Federal Republic of Germany Rating Report

Sovereign and Public Sector



STABLE OUTLOOK

Credit strengths

- Wealthy, large, diversified economy
- Robust fiscal framework and strong track record of fiscal discipline
- Highly competitive external sector

Credit challenges

- Transition risks for energy-intensive industries, and low levels of public and private sector investment
- Ageing population, resulting in rising pension liabilities and lower growth potential

Rating rationale

Wealthy, large, diversified economy: Germany's economy proved resilient during the Covid-19 pandemic. However, the country's high value-added, export-oriented, energy imports-dependent economy has been impacted by the fallout of the Russia-Ukraine war and global supply chain disruptions, resulting in a weaker-than-expected recovery from the pandemic. Rising inflationary pressure will continue to weigh on the country's near-term growth outlook.

Robust fiscal framework: Germany's solid fiscal policy framework and strong record of fiscal discipline are well anchored by its constitutional debt brake. The debt brake is expected to be reinstated in 2023, although greater use of special extra-budgetary funds will raise general government deficits well above debt brake limitations over coming years.

Highly competitive external sector: The economy's external strength is reflected in its large and persistent current account surplus. This has declined in 2022 due to the energy crisis and is expected to remain slightly below pre-pandemic levels in the medium term, but it remains above the peer country average.

Rating challenges include: i) transition risks for energy-intensive industries given carbon neutrality targets and low levels of public and private sector investment relative to peers; and ii) an ageing population, resulting in rising pension liabilities and downward pressure on the country's medium-term growth potential.

Quantitative Qualitative* Reserve currency Final **Risk pillars** rating Domestic Economic Risk 35% -1/3 aaa 20% aa-+1/3 10% +2/3aaa FUR Financial Stability Risk 10% +1/3 aaa [+1] Environmental Factors 5% -1/3 а Social Factors 7.5% b 0 12.5% 0 Governance Factors aaa Indicative outcome +1 aaa Additional considerations 0

Germany's sovereign rating drivers

* Note: The qualitative scorecard adjustments, capped at one notch per rating pillar, are weighted equally with an aggregate adjustment rounded to the nearest integer. The reserve currency adjustment applies to currencies in the IMF's SDR basket. For details, please see Scope's Sovereign Rating Methodology. Source: Scope Ratings

Outlook and rating triggers

The Stable Outlook reflects our view that risks to the ratings are balanced.

Positive rating-change drivers

• N/A

Negative rating-change drivers

- Fiscal deterioration, resulting in a material increase in public debt
- Significant deterioration in the country's growth potential and/or outlook

Ratings and Outlook

Foreign currency

Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

Local currency

Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

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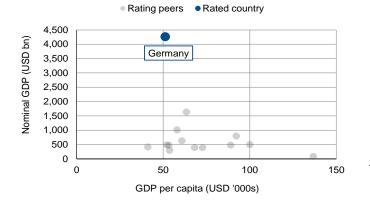
Domestic Economic Risks

- Growth outlook: Following a relatively small decline in real GDP (negative 4.6%) in 2020, Germany's post-pandemic recovery of 2.6% in 2021 was slow compared with peers (averaging 4.9%) and the euro area (5.2%). The slow pace of its recovery was due in part to the impact of global supply chain disruptions on industrial output. Economic momentum remained subdued in the first half of 2022 amid a sharp drop in consumer confidence and a worsening export climate. While GDP growth surprised on the upside in Q3 2022 (up 0.3% QoQ), causing economic activity to edge above its end-2019 level, we anticipate a slowdown in the coming months as elevated inflation and tightening funding conditions result in lower consumption and investments. This is despite extensive government support measures as high nominal energy import prices and weakening external demand weigh on the external balance. We expect economic growth of 1.6% this year but a 0.3% contraction in GDP in 2023. An ageing population and low levels of investment mark material headwinds for the long-term growth potential, which we estimate at 1%.
- Inflation and monetary policy: Inflationary pressures remain at very elevated levels historically, with headline inflation rising to 10.4% YoY in October 2022 (up from 10% in September), energy prices rising by 43% and food prices up by 20%. Price pressures have broadened as core and services inflation stand at 4.6% and 4.0% respectively, with core inflation at its highest level in almost 30 years. Like other major central banks, the ECB has been rapidly tightening its monetary policy to tame price pressures. Key ECB interest rates increased by 75 bps in both September and October 2022, with the deposit rate reaching 1.5%. This is the highest level since 2009, 200 bps higher than in 2019, and we expect additional interest rate increases.
- Labour market: The German labour market has proved to be resilient despite slower economic momentum, with the unemployment rate remaining near historically low levels of around 3%. The employment rate is elevated at 77.3% as of Q2 2022, 0.3 pp above its end-2019 level. While wage negotiations have led to some salary increases for unionised workers, the rise in consumer prices has largely outpaced that of nominal wages, causing a dip in real incomes. We expect the labour market to remain tight in the medium term, with the unemployment rate averaging 3.1% this year and rising slightly to 3.2% in 2023. This is despite recent, more moderate employment gains and a gradual decline in unfilled vacancies.

