Quasi-stagnation in 2023

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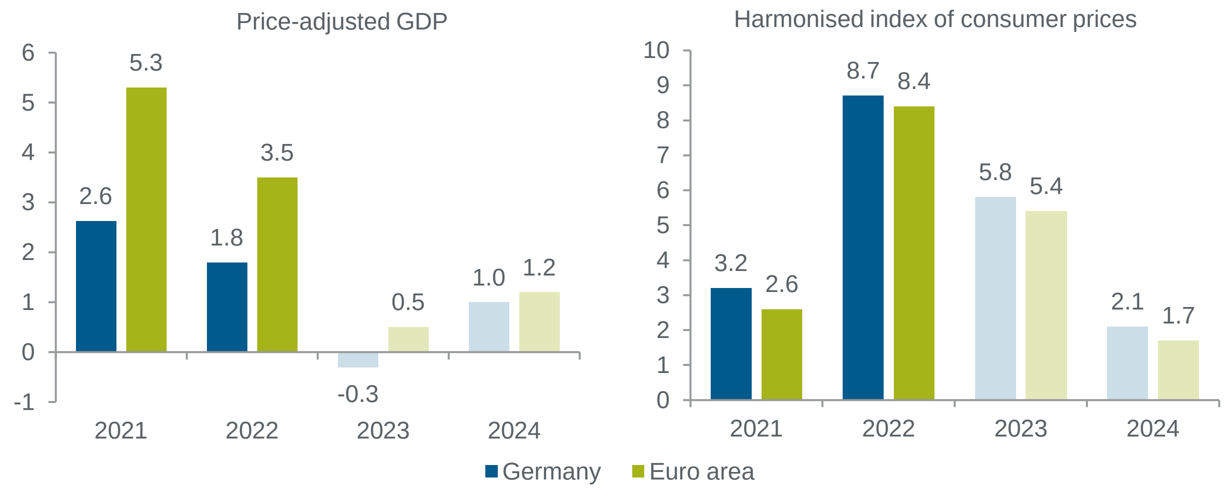
- An inflation shock, war-induced uncertainty, rising interest rates and a weak global economy are choking off economic growth for the time being. Germany is expected to slip into a moderate technical recession in the winter half of 2022/2023.
- KfW Research expects the economy to contract by 0.3% in 2023 (previous forecast: -1.0%). Given the negative calendar effect, that virtually means stagnation. GDP is expected to grow by 1.0% in 2024 (initial forecast).
- The inflation surge triggered by the energy price shock is affecting increasingly more goods and driving wage increases. Germany's inflation rate will remain a high 5.8% in 2023 and drop to 2.1% on average in the year 2024.
- Ecological price tag for GDP: Germany's greenhouse gas emissions are expected to decrease with the predicted economic performance but around 6% (2023) and 7% (2024) less than the policy target.
- The euro area is carrying greater momentum over from the previous year. Its GDP will grow by 0.5% in 2023 and 1.2% in 2024. Inflation will hit 5.4 and 1.7%. The progression of the war in Europe may require significant forecast revisions.

