Federal Ministry of Finance

German Stability Programme

2023

STABILITÄT

German Stability Programme

2023 Update

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Preface to the German Stability Programme for 2023

The member states of the European Union submit their medium-term fiscal plans to the European Commission and to the Economic and Financial Affairs Council (ECOFIN) by the end of April each year. To this end, in order to comply with the rules of the Stability and Growth Pact, member states of the euro area submit updated Stability Programmes, while all other EU member states submit updated Convergence Programmes.

By submitting this updated Stability Programme, which contains projections of budgetary trends at all government levels (Federation, *Länder*, local authorities and social security funds), the federal government is complying in full with its obligation for the year 2023 to submit national medium-term fiscal plans in accordance with Article 4 of Regulation (EU) No 473/2013 on the provisions for monitoring and assessing draft budgetary plans. The programme follows the Guidelines on the format and content of Stability and Convergence Programmes (Code of Conduct).

The projection of budgetary trends at all government levels contained in the Stability Programme is based on the federal government's annual projection on macroeconomic trends of 25 January 2023, the results of the Working Party on Tax Revenue Estimates of 25 October 2022 as subsequently updated to take account of the federal government's annual projection, and the fiscal plan to 2026. The reference date for the projection is 30 March 2023.

This update of the German Stability Programme was approved by the federal cabinet on 26 April 2023. The federal government submits the update of the German Stability Programme to the competent expert committees of the German Bundestag as well as to the Finance Minister Conference (*Finanzministerkonferenz*) and the Stability Council (*Stabilitätsrat*). After review by the ECOFIN Council, the Council's opinion on the Stability Programme is also forwarded to these bodies. –

The Federal Ministry of Finance publishes the updated Stability Programme along with the programmes for preceding years online at:

https://www.bundesfinanzministerium.de

The programmes of all EU member states, corresponding analyses by the European Commission and the recommendations of the ECOFIN Council are published on the European Commission's website:

https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/eu-economic-governance-monitoring-prevention-correction/stability-and-growth-pact/stability-and-convergence-programmes_en

1. Summary

At the start of 2023, German fiscal policy is dominated by three major challenges that have fundamentally altered the general conditions for fiscal policy in Germany. First, the humanitarian, social, geopolitical and energy-policy consequences of Russia's illegal war of aggression against Ukraine necessitate fiscal policy action in the areas of national and alliance defence, support for Ukraine, the reception, care and integration of refugees from Ukraine, and securing energy supplies in Germany.

Second, the energy crisis, problems with global supply chains and also a lack of investment due to the pandemic are putting a strain on macroeconomic development in Germany and have greatly increased inflation. As a result of the monetary policy response to higher inflation, the interest rate environment has changed significantly and limits fiscal space. In view of the economic and social effects on the German population due to the extreme rise in energy prices, German fiscal policy is geared towards the goals of stabilisation during the energy crisis and helping to contain high inflation, whilst at the same time strengthening investment in the future. Therefore, to temporarily cushion the impact of the crisis on citizens and businesses, the federal government quickly implemented temporary, targeted and – given that a wide range of households and businesses are affected – suitably broad-based measures to stabilise incomes and preserve the productive capacity of the German economy. Thanks to the decisive fiscal policy response and substantial energy savings by citizens and businesses, the German economy has shown itself to be highly adaptable and resilient to these strains.

Third, Germany also faces major challenges in the medium- and long-term in view of the necessary transformation to a climate-neutral economy, digitalisation, demographic change and possible structural changes in world trade, which may dampen growth and at the same time create price pressure. To meet these challenges successfully, in its economic and fiscal policy the federal government is pursuing a targeted supply-side policy in order to mobilise sustainable private investment, strengthen the labour supply and increase economic productivity. At the same time, digitalisation and, in the future, the transformation to a climate-neutral economy offer considerable economic opportunities for the renewal of prosperity. Investments will be triggered in sunrise sectors that have the potential to safeguard the competitiveness of the German economy in the long term and to create new, sustainable and socially secure jobs with high added value.

The federal government has responded decisively to these crises. For immediate crisis response, it has adopted three comprehensive and fast-acting relief packages with a total volume of around €100bn for the years 2022 and 2023, and, through the reactivation and reorientation of the Economic Stabilisation Fund (ESF-Energy), it has created an "protective shield" for the economy that earmarks up to €200bn for strictly defined measures to temporarily cushion the economic consequences of the energy crisis. The federal government is thus providing broad relief to support all those affected by rising energy prices. Given the size and power of the German economy as well as the formerly disproportionate dependence on gas imports from Russia, the volume of the protective shield is proportionate and fiscally sustainable in the long term.

All in all, a well-balanced system of relief and stabilisation measures has been created, whose individual measures are adapted to the needs and concerns of different target groups. It includes targeted transfers (such as one-off payments, a heating cost allowance, an increase in the standard

rate of citizens' minimum income (*Bürgergeld*)), more broadly effective tax relief (such as the adjustment of income tax rates to compensate for bracket creep, a temporary reduction in VAT on gas and heat, as well as reduced energy taxes on fuels), and other relief, including measures aimed at saving energy (such as a nationwide public transport ticket). The federal government is thereby safeguarding social cohesion and Germany's economic performance. To avoid further inflationary pressures as far as possible, the federal government's crisis response is designed to be timely, temporary, and targeted. Being subject to a time limit, the price brakes for electricity, gas and heat financed by the ESF-Energy help to bridge price peaks temporarily and have a dampening effect on consumer prices. They are specifically designed to maintain strong incentives to save energy, as market prices continue to operate. Since payments under the energy price brakes vary depending on the contractually agreed end-consumer prices for energy, the effective fiscal costs are reduced, if, and to the extent that, the contractually agreed energy prices fall. Thanks to this flexible adaptation to the market situation, which is deliberately built into the design, the central relief instrument remains cost-efficient and in line with the goal of fiscal stability.

Besides providing stability during the energy crisis, given the medium-term challenges the federal government is pursuing a targeted supply-side policy for self-sustaining economic growth. In the current macroeconomic environment, this can be achieved in particular by increasing productivity, which, at the same time, counteracts inflationary pressure. A successful supply-side policy requires, in particular, the fiscal policy-driven mobilisation of private-sector investment along with measures to strengthen labour supply and skills. By setting spending priorities in a consistent and continuous manner, the federal government is opening up a decade of investment in a modern, digital and climate-neutral Germany with investment spending – excluding special effects – at a record level of more than €54bn in the 2023 federal budget.

For the mobilisation of private investment and other measures to promote the climate-neutral transformation, a total of around €178bn is currently available from the Climate and Transformation Fund (CTF) in the fiscal planning period to 2026. Overall, the federal government's supply-side policy meets the requirements of the transformation towards greenhouse gas neutral prosperity and the preservation of biodiversity, even if conflicting objectives between transformation and nature conservation cannot be prevented in all cases. With a moratorium on red tape, which limits additional bureaucratic burdens on businesses to what is absolutely necessary given the already high costs of adaptation and costs related to the energy crisis, the federal government is reducing uncertainty and strengthening the general conditions for private-sector investment.

With the aim of increasing the supply of labour, the federal government is providing targeted stimuli with regard to tax, labour market, education and family policy to support incentives to work, continuing education and skilled labour immigration. Measures to improve general conditions for innovative high-growth companies, such as the planned Financing for the Future Act (*Zukunftsfinanzierungsgesetz*) help to increase economic productivity. Another key aspect of this policy is the productivity-enhancing potential of digitalisation. This is another reason why a focal point of the German Recovery and Resilience Plan is the modernisation of administration and the removal of barriers to investment, in addition to the digitalisation of the economy, infrastructure and education. All in all, these measures aim to compensate for the projected decline in potential economic growth. In this way, a supply-side policy strengthens the sustainability of public finances and secures Germany's future prosperity. The Inflation Compensation Act (*Inflationsausgleichsgesetz*), which aims, among other things, to reduce bracket creep, prevents inflation-driven increases in the income tax burden for 48m income tax payers. To mobilise private investment more intensively after the crisis, the federal government

plans to improve the tax framework for private investment, among other things, through the investment premium for climate action and digital assets as set out in the coalition agreement.

In view of growing shortages of labour and skilled workers, the federal government has adopted a Skilled Labour Strategy providing a modern, cross-sectoral framework for the targeted recruitment of skilled labour and the maintenance of employability in the face of structural change. It has also taken steps to increase skilled labour immigration from non-EU countries with a set of cornerstone policies relating to the immigration of skilled workers from those countries. With its bill on the further development of skilled labour immigration from third countries and an accompanying ordinance, the federal government has begun to implement the legislative measures relating to the cornerstone policies. To improve the skills of employees and jobseekers, the federal government is extending support for continuing vocational education and training, thus providing more help for those looking to acquire vocational skills and change career. The Citizen's Benefit Act (*Bürgergeld-Gesetz*), which came into force on 1 January 2023, will expand further training opportunities for unemployed and employable people under the basic income support scheme for jobseekers, in order to increase their chances of long-term labour market integration. As part of the citizen's benefit the federal government has increased the allowance (from 20% to 30% of earned income) for monthly income ranging between €520 and €1,000. This is intended to increase the incentive to take up employment subject to social insurance above the minimum income limit.

The federal government continues to prioritise the future-oriented areas of education, science and research, because the skilling of future employees and the economic innovation process play key roles in advancing labour productivity. Therefore, spending on education and research will increase again by some €1.17bn to around €31.75bn in the 2023 federal budget. To increase labour force participation, the federal government is also implementing further structural improvements in the quality of childcare and education provision. For this purpose, the federal government will provide the *Länder* with a further sum of approximately €4bn in 2023 and 2024 under the Child Daycare Quality Act (*KiTa-Qualitätsgesetz*).

Maintaining the sustainability of public finances is key objective of German fiscal policy. In order to safeguard the capacity to act future crises, and in view of the major medium- and long-term challenges facing the German economy, the Stability Programme for 2023 is taking German fiscal policy a step closer towards normality after three exceptional, crisis-ridden years. The return to the regular borrowing limit under Germany's debt rule from 2023 onwards is an important signal for the reliability and soundness of German fiscal policy. Under the fiscal plan to 2026, German fiscal policy will continue on this course by consistently prioritising investment in the future, shifting away from fiscal expansionary mode and securing fiscal space for the future. This will ensure the sustainability of public finances and the confidence of citizens and businesses in the state's fiscal capacity. At the same time, the federal government is avoiding an overly expansionary fiscal policy stance and counteracting additional pressure on inflation. Focusing on investment increases potential output and reduces inflationary pressure.

This transition to fiscal normality is also reflected in the current forecast for public finances. After rising to a projected 4¼% of GDP in 2023, the general government deficit is projected to fall back below the 3% upper limit specified in the European treaties in 2024 and then to continue decreasing incrementally in the following years to approximately ¾% of GDP in 2026. This trend will also be reflected in the structural budget balance, which is projected to improve gradually from −3¼% of GDP in 2023 to about −¾% of GDP in 2026, close to Germany's medium-term objective of −0.5% of GDP. Due to the stabilisation and relief measures taken in response to the energy crisis, the

debt-to-GDP ratio is projected to increase again to about 67¾% in 2023. The debt-to-GDP ratio is then expected to decline steadily to about 65½% of GDP by the end of the projection period in 2026. The projection is subject to a high level of uncertainty, because the actual fiscal costs of the energy price brakes financed by the ESF-Energy may turn out to be lower due to declining contractually agreed end-consumer energy prices. In 2023, the general government deficit excluding ESF-Energy's expenditures is projected to be about 1¼% of GDP, and the corresponding structural deficit would be about ¾% of GDP. This means that Germany's fiscal stance in 2023 will be expansionary only if, for example, average end-consumer energy prices were to fall only slightly and thereby necessitate continued stabilisation measures. Thus Germany is complying with the 2023 country-specific recommendation to adjust current spending to the evolving situation. For 2024, the projection is in alignment with the criteria outlined by the European Commission in March 2023: compliance with the 3% upper limit for the general government deficit specified in the European treaties, a declining debt-to-GDP ratio, phase-out of measures relating to energy prices, and steady levels of public investment.

Demographic change is one of the main challenges to the long-term sustainability of public finances. In addition to measures to enhance the performance potential of the working population and to increase productivity, measures to financially strengthen the social security system have a positive impact on the sustainability of public finances. In order to stabilise the contribution rate over the long term, part of the statutory pension scheme will be financed through investments in capital markets (alongside contributions and federal government payments). This "generational capital fund" will be professionally managed as a permanent fund with a global focus by an independent public body. The 2023 federal budget includes a loan totalling €10bn for the purpose of building up the fund. In order to ensure the long-term sustainability of public finances, government revenue and spending are reviewed regularly to assess their effectiveness and efficiency. To create additional fiscal space, the federal government is committed to making public budgets more target- and results-driven and eliminating subsidies that are superfluous, ineffective and/or detrimental to the environment and climate. Germany will take a leading role in the fight against tax evasion and aggressive tax avoidance.

In this challenging environment, Germany needs a forward-looking and stability-oriented fiscal policy that increases economic growth without further fuelling inflation and that creates fiscal space. To meet the short- and medium-term challenges, the federal government will create conditions to encourage more investment and innovation and thus increase economic productivity and strengthen Germany's position as an attractive place to do business in the face of international competition. It is pursuing an efficient, forward-looking and proactive fiscal policy. With this in view, German fiscal policy is based on short-term stabilisation during the crisis, growth-oriented economic and fiscal policy and a clear focus on the goal of fiscal resilience and fiscal stability.

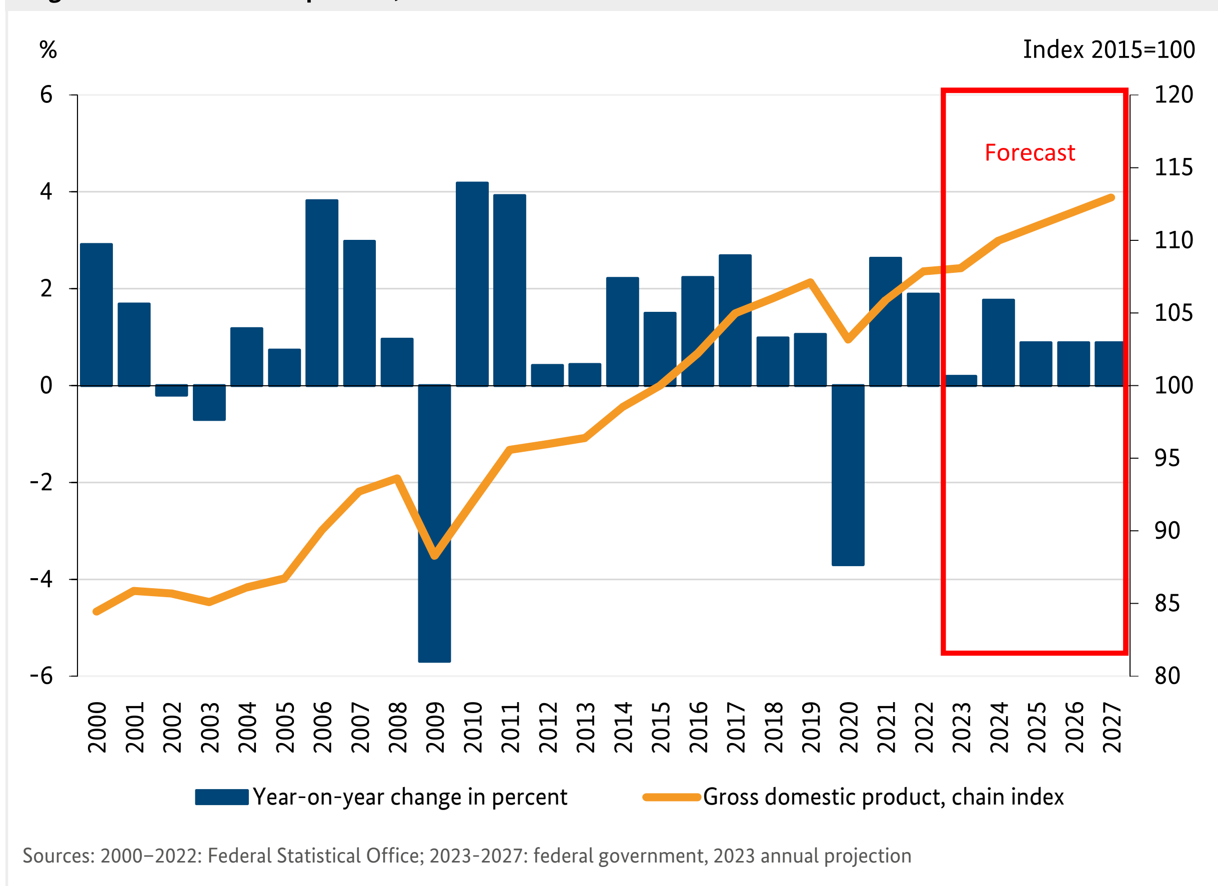
2. Aggregate economic conditions in Germany

2.1 Aggregate economic conditions in Germany in 2022

In the past year, the German economy has shown itself to be very adaptable and resilient to numerous pressures, above all the economic impact of Russia's war of aggression against Ukraine. Real GDP in Germany increased by 1.8% year-on-year in 2022. This meant that real GDP was up by 0.6% over 2019, the year before the outbreak of the COVID-19 pandemic.

Real GDP growth in 2022 was supported in particular by private consumption, which increased by 4.3% in real terms year-on-year. This was due to a sharp increase in consumption in the first half of the year, partly owing to the reappearance or increased use of consumption opportunities in the service sector in the wake of the pandemic. By the end of the year, however, the trend was noticeably dampened by high energy prices, inflation and the associated loss of purchasing power. Plant and equipment investment (+3.3% year-on-year) and government consumption (+1.2%) also had a supporting effect in 2022. In contrast, construction investment declined (–1.7%) against the backdrop of sharply increased construction prices and deteriorating financing conditions. International trade provided clearly negative impetus in arithmetic terms, as imports increased by 6.0%, much

Figure 1: Gross domestic product, in real terms



Sources: 2000–2022: Federal Statistical Office; 2023-2027: federal government, 2023 annual projection

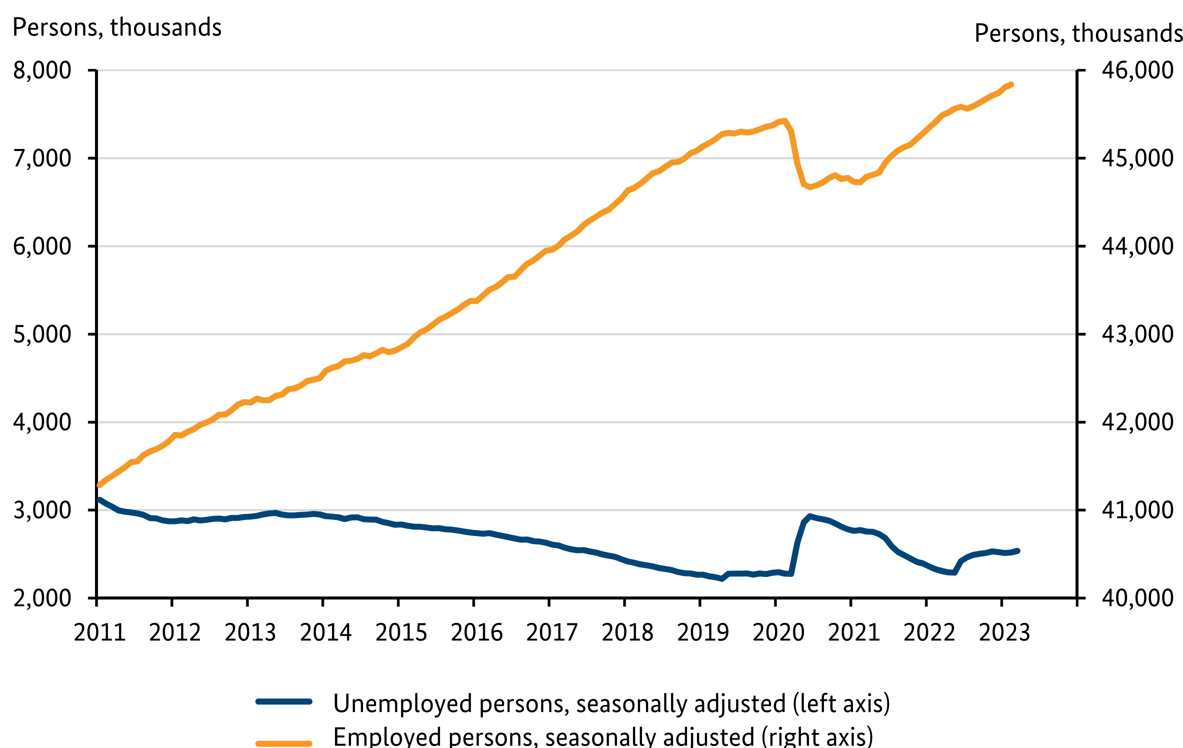
more strongly than exports at 2.9%. Exports may also have been slowed by persistent material shortages. The effects of the sharp rise in energy prices were particularly evident in the marked decline in output by energy-intensive industries. The trend in foreign trade contributed to Germany's clear compliance with the scoreboard indicator of current account balance under the EU Regulation on the Prevention and Correction of Macroeconomic Imbalances.

