Federal Ministry
of Finance

German Stability Programme

2021

STABI
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German Stability Programme

2021 Update

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Preface to the German Stability Programme for 2021

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.

This update of the German Stability Programme was approved by the federal cabinet on 21 April 2021. The programme follows the Guidelines on the format and content of Stability and Convergence Programmes (Code of Conduct). The federal government submits each 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.

By submitting this updated German 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 2021 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 projections of budgetary trends at all levels of government contained in the Stability Programme are based on all the information known up to the date of publication including, in particular, (a) the federal government's annual projection on macroeconomic trends of 27 January 2021, (b) the results of the Working Party on Tax Revenue Estimates of 12 November 2020, as subsequently updated to take account of the federal government's annual projection, (c) the draft supplementary budget for 2021, which was prepared on the basis of the above annual projection and tax revenue estimates, and (d) the federal government's benchmark figures decision of 24 March 2021 on the federal budget for 2022 and fiscal plan until 2025.

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 as well as the corresponding European Commission analyses and ECOFIN recommendations are published on the European Commission's website at:

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

The coronavirus pandemic is one of the greatest challenges in the history of the Federal Republic of Germany, the European Union and the international community. It is therefore the federal government's priority to counteract the health, social and economic impacts of the coronavirus pandemic in a quick, resolute and targeted manner and to minimise them as far as possible. The federal government is providing strong support for these efforts through its fiscal strategy. For example, it is combining short-term assistance programmes to stabilise the economy with targeted investments to help overcome the coronavirus crisis. During times of economic crisis in particular, investing in research and development is especially important in order to stimulate more innovation and thus ensure a rapid return to growth. There is also a focus on promoting and actively shaping structural changes to help strengthen economic potential. All of these measures lay the foundation for strong and sustainable economic growth after the coronavirus crisis ends and will thus ensure the continuation of sound fiscal policy.

The coronavirus pandemic and the measures taken to contain it have led to a severe downturn in the German economy during the past year. According to the Federal Statistical Office, real gross domestic product (GDP) decreased by 4.9% in 2020. However, the decrease in GDP was less severe than that anticipated by various institutions at the beginning of the crisis. The fiscal policy measures adopted by the federal government made a vital contribution to this stabilisation.

For example, the federal government responded at a very early stage in the pandemic by setting up a safety net to protect Germany from the coronavirus (*Corona-Schutzschild*). This established a comprehensive assistance programme to strengthen the healthcare system, support families, protect jobs and support businesses. Furthermore, during the second coronavirus-induced lockdown in the autumn of 2020, the federal government also adopted additional comprehensive grant programmes to support companies and self-employed individuals. In addition, increases to the short-time work benefit and measures to facilitate access to the scheme were introduced and then extended until the end of 2021. In addition to safeguarding jobs, these measures also provide companies and employees with the necessary degree of planning certainty to enable them to restart quickly once the pandemic has been overcome.

With its unprecedented economic stimulus package, the federal government has furthermore provided a powerful boost to help surmount the coronavirus crisis quickly. Taking into account the United Nations Agenda 2030, the federal government has included a future development package (*Zukunftspaket*) within its economic stimulus package in order to support the process of transitioning the German economy towards greater use of innovative technologies and more sustainable growth. This will increase the growth and productivity potential of the German economy and thus ensure that sound fiscal policy is maintained in the future.

At the European level, the federal government also made early and determined efforts to campaign for an EU-wide crisis response. With the resulting Next Generation EU package, a historic recovery package worth more than €750bn was agreed upon. The €672.5bn Recovery and Resilience Facility (RRF) included within the package makes available extensive financial resources to help tackle the coronavirus crisis and modernise the economies of the individual member states. The German Recovery and Resilience Plan provides for additional measures to overcome the

coronavirus crisis in Germany, ensure a resilient health system and drive forward the green and technological modernisation of the German economy. By means of the measures set out in the German Recovery and Resilience Plan, Germany will implement important country-specific recommendations issued in the context of the European Semester.

Germany is also mindful of its international responsibilities during the COVID-19 crisis. For example, the federal government decided to earmark a total of €10.9bn in funding for international measures during the COVID-19 crisis in 2020 and 2021. This funding is intended to benefit the world's poorest and least-developed countries in particular.

Irrespective of the need to combat the economic impacts of the coronavirus pandemic, targeted public investments are important factors for driving the growth of an economy. The federal government has therefore continued its investment campaign of recent years. This played a key role in ensuring that general government investment in 2020 was significantly higher than in previous years. By means of appropriate structural measures, such as the Investment Acceleration Act (*Investitionsbeschleunigungsgesetz*), which entered into force in 2020, the federal government is simultaneously working to accelerate planning and approval procedures significantly, especially in the transport sector. The Federation will maintain high levels of investment in 2021 and thus help to shape the economic recovery and structural change.

In adopting the Climate Action Plan 2050, Germany has committed to achieving climate neutrality by the middle of the century. German fiscal policy supports this aim by means of extensive measures contained in the Climate Action Programme 2030. As a key element of this programme, Germany introduced a carbon pricing scheme at the start of 2021, based on a national emissions trading system in the heating and transport sectors. The objective of achieving both a green transformation and the decarbonisation of industry will be accompanied by funding programmes and incentive programmes to promote innovation in companies.

Strengthening social cohesion is another key element of the federal government's fiscal policy. From 2021 onwards, there will be significant improvements to financial benefits such as the child benefit, the child supplement for low-income families, and tax relief for single parents. To improve equal opportunities for children and make it easier for people to combine family life and work, the Federation is pressing forward with the expansion of child day-care. Furthermore, to help alleviate the burdens experienced by families during the pandemic and boost consumer demand, a €300 child bonus was paid out for the first time in 2020. In 2021, families will once again receive a child bonus of €150 for every child that is entitled to receive the child benefit.

Due to the scope of the measures required to stabilise the economy during the coronavirus pandemic, the general government deficit for 2020 amounted to 4.2% of GDP. The major portion of the general government deficit was accounted for by the Federation, which financed most of the measures aimed at combating the COVID-19 pandemic. In 2020, the general government debt-to-GDP ratio increased to 69.8%.

Given the ongoing need for measures to fight the coronavirus pandemic, the general government deficit is expected to increase to approximately 9% of GDP in 2021. If the pandemic-related expenditures contained in the Federation's draft budgetary plan for 2021 are not incurred in full, the projected government deficit in 2021 will be lower as a result. For this reason, the deficit projection has a high level of uncertainty. The general government deficit is expected to decline significantly in 2022 and to fall continuously in the years after that. The medium-term budgetary objective of a general government structural deficit no higher

than 0.5% of GDP will be achieved again in 2024. Due to the measures to fight the pandemic, the debt-to-GDP ratio is projected to grow again in 2021, to about 74½%. In the subsequent years up to the end of the projection period, the debt-to-GDP ratio is expected to decline on a continuous basis to roughly 69¼%.

Due to the unusually high level of uncertainty regarding the economic and fiscal effects of the pandemic, the European Commission refrained from initiating the excessive deficit procedure against member states in 2020, and will refrain again from doing so in 2021 in accordance with the country-specific recommendations.

With its future development package (*Zukunftspaket*), alongside other structural measures, the federal government is contributing towards improving the quality and sustainability of public finances. This will safeguard Germany's ability to act in the face of multiple challenges. Alongside demographic change, these also include the financial challenges involved in actively promoting the digital and green transformation. In view of the impending ageing of society, Germany faces the challenge of ensuring that social security systems continue to remain acceptable and reliable in the eyes of both benefit recipients and contribution payers. By incrementally increasing the standard retirement age to 67, Germany has improved the long-term financing of the public pension system. At the same time, the federal government introduced the basic pension on 1 January 2021; this provides for the payment of supplementary benefits to pensioners with medium and low incomes who have paid contributions for at least 33 years. The federal government is thus making a significant contribution towards protecting against old-age poverty.

Alongside this continuous development of the social security system, it is particularly important to harness the innovation potential offered by digital technology in order to drive increases in productivity. Furthermore, increasing labour force participation, actively supporting structural change and promoting the immigration of skilled workers are key components for ensuring long-term sustainability. To this end, the federal government's future development package introduces numerous measures to promote digital and climate-friendly innovations. In order to boost the performance potential of people in work, it is vital to provide opportunities for further training and qualifications and to facilitate a balance between work and family life. Among other things, this includes (a) further enhancing the Federal Employment Agency's continuing education assistance for employees, (b) giving employees without formal qualifications a basic legal right to receive support for further training that leads to a vocational qualification, (c) further expanding child day-care, (d) allowing greater flexibility for part-time work and (e) establishing a legal right for primary school children to receive all-day care, which is expected to take effect from 2025. In order to further expand the available pool of skilled labour, the Skilled Labour Immigration Act (*Fachkräfteeinwanderungsgesetz*), which entered into force on 1 March 2020, was enacted to facilitate access to the labour market by skilled workers from non-EU countries.

The specific federal government measures aiming, among other things, to create favourable conditions for growth and to increase labour force participation are described in detail in Germany's National Reform Programme (NRP), which was adopted by the federal government on 24 March 2021 for submission to the European Commission by the end of April.

2. Aggregate economic conditions in Germany

2.1 Aggregate economic conditions in Germany in 2020

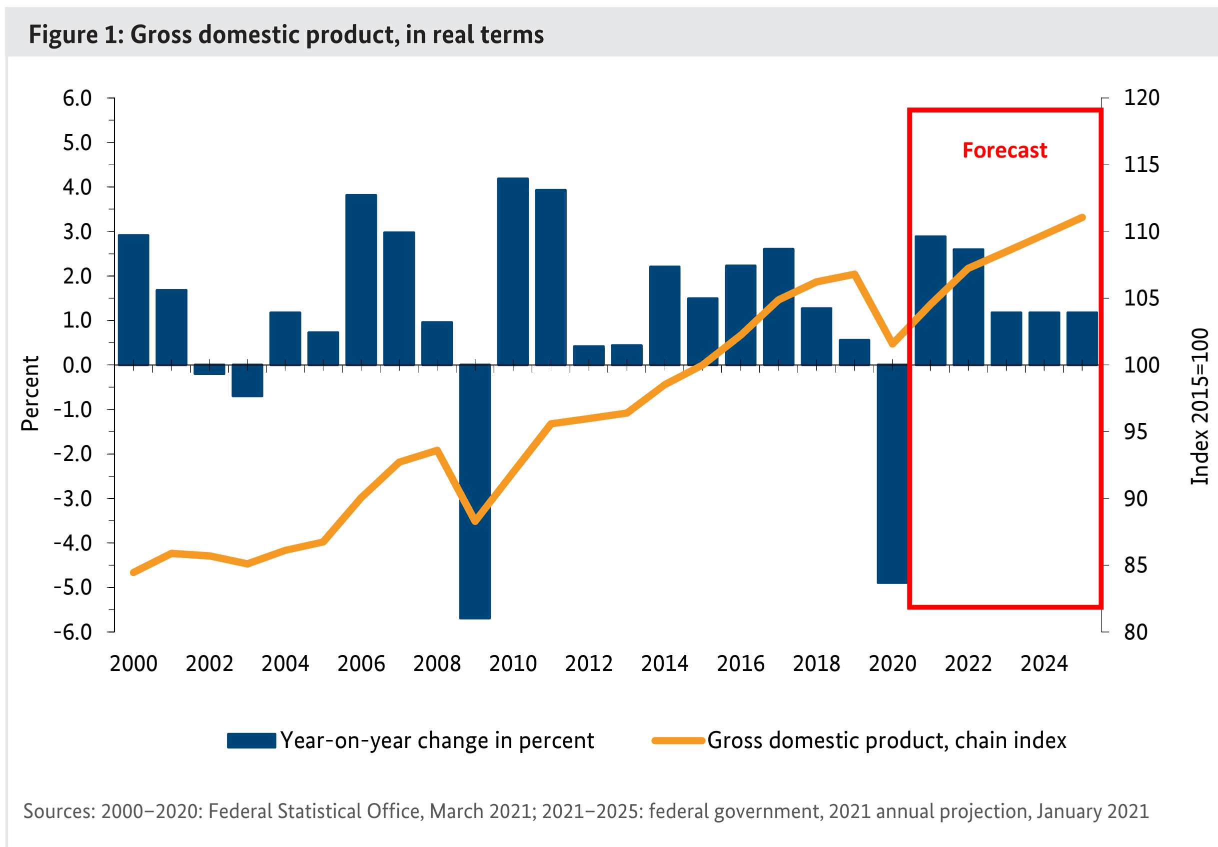
As a consequence of the coronavirus pandemic, real GDP in Germany fell by 4.9% during 2020, as shown in **Figure 1**. A ten-year period of continuous economic growth was thus brought to an end by a deep recession. During the spring of 2020, the measures that were necessary to contain the pandemic and the constraints on international supply chains resulted in a historic decline in economic output. From the summer onwards, following an improvement in the pandemic situation and the gradual relaxation of the containment measures, a noticeable economic recovery began to take place. This was primarily due to the extensive government support measures to preserve jobs and income as well as the federal government's comprehensive economic stimulus package (see also section 3.3). At the end of the year, the economic recovery in Germany was brought to a virtual standstill by a further wave of infection and the associated measures that were taken to contain the pandemic.

While GDP in Germany fell significantly overall during 2020, different economic sectors were affected to varying degrees during the course of the year. In the manufacturing sector, average annual value added declined sharply overall (-10.5% in real terms) due to the huge downturn in the spring. However, as foreign demand increased, output began to grow again in May and this helped to shore up overall economic activity by year end. The service sector, including trade, recorded an overall decline of 4.3% in 2020. This included a significant drop of 11.4% among "other service providers" (which include the art, entertainment and recreation sectors), an 8.1% contraction among business service providers, and a 6.1% decline in the trade, transport and hospitality sectors. In this connection, the trade, transport and hospitality sectors experienced different trends: Whereas online trade grew significantly, both the hospitality sector and the retail sector recorded historic losses in some areas. The coronavirus pandemic had little impact on the construction industry. In fact, value added within this sector actually rose slightly in 2020.

The declines in value added in various economic sectors were reflected in the significant decreases recorded for 2020 in private consumption (-6.1%), gross fixed capital formation (-3.1%), exports (-9.4%) and imports (-8.5%). By contrast, there was a noticeable rise in government consumption (+3.3%) and government investment (+4.2%), which boosted the economy. The assistance measures and the economic stimulus package introduced by the federal government contributed significantly to these increases. As a result of the government measures, the disposable incomes of private households were stabilised in particular. On an annual average, these rose by 0.8%, aided by a sharp increase in social benefits other than social transfers in kind (+8.7% in nominal terms). The effects of the automatic stabilisers are also reflected in this increase.

The pandemic also had an impact on the labour market, as shown in **Figure 2**. On average, approximately 44.8 million persons were in employment in Germany during 2020. This meant that the number of employed persons was down by 486,000 compared with 2019, a drop of 1.1%. Compared with the previous year, the number of unemployed persons rose by 435,000. A larger increase in unemployment was averted, mainly as a result of the short-time work scheme. In April 2020, the number of people in short-time work reached a historic high of 6 million (during the financial crisis, this number peaked at 1.4 million), and an estimated 2.4 million persons were in short-time work at year end.

Figure 1: Gross domestic product, in real terms



Sources: 2000–2020: Federal Statistical Office, March 2021; 2021–2025: federal government, 2021 annual projection, January 2021

On average, consumer prices rose by 0.5% year-on-year in 2020. At the same time, the inflation rate during the second half of the year was mainly in the slightly negative range. The factors contributing to this included, among others, the temporary reduction in VAT rates and the energy price trend during the course of the year.