Figure 1: Economic growth and inflation

Per cent year-over-year change



Sources: KfW Research, Destatis, Eurostat

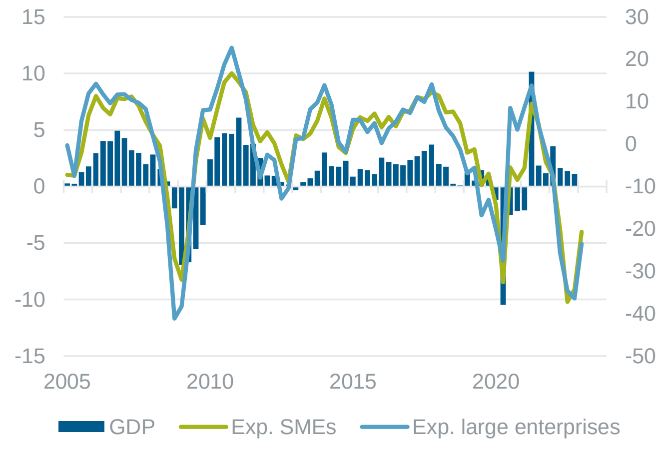
GDP fell at the end of 2022

After the German economy managed to achieve significant growth rates in the first three quarters of 2022 despite supply chain problems, the Russia-Ukraine war, tense energy markets, the inflation shock and interest rate increases, the numerous stress factors eventually stalled the upward trajectory in the fourth quarter. Gross domestic product (GDP) adjusted for price, seasonal and calendar effects shrank by 0.4% on the previous quarter. Household consumption, which had previously significantly bolstered the business cycle, fell noticeably (-1.0%). The two most important special factors that had enabled a temporary growth sprint in consumption last year now largely appear to be a thing of the past: First, the catching-up effects in services consumption, which had long been restricted because of the coronavirus pandemic, and second, the reduction of order backlogs in the automotive industry, where material bottlenecks have now visibly eased from a high level. Motor vehicles represent 36% of durable goods consumed by households and 4.2% of total consumption expenditure.

Pressures remain high but are easing

The downward pressures on consumption, investment and external trade remain high for the time being but are decreasing on balance, as shown by the business expectations reported in the KfW-ifo SME Barometer. After these fell deep into recession territory in both business size classes last autumn, the tender green shoot of optimism is slowly germinating again (see Figure 2).[1] At least the fear of a deep economic slump such as the one recorded in the financial crisis of 2009 or after the outbreak of the coronavirus pandemic in 2020 has now dissipated, probably also because the risk of a gas shortage for this winter has been averted. Thus, noticeable price drops on the previous highs of summer 2022 can now be observed in the natural gas, oil and electricity markets. The price of natural gas future contracts (one month forward) in mid-February was down to EUR 52/MWh after EUR 308/MWh on 26 August of last year. The price brakes on gas, district heating and electricity are also taking pressure away from households.

Figure 2: KfW-ifo business expectations and GDP growth
GDP: Per cent on previous year's quarter, adjusted for price effects (left scale)
Expectations of SMEs/large enterprises: Balance points (right scale)



Sources: Destatis, KfW Research

Private consumption remains in reverse gear for now

Nonetheless, both households and businesses will need to adapt to persistently and significantly higher energy costs and much higher living costs overall compared with previous years, since pressure from energy costs will filter through to other consumer goods along the value chain, especially food. As a result of high inflation, real wages fell for the third consecutive year in 2022 despite strong increases in nominal wages (-4.1% on 2021), after the short-time work that was widely used to bridge pandemic lockdowns had pushed wages down in nominal and real terms in the year 2020.[2] Despite the foreseeable decline in inflationary pressure (see section below 'Inflation rate has passed its peak'), a steady labour market trend – partly because businesses want to retain scarce skilled workers wherever possible – and higher nominal wages, inflation will remain a burden for the time being and cause household consumption expenditure to fall in real terms in 2023. However, a recovery in household consumption is likely in 2024, when earnings are expected to increase again in real terms.

Gross fixed capital formation: Residential construction is suffering most of all

The uncertainty caused by the war, inflation-induced losses in purchasing power, higher interest rates and the considerable tightening of financing conditions will weigh on private investment activity. In 2023 the particularly interest-rate sensitive residential construction sector is set to enter the largest slump in real terms in around two decades and not likely to stabilise until 2024. In contrast, thanks in part to positive impetus from energy transition projects, business investment should generally remain on a path of growth, although it will not be sufficient already in the course of 2023 to close the gap in relation to economic output that opened up during the coronavirus crisis. Investment in the public sector, however, is likely to rise significantly over the forecast period, partly because the money allocated to the new special fund for the German Armed Forces will boost public capital formation in machinery and equipment.[3]

Weak global economy has reduced export outlook

The global economic environment has dimmed considerably since 2022, reducing demand for German export goods. For 2023 we expect global economic growth of just 2.5%, which is along the lower bound of the customary threshold value below which a global recession is typically identified (2½ to 3%). Inflation rates on levels not seen for decades are also depleting purchasing power around the world and the central banks of globally important economies are pursuing a course of rapid monetary policy tightening which is putting the brakes on demand. The danger of geoeconomic fragmentation also looms, in which Germany as an export nation is caught between the superpower rivals US and China.

