Creditreform Sovereign Rating

Creditreform Rating

Rating Object	Rating Information	
FEDERAL REPUBLIC OF GERMANY	Assigned Ratings/Outlook: **AAA /stable**	Type: Monitoring, unsolicited
Long-term sovereign rating Foreign currency senior unsecured long-term debt Local currency senior unsecured long-term debt	Initial Rating Publication Date: Rating Renewal: Rating Methodologies:	29-07-2016 16-04-2021 “Sovereign Ratings” “Rating Criteria and Definitions”

Rating Action

Neuss, 16 April 2021

Creditreform Rating has affirmed the unsolicited long-term sovereign rating of “AAA” for the Federal Republic of Germany. Creditreform Rating has also affirmed Germany’s unsolicited ratings for foreign and local currency senior unsecured long-term debt of “AAA”. The outlook is stable.

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Key Rating Drivers

1. Wealthy, large and well-diversified economy featuring a high level of competitiveness and innovation capability, alongside a still well-performing labor market; while promising to enhance potential growth if well implemented, transition towards electric mobility in the automotive sector and speed and depth of digital transformation present challenges; unfavorable demographic outlook will likely hamper longer-term growth to some extent if unaddressed
2. In light of the third Covid-19 infection wave and rather sluggish progress in the vaccination campaign, the near-term growth outlook remains dampened, pushing back a more meaningful economic recovery towards 2022; the recovery is likely to take hold from the second half of the year, with private consumption gradually accelerating in tandem with a broader vaccination coverage
3. Extraordinarily strong institutional framework including advantages from deep integration into EU/EMU; while we generally expect the consensus-seeking character of a new government and a high degree of policy predictability to prevail following this year’s general election, the political landscape might be coined by a higher degree of fragmentation; commitment to greening the economy and drive forward the digital transformation looks likely to shape policies even more strongly in the forthcoming legislature period
4. Favorable fiscal position at the onset of the corona crisis equipped the government with substantial firepower to combat Covid-19; significant deterioration in public finance metrics assumed to be transitory, although medium-term consolidation might happen at a somewhat slower pace in light of repeated supplementary budgets and increasing fiscal effort to gear the economy towards elements fostering underlying growth going forward; high debt affordability and sound debt management remain key strengths, mitigating fiscal risks stemming from sizeable public guarantees and age-related spending pressure

5. Very large and positive net international investment position (NIIP) continues to point to a strong external position, buttressed by sustained high current account surpluses

Reasons for the Rating Decision and Latest Developments[1]

Macroeconomic Performance

Germany's AAA rating is supported by its exceptionally strong macroeconomic performance profile, which rests on a large, diversified and resilient economy boasting a high level of competitiveness, as well as on a strong labor market. Germany's high wealth level, mirrored in a GDP per capita of USD 54,076 (IMF data, PPP terms), one of the highest in the EU adds to this. We view the medium-term outlook as subject to some challenges relating to the speed and depth of its digital transformation, in particular regarding education and public administration, as highlighted by the current pandemic. The ongoing transition towards electric mobility in the automotive sector, as well as an unfavorable demographic outlook may also hamper medium-term growth going forward.

Following ten consecutive years of economic expansion, the Covid-19 crisis caused real GDP to fall by 4.9% in 2020 (2019: +0.6%), ultimately a more moderate decline than seen during the Global Financial Crisis (2009: -5.7%) and less severe than registered for the euro area (EA) as a whole (-6.6%). Given the nature of the current crisis and its negative consequences, especially for parts of the economy requiring personal contact, the German economy was able to show resilience thanks to the relatively large gross value added share of its industrial sector (excluding construction, Q4-20: 23.7%, EA: 19.7%). To be sure, its export-oriented manufacturing sector was also significantly affected during the first infection wave. Moreover, the fallout from the economic and health crisis was cushioned by substantial fiscal measures, including guarantees, since the outbreak of the crisis.

Overall economic activity contracted substantially in the first half of last year, as the first infection wave caused disruptions to production and supply chains, and the subsequent lockdown brought social activities almost to a complete standstill. Exports were hit hard by collapsing demand for capital goods such as machinery and vehicles during that time. A breather over the summer months that came on the back of the easing of social distancing measures preceded renewed containment measures amid a second infection wave in the fall of 2020, thus causing significant volatility in the quarterly GDP growth profile.

Owing to the significance of its manufacturing sector, Germany's economy proved more resilient to the second infection wave, as industrial production was hardly disrupted and important key trading partners such as China had recovered markedly from the pandemic by then. In light of the relatively fast Chinese economic rebound, Germany's exports to China in Q4-20 exceeded their level in the same quarter of the prior year by 8.5%, helping to secure moderate economic growth in the final quarter of 2020 (Q4-20: 0.3% q-o-q, EA: -0.7%). Ultimately, net exports posed a drag on growth last year (-0.9p.p.), as did domestic demand. Private consumption fell by 6.1% in 2020, while gross fixed capital investment posted a decline of 3.1%, mostly due to collapsing investment in equipment and machinery (-12.1%), whereas construction investment proved

[1] This rating update takes into account information available until 15 April 2021.

growth-supportive (1.9%). While government consumption contributed positively, growing 3.3%, inventories took 0.8 p.p. off GDP growth.

The first quarter of 2021 will likely see economic activity shrink again on account of a renewed lockdown starting in November, with an increasing level of stringency over the following months. The weekly activity index (WAI, Bundesbank) underscores this expectation, pointing to a GDP growth rate of -1% for the 13 weeks up to 28 March against the preceding period of 13 weeks. Against this backdrop, private consumption looks set to decline, also as a consequence of mostly reinstated VAT rates from January after being lowered for the second half of 2020. A likely setback in construction activity, partly due to severe winter weather in January and February, will additionally weigh on Q1-21.

