1

RECOVERY OF THE GERMAN ECONOMY IS DELAYED FURTHER

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References

This is a translated version of the original German-language chapter "Erholung der deutschen Wirtschaft verzögert sich weiter", which is the sole authoritative text. Please cite the original German-language chapter if any reference is made to this text.

KEY MESSAGES

↘ In 2024, real income growth is likely to slowly stimulate private consumption expenditure and thus the German economy. Capital formation is also expected to pick up slightly in 2025.

↘ The GCEE expects Germany's price-adjusted gross domestic product to increase by just 0.2 % this year and by 0.9 % in 2025. Consumer price inflation is expected to be on an annual average of 2.4 % and 2.1 % respectively.

↘ The outlook is subject to significant risks due to the uncertainty surrounding geopolitical developments as well as public finance and economic policy.

SUMMARY

The global economy has started 2024 with renewed strength. This is due in particular to a significant recovery in global trade in goods. At the same time, global industrial production is also on the rise. Despite high interest rates and increased geopolitical uncertainty, the US and China in particular are the main driver of global economic growth. While economic growth in the USA is broad-based, the service sector is the driving force in China. The GCEE expects **global GDP to expand by 2.6 %** and **2.7 %** in **2024 and 2025** respectively.

Although the **euro area economy still performs weakly at the moment**, **the economy is likely to gain some traction**. Rising real wages and the upswing in the global economy should boost demand. However, stronger growth is not expected until 2025. **GDP growth** in the euro area is expected to be **0.8 %** and **1.5 % in 2024 and 2025**. **Inflation** will be **2.4 %** and **2.1 %** respectively. The tightening of monetary policy has proven effective. The first interest rate cuts are expected to take place in the course of 2024. Consequently, financing conditions for companies will improve.

The recovery of the German economy is still on hold. Gross domestic product fell by 0.5 % in the final quarter of 2023 compared to the previous quarter. Employment growth has also levelled off after the increases of recent years. However, the improved economic environment and the picking up of indicators suggest that the German economy will **gain a slight upward momentum in** 2024 and 2025. **As in the euro area, real incomes will rise, which will support the growth of private consumption expenditure**. The increasingly favourable **financing conditions** over the course of 2024 **will stimulate capital formation in 2025**. In contrast, fiscal policy is expected to be restrictive due to less financial scope than in previous years. Labour cost increases and persistently high industrial energy prices as well as a demographically induced slowdown in the labour market are also weighing on overall economy growth. Overall, **German GDP is expected to grow by 0.2 % in 2024 and 0.9 % in 2025**. **Inflation in Germany** is likely to be **2.4 %** and **2.1 %**.

I. OVERVIEW

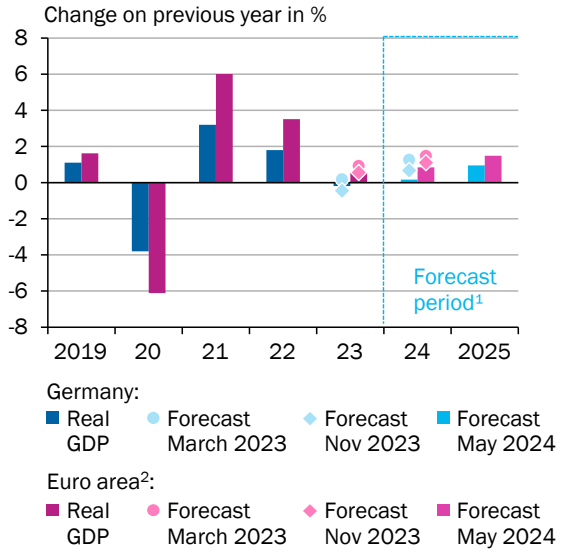
1. The German Council of Economic Experts expects the **weak development of** the German economy to continue **in 2024** and that the annual average gross domestic product (GDP) ↘ GLOSSARY will increase **by just 0.2 %** on a price-adjusted basis. The council is thus revising its forecast downwards by 0.5 percentage points compared to autumn 2023. The overall economy is expected to grow moderately by **0.9 % in 2025**. ↘ ITEM 36 Inflation is expected to average 2.4 % in 2024, 0.2 percentage points lower than forecast in autumn 2023. Compared to 2023, when it was still 5.9 %, it is therefore likely to fall significantly in 2024. In 2025, the council expects the inflation rate to be 2.1 %. ↘ ITEM 47 ↘ CHART 1 Core inflation will be 3.0 % in 2024 and 2.4 % in 2025.

2. **Weak overall economic demand** has increasingly **slowed economic development** since autumn 2023. ↘ ITEM 34 ↘ CHART 18 The spending behaviour of private households is restrained despite real wage growth and new orders in industry and construction have deteriorated further, partly due to the tightening of monetary policy. ↘ CHART 2 In view of further real income gains, however, private consumption is likely to increase over the forecast horizon. However, a persistently high savings rate will prevent stronger growth. ↘ ITEM 38 In addition, gross fixed capital formation in construction is likely to start growing again in 2025 due to improved financing conditions. ↘ ITEMS 40 F. Fiscal policy is expected to take a restrictive stance over the forecast horizon. The measures in response to the

↘ CHART 1

Economic outlook for Germany and Europe

GDP in Germany and the euro area



Key economic indicators (in %)

	2023	2024[1]	2025[1]
Germany			
GDP growth[3]	– 0.2	0.2	0.9
Inflation rate	5.9	2.4	2.1
Unemployment rate[4]	5.7	5.8	5.6
Wage growth[5]	6.3	5.1	3.7
Budget balance[6]	– 2.1	– 1.5	– 1.0
Euro area			
GDP growth[2,3]	0.6	0.8	1.5
Inflation rate[7]	5.4	2.4	2.1
Global economy			
GDP growth[2,3]	2.7	2.6	2.7
Inflation rate	5.3	4.5	3.4

1 – Forecast by the GCEE. 2 – Values are based on seasonal and calendar-adjusted quarterly figures. 3 – Constant prices. 4 – Registered unemployed in relation to civil labour force. 5 – Change of gross wages and salaries (domestic concept) per employees' hour worked. 6 – In relation to nominal GDP; territorial authorities and social security according to national accounts. 7 – Change of the Harmonised Index of Consumer Prices.

Sources: Eurostat, Federal Statistical Office, national statistical offices, own calculations
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coronavirus crisis and the energy price crisis are gradually coming to an end, and the Federal Government's budget consolidation efforts will lead to spending cuts or increased revenues over the forecast period. ↘ ITEMS 48 F. Rising labour costs and persistently high industrial energy prices as well as a demographically induced slowdown in the labour market are also weighing on overall economic growth. ↘ ITEM 34

3. Although the **euro area**, the most important market for German exports, **performs better than the German economy** due to its lower industrial and export focus, economic growth in the euro area has also weakened already. However, the GCEE expects **GDP growth in the euro area** to pick up again. It is **expected to** reach **0.8 % in 2024** and **1.5 % in 2025**. ↘ ITEM 25 The **global economy** is largely driven by strong growth in the US and China and is expected to **grow by 2.6 % and 2.7 % in 2024 and 2025**. ↘ ITEMS 6 AND 9 F. However, the **brightening in the** forecast horizon will only **provide modest support for German exports**. China in particular is increasingly pushing into German manufacturing markets. ↘ BOX 7 Due to the reduction in order backlogs in important sectors of the economy, this is likely to weigh on production and exports over the forecast horizon.

4. As in Germany, inflation in the euro area is continuing to fall. However, it is expected to stabilise at the ECB's inflation target of around 2 % towards the end of the forecast horizon. On the one hand, energy and import prices are falling and monetary policy is restrictive. On the other hand, there is increased domestic price pressure due to rising labour costs and low productivity. ↘ ITEM 47 **Inflation in the euro area is likely to be 2.4 % and 2.1 % in 2024 and 2025, respectively**, as measured by the Harmonised Index of Consumer Prices (HICP). ↘ ITEMS 26 AND 47

↘ CHART 2

Determining factors for the forecast

	Current situation	Outlook	Opportunities and risks
Private households	Purchasing power has picked up, but consumer sentiment subdued	Muted recovery of private consumption	Opportunity: Falling propensity to save could increase consumer spending
Industry	Lower order backlogs and reduced competitiveness	Foreign demand recovers, but provides just small stimulus to the economy	Risk: Energy prices could rise
Monetary and fiscal policy	Monetary policy contraction cycle at its peak, fiscal crisis measures expire	Interest rate cut in 2024, further consolidation of public finances	Risks: High interest rates could persist, restrictive stance of fiscal policy

Source: own representation
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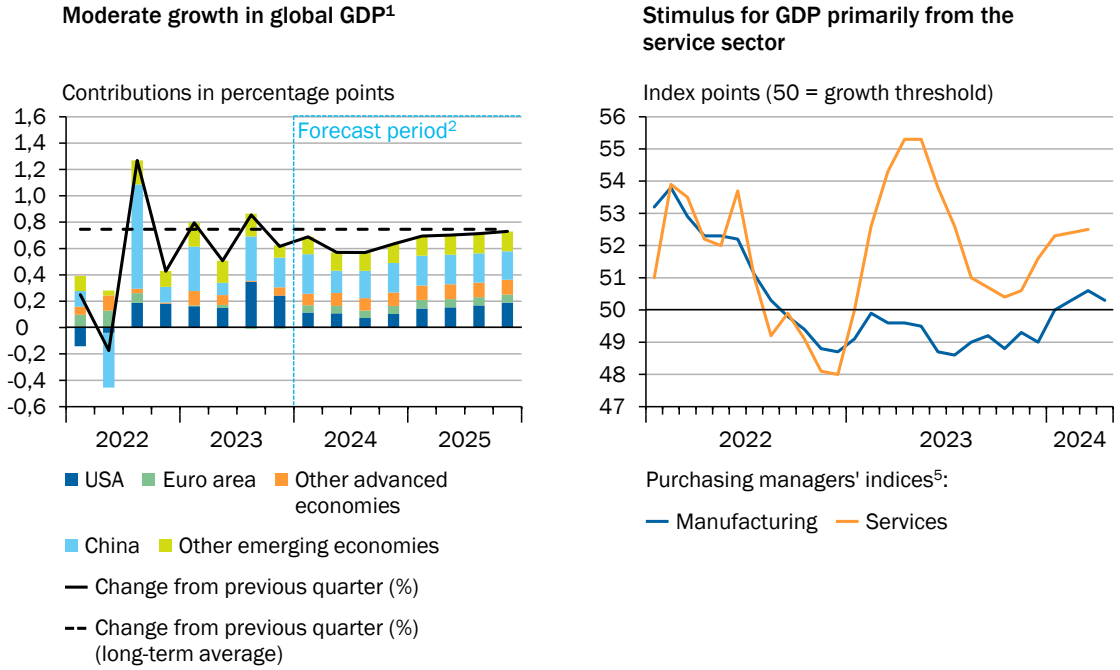
Monetary policy tightening is likely to have reached its peak and the pass-through of past key interest rate hikes to financing conditions is largely complete. ↘ ITEM 28 Further, it is to be **expected that** the **ECB will cut interest rates this year** as a result of the decline in inflation. However, the interest rate cut is likely to be cautious due to domestic price pressure and will not support private demand until 2025. ↘ ITEMS 27 F.

5. Internationally, **geopolitical uncertainty** poses a significant **risk to the economy**. It is significantly higher than the historical average for the years up to 2021. ↘ ITEM 16 The reasons for this are the ongoing war in Ukraine and the conflict in the Middle East as a result of Hamas' terrorist attack on Israel. An escalation of the Middle East conflict could cause energy prices in particular to rise again. **In the euro area,** stronger wage growth or a stronger than expected pass-through of labour costs to prices could prompt **monetary policy** to maintain its tightening course for longer than expected. **In Germany**, the **federal government's difficulties in planning the budget pose a risk**, particularly for 2025. Additional savings efforts may be required in order to comply with the debt brake in 2025. It is also uncertain in which areas the Federal Government will consolidate its budget. ↘ ITEMS 16 AND 48 Irrespective of the shape of fiscal policy and the realisation of geopolitical risks, **the uncertainty** surrounding this **weighs on the investment climate**.

II. GLOBAL ECONOMY

6. **Global GDP growth** in **2023** was **moderate at 2.7 %**. ↘ TABLE 1 Economic performance of the individual countries was very heterogeneous. On the expenditure side, private consumption expenditures in the **US** and **China made a** significant contribution to global growth. ↘ BOX 1 In other advanced economies such as the UK and the euro area, however, growth was low due to private consumer restraint. ↘ ITEMS 9 AND 19 ↘ CHART 3 LEFT On the production side, weak global industrial production and a temporary decline in global trade also dampened the global economy. **Global growth has picked up again since the start of 2024**. The **revival in global trade in goods is playing** an important role in this. ↘ ITEM 8 This is likely to be largely due to lower prices for Chinese exports. Global trade and global industrial production are likely to increase further over the forecast horizon. Inflation should continue to fall worldwide, albeit at a slower rate than in the previous year. ↘ ITEM 15 Key policy rates in advanced economies are expected to fall over the forecast horizon. This should stimulate gross fixed capital formation in particular. The GCEE expects global GDP to grow by 2.6 % in 2024 and by 2.7 % in 2025. ↘ ITEM 11

↘ CHART 3
Global growth and purchasing managers' indices



1 – Averages of seasonally adjusted quarterly values. Global GDP is approximated by the sum of the countries in Table 1 (total). 2 – Forecast by the GCEE. 3 – Definition as in footnote 9 in Table 1. 4 – Definition as in footnote 10 in Table 1. 5 – Global purchase managers's indices based on a monthly survey of purchasing managers and managing directors.

Sources: Eurostat, IMF, national statistical offices, OECD, S&P Global, own calculations
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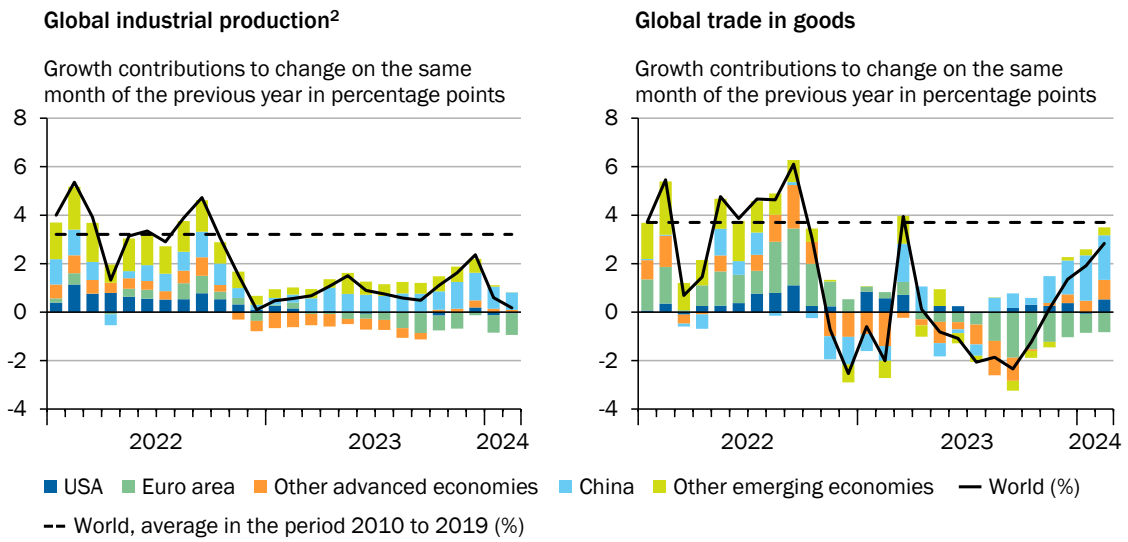
1. Upturn of the global economy in sight

7. **Global industrial production is growing only weakly** at the start of 2024 ↘ CHART 4 LEFT This continues the trend from the previous year. As has been the case since the beginning of 2023, the main contributors to growth were the emerging markets ↘ GLOSSARY, especially China, but hardly any of the advanced economies. ↘ GLOSSARY The **Purchasing Managers' Index for the global manufacturing sector**, which is regarded as a leading indicator for the development of industrial production worldwide, fell **at the current margin,** but remains **above the growth threshold** of 50 points. ↘ CHART 3 RIGHT As in 2023, the indicator in the advanced economies remains below the threshold value of 50 points. For the emerging markets, the index is mostly above this level. The Purchasing Managers' Index for the global services sector has been above the growth threshold since January 2023. In addition to the strong demand for services in the US, higher spending on services in emerging markets is now also likely to be responsible for this.

8. **Global trade in goods** has been **recovering** since September 2023. ↘ CHART 4 RIGHT **Positive contributions** to global trade in goods in the second half of 2023 came primarily from **China**. In addition to the state-subsidised overcapacity in the Chinese manufacturing industry, the weak evolution of domestic price due to the current economic situation in China is also benefiting the Chinese export economy (Boullenois et al., 2024; Cotterill et al., 2024). ↘ BOX 1 The decline in freight costs in 2023 is also likely to have contributed to the **revival of global trade in goods**. ↘ CHART 5 In contrast, weak demand for goods from the euro area and the United Kingdom continues to weigh on global trade. ↘ ITEM 9 According to the OECD, stagnating consumer confidence in the forecast period means that

↘ CHART 4

Regional contributions to global growth of industrial production and trade in goods[1]



1 – Change on same month of the previous year, price- and seasonally adjusted. Data and country definitions of the Dutch Centraal Planbureau (CPB). Country weighting based on 2010. 2 – Excluding construction.

Sources: CPB, own calculations
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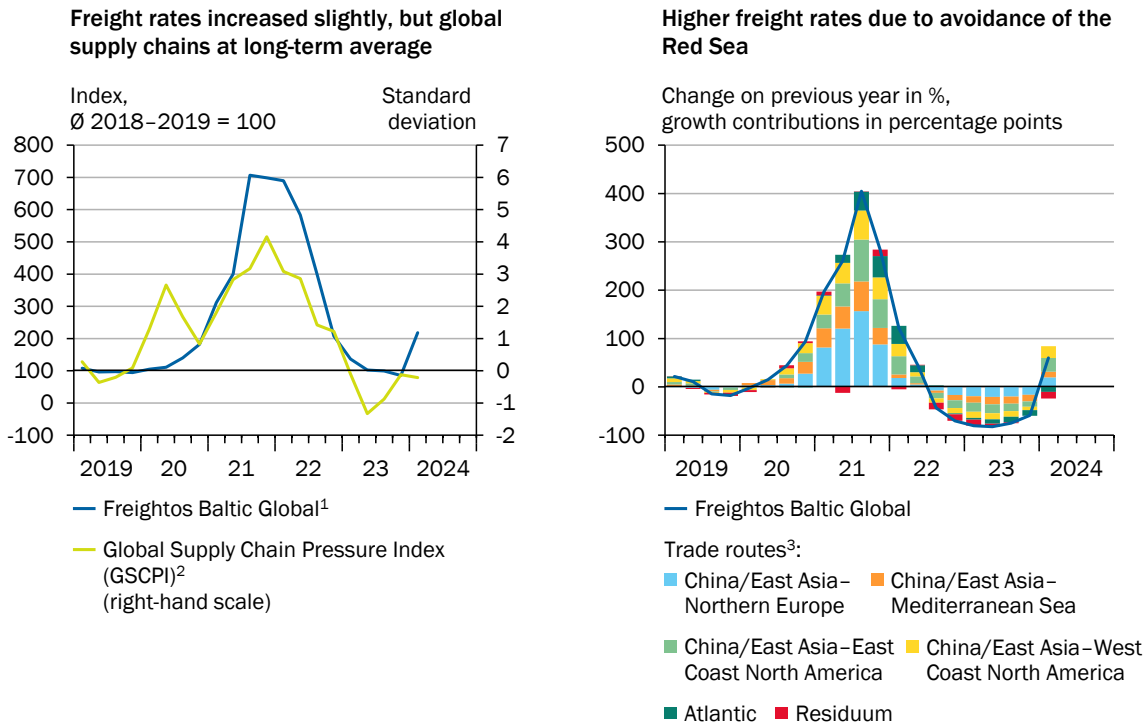
↘ CHART 5

Development of global freight rates and regional distribution



1 – Freight rates on the spot market of 40-foot containers for twelve trade routes. 2 – The GSCPI combines various indicators of transport costs and supply shortages into one index. The Index is normalized to a mean of zero. The deviation from the mean value are measured in standard deviation are shown. 3 – The global price change can be explained by price changes of the 12 trade routes. To estimate the weights for each trade route, the global price change is regressed on the price changes of the trade routes under the following two constraints: Each weight is greater than or equal to zero and the sum of the weights is one. The underlying estimation period is 2017Q3 to 2024Q1.

Sources: Benigno et al. (2022), Freightos, own calculations
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these economies are only expected to make small contributions to growth in global trade in goods in 2024. Freight costs have risen since the beginning of the year due to attacks on cargo ships in the Red Sea and longer transport routes (IfW, 2024; OECD, 2024). However, freight costs are still well below the level of the second half of 2021. ↘ CHART 5

9. In the **group of advanced economies,** the **USA** and **Japan increased** their **economic output** by **2.5 %** and **1.9 %** respectively in 2023, which is well **above their potential output growth rates** (GCEE Annual Report 2023 items 88 ff.). The US upturn was largely driven by a sharp rise in private consumption. ↘ BOX 1 Foreign trade was the main contributor to GDP growth in Japan due to high exports and lower imports in the first half of 2023. The yen has recently depreciated further and is likely to provide renewed impetus for Japan's net exports in 2024. In contrast, GDP growth in the United Kingdom and the euro area was low in 2023 and even negative in the second half of 2023. ↘ TABLE 1 On the expenditure side, **private consumption expenditures were weak** in both regions. ↘ ITEM 19 Private consumption also remained subdued in Japan. With the exception of the USA, the **reluctance of** private consumers **to spend** is likely to

continue to dampen growth prospects in many advanced economies over the forecast horizon.

10. Among the emerging **markets, economic growth** remains **high**. Economies such as India and the Philippines are on the upturn. ↘ TABLE 1 The **Chinese economy grew** by **5.4 %** in 2023, exceeding the government's growth target of 5 %.