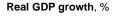
Overview of Scope's qualitative assessments for Germany's Domestic Economic Risks

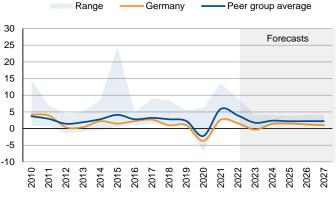
CVS indicative rating	Analytical component	Assessment	Notch adjustment	Rationale		
	Growth potential of the economy	Weak	-1/3	Weak growth potential, reflecting large investment gap and structural challenges in key industries		
aaa	Monetary policy framework	Neutral	0	ECB is a highly credible and effective central bank; effective policy framework and transmission over the cycle		
	Macroeconomic stability and sustainability	Neutral	0	Competitive and diversified economy but weaknesses in digitalisation, labour market challenges related to ageing; high resource dependence and trade linkages with other countries		

Nominal GDP and GDP per capita, USD



Source: IMF World Economic Outlook (WEO), Scope Ratings





Source: IMF WEO, Scope Ratings forecasts



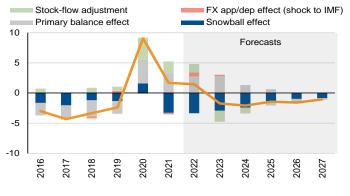
Public Finance Risks

- Fiscal outlook: Federal and state debt-brake laws, introduced for the federal government in 2009 and binding for state governments since 2020, limit structural deficits to 0.35% of GDP a year for the federal government and 0% for state governments. The debt brake was suspended at the onset of the Covid-19 crisis and again after the escalation of the Russia-Ukraine war, enabling the government to fund large budgetary measures. Public funds allocated to mitigate the energy crisis' impact on the private sector are estimated at EUR 264bn (6.9% of 2022 GDP) between September 2021 and October 2022, one of the largest amounts among euro area countries. We expect the headline budget deficit, including extra-budgetary spending, to remain elevated at 3.3% of GDP in 2022 and 3.5% in 2023, down from 3.7% last year, before gradually falling to around 0.8% by 2027. There is an unusually high degree of uncertainty concerning budget deficit estimates. While the government is committed to reimplementing the debt brake from 2023, the use of special funds, with spending spread over several years, will increase government deficits. This includes additional planned borrowing of EUR 100bn to boost military spending and EUR 200bn to cushion rising energy prices for households and businesses.
- Debt trajectory: Strict fiscal discipline, underpinned by a robust fiscal framework, allowed for a sharp decline in the debt-to-GDP ratio in the decade leading up to the pandemic, from 82% to 59% over 2010-19. Unprecedented fiscal support measures during the pandemic led to a sharp jump in debt levels, which are expected to increase to 71.1% of GDP this year. We expect the debt-to-GDP ratio to trend down starting from next year, declining from 69.4% in 2023 to around 63% by 2027.
- Market access: Germany's market access remains very strong, underpinned by its status as the euro area's benchmark issuer. In line with other advanced economies and amid rising inflationary pressure, funding costs have increased in recent months, with yields on 10-year bonds averaging 2.2% in October 2022, up from -0.15% one year earlier. Debt structure is favourable, with a marginal share of inflation-linked securities making up just 4.5% of the total outstanding volume and no foreign currency exposure. Weighted average maturity has gradually increased in recent years, rising from around 5.1 years in 2011 to 6.9 years as of September 2022. Gross issuances are expected to amount to EUR 448.8bn this year (11.6% of GDP), including continued green bond issuances under the twin bond framework.