2.2 Short- and medium-term outlook for the aggregate economy, 2021–2025

The coronavirus pandemic and the necessary containment measures likely continued to have a significant adverse impact on the economy in early 2021. In this respect, leading indicators suggest a two-part economic trend: on the one hand, the service sector is being hit harder by the pandemic and social distancing requirements while, on the other hand, the industrial sector remains robust overall. For example, the export expectations of companies operating in the manufacturing sector have grown significantly since the start of the year and are optimistic again on balance. By contrast, the consumer climate remains low.

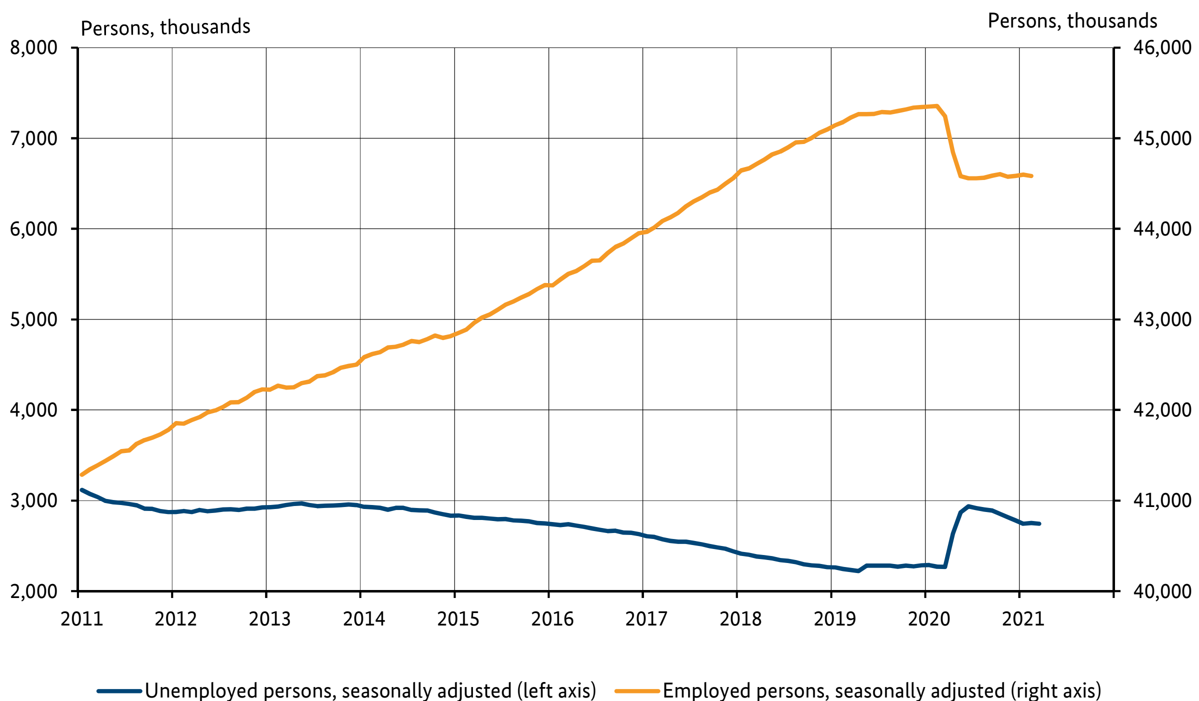
In 2021, overall economic trends will continue to depend largely on the pandemic situation and the necessity for containment measures. In this respect, progress in vaccinating larger portions of the population will play an especially important role. In its annual projection, the federal government expects a 3.0% increase in real GDP for 2021, based on the assumption that economic activity in the economic sectors affected by the pandemic and related containment measures will gradually recover from spring onwards. The overall expansion of the economy is likely to be driven primarily by domestic economic forces. Private consumption is expected to grow substantially by 3.6% this year. As a result of declining levels of uncertainty in particular, plant and equipment investment is also expected to experience strong

year-on-year growth of 6.5% while still remaining well below pre-crisis levels, however. Foreign trade is also expected to see substantial growth. In this regard, projected import growth (+7.2%), which is expected to be spurred by the recovery of the domestic economy and a renewed increase in outbound tourism during the course of the year, is likely to outpace the projected growth in exports (+6.4%), which are expected to receive a boost from the upturn in global industrial activity and international trade. In the government sector, a renewed, if moderate, rise in government consumption is expected (+1.1%), which will further support economic growth.

With regard to the labour market, employment trends are expected to remain subdued at the beginning of 2021. A moderate recovery is then expected during the remainder of the year. Overall, it is expected that the number of people in employment will, on an annual average, remain unchanged at 44.8 million. The number of registered unemployed persons is expected to decline by approximately 76,000, which would thus result in a slight decrease in the unemployment rate from 5.9% to 5.8%.

The recovery of the overall economy is likely to be reflected in a higher rate of consumer price inflation in 2021. Factors contributing to this will include the end of the temporary reduction in VAT rates and the significant resurgence in the oil price following its collapse in the spring of 2020. Overall, consumer prices are expected to rise by 1.5% this year, which is roughly the same as the pre-crisis year of 2019 (+1.4%).

Figure 2: Labour market trends in Germany



Sources: Federal Employment Agency, Federal Statistical Office, April 2021

The coronavirus-induced decline in economic output in 2020 led to a high level of underutilised capacity and thus to a strongly negative output gap. The German economy will continue to run at underutilised capacity this year. However, due to the expected economic growth, the negative output gap is expected to shrink noticeably by approximately two percentage points to −2.3% of potential output. In 2022, the federal government expects real GDP to grow at a rate of 2.6%. The medium-term projection for the 2023–2025 period assumes an average annual growth rate of 1.2%. Domestic demand is expected to remain an important growth driver, sustained in turn by generally robust labour market trends. The moderate rate of GDP growth during the 2023–2025 period will be based largely on trends in potential output (which is expected to increase by 0.9% per year on average). This trend will be significantly influenced by labour's declining contribution to growth. In fact, this contribution is set to turn negative by the end of the medium-term period. This mainly reflects a decline in the working-age population due to demographic change. While slightly higher contributions of capital and productivity to growth may be able to mitigate the impact of labour's declining contribution, they cannot fully compensate for this decline. For this reason, increasing productivity in particular is expected to play an increasingly important role in the future, alongside the immigration of skilled workers and increased labour force participation among women and older people.

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 general government 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 area 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.

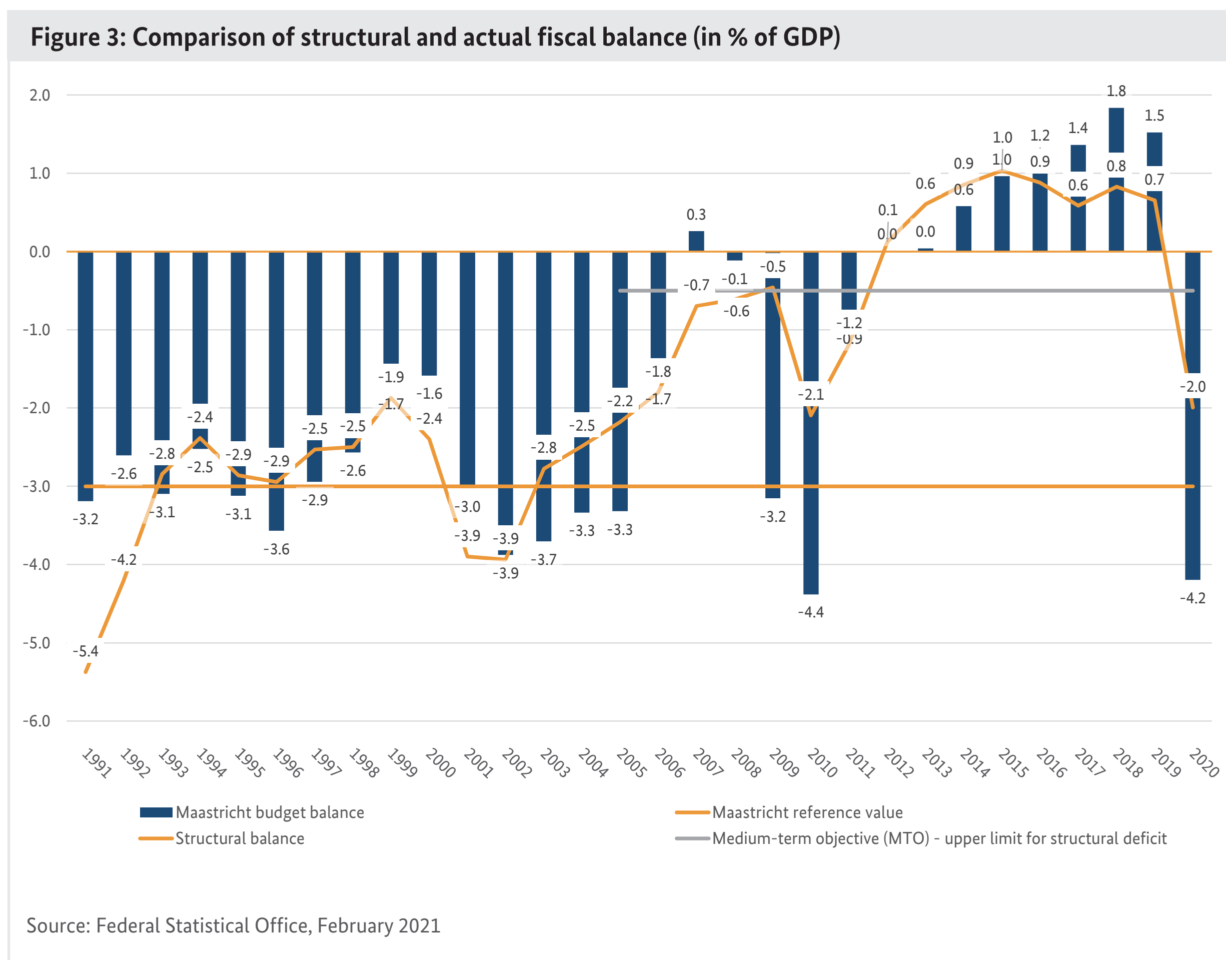
The COVID-19 pandemic and the need to deal with its economic consequences present a huge challenge to the member states in terms of their fiscal policies. They must protect the health of their populations, protect jobs, maintain the productive capacity and competitiveness of their economies and stimulate economic recovery. To provide the EU member states with the fiscal space needed to resolutely combat the pandemic, the European Commission stated on 20 March 2020 that, given the expected severe economic downturn, the conditions for activating the general escape clause had been met. On 23 March 2020, the ECOFIN Council determined that the conditions for applying the general escape clause of the EU fiscal framework (i.e. a severe economic downturn in the euro area or the Union as a whole) had been met. Upon activation of the general escape clause for 2020 – and subsequently, based on the country-specific recommendations, also for 2021 – the member states were permitted, 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 crisis. The procedures of the Stability and Growth Pact were not suspended by the general escape clause.

In line with the European Commission's recommendation on activation of the SGP's general escape clause, the coalition committee in Germany agreed, on 23 March 2020, upon extensive measures to rapidly mitigate the effects of the COVID-19 pandemic. On 25 March 2020, the German Bundestag determined that the preconditions had been met for applying the "debt brake" exception in unusual emergency situations, in accordance with Art. 115 (2) sentence 6 of the Basic Law (*Grundgesetz*). Hence, the Bundestag approved the borrowing set out in the first supplementary budget for 2020, which exceeds the upper limit on new borrowing stipulated in Art. 115 (2) sentences 2 and 3 of the Basic Law. The financial resources were used to implement "timely, targeted and temporary" assistance measures to support the German economy. On 3 June 2020, the coalition committee also agreed upon a comprehensive economic stimulus package in order to counteract the economic impacts of the coronavirus pandemic and strengthen Germany's future viability. In order to finance this package of measures, the German Bundestag approved a second supplementary budget for 2020 on 2 July 2020. In its approval of the 2021 federal budget on 11 December 2020, the Bundestag extended the application of the exception for unusual emergency situations to include fiscal year 2021.

In 2020, due to the extent of the measures necessary to stabilise the economy during this historic and exceptional situation, Germany exceeded the upper limit for the Maastricht deficit for the first time since 2010. The general government fiscal balance (encompassing the Federation, *Länder*, local authorities and social security funds, including their off-budget entities) stood at −4.2 % of GDP in 2020. As shown in **Figure 3**, the general government also recorded a structural deficit of 2.0% of GDP in 2020. In view of the exceptional levels of uncertainty regarding the macroeconomic and fiscal impacts of the coronavirus pandemic, the European Commission took no decisions to initiate excessive deficit procedures in 2020.

As a consequence of the severe economic downturn and the expansionary measures to stabilise the German economy, the debt-to-GDP ratio increased to 69.8% and thus returned to a level above the 60% upper limit. In 2019, Germany's debt-to-GDP ratio fell to 59.7%, 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 margin of fiscal space to fall back on during 2020, when quick and decisive fiscal policy action was required to tackle the coronavirus crisis.

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



Source: Federal Statistical Office, February 2021

3.2 Fiscal situation and strategic direction

According to the conclusions of the ECOFIN Council deliberations of 6 November 2020 on the 2021 annual strategy for sustainable growth, the member states agreed upon the following priorities and recommendations:

> *"[T]hat Member States should continue to provide targeted and temporary fiscal support in 2021, while safeguarding fiscal sustainability in the medium-term and enhancing investments; [...] [Consider] it important to reflect on future fiscal policy orientations; [Underline] that the high uncertainty about the development of the COVID-19 pandemic and its economic and social impact needs to be taken into account in fiscal policy-making; [...] [Call] for making the utmost use of the recovery and resilience facility and swiftly implementing productive investments and structural reforms, in line with the EU priorities, thereby strengthening the resilience of the EU economies and enhancing the growth potential."*

The federal government is taking these guidelines and the Communication of the European Commission to the Council of 3 March 2021 into account and is endeavouring, through its fiscal policy, to minimise the health and economic impacts of the coronavirus pandemic as far as possible. Measures to support the economy will be continuously adapted to the pandemic situation and will be continued for as long as necessary. By supporting the economic recovery, the federal government is helping to overcome the coronavirus crisis. At the same time, the federal government has stated clearly that it aims to use the future-oriented and sustainable measures contained in the economic stimulus package for the purpose of boosting long-term growth potential and productivity potential and, in this way, to ensure the continuation of sound fiscal policy.

The coronavirus pandemic and the measures taken to contain it led to a severe downturn in the German economy during the past year. According to the preliminary estimates of the Federal Statistical Office, real GDP decreased by 4.9% in 2020. The decline in GDP was, however, somewhat less severe than had been predicted by various institutions at the beginning of the crisis. The rapid and targeted support and stabilisation measures, together with the federal government's economic stimulus package and future development package, made a vital contribution in this respect and, in particular, supported the significant rebound in economic activity during the summer and early autumn.

In 2020, the federal government adopted two supplementary budgets to secure financing for the immediate crisis management measures (e.g. immediate assistance and short-term aid) as well as for the measures contained in the economic stimulus package. According to preliminary macroeconomic data, the Federation's structural net borrowing was approximately 1.54% of GDP in 2020 (see **Figure 4**). In total, the Federation recorded net borrowing in the amount of approximately €130bn in 2020. The level of net borrowing therefore remained significantly below the overall amount of approximately €218bn that was originally approved by the German Bundestag. The German Bundestag had determined that an exceptional situation existed in accordance with Article 115 (2) sentence 6 of the Basic Law; this made it possible to invoke the clause that allows deviations from the constitutional debt rule in unusual emergency situations. This determination was necessary to enable borrowing in excess of the limits specified in Art. 115 (2) sentences 2 and 3 of the Basic Law.