However, the overall decline in real GDP should be milder than in Q2-20, when the first lockdown suffocated economic activity on a broader base. While the containment measures again mainly affect consumer-facing services, industrial production, construction, and business services associated with industry and construction are considerably less impacted. Moreover, the manufacturing industry continues to benefit from the ongoing recovery in China as well as from comparatively strong economic activity in the US, hence in Germany's two most important export destinations.

Germany thus looks set to experience an economic recovery aided by external trade this year, as the near-term outlook for exports is brightening. Not only does the US economy benefit from a speedier progression of the vaccination campaign, it also stands to receive a substantial boost from further fiscal stimulus under its new administration. Besides, due to the Trade and Cooperation Agreement between the EU and the UK following the expiry of the transition period at the end of last year, significant downside risks to international trade were removed. In addition, the agreement on financial services between the two jurisdictions struck in March could reduce uncertainty further. According to the ifo institute, export expectations among the German manufacturing industry have climbed for a fourth consecutive month in March (balance of 24.9, Mar-20: -16.7), reaching the highest level since January 2011.

Domestic demand should contribute to growth as well this year. Against the backdrop of better prospects for export activity, and improving sentiment in particular in manufacturing, the outlook for gross fixed capital formation is becoming more positive. The overall ifo business climate indicator rose to 96.6 in March, a level last seen in June 2019, mainly carried by further strong improvement of the sentiment in the manufacturing sector. Sentiment in services, and especially in trade, remains rather muted despite some silver linings such as IT services or retail trade being allowed to open over recent weeks. Business climate in the construction sector, although still at a subdued level, reached a 12-month-high in March, pointing to possible growth impulses. Continued favorable financial market conditions, also as monetary policy remains accommodative, should provide fertile ground for a recovery.

We expect investment to be chiefly driven by rebounding demand for machinery and equipment this year, while residential construction should also add positively amid low mortgage rates and demand for dwellings apparently still exceeding supply. In the medium-to-longer term, however, residential supply should become more balanced with respect to demand, as impulses e.g. via demographics are likely to fade. In this respect, we note that the GVA share of construction has further risen to 6.1% as of Q4-20 (up from 5.5% in Q4-19 and 4.8 in Q4-17), exceeding the respective share in the euro area as a whole (Q4-20: 5.6%) and its long-term average (since Q1-91,

5.1%), which points to limited growth potential for the future. The Recovery and Resilience Facility, from which Germany stands to receive only comparatively small amounts (EUR 23.6bn in grants in 2018 prices), may, if used effectively, add a little to both public and private investment. The funds will mainly be directed towards enhancing the greening of the economy and spur digitization.

Due to the epidemiological situation and rather sluggish progress in terms of vaccination, household spending growth is likely to be somewhat more muted. The short-time work scheme that was extended until end of the year 2021 should favor a recovery of private consumption, partly aided by the increase of the minimum wage, which is to be raised in four steps from January 2021 to EUR 10.45 per hour by July 2022. Beyond the first half of the year, pent-up demand should be released if vaccinations can be stepped up significantly upon increased supply of vaccines. Given households' high saving rate, which at 15.7% in Q4-20 remained close to the peak reached in Q1-20 (16.2%, Bundesbank data), there is substantial room for maneuver despite somewhat higher inflation rates compared to 2020 due to the VAT changes, higher oil prices, and as CO2 pricing has been introduced from January 2021. Judging by the recent conclusion of wage negotiations in the metal and electronics industries in Germany's most populous state (North-Rhine Westphalia), which may serve as a blueprint for further industries, wage increases are set to remain moderate, as the main focus lies on preserving jobs at this stage. At the same time, the reinstating of most of the VAT rates following the lower level in the second half of 2020 will likely weigh on private consumption in early 2021. For the coming year, we would assume that herd immunity is by and large reached and no more severe restrictions will need to be imposed, enabling a more stable quarterly profile for household spending, although the possibility of vaccine development/supply lagging behind virus mutations would pose downside risks to that.

On the labor market, which entered the pandemic on a strong footing following a long-running streak of job creation and record-low unemployment, we observe limited fallout from this crisis so far, as the short-time work scheme has prevented worse. Having said that, the number of employees subject to short-time work increased for a third consecutive months to roughly 2.851mn in January (preliminary data, Federal Employment Agency). Despite this rise, the number remains well below its peak registered in April 2020 (roughly 5.995mn). Indicated short-time arrangements concerned 197.000 employees in March 2021, down from a revised 535.000 in February, after having gone up towards the end of last year. The monthly unemployment rate (Eurostat, LFS) has slowed its increase observed since the start of 2020 (3.4%), broadly stabilizing around 4.5% (Feb-21) since the summer months, still one of the lowest readings in EU.

We do see some risks for the economic recovery relating to the labor market in the form of sharply rising insolvencies once the exceptional policy of suspended obligation to file for insolvency fully expires. While parts of the exceptional policy have been phased out already, companies still awaiting the so-called November support can defer filing for insolvency until the end of April. In 2020, insolvencies fell by 15.5% compared with 2019 (Destatis), with this result substantially affected by the aforementioned policy. According to IMF estimates, insolvencies would have been about 11% higher without the exceptional policy measures.

However, we note that there seems to have been a turnaround in the number of initiated insolvency proceedings, which have been exceeding their level of the preceding year in March 2021 for the first time within a year (+18% vs. March 2020, Destatis), suggesting that the number of bankruptcies may be about to go up. Unemployment could thus rise more markedly in the

course of the year and beyond potentially dampening domestic demand dynamics. Non-financial corporation (NFC) debt had already been on the rise before the pandemic hit and has reached its highest level since the reunification. Nevertheless, at 63.5% of GDP (Q3-20, Q3-19: 59.5%), NFC debt still compares as relatively moderate, moving somewhere in the middle-range among EU countries.