The inflation rate averaged 6.9% in 2022 (result after regular revision of consumer price statistics by the Federal Statistical Office in January 2023). A major factor was the dramatic increase in energy and food prices – one of the clearest economic effects of Russia's war of aggression against Ukraine. Recently, there has also been a sharp rise in core inflation. The labour market proved very robust, especially considering the noticeable strains on the economy as a whole. The average number of people in employment during 2022 increased significantly by 1.3% to 45.6m. Unemployment declined on average over the year to 2.42m people (unemployment rate: 5.3%).

2.2 Short- and medium-term outlook for the aggregate economy, 2023–2027

According to its annual projection for the current year, the federal government expects real GDP to increase by 0.2% in 2023. Despite continuing risks, a significant decline in annual average GDP has become less likely, thanks in particular to the efforts of private households and businesses to adjust to high energy prices, associated gas savings and the government's stabilisation measures.

Figure 2: Labour market trends in Germany



Sources: Federal Employment Agency, Federal Statistical Office, April 2023

In the course of 2023, private consumption will initially remain depressed by the loss of purchasing power associated with high inflation and ongoing uncertainties. Persistent but diminishing material shortages along with energy prices that remain high by historical standards, are dampening growth in the manufacturing sector, especially in energy-intensive industries. However, economic momentum is expected to pick up again after a difficult winter half-year (Q4 2022 and Q1 2023) as inflation slows, supply chain bottlenecks continue to ease and the global economy regains momentum to some extent.

With regard to price trends, the annual projection assumes a high rate of inflation again in 2023, although it is expected to decrease noticeably over the course of the year. In addition to the government's stabilisation measures (especially the gas, electricity and heating price brakes), the base effect due to high energy price increases in the previous year also will also lower the rate of inflation. Overall, the annual projection expects an annual average inflation rate of 6.0% in 2023 (based on the consumer price statistics before the revision that were valid at the time of the projection).

Robust, positive trends on the labour market are expected to continue. Employment is expected to increase by 160,000 persons on average during 2023. However, given the continued high demand for labour, the shortage of skilled workers in many areas could rise once again. Unemployment is expected to decline over the course of 2023, although it is likely to increase slightly by 65,000 to around 2.5m people on average over the year due to a statistical overhang from the previous year following the inclusion of Ukrainian refugees in the basic income support system.

In 2024, the federal government expects real GDP to grow at a rate of 1.8%. The medium-term projection for the 2025–2027 period assumes average annual real GDP growth of 0.9%. Domestic demand is expected to remain an important growth driver, sustained by robust labour market trends. The output gap is set to reach −1.1% of potential output in 2023. In 2024 it will remain within the corridor of normal utilisation at a value of −0.3%, before gradually closing – based on assumptions – by 2027.

In the medium term, the moderate rate of GDP growth during the 2025–2027 period will be based largely on trends in potential output, which is expected to increase by +0.8% per year on average. This trend will be significantly influenced by labour's declining (and, in the medium term, negative) contribution to growth, while the growth contributions of capital and productivity remain constant or increase slightly. Alongside an increase in skilled labour immigration and higher rates of labour force participation among women, older people, the unemployed and immigrants, it will be increasingly important for the German economy's medium-term growth prospects to boost productivity.

3. German fiscal policy in the European context

3.1 The rules of the Stability and Growth Pact and the Fiscal Compact and their implementation in Germany

The Stability and Growth Pact (SGP) requires member states to bring their budgets close to balance over the medium term and to set their own binding targets to this end. The SGP also sets upper limits on budget deficits and debt ratios. Compliance with these targets and limits serves to safeguard each euro member state's fiscal capacity. In addition, the SGP contains rules that allow for investment as well as structural reforms which enhance growth potential and thus contribute to the sustainability of public finances. The SGP thus requires that all EU member states pursue sound fiscal policies as a precondition for ensuring strong, sustainable growth in Europe.

The COVID-19 pandemic and the need to deal with its ongoing economic effects in terms of (a) global supply chain disruptions and (b) investments that failed to materialise continued to present a major challenge to the fiscal policies of EU member states in 2022. Russia's ongoing war of aggression against Ukraine that started on 24 February 2022 has – apart from its social and geopolitical implications – fundamentally altered the macroeconomic environment. Heavy pressures on households and businesses caused by the sharp rise in inflation rates in the wake of historically unprecedented increases in energy prices, rising interest rates and increased economic uncertainty have necessitated swift, targeted and coordinated fiscal policy measures by EU member states.

To provide EU member states with the fiscal space needed to manage an anticipated severe economic downturn, the European Commission and the ECOFIN Council determined in March 2020 that the conditions for activating the fiscal framework's general escape clause – a severe economic downturn in the euro area or the EU as a whole – had been met. Based on the country-specific recommendations, activation continued through 2021 and 2022 as well. When presenting the Spring Package in May 2022, the European Commission concluded that heightened uncertainty and strong downside risks to the economic outlook in the context of war in Ukraine, unprecedented energy price hikes and ongoing supply chain disruptions warranted the extension of the general escape clause through 2023. Activation of the general escape clause allowed member states, subject to ensuring medium-term debt sustainability, to depart temporarily from the budgetary requirements that would normally apply under the European fiscal policy framework, in order to enable them to take all measures necessary to cushion the effects of the coronavirus pandemic and the energy crisis triggered by the economic impact of Russia's war against Ukraine. The procedures of the SGP were not suspended by the general escape clause. As the pandemic continues to have exceptional macroeconomic and fiscal impacts that, together with current geopolitical conditions, have led to high levels of uncertainty – including difficulties in setting detailed fiscal policy plans – the European Commission did not initiate deficit procedures in 2022. Based on the European Commission's winter forecast published in February 2023, due to reduced uncertainty in current macroeconomic conditions and the brighter growth outlook – especially in light of diversified energy supplies, gas savings and robust labour market trends – it is expected that the conditions for the general escape clause will no longer apply in 2024. This was announced in the European Commission's Communication of 8 March 2023.

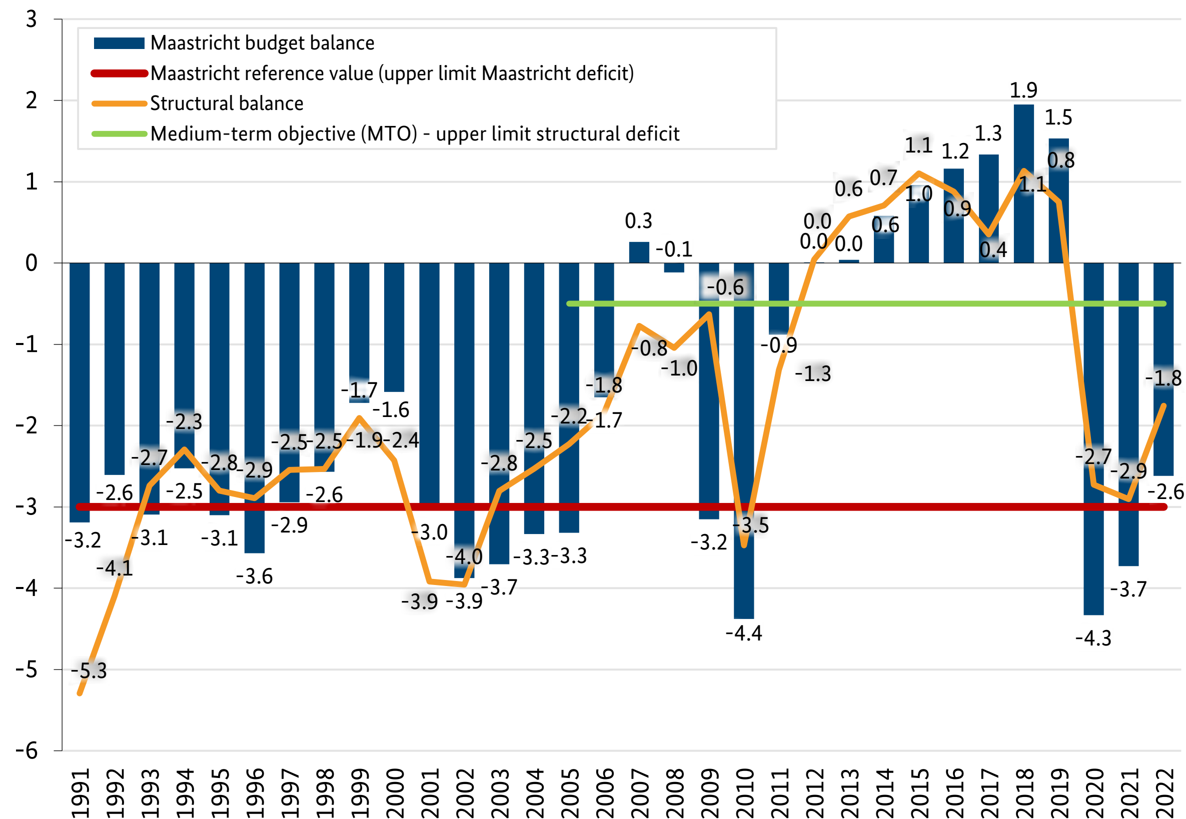
In line with the European Commission's recommendation to activate the SGP's general escape clause, in 2020 and 2021 the federal government implemented extensive measures to rapidly mitigate the effects of the COVID-19 pandemic. On 25 March 2020, the German Bundestag determined for the first time that the conditions had been met for applying the exception to the debt rule in unusual emergency situations, in accordance with Article 115 (2) sentence 6 of the Basic Law (*Grundgesetz*). The German Bundestag thus approved the borrowing set out in the first supplementary budget for 2020, which exceeds the upper limit on new borrowing stipulated in Article 115 (2) sentences 2 and 3 of the Basic Law. The financial resources were quickly used to implement "timely, targeted and temporary" assistance measures to support the German economy. The application of the exception for unusual emergency situations was extended to the second supplementary budget for 2020, the 2021 federal budget and the first and second supplementary budgets for 2021 in order to finance further necessary measures to mitigate the economic consequences of the COVID-19 pandemic and to enhance Germany's future strength. In view of the continuing impact of the COVID-19 pandemic on the federal budget in early 2022, as well as the extensive fiscal measures required to mitigate the humanitarian, social and economic impact of Russia's illegal war of aggression against Ukraine, on 2 June 2022 the German Bundestag passed a resolution declaring an unusual emergency situation for the year 2022 as well. The German Bundestag thus approved the borrowing set out in the 2022 federal budget, which exceeds the upper limit on new borrowing stipulated in Article 115 (2) sentences 2 and 3 of the Basic Law.

After three exceptional, crisis-ridden years, the federal budget for 2023 adopted by the German Bundestag on 25 November 2022 once again complies with the regular borrowing limit under the debt rule which is enshrined in Germany's constitution. The 2023 federal budget thus marks the first step in the transition towards fiscal normality. The return to the regular borrowing limit from 2023 onwards is an important signal for the reliability and soundness of German fiscal policy and avoids additional inflationary pressure, whilst ensuring the sustainability of public finances and the government's capacity to address the medium-term challenges facing the German economy. By setting spending priorities in a consistent and continuous manner, and with record investment levels set out in the 2023 federal budget, the federal government is opening up a decade of investment in a modern, digital and climate-neutral Germany. The federal government's fiscal plan to 2026 continues this stability-oriented policy and reaffirms the return to fiscal normality that is carried out by the 2023 federal budget.

Despite the extent of the measures needed to stabilise the economy in this historically exceptional situation, Germany complied with the Maastricht deficit limit in 2022 for the first time since 2019. The general government fiscal balance (encompassing the Federation, *Länder*, local authorities and social security funds, including their respective off-budget entities) stood at −2.6% of GDP in 2022. As shown in Figure 3, the general government recorded a structural deficit of 1.8% of GDP in 2022.

In 2022, Germany's debt-to-GDP ratio fell considerably to 66.3% (from 69.3% in 2021). Hence, the debt-to-GDP ratio remains above the 60% upper limit. In 2019, Germany's debt-to-GDP ratio fell to 59.6%, its lowest level in many years. General government budget surpluses and sustained economic growth during the preceding years had contributed significantly to achieving this low level. As a result of this development, Germany had a large amount of fiscal space to fall back on in the past three years, when quick and decisive fiscal policy action was required in order to tackle two crises in succession.

Figure 3: Comparison of structural and actual fiscal balance (in % of GDP)



1995: Excludes asset transfers resulting from the assumption of debt owed by the *Treuhand* privatisation agency and German Democratic Republic housing construction companies. Including this effect, the general government budget balance would have been -9.4% of GDP.

Data: Federal Statistical Office, February 2023

3.2 Fiscal situation and strategic direction

According to the conclusions of the ECOFIN Council deliberations of 17 January 2023 on the 2023 annual strategy for sustainable growth, the member states agreed upon the following priorities and recommendations:

> *"[...] to refrain from broad-based fiscal stimulus to aggregate demand in 2023, thus also facilitating the task of monetary policy to reduce inflation and to keep inflation expectations well anchored; [...] that fiscal measures, addressing the impact of high-energy prices, should be temporary and better targeted to vulnerable households and firms, while being fiscally affordable and providing incentives to reduce energy consumption; [...] replacing broad-based price measures with a well calibrated and cost-efficient two-tier energy price model that ensures incentives for energy savings, or with other schemes which achieve similar objectives, taking into account national features; [...] that fiscal policy needs to remain*

> *agile and stand ready to adjust to the rapidly evolving situation if needed; [...] that fiscal policy should preserve debt sustainability as well as raise the growth potential in a sustainable and inclusive manner, taking also into account the increased public and private investment needs for the green and digital transitions, including energy security; [also taking note of] the Commission's intention for the general escape clause of the Stability and Growth Pact to be deactivated as of 2024 [...].”*

The federal government is taking these guidelines and the European Commission's Communication to the Council of 8 March 2023 into account. The fiscal situation in 2023 is shaped by the short-term challenges presented by the macroeconomic impact of Russia's war of aggression against Ukraine, investments that were not undertaken due to the pandemic, problems still affecting global supply chains in 2022 and the medium- and long-term challenges facing the German economy. In this environment, fiscal policy at the start of 2023 is geared towards the goals of stabilisation in the crisis and helping to contain high inflation, whilst at the same time strengthening investment in the future. In order to temporarily cushion the economic and social impacts that dramatic increases in energy prices have had on German citizens and businesses, the federal government quickly implemented temporary, targeted and – given that a wide range of households and businesses are affected – suitably broad-based measures to stabilise incomes and preserve the productive capacity of the German economy. The federal government has also taken decisive action to address the consequences of Russia's war of aggression in the areas of national and alliance defence by launching a “turning point” in German security policy; providing support for Ukraine; receiving, providing services for and integrating refugees from Ukraine; and securing Germany's energy supply. In this context, the federal government has provided considerable support to the *Länder*, especially with regard to the reception of refugees and relief measures such as the €9 public transport ticket, despite these originally being the responsibility of the *Länder*.

To carry out the necessary measures, the federal government has adopted three comprehensive and fast-acting relief packages with a total volume of around €100bn for the years 2022 and 2023 for immediate crisis management. In addition, the Economic Stabilisation Fund (ESF-Energy) provides a “protective shield” for the economy, with borrowing authorisation of €200bn. The federal government has ensured financing for these extraordinary crisis-related expenditures in the 2022 federal budget (including a supplementary budget for 2022), the establishment and financial endowment of the ESF-Energy special fund, the 2023 federal budget and the fiscal plan to 2026.

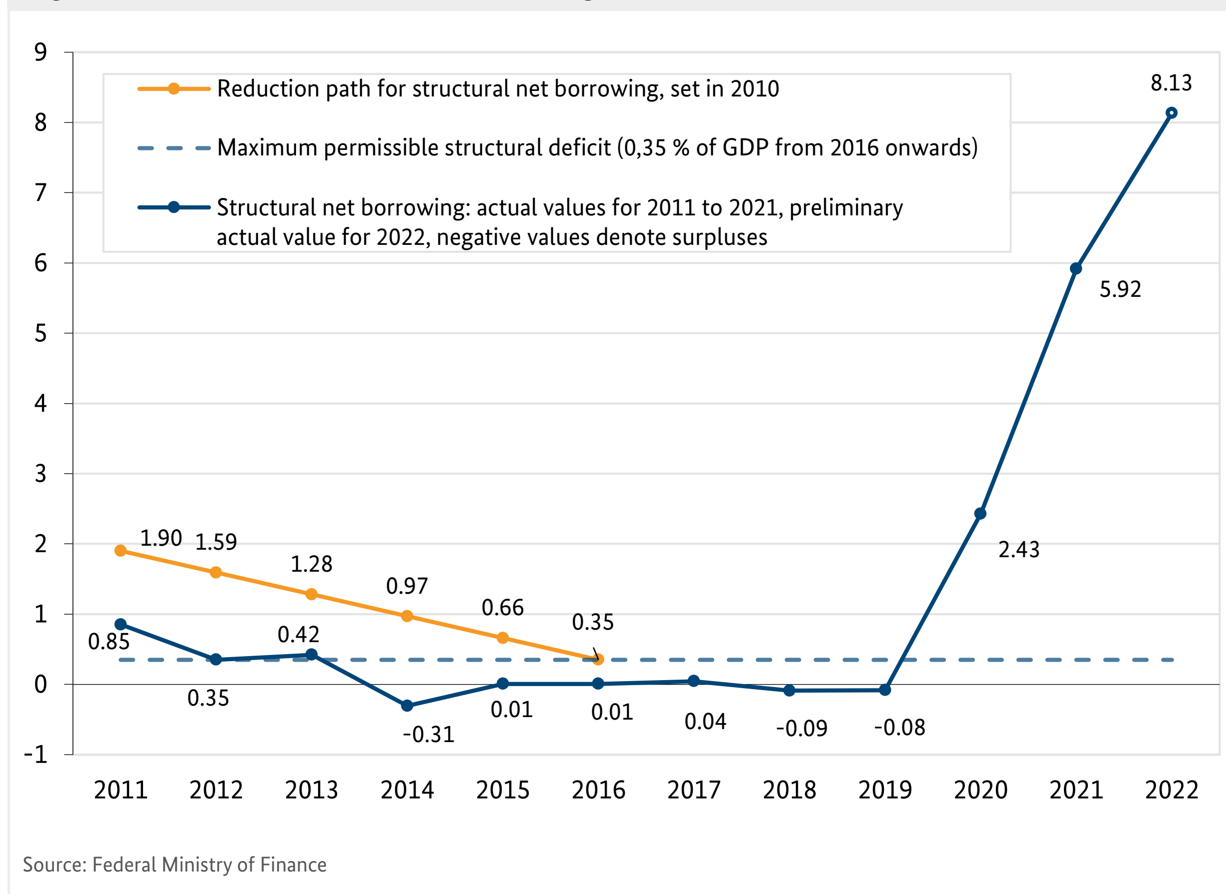
According to the provisional budget closure, the federal budget recorded net borrowing of approximately €115.4bn in the 2022 budget year. After taking into account (a) the net borrowing of the ESF-Energy, (b) the balance of financial transactions and (c) the cyclical component as adjusted for actual economic trends, the Federation's structural net borrowing totalled approximately €290.4bn, or around 8.1% of GDP, according to preliminary macroeconomic data. This means that, according to preliminary data, the upper limit for structural net borrowing (0.35% of GDP recorded in the previous year, in this case for 2021: approximately €12.5bn) was exceeded by about €277.9bn. The amount by which the upper limit was exceeded is thus made up of the additional net borrowing of €200bn by ESF-Energy, adjusted for the balance of the financial transactions carried out by it of around €–20.6bn, and the overrun of the regular borrowing limit in the 2022 federal budget of around €98.4bn (net borrowing under the federal budget (€115.4bn) minus balance of financial transactions (€4.1bn) minus cyclical component (€0.4bn) minus ceiling of 0.35% of GDP (€12.5bn)). The amount by which the upper limit was exceeded is thus approximately €17.3bn lower than the target set out in the 2022 Budget Act (*Haushaltsgesetz*), which put net borrowing at €115.7bn above the upper limit. Exceeding the upper limit in this way is constitutional, based on

the German Bundestag's decision to activate the exception pursuant to Article 115 (2) sentences 6 and 7 of the Basic Law.

Pursuant to Article 115 (2) sentence 7 of the Basic Law, the German Bundestag must adopt amortisation plans for borrowing that exceeds the upper limit specified in the debt rule. The Bundestag has already done this for the years 2020 to 2022. Repayment will take place from 2028 over a period of 31 years. In addition, according to the decision of the German Bundestag, the loans taken out by ESF-Energy in 2022, taking into account the financial transactions carried out by it in 2022, will be repaid over a period of 31 years starting in 2031. Thus, according to current, preliminary figures, approximately €11.6bn will be repaid annually in the years 2028 to 2030. The repayment obligation for ESF-Energy amounting to approximately €5.8bn will be added from 2031 onwards. According to preliminary figures, a total of around €17.4bn per year will be repaid between 2031 and 2058 and around €5.8bn per year between 2059 and 2061.