Due to the continuation of the unusual emergency situation, the 2021 federal budget, which provides for borrowing of approximately €180bn, will again exceed the permissible borrowing limit stipulated under the debt rule. Faced with the continuing pandemic situation, the federal government has made additional funding available in a supplementary budget to the 2021 federal budget. The government draft of the 2021 supplementary budget increased the Federation's net borrowing to approximately €240bn. This means that the net borrowing amount exceeding the debt brake limit will also increase, from roughly €164bn to roughly €213bn. Looking cumulatively at 2020 and 2021, borrowing nevertheless remains lower than originally planned. This is due to the fact that the amount of borrowing authorised in 2020 was not fully needed, in part because some expenditures were shifted to 2021. The cabinet decision on the benchmark figures for the 2022 federal budget and the fiscal plan to 2025 also provides for recourse to the exception for unusual emergency situations in 2022.

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 2020 and 2021. Due to the supplementary budget, the amortisation plan for 2021 will need to be adjusted. Similarly, an amortisation plan will need to be adopted before the 2022 federal budget takes effect.

With its economic stimulus and crisis management package and the associated future development package, the federal government is reaffirming its commitment to boosting the growth drivers and future viability of the German economy in order to emerge from the crisis in a stronger position. By means of additional public investments in the areas of climate action, digital technology, infrastructure, education and research, the federal government is making a decisive contribution to help Germany meet the key challenges of the future. In this way, the government is actively guiding ongoing processes of economic and social transformation. During periods of crisis in particular, public investments can provide important momentum for long-term growth, because they also trigger increased private investment.

Due to their responsibilities within the federal system, the *Länder* and local authorities account for the bulk of public investment needs. To ensure that they too retain fiscal space, and are thus able make necessary investments both during and after the coronavirus crisis, the Federation is supporting the *Länder* and local authorities by means of numerous measures contained in the economic stimulus package. This includes additional relief in the areas of social security, family and education, transport and public investment.

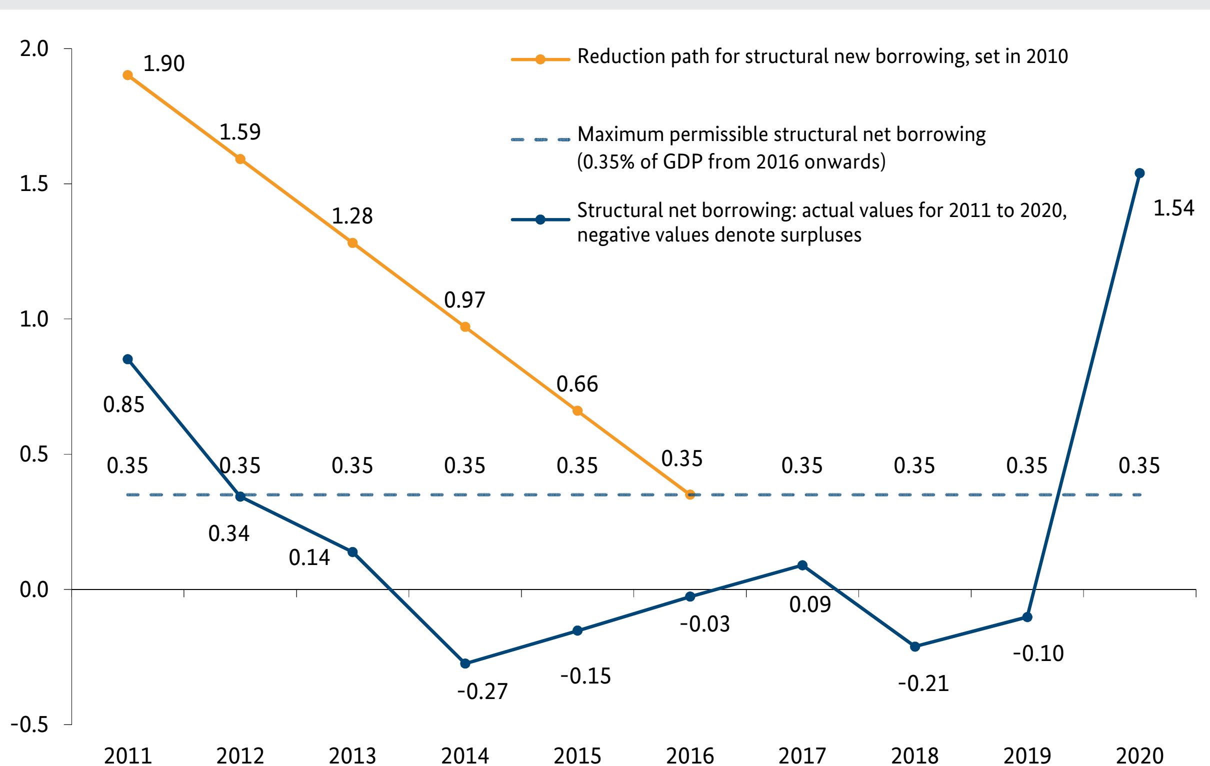
Numerous measures adopted during the coronavirus pandemic, such as the expansion of the short-time work benefit and payment of the child bonus, have proven to be effective in terms of stabilising the labour market and supporting demand. In particular, they are helping to cushion the financial and social impacts experienced by the people and families who are worst affected by the pandemic. In implementing these measures, the federal government is protecting and strengthening social cohesion. Furthermore, the coronavirus crisis has accentuated and accelerated the structural changes that had already begun to take place within many economic sectors and regions across Germany even before the outbreak of the pandemic. The federal government is therefore boosting its efforts to help affected people cope with these structural changes and to ensure this takes place in a socially equitable manner.

At the European level, the federal government has also advocated strongly for a decisive crisis response in the form of the Next Generation EU recovery package, with a capacity of €750bn. Within the framework of the €672.5bn Recovery and Resilience Facility (RRF) that forms part of the EU recovery package, the federal government is currently developing the German Recovery and Resilience Plan. This plan provides for measures worth approximately €23.6bn (at 2018 prices) to

overcome the coronavirus crisis and advance technological modernisation in Germany and Europe. In accordance with the European "Green Deal", at least 37% of the funding provided by the German recovery plan is to be allocated to activities aimed at achieving EU climate targets. A further 20% is to be channelled into projects intended to advance the use of digital technologies in the economy and society.

The federal government's decisive and swift action during the coronavirus crisis is a reflection of a responsible and sustainable fiscal policy. During the crisis, this supports and maintains the macroeconomic base while also safeguarding social equity. At the same time, taking into account the United Nations Agenda 2030, the transformative measures contained in the future development package will serve as the foundation for fostering sustainable growth during the post-pandemic period. In this way, the government's financial capacity to act and the stability of public finances will also be secured over the long term.

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



The financial balances of the Energy and Climate Fund (2011 onwards), the *Aufbauhilfefonds* (a special relief fund established to remedy the damage caused by the June 2013 floods in Germany, 2013 onwards), the Local Authority Investment Promotion Fund (*Kommunalinvestitionsförderungsfonds*, a special fund to promote investment at the local authority level, 2015 onwards), the Digital Infrastructure Fund (2018 onwards) and the special fund for the expansion of all-day education and childcare for primary school-aged children (2020 onwards), all of which are relevant for determining the Federation's structural deficit, are taken into account.

Source: Federal Ministry of Finance

3.3 Fiscal policy measures in terms of expenditure and revenue

Support and stabilisation measures

In a direct response to the crisis in the spring of 2020, the federal government provided immediate assistance in the form of grants. The aim here was to ensure the economic survival of businesses and to bridge any liquidity shortages caused by the coronavirus pandemic. Companies and self-employed persons operating in all sectors of the economy were able to apply for a one-time grant of up to €15,000 for three months. In addition, the federal government created an Economic Stabilisation Fund for the purpose of stabilising larger companies that are particularly important for the German labour market and for maintaining Germany's position as a centre of business and industry. This fund provides assistance, by means of guarantees and recapitalisation measures, to larger companies operating in the real economy and to medium-sized enterprises, in order to help strengthen their capital base and bridge liquidity shortages. The fund has a total capacity of up to €600bn. In addition, the large-scale KfW special programme was launched in March 2020 to ensure that companies experiencing temporary, pandemic-related financing shortfalls have access to low-interest liquidity loans. This special programme is open to commercial companies of all sizes.

Following up on the immediate assistance measures, the federal government then introduced an initial short-term aid programme (*Überbrückungshilfe I*) for the period from June to August 2020. This specifically targeted companies which had, as a consequence of the lockdown in April and May 2020, suffered revenue losses of at least 60% compared with the same period in the previous year. Unchangeable fixed costs were temporarily subsidised up to a maximum amount of €50,000 per month, for up to three months. Following on from this, a second short-term aid programme (*Überbrückungshilfe II*) targeted companies in all sectors which, due to the effects of the pandemic, required assistance to cover fixed costs accruing during the months of September to December 2020. This assistance was aimed at small and medium-sized enterprises, self-employed individuals and freelancers, and not-for-profit companies and organisations.

In the autumn of 2020, the federal government and the *Länder* again adopted lockdown measures to contain the second wave of infections and to prevent the virus from spreading. Companies directly affected by the temporary closure orders could apply for assistance through the Extraordinary Economic Assistance Programme (also referred to as the November and December Assistance Programmes). Indirectly affected companies were also eligible to apply if, among other things, they regularly generated at least 80% of their revenues from companies directly affected by the closure orders. The aid was paid in the form of grants of up to 75% of the respective comparative revenues for the months of November and/or December 2019.

Since the new year, a third short-term aid programme (*Überbrückungshilfe III*) has served as the main assistance measure for companies, self-employed individuals and freelancers. By means of this aid instrument, the federal government has made available a fixed-cost grant to cover pandemic-related revenue losses incurred during the period from November 2020 to June 2021. In compliance with state aid rules, companies, self-employed individuals and freelancers can claim grants of up to €1.5m per month (in the case of groups of related companies, up to €3m per month) for certain fixed operating expenses, up to an aggregate maximum of €12m. Self-employed individuals and single-person corporate entities not claiming any fixed costs under the third short-term aid programme are eligible to receive a one-time "fresh start assistance" (*Neustarthilfe*) payment of up to €7,500. Additional specific aid measures are planned for industry sectors that have been particularly hard hit, such as the retail trade, the events and cultural sectors and the travel industry.

In order to support companies and their employees, and prevent as many lay-offs as possible, the federal government has also introduced increases to the short-time work benefit, as well as measures to facilitate access to the scheme. The federal government has thus delivered a focused response to the labour market challenges triggered by the coronavirus pandemic. The pandemic-related special rules governing the short-time work scheme have been extended until the end of 2021, and jobs remain secure as a result. This provides companies and employees with the necessary planning certainty that will enable them to get back to business at full power after the pandemic has been overcome and thus contribute to a rapid economic recovery. The expansions to the short-time work benefit include, among other things, (a) incremental increases to benefit payments after the fourth and seventh months, (b) the extension of the short-time work scheme to cover up to 24 months (but at the longest until 31 December 2021) and (c) options to reimburse employers for social security contributions. The measures to facilitate access to the scheme include, among other things, a reduction to the threshold above which companies can apply for short-time work for sections of their workforce.

In addition, the federal government has enhanced the incentives to use shortened working hours for the purpose of gaining additional vocational training. For example, for advanced training undertaken after 1 July 2021, the 50% reimbursement of social security contributions will no longer be subject to the condition that the advanced training time amounts to at least 50% of the lost working time. Furthermore, the costs of training courses commenced during the period of short-time work will also be reimbursed.

Economic stimulus package

To support the economic recovery after the end of the coronavirus-induced lockdown in the spring of 2020, the federal government established a comprehensive economic stimulus package in June 2020. A total of roughly €205bn[1] was earmarked for the package in the 2020 and 2021 federal budgets. The measures contained in the economic stimulus package provide targeted assistance to help safeguard the structure of the economy so that – especially as the vaccine roll-out gathers pace – a long-term economic recovery can begin. The package also contains measures to boost investment as a means for decisively tackling impending structural challenges. In many cases, the federal government has built upon existing aid and support programmes to enable the crisis management measures to work as quickly as possible. In addition to accelerating the implementation process, this has also helped to achieve better targeting of the aid measures in many cases. Many of the measures are time-limited, which helps to ensure that they deliver a targeted stimulus.

To stimulate consumer demand, the federal government has used a variety of instruments to boost the disposable incomes of private households. This has included, in particular, a general, temporary reduction in VAT rates until the end of 2020, as well as a sector-specific reduction in VAT rates, which is being continued until 30 June 2021. In addition, a one-time child bonus of €300 was paid out in 2020 and the tax relief for single parents was increased. In 2021, families will again receive a child bonus of €150 for every child that is entitled to receive the child benefit. The Social Guarantee 2021 stabilised social security contributions at a maximum of 40%. In addition, the surcharge that nearly all electricity consumers pay for the purpose of promoting renewable energy sources (EEG surcharge) was capped by means of grants from the federal budget. To increase the incentives for companies

1 Based on the total budget estimates for 2020 and 2021 (as specified in the government draft of the 2021 supplementary budget).

to continue investing in spite of the crisis, the federal government has introduced an accelerated depreciation option. This applies to movable fixed assets acquired or produced in 2020 and 2021. The tax incentives for research were also expanded.

Furthermore, the economic stimulus package includes bonuses to reward small and medium-sized enterprises that continue to offer apprenticeships during the crisis. On the one hand, this helps to provide young people with a seamless start in secure employment. On the other hand, this benefits companies that rely on well-trained skilled staff.

The federal government is also using the economic stimulus package to tackle the long-term challenges posed by climate change, digitalisation and demographic change, and to ensure that these challenges are addressed in a sustainable way. In spite of the current crisis, it is therefore maintaining its efforts to actively guide and shape impending structural changes. For this reason, the future development package that forms part of the economic stimulus package provides for transformative public investments, especially in the areas of climate action, energy transition, mobility and digitalisation. The future development package provides for roughly €50bn in funding for this purpose. These investments will enhance the medium and long-term capacity for innovation and thus boost future growth potential. Overall, the future development package contains funding for climate action measures in the double-digit billions; this includes, among other things, €7bn for implementing the National Hydrogen Strategy and, in total, approximately €2bn for energy-efficient building refurbishment, particularly for heat sourced from renewable energy. Moreover, to increase the level of uptake, the conditions attached to the climate action funding programmes have been made more attractive for local authority applicants.

The *Länder* and local authorities are also experiencing fiscal strain due to revenue shortfalls resulting from the coronavirus crisis. To ensure that they nevertheless remain capable of taking action and making investments in areas that are crucial for Germany's future, the relief measures from previous years have been continued and expanded in a targeted manner. For example, the Federation and the *Länder* have jointly provided local authorities with lump sum compensation (each contributing 50%) for trade tax revenue shortfalls in 2020. In future, the Federation will also take on an additional 25 percentage points of the costs for housing and heating covered by basic income support for jobseekers. This will provide lasting relief for local authority budgets in the area of social expenditure, and especially for local authority budgets that contain high levels of social expenditure. The Federation covered the revenue losses incurred by the *Länder* and local authorities due to child bonus payments (€2.5bn) and due to the reduction in VAT rates during the second half of 2020 (partial compensation of €6.1bn). As part of the future development package, the Federation is also providing local authorities with targeted support for investments, e.g. for energy-efficient building refurbishments and investments in sports facilities.

The German Recovery and Resilience Plan

At the European level, the federal government actively advocated for a decisive crisis response and worked to obtain an agreement among the EU member states, in July 2020, for the Next Generation EU recovery package. The recovery package's central component is the newly created Recovery and Resilience Facility (RRF) with a total volume of €672.5bn (€312.5bn for grants and €360bn for loans). The RRF aims to improve the resilience of member state economies, mitigate the economic and social effects of the crisis and support economic recovery. As key quantitative specifications, the European Commission framework also provides for expenditure ratios of 37% in the

area of climate action and 20% in the area of digital technology, in order to drive further change in these areas. The individual measures contained in national recovery plans are to be assigned milestones and targets and must, as a general rule, contribute towards the implementation of country-specific recommendations for 2019 and 2020.

