The German economy

Macroeconomic situation

German economic output in Q4 2022 lower than in previous quarter

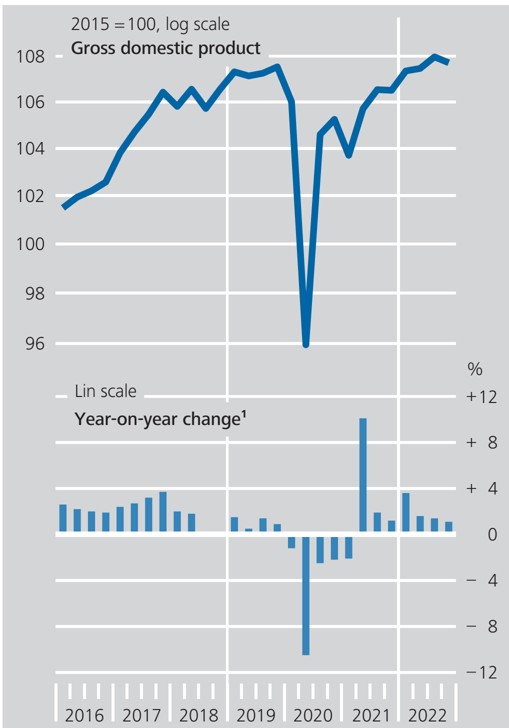
German economic output was lower in the fourth quarter of 2022 than in the previous quarter. According to the Federal Statistical Office's flash estimate, real gross domestic product (GDP) decreased by 0.2% on the quarter after seasonal adjustment,[1] making the decline in economic output milder than had been anticipated in the December projection.[2] The situation in the energy markets eased markedly over the course of the quarter and energy commodity prices moderated. Moreover, output in the manufacturing sector remained more resilient than expected overall. This was supported by the fact that supply bottlenecks eased further and well-filled order books absorbed the decline in demand. The automotive industry, in particular, stepped up production markedly in the final quarter of the year. This more or less offset the decline in output in energy-intensive sectors. Meanwhile, high inflation eroded consumer purchasing power, and sales in the retail sector dropped considerably in terms of quantity. Private consumption is therefore likely to have fallen markedly even though motor vehicle registrations were up steeply.[3] Construction activity also weakened further despite an easing of material shortages. This is mainly due to falling demand for construction services, which are suffering from the effects of high construction prices, reduced household purchasing power and increased financing costs. Economic output is likely to contract again in the first quarter of 2023.

Exports up in real terms yet declining in nominal terms

Real exports of goods increased in the fourth quarter of 2022, but this growth was diminished by a sharp decline in December. In terms of value, however, exports fell somewhat overall due to lower export prices. In particular, fewer goods were exported to China, the Russian Federation and, to a lesser extent, to central and eastern European countries outside the euro area and the United States than in the previous quarter. In addition, nominal exports to the OPEC countries fell sharply. On the other hand, exports to the United Kingdom and Japan were significantly higher. Broken down by sector, price-adjusted exports of intermediate goods declined, while those of capital and consumer goods increased. Exports of chemical products, which have been affected severely by the energy crisis owing to their energy-intensive production, fell particularly substantially. By contrast, exports of pharmaceutical products, machinery, motor vehicles and other vehicles were up considerably.

Aggregate output

Adjusted for price, seasonal and calendar effects



Source of unadjusted figures: Federal Statistical Office. **1** Price and calendar adjusted.

Deutsche Bundesbank

1 Seasonal adjustment here and in the remainder of this text also includes adjustment for calendar variations, provided they can be verified and quantified.
2 See Deutsche Bundesbank (2022).
3 Anticipatory effects were probably also at work here, as since January 2023 government subsidies for purchases of plug-in hybrids and purely electric vehicles have been scrapped and reduced, respectively.

Foreign trade

Seasonally and calendar adjusted, quarterly data

Source of unadjusted figures: Federal Statistical Office. **1** Adjusted using the price indices for foreign trade.
Deutsche Bundesbank

Commercial investment in machinery and equipment probably continued to rise

Enterprises probably expanded their investment in equipment again in the fourth quarter of 2022. In addition to the further easing of supply bottlenecks, the decline in uncertainty caused by the easing of tensions in the energy markets may have fostered investment. Sentiment among producers of capital goods – measured in terms of the ifo business climate index – was still very gloomy in October but brightened strongly over the course of the quarter. Both the production and sales of capital goods in Germany increased markedly compared with the third quarter. Moreover, enterprises invested more heavily in their vehicle fleets. According to data from the German Association of the Automotive Industry (VDA), there was a considerable rise in the number of registrations of commercial vehicles.

Construction investment probably declined slightly

Construction investment is likely to have continued its downward trend in the fourth quarter of 2022, also owing to further increases in construction prices and financing costs as well as high inflation. Construction output also declined significantly. Nevertheless, according to data available up to November, revenue in the main construction sector went up significantly, although this is likely to be attributable in part to high price increases. Investment in commercial and public buildings is likely to have been more buoyant than that in housing construction.

