

Credit strengths

- Wealthy, large and diversified economy
- Strong 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

Ratings and Outlook

Local and foreign

currency

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

Rating rationale:

Wealthy, large and diversified economy: Germany's economy has proved resilient during the Covid-19 pandemic. However, the country's high-value-added economy has been impacted by global supply-chain disruptions, which resulted in lower-than-expected growth during the second half of 2021.

Strong fiscal framework: Germany's solid fiscal policy framework and strong fiscal discipline record are well anchored through its constitutional debt-brake. Government debt is expected decrease from 2023 onwards.

Highly competitive external sector: The economy's external strength is driven by its large and consistent current account surpluses, which have remained above 6% of GDP since 2011, with the level expected to reach 6.8% in 2021.

Rating challenges include: i) transition risks for energy-intensive industries related to 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-run growth potential.

Germany's sovereign rating drivers

		Quantitativ	e scorecard		Qualitative scorecard	Final	
Risk pillars		Weight	Indicative rating		Notches	rating	
Dome	stic Economic Risk	35%	aaa	Reserve	-1/3		
Public Finance Risk		25%	aa	currency	+2/3		
External Economic Risk		10%	aaa	adjustment	+2/3		
Financial Stability Risk		10%	aaa	(notches)	+1/3		
ESG	Environmental Risk	5%	aaa		-1/3	AAA	
Risk	Social Risk	5%	bbb		0		
TATOR	Gov ernance Risk	10%	aaa		0		
Overall outcome		aa	aa	+1	+1		

Note: The sum of the qualitative adjustments, capped at 1 notch per rating pillar, is weighted equally and 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 Ratings' methodology.

Source: Scope Ratings GmbH

Outlook and rating triggers

The Stable Outlook reflects our view that risks to the ratings are balanced over the next 12 to 18 months.

Positive rating-change drivers

Not applicable

Negative rating-change drivers

- Fiscal deterioration resulting in a material increase of public debt
- Insufficient structural reform momentum lowering growth potential

Lead Analyst

Eiko Sievert +49 69 6677389-79 e.sievert@scoperatings.com

Team Leader

Dr Giacomo Barisone +49 69 6677389-22 g.barisone@scoperatings.com

Scope Ratings GmbH

Neue Mainzer Straße 66-68 60311 Frankfurt am Main

Phone +49 69 6677389-0

Headquarters

Lennéstraße 5 10785 Berlin

Phone +49 30 27891-0 Fax +49 30 27891-100

info@scoperatings.com www.scoperatings.com



Bloomberg: RESP SCOP

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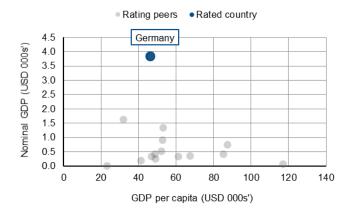
Domestic Economic Risks

- ➤ **Growth outlook:** As global growth started to accelerate, Germany's high-value-added economy has suffered from global supply-chain disruptions, which resulted in slower-than-expected growth during H2 2021. As of Q3 2021, economic output therefore remains around 1.3% below the pre-pandemic level. We have lowered the projection for economic growth in 2021 to around 2.4%, with stronger growth of 4.4% forecast for 2022. We estimate the medium-term growth potential to be 1.1%, although an ageing population is exerting downward pressure.
- Inflation and monetary policy: The expiration of VAT rate cuts, along with higher energy prices and rising production costs due to the shortage of intermediary goods, is expected to raise inflation to around 3% in 2021. These factors are expected to fade in 2022 and cause inflation to fall towards the 2% target, although upside risks remain if inflation expectations result in increased wage growth. While some central banks have started tapering their asset purchase programmes or indicated interest rate rises in the near term, the ECB has signalled that it will maintain its accommodative monetary policy in the near term.
- ➤ Labour market: In September 2021, employment was still 0.8% below its prepandemic level. Labour market conditions have continued to normalise and real wages have increased over the past six months. The number of people on the Kurzarbeit unemployment support scheme decreased substantially from 2.6m in April to 93,000 at the end of October. We expect a slight increase in the unemployment rate until the end of 2021 in light of the rising Covid-19 cases, although remaining at a low 3.6% and falling to 3.4% in 2022.