In order to receive funds from the RRF, the member states are required to submit national recovery and resilience plans. According to the European Commission's 2020 autumn forecast, Germany is entitled to receive grants of approximately €23.6bn (at 2018 prices) by 2026. In Germany, the funds from the RRF will mainly be used to finance measures set out in the economic stimulus package. Germany is not taking out any loans through the RRF. After acceptance of the plan by the European Commission and the Council, an advance payment, amounting to 13% of the total volume, is possible for 2021. The additional payments of EU funding will be disbursed in tranches.

The measures provided for in the German Recovery and Resilience Plan are directed at six priority areas with a clear focus on forward-looking projects to foster green modernisation and digitalisation in the economy and in the public sector. For example, plans are in place to drive forward climate action by means of short- and long-term decarbonisation measures in a variety of sectors, such as electric mobility, building refurbishment and hydrogen technology. A further priority of the German Recovery and Resilience Plan is to intensively expand digital infrastructure; this will be complemented with a digital education initiative and measures to advance digitalisation in public administration. Measures to strengthen the health system and make it more resilient are also included. To give effect to the transnational dimension of the German Recovery and Resilience Plan and generate European added value, plans are in place to implement, among other examples, Franco-German high-technology projects.

Health

The coronavirus pandemic has demonstrated just how important the public health service is in terms of being able to effectively manage and control a dangerous and harmful situation of this magnitude as well as its impacts on all areas of daily life. In order to take account of the experience gained during the pandemic and organise health protection and prevention measures in an even more effective and future-oriented manner, the federal government and the *Länder* have agreed upon a Public Health Services Pact. The Federation will be supporting implementation of the Pact with funding of €4bn up until 2026.

The Future-proof Hospitals Act (*Krankenhauszukunftsgesetz*) has been enacted to implement the "programme to future-proof hospitals", which was adopted by the coalition on 3 June 2020. As of 1 January 2021, the Federation is using this programme to provide hospitals with €3bn in funding to help them invest in modern emergency capacities, digital technology and IT security. In addition, the *Länder* and/or the hospital operators are expected to contribute €1.3bn in investment funding.

To ensure that hospitals and nursing homes can be assisted in emergency situations with rapid and secure equipment supplies, larger volumes of protective equipment and other crisis-relevant consumer goods will, in future, be stocked in Germany. Hence, at the beginning of June 2020, the federal government established the National Health Protection Reserve, earmarking a total of €1bn to be used for building up this health reserve.

The federal government is furthermore providing financial grants to support urgent measures aimed at controlling the outbreak of the coronavirus. Approximately €4bn have been allocated in the 2021 federal budget for this purpose.

To ensure that sufficient intensive care capacities are available during the COVID-19 pandemic, hospitals that are specified by the *Länder* and that are particularly well-suited to treating COVID-19

patients will receive compensation payments for freeing up bed capacity. These will be paid out of the health fund's liquidity reserve to the *Länder*, which will pass the payments on to the hospitals, and the amounts will be reimbursed by the Federation. €4.5bn have already been allocated in the 2021 federal budget for this purpose.

The Federation will also reimburse the national health fund's liquidity reserves for expenses incurred in providing protective masks to vulnerable patient groups. Among other things, it is also assuming the costs for testing members of the public for SARS CoV-2 as well as for the medical fees associated with nation-wide SARS CoV-2 vaccinations conducted by doctor's surgeries. The Federation is in charge of a centralised vaccine procurement process.

Acceleration of public investment

Targeted public investments are important factors for driving the growth of an economy. They directly increase the performance capacity of public infrastructure and, in doing so, they also have the indirect effect of increasing productivity. Moreover, they stimulate private sector investment and thus make a significant contribution to economic recovery. Last but not least, public investments foster further innovation and help to improve the economy's long-term prospects.

Hence, public investments are one of the federal budget's key priorities. In 2020, the federal budget's investment expenditure reached a historic high of €50.3bn. In addition, the Federation continued to provide the *Länder* and local authorities with comprehensive support during 2020 and thereby improved the scope for local investment. For example, the Federation continued and in some cases expanded measures targeting the areas of social security, family and education, investment and transport. The Federation is also continuing to assume a share of the refugee-related costs incurred by the *Länder* and local authorities. The additional relief provided to local authorities by means of the increase in the Federation's contribution to housing costs from 2020 onwards amounts to approximately €3.4bn per year. To provide a further boost to investment, the federal government has also introduced a range of measures to accelerate planning and approval procedures, especially in the areas of transport and digital infrastructure (e.g. the Investment Acceleration Act and legislation to accelerate the implementation of green transport (*Maßnahmengesetzvorbereitungsgesetz*)).

By means of these measures, the federal government has played a key role in driving general government investment to above-average levels, including in 2020. In 2020, government gross fixed capital formation, based on the definition used in the national accounts, rose by 5.6% year-on-year (2019: +7.2%). The Federation is continuing with its investment campaign in 2021. The federal budget has earmarked approximately €61.9bn for investments. In addition, in 2021 the Federation is continuing to provide the *Länder* and local authorities with comprehensive assistance to cushion the effects of the COVID-19 pandemic and is thus opening up further scope for local investment. To this end, many of the measures introduced in 2020 are being continued.

Labour market

The Act on the Promotion of Continuing Vocational Training in Structural Change and on the Further Development of Training Assistance (*Gesetz zur Förderung der beruflichen Weiterbildung im Strukturwandel und zur Weiterentwicklung der Ausbildungsförderung* – "Work of Tomorrow Act"), which entered into force in May 2020, assists employees and companies in addressing the challenges posed by digitalisation and structural change; it also further improves measures to promote advanced training for employees. For example, the new legislation further expands the support measures that were introduced under the Skills Development Opportunities

Act (*Qualifizierungschancengesetz*) for employees and companies particularly affected by structural change. Among other things, this includes an increase in the grants provided by the Federal Employment Agency to help employees and employers cover the costs of training courses and wages. In addition, the application procedures for employers have been simplified through the introduction of an option to submit a single collective application form. Furthermore, new legislation to assist persons without professional qualifications has introduced a basic legal right to support for further training leading to a vocational qualification. The legislation also further enhances opportunities for receiving training assistance. For example, the assisted vocational training scheme (*Assistierte Ausbildung*) has been further developed and enshrined in law as a permanent support mechanism.

Climate action

Curbing global climate change is one of the greatest challenges of our time. The federal government is therefore pursuing the long-term objective of making Germany climate neutral by the middle of the century. In enacting the Climate Action Act (*Bundes-Klimaschutzgesetz*), the federal government has created a legally binding framework for achieving Germany's climate targets. Specifically, it stipulates annual emission reduction targets for the years up to 2030 for specific sectors and introduces a mechanism to monitor and adjust targets if a target is missed. To meet Germany's climate targets for 2030, the federal government adopted comprehensive measures as early as 2019 when it launched the Climate Action Programme 2030. The total funding capacity earmarked for these measures up until 2023 amounts to more than €54bn. This includes a carbon pricing scheme, introduced in 2021, based on a national emissions trading system in the heating and transport sectors. The federal government will use all of the proceeds from the carbon pricing scheme to reduce costs for private individuals and businesses and to invest in climate action measures.

Additional funding programmes and incentive programmes to promote innovation in companies will complement the decarbonisation of industry and enhance Germany's competitiveness as a leading hub for business and industry. This includes the national decarbonisation programme, which is equipped with funding of over €1.5bn up to 2023. In addition, the Federation has provided for, or already implemented, tax incentives (totalling €2.9bn) lasting until 2023 that are targeted towards building refurbishment, electric mobility, reducing railway ticket prices, and increasing federal subsidies for public transport. To promote the use of renewable electricity in consumption sectors and to facilitate the redistribution of proceeds from the national emissions trading system to private individuals and companies, the EEG surcharge has been lowered. At the same time, the housing benefit and the commuter tax allowance have been increased in order to ease social hardships.

To complement the measures contained in the Climate Action Programme 2030 that are designed to reduce the emissions generated by the burning of fossil fuels in the transport sector, the federal government is expanding and modernising public transport infrastructure and offering forward-looking support programmes in the aviation and shipping sectors. To encourage climate-friendly mobility in the public rail and local transport sectors, the federal government plans to spend €62bn by 2030 on maintaining and modernising the railway network. To achieve further emissions reductions within the rail transport sector, additional routes will be electrified. On non-electrified routes, the use of innovative, low-carbon drive systems will be increased.

Germany plans to significantly increase the number of electric vehicles to approximately 10 million by 2030. The federal government is making available approximately €5bn to enable Germany to develop into a leading market for electric mobility. In addition, the €50m in funding that was originally planned for private and commercial charging infrastructure has been increased to €500m

for the period up to 2023. To further support the sustainable, rapid and technology-neutral transformation of the automotive sector, the federal government has, as part of the economic stimulus package, made available an additional €2bn for the years 2020 to 2024 to help fund forward-looking investments in the automotive industry.

Implementing national and international climate action targets will accelerate structural change in some regions and industry sectors within Germany. The phasing out of coal-fired power generation by no later than 2038 is another key project that the federal government is pursuing to ensure that Germany achieves greenhouse gas neutrality. The Structural Reinforcement Act for Mining Regions (*Strukturstärkungsgesetz Kohleregionen*) provides for the Federation to spend, during this period, approximately €41bn on investments and other measures to tackle the structural changes in the affected regions. To ensure the coal phase-out is managed in a socially responsible manner, the Federation will be providing up to €5bn until 2048.

Education and research

The federal government has set itself the goal of enhancing the education system in Germany and advancing the use of digital technology in this area. In addition to supporting young skilled workers and universities, it is also taking various measures to enhance the education of children and adolescents and to promote digitalisation. For example, through the Digital Pact for Schools, the Federation is investing €6.5bn in comprehensive infrastructure to facilitate digital learning. This includes €1.5bn in funding that the federal government allocated in response to the coronavirus pandemic for purposes such as procuring mobile devices for teachers and for pupils in need.

In addition, the provision of financial support to universities also has an important role to play. On the basis of an agreement to strengthen teaching and learning in higher education (*Zukunftsvertrag Studium und Lehre stärken*), the Federation and the *Länder* will take joint measures from 2021 onwards to achieve durable improvements in the quality of teaching and learning at higher education institutions nationwide. To this end, the Federation and the *Länder* will be providing a total of approximately €3.8bn each year until 2023, and then a total of €4.1bn annually from 2024 onwards. Furthermore, the Federation and the *Länder* will, from 2021 onwards, be continuing their efforts to promote quality and innovation in higher education teaching via the Foundation for Innovation in Higher Education Teaching (*Stiftung Innovation in der Hochschullehre*), which was established in late 2020. Initially, from 2021 to 2023, the foundation will be funded institutionally by the Federation alone and then, from 2024 onwards, jointly by the Federation and the *Länder*, whereby the Federation will contribute €110m and the *Länder* will contribute €40m annually.

To boost research and development (R&D) in Germany, the Federation is also providing funding for measures to promote innovation and growth. This will provide incentives for more job creation in Germany and, at the same time, encourage industry and the *Länder* to increase their R&D investment. In this regard, the High-Tech Strategy 2025 serves as a strategic umbrella for the federal government's research and innovation policies. With the fields of action “Societal Challenges”, “Germany's Future Competencies” and “Open Innovation and Venture Culture”, the strategy covers a broad range of priorities intended to drive innovation and growth and thus ensure that Germany is fit for the future.

Families and social affairs

The federal government is strengthening social cohesion with the aid of targeted measures in the areas of family policy, education, and social security. For example, from 2021 onwards, there will be significant improvements to financial benefits such as the child benefit, the child supplement for low-income families, and the tax relief for single parents. High-quality child day-care services play

an important role in children's early educational advancement, and in ensuring equal opportunity. They also help parents to balance family and work life. For this reason, the Federation has pressed forward with the expansion of child day-care services up to 2021 by means of five investment programmes worth a total volume of approximately €5.4bn. In connection with a planned legal right for primary school children to receive all-day care from 2025 onwards, the Federation will also provide the *Länder* with financial assistance of up to €3.5bn to help them expand all-day education and care services for children of primary school age. Out of this financial assistance, the Federation will grant an advance of €750m in 2021 to expedite infrastructure upgrades. To promote early childhood education and care and to facilitate a balance between work and family life, the Federation is providing the *Länder* with funding until 2022 to improve the quality of child day-care. This is being done on the basis of the Good Day-care Facilities Act (*Gute-KiTa-Gesetz*). In this context, approximately €5.5bn is being made available to help further enhance the quality of child day-care and make it more affordable for parents.

The Inclusion Act (*Teilhabechancengesetz*) has introduced two new instruments to facilitate the integration of long-term unemployed persons into the labour market. To combat long-term unemployment, a total of €4bn in additional federal budget funds has been earmarked for this purpose over the 2018–2022 period. On 1 January 2021, the federal cabinet decided to introduce a basic pension into the pension insurance system. This means that pensioners will be able to receive a pension supplement in certain circumstances. Accordingly, the federal grant to the statutory pension system will be increased by €1.4bn in 2021 and will then be adjusted in accordance with the statutory provisions.

International responsibility

The Federal Republic of Germany is mindful of its international responsibilities. In its foreign policy, Germany is committed to a sovereign Europe, the transatlantic partnership, work to support peace and security, the promotion of democracy and human rights, and multilateralism. These guiding principles are also reflected in German fiscal policy.

During the course of the COVID-19 crisis, Germany has dramatically increased its international aid efforts, especially for the world's poorest and least-developed countries. For example, the federal government decided to earmark a total of €10.9bn in funding for international aid measures during the COVID-19 crisis in 2020 and 2021. These funds will be used not only to fight the pandemic but also to expand humanitarian aid and preventive healthcare. One key priority here is to promote the international development of vaccines, tests and pharmaceutical products and to ensure that these also reach people in less-developed countries. With a total contribution of €2.2bn, Germany is one of the top donors to the Access to COVID-19 Tools Accelerator (ACT-A), which aims to achieve these objectives. As part of the "Team Europe" approach, Germany is also participating the EU's joint efforts.

In the area of international development cooperation, the federal government has made a commitment to increase funding for humanitarian aid, crisis prevention and development cooperation and thus at least maintain the current ODA ratio (Official Development Assistance ratio, which measures spending in relation to gross national income), excluding in-donor refugee costs that qualify as ODA. The budget of the Federal Ministry for Economic Cooperation and Development remains on target for both 2020 and 2021 at approximately €12.43bn. The Federal Foreign Office's expenditure on humanitarian aid and crisis prevention measures has risen from €2.52bn in 2020 to €2.58bn in 2021. These amounts include additional funds for tackling the coronavirus

pandemic. Germany is expected to remain the world's second-biggest donor of ODA funds in 2021, and the Federation's actions contribute to this outcome. According to the OECD's calculations, Germany's ODA spending totalled US$24.2bn in 2019. Based on the calculation methods that took effect from 2018, Germany's ODA ratio (including eligible in-donor refugee costs) was thus 0.61% of gross national income (GNI).

Defence expenditure, according to NATO's definition, increased to a total of €51.4bn in 2020. This actual value means that spending has now reached its highest level in 20 years. In this respect, net actual defence-budget spending alone (departmental budget 14) increased by almost €3.5bn year-on-year in 2020. The increased funding has enabled the Federal Armed Forces to continue the process, which commenced during the past few years, of improving staffing levels and upgrading equipment. In this way, Germany is also meeting its mutual defence obligations towards its NATO allies and supporting the EU's common foreign and security policy.

Taxes and social security contributions

On the revenue side, the federal government is placing equally great emphasis on a forward-looking, growth-friendly and socially equitable tax policy. Lower taxes and social security contributions, especially for families and low and middle-income earners, serve to boost disposable incomes and help to overcome the challenges of the coronavirus crisis. The tax system is also a key instrument in terms of overcoming the major challenges posed by climate change and digitalisation.