↘ TABLE 1

Gross domestic product and consumer prices of selected countries

Country/country group	Weight in %[1]	Gross domestic product[2]			Consumer prices		
		Change on previous year in %					
		2023	2024[3]	2025[3]	2023	2024[3]	2025[3]
Europe	**27.8**	**0.9**	**1.2**	**1.8**	**8.0**	**5.1**	**3.7**
Euro area	16.7	0.6	0.8	1.5	5.4	2.4	2.1
United Kingdom	3.5	0.1	0.5	1.6	7.3	3.0	2.4
Russia	2.1	3.0	2.5	1.8	5.9	7.3	6.0
Central and Eastern Europe[4]	1.9	0.4	2.5	3.3	11.4	4.1	3.9
Türkiye	1.2	4.5	3.1	3.3	53.9	52.0	30.9
Other countries[5]	2.5	0.8	1.3	1.9	4.0	2.3	1.7
America	**36.9**	**2.4**	**2.1**	**1.9**	**6.8**	**6.9**	**4.5**
United States	29.0	2.5	2.3	1.8	4.1	3.1	2.4
Latin America[6]	3.3	1.6	0.9	2.1	33.1	44.3	24.6
Canada	2.3	1.1	1.2	2.1	3.9	2.5	2.1
Brazil	2.3	2.9	2.1	2.3	4.6	3.8	3.6
Asia	**33.5**	**4.6**	**4.5**	**4.3**	**1.9**	**1.7**	**2.2**
China	18.7	5.4	5.1	4.7	0.2	0.7	1.8
Japan	4.5	1.9	0.7	1.5	3.3	2.4	1.7
India	3.8	7.1	6.6	6.6	5.7	4.9	4.5
Asian advanced economies[7]	3.6	1.5	3.5	2.8	3.4	2.4	2.2
Southeast Asian emerging economies	2.9	4.1	4.5	4.9	3.4	2.0	1.8
Total	**100**	**2.7**	**2.6**	**2.7**	**5.3**	**4.5**	**3.4**
Advanced economies[9]	65.6	1.6	1.6	1.8	4.6	2.8	2.2
Emerging economies[10]	34.4	4.7	4.4	4.3	6.8	7.8	5.7
memorandum:							
weighted by exports[11]	100	1.4	1.8	2.3	.	.	.
following IMF concept[12]	100	3.2	3.1	3.2	.	.	.
World trade[13]		– 1.7	1.3	2.0	.	.	.

1 – GDP (US dollar) of the named countries or country groups in 2023 as a percentage of total GDP of the named countries or country groups, corresponding to 90 % of the IMF country group weighted by US dollars and 85 % of the IMF country group weighted by purchasing power parities. 2 – Price-adjusted. Values are based on seasonal and calendar-adjusted quarterly figures. 3 – Forecast by the German Council of Economic Experts. 4 – Bulgaria, Czechia, Hungary, Poland, Romania. 5– Denmark, Norway, Sweden, Switzerland. 6 – Argentina, Chile, Colombia, Mexico. 7 – Hong Kong, Republic of Korea, Singapore, Taiwan. 8 – Indonesia, Malaysia, Philippines, Thailand. 9 – Asian advanced economies, euro area, Central and Eastern Europe, Australia, Canada, Denmark, Japan, Norway, Sweden, Switzerland, United Kingdom, United States. 10 – Latin America, Southeast Asian emerging economies, Brazil, China, India, Russia, Türkiye. 11 – Total of all lis countries. Weighted by the respective shares of German exports in 2023. 12 – Weights according to purchasing power parities and extrapolated to the countries covered by the IMF. 13 – As measured by the Dutch Centraal Planbureau (CPB).

Sources: CPB, Eurostat, IMF, national statistical offices, OECD, own calculations

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The relatively strong increase in China's economic output was largely due to strong growth in the first quarter of 2023 following the lifting of pandemic-related restrictions. Following weak growth in the second quarter of 2023, the Chinese economy also expanded strongly again in the second half of 2023. ↘ BOX 1 In spring 2024, rising industrial production and higher sales in retail and other service sectors, such as travel and hospitality, are key factors for continued high GDP growth rates in emerging markets.

↘ BOX 1

Focus: The major economies of the USA and China

The strong **economic growth in the US** in the second half of 2023 was **broad-based**. Private consumption expenditures made the largest contribution to growth. Additional impetus was provided by government spending and gross fixed capital formation in construction and manufacturing. Consumer price inflation has stabilised at a level above 3 % since summer 2023 and has not fallen any further. ↘ CHART 6 LEFT The **core inflation rate** and the inflation rate in core services excluding housing costs ("super core") are still above the overall inflation rate. According to IMF estimates, one reason for the continued high core inflation is the expansionary fiscal policy (IMF, 2024). In particular, the inflation rate in core services excluding housing costs is a meaningful indicator of future inflation dynamics (Powell, 2022) and does not suggest a rapid decline in inflation. As a result, the path for the policy rate cuts expected on the market has already shifted back a few months at the beginning of the year.

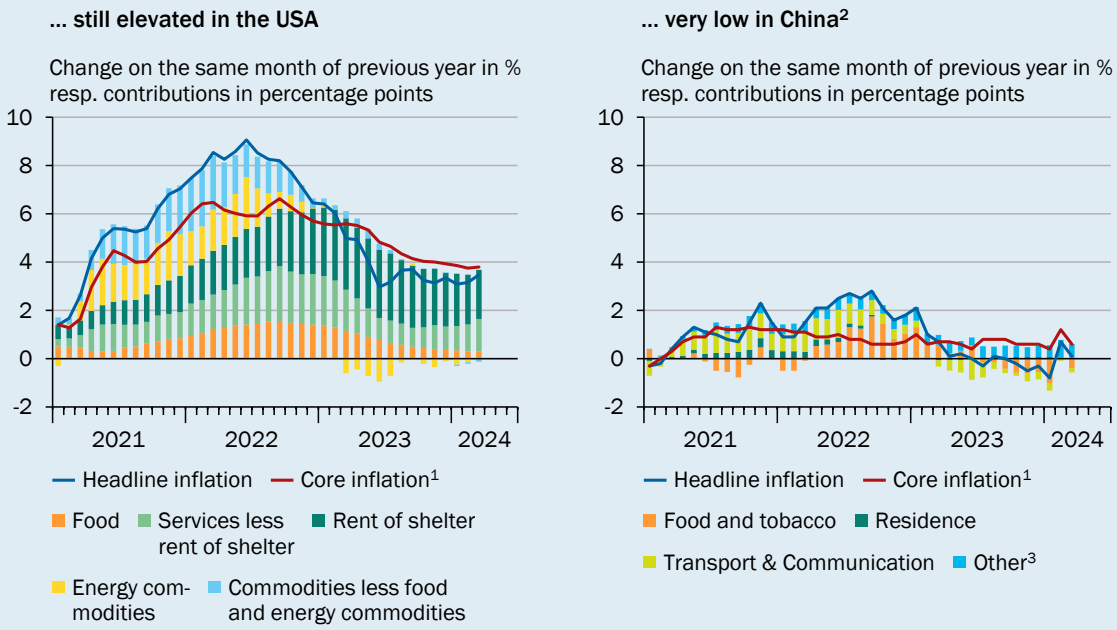
According to the current forecast, the US economy grew by 0.4 % in the 1st quarter of 2024 compared to the previous quarter. The purchasing managers' indices for the manufacturing and services sectors continued the downward trend of recent months in April 2024, but are still above or at the growth threshold level. The outlook for US growth in the second quarter of 2024 has therefore cooled further compared to last year. As the domestic economy continues to expand and inflation in the US is only likely to continue to fall very slowly, the interest rate path expected by the market is shifting. Accordingly, the interest rate projections published by the Federal Open Market Committee of the Federal Reserve System for the forecast year 2025 signal a less sharp fall in the US key policy rate (FOMC, 2024). US growth at the end of 2023 supports growth in 2024 due to a high statistical carry-over ↘ GLOSSARY of 1.4 %. A continued high government deficit should also support growth. The **GCEE is** therefore raising its **forecast for GDP growth in the US** for **2024 to 2.3 %**. For 2025, the GCEE is forecasting GDP growth of 1.8 %. ↘ TABLE 1 For inflation, the GCEE forecasts 3.1 % and 2.4 % for 2024 and 2025 respectively.

Following the strong increase at the start of the year, the **Chinese economy grew strongly again in the second half of 2023, at an annualised rate of 5.4 %** compared to the previous six months. On the production side, industrial production provided support. On the expenditure side, domestic travel made a positive contribution, but private consumption was subdued. Consumer price inflation in China was negative for several months in the second half of 2023. ↘ CHART 6 RIGHT This was mainly due to declines in food and energy prices. Core inflation, on the other hand, fell only slightly in the same period.

In the 1st quarter of 2024, Chinese GDP rose by 1.6 % compared to the previous quarter. Currently, the outlook for Chinese growth in the second quarter of 2024 remains positive. Industrial production and retail sales have been trending upwards since the start of the year. As in 2023, domestic travel and capital formation in infrastructure are also supporting the Chinese domestic economy. In contrast, capital formation in residential and commercial construction continues to decline. As a result, the weak property market continues to weigh on the domestic economy and poses a risk to the Chinese overall economy (GCEE Annual Report 2023 item 13).

↘ CHART 6

Consumer price inflation...



1 – Overall index excluding food and energy. 2 – The National Bureau of Statistics (NBS) of China does not publish weights for the subindices of consumer price inflation. The weights are recalculated every five years, most recently in January 2021. To estimate the weights for the subindices, consumer price inflation from the year 2021 onwards is regressed on the subindices under the following two constraints: Each weight is greater than or equal to zero and the sum of the weights is one. 3 – Includes price changes for the following categories: Clothing; household articles and services; education, culture and recreation; health care; miscellaneous goods and services.

Sources: BLS, NBS, Refinitiv Datastream, own calculations
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In addition, inflation in China remains at a very low level. At the beginning of the year, state-subsidised overcapacity in meat production led to a fall in food prices. The deflationary trend was briefly interrupted in February 2024 due to the New Year celebrations. The price trend was weak again in March 2024. The **GCEE is therefore forecasting Chinese GDP** growth of **5.1 % and 4.7 % for 2024 and 2025**. ↘ TABLE 1 The GCEE is forecasting inflation to be around 0.7 % and 1.8 % for 2024 and 2025.

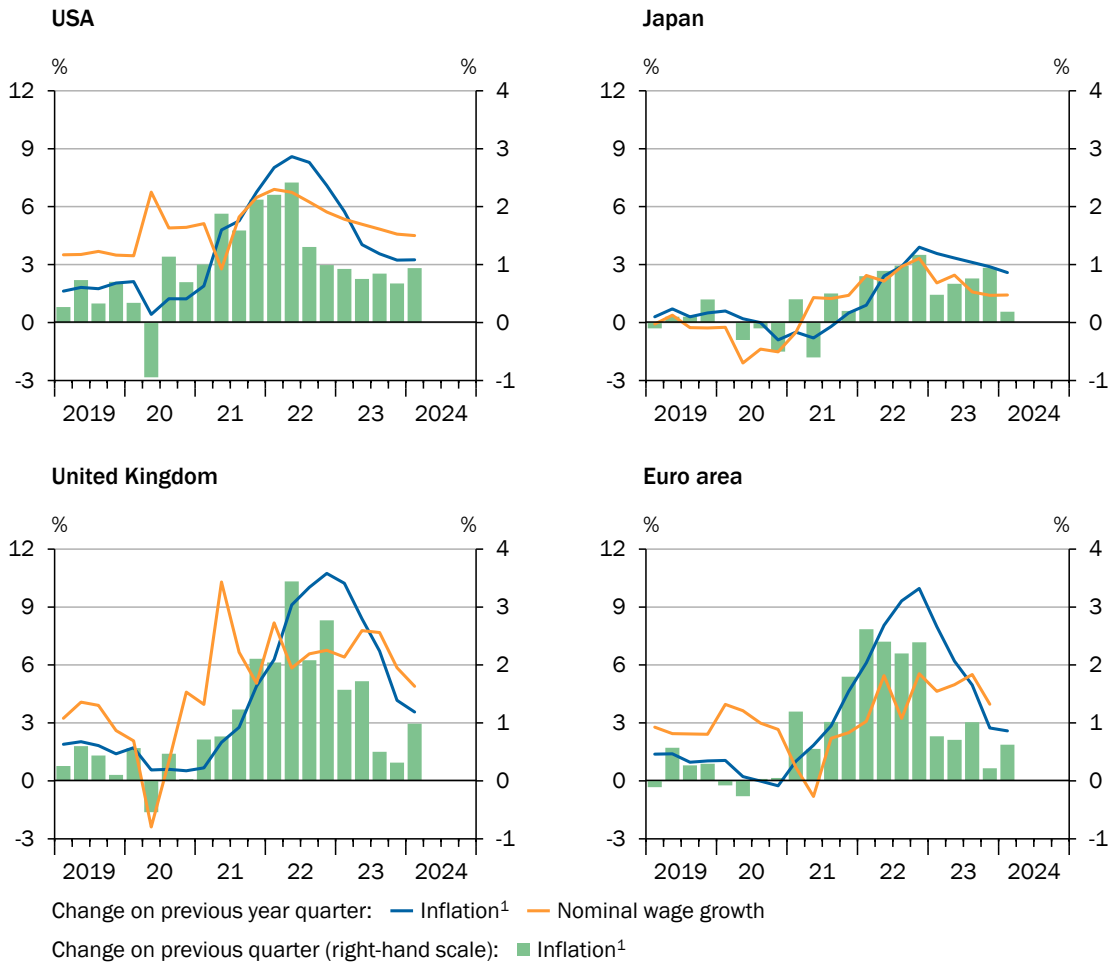
11. **Global GDP growth in 2024** is likely to be at a **similar level to the previous year**. ↘ CHART 3 LEFT This is signalled by the rising global purchasing managers' indices for the services and manufacturing sectors. On the production side, global industrial production and trade in goods are likely to increase. In addition, the policy rate cuts are likely to have a positive effect on financing conditions over the further forecast horizon and thus slowly boost gross fixed capital formation. In contrast, fiscal policy is expected to provide little impetus, as many general governments around the world are consolidating their budgets. **Overall, the GCEE expects global GDP growth of 2.6 % in 2024 and 2.7 % in 2025**. ↘ TABLE 1 Global trade in goods is expected to grow by 1.3 % in 2024 and 2.0 % in 2025.

2. Decline in inflation slows down

12. **Consumer price inflation continued to fall in many economies** at the start of 2024. However, the decline has slowed recently. ↘ CHART 7 In the USA and Japan, consumer prices inflation remains at an elevated level. The core rate - driven by price increases for rents and services - is the main driver of inflation in the USA. ↘ BOX 1 Nominal wages have risen sharply in the USA, the United Kingdom and most recently also in the euro area. ↘ CHART 7 The **strong wage growth is likely to** be partly passed on to consumers and thus **slow down** the **decline in inflation**. In China, however, falling food prices, which together with tobacco products account for around 30 % of the basket of goods, contributed to low, in some cases negative inflation rates. ↘ BOX 1

13. The **price of** North Sea Brent **crude oil has risen considerably** since the beginning of 2024 and averaged just under 89 US dollars per barrel in April 2024. ↘ CHART 8 LEFT This is almost 9 US dollars above the long-term average for the years

↘ CHART 7
Inflation and wage growth in selected economies



1 – Seasonally adjusted. 2 – Seasonally and calendar-adjusted. For Japan and the United Kingdom: The value for 2024Q1 corresponds to the value for January.

Sources: BLS, Eurostat, OECD, ONS, Statistics Bureau of Japan, own calculations
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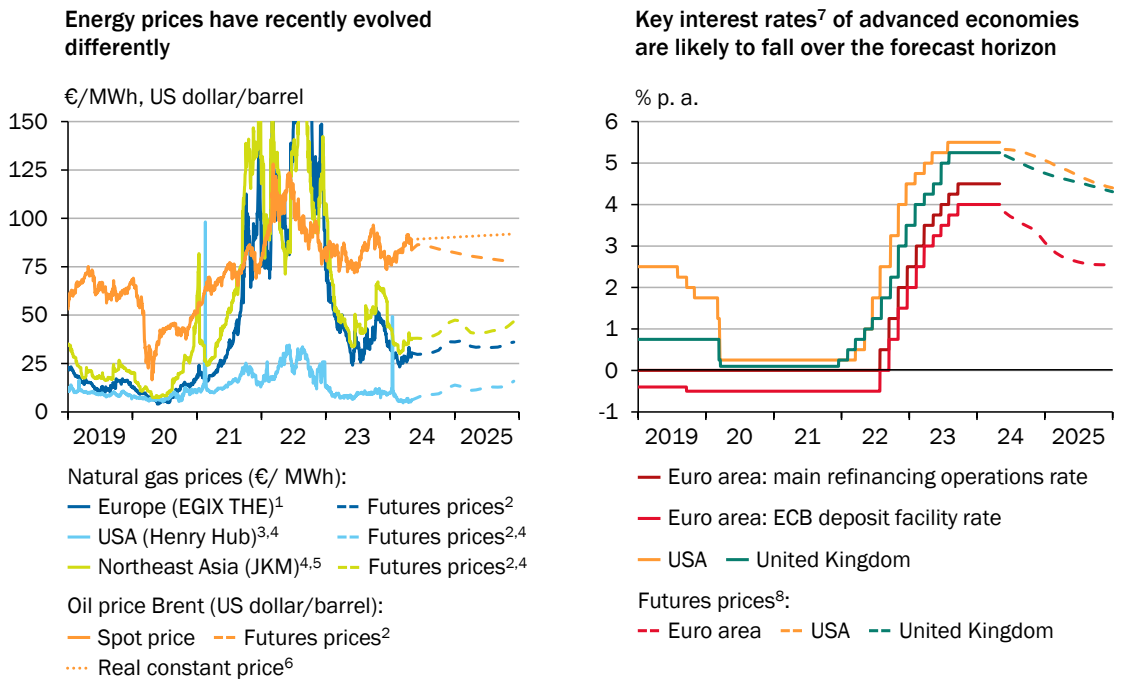
2010 to 2019. On the demand side, the price increase was driven in particular by an improved economic activity in China and the USA. On the supply side, production volumes in the USA, Russia and some OPEC+ member states ↘ GLOSSARY have increased. However, OPEC+ is curbing its production capacity and has announced further production cuts (IEA, 2024). The price is therefore likely to remain high. **Natural gas prices** have fallen **again since the start of 2024**. The wholesale price for natural gas in Europe was around 29 euros per megawatt hour (MWh) in April 2024, which is above the average for the years 2010 to 2019 of around 20 euros per MWh, but well below the highs of 2022. The futures price curves indicate a moderate upward trend for the forecast period.

14. The central banks in the USA, the United Kingdom and the euro area have kept their key policy **rates constant since October 2023**. ↘ CHART 8 RIGHT **Key policy rates are expected to fall over the forecast horizon** due to declining consumer price inflation. The slow decline in inflation in the USA and the United Kingdom ↘ ITEM 12 may be one reason why the markets expect a faster and stronger

↘ CHART 8

Energy prices and key interest rates



1 – The European Gas Index (EGIX) is based on exchange trades with the respective current front month contracts of the Trading Hub Europe (THE). A front month contract is defined as a contract maturing in the next month that is traded on the futures exchanges. 2 – Average futures prices of the last 10 trading days for May 2024 and the following months, as of 3. May 2024. 3 – Prices are based on delivery at the Henry Hub in Louisiana. Official daily closing prices at 2:30 p.m. from the trading floor of the New York Mercantile Exchange (NYMEX) for a specific delivery month. 4 – Price in US dollar/ MMBtu (1 million British thermal units) converted into €/MWh. For the conversion of the futures prices, the last available daily rate is used. 5 – Japan Korean Marker (JKM) is the Northeast Asia spot price index for LNG delivered ex-ship to Japan und Korea. 6 – Oil price extrapolated with an annual inflation rate of 2 %. 7 – The considered key interest rates are the main refinancing operations rate and the ECB deposit facility rate for the euro area, the federal funds rate for the USA and the bank rate for the United Kingdom. 8 – Market participants' expectations of central bank interest rates derived from the 30-day Federal Funds Futures for the USA the 3-month EURIBOR futures for the euro area and the overnight index swap forwards for the United Kingdom, as of 3. May 2024.

Sources: BoE, ECB, EEX, EIA, Fed, ICE, NYMEX, Refinitiv Datastream, own calculations
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interest rate cut in the euro area than in the USA and the United Kingdom, in line with the futures price curves. At the end of 2025, key policy rates in the USA and the United Kingdom are likely to be just below 4.5 %. In the euro area, they are likely to fall more sharply to around 2.6 %.

15. In the first quarter of 2024, consumer price inflation in the USA, the United Kingdom, Japan and the euro area was moderately higher at rates between 2.5 % and 3.6 % compared to the same quarter of the previous year. ↘ CHART 7 In the forecast horizon, inflation is no longer likely to be driven primarily by energy prices. ↘ BOX 5 ↘ ITEM 13 **Nominal wage growth is** expected to **remain high** and exceed inflation. ↘ ITEM 12 The resulting real wage gains are likely to **boost private consumption over the forecast horizon**, but slow down the rapid decline in consumer price inflation. The **GCEE** therefore **expects a global inflation rate of 4.5 % for 2024**, meaning that the target values of the major central banks are unlikely to be reached by the end of 2024. **For 2025**, the GCEE expects a global consumer price inflation rate of **3.4 %**. Inflation dynamics continue to remain subject to increased uncertainty. ↘ BOX 2 For example, an intensification of geopolitical tensions could slow down the normalisation of inflation again. ↘ ITEM 16

The forecast of global consumer price inflation is derived from the GCEE's individual inflation forecasts for 51 countries. ↘ TABLE 1 The evaluation of the **inflation forecasts since 2015** shows that they were **not systematically biased** and that the forecast errors are similar to the forecast errors of other institutions. ↘ BOX 2

↘ BOX 2

Analysis: Evaluation of the GCEE's inflation forecasts

The GCEE has been forecasting the development of GDP and inflation for Germany and 49 other countries twice a year since 2012. ↘ TABLE 1 In the GCEE Annual Report 2023, the **GCEE** systematically evaluated its **GDP forecasts for all 50 countries** and showed that they **are not systematically biased** (GCEE Annual Report 2023 box 2). Forecasts are subject to uncertainty. Shocks can unexpectedly raise the price level, as the energy crisis in 2022 showed (GCEE Annual Report 2022 items 7 f.), or lower it, for example due to an unexpected slump in demand. Forecast errors are therefore not always avoidable.