Overall, we expect real GDP to rise by about 3.1% this year. Generally, current containment measures have been extended to 18 April. However, given the unfavorable infection dynamics on account of a seemingly more contagious virus mutation, as well as a number of setbacks in the vaccination campaign, the recovery which we anticipated to start from Q2-21 now looks likely to be pushed back into the second half of the year, as a further tightening cannot be ruled out. A new emergency break is to be introduced by law that would automatically impose a curfew during night hours and foresee restrictions to private gatherings and non-essential shop openings if an infection rate of 100 cases per 100 thousand people were exceeded on three consecutive days. What is more, due to small amounts of available vaccines, partly limited application due to safety concerns, Germany's vaccination campaign seems sluggish and prone to disruptions, rendering economic recovery fragile. The first-dose vaccination rate was at 15.0% as of 13 April (ECDC), moving in the lower third among the EU member states.

In addition, the German Constitutional Court's decision on an emergency appeal against the financing of the EU's Recovery and Resilience Facility (RRF) is pending (Own Resources Decision, 'Eigenmittelbeschluss-Ratifizierungsgesetz', ERatG). Until a decision is delivered, which according to some press reports might not come before June, the German President has to withhold signing into law the legislation ratifying the RRF. Although we view a delay as highly unlikely, it might slow down the recovery envisaged for a number of EU countries this year.

Looking beyond this year, domestic demand should gain traction due to the easing of social distancing, as well as an elimination of other deterring effects on private consumption, could lead to an expansion of total output by 3.8% in 2022. This should also be supported by a firmer recovery in other European countries, based on positive effects via RRF impetus.

As regards the medium-term outlook, we would flag some risks related to the pivotal automotive industry's ongoing slow shift towards electric mobility. Along with stronger increases in unit labor costs compared to some major European trading partners and the euro area overall over the last few years, this seems to have somewhat weighed on Germany's competitiveness, as mirrored in the global goods export market share which declined from a high level between 2017 and 2020 (8.1% to 7.9%). This went in tandem with demanding regulatory changes facing the automotive industry, and a generally challenging international trade environment amid a rise of protectionist measures. While the latter may be improving somewhat in light of a new US presidency, pressure as regards the transition to electric cars remains high. Furthermore, we consider that the economy may experience deeper scarring in case of repeated or more protracted lockdowns.

Further to the medium-to-longer term perspective, challenges remain with regard to unfavorable demographic prospects that could weigh on growth potential, as well as regarding catching-up potential in terms of digitalization in the educational sector and in public administration in particular. We note that with regard to the EU's Digital Economy and Society Index (DESI, 2020), Germany lags behind the AAA peers in our rating universe (DK, LU, NL), mostly due to the category 'integration of digital technology'. At the same time, infrastructure gaps that are taking a

long time to be plugged despite available funding suggest the presence of inefficiencies in planning procedures and the implementation of bigger projects, which in turn seems to involve some challenges inherent to a federal system. Also, OECD concludes that technical capacity constraints as well as regulatory and administrative obstacles may slow the reduction of infrastructure backlogs. Potentially, delivering on projects around the envisaged greening of the economy may be impeded for these reasons, which will have to be monitored.

This being said, we assess as positive that the challenges mentioned appear well understood and that - across all levels of government - efforts are under way to help remedy these impediments, with the corona crisis presumably acting as a catalyst in this respect (see below). Nevertheless, we would caution that priorities could be shifted if the fight against the pandemic proves more protracted, more damaging and financially more costly than currently envisaged.

We think that potential growth will be strengthened markedly with the aspired-to remodeling of the economy and effective implementation of initiatives elaborated in the German Recovery and Resilience Plan (GRRP) and the National Reform Plan (NRP), not least through enhanced productivity growth, thus contributing to an improved medium-term growth outlook. Federal investment over the years 2021-24 is thus to markedly exceed last year's level (2020: EUR 11.3bn, Finance Ministry), averaging just under EUR 12.4bn over these four years. We observe that public investment has risen by 0.4p.p to 2.5% of GDP in 2015-19, although still comparing relatively low with the euro area (2.8% of GDP in 2019). With a view to the R&D spending target of 3.5% of GDP by 2025, Germany seemed to be on the right path, having allocated 3.2% to R&D in 2019. Current forecasts suggest that potential growth could recover to 1.0% by 2022, which would be roughly in line with estimated potential growth for the euro area as a whole, after being estimated to have fallen to about 0.8% in the crisis year 2020 (AMECO data). To this end, it is worth stressing that TFP growth forecasts exceed those for the euro area as a whole (2021: 3.0%, 2022: 1.8%, EA: 2.4% and 1.6%, respectively).

Notwithstanding the abovementioned uncertainties, we thus remain of the view that the economy's profound underlying strengths, also including the high productivity level, which in terms of nominal labor productivity per hour worked stood 21.3% above the EU-27 level in 2019, continue to support a constructive growth outlook over the coming few years. The sovereign's demonstrated ability to successfully implement necessary structural reforms in the past adds to this.

Institutional Structure

We continue to assess the extraordinarily strong institutional framework as another key strength of the sovereign, including benefits from its deep integration in the EU and the euro area. Monetary policy is set by the highly credible and accountable ECB, which is also in charge of supervising the systemically important financial institutions. Enhancing the impression of a sound monetary policy framework, we observe relatively close alignment inflation trends in Germany and the euro area over time. By and large, the same can also be said about interest rate differentials. Despite uncertainties related to the upcoming general election, we would ultimately expect a new German government to remain consensus-seeking and exert a high level of political predictability. We see a strong ability and willingness to address structural challenges.