Technical recession in winter half of 2022/2023

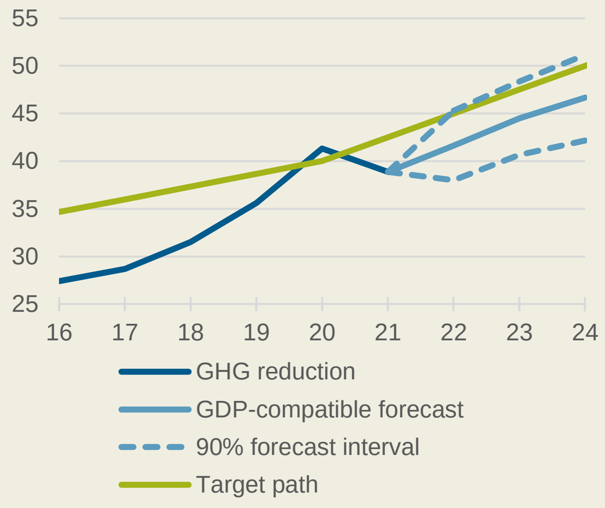
All in all, we expect a contraction rate in the first quarter of 2023 on a similar scale as in the final quarter of 2022 and, thus, a mild technical recession in the winter half of 2022/2023.[4] The weak start to the year was heralded by the sharp month-on-month declines in important activity indicators such as industrial output (-2.1%), construction (-8.0%) and retail turnover (-5.3%) in December, which is why the German economy entered the first quarter of the new year from a low level and first needs to make up for the December drops before it can return to net growth. The second quarter, too, will likely show very subdued economic performance, given that business expectations remain predominantly pessimistic – despite noticeably brightening. The economy is unlikely to return to growth before the summer and will probably start on a rather gradual path. Until then, industrial production is likely to have made significant inroads in adapting to the higher energy prices and noticeably higher nominal wages combined with lower inflation rates will mitigate the real income losses sustained by households. However, when natural gas storage tanks are then refilled again for the winter of 2023/2024, this time without Russian pipeline gas, some new challenges might then arise, which also suggests an initially rather weak economic recovery in the second half of the year.

Box: Ecological price tag for GDP

Economic growth has a wide range of social and ecological consequences that are typically disregarded in the usual economic forecasts. It is a necessary but not sufficient condition for sustained prosperity. The time has therefore come to focus more comprehensively and rigorously than before on the consequences of economic activity, particularly for the environment and climate. To this end we have developed a simple approach for systematically integrating the expected greenhouse gas (GHG) emissions into our economic forecast for Germany.[5]

Figure 3: GHG emissions in Germany

Reduction against 1990 baseline in per cent



Source: Destatis, Eurostat, KfW Research

The starting point is an identity equation according to which total GHG emissions are the product of GDP and the emission of GHG per unit of GDP, in other words, GHG intensity. We take the GDP from our economic forecast and estimate the expected development of GHG intensity using a linear trend extrapolation. Our approach is explained in detail here. It enables the greenhouse gas emissions being expected under current conditions to be compared with the reduction targets set by policymakers, which require Germany to reduce its emissions by 65% against the 1990 baseline by 2030 (see Figure 3). That will sharpen our awareness of the trade-off that exists between more goods and income on the one hand and the consumption of key natural resources on the other hand. It means we will put an ecological price tag on GDP, as it were, that will tell us how much the expected growth will presumably cost us as a society in the form of GHG emissions that harm the climate.

On the basis of our new economic forecast, the ecological price tag predicts that emissions will drop this year and next but less than intended. Thus, Germany's GHG emissions are predicted to be around 37 million t CO_2 equivalent or almost 6% higher in 2023, and around 41 million t CO_2 equivalent or nearly 7% higher in 2024 than prescribed by the reduction trajectory set by policymakers (see Table 1). The predicted additional annual emissions equal or even slightly exceed the total emissions of Slovakia in 2020 (37 million tonnes of CO_2 equivalent).