In accordance with the coalition agreement and in line with the strategic direction of Germany's fiscal policy, the 2023 federal budget and the fiscal plan to 2026 provide that the regular borrowing limit under the debt rule will be complied with again from 2023 onwards. The Federation's net borrowing of up to around €45.6bn provided for in the 2023 Budget Act adjusted for financial transactions of around €–17.7bn and the cyclical component at the time of budget preparation of around €–15.3bn corresponds to structural net borrowing of around €12.6bn or 0.35% of GDP (2023 target figure). This means that, in the 2023 budget preparation, the regular upper limit for structural net borrowing is complied with again

Figure 4: The Federation's structural net borrowing (in % of GDP)



Source: Federal Ministry of Finance

for the first time after three years of unusual emergency situations. The fiscal plan to 2026 also provides for compliance with this upper limit. This strengthens the sustainability of Germany's public finances, taking into account the European guidelines for budgetary policy.

The macroeconomic impact of the crisis of the European security order triggered by Russia's war of aggression, plus the energy crisis and ongoing problems affecting global supply chains in 2022 have slowed down the economic recovery from the COVID-19 pandemic and postponed it. They also dampen Germany's aggregate economic outlook. At the same time, energy prices have risen to historic highs, and prices of goods and services have increased at a rate not seen in four decades. As a result of the monetary policy response to high inflation, the interest rate environment has changed significantly. Germany also faces major challenges in the medium and long term with regard to digitalisation, decarbonisation, demographic change and possible structural changes in world trade, which may dampen growth and at the same time create price pressure.

In this challenging environment characterised by negative supply shocks, Germany needs a forward-looking fiscal policy that keeps the German economy on a growth trajectory without further fuelling inflation and that creates fiscal space. At a time when key production factors are scarce and prices are increasing at a high rate, fiscal policy should support monetary policy as far as possible whilst avoiding an overly expansionary approach. To counter the effects of supply-side constraints, it is necessary to create conditions to encourage more investment and innovation while increasing economic productivity and strengthening Germany's position as an attractive place to do business in the face of international competition, thus counteracting inflationary pressure. The federal government is therefore pursuing a fiscal policy that is efficient, forward-looking and proactive. Efficient means continuously setting spending priorities and evaluating expenditure. Forward-looking means exiting the crisis mode and returning to normality as soon as possible in the face of global challenges, in order to maintain fiscal capacity to address future crises, rising spending needs and changes in the interest rate environment. Proactive means that fiscal policy shapes the ability to successfully navigate major transformations. These guiding principles will be fulfilled by a fiscal policy that is based on three pillars and thus safeguards Germany's capacity to meet the challenges of the future: short-term stabilisation measures during the crisis, pro-growth economic and fiscal policies to boost productivity and a clear focus on the goal of fiscal resilience and stability.

Germany is experiencing two crises of historic proportions within a very short period of time, in the form of the coronavirus pandemic and the illegal war of aggression against Ukraine. As these are rare and exceptional events, fiscal policy has to respond to the crisis with extraordinary measures to stabilise the situation and, in the current environment, find a balance between tackling the crisis and avoiding inflation. To this end, the federal government can deploy significant government financial resources, which it is able to do because of the risk buffers built up before the pandemic. A powerful and resolute response to the increase in uncertainty during the crisis is the first pillar of the fiscal policy strategy. At the same time, fiscal policy must avoid creating additional inflationary pressures. The federal government has therefore designed its crisis response to be timely, temporary, and targeted. The price brakes for electricity, gas and heat provided by the federal government with the ESF-Energy– as a key policy instrument to cushion the economic and social impact that high energy prices are having on citizens and businesses – are an element of this strategy. Being subject to a time limit, the consumption-independent price brakes help to bridge price peaks in a temporary and financially sustainable way and have a stabilising effect by smoothing the necessary transition to energy prices that, in the coming years, are likely to be higher than in the past. They are specifically designed to maintain strong incentives to save energy, as market prices

continue to operate. Since, apart from historical and thus fixed consumption levels, the individual volume of relief is dynamically dependent on the contractually agreed end-consumer prices for energy, the aggregate volume of fiscal costs is variable in relation to energy prices. If the contractually agreed end-consumer prices for energy fall faster than originally expected, the fiscal costs of the price brakes fall in proportion because average end-consumer prices are reduced. Thanks to their flexible adaptation to market conditions, which the federal government has deliberately built into the price brakes' design, the central relief instrument remains cost-efficient. Since relief payments for private energy consumption are subject to income tax above a certain taxable income level, the price brakes are also designed to meet the goal of providing increased relief to particularly vulnerable persons on low and medium incomes.

The design of the price brakes thus follows the strategic principle that stabilisation and relief measures should be designed as efficiently as possible and should not put lasting pressure on public finances. This means that it is not possible to fully offset losses of income permanently. In the case of stabilisation measures for individual companies, those companies' long-term profitability is a precondition for receiving assistance. Market allocation forces must be allowed to play out and, by doing so, advance Germany's modernisation. The fiscal policy response is therefore designed to act as a shock absorber and comprises three strategic elements:

- First, the federal government is stabilising citizens' incomes during the crisis. The markedly higher costs of electricity, food, heating and transport have become a significant burden for many people with low incomes, but increasingly this is also the case for middle-income earners. The federal government is therefore stabilising incomes by taking targeted steps to alleviate the burdens resulting from the war and – like our European partners – providing urgently needed relief.

- Second, in times of crisis it is necessary to protect the productive capacity of the economy and thus avoid "scarring" and hence the danger of weakening potential output. The federal government has put "shock absorbers" in place in the form of targeted and temporary support measures for companies affected by sanctions or the war itself.

- Third, the federal government's fiscal policy addresses structural changes brought about by crises. In the case of the war, the federal government responded to the fundamental changes in Europe's security order by significantly increasing funding for defence in the 2023 budget and in the fiscal plan to 2026 compared with the previous fiscal plan, and by setting up a Special Fund for the Bundeswehr in 2022 with €100bn in order to strengthen alliance and defence capabilities.

In addition to stabilisation in times of crisis, German fiscal policy also includes appropriate measures to counteract low growth and high inflation. As a suitable macroeconomic response to the supply shock caused by the lack of energy supplies and the medium- to long-term challenges for the German economy, the German government is pursuing a targeted supply-side policy, particularly with regard to the transformation to a climate-neutral economy, digitalisation and demographic change. The second strategic goal of German fiscal policy is to initiate self-sustaining economic growth by unleashing the allocative and productive forces of the market. In the current macroeconomic environment, such economic growth can only be achieved by boosting aggregate supply and, above all, productivity. In particular, a successful supply-side policy requires the fiscal mobilisation of private-sector investment.

Given the scale of the mobilisation needed, as well as providing funding to activate private investment, it is important above all to establish attractive conditions for companies, take targeted steps to reduce uncertainty and strengthen Germany's

position as an attractive place to do business. The federal government has therefore set itself the goal of creating an innovation-friendly environment with a competitive tax system, modernised public administration and faster procedures. In the current environment of significantly rising prices and ongoing supply shortages, coupled with the major challenges posed by digital and environmental transformation and the need to modernise the German economy, the federal government will avoid imposing additional tax burdens in line with the coalition agreement. The federal government's fiscal policy aims to provide targeted relief for companies in order to incentivise an increase in aggregate supply, reduce inflation risks and help companies invest in digitalisation and climate neutrality.

To modernise Germany, the federal government will improve the conditions for start-ups, investment and innovation. Key aims here are to fundamentally strengthen the availability of private capital for investment and, in particular, to make it easier for young companies and start-ups to access venture capital. The federal government will systematically reduce bureaucracy and make the public administration more agile and digital. As an important step towards improving conditions for businesses, the federal government is pursuing the objective of halving the duration of planning and approval procedures in Germany and increasing the availability of well-trained workers through initial and continuing vocational training. The decision to increase public investment over the entire fiscal planning period to 2026 will play a particularly important role in ensuring attractive conditions in the form of a modern infrastructure. The federal government is investing more in better infrastructure, education, innovation and a resilient energy infrastructure.

The federal government recognises the strategic dimension of the international challenges facing an open and export-oriented economy. Germany's fiscal policy will promote resilient structures for global value creation in order to enable the country to adapt rapidly and bounce back strongly from crises. Fiscal policy can create positive externalities as part of a forward-looking approach, for example by funding research and development, and provide positive support for the diversification of the German economy's supply chains. The federal government will help to unlock the potential of research and development, especially in key enabling technologies such as artificial intelligence, quantum technologies and robotics, by making targeted investments to improve the data infrastructure.

Maintaining the sustainability of public finances is a key objective of German fiscal policy. Given the major challenges facing Germany in the medium and long term, the federal government must succeed in returning to fiscal normality after crises in order to ensure that it has the fiscal space to take effective action in future crises. Returning to normality is therefore the third strategic goal of Germany's fiscal policy, in order to safeguard fiscal resilience and fiscal stability. In view of the high net borrowing necessitated by crises in recent years and the medium- and long-term challenges, the year 2023 marks the transition from crisis mode to fiscal normality. To this end, from the 2023 federal budget onwards, German fiscal policy will shift away from fiscal expansionary mode and, as normality returns, secure fiscal space for the future. This will ensure the sustainability of public finances and the confidence of citizens and businesses in the state's fiscal capacity and counteract inflation risks. The federal government's fiscal policy aims to avoid causing additional inflationary pressure by being overly expansionary.

To ensure fiscal resilience, the federal government is taking fiscal policy precautions against risks to sound public finances posed by rising expenditure, for example as a result of demographic change, and higher future costs of public debt in an environment of higher interest rates. Complementing the targeted supply-side policy, the goal of fiscal resilience forms an insurance strategy against short-term inflation risks, and also offers

protection against the medium- and long-term risks to self-sustaining economic growth and sustainable public finances. This is because fiscal resilience and supply-side policies have the effect of both dampening inflation and boosting growth.

As a strategic response to rising interest expenditure in public budgets and the consequent narrowing of fiscal space, the federal government is continuously setting spending priorities and is committed to effective, transparent fiscal rules defined with quantitative targets. The return to the regular borrowing limit from the 2023 federal budget onwards ensures the credible reduction of the debt-to-GDP ratio and the confidence of financial markets in the supreme creditworthiness of the German state. Thanks to its inherent flexibility, the debt rule has enabled the federal government to deliver appropriate fiscal policy responses to recent crises; at the same time, however, the debt rule requires it to pursue sound fiscal policies across economic cycles. This fundamental concept of a symmetric fiscal policy is at the heart of fiscal resilience, as it continuously renders it necessary to set priorities and review public spending – particularly when times are good. In this context, the separation of crisis-related expenditure from regular budget management is required not only for purposes of transparency: the separation accomplished with the ESF-Energy special fund ensures that public funds are used sparingly, since any reduction in expenditure is not available for additional spending in the core budget and so directly helps to bring about lower public debt.

The orientation of German fiscal policy towards fiscal resilience enables forward-looking, efficient and at the same time proactive government action by prioritising investment and expenditure aimed at modernising Germany and making budget management more results-driven. With this strategic approach, the federal government ensures stability and growth in equal measure by pursuing a fiscal policy that enables and drives forward the transformation to a competitive, climate-neutral and digital economy. At the same time, the federal government is making an important contribution to increasing the quality of public finances, which requires further improvement.

3.3 Fiscal policy measures in terms of expenditure and revenue

Stabilisation and relief in the energy crisis

In keeping with its fiscal policy strategy, the federal government deploys temporary, targeted relief measures in times of crisis with the aim of maintaining social cohesion, reducing uncertainty and safeguarding the productive capacity of Germany's economy. In 2022, it adopted three extensive relief packages with a total volume of around €100bn for 2022 and 2023 and established a protective shield for the economy in the form of ESF-Energy, featuring a €200bn borrowing authorisation until 30 June 2024, which is earmarked exclusively for measures designed to cushion the economic impact of the energy crisis.

The three relief packages adopted by the federal government are intended to provide citizens and businesses with fast, targeted relief to alleviate in particular the financial impact of spiralling energy costs following Russia's invasion of Ukraine. The first two relief packages from February and March 2022 already provided funding for support measures worth just under €40bn, to be disbursed in 2022 and 2023. Such measures included a €100 child bonus for every child entitled to receive child benefit payments, as well as an immediate supplement of €20 a month for children whose family is entitled to benefits in accordance with Books II or XII of the Social Code (*Sozialgesetzbuch*), the Asylum Seekers Benefits Act (*Asylbewerberleistungsgesetz*), the child supplement or supplementary assistance for subsistence in accordance with the Federal Pensions Act (*Bundesversorgungsgesetz*). They also included the income-taxable €300 energy price allowance

for taxable employed persons and the abolition of the EEG surcharge for electricity consumers, an increase in the standard income tax allowance for employees, as well as bringing forward the planned increase in the tax allowance for long-distance commuters, heating subsidies, the 9-euro ticket and a reduced energy duty on fuel.

The third relief package was adopted in September 2022 and provided more than €60bn in temporary assistance for pensioners, recipients of state benefits, university and vocational students, and recipients of housing benefit in 2022 and 2023. Given their particular vulnerability due to high energy costs, energy-intensive businesses were eligible for targeted, temporary and front-loaded assistance through the Energy Cost Mitigation Programme, with the aim of preventing structural disruptions in the economy and avoiding lasting damage to competitiveness. These short-term measures were complemented by a range of structural changes on the energy market, the lifting of the midi-job limit to €2,000, fundamental reforms of housing benefit and the introduction of the "citizen's benefit" (*Bürgergeld*) to replace "*Arbeitslosengeld II*" as of 1 January 2023 as the unemployment benefit system. Child benefit payments for families were increased from 2023, with parents receiving €250 per month per child. Low-income families received additional relief through the immediate supplement and the increase in the child supplement.

At the same time, the federal government acted decisively to avert impending economic disruptions caused by the progressive decline in deliveries of Russian pipeline gas and to quickly reduce strategic vulnerabilities. For instance, in order to safeguard the supply of energy, stabilise the markets and maintain German and European economic competitiveness, it supported gas importers and utility companies by providing liquidity support and loans. To immediately stabilise the supply of gas and oil, key companies were placed under trusteeship and provided with debt and equity financing. This was particularly the case for Uniper SE and SEFE, companies whose insolvency in the wake of suspended Russian gas deliveries would have had far-reaching consequences on the European gas markets, and which are now almost entirely under the ownership of the federal government. Additionally, filling gas storage facilities in line with clear government targets played a major role in maintaining supply security in Germany and throughout Europe.

Furthermore, a large number of tax measures were of particular significance, including the updated income tax rate set out in the Inflation Compensation Act (*Inflationsausgleichsgesetz*), which will benefit approximately 48 million taxpayers. The relief provided through the Inflation Compensation Act will amount to approximately €19bn in 2023 alone. In this way, the federal government is preventing the income tax burden from rising while real income remains unchanged. Other tax measures in the third relief package included the reduction in VAT on the supply of gas via the natural gas network from 19% to 7% from 1 October 2022 to 31 March 2024; the removal of the time limit on the tax allowance for working from home, which was also increased from €5 per calendar day to €6 per calendar day with the maximum amount lifted to €1,260; and bringing forward to 2023 the full income tax deductibility of pension contribution expenses. These measures represent tangible state relief for private individuals and businesses.

In September 2022, responding swiftly to a dramatically escalating situation on the energy markets, the federal government deployed a comprehensive protective shield for the economy to buffer the economic impact of Russia's invasion of Ukraine and to mitigate the most severe consequences for private households and businesses. The substantial financial volume of the protective shield – up to €200bn – not only provides certainty to consumers and businesses but also sends a clear message to Russia that Germany stands resolutely against Russian aggression, even at the cost of a strain on Germany's economy. With the financial resources being made available immediately on the basis of a €200bn borrowing authorisation for

2022, private individuals and businesses can rest assured that the protective measures are sufficiently funded.

The protective shield includes the introduction of price brakes for gas, heating and electricity as key relief measures for private households, SMEs and industry. As early as 23 September 2022, the federal government established an independent commission of experts for gas and heating (*Expert-Innen-Kommission Gas und Wärme*), which was tasked with developing recommendations for managing the crisis on the gas market. In proposing a gas and heating price brake for regular and bulk consumers, the commission recommended an option that protects social cohesion, purchasing power and the economy while retaining crucial incentives to conserve energy in order to prevent gas shortages. The federal government also used the proposed concept for a gas and heating price brake as a basis for its electricity price brake. These measures curb consumer price inflation, thereby helping to prevent second-round effects of rising energy prices. While the gas and heating price brakes are funded entirely through ESF-Energy, the electricity price brake is also intended to be funded in part through a levy on excess profits on the short and long-term electricity markets. In addition to providing subsidies, ESF-Energy offers pre-financing and closes funding gaps in this area in particular, as levies on windfall profits are subject to a high degree of uncertainty. It also helps to stabilise grid charges.

Given the substantial strain on people and businesses, the speed and impact of relief measures initially took priority over differentiation and targeting. Nonetheless, in order to provide increased protection to particularly vulnerable population groups and certain hard-hit companies, the energy price brakes are complemented by a variety of special rules for cases of hardship for hospitals and care homes, social welfare agencies and service providers, households in need, SMEs, cultural institutions and non-university educational and research institutions (totalling approximately €13bn). Finally, the protective shield includes measures to expand the energy supply and reduce consumption, a solidarity contribution to be levied on certain energy sector companies and a red-tape moratorium that reduces the added bureaucratic strain on businesses to the absolute minimum necessary in light of the already-high costs they face to adapt and operate. In the interest of being able to offer more rapid, targeted and nuanced assistance in future crises, the federal government is working to develop a system for disbursing direct payments to private households.

The measures rolled out as part of the protective shield have not only strengthened public solidarity with respect to the support measures for Ukraine, they have also prevented the supply-side shock from turning into an acute demand-side macroeconomic collapse. Against this backdrop, the federal government has made broad relief temporarily available to support anyone affected by rising energy prices. Given the size and power of the German economy as well as the formerly disproportionate dependence on gas imports from Russia, the volume of the protective shield is proportionate and fiscally sustainable in the long term.

Energy supply

Russia's illegal war of aggression against Ukraine continues to pose major challenges for Germany and Europe. In 2022, the federal government – in coordination with its EU partners – worked hard to guarantee supply security, diversify energy sources, cushion the social and economic impact of rising energy prices and promote the energy transition. The results speak for themselves – the gas stores have been filled; Russian natural gas has in large part been replaced. With plans being accelerated and EEG funding rates adjusted, more renewable sources of energy are expected to be available going forward.

Initially, the stated objective of the federal government was to quickly achieve independence from Russian fuel imports. The federal government

and the EU have taken important steps to realise this aim:

- Before Russia launched its invasion, Germany imported 35% of its oil from Russia. Germany has not sourced any oil directly from Russia since 1 January 2023.

- Before the war began, approximately 50% of coal consumed by Germany came from Russia. The EU imposed an embargo on Russian coal imports that has been in force since mid-August 2022. Since then, Germany has ceased all imports of Russian coal.

- Russian natural gas accounted for 54% of all German gas imports in 2021, before the war began. Thanks to increased deliveries of natural gas from Norway and the Netherlands, additional liquefied natural gas (LNG) imports and significant conservation of gas (gas consumption was reduced by 19% in the period from August 2022 to January 2023 compared with 2017–2022), the share of direct Russian pipeline gas deliveries declined sharply through the summer of last year. Since 1 September 2022, no pipeline gas has flowed directly from Russia to Germany.

In order to avert the risk of energy supply emergencies, the federal government has strengthened its crisis preparedness and bolstered its capacity to handle emergency shortages by amending the Energy Security Act (*Energiesicherungsgesetz*) and other ordinances governing energy industry activities. The Act on the Maintenance of Substitute Power Stations (*Gesetz zur Bereithaltung von Ersatzkraftwerken zur Reduzierung des Gasverbrauchs im Stromsektor*) requires the establishment of a gas replacement reserve as a temporary measure until 31 March 2024. At the same time, the federal government made a further €15bn available to fill German natural gas storage facilities. The new Gas Storage Act (*Gasspeichergesetz*) stipulates for the first time, including on the basis of EU Regulations, that gas stores must be well filled at the beginning of the heating period in order to reduce the risk of gas shortages during the winter (75% as of 1 September, 85% as of 1 October, 95% as of 1 November and 40% as of 1 February). These storage levels had already been met or significantly exceeded before the respective deadlines for autumn and winter 2022.

The federal government is also working at pace to set up the infrastructure for importing LNG through the LNG Acceleration Act (*LNG-Beschleunigungsgesetz*). The Act includes new provisions that make it possible for land-based and floating LNG terminals and the necessary pipelines to be put in place more quickly. In addition, the federal government leases floating LNG terminals. Germany opened its first terminal in Wilhelmshaven in December 2022. In January 2023, another privately operated LNG terminal was put into operation in Lubmin. The Brunsbüttel terminal has also been operating since mid-March 2023. Three ships are planned for use in Stade, in the Baltic Sea and at another location in Wilhelmshaven. The five LNG terminals leased by the government are operated by the newly formed Deutsche Energy Terminal GmbH – a wholly owned subsidiary of the federal government. Through these measures, the federal government is securing and diversifying the supply of energy in Germany, combating the causes of high inflation and creating reliable conditions for companies. This supports the expansion of aggregate supply and boosts the growth potential of the German economy.