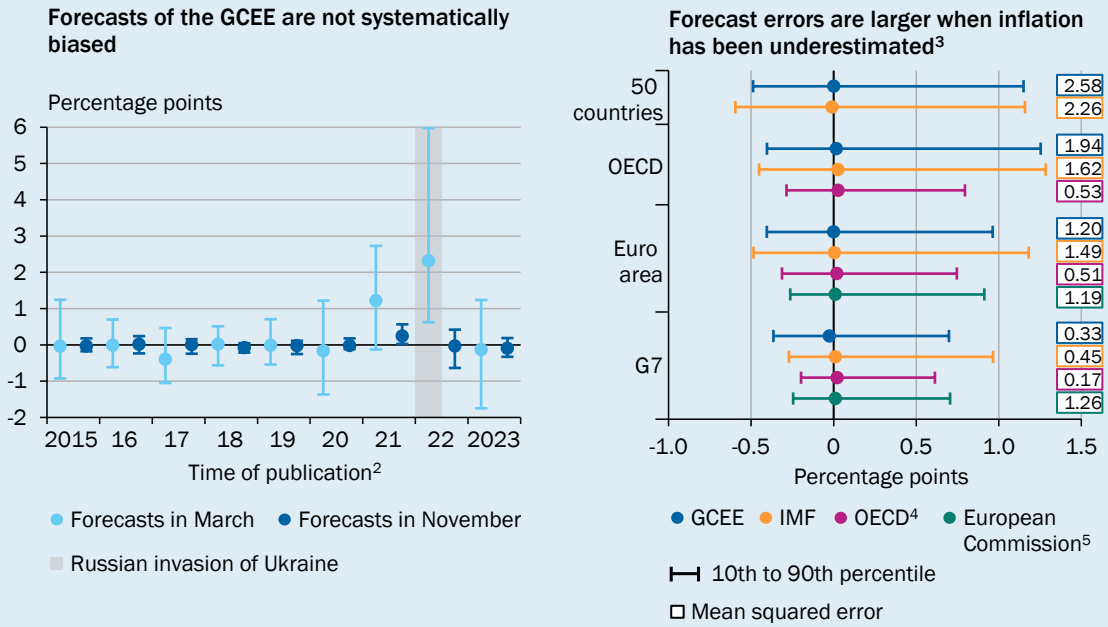
Like the GDP forecasts for the 50 countries, the GCEE's **inflation forecasts** have **not been systematically biased** since 2014. ↘ CHART 9 LEFT As for the forecast errors for GDP (GCEE Annual Report 2023 box 2), the uncertainty about the inflation trend and thus the size of the forecast errors are higher in March than in November. With the additional information available in autumn, inflation for the current year can be better estimated.

The GCEE's **forecast errors** are also **comparable with those of other institutions** that publish their forecasts at similar times. ↘ CHART 9 RIGHT The European Commission and the OECD publish their forecasts in May or June and in November or December respectively. The IMF forecasts are usually published in April or October. The median close to zero indicates that inflation was underestimated just as often as overestimated in the reviewed time period. However, the wider spread of the positive forecast errors reveals that the forecast errors were larger when inflation was underestimated. In 2021 and 2022 in particular, the sharp rise in inflation was repeatedly underestimated by most institutions. This is probably due not least to the tendency to revert to the mean, which is inherent in many empirical forecasting models (GCEE Economic Outlook

2022 box 4). According to the mean square error, an indicator of the average forecast quality, the OECD forecasts are the least prone to revisions.

↘ CHART 9

Forecast error for CPI growth in 50 countries[1]



1 – Forecast errors are the difference between the realised inflation for the respective year and the forecast for the same year, which was prepared either in March or November. The whiskers show the 10th to 90th percentile. The dot represents the median. The 50 countries include those in Table 1 excluding Australia. Forecasts for Venezuela, which were still included in publications until March 2016, are not included. 2 – November and March forecasts are from the GCEE Annual Report and the GCEE Economic Outlook, respectively. 3 – In the groups of 50 countries, OECD, euro area and G7, 791, 526, 272 and 112 forecast errors are included, respectively. 4 – For countries in the euro area and the United Kingdom, the Harmonised Index of Consumer Prices (HICP) is used. 5 – The European Commission forecasts the HICP by default. The forecast of the national CPI is only used for Canada, Japan and the USA.

Sources: European Commission, IMF, OECD, own calculations
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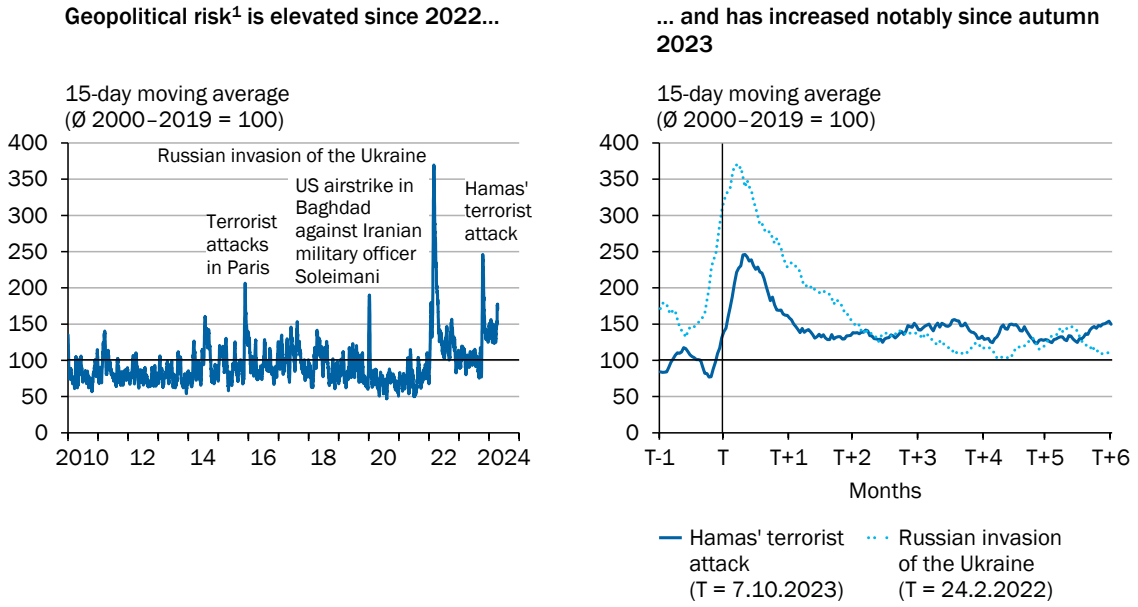
3. Opportunities and risks: Geopolitical tensions and sticky inflation

16. **Geopolitical uncertainty** has been **significantly higher than the historical average** since the start of 2022. ↘ CHART 10 LEFT The reasons for this are the ongoing war in Ukraine and the Middle East conflict resulting from the Hamas terrorist attack on Israel in October 2023. ↘ CHART 10 RIGHT If the uncertainties about support for Ukraine increase, the geopolitical risk could intensify, especially for Europe. In addition, a geographical expansion of the war in the Middle East could affect trade routes for crude oil and natural gas (Tagliapietra, 2023). Distortions in the Strait of Hormuz bordering Iran, a strait through which around a fifth of global crude oil and a quarter of global LNG production is shipped, could make energy significantly more expensive and thus fuel inflation again.

↘ CHART 10
Geopolitical uncertainty



1 – The Geopolitical Risk Index reflects the results of automated text searches in ten newspapers in the USA. It is calculated from the ratio of articles on negative geopolitical events to the total number of articles in each newspaper for each month (see Caldara and Iacoviello, 2022).

Sources: Caldara and Iacoviello (2022), own calculations
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17. Currently, **consumer price inflation in the US** remains at **an elevated level**. ↘ ITEM 12 According to the household survey conducted by the Federal Reserve Bank of New York, **inflation expectations** for the next three years **rose** by 0.2 percentage points to 2.9 % in March 2024 (New York Fed, 2024). The Fed's first interest rate cut could therefore take place later than the markets expect. **Prolonged higher interest rates** would have a greater negative impact on overall economic demand than forecast. In addition, the US government's continued high budget deficit during the 2024 election year could have a negative impact on the fight against inflation in the US (IMF, 2024). ↘ BOX 1

In contrast to the USA, inflation rates in other economies are falling faster. The central banks of these economies could therefore lower their key policy rates earlier than the Fed. Large **interest rate differentials could lead to sharp devaluations of** the affected currencies **against the US dollar,** which could make imports more expensive in these economies and contribute to higher inflation. In addition, there could also be significant capital outflows from emerging markets, which are often dependent on foreign capital to raise debt.

III. EURO AREA

18. In 2023, **GDP in the euro area increased** only **slightly**. The temporary decline in global trade, tight monetary policy, the weakening industry in the wake of of the energy price shock, loss of purchasing power, and dampened consumer confidence all had a negative impact on the real economy. A **recovery** in **private consumption expenditure** due to rising real income**,** the **upturn in global trade** as well as rising global industrial production will drive moderate growth in the euro area in 2024. **Monetary policy easing** in the current year should provide positive growth impetus for 2025. The **GCEE** expects euro area **GDP** to grow by **0.8 %** in 2024 and by **1.5 %** in 2025. **Inflation** is likely to fall from 5.4 % in 2023 to **2.4 %** in 2024 and **2.1 %** in 2025.

1. The economy is facing a slow recovery

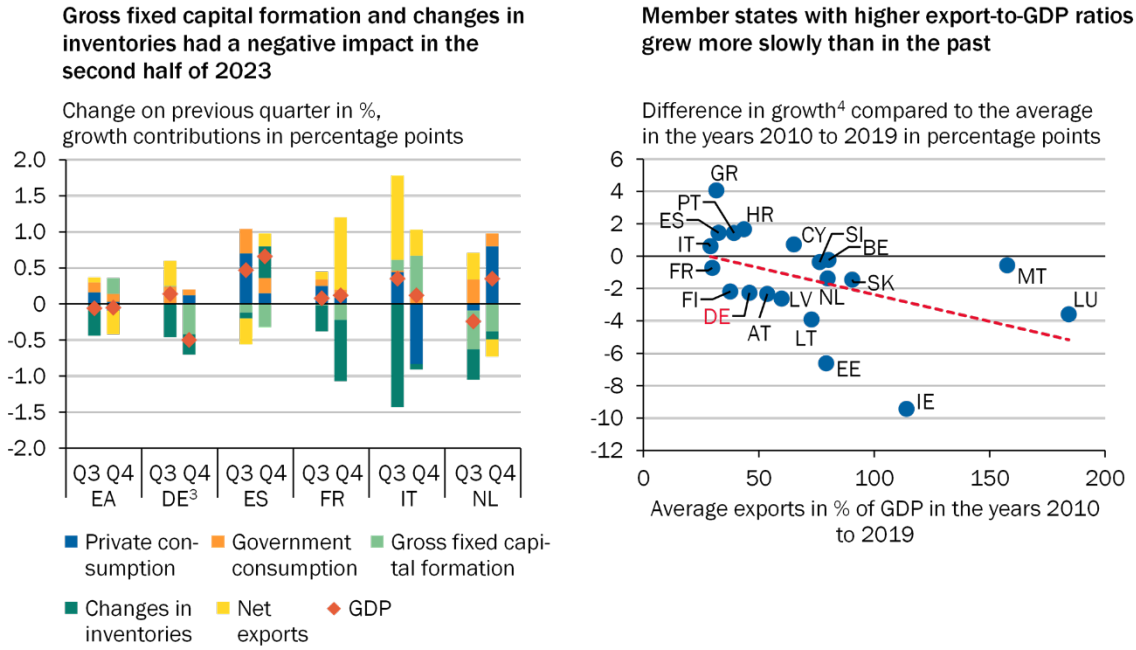
19. In 2023, **euro area GDP experienced sluggish growth of 0.6 %**; ↘ TABLE 3 output remained at roughly the same level throughout the year. ↘ CHART 11 LEFT In the first quarter of 2024, however, GDP in the euro area grew by 0.3 % compared to the previous quarter, according to Eurostat's first flash estimate, indicating that the economy is beginning to recover.

The development of price-adjusted consumption provided moderate support for the euro area economy in the second half of 2023. However, this was mainly attributed to **government consumption**, which, adjusted for price, seasonal and calendar effects, increased in both the third and fourth quarters of 2023 compared to the previous quarter. ↘ CHART 11 LEFT By contrast, after a slight increase in the third quarter of 2023 **private consumption expenditure** only made a marginal contribution to overall growth in the following quarter. This can be attributed to past losses in real income and the deterioration in consumer confidence. **Gross fixed capital formation fell** price-, seasonally and calendar-adjusted **in** many euro area economies in the second half of 2023. Excluding Ireland, it declined significantly in the euro area as a whole in the fourth quarter of 2023. In addition, the declining changes in inventories ↘ GLOSSARY contributed negatively to economic growth in many member states. Among the major economies, gross fixed capital formation only expanded in Italy, largely due to residential construction investment as part of the Superbonus programme (European Commission, 2024).

20. The **weak development** of **global trade in goods** and global **industrial production** ↘ CHART 4 also slowed down the economic development in 2023. ↘ ITEM 8 Not only economies with a high share of the industrial sector in total value added (GCEE Annual Report 2023 box 3), but also those with a high degree of openness were more strongly affected. ↘ CHART 11 RIGHT In 2023, the net export contribution to GDP growth in the euro area was positive at 0.2 percentage points. Nevertheless, this was due to the fact that imports fell to an even greater extent than exports. However, the **trend reversal in global trade**, ↘ ITEM 8 particularly against

↘ CHART 11

GDP growth[1] in the euro area stagnated in the second half of 2023, economies with a high degree of openness grew relatively weakly[2]



1 – Price-, seasonally and calendar-adjusted. 2 – AT-Austria, BE-Belgium, CY-Cyprus, DE-Germany, EA-Euro area, EE-Estonia, ES-Spain, FI-Finland, FR-France, GR-Greece, HR-Croatia, IE-Ireland, IT-Italy, LT-Lithuania, LU-Luxembourg, LV-Latvia, MT-Malta, NL-Netherlands, PT-Portugal, SI-Slovenia, SK-Slovakia. 3 – As only GDP has been revised so far, but not the expenditure components for 2023, it is assumed that the revision of GDP is a revision of changes in inventories. 4 – Difference between real GDP growth in 2023 and the average annual growth rate of real GDP in the years 2010 to 2019.

Sources: Eurostat, own calculations
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the backdrop of rising global industrial production, should contribute to the economic recovery in the euro area over the forecast horizon. ↘ CHART 4

21. The **recovery in the euro area** in 2024 is also likely to be co-determined by the development of **private consumption demand.** The rise in nominal wages and the decline in inflation rates will lead to an increase in real income. However, the latter will only gradually translate into an increase in real consumption expenditure over the forecast horizon. ↘ BOX 3 **Fiscal policy** is expected to provide **little impetus** for economic development in the euro area, particularly due to the planned decline in deficits in many euro area economies (European Commission, 2023). ↘ ITEM 34

↘ BOX 3

Analysis: Effects of changes in price-adjusted disposable income on the price-adjusted consumption of private households

The **relationship** between **private consumption expenditure** and **disposable income** is a thoroughly researched topic in the literature (e.g. Friedman, 1957; Davidson et al., 1978; Hall, 1978; Blinder and Deaton, 1985; Engle and Granger, 1987; Molana, 1991).

In order to analyse the effects of a change in price-adjusted disposable income on price-adjusted final consumption expenditure of private households, the GCEE estimated an **error**

correction model (Engle and Granger, 1987; Molana, 1991). For this purpose, price-adjusted private consumption is regressed on the disposable income of private households in the five largest economies in the euro area, respectively, in two stages. In the first stage, the **long-run relationship between price-adjusted consumption and disposable income** was estimated using a regression of logarithmised price-adjusted private consumption expenditure on logarithmised price-adjusted disposable income of private households. In the second stage, the variables in first differences, the residuals from the first stage - the deviations from the long-run relationship - and other control variables were regressed on each other in order to estimate the **short-run dynamics.** To avoid a bias of the estimates due to extraordinary effects during the pandemic, the period between the first quarter of 1999 and the fourth quarter of 2019 was used for the analysis.

↘ TABLE 2

Real consumption expenditure and real disposable income of private households[1]

	Change in real consumption expenditure of private households[2,3]				
	Germany	France	Italy	Spain	Netherlands
Error correction term in *t–1*	–0.26 ***	–0.12 ***	–0.27 ***	–0.14	–0.18 ***
	(0.09)	(0.05)	(0.08)	(0.08)	(0.04)
Change in real disposable income[2] in *t*	0.61 ***	0.14 **	0.26 ***	0.19 **	0.20 ***
	(0.10)	(0.07)	(0.04)	(0.07)	(0.06)
Change in real disposable income[2] in *t–1*	–	0.21 ***	–	0.14 ***	0.17 ***
		(0.06)		(0.05)	(0.05)
Change in real disposable income[2] in *t–2*	–	0.23 ***	–	0.14 **	–
		(0.07)		(0.06)	
Change in real disposable income[2] in *t–3*	–	0.16 ***	–	0.11 *	–
		(0.05)		(0.05)	
Change in real consumption expenditure[2] in *t–1*	–	–	0.21 **	–	–
			(0.09)		
R^2	0.53	0.40	0.59	0.49	0.51
Durbin-Watson coefficient	2.09	2.20	1.77	1.85	2.18

1 – Significance levels: * p-value < 0,1; ** p-value < 0,05; *** p-value < 0,01. Regressions are based on quarterly values for the period 1999Q1 to 2019Q4. Critical values from Engle and Yoo (1987) and McKinnon (2010) were used to determine the significance levels of the cointegration between real consumption expenditure and real disposable income of private households and non-profit institutions serving households from the level regression. Logarithmised price-, seasonally and calender-adjusted values were used for the level regressions, whereby the level regression for Italy, Spain and the Netherlands includes deterministic time trend in addition to the constant. The test statistics provided evidence that there is a long-run relationship between real consumption expentiture and real disposable income in the countries examined (cointegration relationship). The hypothesis of a spurious regression was rejected at a significance level of 1 % for Germany, France and the Netherlands and at a significance level of 10 % for Spain and Italy. 2 – Changes in the logarithmised price-, seasonally and calender-adjusted values. 3 – The regression includes a constant and, for some member states, additional control variables, such as global GDP growth compared to the same quarter of the previous year or the trend-adjusted 3-month Euribor interest rate.

Sources: ECB, Eurostat, own calculations

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The results from the first stage suggest that there exists a **long-run positive relationship between** price-adjusted **private consumption** and the **disposable income of** private households in the economies analysed. ↘ TABLE 2 The regression from the second stage shows ↘ TABLE 2 that **changes** in **price-adjusted consumption expenditure** compared to the previous quarter are **influenced** not only by **contemporaneous changes** in **price-adjusted disposable income,** but also

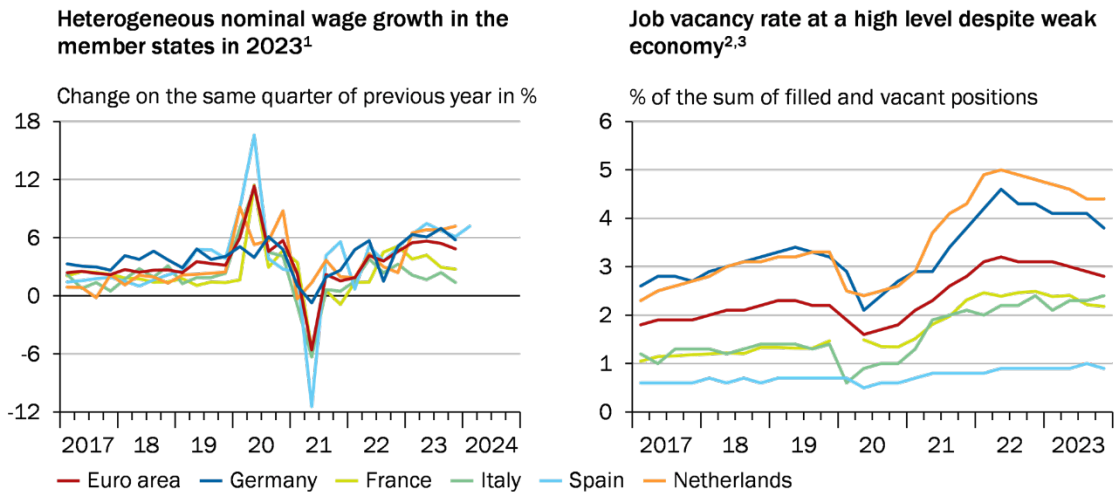
by those from **previous quarters.** As the regression coefficients are much smaller than unity, price-adjusted final consumption expenditure is likely to respond less strongly to a change in price-adjusted disposable income. Furthermore, the negative coefficient for the error correction term implies that **deviations from the long-run relationship between** price-adjusted final consumption expenditure and disposable income are **gradually corrected.**

Overall, this means for the forecast horizon that **real wage growth** resulting from the sharp decline in inflation and dynamic nominal wage growth **will** only **gradually translate into rising real final consumption expenditure.** The results also indicate that this effect is likely to occur more quickly in Germany. However, it should be noted that determinants not included in the model, such as consumer confidence or overall economic uncertainty, can also influence the short-run dynamics of consumption and saving behaviour. ↘ ITEM 37

22. A possible **monetary policy easing** in the course of 2024 is likely to have only **a delayed effect on real economic development** in the euro area. A structural vector autoregression of real GDP, the HICP and the key interest rate in the spirit of Cecioni and Neri (2011), Ramey (2016) and Wolf (2022) suggests that the full **transmission of** changes in the **nominal interest rate to the real economy** in the euro area takes up to one and a half years. The model also allows conclusions to be drawn about the effects of deviations from the development of key policy rates in the euro area currently expected on the markets. If, for example, there was no interest rate cut in the forecast horizon contrary to market expectations, GDP in the euro area would be around 1.0 % lower in the fourth quarter of 2025. However, estimation and identification uncertainty are increased, especially towards the end of the forecast horizon.

↘ CHART 12

Robust labour market continues to ensure dynamic nominal wage growth in the euro area



1 – Seasonally and calendar-adjusted (Germany and France seasonally adjusted). The figure shows gross wages and salaries per hour worked. 2 – Seasonally adjusted. According to the Statistical Classification of Economic Activities in the European Community (NACE Rev. 2). Includes industry, construction and services (excluding private households with domestic staff and extra-territorial organisations and bodies). 3 – Values for France for companies with 10 or more employees; no value for 2020Q1.