Table 1: GHG emissions and policy trajectory

Million tonnes of CO_2 equivalents

	2020	2021	2022	2023
Actual/forecast	759	725	689	662
Target path	714	683	652	621
Actual/forecast deviation from target path				
Absolute	45	42	37	41
Per cent	6.3	6.1	5.7	6.7

Sources: Destatis, Eurostat, KfW Research

Germany is also expected to clearly exceed the greenhouse gas emission reduction trajectory for the year 2022, the provisional data for which will not be presented by the German Federal Environment Agency until mid-March. According to a forecast published by Agora Energiewende in February 2023, greenhouse gas emissions in 2022 are expected to be 'on the previous year's level'.[6] That would again be considerably more than our approach implies.

Against the backdrop of Russia's invasion of Ukraine and the resulting partial substitution of natural gas with more emissions-intensive fuels such as oil and coal, it is quite plausible that, in retrospect, our approach underestimated last year's GHG emissions. After all, the outbreak of the Ukraine war is a typical exogenous shock that is naturally left out in our approach, which is based on the extrapolation of past experiences.

Like all forecasts, the ecological price tag for GDP also involves forecast risks. With reference to the 90% forecast interval presented in Figure 3, which is derived from the historic forecast errors of our approach, the statement that the reduction targets were missed in the forecast period appears to be empirically well validated.

Germany: Quasi-stagnation in 2023, 1% growth in 2024

As the year got off to a weak start – and the recovery from the second half will be rather subdued at first – a moderate GDP contraction of 0.3% must be expected for the year 2023 as a whole as well.[7] But that is still a tangible upward revision of 0.7 percentage points on our autumn forecast of November 2022 (-1.0%). Although quarterly growth rates generally had comparable profiles, we were expecting a much steeper downturn for the winter half of 2022/2023, especially because a gas shortage and persistent extreme increases in energy prices were still part of the risk scenario at the time and the resulting excessive pessimism threatened to paralyse investment in particular, but also consumption. If we consider that 2023 has roughly two fewer working days than 2022 and this fluctuation in the number of working days alone will take away 0.2 percentage points of growth, our new forecast materially reflects a stagnation in the current year. For next year 2024, we expect the German economy to grow by 1.0% (initial forecast).

Pressure to take action on climate change remains high

Pressure to act on climate change continues to be high. According to the ecological price tag for GDP, the new indicator we introduced with our autumn forecast 2022, our current economic forecast implies that greenhouse gas emissions this year and next will be 6 and 5% higher, respectively, than would correspond with the interpolated target trajectory of a 65% reduction by 2030 against the 1990 baseline (see box).

Inflation has passed its peak

The monthly inflation rate likely passed its peak last autumn – the 11.6% surge in October. The price brakes on electricity, district heating and natural gas are working and the market prices for energy have also dropped significantly since then. Measured against the change in the EU-wide comparable Harmonised Index of Consumer Prices (HICP) on the previous year, inflation fell from 9.6% in December 2022 to 9.2% in January 2023. Nonetheless, it is much too early to lower the guard because inflation remains very high compared with the monetary policy target of 2% and has furthermore found its way into the broad economy, with services prices coming into focus this year. The fundamental price pressure that is relevant to wage and monetary policy is currently reflected primarily in inflation without energy and food, that is, the core inflation rate. The reported overall monthly inflation rate will decrease in the course of 2023 as base effects from the previous year will reduce the contributions from energy and food price inflation, and the energy price brakes will also mitigate the rise. However, the decline will remain only gradual at first because the price surges for goods at the beginning of the value chain and, in particular, energy will continue filtering through to the downstream production stages and at least partly shape the coming collective wage settlements. Prices of services and wages, which will then likely increase more strongly in response to the widespread skills shortages, will keep the pressure high on the core inflation rate. In the medium term, however, the European Central Bank's tighter monetary policy will also likely dampen core inflation. We expect consumer prices to increase by 5.8% in all of 2023 and by only 2.1% in 2024.