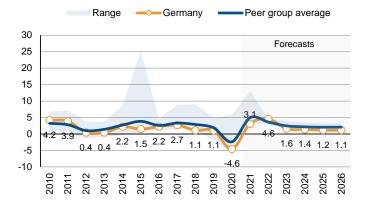
Overview of Scope's qualitative assessments for Germany's Domestic Economic Risks

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	Appropriate central bank response to the 2020 global crisis; high central bank credibility
	Macro-economic stability and sustainability	Neutral	0	Competitive and diversified economy; but weaknesses in digitalisation and ageing-related labour market challenges

Nominal GDP and GDP per capita, USD thousands



Real GDP growth, %



Source: IMF, Scope Ratings GmbH

Source: IMF, Scope Ratings GmbH

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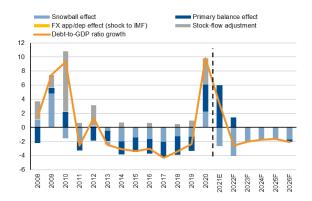
Public Finance Risks

- Fiscal outlook: Federal and state debt-brake laws, introduced in 2009 for the federal government and binding for the state governments since 2020, limit structural deficits to 0.35% of GDP a year and to 0% for state governments. Germany activated the general escape clause of its debt brake last year in response to the pandemic. The government's draft federal budget implies net borrowing of EUR 99.7bn (2.3% of GDP), which would result in a budget deficit of 1.8% in 2022. The European Commission estimates that crisis-related temporary emergency measures will increase from 2.7% of GDP in 2020, to 4.3% in 2021 and then decrease to 0.3% in 2022. We expect the debt brake to be reimplemented from 2023 onwards.
- ➤ **Debt trajectory:** Germany has maintained strict fiscal discipline since public sector debt rose in the wake of the Global Financial Crisis. The strong fiscal framework helped to place general government debt on a clear downward trajectory, reaching 59.2% in 2019 from 82.5% in 2010. The pandemic crisis put an end to this trend and we expect government debt to rise sharply to 72.4% by the end of this year. The debt brake will remain suspended until 2022, but stronger economic growth is likely to return government debt levels to a downward trajectory to reach 62.5% by the end of 2026
- ➤ Market access: Germany retains strong market access with the country's 10-year yield remaining negative at -0.25% and the average maturity of government debt remaining stable at around 6.5 years. According to the Q4 issuance plan published in September, annual borrowing for 2021 is broadly in line with plans made at the beginning of the year, amounting to EUR 475bn. The first 30-year green federal bond was issued in May with a volume of EUR 6bn, followed by a new 10-year green federal bond auctioned in September with a volume of EUR 3.5bn.

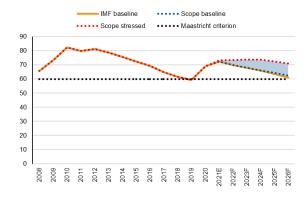
Overview of Scope's qualitative assessments for Germany's Public Finance Risks

CVS indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
_	Fiscal policy framework	Strong	+1/3	Strong policy response to Covid-19 crisis; debt brake on federal and regional level contributing to retention of large fiscal space
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 decreasing interest payments despite higher debt

Contributions to changes in debt levels, pps of GDP



Debt-to-GDP forecasts, % of GDP



Source: Scope Ratings GmbH

Source: Scope Ratings GmbH

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External Economic Risks

- Current account: The economy's external strength is driven by its large and consistent current account surpluses, which have remained above 6% of GDP since 2011, with the figure expected to reach 6.8% in 2021. The significant reduction in cross-border flows at the onset of the pandemic caused a large contraction in Germany's goods trade balance. However, this was largely offset by a corresponding decline in the services deficit due to the reduction in tourism. While the current account balance fell briefly to 5.4% in Q2 2020, it recovered quickly, remaining above 7% until H1 2021 as exports were supported by buoyant external demand in key trading partners such as China and the US. Global supply shortages started to dampen Germany's economic recovery and goods trade, resulting in a lower current account surplus of 6.1% of GDP in Q3 2021.
- > External position: The sound net international investment position has been on a clear upward trend, rising from 18.6% of GDP in 2011 to 66% at the end of 2020. This trend is broadly in line with other AAA rated peer countries and the IMF expects the net international investment position to continue rising over the medium term.
- > Resilience to shocks: Germany, along with all euro area members, benefits from the euro's status as a global reserve currency, significantly mitigating risks to external shocks.