Overview of Scope's qualitative assessments for Germany's Public Finance Risks

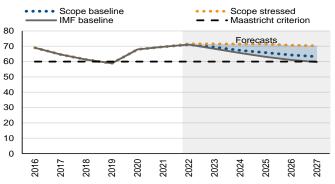
CVS indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
	Fiscal policy framework	Neutral	0	Strong policy response to energy crisis; constitutionally anchored debt brake at federal and regional level, contributing to retention of fiscal space but increased use of extra-budgetary special funds
aa-	Debt sustainability	Neutral	0	Moderate public debt with high resilience to adverse scenarios; rising pension liabilities
	Debt profile and market access	Strong	+1/3	Primary benchmark issuer in euro area, reflected in low interest payments despite heightened debt levels

Contributions to changes in debt levels, pp of GDP



Source: IMF WEO, Scope Ratings forecasts

Debt-to-GDP forecasts, % of GDP



Source: IMF WEO, Scope Ratings forecasts



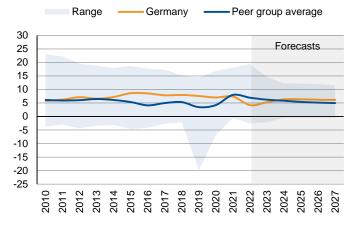
External Economic Risks

- Current account: The German economy's external strength is reflected in its very large, persistent current account surpluses, averaging 7.6% of GDP in the 10 years prior to 2021. The escalation of the Russia-Ukraine war and the associated sharp rise in energy import prices, as well as weaker external demand from key trading partners including China, exerted significant downward pressure on the trade balance in 2022. China is now Germany's biggest single source of imports (12% of total in 2021) and second biggest export destination (8% of total in 2021). The current account surplus narrowed to only EUR 0.6bn (0.2% of GDP) in August after briefly turning into a deficit of 0.1% of GDP in May for the first time since 2003. We expect these headwinds to weigh on Germany's current account balance in the medium term, allowing for only a gradual and partial recovery to pre-pandemic surpluses, but still above the peer group average. In line with IMF estimates, we expect the current account surplus to narrow to 4.2% of GDP in 2022 and stabilise below the previous long-term average at around 6% due to reduced competitiveness and revived domestic demand.
- External position: Germany's net international investment position (NIIP) amounted to EUR 2.8trn (75% of GDP) as of Q2 2022. German claims on non-residents now stand at EUR 12.0trn while German liabilities amount to EUR 9.2trn. Persistent, large current account surpluses have supported the NIIP, which has continued a gradual upward trend in line with other peer countries, rising from around 18% of GDP in 2011. External debt is moderate at about 165% of GDP, albeit remaining around 18 pp above its end-2019 level.
- Resilience to shocks: Like all euro area members, Germany benefits from the euro's status as a global reserve currency, significantly mitigating risks to external shocks. While falling market prices on international equity and bond markets lowered the NIIP by EUR 140bn, this was partially offset by significant positive exchange rate effects amounting to EUR 101bn due to the depreciation of the euro.

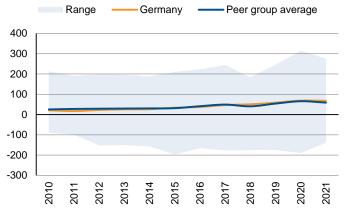
Overview of Scope's qualitative assessments for Germany's External Economic Risks

CVS indicative rating	Analytical component	Assessment	Notch adjustment	Rationale	
	Current account resilience	Strong	+1/3	Diversified and competitive export base; strong track record of current account surpluses	
aaa	External debt structure	Neutral	0	Moderate external debt	
	Resilience to short- term external shocks	Strong	+1/3	Benefits from euro area membership; large external-creditor position	