Sources: Dares France, Eurostat, own calculations
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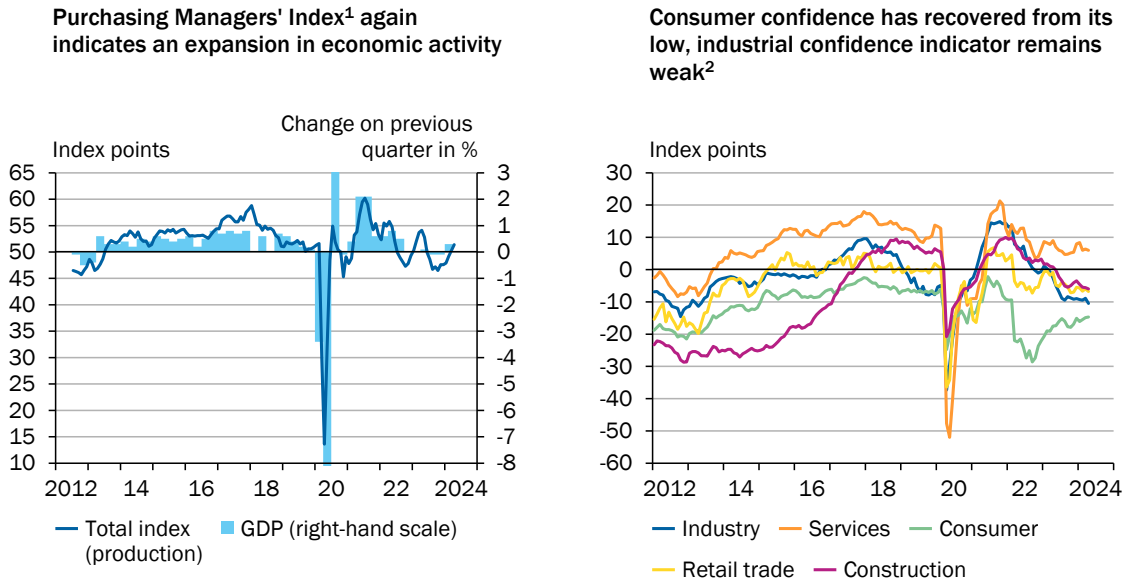
23. As a result of the subdued GDP growth, **unemployment in the euro area stagnated in the winter half-year 2023/24** and stood at 6.5 % in March 2024. The labour market in the euro area is likely to continue to be characterised by a shortage of labour (GCEE Annual Report 2023 chart 110). Employees are therefore likely to be retained in companies despite underutilisation of capacity in the overall economy and in view of the improving economic outlook. It can be assumed that the demand for labour and employment growth will gradually flatten out in the wake of subdued economic growth and that the **unemployment rate will only change slightly**. In view of the tight labour market and past losses in purchasing power, robust wage growth is expected to continue. However, wage increases have probably already peaked. ↘ CHART 12 LEFT AND RIGHT In addition, the Indeed Wage Tracker points to a continuing downward trend in nominal wage increases in the first quarter of 2024 in most of the euro area member states covered. In view of the declining inflation ↘ ITEM 26 and the easing on the labour market, it can be assumed that wage pressure will gradually decrease by the end of the forecast horizon.

24. **Sentiment indicators suggest a slight economic recovery in the first half of 2024**. For example, the aggregate Purchasing Managers' Index in the euro area has moved significantly away from its low in the fourth quarter of 2023 and exceeded the growth threshold of 50 index points again, indicating an expansion in economic activity. ↘ CHART 13 LEFT According to the European Commission's Business and Consumer Survey, consumer confidence has recovered from its low in the fourth quarter of 2022 but remains below average. ↘ CHART 13 RIGHT Confidence indicators in industry, construction and trade have largely declined since the end of 2021, but have mostly stabilised at low levels in the winter half-year

↘ CHART 13

Real-time and leading indicators are signalling slight recovery in the euro area economy



1 – HCOB Eurozone Composite PMI Output Index. 2 – Sectoral confidence indicators from the European Commission's Business and Consumer Survey.

Sources: European Commission, Eurostat, S&P Global, own calculations
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2023/24. However, confidence in industry once again recorded a slight decline at the current margin. Confidence in the services sector has been trending sideways since mid-2022, which is likely due in part to the gradual increase in consumer confidence and the shift from the consumption of goods to services.

25. **The GCEE expects GDP to grow by 0.8 % in the euro area in 2024.** ↘ TABLE 3 **In 2025, economic growth in the euro area** is likely to recover more strongly and average **1.5 % for** the year. The moderate decline in inflation together with the robust growth in nominal wages is expected to have a positive effect on real income. The gradual increase in private consumption expenditure ↘ BOX 3 should therefore drive the economic recovery in the course of 2024. The moderate recovery in global trade and global industrial production ↘ ITEM 11 should already provide impetus in 2024, especially for those economies in the euro area with a high export to GDP ratio. However, higher energy prices, especially electricity prices, are likely to continue to weigh on growth. It can also be assumed that policy rate cuts, which are likely to take place from the second quarter of 2024, will only provide further stimulus from 2025 onwards due to more favourable financing conditions ↘ ITEM 28, especially in the interest-sensitive economic sectors.

↘ TABLE 3

Gross domestic product, consumer prices and unemployment rate in the euro area

Country/ country group	Weight in %[1]	Gross domestic product (calendar-adjusted)[2]			Consumer prices (HICP)[3]			Unemployment rate[4]		
		Change on previous year in %						%		
		2023	2024[5]	2025[5]	2023	2024[5]	2025[5]	2023	2024[5]	2025[5]
Euro area[6]	**100**	**0.6**	**0.8**	**1.5**	**5.4**	**2.4**	**2.1**	**6.6**	**6.5**	**6.4**
including:										
Germany	28.7	0.0	0.2	1.1	6.0	2.4	2.1	3.0	3.3	3.2
France	19.5	0.9	0.8	1.4	5.7	2.4	1.9	7.3	7.6	7.5
Italy	14.5	1.0	0.7	1.0	5.9	1.5	1.8	7.7	7.3	7.3
Spain	10.2	2.5	2.3	2.0	3.4	3.2	2.4	12.2	11.7	11.4
Netherlands	7.2	0.2	0.8	1.5	4.1	2.8	2.2	3.5	3.7	3.9
Belgium	4.1	1.4	1.4	1.5	2.3	3.7	2.2	5.5	5.5	5.5
Ireland	3.5	– 3.3	0.1	3.9	5.2	2.0	2.0	4.3	4.4	4.4
Austria	3.3	– 0.7	0.3	1.6	7.7	3.8	2.7	5.1	5.2	5.2
Finland	1.9	– 1.0	– 0.2	1.9	4.3	1.2	1.6	7.2	7.9	7.9
Portugal	1.8	2.3	1.9	2.0	5.3	2.2	2.1	6.6	6.5	6.4
Greece	1.5	2.0	1.5	2.0	4.2	2.7	2.1	11.1	10.2	9.8
memorandum:										
Euro area without Germany	**71.3**	**0.8**	**1.1**	**1.7**	**5.2**	**2.5**	**2.1**	**7.8**	**7.7**	**7.6**

1 – GDP in the year 2023 as a percentage of the GDP of the euro area. 2 – Price-adjusted. Values are based on seasonal and calendar-adjusted quarterly figures. 3 – Harmonised Index of Consumer Prices. 4 – According to the measuring concept of the International Labour Organization (ILO). For the total euro area and euro area without Germany weighted by the labour force of 2023. 5 – Forecast by the German Council of Economic Experts. 6 – Weighted average of the 20 euro area member states.

Sources: Eurostat, own calculations

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2. Inflation rate already close to the target

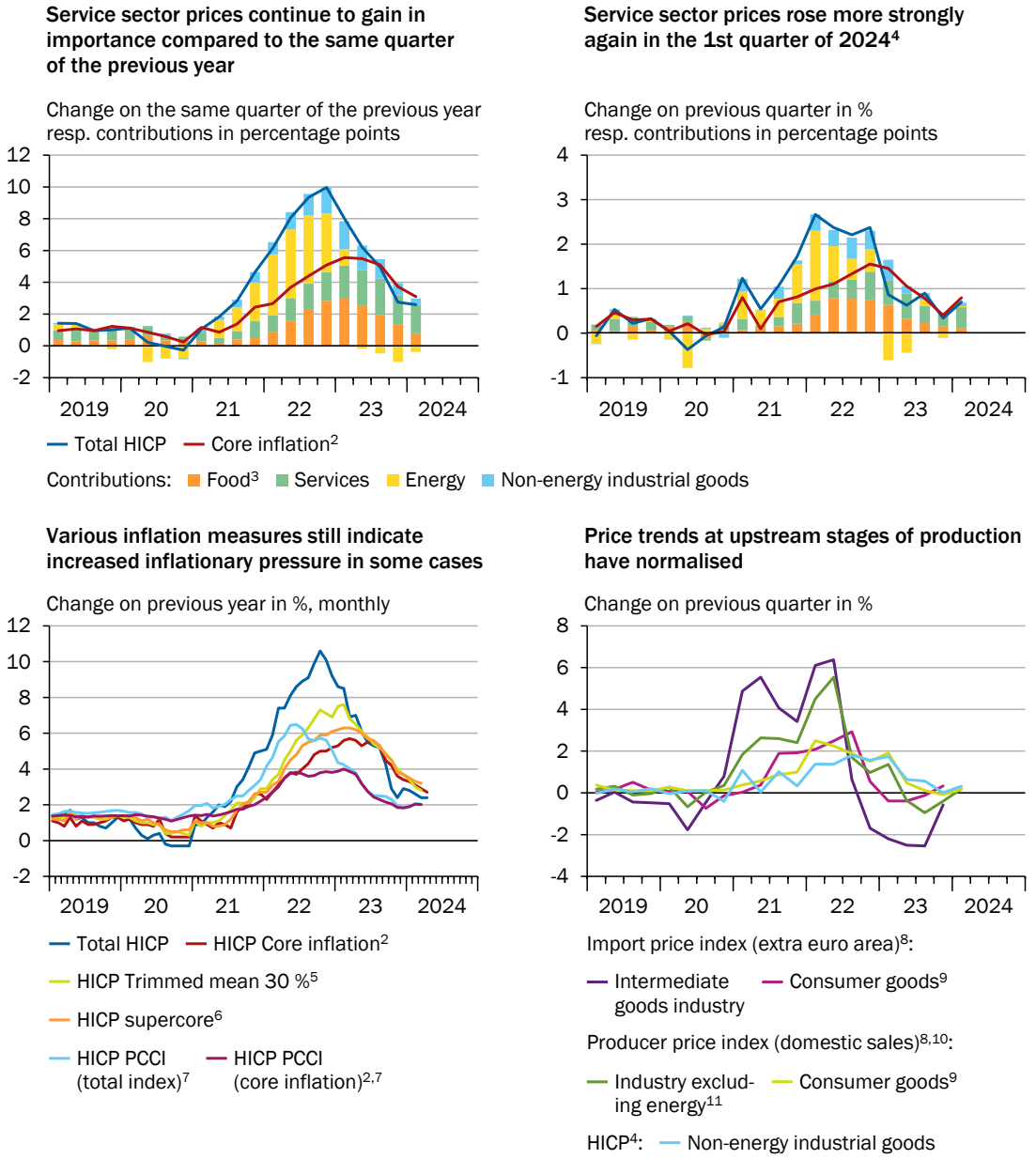
26. HICP inflation in the euro area amounted to around 5.4 % in 2023. It **thus continued** its **downward trend in the winter half-year 2023/24** ↘ CHART 14 TOP LEFT and was 2.4 % in April 2024 compared to the same month of the previous year. However, compared to the previous quarter, seasonally adjusted HICP inflation increased significantly in the first quarter of 2024 and stood at 0.7 %. ↘ CHART 14 TOP RIGHT

    Core inflation also **continued** its **decline**, but was still at 2.7 % in April 2024 compared to the same month of the previous year. It is mainly driven by high inflation in the services sector. Although it fell to 3.7 % in April 2024 compared to the same month of the previous year, it remained at 4.0 % in the previous five months and continued to gain in importance for the overall index in the first quarter of 2024. ↘ CHART 14 TOP LEFT AND RIGHT The **strong persistence of services inflation** is likely to be attributed to strong wage growth ↘ CHART 12 and the greater role of labour costs in the production of services, as well as the sluggish pass-through of inflation (GCEE Annual Report 2023 box 7). This **contributes** significantly **to the high domestic price pressure,** which can be seen, for example, in the 5.3 % increase in the GDP deflator in the fourth quarter of 2023 compared to the same quarter of the previous year. **Inflation** for **non-energy industrial goods,** on the other hand, has **fallen the most** among all inflation components and was 0.9 % in April 2024 compared to the same month of the previous year. Various other inflation measures also show a downward trend and are already at 2 % in some cases - especially the model-based inflation measures. ↘ CHART 14 BOTTOM LEFT Prices at upstream stages of production also fell significantly in some cases, although some indicators are currently showing signs of normalisation and thus an easing of the energy price-related effects. ↘ CHART 14 BOTTOM RIGHT

27. The Governing Council of the ECB had left **key policy rates unchanged since** its meeting **at the end of October 2023**. ↘ CHART 8 RIGHT Since then, it had taken the view that key policy rates are at a level that, if maintained for a sufficiently long period, would make a significant contribution to price stability (ECB, 2023a, 2024a). In April, the **Governing Council of the ECB indicated** that **monetary policy easing** would be **appropriate** if its updated assessment of the inflation outlook, inflation dynamics and the strength of monetary policy transmission strengthened its confidence that inflation would approach the target on a sustained basis (ECB, 2024b). Market participants have already priced in a cut in the key policy rate at the June meeting. ↘ CHART 8 RIGHT The interest rate rules for the euro area also suggest that a monetary policy easing in the second quarter of 2024 is likely to be justified. ↘ BOX 4

↘ CHART 14

HICP inflation[1] in the euro area falls sharply compared to the same period last year, services continue to make the largest contribution



1 – Harmonised Index of Consumer Prices. 2 – Total index excluding energy, food, alcohol and tobacco. 3 – Food including alcohol and tobacco. 4 – Except energy: seasonally and calendar-adjusted values and until the end of 2022 excluding Croatia. 5 – When calculating the trimmed mean, 15 % of the components (measured by their weighting in the overall index) with the lowest or highest price increases are excluded at each point in time. 6 – The supercore measure for the core rate corresponds to the part of the price increases of the respective components of the HICP excluding energy and food that can be explained by the output gap in a regression. Details on the calculation in Ehrmann et al. (2018). 7 – 3-month moving averages. The Persistent and Common Component of Inflation (PCCI) is a model-based measure of the core HICP rate in the euro area based on a dynamic factor model for the individual components of the total HICP and the total HICP excluding energy and food, respectively, in twelve euro area member states. For details on the calculation, see Bańbura and Bobeica (2020a). 8 – According to the Statistical classification of economic activities in the European Community (NACE Rev. 2). 9 – Excluding food and tobacco. 10 – In 2024Q1 only values from January and February are included. 11 – Mining and quarrying; manufacturing excluding the main industrial groupings of energy production.

Sources: ECB, Eurostat, own calculations

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↘ BOX 4

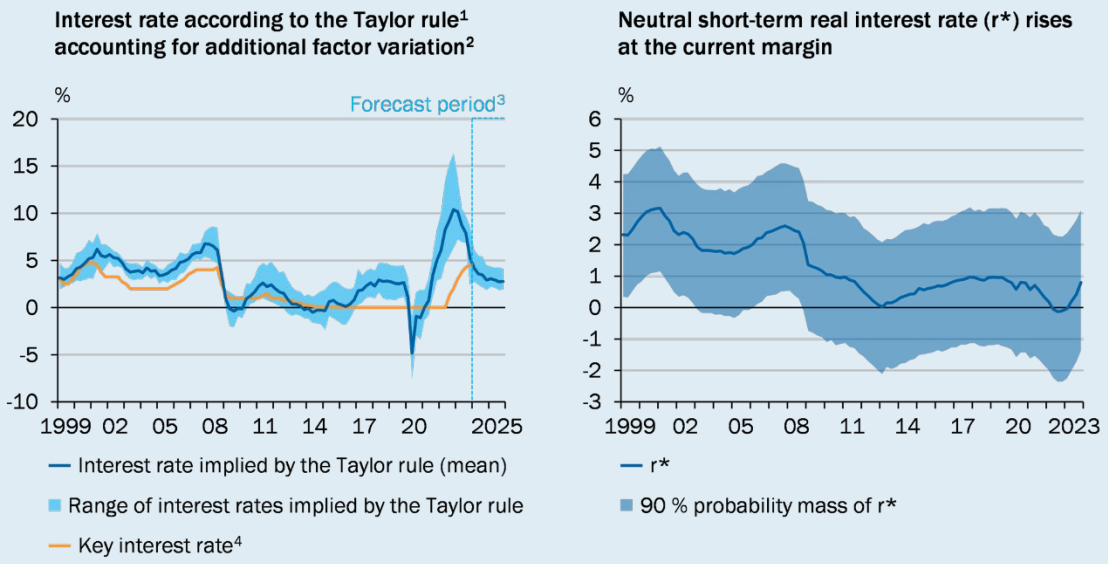
Analysis: Monetary policy classification (r* and interest rate rules)

As a result of the sharp decline in inflation in the euro area, the markets expect a policy rate cut in the near future. ↘ CHART 8 Simple **interest rate rules** (also known as monetary policy reaction functions) such as the Taylor rule can provide guidance on the direction of monetary policy and are often used as a guide by monetary policy decision-makers.

The unobservable **neutral short-term real interest rate r*** ↘ GLOSSARY plays an important role in the calculation of the **Taylor rule.** r* is the real interest rate that clears the capital market without generating inflationary pressure. In order to estimate the development of the neutral interest rate r* for the euro area, the GCEE uses the Bayesian method of Berger and Kempa (2019) and Berger and Ochsner (2024) who apply a version of the Holston-Laubach-Williams (2017) model to estimate r*. The estimate shows an increase in r* from around –0.13 % in third quarter of 2022 to around 0.8 % in in the fourth quarter of 2023. ↘ CHART 15 RIGHT Taking this development of r* into account, monetary policy in the euro area should currently be sufficiently tight according to the **Taylor rule**, meaning that inflation is likely to return to its target of 2 % over the forecast horizon. ↘ CHART 15 LEFT Given the sharp fall in inflation, an interest rate cut in the second quarter of 2024 is likely to be appropriate.

↘ CHART 15

Simple interest rate rules suggest an early and gradual reduction in key interest rates



1 – Equation: $i = 2 + \pi + 0{,}5(\pi - \pi^*) + 0{,}5y$. i is the interest rate implied by the Taylor rule for the money market; it depends on the real interest rate in long-term equilibrium (estimated at 2 %), the current inflation rate in deviation from the central bank's target, $(\pi - \pi^*)$, and the output gap, y. $y = 100(Y-Y^*)/Y^*$, where Y is real GDP and Y* is potential output. 2 – Refers to the euro area with 20 member states. The calculation is based on all combinations of three inflation measures (HICP, core HICP and GDP deflator), three output gaps (AMECO, IMF and OECD) and three different equilibrium interest rates (2 % constant, floating r* following Holston et al. (2017) and floating r* following Berger and Ochsner (2024). Due to the high volatility of r*, the average value from 2023Q1 to 2023Q4 was used to calculate the forecast values). The core HICP was approximated by the HICP excluding energy and unprocessed food (time-varying country composition) for the period between 1999 and 2001. 3 – Based on forecasts by AMECO, ECB, IMF and OECD. 4 – Main refinancing operations rate.

Sources: ECB, European Commission, Fed, IMF, OECD, own calculations
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28. **Lending rates have stabilised at a high level** since autumn 2023. In January 2024, interest rates on mortgages to private households fell only slightly, while

those on corporate loans remained largely unchanged (ECB, 2024c). A similar picture emerges for bank lending standards, which were tightened significantly as monetary policy became more restrictive: In Q1 2024, banks in the euro area tightened these guidelines for corporate e and consumer credit again slightly, while they eased those for mortgages for the first time since the end of 2021, driven primarily by competition in the French banking market (ECB, 2024d). Overall, the rise in interest rates continues to have a negative impact on credit growth. In January 2024, the annual growth rates of **bank lending to firms and households** (adjusted for sales and securitisations) were **close to zero** on average in the euro area and in Germany and France. They were slightly below the respective figures for the fourth quarter of 2023.

Following the recent tightening of monetary policy, there is a clear **gap** between **interest rates for fixed-term deposits,** which have risen in line with key policy rates, and those for **overnight deposits**, which have increased very weakly due to the market power of banks, for example. This has led to considerable **shifts in** household **portfolios.** For example, the volume of overnight deposits held by private households in the euro area fell from €5.6 trillion in July 2022 to €5.1 trillion in January 2024. In the same period, deposits with fixed maturities of up to two years tripled (ECB, 2022, 2024c).

29. The GCEE forecasts an annual average **increase in the HICP** for the euro area of **2.4 % in 2024** and **2.1 % in 2025** compared to the previous year, respectively. **Inflation is likely to approach the inflation target of 2 % from above in the** course of 2024, as the effects of past energy price shocks and supply bottlenecks as well as the economic recovery after the pandemic subside and the monetary policy remains tight and continues to weigh on demand. However, rising real income should lead to an increase in demand and thus dampen the decline in price increases. In addition, the high inflation rates in the services sector in member states with particularly tight labour markets and high increases in unit labour costs are likely to normalise more slowly against the backdrop of a delayed pass-through. ↘ ITEM 47

↘ BOX 5

Forecast assumptions for the euro area and Germany

Wholesale prices for energy sources - especially for natural gas - continued to fall in the winter half-year 2023/24 ↘ ITEM 13 ↘ TABLE 4 and, adjusted for inflation, are slightly above the average level for the years 2010 to 2019. Forward prices for natural gas are also expected to rise only moderately in the winter half-year 2024/25. Accordingly, the **GCEE assumes that prices for natural gas** will **stabilise at** around **the current level** over the forecast horizon. Wholesale prices for electricity in Germany are expected to be somewhat more volatile and at a higher price level than at present. The futures markets for Brent crude oil suggest a downward price trend for 2024 compared to the current level. ↘ ITEM 13

Central banks around the world are likely to cut interest rates in the course of 2024. ↘ ITEM 14 Interest rate rules also suggest a monetary policy easing by the ECB. ↘ BOX 4 As central banks left key policy rates unchanged in the winter half-year 2023/24, the exchange rate of the euro against the US dollar has shown little momentum. For the forecast horizon, the **exchange rate level of USD 1.09 per euro** observed at the end of the data period is assumed to remain

constant.

The GCEE's forecast is based on the assumption that the direct economic impact of **Russia's war of aggression against Ukraine** and the **conflict in the Middle East** will **not worsen** in the future. Dependence on raw material and energy imports from Russia has decreased due to new suppliers and lower natural gas consumption. Furthermore, the global oil supply is not expected to become scarcer as a result of the conflict in the Middle East. ↘ ITEM 16 However, the continuation of the war in Ukraine and tensions between NATO member states and Russia, as well as the conflict in the Middle East, continue to contribute to increased uncertainty. ↘ ITEM 16

↘ TABLE 4

Forecast assumptions[1]

	2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Oil price (Brent) US dollar/barrel	82.2	77.9	85.9	83.0	81.9	87.3	86.3	84.0	82.1	80.5	79.2	78.1
Gas price (EGIX THE) €/MWh	54.3	35.9	34.2	43.5	28.0	28.4	29.4	33.2	35.1	32.8	32.5	34.6
Electricity price (EEX Phelix) €/MWh	122.9	99.5	98.3	87.6	69.9	56.5	71.4	88.6	95.6	74.5	81.1	93.4
Overnight rate (ECB)[2] % p. a.	2.5	3.3	3.8	4.0	4.0	3.8	3.6	3.3	2.8	2.7	2.6	2.5
Exchange rate (ECB) € in US dollar	1.07	1.09	1.09	1.08	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09

1 – Values observed before 2024Q1; assumptions from 2024Q2 onwards. 2 – Deposit facility rate.