In this time of crisis, the federal government is providing a buffer against price spikes by implementing price brakes for electricity, gas and heating, in order to offer broad-based relief while retaining incentives to conserve energy. As a result, the basic supply of energy – whether for private households, SMEs or associations – is becoming more affordable on average. Relief is disbursed across the board, independent of consumption. For all consumers who consume less than 1.5m kilowatt-hours of gas per year, it is calculated based on a baseline quota of 80% of projected annual consumption. For this quota, the differences between the respective individual

end consumer (gross) contractual prices and a reference price is levelled. This reference price is 12 cents for gas, 9.5 cents for heating and 40 cents for electricity – in each case, per kilowatt-hour. Because contractual prices are agreed and the annual consumption level is already forecast, the individual relief is fixed regardless of actual consumption. The market contract price must therefore be paid for each additional kilowatt-hour consumed. As a result, when prices are high there is a virtually unlimited incentive to conserve energy, even if the amounts consumed fall below the baseline quota. This means that incentives are greater than under a two-tier energy pricing model which features a price subsidy within the baseline quota.

The energy price brakes are also intended to help industry safeguard production and employment in the face of unforeseeable disruptions on the energy markets. Similar to the price brakes for private households and SMEs, and in line with EU state aid rules, relief has been granted from January 2023 onwards based on a baseline quota of 70% and a levelling of the difference between the net energy charge per kilowatt-hour for gas and electricity and reference prices of 7 cents and 13 cents, respectively, per kilowatt-hour. This scheme also retains the incentives set through wholesale prices to save energy and switch energy sources. The price brake also applies to hospitals, which receive additional assistance on the basis of special rules for cases of hardship.

In order to mitigate the very high costs faced by gas and heating customers (private households and businesses with supplier rates), a one-off payment based on their September 2022 consumption projections was disbursed to them in December 2022. This one-off payment serves to tide them over until the gas and heating price brakes are put into regular practice. This will not occur until the suppliers' implementation deadline expires on 1 March 2023; however, the price brakes will then be retroactive from 1 January 2023. No discounts for industrial customers such as electrical power generation plants were taken over.

Climate action

The federal government has adopted extensive measures to mitigate climate change and has set ambitious targets, at both national and European level. The EU has set its sights on achieving climate neutrality by 2050 and reducing net emissions by at least 55% (compared to 1990) by 2030. At European level, the EU co-legislators (the Council of the European Union and the European Parliament) reached a preliminary agreement at the end of 2022 regarding the reform of European emissions trading proposed by the European Commission in the context of the "Fit for 55" package. Under those proposals, this system, which previously covered major polluters and intra-European air transport, will be expanded to include maritime transport and a second emissions trading system established to cover heating, transport and process heat. This means that almost 75% of all European carbon emissions would be included in emissions trading, thereby reinforcing a key mechanism for achieving climate targets efficiently. Moreover, portions of the proceeds from energy, industry, aviation and maritime emissions trading will flow to the European Innovation Fund for low-carbon technologies and the EU Modernisation Fund, which supports lower-income EU member states in modernising their energy systems. Portions of the proceeds from emissions trading for buildings, road transport and process heat will flow to the Social Climate Fund, with up to €65bn earmarked to address social equity in the context of rising emission costs. These new and topped-up EU funds are vital to European cohesion and the continent's transition to a net-zero economy. However, the transfers to these EU funds will also reduce the basis for national income from European emissions trading, which in Germany flows to the Climate and Transformation Fund. The European funds will therefore play a larger role than national measures and funds going forward. In addition, a Carbon Border Adjustment Mechanism is being rolled out this year, starting with a pilot phase of just over two years. A carbon price will be levied for the electricity sector and on selected goods

imported into the EU – such as hydrogen and goods from the cement, steel, aluminium and fertiliser industries – if the carbon pricing scheme in the exporting country is inadequate or no such scheme has been established there. The objective of the mechanism is to impose a levy on embedded emissions in imported goods which are not subject to EU emissions trading and to counteract the inefficient shift of production and emissions to third countries where carbon pricing does not take place. Other key preliminary agreements in the context of Fit for 55 include binding national climate targets ("effort sharing") relating to transport, buildings and agriculture for all member states, as well as binding targets for land use, land-use change and forestry (LULUCF), fleet-wide carbon emission targets for personal vehicles, and increased energy efficiency.

In Germany, emissions reduction targets are even more ambitious. In enacting the Federal Climate Change Act (*Bundes-Klimaschutzgesetz*), which came into force in late 2019 and was revised in 2021, the federal government created a legally binding framework for achieving Germany's climate targets, including greenhouse gas neutrality by 2045. On 9 October 2019, the federal government adopted the comprehensive Climate Action Programme 2030. One central element is its carbon pricing scheme, which was introduced in 2021 in the form of a national emissions trading system in the heating and transport sectors. At present, the federal government is also working on a revision of the Climate Change Act to include the review of compliance with climate targets on the basis of a multi-year, cross-sector account, as well as a comprehensive Immediate Climate Action Programme with additional carbon reduction measures in order to meet climate targets.

At the same time, the federal government has actively promoted the energy transition. The "Easter Package 2022" represents the most significant new legislation covering energy policy in decades. Its purpose is to turbocharge the expansion of renewables production – on water, on land and on rooftops. It includes revisions to a wide array of laws (Renewable Energy Sources Act (*Erneuerbare-Energien-Gesetz)*, Offshore Wind Energy Act (*Windenergie-auf-See-Gesetz*), Energy Industry Act (*Energiewirtschaftsgesetz*), Federal Requirements Plan Act (*Bundesbedarfsplangesetz*), Grid Expansion Acceleration Act – Transmission Grid (*Netzausbaubeschleunigungsgesetz Übertragungsnetz*)) and further pieces of energy legislation. The core underlying principle of the package is that the use of renewable energy is in the overriding public interest and serves to ensure public safety. It takes the expansion of renewable energy production on land and at sea to an entirely new level, with the result that 80% of Germany's electricity supply will come from renewable sources by 2030, and almost 100% as soon as 2035. This will take place against the backdrop of sharply rising demand for electricity due to the planned electrification of buildings, transport and industry.

To accompany its decarbonisation efforts, the federal government has established the Climate and Transformation Fund (CTF), which serves to finance a wide range of support programmes relating to the transformation of industry and other measures. The CTF's economic plan budgets for a total of approximately €178bn in programme expenditures in the fiscal planning period ending in 2026. These funds will be used to promote low-carbon and climate-neutral production processes via the "Investing in the decarbonisation of industry" support programme. Approximately €10bn has been made available until 2026 for this programme alone. Support is granted for research and development in the field of energy-intensive industry, as well as for investments in substantial, permanent reductions in the emission of greenhouse gases. At approximately €36bn, the planned programme expenditures in 2023 exceed the target expenditures for 2022 (approximately €27.9bn) by roughly €8bn. The Federal Funding for Efficient Buildings (*Bundesförderung für effiziente Gebäude, BEG*) is particularly noteworthy as the largest individual line item at approximately €16.9bn (target expenditures) in 2023. Funding of approximately €5.6bn has been made available to promote electric mobility, including the

expansion of charging infrastructure in 2023. Approximately €4bn in total will be provided in 2023 to promote the development of the hydrogen industry. In addition, approximately €3bn in relief has been set aside for electricity-intensive companies in 2023 (electricity price compensation). The EEG surcharge was abolished entirely for end customers on 1 July 2022, having already been lowered significantly at the beginning of 2022. Since then, renewable energy funding has therefore been provided exclusively through the CTF.

Public investment

In light of the high level of strain caused by the pandemic and the ramifications of the war in Ukraine, it is all the more important that Germany not neglect investments to meet the challenges of the future and to boost competitiveness. First and foremost, the state is responsible for the quality of public infrastructure. Beyond this, it must mobilise private investment through targeted supply-side economic and fiscal policies that establishes an appropriate framework and targeted incentives, thereby leveraging market forces. Most of Germany's aggregate investment – some 90% – is made by the private sector.

In its 2023 federal budget and medium-term fiscal plan to 2026, the federal government is sticking to its promise of opening up a decade of investment in a modern, digital and climate-neutral Germany. Public investment spending is currently at a record high. With investments financed through the federal budget and the special funds of the Federation, the Federation is making a significant contribution to the positive development of real gross capital formation at the general government level within the fiscal planning horizon.

The investment expenditures in the federal budget have risen from the pre-crisis level of €38.9bn (target) in 2019 – after adjusting for non-recurring effects – to more than €54bn in the Draft Budgetary Plan 2023. In addition to forward-looking investments contained in the federal budget, the Climate and Transformation Fund has already budgeted the aforementioned programme expenditures of approximately €178bn in the period from 2023 to 2026. Gross fixed capital formation at the general government level is expected to grow by 4 ¼% on average between 2022 and 2026. During this period, the rate of growth would therefore be above the expected nominal potential growth (on average 4% per year). Aside from public gross fixed capital formation, government investment grants are also projected to continue increasing until 2026, by 8 ¼% on average in the 2022 to 2026 period.

Employment

The federal government pursues a labour market policy that aims to ensure social inclusion, leverage the potential of manual and skilled workers to strengthen economic growth and ensure the success of the country's socio-economic transformation. It pairs this approach with a fiscal policy that is geared toward stability and growth, even in times of inflation.

In light of the erosion of purchasing power through inflation, lifting the general minimum wage to €12 per hour as of 1 October 2022 represented a key step toward substantially improving conditions for around 6.2 million workers. At the same time, the increase in the minimum wage boosted the incentive for many jobseekers to take up employment. Going forward, the independent Minimum Wage Commission will decide on further adjustments. The next decision, relating to the period commencing on 1 January 2024, is planned for 30 June 2023. By increasing the minimum income limit for mini-jobs to €520 along with the increase in the minimum wage, the federal government is pursuing its objective of further increasing labour market participation. In future, the minimum income limit for mini-jobs will be linked to minimum wage trends and will therefore be more flexible. In addition, the midi-job limit was raised to €2,000 with effect from 1 January 2023.

On 1 January 2023, the "citizen's benefit" (*Bürgergeld*) replaced "*Arbeitslosengeld II*" as unemployment benefit system. This new system updates the basic income support for jobseekers and places greater focus on cooperation between jobcentres and benefit recipients. With the Citizen's Benefit Act (*Bürgergeld-Gesetz*), the federal government increased the standard benefit rates for recipients and modified the procedure for adjusting that amount to better reflect current price trends, which are relevant for the standard benefit rate (the increase also applies to social assistance (Book XII of the Social Code) and social compensation law (Federal Pensions Act)). The reform also underscores the notion that work pays, for instance by letting young people exclude up to €520 of their training pay and by lifting the allowance (from 20% to 30%) for monthly income ranging between €520 and €1,000.

In order to increase the performance potential of the working-age population, the federal government has created targeted incentives for further training and is looking into how to raise awareness of, and further improve, opportunities for career changes and skills development. To that end, the federal government is continuing to develop and pursue the National Skills Strategy, together with the *Länder*, the Federal Employment Agency and social partners. The Citizen's Benefit Act offers even more effective support to unemployed individuals and people of working age who are entitled to receive citizens' minimum income in developing their potential and seizing new opportunities. To achieve this, access to vocational training and further training is improved and the work placement priority (*Vermittlungsvorrang*) in Book II of the Social Code has been abolished. Unemployed individuals receive a monthly further training allowance of €150 per month for further training leading to a qualification. In addition, the further training bonus has been extended indefinitely for successful intermediate and final exams in further training courses leading to a qualification. Moreover, it is now possible to attend a retraining course for three years as part of a subsidised vocational further training programme, instead of two years as previously. A monthly citizens' minimum income bonus of €75 is paid out for training courses that do not culminate in a qualification but nevertheless facilitate lasting labour market integration. Holistic coaching expands options for one-on-one support to benefit recipients and can be offered on an outreach basis or alongside training or employment.

Through other targeted measures to expand the labour supply and increase labour productivity, the federal government is creating good conditions for fast-growing companies and future prosperity through sustainable economic growth. Its Skilled Labour Strategy has laid out a modern, cross-industry framework to achieve this. With its cornerstone policies to attract skilled workers from third countries, the federal government has adopted measures to increase skilled labour immigration from non-EU countries. With the government draft bill on the further development of skilled labour immigration from third countries and an accompanying ordinance approved by the federal cabinet, the federal government has initiated the implementation of the legislative measures relating to the cornerstone policies. The government seeks to exploit untapped potential to improve employment incentives for people in lower income brackets and for people who have not participated in the labour market for a particularly long period of time. The federal government will seek scholarly advice on this subject. A research report on benefit withdrawal rates has been commissioned and the final report will be presented at the end of September 2023.

Education and research

The federal government continues to prioritise the future-oriented areas of education, science and research, because the skilling of future employees and the economic innovation process play a key role in advancing labour productivity and thus future economic growth. In the 2023 federal budget, expenditures for education and research were further increased compared with

2022, by approximately €1.17bn to approximately €31.75bn. Departmental budget 30 (Federal Ministry of Education and Research), which is central to these policy areas, has made a total of approximately €21.5bn available in 2023.

The federal government initiated a reform in 2022 with the 27th Act Amending the Federal Training Assistance Act (*27. BAföG-Änderungsgesetz*), to provide more attractive assistance under the Federal Training Assistance Act (*Bundesausbildungsförderungsgesetz*) and the Upgrading Training Assistance Act (*Gesetz zur Förderung der beruflichen Aufstiegsfortbildung*) by making significant improvements to benefits. As a result, more people will be able to benefit from the Federal Training Assistance Act. For instance, the tax allowances for parental income were raised by 20.75%. The maximum grant rose from €861 to €934. In total, the 2023 federal budget makes approximately €2.7bn available for the Federal Training Assistance Act, including heating subsidy II. Approximately €0.9bn including heating subsidy II is earmarked for benefits under the Upgrading Training Assistance Act in 2023.

The aim of the Excellence Initiative for Vocational Training is to prepare the German economy and its skilled workers as much as possible to meet the challenges that lie ahead. Approximately €0.3bn has been set aside for this for 2023 (in departmental budget 30). Roughly an additional €0.5bn is available for measures to promote lifelong learning.

Providing financial support to universities remains a key priority for the federal government. On the basis of an agreement to strengthen teaching and learning in higher education, the Federation and the *Länder* have been making improvements in the quality of teaching and learning at higher education institutions and maintaining capacities in Germany as required. Like the Pact for Research and Innovation, this programme will be given added dynamism from 2023 onwards. The 2023 federal budget sets aside approximately €1.9bn – representing a 3% increase compared with 2022 – to help accomplish this.

Under departmental budget 30, the Federation will make a total of approximately €7.7bn in grants available to leading research centres (German Research Foundation, Fraunhofer Society, Helmholtz Association, Leibniz Association and Max Planck Society) in 2023, enabling them to conduct high-quality basic and applied research. The annual institutional grants will increase by 3% year-on-year.

In addition, the federal government has laid a new foundation for its policies to promote research and innovation in the "Strategy for the Future of Research and Innovation". This strategy specifies cross-departmental targets, priorities and milestones for research and innovation policies for the coming years. Targeted missions will serve to focus research and innovation more effectively on resolving challenges facing society, such as issues related to climate change, healthcare and key technologies. The strategy will be implemented through programmes and funding measures designed to create the best possible conditions for research and innovation.

To fund research through national, European and international project grants in 2023, a total of approximately €1.3bn will be made available for innovation based on new technologies, as well as approximately €0.6bn for innovation in the life sciences, approximately €0.8bn for research in the field of sustainability, climate and energy, and approximately €0.4bn for selected focus areas in basic physics research (all provided in departmental budget 30).

In order to enable the informed participation of every individual in the economy, it is essential that they have a basic grasp of financial concepts and products, as well as the ability to responsibly weigh potential risks and returns based on that knowledge. This is why Germany has launched an initiative to increase financial literacy. A national

financial literacy strategy is designed to identify challenges and develop recommendations for addressing them. In addition, the creation of a central financial literacy platform is intended to provide information on financial education offerings that are suitable for a variety of user groups of all ages. At the same time, research on financial literacy will also be promoted.

Families and social affairs

Sustainable social policy requires a minimum level of material prosperity for every citizen. In addition to adopting targeted measures to help out those low-income households particularly hard-hit by inflation and to promote stability in times of crisis, the federal government is also committed to further improving the quality of care services and educational services. High-quality, affordable childcare and care for elderly and disabled dependants makes it possible for more people to participate in the labour market and thus to better leverage existing labour force potential. In addition, independent participation in economic and social life is only possible through good education, which is the key to counterbalancing the growing labour and skilled worker shortages.

With the 5th Investment Programme for Childcare Financing 2020–2021 (*5. Investitionsprogramm „Kinderbetreuungsfinanzierung“ 2020 – 2021*) to expand child daycare centres, the federal government is supporting the addition of 90,000 childcare places for children up to school age, in line with demand. To help offset the additional burdens placed on the *Länder* to promote quality and inclusion in child daycare, the Child Daycare Quality Act (*KiTa-Qualitätsgesetz*) will provide them with approximately €4bn in additional funding in 2023 and 2024 through vertical VAT distribution. The All-day Childcare Act (*Ganztagsförderungsgesetz*) of 2021 represents a milestone for families in Germany, providing for the gradual introduction of a legal entitlement to all-day care for primary school children starting from 1 August 2026. These measures are intended to help improve the balance between family and work life, increase working hours and labour force participation among women and promote greater equality of opportunity.

In order to support families against the backdrop of rising costs of living, the federal government increased child benefit payments to €250 per month for each child as at 1 January 2023. This means an increase of €31 per month for the first and second child and €25 per month for the third child. In addition, the tax relief for single parents has been increased by a further €252 to €4,260 per year starting in 2023. The federal government has also placed a particular focus on financial relief for low-income families. Therefore, since 1 July 2022, a €20 monthly immediate supplement has been granted to children, adolescents and young adults whose families receive benefits under the citizens’ minimum income scheme (Book II of the Social Code), social assistance (Book XII of the Social Code) the Asylum Seekers Benefits Act (*Asylbewerberleistungsgesetz*), supplementary assistance for subsistence in accordance with the Federal Pensions Act, or the child supplement in accordance with the Federal Child Benefit Act (*Bundeskindergeldgesetz*). They will continue to receive this supplement until the introduction of the basic income support for children (*Kindergrundsicherung*). In this way, the federal government aims to alleviate the burdens on families and help improve living conditions and opportunities for children and adolescents. Low-income families also receive assistance in the form of the child supplement, which was increased to €250 per month per child as of 1 January 2023, including the immediate supplement.

Housing is a basic human need. The federal government’s housing benefit – in the form of (a) rent subsidies or (b) mortgage and home upkeep support for owner-occupied housing for lower-income households that do not qualify for benefits from basic income support schemes – makes an effective contribution to reducing the burden of housing costs. The introduction of the “*Wohngeld Plus*” enhanced housing benefit will lead, on

average, to a doubling of the housing benefit in 2023 for households that receive the benefit. In addition, a flat-rate heating cost component and a climate component will be permanently integrated into the housing benefit from 2023.

Health

Due to the lingering COVID-19 pandemic, the federal government continued to make substantial funding available until mid-2022 for a range of pandemic-related measures to temporarily ease the burden on the healthcare system. For instance, hospitals received a total of approximately €18.4bn in compensation payments for maintaining free bed capacity and approximately €3bn in supplementary payments designed to prevent them from suffering financial disadvantages. As the pandemic began to abate in 2023, a number of additional pandemic-related support measures for the healthcare sector were phased out.

Under the programme to future-proof hospitals, the Federation has provided €3bn in funding since 2021 to help hospitals invest in modern emergency capacities and improve digital infrastructure, with the *Länder* and/or hospital operators contributing an additional €1.3bn in co-funding. Unclaimed investment funding will be returned to the Federation by the end of 2025.

However, it is not expected that the easing of the pandemic will lead to reduced financial strain on the statutory health insurance system and statutory long-term care insurance in the short term. New additional costs have resulted from high inflation rates due to the economic impact of Russia's war of aggression against Ukraine as well as supply chain bottlenecks for medications. In connection with the gas and electricity price brakes, the federal government has created supplementary support funds for hospitals and nursing homes to help them absorb the impact of high energy costs; a total of up to €8bn from ESF-Energy will be disbursed for this purpose by April 2024.

In accordance with section 221 (1) of Book V of the Social Code, the Federation provides €14.5bn per year to the statutory health insurance system as a flat-rate payment to cover health insurance funds' expenditure on non-insurance related benefits. The Federation provided an additional federal grant of €14bn to the statutory health insurance system for 2022, thereby stabilising the average supplementary premium. Although the pandemic and crisis-related additional expenditures and revenue shortfalls in the healthcare system have declined in severity as the pandemic has subsided, the federal government continues to face the structural challenge of closing the gap between (a) macroeconomic growth rates and (b) public healthcare costs that are rising at a faster pace due to demographic change and medical-technical progress. The federal government is meeting this challenge in 2023 with the Statutory Health Insurance Financial Stabilisation Act (*GKV-Finanzstabilisierungsgesetz*), which was adopted by the German Bundestag on 20 October 2022. This Act contains stabilisation measures designed to prevent substantial increases in contribution rates through the use of the financial reserves of the statutory health insurance system, efficiency reserves in the provision of services, a one-off additional federal grant of €2bn and a one-off €1bn loan from the federal budget.