The measures set out in the Second Family Tax Burden Reduction Act (*Zweites Familienentlastungsgesetz*), along with the abolition of the solidarity surcharge for approximately 90% of wages tax payers and income tax payers who were previously subject to it, will relieve the tax burden on low and middle-income groups in particular by just over €17bn in 2021, and just over €22bn in 2022. These are the largest permanent tax cuts in recent years. This sends out an important signal to low- and middle-income families and individuals and makes our tax system fairer. The measures from 2019, provided for under the first Family Tax Burden Reduction Act (*Familienentlastungsgesetz*), had already provided relief totalling approximately €9.8bn each year. In addition, domestic demand was stabilised during the second half of 2020 by means of the temporary reduction in VAT rates. As one of the measures to address the impact of the coronavirus, the tax relief for single parents was more than doubled to €4,008 per year. In addition, the income tax rate has been adjusted from 2021 onwards through an increase in the basic personal allowance and modifications to tax bracket thresholds. This ensures the tax-exemption of subsistence income and offsets the effects of bracket creep.

The temporary and limited increase to the upper limit for loss carrybacks will temporarily improve the liquidity of companies to assist them during the crisis situation. The upper limits for loss carrybacks were increased for 2020 and 2021 and a mechanism was introduced that allowed loss carrybacks for 2020 to be utilised immediately in 2019 tax returns and thus to generate an immediate financial benefit. Furthermore, social security contributions were stabilised at a maximum of 40% by means of the Social Guarantee 2021, and the EEG surcharge was capped by means of grants from the federal budget. To reinforce incentives for business investment despite the crisis situation, the federal government has temporarily increased the tax incentives for research and introduced temporary accelerated depreciation options for movable assets.

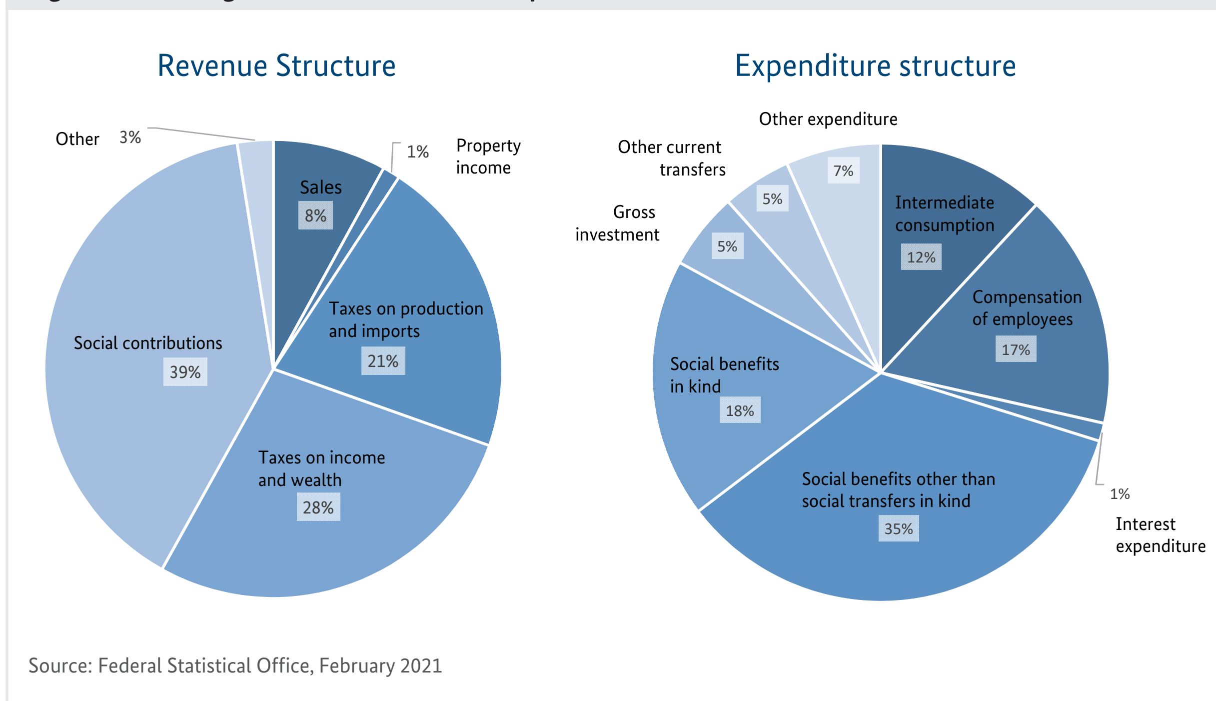
Tax policy priorities continue to include, among other things, ongoing work to simplify tax procedures, modernise the tax enforcement system, and increase tax fairness both nationally and internationally.

The federal government sees huge advantages in coordinating tax policy with European and international partners. Coordinated standards developed by multiple states serve to increase not only acceptance but also transparency. They also help to avoid double taxation. The recommendations agreed in 2015 as part of the OECD and G20 initiative to combat base erosion and profit shifting (BEPS) have been implemented to a large extent. A current work priority at the international level is to develop a strategy for taxing the digital economy. The federal government's aim is to develop a long-term, global solution. At the OECD level, a two-pillar concept has been developed. Pillar 1 aims to realign the global distribution of rights to tax company profits in a manner that takes account of digital business models. Based on a proposal submitted by Germany and France, Pillar 2 aims to introduce a global minimum effective tax. The scope of Pillar 2 is not limited to taxation of the digital economy alone but will instead encompass all areas of the economy.

In 2018, to enable cross-border tax avoidance practices and profit shifting activities to be identified and curtailed promptly, the EU member states agreed the Directive on the automatic exchange of information in relation to reportable cross-border arrangements. This Directive provides that the member states must, by 31 December 2019, establish the statutory bases for an obligation to report cross-border tax arrangements and an associated automatic exchange of information. In October 2020, the first European exchange of information on cross-border tax arrangements took place. On 1 July 2020, participating EU member states automatically exchanged information on specific cross-border tax arrangements for the first time. These measures have further increased transparency in the field of taxation.

Furthermore, the federal government is supporting negotiations to introduce a financial transaction tax within the framework of enhanced cooperation at the European level. On 1 December 2020, the ECOFIN Council also confirmed an amendment to the Council Directive on administrative cooperation in the field of taxation (DAC 7). As of 22 March 2021, this Council Directive has now been officially adopted. The agreement was preceded by negotiations conducted during Germany's Presidency of the Council of the EU. DAC 7 contains provisions for the introduction of a standardised reporting obligation alongside an international exchange of information regarding sellers operating on digital platforms. It will also improve the legal framework for conducting joint company audits as well as the existing rules to increase the efficiency of administrative cooperation.

Figure 5: General government revenue and expenditure structure 2020



Source: Federal Statistical Office, February 2021

3.4 Implementation of country-specific fiscal policy recommendations

The fiscal strategy outlined above also addresses the country-specific fiscal policy recommendations issued by the Council on 20 July 2020.

The Council recommends that Germany should combat the COVID-19 pandemic and support the economy in line with the general escape clause. Germany should furthermore, as soon as economic conditions permit, ensure debt sustainability and increase investment. In addition, the health system should be strengthened.

As in previous years, the Council recommends that investment activity should be boosted by prioritising public investment projects and supporting private investment. In doing so, the focus should be placed on green and digital transformation. In addition to the areas of education, research and development, digitalisation and broadband expansion, the investment recommendation also encompasses transport and energy infrastructure and affordable housing. In addition, digital administration services should also be provided, and regulatory and administrative burdens for businesses should be reduced.

In 2021, the European Semester has been temporarily adapted to allow for coordination with the Recovery and Resilience Facility. The member states will be submitting their National Reform Programmes and their Recovery and Resilience Plans. In these documents, they will provide descriptions of the reforms and investments which they will be making, in line with the objectives of the Facility. The Commission will then assess the content of the Recovery and Resilience Plans, which replace the country reports for the European Semester 2021. The federal government measures for implementing the country-specific recommendations of the Council of the European Union are described in detail in Germany's 2020 National Reform Programme, which was adopted by the federal cabinet on 24 March 2021, as well as in sections of the German Recovery and Resilience Plan, which is scheduled for adoption by the federal cabinet on 27 April 2021.

4. General government budget balance and debt level projection

Medium-term objective

Germany's medium-term objective (MTO) is to ensure that its general government structural deficit does not exceed 0.5% of GDP.

4.1 Trends in general government revenue and expenditure

The projections of budgetary trends at all levels of government presented here are based on (a) the federal government's annual projection on macroeconomic trends of 27 January 2021, (b) the results of the Working Party on Tax Revenue Estimates of 12 November 2020, as subsequently updated to take account of the federal government's annual projection, (c) the draft supplementary budget for 2021 and (d) the federal government's benchmark figures decision of 24 March 2021 on the federal budget for 2022 and fiscal plan to 2025, which was prepared on the basis of, among other things, the above documents and results. The reference date for the projection is 30 March 2021.

The 2021 federal budget makes provision for additional expenditures on measures to fight the COVID-19 pandemic. The projection assumes that this provision will be spent in full. If the expenditures (especially the provision for pandemic-related measures) included in the Federation's draft budgetary plan for 2021 should turn out not to be required in full, the projected government deficit presented here for 2021 would be correspondingly lower. The projection therefore remains highly uncertain.

Decline in revenues as a result of the coronavirus pandemic

In 2020, government revenue declined by 3.0% year-on-year.[2] In particular, tax revenue declined by 6.5% and thus remained well below the level of the previous year. On the other hand, a slight increase was recorded in revenues from social security contributions; however, with a growth rate of 1.7%, this was significantly below the levels of previous years. As overall revenue did not decline as steeply as nominal GDP, the revenue ratio grew from 46.7% of GDP in 2019 to 46.9% of GDP in 2020 (see **Table 1**). By contrast, the tax-to-GDP ratio fell significantly from 24.0% in 2019 to 23.2% in 2020.

The revenue ratio is projected to fall to 45¾% of GDP during the current year and then rise steadily to reach 47¾% of GDP by the end of the projection period. At the same time, it is projected, based on the underlying estimates, that the tax-to-GDP ratio will initially fall to 22½% in 2021 but then rise again during the subsequent years to reach 23¾% in 2025. The social security contribution ratio is also projected to be slightly lower this year (approximately 18%) than in the previous year; however, it is then projected to rise again to around 19% by the end of the projection period.

1 Unless otherwise specified, all data contained in this projection are based on the definitions laid down in the 2010 European system of national and regional accounts (in accordance with Regulation (EU) No 549/2013).

Table 1: Trends in the government revenue ratio

	2020	2021	2022	2023	2024	2025
	in % of GDP					
Taxes	23.2	22½	23	23¼	23¾	23¾
Social security contributions	18.2	18	18¼	18½	19	19
Taxes and social security contributions	41.5	40½	41¼	42	42½	42¾
Total revenue						
April 2021 update	**46.9**	**45¾**	**46¼**	**47**	**47½**	**47¾**
April 2020 Update	47¼	-	-	-	-	-

Differences between (a) the total tax ratio and (b) the sum of the tax ratio and the social contribution ratio are due to rounding; figures for the projection years are rounded to a quarter percentage point of GDP.

Government expenditure ratio only temporarily above 50%

Due to the measures that were necessary to combat the coronavirus pandemic, government expenditure rose significantly in 2020. At 9.3%, the increase was three times as high as the annual average increase in expenditure (3.1%) during the eight preceding years. For example, social benefits other than social transfers in kind increased sharply (by 8.7%). A substantial increase in subsidies (126.6%) was recorded as a result of the expenditure on government immediate assistance and short-term aid measures, among other things. Intermediate consumption also increased significantly, by 11.4% year-on-year; this rise reflects the expenditure for protective equipment, testing centres and vaccination centres, among other things. As a result of the increase in expenditure and the decline in nominal GDP, the government expenditure ratio (government expenditure as a percentage of GDP) increased to 51.1% in 2020 (see **Table 2**). This means that the government expenditure ratio exceeded 50% for the first time since 1995 (when it was 55.1%).

As a consequence of the measures that remain necessary in order to fight the coronavirus pandemic, expenditure is expected to increase significantly again in 2021, by around 11¾% compared with the previous year. This is mainly attributable to two items that have been included in the 2021 federal budget: first, the pandemic-related assistance for businesses, which amounts to around 2% of GDP and, second, budget-wide additional expenditures (*globale Mehrausgaben*) for potential further measures that may be required to fight the COVID-19 pandemic, which amount to approximately 1¼% of GDP. This projection assumes that the budget-wide additional expenditures will be disbursed and, furthermore, that all of the budgeted assistance for businesses will be needed. Without these two items, the increase in expenditures would correspond to approximately 5¼% compared with 2020. When the measures required to tackle the coronavirus are discontinued, it is expected, based on the projection presented here, that government expenditure will decline by approximately 5¾% in 2022 and then, from 2023, increase at a slower rate than nominal GDP. The government expenditure ratio will therefore decline to approximately 47¾% of GDP in 2025.

Government gross fixed capital formation continued to rise sharply in 2020. At 5.6%, the rate of growth was once again well above the long term average (+2.1%). A further significant rise in government gross fixed capital formation is expected in 2021; at the end of the projection period, the investment ratio is forecast to be approximately 2¾% of GDP and thus above the pre-pandemic level (2019: 2.5%).

Table 2: Trends in the government expenditure ratio

	2020	2021	2022	2023	2024	2025
	in % of GDP					
April 2021 update	**51.1**	**54¾**	**49½**	**48½**	**48¼**	**47¾**
April 2020 Update	54½	-	-	-	-	-

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

4.2 Trends in the government budget balance

In 2020, as a consequence of the coronavirus pandemic, Germany recorded a budget deficit for the first time since 2011 (see **Table 3**). At 4.2% of GDP, this was, in percentage terms, the third-largest deficit since reunification. Deficit levels were higher than this only in 1995 (when the German government assumed the debts owed by the *Treuhand* privatisation agency) and 2010 (as a result of the economic and financial crisis), when budget deficits stood at 9.4% of GDP and 4.4% of GDP, respectively.

In 2020, the Federation accounted for the largest share of the general government deficit (see **Table 4**). Including its off-budget entities, the Federation recorded a deficit of 2.6% of GDP. The *Länder* and the local authorities recorded a cumulative deficit amounting to 0.6% of GDP. The deficit for social security funds was 1.0% of GDP.

Table 3: Trends in the general government balance

	2020	2021	2022	2023	2024	2025
	in % of GDP					
April 2021 update	**-4.2**	**-9**	**-3**	**-1½**	**-½**	**0**
April 2020 update	-7¼	-	-	-	-	-

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

Table 4: Budget balances according to government level

	2020	2021	2022	2023	2024	2025
	in % of GDP					
Central government	-2.6	-6¾	-2¼	-1	-½	0
State government	-0.5	-¾	-¼	-¼	0	0
Local government	0.0	-½	-½	-½	-¼	-¼
Social security funds	-1.0	-1	-¼	0	¼	¼
General government	**-4.2**	**-9**	**-3**	**-1½**	**-½**	**0**

Figures for the projection period are rounded to a quarter of a percentage point of GDP. Any discrepancies are due to rounding..

A general government deficit of approximately 9% of GDP is expected this year. This year-on-year increase in the deficit is due, in particular, to an increase in the federal government deficit; this is projected to rise significantly once again to approximately 6¾% of GDP. In this respect it is assumed that the €240.2bn (6.9% of GDP[2]) in net borrowing included in the 2021 federal budget (including the draft supplementary budget of 24 March 2021) will be tapped in full. It is assumed, in particular, that the full amount of the budget-wide additional expenditure on measures to fight the COVID-19 pandemic, as provided for in the 2021 federal budget (including the draft supplementary budget), will be needed. Without this budget provision, the projected general government deficit for 2021 would be 7¾% of GDP.

The impact on the general government budget balance of all of the measures included in the projection is set out in Table 5. This is projected to be −6¼% of GDP in 2021 and hence significantly greater than in the previous year (see **Table 5**).

