- 1.4	+ 2.2	+ 1.5	+ 0.2	+ 0.4	+ 1.3	- 0.8	- 0.8	+ 0.3	+ 0.1	+ 0.1	2023 Q1		
+ 6.2	+ 4.1	- 0.6	+ 0.4	+ 0.7	+ 0.1	+ 4.1	+ 3.8	+ 0.3	+ 0.5	- 0.0	+ 0.1	+ 0.0	Q2		
+ 2.1	+ 3.5	- 1.8	+ 1.7	+ 0.5	- 0.4	+ 6.0	+ 5.0	+ 1.0	+ 0.8	+ 0.1	+ 0.0	- 0.0	Q3		
+ 3.4	+ 2.7	- 0.4	+ 1.3	- 0.4	- 0.2	- 0.0	+ 1.3	- 1.3	- 1.3	- 0.3	- 0.3	- 0.0	Q4		
+ 5.0	+ 1.3	+ 2.4	- 0.8	+ 0.5	+ 0.6	- 0.6	- 0.2	- 0.4	+ 0.8	- 0.1	- 0.2	- 0.1	2024 Q1		
													Short-term lending		
- 0.1	+ 0.4	- 0.7	+ 0.7	+ 0.5	+ 0.3	+ 0.1	- 0.0	+ 0.1	+ 0.0	+ 0.3	-	-	2023 Q1		
- 1.0	+ 0.0	- 0.8	- 0.6	- 0.1	+ 0.2	- 0.0	- 0.2	+ 0.1	+ 0.2	- 0.0	+ 0.0	-	Q2		
- 2.3	- 0.3	- 1.0	+ 0.5	- 0.6	- 0.2	- 0.1	- 0.1	+ 0.0	- 0.1	+ 0.1	- 0.0	-	Q3		
- 2.0	- 0.2	- 0.6	- 0.2	+ 0.1	- 0.3	- 0.5	- 0.1	- 0.3	+ 0.1	- 0.3	- 0.0	+ 0.0	Q4		
+ 2.3	- 0.9	+ 1.8	+ 0.1	+ 0.3	+ 1.2	- 0.9	- 0.0	- 0.8	- 0.1	- 0.1	- 0.1	-	2024 Q1		
													Medium-term lending		
+ 2.1	- 0.1	+ 1.3	+ 0.7	+ 0.2	- 0.1	- 1.6	- 0.8	- 0.7	- 0.7	.	- 0.0	-	2023 Q1		
+ 2.3	+ 0.7	+ 0.6	+ 0.4	+ 0.3	- 0.0	- 0.7	- 0.4	- 0.3	- 0.4	.	+ 0.0	- 0.0	Q2		
+ 0.5	+ 0.6	- 1.2	+ 1.2	+ 0.2	+ 0.0	- 0.4	- 0.4	+ 0.1	- 0.1	.	+ 0.1	- 0.0	Q3		
+ 2.0	- 0.5	+ 0.6	+ 1.3	+ 0.0	+ 0.2	- 0.5	- 0.5	- 0.0	- 0.2	.	- 0.2	+ 0.0	Q4		
- 0.5	- 0.1	- 0.3	- 0.3	- 0.2	- 0.2	- 0.8	- 0.8	+ 0.1	- 0.1	.	-	- 0.0	2024 Q1		
													Long-term lending		
+ 2.1	+ 2.2	- 2.0	+ 0.8	+ 0.9	- 0.1	+ 1.9	+ 2.1	- 0.2	- 0.1	.	+ 0.1	+ 0.1	2023 Q1		
+ 4.9	+ 3.4	- 0.5	+ 0.6	+ 0.6	- 0.1	+ 4.8	+ 4.3	+ 0.5	+ 0.7	.	+ 0.1	+ 0.0	Q2		
+ 3.9	+ 3.2	+ 0.4	+ 0.1	+ 0.9	- 0.2	+ 6.4	+ 5.5	+ 0.9	+ 1.0	.	+ 0.0	+ 0.0	Q3		
+ 3.3	+ 3.5	- 0.3	+ 0.2	- 0.5	- 0.1	+ 0.9	+ 1.9	- 1.0	- 1.2	.	- 0.1	- 0.0	Q4		
+ 3.2	+ 2.3	+ 0.8	- 0.6	+ 0.4	- 0.3	+ 1.0	+ 0.6	+ 0.3	+ 1.0	.	- 0.2	- 0.1	2024 Q1		

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

IV. Banks

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

€ billion

Period	Deposits, total	Sight deposits	Time deposits 1,2				Savings deposits 3	Bank savings bonds 4	Memo item:					
			Total	for up to and including 1 year	for more than 1 year 2				Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities)	Liabilities arising from repos			
					Total	for up to and including 2 years						for more than 2 years		
Domestic non-banks, total													End of year or month *	
2021	3,976.3	2,654.6	736.0	161.0	574.9	49.7	525.2	561.2	24.5	34.2	17.1	1.3		
2022	4,162.0	2,720.6	873.5	314.8	558.7	50.5	508.2	533.2	34.6	35.9	18.5	3.9		
2023	4,229.0	2,540.8	1,100.1	514.7	585.4	80.5	504.9	445.9	142.2	50.1	20.3	2.9		
2023 June	4,176.3	2,600.9	1,020.0	445.4	574.6	64.4	510.2	483.3	72.1	36.5	20.3	2.8		
July	4,180.2	2,582.2	1,042.9	468.5	574.4	65.8	508.6	475.9	79.1	36.7	19.9	3.5		
Aug.	4,188.4	2,568.4	1,061.7	490.2	571.6	67.3	504.3	467.5	90.7	36.9	19.9	4.7		
Sep.	4,189.3	2,558.0	1,072.5	497.7	574.8	71.5	503.3	461.8	97.0	37.1	19.9	6.5		
Oct.	4,198.0	2,544.5	1,086.5	510.9	575.6	74.6	501.0	455.4	111.6	37.3	19.9	6.3		
Nov.	4,217.3	2,552.9	1,085.6	506.9	578.6	76.7	501.9	448.3	130.5	37.6	20.8	6.4		
Dec.	4,229.0	2,540.8	1,100.1	514.7	585.4	80.5	504.9	445.9	142.2	50.1	20.3	2.9		
2024 Jan.	4,216.3	2,496.8	1,128.7	540.7	588.0	84.3	503.8	439.4	151.4	54.5	20.4	4.9		
Feb.	4,213.6	2,478.3	1,143.5	555.4	588.1	85.1	503.0	434.4	157.3	57.5	20.4	5.0		
Mar.	4,239.0	2,479.2	1,168.8	578.6	590.2	87.3	502.9	430.3	160.7	60.2	20.3	4.5		
Apr.	4,239.6	2,475.4	1,173.6	584.9	588.8	84.9	503.8	425.8	164.8	63.7	20.3	4.4		
May	4,263.3	2,497.0	1,176.9	587.4	589.5	85.1	504.3	422.2	167.2	66.9	20.4	4.8		
Changes *													End of year or month *	
2022	+ 191.8	+ 65.8	+ 143.4	+ 152.5	- 9.1	+ 0.6	- 9.7	- 27.5	+ 10.1	+ 1.7	+ 1.2	+ 2.6		
2023	+ 76.6	- 172.0	+ 226.4	+ 198.4	+ 28.0	+ 29.9	- 1.9	- 82.3	+ 104.5	+ 3.5	+ 1.8	- 1.0		
2023 June	+ 2.3	- 23.0	+ 26.0	+ 25.4	+ 0.7	+ 2.4	- 1.7	- 7.3	+ 6.7	- 0.1	- 0.1	- 1.3		
July	+ 3.8	- 18.7	+ 22.8	+ 23.1	- 0.3	+ 1.4	- 1.7	- 7.3	+ 7.0	+ 0.2	- 0.5	+ 0.7		
Aug.	+ 8.2	- 13.2	+ 21.3	+ 21.3	+ 0.0	+ 1.9	- 1.8	- 8.5	+ 8.5	+ 0.2	+ 0.0	+ 1.2		
Sep.	+ 0.9	- 10.5	+ 10.7	+ 8.0	+ 2.7	+ 3.9	- 1.2	- 5.7	+ 6.3	+ 0.2	+ 0.0	+ 1.8		
Oct.	+ 8.7	- 13.4	+ 14.0	+ 13.2	+ 0.8	+ 3.1	- 2.3	- 6.4	+ 14.6	+ 0.3	- 0.0	- 0.2		
Nov.	+ 19.3	+ 8.5	- 1.0	- 4.1	+ 3.1	+ 2.1	+ 0.9	- 7.1	+ 18.8	+ 0.3	+ 0.9	+ 0.2		
Dec.	+ 22.3	- 0.7	+ 13.7	+ 7.7	+ 6.0	+ 4.0	+ 2.0	- 2.5	+ 11.8	+ 1.2	- 0.4	- 3.5		
2024 Jan.	- 12.7	- 44.1	+ 28.7	+ 26.1	+ 2.6	+ 3.8	- 1.1	- 6.5	+ 9.2	+ 4.4	+ 0.0	+ 2.0		
Feb.	- 2.8	- 18.4	+ 14.8	+ 14.7	+ 0.1	+ 0.8	- 0.8	- 5.0	+ 5.9	+ 3.0	- 0.0	+ 0.1		
Mar.	+ 25.5	+ 0.9	+ 25.3	+ 23.2	+ 2.1	+ 2.2	- 0.2	- 4.1	+ 3.4	+ 2.6	- 0.1	- 0.5		
Apr.	+ 0.6	- 3.8	+ 4.8	+ 6.3	- 1.4	- 2.4	+ 1.0	- 4.6	+ 4.2	+ 3.5	+ 0.1	- 0.1		
May	+ 23.7	+ 21.7	+ 3.1	+ 2.4	+ 0.7	+ 0.2	+ 0.5	- 3.5	+ 2.4	+ 3.2	+ 0.0	+ 0.4		
Domestic government													End of year or month *	
2021	210.1	82.4	121.9	42.0	79.9	23.8	56.1	2.5	3.3	25.8	2.0	1.0		
2022	279.8	82.5	191.6	106.8	84.9	23.1	61.7	2.0	3.7	27.3	1.9	2.4		
2023	286.9	91.2	190.5	105.6	84.9	23.3	61.6	0.9	4.4	26.6	1.4	0.2		
2023 June	308.1	95.9	207.0	119.2	87.7	24.2	63.5	1.2	4.0	26.6	1.8	0.5		
July	298.3	85.7	207.5	121.1	86.4	23.0	63.4	1.1	4.0	26.7	1.8	0.8		
Aug.	305.6	95.1	205.4	119.3	86.1	22.8	63.3	1.0	4.1	26.6	1.9	2.2		
Sep.	304.9	94.2	205.6	119.5	86.2	23.9	62.2	0.9	4.2	26.4	1.8	3.8		
Oct.	291.0	92.3	193.5	108.0	85.6	23.5	62.0	0.9	4.2	26.2	1.8	2.9		
Nov.	285.2	92.5	187.5	103.7	83.8	22.1	61.7	0.9	4.4	26.0	1.8	2.2		
Dec.	286.9	91.2	190.5	105.6	84.9	23.3	61.6	0.9	4.4	26.6	1.4	0.2		
2024 Jan.	272.5	84.9	182.5	98.4	84.1	23.4	60.7	0.8	4.3	26.5	1.3	1.0		
Feb.	276.6	87.8	183.7	101.4	82.4	21.0	61.3	0.8	4.3	26.7	1.3	1.2		
Mar.	283.2	89.0	189.1	106.1	83.0	22.0	61.1	0.8	4.3	26.9	1.3	1.3		
Apr.	266.2	81.6	179.4	99.9	79.5	18.7	60.8	0.8	4.4	26.9	1.3	0.3		
May	274.8	92.1	177.5	98.4	79.1	18.4	60.7	0.7	4.5	27.0	1.3	0.8		
Changes *													End of year or month *	
2022	+ 69.1	+ 0.2	+ 69.2	+ 64.7	+ 4.5	- 0.9	+ 5.4	- 0.6	+ 0.3	+ 1.5	- 0.1	+ 1.4		
2023	+ 6.5	+ 8.7	- 1.7	- 1.7	- 0.1	+ 0.1	- 0.2	- 1.1	+ 0.6	+ 0.1	- 0.6	- 2.2		
2023 June	+ 8.0	+ 3.8	+ 4.2	+ 4.2	- 0.0	- 0.1	+ 0.1	- 0.1	+ 0.1	- 0.2	- 0.0	- 1.3		
July	- 9.8	- 10.2	+ 0.5	+ 1.8	- 1.3	- 1.2	- 0.1	- 0.2	+ 0.0	+ 0.0	-	+ 0.4		
Aug.	+ 7.3	+ 9.3	- 2.1	- 1.8	- 0.4	- 0.3	- 0.1	- 0.1	+ 0.2	- 0.1	+ 0.0	+ 1.4		
Sep.	- 0.7	- 0.9	+ 0.3	+ 0.2	+ 0.1	+ 1.2	- 1.1	- 0.1	+ 0.0	- 0.2	- 0.0	+ 1.6		
Oct.	- 14.0	- 1.9	- 12.2	- 11.5	- 0.6	- 0.4	- 0.2	- 0.0	+ 0.0	- 0.2	- 0.0	- 0.9		
Nov.	- 5.8	+ 0.2	- 6.2	- 4.4	- 1.8	- 1.4	- 0.4	- 0.0	+ 0.1	- 0.2	- 0.0	- 0.7		
Dec.	+ 1.7	- 1.3	+ 2.9	+ 1.9	+ 1.1	+ 1.2	- 0.1	- 0.0	+ 0.0	+ 0.7	- 0.4	- 2.0		
2024 Jan.	- 14.4	- 6.3	- 8.0	- 7.2	- 0.8	+ 0.1	- 0.9	- 0.1	- 0.0	- 0.2	- 0.0	+ 0.8		
Feb.	+ 4.1	+ 2.9	+ 1.2	+ 3.0	- 1.8	+ 2.4	+ 0.6	- 0.0	+ 0.0	+ 0.2	+ 0.0	+ 0.3		
Mar.	+ 6.6	+ 1.2	+ 5.4	+ 4.7	+ 0.7	+ 0.9	- 0.3	- 0.0	+ 0.0	+ 0.3	- 0.0	+ 0.1		
Apr.	- 17.0	- 7.3	- 9.7	- 6.2	- 3.5	- 3.2	- 0.2	- 0.0	+ 0.0	- 0.0	+ 0.0	- 1.0		
May	+ 8.6	+ 10.5	- 1.9	- 1.5	- 0.4	- 0.3	- 0.2	- 0.0	+ 0.1	+ 0.1	- 0.0	+ 0.5		

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

1 Including subordinated liabilities and liabilities arising from registered debt securities. 2 Including deposits under savings and loan contracts (see Table IV.12). 3 Excluding deposits under savings and loan contracts (see also footnote 2).

IV. Banks

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

€ billion

Period	Deposits, total	Sight deposits	Time deposits 1,2					Savings deposits 3	Bank savings bonds 4	Memo item:				
			Total	for up to and including 1 year	for more than 1 year 2					Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities)	Liabilities arising from repos		
					Total	for up to and including 2 years	for more than 2 years							
Domestic enterprises and households													End of year or month *	
2021	3,766.2	2,572.2	614.1	119.0	495.0	25.9	469.2	558.7	21.2	8.4	15.1	0.3		
2022	3,882.2	2,638.1	681.9	208.0	473.9	27.4	446.5	531.2	31.0	8.6	16.6	1.5		
2023	3,942.1	2,449.6	909.6	409.1	500.5	57.2	443.3	445.0	137.9	23.5	19.0	2.7		
2023 June	3,868.2	2,505.0	813.1	326.1	486.9	40.2	446.7	482.0	68.1	9.9	18.5	2.3		
July	3,881.9	2,496.5	835.4	347.4	488.0	42.8	445.2	474.9	75.1	10.0	18.0	2.7		
Aug.	3,882.8	2,473.4	856.4	370.9	485.5	44.5	441.0	466.5	86.6	10.3	18.0	2.4		
Sep.	3,884.4	2,463.8	866.9	378.3	488.6	47.5	441.1	460.9	92.9	10.7	18.1	2.7		
Oct.	3,907.1	2,452.2	892.9	402.9	490.0	51.0	439.0	454.5	107.9	11.2	18.1	3.4		
Nov.	3,932.1	2,460.5	898.0	403.2	494.8	54.5	440.3	447.5	126.1	11.6	19.0	4.2		
Dec.	3,942.1	2,449.6	909.6	409.1	500.5	57.2	443.3	445.0	137.9	23.5	19.0	2.7		
2024 Jan.	3,943.8	2,411.9	946.2	442.3	503.9	60.8	443.1	438.6	147.1	28.0	19.1	4.0		
Feb.	3,937.0	2,390.6	959.8	454.0	505.8	64.1	441.7	433.6	153.0	30.9	19.0	3.8		
Mar.	3,955.8	2,390.3	979.6	472.5	507.2	65.4	441.8	429.6	156.4	33.2	19.0	3.1		
Apr.	3,973.4	2,393.8	994.2	485.0	509.2	66.2	443.0	425.0	160.5	36.8	19.0	4.1		
May	3,988.5	2,404.8	999.4	489.0	510.4	66.7	443.7	421.5	162.7	39.9	19.1	4.1		
													Changes *	
2022	+ 122.7	+ 65.6	+ 74.2	+ 87.8	- 13.6	+ 1.4	- 15.1	- 27.0	+ 9.8	+ 0.2	+ 1.3	+ 1.3		
2023	+ 70.0	- 180.7	+ 228.1	+ 200.1	+ 28.1	+ 29.8	- 1.7	- 81.2	+ 103.8	+ 3.5	+ 2.4	+ 1.2		
2023 June	- 5.6	- 26.8	+ 21.8	+ 21.1	+ 0.7	+ 2.4	- 1.8	- 7.2	+ 6.6	+ 0.1	- 0.1	- 0.1		
July	+ 13.7	- 8.5	+ 22.3	+ 21.3	+ 1.0	+ 2.6	- 1.6	- 7.2	+ 7.0	+ 0.1	- 0.5	+ 0.3		
Aug.	+ 0.9	- 22.5	+ 23.4	+ 23.1	+ 0.4	+ 2.1	- 1.8	- 8.4	+ 8.4	+ 0.3	- 0.0	- 0.3		
Sep.	+ 1.6	- 9.6	+ 10.5	+ 7.9	+ 2.6	+ 2.7	- 0.1	- 5.6	+ 6.3	+ 0.4	+ 0.1	+ 0.2		
Oct.	+ 22.7	- 11.6	+ 26.1	+ 24.7	+ 1.5	+ 3.5	- 2.0	- 6.4	+ 14.5	+ 0.5	+ 0.0	+ 0.7		
Nov.	+ 25.1	+ 8.3	+ 5.2	+ 0.4	+ 4.8	+ 3.5	+ 1.3	- 7.0	+ 18.7	+ 0.5	+ 0.9	+ 0.9		
Dec.	+ 20.7	+ 0.6	+ 10.8	+ 5.9	+ 4.9	+ 2.8	+ 2.1	- 2.4	+ 11.8	+ 0.5	+ 0.0	- 1.5		
2024 Jan.	+ 1.7	- 37.8	+ 36.7	+ 33.3	+ 3.4	+ 3.7	- 0.2	- 6.5	+ 9.2	+ 4.5	+ 0.1	+ 1.2		
Feb.	- 6.8	- 21.3	+ 13.6	+ 11.7	+ 1.9	+ 3.3	- 1.4	- 5.0	+ 5.9	+ 2.8	- 0.0	- 0.2		
Mar.	+ 18.9	- 0.3	+ 19.9	+ 18.4	+ 1.4	+ 1.3	+ 0.1	- 4.1	+ 3.4	+ 2.4	- 0.1	- 0.6		
Apr.	+ 17.6	+ 3.5	+ 14.6	+ 12.5	+ 2.0	+ 0.8	+ 1.2	- 4.6	+ 4.1	+ 3.5	+ 0.1	+ 1.0		
May	+ 15.0	+ 11.3	+ 5.0	+ 3.9	+ 1.2	+ 0.5	+ 0.6	- 3.5	+ 2.3	+ 3.1	+ 0.1	- 0.0		
of which: Domestic enterprises													End of year or month *	
2021	1,142.7	765.1	364.3	87.4	276.9	15.8	261.1	5.3	8.0	2.3	12.2	0.3		
2022	1,193.5	783.4	397.1	140.8	256.3	16.8	239.5	4.4	8.6	1.9	13.5	1.5		
2023	1,194.6	723.0	453.9	204.3	249.6	19.0	230.6	3.3	14.4	2.5	15.5	2.7		
2023 June	1,181.8	726.7	441.4	185.1	256.2	18.3	237.9	3.8	9.9	2.0	15.1	2.3		
July	1,189.1	727.3	447.9	192.7	255.3	18.6	236.7	3.7	10.1	2.1	14.6	2.7		
Aug.	1,189.2	719.9	452.0	202.1	249.9	18.0	231.9	3.7	13.6	2.2	14.6	2.4		
Sep.	1,187.8	719.1	451.5	200.9	250.6	18.7	231.9	3.6	13.6	2.2	14.6	2.7		
Oct.	1,209.6	727.6	464.5	215.8	248.7	19.2	229.5	3.5	14.0	2.3	14.6	3.4		
Nov.	1,213.9	738.9	457.4	208.5	248.9	19.0	229.8	3.5	14.2	2.3	15.5	4.2		
Dec.	1,194.6	723.0	453.9	204.3	249.6	19.0	230.6	3.3	14.4	2.5	15.5	2.7		
2024 Jan.	1,203.8	714.6	471.4	223.4	248.0	19.1	228.9	3.3	14.5	2.5	15.4	4.0		
Feb.	1,183.1	697.1	468.1	221.6	246.5	19.1	227.4	3.2	14.7	2.7	15.4	3.8		
Mar.	1,191.0	697.0	476.0	229.7	246.3	19.3	227.0	3.2	14.7	2.8	15.2	3.1		
Apr.	1,197.7	700.0	479.7	232.5	247.1	19.1	228.1	3.2	14.8	2.9	15.3	4.1		
May	1,203.1	709.0	475.9	228.2	247.7	19.4	228.3	3.2	15.0	3.0	15.3	4.1		
													Changes *	
2022	+ 56.2	+ 17.7	+ 38.8	+ 52.1	- 13.3	+ 1.0	- 14.3	- 0.9	+ 0.6	- 0.5	+ 1.0	+ 1.3		
2023	+ 11.1	- 48.0	+ 57.5	+ 63.0	- 5.5	+ 2.0	- 7.6	- 1.1	+ 2.7	+ 0.6	+ 2.0	+ 1.2		
2023 June	- 8.5	- 15.9	+ 7.3	+ 8.9	- 1.6	+ 0.1	- 1.7	- 0.1	+ 0.2	+ 0.0	- 0.1	- 0.1		
July	+ 7.2	+ 0.6	+ 6.5	+ 7.5	- 1.1	+ 0.3	- 1.4	- 0.1	+ 0.2	+ 0.0	- 0.5	+ 0.3		
Aug.	+ 0.1	- 6.8	+ 6.6	+ 9.1	- 2.5	- 0.3	- 2.2	- 0.1	+ 0.4	+ 0.1	- 0.0	- 0.3		
Sep.	- 1.3	- 0.7	- 0.5	- 0.7	+ 0.2	+ 0.5	- 0.3	- 0.1	- 0.0	+ 0.1	+ 0.0	+ 0.2		
Oct.	+ 21.8	+ 8.5	+ 13.0	+ 14.9	- 1.9	+ 0.5	- 2.4	- 0.1	+ 0.4	+ 0.1	- 0.0	+ 0.7		
Nov.	+ 4.4	+ 11.2	- 7.0	- 7.2	+ 0.2	- 0.2	+ 0.4	- 0.1	+ 0.2	+ 0.0	+ 0.9	+ 0.9		
Dec.	- 8.7	- 4.4	- 4.3	- 4.2	- 0.1	+ 0.0	- 0.1	- 0.2	+ 0.2	+ 0.2	- 0.0	- 1.5		
2024 Jan.	+ 9.2	- 8.5	+ 17.5	+ 19.1	- 1.6	+ 0.1	- 1.7	- 0.0	+ 0.1	+ 0.0	- 0.0	+ 1.2		
Feb.	- 20.7	- 17.5	- 3.3	- 1.8	- 1.5	- 0.0	- 1.5	- 0.0	+ 0.2	+ 0.2	- 0.1	- 0.2		
Mar.	+ 7.8	- 0.1	+ 7.9	+ 8.1	- 0.2	+ 0.2	- 0.4	- 0.0	+ 0.0	+ 0.1	- 0.1	- 0.6		
Apr.	+ 6.7	+ 3.0	+ 3.6	+ 2.8	+ 0.8	- 0.2	+ 1.0	- 0.0	+ 0.1	+ 0.2	+ 0.0	+ 1.0		
May	+ 5.5	+ 9.2	- 3.9	- 4.4	+ 0.5	+ 0.3	+ 0.2	- 0.0	+ 0.2	+ 0.1	+ 0.0	- 0.0		

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

IV. Banks

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

€ billion

Period	Sight deposits							Time deposits 1,2					
	Deposits of domestic households and non-profit institutions, total	by creditor group						Total	by creditor group				
		Domestic households					Domestic non-profit institutions		Domestic households				
		Total	Total	Self-employed persons	Employees	Other individuals			Total	Total	Self-employed persons	Employees	Other individuals
End of year or month *													
2021	2,623.6	1,807.1	1,762.4	308.6	1,288.4	165.4	44.7	249.8	237.8	18.2	185.6	33.9	
2022	2,688.7	1,854.7	1,809.9	307.3	1,342.5	160.1	44.8	284.8	268.7	31.2	200.5	37.1	
2023	2,747.5	1,726.6	1,685.2	270.9	1,271.0	143.4	41.3	455.7	434.0	67.6	317.3	49.2	
2023 Dec.	2,747.5	1,726.6	1,685.2	270.9	1,271.0	143.4	41.3	455.7	434.0	67.6	317.3	49.2	
2024 Jan.	2,740.1	1,697.3	1,656.3	268.0	1,248.0	140.4	41.0	474.8	453.1	71.2	331.3	50.7	
Feb.	2,753.9	1,693.5	1,652.1	265.9	1,247.2	139.0	41.4	491.7	469.9	74.0	344.0	52.0	
Mar.	2,764.9	1,693.3	1,652.0	261.1	1,252.7	138.1	41.3	503.6	481.4	75.5	352.8	53.2	
Apr.	2,775.8	1,693.8	1,652.7	265.5	1,251.1	136.1	41.1	514.5	492.2	76.4	361.7	54.1	
May	2,785.4	1,695.8	1,653.6	266.0	1,251.8	135.9	42.2	523.6	500.8	77.5	368.6	54.7	
Changes *													
2022	+ 66.5	+ 48.0	+ 47.8	- 1.5	+ 54.1	- 4.7	+ 0.1	+ 35.4	+ 31.4	+ 12.9	+ 17.2	+ 1.2	
2023	+ 58.9	- 132.7	- 129.2	- 36.7	- 76.8	- 15.7	- 3.5	+ 170.6	+ 164.9	+ 36.1	+ 116.5	+ 12.2	
2023 Dec.	+ 29.3	+ 5.0	+ 4.1	- 2.4	+ 6.5	+ 0.1	+ 0.9	+ 15.0	+ 13.9	+ 2.6	+ 9.9	+ 1.3	
2024 Jan.	- 7.5	- 29.3	- 29.0	- 2.9	- 23.1	- 3.0	- 0.3	+ 19.2	+ 19.1	+ 3.6	+ 14.0	+ 1.5	
Feb.	+ 13.8	- 3.8	- 4.2	- 2.0	- 0.7	- 1.4	+ 0.4	+ 16.9	+ 16.8	+ 2.8	+ 12.7	+ 1.3	
Mar.	+ 11.0	- 0.2	- 0.1	- 4.8	+ 5.5	- 0.8	- 0.1	+ 11.9	+ 11.5	+ 1.5	+ 8.8	+ 1.2	
Apr.	+ 10.9	+ 0.5	+ 0.7	+ 4.3	- 1.7	- 2.0	- 0.2	+ 10.9	+ 10.8	+ 0.8	+ 8.6	+ 1.4	
May	+ 9.5	+ 2.0	+ 1.0	+ 0.5	+ 0.7	- 0.2	+ 1.0	+ 9.0	+ 8.5	+ 1.1	+ 6.8	+ 0.6	

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

Subsequent revisions, which appear in the following Monthly Report, are not specially marked. 1 Including subordinated liabilities and liabilities arising from

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

€ billion

Period	Deposits												
	Domestic government, total	Federal Government and its special funds 1						State governments					
		Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds 2	Memo item: Fiduciary loans	Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds 2	Memo item: Fiduciary loans
				for up to and including 1 year	for more than 1 year					for up to and including 1 year	for more than 1 year		
End of year or month *													
2021	210.1	43.5	4.2	3.2	36.0	0.1	11.7	47.4	21.7	13.8	11.3	0.6	14.1
2022	279.8	66.8	7.9	24.2	34.6	0.1	11.4	53.8	17.1	25.2	10.9	0.5	15.9
2023	286.9	52.0	9.8	6.7	35.5	0.0	11.6	51.9	19.7	21.9	9.9	0.4	15.1
2023 Dec.	286.9	52.0	9.8	6.7	35.5	0.0	11.6	51.9	19.7	21.9	9.9	0.4	15.1
2024 Jan.	272.5	50.5	10.8	4.2	35.4	0.0	11.6	55.7	22.3	24.0	9.1	0.3	14.9
Feb.	276.6	49.5	10.1	4.0	35.3	0.0	11.7	57.9	21.1	26.7	9.7	0.4	14.9
Mar.	283.2	49.9	10.6	4.0	35.3	0.0	11.9	63.1	20.8	32.5	9.4	0.4	15.0
Apr.	266.2	49.2	10.4	3.5	35.2	0.0	11.9	54.2	18.1	27.4	8.3	0.4	15.0
May	274.8	49.5	10.5	3.8	35.1	0.0	11.9	54.3	21.3	24.5	8.2	0.4	15.1
Changes *													
2022	+ 69.1	+ 23.0	+ 3.5	+ 20.9	- 1.4	- 0.0	- 0.3	+ 6.4	- 4.6	+ 11.3	- 0.3	- 0.1	+ 1.8
2023	+ 6.5	- 14.8	+ 1.9	- 17.6	+ 0.9	- 0.0	+ 0.2	- 2.0	+ 2.9	- 3.7	- 1.0	- 0.1	- 0.1
2023 Dec.	+ 1.7	- 3.1	- 2.9	- 0.8	+ 0.6	+ 0.0	+ 0.3	+ 0.8	+ 1.1	+ 0.3	- 0.5	- 0.0	+ 0.4
2024 Jan.	- 14.4	- 1.5	+ 1.0	- 2.5	- 0.1	- 0.0	+ 0.0	+ 3.8	+ 2.5	+ 2.0	- 0.8	- 0.0	- 0.2
Feb.	+ 4.1	- 1.0	- 0.7	- 0.2	- 0.1	+ 0.0	+ 0.1	+ 2.2	- 1.2	+ 2.8	+ 0.6	+ 0.0	+ 0.0
Mar.	+ 6.6	+ 0.5	+ 0.4	+ 0.0	- 0.0	+ 0.0	+ 0.2	+ 5.2	- 0.3	+ 5.7	- 0.2	+ 0.0	+ 0.0
Apr.	- 17.0	- 0.8	- 0.2	- 0.5	- 0.1	- 0.0	- 0.0	- 8.9	- 2.7	- 5.0	- 1.2	+ 0.0	+ 0.0
May	+ 8.6	+ 0.3	+ 0.1	+ 0.3	- 0.1	+ 0.0	- 0.0	+ 0.1	+ 3.1	- 2.9	- 0.1	- 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

IV. Banks

					Savings deposits ³			Memo item:					
by maturity					Total	Domestic households	Domestic non-profit institutions	Bank savings bonds ⁴	Fiduciary loans	Subordinated liabilities (excluding negotiable debt securities) ⁵	Liabilities arising from repos	Period	
Domestic non-profit institutions	up to and including 1 year	more than 1 year ²											
		Total	of which:										
		up to and including 2 years	more than 2 years										
End of year or month *													
12.0	31.7	218.1	10.1	208.0	553.4	547.2	6.2	13.2	6.1	2.8	–	2021	
16.0	67.2	217.5	10.6	206.9	526.8	521.8	5.1	22.4	6.8	3.1	–	2022	
21.6	204.7	251.0	38.2	212.7	441.8	438.4	3.4	123.5	21.0	3.5	–	2023	
21.6	204.7	251.0	38.2	212.7	441.8	438.4	3.4	123.5	21.0	3.5	–	2023 Dec.	
21.7	218.9	255.9	41.7	214.2	435.3	432.0	3.3	132.6	25.5	3.6	–	2024 Jan.	
21.8	232.4	259.3	45.0	214.3	430.4	427.2	3.2	138.3	28.2	3.7	–	Feb.	
22.2	242.8	260.8	46.1	214.8	426.3	423.2	3.2	141.7	30.5	3.7	–	Mar.	
22.3	252.5	262.1	47.1	215.0	421.8	418.7	3.1	145.6	33.8	3.8	–	Apr.	
22.8	260.9	262.7	47.3	215.4	418.3	415.2	3.1	147.7	36.9	3.8	–	May	
Changes *													
+ 4.0	+ 35.7	– 0.3	+ 0.5	– 0.8	– 26.1	– 25.0	– 1.1	+ 9.2	+ 0.7	+ 0.3	–	2022	
+ 5.7	+ 137.0	+ 33.6	+ 27.8	+ 5.8	– 80.1	– 78.4	– 1.7	+ 101.1	+ 2.9	+ 0.4	–	2023	
+ 1.2	+ 10.0	+ 5.0	+ 2.8	+ 2.3	– 2.3	– 2.2	– 0.1	+ 11.6	+ 0.3	+ 0.0	–	2023 Dec.	
+ 0.0	+ 14.2	+ 5.0	+ 3.5	+ 1.5	– 6.4	– 6.3	– 0.1	+ 9.1	+ 4.5	+ 0.1	–	2024 Jan.	
+ 0.1	+ 13.5	+ 3.4	+ 3.3	+ 0.1	– 4.9	– 4.9	– 0.1	+ 5.7	+ 2.7	+ 0.1	–	Feb.	
+ 0.4	+ 10.3	+ 1.6	+ 1.1	+ 0.5	– 4.1	– 4.0	– 0.1	+ 3.4	+ 2.3	+ 0.0	–	Mar.	
+ 0.1	+ 9.7	+ 1.2	+ 1.1	+ 0.2	– 4.5	– 4.5	– 0.1	+ 4.0	+ 3.3	+ 0.1	–	Apr.	
+ 0.5	+ 8.3	+ 0.7	+ 0.2	+ 0.4	– 3.5	– 3.5	– 0.0	+ 2.1	+ 3.0	+ 0.0	–	May	

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

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

Local government and local government associations (including municipal special-purpose associations)						Social security funds						
Total	Sight deposits	Time deposits ³		Savings deposits and bank savings bonds ^{2,4}	Memo item: Fiduciary loans	Total	Sight deposits	Time deposits		Savings deposits and bank savings bonds ²	Memo item: Fiduciary loans	Period
		for up to and including 1 year	for more than 1 year					for up to and including 1 year	for more than 1 year			
End of year or month *												
70.9	48.5	6.0	12.0	4.4	0.0	48.3	8.0	19.0	20.5	0.8	–	2021
80.0	49.2	12.5	13.8	4.4	0.0	79.2	8.3	44.9	25.5	0.6	–	2022
83.3	45.6	19.8	14.1	3.8	0.0	99.6	16.1	57.2	25.3	1.0	–	2023
83.3	45.6	19.8	14.1	3.8	0.0	99.6	16.1	57.2	25.3	1.0	–	2023 Dec.
73.1	35.5	19.8	14.0	3.7	0.0	93.2	16.2	50.4	25.5	1.0	–	2024 Jan.
77.5	39.4	20.1	14.2	3.7	0.0	91.8	17.1	50.5	23.2	1.0	–	Feb.
73.1	35.4	20.0	14.1	3.7	0.0	97.1	22.2	49.6	24.2	1.0	–	Mar.
71.6	34.9	19.1	13.9	3.7	0.0	91.2	18.2	49.8	22.1	1.0	–	Apr.
77.8	40.6	19.8	13.7	3.7	0.0	93.2	19.7	50.3	22.1	1.1	–	May
Changes *												
+ 10.2	+ 0.9	+ 7.9	+ 1.3	+ 0.1	–	+ 29.6	+ 0.3	+ 24.5	+ 4.9	– 0.2	–	2022
+ 3.2	– 3.8	+ 7.3	+ 0.3	– 0.6	–	+ 20.2	+ 7.8	+ 12.4	– 0.3	+ 0.3	–	2023
+ 3.8	+ 3.3	+ 0.3	+ 0.1	+ 0.0	–	+ 0.1	– 2.8	+ 2.0	+ 0.9	+ 0.0	–	2023 Dec.
– 10.2	– 10.1	+ 0.0	– 0.1	– 0.1	–	– 6.5	+ 0.2	– 6.8	+ 0.2	– 0.0	–	2024 Jan.
+ 4.3	+ 3.9	+ 0.3	+ 0.2	– 0.0	–	– 1.4	+ 0.9	+ 0.1	– 2.4	+ 0.0	–	Feb.
– 4.4	– 4.0	– 0.1	– 0.2	– 0.0	–	+ 5.3	+ 5.1	– 0.9	+ 1.1	– 0.0	–	Mar.
– 1.5	– 0.4	– 0.9	– 0.1	+ 0.0	–	– 5.8	– 4.0	+ 0.2	– 2.1	+ 0.0	–	Apr.
+ 6.2	+ 5.7	+ 0.7	– 0.2	+ 0.0	–	+ 2.0	+ 1.5	+ 0.4	– 0.1	+ 0.1	–	May