Our assessment of the institutional set-up is corroborated by the latest set of Worldwide Governance Indicators for 2019 compiled by the World Bank. Germany continued to clearly outperform the euro area median, while lagging slightly behind the AAA-peers such as the Netherlands and Denmark. Compared to the preceding year, Germany's WGI scores remained broadly unchanged. As far as government effectiveness is concerned, Germany occupied rank 15 (out of 209 economies, EA median: 35), while in terms of voice and accountability, it held rank 11 (out of 204 economies, EA-median: 26). As to rule of law, it edged up to rank 17 (out of 209 economies; EA-median: 33), while maintaining rank 11 when it comes to control of corruption (out of 209 economies, EA-median: 42).

Turning to the political landscape we assume that the management of the corona crisis will presumably play a large role with regard to the upcoming federal election on 26 September. We would highlight that Germany faces a pivotal year as Chancellor Merkel's final term draws to a close. While two state elections (Baden-Württemberg, Rhineland Palatinate) yielded continuation of the previous coalitions, possibly suggesting voters' preference for stability, the same cannot be said about the federal level. Yet another Grand Coalition of CDU/CSU and SPD, even if the two parties combined obtained a majority of the ballots, looks highly unlikely at this stage. Having gained support in the initial stages of the pandemic, the Christian Union is fast losing popularity currently, although it is still slightly ahead in the polls, having drawn criticism over its crisis management, including of the vaccination campaign and perceived lack of a coherent strategy as far as reducing social contacts is concerned. Moreover, contrary to the coalition partner SPD, CDU/CSU are still in the process of selecting their candidate for chancellorship.

Compared to a share of the vote of 32.9% in the 2017 election, CDU/CSU would currently only obtain about 27%, SPD just under 17%, losing respondents approval as well (2017: 20.5%). A coalition of CDU/CSU and the Greens might still be the most likely option. The party's support has climbed to about 22% of the vote, according to the polls, which would be more than double the share won in the 2017 federal election (8.9%). Whilst a variety of conceivable models have emerged, a black-green coalition could be expected to put more emphasis on sustainability issues and foster digitization more determinedly, although the pace of the transition towards increased use of renewable energy and its financing might harbor potential for conflict. Having said this, we would ultimately expect a new German government to remain consensus-seeking and, by and large, exert a high level of political predictability.

In this vein, we are aware that the draft GRRP focuses on investment in digitization in various vital areas such as education and public administration, as well as in emission-free energy and mobility, strengthening the healthcare system, and social inclusion. Among other things, based on the Online Access Act, a nationwide digital administrative service is to be created by 2022. To overcome barriers apparently delaying investment projects involving various levels of public administration, there could be a joint initiative with 'Partnerschaft Deutschland', set up in 2009 and aiming to provide local authorities with assistance in planning and implementing investment and modernization projects to help identify obstacles and develop targeted solutions. The Investment Acceleration Act already adopted by the Bundestag aims at speeding up reviewing and decision processes along major investment projects.

To enhance Germany's data infrastructure, the government aims to strike a balance between efficient data pooling and joint use and promoting technical data protection. Programs for vehicle manufacturers, including the rail industry and the associated suppliers, aim at modernizing these industries via investments in new technologies, processes and facilities, intending for

them to become more material- and energy-efficient, and as digitized as possible. Overall costs of the GRRP plan, which was based on consultation with social partners, ministries, Bundesbank, and the national productivity board, thus emphasizing informed decisions and broad consensus, are estimated to amount to about EUR 29.3bn.

In terms of making the economy environmentally more sustainable, the planned decarbonization is to be supported through intensified use of renewable hydrogen. The National Hydrogen Strategy explores current and future possibilities around this issue. In order to foster electric mobility, subsidies for the construction of filling and charging infrastructure, as well as tax incentives, will be put in place, while various initiatives for climate-friendly construction are to increase energy efficiency.

The government thus remains committed to addressing the pressing issue of climate change, and, according to EU and OECD assessments, is among the frontrunners in many respects. With regard to the EU's ECO innovation index, Germany ranks 6th among EU-27+UK. Authorities aim to reduce greenhouse gas emissions by at least 55% by 2030, compared to the level in 1990, as set out in the 2030 Climate Package and stipulated by law, with dedicated targets according to industry sector. While on a declining trend, per capita levels of German GHG emissions, at 10.7 tons of CO2 equivalent (2018, Eurostat), remain well above France's and Italy's, as well as above the EU average (2018: 8.7). The long-term objective remains to achieve climate neutrality by 2050. Pertaining to the share of renewable energy sources in electricity, we observe that Germany is well ahead of France, Italy and the UK, with a share of 40.8% in 2019 (2015: 30.9%; EU-27: 34.1%). The overall share of energy from renewable sources has climbed to 17.4% of gross final energy consumption in 2019 (2015: 14.9%), remaining close to Italy and France, and somewhat below the EU-27 average of 19.7%.

As regards financial supervision, the auditing framework, and fraud prevention, we note that in reaction to the fraud scandal involving the now insolvent financial service provider Wirecard, which has exposed deficiencies in these respects, the government approved a reform plan that is to lend more power to supervisor BaFin, as well as increase its specialized staff and tighten audit regulation. The case of the likewise insolvent Greensill Bank seems to underscore existing shortcomings in the supervision and auditing framework; however, we ultimately view the sovereign's swift tackling of these issues as they emerge as testament to its ability and willingness to address such structural challenges.

Further strengthening this point, we observe that the government has agreed to establish a lobby register to increase transparency over potential conflicts of interest, as a consequence of recent political incidents involving members of parliament. Prior to these cases, the European Commission's Rule of Law Report and the GRECO evaluation report (Fifth Evaluation Round) underscored Germany's solid anti-corruption framework and suggested complementing existing policies with a code of conduct for persons with top executive functions.