Private consumption probably lower in Q4

Private consumption is likely to have gone down distinctly in the fourth quarter of 2022 after rising considerably in the third quarter. High inflation and uncertainty about energy supply, in particular, caused consumers to exercise restraint in their purchasing behaviour. For example, real retail sales (excluding motor vehicles) fell steeply compared with the previous quarter. Price-adjusted accommodation and food services revenue likewise dropped sharply. Moreover, according to the GfK survey, consumer sentiment reached a new record low in the fourth quarter of 2022, and for a time the propensity to save was higher than it had been for more than a decade. Nevertheless, motor vehicle trade is likely to have mitigated the decline in private consumption. This is indicated by new motor vehicle registrations, which, according to data provided by the VDA, rose considerably towards the end of the year. Households were probably particularly aware that government subsidies for plug-in hybrid and purely electric vehicles partly expired at the end of the year.

Imports of goods clearly down in nominal terms due to considerably lower energy import prices

Imports of goods fell markedly in real terms in the fourth quarter of 2022. The value of imports even dropped very significantly, mainly owing to a considerable fall in energy import prices. Imports from China and the United

Kingdom were down substantially. In particular, significantly fewer goods were imported from Russia again, partly owing to the complete cut-off of gas deliveries. By contrast, imports from the OPEC countries, the newly industrialised countries of Asia and Japan increased. Broken down by sector, price-adjusted imports of capital and consumer goods were higher, whilst imports of intermediate goods remained at the previous quarter's level overall. Imports of chemical and pharmaceutical products, in particular, declined. By contrast, considerably more electrical equipment, motor vehicles and machinery were imported.

Sectoral trends

Industrial production robust in Q4 thanks to full order books and easing of supply bottlenecks

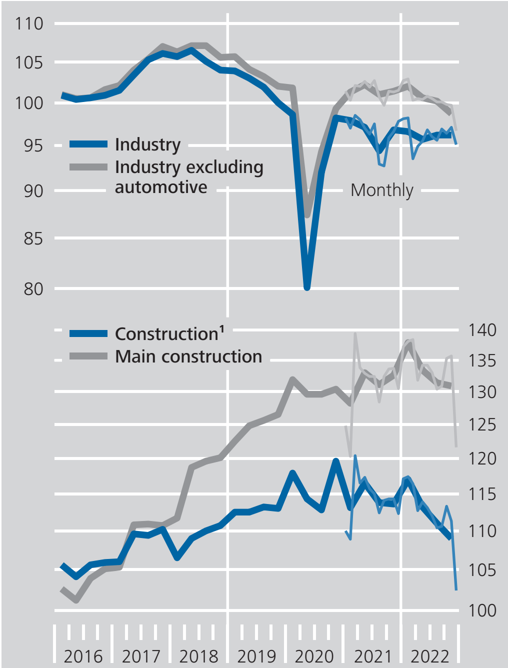
Industrial production in the fourth quarter of 2022 remained unchanged on the quarter after seasonal adjustment. On the one hand, the high energy costs continue to be a drag, with output in the energy-intensive sectors of the economy contracting sharply once again. The production of chemical products, for example, fell by more than one-tenth, but the manufacture of paper and cardboard as well as of metal (including its processing) also declined sharply. In addition to the resultant steep fall in the production of intermediate goods, fewer consumer goods were produced as well. On the other hand, industry benefited from further easing of supply bottlenecks and full order books. This was probably beneficial for the automotive industry, in particular, which expanded its production particularly strongly. Owing to the strong increase generated by the automotive industry, the production of capital goods rose substantially overall. Excluding motor vehicles and the energy-intensive sectors, industrial production fell slightly in the final quarter of 2022.

Construction activity weakened further

After seasonal adjustment, construction output decreased significantly once again in the fourth quarter of 2022. December 2022, in particular, saw a substantial decline, possibly related to the unusually cold weather in the first half of the month. Production in the finishing trades dropped even more considerably than in the main construction sector. While output in building construction fell markedly, it increased by almost the same magnitude in civil engineering. The unfavourable underlying conditions created by high construction prices, high headline inflation and rising funding costs dampened demand for construction services. According to ifo Institute surveys, the share of construction enterprises complaining of a lack of orders therefore increased again significantly. Supply-side bottlenecks also persisted. To wit, in the autumn quarter, many enterprises in the main construction sector reported that their activity had been hampered by a lack of staff or a shortage of materials. Equipment utilisation continued to decline.

Output in industry and in construction

2015 = 100, seasonally and calendar adjusted, quarterly data, log scale



Source of unadjusted figures: Federal Statistical Office. **1** Main construction sector and finishing trades.
Deutsche Bundesbank

Economic activity in the services sector probably declined

Economic activity in the services sector probably decreased in the fourth quarter of 2022. Services production fell markedly compared with the third quarter according to data available up to November. Accommodation and food service activities, in particular, experienced a sharp decline. Price-adjusted sales also dropped significantly here. In wholesale and retail trade (excluding motor vehicles), real sales likewise decreased markedly. This gloomy picture is also reflected in the ifo current business situation index for the services sector, which, in the final quarter of 2022, was well below the third-quarter level. Nevertheless, trade in motor vehicles was brisk, according to the VDA data on passenger car registrations.