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

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

IV. Banks

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

€ billion

Period	Savings deposits 1								Memo item: Interest credited on savings deposits	Bank savings bonds, 3 sold to				
	of residents				of non-residents					non-banks, total	domestic non-banks			foreign non-banks
	Total	Total	at 3 months' notice		at more than 3 months' notice		Total	of which: At 3 months' notice			Total	of which: With maturities of more than 2 years		
			Total	of which: Special savings facilities 2	Total	of which: Special savings facilities 2								
End of year or month *														
2021	567.1	561.2	537.1	269.0	24.1	14.8	5.9	5.4	1.5	24.7	24.5	19.5	0.2	
2022	538.5	533.2	510.3	254.2	22.9	14.2	5.3	4.8	1.4	34.9	34.6	20.8	0.2	
2023	450.5	445.9	395.3	187.1	50.6	43.0	4.6	3.8	2.6	143.2	142.2	35.5	1.0	
2024 Jan.	444.0	439.4	386.3	184.1	53.1	45.8	4.5	3.7	0.1	152.5	151.4	36.8	1.0	
Feb.	439.0	434.4	379.0	180.9	55.5	48.3	4.5	3.7	0.1	158.4	157.3	37.9	1.1	
Mar.	434.9	430.3	373.2	178.5	57.1	50.0	4.5	3.6	0.1	161.8	160.7	38.8	1.1	
Apr.	430.2	425.8	367.7	176.3	58.0	51.0	4.5	3.6	0.1	166.0	164.8	39.5	1.1	
May	426.7	422.2	363.7	174.7	58.6	51.5	4.5	3.5	0.1	168.3	167.2	40.0	1.1	
Changes *														
2022	- 28.1	- 27.5	- 26.4	- 14.6	- 1.2	- 0.6	- 0.6	- 0.6	.	+ 10.2	+ 10.1	+ 1.3	+ 0.1	
2023	- 83.0	- 82.3	-110.0	- 52.3	+ 27.7	+ 28.8	- 0.7	- 1.1	.	+ 105.2	+ 104.5	+ 12.2	+ 0.7	
2024 Jan.	- 6.6	- 6.5	- 9.1	- 3.1	+ 2.5	+ 2.8	- 0.0	- 0.1	.	+ 9.3	+ 9.2	+ 1.2	+ 0.1	
Feb.	- 5.0	- 5.0	- 7.3	- 3.0	+ 2.4	+ 2.4	- 0.0	- 0.0	.	+ 5.9	+ 5.9	+ 1.1	+ 0.0	
Mar.	- 4.1	- 4.1	- 5.7	- 2.4	+ 1.7	+ 1.7	- 0.0	- 0.1	.	+ 3.4	+ 3.4	+ 0.9	- 0.0	
Apr.	- 4.6	- 4.6	- 5.5	- 2.1	+ 0.9	+ 1.0	- 0.0	- 0.0	.	+ 4.2	+ 4.2	+ 0.7	+ 0.0	
May	- 3.6	- 3.5	- 4.0	- 1.7	+ 0.5	+ 0.5	- 0.0	- 0.1	.	+ 2.4	+ 2.4	+ 0.5	+ 0.0	

* See Table IV.2, footnote *; statistical breaks have been eliminated from the changes. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. 1 Excluding deposits under savings and loan contracts, which are classified as time

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

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

€ billion

Period	Negotiable bearer debt securities and money market paper										Non-negotiable bearer debt securities and money market paper 6		Subordinated	
	Total	of which:				with maturities of					Total	of which: with maturities of more than 2 years	negotiable debt securities	non-negotiable debt securities
		Floating rate bonds 1	Zero coupon bonds 1,2	Foreign currency bonds 3,4	Certificates of deposit	up to and including 1 year		more than 1 year up to and including 2 years		more than 2 years				
						Total	of which: without a nominal guarantee 5	Total	of which: without a nominal guarantee 5					
End of year or month *														
2021	1,173.6	106.8	13.5	331.4	98.7	106.8	1.9	18.0	4.5	1,048.8	0.9	0.7	34.6	0.1
2022	1,231.5	92.8	15.0	307.8	88.6	98.6	1.4	26.6	3.4	1,106.4	0.8	0.7	37.8	0.1
2023	1,327.5	85.8	15.7	312.6	101.2	122.9	1.3	43.7	3.4	1,160.9	0.0	0.0	37.5	0.1
2024 Jan.	1,341.4	89.1	16.7	310.2	87.0	109.9	1.4	48.2	3.6	1,183.2	0.0	0.0	37.7	0.1
Feb.	1,348.7	90.2	17.1	306.7	83.6	104.7	1.5	48.7	3.7	1,195.3	0.0	0.0	37.7	0.1
Mar.	1,362.4	93.1	17.3	310.4	93.6	114.0	1.4	49.0	3.7	1,199.4	0.0	0.0	37.9	0.1
Apr.	1,355.4	95.1	16.7	304.7	75.2	93.0	1.4	53.0	3.8	1,209.4	0.0	0.0	38.1	0.1
May	1,357.0	96.8	16.3	303.2	73.6	91.1	1.5	53.1	3.9	1,212.8	0.0	0.0	38.6	0.1
Changes *														
2022	+ 59.1	- 12.7	+ 1.1	- 23.6	- 9.9	- 8.3	- 0.5	+ 8.5	- 1.1	+ 58.9	- 0.1	+ 0.1	+ 3.5	-
2023	+ 97.0	- 6.3	+ 1.4	+ 4.4	+ 11.4	+ 24.5	- 0.0	+ 17.7	+ 0.6	+ 54.8	+ 0.0	+ 0.1	- 0.3	-
2024 Jan.	+ 13.9	+ 3.3	+ 1.0	- 2.4	- 14.2	- 13.0	+ 0.2	+ 4.5	+ 0.2	+ 22.3	-	-	+ 0.2	-
Feb.	+ 7.3	+ 1.2	+ 0.4	- 3.5	- 3.3	- 5.3	+ 0.1	+ 0.4	+ 0.1	+ 12.1	+ 0.0	-	- 0.1	-
Mar.	+ 13.7	+ 2.9	+ 0.2	+ 3.7	+ 10.0	+ 9.3	- 0.1	+ 0.4	- 0.0	+ 4.1	- 0.0	- 0.0	+ 0.2	-
Apr.	- 7.0	+ 2.0	- 0.6	- 5.7	- 18.5	- 21.0	+ 0.0	+ 3.9	+ 0.1	+ 10.0	+ 0.0	+ 0.0	+ 0.3	-
May	+ 1.6	+ 1.7	- 0.3	- 1.5	- 1.6	- 2.4	+ 0.0	+ 0.6	+ 0.1	+ 3.4	- 0.0	- 0.0	+ 0.4	- 0.0

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

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

IV. Banks

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

€ billion

End of year/month	Number of associations	Balance sheet total ¹	Lending to banks (MFIs)			Lending to non-banks (non-MFIs)				Deposits of banks (MFIs) ⁶		Deposits of non-banks (non-MFIs)		Bearer debt securities outstanding	Capital (including published reserves) ⁸	Memo item: New contracts entered into in year or month ⁹
			Credit balances and loans (excluding building loans) ²	Building loans ³	Bank debt securities ⁴	Building loans			Securities (including Treasury bills and Treasury discount paper) ⁵	Deposits under savings and loan contracts	Sight and time deposits	Deposits under savings and loan contracts	Sight and time deposits ⁷			
						Loans under savings and loan contracts	Interim and bridging loans	Other building loans								
All building and loan associations																
2023	15	259.5	25.6	0.1	15.9	15.7	135.0	41.3	21.8	1.2	36.8	183.2	10.7	6.6	13.0	98.2
2024 Mar.	14	259.0	25.3	0.2	15.6	17.0	134.5	41.4	21.1	1.0	36.7	181.7	11.5	7.0	13.0	7.7
Apr.	14	258.1	24.2	0.2	15.6	17.5	134.2	41.5	21.1	1.0	36.3	180.9	11.5	7.5	13.1	6.4
May	14	258.6	24.4	0.2	15.7	17.9	134.1	41.6	20.7	0.9	36.6	180.7	11.8	7.5	13.1	6.2
Private building and loan associations																
2024 Mar.	9	182.8	11.7	0.2	8.6	11.4	104.3	35.3	8.8	0.3	33.8	116.6	11.1	7.0	8.9	4.2
Apr.	9	182.0	10.6	0.2	8.7	11.7	104.0	35.4	8.9	0.3	33.2	116.0	11.1	7.5	9.0	4.2
May	9	182.5	10.7	0.2	8.9	11.9	103.9	35.5	8.8	0.3	33.4	115.8	11.3	7.5	9.0	4.0
Public building and loan associations																
2024 Mar.	5	76.1	13.6	0.0	7.0	5.6	30.2	6.1	12.3	0.7	2.9	65.2	0.5	-	4.1	3.4
Apr.	5	76.1	13.5	0.0	6.9	5.8	30.2	6.1	12.2	0.7	3.1	65.0	0.4	-	4.1	2.3
May	5	76.1	13.8	0.0	6.8	6.0	30.2	6.2	11.9	0.7	3.1	64.9	0.5	-	4.1	2.3

Trends in building and loan association business

€ billion

Period	Changes in deposits under savings and loan contracts			Capital promised		Capital disbursed					Disbursement commitments outstanding at end of period		Interest and repayments received on building loans ¹¹		Memo item: Housing bonuses received ¹³	
	Amounts paid into savings and loan accounts ¹⁰	Interest credited on deposits under savings and loan contracts	Repayments of deposits under cancelled savings and loan contracts	Total	of which: Net allocations ¹²	Total	Allocations			Newly granted interim and bridging loans and other building loans	Total	of which: Under allocated contracts	Total	of which: Repayments during quarter		
							Deposits under savings and loan contracts		Loans under savings and loan contracts ¹⁰							
							Total	of which: Applied to settlement of interim and bridging loans	Total							of which: Applied to settlement of interim and bridging loans
All building and loan associations																
2023	27.0	1.9	6.4	52.0	40.3	49.9	25.9	4.2	8.7	4.4	15.3	12.6	7.3	4.9	4.1	0.2
2024 Mar.	2.1	0.1	0.5	4.9	3.8	4.4	2.5	0.3	0.8	0.4	1.1	12.4	7.4	0.4	1.1	0.0
Apr.	2.1	0.1	0.5	4.9	3.8	4.6	2.5	0.4	0.9	0.4	1.2	12.2	7.3	0.5	.	0.0
May	2.4	0.1	0.5	4.5	3.5	4.1	2.2	0.4	0.8	0.4	1.1	12.2	7.4	0.5	.	0.0
Private building and loan associations																
2024 Mar.	1.4	0.1	0.3	3.3	2.5	3.2	1.8	0.3	0.5	0.3	0.9	8.1	4.0	0.3	0.8	0.0
Apr.	1.4	0.1	0.3	3.5	2.6	3.3	1.7	0.4	0.6	0.3	0.9	8.0	4.0	0.3	.	0.0
May	1.5	0.0	0.2	3.1	2.3	2.9	1.5	0.3	0.5	0.3	0.9	7.9	4.1	0.3	.	0.0
Public building and loan associations																
2024 Mar.	0.7	0.0	0.2	1.5	1.3	1.2	0.7	0.1	0.3	0.1	0.2	4.3	3.4	0.1	0.3	0.0
Apr.	0.7	0.0	0.2	1.5	1.2	1.3	0.7	0.1	0.3	0.1	0.3	4.3	3.3	0.1	.	0.0
May	0.9	0.0	0.2	1.5	1.2	1.2	0.7	0.1	0.3	0.1	0.3	4.3	3.4	0.1	.	0.0

* Excluding assets and liabilities and/or transactions of foreign branches. The figures for the latest date are always to be regarded as provisional. Subsequent revisions, which appear in the following Monthly Report, are not specially marked. **1** See Table IV.2, footnote 1. **2** Including claims on building and loan associations, claims arising from registered debt securities and central bank credit balances. **3** Loans under savings and loan contracts and interim and bridging loans. **4** Including money market paper and small amounts of other securities issued by banks. **5** Including equalisation claims. **6** Including liabilities to building and loan associations. **7** Including small amounts of savings deposits. **8** Including participation rights capital and fund for general banking

risks. **9** Total amount covered by the contracts; only contracts newly entered into, for which the contract fee has been fully paid. Increases in the sum contracted count as new contracts. **10** For disbursements of deposits under savings and loan contracts arising from the allocation of contracts see "Capital disbursed". **11** Including housing bonuses credited. **12** Only allocations accepted by the beneficiaries; including allocations applied to settlement of interim and bridging loans. **13** The amounts already credited to the accounts of savers or borrowers are also included in "Amounts paid into savings and loan accounts" and "Interest and repayments received on building loans".

IV. Banks

Deposits												Other liabilities 6,7		Period	
of banks (MFIs)				of non-banks (non-MFIs)					Money market paper and debt securities outstanding 5	Working capital and own funds	Total	of which: Derivative financial instruments in the trading portfolio			
Total	Total	German banks	Foreign banks	Total	German non-banks 4			Foreign non-banks							
					Total	Shortterm	Medium and longterm								
End of year or month *													Foreign branches		
950.2	638.5	461.2	177.3	311.7	8.1	6.3	1.8	303.6	65.2	51.3	437.9	403.4	2021		
943.4	573.6	435.2	138.5	369.8	10.4	8.9	1.5	359.4	61.7	63.1	557.4	512.9	2022		
943.5	554.5	422.6	131.9	389.0	10.6	9.5	1.2	378.4	64.1	66.1	470.5	418.3	2023		
966.6	577.8	416.3	161.5	388.8	7.7	6.5	1.2	381.0	76.1	65.1	541.7	492.8	2023 July		
965.4	581.8	423.8	158.0	383.5	8.3	7.0	1.3	375.3	78.9	65.4	553.8	503.1	Aug.		
963.9	571.6	418.7	152.9	392.3	11.0	9.6	1.4	381.3	84.4	66.0	566.5	513.9	Sep.		
958.1	572.8	421.2	151.6	385.3	11.0	9.5	1.4	374.3	82.9	66.0	586.0	530.5	Oct.		
958.5	561.4	414.6	146.8	397.0	11.5	10.3	1.2	385.5	81.2	65.9	516.6	463.3	Nov.		
943.5	554.5	422.6	131.9	389.0	10.6	9.5	1.2	378.4	64.1	66.1	470.5	418.3	Dec.		
967.4	573.0	433.0	140.0	394.4	11.0	9.8	1.2	383.4	88.2	69.1	455.4	404.8	2024 Jan.		
984.5	586.5	443.4	143.1	398.0	10.7	9.7	1.0	387.3	88.5	69.2	477.9	427.6	Feb.		
997.2	587.3	442.4	144.9	409.9	11.3	10.3	1.0	398.6	86.3	69.4	481.8	431.6	Mar.		
978.9	576.4	435.8	140.6	402.5	11.1	10.1	1.0	391.4	88.0	69.2	531.8	479.3	Apr.		
Changes *													Foreign branches		
- 6.2	- 64.2	- 22.2	- 42.0	+ 58.0	+ 2.3	+ 2.6	- 0.3	+ 55.7	- 6.3	+ 11.8	+ 119.0	+ 109.5	2022		
+ 1.2	- 17.0	- 13.8	- 3.1	+ 18.1	+ 1.2	+ 1.5	- 0.3	+ 16.9	+ 3.9	+ 3.0	- 88.0	- 94.5	2023		
- 2.6	+ 2.9	+ 7.6	- 4.8	- 5.4	+ 0.4	+ 0.3	+ 0.1	- 5.8	+ 2.2	+ 0.3	+ 12.1	+ 10.3	2023 Aug.		
- 4.2	- 12.7	- 5.1	- 7.6	+ 8.4	+ 2.7	+ 2.7	+ 0.1	+ 5.7	+ 4.2	+ 0.6	+ 12.8	+ 10.8	Sep.		
- 5.2	+ 1.7	+ 2.5	- 0.8	- 6.9	- 0.0	- 0.1	+ 0.1	- 6.9	- 1.3	+ 0.0	+ 19.4	+ 16.6	Oct.		
+ 3.1	- 8.9	- 6.6	- 2.3	+ 12.0	+ 0.5	+ 0.8	- 0.3	+ 11.5	- 0.2	- 0.2	- 69.3	- 67.1	Nov.		
- 13.7	- 5.9	+ 8.4	- 14.3	- 7.9	- 0.9	- 0.9	+ 0.0	- 7.0	- 16.6	+ 0.2	- 46.7	- 45.0	Dec.		
+ 22.3	+ 17.2	+ 10.4	+ 6.8	+ 5.2	+ 0.4	+ 0.4	+ 0.0	+ 4.8	+ 23.5	+ 3.0	- 15.1	- 13.5	2024 Jan.		
+ 17.2	+ 13.7	+ 10.5	+ 3.2	+ 3.5	- 0.3	- 0.2	- 0.1	+ 3.8	+ 0.3	+ 0.1	+ 22.5	+ 22.8	Feb.		
+ 12.7	+ 0.7	- 1.0	+ 1.8	+ 11.9	+ 0.6	+ 0.6	- 0.1	+ 11.4	- 2.3	+ 0.1	+ 4.0	+ 4.0	Mar.		
- 18.8	- 11.4	- 6.6	- 4.8	- 7.4	- 0.2	- 0.2	- 0.0	- 7.3	+ 1.3	- 0.2	+ 50.0	+ 47.7	Apr.		
End of year or month *													Foreign subsidiaries 8		
178.6	64.2	33.0	31.2	114.4	7.3	4.9	2.4	107.1	16.4	20.3	30.7	0.0	2021		
189.4	67.5	38.6	28.9	122.0	6.9	4.6	2.3	115.1	13.5	20.1	33.7	0.0	2022		
195.9	76.0	51.2	24.8	119.9	6.4	4.0	2.4	113.4	12.1	20.8	35.3	0.0	2023		
186.6	71.2	42.2	29.1	115.4	6.8	4.3	2.5	108.5	12.3	20.3	34.8	0.0	2023 Mar.		
183.5	71.0	44.0	27.0	112.5	6.9	4.5	2.5	105.6	12.2	20.2	35.0	0.0	Apr.		
183.9	71.2	43.6	27.6	112.8	6.9	4.4	2.5	105.9	12.1	20.6	34.3	0.0	May		
185.6	71.9	45.4	26.5	113.7	6.6	4.2	2.4	107.1	10.6	20.5	36.6	0.0	June		
187.9	72.3	47.0	25.3	115.6	6.8	4.4	2.4	108.8	10.5	20.5	34.4	0.0	July		
185.5	70.6	46.0	24.7	114.8	6.6	4.2	2.4	108.2	10.3	20.6	36.4	0.0	Aug.		
188.2	74.1	49.1	25.1	114.1	6.7	4.3	2.4	107.4	11.3	20.5	36.0	0.0	Sep.		
189.3	73.1	48.3	24.8	116.2	6.5	4.1	2.4	109.7	11.6	20.8	35.8	0.0	Oct.		
192.1	73.7	48.4	25.3	118.4	6.5	4.1	2.4	111.8	11.6	20.8	35.4	0.0	Nov.		
195.9	76.0	51.2	24.8	119.9	6.4	4.0	2.4	113.4	12.1	20.8	35.3	0.0	Dec.		
Changes *													Foreign subsidiaries 8		
+ 7.7	+ 1.4	+ 5.6	- 4.2	+ 6.3	- 0.4	- 0.3	- 0.1	+ 6.7	- 2.9	- 0.2	+ 2.2	± 0.0	2022		
+ 7.6	+ 8.9	+ 12.6	- 3.8	- 1.3	- 0.4	- 0.5	+ 0.1	- 0.8	- 1.4	+ 0.7	+ 1.8	± 0.0	2023		
- 2.7	- 0.1	+ 1.8	- 1.9	- 2.6	+ 0.1	+ 0.2	- 0.0	- 2.7	- 0.1	- 0.1	+ 0.2	± 0.0	2023 Apr.		
- 0.6	- 0.3	- 0.4	+ 0.2	- 0.4	- 0.0	- 0.0	+ 0.0	- 0.4	- 0.0	+ 0.4	- 1.2	± 0.0	May		
+ 2.3	+ 1.0	+ 1.8	- 0.9	+ 1.3	- 0.3	- 0.3	- 0.0	+ 1.6	- 1.6	- 0.1	+ 2.5	± 0.0	June		
+ 2.7	+ 0.6	+ 1.6	- 1.1	+ 2.2	+ 0.2	+ 0.2	+ 0.0	+ 2.0	- 0.0	+ 0.0	- 2.1	± 0.0	July		
- 2.9	- 1.9	- 1.0	- 0.8	- 1.1	- 0.2	- 0.2	+ 0.0	- 0.9	- 0.2	+ 0.1	+ 1.8	± 0.0	Aug.		
+ 1.9	+ 3.2	+ 3.1	+ 0.1	- 1.3	+ 0.1	+ 0.1	- 0.0	- 1.4	+ 1.0	- 0.1	- 0.7	± 0.0	Sep.		
+ 1.2	- 1.0	- 0.8	- 0.2	+ 2.2	- 0.2	- 0.2	- 0.0	+ 2.3	+ 0.2	+ 0.3	- 0.2	± 0.0	Oct.		
+ 3.7	+ 0.9	+ 0.1	+ 0.8	+ 2.8	- 0.0	- 0.0	- 0.0	+ 2.8	+ 0.1	+ 0.0	- 0.0	± 0.0	Nov.		
+ 4.1	+ 2.4	+ 2.8	- 0.4	+ 1.7	- 0.1	- 0.1	- 0.0	+ 1.8	+ 0.4	+ 0.0	+ 0.0	± 0.0	Dec.		

and other money market paper, debt securities. 3 Including own debt securities. 4 Excluding subordinated liabilities and non-negotiable debt securities. 5 Issues of negotiable and non-negotiable debt securities and money market paper. 6 Including

subordinated liabilities. 7 See also Table IV.2, footnote 1. 8 The collection of data regarding foreign subsidiaries matured in 12/2023.

V. Minimum reserves

1. Reserve maintenance in the euro area

€ billion

Maintenance period beginning in ¹	Reserve base ²	Required reserves before deduction of lump-sum allowance ³	Required reserves after deduction of lump-sum allowance ⁴	Current accounts ⁵	Excess reserves (without deposit facility) ⁶	Deficiencies ⁷
2017	12,415.8	124.2	123.8	1,275.2	1,151.4	0.0
2018	12,775.2	127.8	127.4	1,332.1	1,204.8	0.0
2019	13,485.4	134.9	134.5	1,623.7	1,489.3	0.0
2020	14,590.4	145.9	145.5	3,029.4	2,883.9	0.0
2021	15,576.6	155.8	155.4	3,812.3	3,656.9	0.1
2022	16,843.0	168.4	168.0	195.6	28.1	0.0
2023	16,261.6	162.6	162.3	170.5	8.2	0.0
2024 Apr. ^P	16,161.1	161.6	161.3	166.7	5.4	0.0
May	.	.	.	.	.	.
June ^P	16,226.7	162.3	161.9	...	...	...

2. Reserve maintenance in Germany

€ billion

Maintenance period beginning in ¹	Reserve base ²	German share of euro area reserve base as a percentage	Required reserves before deduction of lump-sum allowance ³	Required reserves after deduction of lump-sum allowance ⁴	Current accounts ⁵	Excess reserves (without deposit facility) ⁶	Deficiencies ⁷
2017	3,456,192	27.8	34,562	34,404	424,547	390,143	2
2018	3,563,306	27.9	35,633	35,479	453,686	418,206	1
2019	3,728,027	27.6	37,280	37,131	486,477	449,346	0
2020	4,020,792	27.6	40,208	40,062	878,013	837,951	1
2021	4,260,398	27.4	42,604	42,464	1,048,819	1,006,355	0
2022	4,664,630	27.7	46,646	46,512	54,848	8,337	5
2023	4,483,853	27.6	44,839	44,709	47,008	2,299	0
2024 Apr. ^P	4,456,651	27.6	44,567	44,437	46,317	1,880	0
May	.	.	.	.	.	.	.
June ^P	4,465,934	27.5	44,659	44,530	...	...	...

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
2017	6,366	5,678	3,110	11,163	6,256	132	1,699
2018	7,384	4,910	3,094	11,715	6,624	95	1,658
2019	7,684	5,494	2,765	12,273	7,028	109	1,778
2020	8,151	6,371	3,019	12,912	7,547	111	2,028
2021	9,113	6,713	2,943	13,682	8,028	109	1,876
2022	9,814	7,396	3,216	14,465	8,295	117	2,471
2023	9,282	7,417	3,170	14,061	8,178	148	2,118
2024 Apr. ^P	9,221	7,393	3,122	14,038	8,219	136	2,106
May	.	.	.	.	.	.	.
June	9,301	7,441	3,018	14,154	8,266	140	2,031

b) Reserve base by subcategories of liabilities

€ billion

Maintenance period beginning in ¹	Liabilities (excluding savings deposits, deposits with building and loan associations and repos) to non-MFIs with agreed maturities of up to 2 years	Liabilities (excluding repos and deposits with building and loan associations) with agreed maturities of up to 2 years to MFIs that are resident in euro area countries but not subject to minimum reserve requirements	Liabilities (excluding repos and deposits with building and loan associations) with agreed maturities of up to 2 years to banks in non-euro area countries	Savings deposits with agreed periods of notice of up to 2 years	Liabilities arising from bearer debt securities issued with agreed maturities of up to 2 years and bearer money market paper after deduction of a standard amount for bearer debt certificates or deduction of such paper held by the reporting institution
2017	2,338,161	628	415,084	581,416	120,894
2018	2,458,423	1,162	414,463	576,627	112,621
2019	2,627,478	1,272	410,338	577,760	111,183
2020	2,923,462	1,607	436,696	560,770	105,880
2021	3,079,722	9,030	508,139	561,608	101,907
2022	3,352,177	12,609	566,227	543,694	116,094
2023	3,447,513	968	420,839	455,493	125,531
2024 Apr. ^P	3,471,855	848	399,588	433,915	130,309
May	.	.	.	.	.
June	3,503,135	1,963	393,765	425,000	124,033

¹ The reserve maintenance period starts on the settlement day of the main refinancing operation immediately following the meeting of the Governing Council of the ECB for which the discussion on the monetary policy stance is scheduled. ² Article 5 of the Regulation (EU) 2021/378 of the European Central Bank on the application of minimum reserve requirements (excluding liabilities to which a reserve ratio of 0% applies, pursuant to Article 6(1)(a)). ³ Amount after applying the reserve ratio to the reserve base. The reserve ratio for liabilities with agreed maturities of up to two years was 2%

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

VI. Interest rates

1. ECB interest rates / basic rates of interest

% per annum

ECB interest rates										Basic rates of interest			
Applicable from	Deposit facility	Main refinancing operations			Applicable from	Deposit facility	Main refinancing operations			Applicable from	Basic rate of interest as per Civil Code 1	Applicable from	Basic rate of interest as per Civil Code 1
		Fixed rate	Minimum bid rate	Marginal lending facility			Fixed rate	Minimum bid rate	Marginal lending facility				
2012 July 11	0.00	0.75	–	1.50	2022 July 27	0.00	0.50	–	0.75	2008 Jan. 1	3.32	2014 Jan. 1	–0.63
2013 May 8	0.00	0.50	–	1.00	Sep. 14	0.75	1.25	–	1.50	July 1	3.19	July 1	–0.73
Nov. 13	0.00	0.25	–	0.75	Nov. 2	1.50	2.00	–	2.25	2009 Jan. 1	1.62	2015 Jan. 1	–0.83
2014 June 11	–0.10	0.15	–	0.40	Dec. 21	2.00	2.50	–	2.75	July 1	0.12	2016 July 1	–0.88
Sep. 10	–0.20	0.05	–	0.30	2023 Feb. 8	2.50	3.00	–	3.25	2011 July 1	0.37	2023 Jan. 1	1.62
2015 Dec. 9	–0.30	0.05	–	0.30	Mar. 22	3.00	3.50	–	3.75	2012 Jan. 1	0.12	July 1	3.12
2016 Mar. 16	–0.40	0.00	–	0.25	May 10	3.25	3.75	–	4.00	2013 Jan. 1	–0.13	2024 Jan. 1	3.62
2019 Sep. 18	–0.50	0.00	–	0.25	June 21	3.50	4.00	–	4.25	July 1	–0.38	July 1	3.37
					Aug. 2	3.75	4.25	–	4.50				
					Sep. 20	4.00	4.50	–	4.75				
					2024 June 12	3.75	4.25	–	4.50				

2. Eurosystem monetary policy operations allotted through tenders *

Date of Settlement	Bid amount € million	Allotment amount	Fixed rate tenders		Variable rate tenders		Running for ... days
			Fixed rate	Minimum bid rate	Marginal rate 1	Weighted average rate	
			% per annum				
Main refinancing operations							
2024 Jun. 19	19	4 258	4 258	4.25	–	–	7
Jun. 26	26	11 078	11 078	4.25	–	–	7
Jul. 3	3	6 704	6 704	4.25	–	–	7
Jul. 10	10	5 334	5 334	4.25	–	–	7
Jul. 17	17	4 687	4 687	4.25	–	–	7
Long-term refinancing operations							
2024 Mar. 27	27	4 663	4 663	2 4.46	–	–	90
May 2	2	355	355	2 ...	–	–	90
May 29	29	1 170	1 170	2 ...	–	–	91
Jun. 26	26	5 877	5 877	2 ...	–	–	91

* Source: ECB. 1 Lowest or highest interest rate at which funds were allotted or collected. 2 Interest payment on the maturity date; the rate will be fixed at: a) the average minimum bid rate of the main refinancing operations over the life of this

operation including a spread or b) the average deposit facility rate over the life of this operation.

3. Money market rates, by month

% per annum

Monthly average	€STR 1	EURIBOR ® 2				
		One-week funds	One-month funds	Three-month funds	Six-month funds	Twelve-month funds
2023 Nov.	3.902	3.874	3.841	3.972	4.065	4.022
Dec.	3.902	3.858	3.858	3.935	3.927	3.679
2024 Jan.	3.904	3.874	3.869	3.925	3.892	3.609
Feb.	3.907	3.878	3.868	3.923	3.901	3.671
Mar.	3.907	3.873	3.853	3.923	3.895	3.718
Apr.	3.908	3.868	3.853	3.885	3.838	3.703
May	3.907	3.881	3.816	3.813	3.787	3.680
June	3.749	3.681	3.635	3.725	3.715	3.650

* Publication does not establish an entitlement to provision of the rates. The Deutsche Bundesbank reserves the right to cease publishing the information on its website in future. All data are supplied without liability. No explicit or implicit assurances or guarantees are made as to the up-to-dateness, accuracy, timeliness, completeness, marketability or suitability of the data as interest rates or reference interest rates. Neither the European Money Markets Institute (EMMI), nor Euribor EBF, nor Euribor ACI, nor the Euribor Panel Banks, nor the Euribor Steering Committee, nor the European Central Bank, nor Reuters, nor the Deutsche Bundesbank can be held liable for any irregularity or inaccuracy, incompleteness or late provision of the money market rates. With regard to the €STR please consider the European Central Bank's disclaimer, which also applies for the Deutsche Bundesbank's publication:

https://www.ecb.europa.eu/stats/financial_markets_and_interest_rates/euro_short-term_rate/html/index.en.html

1 Euro Short-Term Rate: On the basis of individual euro-denominated transactions conducted and settled on the previous business day, the European Central Bank

publishes the €STR since 2 October 2019. Transactions are reported by euro area banks subject to reporting obligations in compliance with Money Market Statistical Reporting Regulation. Monthly averages are calculations by Deutsche Bundesbank. 2 Monthly averages are own calculations by Deutsche Bundesbank based on Euribor® daily rates calculated by the European Money Markets Institute (EMMI). These are unweighted averages. Information on the methodology of Euribor® daily rates are available below. Please be aware that commercial use of these data is only possible with a licence agreement with the European Money Markets Institute (EMMI). Information on its terms of use are available under the link below. Values calculated from November 2023 onwards with three decimal places. Previous values calculated with two decimal places. For technical reasons, these values are also displayed with three decimal places and the third decimal place is filled with a 0. Up to and including October 2023 all values calculated and published with two decimal places

<https://www.emmi-benchmarks.eu/terms-of-use>

<https://www.emmi-benchmarks.eu/benchmarks/euribor/>

VI. Interest rates

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

a) Outstanding amounts °

End of month	Households' deposits				Non-financial corporations' deposits			
	with an agreed maturity of							
	up to 2 years		over 2 years		up to 2 years		over 2 years	
	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2023 May	2.07	180,323	0.90	225,884	2.65	153,693	1.17	22,199
June	2.23	200,501	0.91	226,645	2.86	162,035	1.20	22,133
July	2.37	222,529	0.92	227,182	3.01	168,874	1.24	21,619
Aug.	2.52	246,001	0.94	228,521	3.15	180,132	1.27	21,610
Sep.	2.61	262,537	0.95	229,285	3.27	181,385	1.28	21,507
Oct.	2.76	288,227	0.97	230,966	3.39	197,527	1.32	21,449
Nov.	2.88	315,984	1.01	233,972	3.43	193,442	1.39	21,232
Dec.	2.96	338,959	1.04	237,917	3.47	190,801	1.43	21,697
2024 Jan.	3.01	364,579	1.06	240,513	3.51	204,092	1.46	21,689
Feb.	3.04	385,969	1.08	241,610	3.54	205,657	1.48	20,732
Mar.	3.06	400,182	1.09	242,659	3.56	212,882	1.56	20,688
Apr.	3.08	414,278	1.11	243,548	3.54	213,659	1.62	20,719
May	3.09	424,117	1.12	244,423	3.50	211,311	1.75	20,827

End of month	Housing loans to households 3						Loans to households for consumption and other purposes 4,5					
	with a maturity of											
	up to 1 year 6		over 1 year and up to 5 years		over 5 years		up to 1 year 6		over 1 year and up to 5 years		over 5 years	
	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2023 May	4.93	3,423	3.03	25,960	1.81	1,544,206	9.12	47,513	4.14	75,472	3.77	330,677
June	5.10	3,298	3.13	25,865	1.82	1,546,102	9.25	48,284	4.24	76,260	3.83	329,576
July	5.34	3,413	3.26	25,712	1.83	1,548,159	9.45	47,192	4.35	76,468	3.90	330,500
Aug.	5.41	3,391	3.33	25,573	1.85	1,550,499	9.55	47,277	4.45	76,654	3.95	330,602
Sep.	5.49	3,233	3.38	25,315	1.86	1,553,618	9.72	47,706	4.54	76,662	3.99	329,641
Oct.	5.57	3,312	3.50	25,212	1.87	1,554,344	9.95	47,325	4.65	76,583	4.06	329,490
Nov.	5.70	3,294	3.58	24,792	1.89	1,556,410	9.99	46,653	4.74	76,885	4.09	328,941
Dec.	5.62	3,198	3.64	24,499	1.90	1,556,523	10.01	47,390	4.81	77,044	4.13	326,980
2024 Jan.	5.66	3,354	3.69	24,060	1.91	1,554,763	10.16	46,574	4.89	76,552	4.18	327,358
Feb.	5.70	3,250	3.72	23,819	1.92	1,555,595	10.18	46,259	4.97	76,486	4.22	327,721
Mar.	5.68	3,184	3.75	23,540	1.93	1,558,297	10.05	47,109	4.90	76,985	4.26	326,829
Apr.	5.65	3,289	3.78	23,271	1.94	1,559,197	10.13	45,949	4.97	76,906	4.30	327,227
May	5.55	3,400	3.81	23,042	1.95	1,561,200	10.13	46,180	5.13	77,091	4.34	327,319

End of month	Loans to non-financial corporations with a maturity of					
	up to 1 year 6		over 1 year and up to 5 years		over 5 years	
	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2023 May	5.19	194,261	3.76	252,289	2.22	885,481
June	5.42	193,968	3.95	250,107	2.29	883,229
July	5.62	194,789	4.09	251,312	2.35	887,112
Aug.	5.72	188,564	4.17	251,445	2.37	889,482
Sep.	5.89	187,448	4.29	248,998	2.41	887,643
Oct.	6.05	186,407	4.42	251,931	2.45	889,648
Nov.	5.97	187,977	4.45	253,976	2.48	892,391
Dec.	6.05	180,730	4.50	255,561	2.51	891,507
2024 Jan.	6.06	183,005	4.53	255,411	2.52	893,128
Feb.	6.00	184,401	4.64	253,221	2.55	896,388
Mar.	6.03	189,482	4.62	249,544	2.56	895,185
Apr.	5.97	188,827	4.72	248,341	2.58	897,166
May	5.92	188,820	4.74	249,248	2.59	899,488

* 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. 1 The effective interest rates are calculated either as

annualised agreed interest rates or as narrowly defined effective rates. Both calculation methods cover all interest payments on deposits and loans but not any other related charges which may occur for enquiries, administration, preparation of the documents, guarantees and credit insurance. 2 Data based on monthly balance sheet statistics. 3 Secured and unsecured loans for home purchase, including building and home improvements; including loans granted by building and loan associations and interim credits as well as transmitted loans granted by the reporting agents in their own name and for their own account. 4 Loans for consumption are defined as loans granted for the purpose of personal use in the consumption of goods and services. 5 For the purpose of these statistics, other loans are loans granted for other purposes such as business, debt consolidation, education, etc. 6 Including overdrafts (see also footnotes 12 to 14 on p. 47).

VI. Interest rates

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

b) New business +

Households' deposits												
Overnight		with an agreed maturity of						redeemable at notice 8 of				
		up to 1 year		over 1 year and up to 2 years		over 2 years		up to 3 months		over 3 months		
Reporting period	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million
2023 May	0.30	1,792,902	2.58	35,359	2.67	4,281	2.39	2,371	0.39	460,587	1.13	30,499
June	0.34	1,782,329	2.78	34,870	2.91	4,260	2.53	1,999	0.43	450,713	1.28	33,163
July	0.41	1,773,505	2.94	38,938	2.98	3,412	2.59	2,044	0.50	440,519	1.48	36,162
Aug.	0.51	1,757,994	3.12	46,037	3.15	4,422	2.81	2,374	0.55	429,372	1.62	38,895
Sep.	0.55	1,748,975	3.22	40,232	3.30	3,611	2.92	1,787	0.59	420,872	1.76	41,824
Oct.	0.56	1,728,935	3.40	51,187	3.46	5,558	2.99	2,743	0.64	411,490	1.94	44,837
Nov.	0.59	1,726,394	3.46	57,743	3.40	6,243	3.18	4,292	0.67	400,980	2.09	48,268
Dec.	0.60	1,731,513	3.37	49,974	3.25	4,896	3.17	4,389	0.69	396,006	2.17	50,818
2024 Jan.	0.62	1,702,116	3.27	56,368	3.13	5,846	2.80	3,300	0.71	386,987	2.25	53,387
Feb.	0.58	1,698,248	3.28	55,090	3.04	5,651	2.65	2,339	0.72	379,659	2.30	55,755
Mar.	0.60	1,698,313	3.27	47,316	2.94	3,332	2.53	2,296	0.74	373,900	2.35	57,421
Apr.	0.60	1,698,724	3.21	52,193	2.95	3,789	2.76	2,954	0.75	368,393	2.38	58,350
May	0.60	1,701,051	3.22	50,351	2.91	3,284	2.43	1,947	0.76	364,344	2.41	58,880

Non-financial corporations' deposits								
Overnight		with an agreed maturity of						
		up to 1 year		over 1 year and up to 2 years		over 2 years		
Reporting period	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million
2023 May	0.55	558,743	3.01	81,462	2.86	625	2.64	225
June	0.63	548,727	3.20	88,967	3.48	703	2.90	206
July	0.72	551,199	3.34	79,832	3.53	614	3.26	252
Aug.	0.81	548,242	3.50	89,027	3.46	570	2.93	210
Sep.	0.92	548,230	3.64	95,610	3.63	807	2.96	287
Oct.	0.97	551,400	3.74	95,412	3.78	752	2.97	266
Nov.	1.02	556,270	3.73	99,933	3.71	820	3.30	418
Dec.	1.02	553,882	3.71	92,454	3.47	855	2.98	343
2024 Jan.	1.05	535,302	3.71	91,219	3.20	419	2.81	401
Feb.	1.03	524,848	3.70	94,014	3.16	527	2.90	239
Mar.	1.00	525,597	3.74	109,409	3.29	609	3.60	538
Apr.	1.01	527,442	3.74	109,540	3.46	815	3.68	573
May	1.06	535,775	3.71	99,982	3.58	1,720	3.63	1,543

Loans to households											
Loans for consumption 4 with an initial rate fixation of											
Reporting period	Total (including charges)	Total		of which: Renegotiated loans 9		floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years	
		Annual percentage rate of charge 10 % p.a.	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million
2023 May	8.13	8.07	8,269	9.00	1,505	9.98	296	6.79	2,819	8.66	5,154
June	8.05	7.99	9,277	9.15	1,568	10.32	316	6.62	3,493	8.72	5,468
July	8.40	8.35	8,628	9.32	1,609	10.92	295	7.04	2,974	8.94	5,359
Aug.	8.46	8.43	8,818	9.46	1,689	10.65	288	7.13	3,011	9.02	5,518
Sep.	8.57	8.47	8,036	9.53	1,530	10.21	274	7.18	2,798	9.11	4,964
Oct.	8.66	8.55	8,347	9.62	1,655	9.43	288	7.21	2,893	9.24	5,166
Nov.	8.72	8.55	8,130	9.70	1,626	8.45	329	7.29	2,863	9.29	4,938
Dec.	8.69	8.25	6,106	9.28	905	7.99	298	7.22	2,491	9.04	3,317
2024 Jan.	8.73	8.49	8,062	9.55	1,563	7.86	261	7.30	2,718	9.16	5,082
Feb.	8.56	8.34	8,245	9.24	1,308	7.86	262	7.24	2,909	8.99	5,073
Mar.	8.27	8.03	8,190	9.21	1,250	8.15	260	6.87	3,173	8.79	4,757
Apr.	8.34	8.07	9,080	9.32	1,348	7.46	320	6.91	3,581	8.91	5,180
May	8.46	8.16	8,493	9.36	1,229	7.04	328	7.09	3,330	8.97	4,835

For footnotes * and 1 to 6, see p. 44*. For footnote x see p. 47*. + For deposits with an agreed maturity and all loans excluding revolving loans and overdrafts, credit card debt: new business covers all new agreements between households or non-financial corporations and the bank. The interest rates are calculated as volume-weighted average rates of all new agreements concluded during the reporting month. For overnight deposits, deposits redeemable at notice, revolving loans and overdrafts, credit card debt: new business is collected in the same way as outstanding amounts for the sake of simplicity. This means that all outstanding deposit and lending business at

the end of the month has to be incorporated in the calculation of average rates of interest. 7 Estimated. The volume of new business is extrapolated to form the underlying total using a grossing-up procedure. 8 Including non-financial corporations' deposits; including fidelity and growth premiums. 9 Excluding overdrafts. 10 Annual percentage rate of charge, which contains other related charges which may occur for enquiries, administration, preparation of the documents, guarantees and credit insurance.