In February 2021, the German government adopted a draft law upgrading the transparency register, which facilitates accessing information on beneficial ownership pertaining to companies and trusts, in particular in cases of foreign ownership, an issue which previously complicated procedures for banks seeking to identify account owners. This should further strengthen the framework for investigating and prosecuting money laundering cases, both domestically and internationally, which is generally found to be robust, with some room for improvement with regard to effective implementation. We will follow the outcome of the Financial Action Task

Force's (FATF) latest assessment of Germany, with the final mutual evaluation report due to be adopted in October 2021.

Fiscal Sustainability

We view the firm downward trajectory of Germany's debt-to-GDP ratio prior to the outbreak of the corona crisis and the resulting significant fiscal headroom, which put the sovereign in a relatively strong positon to combat the crisis, as well as its ongoing commitment to medium-term fiscal consolidation, as important elements limiting fiscal sustainability risks. Current uncertainty over the constellation of the next government does not fundamentally alter this view, not least due to the debt brake enshrined in the German Basic Law which has aided fiscal sustainability since its inception. While very high debt affordability remains a key strength further mitigating risks, an elevated level of public guarantees, along with age-related spending pressure due to demographic changes, pose challenges for the medium term.

In terms of public finances, Germany entered the pandemic on a comparatively strong footing, allowing for a forceful fiscal response in combating the crisis and demonstrating willingness to future-proof the economy, with additional funds directed towards the improvement and intensified use of digital infrastructure, as well as towards an environmentally more sustainable economic model.

The fiscal packages, including guarantees in reaction to the outbreak of coronavirus, count among the largest in Europe, totaling about 39% of 2020 GDP so far, with direct budgetary effects estimated to come to about 11% of GDP (IMF data). Over the course of the crisis, the government has been pursuing a two-pronged strategy, with a stabilizing pillar on the one hand, providing support to the health sector, measures to maintain employment, direct support to businesses, and extended credit guarantees. The second pillar aims to strengthen the recovery, inter alia by buttressing household spending via e.g. a temporary VAT reduction (H2-20), a child bonus, and a subsidy for the electric vehicle purchase, as well as by ramping up investment to modernize the economy and enhance Germany's competitiveness with regard to forward-looking topics such as digitalization, health, education, and green technologies.

After having registered a general government surplus since 2014 (2019: 1.5% of GDP), the pandemic had the headline balance turn sharply into a deficit to the tune of EUR 139.6bn or 4.2% of GDP (preliminary Destatis data) in 2020, although comparing as relatively tame with the headline deficit of other major European economies. The deficit came on the back of falling revenue (-3.0%, 2019: +3.6%) and soaring expenditure (+9.3%, 2019: +4.4%), and occurred against the backdrop of two supplementary budgets (March 2020 and June 2020). Tax revenue contracted by 6.5% last year, with the corporate tax intake falling by 13.5% in the face of declining economic activity and tax deferrals.

Looking at the current year, the negative general government balance should widen further, with the debt brake rule remaining suspended for both this year and next. We note that the new supplementary budget adopted by the government coalition on 24 March this year entails measures amounting to EUR 60.4bn, and would lift net borrowing to EUR 240.2bn in 2021. The lion's share of new fiscal support (EUR 25.5bn) is dedicated to companies heavily affected by this crisis. Apart from initiatives related to the pandemic and the immediate recovery thereof, the government allocated EUR 38.9bn via the Energy and Climate Fund (EKF) e.g. for promoting elec-

tric mobility including necessary infrastructure as well as making buildings more energy-efficient. Further budget-impacting measures include the partial removal of the solidarity surcharge (for the majority of income tax payers), tax relief for families with children, and the introduction of a basic pension. In the face of the latest initiative announced on 1 April, foreseeing of a maximum of EUR 50bn to support companies whose turnover has more than halved in at least three months since November, we expect the headline deficit to come to about 7.6% of GDP this year. For 2022, we cautiously forecast the deficit to narrow to 2.2% of GDP, as some aid will have phased out by then and GDP should grow more vividly than in the current year.

We have to emphasize that any forecast remains subject to abnormal high uncertainty, and is ultimately dependent on the epidemiological situation and vaccination progress. The challenging task of forecasting the fiscal outcome was underlined by the necessity to substantially revise the medium-term path for the headline deficit previously envisaged in the authorities' GRRP after a relatively short period of time, in light of the evolving pandemic and the third supplementary budget mentioned above.

According to preliminary Bundesbank data, the public debt level leaped to 70.0% of GDP in 2020, after having fallen to 59.7% of GDP in 2019 and thus below the Maastricht threshold for the first time since 2002. Roughly half of last year's increase is accounted for by the deficits incurred across different layers of government and social security funds. The strong rise notwithstanding, the debt ratio remains well below the level reached in the aftermath of the global financial crisis (2010: 82.3% of GDP) as well as significantly below the level likely registered for the euro area as a whole where government debt already posted at 84.0% of GDP in 2019.

Against the backdrop of a large primary deficit prospectively offsetting rebounding debt-reducing effects from positive economic growth, the public debt ratio should climb to about 73.3% this year before starting to descend from next year (2022e: 71.4% of GDP), as we expect real GDP to expand at a faster pace and the deficit to shrink markedly. Risks surrounding these expectations still seem skewed to the downside, although decisive progress in the vaccination campaign, not only in Germany but also elsewhere, may eventually give rise to upside surprises. To be sure, even assuming a less dynamic economic recovery, we would still expect public debt to follow a firm downward path over the medium term.

In view of ongoing high debt affordability and the recent history of prudent debt management, we continue to regard risks to fiscal sustainability as limited. Moreover, despite current uncertainty over the future government constellation, we think that commitment to fiscal consolidation will remain a trait of the sovereign, also under a new administration after the general election in September.