Security order and international responsibility

At present, Russia's illegal war of aggression against Ukraine represents a threat to international order. The federal government believes that it has a responsibility to support Ukraine in its right to defend itself. Moreover, the escalating security situation has made it clear that it is essential for Germany to defend its territory and alliances and to coordinate with partners who share our values. The fragmentation of international markets also poses increasing challenges to the international order, jeopardising global prosperity. This is why the federal government is committed to rules-based multilateralism to reach

joint solutions for global issues. These principles are also reflected in German fiscal policy.

The total value of military support in the form of individual licences granted by the federal government for the export of military equipment amounted to €2.3bn in the period from 1 January 2022 to 23 January 2023. The funds earmarked for the Enable & Enhance Initiative (*Ertüchtigungsinitiative*) and the European Peace Facility (EPF) amounted to €5.4bn in total for 2023. This amount is intended primarily to support Ukraine, for instance by using EPF funds to reimburse EU member states' costs for support payments to Ukraine. In 2022, Germany was the second-largest donor of humanitarian aid after the U.S. Germany made more than €450m in humanitarian aid available to Ukraine and neighbouring countries from the beginning of the war until December 2022.

By establishing the €100bn "Special Fund for the Bundeswehr", the federal government is adapting to the requirements of a new era in security policy. The special fund makes it possible to carry out significant procurement projects for Bundeswehr equipment. Its purpose is to strengthen Germany's alliance and defence capabilities, to close gaps in the Bundeswehr's capabilities, and thereby to ensure Germany's contribution to NATO capability targets. The 2023 budget for the Federal Ministry for Economic Cooperation and Development totals approximately €12.2bn. Funding that qualifies as official development assistance (ODA), which falls under the remit of the Federal Foreign Office, stands at approximately €4.5bn in 2023. In addition, €2bn in precautionary funding has been earmarked for costs in connection with overcoming the COVID-19 pandemic and the war in Ukraine. Thanks to the federal government's efforts, Germany is set to remain the world's second-largest donor of ODA funds in 2023. According to the OECD's calculations, Germany's ODA spending totalled approximately US$33.3bn in 2021. Germany's ODA ratio (including eligible in-donor refugee costs) was thus 0.76% of gross national income.

Within the framework of multilateral organisations and forums, the Federal Republic of Germany works together with partner countries around the world to cooperate in overcoming global challenges and protecting global public goods. This takes the form of partnership with development banks, the sub-organizations of the United Nations and forums such as the G7 and G20. For the federal government, the answer to economic challenges posed by geopolitical crises lies not in increasing protectionism, which leads to the fragmentation of international markets, but in diversifying and strengthening the resilience of global supply chains.

Taxes and duties

The federal government's objective is to strengthen Germany's overall competitiveness and productivity as a centre of business and industry in order to preserve and renew prosperity in a globalised world. A tax framework aligned with the strategic direction of Germany's fiscal policy not only stimulates growth and innovation, it also plays a vital role in continuously expanding aggregate supply, increasing fiscal capacity and strengthening sustainable public finances. Tax policy represents a key element to this approach while also supporting modernisation and the transformation into a digital, net-zero economy. Furthermore, given the prevailing demographic trends, it is important for Germany to defend its international position as an attractive place to invest and work. The federal government's objective is to create a tax environment for businesses that strengthens investment capacity, improves incentives to invest and innovate, and cuts red tape – without exceeding the limit on new borrowing under the debt rule. This is crucial for productivity growth and economic success.

The Inflation Compensation Act prevents the income tax burden from rising due to inflation. In order to mitigate the effects of bracket creep, the income tax bracket thresholds and the basic personal allowance for 2023 and 2024 were adjusted

in line with the findings of the 14th report on subsistence levels (*Existenzminimumbericht*) and the 5th report on bracket creep (*Steuerprogressionsbericht*). The maximum deduction for maintenance payments was also increased based on the basic personal allowance. The Inflation Compensation Act limits inflation-induced additional tax burdens and creates performance incentives. The Act benefits approximately 48 million taxpayers, although the lower threshold for the maximum tax rate was deliberately not adjusted. This means that individuals will actually feel the benefit of pay rises and inflation relief measures without erosion through bracket creep. In order to limit additional burdens on income tax payers, the Act also increases the solidarity surcharge exemption limit. In addition, families receive targeted tax support. The 2023 tax allowance for children has been increased in line with the findings of the 14th report on subsistence levels, with a further increase planned from 2024.

To provide relief to taxpayers, legislation temporarily reducing the VAT rate on gas supplies from the natural gas grid (*Gesetz zur temporären Senkung des Umsatzsteuersatzes auf Gaslieferungen im Erdgasnetz*) reduces the VAT rate on gas supplies from the natural gas grid and on heating from the district heating grid to 7% from 1 October 2022 to 31 March 2024. The reduced rate for meals in restaurants was extended again until 31 December 2023. Employers can provide their employees with (cash and non-cash) inflation compensation bonuses in addition to their regular wages; until 31 December 2024, such bonuses of up to €3,000 are exempt from taxes and social security contribution.

Aside from introducing the usual range of technical adjustments to tax law, the Annual Tax Act 2022 (*Jahressteuergesetz 2022*) implemented important plans set out in the coalition agreement. These included in particular tax relief and measures to boost digitalisation. The Act also seeks to simplify processes, enhance legal certainty and promote tax fairness, thereby cutting red tape for private individuals and businesses. For instance, the bureaucratic hurdles to installing and operating certain types of photovoltaic systems have been eliminated through the introduction of an income tax exemption and a zero tax rate on the supply and installation of photovoltaic systems. The aim is to better leverage the existing potential for expanding photovoltaic systems in the private housing sector.

In addition, the creation of the legal basis for storing bank details in the tax identification number database has set the stage for the digitalisation and automation of grant payments. This data can be used to establish a direct disbursement channel for public benefits based on tax identification numbers. Aside from this, the Annual Tax Act 2022 modernises and expands the deduction of expenses for business and professional activities undertaken in the home, and lifts the straight-line depreciation rate for residential buildings completed after 31 December 2022 from 2% to 3%. In addition, the ability to deduct pension contribution expenses in full, which had been set to enter into effect in 2025, was brought forward to 2023 and the lump-sum savings allowance and "education allowance" (*Ausbildungsfreibetrag*) were increased. Furthermore, improvements were made to the process surrounding Riester pension support.

The Act Amending the Energy Duty Act and the Electricity Duty Act to extend the so-called equalisation scheme until 31 December 2023 (*Gesetz zur Änderung des Energiesteuer- und des Stromsteuergesetzes zur Verlängerung des sogenannten Spitzenausgleichs bis zum 31. Dezember 2023*) will support energy-intensive manufacturing companies in the face of high energy prices and ensure an affordable energy supply and safeguard competitiveness. For the period beginning in 2024, the benefits for manufacturing companies under energy and electricity tax law will be reformed in order to make the greatest possible contribution to achieving the objectives set out in the Climate Change Act.

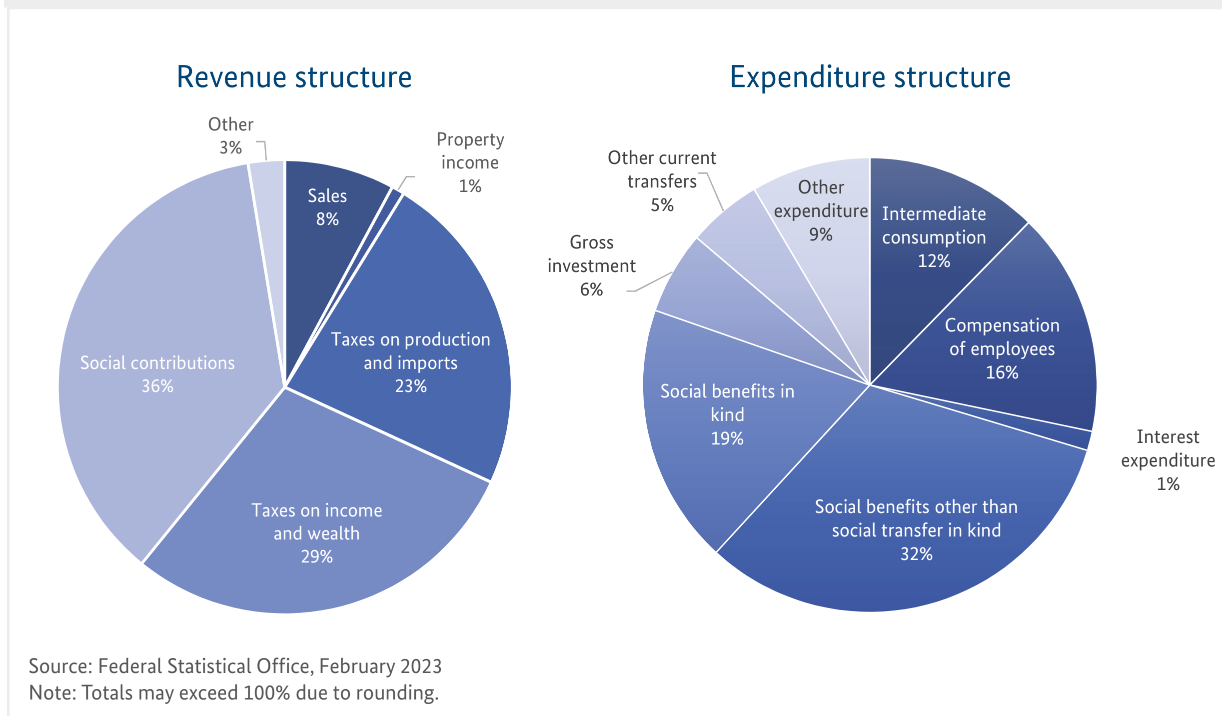
In addition to maintaining the increased upper limit for 2022 and 2023 at €10m (€20m for joint filers), the Fourth Coronavirus Tax Assistance Act (*Viertes Corona-Steuerhilfegesetz*) permanently extended the loss carryback from one to two years from 2022. In addition, the Act introduced a €4,500 tax-free coronavirus bonus for carers. With the planned Financing for the Future Act (*Zukunftsfinanzierungsgesetz*), the federal government intends to create the conditions to enable start-ups, scale-ups and other SMEs in Germany to gain access to an attractive capital market, thereby improving these companies' options for securing funding. This Act also provides for the further digitalisation of the capital market. The provisions of the Financing for the Future Act are designed to improve the tax framework for employee share ownership. The objective is to make it easier for young companies to attract workers and hold their own in the international competition for skilled workers.

Corporate tax policy plays a key role in enhancing a country's attractiveness as a place to do business, by creating incentives to increase investment and thereby improving general business conditions. In addition, an up-to-date corporate tax system can tap into the potential of innovative companies operating in Germany and support their efforts to achieve a sustainable transformation. Good growth opportunities require a modern and fair tax environment. The agreement by the EU member states in December 2022 to implement a common EU directive to ensure a global minimum effective rate of taxation represented an important step in this regard. This will ensure uniform and timely implementation of global minimum effective taxation within the EU. The federal government is working tirelessly to develop an implementing act that will transpose this reform into German law with minimal bureaucratic effort. It will also move swiftly to advance the other elements of global tax reform. The notification requirement already introduced for cross-border tax arrangements will be extended to national tax arrangements. To ensure appropriate taxation of income flowing out of Germany, the interest capping rule (*Zinsschranke*) will be supplemented by an interest rate cap (*Zinshöhenschranke*), among other things.

The federal government will also present ambitious tax policy measures in 2023 to strengthen and improve Germany's international competitiveness. To this end, the federal government plans in particular to introduce the investment premium for climate action and digital assets as agreed in the coalition agreement. In addition, incentives in the form of accelerated depreciation options, more attractive depreciation conditions (particularly for SMEs) and even better tax incentives for research will be considered. In line with the mandate set out in the coalition agreement, the option of being treated like a corporation for tax purposes and the rules on favourable treatment of retained earnings (Section 34a of the Income Tax Act) will be evaluated to determine whether adjustments are needed to make these measures more effective in practice.

Combating VAT fraud is a high priority in order to protect honest taxpaying households and businesses and to prevent unfair competition. The federal government will introduce a nationwide electronic reporting procedure for the creation, verification and forwarding of invoices as quickly as possible. In order to avoid undue burdens on businesses and the public administration arising from parallel processes, the federal government will include in its further considerations the legislative proposal "VAT in the digital age" submitted by the European Commission and the consultations taking place on this in the EU bodies. The federal government will work to ensure that the electronic reporting system is implemented as quickly as possible, as this is not simply a matter of curbing tax evasion, but is also in the interest of administrative efficiency and digital transformation.

Figure 5: General government revenue and expenditure structure 2022



Source: Federal Statistical Office, February 2023
Note: Totals may exceed 100% due to rounding.

3.4 Implementation of country-specific fiscal policy recommendations

As part of the European Semester, the Commission assesses the economic and fiscal policies of the EU member states annually and submits recommendations. Its analysis draws on the national reform programmes as well as the stability and convergence programmes.

The European Council agreed on the country-specific recommendations for 2022 and 2023 on 17 June 2022. With regard to German fiscal policy, the Council recommends that the increase in nationally funded current expenditure in 2023 be consistent with a broadly neutral fiscal stance. This should take into account continued temporary and targeted support for households and businesses particularly affected by the rise in energy prices and for people who have fled Ukraine. There should be a willingness to adjust current spending as the situation evolves.

The Council also recommends expanding public investment for the green and digital transformation and energy security, including through the use of the Recovery and Resilience Facility, REPowerEU and other EU funds.

Beyond 2023, the Council recommends a budget policy aimed at achieving a prudent fiscal position in the medium term. Improving the tax mix should ensure inclusive and sustainable growth, in particular through improved tax incentives to increase the number of hours worked. Another recommendation focuses on ensuring the long-term viability of the pension system.

The country-specific recommendations are in line with the federal government's fiscal and economic policy agenda and the relief and stabilisation measures that Germany has adopted (see section 3.3). The measures form part of a balanced, comprehensive system of relief and stabilisation measures, each adapted to the needs of different target groups and the extent to which they have

been impacted. They include targeted transfers (such as one-off payments and the heating subsidy), more broadly effective tax relief (such as the regular adjustment of the income tax rate also for 2023 and 2024 to reduce bracket creep, etc., a temporary reduction in the VAT rate on gas and heating, and a reduction in energy duty on fuels) and further relief (such as a nationwide public transport ticket). The federal government's protective shield for the economy, which comprises measures worth up to €200bn, contains additional comprehensive policies to provide tangible support to private individuals, to stabilise businesses and to protect future-proof structures (see sections 3.2 and 3.3). Since the payments under the energy price brakes depend on the respective contractually agreed end-consumer prices for energy, the effective fiscal costs vary in relation to the contractually agreed energy prices (see section 3.2).

Under the 2023 federal budget and fiscal plan to 2026 adopted by the federal government, the regular borrowing limit under Germany's debt rule will be complied with again for the first time after three years of exceptional circumstances, despite record levels of investment and extensive crisis management measures. This means that the Federation will remain able to take effective action in the future. At the same time, significant financial resources are available via special funds, many of which are earmarked for investments in Germany's future (see section 3.3).

With the "generational capital fund", the federal government is expanding the financing base of the statutory pension insurance system in line with the country-specific recommendations. In addition to federal pension contributions and subsidies, the statutory pension insurance system will in the future also be financed through returns on a capital stock managed by a public body. The generational capital fund can help to mitigate future increases in pension contribution rates. This will bolster the sustainability of public finances in Germany.

4. General government budget balance and debt level projection

The projection set out below for the budgetary trends at all levels of government is based on the following:

- The federal budget for 2023 dated 19 December 2022 and the Federation's fiscal plan to 2026 dated 1 July 2022. The benchmark figures decision for the 2024 federal budget, originally planned for March 2023, had not been taken at the time the projection was completed.
- Federal government annual projection on macroeconomic trends dated 25 January 2023.
- Results of the Working Party on Tax Revenue Estimates of 27 October 2022 updated on the basis of the annual projection and actual results.
- An updated estimate of the budgetary trends of the *Länder*, local authorities and social security funds based on the actual results for 2022 and the federal government's annual projection.

The reference date for the projection is 30 March 2023.

Compared with the German Draft Budgetary Plan 2023 of 14 October 2022, the projection includes, in particular, the Economic Stabilisation Fund Energy (ESF-Energy) with a volume of up to €200bn (see Chapter 3).

4.1 Trends in general government revenue and expenditure

Revenue ratio decreases in 2023 and increases gradually thereafter

The revenue ratio decreased to 47.1% of GDP in 2022 from 47.5% of GDP in the previous year. This was due in particular to a decline in the social security contribution ratio from 17.6% to 17.2% of GDP. The tax-to-GDP ratio, on the other hand, remained almost unchanged at 24.5%.

The revenue ratio is projected to decline from 47.1% of GDP in 2022 to 45¾% of GDP in 2023. This is mainly due to a lower projected tax-to-GDP ratio. Above all, the Inflation Compensation Act, the temporary cut in VAT on gas supplies from the natural gas network and on heating from the heating network, and the Annual Tax Act 2022 significantly reduce the tax burden. The revenue ratio is then expected to rise gradually over the following years.

Table 1: Trends in the government revenue ratio

	2022	2023	2024	2025	2026
	in % of GDP				
Taxes	24.5	23¾	23¾	24	24¼
Social security contributions	17.2	17¼	17½	17½	17½
Taxes and social security contributions	42.0	41	41¼	41¾	42¼
Total revenue					
April 2023 update	**47.1**	**45¾**	**46**	**46½**	**46¾**
April 2022 Update	45½	46	46¼	47	47¼

The tax-to-GDP ratio relates to current taxes. Ratio for taxes and social security contributions ratio also includes capital taxes. Figures for the projection period are rounded to a quarter percentage point of GDP.

Government expenditure ratio rises again in 2023, but declines significantly thereafter

In 2022, the government expenditure ratio fell to 49.7% of GDP, compared with 51.3% of GDP in 2021. A key reason for this decline was the sharp decrease in subsidies[1] from 3.1% of GDP in 2021 to 1.9% of GDP in 2022, mainly due to the expiry of measures to address the impact of the COVID-19 pandemic such as pandemic-related business support schemes. However, the government expenditure ratio remained above the pre-crisis level of 45.0% of GDP in 2019.

In 2023, the government expenditure ratio is projected to rise to around 50% of GDP, and then to decline again in 2024 and 2025. This is due, in particular, to a significant increase in subsidies from 1.9% of GDP in 2022 to 3¾% of GDP in 2023. In 2024 and 2025, subsidies will then decrease once more to 1¾% and 1½% of GDP.

The significant increase in subsidies in 2023 and the subsequent decrease are due to the ESF-Energy special fund. The fund's business plan anticipates expenditure of around 3% of GDP in 2023, of which around 2½ percentage points are allocated to subsidies.[2] In 2024 and 2025, these subsidies are set to decrease to ½% of GDP, then zero. The overall increase in subsidies in 2023 is smaller than the subsidy volume of ESF-Energy, as coronavirus programmes are being phased out at the same time.

With regard to the expenditure of ESF-Energy, its business plan[3] was used as a basis. However, the actual outflow of these funds is highly uncertain. ESF-Energy is centred around expenditure for electricity, gas and heating price brakes, which are directly dependent on trends in electricity, gas and heating prices for end-consumers. If end-consumer prices turn out to be lower than expected at the time the business plan was drafted, the expenditure for the price brakes will

1 This chapter presents the projection of the government account within the meaning of the European System of Accounts (ESA). Accordingly, in the following the term "subsidy" refers to subsidies as defined in the ESA (ESA code D.3). The ESA's definition of subsidies differs from that in the federal government's subsidy report.

2 All expenditures of ESF-Energy have been allocated to subsidies apart from capital measures for Uniper/SEFE and interest expenditure. With regard to expenditure for the electricity price brake, which represents a significant part of ESF-Energy, only expenditure planned directly by ESF-Energy has been included. However, it is also planned that the electricity price brake will be partly financed with income from skimming of surplus revenues in the electricity market. These only pass through the electricity price brake account and not through the federal budget or the ESF-Energy special fund. Nevertheless, income and expenditure are expected to be calculated "gross" in the national accounts, i.e., added to both tax revenues and subsidy expenditure. For the projection within the framework of the Stability Programme, this gross calculation was dispensed with. Otherwise, it would result in a higher tax-to-GDP ratio and a higher subsidy ratio. However, budget balances would remain unaffected, as would expenditure growth using the expenditure benchmark definition.

3 Version after the final meeting of the Budget Committee of the German Bundestag in November 2022

be correspondingly lower than estimated in the business plan. As a result, the general government deficit in 2023 would also be lower.

Wholesale prices for electricity and gas have fallen significantly compared with the time the business plan was prepared. However, to what extent and how soon this will be reflected in end-consumer prices largely remains to be seen. Hence, there is considerable uncertainty regarding the actual outflow of funds from ESF-Energy and thus also regarding general government expenditure and the general government deficit (see section 4.2).

The projected increase in the government expenditure ratio in 2023 is tempered by lower expenditure in other areas, such as social benefits in kind (9.2% to 8¾% of GDP) and current transfers (2.9% to 2¼% of GDP). Key reasons for this are the discontinuation of measures to address the impact of the pandemic and the energy price allowance, which increased current transfers in 2022.