VI. Interest rates

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

b) New business +

Loans to households (cont'd)											
Loans to households for other purposes ⁵ with an initial rate fixation of											
Reporting period	Total		of which: Renegotiated loans ⁹		floating rate or up to 1 year ⁹		over 1 year and up to 5 years		over 5 years		
	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	
Loans to households											
2023 May	4.83	3,400	4.62	997	5.08	1,511	5.10	710	4.37	1,179	
June	4.93	4,341	4.68	1,388	5.26	1,974	5.19	892	4.33	1,475	
July	4.96	4,086	4.54	1,161	5.39	1,766	5.12	933	4.31	1,387	
Aug.	5.16	3,430	5.02	882	5.72	1,290	5.24	910	4.50	1,230	
Sep.	5.24	3,526	5.08	814	5.76	1,489	5.29	848	4.54	1,189	
Oct.	5.45	3,348	5.37	1,068	5.95	1,483	5.57	724	4.73	1,141	
Nov.	5.43	3,152	5.13	765	5.90	1,345	5.53	764	4.76	1,043	
Dec.	5.20	4,287	5.21	988	5.77	1,719	5.12	1,234	4.54	1,334	
2024 Jan.	5.23	3,673	5.02	1,102	5.78	1,717	5.26	823	4.38	1,133	
Feb.	5.13	2,997	5.13	703	5.73	1,237	5.24	675	4.36	1,085	
Mar.	4.91	3,987	5.08	953	5.68	1,522	5.16	814	4.07	1,651	
Apr.	5.05	3,544	4.99	1,093	5.67	1,314	5.26	891	4.30	1,339	
May	4.99	3,197	5.00	881	5.48	1,288	5.19	749	4.32	1,160	
of which: Loans to sole proprietors											
2023 May	4.98	2,473	.	.	5.28	1,072	5.24	547	4.44	854	
June	5.04	3,178	.	.	5.36	1,535	5.36	633	4.35	1,010	
July	5.09	2,963	.	.	5.48	1,337	5.48	592	4.37	1,034	
Aug.	5.30	2,381	.	.	5.91	934	5.55	551	4.53	896	
Sep.	5.32	2,459	.	.	5.80	1,094	5.57	523	4.55	842	
Oct.	5.52	2,472	.	.	6.03	1,094	5.67	547	4.74	831	
Nov.	5.52	2,249	.	.	6.06	900	5.60	587	4.82	762	
Dec.	5.42	2,861	.	.	5.93	1,256	5.58	660	4.63	945	
2024 Jan.	5.33	2,814	.	.	5.88	1,335	5.34	656	4.42	823	
Feb.	5.22	2,274	.	.	5.82	908	5.40	573	4.40	793	
Mar.	4.96	3,188	.	.	5.75	1,215	5.25	700	4.05	1,273	
Apr.	5.08	2,756	.	.	5.70	962	5.39	760	4.27	1,034	
May	5.09	2,320	.	.	5.57	859	5.34	643	4.38	818	

Loans to households (cont'd)													
Housing loans ³ with an initial rate fixation of													
Erhebungszeitraum	Total (including charges)	Total		of which: Renegotiated loans ⁹		floating rate or up to 1 year ⁹		over 1 year and up to 5 years		over 5 year and up to 10 years		over 10 years	
	Annual percentage rate of charge ¹⁰ % p.a.	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million	Effective interest rate ¹ % p.a.	Volume ⁷ € million
Total loans													
2023 May	3.99	3.94	13,657	3.92	2,945	4.82	2,148	4.27	1,359	3.66	5,038	3.76	5,112
June	4.12	4.06	13,983	4.28	2,565	5.05	2,301	4.38	1,450	3.73	4,986	3.84	5,246
July	4.08	4.02	14,335	4.03	2,845	5.20	1,949	4.37	1,469	3.71	5,352	3.82	5,564
Aug.	4.19	4.14	14,386	4.43	2,611	5.29	2,198	4.53	1,388	3.81	5,275	3.89	5,525
Sep.	4.17	4.12	12,286	4.32	2,017	5.40	1,523	4.48	1,171	3.89	4,534	3.85	5,058
Oct.	4.22	4.18	13,831	4.39	2,853	5.53	1,989	4.53	1,403	3.85	5,304	3.90	5,136
Nov.	4.27	4.22	13,473	4.56	2,236	5.62	1,723	4.61	1,588	3.92	4,936	3.92	5,225
Dec.	4.12	4.05	12,151	4.32	2,055	5.56	1,576	4.44	1,553	3.80	4,349	3.65	4,672
2024 Jan.	3.90	3.85	14,667	4.10	2,844	5.44	1,862	4.08	1,584	3.56	5,397	3.55	5,825
Feb.	3.92	3.88	14,245	4.30	2,429	5.41	1,783	4.04	1,612	3.59	5,153	3.61	5,697
Mar.	3.88	3.83	15,439	4.01	2,258	5.28	1,739	4.09	1,755	3.55	5,414	3.61	6,530
Apr.	3.91	3.86	16,793	4.21	2,754	5.45	1,869	4.06	1,868	3.57	6,234	3.64	6,822
May	3.96	3.91	15,403	4.19	2,277	5.44	1,828	4.14	1,480	3.60	6,051	3.69	6,044
of which: Collateralised loans ¹¹													
2023 May	.	3.82	5,821	.	.	4.68	789	4.14	629	3.59	2,225	3.66	2,178
June	.	3.85	6,185	.	.	4.81	836	4.13	648	3.61	2,314	3.67	2,387
July	.	3.88	6,592	.	.	5.08	729	4.20	661	3.63	2,384	3.72	2,818
Aug.	.	3.96	6,467	.	.	5.10	767	4.29	637	3.73	2,399	3.75	2,664
Sep.	.	3.93	5,704	.	.	5.36	540	4.32	551	3.78	2,092	3.65	2,521
Oct.	.	4.01	6,207	.	.	5.44	769	4.38	587	3.73	2,335	3.76	2,516
Nov.	.	4.02	6,174	.	.	5.50	669	4.45	728	3.80	2,170	3.70	2,607
Dec.	.	3.86	5,588	.	.	5.39	612	4.29	609	3.73	1,935	3.47	2,432
2024 Jan.	.	3.69	7,051	.	.	5.34	706	3.96	746	3.44	2,461	3.45	3,138
Feb.	.	3.70	6,827	.	.	5.33	717	3.82	764	3.43	2,314	3.50	3,032
Mar.	.	3.66	7,324	.	.	5.00	737	3.91	762	3.43	2,491	3.49	3,334
Apr.	.	3.74	7,898	.	.	5.48	783	3.88	853	3.48	2,770	3.53	3,492
May	.	3.77	6,873	.	.	5.35	740	3.97	677	3.48	2,483	3.57	2,973

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

VI. Interest rates

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

Reporting period	Loans to households (cont'd)						Loans to non-financial corporations					
	Revolving loans 12 and overdrafts 13 Credit card debt 14		of which:				Revolving loans 12 and overdrafts 13 Credit card debt 14		of which:			
			Revolving loans 12 and overdrafts 13		Extended credit card debt				Revolving loans 12 and overdrafts 13			
Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	Effective interest rate 1 % p.a.	Volume 2 € million	
2023 May	9.98	38,906	10.10	27,431	17.19	6,478	5.61	99,175	5.63	98,709		
June	10.11	39,692	10.30	28,067	17.23	6,528	5.83	99,351	5.86	98,897		
July	10.32	38,818	10.48	27,182	17.58	6,580	6.00	98,185	6.03	97,770		
Aug.	10.39	39,026	10.60	27,146	17.79	6,611	6.11	94,939	6.14	94,514		
Sep.	10.59	39,548	10.75	27,976	17.86	6,629	6.25	95,468	6.28	95,004		
Oct.	10.82	39,186	11.02	27,570	18.09	6,656	6.42	94,418	6.45	93,913		
Nov.	10.80	38,416	10.95	26,932	18.18	6,614	6.41	95,688	6.44	95,191		
Dec.	10.76	39,266	11.03	27,422	18.17	6,609	6.49	92,617	6.52	92,164		
2024 Jan.	11.03	38,673	11.19	27,497	18.22	6,534	6.48	93,839	6.51	93,367		
Feb.	11.06	38,233	11.22	27,163	18.29	6,460	6.47	95,704	6.50	95,225		
Mar.	10.88	39,566	11.17	27,767	18.66	6,459	6.48	97,035	6.51	96,538		
Apr.	11.00	38,415	11.19	27,036	18.65	6,438	6.37	96,481	6.40	95,979		
May	10.94	38,754	11.22	27,112	18.66	6,427	6.38	96,270	6.41	95,791		

Reporting period	Loans to non-financial corporations (cont'd)															
	Total		of which:		Loans up to €1 million 15 with an initial rate fixation of						Loans over €1 million 15 with an initial rate fixation of					
			Renegotiated loans 9		floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years		floating rate or up to 1 year 9		over 1 year and up to 5 years		over 5 years	
Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	Effective interest rate 1 % p.a.	Volume 7 € million	
Total loans																
2023 May	4.65	79,772	4.62	21,546	5.37	11,322	6.13	1,607	4.22	1,060	4.59	55,568	4.00	3,590	4.00	6,625
June	4.88	100,910	4.89	33,256	5.58	12,583	6.39	1,760	4.31	1,219	4.85	72,375	4.70	4,371	3.95	8,602
July	5.06	85,629	4.88	28,176	6.39	10,764	6.54	1,838	4.35	1,167	4.91	61,061	5.32	3,989	3.94	6,810
Aug.	5.11	73,312	5.15	21,335	6.01	10,015	6.63	1,698	4.46	999	5.06	51,942	4.47	3,017	3.95	5,641
Sep.	5.16	83,317	5.30	25,702	6.04	10,804	6.76	1,689	4.35	959	5.09	60,497	5.03	3,077	4.10	6,291
Oct.	5.39	76,734	5.27	24,750	6.35	10,963	6.93	1,781	4.61	912	5.30	54,862	5.02	3,674	4.11	4,542
Nov.	5.17	79,316	5.28	22,467	6.27	10,430	6.87	1,838	4.50	936	5.07	56,524	4.66	3,644	4.10	5,944
Dec.	5.19	108,487	5.34	31,589	6.07	11,245	6.60	2,020	4.33	1,115	5.28	76,500	4.63	7,141	3.79	10,466
2024 Jan.	5.16	75,818	5.37	22,554	5.81	10,279	6.48	1,856	4.21	932	5.18	54,103	4.51	3,830	3.64	4,818
Feb.	5.06	72,892	5.36	18,973	5.77	10,256	6.77	1,809	4.19	879	5.19	49,631	3.29	6,114	3.85	4,203
Mar.	5.19	94,238	5.42	27,803	5.64	12,574	6.70	1,930	4.24	1,017	5.27	67,328	4.29	5,644	3.79	5,745
Apr.	5.20	79,786	5.35	23,180	5.67	9,851	6.60	3,249	4.20	1,118	5.24	56,030	4.40	4,605	3.84	4,933
May	5.09	81,443	5.27	20,658	5.66	9,281	6.62	3,568	4.24	961	5.13	57,453	4.12	4,985	3.69	5,195
of which: Collateralised loans 11																
2023 May	.	.	.	.	5.06	456	4.80	108	3.80	268	.	.	4.37	876	3.77	1,623
June	.	.	.	.	5.14	573	4.75	99	3.87	340	.	.	5.16	1,293	3.75	1,183
July	4.86	11,078	.	.	5.44	489	4.91	126	3.98	325	4.87	6,823	5.86	1,544	3.94	1,771
Aug.	5.08	9,797	.	.	5.58	425	5.01	122	3.85	279	5.45	6,747	4.32	890	3.79	1,334
Sep.	.	.	.	.	5.63	450	5.28	109	3.88	253	.	.	5.19	1,187	3.76	1,487
Oct.	5.05	12,103	.	.	5.66	508	5.14	140	3.95	213	5.21	8,840	5.38	1,005	3.73	1,397
Nov.	4.69	10,586	.	.	5.73	353	4.83	107	3.88	250	4.90	7,211	4.51	1,045	3.74	1,620
Dec.	4.83	15,673	.	.	5.55	459	5.01	139	3.82	291	5.22	10,040	4.81	1,915	3.45	2,829
2024 Jan.	4.78	8,277	.	.	5.69	446	4.64	150	3.68	250	5.04	5,880	4.09	707	3.41	844
Feb.	4.87	7,393	.	.	5.68	351	4.70	113	3.60	231	5.16	5,054	4.55	846	3.45	798
Mar.	5.03	11,566	.	.	5.74	412	4.91	99	3.75	277	5.24	8,292	5.35	1,271	3.39	1,215
Apr.	4.81	8,922	.	.	5.61	457	4.90	159	3.69	272	4.93	5,989	5.13	1,001	3.77	1,044
May	4.79	8,861	.	.	5.64	356	4.62	151	3.76	247	5.13	5,522	4.71	1,249	3.46	1,336

For footnotes * and 1 to 6, see p. 44*. For footnotes + and 7 to 10, see p. 45*;
11 For the purposes of the interest rate statistics, a loan is considered to be secured if collateral (amongst others financial collateral, real estate collateral, debt securities) in at least the same value as the loan amount has been posted, pledged or assigned.
12 Including revolving loans which have all the following features: (a) the borrower may use or withdraw the funds to a pre-approved credit limit without giving prior notice to the lender; (b) the amount of available credit can increase and decrease as funds are borrowed and repaid; (c) the loan may be used repeatedly; (d) there is no obligation of regular repayment of funds. **13** Overdrafts are defined as debit balances

on current accounts. They include all bank overdrafts regardless of whether they are within or beyond the limits agreed between customers and the bank. **14** Including convenience and extended credit card debt. Convenience credit is defined as the credit granted at an interest rate of 0% in the period between payment transactions effected with the card during one billing cycle and the date at which the debt balances from this specific billing cycle become due. **15** The amount category refers to the single loan transaction considered as new business. **x** Dominated by the business of one or two banks. Therefore, the value cannot be published due to confidentiality.

VII. Insurance corporations and pension funds

1. Assets

€ billion

End of year/quarter	Total	Currency and deposits ¹	Debt securities	Loans ²	Shares and other equity	Investment fund shares/units	Financial derivatives	Technical reserves ³	Non-financial assets	Remaining assets
Insurance corporations										
2021 Q3	2,653.1	271.7	474.2	358.2	463.4	899.8	3.3	87.8	38.3	56.3
Q4	2,667.2	261.3	468.6	355.1	472.4	921.6	3.2	85.0	40.8	59.3
2022 Q1	2,547.3	243.7	440.2	333.2	468.7	870.5	2.7	87.5	41.0	59.8
Q2	2,369.7	215.6	390.3	305.5	462.5	803.5	3.0	85.5	41.3	62.5
Q3	2,296.2	202.0	369.9	289.1	461.2	776.7	4.0	84.2	41.4	67.6
Q4	2,274.7	189.5	373.7	279.7	465.8	772.2	3.4	79.5	38.7	72.2
2023 Q1	2,326.9	201.7	380.8	280.2	472.3	790.3	3.6	85.2	38.5	74.4
Q2	2,330.1	194.7	383.3	280.0	474.3	799.0	3.6	84.1	38.1	73.0
Q3	2,305.3	186.0	376.1	273.3	480.9	783.5	3.7	88.9	38.2	74.7
Q4	2,408.4	190.2	405.6	291.0	499.7	822.6	3.3	79.0	34.2	83.0
2024 Q1	2,477.5	193.6	412.6	289.5	502.9	847.6	3.7	97.0	35.1	95.5
Life insurance										
2021 Q3	1,400.1	159.2	233.8	214.8	87.7	654.6	1.9	13.4	20.8	13.8
Q4	1,411.1	152.4	231.9	211.8	93.4	669.1	1.7	14.6	21.9	14.3
2022 Q1	1,317.7	136.8	211.5	193.1	99.7	626.1	0.9	13.9	22.0	13.8
Q2	1,202.1	120.5	180.3	173.1	104.2	569.4	0.9	13.6	22.1	17.9
Q3	1,149.6	110.2	166.6	162.1	107.0	546.4	1.1	12.3	22.3	21.7
Q4	1,130.1	103.6	170.5	155.6	111.4	540.0	1.1	11.5	19.5	16.8
2023 Q1	1,147.9	105.1	170.4	155.6	113.3	553.4	1.0	12.1	19.4	17.5
Q2	1,153.6	102.8	171.7	154.9	114.3	559.4	1.0	12.1	19.3	18.1
Q3	1,120.9	97.6	162.9	149.1	115.7	545.2	1.5	11.8	19.1	18.0
Q4	1,180.4	101.5	178.7	161.0	116.6	574.7	1.4	10.3	16.6	19.5
2024 Q1	1,193.5	98.4	176.5	156.1	115.6	594.3	1.4	10.2	16.6	24.3
Non-life insurance										
2021 Q3	733.1	98.7	141.0	83.8	93.7	228.4	0.4	46.4	12.8	27.7
Q4	738.4	94.6	140.1	84.7	97.5	234.3	0.3	44.6	14.0	28.4
2022 Q1	722.4	91.4	133.4	80.8	98.5	227.7	0.2	45.7	13.9	30.7
Q2	681.6	81.9	122.0	74.8	98.6	216.5	0.1	44.0	14.1	29.5
Q3	661.1	76.2	116.0	70.3	99.2	212.2	0.1	43.1	14.1	29.7
Q4	659.0	72.7	115.2	69.1	99.8	215.5	0.2	42.4	14.2	30.1
2023 Q1	687.2	81.3	121.2	69.5	102.7	219.8	0.1	45.2	14.2	33.2
Q2	687.1	77.2	123.9	70.3	103.1	222.4	0.1	45.1	14.1	30.9
Q3	679.6	73.6	122.3	68.6	104.5	221.2	0.1	45.6	14.3	29.4
Q4	708.0	74.9	131.9	74.1	109.0	230.1	0.1	43.9	13.0	31.1
2024 Q1	748.8	81.0	139.5	75.2	110.6	234.6	0.1	55.8	13.9	38.0
Reinsurance ⁴										
2021 Q3	519.9	13.9	99.3	59.6	282.0	16.7	1.0	28.0	4.7	14.8
Q4	517.7	14.3	96.6	58.6	281.4	18.2	1.1	25.9	4.9	16.7
2022 Q1	507.1	15.5	95.3	59.3	270.4	16.7	1.6	27.9	5.0	15.3
Q2	486.0	13.2	88.0	57.5	259.6	17.6	1.9	27.9	5.1	15.1
Q3	485.5	15.6	87.3	56.7	255.1	18.1	2.7	28.8	5.1	16.2
Q4	485.6	13.2	88.0	55.0	254.6	16.7	2.1	25.7	5.0	25.3
2023 Q1	491.8	15.3	89.2	55.0	256.3	17.1	2.4	27.8	4.8	23.7
Q2	489.5	14.7	87.6	54.8	256.9	17.2	2.5	26.9	4.8	24.0
Q3	504.9	14.8	90.9	55.5	260.7	17.1	2.1	31.6	4.8	27.3
Q4	520.0	13.7	95.0	55.9	274.1	17.8	1.8	24.7	4.6	32.4
2024 Q1	535.3	14.2	96.6	58.1	276.6	18.7	2.2	31.0	4.6	33.2
Pension funds ⁵										
2021 Q3	689.8	82.9	60.4	48.9	11.8	453.6	0.1	12.2	17.8	2.2
Q4	709.9	82.1	60.0	48.7	11.3	473.5	0.1	12.4	18.5	3.3
2022 Q1	689.8	75.8	56.7	46.2	12.0	465.9	0.0	12.4	18.5	2.2
Q2	665.9	70.3	52.9	43.3	12.5	453.5	0.0	12.3	18.6	2.5
Q3	657.0	67.7	52.0	42.1	12.9	448.1	0.0	12.9	18.7	2.6
Q4	664.0	67.3	54.6	41.9	13.6	451.3	0.0	13.1	18.8	3.5
2023 Q1	671.5	66.4	56.9	42.3	13.6	457.9	0.0	12.9	18.7	2.7
Q2	678.7	67.5	58.9	42.7	13.4	462.0	0.0	12.9	18.7	2.6
Q3	675.9	67.1	60.3	42.3	13.5	458.2	0.1	12.9	18.7	2.8
Q4	703.5	70.1	67.7	44.0	13.5	472.6	0.1	13.2	18.9	3.4
2024 Q1	712.1	70.6	69.8	44.2	13.6	480.3	0.1	12.4	18.6	2.6

Sources: The calculations for the insurance sectors are based on supervisory data according to Solvency I and II and for pension funds on IORP supervisory data and own data collections. ¹ Accounts receivable to monetary financial institutions, including registered bonds, borrower's note loans and registered Pfandbriefe. ² Including deposits retained on assumed reinsurance as well as registered bonds, borrower's note loans and registered Pfandbriefe. ³ Including reinsurance recoverables and claims of

pension funds on pension managers. ⁴ Not including the reinsurance business conducted by primary insurers, which is included there. ⁵ The term "pension funds" refers to the institutional sector "pension funds" of the European System of Accounts. Pension funds thus comprise company pension schemes and occupational pension schemes for the self-employed. Social security funds are not included.

VII. Insurance corporations and pension funds

2. Liabilities

€ billion

End of year/quarter	Total	Debt securities issued	Loans ¹	Shares and other equity	Technical reserves			Financial derivatives	Remaining liabilities	Net worth ⁶
					Total ²	Life/pension entitlements ³	Non-life			
Insurance corporations										
2021 Q3	2,653.1	35.4	82.8	567.0	1,817.7	1,569.1	248.7	2.5	147.6	–
2021 Q4	2,667.2	36.0	81.9	579.3	1,820.7	1,578.3	242.3	2.5	146.8	–
2022 Q1	2,547.3	34.4	82.1	563.1	1,725.9	1,472.6	253.3	4.0	137.7	–
2022 Q2	2,369.7	33.6	78.7	541.6	1,574.4	1,326.8	247.5	6.0	135.3	–
2022 Q3	2,296.2	33.8	73.6	537.4	1,506.0	1,262.3	243.7	7.4	138.0	–
2022 Q4	2,274.7	32.3	70.1	543.7	1,486.5	1,248.7	237.8	5.6	136.5	–
2023 Q1	2,326.9	33.1	71.2	544.7	1,539.1	1,277.1	261.9	4.4	134.4	–
2023 Q2	2,330.1	33.2	68.4	546.7	1,543.8	1,283.7	260.1	4.5	133.6	–
2023 Q3	2,305.3	35.3	76.8	549.1	1,505.3	1,245.0	260.3	4.8	134.1	–
2023 Q4	2,408.4	30.5	73.2	569.8	1,586.6	1,325.4	261.2	4.1	144.1	–
2024 Q1	2,477.5	30.6	78.1	575.0	1,642.4	1,345.5	296.9	3.7	147.8	–
Life insurance										
2021 Q3	1,400.1	3.3	19.3	148.1	1,176.4	1,176.4	–	1.1	51.9	–
2021 Q4	1,411.1	3.3	20.7	148.2	1,185.5	1,185.5	–	0.9	52.5	–
2022 Q1	1,317.7	3.2	19.9	142.9	1,101.6	1,101.6	–	1.4	48.8	–
2022 Q2	1,202.1	3.1	19.0	141.4	984.5	984.5	–	2.7	51.3	–
2022 Q3	1,149.6	3.0	17.0	138.0	936.9	936.9	–	3.1	51.8	–
2022 Q4	1,130.1	2.7	16.6	136.0	924.9	924.9	–	2.3	47.7	–
2023 Q1	1,147.9	2.8	17.8	133.0	945.8	945.8	–	1.9	46.6	–
2023 Q2	1,153.6	2.7	17.5	133.8	950.9	950.9	–	1.8	46.9	–
2023 Q3	1,120.9	2.7	16.8	134.1	917.2	917.2	–	2.5	47.6	–
2023 Q4	1,180.4	0.8	17.7	133.3	977.7	977.7	–	2.0	48.8	–
2024 Q1	1,193.5	0.8	17.5	128.8	994.3	994.3	–	1.7	50.2	–
Non-life insurance										
2021 Q3	733.1	1.2	10.5	168.9	498.7	367.8	130.9	0.2	53.7	–
2021 Q4	738.4	1.4	10.7	175.8	492.6	367.6	125.0	0.2	57.8	–
2022 Q1	722.4	1.3	11.7	173.1	483.0	347.1	135.9	0.3	53.0	–
2022 Q2	681.6	1.2	11.1	167.6	451.9	322.7	129.2	0.5	49.2	–
2022 Q3	661.1	1.2	10.5	167.9	430.4	307.4	123.0	0.5	50.5	–
2022 Q4	659.0	1.2	10.4	170.2	425.1	306.7	118.4	0.4	51.7	–
2023 Q1	687.2	1.2	10.7	173.0	451.0	314.4	136.6	0.4	51.0	–
2023 Q2	687.1	1.2	10.6	174.6	451.2	317.0	134.2	0.3	49.1	–
2023 Q3	679.6	1.7	10.9	173.8	444.2	312.6	131.5	0.4	48.7	–
2023 Q4	708.0	0.6	12.5	180.2	461.3	333.6	127.7	0.3	53.3	–
2024 Q1	748.8	0.6	13.4	184.6	494.4	337.1	157.3	0.3	55.5	–
Reinsurance ⁴										
2021 Q3	519.9	30.9	53.0	250.1	142.7	24.9	117.8	1.3	42.0	–
2021 Q4	517.7	31.4	50.5	255.3	142.6	25.3	117.3	1.4	36.5	–
2022 Q1	507.1	30.0	50.4	247.2	141.3	23.9	117.4	2.3	35.9	–
2022 Q2	486.0	29.3	48.6	232.6	138.0	19.6	118.4	2.8	34.7	–
2022 Q3	485.5	29.7	46.2	231.5	138.7	18.0	120.7	3.8	35.7	–
2022 Q4	485.6	28.4	43.1	237.5	136.5	17.1	119.4	2.9	37.1	–
2023 Q1	491.8	29.2	42.8	238.7	142.2	17.0	125.3	2.1	36.8	–
2023 Q2	489.5	29.3	40.2	238.3	141.7	15.8	125.9	2.4	37.6	–
2023 Q3	504.9	31.0	49.2	241.2	143.9	15.2	128.7	1.9	37.8	–
2023 Q4	520.0	29.1	43.0	256.3	147.7	14.2	133.5	1.8	42.0	–
2024 Q1	535.3	29.1	47.2	261.6	153.7	14.1	139.6	1.7	42.0	–
Pension funds ⁵										
2021 Q3	689.8	–	1.9	31.9	539.8	537.6	–	0.2	9.3	106.8
2021 Q4	709.9	–	1.9	32.0	560.2	557.3	–	0.1	8.9	106.8
2022 Q1	689.8	–	2.0	33.5	559.7	556.9	–	0.1	9.5	85.1
2022 Q2	665.9	–	1.8	33.5	561.0	558.4	–	0.1	9.0	60.4
2022 Q3	657.0	–	1.9	34.7	563.1	560.6	–	0.1	9.7	47.5
2022 Q4	664.0	–	1.8	34.5	576.4	573.9	–	0.1	9.4	41.8
2023 Q1	671.5	–	1.8	35.5	577.3	574.9	–	0.1	9.5	47.3
2023 Q2	678.7	–	1.8	35.7	582.0	579.6	–	0.1	9.6	49.5
2023 Q3	675.9	–	1.9	35.0	583.7	581.5	–	0.1	9.7	45.6
2023 Q4	703.5	–	1.9	35.0	597.0	594.8	–	0.1	9.9	59.6
2024 Q1	712.1	–	1.9	36.0	600.0	597.7	–	0.1	9.6	64.6

Sources: The calculations for the insurance sectors are based on supervisory data according to Solvency I and II and for pension funds on IORP supervisory data and own data collections. ¹ Including deposits retained on ceded business as well as registered bonds, borrower's 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 Not including the reinsurance business conducted by primary insurers, which is included there. ⁵ 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. ⁶ Own funds correspond to the sum of "Net worth" and "Shares and other equity".

VIII. Capital market

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

€ million

Period	Debt securities											
	Sales = total pur- chases	Sales					Purchases					
		Domestic debt securities ¹					Residents					
		Total	Bank debt securities	Corporate bonds (non-MFIs) ²	Public debt secur- ities	Foreign debt secur- ities ³	Total ⁴	Credit in- stitutions including building and loan associations ⁵	Deutsche Bundesbank	Other sectors ⁶	Non- residents ⁷	
2012	51,813	- 21,419	- 98,820	- 8,701	86,103	73,231	- 3,767	- 42,017	- 3,573	41,823	55,581	
2013	- 15,971	- 101,616	- 117,187	153	15,415	85,645	16,409	- 25,778	- 12,708	54,895	- 32,379	
2014	58,735	- 31,962	- 47,404	- 1,330	16,776	90,697	44,384	- 12,124	- 11,951	68,459	14,351	
2015	15,219	- 36,010	- 65,778	26,762	3,006	51,229	99,225	- 66,330	121,164	44,391	- 84,006	
2016	68,998	27,429	19,177	18,265	- 10,012	41,569	161,776	- 58,012	187,500	32,288	- 92,778	
2017	51,034	11,563	1,096	7,112	3,356	39,471	134,192	- 71,454	161,012	44,634	- 83,158	
2018	78,657	16,630	33,251	12,433	- 29,055	62,027	107,155	- 24,417	67,328	64,244	- 28,499	
2019	139,611	68,536	29,254	32,505	6,778	71,075	60,195	8,059	2,408	49,728	79,416	
2020	451,481	374,034	14,462	88,703	270,870	77,446	280,820	18,955	226,887	34,978	170,661	
2021	230,854	221,648	31,941	19,754	169,953	9,205	243,497	- 41,852	245,198	40,150	- 12,643	
2022	150,974	156,190	59,322	35,221	61,648	- 5,216	143,527	2,915	49,774	90,839	7,447	
2023	289,352	158,228	88,018	- 11,899	82,109	131,124	126,229	32,163	- 59,817	153,883	163,123	
2023 June	42,277	22,910	- 6,490	5,312	24,089	19,366	35,553	16,773	- 8,853	27,632	6,724	
July	28,670	27,889	981	- 79	26,987	781	2,548	- 8,514	- 324	10,738	26,122	
Aug.	17,661	10,967	- 10,278	- 1,708	2,397	6,694	3,128	503	- 9,067	11,691	14,533	
Sep.	19,604	16,310	- 7,089	6,461	16,938	3,294	- 4,880	- 8,020	- 11,311	14,451	24,484	
Oct.	- 20,618	- 19,390	1,677	- 10,955	- 10,113	- 1,227	- 13,989	- 4,855	- 6,759	- 2,375	- 6,628	
Nov.	28,453	18,861	9,439	- 3,337	12,759	9,592	9,557	10,752	- 5,186	3,992	18,896	
Dec.	- 20,319	- 27,517	4,368	- 8,386	- 23,499	7,199	- 8,134	- 7,024	- 5,130	4,020	- 12,185	
2024 Jan.	30,652	25,509	8,437	6,301	10,771	5,143	6,259	17,106	- 7,128	- 3,718	24,392	
Feb.	19,146	11,577	6,463	- 957	6,070	7,569	3,675	7,562	- 9,079	5,191	15,471	
Mar.	42,591	15,188	13,915	3,072	- 1,799	27,402	19,477	16,349	- 4,776	7,905	23,113	
Apr.	- 27,913	- 25,395	- 10,665	6,215	- 20,946	- 2,518	- 31,713	- 4,492	- 12,041	- 15,181	3,800	
May	27,704	23,407	3,109	795	19,503	4,297	18,281	3,605	- 9,394	24,070	9,423	

€ million

Period	Shares									
	Sales = total purchases	Sales			Purchases					
		Domestic shares ⁸	Foreign shares ⁹		Residents					
					Total ¹⁰	Credit in- stitutions ⁵	Other sectors ¹¹		Non- residents ¹²	
2012	15,061	5,120	9,941	14,405	10,259	4,146	656			
2013	20,187	10,106	10,081	17,337	11,991	5,346	2,851			
2014	43,488	18,778	24,710	43,930	17,203	26,727	443			
2015	56,979	7,668	49,311	46,721	- 5,421	52,142	10,258			
2016	39,133	4,409	34,724	39,265	- 5,143	44,408	132			
2017	52,932	15,570	37,362	51,270	7,031	44,239	1,662			
2018	61,400	16,188	45,212	89,624	- 11,184	100,808	28,224			
2019	54,830	9,076	45,754	43,070	- 1,119	44,189	11,759			
2020	78,464	17,771	60,693	111,570	27	111,543	33,106			
2021	115,933	49,066	66,868	102,921	10,869	92,052	13,012			
2022	- 6,275	27,792	- 34,066	2,997	- 8,262	11,259	9,272			
2023	41,999	36,898	5,101	52,912	14,650	38,262	10,913			
2023 June	- 4,707	1,067	- 5,774	- 525	- 3,322	2,797	4,182			
July	6,873	478	6,396	3,534	- 136	3,670	3,340			
Aug.	766	1,474	707	3,833	- 893	4,726	3,067			
Sep.	- 4,577	687	- 5,265	- 3,470	1,962	5,432	1,107			
Oct.	564	583	- 18	3,007	- 88	3,095	2,442			
Nov.	591	301	290	2,437	538	2,975	3,028			
Dec.	27,982	24,942	3,039	26,378	6,437	19,941	1,604			
2024 Jan.	282	351	- 69	2,171	- 1,361	3,532	1,888			
Feb.	856	206	- 1,062	626	- 4,247	4,873	230			
Mar.	7,233	4,679	2,554	9,297	6,657	2,640	2,064			
Apr.	1,852	1,546	306	2,664	- 2,481	5,145	812			
May	5,136	474	4,662	4,800	3,531	1,269	336			

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

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

VIII. Capital market

2. Sales of debt securities issued by residents *

€ million, nominal value

Period	Bank debt securities ¹						Corporate bonds (non-MFIs) ²	Public debt securities
	Total	Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special-purpose credit institutions	Other bank debt securities		
Gross sales								
2012	1,340,568	702,781	36,593	11,413	446,153	208,623	63,258	574,530
2013	1,433,628	908,107	25,775	12,963	692,611	176,758	66,630	458,892
2014	1,362,056	829,864	24,202	13,016	620,409	172,236	79,873	452,321
2015	1,359,422	852,045	35,840	13,376	581,410	221,417	106,675	400,701
2016 ³	1,206,483	717,002	29,059	7,621	511,222	169,103	73,371	416,108
2017 ³	1,047,822	619,199	30,339	8,933	438,463	141,466	66,290	362,332
2018	1,148,091	703,416	38,658	5,673	534,552	124,530	91,179	353,496
2019	1,285,541	783,977	38,984	9,587	607,900	127,504	94,367	407,197
2020 ⁶	1,870,084	778,411	39,548	18,327	643,380	77,156	184,206	907,466
2021	1,658,004	795,271	41,866	17,293	648,996	87,116	139,775	722,958
2022	1,683,265	861,989	66,811	11,929	700,062	83,188	169,680	651,596
2023	1,705,524	937,757	45,073	12,633	782,969	97,082	153,128	614,639
2023 June	171,957	84,953	3,264	1,556	70,601	9,532	21,526	65,478
July	121,578	53,812	2,876	130	43,776	7,031	14,133	53,632
Aug.	142,211	82,749	3,085	1,013	71,729	6,922	10,064	49,397
Sep.	152,408	82,679	3,337	550	71,155	7,637	18,722	51,007
Oct.	132,402	83,350	1,697	2,557	71,328	7,769	10,151	38,901
Nov.	125,657	72,915	7,203	1,354	57,521	6,837	8,850	43,892
Dec.	81,025	55,000	1,834	1,453	46,549	5,164	4,722	21,302
2024 Jan.	151,286	89,021	6,405	1,630	70,605	10,380	14,833	47,433
Feb.	148,430	79,876	3,301	2,051	63,439	11,086	7,181	61,373
Mar.	124,684	62,659	5,081	608	45,393	11,577	11,709	50,316
Apr.	150,134	84,574	5,951	1,213	66,287	11,124	13,211	52,349
May	143,772	78,454	1,463	1,027	66,133	9,831	12,228	53,091
of which: Debt securities with maturities of more than four years ⁴								
2012	421,018	177,086	23,374	6,482	74,386	72,845	44,042	199,888
2013	372,805	151,797	16,482	10,007	60,662	64,646	45,244	175,765
2014	420,006	157,720	17,678	8,904	61,674	69,462	56,249	206,037
2015	414,593	179,150	25,337	9,199	62,237	82,379	68,704	166,742
2016 ³	375,859	173,900	24,741	5,841	78,859	64,460	47,818	154,144
2017 ³	357,506	170,357	22,395	6,447	94,852	46,663	44,891	142,257
2018	375,906	173,995	30,934	4,460	100,539	38,061	69,150	132,760
2019	396,617	174,390	26,832	6,541	96,673	44,346	69,682	152,544
2020 ⁶	658,521	165,097	28,500	7,427	90,839	38,330	77,439	415,985
2021	486,335	171,799	30,767	6,336	97,816	36,880	64,234	250,303
2022	485,287	164,864	41,052	7,139	91,143	25,530	56,491	263,932
2023	482,193	155,790	28,294	4,664	101,059	21,772	44,272	282,132
2023 June	53,960	12,885	2,664	498	9,123	600	10,475	30,600
July	34,145	10,133	430	2	7,964	1,736	2,298	21,715
Aug.	36,582	12,501	2,383	1,000	8,182	936	1,656	22,425
Sep.	40,995	8,847	2,250	-	5,127	1,470	8,741	23,407
Oct.	37,642	15,411	262	20	11,876	3,253	2,456	19,775
Nov.	35,532	13,641	6,703	600	4,135	2,203	2,541	19,350
Dec.	14,764	6,401	1,040	1,205	2,551	1,605	763	7,600
2024 Jan.	55,105	23,961	5,330	537	14,875	3,219	8,244	22,900
Feb.	53,198	21,778	1,920	1,251	15,159	3,448	1,870	29,550
Mar.	44,606	12,428	4,590	606	4,928	2,304	6,478	25,700
Apr.	47,632	18,861	3,459	1,026	9,789	4,587	5,921	22,850
May	45,799	13,636	328	1,027	9,717	2,563	5,238	26,925
Net sales ⁵								
2012	-	85,298	-	4,177	-	3,259	-	6,401
2013	-	140,017	-	17,364	-	4,027	-	1,394
2014	-	34,020	-	6,313	-	862	-	10,497
2015	-	65,147	-	9,271	-	2,758	-	25,300
2016 ³	-	21,951	-	10,792	-	12,979	-	18,177
2017 ³	-	2,669	-	6,389	-	4,697	-	6,828
2018	-	2,758	-	19,814	-	18,850	-	9,738
2019	-	59,719	-	13,098	-	26,263	-	30,449
2020 ⁶	-	473,795	-	8,661	-	22,067	-	49,536
2021	-	210,231	-	17,821	-	22,973	-	35,531
2022	-	135,853	-	23,894	-	15,944	-	30,671
2023	-	190,577	-	10,184	-	46,069	-	34
2023 June	-	25,517	-	7,752	-	9,065	-	7,559
July	-	30,229	-	700	-	502	-	734
Aug.	-	15,869	-	9,610	-	7,387	-	1,791
Sep.	-	12,991	-	6,384	-	4,706	-	8,074
Oct.	-	7,927	-	1,596	-	895	-	2,197
Nov.	-	30,649	-	13,427	-	7,149	-	4,018
Dec.	-	11,217	-	10,301	-	9,314	-	4,873
2024 Jan.	-	4,841	-	4,209	-	2,865	-	4,372
Feb.	-	12,862	-	7,348	-	522	-	2,312
Mar.	-	17,943	-	13,538	-	8,865	-	3,784
Apr.	-	9,914	-	10,653	-	14,334	-	4,972
May	-	7,170	-	3,978	-	2,782	-	3,723

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

redemptions. ⁶ Methodological changes since January 2020. — The figures for the year 2020 have been revised. The figures for the most recent date are provisional. Revisions are not specially marked.