Interest payments decreased by 20.7% to EUR 21.8bn, or 0.7% of GDP (1.4% of total revenue) in 2019-20, and long-term government bond yields should stay at historically low levels. While remaining firmly in negative territory, the yield on German 10-year government bonds has trended slightly upward since the start of the year, but has been moving sideways since March in view of heightened uncertainty over the timing and extent of economic recovery (9-Apr-21: -0.296%, weekly quote). Monetary policy should thus contribute to ongoing benign financial conditions, with Germany being a beneficiary of the ECB's Asset Purchase Program (APP). Since our last review, the ECB has strengthened its accommodative stance, increasing its PEPP envelope to a total of EUR 1,850bn, while the horizon for net purchases under PEPP was extended to at least the end of March 2022. Besides extended and enhanced refinancing operations (TLTRO,

PELTRO), the duration of a set of collateral easing measures was extended as well. Net purchases under the APP continue at a monthly pace of EUR 20bn. At the end of March, cumulative net purchases of German government bonds under the PEPP stood at about EUR 220.5bn, corresponding to a share of 24.5% of total net purchases under this program. With regard to the PSPP, cumulative net purchases increased by 11.2% to roughly EUR 593bn over the 12 months to Mar-21.

As far as contingent liability risks to fiscal sustainability are concerned, we gather that the maximum budgeted amount of public guarantees relating to the Covid-19 pandemic comes to about 19.6% of GDP (DBP21), which would add to a level that already compared relatively high among EU countries despite having trended downward over the last ten years (2019: 13.19% of GDP, Eurostat). Guarantees associated with the ESM (a maximum of EUR 189.9bn, or 5.7% of GDP) would come on top of that.

That said, state-guaranteed loans to enterprises, mainly refinanced via the Economic Stabilization Fund (WSF), which is endowed with a firepower of EUR 600bn, and stakes the state took in some enterprises amounted to about EUR 36bn in 2020 (Bundesbank), or about a mere 1.1% of 2020 GDP. According to KfW, an overall credit volume of EUR 49.42bn via the special corona facility has been approved as of 31 March. We thus flag that, if called upon, guarantees could derail the envisaged debt reduction path over the next few years.

At the current juncture, we deem risks to fiscal sustainability stemming from the banking sector as manageable, judging by the asset quality, which remained above the EU-level as measured by the NPL ratio, standing at a stable 1.3% in Q4-20 (Q4-19: 1.3%). We also note that the credit quality does not seem to have deteriorated materially since the outbreak of Covid-19. While the share of so-called stage 2 loans increased from 5.6% to 9.2% between March and December 2020, it remains in line with the EU average (9.1%, EBA). Profitability remained very low (return on assets: 0.0% in Q4-20, EU average: 0.1%), whereas bank capitalization in terms of CET1 improved to 15.7% in Q4-20 (Q4-19: 14.5%), almost closing the gap to the EU overall (Q4-20: 15.9%).

Having said that, the persistent low interest rate environment continues to put pressure on banks' profitability, and spiking insolvencies as well as rising unemployment could inflict losses especially on smaller savings banks and cooperative banks, as these tend to have larger exposure to SMEs, which appear more fragile in the current macroeconomic environment. Furthermore, we remain vigilant with a view to risks emanating from mortgage defaults, as lending for house purchases had remained vivid since the outbreak of the crisis. Mortgage lending to households slightly accelerated to 6.5% in Feb-21 (Feb 20: 6.1%), amid increasing house price dynamics in the second half of 2020, as suggested by Eurostat data (Q3-20: 7.8% y-o-y, Q3-19: 5.3%). At the same time, OECD data hints at deteriorating affordability, with the price-to-income ratio exceeding its long-term average by 15.4% in Q3-20 (Q3-19: 8.2%). However, household debt measured against disposable income, while having edged up to 88.8% in Q3-20 (Q3-19: 86.7%, ECB data), is far from being excessive. While we will continue to monitor developments here, we think that the ongoing low interest rate environment, supply shortages which had already been prevalent prior to the outbreak of Covid-19, and increased demand for homes as work patterns may shift more permanently towards remote working, appear to be the main forces behind the most recent developments.

Further to fiscal risks in the medium-term, we continue to see fiscal pressures associated with Germany's ageing population. We would monitor developments pertaining to proposals report-

edly discussed among Christian democratic policymakers to reform the pension system, possibly involving removal of a statutory retirement age and shifting to a more flexible model. However, we think such a major step would require broad consensus in parliament, whilst any evaluation appears essentially premature in the face of the upcoming general election.

Foreign Exposure

While its relatively high trade openness and its deep integration in global value chains generally constitute sources of vulnerability, we regard Germany's sizable external buffers as a mitigating factor. Thanks to its competitive, export-oriented economy, Germany displays a persistently high current account surplus, buttressing its position as a large net external creditor.

Germany's current account surplus fell by 0.5 p.p. to 7.0% of GDP in 2020, thus remaining on a comparatively high level while continuing the slight downward trend since peaking in 2015. Over the course of 2020, the current account position saw a pronounced degree of volatility owing to the pandemic and the actions taken to cushion its impact, shrinking to below 5% of GDP (Q2-20), but closing the year at 8.1% of GDP (Q4-20). Overall, the surplus in the goods balance narrowed further to 5.7% of GDP (-0.6 p.p.) in 2020, as due to the global recession exports fell more steeply than imports, with the decline of the latter also influenced by lower energy prices. The usually negative services balance ended up broadly in balance, as cross-border travel widely came to a standstill in the face of the spreading virus. The positive primary balance diminished (-0.4p.p. to 2.8% of GDP), mainly on account of lower returns on German direct investment abroad.