Current account balance, % of GDP



Net international investment position (NIIP), % of GDP



Source: IMF WEO, Scope Ratings

Source: IMF, Scope Ratings



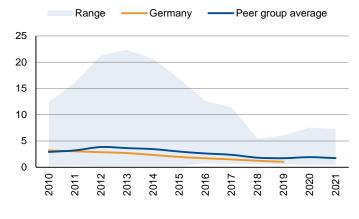
Financial Stability Risks

- Banking sector: German banks are highly liquid and adequately capitalised, as reflected in liquid assets as a share of short-term liabilities of 158%, and an average Tier 1 ratio of 16.3% as of Q2 2022, in line with the EU average of 16.5%. The sector's resilience is supported by strong asset quality, with low and stable levels of non-performing loans of around 1% of gross loans according to the European Banking Authority. Banking sector challenges relate to structurally weak profitability, with the aggregate sector return on equity averaging 2.2% over 2015-19 the lowest level among similarly rated peers due to high cost-to-income ratios and the prolonged period of low interest rates. After avoiding significant losses during the Covid crisis, profitability has been improving somewhat since 2021, with aggregate return on equity edging above prepandemic levels, at 5.4% as of Q2 2022. A deteriorating economic outlook will weigh on credit demand and asset quality, but we expect rising interest rates to support higher interest margins in the medium term.
- Private debt: Private sector leverage remains very moderate relative to peer countries. Household and non-financial corporate debt levels amounted to 56% and 72% of GDP as of Q1 2022, remaining well below other AAA rated countries and lower than the euro area averages of 59% and 110% respectively. Debt service ratios are similarly favourable relative to peers, providing a higher buffer to the rising interest rate environment.
- Financial imbalances: Residential real estate prices continued to grow rapidly throughout the pandemic, driven by structural demand pressures and supply shortages. In early 2022, the European Systemic Risk Board issued recommendations to the German government to highlight significant overvaluations of house prices and signs of loosening credit standards. The national regulator implemented several measures aimed at addressing these risks, including the introduction of a 2% systemic risk buffer on housing loans and an increase to the countercyclical capital buffer rate (to 0.75%, effective 1 February 2023). While we expect the housing market to cool over the coming months as mortgage rates rise, related risks appear to be contained in view of continued housing shortages, high amortisation rates, a prevalence of fixed-rate mortgages and a high proportion of renters relative to other countries.

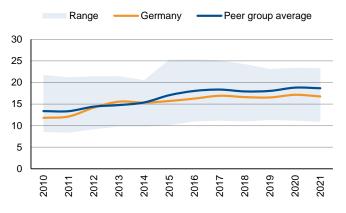
Overview of Scope's qualitative assessments for Germany's Financial Stability Risks

CVS indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
	Banking sector Performance 0		0	Low profitability and unfavourable cost structure of banking sector balanced by adequate capitalisation and moderate exposure risk to non- financial corporate debt
	Banking sector oversight	Neutral	0	Oversight under National Supervisory Authority and ECB as part of banking union
	Financial imbalances	Strong	+1/3	Moderate household and private sector indebtedness; closely monitored systemic risks in financial system

Non-performing loans, % of total loans



Tier 1 ratio, % of risk-weighted assets



Source: IMF, Scope Ratings



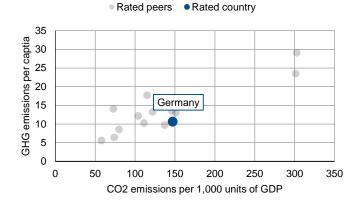
ESG Risks

- Environment: Despite having achieved material progress in developing renewable energy production capacities over recent decades, Germany remains largely reliant on fossil fuels, which accounted for 78% of primary energy consumption in 2021 compared to around 70% in the EU. The escalation of the Russia-Ukraine war has prompted the government to present measures aimed at accelerating the country's transition away from fossil fuels and strengthening its energy security, including additional investments and relaxed planning rules. The government aims to reach climate neutrality by 2045 through an accelerated phase-out of coal and a rapid scale-up of renewable sources of energy, which are to cover 80% of the country's electricity needs by 2030. Meeting these ambitious targets will require continued, rapid structural changes to keep up with other highly rated economies. Germany ranks 18th within the World Economic Forum's Energy Transition Index well behind other AAA rated sovereigns, all of which rank within the top five. The Council of Experts on Climate Change has noted that Germany is currently not on track to meet its emission reduction targets specified in the 2019 Federal Climate Change Act.
- Social: Germany managed to raise labour force participation before the pandemic but mostly in favour of the lower-paid sector. Income and wealth inequality was already on the rise in Germany before the pandemic and has likely been exacerbated by the strong rise in asset prices during the pandemic. Among OECD economies, Germany is one of the least capable of guaranteeing equal opportunities for students, partly due to insufficient digitalisation and investment in schooling. Demographic pressures are rising and are more adverse compared to peers.
- Governance: Germany benefits from high-quality institutions and a stable political environment. Although the last election delivered a fragmented parliament, the centre-left Social Democratic Party, the Greens and the liberal Free Democratic Party quickly established a three-way coalition and have effectively reached compromises in key policy areas.