Sources: ECB, EEX, ICE, NYMEX, Refinitiv Datastream, own calculations

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The **sickness level** in Germany has been **significantly higher** since 2022 **and there are no signs of normalisation so far.** This continues to put a strain on the overall economy's labour volume. A calculation by the GCEE shows that a return of the sickness level to the pre-pandemic trend would have resulted in an increase in the overall economy's labour volume of around 1.7 % in 2023. While the increased sickness rate has so far mainly been attributed to post-pandemic catch-up effects in respiratory diseases (GCEE Annual Report 2023 box 8), the lack of normalisation currently indicates a structurally increased level.

3. Opportunities and risks: Inflation trend could delay monetary policy easing

30. Unexpectedly strong growth in nominal wages could cause **inflation to rise again** (Lagarde and de Guindos, 2024). As a result, the ECB could feel compelled to keep key policy rates at the current level or higher than currently expected by the markets. ↘ ITEM 22 **In addition, the transmission of the tight monetary policy,** to the real economy of the euro area could be **stronger** than initially assumed. A further **intensification of geopolitical tensions** is also likely to **increase macroeconomic uncertainty,** which could affect private consumption through increased precautionary savings by households.

IV. GERMANY

31. **The German economy continues to be in a period of weakness**. Gross domestic product fell by 0.5 % in the 4th quarter of 2023, after adjusting for price, seasonal and calendar effects. Employment growth has almost come to a halt following the increases of recent years. In the winter of 2023/24, the ongoing strikes and the continued increase in sick leave (Jannsen, 2022; Michelsen and Junker, 2024), but also generally weak demand weighed on the economy. However, there are **signs that** the trend is turning and that **growth in the German economy will pick up** over the course of 2024. The GCEE expects German GDP to grow by 0.2 % in 2024 and by 0.9 % in 2025. Gains in real labour income should lead to rising private consumption expenditures and the improvement in financing conditions this year should support gross fixed capital formation in construction in 2025. However, the recovery is likely to be driven exclusively by domestic demand, as exports will be subdued. Inflation is likely to fall from 5.9 % in 2023 to 2.4 % in 2024 and 2.1 % in 2025. Core inflation will amount to 3.0 % in 2024 and 2.4 % in 2025.

1. Economy stabilises

32. **The downturn in winter 2023/24 was broad-based**. The weak development is reflected in the retail sector, which had to absorb significant losses in sales and value added. In addition to increased consumption of services by private households after the end of the coronavirus pandemic, specific problems in the stationary retail sector are also likely to play a role here (Creditreform, 2024). In addition, the manufacturing industry recorded a significant decline compared to the previous year, both in terms of gross value added and the production index. ↘ CHARTS 16 AND 17 TOP LEFT This decline is linked to weak international demand for capital goods and thus to the sharp decline in German goods exports. ↘ BOX 7 According to the latest ifo economic survey, order backlogs have either fallen significantly or are not providing much support.

The production index in the manufacturing sector has fallen since 2017. This has fuelled the debate about **structural economic change in Germany** (Walk, 2023; Heymann, 2024). Unlike the production index, gross value added has remained stable over the same period, which may alleviate concerns about deindustrialisation somewhat (Joint Economic Forecast, 2023; Lehmann and Wollmershäuser, 2024). ↘ BOX 6 The reason for the difference between gross value added and production is a lower input ratio. This decline could be explained by increasing automation in the production process and the relocation of input-intensive production abroad (Krenz et al., 2021; Lehmann and Wollmershäuser, 2024).

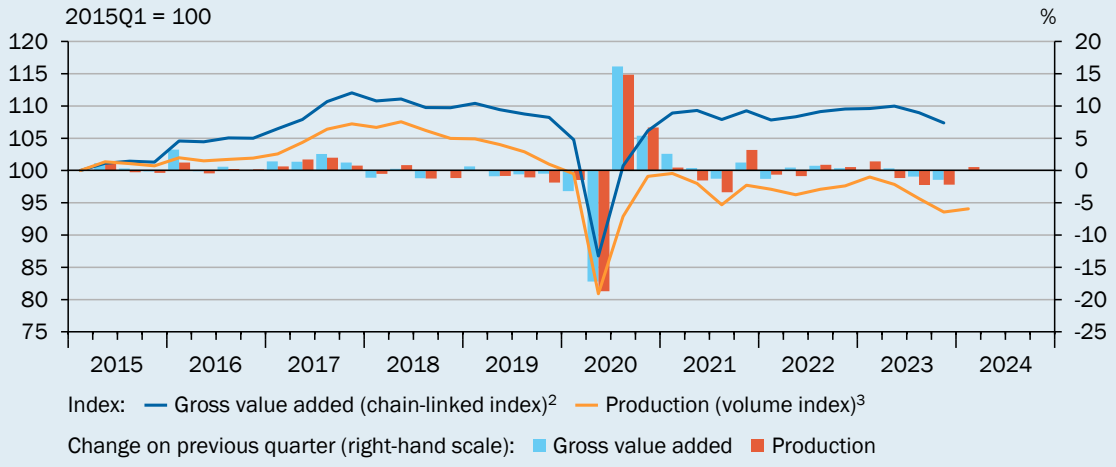
↘ BOX 6

Background: On the discrepancy between the production index and gross value added in the manufacturing industry

The **production index**, which measures the monthly production volume in the manufacturing sector, **fell** by 4.2 % between 2015 and 2023. In 2023, the decline accelerated and amounted to 6.5 % between January and December 2023, followed by an increase at the beginning of 2024. ↘ CHART 16 In contrast, quarterly **gross value added** (GVA), which indicates the difference between the volume of production and intermediate consumption based on the cost structure survey, was 7.9 % **higher** in manufacturing in 2023 **compared to 2015**. In the period between 2017 and 2023, however, the GVA was almost constant.

↘ CHART 16

Discrepancy between gross value added and production in manufacturing[1]



1 – Seasonally and calender-adjusted values. 2 – Values from 2022Q1 are updated using the production index.
3 – The value for 2024Q1 is calculated as the average of the values for January and February.

Sources: Federal Statistical Office, own calculations
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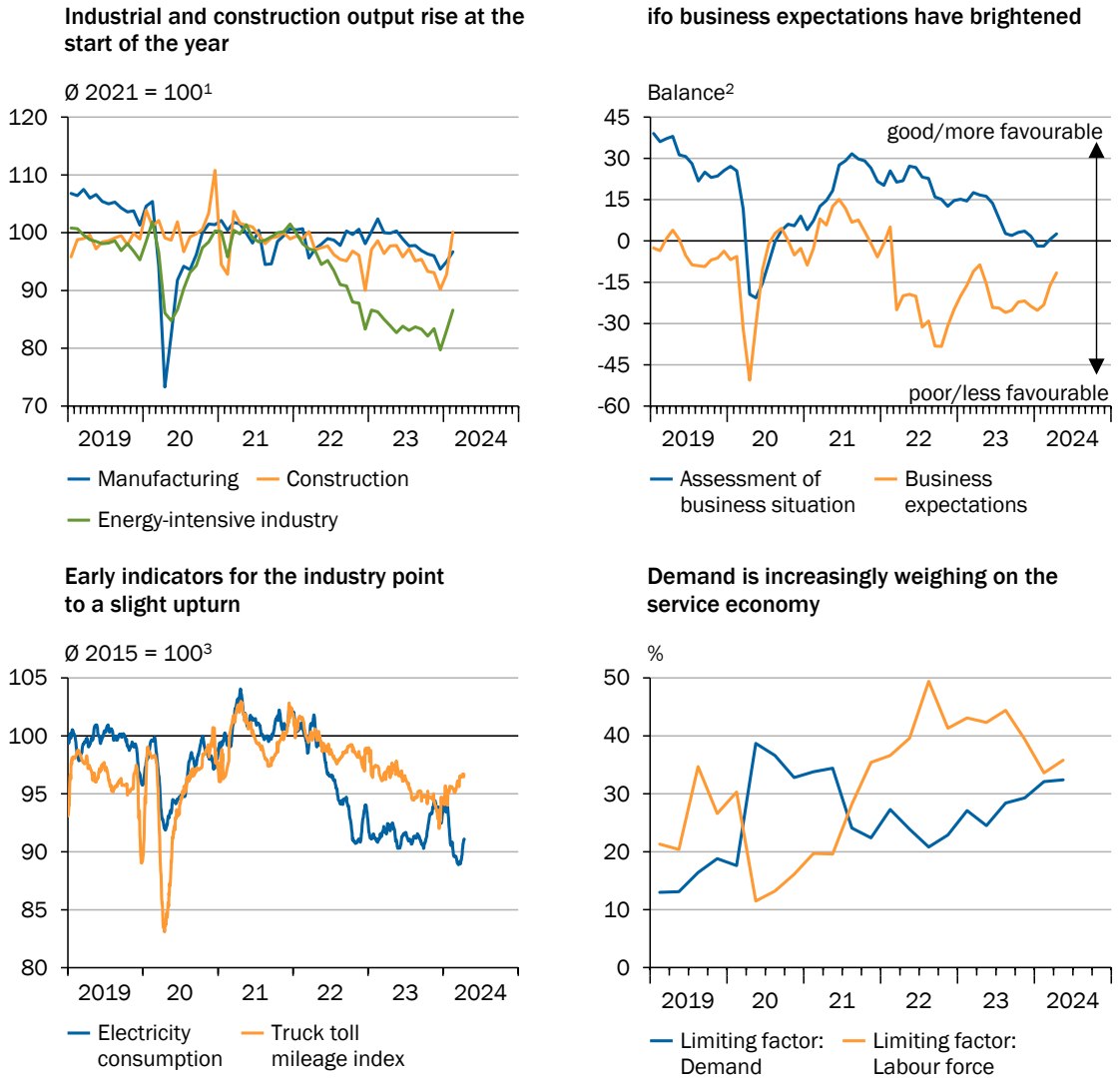
As the cost structure survey is published with a lag of 20 months, the Federal Statistical Office provisionally updates the GVA values from 2022 using the production index. **Both indicators** are therefore synchronized by design since 2022. However, the revised GVA values are also largely in line in the short term, particularly in qualitative terms. ↘ CHART 16
The **input ratio plays** an important role in the **long-term discrepancy between** the two indicators. If the input ratio of production decreases, the rate of change in GVA is higher than the rate of change in production, as **a decrease in the use of intermediate goods increases value added for a given level** of **production**. The **real input ratio of German industry fell** between 2010 and 2021 (Lehmann and Wollmershäuser, 2024). Only the cost structure survey for 2022, which will be published in mid-2024, will provide information on the impact of the input ratio on GVA in 2022.

Theoretically, the discrepancy could also be attributed to **differences in the weighting of** the indicator components instead of the intermediate input ratio. Unlike the GVA, the weights for the individual economic sectors are fixed in the aggregate production index and correspond to the GVA sector weights in the base year, which was 2015 until December 2023. Our own calculations show negligible changes in the weights for the period between 2015 to 2020. However, **the energy crisis in 2022** could have led to a **shift within the industry sector,** thereby distorting the production index downwards. This hypothesis can also only be tested with the publication of the next cost structure survey.

33. **Supply-side bottlenecks continue to play a significant role** for the overall economy. However, according to surveys, they have receded somewhat since autumn 2023 (DIHK, 2024a). ↘ CHART 17 BOTTOM RIGHT In addition to **high sickness rates** and declining working hours, **labour hoarding** is likely to play an increasing role due to labour shortages. ↘ ITEM 51 ↘ BOXES 5 AND 8 This hinders reallocation and can reduce labour productivity. **Energy and labour costs** also affect companies' operations. Energy prices are even considered to be the biggest stress factor in the construction and industry sector, although they have fallen sharply compared to the previous year. ↘ ITEM 13 In order to reduce their costs, German industrial companies are increasingly investing abroad according to the DIHK survey (DIHK, 2024b).

↘ CHART 17

Economic indicators in Germany



1 – Volume index; seasonally and calendar-adjusted values. 2 – Business expectations in the next six months. Difference in the percentages of firms expecting/reporting an improvement and firms expecting/reporting a deterioration. 3 – Moving 30-day average; seasonally and calendar-adjusted values. 4 – Share of companies reporting the stated production-limiting factors. Seasonally adjusted values.

Sources: Deutsche Bundesbank, European Commission, Federal Statistical Office, ifo, own calculations
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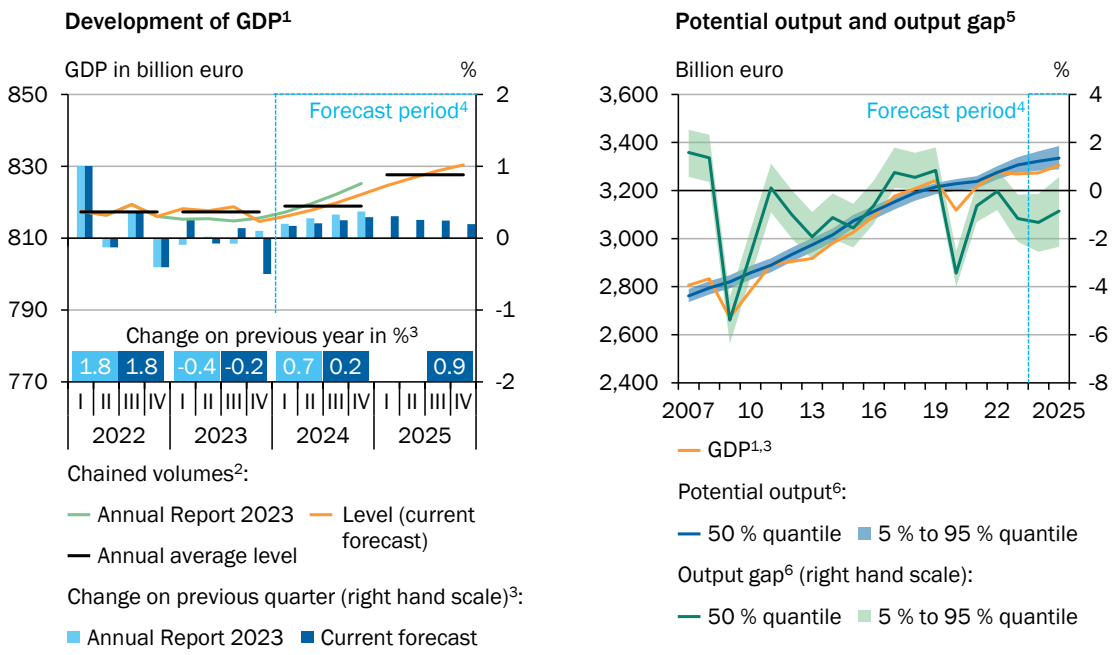
34. The **weak economic development can increasingly be explained by a decline in** overall economic **demand**. One reason is that private households are holding back on their private consumption expenditure and incoming orders in the manufacturing sector are weak. ↘ BOX 7 ↘ ITEM 38 In the services sector, 32 % of companies now report that a lack of demand is hampering their business activities. ↘ CHART 17 BOTTOM RIGHT This is the highest figure since the pandemic-related peak of 39 % in Q2 2020.

While private demand is likely to recover over the forecast horizon, **fiscal policy will have a slightly restrictive effect**. ↘ ITEMS 54 FF. The 2024 federal budget was adopted without utilising the debt brake exception clause. This goes hand in hand with **consolidation.** In particular, expenditure to cushion the energy crisis, such as the electricity and gas price brakes, are cancelled. The progression-related increase in nominal tax revenue contributes to consolidation, whereby the adjustment of the income tax rate through the Inflation Compensation Act dampens the contractionary effect. Overall, the GCEE estimates that the structural deficit in relation to GDP will fall from –1.5 % in 2023 to –0.8 % and –0.6 % in 2024 and 2025 respectively.

35. A As GDP is below medium-term potential output, the output gap is negative. This implies underutilisation. According to the GCEE's estimate, the output gap widens from 1.2 % of potential output in 2023 to 1.3 % in 2024. ↘ CHART 18 RIGHT Survey-based capacity utilisation has also fallen across all sectors. However, the forecast assumes that **GDP will converge to normal capacity utilisation**. Domestic

↘ CHART 18

Expected economic development in Germany



1 – Chained volumes, price adjusted, reference year 2015. 2 – Seasonally and calendar-adjusted. 3 – Not adjusted. 4 – Forecast by the GCEE. 5 – Estimate by the GCEE. 6 – Quantiles of the sample.

Sources: Federal Statistical Office, own calculations
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demand, in particular consumption and capital formation, is likely to provide a moderate boost to GDP growth. ↘ ITEMS 38 AND 40

36. GDP growth in the first quarter of 2024 was around 0.2 % according to the Federal Statistical Office's flash report of 30 April 2024. A countermovement to the declines in industrial and construction production at the end of 2023 significantly contributed to this. ↘ CHART 17 TOP LEFT The currently available **sentiment and real-time indicators** have **brightened**. However, they are still gloomy in a multi-year comparison, as is the order situation in the industry. ↘ CHART 17 TOP RIGHT AND BOTTOM LEFT The nowcast for the second quarter points to a GDP growth of 0.2 %. Over the course of 2024, GDP growth rates are likely to increase slightly compared to the previous quarter, but remain weak overall. ↘ CHART 18 LEFT Growth in 2024 as a whole is also influenced by a statistical overhang of –0.3 % from 2023 and will therefore be just 0.2 %. Quarterly growth rates are likely to fall slightly again over the course of 2025, implying a growth rate of 0.9 % for the year as a whole. ↘ TABLE 5 At –0.9 %, the output gap in 2025 will be slightly smaller than in 2024. ↘ CHART 18 RIGHT

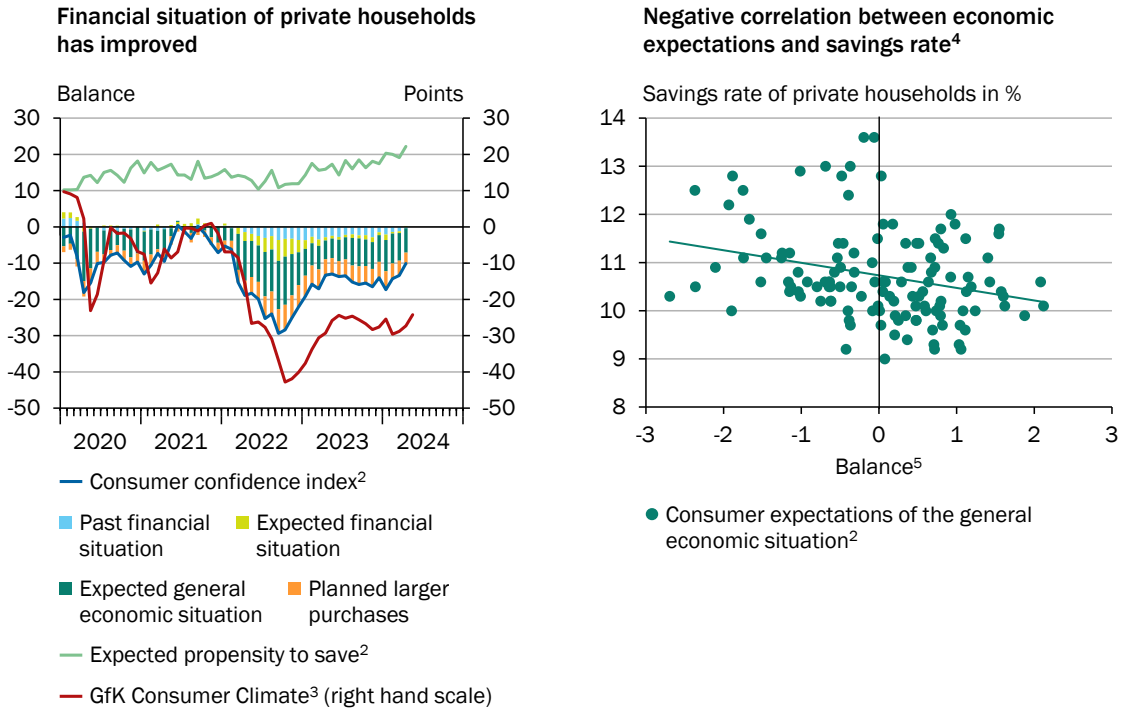
Final consumption expenditure

37. **Price-adjusted private consumption expenditure** has so far shown **little upward momentum**. In the 4th quarter of 2023, it only grew by 0.2 % compared to the previous quarter. One possible reason for this is that although nominal net wages rose sharply by 9.0 % in 2023, price-adjusted growth for 2023 as a whole was only 2.5 %. This growth is primarily attributable to the 4th quarter of 2023, in which net wages and salaries grew by 1.9 % compared to the previous quarter after adjusting for price and seasonal effects. **At 11.4 %,** the **savings rate** is also **higher than before the pandemic** and, according to survey data, there are no signs of a decline over the next 12 months. Private households are likely holding back funds as a precautionary measure to prepare for possible future spending. **Consumer expectations regarding the general economic situation remain gloomy**. ↘ CHART 19 LEFT These expectations show a negative correlation with the saving ratio. ↘ CHART 19 RIGHT The correlation with expectations about one's own financial situation is also negative and somewhat stronger. However, this component no longer has a negative impact on consumer confidence.

38. Private consumption will provide a positive impetus over the course of 2024 and 2025. **Net wages are likely to increase** by 5.2 % this year and by 3.1 % next year. Adjusted for consumer price inflation, growth will be 2.7 % and 1.0 % respectively. The decisive factor here is that numerous wage agreements concluded under the influence of high inflation rates take effect within the forecast horizon and result in real wage increases in view of falling inflation. ↘ ITEM 53 In addition, the tax-free inflation compensation premium will be utilised in 2024 before it expires in 2025. Monetary social benefits are also likely to rise sharply at rates of 5.3 % and 3.7 %. **By contrast, employment** momentum is **will be weak** and, in contrast to 2023, provide **little impetus** for private consumption. ↘ ITEM 52 Against this backdrop, growth rates for private consumption expenditure are expected to be 0.8 % in 2024 and 0.9 % in 2025.