Going forward, amid recovering economic growth among important trading partners, we expect the current account surplus to increase again this year, with an increasing goods surplus as the main driver. Further out, the current account position could continue its gradual narrowing trend amid rising domestic demand as efforts to drive forward the digital transformation and to green the economy are stepped up.

Hence, Germany's positive NIIP should remain one of the highest in the EU, having widened to a new peak at the end of 2020 (76.3% of GDP, 2019: 71.9%). Both assets and liabilities saw large increases last year, while positive valuation effects also played a role. We note that enhanced exposure to the Eurosystem via the TARGET2 payment system was an important driver for the increase in assets, contributing to driving the 'other investment' component up by 2.7 p.p. to 26.2% of GDP.

Rating Outlook and Sensitivity

Our rating outlook on the Federal Republic of Germany is stable. We perceive current downside risks, especially regarding its macroeconomic performance and regarding the fiscal outlook, as being offset by Germany's economic diversification and resilience as well as by its high-quality institutional set-up, alongside the highlighted factors mitigating fiscal sustainability risks. We have to emphasize that the assessment and interpretation of economic developments remains considerably more challenging than under normal circumstances, as is the case for other indicators, in particular from the fiscal realm.

We could lower our rating or the outlook if it takes significantly longer to control the spread of the virus, resulting in stronger and more protracted adverse effects on the German economy

than assumed at this juncture. A negative rating action could thus be prompted if we conclude that medium-term potential growth is deteriorating materially, implying that fiscal support may have to continue for longer, potentially exhausting funds earmarked to accelerate and intensify the digital and green transformation of the economy.

Downward pressure on our rating or on the outlook could also arise if - in light of Germany's high degree of trade openness and integration into global value chains - delayed economic recovery in the EU and/or a renewed slowdown of the global economy occurred, possibly amid renewed virus infection waves. We could also consider a negative rating action if public finances continue to deteriorate for a protracted period, possibly further burdened by materializing contingent liabilities.

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Ratings*

Long-term sovereign rating	AAA/ stable
Foreign currency senior unsecured long-term debt	AAA/ stable
Local currency senior unsecured long-term debt	AAA/ stable

*) Unsolicited

ESG Factors

While there is no universal and commonly agreed typology or definition of environment, social, and governance (ESG) criteria, Creditreform Rating views ESG factors as an essential yardstick for assessing the sustainability of a state. Creditreform Rating thus takes account of ESG factors in its decision-making process before arriving at a sovereign credit rating. In the following, we explain how and to what degree any of the key drivers behind the credit rating or the related outlook is associated with what we understand to be an ESG factor, and outline why these ESG factors were material to the credit rating or rating outlook. For further information on the conceptual approach pertaining to ESG factors in public finance and the relevance of ESG factors to sovereign credit ratings and to Creditreform Rating credit ratings more generally, we refer to

the basic documentation, which lays down key principles of the impact of ESG factors on credit ratings.

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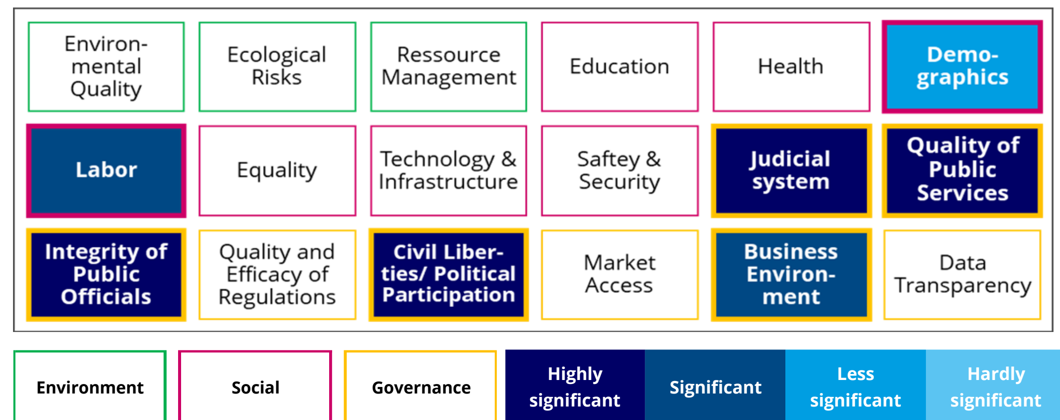
ESG Factor Box



The governance dimension plays a pivotal role in forming our opinion on the creditworthiness of the sovereign. As the World Bank's Worldwide Governance Indicators Rule of Law, Government Effectiveness, Voice and Accountability, and Control of corruption have a material impact on Creditreform Rating's assessment of the sovereign's institutional set-up, which we regard as a key rating driver, we consider the ESG factors 'Judicial System and Property Rights', 'Quality of Public Services and Policies', 'Civil Liberties and Political Participation', and 'Integrity of Public Officials' as highly significant to the credit rating.

Since indicators relating to the competitive stance of the sovereign such as the World Bank's Ease of Doing Business index and the World Economic Forum's Global Competitiveness Indicator add further input to our rating or adjustments thereof, we judge the ESG factor 'Business Environment' as significant.

The social dimension plays an important role in forming our opinion on the creditworthiness of the sovereign. Labor market metrics constitute crucial goalposts in Creditreform Rating's considerations on macroeconomic performance of the sovereign, and we regard the ESG factor 'Labor' as significant to the credit rating or adjustments thereof. Indicators or projections providing insight into likely demographic developments and related cost represent a social component affecting our rating or adjustments thereof. We regard the ESG factor 'Demographics' as less significant.