In 2023, at 2¼% of GDP, capital transfers are projected to remain at roughly the previous year's level. Two offsetting effects influence this outcome: On the one hand, the projection shows a strong increase in investment grants from 1.4% of GDP to around 1¾% of GDP. The Climate and Transformation Fund plays an important role in this respect. On the other hand, other capital transfers will fall from 0.9% to approximately ½% of GDP. This is mainly due to a reduction in the capital measures planned for energy companies such as Uniper compared with 2022. ESF-Energy funding of about €15bn is still allocated for this purpose in 2023. The extent of these cash outflows is also very uncertain and depends on future trends on energy markets. In 2024, capital transfers will decrease overall as the planned capital measures of ESF-Energy are largely discontinued.

Gross fixed capital formation will continue to develop strongly over the projection period, with average growth of around 4¼% per year between 2022 and 2026. Total government investment expenditure (government gross fixed capital formation plus investment grants) will increase at an even faster pace due to the strong growth in investment grants mentioned above: investment expenditure is expected to grow on average by roughly 5¾% per year between 2022 and 2026.

Interest expenditure is projected to increase significantly in the coming years. While this was still around 0.7% of GDP in 2022, rising interest rates will increase it to around 1¼% of GDP by 2026.

Table 2: Trends in the government expenditure ratio

	2022	2023	2024	2025	2026
	in % of GDP				
April 2023 update	**49.7**	**50**	**47¾**	**47¼**	**47¼**
April 2022 Update	49¼	47¾	48	47¾	47¾

Figures for the projection period are rounded to a quarter of a percentage point of GDP.

4.2 Trends in the government budget balance

The budget balance improved in 2022 compared with the previous year from −3.7% of GDP to −2.6% of GDP. Germany's general government deficit ratio was thus again below the 3% ceiling of the European treaties after the divergences in 2020 and 2021.

In 2023, the budget balance will deteriorate to −4¼% of GDP according to the projection. ESF-Energy contributes around 3% of GDP to this deficit ratio: without it, the budget balance would be around −1¼% of GDP in 2023. The projected deficit should therefore be seen against the background of the high uncertainty described above concerning the actual expenditure of ESF-Energy and presumably interpreted as an upper limit. In 2024, the deficit ratio in the projection falls back below the 3% limit of the European treaties. In the following years, the budget balance then gradually improves to around −¾% of GDP.

As in previous years, the budget deficit is primarily attributable to the federal level. The *Länder*, local authorities and social security funds, on the other hand, show surpluses or only moderate deficits of up to ½% of GDP.

Table 3: Trends in the general government budget balance

	2022	2023	2024	2025	2026
	in % of GDP				
April 2023 update	**−2.6**	**−4¼**	**−1¾**	**−¾**	**−¾**
April 2022 update	−3¾	−2	−1¾	−1	−½

Figures for the projection period are rounded to a quarter of a percentage point of GDP.

Table 4: Budget balances according to government level

	2022	2023	2024	2025	2026
	in % of GDP				
Central government	−3.3	−4½	−1¾	−1	−¾
State government	0.3	0	0	¼	¼
Local government	0.2	¼	¼	¼	¼
Social security funds	0.2	0	0	−¼	−½
General government	**−2.6**	**−4¼**	**−1¾**	**−¾**	**−¾**

Figures for the projection period are rounded to a quarter percentage point of GDP. Differences between the general government budget balance and the sum of the budget balances of the various levels of government are due to rounding.

4.3 Trends in the general government structural balance

Structural balance: Germany will come close to meeting the medium-term objective from 2025 onwards

Fiscal policy influences the general government budget balance mainly through the channel of budget policy, i.e. the management of revenue and expenditure. At the same time, however, the general government budget balance is affected by a number of cyclical and exceptional factors that lie largely outside the direct control of governments. For this reason, EU budgetary surveillance looks at structural indicators in order to assess fiscal policy in a manner that excludes these factors. The structural balance is the balance adjusted for one-off effects and the cyclical component.

The structural balance improved in 2022 compared with the previous year, from −2.9% of GDP to −1.8% of GDP. The cyclical component was −0.2% of GDP in 2022, compared with −0.7% of GDP in 2021. The asset transfers to Uniper and SEFE totalling €26.6bn were assessed as one-off effects in 2022.

In 2023, the structural balance is projected to deteriorate to −3¼% of GDP. This has been adjusted for the ESF-Energy's planned capital measures of around €15 billion, which are treated as a one-off measure. The cyclical component contributes around ½% of GDP to the deficit in 2023. Without ESF-Energy, the structural balance would be around −¾% of GDP.

In the following years, the structural balance will gradually improve to around −¾% of GDP, close to Germany's medium-term objective of −0.5% of GDP.

Trends in government expenditure (using the expenditure benchmark definition)

In addition to the medium-term objective, the Stability and Growth Pact's preventive arm also includes an expenditure benchmark. For the purposes of the expenditure benchmark, expenditure is adjusted for various items including interest expenditure, cyclical labour market effects, fluctuations in investment spending from the average investment level, expenditure financed by EU programmes and the effects of discretionary measures on revenue.

Expenditure (using the expenditure benchmark definition) increased by 4.8% in 2022 compared with the previous year and thus more slowly than nominal medium-term potential output growth[4]. For 2023, on the other hand, a strong increase of

Table 5: Structural budget balance compared with actual budget balance and GDP trend

	2022	2023	2024	2025	2026
	in % of GDP				
Structural balance	−1.8	−3¼	−1½	−¾	−¾
Actual balance	−2.6	−4¼	−1¾	−¾	−¾
	% change yoy				
Real GDP	**1.8**	**0.2**	**1.8**	**0.9**	**0.9**

Budget balance figures for the projection period are rounded to a quarter of a percentage point of GDP.

4 Nominal medium-term potential output growth is calculated here in a similar way to the derivation of the reference rate (using the expenditure benchmark definition) according to Vademecum (2019): the geometrically averaged real potential output growth from year t-5 to year t+4 plus inflation measured by the development of the GDP deflator for year t.

8% is expected, due in particular to ESF-Energy expenditure (which is subject to high uncertainties), but also, among other things, discretionary measures that reduce revenue. In the following years, however, expenditure growth will be below nominal medium-term potential output growth at around 0% in 2024, 1% in 2025 and 2½% in 2026.

Under the positive alternative scenario – that is, if actual GDP growth were to exceed the federal government's annual projection (the baseline scenario) by one-half a percentage point per year – under otherwise identical assumptions the general government budget balance would be balanced again as early as 2025. Under the negative alternative scenario – that is, if actual GDP growth were half a percentage point lower than the baseline scenario – the general government budget deficit would still be around −1¾% of GDP in 2026.

Table 6: Expenditure benchmark: projected expenditure and potential output

	2022	2023	2024	2025	2026
	in relation to GDP (%)				
Expenditure (using the expenditure benchmark definition)	4.8	8	0	1	2½
Nominal potential GDP growth (moving 10-year annual average)	6.1	6.8	3.6	2.8	2.8

Figures for the projection period are rounded to a quarter of a percentage point of GDP.

4.4 Sensitivity of the budget balance projection

Sensitivity analyses can provide indications of how a projected trend is affected under altered conditions. The model used to analyse the budget balance's sensitivity to changes in GDP and interest rates thus takes into account the fact that the underlying macroeconomic assumptions are subject to uncertainty. For each sensitivity analysis, two alternative scenarios are considered. All other assumptions remain unchanged. For the purposes of the GDP sensitivity analysis, government revenue and expenditure are assumed to respond to the GDP scenarios in a manner consistent with their long-term elasticity. The budget semi-elasticity used in the context of the European budgetary surveillance process is applied for this purpose.

If the market interest rate were to be 50 basis points p.a. higher than under the baseline scenario (which would then be gradually reflected in the implicit interest rate), the general government budget deficit during the projection period would be up to one quarter of a percentage point of GDP p.a. higher. Under the second alternative scenario – that is, if the market interest rate were to be 50 basis points lower, the general government budget deficit during the projection period would be up to one quarter of a percentage point of GDP p.a. below the projected values in the baseline scenario.

Table 7a: GDP-sensitivity of the general government budget balance projection

GDP trends according to	2022	2023	2024	2025	2026
	General government budget balance in % of GDP				
- Baseline scenario	**−2.6**	**−4¼**	**−1¾**	**−¾**	**−¾**
- Alternative scenarios					
real GDP growth ½ pp p.a. below baseline		−4½	−2¼	−1½	−1¾
real GDP growth ½ pp p.a. above baseline		−4	−1¼	0	¼

Figures for the projection period are rounded to a quarter of a percentage point of GDP.

Table 7b: Interest rate sensitivity of the general government budget balance projection

Interest rate trends according to	2022	2023	2024	2025	2026
	General government budget balance in % of GDP				
- Baseline scenario	**−2.6**	**−4¼**	**−1¾**	**−¾**	**−¾**
- Alternative scenarios compared with the baseline scenario					
Interest rate +50 basis points p.a.		−4¼	−1¾	−1	−1
Interest rate −50 basis points p.a.		−4	−1½	−¾	½

Figures for the projection period are rounded to a quarter of a percentage point of GDP.

4.5 Trends in debt levels

From 2013 to 2019 there was a continuous decline in Germany's debt-to-GDP ratio (debt level as a percentage of GDP). By the end of 2019, it stood at 59.6%. This means that it was below the Maastricht reference value of 60% for the first time since 2002. The decline in the debt-to-GDP ratio during the years prior to the outbreak of the COVID-19 pandemic helped put Germany in a position to deliver a strong and decisive response to the challenges presented by the pandemic, without compromising the sustainability of public finances. As a result of the measures taken to combat the pandemic, the debt-to-GDP ratio rose to 69.3% of GDP by the end of 2021. Last year, despite a general government budget deficit, the debt-to-GDP ratio fell significantly to 66.3%. This was essentially due to two effects: First, borrowing on the capital markets in 2021 exceeded budgetary requirements as a result of the uncertain budgetary situation, which thus led to a reduction in new borrowing in 2022; second, the high level of nominal GDP growth in 2022 significantly lowered the debt-to-GDP ratio.

The debt-to-GDP ratio is projected to initially rise again to around 67¾% of GDP in 2023. This increase is largely due to the measures taken in the wake of Russia's war of aggression against Ukraine, in order to stabilise energy supplies and ease the burden on private households and businesses during the energy crisis. In the coming years, the debt-to-GDP ratio is expected to decline steadily to around 65½% of GDP by the end of the projection period in 2026.

Table 8: Trends in the general government debt-to-GDP ratio

	2022	2023	2024	2025	2026
	in % of GDP				
April 2023 update	**66.3**	**67¾**	**66½**	**66¼**	**65½**
April 2022 update	66¾	65¾	65¾	65	64½

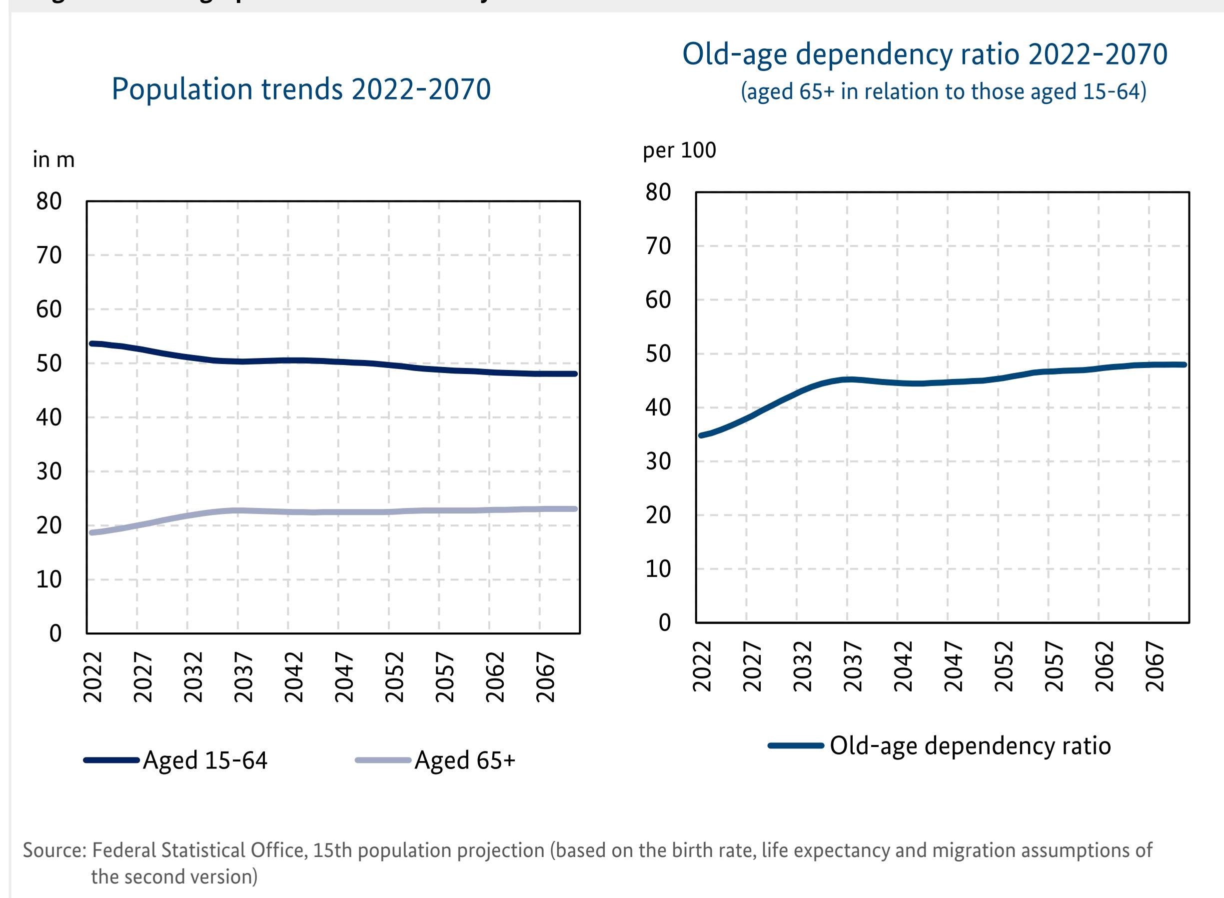
Figures for the projection period are rounded to a quarter of a percentage point of GDP.

5. Long-term sustainability and quality of public finances

5.1 Challenges to the sustainability of public finances

Demographic change is one of the main challenges to the long-term sustainability of public finances in Germany. In the 2020s and 2030s, the number of people of retirement age will increase significantly both in absolute terms and in relation to the number of people of working age. The old-age dependency ratio provides an indication of fiscal burdens that are likely to result from the ageing population. It measures the number of people of retirement age (aged 65+) against the number of people of working age (aged 15–64). While in 2000 the old-age dependency ratio was still around 22, by 2022 the ratio had risen to around 35. In the coming years, the old-age dependency ratio will continue to rise, before plateauing in 2040 and then rising only moderately up to 2070 (see Figure 6).

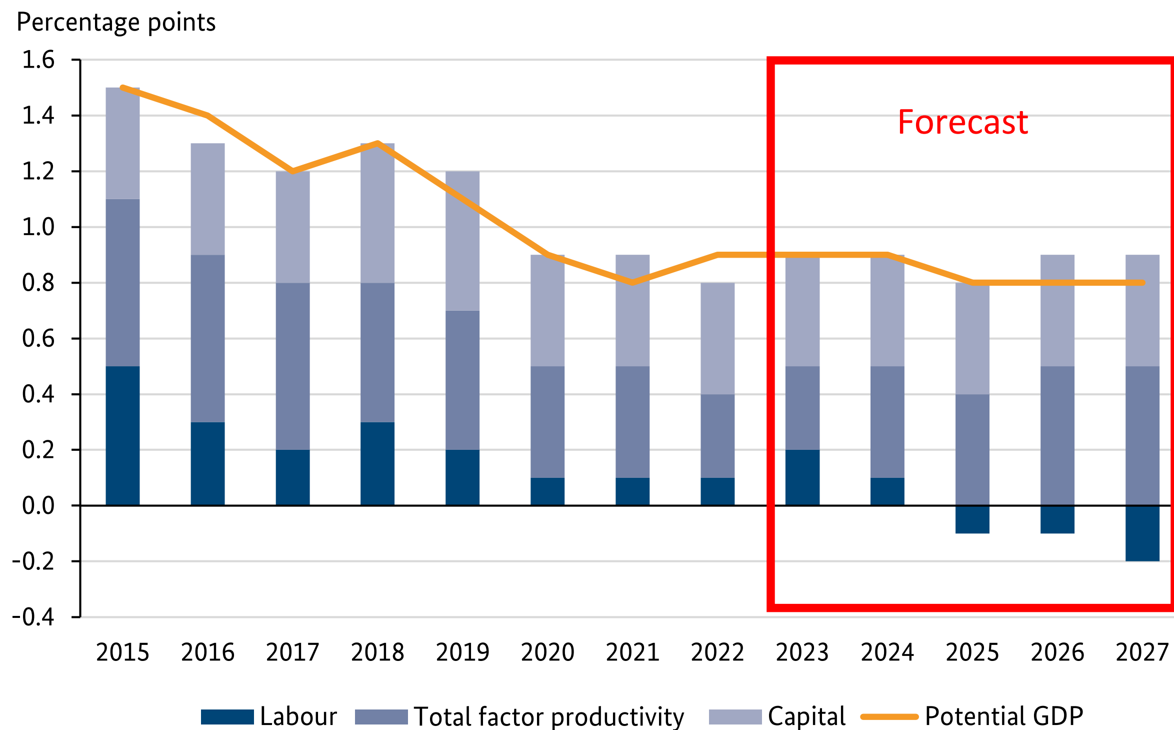
Figure 6: Demographic trends in Germany



Source: Federal Statistical Office, 15th population projection (based on the birth rate, life expectancy and migration assumptions of the second version)

The increase in the old-age dependency ratio is due to two opposing trends in the composition of the population: a rise in the number of people of retirement age, which is partly due to increased life expectancy, and a fall in the number of people of working age, because births and immigration are not fully compensating for the number of employed people moving into retirement. Hence in its latest population projection (15th coordinated population projection), the Federal Statistical Office predicts that by the mid-2030s, the number of people of retirement age (over 67) will have risen by around 4m to a projected 20m. In the decades after that, up to the projection horizon of 2070, the number of people over the age of 67 will remain relatively stable. The number of people of working age will fall by around 3.2m to about 50m in the period up to the mid-2030s. If immigration is higher than forecast in the version of the population projection depicted below, the number of people of working age would develop more favourably. Demographic change also affects the growth of overall potential output. According to federal government estimates, potential output growth is expected to decline from 0.9% in 2022 to 0.8% in 2027. The reason for this is the decreasing (and, in the medium-term projection period, negative) contribution of labour to growth (see Figure 7) and the associated decline in the labour pool.

Figure 7: Trend in German potential output, 2015–2027



Source: Federal government, 2023 annual projection

Efficient, forward-looking and proactive fiscal and economic policies aimed at boosting aggregate supply and the productivity of the economy can mitigate the effects of the rise of demography-related public spending and the projected decline in potential output growth. Measures to enhance the performance potential of the working population and to boost productivity – especially through greater mobilisation of private investment and high levels of public investment – are just one element of the federal government's facilitative and proactive fiscal and economic policy agenda. Also of significance are efforts to increase employment levels among women, older people and the unemployed, and to enable them to increase their working hours, as well the recruitment and integration of immigrants in the labour market. These measures contribute to the solidity and long-term sustainability of public finances and thus to fiscal resilience in Germany.

5.2 Government revenue and expenditure from a long-term perspective

Comprehensive long-term projections of demography-related government revenue and expenditure are needed to assess the long-term sustainability of Germany's public finances from a fiscal policy perspective and to assess where action needs to be taken over time. The Federal Ministry of Finance last presented such projections and an assessment of the long-term sustainability of public finances in its 2020 Sustainability Report. The Sustainability Report is published once every legislative term and the next one is scheduled for the autumn of 2023.

The revenue and expenditure projections contained in the Sustainability Report are based on a range of assumptions regarding long-term demographic and macroeconomic trends, for example population trends and ageing, labour force participation, as well as economic growth and interest rate trends. With regard to public revenues and non-demography-related spending, it is assumed that these will develop in line with GDP growth. Under the additional assumption that during the projection period there will be no further policy change affecting expenditure and revenue, the projections regarding demography-related spending show that action may need to be taken over time.

The findings of the fifth Sustainability Report from March 2020 do not yet reflect the financial impact of the COVID-19 pandemic and the Russian war of aggression or the fiscal policy measures that needed to be taken to address these unforeseen crises. These crises are not expected to have a significant impact on the basic and long-term dynamics of the demography-related spending increases described in the report. However, due to the stabilisation and relief measures, the government's fiscal position has worsened since the last Sustainability Report.

The findings of the fifth Sustainability Report show that in the medium and long term, expenditure on health, long-term care and old age, in particular, will grow disproportionately in relation to GDP. They also show that employment trends will have a major impact on the sustainability of public finances. For example, thanks in part to the positive employment trends over the past decade, contribution rates to the statutory pension insurance scheme have not increased as previously projected; in fact, they have even been reduced. At currently 18.6%, the contribution rate to the statutory pension insurance scheme is 1.3 percentage point lower than in 2010.