↘ CHART 19

Consumption indicators in Germany[1]



1 – Seasonally adjusted values. 2 – The consumer confidence index and the saving propensity indicator are based on selected questions answered by consumers according to the Joint Harmonised EU Programme of Business and Consumer Surveys. They relate to the past or coming 12 months. 3 – Based on about 2,000 consumer interviews per month. 4 – Values from 1991 onwards, 3-month averages. Excluding the quarters 2020Q2 to 2021Q2. 5 – Standard deviations from the mean.

Sources: European Commission, Federal Statistical Office, GfK, own calculations
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39. After **government consumption fell by 1.5 % in 2023** due to the cancellation of pandemic-related expenses, it is expected to **rise by 1.3 % in 2024** and by **1.1 % in 2025**. In 2024, the share of government consumption in GDP is likely to be 22 % and thus at a higher level than before the coronavirus pandemic of just under 20 %. In addition to a continued increase in upfront expenditure in the healthcare sector, the introduction of the 49-euro ticket and the associated allocation of public transport companies to the state sector will also contribute to this.

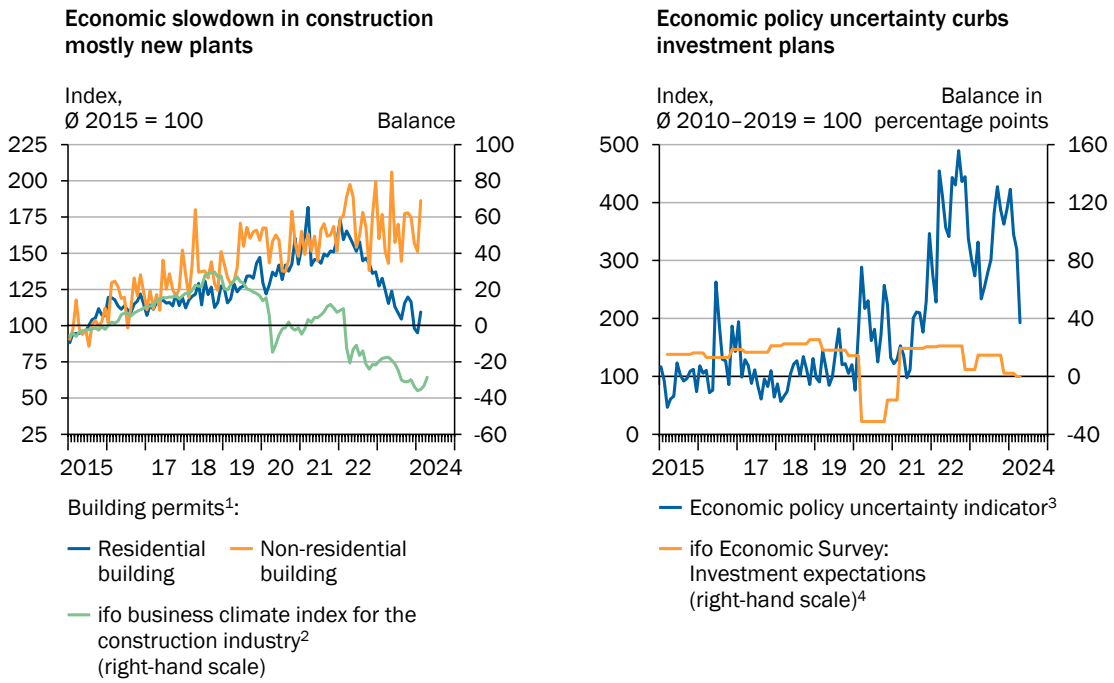
Capital formation

40. In addition to the higher financing costs resulting from the tightening of monetary policy, economic policy uncertainty is making **many companies less willing to invest**. For example, the economic policy uncertainty indicator based on the analysis of newspaper articles by Baker et al. (2016) for Germany is still significantly higher than the average for the years 2010 to 2019. ↘ CHART 20 RIGHT According to this indicator, economic policy uncertainty rose sharply after the Russian attack on Ukraine and remained at a very high level until March 2024. It fell significantly in April 2024, but was still above the level of the first coronavirus wave in 2020. Unexpected increases in economic policy uncertainty can have a dampening effect on private gross fixed capital formation, especially in the current weak phase of

the German economy (Caggiano et al., 2014; Salzmann, 2020; Lhuissier and Tripier, 2021). This is in line with current business surveys. According to these, a lower proportion of companies are planning to expand their capital formation in spring 2024 than in autumn 2023 (DIHK, 2024a; ifo Institute, 2024a). ↘ CHART 20 RIGHT ↘ ITEM 48

41. Gross fixed **capital formation in machinery and equipment** exhibited an **upward trend** until the 3rd quarter of 2023, contrary to the general economic weakness. In the 4th quarter of 2023, however, it recorded a sharp decline of 3.5 % compared to the previous quarter. This development was driven in particular by private company capital formation in vehicles. The subsidisation of electric vehicles, which was valid until August 2023, is likely to have contributed significantly to this. In 2024, no strong impetus is likely to come from private gross fixed capital formation in machinery and equipment. This is signalled by the domestic turnover of capital goods manufacturers, which fell by 2.9 % in January and February 2024 compared to the average of the previous quarter. In addition, registrations of commercially used vehicles trended sideways in the 1st quarter of 2024. In the later forecast horizon, demand for more energy-efficient equipment is likely to pick up slightly. According to the DIHK, replacement investments as an investment motive for the companies surveyed are at their highest level to date. Public spending on military weapons systems is likely to boost gross fixed capital

↘ CHART 20
Investment indicators



1 – Estimated construction cost, including construction work on existing buildings; seasonally and calendar-adjusted. 2 – Current business situation and business expectations in six months. Seasonally adjusted mean value from the difference between the percentage shares that expect an improvement and those that expect a deterioration. 3 – The index measures the relative frequency with which the words 'uncertainty', 'economy' and specific policy-related keywords occur together in newspaper articles. 4 – The balance is calculated by subtracting the percentage of companies that want to increase their investments from the percentage of those that want to reduce their investments.

Sources: Baker et al. (2024), Deutsche Bundesbank, ifo, own calculations
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formation in machinery and equipment over the entire forecast horizon. Overall, the GCEE expects a decline in gross fixed capital formation in machinery and equipment of 1.6 % in 2024 and an increase of 2.6 % in 2025.

42. In 2023, gross fixed capital formation in construction fell for the third year in a row. The **economic weakness of the construction industry was particularly evident** in the **decline in residential construction investment,** which fell more sharply over the course of the year. Most recently, over 50 % of the residential construction companies surveyed by the ifo Institute complained of a severe lack of orders (ifo Institute, 2024b). The sharp rise in mortgage interest rates in 2023 is likely to have been the main reason for this. ↘ ITEM 28

43. Despite all the negative factors, the construction industry as a whole is likely to have shown a weather-related positive countermovement in the 1st quarter of 2024 compared to the decline in the 4th quarter of 2023. The construction output figures in January and February 2024 provide very strong signals of this (Federal Statistical Office, 2024). The **economic slowdown in residential construction is nevertheless likely to continue over the course of 2024**. Compared to other sectors of the economy, both business expectations and investment intentions in the construction industry are currently the worst (DIHK, 2024a). According to the ifo Institute, the business expectations of companies in the construction industry reached their lowest level since 1991 in February 2024. Expectations have nevertheless improved noticeably recently, but are still at a low level (ifo Institute, 2024c). ↘ CHART 20 LEFT **In contrast, non-residential construction is likely to support the construction industry, as it did in 2023**. Price-adjusted order backlogs in non-residential construction are still at a high level after peaking in 2022. In addition, commercial construction is likely to benefit from orders for the renovation of the railway network and the expansion of the energy grid from 2024.

From 2025 onwards, residential construction investment is likely to pick **up** slightly as financing conditions improve. ↘ ITEM 27 An initial sign of a recovery in residential construction investment in the further forecast horizon is the increase in new mortgage contracts for residential construction loans (Boysen-Hogrefe et al., 2024). Overall, gross fixed capital formation in construction is expected to decline by 1.5 % in 2024 and increase slightly by 0.7 % in 2025.

Foreign trade

44. The German **export industry has cooled down considerably**, which, given its great importance for the German economy, is contributing significantly to the current economic weakness. ↘ CHART 11 **Price-adjusted exports fell** significantly by 2.1 % in 2023. The weakness in exports is linked to the weak global trade in goods in 2023. ↘ ITEMS 6 FF. The tightening of monetary policy, which has dampened demand for capital goods, played an important role here. However, the fact that German exports - unlike in the past - are once again significantly weaker than global trade is an indication of **increased price** ↘ CHART 21 RIGHT or **technological competitive pressure on the German manufacturing industry**. ↘ BOX 7 This is increasingly materialising as order backlogs shrink, particularly in the

automotive industry. ↘ CHART 21 RIGHT The decline in exports was overshadowed by an even sharper decline in imports (–3.4 %), meaning that the contributions to growth from net exports were positive for the year as a whole. Accordingly, the positive net export contribution in 2023 is primarily due to Germany's weak domestic economy.

↘ BOX 7

Background: Competitiveness of Germany's exports compared to China

The **German and Chinese economies** are closely **linked to each other**. In addition to the strong importance of Chinese imports (GCEE Annual Report 2022 items 462 ff.), **China plays a** significant role **as a sales market**, particularly in the core areas of automotive and mechanical engineering (Deutsche Bundesbank, 2024).

German exports to China have been declining in real terms since 2018, despite substantial growth in Chinese GDP. ↘ ITEM 10 There are several reasons for this. Firstly, there is an increasing trend towards the **relocation of value added from Germany to China** (Stamer, 2023). Products that are sold in China are increasingly being produced locally. One motivation for German companies to relocate could be to be close to their customers and to reduce their production and transport costs. In addition, the **vertical integration of the Chinese industry** has **increased**. The value-added share of goods consumed and invested in China has grown significantly, which has dampened Chinese demand for end products from Germany. In this context, a significant drop in the intensity of trade in the Chinese manufacturing sector should be mentioned (Joint Economic Forecast, 2024).

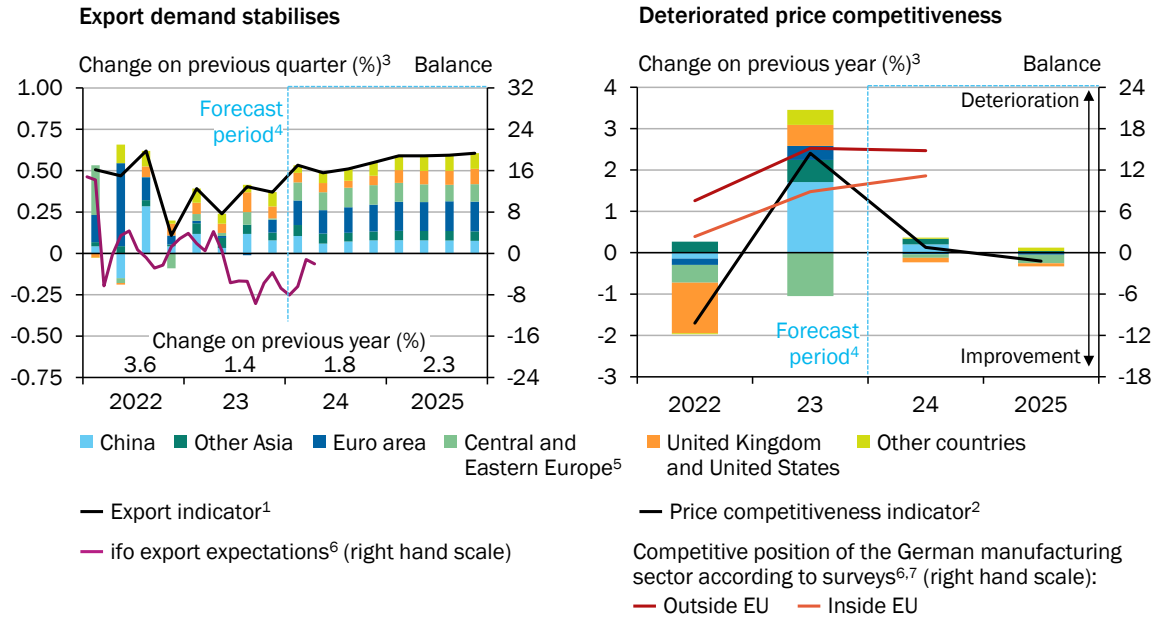
With the change in its value creation, **China is** increasingly pushing into the core areas of the German manufacturing industry and is **therefore also competing on the sales market in third countries**. The share of German exports in EU imports and global exports has been falling for several years. At the same time, the corresponding Chinese shares have risen (Matthes, 2023; Barkin and Sebastian, 2024). In the electrical industry, China has already overtaken Germany in terms of EU imports. China is also rapidly increasing its market share in electric vehicles in Europe, albeit from a lower level. According to surveys of German vehicle manufacturers, 58 % of companies see China as the technology leader in their field in the next 5 years (AHK Greater China, 2024).

The **Chinese government plays a key role** in this context. Extensive subsidies for the industry distort competition (THINK!DESK, 2017; Mattera and Silva, 2018; OECD, 2019), allowing Chinese companies to build up overcapacities. The Chinese government's "Made-In-China-2025" investment programme is likely to reinforce this development, as it aims to expand market shares in certain industrial sectors.

45. The **recovery of** the **global economy** and world trade in particular should help German **exports gain some momentum in 2024**. Improved export expectations are already pointing to a stabilisation. The impact of the global tightening of monetary policy is likely to slowly recede and thus only have a slight negative impact on foreign demand for capital goods towards the end of the forecast horizon. However, the upward trend will be significantly less strong than before the outbreak of the energy crisis. As in the overall economy, trend growth in the export industry has declined significantly. ↘ ITEM 58 The GCEE expects exports to fall by 0.3 % this year and to grow by a modest 1.8 % in 2025. **Imports are** also **likely to gain momentum** as a result of rising demand for intermediate products for export goods and rising consumer demand. Due to the negative overhang in 2023, imports will shrink by 0.6 % in 2024 and grow by 2.2 % in 2025.

↘ CHART 21

Export indicator[1] and price competitiveness[2]



1 – The indicator is based on the GDP development of 50 trading partners. The weighting of each country corresponds to its share of German exports. Country definitions as in Table 1. Seasonally and calendar-adjusted. 2 – The indicator is based on Germany's inflation rates relative to those of 37 trading partners as well as exchange rates and corresponds to the sum of contributions to growth; a positive change indicates reduced price competitiveness of German products. Calculation and country definitions based on the approach of the Deutsche Bundesbank. Forecast by the GCEE. 3 – Growth contributions of the respective regions. 4 – Forecast by the GCEE for the export indicator and the price competitiveness indicator. 5 – Bulgaria, Czechia, Hungary, Poland, Romania. 6 – Seasonally adjusted. 7 – Annual averages of the quarterly survey values of the European Commission. Values shown with reversed sign. The value for 2024 refers to the first two quarters of 2024.

Sources: Deutsche Bundesbank, European Commission, ifo, national statistical offices, own calculations
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↘ TABLE 5

Key economic indicators for Germany

	Unit	2022	2023	2024[1]	2025[1]
Gross domestic product[2,3]	**Growth in %**	**1.8**	**– 0.2**	**0.2**	**0.9**
Final consumption expenditure	Growth in %	3.2	– 1.0	0.8	0.9
Private consumption[4]	Growth in %	3.9	– 0.7	0.6	0.9
Government consumption	Growth in %	1.6	– 1.5	1.3	1.1
Gross fixed capital formation	Growth in %	0.1	– 0.7	– 1.0	1.5
Investment in machinery & equipment[5]	Growth in %	4.0	3.0	– 1.6	2.6
Construction investment	Growth in %	– 1.8	– 2.7	– 1.5	0.7
Other products	Growth in %	– 0.7	– 0.6	1.8	2.4
Domestic demand[3]	Growth in %	3.2	– 0.8	0.0	1.1
Net exports	Growth contribution in percentage points	– 1.2	0.6	0.1	– 0.1
Exports of goods and services	Growth in %	3.3	– 2.2	– 0.3	1.8
Imports of goods and services	Growth in %	6.6	– 3.4	– 0.6	2.2
Current account balance[6]	**%**	**4.2**	**5.9**	**6.7**	**6.7**
Persons employed (domestic)	**1,000**	**45,596**	**45,933**	**46,054**	**46,099**
Persons employed, covered by social security	**1,000**	**34,507**	**34,789**	**34,967**	**35,091**
Registered unemployment, stocks	**1,000**	**2,418**	**2,609**	**2,679**	**2,592**
Unemployment rate[7]	**%**	**5.3**	**5.7**	**5.8**	**5.6**
Consumer prices[8]	**Growth in %**	**6.9**	**5.9**	**2.4**	**2.1**
Budget balance[9]	**%**	**– 2.5**	**– 2.1**	**– 1.5**	**– 1.0**
Gross domestic product per capita[10,11]	**Growth in %**	**1.1**	**– 1.1**	**– 0.2**	**0.6**
Gross domestic product, calendar-adjusted[11]	**Growth in %**	**1.9**	**0.0**	**0.2**	**1.1**

1 – Forecast by the GCEE. 2 – Price-adjusted. Change on previous year. Also applies to all listed components of GDP. 3 – As the expenditure-side composition of the revisions to GDP in 2023 is still pending, it is assumed that they represent an adjustment to the changes in inventories. 4 – Including non-profit institutions serving households. 5 – Including military weapon systems. 6 – In relation to GDP. 7 – Registered unemployed in relation to civil labour force. 8 – Change on previous year. 9 – Regional auhorities and social security according to national accounts; in relation to GDP. 10 – Population development according to medium-term projection of the GCEE calculations. 11 – Price-adjusted. Change on previous year.

Sources: Federal Employment Agency, Deutsche Bundesbank, Federal Statistical Office, own calculations
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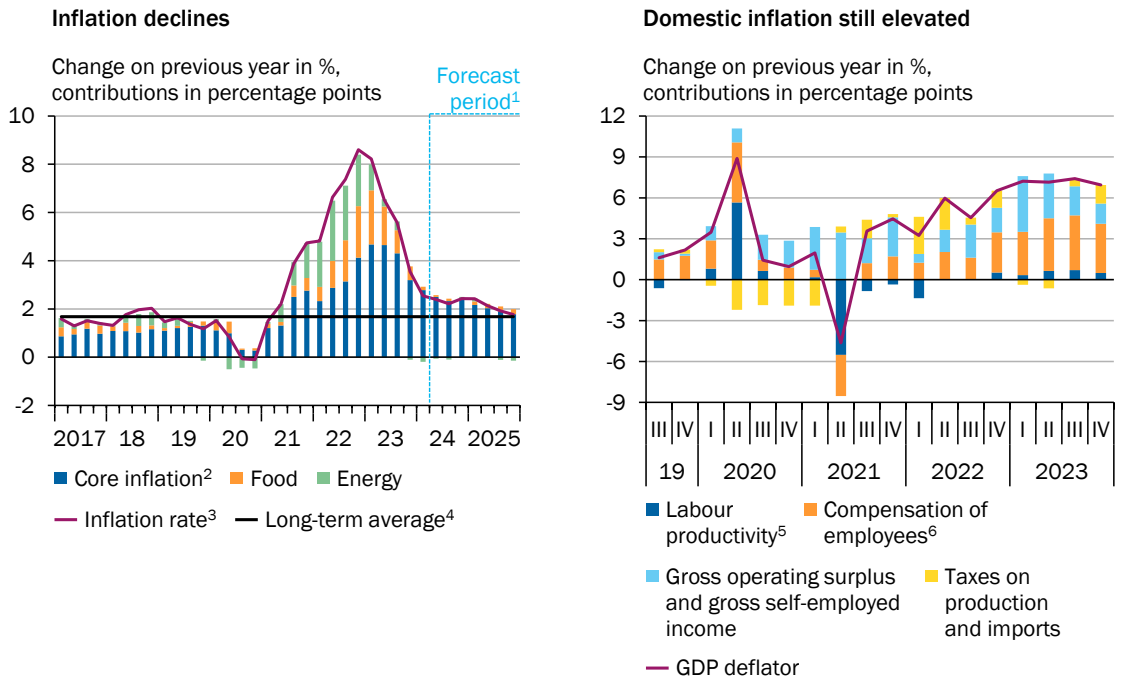
2. Inflation on track, core inflation remains high

46. **Consumer price inflation has continued to fall** since autumn 2023. In the 1st quarter of 2024, it was 2.5 % year-on-year, compared to 5.6 % in the 3rd quarter of 2023. However, the high inflation in 2023 will lead to base effects in 2024, which will have a significant impact on year-on-year inflation (ECB, 2023b). For example, inflation rose again in the first quarter of 2024 compared to the previous quarter, while it fell year-on-year. Core inflation is significantly higher than the overall rate and has also weakened less. In the 1st quarter of 2024, it was 3.4 % year-on-year, after 5.2 % in the 3rd quarter of 2023. ↘ CHART 22 LEFT **Domestic inflation, as measured by the GDP deflator, is significantly higher than imported inflation, which dampens the consumer price index**. The GDP deflator rose by 4.6 % in the 1st quarter of 2024 compared to the same quarter of

↘ CHART 22

Inflation in Germany



1 – Forecast by the GCEE. 2 – Overall index excluding food and energy. 3 – Consumer price index, seasonally and calender-adjusted. 4 – Average over the period from 1999 to 2022. 5 – Increases in labour productivity have a negative impact on the GDP deflator. 6 – According to the domestic concept.

Sources: Deutsche Bundesbank, Eurostat, Federal Statistical Office, own calculations
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the previous year. The flash report from the Federal Statistical Office suggests that deflator growth has slowed significantly by 1.8 percentage points compared to the 4th quarter of 2023. However, the extent to which this can be explained by special effects or whether the result will be revised again will only become clear when the detailed results are published. In the 4th quarter of 2023, for example, special effects in changes in inventories lifted inflation sharply and will also have an impact on the GDP deflator in 2024 due to the overhang. On the distribution side, compensation of employees is the main contributor to the increase, while the profit share is only small. ↘ ITEMS 15 AND 26

47. The decline in the annual CPI rate is will continue until the third quarter of 2024, albeit at a much slower pace. Core inflation is expected to remain under price pressure. **Unit labour cost momentum remains high** due to wage settlements that have already been agreed on and low productivity growth resulting from the economic weakness. In 2024 and 2025, nominal unit labour costs will rise by 5.3 % and 3.1 % respectively according to the hourly concept, with an average growth of 1.6 % in the years 2010 to 2019. As the level of aggregate operating surpluses and self-employment income has fallen in the course of 2023, new price pressure is less likely to be cushioned. ↘ CHART 22 RIGHT At the same time, the **underutilisation of capacity in** the **overall economy** assumed in the forecast horizon is likely to have **a dampening effect** on **cost pass-through** (Bańbura and Bobeica, 2020). Labour costs are likely to be passed on primarily in the services sector, as wage intensity is particularly high here (GCEE Annual Report

2023 box 7). Compared to goods, it is also relatively difficult to switch to foreign services.