While Covid-19 may have significant adverse effects on several components in our ESG factor framework in the medium to long term, it has not been visible in the relevant metrics we consider in the context of ESG factors – though it has a significant bearing concerning economic prospects and public finances. To be sure, we will follow ESG dynamics closely in this regard.

Economic Data

[in %, otherwise noted]	2015	2016	2017	2018	2019	2020e	2021e
Macroeconomic Performance							
Real GDP growth	1.5	2.2	2.6	1.3	0.6	-4.9	3.1
GDP per capita (PPP, USD)	47,622	50,574	53,255	55,059	56,226	54,076	56,956
Credit to the private sector/GDP	82.6	82.0	82.0	83.1	84.8	91.6	n/a
Unemployment rate	4.6	4.1	3.8	3.4	3.1	3.8	n/a
Real unit labor costs (index 2015=100)	100.0	100.0	100.0	101.3	102.5	n/a	n/a
Ease of doing business (score)	79.5	79.6	79.3	79.3	79.7	n/a	n/a
Life expectancy at birth (years)	80.7	81.0	81.1	81.0	81.3	81.1	n/a
Institutional Structure							
WGI Rule of Law (score)	1.8	1.6	1.6	1.6	1.6	n/a	n/a
WGI Control of Corruption (score)	1.8	1.8	1.8	1.9	1.9	n/a	n/a
WGI Voice and Accountability (score)	1.4	1.4	1.4	1.4	1.3	n/a	n/a
WGI Government Effectiveness (score)	1.7	1.7	1.7	1.6	1.6	n/a	n/a
HICP inflation rate, y-o-y change	11.4	11.4	11.2	10.7		n/a	2.4
GHG emissions (tons of CO2 equivalent p.c.)	0.7	0.4	1.7	1.9	1.4	0.4	n/a
Default history (years since default)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fiscal Sustainability							
Fiscal balance/GDP	1.0	1.2	1.4	1.8	1.5	-4.2	-7.6
General government gross debt/GDP	72.3	69.3	65.1	61.8	59.6	70.0	73.3
Interest/revenue	3.1	2.6	2.3	2.0	1.7	1.4	n/a
Debt/revenue	160.3	152.2	142.9	133.4	127.7	149.2	n/a
Weighted average maturity of debt (years)	5.7	5.8	6.0	6.2	6.5	6.7	n/a
Foreign exposure							
Current account balance/GDP	8.6	8.5	7.8	7.9	7.5	7.0	n/a
International reserves/imports	16.5	17.6	17.2	15.4	18.1	23.4	n/a
NIIP/GDP	46.6	51.4	56.3	63.1	71.9	76.3	n/a
External debt/GDP	151.2	152.2	146.5	145.5	145.1	165.4	n/a

Sources: IMF, World Bank, Eurostat, AMECO, ECB, Destatis, own estimates

Appendix

Rating History

Event	Publication Date	Rating /Outlook
Initial Rating	29.07.2016	AAA/ stable
Monitoring	30.06.2017	AAA/ stable
Monitoring	27.04.2018	AAA/ stable
Monitoring	26.04.2019	AAA/ stable
Monitoring	24.04.2020	AAA/ stable
Monitoring	16.04.2021	AAA/ stable

Regulatory Requirements

In 2011 Creditreform Rating AG (CRAG) was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration Creditreform Rating AG is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the

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This sovereign rating is an unsolicited credit rating. Neither the rated sovereign nor a related third party participated in the credit rating process. Creditreform Rating AG had no access to the accounts, representatives or other relevant internal documents for the rated entity or a related third party. Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

Unsolicited Credit Rating	
With Rated Entity or Related Third Party Participation	NO
With Access to Internal Documents	NO
With Access to Management	NO

The rating was conducted on the basis of CRAG's "Sovereign Ratings" methodology (v1.2, July 2016) in conjunction with its basic document "Rating Criteria and Definitions" (v1.3, January 2018). CRAG ensures that methodologies, models and key rating assumptions for determining sovereign credit ratings are properly maintained, up-to-date, and subject to a comprehensive review on a periodic basis. A complete description of CRAG´s rating methodologies and basic document "Rating Criteria and Definitions" is published on our website.

To prepare this credit rating, CRAG has used the following substantially material sources: International Monetary Fund, World Bank, Organization for Economic Co-operation and Development, Eurostat, European Commission, European Banking Authority, European Central Bank, World Economic Forum, ECDC, Destatis, Deutsche Bundesbank, Bundesministerium der Finanzen, Bundesagentur für Arbeit, Bundesanstalt für Finanzdienstleistungsaufsicht.

A Rating Committee was called consisting of highly qualified analysts of CRAG. The quality and extent of information available on the rated entity was considered satisfactory. The analysts and committee members declared that the rules of the Code of Conduct were complied with. No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or approving credit ratings and rating outlooks. The analysts presented the results of the quantitative and qualitative analyses and provided the Committee with a recommendation for the rating decision. After the discussion of the relevant quantitative and qualitative risk factors, the Rating Committee arrived at a unanimous rating decision. The weighting of all risk factors is described in CRAG´s "Sovereign Ratings" methodology. The main arguments that were raised in the discussion are summarized in the "Reasons for the Rating Decision".

As regards the rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within the credit rating report. There are no other attributes and limitations of the credit rating or rating outlook other than displayed on the CRAG website. In case of providing ancillary services to the rated entity, CRAG will disclose all ancillary services in the credit rating report.

The date at which the credit rating was released for distribution for the first time and when it was last updated including any rating outlooks is indicated clearly and prominently in the rating report; the first release is indicated as “initial rating”; other updates are indicated as an “update”, “upgrade or downgrade”, “not rated”, “affirmed”, “selective default” or “default”.

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An explanatory statement of the meaning of each rating category and the definition of default are available in the credit rating methodologies disclosed on the website.

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