Labour market

Labour market developments more favourable than expected

The labour market continued to improve in the fourth quarter of 2022. Employment rose slightly in the fourth quarter after recording next to no growth in the third quarter. Unemployment remained stable at a low level. This meant that the expectations expressed in the December projection were exceeded. Despite the recessionary outlook and sharp increase in the minimum wage, robust labour market developments were already anticipated back then. The short-term outlook is also more favourable at present than it was just a few months ago.

Low-paid part-time employment up unexpectedly

On an average of the reporting quarter, seasonally adjusted total employment was up by only 107,000 people, or just over 0.2%, from the previous quarter's level. However, the increase in the number of persons working in low-paid part-time jobs was surprising. Owing to the often low hourly wages, the sharp increase in the minimum wage in October 2022 could have led to a reduction in the number of "mini jobs". However, persistent labour shortages in some services sectors and high inflation rates seem to have strongly tempered the impact of the minimum wage increase. The number of low-paid part-time workers has only a small impact on the total number of hours worked in the economy, however, owing to their small number of weekly working hours. The decline in self-employment eased, at least.

Employment subject to social security contributions grew only slightly and …

Employment subject to social security contributions, which has been the main driver of employment growth in Germany for some time now, increased only comparatively moderately after seasonal adjustment. On an average of October and November, the number of employees exceeded the previous quarter's level by 61,000, representing an increase of just under 0.2%. The relatively low growth affected nearly all sectors of the economy. Only IT and business-related services – excluding temporary agency employment, which declined further – bucked the trend by growing significantly.

… short-time work used to somewhat greater extent again

In addition, enterprises have resumed making somewhat greater use of short-time work since September to soften the effects of a weak economy. In August of last year, following the lifting of pandemic restrictions, short-time work hit a preliminary low. According to initial extrapolations of data by the Federal Employment Agency up until November 2022, at that time just over 200,000 people were drawing short-time working benefits, more than twice as many as in August. As growth was from a low level, this still means that relatively few employees are affected, despite the slight increase in uptake. A further significant increase since then is unlikely; the number of registrations for short-time work went back down in January.

Underemployment broadly constant

In seasonally adjusted terms, registered unemployment remained roughly at the level of the third quarter. The unemployment rate held steady at 5.5%. This was also the case in January 2023 when the Federal Employment Agency recorded 2.50 million unemployed persons. However, this was around 30,000 fewer than two months earlier. This slight decline at the current end was confined to unemployment among those receiving the basic welfare allowance. This is less a cyclical recovery, though, but instead due in considerable measure to the fact that a growing number of Ukrainians have begun to attend language and integration courses. In the third quarter, the number of unemployed persons receiving the basic welfare allowance had risen markedly as a result of the incorporation of Ukrainian refugees into the German social security system. Total underemployment excluding Ukrainian refugees is currently a better reflection of economic developments. It has remained broadly constant lately.[4]

Leading indicators mostly improved

The outlook for the labour market has brightened in recent months. The employment barometers of the ifo Institute and the Institute for Employment Research (IAB) are currently tilted in favour of plans to expand the workforce in the short term. The number of vacant jobs subject to social security contributions reported to the Federal Employment Agency stabilised in January. In the course of the second half of 2022, it declined slowly, although the number of vacancies still remained high. The IAB survey on unemployment over the next three months improved considerably in January. It is now in positive territory, which is consistent with the expectation of falling unemployment.

Wages and prices

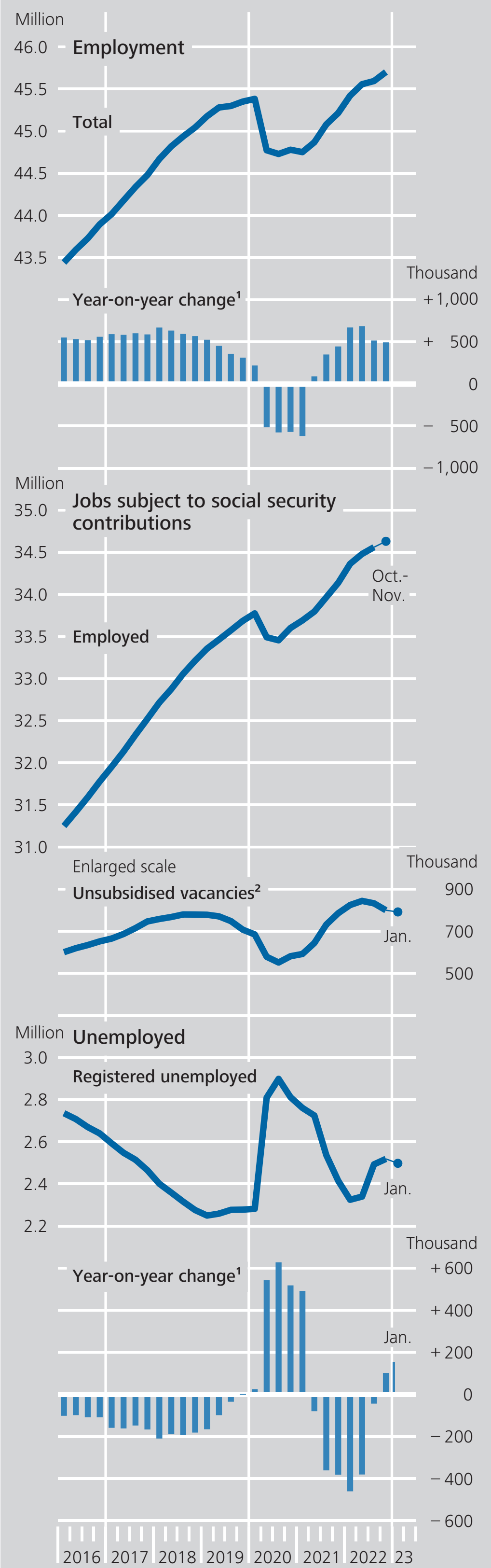
Negotiated wages continued to rise moderately, actual earnings up more strongly