Annual average **inflation of 2.4 % is expected** in **2024**. In **2025,** it is likely to be **2.1 %.** The core rate is expected to be 3.0 % in 2024 and 2.4 % in 2025. The GDP deflator will rise by 3.1 % and 1.8 % respectively.

3. Opportunities and risks: Budget policy and propensity to consume

48. **Uncertainty about the future shape of budgetary and economic policy** is currently **high**. As a result of the ruling of the Federal Constitutional Court in November 2023, funds from special funds are available to a significantly lesser extent than previously planned in the budget (BVerfG, 2023; GCEE, 2024). As a result, the already limited fiscal policy scope has narrowed further and the pressure to consolidate has increased. In particular, there is uncertainty about the specific consolidation course in 2025. It is uncertain whether the restrained spending policy assumed in this forecast will be sufficient to comply with the debt brake or whether additional savings efforts will be necessary.

49. The **reaction of private households to the expected real income growth** could boost growth more strongly than assumed in this forecast. Although it is assumed that saving behaviour will tend to normalise, it will remain elevated for precautionary reasons. Accordingly, private consumption will expand only moderately. However, in the event of stronger spending of real income growth, consumption could rise disproportionately. ↘ ITEM 38

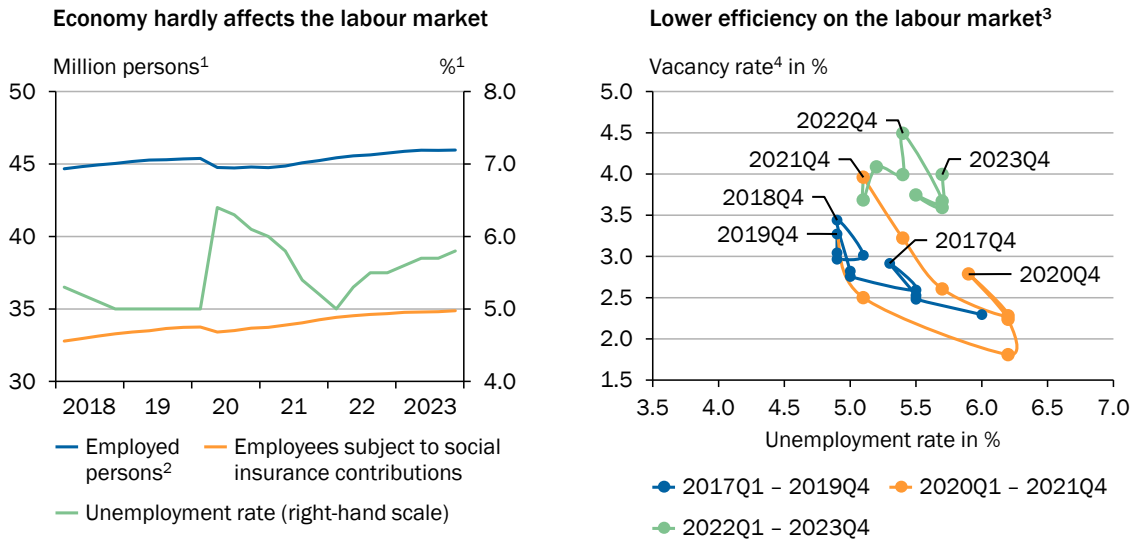
4. Demographic change and low reallocation characterise the labour market

50. The **labour market remains largely resilient** to the economic downturn. Employment rose by 0.1 % in the 4th quarter of 2023 compared to the previous quarter, but growth is increasingly weakening. ↘ CHART 23 LEFT The increase in employment subject to social insurance contributions is the main driver of growth. In the 4th quarter of 2023, the unemployment rate rose by 0.1 percentage points to 5.8 % compared to the previous quarter. ↘ CHART 23 LEFT Cyclical short-time work increased slightly to 0.6 % of employees subject to social insurance contributions in February 2024, but remains at a moderate level given the economic situation (BA, 2024a).

51. **Since the Corona pandemic, structural conditions on the German labour market have deteriorated and matching efficiency has decreased**. This can be seen in the outward shift of the Beveridge Curve for the period 2022 and 2023 compared to the pre-pandemic level. ↘ CHART 23 RIGHT Influencing factors that have caused this development can be found on both the supply and demand side. On the supply side, an increasing shortage is emerging due to demographic change and declining average working hours. On the demand side, an

↘ CHART 23

Development of the labour market



1 – Seasonally adjusted. 2 – Place of work in Germany regardless of place of residence (national concept). 3 – The representation of the inverse relationship between the vacancy rate and the unemployment rate is also known as the Beveridge curve and is a simple model for supply and demand on the labour market. While movements along the stylised curve represent cyclical fluctuations in employment, an outward shift in the curve indicates a deterioration in structural conditions (e.g. increased search frictions or increased skill mismatch) and thus a lower efficiency of the labour market. 4 – Ratio of vacancies to be filled immediately according to the IAB Job Vacancy Survey to the sum of vacancies to be filled immediately and employees subject to social insurance contributions.

Sources: Federal Employment Agency, Federal Statistical Office, Institute for Employment Research (IAB), own calculations
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increasing hoarding of labour can be observed, as many companies are refraining from making redundancies despite the poor economic situation. ↘ BOX 8 Both of these factors make it more difficult for companies to fill vacancies and at the same time prevent a significant increase in unemployment. There is also a risk that existing unemployment will become solidified due to an increasing skill and regional mismatch between jobseekers and vacancies (BA, 2024b).

↘ BOX 8

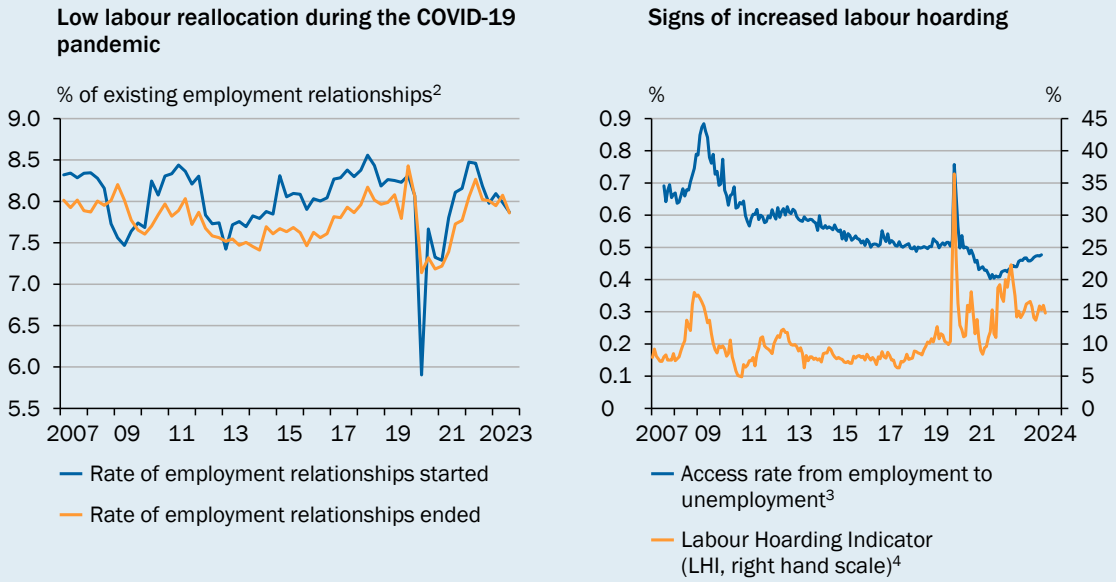
Focus: Persistent labour hoarding in the German labour market

Since the 2008 financial crisis, employment growth in Germany has decoupled from economic growth. This is primarily due to a shift in the sectoral composition towards more labour-intensive services (Klinger and Weber, 2020). **Despite the poor economic development, employment in Germany is also currently continuing to rise.** ↘ CHART 23 LEFT In 2020 and 2021, the government supported the retention of labour in Germany in order to cushion the temporary effects of the Corona pandemic. The government support measures included coronavirus business aid, the suspension of the obligation to file for insolvency and easier use of short-time work (Fitzenberger and Walwei, 2023). As a result, Germany - in contrast to the USA - experienced labour hoarding and therefore no major reallocation of employees. Instead, both the number of employment relationships subject to social security contributions that started and those that ended declined (Garnadt et al., 2021). ↘ CHART 24 LEFT

Various indicators suggest that **labour hoarding will continue to** be **widespread in the coming years.** On the one hand, transitions from employment to unemployment have barely

↘ CHART 24

Hardly any reallocation on the labour market[1]



1 – Seasonally adjusted values. 2 – Quarterly values. 3 – Transitions from employment subject to social insurance contributions to unemployment (SGB III) relative to the stock of employment subject to social insurance contributions. Data available from July 2007. 4 – The indicator is based on data from the Harmonised Business and Consumer Surveys and measures the (weighted) percentage of companies that expect their production to fall but employment to remain the same or even rise.

Sources: European Commission, Federal Employment Agency, own calculations
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increased despite the current economic weakness. ↘ CHART 24 RIGHT On the other hand, Germany's score on the European Commission's survey-based Labour Hoarding Indicator has been significantly higher than most other EU countries since the beginning of 2022. At the current margin, this is more than 50 % above the value at the end of 2019. ↘ CHART 24 RIGHT While labour **hoarding** helps to stabilise the labour market in the short term, it **can have a negative impact on overall economic productivity in the medium term by preventing the reallocation of** workers to more productive companies (Cooper et al., 2017; Giupponi and Landais, 2023).

52. Key employment indicators, such as the ifo Employment Barometer and the IAB Labour Market Barometer, point to a **further slight increase in employment in the short term** in April 2024. However, advancing demographic change will limit further employment growth (AR 2023 chart 110). After an increase of 0.3 % in 2024, employment is therefore expected to stagnate in 2025 for the forecast period. ↘ ITEMS 23 AND 38 ↘ TABLE 6

Due to the economic recovery in 2024 and the continued tight situation on the labour market, there will only be a **slight increase in unemployment**. ↘ CHART 23 RIGHT Companies are expected to counter the current economic weakness by reducing their hiring but not by laying off their employees. ↘ BOX 8 On the other hand, well-trained workers without a job are unlikely to have any problems finding new employment due to the continuing high level of shortages on the labour market. In 2025, the stronger economic recovery should lead to a decline in unemployment. ↘ TABLE 6

↘ TABLE 6

Labour market in Germany

	2022	2023	2024[1]	2025[1]	2024[1]	2025[1]
	Annual value				Change on previous year	
	1,000 persons				%	
Labour force[2]	46,800	47,119	47,370	47,382	0.5	0.0
Unemployed persons[3]	1,343	1,334	1,460	1,426	9.4	– 2.3
Employed persons[4]	45,596	45,933	46,054	46,099	0.3	0.1
Employees subject to social security contributions	34,507	34,789	34,967	35,091	0.5	0.4
Exclusively marginally employed[5]	4,125	4,197	4,136	4,062	– 1.5	– 1.8
Registered unemployed persons	2,418	2,609	2,679	2,592	2.7	– 3.2
Underemployment excluding short-time work[6]	3,185	3,449	3,515	3,397	1.9	– 3.4
Short-time work (Employment equivalence)[7]	161	74	63	56	– 14.4	– 12.1
	Yearly averages in %				Percentage points	
Unemployment rate (FEA)[8]	5.3	5.7	5.8	5.6	0.1	– 0.2
Unemployment rate (ILO)[9]	3.1	3.0	3.3	3.2	0.2	– 0.1
	Change on previous year in %					
Collectively agreed wages (hourly concept)	2.2	3.7	4.6	3.0	.	.
Effective wages[10]	4.3	6.3	5.1	3.7	.	.

1 – Forecast by the GCEE. 2 – Unemployed and employed persons in their working age with residence in Germany (national concept); as defined by the national accounts systems. 3 – According to the measuring concept of the International Labour Organization (ILO). 4 – Employed persons in Germany independent of their residence (domestic concept). 5 – Employed workers with a monthly wage up to 450 Euro and, since 1 October 2022, with a wage of up to 520 euro (§ 8 Absatz 1 Nr. 1 SGB IV). 6 – According to the concept of underemployment by the FEA. 7 – Since 2023 forecast by the GCEE. 8 – Registered unemployed persons in relation to civilian labour force. 9 – Unemployed persons in relation to the civilian labour force, in each case persons in private households aged from 15 to 74 years. 10 – Gross wages and salaries (domestic concept) per employees' hour worked.

Sources: Federal Employment Agency (FEA), Federal Statistical Office, own calculations
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53. A **further increase in real wages is** expected for the current year, mainly due to wage increases already agreed last year and the decline in inflation. Nominal wage growth is expected to return to a lower level in 2025 due to low inflation and the economic situation. ↘ TABLE 6 Real wages are expected to return to their pre-pandemic level until the end of the forecast period.

5. Reorganisation of public finances after the crises

54. The Federal Government is not applying the debt brake exception clause again in the current year after the years 2020 to 2023. Following the Federal Constitutional Court's ruling in November 2023, reserves formed in special funds as part of the exception clause are no longer available (GCEE, 2024). **Overall, there is less fiscal policy room for manoeuvre in the forecast period than in previous years**. In addition to the expiry of crisis-related one-off measures, such as the electricity and gas price brakes, this will lead to a subdued nominal increase in public spending.

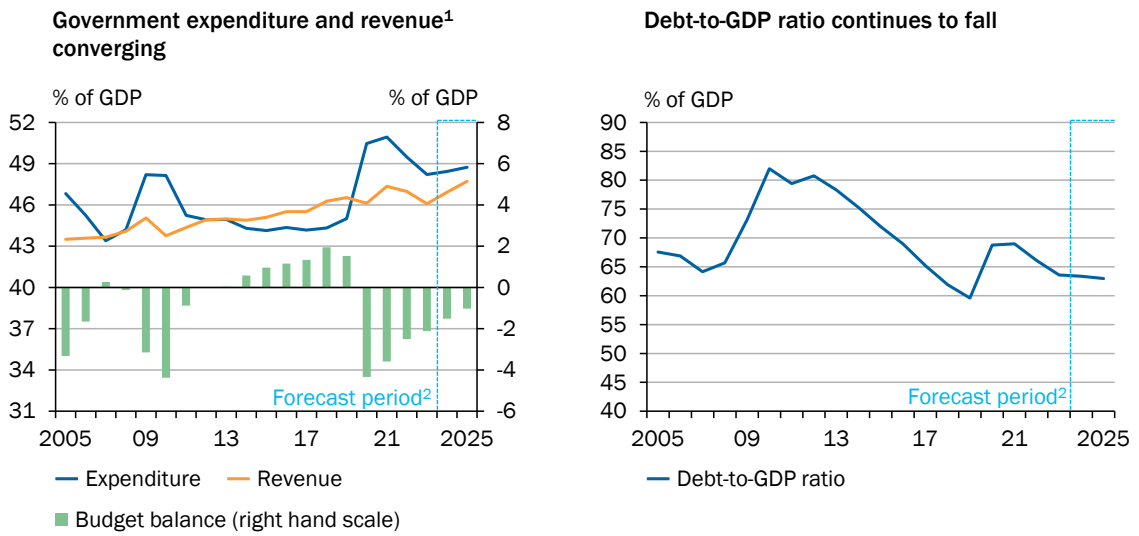
55. **Government spending** is expected to **increase slightly** in 2024, both **in nominal terms and relative to GDP,** despite the expiry of measures to contain the energy crisis. ↘ CHART 25 LEFT In addition to higher defence spending, this is also due to additional capital formation for climate protection. Monetary social benefits will remain at a higher level in relation to GDP than before the crisis years, not least due to the increase in child benefit and the reform of housing benefit. There are major fiscal policy challenges for the 2025 financial year. From 2025, the Federal Ministry of Finance plans to return to the federal government's financial plan adopted in July 2023 (BMF, 2024). This provides for significantly lower expenditure in the core budget than estimated for 2024. In addition, the financing and scope of the measures from the KTF funds is still open. While existing KTF reserves can still be utilised for this in the current year, these are likely to be largely exhausted in the coming year. However, the actual amount of funds used could be significantly lower than estimated. One reason for this is that these are often not fully utilised.

56. Government **revenue is expected to increase** by around 5.1 % **in nominal terms** in 2024. **In relation to GDP,** government revenue will also increase in the current year. The increase in tax revenue will be dampened in the current year by lower revenue and by the shift in the income tax rate as a result of the Inflation Compensation Act. The increase in social security contributions will continue unabated in the coming year, with the abolition of tax-free inflation compensation premiums exacerbating the rise. In contrast to previous years, tax revenue in 2025 is not expected to be dampened again by rate adjustments, meaning that revenue will increase by a nominal 4.5 % in the coming year.

57. The **government's financing deficit is expected to decline** over the forecast period. ↘ CHART 25 LEFT After –2.1 % in 2023, this is expected to amount to

↘ CHART 25

Development of public finances



1 – National accounts (nominal values). 2 – Forecast by the GCEE. 3 – General government gross debt as defined in the Maastricht Treaty.

Sources: Deutsche Bundesbank, Federal Statistical Office, own calculations
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–1.5 % and –1.0 % of GDP in 2024 and 2025, respectively. ↘ TABLE 10 APPENDIX This assumes a cautious spending policy on the part of the federal government due to the restrictions imposed by debt brake and the fact that some funds from special funds are no longer available. Whether this forecast is compatible with compliance with the debt brake in 2025 cannot be assessed with certainty, as the accounting system used for the debt brake differs from the national accounts. Furthermore, the cash outflow from the special funds is unclear. ↘ ITEM 55 If the consolidation requirement for 2025 required to comply with the debt brake turns out to be higher than assumed in the forecast, this could additionally dampen the economy slightly. The **debt ratio is likely to fall slightly over** the forecast period and amount to 63.4 % of GDP in 2024 and 63.0 % in 2025. ↘ CHART 25 RIGHT

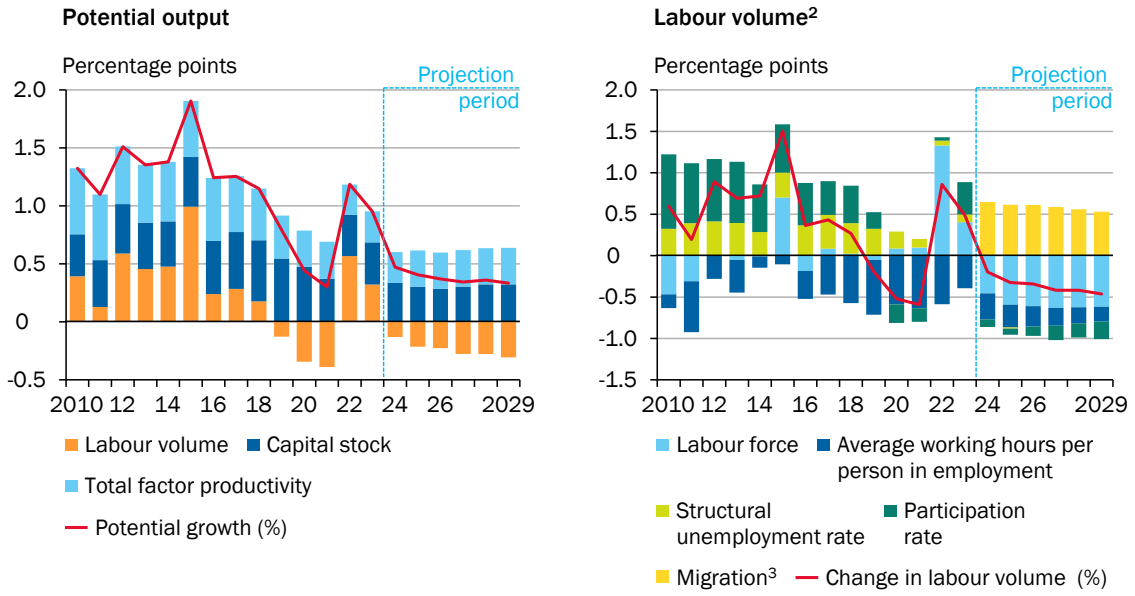
6. Medium-term growth remains subdued

58. The medium-term projection estimates **potential output** in Germany for the **next five years** under the **given structural regulatory framework.** An important determinant here is the current dynamics of population development. Until now, the estimation of immigration was based on the population forecast of the Federal Statistical Office, which is only updated every three years. A new approach makes it possible to update the data annually and thus map demographic developments and the integration of immigrants into the labour market in more detail and use them for the projection. ↘ BOX 9

The GCEE estimates potential **growth at 0.5 % in 2024 and 0.4 % in 2025**. ↘ CHART 26 LEFT In the following years up to 2029, potential growth is likely to remain

↘ CHART 26

Growth contributions of components to potential output and labour volume[1]



1 – Calculations by the GCEE. 2 – The output elasticity of labour is 0.66. 3 – Explicitly modelled from 2024; included in labour force until 2023.

Sources: Federal Statistical Office, own calculations
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at around 0.3 % to 0.4 %. This means that the growth prospects until the end of the decade have hardly changed compared to the autumn estimate for 2023. The GCEE breaks down the growth in potential output into contributions to growth from capital input, labour input and total factor productivity (TFP). No significant growth impetus is expected from capital input. The ongoing stagnation in capital formation since 2021 is reflected in relatively low annual trend growth of around 0.9 % in capital input. According to the projections, TFP growth ↘ GLOSSARY will also amount to just 0.3 % in the coming years. ↘ CHART 26 LEFT

59. Due to data revisions and methodological changes in the population projection, the volume of labour in 2022 and 2023 has been revised upwards compared to the autumn estimate for 2023. ↘ CHART 26 RIGHT ↘ BOX 9 This does not change the fact that labour is likely to remain a scarce factor in the coming years. In particular, the progressive ageing of the baby boomers will lead to a steady decline in the labour force potential. **From 2024** and until the end of the projection horizon, **only negative contributions to growth can** therefore be expected from the volume of labour.

↘ BOX 9

Background: Methodological changes in the population projection

Since 2022, the 15th coordinated population forecast has been the basis for estimating the development of the labour force as part of the GCEE's growth projection. As the population forecast is only updated every three years, this can lead to distortions if developments in the meantime deviate significantly from the assumed developments. This is particularly the case with immigration at the current margin. In order to be able to incorporate up-to-date information on population development into the medium-term growth projection in the years between the official forecasts, the GCEE has made **methodological changes to** the **population projection.** This is **now based** on the **current population status as well as updated assumptions on immigration, birth rate and life expectancy**. In addition, a distinction will be made in future between three groups: the native population, i.e. all people who were recorded in the population statistics up to the previous year, future immigrant skilled workers and future refugees. This classification makes it possible to map the various demographic movements and integration into the labour market in more detail and more up-to-date than before.