It is expected that the general government deficit will shrink significantly to approximately 3% of GDP in 2022. The projected decrease in the deficit in comparison to 2021 is mainly based on the fact that the pandemic-related assistance for businesses and other temporary additional expenditures on measures to fight the pandemic are set to be discontinued. The deficit is also projected to show a continuous decline in the subsequent years; it is expected that the general government budget will be back in balance by the end of the projection period.

Table 5: General government budget balance: impact of measures to fight the coronavirus pandemic and of other measures contained in the projection

	ESA code	2020	2021	2022	2023	2024	2025
		in % of GDP					
Employee compensation	D.1	0.1	0.0	0.0	0.0	0.0	0.0
Intermediate consumption	P.2	0.6	1.0	0.3	0.1	0.1	0.0
Social payments	D.62, D.63	0.9	0.5	0.2	0.2	0.2	0.0
Subsidies	D.3	0.6	2.9	0.2	0.0	0.0	0.0
Other current transfers	D.7	0.1	0.3	0.0	0.0	0.0	0.0
Gross fixed capital formation	P.51g	0.1	0.2	0.1	0.0	0.0	0.0
Capital transfers	D.9	0.1	0.4	0.2	0.1	0.1	0.0
Total expenditure		**2.6**	**5.4**	**1.0**	**0.5**	**0.4**	**0.0**
Taxes on production and imports	D.2	-0.4	-0.4	-0.1	0.0	0.1	0.1
Current taxes on income, wealth, etc.	D.5	-0.2	-0.3	-0.5	-0.5	-0.4	-0.1
Net social contributions	D.61	-0.2	-0.2	0.0	0.0	0.0	0.0
Total revenue		**-0.8**	**-0.9**	**-0.6**	**-0.5**	**-0.3**	**0.0**
Impact on balance		**-3½**	**-6¼**	**-1½**	**-1**	**-¾**	**-0**

The projected impact for 2021 includes the federal budget provision for costs in connection with measures to fight the COVID-19 pandemic (roughly 1¼% of GDP). Figures for the projection period are rounded to a quarter of a percentage point of GDP. Any discrepancies are due to rounding.

2 The difference between the net borrowing planned in the federal budget for 2021 (6.9% of GDP) and the expected federal government deficit (approximately 6¾% of GDP, see Table 4) stems from the fact that the federal government deficit is (a) calculated on the basis of the definition used in the national accounts and (b) also includes the budget balances for the Federation's off-budget entities.

4.3 Trends in the general government structural balance

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, the general government budget balance is affected by a number of cyclical, structural and exceptional factors that lie largely outside the control of governments. For this reason, EU budgetary surveillance looks at structural indicators in order to assess the impact and stance of fiscal policy. To do this, the structural balance and primary expenditure trends are compared with GDP trends at normal capacity utilisation levels.

On this basis, the general government structural balance in 2020 amounted to -2.0% of GDP (see **Table 6**). In 2021, the structural deficit is expected to increase to approximately 7¾% of GDP. The increase (5¾% of GDP) is therefore expected to be larger than the increase in the nominal deficit (4¾%), because the cyclical deficit is expected to decline.

The structural deficit is also expected to decline noticeably in the subsequent years. The medium-term objective – i.e. a structural deficit no higher than 0.5% of GDP – is expected to be met once again in 2024. It is also projected that the general government budget will be structurally balanced in 2025. This is based on the federal government's benchmark figures decision on the fiscal plan, including the assumption that the necessary adjustments to ensure compliance with the federal debt brake in 2024 and 2025 (amounting to €4.9bn and €15.2bn, respectively), which are included in the benchmark figures decision, will in fact be implemented. If the necessary adjustments are not implemented, the structural budget balance for 2024 would also be approximately -½% of GDP and then approximately -¼% of GDP in 2025 (see **Table 7**).

Table 6: Structural balance compared with actual balance and GDP trend

	2020	2021	2022	2023	2024	2025
	in % of GDP					
Structural balance	-2.0	-7¾	-2¾	-1¼	- ½	0
Actual balance	-4.2	-9	-3	-1½	- ½	0
	(% change yoy)					
Real GDP	-4.9	3.0	2.6	1.2	1.2	1.2

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

Structural balance: The medium-term objective will be achieved once again from 2024

The structural balance is determined by adjusting the nominal balance for cyclical effects and, in general, for one-off effects, in accordance with the EU's standardised method. However, the measures adopted in order to tackle the COVID-19 pandemic are not treated as one-off effects. This approach is based on the European Commission's recommendation that all of these measures should be dealt with in accordance with the terms of the general escape clause.[3]

3 European Commission (6 April 2020), "Guidelines for a streamlined format of the 2020 Stability and Convergence Programmes in light of the Covid-19 outbreak".

Table 7: General government structural balance, including and excluding implementation of necessary adjustments to comply with the federal debt brake

	2020	2021	2022	2023	2024	2025
	in % of GDP					
... including implementation of necessary adjustments	-2.0	-7¾	-2¾	-1¼	-½	0
... excluding implementation of necessary adjustments	-2.0	-7¾	-2¾	-1¼	-½	-¼

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

Based on the expected reduction of the general government structural deficit by more than ½% of GDP per year, the usual structural balance requirements under the Stability and Growth Pact's preventive arm (which are currently suspended) will be fulfilled, irrespective of whether or not the debt brake compliance actions are implemented.

Trends in general 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. Under this rule [4], member states that meet their MTOs without a safety margin must make sure their adjusted expenditure does not increase at a faster pace than their average nominal potential output (i.e. GDP trends under normal capacity utilisation). 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, and co-financed EU programmes; it is also adjusted to take into account the effects of discretionary measures on revenue and expenditure. However, the expenditure benchmark is also suspended due to the current suspension of the Stability and Growth Pact's preventive arm.

Using the expenditure benchmark definition, Germany's expenditure is projected to increase by 11¾% on the year in 2021 and thus at a significantly faster pace than average nominal potential output (see **Table 8**). In 2022, expenditure (using the expenditure benchmark definition) is projected to decline by 5¼%. In the subsequent years, expenditure (using the expenditure benchmark definition) is projected to rise again, although the growth rates are expected to be lower than the rate of increase in potential output.

Table 8: Expenditure benchmark: projected expenditure and potential output

	2020	2021	2022	2023	2024	2025
	in relation to GDP (%)					
Expenditure (yoy increase; according to the expenditure benchmark definition)	10.9	11¾	-5¼	¾	1½	1¾
Nominal potential GDP growth (moving 10-year annual average)	3.2	2.6	2.6	2.6	2.5	2.5

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

4 As stipulated by the European Commission.

The rates of change in 2021 and 2022 are expected to be driven, in particular, by additional expenditure on measures to fight the coronavirus pandemic in 2021, which, according to the projection, will be discontinued in 2022. As the expenditure on business assistance measures and pandemic-related precautionary measures is only of a temporary nature, the decline in expenditure in 2022 is overstated. Adjusting for the effect of (a) expenditure on pandemic-related assistance for businesses and (b) budget-wide additional expenditures on measures to fight the COVID-19 pandemic, expenditure (using the expenditure benchmark definition) would actually increase by approximately ¾% in 2022 instead of declining.

4.4 Sensitivity of the budget balance projection

Sensitivity analyses can provide indicators of how a projected trend is affected under altered conditions. The model used to analyse the budget balance's sensitivity to changes in GDP thus takes into account the possibility that the underlying macroeconomic assumptions may change. Two alternative scenarios are analysed to show what would occur in the event of a one-half percentage point annual decrease or increase in the real GDP growth rate in the years from 2021 to 2025. All other assumptions – including interest expenditure, the projected GDP deflator and the composition of GDP – are held constant. In addition, 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 European budgetary surveillance process is applied for this purpose.

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 – the general government budget balance would turn positive again as early as 2024 (see **Table 9**). Under the negative alternative scenario – that is, if actual GDP growth were one-half a percentage point lower than the baseline scenario – the general government budget balance would still be in the negative range even at the end of the projection period.

Table 9: GDP-sensitivity of the general government budget balance projection

GDP trends according to	2020	2021	2022	2023	2024	2025
	General government budget balance in % of GDP					
- Baseline scenario	**-4.2**	**-9**	**-3**	**-1½**	**-½**	**0**
- Alternative scenarios						
real GDP growth ½ pp p.a. below baseline		-9¼	-3¾	-2¼	-1½	-1¼
real GDP growth ½ pp p.a. above baseline		-8½	-2½	-¾	½	1¼

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

4.5 Trends in debt levels

From 2012 to 2019 there was a continuous decline in Germany's debt-to-GDP ratio. By the end of 2019, the debt ratio had shrunk to 59.7% of GDP. 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 coronavirus pandemic helped put Germany in a position to deliver a strong and decisive response to the challenges presented by the pandemic, without compromising the stability of the general government budget.

As a consequence of the measures that were necessary to fight the pandemic, the debt-to-GDP ratio increased to 69.8% in 2020 (see **Table 10**). Due to the increase in the general government deficit, the debt-to-GDP ratio is projected to rise to 74½% in 2021. The debt-to-GDP ratio is expected to decline continuously in the subsequent years, falling to 69¼% in 2025.

Table 10: Trends in the debt-to-GDP ratio

	2020	2021	2022	2023	2024	2025
	Debt ratio in % of GDP					
April 2021 update	**69.8**	**74½**	**74**	**73¼**	**72**	**69¼**
April 2020 update	75¼	-	-	-	-	-

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

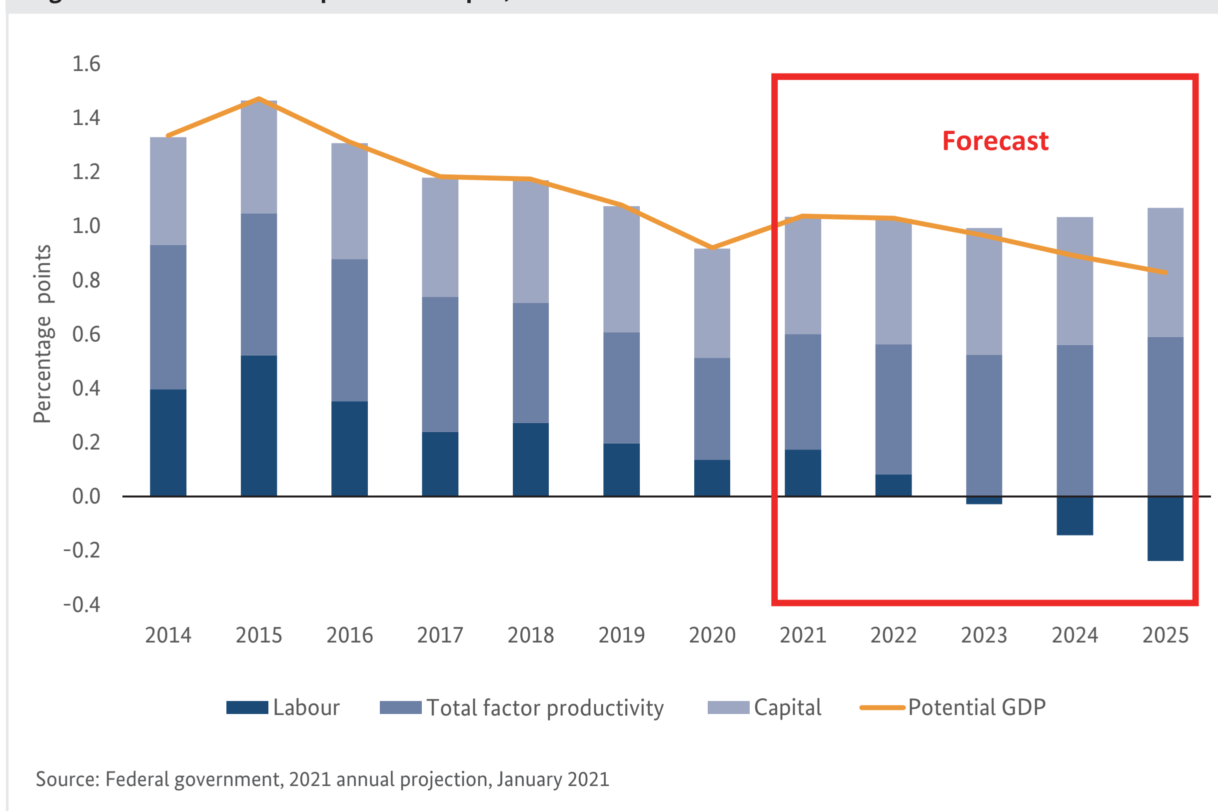
Demographic change is a major challenge to the sustainability of public finances. Even today, one of every two persons in Germany is aged over 45 and one of every five persons is aged over 66. Assuming no change in the relevant parameters, the ageing of society will lead to a significant rise in age-related government spending as a proportion of GDP.

The ongoing ageing of society will be reflected, among other things, in the old-age dependency ratio, i.e. the ratio of the number of persons of retirement age (aged 67+) to the number of persons of working age (aged 20–66). In 2000, this ratio was just 22.2%. By 2019, it had risen to 31.1%. The old-age dependency ratio is set to rise to 46.7% by 2040 as the baby boomer generation enters into retirement. It is then expected to rise more gradually to reach 50.2% by 2060. At the same time, the working-age population (aged 20–66), which stood at just under 52 million people in 2018, is expected to decline by approximately 6 million by 2040 and by approximately 9 million by 2060.

As a consequence of demographic change, age-related government spending is set to rise disproportionately in relation to GDP. At the same time, this will dampen the growth of overall potential output. According to federal government estimates, potential output growth is expected to decline to 0.8% over the medium-term to 2025. This forecast is primarily based the decreasing contribution of labour to growth, which is set to turn negative by the end of the medium-term period (see **Figure 6**).

This expected decline in the volume of labour, and hence the potential output growth rate, can be counteracted by means of forward-looking fiscal and economic policies. Policies that are geared towards fiscal sustainability aim to boost the labour supply (especially the level of female employment), improve the performance potential of the working population and increase the productivity of the economy through improved policy conditions and targeted investment measures, particularly in terms of green and digital investments.

Figure 6: Trend in German potential output, 2014–2025



Source: Federal government, 2021 annual projection, January 2021

5.2 Government revenue and expenditure from a long-term perspective

To provide a comprehensive overview and fiscal assessment of the long-term sustainability of Germany's public finances, the Federal Ministry of Finance has, as in previous legislative terms, published a Sustainability Report.

The projections forming the basis of the Sustainability Report are based on assumptions regarding long-term trends in relation to demographics, labour force participation, employment and economic growth. Taking into account the additional assumptions that the revenue-to-GDP ratio will remain constant and that there will be no policy change, the projections provide extrapolations of government expenditure. In this respect, the focus will be on pensions, health and long-term care insurance.

The last report was drafted shortly before the outbreak of the coronavirus pandemic and published in March 2020. Hence, the effects of the pandemic-induced coronavirus crisis are not reflected in the report's findings. The projections demonstrate that public finances will generally remain sound over the long term while, in the medium and long term, expenditure on health, long-term care and old-age will grow disproportionately, although the rise in health expenditure will be significantly less steep.

Since the outbreak of the coronavirus pandemic, the debt-to-GDP ratio increased to 69.8% in 2020, whereas, at the end of 2019, it had fallen below the 60% upper limit set out in the Maastricht Treaty. Although this is a substantial increase, it is nevertheless limited in comparison to the financial crisis, when the ratio rose to over 80%.

The coronavirus pandemic is not expected to have a significant impact on the basic dynamics of the demography-related spending increases described in the Sustainability Report. The Sustainability Report also shows that employment trends will have a major impact on public spending and hence on the sustainability of public finances.

High employment and productivity increase government revenue and thus make an active contribution to long-term sustainability. In view of the above, fiscal and economic policies that (a) protect economic growth drivers by means of targeted investment measures, (b) increase productive potential and thus (c) create employment opportunities are of paramount importance for long-term sustainability.