The fourth quarter of 2022 saw a continued moderate increase in negotiated wages. Including additional benefits, they were up by 2.0% on the year in the fourth quarter, compared with 2.5% in the quarter before. It should be noted that the fourth-quarter growth rate was depressed by deferred bonus payments. Excluding bonus payments, at 2.4% the year-on-year increase in negotiated wages in the fourth quarter was marginally stronger than in the third quarter. Older wage agreements from before the period of high inflation still dominated. Actual earnings are likely to have once again risen more strongly than negotiated wages in the last three months of the year. This would be consistent with the significantly lower take-up of short-time work compared with the previous year and the substantial increase in the general statutory minimum wage to €12 per hour on 1 October 2022.

4 See Statistics provided by the Federal Employment Agency (2023).

Labour market

Seasonally adjusted, quarterly data



Sources of unadjusted figures: Federal Statistical Office and Federal Employment Agency. **1** Not seasonally adjusted. **2** Excluding seasonal jobs.

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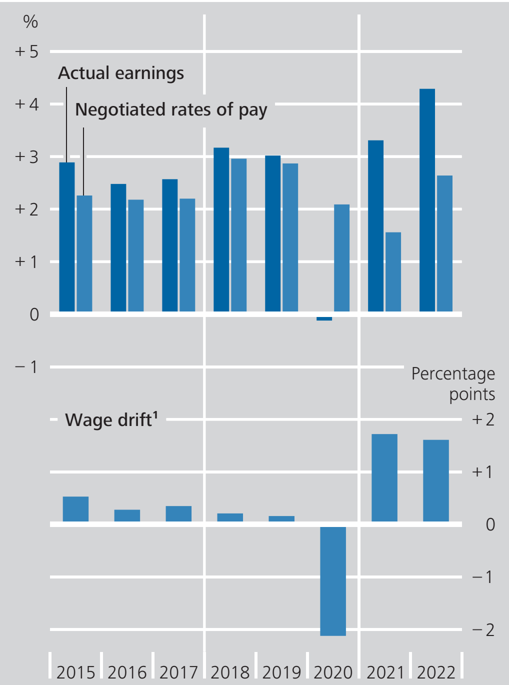
Rates of pay and wage drift

Year-on-year change, on monthly basis



Sources: Federal Statistical Office (actual earnings) and Deutsche Bundesbank (negotiated rates of pay). **1** Wage drift is calculated as the annual change in the ratio of actual earnings to negotiated rates of pay.

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Recent wage agreements again contain significantly larger wage increases

The most recent wage agreements were significantly higher than in previous years. It is noteworthy that a growing number of agreements in some sectors included inflation compensation bonuses in addition to the increase in scheduled rates of pay.[5] Unscheduled renegotiations of current wage agreements took place to this end in a handful of sectors. The wage agreements still in place for insurers and in the main construction sector, for example, had inflation compensation bonuses added. These are attractive to employees as they increase wages by a greater percentage in net than in gross terms and this benefits low pay grades in particular. For firms, a combination of relatively moderate permanent wage increases and temporary wage components, such as inflation compensation bonuses, may appear more advantageous in the medium term than offering only permanent pay rises.

Unusually high wage demands from trade unions

Current wage demands are unusually high by historical standards. The trade union ver.di is calling for a 10.5%[6] increase in wages for the public sector at the central and local government level as well as for the paper and cardboard manufacturing industry for a period of 12 months, and is demanding as much as 15% for the Deutsche Post. In the textile and clothing industry, the IG Metall trade union is also asking for an unusually high wage increase of 8%. The same is true of the German Railway and Transport Union's demand that Deutsche Bahn increases wages by 12%, but at least by €650 per month.