A **net immigration of** 550,000 people is assumed for 2024, including around 250,000 skilled workers and 300,000 refugees. These values decrease linearly to 150,000 and 100,000 people respectively by 2032, following the example of the 15th coordinated population forecast. It is assumed that all immigrants are on average 25 years old and are equally divided between male and female. In addition, any **economic frictions in the labour market integration of immigrants** are **taken into account**. It is assumed that the labour market participation rate of immigrants is 65 %. The structural unemployment rate of immigrant skilled workers is set at 8 % and that of refugees at 30 %.

APPENDIX

↘ TABLE 7

Components of the forecast for GDP growth[1] (in %)

	2019	2020	2021	2022	2023	2024[2]	2025[2]
Statistical overhang at the end of the previous year[3]	0.4	0.2	2.4	0.9	– 0.2	– 0.3	0.4
Growth rate over the course of the year[4]	0.9	– 2.1	1.6	0.8	– 0.2	0.9	1.0
Annual rate of change of GDP, calendar adjusted	1.1	– 4.2	3.1	1.9	0.0	0.2	1.1
Calendar effect (in percentage points)	0.0	0.4	0.0	– 0.1	– 0.2	0.0	– 0.1
Annual rate of change of GDP[5]	1.1	– 3.8	3.2	1.8	– 0.2	0.2	0.9

1 – Price adjusted. 2 – Forecast by the GCEE. 3 – Percentage difference between the level of GDP in the last quarter of year t and the average level of quarterly GDP in the total year t (Annual Report 2005 Box 5), seasonally and calendar adjusted. 4 – Percentage change of the fourth quarter on the fourth quarter of the previous year, seasonally and calendar adjusted. 5 – Deviations in sums due to rounding.

Sources: Federal Statistical Office, own calculations

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↘ TABLE 8

Contributions to growth of gross domestic product by expenditure components[1]
Percentage points

	2019	2020	2021	2022	2023	2024[2]	2025[2]
Domestic demand[3]	**1.4**	**– 2.9**	**2.3**	**3.0**	**– 0.7**	**0.0**	**1.0**
Final consumption expenditure	1.4	– 2.2	1.4	2.3	– 0.7	0.6	0.7
Private consumption[4]	0.8	– 3.0	0.8	1.9	– 0.4	0.3	0.4
Government consumption	0.5	0.8	0.7	0.3	– 0.3	0.3	0.2
Gross fixed capital formation	0.4	– 0.5	0.0	0.0	– 0.1	– 0.2	0.3
Investment in machinery & equipment[5]	0.1	– 0.8	0.2	0.3	0.2	– 0.1	0.2
Construction investment	0.1	0.4	– 0.3	– 0.2	– 0.3	– 0.2	0.1
Other products	0.2	– 0.2	0.1	0.0	0.0	0.1	0.1
Changes in inventories[3]	– 0.3	– 0.2	0.9	0.7	0.1	– 0.3	0.0
Net exports	**– 0.3**	**– 1.0**	**0.9**	**– 1.2**	**0.6**	**0.1**	**– 0.1**
Exports of goods and services	1.1	– 4.4	4.2	1.6	– 1.1	– 0.2	0.8
Imports of goods and services	– 1.4	3.4	– 3.4	– 2.8	1.7	0.3	– 0.9
Gross domestic product (%)[3]	**1.1**	**– 3.8**	**3.2**	**1.8**	**– 0.2**	**0.2**	**0.9**

1 – Contributions to growth of price-adjusted GDP. Deviations in sums due to rounding. 2 – Forecast by the GCEE. 3 – As the expenditure-side composition of the revisions to GDP in 2023 is still pending, it is assumed that they represent an adjustment to the changes in inventories. 4 – Including non-profit institutions serving households. 5 – Including military weapon systems.

Sources: Federal Statistical Office, own calculations

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↘ TABLE 9

Key figures of the national accounts

Absolute values

	Unit	2023	2024[1]	2025[1]	2024[1]		2025[1]	
					1. half-year	2. half-year	1. half-year	2. half-year
Use of domestic product								
at current prices								
Final consumption expenditure	billion euro	2,978.2	3,083.9	3,177.6	1,504.4	1,579.5	1,552.6	1,625.0
Private consumption[2]	billion euro	2,089.7	2,155.0	2,217.6	1,052.7	1,102.4	1,084.8	1,132.8
Government consumption	billion euro	888.5	928.8	959.9	451.7	477.1	467.8	492.2
Gross fixed capital formation	billion euro	904.2	912.7	937.3	442.5	470.2	451.7	485.6
Investment in machinery & equipment[3]	billion euro	275.5	277.2	289.9	132.0	145.2	137.3	152.6
Construction investment	billion euro	486.8	489.9	495.0	242.4	247.5	243.1	251.9
Other products	billion euro	141.9	145.7	152.4	68.1	77.6	71.3	81.1
Domestic demand[4]	billion euro	3,954.7	4,059.7	4,176.0	1,983.4	2,076.3	2,038.6	2,137.4
Exports of goods and services	billion euro	1,942.5	1,951.1	2,016.3	965.2	985.9	990.5	1,025.9
Imports of goods and services	billion euro	1,771.0	1,749.3	1,813.8	854.6	894.7	879.8	934.0
Gross domestic product[4]	**billion euro**	**4,126.2**	**4,261.5**	**4,378.5**	**2,094.0**	**2,167.5**	**2,149.2**	**2,229.3**
Chained volumes								
Final consumption expenditure	billion euro	2,394.4	2,413.8	2,436.4	1,189.4	1,224.4	1,200.1	1,236.3
Private consumption[2]	billion euro	1,692.7	1,703.0	1,717.9	837.2	865.6	844.3	873.5
Government consumption	billion euro	700.5	709.7	717.3	351.5	358.2	355.1	362.2
Gross fixed capital formation	billion euro	657.4	650.9	660.8	316.3	334.6	319.0	341.8
Investment in machinery & equipment[3]	billion euro	229.2	225.6	231.4	107.7	117.9	109.6	121.8
Construction investment	billion euro	306.2	301.7	303.7	149.5	152.2	149.3	154.4
Other products	billion euro	123.9	126.1	129.2	59.4	66.8	60.8	68.4
Domestic demand[4]	billion euro	3,103.3	3,104.7	3,138.0	1,527.9	1,576.8	1,541.6	1,596.3
Exports of goods and services	billion euro	1,605.2	1,599.9	1,629.1	794.5	805.5	804.9	824.2
Imports of goods and services	billion euro	1,447.2	1,437.9	1,469.7	704.6	733.2	716.7	753.0
Gross domestic product	**billion euro**	**3,268.6**	**3,274.0**	**3,305.0**	**1,620.9**	**1,653.0**	**1,632.9**	**1,672.0**
Price Development (deflators)								
Final consumption expenditure	2015=100	124.4	127.8	130.4	126.5	129.0	129.4	131.4
Private consumption[2]	2015=100	123.5	126.6	129.1	125.7	127.4	128.5	129.7
Government consumption	2015=100	126.8	130.9	133.8	128.5	133.2	131.7	135.9
Gross fixed capital formation	2015=100	137.5	140.2	141.8	139.9	140.6	141.6	142.1
Investment in machinery & equipment[3]	2015=100	120.2	122.9	125.3	122.6	123.1	125.3	125.3
Construction investment	2015=100	159.0	162.4	163.0	162.1	162.6	162.8	163.2
Other products	2015=100	114.5	115.5	117.9	114.7	116.2	117.3	118.5
Domestic demand[4]	2015=100	127.4	130.8	133.1	129.8	131.7	132.2	133.9
Terms of Trade	2015=100	98.9	100.2	100.3	100.2	100.3	100.2	100.3
Exports of goods and services	2015=100	121.0	122.0	123.8	121.5	122.4	123.1	124.5
Imports of goods and services	2015=100	122.4	121.7	123.4	121.3	122.0	122.8	124.1
Gross domestic product[4]	**2015=100**	**126.2**	**130.2**	**132.5**	**129.2**	**131.1**	**131.6**	**133.3**
Production of domestic product								
Employed persons (domestic)	1,000	45,933	46,054	46,099	45,893	46,214	45,963	46,234
Labour volume	million hours	61,661	61,759	61,857	30,323	31,435	30,427	31,430
Labour productivity (per hour)	2015=100	105.7	105.7	106.5	106.7	105.0	107.1	106.2
Distribution of net national income								
Net national income	billion euro	3,080.4	3,144.7	3,240.2	1,527.1	1,617.5	1,572.4	1,667.8
Compensation of employees	billion euro	2,158.8	2,277.0	2,368.7	1,087.7	1,189.3	1,138.2	1,230.5
Gross wages and salaries	billion euro	1,778.9	1,872.2	1,943.8	891.7	980.4	931.6	1,012.1
among them: net wages and salaries[5]	billion euro	1,219.3	1,282.3	1,321.5	602.8	679.6	624.8	696.7
Property and entrepreneurial income	billion euro	921.6	867.7	871.4	439.5	428.2	434.1	437.3
Disposable income of private households[2]	billion euro	2,295.5	2,369.8	2,430.7	1,173.9	1,195.9	1,203.7	1,227.0
Savings rate of private households[2,6]	%	11.4	11.4	11.1	12.6	10.3	12.2	10.1
For information purposes:								
Nominal unit labour costs[7]	2015=100	123.5	130.0	134.0	125.3	134.7	130.2	137.8
Real unit labour costs[8]	2015=100	97.8	100.0	101.2	97.0	102.8	98.9	103.4
Consumer prices	2020=100	116.7	119.5	122.0	118.8	120.2	121.5	122.4

1 – Forecast by the GCEE. 2 – Including non-profit institutions serving households. 3 – Including military weapon systems. 4 – As the expenditure-side composition of the revisions to GDP in 2023 is still pending, it is assumed that they represent an adjustment to the changes in inventories. 5 – Compensation of employees minus social contributions of employers and employees and income tax of employees. 6 – Savings relative to disposable income. 7 – Compensation of employees per working hour (employee concept) in relation to real GDP per working hour (employed person concept). 8 – Compensation of employees per working hour (employee concept) in relation to GDP per working hour (employed person concept).

Sources: Federal Employment Agency, Federal Statistical Office, own calculations

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↘ TABLE 9 CONTINUED

Key figures of the national accounts

Change on the previous year in %

2023	2024[1]	2025[1]	2024[1]		2025[1]		
			1. half-year	2. half-year	1. half-year	2. half-year	
							Use of domestic product
							at current prices
5.2	3.5	3.0	3.8	3.3	3.2	2.9	Final consumption expenditure
5.6	3.1	2.9	3.0	3.2	3.1	2.8	Private consumption[2]
4.4	4.5	3.4	5.7	3.4	3.6	3.2	Government consumption
5.6	0.9	2.7	– 0.1	1.9	2.1	3.3	Gross fixed capital formation
8.7	0.6	4.6	– 0.4	1.6	4.0	5.1	Investment in machinery & equipment[3]
5.0	0.6	1.1	– 0.3	1.6	0.3	1.8	Construction investment
1.9	2.6	4.6	1.4	3.7	4.7	4.6	Other products
4.1	2.7	2.9	2.6	2.7	2.8	2.9	Domestic demand[4]
– 1.6	0.4	3.3	– 1.5	2.4	2.6	4.1	Exports of goods and services
– 6.7	– 1.2	3.7	– 4.0	1.6	2.9	4.4	Imports of goods and services
6.4	**3.3**	**2.7**	**3.6**	**3.0**	**2.6**	**2.8**	**Gross domestic product[4]**
							Chained volumes
– 1.0	0.8	0.9	0.7	0.9	0.9	1.0	Final consumption expenditure
– 0.7	0.6	0.9	0.3	0.9	0.8	0.9	Private consumption[2]
– 1.5	1.3	1.1	1.6	1.0	1.0	1.1	Government consumption
– 0.7	– 1.0	1.5	– 2.0	– 0.1	0.8	2.2	Gross fixed capital formation
3.0	– 1.6	2.6	– 2.6	– 0.6	1.8	3.3	Investment in machinery & equipment[3]
– 2.7	– 1.5	0.7	– 2.6	– 0.3	– 0.1	1.4	Construction investment
– 0.6	1.8	2.4	1.3	2.1	2.4	2.5	Other products
– 0.8	0.0	1.1	– 0.5	0.6	0.9	1.2	Domestic demand[4]
– 2.2	– 0.3	1.8	– 2.0	1.3	1.3	2.3	Exports of goods and services
– 3.4	– 0.6	2.2	– 2.6	1.3	1.7	2.7	Imports of goods and services
– 0.2	**0.2**	**0.9**	**– 0.3**	**0.6**	**0.7**	**1.2**	**Gross domestic product**
							Price Development (deflators)
6.2	2.7	2.1	3.1	2.3	2.3	1.9	Final consumption expenditure
6.3	2.5	2.0	2.7	2.3	2.2	1.8	Private consumption[2]
6.0	3.2	2.2	4.0	2.4	2.5	2.0	Government consumption
6.3	2.0	1.2	1.9	2.0	1.2	1.1	Gross fixed capital formation
5.6	2.2	2.0	2.2	2.3	2.2	1.8	Investment in machinery & equipment[3]
7.9	2.1	0.4	2.3	1.9	0.4	0.4	Construction investment
2.5	0.8	2.1	0.1	1.4	2.3	2.0	Other products
4.9	2.6	1.8	3.1	2.1	1.9	1.7	Domestic demand[4]
4.1	1.4	0.0	2.0	0.7	0.1	0.0	Terms of Trade
0.6	0.8	1.5	0.5	1.1	1.3	1.7	Exports of goods and services
– 3.4	– 0.6	1.4	– 1.5	0.3	1.2	1.7	Imports of goods and services
6.6	**3.1**	**1.8**	**3.9**	**2.4**	**1.9**	**1.7**	**Gross domestic product[4]**
							Production of domestic product
0.7	0.3	0.1	0.3	0.3	0.2	0.0	Employed persons (domestic)
0.4	0.2	0.2	– 0.6	0.9	0.3	0.0	Labour volume
– 0.7	0.0	0.8	0.2	– 0.1	0.4	1.2	Labour productivity (per hour)
							Distribution of net national income
6.6	2.1	3.0	2.2	1.9	3.0	3.1	Net national income
6.7	5.5	4.0	5.7	5.3	4.7	3.5	Compensation of employees
7.0	5.2	3.8	5.4	5.1	4.5	3.2	Gross wages and salaries
9.0	5.2	3.1	5.1	5.2	3.7	2.5	among them: net wages and salaries[5]
6.3	– 5.9	0.4	– 5.4	– 6.3	– 1.2	2.1	Property and entrepreneurial income
6.1	3.2	2.6	3.5	3.0	2.5	2.6	Disposable income of private households[2]
.	.	.	.	.	.	.	Savings rate of private households[2,6]
							For information purposes:
6.7	5.3	3.1	5.9	4.8	3.9	2.3	Nominal unit labour costs[7]
0.0	2.2	1.3	2.0	2.4	2.0	0.6	Real unit labour costs[8]
5.9	2.4	2.1	2.5	2.3	2.3	1.8	Consumer prices

1 – Forecast by the GCEE. 2 – Including non-profit institutions serving households. 3 – Including military weapon systems. 4 – As the expenditure-side composition of the revisions to GDP in 2023 is still pending, it is assumed that they represent an adjustment to the changes in inventories. 5 – Compensation of employees minus social contributions of employers and employees and income tax of employees. 6 – Savings relative to disposable income. 7 – Compensation of employees per working hour (employee concept) in relation to real GDP per working hour (employed person concept). 8 – Compensation of employees per working hour (employee concept) in relation to GDP per working hour (employed person concept).

Sources: Federal Employment Agency, Federal Statistical Office, own calculations

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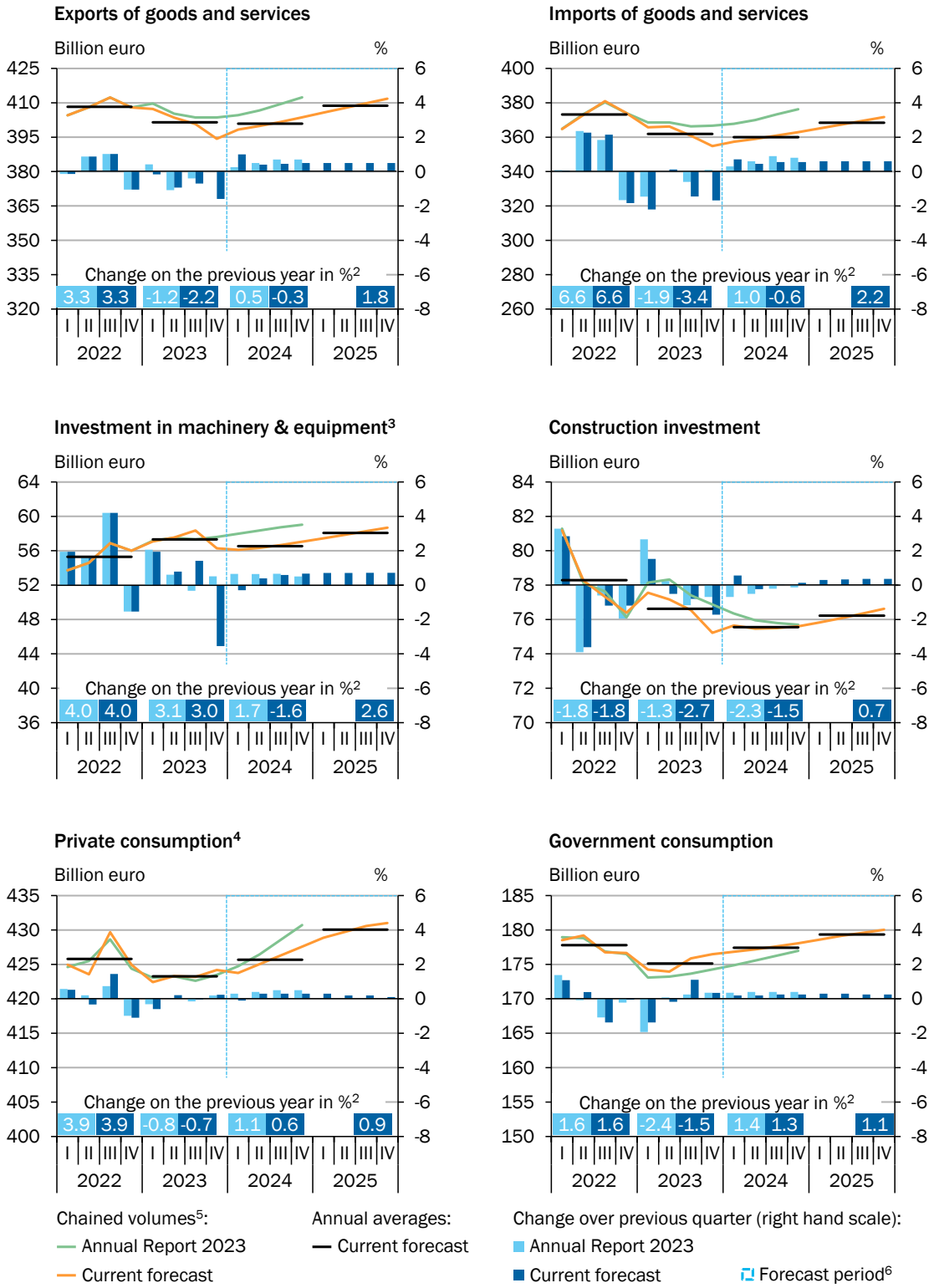
↘ CHART 27

Components of German GDP[1]



1 – All components of GDP reported price-adjusted. 2 – Not seasonally and calendar-adjusted. 3 – Including military weapon systems. 4 – Including non-profit institutions serving households. 5 – Reference year 2015, seasonally and calendar-adjusted. 6 – Current forecast period. Forecasts by the GCEE.

Sources: Federal Statistical Office, own calculations

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↘ TABLE 10

General government revenues and expenditures and selected fiscal indicators[1]

	Billion euro			Change on previous year in %	
	2023	2024[2]	2025[2]	2024[2]	2025[2]
Total revenues	**1,901.8**	**1,999.4**	**2,089.1**	**5.1**	**4.5**
Taxes	953.7	984.8	1,027.9	3.3	4.4
Net social contributions	709.6	757.2	794.7	6.7	4.9
Sales	157.8	172.6	179.5	9.4	4.0
Other current transfers	31.1	31.3	31.9	0.7	1.8
Capital transfers	19.4	19.6	20.1	0.9	2.6
Property income	30.0	33.8	35.0	12.3	3.6
Other subsidies on production	0.2	0.2	0.2	0.0	0.0
Total expenditures	**1,989.2**	**2,063.9**	**2,134.2**	**3.8**	**3.4**
Social benefits other than social transf. in kind	661.4	696.1	721.7	5.3	3.7
Social benefits in kind	359.8	369.0	379.7	2.6	2.9
Compensation of employees	327.4	348.4	363.3	6.4	4.3
Intermediate consumption	256.5	274.0	280.9	6.8	2.5
Subsidies payable	66.3	40.2	38.8	– 39.5	– 3.5
Gross capital formation	108.0	115.7	121.8	7.1	5.3
Other current transfers	91.5	93.1	97.0	1.7	4.2
Capital transfers	82.6	86.4	86.6	4.7	0.2
Property income	36.1	41.4	44.8	14.6	8.1
Other taxes on production	0.3	0.3	0.3	3.3	6.0
Acquisitions less disposals of non-prod. assets	– 0.7	– 0.7	– 0.7	0.0	0.0
Budget balance	**– 87.4**	**– 64.5**	**– 45.1**	**x**	**x**
Fiscal indices (%)[3]					
Tax ratio[4]	23.5	23.5	23.8	x	x
Tax and contribution ratio[5]	39.6	40.1	40.9	x	x
Budget balance	– 2.1	– 1.5	– 1.0	x	x
Structural budget balance[6]	– 1.5	– 0.8	– 0.6	x	x
Structural primary balance[6]	– 0.7	0.2	0.5	x	x
Debt-to-GDP ratio[7]	63.6	63.4	63.0	x	x

1 – National accounts (nominal values). 2 – Forecast by the GCEE. 3 – In relation to GDP. 4 – Taxes including inheritance tax and taxes entitled to the EU. 5 – Taxes including inheritance tax and taxes entitled to the EU, and actual social contributions. 6 – Based on the estimate for potential output. Calculated with a budget semielasticity of 0.504. The budget semielasticity measures by how many percentage points the relationship between budget balance and GDP changes in the event of a 1 % increase in GDP. 7 – General government gross debt as defined in the Maastricht Treaty.

Sources: Deutsche Bundesbank, Federal Statistical Office, own calculations

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