VIII. Capital market

3. Amounts outstanding of debt securities issued by residents *

€ million, nominal value

End of year or month/ Maturity in years	Bank debt securities						Corporate bonds (non-MFIs)	Public debt securities
	Total	Total	Mortgage Pfandbriefe	Public Pfandbriefe	Debt securities issued by special-purpose credit institutions	Other bank debt securities		
2012	3,285,422	1,414,349	145,007	147,070	574,163	548,109	220,456	1,650,617
2013	3,145,329	1,288,340	127,641	109,290	570,136	481,273	221,851	1,635,138
2014	3,111,308	1,231,445	121,328	85,434	569,409	455,274	232,342	1,647,520
2015	3,046,162	1,154,173	130,598	75,679	566,811	381,085	257,612	1,634,377
2016 ¹	3,068,111	1,164,965	132,775	62,701	633,578	335,910	275,789	1,627,358
2017 ¹	3,090,708	1,170,920	141,273	58,004	651,211	320,432	302,543	1,617,244
2018	3,091,303	1,194,160	161,088	51,439	670,062	311,572	313,527	1,583,616
2019	3,149,373	1,222,911	174,188	47,712	696,325	304,686	342,325	1,584,136
2020 ⁴	3,545,200	1,174,817	183,980	55,959	687,710	247,169	379,342	1,991,040
2021	3,781,975	1,250,777	202,385	63,496	731,068	253,828	414,791	2,116,406
2022	3,930,390	1,302,028	225,854	54,199	761,047	260,928	441,234	2,187,127
2023	4,131,592	1,384,958	237,099	54,312	806,808	286,739	441,742	2,304,892
2023 June	4,052,214	1,354,415	230,474	53,223	788,438	282,281	446,780	2,251,019
July	4,077,718	1,354,010	231,454	53,389	786,384	282,783	446,064	2,277,644
Aug.	4,095,643	1,365,614	234,566	53,961	795,808	281,279	444,711	2,285,319
Sep.	4,117,795	1,365,365	234,599	53,128	796,782	280,856	453,037	2,299,393
Oct.	4,110,219	1,362,975	231,537	52,084	794,730	284,623	450,654	2,296,591
Nov.	4,139,444	1,373,679	236,596	53,034	798,461	285,588	446,199	2,319,566
Dec.	4,131,592	1,384,958	237,099	54,312	806,808	286,739	441,742	2,304,892
2024 Jan.	4,140,092	1,394,649	236,671	55,735	808,508	293,736	446,559	2,298,884
Feb.	4,152,812	1,401,409	237,658	57,450	807,692	298,609	444,310	2,307,093
Mar.	4,173,121	1,415,363	239,096	56,960	816,963	302,344	448,012	2,309,746
Apr.	4,169,790	1,408,556	242,090	55,474	805,788	305,203	453,941	2,307,292
May	4,176,649	1,410,378	240,617	55,574	807,179	307,008	457,427	2,308,844
Breakdown by remaining period to maturity³								
up to under 2	1 204 430	501 063	66 607	16 547	305 134	112 775	90 085	613 283
2 to under 4	807 636	347 863	72 777	17 995	182 212	74 880	81 181	378 592
4 to under 6	636 930	226 598	46 145	7 660	130 971	41 822	74 166	336 166
6 to under 8	399 654	134 052	22 329	3 238	80 453	28 032	38 198	227 404
8 to under 10	324 479	100 448	22 558	6 577	54 326	16 986	30 662	193 370
10 to under 15	241 156	54 660	7 386	3 199	34 628	9 447	28 392	158 104
15 to under 20	121 531	15 121	2 009	232	10 554	2 327	18 224	88 186
20 and above	440 833	30 574	807	128	8 901	20 739	96 520	313 740
Position at end-May 2024								

* Including debt securities temporarily held in the issuers' portfolios. ¹ Sectoral reclassification of debt securities. ² Adjustments due to the change in the country of residence of the issuers or debt securities. ³ Calculated from month under review until final maturity for debt securities falling due en bloc and until mean maturity of the

residual amount outstanding for debt securities not falling due en bloc. ⁴ Methodological changes since January 2020. — The figures for the year 2020 have been revised. The figures for the most recent date are provisional. Revisions are not specially marked.

4. Shares in circulation issued by residents *

€ million, nominal value

Period	Share capital = circulation at end of period under review	Net increase or net decrease (-) during period under review	Change in domestic public limited companies' capital due to						Memo item: Share circulation at market values (market capitalisation) level at end of period under review ²
			cash payments and ex-change of convertible bonds ¹	issue of bonus shares	contribution of claims and other real assets	merger and transfer of assets	change of legal form	reduction of capital and liquidation	
2012	178,617	1,449	3,046	129	570	478	594	2,411	1,150,188
2013	171,741	6,879	2,971	718	476	1,432	619	8,992	1,432,658
2014	177,097	5,356	5,332	1,265	1,714	465	1,044	1,446	1,478,063
2015	177,416	319	4,634	397	599	1,394	1,385	2,535	1,614,442
2016	176,355	1,062	3,272	319	337	953	2,165	1,865	1,676,397
2017	178,828	2,471	3,894	776	533	457	661	1,615	1,933,733
2018	180,187	1,357	3,670	716	82	1,055	1,111	946	1,634,155
2019 ^{3,4}	183,461	1,673	2,411	2,419	542	858	65	2,775	1,950,224
2020 ⁴	181,881	2,872	1,877	219	178	2,051	460	2,635	1,963,588
2021	186,580	4,152	9,561	672	35	326	212	5,578	2,301,942
2022	199,789	12,272	14,950	224	371	29	293	2,952	1,858,963
2023	182,246	15,984	3,377	3	50	564	2,515	16,335	2,051,675
2023 June	198,505	8	422	—	—	262	17	135	2,061,065
July	198,406	99	52	—	—	0	89	62	2,113,570
Aug.	198,654	210	452	—	—	1	24	217	2,038,560
Sep.	198,328	325	280	3	—	201	10	397	1,966,858
Oct.	198,522	194	504	—	—	100	2	208	1,852,180
Nov.	198,456	67	62	0	0	0	0	129	2,002,568
Dec.	182,246	16,210	677	0	0	0	2,366	14,521	2,051,675
2024 Jan.	182,103	144	42	0	0	0	115	71	2,061,708
Feb.	181,987	117	48	0	0	2	25	138	2,126,888
Mar.	182,100	113	344	0	0	7	5	218	2,213,065
Apr.	181,805	295	126	0	0	4	4	414	2,159,884
May	181,553	322	187	—	—	—	328	180	2,159,986

* 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-Mitteilungen and Deutsche Börse

AG. ³ Methodological changes since October 2019. ⁴ Changes due to statistical adjustments.

VIII. Capital market

5. Yields on German securities

Period	Issue yields				Yields on debt securities outstanding issued by residents 1							
	Total	Public debt securities		Bank debt securities	Total	Public debt securities			Bank debt securities		Corporate bonds (non-MFIs)	
		Total	of which: Listed Federal debt securities			Total	Listed Federal securities	With a residual maturity of 9 to 10 years 2	Total	With a residual maturity of more than 9 years and up to 10 years		
												Total	Total
% per annum	Total	of which: Listed Federal debt securities	Bank debt securities	Total	Total	Listed Federal securities	With a residual maturity of 9 to 10 years 2	Total	With a residual maturity of more than 9 years and up to 10 years	Corporate bonds (non-MFIs)		
2012	1.6	1.3	1.2	1.8	1.4	1.3	1.3	1.5	1.6	2.1	3.7	
2013	1.6	1.3	1.2	1.8	1.4	1.3	1.3	1.6	1.3	2.1	3.4	
2014	1.2	1.1	0.9	1.3	1.0	1.0	1.0	1.2	0.9	1.7	3.0	
2015	0.7	0.4	0.4	0.7	0.5	0.4	0.4	0.5	0.5	1.2	2.4	
2016	0.4	0.1	0.1	0.6	0.1	0.0	0.0	0.1	0.3	1.0	2.1	
2017	0.6	0.4	0.2	0.6	0.3	0.2	0.2	0.3	0.4	0.9	1.7	
2018	0.7	0.6	0.4	0.6	0.4	0.3	0.3	0.4	0.6	1.0	2.5	
2019	0.2	0.1	0.3	0.4	0.1	0.2	0.3	0.3	0.1	0.3	2.5	
2020	0.1	0.3	0.5	0.1	0.2	0.4	0.5	0.5	0.0	0.1	1.7	
2021	0.0	0.2	0.3	0.1	0.1	0.3	0.4	0.4	0.1	0.2	0.9	
2022	1.6	1.3	1.2	1.9	1.5	1.2	1.1	1.1	1.9	1.9	3.3	
2023	2.9	2.6	2.5	3.4	2.9	2.6	2.5	2.4	3.3	3.2	4.2	
2023 June	2.89	2.55	2.55	3.31	2.88	2.58	2.46	2.38	3.32	3.12	4.24	
July	2.98	2.61	2.61	3.64	2.97	2.67	2.55	2.46	3.43	3.24	4.25	
Aug.	2.92	2.58	2.58	3.42	3.01	2.71	2.60	2.55	3.44	3.31	4.27	
Sep.	3.18	2.75	2.75	3.57	3.11	2.82	2.71	2.66	3.51	3.42	4.39	
Oct.	3.18	2.86	2.86	3.66	3.25	2.96	2.84	2.82	3.66	3.63	4.56	
Nov.	3.01	2.61	2.61	3.53	3.02	2.75	2.64	2.60	3.40	3.37	4.23	
Dec.	3.01	2.44	2.44	3.67	2.52	2.26	2.15	2.10	2.91	2.92	3.63	
2024 Jan.	2.81	2.44	2.44	2.87	2.57	2.32	2.22	2.17	2.94	2.97	3.67	
Feb.	2.71	2.47	2.47	3.05	2.72	2.48	2.39	2.33	3.09	3.10	3.74	
Mar.	2.94	2.56	2.56	3.10	2.73	2.49	2.41	2.35	3.07	3.02	3.73	
Apr.	3.05	2.61	2.61	3.12	2.81	2.58	2.50	2.45	3.15	3.14	3.74	
May	3.08	2.70	2.70	3.18	2.88	2.66	2.58	2.52	3.19	3.20	3.84	

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 Only debt securities eligible as underlying instruments for futures contracts; calculated as unweighted averages.

6. Sales and purchases of mutual fund shares in Germany

Period	€ million													
	Sales = total purchases	Sales						Purchases						
		Open-end domestic mutual funds 1 (sales receipts)						Residents						
		Total	Mutual funds open to the general public		Real estate funds	Specialised funds	Foreign funds 4	Total	Credit institutions including building and loan associations 2		Other sectors 3		Non-residents 5	
Total	of which: Money market funds		Securities-based funds	Total					of which: Foreign mutual fund shares	Total	of which: Foreign mutual fund shares			
2012	111,236	89,942	2,084	1,036	97	3,450	87,859	21,293	114,676	3,062	1,562	117,738	22,855	3,437
2013	123,736	91,337	9,184	574	5,596	3,376	82,153	32,400	117,028	771	100	116,257	32,300	6,710
2014	137,294	97,711	3,998	473	862	1,000	93,713	39,583	141,134	819	1,745	140,315	41,328	3,841
2015	189,802	146,136	30,420	318	22,345	3,636	115,716	43,665	181,932	7,362	494	174,570	43,171	7,870
2016	149,288	119,369	21,301	342	11,131	7,384	98,068	29,919	156,236	2,877	3,172	153,359	33,091	6,948
2017	148,214	94,921	29,560	235	21,970	4,406	65,361	53,292	150,740	4,938	1,048	145,802	52,244	2,526
2018	108,293	103,694	15,279	377	4,166	6,168	88,415	4,599	114,973	2,979	2,306	111,994	6,905	6,680
2019	171,666	122,546	17,032	447	5,097	10,580	105,514	49,120	176,210	2,719	812	173,491	49,932	4,544
2020	157,349	116,028	19,193	42	11,343	8,795	96,835	41,321	156,421	336	1,656	156,085	42,977	928
2021	280,746	157,861	41,016	482	31,023	7,841	116,845	122,885	289,169	13,154	254	276,015	122,631	8,423
2022	108,741	79,022	6,057	482	444	5,071	72,991	29,718	111,948	3,170	1,459	108,778	31,177	3,207
2023	67,941	44,484	5,969	460	4,951	723	38,461	23,457	69,924	4,778	2,054	74,702	25,511	1,984
2023 June	11,322	2,213	312	31	628	271	1,901	891	41	85	19	44	910	1,363
July	10,274	6,405	433	280	69	90	5,972	3,870	11,200	437	167	11,637	4,037	926
Aug.	4,460	4,731	13	115	107	40	4,720	271	4,311	132	129	4,179	142	149
Sep.	4,757	2,115	702	61	785	115	1,411	2,641	5,562	362	106	5,200	2,535	805
Oct.	2,603	2,394	1,269	130	843	139	1,186	209	2,712	814	113	3,526	96	108
Nov.	219	3,273	592	93	807	276	3,865	3,493	1,322	95	288	1,227	3,781	1,102
Dec.	10,428	10,971	1,536	156	1,448	182	12,506	543	9,666	11	13	9,677	556	762
2024 Jan.	23,814	10,382	457	141	406	19	10,839	13,431	24,111	1,999	196	22,112	13,235	298
Feb.	1,751	1,458	1,095	23	688	430	363	3,209	2,272	60	162	2,212	3,047	521
Mar.	2,573	2,329	1,070	188	610	455	1,259	4,902	2,221	358	426	1,863	5,328	352
Apr.	15,151	10,159	742	220	1,063	481	9,417	4,992	14,331	442	226	13,889	4,766	821
May	8,267	378	210	137	479	463	172	7,889	8,641	233	46	8,408	7,935	375

1 Including public limited investment companies. 2 Book values. 3 Residual. 4 Net purchases or net sales (-) of foreign fund shares by residents; transaction values. 5 Net purchases or net sales (-) of domestic fund shares by non-residents; transaction values.

— The figures for the most recent date are provisional; revisions are not specially marked.

IX. Financial accounts

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

€ billion

Item	2021	2022	2023	2023					2024
				Q4	Q1	Q2	Q3	Q4	Q1
Acquisition of financial assets									
Currency and deposits	45.36	67.77	- 0.75	23.78	- 22.94	- 12.62	24.29	10.52	- 15.53
Debt securities	2.81	4.10	6.70	0.05	4.49	1.79	1.67	- 1.25	5.80
Short-term debt securities	2.29	1.23	1.62	- 0.22	2.00	1.06	- 0.15	- 1.29	2.51
Long-term debt securities	0.52	2.87	5.08	0.26	2.49	0.73	1.82	0.04	3.29
Memo item:									
Debt securities of domestic sectors	1.31	3.40	6.68	0.43	3.81	2.76	0.42	- 0.32	3.02
Non-financial corporations	0.72	0.86	- 0.03	0.13	0.76	- 0.34	- 0.48	0.03	0.65
Financial corporations	1.08	1.79	3.19	- 0.04	1.43	1.43	0.28	0.06	0.92
General government	- 0.48	0.74	3.51	0.34	1.63	1.66	0.62	- 0.40	1.45
Debt securities of the rest of the world	1.50	0.70	0.02	- 0.38	0.68	- 0.98	1.25	- 0.93	2.77
Loans	67.49	46.20	84.87	- 11.70	32.33	7.60	18.91	26.03	38.21
Short-term loans	47.34	24.94	69.68	- 18.66	23.26	8.20	16.65	21.57	28.20
Long-term loans	20.15	21.26	15.19	6.95	9.07	- 0.60	2.26	4.46	10.02
Memo item:									
Loans to domestic sectors	10.10	27.15	81.44	- 3.46	37.72	7.91	17.45	18.36	30.78
Non-financial corporations	7.11	23.94	71.35	7.51	29.88	7.51	14.72	19.24	17.94
Financial corporations	3.33	1.46	11.89	- 9.63	7.34	2.27	3.04	- 0.75	9.12
General government	- 0.34	1.75	- 1.81	- 1.35	0.50	- 1.87	- 0.30	- 0.13	3.71
Loans to the rest of the world	57.40	19.05	3.43	- 8.24	- 5.38	- 0.31	1.45	7.67	7.44
Equity and investment fund shares	145.48	104.11	37.76	24.34	- 12.63	28.67	8.53	13.18	31.63
Equity	123.72	104.06	34.30	22.35	- 13.35	26.34	7.21	14.10	25.82
Listed shares of domestic sectors	15.33	44.06	- 14.32	- 3.71	- 10.51	- 0.27	4.72	- 8.26	3.45
Non-financial corporations	16.89	43.79	- 13.91	- 3.82	- 10.45	- 0.32	5.06	- 8.21	2.43
Financial corporations	- 1.56	0.27	- 0.41	0.11	- 0.07	0.05	- 0.34	- 0.05	1.02
Listed shares of the rest of the world	8.32	2.56	- 25.42	2.99	- 20.50	0.31	- 9.40	4.17	2.88
Other equity ¹	100.07	57.44	74.03	23.07	17.66	26.30	11.88	18.19	19.49
Investment fund shares	21.77	0.05	3.46	1.99	0.72	2.33	1.33	- 0.92	5.80
Money market fund shares	0.66	- 0.38	- 0.58	2.37	- 0.80	- 0.41	0.59	0.04	- 0.53
Non-MMF investment fund shares	21.11	0.43	4.04	- 0.38	1.52	2.74	0.74	- 0.95	6.33
Insurance technical reserves	19.52	1.60	4.81	- 1.17	6.55	0.02	- 0.09	- 1.67	12.32
Financial derivatives	15.54	28.93	- 1.07	- 30.76	3.95	0.70	14.01	- 19.73	4.26
Other accounts receivable	64.45	18.33	79.55	130.88	88.87	- 9.40	- 52.95	53.04	76.18
Total	360.65	271.05	211.86	135.43	100.63	16.75	14.36	80.11	152.87
External financing									
Debt securities	20.86	14.16	0.35	- 1.93	1.38	2.44	1.57	- 5.04	6.82
Short-term securities	2.51	- 0.36	- 4.68	- 2.69	- 0.16	- 0.70	- 0.84	- 2.99	1.01
Long-term securities	18.35	14.52	5.03	0.76	1.54	3.14	2.41	- 2.05	5.80
Memo item:									
Debt securities of domestic sectors	9.11	5.85	0.60	- 1.61	1.62	0.50	0.56	- 2.08	2.04
Non-financial corporations	0.72	0.86	- 0.03	0.13	0.76	- 0.34	- 0.48	0.03	0.65
Financial corporations	9.09	4.46	- 2.89	- 1.99	0.29	- 0.28	- 0.08	- 2.82	1.02
General government	0.09	- 0.07	- 0.11	0.01	0.00	- 0.07	- 0.04	- 0.00	0.01
Households	- 0.79	0.60	3.62	0.24	0.57	1.18	1.16	0.71	0.36
Debt securities of the rest of the world	11.75	8.31	- 0.25	- 0.32	- 0.25	1.94	1.02	- 2.96	4.78
Loans	138.35	176.99	46.79	28.41	15.49	21.40	5.48	4.43	24.82
Short-term loans	77.99	73.18	22.58	- 16.64	7.16	13.36	2.82	- 0.75	18.82
Long-term loans	60.36	103.82	24.21	45.05	8.33	8.04	2.66	5.18	6.00
Memo item:									
Loans from domestic sectors	76.20	155.70	81.00	15.04	50.10	16.67	10.98	3.25	31.77
Non-financial corporations	7.11	23.94	71.35	7.51	29.88	7.51	14.72	19.24	17.94
Financial corporations	55.94	110.61	30.27	17.77	27.60	13.60	1.32	- 12.24	18.99
General government	13.16	21.15	- 20.63	- 10.25	- 7.38	- 4.44	- 5.06	- 3.75	- 5.16
Loans from the rest of the world	62.15	21.29	- 34.21	13.38	- 34.61	4.72	- 5.50	1.18	- 6.95
Equity	61.44	16.99	2.98	1.42	- 4.77	7.18	1.91	- 1.33	15.77
Listed shares of domestic sectors	26.44	57.01	- 27.67	0.59	- 13.76	- 5.08	1.80	- 10.64	- 7.77
Non-financial corporations	16.89	43.79	- 13.91	- 3.82	- 10.45	- 0.32	5.06	- 8.21	2.43
Financial corporations	- 2.39	2.17	- 8.32	2.89	- 0.69	- 4.56	- 1.88	- 1.19	- 9.73
General government	- 0.09	0.76	- 1.12	0.10	- 0.88	- 0.21	- 0.04	0.01	0.05
Households	12.04	10.29	- 4.32	1.42	- 1.75	0.01	- 1.33	- 1.24	- 0.53
Listed shares of the rest of the world	18.88	- 9.46	13.66	- 2.61	2.00	7.38	1.84	2.45	10.75
Other equity ¹	16.11	- 30.55	16.99	3.43	6.98	4.88	- 1.73	6.86	12.80
Insurance technical reserves	4.26	3.53	3.53	0.89	0.88	0.88	0.88	0.89	0.88
Financial derivatives and employee stock options	14.32	- 14.10	10.22	- 13.34	1.58	2.08	2.72	3.85	0.62
Other accounts payable	139.60	64.69	59.45	20.47	10.76	3.01	3.48	42.20	- 1.52
Total	378.83	262.27	123.33	35.91	25.31	36.98	16.04	44.99	47.38

¹ Including unlisted shares.

IX. Financial accounts

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

End of year/quarter; € billion

Item	2021	2022	2023	2022	2023				2024
				Q4	Q1	Q2	Q3	Q4	Q1
Financial assets									
Currency and deposits	726.6	794.5	710.5	794.5	746.4	654.8	732.5	710.5	638.3
Debt securities	54.3	53.8	62.1	53.8	58.9	60.5	62.1	62.1	68.2
Short-term debt securities	7.1	8.4	9.8	8.4	10.4	11.2	11.1	9.8	12.7
Long-term debt securities	47.2	45.5	52.3	45.5	48.5	49.3	51.1	52.3	55.5
Memo item:									
Debt securities of domestic sectors	23.3	24.7	32.2	24.7	28.7	31.4	31.9	32.2	35.4
Non-financial corporations	5.3	5.8	5.8	5.8	6.5	6.2	5.7	5.8	6.5
Financial corporations	14.5	15.0	18.8	15.0	16.6	18.0	18.3	18.8	19.9
General government	3.5	3.9	7.6	3.9	5.6	7.2	7.8	7.6	9.0
Debt securities of the rest of the world	31.0	29.2	29.9	29.2	30.2	29.1	30.3	29.9	32.7
Loans	803.0	852.9	935.7	852.9	884.0	891.0	911.2	935.7	975.2
Short-term loans	612.9	640.1	708.2	640.1	662.4	669.9	687.5	708.2	736.9
Long-term loans	190.1	212.7	227.5	212.7	221.6	221.1	223.7	227.5	238.3
Memo item:									
Loans to domestic sectors	439.8	467.0	548.4	467.0	504.7	512.6	530.1	548.4	579.2
Non-financial corporations	334.7	358.7	430.0	358.7	388.5	396.0	410.8	430.0	447.9
Financial corporations	82.8	84.2	96.1	84.2	91.6	93.8	96.9	96.1	105.2
General government	22.4	24.1	22.3	24.1	24.6	22.7	22.4	22.3	26.0
Loans to the rest of the world	363.2	385.9	387.3	385.9	379.3	378.3	381.1	387.3	396.0
Equity and investment fund shares	2,852.2	2,607.8	2,693.3	2,607.8	2,681.7	2,705.4	2,657.2	2,693.3	2,780.1
Equity	2,612.0	2,395.2	2,457.7	2,395.2	2,463.0	2,480.0	2,431.2	2,457.7	2,531.0
Listed shares of domestic sectors	393.0	331.8	334.5	331.8	361.1	354.8	330.1	334.5	359.7
Non-financial corporations	384.9	324.5	326.7	324.5	353.9	347.0	322.9	326.7	351.0
Financial corporations	8.0	7.4	7.8	7.4	7.2	7.8	7.2	7.8	8.6
Listed shares of the rest of the world	74.7	69.8	48.0	69.8	51.6	51.4	41.5	48.0	51.4
Other equity ¹	2,144.3	1,993.6	2,075.2	1,993.6	2,050.4	2,073.8	2,059.5	2,075.2	2,120.0
Investment fund shares	240.2	212.6	235.6	212.6	218.6	225.4	226.0	235.6	249.1
Money market fund shares	7.6	7.2	6.9	7.2	6.5	6.1	6.8	6.9	6.4
Non-MMF investment fund shares	232.6	205.4	228.7	205.4	212.1	219.3	219.3	228.7	242.7
Insurance technical reserves	64.8	41.1	44.6	41.1	47.3	46.6	45.8	44.6	55.0
Financial derivatives	105.9	92.2	33.4	92.2	65.1	56.9	44.7	33.4	35.0
Other accounts receivable	1,454.4	1,518.1	1,629.7	1,518.1	1,572.4	1,568.3	1,597.2	1,629.7	1,674.8
Total	6,061.2	5,960.5	6,109.3	5,960.5	6,055.7	5,983.4	6,050.8	6,109.3	6,226.6
Liabilities									
Debt securities	252.3	228.7	239.7	228.7	231.2	234.8	234.8	239.7	247.0
Short-term securities	9.6	9.3	4.5	9.3	9.1	8.4	7.5	4.5	5.6
Long-term securities	242.7	219.4	235.2	219.4	222.1	226.4	227.3	235.2	241.4
Memo item:									
Debt securities of domestic sectors	100.6	91.0	96.4	91.0	93.5	94.2	94.2	96.4	102.3
Non-financial corporations	5.3	5.8	5.8	5.8	6.5	6.2	5.7	5.8	6.5
Financial corporations	83.2	73.5	74.8	73.5	74.4	74.4	73.9	74.8	79.3
General government	0.4	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.3
Households	11.8	11.4	15.5	11.4	12.2	13.3	14.4	15.5	16.2
Debt securities of the rest of the world	151.7	137.7	143.3	137.7	137.7	140.6	140.7	143.3	144.7
Loans	2,429.1	2,613.8	2,654.5	2,613.8	2,626.0	2,646.5	2,653.8	2,654.5	2,681.0
Short-term loans	904.0	981.3	999.7	981.3	986.5	999.5	1,003.8	999.7	1,017.8
Long-term loans	1,525.1	1,632.5	1,654.8	1,632.5	1,639.5	1,646.9	1,649.9	1,654.8	1,663.2
Memo item:									
Loans from domestic sectors	1,483.9	1,640.0	1,718.9	1,640.0	1,689.1	1,705.3	1,715.8	1,718.9	1,751.8
Non-financial corporations	334.7	358.7	430.0	358.7	388.5	396.0	410.8	430.0	447.9
Financial corporations	1,034.5	1,145.7	1,174.0	1,145.7	1,172.1	1,185.3	1,186.6	1,174.0	1,193.2
General government	114.7	135.7	115.0	135.7	128.5	123.9	118.4	115.0	110.6
Loans from the rest of the world	945.1	973.8	935.5	973.8	936.9	941.1	938.0	935.5	929.2
Equity	3,689.0	2,983.3	3,216.9	2,983.3	3,267.6	3,266.2	3,114.0	3,216.9	3,384.0
Listed shares of domestic sectors	924.8	761.4	807.6	761.4	855.9	821.5	778.6	807.6	851.9
Non-financial corporations	384.9	324.5	326.7	324.5	353.9	347.0	322.9	326.7	351.0
Financial corporations	210.3	151.2	173.2	151.2	182.3	165.2	167.9	173.2	173.5
General government	69.9	69.2	76.0	69.2	78.9	75.3	70.9	76.0	83.0
Households	259.7	216.4	231.7	216.4	240.9	234.0	216.8	231.7	244.3
Listed shares of the rest of the world	1,126.3	823.1	951.1	823.1	941.1	976.2	910.3	951.1	1,029.2
Other equity ¹	1,637.9	1,398.8	1,458.2	1,398.8	1,470.6	1,468.5	1,425.1	1,458.2	1,502.9
Insurance technical reserves	287.4	290.9	294.5	290.9	291.8	292.7	293.6	294.5	295.3
Financial derivatives and employee stock options	137.4	73.3	30.5	73.3	44.7	39.5	15.0	30.5	28.1
Other accounts payable	1,526.5	1,601.6	1,677.0	1,601.6	1,596.7	1,610.6	1,674.1	1,677.0	1,656.3
Total	8,321.7	7,791.5	8,113.0	7,791.5	8,058.1	8,090.3	7,985.3	8,113.0	8,291.7

¹ Including unlisted shares.

IX. Financial accounts

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

€ billion

Item	2021	2022	2023	2022					2023	2024
				Q4	Q1	Q2	Q3	Q4	Q1	
Acquisition of financial assets										
Currency and deposits	145.09	110.33	90.46	41.11	- 10.65	25.45	13.52	62.14	33.12	
Currency	59.48	44.15	14.18	6.15	2.94	3.37	2.53	5.34	0.95	
Deposits	85.61	66.18	76.28	34.96	- 13.59	22.08	11.00	56.80	32.17	
Transferable deposits	90.84	47.63	- 129.98	4.41	- 60.51	- 18.16	- 32.67	- 18.65	- 33.47	
Time deposits	- 5.09	34.49	184.51	33.49	50.43	43.22	42.53	48.32	61.89	
Savings deposits (including savings certificates)	- 0.13	- 15.94	21.75	- 2.95	- 3.52	- 2.99	1.14	27.12	3.75	
Debt securities	- 5.89	25.03	65.16	11.96	29.74	20.44	14.29	0.69	8.76	
Short-term debt securities	0.31	2.01	11.75	1.79	7.99	5.68	2.12	- 4.04	- 1.03	
Long-term debt securities	- 6.20	23.02	53.40	10.17	21.74	14.76	12.17	4.73	9.79	
Memo item:										
Debt securities of domestic sectors	- 3.70	20.31	53.95	10.52	25.57	16.76	11.99	- 0.36	6.58	
Non-financial corporations	- 0.83	0.50	3.41	0.23	0.52	1.11	1.09	0.68	0.32	
Financial corporations	- 2.57	17.47	42.65	9.01	21.52	12.75	9.33	- 0.94	6.31	
General government	- 0.30	2.35	7.88	1.29	3.52	2.90	1.57	- 0.10	- 0.05	
Debt securities of the rest of the world	- 2.19	4.72	11.21	1.44	4.17	3.69	2.30	1.05	2.18	
Equity and investment fund shares	136.69	78.09	36.31	15.59	12.05	9.93	8.70	5.63	15.39	
Equity	31.80	26.89	0.25	4.97	0.11	0.36	0.80	- 1.02	1.72	
Listed shares of domestic sectors	14.29	12.38	- 4.63	0.70	- 0.91	0.02	- 1.43	- 2.31	- 1.13	
Non-financial corporations	12.71	9.96	- 3.59	1.36	- 2.03	0.10	- 0.41	- 1.25	- 0.52	
Financial corporations	1.58	2.42	- 1.04	- 0.66	1.12	- 0.08	- 1.02	- 1.07	- 0.62	
Listed shares of the rest of the world	10.83	8.55	2.89	3.04	0.44	- 0.21	1.73	0.92	2.09	
Other equity ¹	6.69	5.96	1.99	1.23	0.57	0.56	0.50	0.37	0.77	
Investment fund shares	104.88	51.19	36.07	10.62	11.94	9.57	7.91	6.65	13.67	
Money market fund shares	0.19	0.82	4.39	0.44	0.43	1.47	1.67	0.82	1.48	
Non-MMF investment fund shares	104.70	50.37	31.68	10.18	11.50	8.10	6.24	5.83	12.20	
Non-life insurance technical reserves and provision for calls under standardised guarantees	20.31	- 0.39	1.15	- 1.69	5.43	- 0.96	- 1.07	- 2.26	10.98	
Life insurance and annuity entitlements	51.74	31.33	- 11.47	7.29	0.85	0.55	- 2.15	- 10.71	0.14	
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	27.32	48.64	41.98	11.96	14.04	5.55	11.97	10.42	3.78	
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	0.76	0.04	33.14	- 19.50	20.65	- 0.31	13.68	- 0.87	14.75	
Total	376.00	293.06	256.73	66.72	72.10	60.66	58.94	65.03	86.91	
External financing										
Loans	98.17	83.71	14.40	9.52	2.49	5.68	6.31	- 0.07	0.25	
Short-term loans	0.86	2.59	- 0.90	0.10	0.74	- 0.28	- 0.50	- 0.86	- 0.80	
Long-term loans	97.31	81.12	15.30	9.42	1.75	5.96	6.80	0.79	1.05	
Memo item:										
Mortgage loans	99.89	79.73	18.85	10.55	2.73	5.91	6.43	3.79	1.78	
Consumer loans	- 0.89	4.60	1.44	0.87	0.54	1.26	1.66	- 2.02	- 0.41	
Entrepreneurial loans	- 0.83	- 0.61	- 5.89	- 1.90	- 0.78	- 1.49	- 1.78	- 1.84	- 1.13	
Memo item:										
Loans from monetary financial institutions	94.32	82.56	12.26	9.45	1.80	4.69	6.41	- 0.64	- 0.24	
Loans from financial corporations other than MFIs	3.85	1.15	2.14	0.07	0.68	0.99	- 0.10	0.57	0.49	
Loans from general government and rest of the world	- 0.00	- 0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Financial derivatives	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Other accounts payable	0.90	3.08	2.09	2.03	- 0.57	- 0.33	0.51	2.47	1.52	
Total	99.07	86.79	16.49	11.55	1.92	5.35	6.82	2.41	1.76	

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

IX. Financial accounts

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

End of year/quarter; € billion

Item	2021	2022	2023	2023				2024	
				Q4	Q1	Q2	Q3	Q4	Q1
Financial assets									
Currency and deposits	3,007.3	3,119.7	3,219.2	3,119.7	3,107.9	3,133.4	3,148.7	3,219.2	3,254.0
Currency	386.8	431.0	445.2	431.0	433.9	437.3	439.8	445.2	446.1
Deposits	2,620.5	2,688.7	2,774.1	2,688.7	2,674.0	2,696.1	2,708.8	2,774.1	2,807.9
Transferable deposits	1,764.4	1,811.7	1,686.3	1,811.7	1,756.0	1,737.7	1,705.0	1,686.3	1,652.9
Time deposits	297.3	334.8	528.7	334.8	384.2	427.6	471.9	528.7	592.2
Savings deposits (including savings certificates)	558.8	542.3	559.1	542.3	533.8	530.8	531.9	559.1	562.8
Debt securities	109.6	125.0	198.2	125.0	157.1	177.7	192.5	198.2	209.0
Short-term debt securities	1.8	3.9	12.5	3.9	11.9	15.9	16.4	12.5	18.5
Long-term debt securities	107.8	121.1	185.7	121.1	145.2	161.8	176.1	185.7	190.5
Memo item:									
Debt securities of domestic sectors	75.3	88.4	147.8	88.4	116.1	133.0	144.6	147.8	154.6
Non-financial corporations	9.8	9.7	13.5	9.7	10.4	11.4	12.4	13.5	14.1
Financial corporations	63.2	74.5	122.0	74.5	98.0	110.9	120.0	122.0	128.2
General government	2.2	4.2	12.3	4.2	7.8	10.7	12.2	12.3	12.3
Debt securities of the rest of the world	34.3	36.6	50.4	36.6	41.0	44.7	47.9	50.4	54.4
Equity and investment fund shares	1,900.6	1,725.3	1,930.8	1,725.3	1,824.2	1,864.9	1,837.0	1,930.8	2,064.6
Equity	967.8	869.3	968.1	869.3	931.1	943.0	921.8	968.1	1,027.4
Listed shares of domestic sectors	296.0	255.9	279.2	255.9	282.1	277.0	262.5	279.2	299.5
Non-financial corporations	250.4	208.7	223.9	208.7	232.3	225.6	209.5	223.9	236.4
Financial corporations	45.6	47.2	55.3	47.2	49.9	51.3	53.0	55.3	63.1
Listed shares of the rest of the world	249.2	209.3	247.9	209.3	227.3	239.5	235.7	247.9	270.1
Other equity ¹	422.6	404.1	441.0	404.1	421.7	426.6	423.6	441.0	457.8
Investment fund shares	932.7	856.0	962.6	856.0	893.1	921.9	915.2	962.6	1,037.2
Money market fund shares	2.5	3.3	7.8	3.3	3.7	5.2	7.0	7.8	9.3
Non-MMF investment fund shares	930.2	852.7	954.8	852.7	889.4	916.7	908.2	954.8	1,027.9
Non-life insurance technical reserves and provision for calls under standardised guarantees	432.5	41.4	43.7	41.4	47.2	46.1	45.0	43.7	53.6
Life insurance and annuity entitlements	1,162.2	1,087.1	1,141.3	1,087.1	1,108.4	1,111.8	1,077.0	1,141.3	1,158.6
Pension entitlement, claims of pension funds on pension managers, entitlements to non-pension benefits	986.1	1,117.7	1,161.3	1,117.7	1,132.1	1,139.8	1,141.2	1,161.3	1,167.8
Financial derivatives and employee stock options	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable ²	27.5	26.5	35.5	26.5	26.9	27.6	26.8	35.5	37.9
Total	7,625.7	7,242.6	7,730.0	7,242.6	7,403.8	7,501.3	7,468.1	7,730.0	7,945.5
Liabilities									
Loans	2,024.3	2,111.8	2,128.7	2,111.8	2,114.4	2,119.9	2,126.7	2,128.7	2,128.3
Short-term loans	53.0	55.5	55.1	55.5	56.6	56.4	55.9	55.1	54.4
Long-term loans	1,971.3	2,056.3	2,073.5	2,056.3	2,057.8	2,063.5	2,070.9	2,073.5	2,073.9
Memo item:									
Mortgage loans	1,549.3	1,632.3	1,654.5	1,632.3	1,636.1	1,641.8	1,648.8	1,654.5	1,655.6
Consumer loans	224.5	228.9	230.0	228.9	229.7	230.8	232.1	230.0	229.6
Entrepreneurial loans	250.5	250.6	244.2	250.6	248.6	247.3	245.9	244.2	243.2
Memo item:									
Loans from monetary financial institutions	1,920.3	2,004.0	2,016.3	2,004.0	2,005.8	2,010.5	2,016.9	2,016.3	2,016.2
Loans from financial corporations other than MFIs	104.0	107.8	112.4	107.8	108.6	109.4	109.9	112.4	112.2
Loans from general government and rest of the world	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts payable	20.3	23.5	25.9	23.5	23.0	22.8	23.3	25.9	27.4
Total	2,044.6	2,135.4	2,154.5	2,135.4	2,137.4	2,142.6	2,150.1	2,154.5	2,155.7