Overview of Scope's qualitative assessments for Germany's ESG Risks

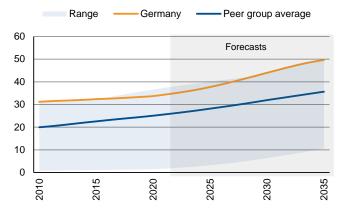
CVS indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
	Environmental factors	Weak	-1/3	Structural challenges related to transition risk in view of carbon neutrality targets and economic importance of energy-intensive key industries
a+	Social factors	Neutral	0	Weak demographics in form of ageing workforce, balanced by high social inclusion and improving labour force participation; rising inequality risks, reinforced by the Covid-19 crisis
	Governance factors	Neutral	0	High-quality institutions and stable political environment

Emissions per GDP and per capita, mtCO2e



Source: European Commission, Scope Ratings

Old-age dependency ratio, %

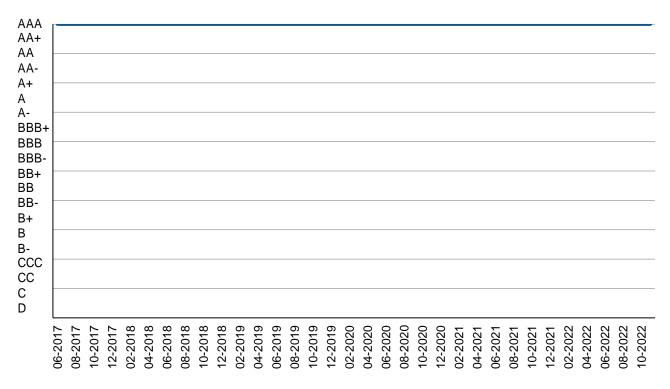


Source: United Nations, Scope Ratings

Old-age dependency



Appendix I. Rating history



NB. Positive/Negative Outlooks are treated with a +/-0.33-notch adjustment. Credit Watch positive/negative with a +/-0.67-notch adjustment.

Appendix II. Rating peers

Rating peers are related to sovereigns with an indicative rating in the same rating category or in adjacent categories per Scope's Core Variable Scorecard, including a methodological reserve-currency adjustment.

Peer group*
Austria
Denmark
Finland
Ireland
Luxembourg
Netherlands
Norway
Sweden
Switzerland

*Publicly rated sovereigns only; the full sample may be larger.

Federal Republic of Germany

Rating Report

SCOPE

Appendix III. Statistical table for selected CVS indicators

This table presents a selection of the indicators (24 out of 30 – with the governance indicator reflecting a composite of six indicators) used in Scope's quantitative model, the Core Variable Scorecard, in line with Scope's Sovereign Rating Methodology. The metrics and sources for the data presented here ensure comparability across global peers and may therefore differ from national and other selective international statistics.

Pillar	Core variable	Source	2017	2018	2019	2020	2021
	GDP per capita, USD '000s	IMF	44,637	47,961	46,799	46,735	51,238
nic	Nominal GDP, USD bn	IMF	3,689.5	3,976.2	3,888.7	3,886.6	4,262.8
Domestic Economic	Real growth, %	IMF	2.7	1.0	1.1	-3.7	2.6
ОŬШ	CPI inflation, %	IMF	1.7	1.9	1.4	0.4	3.2
	Unemployment rate, %	WB	3.8	3.4	3.1	3.8	3.5
ပမ္ပ	Public debt, % of GDP	IMF	64.6	61.3	58.9	68.0	69.6
Public Finance	Interest payment, % of revenue	IMF	1.8	1.6	1.2	0.9	0.9
^م ب ت	Primary balance, % of GDP	IMF	2.2	2.7	2.1	-3.9	-3.3
nic	Current account balance, % of GDP	IMF	7.8	8.0	7.6	7.0	7.4
External Economic	Total reserves, months of imports	IMF	1.5	1.3	1.6	2.0	1.9
ш	NIIP, % of GDP	IMF	47.0	50.7	58.7	69.0	67.6
t≺ al	NPL ratio, % of total loans	IMF	1.5	1.2	1.1	-	-
Financial Stability	Tier 1 ratio, % of RWA	IMF	16.1	16.5	16.6	16.1	16.8
ц Б Д	Credit to private sector, % of GDP	WB	77.6	78.1	79.6	85.7	-
	CO ₂ per EUR 1,000 of GDP, mtCO ₂ e	EC	177.3	169.9	156.6	147.1	151.3
	Income share of bottom 50%, %	WID	18.6	18.9	18.9	19.0	19.0
ESG	Labour force participation rate, %	WB	78.1	78.5	79.1	-	-
	Old-age dependency ratio, %	UN	32.8	33.1	33.4	33.7	34.3
	Composite governance indicators*	WB	1.5	1.5	1.5	1.4	-

* Average of the six World Bank Worldwide Governance Indicators

Appendix IV. Economic development and default indicators

IMF Development Classification

5y USD CDS spread (bps) as of 11 November 2022

Advanced economy

24.2



Federal Republic of Germany

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