The findings of the fifth Sustainability Report underscore the importance of an efficient, forward-looking and proactive fiscal policy that contributes to increased productivity and additional employment opportunities through growth-oriented measures and measures to drive innovation, and which thereby boosts the economy's potential output without putting additional pressure on prices. This forms the basis for self-sustaining and sustainable economic growth and ensures the long-term sustainability of public finances.

5.3 Measures to ensure long-term fiscal sustainability

The long-term sustainability of public finances is ensured if the state is able to meet its financial obligations over the long term. Compliance with this principle is supported by the debt rule, which is enshrined in Germany's constitution. It is therefore all the more important that in 2023 the federal government returns to compliance with the regular borrowing limit.

Germany faces major structural challenges in the medium and long term as a result of decarbonisation, demographic trends and geopolitical changes. By keeping public investment at a high level in the period covered by the fiscal plan, the federal government is investing in a modern infrastructure and helping the German economy navigate the upcoming transformation processes. This strengthens the long-term sustainability of public finances.

Numerous policy approaches are aimed at ensuring this long-term sustainability. These cover both government revenues and spending and extend across a range of policy areas, from fiscal and economic policies, pension, health care and long-term care policies to family and education policies. They also include measures to strengthen the labour market and to boost the overall productivity of the economy, as well as to improve economic capacity and to expand the economy's production capacity and potential to drive innovation.

In this regard, the federal government considers the productivity-enhancing potential of digitalisation, especially in the public administration, as a vital foundation for establishing attractive conditions for companies, for technological advances and hence for future economic growth. Only by making comprehensive use of the opportunities created by digitalisation can the public administration provide user-friendly services to companies and citizens. This is also why, alongside the digitalisation of the economy, infrastructure and education, one of the priorities of the German Recovery and Resilience Plan (DARP) is to modernise the public administration and reduce barriers to investment. Promoting digitalisation and cutting red tape can reduce the demand for labour and consequently also reduce costs. To this end, the federal government plans to adopt a Bureaucracy Reduction Act (*Bürokratieentlastungsgesetz*). With the rollout of fibre networks throughout Germany and the further expansion of mobile networks, the federal government is improving conditions for the economy to thrive. The federal government's large-scale investments in other important areas that are crucial for the future – which besides digitalisation include in particular climate neutrality and education and research – are enabling long-term planning certainty and providing good conditions for companies to harness their growth potential to the full.

With regard to the social insurance system, key approaches to strengthening sustainability include (a) further improving conditions to increase employment rates among women, older people, the unemployed and immigrants, in particular, and to enable them to increase their working hours, (b) increasing net migration of skilled workers and their relatives over the long term and (c) building up skills in the working population. However, it is important to note that there are already 45.6m people employed in Germany – more than ever before. In total, 78% of all people of working age, including 75% of all women, 66% of all non-nationals and 71% of all people aged 55–64, are in gainful employment.

The labour market is critically important for ensuring the long-term soundness of public finances. Here, too, there are a range of challenges related to Germany's rapidly ageing population that need to be addressed. The federal government's stated aim is therefore to counteract the currently projected decline in labour's contribution to potential output growth with targeted measures such as improvements in the area of school education as well as vocational and further training.

A forward-looking approach to securing skilled labour is vital for ensuring future prosperity. The baby boomer generation's gradual withdrawal from the labour market well into the 2030s, as well as structural changes precipitated by digitalisation and decarbonisation and regional shifts in value creation and demand for labour will all contribute to skilled labour shortages. An adequate supply of skilled workers with the appropriate qualifications is an important determinant for the success of the digital as well as the socio-environmental transformation. The goal of the federal government's Skilled Labour Strategy is to support companies and businesses in their efforts to recruit and retain skilled labour with statutory and administrative measures. The five key priorities of the strategy are a) up-to-date education, b) targeted professional development and training, c) increasing labour potential and labour force participation, d) improving the quality of work and work culture, and e) modernising immigration policy and reducing emigration.

The federal government has decided to abolish supplementary income limits for people drawing a pension before retirement age, thus creating new incentives for older people to work. With the continuation and further development of the National Skills Strategy, the federal government is underscoring the importance of further training and skills development, and together with the *Länder*, industry associations and social partners, as well as the Federal Employment Agency (*Bundesagentur für Arbeit*), it is pursuing the goal of maintaining and expanding the employability of workers on a sustainable basis, facilitating individual opportunities for education and advancement and strengthening the innovative capacity and competitiveness of companies. For people receiving basic income support for jobseekers, the introduction of the citizen's benefit (*Bürgergeld*) as of 1 January 2023 has placed an even stronger emphasis on continuing education to open up long-term employment opportunities.

Demographic trends in the coming decades pose a major challenge, particularly in the area of pensions. Sustainable financing of statutory pensions and people's confidence that they will receive an adequate pension in old age need to be brought in line. Important measures have already been implemented in recent years to address these foreseeable demographic challenges. For example, the incremental increase of the standard retirement age to 67 by 2031 will contribute to an intergenerational balance between those receiving a pension and those paying contributions.

The 2022 pension insurance report shows that, despite the economic impact of the COVID-19 pandemic and the war in Ukraine, the finances of the statutory pension insurance system are currently in good shape. For example, the total revenue from contributions collected by the general pension insurance scheme from January to September 2022 increased by 4.9% compared with the same period in 2021. The labour market continued to be very robust in the remaining months of 2022, and employment levels reached historic highs. In the most recent pension insurance report, it was estimated that sustainability reserves at the end of 2022 would amount to €41.7bn, or 1.7 months' expenditure. Based on projections in the pension insurance report, the contribution rate for pension insurance is expected to remain stable at the current rate of 18.6% until 2026. This is below the upper limit of 20% which has been set until 2025. The contribution rate is expected to increase steadily from 2027.

To ensure sustainable financing of the statutory pension scheme and to maintain intergenerational equity, the Act Adjusting Pensions for 2022 and Improving Pension Benefits for Persons with Reduced Earning Capacity (*Gesetz zur Rentenanpassung 2022 und zur Verbesserung von Leistungen für den Erwerbsminderungsrentenbestand*) reintroduced, among other things, the "catch-up factor" in pension calculations. The pension reduction that was not applied in 2021 due to the economic effects of the COVID-19 pandemic was taken into account in the pension increase in 2022. The Act

also introduced improvements for existing recipients of reduced earning capacity pensions.

The federal government aims to maintain the pension level in the statutory pension scheme at 48% beyond 2025. In order to stabilise the contribution rate over the long term, part of the statutory pension scheme will be financed through investments in capital markets (alongside contributions and federal government payments). This "generational capital fund" will be professionally managed as a permanent fund with a global focus by an independent public body. The 2023 federal budget includes a loan totalling €10bn for the purpose of building up the fund. The allocations are financial transactions that do not affect the Federation's assets and do not count towards the borrowing limits set out in Article 115 of the Basic Law.

A specialist dialogue on strengthening occupational pensions was launched in the autumn of 2022. One of its aims is to promote the implementation of the "social partner model" by the parties to collective wage agreements. The "private pension focus group", which was established in November 2022, will carry out preparations for a fundamental reform of the current system of private pensions. The focus group has two tasks: The first is to investigate the possibility of launching a government-managed fund with an opt-out system. The second is to look into the option of providing financial support for private investment products with higher returns than those achieved by the existing Riester pension products, and targeting this support at lower income groups. A final report containing recommendations will be issued in the summer of 2023.

A social dialogue will be conducted with the social partners on how to make it easier for people to stay in employment for longer if they wish. The supplementary income limits for people drawing early retirement pensions were abolished as of 1 January 2023, while the supplementary income limits for recipients of reduced earning capacity pensions have been raised substantially. This has created new incentives to work for people who are drawing a pension before reaching retirement age. By the end of 2027, the federal government will conduct an analysis to determine whether the stated aims of abolishing the supplementary income limits for recipients of early retirement pensions are actually being achieved.

In order for people to feel secure about their old-age provision, it is important that they have easy access to information about their accrued entitlements from statutory, occupational and private pensions. This enables them to make informed decisions about their old-age provision that suit their life circumstances. To this end, the Central Office for the Digital Pension Overview at the Deutsche Rentenversicherung Bund has been working on implementing a digital pension overview since the Pension Overview Act (*Rentenübersichtsgesetz*) came into force in 2021. During the initial operating phase, which began on 16 December 2022, the digital pension overview will be evaluated by test users in several stages. Starting in the summer of 2023, everyone will be able to access the portal and use the new service. The information available will be expanded gradually as additional pension providers are included.

An initiative to strengthen financial literacy will improve people's understanding of fundamental financial concepts and financial products, not just in the area of pensions. In particular, the proposed central financial literacy platform will offer financial literacy tools in user-friendly formats, tailored to the needs of different user groups. The aim is to increase financial literacy among all segments of the population, thus enhancing people's confidence to participate fully in economic life on a long-term basis.

Reforms of the statutory health insurance system are needed in order to achieve stable and reliable financing, thus ensuring the system's long-term sustainability. In 2023, the federal government is meeting this challenge by introducing a set of temporary stabilisation measures that will make use of financial reserves in the statutory health

insurance funds, efficiency reserves in the provision of services, a one-off additional federal subsidy, and a one-off loan from the federal budget in order to prevent high increases in contributions while maintaining high quality standards in healthcare (see “Health” in section 3.3).

In the medium to long term, the federal government plans to implement structural reforms to the statutory healthcare system that will make the provision of services more efficient by focusing on the expenditure side in particular, in conjunction with stabilisation measures on the revenue side. This will help to ensure that healthcare can be financed in a sustainable and socially equitable way. Measures include a stronger focus on prevention and early detection, the expansion of innovative and efficiency-enhancing healthcare approaches (e.g. telemedicine, digital health applications, telemonitoring) and a strategic and user-focused digitalisation of healthcare and long-term care.

In particular, expanding cross-sector care services as well as increasing outpatient provision of previously impatient treatments, while maintaining the same high quality of care, can lead to a less cost-intensive provision of services. Corresponding reform concepts based on the criteria of accessibility and demographic trends are currently being developed by, among others, the Government Commission for Modern and Needs-based Hospital Care, which was established in 2022. In the area of long-term care insurance, too, the federal government is examining the details of a package of measures aimed at sustainably financing care services and stabilising the financial situation of long-term care insurance.

Attracting skilled labour from abroad and enabling foreign workers to remain in Germany is an important factor in dealing with skilled labour shortages, demographic ageing and the associated challenges for the sustainability of public finances. The federal government has adopted a set of cornerstone policies to attract more skilled workers from third countries. The aim is to make Germany a modern immigration country by improving the recruitment of skilled workers, the recognition of professional qualifications, the matching process, cooperation with third countries, language learning, social integration, processes and procedures, and digitalisation. In this context, it is also important to improve the legal framework, an area in which Germany has made significant progress in the form of the draft Act to Further Develop the Immigration of Skilled Workers from Third Countries (*Gesetz zur Weiterentwicklung Fachkräfteeinwanderung aus Drittstaaten*) as well as an accompanying ordinance, both put forward by the Federal Ministry of Labour and Social Affairs. Going forward, skilled labour immigration will be based on three pillars: skilled labour, experience, and potential. The skilled labour pillar will remain the central path to employment-related immigration from third countries and will be open to skilled workers who hold a recognised qualification and have secured an employment contract with working conditions equivalent to those of German nationals. The experience pillar will offer a pathway for qualified third-country nationals to work in Germany without prior formal recognition of their qualifications under certain conditions. The potential pillar is new – it envisages the introduction of an opportunity card that will allow people to come to Germany to look for work, based on a transparent, unbureaucratic points system.

Another important way of stabilising the social security system and thereby ensuring its sustainability is to increase the number of women in employment. The percentage of gainfully employed women with children under the age of 18 already rose from around 67.8% in 2010 to 74.6% in 2021. The federal government has set itself the goal of removing the remaining obstacles that impede higher employment rates among women and an increase in women’s working hours. The federal government believes that the best and most effective approach is to improve basic conditions in a way that enables both men and women to achieve a good balance between family and working life and a fair distribution of

care responsibilities. The funds already provided by the federal government to assist the *Länder* in expanding child daycare play a particularly important role in this context. In addition, a legal entitlement to all-day care for primary school children will be gradually introduced from 2026. To implement this legal entitlement, the federal government is providing the *Länder* with total funding of €3.5bn to expand childcare infrastructure via the special fund for the expansion of all-day education and childcare for primary school-aged children. To take account of the additional burden on the *Länder* (including local authorities) resulting from this legal entitlement, a change in the vertical distribution of VAT in favour of the *Länder* is also planned, rising gradually from €135m per year in 2026 to €1.3bn per year from 2030 onwards. In addition, the federal government plans to change income tax legislation in such a way as to incentivise the equal distribution of child-rearing and care work. The first step in this process will be to replace the combination of tax classes III and V for spouses with the factor-based method under tax class IV. One systemic effect of the tax class III/V combination is that more wages tax is sometimes withheld from the "second earner" (in most cases the wife), which can act as a disincentive to employment. Replacing this tax class combination with the factor-based method will mean that the tax burden on each spouse corresponds to the contribution of his or her wages to the household income. The factor-based method distributes withheld wages tax very precisely and more fairly between the spouses, which should have the effect of significantly increasing the incentive for the second earner in particular to take up employment or work more.

Education and skills development begin in early childhood and extend throughout a person's working life. Not least in view of the expected demographic trends and the projected decline in labour's contribution to potential output, further improvements in the area of school education as well as vocational training and further training are essential. Ensuring that the workforce has the skills needed for the future requires a strong education system with good schools, a robust vocational training system and a competitive higher education system.

One of the federal government's main aims in this respect is to increase educational equity and to ensure that the educational opportunities of children and young people are not dependent on their parents' social situation. The proposed "Startchancen" programme for a better educational start in life is an important part of this. According to current plans, its implementation will start in the 2024/2025 school year. The programme will be aimed at approximately 4,000 general education and vocational schools along the education chain that are facing challenging situations. The aim of the "Startchancen" programme is to initiate structural changes (within the framework of the government's constitutional responsibilities) that will have a long-term impact.

The 27th Act Amending the Federal Training Assistance Act *(27. BAföG-Änderungsgesetz)*, which came into force in 2022, made training assistance (federal training assistance and upgrading assistance) more attractive by providing substantial benefit increases. In addition, an Excellence Initiative for Vocational Training will inject new momentum into initial and further vocational training, with the aim of meeting the growing future demand for skilled workers and providing the best possible individual educational opportunities.

5.4 Measures to increase the effectiveness and efficiency of public revenues and spending

In order to ensure the long-term sustainability of public finances, government revenue and spending are reviewed regularly to assess their effectiveness and efficiency. The primary aim is to make public budgets more target- and results-driven and thereby create additional fiscal space.

As a general trend, rising demography-related costs as well as increasing interest and repayment obligations are reducing disposable spending as a share of total expenditure. For this reason, it is important to set consistent priorities in line with the strategic focus of Germany's fiscal policy. A return to compliance with the regular borrowing limit under Germany's debt rule from 2023 onwards and the restraints this will place on the federal budget mean that spending on present and future challenges will have to be reviewed more rigorously to ensure that it is target- and results-driven, and priorities will have to be set more stringently.

The federal government is committed to boosting the impact of the budget resources it deploys. Since 2015, it has been conducting spending reviews, which complement the top-down budget preparation process. Different subject areas are selected for review every year. In the spending reviews, existing revenue and spending categories are scrutinised to determine whether the associated targets are achieved (effectiveness) and whether this is done economically (efficiency). The subject areas selected can include funding programmes, statutory benefits and cross-departmental tasks. Spending reviews increase transparency regarding the use of public funds, improve the efficiency and impact of their deployment, and serve the purpose of reprioritising spending and creating fiscal space for new measures on both the revenue and expenditure side. So far, seven spending-review cycles focusing on ten different subjects have been conducted and successfully concluded.

In the 2021/2022 cycle, the Federal Ministry of Finance conducted a spending review on "Embedding sustainable development goals in the federal budget" in cooperation with the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection and the Federal Ministry for Economic Cooperation and Development. The aim was to analyse how sustainable development goals can be embedded in the federal budget in a way that enhances their visibility and implementation. The next spending review will focus on "Making the federal budget more results-driven, with a particular emphasis on sustainability". This will be informed by the findings of a study on this subject that has been commissioned by the Federal Ministry of Finance. The spending review will help drive forward the process of making the federal budget more results-driven, an aim that is also enshrined in the federal government's coalition agreement.

The federal government coordinates its subsidies policy on the basis of its subsidy policy guidelines, which are geared towards the sustainable and efficient use of public funds. New investments in Germany's future and in forward-looking technologies are supported primarily in the form of financial assistance. In order to create additional fiscal space, the federal government aims to reduce subsidies and expenditures that are ineffective or harmful to the environment and climate. In this context, evaluations of subsidies play an important role, as they can contribute to strengthening evidence-based and results-driven fiscal and tax policies. Alongside this, sustainability impact assessments enable coordinated and coherent federal government policies that are aligned with the federal government's various goals.

The federal government reports on subsidies in its Subsidy Report, which is published every two years. The next Subsidy Report is scheduled for the summer of 2023. The government's subsidy policy is increasingly being shaped by climate and environmental policies, especially in the area of direct funding in the form of federal financial assistance. In 2022, 75 of the 128 financial assistance items, making up an estimated total financing volume of €15.7bn, were directly related to the environmental and climate goals anchored in the German Sustainable Development Strategy. Their share of the total volume of financial assistance in 2022 stood at 78.9%.

Annex

Table 9: Forecast of macroeconomic trends[1]

	ESA code	2022	2022	2023	2024	2025	2026	2027
		Index 2015=100	% change p.a.					
1. Real GDP chain index	B1g	107.8	1.8	0.2	1.8	0.9	0.9	0.9
2. GDP in respective market prices (€bn)	B1g	3,867.1	7.4	6.1	4.5	2.9	2.9	2.9
Real utilisation of GDP chain index								
3. Private consumption expenditure[2]	P.3	105.9	4.3	−0.2	1.6	0.9	0.9	0.9
4. Government consumption expenditure	P.3	119.5	1.2	−0.4	0.8	0.7	0.7	0.7
5. Gross fixed capital formation	P.51	111.5	0.4	0.0	2.8	1.4	1.4	1.4
6 Changes in inventories (GDP growth contribution)[3]	P.52 + P.53	-	0.4	0.0	0.0	0.0	0.0	0.0
7. Exports	P.6	113.9	2.9	2.2	3.3	3.2	3.2	3.2
8. Imports	P.7	124.3	6.0	1.6	3.2	3.4	3.4	3.4
Contributions to real GDP growth[3]								
9. Final domestic demand		-	2.6	−0.2	1.6	0.9	0.9	0.9
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	0.4	0.0	0.0	0.0	0.0	0.0
11. External balance of goods and services	B.11	-	−1.2	0.4	0.1	0.0	0.0	0.0

1 2022: Federal Statistical Office: as of February 2023
2023 and 2024: from the short-term forecast for the 2023 Annual Projection, January 2023
2025 to 2027: from the medium-term forecast for the 2023 Annual Projection, January 2023
2 Including private non-profit organisations serving households
3 Contribution to GDP growth rate

Table 10: Price trends – deflators[1]

	ESA code	2022	2022	2023	2024	2025	2026	2027
		Index (2015=100)	% change p.a.					
1. GDP		118.6	5.5	5.9	2.7	2.0	2.0	2.0
2. Private consumption expenditure[2]		116.5	6.9	5.5	2.2	2.0	2.0	2.0
3. Public consumption		119.2	5.2	3.1	2.4	2.6	2.6	2.6
4. Gross fixed capital formation		135.9	11.9	5.2	2.9	1.6	1.6	1.6
5. Exports		120.3	11.7	3.5	2.0	1.7	1.7	1.7
6. Imports		126.2	17.3	1.4	1.4	1.8	1.8	1.8

1 2022: Federal Statistical Office: as of February 2023
2023 and 2024: from the short-term forecast for the 2023 Annual Projection, January 2023
2025 to 2027: from the medium-term forecast for the 2023 Annual Projection, January 2023
2 Including private non-profit organisations serving households

Table 11: Labour market developments[1]

	ESA code	2022	2022	2023	2024	2025	2026	2027
		Level	% change p.a.					
1. Employment, persons (domestic)[2] (m)		45.6	1.3	0.3	0.2	−0.2	−0.2	−0.2
2. Employment, hours worked[3] (bn hours)		61.1	1.4	0.5	1.6	−0.5	−0.5	−0.5
3. Unemployment rate[4] (%)		–	2.8	2.8	2.7	3.1	3.3	3.5
4. Labour productivity[5] (2015=100)		102.0	0.5	−0.2	1.5	1.1	1.1	1.1
5. Labour productivity[6] (2015=100)		106.5	0.4	−0.3	0.2	1.4	1.4	1.4
6. Compensation of employees (€bn)	D.1	2,025.3	5.8	5.6	4.9	2.7	2.7	2.8
7. Compensation per employee (thousand €)		48.6	4.2	5.1	4.7	3.1	3.1	3.2