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

X. Public finances in Germany

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

Period	€ billion					As a percentage of GDP					Deficit/surplus	Memo item: Total tax burden ¹
	General government	Central government	State government	Local government	Social security funds	General government	Central government	State government	Local government	Social security funds		
Deficit/surplus ¹												
2017	+ 43.7	+ 7.9	+ 13.9	+ 10.7	+ 11.1	+ 1.3	+ 0.2	+ 0.4	+ 0.3	+ 0.3	+ 0.3	
2018	+ 65.6	+ 21.0	+ 12.0	+ 16.7	+ 16.0	+ 1.9	+ 0.6	+ 0.4	+ 0.5	+ 0.5	+ 0.5	
2019	+ 53.0	+ 21.5	+ 14.0	+ 8.4	+ 9.1	+ 1.5	+ 0.6	+ 0.4	+ 0.2	+ 0.2	+ 0.3	
2020 p	- 147.7	- 87.1	- 32.6	+ 6.9	- 34.8	- 4.3	- 2.6	- 1.0	+ 0.2	- 1.0	- 1.0	
2021 p	- 129.7	- 144.2	+ 5.6	+ 6.2	+ 2.6	- 3.6	- 4.0	+ 0.2	+ 0.2	+ 0.1	+ 0.1	
2022 p	- 96.9	- 124.3	+ 14.4	+ 4.7	+ 8.3	- 2.5	- 3.2	+ 0.4	+ 0.1	+ 0.2	+ 0.2	
2023 pe	- 99.1	- 90.5	- 5.3	- 12.1	+ 8.8	- 2.4	- 2.2	- 0.1	- 0.3	+ 0.2	+ 0.2	
2022 H1 p	- 4.6	- 36.2	+ 18.2	+ 5.8	+ 7.7	- 0.2	- 1.9	+ 1.0	+ 0.3	+ 0.4	+ 0.4	
H2 p	- 92.3	- 88.0	- 3.8	- 1.1	+ 0.6	- 4.7	- 4.4	- 0.2	- 0.1	+ 0.0	+ 0.0	
2023 H1 pe	- 37.9	- 43.3	- 2.2	- 2.9	+ 10.4	- 1.9	- 2.1	- 0.1	- 0.1	+ 0.5	+ 0.5	
H2 pe	- 61.2	- 47.2	- 3.0	- 9.2	- 1.7	- 2.9	- 2.2	- 0.1	- 0.4	- 0.1	- 0.1	
Debt level ²												
2017	2,130.3	1,361.5	616.8	168.3	0.8	65.2	41.7	18.9	5.2	0.0	0.0	
2018	2,083.7	1,334.5	603.2	162.2	0.7	61.9	39.7	17.9	4.8	0.0	0.0	
2019	2,069.9	1,312.3	612.7	161.4	0.9	59.6	37.8	17.6	4.6	0.0	0.0	
2020 p	2,340.8	1,526.5	664.4	163.2	7.6	68.8	44.8	19.5	4.8	0.2	0.2	
2021 p	2,495.5	1,679.3	665.3	165.3	0.6	69.0	46.4	18.4	4.6	0.0	0.0	
2022 p	2,561.7	1,776.0	634.2	172.2	2.8	66.1	45.8	16.4	4.4	0.1	0.1	
2023 p	2,622.7	1,850.1	623.1	177.7	2.6	63.6	44.9	15.1	4.3	0.1	0.1	
2022 Q1 p	2,499.1	1,684.3	663.4	164.9	3.4	67.6	45.6	17.9	4.5	0.1	0.1	
Q2 p	2,537.4	1,723.4	660.2	166.8	3.7	67.4	45.8	17.5	4.4	0.1	0.1	
Q3 p	2,551.3	1,757.0	643.8	166.6	4.2	66.8	46.0	16.9	4.4	0.1	0.1	
Q4 p	2,561.7	1,776.0	634.2	172.2	2.8	66.1	45.8	16.4	4.4	0.1	0.1	
2023 Q1 p	2,587.2	1,798.7	632.0	173.0	3.5	65.6	45.6	16.0	4.4	0.1	0.1	
Q2 p	2,586.5	1,806.1	624.2	172.8	2.7	64.6	45.1	15.6	4.3	0.1	0.1	
Q3 p	2,627.2	1,848.6	621.6	175.5	3.8	64.6	45.5	15.3	4.3	0.1	0.1	
Q4 p	2,622.7	1,850.1	623.1	177.7	2.6	63.6	44.9	15.1	4.3	0.1	0.1	
2024 Q1 p	2,635.9	1,856.3	630.8	180.6	3.0	63.4	44.6	15.2	4.3	0.1	0.1	

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

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

Period	Revenue				Expenditure							Deficit/surplus	Memo item: Total tax burden ¹
	Total	of which:			Total	of which:							
	Taxes	Social contributions	Other		Social benefits	Compensation of employees	Intermediate consumption	Gross capital formation	Interest	Other			
€ billion													
2017	1,486.9	773.3	549.5	164.2	1,443.3	784.8	250.6	169.5	71.6	33.8	132.9	+ 43.7	1,329.5
2018	1,557.2	808.1	572.6	176.6	1,491.6	805.6	260.3	176.4	78.5	31.2	139.7	+ 65.6	1,387.7
2019	1,616.5	834.7	598.2	183.6	1,563.4	846.2	273.6	187.4	84.2	27.4	144.5	+ 53.0	1,440.0
2020 p	1,569.9	781.7	608.1	180.1	1,717.6	904.5	285.2	211.3	92.9	21.7	201.9	- 147.7	1,396.7
2021 p	1,712.9	889.0	632.1	191.8	1,842.6	941.1	295.4	226.6	92.5	21.1	266.0	- 129.7	1,528.7
2022 p	1,821.2	955.9	666.8	198.6	1,918.1	974.0	307.9	238.4	100.9	26.5	270.4	- 96.9	1,633.4
2023 pe	1,908.0	967.8	709.4	230.8	2,007.1	1,022.8	328.0	259.0	106.7	36.2	254.4	- 99.1	1,685.6
As a percentage of GDP													
2017	45.5	23.7	16.8	5.0	44.2	24.0	7.7	5.2	2.2	1.0	4.1	+ 1.3	40.7
2018	46.3	24.0	17.0	5.2	44.3	23.9	7.7	5.2	2.3	0.9	4.1	+ 1.9	41.2
2019	46.5	24.0	17.2	5.3	45.0	24.4	7.9	5.4	2.4	0.8	4.2	+ 1.5	41.4
2020 p	46.1	23.0	17.9	5.3	50.5	26.6	8.4	6.2	2.7	0.6	5.9	- 4.3	41.0
2021 p	47.3	24.6	17.5	5.3	50.9	26.0	8.2	6.3	2.6	0.6	7.4	- 3.6	42.3
2022 p	47.0	24.7	17.2	5.1	49.5	25.1	7.9	6.1	2.6	0.7	7.0	- 2.5	42.1
2023 pe	46.3	23.5	17.2	5.6	48.7	24.8	8.0	6.3	2.6	0.9	6.2	- 2.4	40.9
Percentage growth rates													
2017	+ 4.2	+ 4.6	+ 4.8	+ 0.5	+ 3.8	+ 4.0	+ 4.1	+ 4.3	+ 5.1	- 9.3	+ 4.5	.	+ 4.7
2018	+ 4.7	+ 4.5	+ 4.2	+ 7.6	+ 3.3	+ 2.6	+ 3.9	+ 4.1	+ 9.7	- 7.8	+ 5.1	.	+ 4.4
2019	+ 3.8	+ 3.3	+ 4.5	+ 4.0	+ 4.8	+ 5.1	+ 5.1	+ 6.2	+ 7.2	- 12.0	+ 3.5	.	+ 3.8
2020 p	- 2.9	- 6.3	+ 1.6	- 1.9	+ 9.9	+ 6.9	+ 4.2	+ 12.7	+ 10.4	- 20.8	+ 39.7	.	- 3.0
2021 p	+ 9.1	+ 13.7	+ 3.9	+ 6.5	+ 7.3	+ 4.1	+ 3.6	+ 7.2	- 0.5	- 3.1	+ 31.7	.	+ 9.4
2022 p	+ 6.3	+ 7.5	+ 5.5	+ 3.6	+ 4.1	+ 3.5	+ 4.3	+ 5.2	+ 9.0	+ 25.8	+ 1.7	.	+ 6.9
2023 pe	+ 4.8	+ 1.2	+ 6.4	+ 16.2	+ 4.6	+ 5.0	+ 6.5	+ 8.7	+ 5.7	+ 36.6	- 5.9	.	+ 3.2

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

X. Public finances in Germany

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

€ billion

Period	Central, state and local government 1									Social security funds 2			General government, total			
	Revenue			Expenditure						Deficit/ surplus	Rev- enue 6	Expend- iture	Deficit/ surplus	Rev- enue	Expend- iture	Deficit/ surplus
	Total 4	of which:		Total 4	of which: 3											
		Taxes	Finan- cial transac- tions 5		Person- nel expend- iture	Current grants	Interest	Fixed asset forma- tion	Finan- cial transac- tions 5							
2017	897.6	734.5	7.7	867.8	261.5	327.2	41.9	51.7	13.8	+ 29.8	631.5	622.0	+ 9.5	1,414.9	1,375.6	+ 39.3
2018	949.2	776.3	6.0	904.0	272.4	337.3	39.1	55.1	16.1	+ 45.2	656.2	642.5	+ 13.6	1,488.1	1,429.3	+ 58.8
2019	1,007.7	799.4	11.0	973.9	285.9	348.9	33.5	62.2	16.8	+ 33.7	685.0	676.7	+ 8.3	1,571.2	1,529.2	+ 42.0
2020	944.3	739.9	13.7	1,109.7	299.4	422.0	25.8	68.6	59.9	- 165.4	719.5	747.8	- 28.3	1,516.2	1,709.9	- 193.7
2021	1,105.4	833.3	25.3	1,239.9	310.7	530.8	21.0	69.3	26.1	- 134.5	769.2	777.1	- 7.9	1,701.6	1,844.0	- 142.4
2022	1,145.2	895.9	32.4	1,287.0	325.7	499.6	33.5	72.5	79.3	- 141.8	800.5	793.3	+ 7.2	1,772.9	1,907.5	- 134.6
2023 P	1,224.6	915.9	36.4	1,320.3	349.7	479.8	64.4	83.5	31.9	- 95.7	820.3	814.5	+ 5.9	1,904.7	1,994.5	- 89.8
2021 Q1	240.7	185.3	4.3	300.6	75.5	130.8	7.3	11.1	14.6	- 59.9	P 182.4	P 196.3	P - 13.9	P 385.2	P 458.9	P - 73.8
Q2	267.0	195.8	7.5	297.1	74.8	122.7	10.7	15.2	10.5	- 30.2	P 185.9	P 197.0	P - 11.1	P 414.1	P 455.3	P - 41.2
Q3	270.9	210.7	7.4	290.2	75.8	116.3	- 0.4	16.5	10.4	- 19.3	P 183.4	P 191.9	P - 8.6	P 413.5	P 441.4	P - 27.8
Q4	332.9	237.7	6.1	347.8	84.1	153.4	3.1	26.4	- 9.4	- 14.9	P 197.3	P 190.4	P + 6.9	P 492.6	P 500.6	P - 8.0
2022 Q1	278.2	224.0	5.0	279.3	79.6	116.8	5.5	11.9	7.0	- 1.0	P 193.8	P 199.8	P - 6.0	P 430.7	P 437.8	P - 7.1
Q2	287.9	224.6	5.1	294.2	77.8	126.4	10.6	15.3	5.9	- 6.2	P 199.9	P 196.7	P + 3.2	P 444.2	P 447.2	P - 3.1
Q3	267.7	207.0	13.3	298.8	78.1	116.8	10.8	17.7	10.8	- 31.0	P 194.0	P 197.6	P - 3.6	P 419.2	P 453.8	P - 34.6
Q4	318.5	244.5	9.0	413.5	89.7	138.5	6.5	27.5	55.6	- 95.0	P 210.5	P 198.1	P + 12.4	P 486.0	P 568.5	P - 82.5
2023 Q1	281.9	215.4	9.3	331.8	81.3	130.7	20.1	13.6	17.8	- 49.9	P 195.4	P 200.8	P - 5.4	P 441.7	P 497.0	P - 55.3
Q2	311.6	226.3	9.4	313.4	84.7	117.7	24.2	17.8	2.2	- 1.8	P 199.3	P 198.9	P + 0.4	P 476.2	P 477.6	P - 1.4
Q3	290.5	229.6	7.2	303.1	86.5	103.2	12.6	21.0	4.5	- 12.6	P 201.5	P 205.0	P - 3.6	P 457.1	P 473.3	P - 16.1
Q4	347.5	244.6	10.6	375.0	96.7	126.3	11.5	30.9	7.4	- 27.5	P 218.4	P 208.7	P + 9.7	P 530.8	P 548.6	P - 17.8

Source: Bundesbank calculations based on Federal Statistical Office data. 1 Annual figures based on the quarterly figures of the Federal Statistical Office, core budgets and off-budget entities which are assigned to the general government sector. 2 The annual figures do not tally with the sum of the quarterly figures, as the latter are all provisional. The quarterly figures for some insurance sectors are estimated. 3 The development of the types of expenditure recorded here is influenced in part by statistical

changeovers. 4 Including discrepancies in clearing transactions between central, state and local government. 5 On the revenue side, this contains proceeds booked as disposals of equity interests and as loan repayments. On the expenditure side, this contains the acquisition of equity interests and loans granted. 6 Excluding central government liquidity assistance to the Federal Employment Agency.

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

€ billion

Period	Central government			State government 2,3			Local government 3		
	Revenue 1	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus	Revenue	Expenditure	Deficit/surplus
2017	357.8	352.8	+ 5.0	396.7	385.5	+ 11.3	258.5	247.7	+ 10.7
2018	374.4	363.5	+ 10.9	419.6	399.8	+ 19.9	270.0	260.1	+ 9.8
2019	382.5	369.2	+ 13.3	436.3	419.3	+ 17.0	282.4	276.7	+ 5.7
2020	341.4	472.1	- 130.7	455.5	489.0	- 33.6	295.2	293.2	+ 2.0
2021	370.3	511.9	- 141.6	509.3	508.7	+ 0.5	308.0	303.4	+ 4.6
2022	399.6	515.6	- 116.0	534.8	522.5	+ 12.3	328.5	325.8	+ 2.7
2023	425.3	490.2	- 64.9	530.9	531.7	- 0.8	358.2	365.0	- 6.8
2021 Q1	75.0	127.5	- 52.5	113.7	120.7	- 7.1	61.1	69.7	- 8.6
Q2	86.4	123.5	- 37.1	122.8	122.0	+ 0.8	74.6	71.7	+ 2.9
Q3	93.9	114.7	- 20.7	125.9	120.2	+ 5.7	74.6	74.9	- 0.3
Q4	115.1	146.3	- 31.2	145.6	144.5	+ 1.2	97.6	87.0	+ 10.6
2022 Q1	94.7	114.0	- 19.3	134.6	122.7	+ 11.9	68.4	73.8	- 5.4
Q2	99.7	123.5	- 23.7	133.2	123.6	+ 9.6	81.0	77.3	+ 3.7
Q3	89.0	127.8	- 38.7	126.1	121.4	+ 4.7	81.1	80.3	+ 0.8
Q4	116.1	150.4	- 34.2	139.6	153.4	- 13.8	98.0	94.5	+ 3.5
2023 Q1	96.2	116.9	- 20.7	121.0	122.3	- 1.3	73.3	81.0	- 7.7
Q2	101.8	119.6	- 17.7	138.5	133.6	+ 4.9	87.0	86.6	+ 0.4
Q3	106.1	115.9	- 9.8	123.1	120.0	+ 3.2	87.4	91.5	- 4.1
Q4	121.2	137.8	- 16.6	146.9	154.4	- 7.5	110.4	105.8	+ 4.6

Source: Federal Ministry of Finance, Federal Statistical Office data and Bundesbank calculations. 1 Any amounts of the Bundesbank's profit distribution exceeding the reference value that were used to repay parts of the debt of central government's

special funds are not included here. 2 Including the local authority level of the city states Berlin, Bremen and Hamburg. 3 Data of core budgets and off-budget entities which are assigned to the general government sector.

X. Public finances in Germany

5. Central, state and local government: tax revenue

€ million

Period	Central and state government and European Union						Local government 3	Balance of untransferred tax shares 4	Memo item: Amounts deducted in the Federal budget 5
	Total	Total	Central government 1	State government 1	European Union 2				
2017	734,540	629,458	336,730	271,046	21,682	105,158	- 76	27,368	
2018	776,314	665,005	349,134	287,282	28,589	111,308	+ 1	26,775	
2019	799,416	684,491	355,050	298,519	30,921	114,902	+ 23	25,998	
2020	739,911	632,268	313,381	286,065	32,822	107,916	- 274	30,266	
2021	833,337	706,978	342,988	325,768	38,222	125,000	+ 1,359	29,321	
2022	895,854	760,321	372,121	349,583	38,617	134,146	+ 1,387	34,911	
2023	915,893	774,112	389,114	349,554	35,444	143,663	- 1,882	33,073	
2022 Q1	224,006	189,158	92,112	87,240	9,806	24,772	+ 10,077	7,261	
Q2	224,538	190,982	94,153	86,852	9,977	34,149	- 594	11,576	
Q3	205,544	174,232	84,078	80,020	10,133	33,618	- 2,306	7,953	
Q4	241,767	205,950	101,778	95,471	8,702	41,607	- 5,790	8,121	
2023 Q1	220,950	186,173	93,366	83,536	9,271	26,505	+ 8,271	7,665	
Q2	221,225	186,597	94,492	82,961	9,144	35,152	- 525	8,959	
Q3	230,151	195,334	98,626	87,824	8,884	34,958	- 141	8,678	
Q4	243,568	206,008	102,631	95,233	8,145	47,048	- 9,488	7,770	
2024 Q1	225,304	188,806	96,283	85,277	7,246	25,910	+ 10,588	7,999	
2023 Apr.	.	50,321	25,108	22,328	2,885	.	.	2,486	
May	.	56,035	28,526	24,387	3,121	.	.	3,986	
2024 Apr.	.	54,202	27,595	24,273	2,333	.	.	2,769	
May	.	57,375	29,479	25,543	2,353	.	.	2,769	

Sources: Federal Ministry of Finance, Federal Statistical Office and Bundesbank calculations. **1** Before deducting or adding supplementary central government transfers, regionalisation funds (local public transport), compensation for the transfer of motor vehicle tax to central government and consolidation assistance, which central government remits to state government. See the last column for the volume of these amounts which are deducted from tax revenue in the Federal budget. **2** Customs duties and

shares in VAT and gross national income accruing to the EU from central government tax revenue. **3** Including local government taxes in the city states Berlin, Bremen and Hamburg. Including revenue from offshore wind farms. **4** Difference between local government's share in the joint taxes received by the state government cash offices in the period in question (see Table X. 6) and the amounts passed on to local government in the same period. **5** Volume of the positions mentioned under footnote 1.

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

€ million

Period	Joint taxes											Local government share in joint taxes		
	Total 1	Income taxes 2					Value added taxes (VAT) 7			Local business tax transfers 8	Central government taxes 9		State government taxes 9	EU customs duties
		Total	Wage tax 3	Assessed income tax 4	Corporation tax 5	Investment income tax 6	Total	Domestic VAT	Import VAT					
2017	674,598	312,462	195,524	59,428	29,259	28,251	226,355	170,498	55,856	8,580	99,934	22,205	5,063	45,141
2018	713,576	332,141	208,231	60,415	33,425	30,069	234,800	175,437	59,363	9,078	108,586	23,913	5,057	48,571
2019	735,869	344,016	219,660	63,711	32,013	28,632	243,256	183,113	60,143	8,114	109,548	25,850	5,085	51,379
2020	682,376	320,798	209,286	58,982	24,268	28,261	219,484	168,700	50,784	3,954	105,632	27,775	4,734	50,107
2021	760,953	370,296	218,407	72,342	42,124	37,423	250,800	187,631	63,169	4,951	98,171	31,613	5,122	53,976
2022	814,886	390,111	227,205	77,411	46,334	39,161	284,850	198,201	86,649	6,347	96,652	30,097	6,829	54,565
2023	829,774	399,271	236,227	73,388	44,852	44,803	291,394	212,596	78,798	6,347	101,829	25,199	5,734	55,662
2022 Q1	203,130	96,245	56,206	20,915	11,178	7,946	73,584	54,234	19,350	615	22,252	8,975	1,459	13,972
Q2	204,740	101,822	60,363	17,194	11,246	13,019	67,763	46,755	21,008	1,521	24,441	7,564	1,630	13,758
Q3	185,552	82,392	43,431	17,598	10,724	10,639	71,164	49,323	21,841	1,471	21,657	7,115	1,753	11,320
Q4	221,464	109,652	67,205	21,704	13,186	7,557	72,339	47,889	24,451	2,740	28,302	6,444	1,987	15,514
2023 Q1	199,764	94,453	55,669	19,728	10,700	8,357	73,522	52,197	21,325	370	23,110	6,815	1,494	13,591
Q2	199,993	98,917	59,538	15,467	12,406	11,506	67,260	47,855	19,405	1,499	24,740	6,142	1,435	13,396
Q3	208,722	98,832	56,370	17,010	9,902	15,550	76,093	56,986	19,106	1,583	24,665	6,160	1,389	13,388
Q4	221,295	107,069	64,651	21,184	11,844	9,390	74,519	55,557	18,962	2,895	29,314	6,082	1,417	15,287
2024 Q1	202,975	97,423	57,101	19,102	10,141	11,080	73,613	56,469	17,144	489	23,846	6,478	1,125	14,168
2023 Apr.	53,953	23,064	19,855	- 112	1,128	2,193	19,788	13,838	5,950	1,231	7,358	2,021	492	3,633
May	59,648	23,002	19,140	- 287	937	3,212	25,870	18,726	7,144	258	8,140	1,915	463	3,613
2024 Apr.	58,136	24,043	20,954	- 361	- 155	3,604	22,567	16,494	6,073	1,354	7,685	2,041	446	3,934
May	61,173	25,453	19,929	- 308	665	5,167	24,517	17,975	6,542	244	8,208	2,285	465	3,798

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 2023: 47.5:49.7:2.8. The EU share is deducted from central government's share. **8** Respective percentage share of central and state government for 2023: 41.4:58.6. **9** For the breakdown, see Table X. 7.

X. Public finances in Germany

7. Central, state and local government: individual taxes

€ million

Period	Central government taxes 1								State government taxes 1				Local government taxes		
	Energy tax	Solidarity surcharge	Tobacco tax	Insurance tax	Motor vehicle tax	Electricity tax	Alcohol tax	Other	Tax on the acquisition of land and buildings	Inheritance tax	Betting and lottery tax	Other	Total	of which:	
														Local business tax 2	Real property taxes
2017	41,022	17,953	14,399	13,269	8,948	6,944	2,094	- 4,695	13,139	6,114	1,837	1,115	68,522	52,899	13,966
2018	40,882	18,927	14,339	13,779	9,047	6,858	2,133	2,622	14,083	6,813	1,894	1,122	71,817	55,904	14,203
2019	40,683	19,646	14,257	14,136	9,372	6,689	2,118	2,648	15,789	6,987	1,975	1,099	71,661	55,527	14,439
2020	37,635	18,676	14,651	14,553	9,526	6,561	2,238	1,792	16,055	8,600	2,044	1,076	61,489	45,471	14,676
2021	37,120	11,028	14,733	14,980	9,546	6,691	2,089	1,984	18,335	9,824	2,333	1,121	77,335	61,251	14,985
2022	33,667	11,978	14,229	15,672	9,499	6,830	2,191	2,585	17,122	9,226	2,569	1,180	87,315	70,382	15,282
2023	36,658	12,239	14,672	16,851	9,514	6,832	2,159	2,904	12,203	9,286	2,477	1,233	92,466	75,265	15,493
2022 Q1	4,452	2,840	2,372	7,175	2,594	1,785	531	503	5,061	2,827	701	385	21,492	17,454	3,577
Q2	9,092	3,518	3,648	2,872	2,433	1,722	505	651	4,406	2,238	661	259	21,318	16,839	4,077
Q3	7,103	2,571	3,742	3,059	2,325	1,598	549	710	4,100	2,138	596	281	21,463	16,792	4,249
Q4	13,020	3,049	4,467	2,567	2,147	1,725	606	722	3,555	2,023	611	254	23,043	19,298	3,380
2023 Q1	4,362	2,888	2,669	7,637	2,632	1,749	530	643	3,362	2,368	666	420	21,555	17,471	3,610
Q2	8,796	3,649	3,830	3,091	2,475	1,669	517	712	2,937	2,323	615	267	22,731	18,117	4,192
Q3	9,477	2,607	3,879	3,309	2,339	1,749	532	773	2,997	2,302	577	284	23,013	18,294	4,271
Q4	14,023	3,095	4,294	2,813	2,068	1,665	580	776	2,907	2,292	620	263	25,168	21,383	3,421
2024 Q1	4,488	3,028	2,672	8,255	2,661	1,540	520	681	2,986	2,388	651	453	22,819	18,587	3,718
2023 Apr.	2,827	614	1,104	1,054	769	574	185	229	904	804	230	82	.	.	.
May	3,123	701	1,377	1,157	805	561	183	233	1,016	649	193	57	.	.	.
2024 Apr.	2,777	652	1,404	1,116	868	486	137	245	1,016	735	204	87	.	.	.
May	2,918	789	1,493	1,285	882	450	151	241	1,051	940	202	91	.	.	.

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

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

€ million

Period	Revenue 1			Expenditure 1				Assets 3			Memo item: Administrative assets
	Total	of which:		Total	of which:		Deficit/surplus	Total	Deposits 4	Securities	
		Contributions 2	Payments from central government		Pension payments	Pensioners' health insurance					
2017	299,826	211,424	87,502	299,297	255,261	18,028	+ 529	35,366	33,740	1,335	4,032
2018	312,788	221,572	90,408	308,356	263,338	18,588	+ 4,432	40,345	38,314	1,713	4,008
2019	327,298	232,014	94,467	325,436	277,282	20,960	+ 1,861	42,963	40,531	2,074	3,974
2020	335,185	235,988	98,447	339,072	289,284	21,865	- 3,887	39,880	38,196	1,286	3,901
2021	348,679	245,185	102,772	347,486	296,343	22,734	+ 1,192	42,014	40,320	1,241	3,807
2022	363,871	258,269	104,876	360,436	308,168	23,792	+ 3,435	46,087	44,181	1,399	3,746
2023	382,540	271,852	108,836	381,073	325,369	25,346	+ 1,467	48,869	46,649	1,637	3,697
2021 Q1	83,066	57,351	25,542	86,048	73,799	5,600	- 2,982	36,888	35,326	1,166	3,887
Q2	86,386	60,666	25,545	86,486	73,905	5,679	- 100	36,941	35,554	988	3,871
Q3	85,535	59,941	25,468	87,123	74,453	5,718	- 1,588	36,041	34,670	973	3,840
Q4	92,818	67,211	25,415	87,385	74,556	5,730	+ 5,432	41,974	40,310	1,241	3,835
2022 Q1	86,684	60,599	25,937	86,841	74,568	5,734	- 157	41,784	39,952	1,367	3,783
Q2	90,040	63,978	25,879	87,138	74,644	5,756	+ 2,903	44,425	42,441	1,513	3,761
Q3	89,284	62,891	26,218	92,606	79,400	6,127	- 3,322	41,548	39,767	1,315	3,775
Q4	96,931	70,750	25,995	93,444	79,944	6,170	+ 3,487	46,082	44,186	1,399	3,767
2023 Q1	91,370	64,171	26,972	92,422	79,330	6,142	- 1,052	45,109	43,030	1,569	3,724
Q2	94,735	67,459	26,942	92,585	79,177	6,165	+ 2,151	47,245	45,043	1,693	3,705
Q3	93,776	66,300	26,950	97,619	83,549	6,513	- 3,843	44,354	42,208	1,632	3,703
Q4	101,578	73,852	27,041	97,967	83,678	6,520	+ 3,611	48,825	46,660	1,637	3,697
2024 Q1	96,340	67,378	28,344	97,801	83,894	6,560	- 1,461	46,926	44,166	2,179	3,758

Sources: German pension insurance scheme and Bundesbank calculations. * Excluding the German pension insurance scheme for mining, railway and maritime industries. The final annual figures generally differ from the total of the reported quarterly figures as the latter are not revised. 1 Including financial compensation payments. Excluding in-

vestment spending and proceeds. 2 Including contributions for recipients of government cash benefits. 3 Largely corresponds to the sustainability reserves. End of year or quarter. 4 Including cash.

X. Public finance in Germany

9. Federal Employment Agency: budgetary development *

€ million

Period	Revenue			Expenditure						Deficit/ surplus	Memo item: Deficit- offsetting grant or loan from central government
	Total 1	of which:		Total	of which:						
		Contributions	Insolvency compen- sation levy		Unemploy- ment benefit 2	Short-time working benefits 3	Job promotion 4	Insolvency benefit payment	Adminis- trative expenditure 5		
2017	37,819	32,501	882	31,867	14,055	769	7,043	687	6,444	+ 5,952	-
2018	39,335	34,172	622	33,107	13,757	761	6,951	588	8,129	+ 6,228	-
2019	35,285	29,851	638	33,154	15,009	772	7,302	842	6,252	+ 2,131	-
2020	33,678	28,236	630	61,013	20,617	22,719	7,384	1,214	6,076	- 27,335	6,913
2021	35,830	29,571	1,302	57,570	19,460	21,003	7,475	493	6,080	- 21,739	16,935
2022	37,831	31,651	1,062	37,530	16,588	3,779	7,125	534	6,256	+ 300	423
2023	42,245	36,058	748	39,233	18,799	981	7,614	1,236	7,006	+ 3,012	- 423
2021 Q1	8,228	6,747	289	18,260	5,956	8,006	1,935	184	1,391	- 10,033	-
Q2	8,830	7,301	324	16,720	5,029	7,495	1,912	108	1,452	- 7,890	-
Q3	8,791	7,290	330	12,042	4,447	3,631	1,744	91	1,452	- 3,251	-
Q4	9,982	8,234	359	10,547	4,028	1,871	1,884	110	1,785	- 565	16,935
2022 Q1	8,827	7,374	251	10,685	4,424	2,037	1,821	135	1,412	- 1,858	-
Q2	9,327	7,857	262	9,457	4,091	1,180	1,794	147	1,450	- 130	-
Q3	9,278	7,740	261	8,401	4,056	406	1,621	107	1,506	+ 877	-
Q4	10,398	8,679	289	8,987	4,016	156	1,889	145	1,888	+ 1,411	423
2023 Q1	9,836	8,442	178	9,942	4,727	408	1,858	376	1,550	- 106	-
Q2	10,387	8,976	186	9,661	4,604	290	1,902	271	1,689	+ 726	-
Q3	10,361	8,804	182	9,351	4,712	140	1,775	284	1,691	+ 1,010	-
Q4	11,661	9,836	202	10,278	4,755	144	2,079	306	2,076	+ 1,382	- 423
2024 Q1	10,298	8,903	183	11,237	5,511	465	2,074	380	1,729	- 939	-

Source: Federal Employment Agency and Bundesbank calculations. * Including transfers to the civil servants' pension fund. 1 Excluding central government deficit-offsetting grant or loan. 2 Unemployment benefit in case of unemployment. 3 Including seasonal short-time working benefits and restructuring short-time working benefits, restructuring measures and refunds of social contributions. 4 Vocational training, meas-

ures to encourage job take-up, rehabilitation, integration, compensation top-up payments and promotion of business start-ups. 5 Including collection charges to other social security funds, excluding administrative expenditure within the framework of the basic allowance for job seekers.

10. Statutory health insurance scheme: budgetary development

€ million

Period	Revenue 1			Expenditure 1								Deficit/ surplus
	Total	of which:		Total	of which:							
		Contri- butions	Central government funds 2		Hospital treatment	Pharma- ceuticals	Medical treatment	Dental treatment 3	Remedies and therapeutic appliances	Sickness benefits	Adminis- trative expend- iture 4	
2017	233,814	216,227	14,500	230,773	72,303	37,389	38,792	14,070	14,776	12,281	10,912	+ 3,041
2018	242,360	224,912	14,500	239,706	74,506	38,327	39,968	14,490	15,965	13,090	11,564	+ 2,654
2019	251,295	233,125	14,500	252,440	77,551	40,635	41,541	15,010	17,656	14,402	11,136	- 1,145
2020	269,158	237,588	27,940	275,268	78,531	42,906	44,131	14,967	18,133	15,956	11,864	- 6,110
2021	289,270	249,734	36,977	294,602	82,748	46,199	45,058	16,335	20,163	16,612	11,727	- 5,332
2022	315,248	262,367	50,223	310,594	85,061	48,354	46,379	16,737	21,259	17,947	12,418	+ 4,654
2023	304,441	278,742	21,896	309,596	90,891	49,653	47,157	17,593	23,214	19,112	12,681	- 5,155
2021 Q1	72,970	59,338	13,303	72,660	19,631	11,175	11,564	4,069	4,564	4,287	2,967	+ 310
Q2	71,964	61,819	9,965	74,492	20,287	11,275	11,536	4,219	5,085	4,120	2,850	- 2,529
Q3	70,592	61,899	7,942	73,569	20,748	11,756	10,730	4,060	5,085	4,004	2,849	- 2,977
Q4	74,020	66,678	5,767	73,209	21,340	12,043	11,252	4,062	5,290	4,200	3,109	+ 810
2022 Q1	79,253	62,142	17,049	81,493	20,550	11,891	11,847	4,286	5,216	4,574	3,510	- 2,240
Q2	79,112	64,611	14,280	79,269	21,080	11,753	11,536	4,249	5,335	4,457	2,958	- 158
Q3	75,516	65,242	9,804	75,011	21,164	12,221	11,384	3,956	5,352	4,441	2,996	+ 505
Q4	81,512	70,384	9,091	74,894	21,659	12,242	11,566	4,310	5,442	4,486	3,148	+ 6,617
2023 Q1	73,718	66,513	6,759	77,593	22,196	12,209	12,012	4,370	5,621	4,927	3,169	- 3,875
Q2	73,722	68,792	4,495	76,031	22,421	12,284	11,762	4,476	5,762	4,682	3,166	- 2,309
Q3	75,330	69,236	5,244	76,967	22,632	12,540	11,502	4,371	5,958	4,695	3,030	- 1,637
Q4	81,548	74,199	5,399	78,860	23,218	12,720	11,923	4,437	5,802	4,809	3,452	+ 2,688
2024 Q1	75,004	70,700	3,617	80,253	24,066	13,319	12,519	4,599	6,148	5,148	3,069	- 5,249

Source: Federal Ministry of Health and Bundesbank calculations. 1 The final annual figures generally differ from the total of the reported quarterly figures as the latter are not revised. Excluding revenue and expenditure as part of the risk structure compensation

scheme. 2 Federal grant and liquidity assistance. 3 Including dentures. 4 Net, i.e. after deducting reimbursements for expenses for levying contributions incurred by other social security funds.

X. Public finances in Germany

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

€ million

Period	Revenue		Expenditure 1						Deficit/ surplus
	Total	of which:	Total	of which:					
		Contributions		Non-cash care benefits	Inpatient care total 2	Nursing benefit	Contributions to pension insur- ance scheme 3	Administrative expenditure	
2017	36,305	36,248	38,862	6,923	16,034	10,010	1,611	1,606	- 2,557
2018	37,949	37,886	41,265	7,703	16,216	10,809	2,093	1,586	- 3,315
2019	47,228	46,508	44,008	8,257	16,717	11,689	2,392	1,781	+ 3,220
2020	50,622	48,003	49,284	8,794	16,459	12,786	2,714	1,946	+ 1,338
2021	52,573	49,764	53,903	9,573	16,511	13,865	3,070	2,024	- 1,330
2022	57,944	52,604	60,100	10,405	20,542	14,872	3,223	2,166	- 2,156
2023	61,374	58,807	59,178	11,506	22,513	16,035	3,582	2,267	+ 2,196
2021 Q1	12,093	11,831	13,344	2,355	3,971	3,387	725	512	- 1,251
Q2	12,933	12,329	13,521	2,287	4,030	3,421	745	510	- 587
Q3	12,624	12,294	13,390	2,393	4,182	3,466	783	509	- 767
Q4	14,853	13,242	13,595	2,475	4,270	3,646	788	503	+ 1,258
2022 Q1	12,912	12,412	14,739	2,564	4,974	3,572	775	529	- 1,827
Q2	15,350	12,951	14,827	2,464	5,026	3,698	795	548	+ 523
Q3	13,708	13,021	15,387	2,638	5,197	3,755	802	542	- 1,679
Q4	15,813	14,067	15,078	2,581	5,281	3,892	837	528	+ 735
2023 Q1	14,283	13,169	14,698	2,876	5,377	3,846	843	570	- 415
Q2	14,227	13,668	14,392	2,745	5,539	3,940	869	561	- 165
Q3	15,585	15,228	14,823	2,867	5,776	4,074	891	571	+ 762
Q4	16,920	16,469	15,317	2,863	5,782	4,317	949	560	+ 1,603
2024 Q1	15,896	15,525	16,546	3,207	6,038	4,387	950	645	- 651

Source: Federal Ministry of Health and Bundesbank calculations. * The final annual figures generally differ from the total of the reported provisional quarterly figures as the latter are not revised. 1 Including transfers to the long-term care provident fund. 2 In-

cluding benefits for short-term care and daytime/night-time nursing care, inter alia. 3 For non-professional carers.