Second-round effects contribute to prolonging the period of high inflation rates

The old, moderate wage agreements from before the high inflation period began will expire this year. The significant wage increases set out in the new collective wage agreements will increasingly be reflected in higher growth in negotiated wages overall. This year's pay round for just under 11 million wage earners will predominantly feature negotiations in the services sectors. They will be shaped by high inflation and labour shortages on the one hand, and by the currently sluggish economy as well as uncertainties due to geopolitical risks on the other. Furthermore, negotiations will be made more difficult by the restricted scope for wage distribution. This is because Germany is losing purchasing power and wealth due to the country being a net importer of energy, the prices of which have gone up massively. The impact of high rates of inflation is already clearly discernible in the latest wage agreements. Marked second-round effects on prices are foreseeable.[7] Viewed in isolation, they will play a part in prolonging the period over which inflation

5 Lawmakers gave employers the option of granting their employees up to €3,000 as a special tax-free and social contribution-exempt bonus any time between 26 October 2022 and the end of December 2024 to compensate for high inflation. This relief measure, referred to as the inflation compensation bonus, can be paid out in a lump sum or in multiple instalments.
6 In addition, a minimum of €500 more per month is being demanded for employees of central and local government. This should benefit those in low and middle pay grades in particular.
7 In this context, second-round effects are price effects resulting from an inflation shock, which trigger reactions in wages and/or inflation expectations, and then feed back into inflation. See European Central Bank (2004).

remains well above the medium-term target of 2% for the euro area.

Strong price increases in Q4 2022, too

The steep rise in consumer prices continued in the fourth quarter of 2022 as well. Between October and December, the Harmonised Index of Consumer Prices (HICP) increased by an average of 2.6% on the quarter in seasonally adjusted terms, thereby exceeding the growth of 2.1% recorded in the third quarter. The renewed increase in momentum was mainly driven by the further surge in prices for services. First, the temporary introduction of the €9 travel ticket in early summer no longer had a dampening effect. Second, the statutory minimum wage was raised substantially in October. Prices for industrial goods rose at roughly the same pace as in the previous quarter, despite the fact that producer prices for industrial goods have not been quite as dynamic since October. Food prices, too, continued to rise steeply on a broad basis in the fourth quarter. The energy component lost some momentum as a result of the government covering advance payments for gas in December ("immediate assistance") and declining crude oil prices.

Inflation down somewhat in November and December 2022 after record high in October

The annual HICP rate rose by 1.4 percentage points to 10.8% in the fourth quarter. Following the record high of 11.6% in October, the inflation rate cooled slightly to 11.3% in November. In December, it saw a stronger dip to 9.6% owing to the government's assumption of advance payments for gas and district heating.[8] The rate excluding energy and food also picked up steeply in the fourth quarter, climbing from 3.8% to 5.2%. This put it well above its long-term average.

Further slight drop in inflation in January

The HICP rate is estimated to have fallen from 9.6% to 9.2% in January.[9] Detailed information on the adjustment of the underlying basket of goods will only be known once the final figures have been published on 22 February 2023. The HICP weighting scheme may have changed markedly[10] as the further decline in inflation came as a surprise. Based on the old weighting scheme, a significant increase would have been expected due to the absence of the dampening effect generated by December's immediate assistance. The electricity and gas price brakes, which are already captured in the price statistics in January, will probably be of less significance, by contrast.

Inflation will cool in coming months; underlying price pressures remain high

The inflation rate is likely to fall in the coming months. In March, for instance, the steep rise in energy prices in the previous year will no longer feed into the calculation of the rate. Wholesale electricity and gas prices recently fell quite significantly in some cases, but they are still at an exceptionally high level and, moreover, there is likely to be delayed pass-through to end consumers. Without the price brakes, the consumer prices for electricity and gas included in the price statistics would probably have been raised even further. In general, there is a high degree of uncertainty about energy price developments. However, the underlying pressure on prices is likely to decline only tentatively over the next few months from an exceptionally high level.