1 2022: Federal Statistical Office: as of February 2023
2023 and 2024: from the short-term forecast for the 2023 Annual Projection, January 2023
2025 to 2027: from the medium-term forecast for the 2023 Annual Projection, January 2023
2 Employed persons, domestic concept
3 National accounts definition
4 Unemployed (ILO) / labour force
5 Real GDP per person employed (domestic)
6 Real GDP per hour worked

Table 12: Sectoral balances[1]

	ESA code	2022	2023	2024	2025	2026	2027
		% of GDP					
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	3.4	4.9	5.3	5.2	5.0	4.9
of which:							
Balance on goods and services		2.1	3.2	3.5	3.5	3.4	3.4
2. Net lending/borrowing of households	B.9	5.4	4.9	5.0	4.8	4.7	4.6
3. Net lending/borrowing of general government	EDP-B.9	−2.6	−4¼	−1¾	−¾	−¾	–
4. Statistical discrepancy		–	–	–	–	–	–

1 2022: Federal Statistical Office: as of February 2023
2023 and 2024: from the short-term forecast for the 2023 Annual Projection, January 2023
2025 to 2027: from the medium-term forecast for the 2023 Annual Projection, January 2023

Table 13: General government budgetary prospects

	ESA code	2022	2022	2023	2024	2025	2026
		€bn	% of GDP				
Net lending (EDP B.9) by subsector							
1. General government	S. 13	−101.3	−2.6	−4¼	−1¾	−¾	−¾
2. Central government	S. 1311	−129.2	−3.3	−4½	−1¾	-1	−¾
3. State government	S. 1312	12.4	0.3	0	0	¼	¼
4. Local government	S. 1313	8.8	0.2	¼	¼	¼	¼
5. Social security funds	S. 1314	6.7	0.2	0	0	−¼	−½
General government (S.13)							
6. Total revenue	TR	1,820.8	47.1	45¾	46	46½	46¾
7. Total expenditure	TE[1]	1,922.1	49.7	50	47¾	47¼	47¼
8. Net lending/borrowing	B.9	−101.3	−2.6	−4¼	−1¾	−¾	−¾
9. Interest expenditure	D. 41	26.1	0.7	¾	1	1	1¼
10. Primary balance[2]		−75.2	−1.9	−3½	−¾	¼	½
11. One-off and other temporary measures[3]		−26.6	−0.7	−¼	0	0	0

Table 13: General government budgetary prospects (continued)

	ESA code	2022	2022	2023	2024	2025	2026
		€bn	% of GDP				
Selected components of revenue							
12. Total taxes (12=12a+12b+12c)		957.5	24.8	24	23¾	24¼	24½
12a. Taxes on production and imports	D.2	420.5	10.9	10¾	10¾	10¾	11
12b. Current taxes on income, wealth, etc.	D.5	527.8	13.6	13	13	13¼	13½
12c. Capital taxes	D.91	9.2	0.2	¼	¼	¼	¼
13. Social contributions	D.61	665.8	17.2	17¼	17½	17½	17½
14. Property income	D.4	16.6	0.4	¼	½	½	½
15. Other[4]		180.9	4.7	4¼	4¼	4¼	4
16. = 6. Total revenue	TR	1,820.8	47.1	45¾	46	46½	46¾
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[5]		1,623.3	42.0	41	41¼	41¾	42¼
Selected components of expenditure							
17. Compensation of employees + intermediate consumption	D.1+P.2	543.6	14.1	13½	13½	13¼	13
17a. Compensation of employees	D.1	306.7	7.9	7¾	7¾	7¾	7¾
17b. Intermediate consumption	P.2	236.9	6.1	5¾	5¾	5½	5¼
18. Social payments (18=18a+18b)		974.2	25.2	24¾	24¾	25	25¼
of which: unemployment benefits[6]		64.4	1.7	1¾	1½	1¾	2
18a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	355.6	9.2	8¾	8¾	8¾	9
18b. Social transfers other than in kind	D.62	618.7	16.0	16	16	16¼	16¼
19. = 9. Interest expenditure	D.41	26.1	0.7	¾	1	1	1¼
20. Subsidies	D.3	72.8	1.9	3¾	1¾	1½	1¼
21. Gross fixed capital formation	P.51	101.4	2.6	2½	2½	2¾	2¾
22. Capital transfers	D. 9	91.4	2.4	2¼	2	1¾	1¾
23. Other[7]		112.6	2.9	2¼	2¼	2	2
24. = 7. Total expenditure	TE[1]	1,922.1	49.7	50	47¾	47¼	47¼
p.m.: Government consumption (nominal)	P.3	848.4	21.9	21¼	21	21	21

1 Adjusted by the net amount of payments in connection with swaps, so that TR - TE = B.9.
2 The primary balance corresponds to (B.9. line 8) plus (D.41. line 9).
3 A plus sign means deficit-reducing one-off measures.
4 P.11+P.12+P.131+D.39+D.7+D.9 (except D.91)
5 Including those collected by the EU and including an adjustment for uncollected taxes and social contributions (D.995), if appropriate.
6 Includes cash benefits (D.621 and D.624) and in-kind benefits (D.631) related to unemployment benefits.
7 D.29+D.4 (except D.41) + D.5+D.7+P.52+P.53+K.2+D.8

Figures for the projection period are rounded to ¼.

Table 14: Projections under the no-policy change scenario

	2022	2022	2023	2024	2025	2026
	€bn	% of GDP				
1. Total revenue at unchanged policies	1,820.8	47.1	46	46¼	46¾	47
2. Total expenditure at unchanged policies	1,922.1	49.7	47	47	47¼	47¼

Figures for the projection period are rounded to ¼.

Table 15: Amounts to be excluded from the expenditure benchmark

	2022	2022	2023	2024	2025	2026
	€bn	% of GDP				
1. Expenditure on EU programmes fully matched by EU funds revenue	9.0	0.2	¼	¼	¼	¼
2. Cyclical unemployment benefit expenditure	−1.5	0.0	0	−¼	0	0
3. Effect of discretionary revenue measures	−27.7	−0.7	−¼	0	¼	0
4. Revenue increases mandated by law	0.0	0.0	0	0	0	0

Figures for the projection period are rounded to ¼.

Table 16: Discretionary measures at the general government level (including discretionary measures at the federal level)

List of new measures*	Detailed description	ESA code	Adoption status / entry into force	Effects on the general government budget (% of GDP)			
				2023	2024	2025	2026
Act to Reduce Bracket Creep to Ensure a Fair Income Tax Schedule and Modify Additional Tax Regulations (*Gesetz zum Abbau der kalten Progression für einen fairen Einkommensteuertarif sowie zur Anpassung weiterer steuerlicher Regelungen*)[1]	Increase in the basic personal allowance, adjustment of tax bracket thresholds, child benefit increase, increase in tax allowances for children, increase in the maximum deduction rate for maintenance payments	D.51	Different provisions enter into force on different dates	−0.16	−0.32	−0.34	−0.34
Creation of a capital stock to stabilise the rise of contributions in the statutory pension insurance system (pension reserve fund)[2]	Creation of a “generational capital fund” to bolster the statutory pension insurance system using capital market yields	F.51	Upon adoption of the 2023 federal budget	−0.24			
Economic defence shield to mitigate the impact of Russia’s war of aggression[3]			Upon adoption of the 2023 federal budget	−2.95	−0.6	−0.2	−0.1
	of which:						
	Financing the gas price brake	D.31		−0.98	−0.4		
	Liquidity and grants for the electricity price brake	D.31		−1.05	0.1		
	Financing further support measures and compensation payments	D.31, D.7, D.9		−0.44	−0.2	0.0	
	Federal holdings in the gas and energy sectors	D.9		−0.37	0.0		

1 The figures show the expansion of tax relief measures adopted in the parliamentary procedure compared with the federal government’s draft act of 14 September 2022. For details (in German), please see: https://www.bundesfinanzministerium.de/Content/DE/Standardartikel/Themen/Schlaglichter/Entlastungen/inflationsausgleichsgesetz.html

2 Affects debt-to-GDP ratio only. For details (in German), please see: https://www.bundesfinanzministerium.de/Web/DE/Themen/Internationales_Finanzmarkt/Generationenkapital/generationenkapital.html

3 For 2023: based on the 2023 Budget Act; for future years: technical assumptions. For details (in German), please see: https://www.bundesfinanzministerium.de/Content/DE/Downloads/Schlaglichter/Entlastungen/abwehrschirm-gegen-folgen-des-russischen-angriffskrieges.pdf?__blob=publicationFile&v=5

*Compared with the Finance Ministry forecast of October 2022.

Table 17: General government debt developments (Maastricht debt ratio)

	ESA code	2022	2023	2024	2025	2026
		% of GDP				
1. Gross debt		66.3	67¾	66½	66¼	65½
2. Change in gross debt ratio		−3.0	1½	−1¼	−½	−¾
Contribution to changes in the Maastricht debt ratio						
3. Primary balance		1.9	3½	¾	−¼	−½
4. Interest expenditure	D.41	0.7	¾	1	1	1¼
5. Stock-flow adjustment		−5.6	−2¾	−2¾	−1¼	−1½
p.m.: Implicit interest rate on debt[1]		1.0	1¼	1½	1¾	2

1 Proxied by interest expenditure divided by the debt level of the previous year.

Figures for the projection period are rounded to ¼.

Table 18: Cyclical developments

	ESA code	2022	2023	2024	2025	2026	2027
		% of GDP					
1. Real GDP growth (%)		1.8	0.2	1.8	0.9	0.9	0.9
2. Net lending of general government	B.9	−2.6	−4¼	−1¾	−¾	−¾	–
3. Interest expenditure	D.41	0.7	¾	1	1	1¼	–
4. One-off and other temporary measures[1]		−0.7	−¼	0	0	0	–
5. Potential GDP growth (%)		0.9	0.9	0.9	0.8	0.8	0.8
contributions:							
- labour		0.1	0.2	0.1	−0.1	−0.1	−0.2
- capital		0.4	0.4	0.4	0.4	0.4	0.4
- total factor productivity		0.3	0.3	0.4	0.4	0.5	0.5
6. Output gap		−0.3	−1.1	−0.3	−0.2	−0.1	0.0
7. Cyclical budgetary component		−0.2	−½	−¼	0	0	–
8. Cyclically adjusted balance (2-7)		−2.4	−3½	−1½	−¾	−¾	–
9. Cyclically adjusted primary balance (8+3)		−1.8	−2¾	−½	½	½	–
10. Structural balance (8-4)		−1.8	−3¼	−1½	−¾	−¾	–

1 A plus sign means deficit-reducing one-off measures.

Figures for the projection period are rounded to ¼.

Table 19: Divergence from previous update

	ESA code	2022	2023	2024	2025	2026
Real GDP growth (yoy in %)						
April 2022 projection		3.6	2.3	0.8	0.8	0.8
April 2023 projection		1.8	0.2	1.8	0.9	0.9
Difference		−1.8	−2.1	1.0	0.1	0.1
General government net lending (% of GDP)	B.9					
April 2022 projection		−3¾	−2	−1¾	−1	−½
April 2023 projection		−2.6	−4¼	−1¾	−¾	−¾
Difference		1	−2¼	0	0	0
General government gross debt (% of GDP)						
April 2022 projection		66¾	65¾	65¾	65	64½
April 2023 projection		66.3	67¾	66½	66¼	65½
Difference		−½	1¾	1	1¼	1

Figures for the projection period are rounded to ¼.

Table 20: Long-term trends in age-related general government expenditure

	2021 (actual)	2030	2040	2050	2060
Expenditure in % of GDP[1]					
(pessimistic variant "T-" / optimistic variant "T+")					
Pension expenditure[2]	9.9	10.9 / 10.3	11.9 / 10.9	12.5 / 11.1	13.4 / 11.5
Healthcare expenditure[3]	8.5	8.3 / 8.1	8.6 / 8.2	8.7 / 8.1	8.7 / 8.0
Long-term care expenditure[4]	1.5	1.6 / 1.5	1.9 / 1.7	2.4 / 2.0	2.7 / 2.0
Unemployment benefits[5]	2.9	2.6 / 2.2	3.4 / 2.3	3.4 / 2.4	3.4 / 2.5
Spending on education and childcare[6]	4.4	4.2 / 4.2	4.2 / 4.4	4.0 / 4.4	4.2 / 4.6
Expenditure on the family benefits system[7]	1.7	1.5 / 1.5	1.5 / 1.5	1.4 / 1.5	1.5 / 1.6
Total age-related expenditure	28.6	28.8 / 27.5	31.2 / 29.0	32.2 / 29.5	33.6 / 29.9
Assumptions					
Productivity growth (%)[8,9]	0.2	1.5 / 1.5	1.2 / 1.2	1.1 / 1.2	1.2 / 1.2
GDP growth (%)[9]	1.0	0.9 / 1.3	0.4 / 1.0	0.6 / 1.1	0.4 / 1.1
Labour force participation (%)					
- Men (15 to 64)	86.6	86.8 / 87.6	86.4 / 87.6	86.3 / 87.6	86.4 / 87.5
- Women (15 to 64)	81.8	83.2 / 83.5	83.1 / 84.1	83.3 / 84.4	83.5 / 84.5
Unemployment rate (%)[10]	3.3	4.3 / 3.5	5.6 / 3.7	5.6 / 3.8	5.7 / 4.0
Old-age dependency ratio (per 100)[11]	34.7	44.0 / 42.7	50.4 / 46.4	54.1 / 46.4	59.9 / 47.8
Total population (m)	83.2	83.1 / 84.7	80.7 / 85.3	77.5 / 85.6	74.0 / 86.0
Population aged 65+ (m)	18.4	21.8 / 21.6	23.7 / 23.1	24.0 / 23.2	24.3 / 23.6

Sources: Actual figures for 2021: Federal Statistical Office, German Pension Insurance, Federal Ministry of Health, Federal Employment Agency, Federal Ministry of Labour and Social Affairs, Federal Ministry of Finance, Federal Ministry for Family Affairs, Senior Citizens, Women and Youth; projections (2030–2060): M. Werding et al. (2020), *Modellrechnungen für den Fünften Tragfähigkeitsbericht des BMF* (Projections for the Federal Finance Ministry's Fifth Sustainability Report), Munich 2020, updated for the base year 2021.

1 Cross-payments between sub-budgets have been consolidated.
2 Statutory pension insurance and civil servants' pensions
3 Statutory health insurance and medical assistance payments for civil servants and eligible relatives
4 Social long-term care insurance (applying the dynamic index used in the EU's 2018 Ageing Report)
5 Unemployment insurance, other Federal Employment Agency expenses and basic income support for jobseekers (including housing costs)
6 Public education spending (including childcare facilities) according to the definition used in the Education Finance Report
7 Child benefit, tax allowances for children under the Income Tax Act, parental benefit
8 Measured by labour productivity
9 Inflation-adjusted figures on productivity growth and GDP growth refer to changes compared with the previous ten-year period.
10 The number of people in employment and the number of unemployed people is determined on the basis of relevant national account strategies and therefore deviates from the microcensus data.
11 The old-age dependency ratio is based on the definition of a working-age population aged 15-64.

Table 21: Recovery and Resilience Facility's impact on the projection – grants

	2020	2021	2022	2023	2024	2025	2026
	Revenue from RRF grants (% of GDP)						
RRF grants as included in the revenue projections	0.00	0.20	0.10	0.11	0.10	0.08	0.05
Cash disbursements of RRF grants from EU	0.00	0.06	0.00	0.26	0.14	0.07	0.07
	Expenditure financed by RRF grants (% of GDP)						
Total current expenditure	0.00	0.11	0.05	0.04	0.02	0.01	0.00
Gross fixed capital formation (P.51g)	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Capital transfers (D.9)	0.00	0.07	0.05	0.07	0.07	0.06	0.04
Investment expenditure	0.02	0.08	0.05	0.07	0.07	0.06	0.04
	Other costs financed by RRF grants (% of GDP)						
Tax revenues losses	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Other revenue losses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Financial transactions							

Any discrepancies are due to rounding.

Table 22: Guarantees

Description	Entry into force of legislation	Guarantee framework in % of GDP	Utilisation in % of GDP
In response to the COVID-19 pandemic			
Federation: guarantees under the Budget Act (*Haushaltsgesetz*), here: status of expansion of guarantee framework (following entry into force of the first supplementary budget for 2020) in 2022 Budget Act pursuant to section 3 (1) sentence 1 no ... [1]	retroactively from 1 January 2022	**6.4**	
1. Exports (export guarantees)		0.1	
2. Loans to foreign debtors, foreign direct investment, EIB loans		0.1	
3. Financial cooperation projects		0.1	
4. Market regulation and stockpiling measures		0.0	
5. Domestic guarantees		5.9	
6. International financing institutions		0.3	
7. *Treuhandanstalt* successor organisations		0.0	
8. Interest compensation guarantees		0.0	
Federation: guarantees under other laws			
Guarantees under the Act on the Assumption of Guarantees within the Framework of the European Instrument for Temporary Support to Mitigate Unemployment Risks in an Emergency (SURE) (*SURE-Gewährleistungsgesetz*)	10 July 2020	0.2	0.2
German contribution to the Pan-European Guarantee Fund	2020[2]	0.1	0.1

Table 22: Guarantees (continued)

Description	Entry into force of legislation	Guarantee framework in % of GDP	Utilisation in % of GDP
Federation: guarantees by special funds			
Guarantees by the Economic Stabilisation Fund under section 21 of the Stabilisation Fund Act (*Stabilisierungsfondsgesetz*)[3]	28 March 2020[4]	2.6	0.0
***Länder*: Expansion of guarantee framework provided by the *Länder*.**	tbd	2.0	0.0
Other federal guarantees			
Federation: total guarantees under the Budget Act pursuant to section 3 (1) sentence 1 no … [5]	1 January 2022	**23.4**	**16.1**
1. Exports (export guarantees)		3.9	3.1
2. Loans to foreign debtors, foreign direct investment, EIB loans		1.6	1.0
3. Financial cooperation projects		1.0	0.8
4. Market regulation and stockpiling measures		0.0	0.0
5. Domestic guarantees		14.2	8.8
6. International financing institutions		2.3	2.0
7. *Treuhandanstalt* successor organisations		0.0	0.0
8. Interest compensation guarantees		0.4	0.4
Federation: guarantees under other laws			
Guarantees for loans to Greece under the Act on Financial Stability within the Monetary Union (*Währungsunion-Finanz-stabilitätsgesetz*)	7 May 2010	0.6	0.6
Guarantees under the Act on the Assumption of Guarantees within the Framework of a European Stabilisation Mechanism (*Gesetz zur Übernahme von Gewährleistungen im Rahmen eines europäischen Stabilisierungsmechanismus*)	23 May 2010[6]	5.5	2.3
Travel Insolvency Fund	25 June 2021	0.0	0.0
Federation: guarantees by special funds			
Guarantees by the Federal Railways Fund (*Bundeseisenbahnver-mögen*)		0.0	0.0
Guarantees by the ERP Special Fund		0.1	0.1
Guarantees by the Financial Stabilisation Fund under sections 6 and 8a of the Stabilisation Fund Act	18 October 2008[7]	10.4	0.0

1 Utilisation levels can be shown only for total guarantees under the Budget Act (see below).
2 Decision by EIB Board of Directors: 26 May 2020; date of Germany's signature confirming participation in fund: 7 July 2020
3 As of 1 December 2022 (for both guarantee framework and utilisation level)
4 Reduced to €100bn under the Act Amending the Stabilisation Fund Act and the Economic Stabilisation Acceleration Act (*Gesetz zur Änderung des Stabilisierungsfondsgesetzes und des Wirtschaftsstabilisierungsbeschleunigungsgesetzes*) of 20 December 2021
5 Including the expansion of the guarantee framework cited above
6 Entry into force of most recent amendment: 1 June 2012
7 Entry into force of most recent amendment: 29 December 2020

Utilisation level as of 31 December 2022 (except where otherwise specified)

Table 23: Technical assumptions

	2022	2023	2024	2025	2026	2027
Short-term interest rate (annual average)	0.67	3.00	2.75	2.75	2.75	2.75
Long-term interest rate (annual average)	1.2	0.2	0.1	0.1	0.1	0.1
USD/€ exchange rate (annual average)	1.05	1.06	1.06	1.06	1.06	1.06
Nominal effective exchange rate	106.6	107.0	107.5	107.5	107.5	107.5
World GDP growth rate (excluding EU)	3.3	2.2	3.5	4	4	3¾
EU GDP growth rate	3.5	−0.2	2.2	2¼	2	1½
Growth of German sales markets (in %)[1]	6.2	0.8	4.0	3¾	3	2¾
World imports growth rate (excluding EU)	5.6	0.8	4.2	2¾	4¾	3¾
Oil price (Brent, USD/barrel)	99	81	77	74	80	82

1 Values rounded to ¼

Federal Ministry of Finance
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To order this publication
Publikationsversand der Bundesregierung
Postfach 48 10 09
18132 Rostock, Germany

Telephone: +49 3018 272 2721
Fax: +49 3018 10 272 2721
email: publikationen@bundesregierung.de

More information is available online at
www.bundesfinanzministerium.de

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