12. Maastricht debt by creditor

€ million

Period (end of year or quarter)	Banking system					Domestic non-banks					Foreign creditors
	Total	Bundesbank		Domestic MFIs		Total	Other domestic financial corporations		Other domestic creditors		
		Total	of which: Debt securities	Total	of which: Debt securities		Total	of which: Debt securities	Total	of which: Debt securities	
2017	2,130,324	319,159	305,301	546,063	194,619	180,104	81,125	56,798	10,456	1,028,201	941,750
2018	2,083,675	364,731	350,487	504,476	167,506	186,346	89,794	56,071	8,725	972,052	892,222
2019	2,069,889	366,562	352,025	465,628	158,119	183,714	88,771	64,379	7,225	989,606	908,749
2020	2,340,849	522,392	507,534	505,373	157,828	191,231	99,840	54,238	8,373	1,067,615	996,417
2021	2,495,538	716,004	700,921	497,968	144,646	191,580	103,049	51,633	7,435	1,038,353	969,245
2022	2,561,674	742,514	727,298	509,376	128,892	210,885	126,039	58,165	10,782	1,040,734	975,548
2023 P	2,622,669	696,287	680,801	461,592	126,354	207,203	124,202	72,214	23,030	1,185,373	1,121,033
2021 Q1	2,369,872	561,444	546,540	480,026	162,961	190,136	99,333	63,796	8,060	1,074,470	1,010,641
Q2	2,419,762	620,473	605,430	481,517	151,182	189,993	99,735	53,897	7,699	1,073,882	1,008,532
Q3	2,453,545	669,659	654,600	484,986	152,068	191,571	101,742	54,275	8,070	1,053,054	987,736
Q4	2,495,538	716,004	700,921	497,968	144,646	191,580	103,049	51,633	7,435	1,038,353	969,245
2022 Q1	2,499,123	737,978	722,843	481,772	143,411	194,096	106,165	50,834	6,959	1,034,442	967,915
Q2	2,537,416	759,385	744,213	485,428	133,999	202,681	115,577	53,612	8,086	1,036,310	970,547
Q3	2,551,282	741,360	726,147	512,999	126,865	202,278	116,268	55,917	8,987	1,038,727	968,178
Q4	2,561,674	742,514	727,298	509,376	128,892	210,885	126,039	58,165	10,782	1,040,734	975,548
2023 Q1 P	2,587,201	741,587	726,326	480,650	129,372	208,934	124,777	63,478	16,123	1,092,551	1,029,541
Q2 P	2,586,471	719,981	704,639	458,449	125,988	209,153	124,769	65,763	20,879	1,133,126	1,069,341
Q3 P	2,627,247	706,113	690,704	455,180	126,626	208,036	124,077	67,819	23,354	1,190,099	1,124,411
Q4 P	2,622,669	696,287	680,801	461,592	126,354	207,203	124,202	72,214	23,030	1,185,373	1,121,033
2024 Q1 P	2,635,910	683,097	667,557	458,913	128,892	204,031	123,217	76,303	24,400	1,213,567	1,150,545

Source: Bundesbank calculations based on data from the Federal Statistical Office.

X. Public finances in Germany

13. Maastricht debt by instrument

€ million

Period (end of year or quarter)	Total	Currency and deposits ¹	Debt securities by original maturity		Loans by original maturity		Memo item: 2	
			Short-term debt securities (up to one year)	Long-term debt securities (more than one year)	Short-term loans (up to one year)	Long-term loans (more than one year)	Debt vis-à-vis other government subsectors	Claims vis-à-vis other government subsectors
General government								
2017	2,130,324	14,298	48,789	1,484,462	88,841	493,934	.	.
2018	2,083,675	14,680	52,572	1,456,160	79,171	481,091	.	.
2019	2,069,889	14,449	56,350	1,458,540	64,464	476,086	.	.
2020	2,340,849	14,486	173,851	1,596,141	85,384	470,987	.	.
2021 Q1	2,369,872	12,283	190,039	1,637,496	62,705	467,348	.	.
Q2	2,419,762	13,065	182,676	1,689,902	69,170	464,949	.	.
Q3	2,453,545	13,565	192,489	1,711,727	70,496	465,268	.	.
Q4	2,495,538	17,743	195,421	1,729,876	88,481	464,017	.	.
2022 Q1	2,499,123	15,676	172,809	1,774,484	70,930	465,223	.	.
Q2	2,537,416	17,793	161,844	1,810,578	76,484	470,717	.	.
Q3	2,551,282	22,631	149,825	1,796,620	82,049	500,157	.	.
Q4	2,561,674	16,985	150,371	1,818,189	112,199	463,932	.	.
2023 Q1 P	2,587,201	14,994	145,736	1,880,403	83,437	462,631	.	.
Q2 P	2,586,471	14,990	154,379	1,891,236	66,864	459,003	.	.
Q3 P	2,627,247	17,760	165,992	1,923,180	59,627	460,688	.	.
Q4 P	2,622,669	16,514	148,889	1,926,532	66,232	464,502	.	.
2024 Q1 P	2,635,910	14,910	135,667	1,958,944	62,540	463,849	.	.
Central government								
2017	1,361,492	14,298	36,297	1,131,896	48,305	130,696	1,131	10,618
2018	1,334,500	14,680	42,246	1,107,140	43,067	127,367	933	9,975
2019	1,312,338	14,449	38,480	1,101,866	29,956	127,587	605	10,301
2020	1,526,491	14,486	154,498	1,180,683	48,414	128,410	609	14,521
2021 Q1	1,552,060	12,283	167,485	1,212,495	31,284	128,513	604	22,929
Q2	1,602,137	13,065	165,374	1,259,206	36,297	128,195	647	29,448
Q3	1,630,056	13,565	170,962	1,280,586	37,116	127,826	693	31,382
Q4	1,679,310	17,743	176,428	1,300,416	57,779	126,943	618	8,078
2022 Q1	1,684,290	15,676	155,123	1,340,340	41,680	131,472	576	10,430
Q2	1,723,415	17,793	147,681	1,373,616	47,196	137,129	623	10,491
Q3	1,757,005	22,631	144,999	1,369,628	55,559	164,188	828	13,101
Q4	1,775,982	16,985	146,989	1,391,638	93,352	127,017	8,815	9,011
2023 Q1 P	1,798,688	14,994	140,641	1,456,147	59,981	126,926	3,664	10,500
Q2 P	1,806,085	14,990	150,168	1,471,888	41,802	127,237	2,889	11,235
Q3 P	1,848,614	17,760	161,140	1,503,891	38,943	126,880	6,373	9,852
Q4 P	1,850,057	16,514	144,507	1,511,599	51,457	125,980	15,858	9,103
2024 Q1 P	1,856,300	14,910	129,404	1,533,118	51,608	127,259	18,539	10,437
State government								
2017	616,785	-	12,543	354,688	19,790	229,764	14,038	2,046
2018	603,166	-	10,332	351,994	19,250	221,590	14,035	1,891
2019	612,698	-	17,873	360,495	19,076	215,254	14,934	1,826
2020	664,421	-	19,354	419,862	19,481	205,724	11,924	1,410
2021 Q1	667,651	-	22,556	429,623	14,375	201,097	10,942	1,995
Q2	667,940	-	17,304	435,709	16,178	198,750	12,454	2,041
Q3	673,373	-	21,528	436,499	16,334	199,012	11,414	2,110
Q4	665,250	-	18,994	434,930	14,074	197,252	12,441	1,772
2022 Q1	663,426	-	17,688	439,767	12,533	193,438	11,634	1,915
Q2	660,169	-	14,166	442,621	12,404	190,979	11,393	1,742
Q3	643,826	-	4,828	432,653	14,873	191,472	14,067	2,147
Q4	634,151	-	3,384	432,186	9,881	188,700	11,585	1,719
2023 Q1 P	631,953	-	5,099	429,985	10,976	185,893	11,918	2,360
Q2 P	624,231	-	4,215	424,818	11,908	183,291	13,336	2,041
Q3 P	621,611	-	4,856	424,945	8,727	183,084	11,049	2,629
Q4 P	623,057	-	4,392	421,349	12,631	184,684	11,519	5,357
2024 Q1 P	630,848	-	6,272	432,381	11,585	180,610	12,385	12,405
Local government								
2017	168,304	-	-	3,082	24,909	140,313	1,881	466
2018	162,175	-	1	3,046	20,903	138,225	1,884	497
2019	161,367	-	-	2,996	19,607	138,763	1,856	532
2020	163,163	-	-	3,366	18,520	141,276	1,402	330
2021 Q1	163,189	-	-	3,121	17,998	142,070	2,009	325
Q2	164,321	-	-	3,121	18,969	142,231	2,070	323
Q3	163,772	-	-	3,000	18,156	142,616	2,127	321
Q4	165,316	-	-	3,241	18,011	144,064	1,813	313
2022 Q1	164,860	-	-	3,052	17,532	144,276	1,884	349
Q2	166,840	-	-	2,902	17,566	146,373	1,724	370
Q3	166,624	-	-	2,856	15,623	148,145	2,098	392
Q4	172,244	-	-	2,896	17,917	151,431	1,614	399
2023 Q1 P	173,042	-	-	2,883	17,102	153,057	2,163	422
Q2 P	172,832	-	-	2,988	17,678	152,166	1,746	748
Q3 P	175,462	-	-	2,825	18,287	154,350	2,329	796
Q4 P	177,735	-	-	2,884	17,295	157,557	2,385	798
2024 Q1 P	180,561	-	-	2,723	18,243	159,595	2,392	825

For footnotes see end of table.

X. Public finances in Germany

13. Maastricht debt by instrument (cont'd)

€ million

Period (end of year or quarter)	Currency and deposits ¹	Debt securities by original maturity		Loans by original maturity		Memo item: ²	
		Short-term debt securities (up to one year)	Long-term debt securities (more than one year)	Short-term loans (up to one year)	Long-term loans (more than one year)	Debt vis-à-vis other government subsectors	Claims vis-à-vis other government subsectors
Social security funds							
2017	807	-	-	262	545	15	3,934
2018	704	-	-	388	316	16	4,506
2019	899	-	-	375	524	16	4,753
2020	7,641	-	-	7,128	513	6,931	4,606
2021 Q1	16,381	-	-	15,985	395	15,853	4,160
Q2	21,395	-	-	20,995	400	20,860	4,220
Q3	24,449	-	-	24,053	395	23,872	4,292
Q4	553	-	-	131	422	19	4,729
2022 Q1	3,378	-	-	2,883	496	2,739	4,140
Q2	3,690	-	-	3,098	592	2,958	4,095
Q3	4,151	-	-	3,459	692	3,330	4,683
Q4	2,755	-	-	608	2,147	1,442	12,328
2023 Q1 P	3,527	-	-	1,411	2,115	2,263	6,728
Q2 P	2,736	-	-	595	2,141	1,442	5,389
Q3 P	3,754	-	-	1,600	2,154	2,442	8,917
Q4 P	2,624	-	-	742	1,882	1,042	15,547
2024 Q1 P	3,036	-	-	1,195	1,841	1,519	11,168

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.

14. Maastricht debt of central government by instrument and category

€ million

Period (end of year or quarter)	Currency and deposits ²		Debt securities									Loans ¹
	Total ¹	Federal day bond	Total ¹	of which: ³					Inflation- linked Federal securities ⁶	Capital indexation of inflation- linked securities		
				Conventional Federal bonds (Bunds)	Conventional Federal notes (Bobs)	Conventional Federal Treasury notes (Schätze) ⁴	Treasury discount paper (Bubills) ⁵	Federal savings notes			Green Federal securities	
2007	987,909	6,675	917,584	564,137	173,949	102,083	37,385	10,287	.	13,464	506	63,650
2008	1,019,905	12,466	928,754	571,913	164,514	105,684	40,795	9,649	.	19,540	1,336	78,685
2009	1,086,173	9,981	1,013,072	577,798	166,471	113,637	104,409	9,471	.	24,730	1,369	63,121
2010	1,337,160	10,890	1,084,019	602,624	185,586	126,220	85,867	8,704	.	35,906	2,396	242,251
2011	1,346,869	10,429	1,121,331	615,200	199,284	130,648	58,297	8,208	.	44,241	3,961	215,109
2012	1,390,377	9,742	1,177,168	631,425	217,586	117,719	56,222	6,818	.	52,119	5,374	203,467
2013	1,392,735	10,582	1,192,025	643,200	234,759	110,029	50,004	4,488	.	51,718	4,730	190,127
2014	1,398,472	12,146	1,206,203	653,823	244,633	103,445	27,951	2,375	.	63,245	5,368	180,123
2015	1,371,933	13,949	1,188,463	663,296	232,387	96,389	18,536	1,305	.	74,495	5,607	169,521
2016	1,365,579	15,491	1,179,062	670,245	221,551	95,727	23,609	737	.	66,464	3,602	171,026
2017	1,361,492	14,298	1,168,193	693,687	203,899	91,013	10,037	289	.	72,855	4,720	179,001
2018	1,334,500	14,680	1,149,386	710,513	182,847	86,009	12,949	48	.	64,647	5,139	170,435
2019	1,312,338	14,449	1,140,346	719,747	174,719	89,230	13,487	.	.	69,805	6,021	157,543
2020	1,526,491	14,486	1,335,181	801,910	179,560	98,543	113,141	.	9,876	58,279	3,692	176,824
2021	1,679,310	17,743	1,476,844	892,464	190,839	103,936	153,978	.	21,627	65,390	6,722	184,722
2022	1,775,982	16,985	1,538,628	947,349	198,084	113,141	137,990	.	36,411	72,357	15,844	220,369
2023 P	1,850,057	16,514	1,656,105	1,045,613	216,276	119,180	135,469	.	53,965	60,470	14,686	177,438
2021 Q1	1,552,060	12,283	1,379,980	814,864	189,935	103,910	134,800	.	11,026	60,687	3,857	159,797
Q2	1,602,137	13,065	1,424,579	861,455	184,413	104,997	139,451	.	16,526	62,569	5,056	164,492
Q3	1,630,056	13,565	1,451,549	869,195	198,692	105,398	146,533	.	19,824	63,851	5,456	164,942
Q4	1,679,310	17,743	1,476,844	892,464	190,839	103,936	153,978	.	21,627	65,390	6,722	184,722
2022 Q1	1,684,290	15,676	1,495,463	911,280	204,534	108,702	140,427	.	23,961	67,776	7,809	173,152
Q2	1,723,415	17,793	1,521,297	937,949	198,472	111,343	138,495	.	29,425	70,217	11,209	184,325
Q3	1,757,005	22,631	1,514,627	918,838	208,509	111,675	137,740	.	35,527	71,498	12,879	219,747
Q4	1,775,982	16,985	1,538,628	947,349	198,084	113,141	137,990	.	36,411	72,357	15,844	220,369
2023 Q1 P	1,798,688	14,994	1,596,787	987,363	213,514	120,904	127,143	.	39,459	73,591	15,497	186,907
Q2 P	1,806,085	14,990	1,622,056	1,007,004	211,742	124,160	139,012	.	50,243	59,227	13,604	169,039
Q3 P	1,848,614	17,760	1,665,030	1,021,675	226,340	125,255	148,407	.	52,763	59,923	13,863	165,823
Q4 P	1,850,057	16,514	1,656,105	1,045,613	216,276	119,180	135,469	.	53,965	60,470	14,686	177,438
2024 Q1 P	1,856,300	14,910	1,662,522	1,054,941	226,133	119,517	119,164	.	58,565	60,312	14,048	178,867

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 Including medium-term notes issued by the Treuhand agency (expired in 2011). ⁵ Including Federal Treasury financing papers (expired in 2014). ⁶ Excluding inflation-induced indexation of capital.

XI. Economic conditions in Germany

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

Item	2021			2022			2023		2024				2024
	2021	2022	2023	2021	2022	2023	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	Index 2015=100			Annual percentage change									
At constant prices, chained													
I. Origin of domestic product													
Production sector (excluding construction)	108.2	107.6	106.0	7.4	- 0.5	- 1.5	0.3	- 2.1	1.2	- 1.2	- 3.3	- 2.7	- 4.7
Construction	97.4	94.1	93.7	- 5.3	- 3.3	- 0.4	- 4.9	- 7.0	- 1.9	- 1.1	0.8	0.3	- 0.9
Wholesale/retail trade, transport and storage, hotel and restaurant services	102.8	106.3	105.2	1.2	3.3	- 1.0	1.6	- 0.9	0.3	- 1.7	- 1.3	- 1.2	- 0.5
Information and communication	130.1	136.5	140.4	7.8	5.0	2.8	6.8	3.8	2.8	3.2	2.5	2.9	1.9
Financial and insurance activities	100.8	105.0	103.9	6.8	4.2	- 1.1	2.9	6.3	1.5	- 0.7	- 1.4	- 3.7	- 1.2
Real estate activities	102.6	103.5	104.7	1.4	0.8	1.1	0.8	- 0.3	0.9	0.6	1.6	1.4	1.2
Business services ¹	109.7	112.5	113.1	4.6	2.6	0.5	1.0	1.0	- 0.1	0.5	0.7	0.9	0.7
Public services, education and health	106.8	109.6	111.1	1.2	2.7	1.4	2.5	3.1	3.0	1.3	0.4	0.9	0.8
Other services	90.3	95.7	97.7	0.2	6.0	2.0	2.4	5.7	2.1	1.4	1.5	3.1	1.7
Gross value added	106.1	107.9	107.9	3.3	1.7	0.1	1.3	0.3	1.0	- 0.0	- 0.5	- 0.2	- 0.9
Gross domestic product ²	106.3	108.2	108.0	3.2	1.8	- 0.2	1.2	0.2	0.5	- 0.3	- 0.5	- 0.4	- 0.9
II. Use of domestic product													
Private consumption ³	102.4	106.4	105.6	1.5	3.9	- 0.7	1.8	0.2	- 0.1	- 0.6	- 1.6	- 0.4	0.0
Government consumption	117.5	119.3	118.1	3.1	1.6	- 1.0	0.1	0.1	- 2.3	- 2.6	0.0	0.8	1.5
Machinery and equipment	103.4	107.5	110.5	2.8	4.0	2.8	9.5	4.9	7.1	4.5	1.4	- 1.0	- 4.4
Premises	110.0	108.0	105.1	- 2.6	- 1.8	- 2.7	- 1.6	- 4.8	- 4.1	- 2.4	- 2.0	- 2.3	- 2.1
Other investment ⁴	116.7	115.8	115.1	2.1	- 0.7	- 0.6	- 1.3	1.0	- 0.8	- 0.8	- 0.6	- 0.3	- 0.5
Changes in inventories ^{5,6}	.	.	.	0.9	0.7	- 0.3	1.7	1.3	0.2	0.2	- 0.8	- 0.8	- 0.9
Domestic demand	108.4	111.8	110.7	2.5	3.2	- 1.1	3.1	1.2	- 0.5	- 0.7	- 1.7	- 1.3	- 1.2
Net exports ⁶	.	.	.	0.9	- 1.2	0.8	- 1.8	- 0.9	0.8	0.4	1.3	1.0	0.3
Exports	111.8	115.5	114.8	9.7	3.3	- 0.7	5.3	- 0.2	3.0	- 0.3	- 2.6	- 2.7	- 2.8
Imports	118.0	125.9	122.8	8.9	6.6	- 2.4	10.3	1.8	1.6	- 1.1	- 5.2	- 4.7	- 3.8
Gross domestic product ²	106.3	108.2	108.0	3.2	1.8	- 0.2	1.2	0.2	0.5	- 0.3	- 0.5	- 0.4	- 0.9
At current prices (€ billion)													
III. Use of domestic product													
Private consumption ³	1,785.5	1,979.3	2,090.6	4.5	10.9	5.6	9.3	8.5	8.1	6.3	4.4	4.0	2.9
Government consumption	796.8	850.9	891.5	6.3	6.8	4.8	5.7	5.8	2.1	4.2	6.8	5.9	7.4
Machinery and equipment	227.5	253.4	275.1	4.8	11.4	8.6	18.1	13.1	15.1	11.3	6.4	3.3	- 1.9
Premises	406.5	463.5	486.0	5.7	14.0	4.9	13.3	9.9	10.0	5.3	3.4	1.2	0.1
Other investment ⁴	136.5	139.3	141.9	3.8	2.1	1.9	1.9	2.2	1.6	1.9	2.1	1.9	1.0
Changes in inventories ⁵	69.4	114.1	50.2	.	.	.	.	.	.	.	.	.	.
Domestic use	3,422.2	3,800.5	3,935.3	6.7	11.1	3.5	11.3	8.1	5.8	3.8	1.9	2.9	2.0
Net exports	195.3	76.3	186.9	.	.	.	.	.	.	.	.	.	.
Exports	1,710.3	1,974.2	1,973.3	15.6	15.4	- 0.0	19.0	9.1	7.9	0.4	- 4.6	- 3.3	- 2.3
Imports	1,515.0	1,897.9	1,786.4	18.2	25.3	- 5.9	33.3	13.4	4.7	- 4.6	- 12.9	- 9.1	- 6.4
Gross domestic product ²	3,617.5	3,876.8	4,122.2	6.3	7.2	6.3	5.8	6.2	7.4	6.2	6.2	5.6	3.6
IV. Prices (2015=100)													
Private consumption	108.8	116.1	123.5	3.0	6.7	6.4	7.4	8.3	8.2	6.9	6.0	4.5	2.9
Gross domestic product	112.5	118.4	126.1	3.0	5.3	6.5	4.5	6.0	6.9	6.6	6.7	6.0	4.6
Terms of trade	99.8	95.0	99.1	- 2.9	- 4.9	4.3	- 6.5	- 1.9	1.7	4.4	6.7	4.2	3.2
V. Distribution of national income													
Compensation of employees	1,918.3	2,023.6	2,159.4	3.5	5.5	6.7	4.3	5.4	6.7	7.1	7.2	6.0	6.2
Entrepreneurial and property income	851.0	867.4	921.9	19.5	1.9	6.3	3.8	- 0.6	9.0	9.5	5.7	1.0	- 5.7
National income	2,769.3	2,890.9	3,081.4	7.9	4.4	6.6	4.2	3.7	7.4	7.8	6.7	4.7	2.2
Memo item: Gross national income	3,756.8	4,027.6	4,287.8	7.3	7.2	6.5	5.8	6.0	7.2	6.5	6.6	5.6	3.1

Source: Federal Statistical Office; figures computed in May 2024. 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 software and entertainment, literary or artistic originals) and cultivated assets. ⁵ Including net increase in valubles. ⁶ Contribution of growth to GDP.

XI. Economic conditions in Germany

2. Output in the production sector *

Adjusted for working-day variations ◦

Production sector, total	of which:											
	Construc- tion	Energy	Industry									
			Total	of which: by main industrial grouping				of which: by economic sector				
				Inter- mediate goods	Capital goods	Durable goods	Non- durable goods	Manu- facture of basic metals and fabricated metal products	Manu- facture of computers, electronic and optical products and electrical equipment	Machinery and equipment	Motor vehicels, trailers and semi- trailers	
2021 = 100												
% of total ¹	100	17.08	8.21	74.71	27.84	33.97	2.53	10.36	9.71	9.59	11.83	12.21
Period												
2020	95.9	101.4	96.9	94.8	91.9	96.7	93.5	97.5	91.0	90.0	92.6	101.7
2021	99.3	99.1	99.9	99.3	99.4	99.2	99.2	99.4	99.4	99.3	99.3	99.0
2022	98.7	96.7	98.7	99.2	96.3	101.1	101.0	100.1	97.3	102.9	100.2	103.0
2023	97.0	95.6	84.8	98.6	90.7	106.4	93.5	95.6	93.5	103.7	99.3	116.1
2023 Q1	97.1	82.4	98.2	100.3	94.5	106.6	98.3	95.7	95.9	105.8	96.2	124.2
Q2	97.9	98.4	77.7	100.0	92.7	108.0	92.5	95.2	95.9	103.9	99.5	121.5
Q3	95.7	100.2	72.8	97.2	90.7	103.1	92.1	96.6	93.4	104.4	98.8	107.1
Q4	97.2	101.4	90.6	96.9	84.8	107.9	91.1	94.9	88.8	100.9	102.7	111.6
2024 Q1 ^x	92.2	80.4	90.7	95.0	89.3	99.8	89.0	96.1	90.5	95.5	89.8	111.1
2023 May	97.3	98.3	75.4	99.5	92.4	107.9	91.1	93.1	95.5	102.3	97.8	124.4
June	99.3	100.0	72.4	102.1	93.4	111.0	93.9	98.2	96.7	108.0	105.4	120.5
July ²	97.6	105.1	75.4	98.4	92.4	104.0	91.4	97.6	94.2	104.1	99.4	108.7
Aug. ²	89.5	94.3	71.5	90.4	87.6	91.8	84.7	94.7	89.7	100.8	89.4	90.3
Sep.	100.0	101.3	71.5	102.8	92.1	113.4	100.3	97.4	96.4	108.3	107.6	122.3
Oct.	98.3	101.2	84.0	99.2	91.7	105.9	96.2	98.2	95.1	103.8	95.5	116.7
Nov.	102.1	103.4	91.1	103.0	91.2	114.5	97.2	98.7	95.2	105.0	103.1	128.4
Dec.	91.1	99.6	96.8	88.5	71.5	103.3	79.8	87.7	76.0	93.8	109.6	89.8
2024 Jan. ^x	83.7	63.0	99.0	86.8	84.3	87.5	81.3	92.3	85.1	89.9	80.1	95.0
Feb. ^x	90.8	81.0	86.0	93.5	87.7	98.7	89.7	93.0	88.6	93.0	87.7	112.9
Mar. ^x	102.0	97.2	87.0	104.8	95.9	113.2	95.9	103.1	97.9	103.7	101.6	125.5
Apr. ^x	93.5	93.1	80.1	95.1	88.5	101.2	87.5	94.7	89.8	92.6	88.6	117.7
May ^{x,p}	90.8	91.4	77.0	92.2	86.5	96.6	81.5	95.5	87.4	87.6	84.8	107.9
Annual percentage change												
2020	- 7.7	+ 2.9	- 6.6	- 9.8	- 6.9	- 14.0	- 8.2	- 3.8	- 11.9	- 7.4	- 13.5	- 20.1
2021	+ 3.5	- 2.3	+ 3.1	+ 4.7	+ 8.2	+ 2.6	+ 6.1	+ 1.9	+ 9.2	+ 10.3	+ 7.2	- 2.7
2022	- 0.6	- 2.4	- 1.2	- 0.1	- 3.1	+ 1.9	+ 1.8	+ 0.7	- 2.1	+ 3.6	+ 0.9	+ 4.0
2023	- 1.7	- 1.1	- 14.1	- 0.6	- 5.8	+ 5.2	- 7.4	- 4.5	- 3.9	+ 0.8	- 0.9	+ 12.7
2023 Q1	+ 0.4	- 2.4	- 10.8	+ 2.2	- 5.8	+ 11.7	- 1.5	- 4.7	- 3.7	+ 5.6	+ 2.6	+ 27.0
Q2	- 0.3	- 0.2	- 18.3	+ 1.6	- 6.2	+ 9.8	- 8.6	- 2.1	- 3.3	+ 3.5	+ 2.0	+ 20.7
Q3	- 2.9	+ 0.1	- 20.7	- 1.7	- 5.8	+ 2.8	- 8.7	- 4.1	- 3.4	- 1.2	- 1.0	+ 5.9
Q4	- 4.1	- 2.1	- 7.2	- 4.2	- 5.4	- 2.3	- 10.6	- 6.9	- 5.3	- 4.4	- 6.2	- 0.7
2024 Q1 ^x	- 5.0	- 2.5	- 7.6	- 5.2	- 5.5	- 6.3	- 9.5	+ 0.4	- 5.6	- 9.7	- 6.7	- 10.5
2023 May	+ 0.4	+ 0.5	- 18.7	+ 2.5	- 6.0	+ 12.4	- 9.4	- 3.5	- 2.9	+ 3.0	+ 3.1	+ 25.8
June	- 1.9	- 1.9	- 19.8	- 0.2	- 6.2	+ 5.4	- 7.8	- 1.6	- 3.7	+ 3.8	- 0.3	+ 11.8
July ²	- 2.3	+ 1.2	- 20.6	- 1.1	- 6.6	+ 3.5	- 6.5	- 0.5	- 4.4	± 0.0	+ 0.8	+ 6.4
Aug. ²	- 2.3	- 0.8	- 20.3	- 0.7	- 4.7	+ 4.1	- 9.3	- 2.5	- 1.2	± 0.0	- 3.2	+ 13.7
Sep.	- 3.9	- 0.1	- 21.2	- 3.1	- 6.0	+ 1.1	- 10.0	- 8.9	- 4.4	- 3.4	- 0.8	+ 0.5
Oct.	- 4.0	- 3.2	- 10.1	- 3.7	- 5.4	- 0.7	- 10.6	- 7.7	- 6.1	- 2.6	- 6.7	+ 4.0
Nov.	- 4.5	- 2.8	- 7.4	- 4.5	- 6.2	- 2.6	- 10.8	- 5.9	- 5.3	- 7.1	- 5.8	- 1.6
Dec.	- 3.7	- 0.1	- 4.3	- 4.5	- 4.5	- 3.5	- 10.4	- 7.0	- 4.3	- 3.3	- 6.0	- 5.0
2024 Jan. ^x	- 5.3	- 6.5	- 3.5	- 5.2	- 6.5	- 5.4	- 10.2	- 0.5	- 5.2	- 8.0	- 5.4	- 9.6
Feb. ^x	- 5.6	- 1.6	- 9.3	- 6.1	- 5.5	- 8.4	- 7.4	+ 1.0	- 5.8	- 9.6	- 8.0	- 13.0
Mar. ^x	- 4.3	- 0.4	- 10.4	- 4.4	- 4.5	- 5.3	- 10.8	+ 0.8	- 5.7	- 11.1	- 6.4	- 8.9
Apr. ^x	- 3.7	- 3.9	- 6.2	- 3.5	- 4.2	- 3.7	- 5.5	+ 0.3	- 6.0	- 8.6	- 7.0	- 1.5
May ^{x,p}	- 6.7	- 7.0	+ 2.1	- 7.3	- 6.4	- 10.5	- 10.5	+ 2.6	- 8.5	- 14.4	- 13.3	- 13.3

Source of the unadjusted figures: Federal Statistical Office. * For explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Tables III.1.a to III.1.c ◦ Using JDemetra+ 2.2.2 (X13). ¹ Share of gross value added at factor cost of the production sector in the base year 2021. ² Influenced by a change in holiday dates. ^x Provisional;

estimated and adjusted in advance by the Federal Statistical Office to the results of the Quarterly Production Survey and the Quarterly Survey in the specialised construction industry, respectively.

XI. Economic conditions in Germany

3. Orders received by industry *

Adjusted for working-day variations ◦

Period	Industry		of which:				Consumer goods		of which:				
	2021 = 100	Annual percentage change	Intermediate goods		Capital goods		2021 = 100	Annual percentage change	Durable goods		Non-durable goods		
			2021 = 100	Annual percentage change	2021 = 100	Annual percentage change			2021 = 100	Annual percentage change	2021 = 100	Annual percentage change	
Total													
2021	99.4	+ 22.7	99.4	+ 27.3	99.4	+ 21.7	99.4	+ 11.2	99.4	+ 17.8	99.3	+ 8.2	
2022	105.1	+ 5.7	110.3	+ 11.0	101.1	+ 1.7	109.6	+ 10.3	113.2	+ 13.9	108.0	+ 8.8	
2023	101.2	- 3.7	100.0	- 9.3	101.6	+ 0.5	105.1	- 4.1	100.4	- 11.3	107.3	- 0.6	
2023 May	100.6	- 2.6	99.2	- 10.8	101.7	+ 4.5	99.1	- 9.1	91.8	- 26.7	102.4	+ 0.7	
June	113.0	+ 4.8	102.0	- 10.2	120.9	+ 17.6	108.2	- 6.3	105.3	- 8.5	109.5	- 5.4	
July	95.7	- 10.1	94.9	- 17.2	95.1	- 6.4	104.8	+ 1.9	88.5	- 14.7	112.3	+ 9.8	
Aug.	89.8	- 5.9	90.7	- 11.3	86.8	- 3.2	108.2	+ 4.2	105.1	- 5.9	109.5	+ 9.3	
Sep.	98.6	- 4.3	96.6	- 8.2	99.6	- 0.4	100.7	- 11.8	95.7	- 16.2	103.0	- 9.9	
Oct.	96.2	- 8.0	97.0	- 9.9	94.4	- 7.5	105.9	- 2.9	99.1	- 15.2	109.0	+ 3.2	
Nov.	99.6	- 3.9	96.4	- 10.6	100.4	+ 0.5	109.6	- 0.2	112.1	+ 9.6	108.6	- 4.0	
Dec.	109.0	+ 8.0	92.4	- 8.9	121.5	+ 19.9	96.5	+ 1.8	88.2	- 7.0	100.3	+ 5.7	
2024 Jan.	98.2	- 5.0	98.1	- 12.0	98.0	+ 0.1	100.4	- 3.9	85.1	- 8.7	107.4	- 1.9	
Feb.	96.3	- 8.7	94.4	- 11.3	96.4	- 7.8	106.2	- 1.5	89.0	- 15.2	114.0	+ 4.5	
Mar.	105.8	- 2.5	102.6	- 7.5	106.9	+ 0.4	113.3	+ 1.3	105.7	- 8.3	116.7	+ 5.8	
Apr.	93.1	- 1.8	93.8	- 7.5	91.0	+ 1.9	104.7	+ 0.5	94.4	- 10.1	109.3	+ 5.2	
May P	92.5	- 8.1	93.8	- 5.4	89.7	- 11.8	107.0	+ 8.0	112.2	+ 22.2	104.7	+ 2.2	
From the domestic market													
2021	99.3	+ 21.7	99.4	+ 26.9	99.3	+ 19.1	99.3	+ 10.2	99.2	+ 8.9	99.3	+ 10.7	
2022	105.6	+ 6.3	112.5	+ 13.2	98.7	- 0.6	109.7	+ 10.5	111.3	+ 12.2	109.1	+ 9.9	
2023	100.9	- 4.5	103.1	- 8.4	99.1	+ 0.4	99.7	- 9.1	99.5	- 10.6	99.7	- 8.6	
2023 May	105.7	+ 0.1	103.4	- 8.8	109.1	+ 11.0	96.1	- 10.1	99.3	- 22.6	94.9	- 3.7	
June	107.7	- 0.4	99.7	- 12.5	116.6	+ 14.7	95.8	- 17.2	93.9	- 16.3	96.5	- 17.6	
July	98.4	- 8.1	97.5	- 18.5	99.0	+ 2.6	100.0	- 2.9	97.4	- 13.3	101.0	+ 1.7	
Aug.	90.9	- 4.2	94.9	- 8.6	86.2	+ 0.2	99.1	- 1.4	103.8	- 6.1	97.2	+ 0.6	
Sep.	93.7	- 9.7	95.4	- 10.9	91.3	- 7.8	99.1	- 14.9	103.3	- 5.3	97.5	- 18.3	
Oct.	96.0	- 7.3	100.2	- 9.9	91.2	- 4.5	102.9	- 8.4	93.6	- 11.9	106.6	- 7.0	
Nov.	99.1	- 6.5	100.0	- 10.5	98.1	- 1.3	99.8	- 13.9	97.4	- 12.5	100.7	- 14.4	
Dec.	98.4	- 0.9	97.0	- 8.5	100.4	+ 5.4	93.8	+ 10.5	89.9	+ 5.8	95.3	+ 12.4	
2024 Jan.	94.4	- 8.0	99.6	- 13.2	89.7	- 2.9	94.3	- 4.1	85.5	- 9.9	97.8	- 1.8	
Feb.	95.7	- 10.1	96.4	- 12.8	94.7	- 8.5	97.9	- 4.6	86.1	- 13.6	102.6	- 1.2	
Mar.	102.3	- 9.1	102.0	- 11.1	102.3	- 7.6	104.1	- 5.5	100.9	- 14.0	105.4	- 1.9	
Apr.	90.9	- 8.6	94.7	- 13.0	86.7	- 4.9	96.8	- 1.6	94.9	- 8.4	97.5	+ 1.1	
May P	92.0	- 13.0	92.8	- 10.3	91.2	- 16.4	92.8	- 3.4	85.3	- 14.1	95.7	+ 0.8	
From abroad													
2021	99.5	+ 23.6	99.4	+ 27.6	99.5	+ 23.1	99.4	+ 11.7	99.6	+ 23.4	99.3	+ 6.5	
2022	104.8	+ 5.3	108.1	+ 8.8	102.5	+ 3.0	109.6	+ 10.3	114.4	+ 14.9	107.2	+ 8.0	
2023	101.5	- 3.1	96.8	- 10.5	103.0	+ 0.5	108.8	- 0.7	100.9	- 11.8	112.8	+ 5.2	
2023 May	97.0	- 4.5	95.0	- 12.8	97.5	+ 0.8	101.1	- 8.5	87.5	- 29.1	107.9	+ 3.8	
June	116.8	+ 8.7	104.3	- 7.9	123.3	+ 19.1	116.6	+ 1.0	111.9	- 4.2	119.0	+ 3.8	
July	93.8	- 11.5	92.3	- 15.9	92.8	- 11.2	108.1	+ 5.4	83.3	- 15.7	120.5	+ 15.3	
Aug.	89.0	- 7.0	86.5	- 14.1	87.2	- 5.0	114.3	+ 7.7	105.9	- 5.8	118.5	+ 15.2	
Sep.	102.1	- 0.3	97.7	- 5.5	104.4	+ 3.8	101.8	- 9.7	91.4	- 22.0	107.0	- 3.2	
Oct.	96.4	- 8.5	93.8	- 10.0	96.3	- 8.9	107.9	+ 0.8	102.2	- 16.8	110.7	+ 11.7	
Nov.	100.0	- 1.8	92.8	- 10.8	101.8	+ 1.6	116.3	+ 10.1	120.5	+ 24.1	114.3	+ 4.2	
Dec.	116.6	+ 14.3	87.9	- 9.3	133.7	+ 27.7	98.4	- 3.1	87.2	- 13.2	104.0	+ 1.8	
2024 Jan.	101.0	- 2.9	96.7	- 10.8	102.8	+ 1.7	104.5	- 3.9	84.8	- 8.0	114.4	- 2.1	
Feb.	96.8	- 7.5	92.5	- 9.6	97.3	- 7.4	111.8	+ 0.4	90.6	- 16.2	122.4	+ 8.3	
Mar.	108.3	+ 2.5	103.1	- 3.7	109.6	+ 5.3	119.5	+ 5.7	108.5	- 5.0	124.9	+ 11.0	
Apr.	94.6	+ 3.4	93.0	- 1.0	93.5	+ 6.0	110.0	+ 1.7	94.1	- 11.1	117.9	+ 7.8	
May P	92.8	- 4.3	94.7	- 0.3	88.8	- 8.9	116.7	+ 15.4	127.7	+ 45.9	111.3	+ 3.2	

Source of the unadjusted figures: Federal Statistical Office. * At current prices; for explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Tables III.2.a to III.2.c. ◦ Using JDemetra+ 2.2.2 (X13).