5.3 Measures to ensure long-term fiscal sustainability

The central policy approaches for ensuring the sustainability of public finances comprise strengthening the labour market, boosting labour supply, improving the performance potential of the working population and increasing productivity, i.e. the performance and investment capacity of the economy. Possible areas for specific measures include, in particular, (a) enhancing and increasing the labour potential of women, older people and immigrants, (b) further training programmes, and (c) an improved policy framework coupled with targeted, lasting measures for promoting a green and digital transformation.

Through its comprehensive fiscal assistance programmes and the economic stimulus package, the federal government is also preserving the productive capacity of the economy during the pandemic. This will serve as the basis for a rapid economic recovery after the end of the crisis. The assistance programmes limit the financial constraints that companies are experiencing as a consequence of the coronavirus pandemic and thereby indirectly support the revenue base of public budgets. This ultimately serves to guarantee the long-term sustainability of public finances. With its economic stimulus package, the federal government is continuing the public investment campaign it has been pursuing during recent years. This plays a vital role both in terms of economic stabilisation as well as in terms of ensuring that Germany is ready for the future.

The federal government considers the productivity-enhancing potential of digitalisation to be a key foundation for future growth and hence for the long-term sustainability of public finances. This applies especially to digitalisation in the public administration, health system and education system and to the expansion of digital business models. The federal government is therefore supporting the transformation process by means of appropriate policy frameworks and market-based incentives, with a particular focus on innovation.

The aim is also to create further incentives for investing in climate-friendly products and innovations. In 2019, the federal government made approximately €54bn available through the Climate Action Programme 2030, in order to fund climate action measures during the period from 2020 to 2023. The future development package included in the economic stimulus package contains approximately €15bn of additional funding for these measures. These measures will also contribute towards ensuring the long-term sustainability of public finances.

Alongside digitalisation and the green transformation, the public sector also plays a key role as a driver of innovation. As part of the future development package included within the economic stimulus package, numerous additional measures have been introduced to promote innovation and thus increase long-term potential output and growth. These measures include boosting public investment in cutting-edge technology such as artificial intelligence and quantum computers; expanding digital infrastructure such as 5G and 6G technologies and networks; promoting

research and development through tax incentives; and supporting small and medium-sized businesses, with a focus on putting innovations into practice. To ensure the effective implementation of these measures, it is also necessary to focus on reducing barriers to investment and modernising public administration.

As a comprehensive strategy for innovation, the High-Tech Strategy 2025 bundles together the federal government's research and innovation activities across all policy areas, industries and disciplines. In addition, the strategy specifies cross-departmental targets, priorities and milestones for research and innovation policies. It is closely interlinked with other federal government strategies such as the Skilled Labour Strategy, the Demographic Strategy, the Digital Agenda and the National Sustainable Development Strategy. Hence, in addition to bringing together key processes and stakeholders within the innovation system, the High-Tech Strategy 2025 also serves as the central instrument for determining the strategic direction of Germany's innovation policies.

The federal government has set itself the goal of removing the remaining obstacles that impede higher employment rates among women and an increase in their working hours. In the opinion of the federal government, the priority approach, which is also the most effective, is to improve basic conditions in a way that would allow for a fair balance between family and work life. This also includes, in particular, further expansion of child day-care services. The federal government also plans to establish a legal right for primary school children to receive all-day care from 2025 onwards. Pending the introduction of this legal right, the Federation will help the *Länder* expand child care infrastructure with funding of up to €3.5bn, which will be provided via the new special fund created in 2020 for the expansion of all-day education and childcare for primary school-aged children. In 2021, the Federation will provide the *Länder* with an advance of €750m out of the above amount to help expedite the infrastructure upgrades needed to provide all-day care to primary school children. In addition, the Act on Further Development of Part-Time Employment Law – Introduction of Bridging Part-Time Work (*Gesetz zur Weiterentwicklung des Teilzeitrechts – Einführung einer Brückenteilzeit*), which entered into force in 2019, ensures that employees who have decided to make a temporary switch to part-time work are subsequently able to return to their former working-time arrangement.

In view of technological developments, it is becoming increasingly important to enable employees who are already in work to acquire further training and qualifications. The federal government's objective is to establish a new continuing and advanced training culture in Germany. To this end, the Skills Development Opportunities Act was brought into force on 1 January 2019. Employees whose vocational activity is under threat of replacement by technology, or who are otherwise affected by structural change, will be able to benefit from this legislation. Increased funding is also aimed at those who are interested in pursuing further training for occupations in which there is a shortage of skilled workers. Furthermore, representatives of the Federal Ministry of Labour and Social Affairs, the Federal Ministry for Economic Affairs and Energy, the Federal Ministry of Education and Research, the *Länder*, and the Federal Employment Agency, as well as representatives of trade associations and trade unions, adopted the National Skills Strategy on 12 June 2019. This strategy focuses on promoting continuing vocational training, particularly among groups of persons with below-average levels of participation in continuing vocational training courses, as well as among small and medium-sized enterprises. The main objective is to increase the opportunities and support options for further training, as well as to make these more transparent and easier to access. On 1 October 2020, the Work of Tomorrow Act introduced further improvements to the support measures available to employees and companies particularly affected by structural change. There are explicit rules allowing employees in short-time work to engage in further training, and the federal government has adopted additional support

measures to facilitate this. Moreover, a basic legal right to receive support for further training leading to a vocational qualification has been introduced for low-skilled workers.

In addition, the federal government has adopted measures to facilitate the integration of long-term unemployed persons into the labour market by means of a holistic approach. "*MitArbeit*" is a general strategy aimed at improving the employability of long-term unemployed persons by providing them with intensive guidance, individual advice and effective financial support while at the same time offering them concrete employment opportunities. To this end, the Inclusion Act has introduced two new instruments into Book II of the Social Code (*Sozialgesetzbuch*) that provide for labour-cost subsidies for a period of up to five years. In order to combat long-term unemployment, €4bn in additional federal budget funds have been earmarked for this purpose over the 2018–2022 period under the integration budget heading for Book II of the Social Code.

People from third countries offer significant potential for increasing the labour supply and labour productivity. In addition to the priority task of strengthening the domestic and European skills base, it is the federal government's declared aim to make Germany even more attractive for skilled workers from third countries. To make it easier for skilled workers from non-EU countries to access the labour market, the Skilled Labour Immigration Act was brought into force on 1 March 2020. As a general rule from now on, applicants for a work visa need only have an employment contract for a skilled employment position and a recognised qualification. In cooperation with German industry associations, the federal government has also agreed upon a joint strategy for recruiting skilled labour from third countries which, alongside measures for accelerating the procedures for obtaining visas and the recognition of foreign qualifications, also includes improved marketing and intensification of language learning in Germany and abroad. The information and advisory service on the federal government's "Make it in Germany" website will be maintained. Furthermore, following the entry into force of the Foreign Nationals Employment Support Act (*Ausländerbeschäftigungsförderungsgesetz*) on 1 August 2019, access to support for vocational training and pre-vocational training is now largely free from requirements relating to residence status for foreign nationals who are eligible to access the vocational training market. In addition, access to language courses has been improved for people granted temporary suspension of deportation (*Duldung*) and permission to remain pending an asylum decision (*Aufenthaltsgestattung*).

Demographic trends pose a major challenge, particularly in the area of pensions. The 2020 pension insurance report shows that, despite the impacts of the COVID-19 pandemic, the finances of the statutory pension insurance scheme are currently in good shape. For example, the total revenue from contributions collected by the general pension insurance scheme from January to September 2020 increased by 1.9% compared with the same period in 2019. This rise was also made possible as a result of the short-time work scheme and the associated contribution payments. The 2020 pension insurance report estimated that sustainability reserves at year end amounted to €36.3bn, or 1.5 months' expenditure. According to preliminary accounting results, the sustainability reserve fund held €37.1bn at the end of 2020. The replacement rate before tax was 48.2%. By incrementally increasing the standard retirement age to 67, Germany has improved the long-term financing of the public pension system.

A well-functioning pay-as-you-go pension scheme depends on private individuals having confidence in their entitlement to an adequate pension. The introduction of a basic pension into the pension insurance system as of 1 January 2021 shows recognition of people's lifetime work effort. Moreover, the basic pension helps to prevent old-age poverty and thus raises confidence in the safety net provided by the statutory pension insurance system. Pensioners who have paid in contributions for at least 33 years, and whose contribution payments

correspond to between 30% and 80% of average income, will be eligible for a means-tested pension supplement. Accordingly, the federal grant to the statutory pension system will be increased by €1.4bn in 2021 and will then be adjusted in accordance with the statutory provisions.

To maintain people's confidence the pension insurance system, it is important for them to be able to receive information about the size of any entitlements they may have under its various pillars. This enables people to make informed decisions that are appropriate for their life circumstances. The introduction of the digital pensions overview, adopted by the German Bundestag in November 2020, advances this objective and will thus contribute indirectly towards the build-up and expansion of supplementary private and occupational pensions.

The Act Introducing a Statutory Health Insurance Allowance to Promote Occupational Pension Schemes (*Gesetzliche Krankenversicherung – Betriebsrentenfreibetragsgesetz*), which entered into force on 1 January 2020, has further enhanced the attractiveness of occupational pension schemes. Occupational pension recipients subject to mandatory statutory health insurance receive allowances, which are adjusted annually in line with average wage growth, to reduce the amount of their statutory health insurance contributions; in aggregate these allowances amount to approximately €1.2bn annually. Under the Basic Pension Act (*Grundrentengesetz*), tax relief for low-income employees has, as of mid-2020, been broadened and doubled in amount (amendment of section 100 of the Income Tax Act (*Einkommensteuergesetz*) pursuant to the Basic Pension Act of 12 August 2020). Moreover, given the sustained low-interest rate environment, the federal government has implemented measures to further ensure the security and attractiveness of occupational pension schemes. For example, from next year onwards, occupational pension schemes managed by pension funds will benefit from the full protection of the Occupational Pension Guarantee Association (*Pensions-Sicherungs-Verein*) (amendment of the Occupational Pension Act (*Betriebsrentengesetz*) pursuant to the 7th Act Amending Book IV of the Social Code (*7. SGB IV Änderungsgesetz*) of 12 June 2020). In addition, the generally mandatory requirement for payment of an employer contribution corresponding to 15% of deferred salary, as provided for in the legislation to strengthen occupational pensions (*Betriebsrentenstärkungsgesetz*), will enter into force in 2022, including for any existing pension plans financed through deferred compensation.

In the area of private pensions, the federal government has taken measures to support the interests of life insurance policy holders. This includes ensuring interest rate guarantees in an even more efficient and reliable way. In addition, supervision will be improved in the areas of life insurance and consumer protection.

To promote innovative forms of care and research projects in the healthcare sector, an innovation fund was established as early as 2015. Its objective is to achieve further improvements in the quality of healthcare provided through the statutory health insurance system in Germany. Under the Digital Healthcare Act (*Digitale-Versorgung-Gesetz*) adopted by the German Bundestag on 7 November 2019, the innovation fund has been extended beyond 2020 to 2024; the annual funding capacity is currently €200m.

The effects of increasing life expectancy and lower birth rates are also presenting challenges to long-term care insurance. Germany has established a long-term care reserve fund that helps to ensure intergenerational fairness with respect to the future financing of long-term care insurance. Since 2015, an annual amount equalling 0.1 contribution rate point of the revenues from insurance contributions is being invested in the long-term care reserve fund for a period of just under 20 years. This will safeguard financing for the long-term care system while also helping to reduce increases in contribution rates in subsequent years, when the baby boomer generation starts to move into age brackets associated with a higher probability of needing long-term care.

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, it is vital to review government revenue and spending regularly to assess their effectiveness and efficiency. The aim is to make public budgets more results-driven and create additional fiscal space.

The Stability Council (*Stabilitätsrat*) is a joint body run by the Federation and the *Länder*. It is responsible for identifying impending budgetary emergencies at an early stage and initiating targeted counter-measures promptly in order to counteract them. For example, the Stability Council regularly monitors the budgets of the Federation and the *Länder*, recommends appropriate consolidation measures and, where necessary, agrees an adjustment programme with the government of the relevant entity. In doing so, it is assisted by an independent advisory board.

The federal government has conducted spending reviews since 2015. These issue-specific budget analyses examine selected policy areas or cross-departmental tasks to determine whether the relevant federal government goals still have priority, whether they are being attained and whether the relevant tasks are being performed economically. During the five completed cycles since 2015, the respective spending reviews have addressed issues relating to effectiveness and efficiency in individual or cross-departmental areas on the revenue and expenditure sides of the federal budget. For the sixth cycle, covering 2020/2021, the federal cabinet has assigned the Federal Ministry of Finance the task of conducting a spending review on the internal administrative issue of “personnel budgets” in cooperation with selected ministries. It is expected that this will be completed in June 2021.

The federal government also regularly reviews the target attainment, efficiency, transparency and necessity of subsidies. The results of these reviews are published every two years in its Subsidy Report. Under the subsidy policy guidelines adopted by the federal cabinet in 2015, all ministries are subject to a general requirement to carry out regular performance monitoring with respect to all financial assistance measures and tax expenditures. This plays an important role in ensuring evidence-based fiscal and tax policies. For example, the current Subsidy Report incorporates a systematic evaluation of 33 tax expenditures that was commissioned by the Federal Ministry of Finance. Furthermore, all subsidies are subject to a sustainability impact assessment. These impact assessments evaluate each individual subsidy in terms of its economic, environmental and social impact and, in particular, any conflicts between objectives.

The federal government has implemented a series of reforms in recent years to improve quality and cost-efficiency in statutory health insurance. Under the Care Staff Support Act (*Pflegepersonal-Stärkungsgesetz*) adopted on 11 December 2018, funding from the hospital structure fund, which was established in early 2016, will be extended to cover the years from 2019 to 2024, with total financing of €4bn. As previously, 50% of the financing will come from the health fund’s liquidity reserve, and the remaining 50% will be covered through funds provided by the *Länder*. The current funding categories consisting of “closure”, “consolidation” and “conversion” will be given a tighter focus and, in some areas, will be redefined. In addition, funding will also be targeted towards IT security, networking, the establishment of medical centres, (integrated) emergency care and nursing care training.

Digital technologies offer great potential for improving procedures and increasing efficiency in the delivery of healthcare services. Electronic patient records which, among other features, enable doctors to store patients’ medical data (subject to their consent) are a key element in this respect.

The Appointment Service and Care Act (*Terminservice- und Versorgungsgesetz*), which entered into force on 11 May 2019, will expedite the introduction of such records. Under this legislation, health insurance funds must provide insured persons with electronic patient records by the beginning of 2021 at the latest. In addition, the federal government is pressing forward with the introduction of a nationwide telematics infrastructure. This means that all stakeholders in the health system will be gradually integrated into the network, thus ensuring that information can be exchanged securely across sectors and systems. Under the Patient Data Protection Act (*Patientendaten-Schutz-Gesetz*), which entered into force on 20 October 2020, the electronic patient record will be further developed, in a series of stages, as a core component of digital medical applications. Furthermore, as of 1 January 2022, it will become mandatory to issue electronic prescriptions for prescription drugs (e-prescription). Electronic referral forms are also to be introduced in the near future. Other service providers such as care and rehabilitation institutions will also be integrated into the telematics infrastructure.

The new legislation to advance the use of digital technology in health care and long-term care (*Gesetz zur digitalen Modernisierung von Versorgung und Pflege*), which is due to enter into force in mid-June 2021, builds on the objectives of the Digital Healthcare Act and the Patient Data Protection Act. Furthermore, additional forward-looking measures will be taken, such as financing for digital long-term care applications, the expansion of telehealth, the further integration of digital health applications into the healthcare system, and the further development of the telematics infrastructure and its associated applications (particularly electronic patient records and e-prescriptions).