Order books and outlook

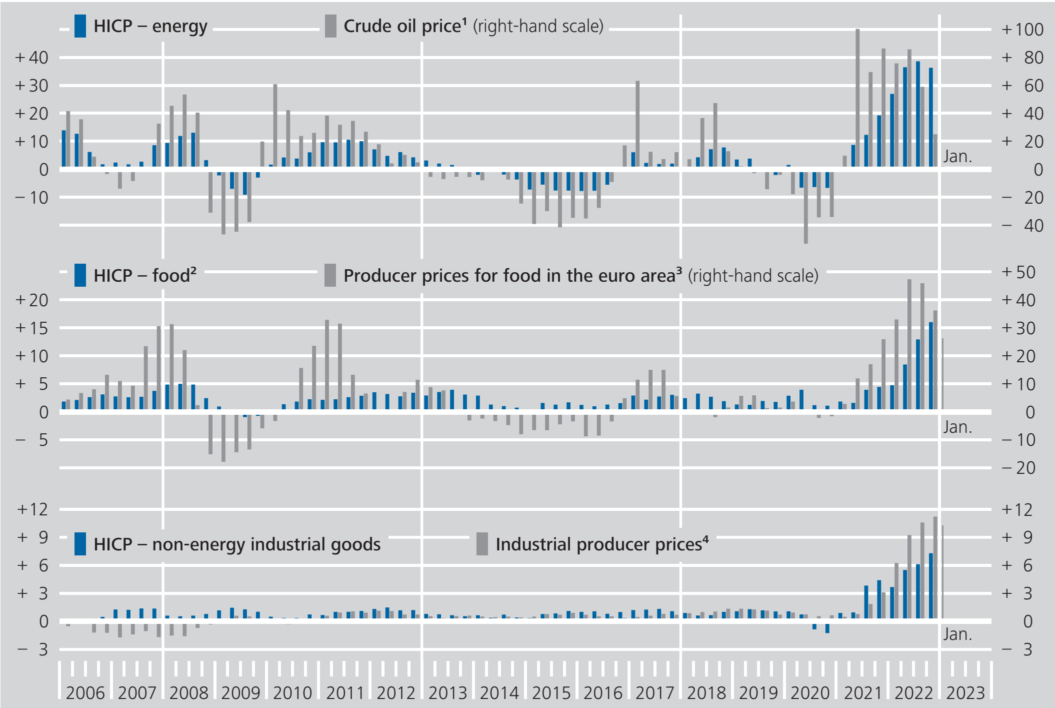
German economic output likely to be lower again in Q1 2023 than in previous quarter

Economic output is likely to be lower again in the first quarter of 2023 than in the previous quarter. On the one hand, a gas shortage is no longer to be expected.[11] In addition, the electricity and gas price brakes are reducing energy costs for households and enterprises. Tensions in the energy markets and uncertainty have

8 This measure is likely to have dampened the HICP rate by around 1½ percentage points according to Bundesbank calculations.
9 The rate according to the national consumer price index (CPI) was 8.7%, up from 8.6%.
10 The weights of the HICP components are updated at the beginning of each year. This year, however, they could change more strongly than in previous years. The stronger price dynamics of the past few months entail greater dispersion among the sub-components. Moreover, the CPI is being rebased to base year 2020, which may also lead to major adjustments in the HICP.
11 The Federal Network Agency considers the gas supply situation to be less tight than at the beginning of the winter half-year. Current gas inventories are significantly higher than the previous year's levels. See Federal Network Agency (2023).

Price developments at economic stages as classified for HICP purposes

Year-on-year percentage change



1 Bundesbank calculations (in euro) based on daily prices in USD as quoted by Bloomberg Finance L.P. **2** Including beverages and tobacco products. **3** ECB calculations of DG AGRI prices based on the European Commission's farm gate and wholesale prices. **4** Analogous to HICP classification "non-energy industrial goods"; Bundesbank calculations based on data from the Federal Statistical Office.
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eased considerably. This is likely to benefit primarily business investment, but also industrial production. The latter should remain relatively robust in the first quarter, too, in light of the further easing of supply bottlenecks and well-filled order books.[12] On the other hand, industrial production started out from a depressed level in 2023 following the significant contraction in December 2022. This applies, inter alia, to exports as well, which are likewise being dampened by declining foreign demand. Moreover, inflation remains high and continues to eat into households' purchasing power. In addition, car purchases will not receive any further boost due to the reduced government subsidisation of electric vehicles. Private consumption is therefore likely to decline at the beginning of 2023 as well, thus curbing activity in the consumer-related services sectors. Finally, construction activity will probably continue to cool down in view of high construction prices, lower purchasing power and increased financing costs.

Slight pick-up over remainder of the year, but no major improvement yet

Although there could be a gradual pick-up over the remainder of the year, no major improvement is yet in sight. All in all, from today's perspective, Germany's economic output is likely to decline slightly on average in 2023 but perform a little better than expected in the December projection.[13]

Enterprises more confident going into the new year

The ifo Institute's business climate index rose for the fourth time in succession in January 2023. Business expectations improved in all sectors of the economy – significantly in some cases – and exceeded the respective average of the fourth quarter.[14] This is likely to be a reflection of the easing of tension in the energy mar-

12 This is also backed up by the fact that export expectations and production plans picked up in January from a low level, according to data from the ifo Institute.
13 The December projection had still predicted a distinct year-on-year drop of 0.5% in calendar-adjusted real GDP in 2023. See Deutsche Bundesbank (2022).
14 The early summer survey conducted by the German Chamber of Commerce and Industry also reveals a distinct decrease in pessimism among firms.