XI. Economic conditions in Germany

4. Orders received by construction *

Adjusted for working-day variations ◦

Zeit	Breakdown by type of construction												Breakdown by client ¹			
	Structural engineering												Civil engineering			
	Total		Residential construction		Industrial construction		Public sector construction		Industrial clients		Public sector ²					
	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change	2015 = 100	Annual percentage change
2020	145.6	- 0.4	144.2	- 0.8	160.8	+ 6.9	130.3	- 8.6	141.5	+ 1.9	147.3	+ 0.1	139.6	- 5.7	143.3	+ 1.4
2021	159.0	+ 9.2	164.1	+ 13.8	174.3	+ 8.4	156.6	+ 20.2	158.5	+ 12.0	153.0	+ 3.9	161.6	+ 15.8	146.7	+ 2.4
2022	166.8	+ 4.9	161.7	- 1.5	167.7	- 3.8	155.0	- 1.0	166.8	+ 5.2	172.7	+ 12.9	171.9	+ 6.4	160.5	+ 9.4
2023	173.1	+ 3.8	154.5	- 4.5	145.6	- 13.2	151.7	- 2.1	194.2	+ 16.4	194.8	+ 12.8	190.8	+ 11.0	169.5	+ 5.6
2023 Apr.	169.8	+ 3.4	147.5	- 6.4	144.6	- 18.8	141.4	- 0.8	179.7	+ 22.7	195.7	+ 14.0	178.1	+ 15.7	175.5	+ 4.8
May	176.2	+ 0.1	153.6	- 10.8	153.9	- 15.5	147.5	- 9.6	175.1	+ 0.9	202.4	+ 12.2	187.6	+ 9.8	176.5	- 1.0
June	181.0	+ 3.3	164.1	- 1.3	165.3	- 7.1	135.6	- 11.5	266.8	+ 51.1	200.7	+ 8.1	178.7	+ 0.7	193.2	+ 13.0
July	194.3	+ 7.6	170.9	- 4.7	160.9	- 6.0	166.1	- 6.6	221.6	+ 4.8	221.6	+ 21.8	190.5	+ 0.3	219.0	+ 24.9
Aug.	191.7	+ 21.9	153.7	+ 3.6	140.4	- 3.2	156.7	+ 9.5	186.4	+ 4.7	235.9	+ 40.8	241.6	+ 54.9	165.8	- 0.1
Sep.	192.8	+ 17.3	184.4	+ 15.7	145.1	- 10.7	191.3	+ 24.3	288.2	+ 70.0	202.5	+ 19.2	223.8	+ 34.7	186.1	+ 14.0
Oct.	171.2	+ 5.9	145.2	+ 0.1	143.3	- 3.4	141.5	+ 1.1	164.9	+ 7.8	201.5	+ 11.3	197.1	+ 14.4	158.6	+ 0.5
Nov.	147.1	- 0.8	137.2	+ 1.9	124.2	- 5.1	140.4	+ 10.6	168.0	- 4.6	158.6	- 3.4	170.0	+ 9.5	134.7	- 10.8
Dec.	176.3	+ 6.1	161.4	- 0.6	160.1	+ 3.4	140.6	- 15.1	243.6	+ 39.6	193.6	+ 13.5	191.2	+ 1.3	169.0	+ 15.0
2024 Jan.	136.7	+ 3.4	118.5	- 5.7	105.8	- 16.6	122.3	- 4.8	145.8	+ 30.1	157.9	+ 13.0	156.8	+ 7.5	132.4	+ 10.5
Feb.	154.5	+ 1.8	128.5	- 1.5	126.2	- 0.9	113.4	- 14.7	192.6	+ 47.1	184.6	+ 4.5	165.0	- 1.5	159.5	+ 7.4
Mar.	198.8	+ 3.1	169.2	- 5.7	159.1	+ 2.6	163.8	- 17.0	222.7	+ 15.3	233.1	+ 11.9	198.9	- 8.4	222.8	+ 18.6
Apr.	175.2	+ 3.2	141.1	- 4.3	144.3	- 0.2	129.9	- 8.1	172.8	- 3.8	214.7	+ 9.7	190.2	+ 6.8	176.6	+ 0.6

Source of the unadjusted figures: Federal Statistical Office. * At current prices; excluding value added tax; for explanatory notes, see Statistical Series – Seasonally adjusted

business statistics, Table III.2.f. ◦ Using JDemetra+ 2.2.2 (X13). ¹ Excluding residential construction. ² Including road construction.

5. Retail trade turnover *

Adjusted for calendar variations ◦

Zeit	of which:															
	In stores by enterprises main product range															
	Food, beverages, tobacco ¹		Textiles, clothing, footwear and leather goods		Information and communications equipment		Construction and flooring materials, household appliances, furniture		Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles		Retail sale via mail order houses or via internet as well as other retail sale ²					
	At current prices	Annual percentage change	At 2015 prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change	At current prices	Annual percentage change				
2020	121.4	+ 5.6	115.9	+ 4.4	121.3	+ 8.1	81.9	- 23.2	106.9	- 1.8	117.1	+ 9.3	125.4	+ 5.6	168.6	+ 21.8
2021	124.7	+ 2.7	116.7	+ 0.7	121.7	+ 0.3	78.1	- 4.6	95.4	- 10.8	110.4	- 5.7	135.2	+ 7.8	190.1	+ 12.8
2022	134.4	+ 7.8	115.8	- 0.8	128.2	+ 5.3	102.9	+ 31.8	107.8	+ 13.0	122.8	+ 11.2	144.7	+ 7.0	188.9	- 0.6
2023 ³	137.7	+ 2.5	112.3	- 3.0	136.0	+ 6.1	106.8	+ 3.8	107.9	+ 0.1	118.3	- 3.7	149.5	+ 3.3	186.6	- 1.2
2023 Apr.	137.6	+ 3.8	111.9	- 4.0	137.3	+ 8.1	108.2	+ 6.4	95.0	+ 0.4	126.0	- 3.4	144.0	+ 2.6	180.6	- 2.1
May	140.9	+ 4.5	114.6	- 1.8	139.4	+ 9.2	113.4	+ 3.1	91.8	+ 0.9	127.9	- 1.2	147.9	+ 3.9	183.6	+ 1.0
June	138.0	+ 5.3	112.3	- 0.5	136.7	+ 7.9	117.7	+ 11.5	95.4	+ 1.1	120.4	+ 0.2	148.5	+ 6.1	180.1	+ 3.2
July	139.6	+ 3.1	114.0	- 1.6	139.9	+ 7.0	109.1	+ 3.3	99.8	- 0.4	118.2	- 3.4	152.9	+ 4.0	183.0	- 1.2
Aug.	132.6	+ 2.2	107.9	- 2.3	132.9	+ 5.2	102.4	+ 4.3	97.3	- 1.7	111.2	- 2.1	145.7	+ 4.5	168.6	- 2.5
Sep.	133.0	± 0.0	107.4	- 3.8	132.4	+ 6.3	105.0	- 10.3	104.0	- 4.2	112.4	- 5.2	149.9	+ 3.8	169.2	- 10.6
Oct.	141.7	+ 2.8	114.7	+ 0.1	137.2	+ 3.9	121.9	+ 5.1	111.5	- 0.4	121.4	- 3.3	156.5	+ 7.5	196.0	+ 1.3
Nov.	147.8	+ 1.0	120.1	- 1.6	137.8	+ 4.2	117.8	+ 1.7	136.7	+ 1.3	122.0	- 6.4	156.5	+ 2.2	231.9	- 0.7
Dec.	154.5	+ 2.0	125.2	- 0.5	155.2	+ 5.5	117.8	- 5.2	142.7	- 3.4	117.5	- 6.6	166.8	+ 6.0	216.0	+ 1.3
2024 Jan.	126.8	+ 1.7	102.8	- 1.2	127.8	+ 4.2	86.0	+ 1.4	106.8	- 5.7	98.1	- 7.2	150.5	+ 7.8	175.6	- 0.5
Feb.	123.1	+ 0.1	99.3	- 2.3	124.8	+ 1.3	83.5	± 0.0	97.5	- 3.7	103.8	- 4.1	145.9	+ 7.9	158.6	- 5.3
Mar.	143.3	+ 2.9	114.9	+ 1.1	144.2	+ 4.9	104.7	+ 4.2	101.1	- 5.2	126.9	- 1.7	157.9	+ 5.3	186.9	+ 0.2
Apr.	140.1	+ 1.8	112.2	+ 0.3	140.6	+ 2.4	109.1	+ 0.8	94.1	- 0.9	122.9	- 2.5	152.4	+ 5.8	179.4	- 0.7

Source of the unadjusted figures: Federal Statistical Office. * Excluding value added tax; for explanatory notes, see Statistical Series - Seasonally adjusted business statistics, Table III.4.c. ◦ Using JDemetra+ 2.2.2 (X13). ¹ Including stalls and markets. ² Excluding

stores, stalls and markets. ³ As of January 2023 figures are provisional, partially revised, and particularly uncertain in recent months due to estimates for missing reports.

XI. Economic conditions in Germany

7. Prices

Harmonised Index of Consumer Prices														Indices of foreign trade prices		
Period	of which:										Memo item: Consumer price index (national concept)	Construction price index	Index of producer prices of industrial products sold on the domestic market ³	Index of producer prices of agricultural products ³	Indices of foreign trade prices	
	Total	Food ^{1,2}	Non-energy industrial goods ¹	Energy ¹	Services ¹	of which:		Exports	Imports							
						Actual rents for housing										
2015 = 100											2020 = 100	2021 = 100		2020 = 100	2021=100	
Index level																
2020	⁴ 105.8	⁴ 110.9	⁴ 104.1	⁴ 99.0	⁴ 106.9	107.6	⁴ 100.0	⁴ 92.0	91.2	100.0	...	...		
2021	⁴ 109.2	⁴ 114.1	⁴ 106.7	⁴ 109.0	⁴ 109.0	109.0	⁴ 103.1	⁴ 100.0	100.0	107.0	100.0	100.0				
2022	118.7	126.2	112.7	146.8	112.2	110.8	110.2	116.6	129.8	141.2	113.5	121.8				
2023	125.9	140.9	119.1	154.2	117.6	113.1	116.7	126.7	130.1	⁵ 141.3	114.2	113.9				
2022 Aug.	119.5	129.1	113.0	148.6	112.2	111.1	110.7	119.3	139.9	144.8	117.9	128.6				
Sep.	122.1	130.9	114.5	158.8	113.9	111.2	112.7		142.3	148.7	117.1	127.3				
Oct.	123.5	132.2	115.8	164.5	114.3	111.4	113.5		139.3	151.7	115.4	125.3				
Nov.	123.5	133.6	116.3	163.5	113.7	111.6	113.7	122.1	135.0	152.3	115.2	121.5				
Dec.	122.0	134.6	116.6	143.9	114.8	111.7	113.2		134.2	152.4	115.1	120.1				
2023 Jan.	122.6	136.7	116.4	154.8	113.8	112.1	114.3		133.5	⁵ 150.0	115.1	118.7				
Feb.	123.8	139.5	117.0	154.9	115.0	112.2	115.2	125.5	132.5	149.0	115.1	117.2				
Mar.	125.1	141.3	118.3	155.0	116.1	112.5	116.1		131.1	144.9	115.0	116.1				
Apr.	125.8	141.1	119.0	156.1	117.1	112.6	116.6		131.8	142.2	114.6	114.6				
May	125.6	141.1	119.3	154.0	117.8	112.8	116.5	126.6	130.4	139.4	114.2	113.2				
June	126.1	141.2	119.5	153.7	117.8	113.0	116.8		129.8	141.6	114.0	112.3				
July	126.7	141.2	118.8	153.6	119.6	113.2	117.1		128.9	142.8	113.7	111.6				
Aug.	127.2	141.0	119.2	156.5	119.8	113.5	117.5	127.1	129.2	142.8	113.7	112.0				
Sep.	127.4	141.5	120.1	157.6	119.3	113.6	117.8		129.3	137.8	114.0	113.3				
Oct.	127.2	141.6	120.5	154.7	119.1	113.7	117.8		129.1	135.3	114.1	113.4				
Nov.	126.3	142.4	120.5	151.6	117.6	113.9	117.3	127.7	128.3	135.7	113.8	112.8				
Dec.	126.6	142.4	120.5	148.4	118.7	114.0	117.4		127.3	137.6	113.5	111.7				
2024 Jan.	126.4	143.7	119.7	150.2	118.1	114.4	117.6		127.6	138.5	113.6	111.7				
Feb.	127.2	143.6	120.3	150.9	119.3	114.6	118.1	129.5	127.1	140.1	113.8	111.5				
Mar.	128.0	143.5	120.9	150.5	120.7	114.9	118.6		127.3	141.3	113.9	111.9				
Apr.	128.8	144.3	121.1	154.0	121.3	115.1	119.2		127.5	142.4	114.4	112.7				
May	129.1	144.0	120.9	152.1	122.4	115.3	119.3	130.4	127.5	144.3	114.4	112.7				
June	129.3	144.4	120.8	150.3	123.3	115.5	119.4		127.7	...	...	...	
Annual percentage change																
2020	⁴ + 0.4	⁴ + 2.3	⁴ - 0.1	⁴ - 4.5	⁴ + 1.2	+ 1.4	⁴ + 0.5	⁴ + 1.4	- 1.0	- 3.1	...	...		
2021	⁴ + 3.2	⁴ + 2.9	⁴ + 2.5	⁴ + 10.1	⁴ + 2.0	+ 1.3	⁴ + 3.1	⁴ + 8.8	+ 9.6	+ 7.0	...	...		
2022	+ 8.7	+ 10.6	+ 5.7	+ 34.7	+ 2.9	+ 1.7	+ 6.9	+ 16.6	+ 29.8	+ 32.0	+ 13.5	+ 21.8				
2023	+ 6.0	+ 11.7	+ 5.6	+ 5.1	+ 4.8	+ 2.1	+ 5.9	+ 8.7	+ 0.2	⁵ + 0.1	+ 0.6	- 6.5				
2022 Aug.	+ 8.8	+ 12.8	+ 6.1	+ 35.8	+ 1.7	+ 1.7	+ 7.0	+ 17.1	+ 38.5	+ 33.3	+ 16.7	+ 26.7				
Sep.	+ 10.9	+ 14.4	+ 6.4	+ 44.2	+ 3.6	+ 1.7	+ 8.6		+ 38.6	+ 39.1	+ 15.0	+ 24.0				
Oct.	+ 11.6	+ 15.5	+ 7.2	+ 43.5	+ 3.9	+ 1.7	+ 8.8		+ 31.7	+ 38.8	+ 12.0	+ 18.2				
Nov.	+ 11.3	+ 16.3	+ 7.3	+ 40.1	+ 3.8	+ 1.9	+ 8.8	+ 17.3	+ 26.4	+ 34.2	+ 10.9	+ 12.3				
Dec.	+ 9.6	+ 16.3	+ 7.4	+ 25.1	+ 4.1	+ 1.9	+ 8.1		+ 21.4	+ 32.8	+ 9.8	+ 9.6				
2023 Jan.	+ 9.2	+ 16.6	+ 7.4	+ 25.1	+ 3.6	+ 2.0	+ 8.7		+ 16.4	⁵ + 28.1	+ 8.1	+ 5.3				
Feb.	+ 9.3	+ 18.0	+ 7.2	+ 21.6	+ 4.4	+ 2.0	+ 8.7	+ 15.5	+ 13.9	+ 23.1	+ 6.6	+ 3.1				
Mar.	+ 7.8	+ 18.6	+ 7.2	+ 6.1	+ 5.0	+ 2.1	+ 7.4		+ 7.5	+ 6.0	+ 3.3	- 3.1				
Apr.	+ 7.6	+ 15.5	+ 6.9	+ 9.4	+ 4.8	+ 2.0	+ 7.2		+ 5.2	- 1.1	+ 1.7	- 5.6				
May	+ 6.3	+ 13.6	+ 6.2	+ 5.0	+ 4.4	+ 2.0	+ 6.1	+ 8.9	+ 2.5	- 2.6	+ 0.9	- 7.7				
June	+ 6.8	+ 12.6	+ 6.2	+ 4.0	+ 6.1	+ 2.0	+ 6.4		+ 1.2	- 0.1	- 0.1	- 8.6				
July	+ 6.5	+ 10.7	+ 5.5	+ 3.9	+ 6.7	+ 2.1	+ 6.2		- 2.9	+ 0.5	- 2.0	- 10.8				
Aug.	+ 6.4	+ 9.2	+ 5.5	+ 5.3	+ 6.8	+ 2.2	+ 6.1	+ 6.5	- 7.6	- 1.4	- 3.6	- 12.9				
Sep.	+ 4.3	+ 8.1	+ 4.9	- 0.8	+ 4.7	+ 2.2	+ 4.5		- 9.1	- 7.3	- 2.6	- 11.0				
Oct.	+ 3.0	+ 7.1	+ 4.1	- 6.0	+ 4.2	+ 2.1	+ 3.8		- 7.3	- 10.8	- 1.1	- 9.5				
Nov.	+ 2.3	+ 6.6	+ 3.6	- 7.3	+ 3.4	+ 2.1	+ 3.2	+ 4.6	- 5.0	- 10.9	- 1.2	- 7.2				
Dec.	+ 3.8	+ 5.8	+ 3.3	+ 3.1	+ 3.4	+ 2.1	+ 3.7		- 5.1	- 9.7	- 1.4	- 7.0				
2024 Jan.	+ 3.1	+ 5.1	+ 2.8	- 3.0	+ 3.8	+ 2.1	+ 2.9		- 4.4	- 7.7	- 1.3	- 5.9				
Feb.	+ 2.7	+ 2.9	+ 2.8	- 2.6	+ 3.7	+ 2.1	+ 2.5	+ 3.2	- 4.1	- 6.0	- 1.1	- 4.9				
Mar.	+ 2.3	+ 1.6	+ 2.2	- 2.9	+ 4.0	+ 2.1	+ 2.2		- 2.9	- 2.5	- 1.0	- 3.6				
Apr.	+ 2.4	+ 2.3	+ 1.8	- 1.3	+ 3.6	+ 2.2	+ 2.2		- 3.3	+ 0.1	- 0.2	- 1.7				
May	+ 2.8	+ 2.1	+ 1.3	- 1.2	+ 4.7	+ 2.2	+ 2.4	+ 3.0	- 2.2	+ 3.5	+ 0.2	- 0.4				
June	+ 2.5	+ 2.3	+ 1.1	- 2.2	+ 4.7	+ 2.2	+ 2.2		- 1.6	...	...	...	

Sources: Eurostat; Federal Statistical Office and Bundesbank calculation based on data from the Federal Statistical Office. ¹ The last data point is at times based on the Bundesbank's own estimates. ² Including alcoholic beverages and tobacco. ³ Excluding va-

lue added tax. ⁴ Influenced by a temporary reduction of value added tax between July and December 2020. ⁵ From January 2023 onwards, provisional figures.

XI. Economic conditions in Germany

8. Households' income *

Period	Gross wages and salaries ¹		Net wages and salaries ²		Monetary social benefits received ³		Mass income ⁴		Disposable income ⁵		Saving ⁶		Saving ratio ⁷
	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change	As percentage
2016	1,337.4	4.0	896.3	3.8	426.2	3.8	1,322.5	3.8	1,841.5	3.3	187.8	4.7	10.2
2017	1,395.4	4.3	932.5	4.0	441.8	3.6	1,374.3	3.9	1,905.2	3.5	202.8	8.0	10.6
2018	1,462.7	4.8	976.1	4.7	455.2	3.0	1,431.3	4.1	1,976.6	3.7	223.2	10.1	11.3
2019	1,524.7	4.2	1,021.8	4.7	477.5	4.9	1,499.3	4.8	2,024.4	2.4	219.8	- 1.5	10.9
2020	1,515.3	- 0.6	1,021.1	- 0.1	523.9	9.7	1,545.0	3.0	2,046.9	1.1	338.2	53.9	16.5
2021	1,571.3	3.7	1,062.9	4.1	534.1	1.9	1,597.0	3.4	2,098.5	2.5	313.0	- 7.5	14.9
2022	1,661.8	5.8	1,118.8	5.3	541.8	1.4	1,660.6	4.0	2,227.5	6.1	248.2	- 20.7	11.1
2023	1,779.6	7.1	1,219.9	9.0	577.7	6.6	1,797.6	8.2	2,357.4	5.8	266.9	7.5	11.3
2022 Q4	463.0	5.5	312.0	5.4	136.6	5.5	448.6	5.5	575.1	7.4	60.2	- 1.1	10.5
2023 Q1	416.8	7.1	285.9	9.2	144.2	7.0	430.1	8.5	580.2	7.0	77.6	0.1	13.4
Q2	429.7	7.6	287.8	9.7	141.3	7.0	429.1	8.8	582.8	7.1	64.0	14.4	11.0
Q3	441.0	7.5	307.9	8.9	146.3	5.7	454.2	7.8	594.0	5.0	60.4	10.6	10.2
Q4	492.2	6.3	338.3	8.4	145.9	6.9	484.3	8.0	600.5	4.4	64.9	7.9	10.8
2024 Q1	443.9	6.5	307.4	7.5	152.1	5.5	459.5	6.8	607.7	4.7	90.4	16.5	14.9

Source: Federal Statistical Office; figures computed in May 2024. * Households including non-profit institutions serving households. **1** Residence concept. **2** After deducting the wage tax payable on gross wages and salaries and employees' contributions to the social security funds. **3** Social security benefits in cash from the social security funds, central, state and local government and foreign countries, pension payments (net), private funded social benefits, less social contributions on social benefits, consumption-related taxes and public charges. **4** Net wages and salaries plus monetary

social benefits received. **5** Mass income plus operating surplus, mixed income, property income (net), other current transfers received, income of non-profit institutions serving households, less taxes (excluding wage tax and consumption-related taxes) and other current transfers paid. Including the increase in claims on company pension funds. **6** Including the increase in claims on company pension funds. **7** Saving as a percentage of disposable income.

9. Negotiated pay rates (overall economy)

Period	Index of negotiated wages ¹								Memo item: Wages and salaries per employee ³	
	On an hourly basis		On a monthly basis				Basic pay rates ²			
	2015=100	Annual percentage change	2015=100	Annual percentage change	2015=100	Annual percentage change	2015=100	Annual percentage change	2015=100	Annual percentage change
2016	102.2	2.2	102.2	2.2	102.2	2.2	102.3	2.3	102.5	2.5
2017	104.6	2.3	104.5	2.3	104.6	2.3	104.8	2.4	105.1	2.6
2018	107.7	3.0	107.7	3.0	107.7	2.8	107.7	2.8	108.4	3.2
2019	110.9	3.0	110.8	3.0	110.7	2.9	110.4	2.5	111.7	3.0
2020	113.3	2.2	113.3	2.2	113.0	2.1	112.7	2.1	111.6	- 0.1
2021	115.0	1.5	115.0	1.5	114.9	1.6	114.5	1.5	115.3	3.3
2022	118.0	2.6	118.0	2.6	117.4	2.2	116.8	2.0	120.1	4.1
2023	122.8	4.0	122.7	4.0	120.5	2.7	119.8	2.6	127.5	6.2
2022 Q4	130.2	1.9	130.1	1.9	130.1	1.9	117.8	2.3	132.6	4.2
2023 Q1	115.2	3.8	115.1	3.8	111.7	2.5	118.7	2.6	120.1	5.9
Q2	114.3	3.9	114.3	3.9	112.1	2.5	119.5	2.5	123.2	6.6
Q3	126.7	4.7	126.6	4.7	124.9	3.2	120.4	3.0	126.3	6.6
Q4	134.9	3.7	134.9	3.6	133.4	2.5	120.8	2.5	140.2	5.7
2024 Q1	122.3	6.2	122.3	6.2	115.2	3.1	122.3	3.0	127.4	6.1
2023 Nov.	173.5	3.2	173.4	3.2	172.5	2.5	120.8	2.7	.	.
Dec.	116.1	3.3	116.1	3.3	114.9	2.4	120.9	2.3	.	.
2024 Jan.	117.3	1.1	117.2	1.1	113.7	2.5	121.5	2.5	.	.
Feb.	124.7	5.9	124.6	5.9	116.3	2.6	121.6	2.5	.	.
Mar.	125.0	11.8	125.0	11.8	115.5	4.1	123.6	4.1	.	.
Apr.	117.8	4.8	117.7	4.8	116.5	4.0	123.8	3.9	.	.
May	118.0	4.4	118.0	4.4	117.3	4.9	124.9	4.7	.	.

1 Current data are normally revised on account of additional reports. **2** Excluding one-off payments and covenants (capital formation benefits, special payments, such as annual bonuses, holiday pay, Christmas bonuses (13th monthly salary payment) and

retirement provisions). **3** Source: Federal Statistical Office; figures computed in May 2024.

XII. External sector

1. Major items of the balance of payments of the euro area *

€ million

Item	2021	2022	2023	2023		2024	2024		
				Q3	Q4	Q1	February	March	April P
I. Current Account	+ 310,699	- 42,740	+ 229,722	+ 83,491	+ 87,918	+ 105,371	+ 35,523	+ 43,103	+ 34,443
1. Goods									
Receipts	2,502,629	2,958,629	2,899,575	705,860	726,365	717,851	238,981	249,648	254,941
Expenditure	2,227,466	3,049,828	2,650,915	634,025	650,043	616,054	202,084	211,527	221,792
Balance	+ 275,164	- 91,199	+ 248,660	+ 71,835	+ 76,321	+ 101,796	+ 36,897	+ 38,121	+ 33,149
2. Services									
Receipts	1,066,641	1,309,512	1,344,088	350,739	349,624	335,307	109,743	112,688	108,292
Expenditure	967,603	1,152,235	1,223,616	302,247	332,343	312,752	102,879	104,638	96,551
Balance	+ 99,038	+ 157,277	+ 120,473	+ 48,493	+ 17,281	+ 22,555	+ 6,864	+ 8,050	+ 11,742
3. Primary income									
Receipts	888,282	1,072,541	1,213,011	311,813	319,231	289,292	92,004	105,742	105,118
Expenditure	785,012	1,008,462	1,184,327	305,664	283,143	266,362	85,214	94,896	104,665
Balance	+ 103,271	+ 64,080	+ 28,683	+ 6,150	+ 36,087	+ 22,930	+ 6,790	+ 10,847	+ 453
4. Secondary income									
Receipts	158,408	168,040	178,252	38,985	50,291	42,669	13,765	15,066	14,699
Expenditure	325,182	340,939	346,346	81,973	92,064	84,580	28,793	28,981	25,600
Balance	- 166,773	- 172,898	- 168,094	- 42,987	- 41,772	- 41,910	- 15,028	- 13,915	- 10,900
II. Capital account	+ 48,516	+ 147,850	+ 37,316	+ 10,449	+ 20,891	- 11,709	- 3,406	+ 1,078	- 787
III. Financial account ¹	+ 369,865	+ 52,136	+ 324,887	+ 94,204	+ 120,332	+ 112,005	+ 14,865	+ 57,195	+ 17,344
1. Direct investment	+ 421,009	+ 289,854	+ 6,077	- 10,320	- 7,849	+ 68,288	+ 49,381	+ 9,244	+ 35,148
By resident units abroad the euro area	+ 370,949	+ 13,111	- 320,099	+ 4,440	- 308,053	+ 118,290	+ 52,373	+ 40,301	+ 26,963
By non-resident units of the euro area	- 50,060	- 276,742	- 326,176	+ 14,760	- 300,205	+ 50,002	+ 2,992	+ 31,056	- 8,185
2. Portfolio investment	+ 241,851	- 249,580	- 92,887	- 12,459	- 40,253	- 15,581	- 13,543	+ 17,800	- 22,191
By resident units abroad the euro area	+ 790,793	- 189,611	+ 432,297	+ 98,534	+ 44,038	+ 174,417	+ 59,093	+ 44,007	+ 22,290
Equity and investment fund shares	+ 362,282	- 175,934	+ 49,415	- 4,257	- 8,043	+ 37,905	- 2,473	+ 333	+ 13,674
Short-term debt securities	+ 119,102	- 107,782	+ 96,770	+ 32,174	+ 41,582	+ 12,080	+ 12,295	+ 1,654	- 3,563
Long-term debt securities	+ 309,409	+ 94,104	+ 286,111	+ 70,617	+ 10,499	+ 124,432	+ 49,270	+ 42,021	+ 12,179
By non-resident units of the euro area	+ 548,942	+ 59,969	+ 525,184	+ 110,993	+ 84,291	+ 189,999	+ 72,636	+ 26,207	+ 44,481
Equity and investment fund shares	+ 646,900	+ 38,541	+ 158,010	+ 26,598	+ 84,410	+ 22,644	+ 12,066	- 18,179	+ 36,200
Short-term debt securities	+ 44,452	- 66,303	- 11,743	+ 3,829	- 32,242	- 29,298	- 16,477	+ 9,191	- 46,059
Long-term debt securities	- 142,410	+ 87,731	+ 378,917	+ 80,566	+ 32,122	+ 196,653	+ 77,047	+ 35,195	+ 54,341
3. Financial derivatives and employee stock options	+ 56,314	+ 66,675	+ 17,408	- 1,097	+ 22,979	+ 11,449	+ 11,358	- 11,891	+ 7,309
4. Other investment	- 479,679	- 72,688	+ 406,739	+ 120,255	+ 139,063	+ 46,695	- 33,197	+ 42,574	- 3,726
Eurosysteem	- 443,466	+ 172,310	+ 318,620	+ 55,540	+ 17,852	+ 76,666	- 26,516	+ 27,146	- 11,539
General government MFIs ²	- 72,491	- 48,301	- 3,592	- 2,590	- 10,474	+ 10	- 1,972	+ 1,207	- 1,453
Enterprises and households	+ 153,413	+ 104,556	- 68,606	+ 21,550	- 17,538	- 67,352	+ 1,368	- 5,639	+ 8,244
5. Reserve assets	+ 130,369	+ 17,876	- 12,450	- 2,175	+ 6,390	+ 1,155	+ 866	- 532	+ 804
IV. Net errors and omissions	+ 10,650	- 52,974	+ 57,848	+ 264	+ 11,523	+ 18,343	- 17,252	+ 13,014	- 16,312

* 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 Eurosysteem.

XII. External sector

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

€ million

Zeit	Current Account						Balance of capital account 2	Financial account 3		
	Total	Goods		Services	Primary income	Secondary income		Total	of which: Reserve assets	Errors and omissions 4
		Total	of which: Supplementary trade items 1							
2009	+ 142,744	+ 140,626	- 6,605	- 17,642	+ 54,524	- 34,764	- 1,858	+ 129,693	+ 8,648	- 11,194
2010	+ 147,298	+ 160,829	- 6,209	- 25,255	+ 51,306	- 39,582	+ 1,219	+ 92,757	+ 1,613	- 55,760
2011	+ 167,340	+ 162,970	- 9,357	- 29,930	+ 69,087	- 34,787	+ 419	+ 120,857	+ 2,836	- 46,902
2012	+ 195,712	+ 199,531	- 11,388	- 30,774	+ 65,658	- 38,703	+ 413	+ 151,417	+ 1,297	- 43,882
2013	+ 184,352	+ 203,802	- 12,523	- 39,321	+ 63,284	- 43,413	+ 563	+ 226,014	+ 838	+ 42,224
2014	+ 211,477	+ 219,629	- 14,296	- 25,303	+ 58,646	- 41,495	+ 3,255	+ 230,931	+ 2,564	+ 16,200
2015	+ 259,781	+ 248,394	- 15,405	- 18,516	+ 69,324	- 39,420	+ 265	+ 237,733	- 2,213	- 22,313
2016	+ 270,200	+ 252,409	- 19,921	- 20,987	+ 77,258	- 38,480	+ 2,451	+ 258,906	+ 1,686	- 13,744
2017	+ 255,964	+ 255,077	- 13,613	- 23,994	+ 77,046	- 52,165	+ 2,653	+ 268,306	+ 1,269	+ 14,996
2018	+ 267,609	+ 221,983	- 22,985	- 15,806	+ 112,389	- 50,958	+ 914	+ 242,889	+ 392	- 25,634
2019	+ 283,849	+ 219,548	- 32,263	- 13,553	+ 128,602	- 50,747	- 3,705	+ 200,312	- 544	- 79,832
2020	+ 222,507	+ 182,725	- 16,381	+ 6,634	+ 86,037	- 52,889	- 10,345	+ 168,767	- 51	- 43,395
2021	+ 263,454	+ 196,491	+ 2,541	+ 1,615	+ 123,181	- 57,832	- 2,593	+ 208,978	+ 31,892	- 51,883
2022	+ 164,630	+ 125,916	+ 9,742	+ 37,289	+ 142,094	- 66,091	- 21,644	+ 198,190	+ 4,426	+ 55,204
2023	+ 257,705	+ 241,414	- 13,973	- 62,994	+ 143,901	- 64,616	- 27,252	+ 239,737	+ 884	+ 9,284
2021 Q2	+ 64,457	+ 49,623	+ 659	+ 6,593	+ 16,972	- 8,731	+ 2,375	+ 72,773	+ 58	+ 10,691
Q3	+ 61,257	+ 50,021	- 75	+ 6,609	+ 33,320	- 15,474	+ 2,074	+ 16,358	+ 31,199	- 46,973
Q4	+ 62,145	+ 38,842	+ 1,567	- 2,897	+ 42,462	- 16,263	- 378	+ 52,941	+ 250	- 8,825
2022 Q1	+ 58,486	+ 37,406	+ 5,570	+ 406	+ 37,066	- 16,392	- 3,462	+ 72,054	+ 2,200	+ 17,029
Q2	+ 27,439	+ 29,673	+ 7,848	- 6,775	+ 17,726	- 13,185	- 4,694	+ 60,417	+ 597	+ 37,672
Q3	+ 22,413	+ 23,635	- 610	- 22,705	+ 38,696	- 17,213	- 6,692	- 19,845	+ 784	- 35,567
Q4	+ 56,291	+ 35,201	- 3,067	- 8,215	+ 48,606	- 19,300	- 6,797	+ 85,565	+ 845	+ 36,070
2023 Q1	+ 68,626	+ 60,219	- 2,339	- 10,046	+ 38,191	- 19,737	- 13,018	+ 82,418	+ 224	+ 26,809
Q2	+ 49,603	+ 58,897	- 2,642	- 17,562	+ 18,342	- 10,075	- 4,058	+ 30,548	+ 1,096	- 14,996
Q3	+ 68,343	+ 65,909	- 1,436	- 23,372	+ 41,198	- 15,393	- 3,974	+ 28,266	- 790	- 36,102
Q4	+ 71,133	+ 56,390	- 7,557	- 12,013	+ 46,169	- 19,412	- 6,202	+ 98,505	+ 355	+ 33,574
2024 Q1	+ 83,599	+ 77,824	- 3,323	- 12,544	+ 37,353	- 19,034	- 8,155	+ 48,208	+ 378	- 27,236
2021 Dec.	+ 25,098	+ 9,154	+ 336	+ 2,151	+ 18,589	- 4,796	+ 224	+ 15,623	- 974	- 9,699
2022 Jan.	+ 15,642	+ 7,408	+ 1,263	+ 752	+ 13,109	- 5,627	- 1,107	+ 27,312	+ 309	+ 12,777
Feb.	+ 22,460	+ 16,318	+ 2,037	+ 1,099	+ 10,568	- 5,525	- 1,629	+ 46,824	+ 1,161	+ 25,992
Mar.	+ 20,385	+ 13,680	+ 2,270	+ 1,444	+ 13,390	- 5,241	- 726	- 2,083	+ 730	- 21,741
Apr.	+ 11,194	+ 6,514	+ 2,803	- 1,383	+ 11,442	- 5,378	- 1,551	+ 19,026	+ 83	+ 9,383
May	+ 4,457	+ 11,167	+ 4,080	- 2,254	- 3,089	- 1,368	- 2,634	+ 1,842	+ 161	+ 19
June	+ 11,788	+ 11,993	+ 965	+ 3,138	+ 9,373	- 6,439	- 509	+ 39,549	+ 353	+ 28,270
July	+ 8,077	+ 9,085	+ 370	- 6,153	+ 11,982	- 6,837	- 3,180	- 21,413	- 484	- 26,310
Aug.	+ 1,341	+ 3,251	- 694	- 9,755	+ 13,728	- 5,883	- 1,234	+ 23,390	+ 81	+ 23,283
Sep.	+ 12,995	+ 11,299	- 286	- 6,797	+ 12,986	- 4,493	- 2,278	- 21,822	+ 1,187	- 32,540
Oct.	+ 8,848	+ 7,014	- 407	- 5,801	+ 13,094	- 5,460	- 2,335	+ 41,713	+ 672	+ 35,200
Nov.	+ 20,907	+ 15,339	- 667	- 2,284	+ 13,933	- 6,081	- 2,429	+ 4,927	+ 425	- 23,406
Dec.	+ 26,536	+ 12,847	- 1,993	- 131	+ 21,578	- 7,759	- 2,032	+ 48,780	- 252	+ 24,276
2023 Jan.	+ 18,821	+ 13,395	+ 206	- 2,113	+ 12,999	- 5,458	- 6,283	- 3,003	- 341	- 15,541
Feb.	+ 22,557	+ 20,302	- 525	- 3,355	+ 11,025	- 5,415	- 984	+ 29,913	+ 143	+ 8,340
Mar.	+ 27,248	+ 26,522	- 2,020	- 4,578	+ 14,168	- 8,864	- 5,751	+ 55,507	+ 423	+ 34,010
Apr.	+ 20,231	+ 17,355	- 150	- 4,055	+ 12,006	- 5,076	- 476	- 31,839	+ 88	- 51,594
May	+ 6,463	+ 17,384	- 801	- 6,619	- 3,922	- 380	- 2,355	+ 5,358	+ 45	+ 1,250
June	+ 22,909	+ 24,158	- 1,691	- 6,888	+ 10,258	- 4,619	- 1,228	+ 57,030	+ 962	+ 35,348
July	+ 19,428	+ 21,123	- 1,987	- 7,757	+ 11,961	- 5,899	- 4,836	+ 2,756	- 118	- 11,837
Aug.	+ 21,748	+ 21,168	+ 1,278	- 9,908	+ 15,479	- 4,991	- 598	+ 20,292	- 107	- 858
Sep.	+ 27,166	+ 23,618	- 726	- 5,708	+ 13,759	- 4,503	+ 1,460	+ 5,219	- 566	- 23,407
Oct.	+ 9,905	+ 13,404	- 826	- 9,458	+ 12,509	- 6,550	- 4,081	+ 24,465	+ 858	+ 18,641
Nov.	+ 29,200	+ 25,082	- 3,607	- 2,826	+ 13,543	- 6,600	- 4,497	+ 36,655	+ 65	+ 11,952
Dec.	+ 32,029	+ 17,904	- 3,124	+ 271	+ 20,117	- 6,262	+ 2,375	+ 37,385	- 569	+ 2,980
2024 Jan.	+ 27,112	+ 23,461	- 1,412	- 4,346	+ 12,404	- 4,407	- 7,057	+ 8,040	- 249	- 12,015
Feb.	+ 28,772	+ 27,105	- 1,009	- 3,764	+ 10,266	- 4,834	- 1,597	+ 7,039	+ 1,193	- 20,136
Mar.	+ 27,715	+ 27,258	- 902	- 4,434	+ 14,683	- 9,793	+ 499	+ 33,129	- 566	+ 4,915
Apr. r	+ 25,142	+ 25,506	- 1,891	- 5,553	+ 8,307	- 3,118	- 2,261	+ 6,640	- 317	- 16,240
May p	+ 18,511	+ 26,229	- 1,237	- 8,070	+ 1,853	- 1,501	- 1,656	+ 19,677	+ 156	+ 2,822

1 For example, warehouse transactions for the account of residents, deductions of goods returned and deductions of exports and imports in connection with goods for processing. 2 Including net acquisition/disposal of non-produced non-financial assets.