Annex

Table 11: Forecast of macroeconomic trends[1]

	ESA code	2020	2020	2021	2022	2023	2024	2025	2023 to 2025[4]
		Index 2015=100	% change p.a.						
1. Real GDP chain index	B1g	101.58	-4.9	3.0	2.6	1.2	1.2	1.2	1¼
2. GDP in respective market prices (€bn)	B1g	3,332.2	-3.4	4.3	4.2	2.8	2.8	2.8	2¾
Real utilisation of GDP chain index									
3. Private consumption expenditure[2]	P.3	100.73	-6.1	3.6	2.9	1.2	1.2	1.2	1¼
4. Government consumption expenditure	P.3	113.52	3.3	1.1	0.5	1.0	1.0	1.0	1
5. Gross fixed capital formation	P.51	109.38	-3.1	3.6	3.5	1.7	1.7	1.7	1¾
6 Changes in inventories (GDP growth contribution)[3]	P.52 + P.53	-	-0.7	0.0	0.0	0.0	0.0	0.0	-0
7. Exports	P.6	100.45	-9.4	6.4	5.7	3.1	3.1	3.1	3¼
8. Imports	P.7	107.08	-8.5	7.2	6.0	3.6	3.6	3.6	3½
Contributions to real GDP growth[3]									
9. Final domestic demand		-	-3.2	2.9	2.4	1.2	1.2	1.2	1¼
10. Changes in inventories and net acquisition of valuables	P.52 + P.53	-	-0.7	0.0	0.0	0.0	0.0	0.0	0
11. External balance of goods and services	B.11	-	-1.1	0.1	0.2	0.0	0.0	0.0	0

1 2020: Federal Statistical Office: as of February 2021
2021 and 2022: results of the short-term forecast for the 2021 Annual Projection, January 2021
2023 to 2025: results of the medium-term forecast for the 2021 Annual Projection, January 2021
2 Including private non-profit organisations serving households
3 Contribution to GDP growth rate
4 Values rounded to ¼

Table 12: Price trends – deflators[1]

	ESA code	2020	2020	2021	2022	2023 to 2025[3]
		Index (2015=100)	% change p.a.			
1. GDP		108.40	1.6	1.3	1.6	1½
2. Private consumption expenditure[2]		105.86	0.7	1.6	1.6	1½
3. Public consumption		110.99	3.2	2.9	1.7	1½
4. Gross fixed capital formation		107.87	-1.3	1.5	1.6	1½
5. Exports		102.37	-0.4	0.7	0.7	1½
6. Imports		99.36	-2.4	1.9	0.7	1½

1 2020: Federal Statistical Office: as of February 2021
2021 and 2022: results of the short-term forecast for the 2021 Annual Projection, January 2021
2023 to 2025: results of the medium-term forecast for the 2021 Annual Projection, January 2021
2 Including private non-profit organisations serving households
3 Values rounded to ¼

Table 13: Labour market trends[1]

	ESA code	2020	2020	2021	2022	2023 to 2025[7]
		Level	% change p.a.			
1. Employment, persons (domestic)[2] (m)		44.8	-1.1	0.0	0.6	-¼
2. Employment, hours worked[3] (bn hours)		59.6	-4.7	2.6	1.0	-¼
3. Unemployment rate[4] (%)		-	4.0	3.9	3.5	3¾
4. Labour productivity[5] (2015=100)		97.8	-3.9	3.0	2.0	1¼
5. Labour productivity[6] (2015=100)		102.9	-0.2	0.3	1.6	1½
6. Compensation of employees (€bn)	D.1	1,839.4	-0.3	3.3	3.0	2¾
7. Compensation per employee (thousand €)		45.1	0.5	3.2	2.6	3

1 2020: Federal Statistical Office: as of February 2021
2021 and 2022: results of the short-term forecast for the 2021 Annual Projection, January 2021
2023 to 2025: results of the medium-term forecast for the 2021 Annual Projection, January 2021
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
7 Values rounded to ¼; unemployment rate: value displayed is value for last year of forecast (2025)

Table 14: Sectoral balances[1]

	ESA code	2020	2021	2022	2023	2024	2025	2023 to 2025[2]
		% of GDP						
1. Net lending/borrowing vis-à-vis the rest of the world	B.9	6.9	6.2	6.4	6.3	6.3	6.2	6¼
of which:								
Balance on goods and services		5.8	5.0	5.0	5.0	4.9	4.8	4¾
2. Net lending/borrowing of households	B.9	9.3	7.9	6.4	5.8	5.6	5.4	5½
3. Net lending/borrowing of general government	EDP B.9	-4.2	-9	-3	-1½	-½	0	-
4. Statistical discrepancy		-	-	-	-	-	-	-

1 2020: Federal Statistical Office: as of February 2021
2021 and 2022: results of the short-term forecast for the 2021 Annual Projection, January 2021
2023 to 2025: results of the medium-term forecast for the 2021 Annual Projection, January 2021
2 Values rounded to ¼; value for last year of forecast (2025)

Table 15: General government budgetary prospects

	ESA code	2020	2020	2021	2022	2023	2024	2025
		€bn	% of GDP					
Net lending (EDP B.9) by sub-sector								
1. General government	S. 13	-139.6	-4.2	-9	-3	-1½	-½	0
2. Central government	S. 1311	-86.6	-2.6	-6¾	-2¼	-1	-½	0
3. State government	S. 1312	-18.0	-0.5	-¾	-¼	-¼	0	0
4. Local government	S. 1313	-1.3	0.0	-½	-½	-½	-¼	-¼
5. Social security funds	S. 1314	-33.7	-1.0	-1	-¼	0	¼	¼
General government (S.13)								
6. Total revenue	TR	1,563.0	46.9	45¾	46¼	47	47½	47¾
7. Total expenditure	TE[1]	1,702.6	51.1	54¾	49½	48½	48¼	47¾
8. Net lending/borrowing	B.9	-139.6	-4.2	-9	-3	-1½	-½	0
9. Interest expenditure	D. 41	21.8	0.7	½	½	½	½	½
10. Primary balance[2]		-117.8	-3.5	-8¼	-2½	-1	0	½
11. One-off and other temporary measures[3]		0.0	0.0	0	0	0	0	0
Selected components of revenue								
12. Total taxes (12=12a+12b+12c)		782.0	23.5	22¾	23¼	23½	24	24
12a. Taxes on production and imports	D.2	346.5	10.4	10½	11	11	11	11
12b. Current taxes on income, wealth, etc.	D.5	426.9	12.8	12	12	12½	12¾	13
12c. Capital taxes	D.91	8.7	0.3	¼	¼	¼	¼	¼
13. Social security contributions	D.61	607.9	18.2	18	18¼	18½	19	19
14. Property income	D.4	19.1	0.6	½	½	½	½	½
15. Other[4]		154.0	4.6	4½	4¼	4¼	4¼	4¼
16. = 6. Total revenue	TR	1,563.0	46.9	45¾	46¼	47	47½	47¾
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)[5]		1,389.9	41.5	40½	41¼	42	42½	42¾

Table 15: General government budgetary prospects (continued)

	ESA code	2020	2020	2021	2022	2023	2024	2025
		€bn	% of GDP					
Selected components of expenditure								
17. Compensation of employees + intermediate consumption	D.1+P.2	486.0	14.6	15¼	14½	14¼	14	13¾
17a. Compensation of employees	D.1	283.4	8.5	8¼	8¼	8¼	8¼	8¼
17b. Intermediate consumption	P.2	202.6	6.1	6¾	6¼	6	5¾	5½
18. Social payments (18=18a+18b)		904.9	27.2	27	26¼	26½	26½	26½
of which: unemployment benefits[6]		64.8	1.9	1¾	1½	1½	1½	1½
18a. Social transfers in kind supplied via market producers	D.6311, D.63121, D.63131	311.8	9.4	9½	9½	9½	9½	9¾
18b. Social transfers other than in kind	D.62	593.1	17.8	17½	16¾	17	16¾	16¾
19. = 9. Interest expenditure	D.41	21.8	0.7	½	½	½	½	½
20. Subsidies	D.3	69.8	2.1	3¾	1¼	¾	¾	¾
21. Gross fixed capital formation	P.51	90.4	2.7	2¾	2¾	2¾	2¾	2¾
22. Capital transfers	D. 9	45.4	1.4	2	1¾	1¾	1½	1½
23. Other[7]		84.3	2.5	3¼	2½	2¼	2	2
24. = 7. Total expenditure	TE[1]	1,702.6	51.1	54¾	49½	48½	48¼	47¾
p.m.: Government consumption (nominal)	P.3	750.8	22.5	23½	23	22¾	22½	22½

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 16: No-policy change projections

	2020	2020	2021	2022	2023	2024	2025
	€bn	% of GDP					
1. Total revenue at unchanged policies	1,563.0	46.9	45¾	46¼	47	47½	47½
2. Total expenditure at unchanged policies	1,702.6	51.1	53½	49½	48½	48¼	47¾

Figures for the projection period are rounded to ¼.

Table 17: Amounts to be excluded from the expenditure benchmark

	2020	2020	2021	2022	2023	2024	2025
	€bn	% of GDP					
1. Expenditure on EU programmes fully matched by EU funds revenue	4.9	0.1	½	¼	¼	¼	¼
2. Cyclical unemployment benefit expenditure	11.7	0.4	¼	¼	¼	¼	0
3. Effect of discretionary revenue measures	-33.8	-1.0	0	0	¼	¼	¼
4. Revenue increases mandated by law	0.0	0.0	0	0	0	0	0

Figures for the projection period are rounded to ¼.

Table 18: General government debt developments (Maastricht debt ratio)

	ESA code	2020	2021	2022	2023	2024	2025
		% of GDP					
1. Gross debt		69.8	74½	74	73¼	72	69¼
2. Change in gross debt ratio		10.1	4¾	-½	-¾	-1¼	-2¾
Contribution to changes in the Maastricht debt ratio							
3. Primary balance		-3.5	-8¼	-2½	-1	0	½
4. Interest expenditure	D.41	-0.7	-½	-½	-½	-½	-½
5. Stock-flow adjustment		-5.9	4¼	3¾	2¼	1¾	2½
p.m.: Implicit interest rate on debt[1]		1.1	1	¾	¾	¾	¾

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

Figures for the projection period are rounded to ¼.

Table 19: Cyclical developments

	ESA code	2020	2021	2022	2023	2024	2025	2023 to 2025
		% of GDP						
1. Real GDP growth (%)		-4.9	3.0	2.6	1.2	1.2	1.2	1¼
2. Net lending of general government	B.9	-4.2	-9	-3	-1½	-½	0	-
3. Interest expenditure	D.41	0.7	½	½	½	½	½	-
4. One-off and other temporary measures[1]		0.0	0	0	0	0	0	-
5. Potential GDP growth (%)		0.9	1.0	1.0	1.0	0.9	0.8	1
contributions:								
- labour		0.1	0.2	0.1	0.0	-0.1	-0.2	-¼
- capital		0.4	0.4	0.5	0.5	0.5	0.5	½
- total factor productivity		0.4	0.4	0.5	0.5	0.6	0.6	½
6. Output gap		-4.2	-2.3	-0.8	-0.6	-0.3	0.0	-
7. Cyclical budgetary component		-2.2	-1¼	-½	-¼	-¼	0	-
8. Cyclically-adjusted balance (2 - 7)		-2.0	-7¾	-2¾	-1¼	-½	0	-
9. Cyclically-adjusted primary balance (8 + 3)		-1.3	-7	-2¼	-¾	0	½	-
10. Structural balance (8 - 4)		-2.0	-7¾	-2¾	-1¼	-½	0	-

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

Figures for the projection period are rounded to ¼.

Table 20: Divergence from previous update

	ESA code	2020	2021	2022	2023	2024	2025
Real GDP growth (yoy in %)							
April 2020 projection		-6.0	-	-	-	-	-
April 2021 projection		-4.9	3.0	2.6	1.2	1.2	1.2
Difference		1.1	-	-	-	-	-
General government net lending (% of GDP)	B.9						
April 2020 projection		-7¼	-	-	-	-	-
April 2021 projection		-4.2	-9	-3	-1½	-½	0
Difference		3	-	-	-	-	-
General government gross debt (% of GDP)							
April 2020 projection		75¼	-	-	-	-	-
April 2021 projection		69.8	74½	74	73¼	72	69¼
Difference		-5½	-	-	-	-	-

Figures for the projection period are rounded to ¼.

Table 21: Long-term trends in age-related general government expenditure

	2019 (target)	2030	2040	2050	2060
Expenditure in % of GDP[1] (pessimistic variant "T-" / optimistic variant "T+")					
Pension expenditure[2]	9.7	10.9 / 10.3	11.9 / 10.9	12.5 / 11.2	13.4 / 11.5
Health care expenditure[3]	7.7	8.1 / 8.0	8.4 / 8.0	8.5 / 8.0	8.5 / 7.8
Long-term care expenditure[4]	1.3	1.5 / 1.4	1.8 / 1.6	2.3 / 1.9	2.6 / 1.9
Unemployment benefits[5]	2.2	2.6 / 2.1	3.3 / 2.3	3.3 / 2.3	3.3 / 2.4
Spending on education and childcare[6]	4.0	4.2 / 4.2	4.2 / 4.4	4.0 / 4.4	4.2 / 4.6
Expenditure on the family benefits system[7]	1.5	1.5 / 1.5	1.5 / 1.5	1.4 / 1.5	1.5 / 1.6
Total age-related expenditure	26.3	28.5 / 27.4	30.8 / 28.7	31.8 / 29.2	33.2 / 29.6
Assumptions					
Productivity growth (%)[8,9]	0.9	1.3 / 1.3	1.2 / 1.2	1.1 / 1.2	1.2 / 1.2
GDP growth (%)[9]	1.9	0.6 / 1.0	0.4 / 1.0	0.6 / 1.1	0.4 / 1.1
Labour force participation (%)					
- Men (15 to 64)		86.4	86.8 / 87.6	86.4 / 87.6	86.3 / 87.6
- Women (15 to 64)		81.0	83.2 / 83.5	83.1 / 84.1	83.3 / 84.4
Unemployment rate (%)	3.0	4.3 / 3.5	5.6 / 3.7	5.6 / 3.8	5.7 / 4.0
Old-age dependency ratio[10]	33.6	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)	18.1	21.8 / 21.6	23.7 / 23.1	24.0 / 23.2	24.3 / 23.6

Sources: Actual values 2019: 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 (2020–2060) M. Werding et al., projections for the Finance Ministry's Fifth Sustainability Report, Munich 2020.

Updated for 2019 base year. Table reflects prevailing law and available data as of 31 December 2020.

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 Long-term care insurance (using the dynamic index 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 old-age dependency ratio is based on the definition of a working-age population aged 15-64.

Table 22: Technical assumptions

	2020	2021	2022	2023	2024	2025	2023 to 2025
Short-term interest rate (annual average)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Long-term interest rate (annual average)	-0.5	-0.5	-0.1	-0.2	-0.3	-0.3	-0.2
USD/€ exchange rate (annual average)	1.14	1.22	1.16	1.16	1.16	1.18	1.17
Nominal effective exchange rate	106.94	104.03	104.6	105.1	105.0	105.1	105.1
World GDP growth rate (excluding EU)	-2.9	5.5	2.7	2½	2¼	2	2¼
EU GDP growth rate	-6.7	4.1	4.0	2¼	1½	1¼	1¾
Growth of German sales markets (in %)[1]	-9.2	6.3	5.4	3½	3	2¾	3¼
World imports growth rate (excluding EU)	8.5	3.2	3.2	3¼	3¼	3¼	3¼
Oil price (Brent, USD/barrel)	43	51	50	56	53	50	53

1 Values rounded to ¼.

Table 23: Contingent liabilities

% of GDP	2020
Public guarantees	13.2*
Of which: linked to the financial sector	0.1

* Year 2019

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