House prices in Germany in 2022

The steep upward pressure on house prices persisted up until the middle of 2022 before prices receded in the second half of the year. High inflation and increased financing costs were the main drivers behind the end of the property boom, as financing scope tightened for many prospective buyers and housing demand eased. On the other hand, price pressures were created by the massive rise in construction prices and the deceleration in the expansion of housing supply. Given the fact that price increases were still sizeable in the first half of the year, house prices in Germany were roughly just as overvalued as previously on an annual average.[1]

Residential real estate prices rose by 9.0% in Germany as a whole in 2022 according to data provided by the Association of German Pfandbrief Banks (vdp). The bulk of the price growth took place in the first half of the year, while prices dwindled in the second half of the year. The Destatis House Price Index published by the Federal Statistical Office was likewise up by a significant 8.6% on an average of the first three quarters of 2022 compared with the same period of the previous year. However, prices in the third quarter remained virtually unchanged relative to the preceding quarter. Hypoport AG's Europace house price index (EPX) indicates that house prices in Germany rose by 7.7% on average in 2022 yet, in the fourth quarter, dropped below their level at the end of 2021. All three indicators therefore signal that the years of upswing in the residential real estate market are over.

According to calculations based on annual data provided by bulwiengesa AG for 127 German towns and cities, house prices increased by 6.0% on an annual average in 2022, which is somewhat weaker than in the past. At 6.2%, house price inflation in the seven major cities was also down on the year.[2] The quarterly data gathered by vdp also show that, at 7.9%, residential property prices rose more slowly in the seven major cities in the reporting year than one year earlier. Furthermore, prices in these cities declined at an above-average rate in the final quarter.

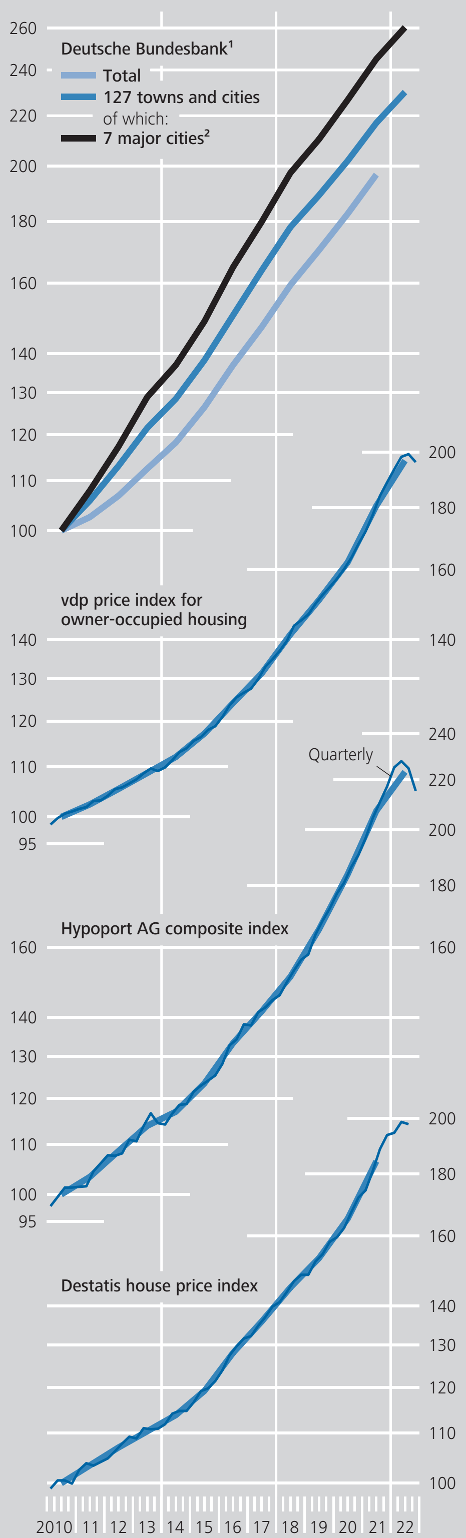
In contrast to prices, rents for new lettings in Germany increased at an accelerated rate over the course of the year, up from 3.7% in the first quarter to 6.5% in the final quarter year-on-year according to vdp data. On an annual average, rents for new lettings saw the strongest rise since the start of the property market upswing at the beginning of the last decade. Calculations based on data provided by both bulwiengesa AG and vdp show that rents in towns and cities, including major cities, went up more strongly than in the previous two years.

The key determinants of demand in the housing market developed only moderately last year. Households' disposable income was up strongly by just over 7%, yet high inflation more than offset this contribution to purchasing power. In addition, the interest on mortgage loans rose sharply to an annual average of 2.6%. This significantly increased the cost of credit-financed residential property purchases and is likely to

1 This box deals with residential property price developments in the context of the real economy. To assess them from a financial stability perspective, it is also necessary to take into account aspects connected with mortgage financing.
2 The seven major cities are Berlin, Cologne, Düsseldorf, Frankfurt am Main, Hamburg, Munich and Stuttgart.

Price indices for housing

2010 = 100, annual data, log scale



1 Weighted by transaction. Bundesbank calculations based on price data provided by bulwiengesa AG. 2 Berlin, Cologne, Düsseldorf, Frankfurt am Main, Hamburg, Munich and Stuttgart.