Euro area will grow by 0.5% in 2023 and 1.2% in 2024

The inflation-induced purchasing power losses and energy price-related cost pressures on businesses are clearly perceivable in all member states of the European Monetary Union, so that basically the same economic forces as in Germany are acting on the euro area. Still, in the course of the past year the large countries France, Italy and Spain in particular built up more economic momentum than Germany, among other things because they benefited from a vigorous recovery in summer tourism and were less exposed to the headwinds blowing towards manufacturing industries.

Table 2: Price-adjusted GDP growth in the euro area
Per cent year-over-year change

	DE	FR	IT	ES	EA
2021	2.6	6.8	6.7	5.5	5.3
2022	1.8	2.6	3.9	5.5	3.5
2023	-0.3	0.4	0.4	1.1	0.5
2024	1.0	0.9	0.8	1.9	1.2

Sources: Destatis, Eurostat, KfW Research

This stronger momentum is also reflected positively as a statistical overhang in the annual growth rate of these countries for the current year, while Germany remains clearly behind in 2023 (see Table 2). Moreover, owing to Germany's relatively important export industry, the weakness of the global economy can be felt here particularly acutely. We expect GDP growth of 0.5% across the euro area in 2023 (previous forecast: stagnation). In 2024 the euro area is likely to grow by 1.2%, only moderately faster than Germany alone (initial forecast). We anticipate an average annual euro area inflation rate of 5.4% for 2023 and 1.7% for 2024, which is slightly lower than in Germany.

Forecast risks are roughly balanced

The Russia-Ukraine war continues to generate increased forecasting uncertainty, depending among other things on its duration and intensity. Our forecast is based on the assumption of a drawn-out war of attrition limited to the territory of Ukraine with heavy losses on both sides and no clear military victor for the foreseeable future – in essence, a continuation of the status quo. However, other scenarios are also conceivable that could lead to abrupt and sharp forecast revisions – in both directions. Thus, a spillover of acts of war to the Republic of Moldova, for example, or even NATO territory could generate a new uncertainty shock and cripple economic activity. A peaceful solution for Ukraine that is accepted by all sides, however, would eliminate the uncertainties created by the war, give businesses more confidence again, lay the groundwork for reconstruction and thus provide new economic impetus, especially through investments and exports. Beyond the war, several genuinely economic risks are also of concern. Should inflation remain unexpectedly persistent, monetary policy in the euro area and around the world could be tightened further than anticipated. Given that many countries are now forced to consolidate their finances, that, in turn, could lead to increased financial stress and a correction in the valuation of assets, including real estate, through tougher international financing conditions. Because of its close integration into international value chains, the importance of mechanical engineering and the automotive industry and the high share of exports in GDP, Germany's economy becomes particularly vulnerable as soon as global risks materialise. By contrast, households' consistently high saving rate offers an opportunity for the economy to perform better than expected. If, contrary to the assumptions made in the forecast, the saving rate were to drop significantly, consumption could even grow moderately in 2023.

[1] Cf. Borger, K. (2023), The green shoot of optimism continues to grow, KfW-ifo SME Barometer January 2023, KfW Research.

[2] Cf. Destatis (2023), Real earnings down 4.1% in 2022 year on year, press release of 7 February 2023.

[3] In opposition to the federal budget, military weapon systems are reported as part of fixed capital formation by general government in the national accounts, specifically as part of fixed capital formation in machinery and equipment.

[4] A technical recession is defined as two or more consecutive quarters of negative GDP growth.

[5] Cf. Borger, K. (2022), GDP forecasting and greenhouse gas emissions – an integrated approach, Focus on Economics No. 400, KfW Research.

[6] Cf. Agora Energiewende (2023): Die Energiewende in Deutschland: Stand der Dinge 2022. Rückblick auf die wesentlichen Entwicklungen sowie Ausblick auf 2023 (*The energy transition in Germany: situation in 2022. Review of major developments and an outlook on 2023* – our title translation, in German), page 11.

[7] The price-adjusted GDP growth rate forecast here is primarily communicated in Germany. In addition to the fundamental economic drivers, however, it is also influenced by the annual fluctuations in the number of working days The calendar effect accounts for -0.2 percentage points this year but is negligible for next year. The forecast GDP growth rate is therefore -0.1% (2023) and 1.0% (2024) on a price- and calendar-adjusted basis.