3 Net lending: + / net borrowing: - 4 Statistical errors and omissions resulting from the difference between the balance on the financial account and the balances on the current account and the capital account.

XII. External sector

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

€ million

Zeit	Services								Primary income		
	Total	of which:							Compensation of employees	Investment income	Other primary income ³
		Transport	Travel ¹	Financial services	Charges for the use of intellectual property	Telecommunications-, computer and information services	Other business services	Government goods and services ²			
2019	- 13,553	+ 3,607	- 45,947	+ 10,755	+ 18,368	- 9,763	- 2,948	+ 3,489	+ 492	+ 128,990	- 880
2020	+ 6,634	- 5,392	- 14,678	+ 9,696	+ 18,149	- 7,941	- 4,483	+ 2,920	+ 4,422	+ 83,747	- 2,133
2021	+ 1,615	- 6,717	- 24,323	+ 8,280	+ 31,784	- 9,449	- 3,058	+ 3,744	+ 3,744	+ 122,198	- 2,762
2022	- 37,289	- 11,246	- 54,946	+ 8,910	+ 29,373	- 12,432	- 10,206	+ 3,617	+ 4,093	+ 143,330	- 5,330
2023	- 62,994	- 9,907	- 68,937	+ 9,206	+ 21,219	- 11,931	- 14,316	+ 3,345	+ 4,079	+ 144,527	- 4,706
2022 Q3	- 22,705	- 3,706	- 22,506	+ 2,084	+ 5,742	- 3,735	- 3,897	+ 984	+ 226	+ 40,032	- 1,561
Q4	- 8,215	- 2,447	- 13,323	+ 2,600	+ 5,965	- 2,300	- 1,776	+ 739	+ 1,184	+ 44,713	+ 2,709
2023 Q1	- 10,046	- 3,012	- 11,374	+ 1,927	+ 5,683	- 4,044	- 3,185	+ 1,037	+ 1,769	+ 38,089	- 1,668
Q2	- 17,562	- 1,729	- 18,332	+ 2,390	+ 4,679	- 2,580	- 4,601	+ 873	+ 911	+ 21,388	- 3,957
Q3	- 23,372	- 2,514	- 23,333	+ 2,572	+ 4,893	- 3,568	- 4,389	+ 805	+ 205	+ 42,403	- 1,409
Q4	- 12,013	- 2,651	- 15,899	+ 2,318	+ 5,965	- 1,740	- 2,142	+ 630	+ 1,194	+ 42,647	+ 2,328
2024 Q1	- 12,544	- 1,972	- 12,612	+ 2,659	+ 4,846	- 3,777	- 4,363	+ 949	+ 1,747	+ 36,356	- 749
2023 July	- 7,757	- 586	- 6,504	+ 797	+ 1,052	- 1,644	- 1,598	+ 200	+ 69	+ 12,328	- 436
Aug.	- 9,908	- 1,022	- 8,691	+ 962	+ 796	- 1,137	- 1,693	+ 298	+ 65	+ 15,920	- 506
Sep.	- 5,708	- 906	- 8,138	+ 813	+ 3,045	- 787	- 1,097	+ 306	+ 70	+ 14,155	- 467
Oct.	- 9,458	- 1,149	- 9,567	+ 451	+ 2,239	- 1,433	- 797	+ 329	+ 353	+ 12,659	- 503
Nov.	- 2,826	- 761	- 3,771	+ 805	+ 2,177	- 450	- 1,436	+ 149	+ 345	+ 13,523	- 325
Dec.	+ 271	- 741	- 2,561	+ 1,061	+ 1,549	+ 143	+ 91	+ 152	+ 496	+ 16,465	+ 3,156
2024 Jan.	- 4,346	- 556	- 3,613	+ 827	+ 1,492	- 1,648	- 1,850	+ 349	+ 577	+ 12,265	- 438
Feb.	- 3,764	- 387	- 3,884	+ 720	+ 1,228	- 1,269	- 933	+ 296	+ 586	+ 10,047	- 368
Mar.	- 4,434	- 1,029	- 5,115	+ 1,112	+ 2,126	- 860	- 1,580	+ 304	+ 584	+ 14,044	+ 56
Apr. ^r	- 5,553	- 400	- 5,214	+ 831	+ 2,132	- 1,666	- 1,996	+ 303	+ 300	+ 8,421	- 414
May ^p	- 8,070	- 795	- 7,000	+ 986	+ 1,159	- 1,043	- 2,039	+ 116	+ 302	+ 1,780	- 229

¹ Since 2001 the sample results of a household survey have been used on the expenditure side. ² Domestic public authorities' receipts from and expenditure on services, not included elsewhere; including the receipts from foreign military bases.

³ Includes, inter alia, taxes on leasing, production and imports transferred to the EU as well as subsidies received from the EU.

5. Secondary income and Capital account of the Federal Republic of Germany (balances)

€ million

Zeit	Secondary income						Capital account			
	Total	General government			All sectors excluding general government ²			Total	Non-produced non-financial assets	Capital transfers
		Total	of which:		Total	of which:				
		Current international cooperation ¹	Current taxes on income, wealth, etc.		Personal transfers between resident and non-resident households ³	of which: Workers' remittances				
2019	- 50,747	- 30,251	- 11,473	+ 11,591	- 20,496	-	+ 5,431	- 3,705	- 298	- 3,407
2020	- 52,889	- 34,755	- 12,175	+ 10,767	- 18,134	- 5,920	- 5,908	- 10,345	- 3,547	- 6,799
2021	- 57,832	- 35,627	- 9,927	+ 11,886	- 22,205	- 6,178	- 6,170	- 2,593	- 565	- 2,028
2022	- 66,091	- 40,174	- 16,147	+ 14,051	- 25,917	- 8,028	- 7,149	- 21,644	- 15,993	- 5,652
2023	- 64,616	- 36,933	- 15,557	+ 14,302	- 27,683	- 7,418	- 6,805	- 27,252	- 19,116	- 8,136
2022 Q3	- 17,213	- 11,247	- 3,569	+ 2,137	- 5,966	- 1,837	- 1,810	- 6,692	- 4,955	- 1,737
Q4	- 19,300	- 12,801	- 6,976	+ 2,089	- 6,499	- 1,844	- 1,810	- 6,797	- 4,390	- 2,407
2023 Q1	- 19,737	- 10,976	- 4,301	+ 2,404	- 8,761	- 1,882	- 1,731	- 13,018	- 10,626	- 2,392
Q2	- 10,075	- 3,809	- 2,117	+ 7,721	- 6,265	- 1,846	- 1,691	- 4,058	- 3,071	- 987
Q3	- 15,393	- 9,533	- 3,111	+ 2,062	- 5,860	- 1,844	- 1,691	- 3,974	- 2,270	- 1,703
Q4	- 19,412	- 12,615	- 6,029	+ 2,115	- 6,797	- 1,846	- 1,691	- 6,202	- 3,149	- 3,053
2024 Q1	- 19,034	- 7,180	- 1,672	+ 2,775	- 11,854	- 1,935	- 1,933	- 8,155	- 6,849	- 1,307
2023 July	- 5,899	- 3,861	- 1,293	+ 543	- 2,038	- 615	- 564	- 4,836	- 3,670	- 1,166
Aug.	- 4,991	- 3,161	- 1,057	+ 389	- 1,830	- 614	- 564	- 598	- 439	- 159
Sep.	- 4,503	- 2,511	- 761	+ 1,130	- 1,992	- 615	- 564	+ 1,460	+ 1,839	- 378
Oct.	- 6,550	- 4,423	- 1,562	+ 399	- 2,127	- 611	- 560	- 4,081	- 3,423	- 657
Nov.	- 6,600	- 4,444	- 1,718	+ 453	- 2,155	- 612	- 560	- 4,497	- 3,416	- 1,081
Dec.	- 6,262	- 3,748	- 2,748	+ 1,262	- 2,515	- 623	- 571	+ 2,375	+ 3,691	- 1,315
2024 Jan.	- 4,407	- 2,250	- 709	+ 534	- 2,157	- 645	- 644	- 7,057	- 5,390	- 1,667
Feb.	- 4,834	- 2,461	- 667	+ 1,122	- 2,374	- 645	- 644	- 1,597	- 1,858	+ 261
Mar.	- 9,793	- 2,469	- 296	+ 1,119	- 7,324	- 644	- 644	+ 499	+ 400	+ 99
Apr. ^r	- 3,118	- 1,018	- 432	+ 1,837	- 2,100	- 646	- 644	- 2,261	- 2,945	+ 684
May ^p	- 1,501	+ 722	- 392	+ 3,764	- 2,223	- 643	- 644	- 1,656	- 1,651	- 5

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

(excluding life insurance policies). ³ Transfers between resident and non-resident households.

XII. External sector

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

€ million

Item	2021	2022	2023	2023		2024	2024		
				Q3	Q4	Q1	March	April r	May p
I. Net domestic investment abroad (increase: +)	+ 801,268	+ 322,457	+ 267,197	+ 24,562	+ 118,505	+ 176,302	+ 32,291	+ 23,985	+ 60,413
1. Direct investment	+ 167,477	+ 170,303	+ 74,679	- 9,713	+ 44,069	+ 27,451	+ 19,399	+ 12,429	+ 2,352
Equity	+ 107,462	+ 104,545	+ 62,650	+ 11,722	+ 15,003	+ 20,776	+ 1,654	+ 11,399	+ 5,629
of which:									
Reinvestment of earnings ¹	+ 45,048	+ 57,927	+ 46,188	+ 16,123	+ 8,766	+ 21,056	+ 8,272	+ 9,081	+ 5,157
Debt instruments	+ 60,014	+ 65,758	+ 12,030	- 21,434	+ 29,066	+ 6,675	+ 17,745	+ 1,029	- 3,277
2. Portfolio investment	+ 178,741	+ 9,165	+ 149,308	+ 11,882	+ 18,941	+ 61,661	+ 33,778	+ 2,653	+ 16,568
Shares ²	+ 46,651	- 15,337	- 5,273	- 5,128	+ 637	+ 4	+ 1,474	+ 179	+ 4,382
Investment fund shares ³	+ 122,885	+ 29,718	+ 23,457	+ 6,240	+ 2,741	+ 21,543	+ 4,902	+ 4,992	+ 7,889
Short-term ⁴									
debt securities	- 98	+ 16,199	+ 9,292	+ 3,105	+ 3,059	+ 6,578	+ 1,913	+ 3,593	- 2,542
Long-term ⁵									
debt securities	+ 9,303	- 21,415	+ 121,832	+ 7,665	+ 12,504	+ 33,536	+ 25,489	- 6,111	+ 6,839
3. Financial derivatives and employee stock options ⁶	+ 47,880	+ 41,519	+ 39,966	+ 12,714	- 344	+ 6,439	- 1,495	+ 5,343	- 81
4. Other investment ⁷	+ 375,278	+ 97,044	+ 2,359	+ 10,469	+ 55,484	+ 80,373	- 18,824	+ 3,877	+ 41,419
MFIs ⁸	+ 112,904	+ 59,472	+ 42,150	+ 20,168	- 20,784	+ 98,981	+ 3,161	+ 11,405	+ 30,992
Short-term	+ 99,380	+ 34,961	+ 16,508	+ 2,381	- 35,986	+ 94,149	- 3,636	+ 9,103	+ 29,388
Long-term	+ 13,204	+ 24,473	+ 25,575	+ 17,766	+ 15,204	+ 4,861	+ 485	+ 2,298	+ 1,601
Enterprises and households ⁹	+ 147,223	+ 48,475	+ 125,919	+ 16,590	+ 19,110	+ 19,441	- 4,102	+ 12,010	- 2,305
Short-term	+ 114,647	+ 24,730	+ 107,673	+ 11,913	+ 15,696	+ 15,043	- 6,804	+ 10,143	- 2,484
Long-term	- 13,302	- 7,670	+ 1,130	+ 1,358	- 1,596	- 378	+ 321	- 15	- 1,382
General government	- 8,243	- 25,070	+ 6,629	- 3,450	+ 3,373	- 3,312	- 1,540	- 102	- 911
Short-term	- 7,256	- 23,472	+ 2,165	- 3,304	+ 4,091	- 3,095	- 1,471	- 21	- 714
Long-term	- 978	- 1,593	+ 4,449	- 145	- 718	- 216	- 69	- 80	- 197
Bundesbank	+ 123,394	+ 14,167	- 172,339	- 22,840	+ 53,785	- 34,737	- 10,020	- 19,437	+ 13,643
5. Reserve assets	+ 31,892	+ 4,426	+ 884	- 790	+ 355	+ 378	- 566	- 317	+ 156
II. Net foreign investment in the reporting country (increase: +)	+ 592,289	+ 124,267	+ 27,460	- 3,705	+ 20,000	+ 128,094	- 838	+ 17,344	+ 40,737
1. Direct investment	+ 85,983	+ 58,137	+ 14,975	- 14,410	+ 16,119	+ 15,044	+ 3,605	+ 6,328	- 962
Equity	+ 46,474	+ 22,102	+ 24,920	- 2,525	+ 6,251	+ 16,228	+ 3,102	+ 1,007	- 2,338
of which:									
Reinvestment of earnings ¹	+ 8,359	+ 10,299	+ 2,668	+ 753	+ 2,010	+ 5,133	+ 614	- 1,374	- 3,128
Debt instruments	+ 39,509	+ 36,035	- 9,945	- 11,885	+ 9,868	- 1,184	+ 503	+ 5,321	+ 1,376
2. Portfolio investment	- 18,451	- 1,568	+ 148,156	+ 62,206	- 196	+ 58,313	+ 21,385	+ 3,026	+ 9,102
Shares ²	+ 2,615	- 5,807	- 12,984	- 1,351	- 47	- 4,197	- 2,080	- 1,594	+ 54
Investment fund shares ³	- 8,423	- 3,207	- 1,984	- 1,583	- 232	- 467	+ 352	+ 821	- 375
Short-term ⁴									
debt securities	+ 30,545	- 32,717	+ 3,936	- 2,131	- 6,138	- 20,838	+ 5,759	- 24,014	- 3,159
Long-term ⁵									
debt securities	- 43,188	+ 40,163	+ 159,188	+ 67,271	+ 6,221	+ 83,815	+ 17,354	+ 27,814	+ 12,582
3. Other investment ⁷	+ 524,758	+ 67,698	- 135,671	- 51,501	+ 4,077	+ 54,737	- 25,828	+ 7,990	+ 32,596
MFIs ⁸	+ 161,287	+ 153,003	- 55,282	- 35,891	- 93,935	+ 139,975	- 2,075	- 3,504	+ 9,693
Short-term	+ 115,265	+ 160,861	- 88,243	- 50,804	- 88,073	+ 140,506	+ 8,700	- 9,981	+ 18,203
Long-term	+ 46,044	- 7,860	+ 32,959	+ 14,912	- 5,863	- 526	- 10,776	+ 6,476	- 8,509
Enterprises and households ⁹	+ 141,138	+ 11,086	+ 58,576	- 13,249	+ 35,026	+ 26,282	- 13,462	+ 24,766	+ 13,698
Short-term	+ 99,842	- 8,533	+ 31,822	- 18,460	+ 32,264	+ 17,220	- 16,039	+ 23,758	+ 12,455
Long-term	+ 14,022	+ 8,384	+ 18,865	+ 2,788	+ 238	+ 6,124	+ 1,616	+ 35	+ 243
General government	- 4,463	- 5,674	- 717	+ 2,898	- 4,126	+ 2,314	+ 2,886	- 703	- 404
Short-term	- 2,134	- 3,293	- 1,066	+ 2,790	- 4,554	+ 2,346	+ 2,901	- 498	- 376
Long-term	- 2,326	- 2,379	+ 540	+ 299	+ 428	- 31	- 15	- 205	- 28
Bundesbank	+ 226,796	- 90,717	- 138,249	- 5,260	+ 67,112	- 113,835	- 13,177	- 12,569	+ 9,609
III. Net financial account (net lending: +/net borrowing: -)	+ 208,978	+ 198,190	+ 239,737	+ 28,266	+ 98,505	+ 48,208	+ 33,129	+ 6,640	+ 19,677

¹ Estimated on the basis of the figures on the level of direct investment stocks abroad and in the Federal Republic of Germany (see Statistical series, direct investment statistics). ² Including participation certificates. ³ Including reinvestment of earnings. ⁴ Short-term: original maturity up to one year. ⁵ Up to and including 2012 without accrued interest. Long-term: original maturity of more than one year or unlimited.

⁶ Balance of transactions arising from options and financial futures contracts as well as employee stock options. ⁷ Includes in particular loans, trade credits as well as currency and deposits. ⁸ Excluding Bundesbank. ⁹ Includes the following sectors: financial corporations (excluding monetary financial institutions) as well as non-financial corporations, households and non-profit institutions serving households.

XII. External sector

7. External position of the Bundesbank *

€ million

End of reporting period	External assets										External liabilities 3 4	Net external position 5
	Total	Reserve assets				Other investment						
		Total	Gold and gold receivables	Special drawing rights	Reserve position in the IMF	Currency, deposits and securities	Total	of which: Clearing accounts within the ESCB 1	Portfolio investment 2			
1999 Jan. 6	95,316	93,940	29,312	1,598	6,863	56,167	1,376	–	–	9,628	85,688	
2004	93,110	71,335	35,495	1,512	5,036	29,292	21,110	7,851	665	95,014	–	1,904
2005	130,268	86,181	47,924	1,601	2,948	33,708	43,184	29,886	902	115,377	–	14,891
2006	104,389	84,765	53,114	1,525	1,486	28,640	18,696	5,399	928	134,697	–	30,308
2007	179,492	92,545	62,433	1,469	949	27,694	84,420	71,046	2,527	176,569	–	2,923
2008	230,775	99,185	68,194	1,576	1,709	27,705	129,020	115,650	2,570	237,893	–	7,118
2009	323,286	125,541	83,939	13,263	2,705	25,634	190,288	177,935	7,458	247,645	–	75,641
2010	524,695	162,100	115,403	14,104	4,636	27,957	337,921	325,553	24,674	273,241	–	251,454
2011	714,662	184,603	132,874	14,118	8,178	29,433	475,994	463,311	54,065	333,730	–	380,932
2012	921,002	188,630	137,513	13,583	8,760	28,774	668,672	655,670	63,700	424,999	–	496,003
2013	721,741	143,753	94,876	12,837	7,961	28,080	523,153	510,201	54,834	401,524	–	320,217
2014	678,804	158,745	107,475	14,261	6,364	30,646	473,274	460,846	46,784	396,314	–	282,490
2015	800,709	159,532	105,792	15,185	5,132	33,423	596,638	584,210	44,539	481,787	–	318,921
2016	990,450	175,765	119,253	14,938	6,581	34,993	767,128	754,263	47,557	592,723	–	397,727
2017	1,142,845	166,842	117,347	13,987	4,294	31,215	923,765	906,941	52,238	668,527	–	474,318
2018	1,209,982	173,138	121,445	14,378	5,518	31,796	980,560	966,190	56,284	770,519	–	439,462
2019	1,160,971	199,295	146,562	14,642	6,051	32,039	909,645	895,219	52,031	663,320	–	497,651
2020	1,429,236	219,127	166,904	14,014	8,143	30,066	1,152,757	1,136,002	57,353	781,339	–	647,898
2021	1,592,822	261,387	173,821	14,911	8,426	32,649	1,276,150	1,260,673	55,285	1,009,488	–	583,334
2022	1,617,056	276,488	184,036	14,567	9,480	34,404	1,290,317	1,269,076	50,251	919,441	–	697,614
2023	1,455,788	292,259	201,335	14,766	8,782	33,376	1,117,978	1,093,371	45,550	779,844	–	675,943
2022 Jan.	1,479,694	261,965	173,362	14,931	8,504	33,168	1,163,561	1,149,868	54,168	807,889	–	671,805
Feb.	1,491,552	273,726	184,255	14,854	8,711	33,905	1,164,098	1,149,722	53,729	774,786	–	716,766
Mar.	1,516,744	277,782	187,779	14,375	8,663	33,965	1,184,501	1,169,952	54,462	808,690	–	708,055
Apr.	1,491,558	288,953	196,274	14,617	8,799	35,263	1,148,681	1,135,400	53,923	790,221	–	701,337
May	1,505,419	278,174	186,481	14,031	8,681	34,980	1,173,376	1,159,716	53,869	805,179	–	700,240
June	1,566,099	281,157	187,573	14,712	8,948	35,923	1,232,176	1,216,530	52,767	826,280	–	739,819
July	1,514,570	280,910	185,950	14,465	9,086	36,409	1,179,431	1,166,155	54,229	810,881	–	703,689
Aug.	1,590,572	280,160	184,794	14,614	9,300	36,451	1,258,187	1,245,014	52,225	842,576	–	747,996
Sep.	1,613,008	281,258	184,022	14,287	9,358	37,592	1,281,266	1,266,647	50,483	829,129	–	783,879
Oct.	1,569,272	274,421	178,101	14,675	9,527	37,119	1,243,873	1,230,005	50,977	811,035	–	758,237
Nov.	1,577,175	277,458	183,052	14,168	9,315	35,923	1,248,088	1,233,980	51,629	810,314	–	766,861
Dec.	1,617,056	276,488	184,036	14,567	9,480	34,404	1,290,317	1,269,076	50,251	919,441	–	697,614
2023 Jan.	1,508,507	281,692	190,062	14,256	9,437	33,938	1,176,042	1,162,354	50,772	793,716	–	714,791
Feb.	1,455,724	276,016	183,755	14,582	9,480	34,199	1,130,353	1,114,888	49,356	743,006	–	712,718
Mar.	1,522,539	288,131	196,405	14,039	9,373	34,314	1,184,604	1,170,620	49,804	791,478	–	731,061
Apr.	1,431,180	285,667	194,679	14,642	9,297	34,049	1,096,324	1,081,284	49,189	726,986	–	704,194
May	1,435,049	290,368	197,915	14,658	9,379	34,416	1,095,750	1,081,900	48,931	701,467	–	733,582
June	1,416,292	280,820	188,991	14,618	9,292	33,919	1,087,034	1,068,747	48,438	718,324	–	697,969
July	1,399,374	282,438	191,458	14,368	9,184	33,429	1,068,875	1,052,218	48,061	689,447	–	709,927
Aug.	1,406,665	284,364	192,914	14,979	9,218	33,253	1,074,575	1,056,420	47,725	687,342	–	719,322
Sep.	1,393,337	282,490	190,232	14,647	9,278	33,333	1,064,193	1,048,059	46,654	713,662	–	679,675
Oct.	1,415,403	295,288	202,630	14,531	9,256	33,871	1,074,627	1,058,985	45,488	688,966	–	726,437
Nov.	1,414,241	292,718	201,195	14,939	8,958	33,627	1,076,415	1,060,074	45,107	691,309	–	722,932
Dec.	1,455,788	292,259	201,335	14,766	8,782	33,376	1,117,978	1,093,371	45,550	779,844	–	675,943
2024 Jan.	1,397,172	294,402	202,641	14,412	8,921	33,428	1,058,508	1,041,902	44,261	669,890	–	727,281
Feb.	1,431,638	295,014	202,181	14,313	8,777	34,744	1,093,262	1,075,510	43,361	679,579	–	752,058
Mar.	1,436,723	312,728	220,571	14,281	8,563	34,314	1,083,242	1,065,759	40,754	666,365	–	770,359
Apr.	1,428,136	324,404	232,438	14,368	8,591	34,007	1,063,804	1,047,932	39,928	653,953	–	774,183
May	1,441,362	324,156	232,717	14,501	8,399	33,538	1,077,447	1,061,110	39,758	663,179	–	778,183
June	1,474,113	328,214	234,891	14,858	8,355	35,109	1,106,429	1,090,444	39,470	666,316	–	807,797

* Assets and liabilities vis-à-vis all countries within and outside the euro area. Up to December 2000 the levels at the end of each quarter are shown, owing to revaluations, at market prices; within each quarter, however, the levels are computed on the basis of cumulative transaction values. From January 2001 all end-of-month levels are valued at market prices. **1** Mainly net claims on TARGET2 balances (acc. to the respective country designation), since November 2000 also balances with non-euro area central banks

within the ESCB. **2** Mainly long-term debt securities from issuers within the euro area. **3** Including estimates of currency in circulation abroad. **4** See Deutsche Bundesbank, Monthly Report, October 2014, p. 22. **5** Difference between External assets and External liabilities. **6** Euro opening balance sheet of the Bundesbank as at 1 January 1999.

XII. External sector

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

EUR 1 = currency units ...

Yearly or monthly average	Australia	Canada	China	Denmark	Japan	Norway	Sweden	Switzerland	United Kingdom	United States
	AUD	CAD	CNY	DKK	JPY	NOK	SEK	CHF	GBP	USD
2012	1.2407	1.2842	8.1052	7.4437	102.49	7.4751	8.7041	1.2053	0.81087	1.2848
2013	1.3777	1.3684	8.1646	7.4579	129.66	7.8067	8.6515	1.2311	0.84926	1.3281
2014	1.4719	1.4661	8.1857	7.4548	140.31	8.3544	9.0985	1.2146	0.80612	1.3285
2015	1.4777	1.4186	6.9733	7.4587	134.31	8.9496	9.3535	1.0679	0.72584	1.1095
2016	1.4883	1.4659	7.3522	7.4452	120.20	9.2906	9.4689	1.0902	0.81948	1.1069
2017	1.4732	1.4647	7.6290	7.4386	126.71	9.3270	9.6351	1.1117	0.87667	1.1297
2018	1.5797	1.5294	7.8081	7.4532	130.40	9.5975	10.2583	1.1550	0.88471	1.1810
2019	1.6109	1.4855	7.7355	7.4661	122.01	9.8511	10.5891	1.1124	0.87777	1.1195
2020	1.6549	1.5300	7.8747	7.4542	121.85	10.7228	10.4848	1.0705	0.88970	1.1422
2021	1.5749	1.4826	7.6282	7.4370	129.88	10.1633	10.1465	1.0811	0.85960	1.1827
2022	1.5167	1.3695	7.0788	7.4396	138.03	10.1026	10.6296	1.0047	0.85276	1.0530
2023	1.6288	1.4595	7.6600	7.4509	151.99	11.4248	11.4788	0.9718	0.86979	1.0813
2023 Feb.	1.5514	1.4400	7.3244	7.4447	142.38	10.9529	11.1725	0.9905	0.88550	1.0715
Mar.	1.6034	1.4649	7.3807	7.4456	143.01	11.2858	11.2276	0.9908	0.88192	1.0706
Apr.	1.6389	1.4792	7.5561	7.4518	146.51	11.5187	11.3370	0.9846	0.88115	1.0968
May	1.6346	1.4687	7.5948	7.4485	148.93	11.7330	11.3697	0.9751	0.87041	1.0868
June	1.6157	1.4414	7.7653	7.4492	153.15	11.7164	11.6766	0.9764	0.85861	1.0840
July	1.6423	1.4618	7.9482	7.4508	155.94	11.3474	11.6343	0.9663	0.85856	1.1058
Aug.	1.6818	1.4703	7.9096	7.4522	157.96	11.4127	11.8117	0.9588	0.85892	1.0909
Sep.	1.6622	1.4458	7.7967	7.4566	157.80	11.4525	11.8417	0.9600	0.86158	1.0684
Oct.	1.6637	1.4474	7.7200	7.4604	158.04	11.6284	11.6472	0.9547	0.86798	1.0563
Nov.	1.6634	1.4828	7.8087	7.4581	161.84	11.7958	11.5475	0.9634	0.87045	1.0808
Dec.	1.6321	1.4653	7.7870	7.4556	157.21	11.5333	11.2028	0.9441	0.86168	1.0903
2024 Jan.	1.6422	1.4631	7.8201	7.4572	159.46	11.3501	11.2834	0.9368	0.85873	1.0905
Feb.	1.6533	1.4564	7.7651	7.4550	161.38	11.3843	11.2500	0.9462	0.85466	1.0795
Mar.	1.6586	1.4726	7.8297	7.4566	162.77	11.5214	11.3054	0.9656	0.85524	1.0872
Apr.	1.6469	1.4661	7.7658	7.4596	165.03	11.6828	11.5910	0.9761	0.85658	1.0728
May	1.6317	1.4780	7.8206	7.4606	168.54	11.5988	11.6186	0.9830	0.85564	1.0812
June	1.6206	1.4750	7.8051	7.4592	169.81	11.4178	11.2851	0.9616	0.84643	1.0759

* Averages: Bundesbank calculations based on the daily euro foreign exchange reference rates published by the ECB; for additional euro foreign exchange reference rates, see Statistical Series Exchange rate statistics.

10. Euro area countries and irrevocable euro conversion rates in the third stage of Economic and Monetary Union

From	Country	Currency	ISO currency code	EUR 1 = currency units ...
1999 January 1	Austria	Austrian schilling	ATS	13.7603
	Belgium	Belgian franc	BEF	40.3399
	Finland	Finnish markka	FIM	5.94573
	France	French franc	FRF	6.55957
	Germany	Deutsche Mark	DEM	1.95583
	Ireland	Irish pound	IEP	0.787564
	Italy	Italian lira	ITL	1,936.27
	Luxembourg	Luxembourg franc	LUF	40.3399
	Netherlands	Dutch guilder	NLG	2.20371
	Portugal	Portuguese escudo	PTE	200.482
	Spain	Spanish peseta	ESP	166.386
2001 January 1	Greece	Greek drachma	GRD	340.750
2007 January 1	Slovenia	Slovenian tolar	SIT	239.640
2008 January 1	Cyprus	Cyprus pound	CYP	0.585274
	Malta	Maltese lira	MTL	0.429300
2009 January 1	Slovakia	Slovak koruna	SKK	30.1260
2011 January 1	Estonia	Estonian kroon	EEK	15.6466
2014 January 1	Latvia	Latvian lats	LVL	0.702804
2015 January 1	Lithuania	Lithuanian litas	LTL	3.45280
2023 January 1	Croatia	Croatian kuna	HRK	7.53450

XII. External sector

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

Q1 1999 = 100

Period	Effective exchange rates of the euro vis-à-vis the currencies of the						Indicators of the German economy's price competitiveness						
	extended EER group of trading partners 1				broad EER group of trading partners 2		Based on the deflators of total sales 3 vis-à-vis			Based on consumer price indices vis-à-vis			
	Nominal	In real terms based on consumer price indices	In real terms based on the deflators of gross domestic product 3	In real terms based on unit labour costs of national economy 3	Nominal	In real terms based on consumer price indices	27 selected industrial countries 4			37 countries 5	27 selected industrial countries 4	37 countries 5	60 countries 6
							Total	of which:					
						Euro area countries	Non-euro area countries						
1999	96.2	96.1	95.8	96.1	96.5	95.9	97.8	99.6	95.7	97.6	98.3	98.1	97.8
2000	87.0	86.8	85.9	85.6	88.0	86.1	91.9	97.5	85.4	91.1	93.1	92.3	91.2
2001	87.4	87.1	86.6	84.5	90.1	86.9	91.7	96.6	86.0	90.5	93.0	91.7	91.1
2002	89.7	90.3	89.8	88.2	94.4	90.6	92.3	95.7	88.4	91.0	93.5	92.2	91.9
2003	100.5	101.6	101.1	99.4	106.5	101.7	95.9	94.8	97.5	95.3	97.0	96.7	96.8
2004	104.3	105.6	104.2	102.7	111.0	105.6	96.2	93.6	99.9	95.6	98.5	98.2	98.4
2005	102.9	104.3	102.2	101.0	109.1	103.2	94.7	92.0	98.7	93.3	98.5	97.2	96.8
2006	102.9	104.3	101.7	100.0	109.3	102.6	93.5	90.4	98.1	91.6	98.6	96.8	96.0
2007	106.5	107.3	104.1	101.8	112.9	104.8	94.6	89.7	102.1	92.1	100.9	98.3	97.4
2008	110.4	110.3	106.3	105.8	117.8	107.3	94.9	88.4	105.2	91.4	102.4	98.5	97.6
2009	111.9	111.1	107.3	109.3	120.8	108.3	95.3	89.3	104.7	92.1	101.9	98.6	97.9
2010	104.6	103.3	99.1	101.8	112.1	99.3	92.5	88.7	98.2	88.2	98.8	94.3	92.5
2011	104.4	102.4	97.2	100.0	112.9	98.8	92.1	88.5	97.6	87.4	98.2	93.5	91.9
2012	98.6	97.0	91.6	94.2	107.6	94.0	90.1	88.4	92.6	84.8	95.9	90.5	88.9
2013	102.2	100.1	94.7	97.1	112.4	97.0	92.4	88.8	97.5	86.7	98.1	92.3	90.9
2014	102.4	99.5	94.6	97.2	114.7	97.4	93.0	89.6	97.9	87.4	98.2	92.5	91.5
2015	92.5	89.7	85.9	86.5	106.1	88.7	89.8	90.3	89.1	83.6	94.3	87.8	86.9
2016	95.2	91.6	88.2	p 87.8	110.1	90.7	90.7	90.7	90.6	85.0	95.0	88.8	88.1
2017	97.5	93.6	89.4	p 88.7	112.5	92.0	91.9	90.8	93.5	85.7	96.3	89.9	88.9
2018	100.0	95.8	91.0	p 90.5	117.3	95.2	93.2	90.9	96.6	86.7	97.7	91.1	90.8
2019	98.1	93.3	89.2	p 88.0	115.5	92.5	92.3	91.2	93.8	85.9	96.4	89.9	89.4
2020	99.7	93.7	90.0	p 89.3	119.2	93.9	92.5	91.4	93.9	86.5	96.4	90.1	90.1
2021	99.6	93.7	p 89.3	p 87.5	120.5	94.3	93.5	91.8	96.0	86.7	97.4	90.6	90.9
2022	95.3	90.8	p 84.2	p 82.7	116.1	p 90.9	92.0	91.3	92.8	85.1	95.9	89.1	89.0
2023	98.1	94.0	p 88.3	p 86.3	121.8	p 94.7	93.5	91.7	96.2	87.1	98.0	91.3	p 91.6
2022 Jan.	96.6	91.4			118.2	p 92.3					96.0	89.0	89.4
2022 Feb.	96.8	91.8	p 85.5	p 83.9	118.5	p 92.6	92.7	91.6	94.1	85.4	96.2	89.1	89.4
2022 Mar.	95.8	91.5			117.9	p 92.6					96.3	89.5	89.9
2022 Apr.	95.0	90.1			116.0	p 90.3					96.1	88.9	88.8
2022 May	95.4	90.5	p 84.0	p 82.5	115.8	p 90.2	92.0	91.2	93.1	84.8	96.5	89.5	89.1
2022 June	95.7	90.7			116.1	p 90.3					95.7	88.7	88.4
2022 July	93.9	89.2			114.1	p 88.9					94.8	87.9	87.5
2022 Aug.	93.4	88.9	p 82.4	p 81.1	113.6	p 88.6	91.4	91.3	91.2	84.5	94.5	87.6	87.3
2022 Sep.	93.9	89.8			113.9	p 89.3					95.9	89.1	88.7
2022 Oct.	94.5	91.3			114.8	p 90.8					96.0	89.7	89.4
2022 Nov.	95.7	92.3	p 85.0	p 83.4	116.6	p 92.0	92.0	91.3	92.9	85.5	97.0	90.6	90.3
2022 Dec.	96.8	92.6			118.6	p 92.9					96.2	89.7	89.8
2023 Jan.	97.1	92.8			119.2	p 93.1					97.5	90.4	p 90.4
2023 Feb.	97.0	93.1	p 87.0	p 85.2	119.3	p 93.4	92.8	91.2	95.2	86.0	97.7	90.5	p 90.6
2023 Mar.	97.3	93.3			119.7	p 93.6					98.0	90.9	p 91.1
2023 Apr.	98.4	94.2			121.5	p 94.9					98.5	91.5	p 91.9
2023 May	98.0	93.6	p 88.1	p 85.7	120.9	p 94.2	93.3	91.4	96.1	86.7	98.1	91.1	p 91.3
2023 June	98.2	93.8			121.8	p 94.7					98.2	91.3	p 91.8
2023 July	99.2	95.0			123.7	p 96.1					98.4	91.8	p 92.5
2023 Aug.	99.0	95.0	p 89.0	p 87.2	123.7	p 96.1	93.6	91.7	96.5	87.6	98.3	91.8	p 92.4
2023 Sep.	98.5	94.6			123.0	p 95.5					98.0	91.7	p 92.1
2023 Oct.	98.0	94.1			122.5	p 95.0					97.7	91.3	p 91.7
2023 Nov.	98.7	94.6	p 88.8	p 87.1	123.4	p 95.3	94.2	92.4	97.0	88.0	98.2	91.6	p 91.9
2023 Dec.	98.2	94.0			123.2	p 94.9					97.7	91.1	p 91.5
2024 Jan.	98.4	94.4			123.6	p 95.2					97.8	91.4	p 91.8
2024 Feb.	98.1	94.1	p 88.8	p 87.7	123.3	p 94.9	93.9	92.2	96.4	87.8	97.7	91.3	p 91.6
2024 Mar.	98.8	94.8			124.2	p 95.5					98.1	91.8	p 92.1
2024 Apr.	98.6	p 94.5			124.0	p 95.1					98.3	p 91.8	p 92.1
2024 May	98.9	p 94.8			124.4	p 95.3					98.6	p 92.0	p 92.2
2024 June	98.5	p 94.4			124.0	p 94.9					p 98.1	p 91.8	p 92.0

* The effective exchange rate corresponds to the weighted external value of the currency concerned. The method of calculating the indicators of the German economy's price competitiveness is consistent with the procedure to compute the effective exchange rates of the euro. A decline in the figures implies an increase in competitiveness. The weights are based on trade in manufactured goods and services. For more detailed information on methodology and weighting scale, see the website of the Deutsche Bundesbank (<https://www.bundesbank.de/content/796162>). 1 The calculations are based on the weighted averages of the changes in the bilateral exchange rates of the euro vis-à-vis the currencies of the following 18 countries: Australia, Bulgaria, Canada, China, Czechia, Denmark, Hong Kong, Hungary, Japan, Norway, Poland, Romania, Singapore, South Korea, Sweden, Switzerland, the United Kingdom and the United States. Where current price and wage indices were not available, estimates were used. 2 Includes countries belonging to the extended EER group of trading partners (fixed composition) and additionally the following 23 countries: Algeria, Argentina, Brazil, Chile, Colombia, Iceland, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, Peru, Philippines, the Russian Federation, Saudi Arabia, South Africa, Taiwan,

Thailand, Turkey, Ukraine and United Arab Emirates. The ECB has suspended the publication and calculation of the euro foreign exchange reference rate against Russian rouble with effect from March 2, 2022 until further notice. For the calculation of effective exchange rates, an indicative rate is used for the Russian Federation from that date. It is calculated from the daily RUB/USD rates determined by the Bank of Russia in conjunction with the respective ECB's euro foreign exchange reference rate to the US dollar. 3 Annual and quarterly averages. 4 Euro area countries (from 2001 including Greece, from 2007 including Slovenia, from 2008 including Cyprus and Malta, from 2009 including Slovakia, from 2011 including Estonia, from 2014 including Latvia, from 2015 including Lithuania, from 2023 including Croatia) as well as Canada, Denmark, Japan, Norway, Sweden, Switzerland, the United Kingdom and the United States. 5 Euro area countries (current composition) and countries belonging to the extended EER group of trading partners (fixed composition). 6 Euro area countries (current composition) and countries belonging to the broad EER group of trading partners (fixed composition).