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have severely dampened demand for residential real estate. On balance, the affordability of residential real estate deteriorated significantly and was below its level prior to the outbreak of the financial and economic crisis of 2008-09.[3]

The expansion in the supply of housing also clearly lost momentum. A scarcity of raw materials and building materials, on top of the existing labour shortages, caused the prices of construction materials to soar. The sharp rise in construction prices has made new builds financially less attractive than existing properties. Furthermore, the rapid and massive increase in prices for construction materials has hampered the calculation of construction projects. As a result, the number of cancelled construction projects shot up in 2022.[4] Overall, it is likely that fewer dwellings were completed than the almost 295,000 units in the previous year. The number of new permits for housing construction also declined over the course of the year and, at an estimated 355,000 units, was down on the year.

Overvaluations of residential real estate did not decrease on average in 2022. The fall in house prices in the second half of the year only partially counteracted the price increases which remained very steep up until the middle of the year. According to current estimates, real estate prices in urban areas were between 25% and 40% above the level suggested by the socio-demographic and economic fundamentals.[5] On an annual average, the price-rent ratio for hous-

3 See the Bundesbank's system of indicators for the German residential property market, which is available at https://www.bundesbank.de/en/statistics/sets-of-indicators/system-of-indicators-for-the-german-residential-property-market/system-of-indicators-for-the-german-residential-property-market-795268.
4 See ifo Institute (2022).
5 For an explanation of the underlying panel estimation approach used, see Deutsche Bundesbank (2020a).

ing units in towns and cities was still just over 30% above its longer-term mean, and in the seven major cities, around 40% above its longer-term mean. Both in terms of the price-income ratio and according to estimation results for the long-run relationship between real estate prices, incomes and interest rates, housing prices in Germany stood at between 20% and 30% above the benchmark.[6]

6 For an explanation of the valuation approaches used, see Deutsche Bundesbank (2020b).

kets and the reduced uncertainty this has produced. Even so, enterprises remained predominantly pessimistic. However, the assessment of the current business situation in the ifo survey did not change overall compared with the previous quarter; enterprises are still satisfied on the whole. In the manufacturing and trade sectors, they even rated their business situation somewhat better in January than in the fourth quarter of 2022. By contrast, construction firms and service providers, especially in the transport and logistics sector and in hotel and restaurant services, considered their situation to be somewhat worse.

Industrial new orders down steeply; high order backlog a buffer against declining demand

There were further steep declines in industrial orders in the fourth quarter of 2022. Orders from abroad fell particularly sharply, but slightly fewer new orders were received from within Germany as well. This decrease related to all categories of goods. Producers of capital goods, in particular, saw a steep drop in orders, but producers of intermediate and consumer goods also received markedly fewer orders. Order intake fell in almost all sectors. Only manufacturers of motor vehicles and motor vehicle parts and of pharmaceutical products experienced an increase in new orders. The receding demand was absorbed by the well-filled order books. In combination with further easing of supply bottlenecks, the order backlog, which is still large according to ifo Institute surveys, is likely to continue to support industrial production in the coming months.

Construction activity likely to weaken further

Construction activity is likely to continue to slow down at the beginning of 2023. According to surveys conducted by the ifo Institute, construction firms assessed their business situation in January to be somewhat worse than in the previous quarter.[15] Expectations did

15 The mild weather in January is likely to have lent a boost to the start of 2023. There may even have been catch-up effects following the depressed level of construction output in the first half of December owing to the unusually cold weather.

Demand for industrial goods and construction services

Volumes, 2015 = 100, seasonally and calendar adjusted, quarterly data

Source of unadjusted figures: Federal Statistical Office. **1** Only calendar adjusted.
Deutsche Bundesbank

brighten slightly, but a large majority of firms still feel pessimistic about the future. Demand for construction work declined further. Last October and November – the most recent months for which data are available – slightly fewer new orders were recorded again than the average for the third quarter. In the first three quarters of 2022, order intake had already shrunk considerably in some cases quarter on quarter. The number of building permits granted also continued to decline steeply. Moreover, the impairment of construction activity caused by a shortage of orders, as surveyed by the ifo Institute, increased slightly again compared with the average for the fourth quarter of 2022. By contrast, reports of construction activity being hampered due to a shortage of labour and materials were significantly lower in January. The share of firms affected remained high from a long-term perspective, however.

Private consumption likely to continue to weigh on economic output for now

Household final consumption expenditure will probably continue to fall in the first quarter of 2023. This is largely due to high inflation, which is continuing to reduce consumers' purchasing power. On top of this, there are withdrawal effects relating to motor vehicle purchases following the boost from subsidies at the end of the previous quarter. Motor vehicle registrations had already fallen sharply in January. The consumer climate index compiled by market research institution GfK continued the tentative upward trend it has charted since its trough in October 2022, but remained at a very low level. The propensity to purchase actually decreased compared with the fourth quarter of 2022. According to ifo Institute surveys, retail firms considered their situation in January to be distinctly better than in the fourth quarter, but nevertheless continued to rate their business situation as generally poor. In the hotel and restaurant services, by contrast, enterprises were somewhat less satisfied with their current situation than in the fourth quarter. Business expectations improved in both sectors, but remained predominantly pessimistic.

List of references

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