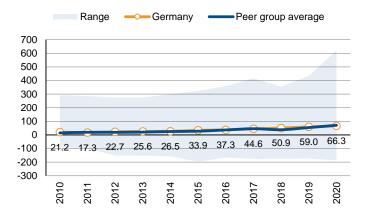
Overview of Scope's qualitative assessments for Germany's External Economic Risks

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 shocks	Strong	+1/3	Benefits from euro area membership; large external-creditor position

Current account balance, % of GDP

Range Germany Peer group average Forecasts 5 0 5 7 6.2 7.1 6.6 7.2 8.8 8.5 7.8 7.8 7.4 6.9 6.8 6.9 7.2 7.0 6.8 6.7 -5 -10 -15 -20 -25

Net international investment position, % of GDP



Source: IMF, Scope Ratings GmbH

Source: IMF, Scope Ratings GmbH

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Financial Stability Risks

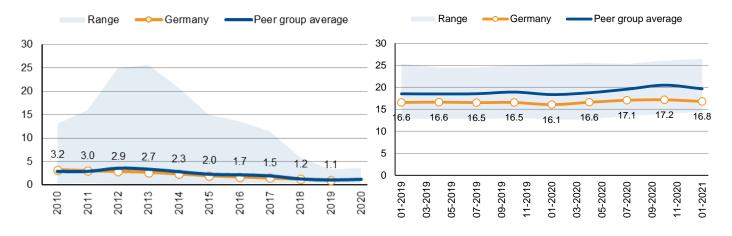
- ➤ Banking sector: Germany's banking sector is medium-sized and well-capitalised in line with that of peers, although it suffers from structurally weak profitability. Tier 1 capital reached 17.2% of risk-weighted assets in 2020, remaining relatively stable in recent years. The large government support measures meant that the banking sector did not suffer significant losses during the crisis, with non-performing loans remaining low and no significant rise in default risk on banks' loan books.
- Private debt: Private sector debt levels in Germany are still modest compared with those of other AAA rated peer countries. Corporate insolvencies fell during the pandemic crisis as a result of the extraordinary fiscal support measures. Non-financial corporate debt has started to decline, amounting to 112% of GDP in Q2 2021 after peaking at 115% in the previous quarter. Household debt levels also fell slightly by 1pp to 58% of GDP over the same period.
- Financial imbalances: House prices have increased strongly during the pandemic, by 8.1% in 2020, with strong growth continuing into 2021. The increase in prices is broad-based in both urban areas and the countryside, hinting at both structural demand pressures as well as supply bottlenecks. The Bundesbank notes in the latest Financial Stability Review that while debt-to-income ratios remain moderate from a long-term perspective, the ratio has been increasing continuously since 2018. However, risks to financial stability caused by lending to households appear low given that Germany's housing market has a higher proportion of renters than in 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	Neutral	Low profitability and unfavourable cost structure of banking sector balanced by adequate capitalisation and moderate exposure risks non-financial corporate debt	
	aaa	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 GmbH

Source: IMF, Scope Ratings GmbH

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ESG Risks

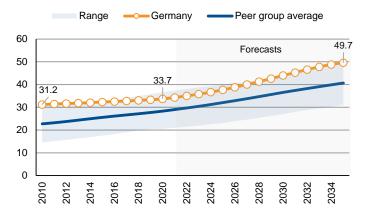
- ➤ Environment: The ruling of Germany's Constitutional Court to enhance carbon emission reduction plans, especially until 2030, has prompted the government to bring forward its climate neutrality goal to 2045 from 2050. To date, Germany remains heavily reliant on fossil fuels, which accounted for 76% of primary energy consumption in 2020 compared to around 62% for similar countries. The 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 and thereby remains well behind other AAA rated sovereigns, all of which rank within the top five.
- 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 increasing in Germany before the pandemic and is likely being exacerbated by the strong rise in asset prices during the pandemic. Of the OECD economies, Germany is among the least able to guarantee equal opportunities for students, partly due to insufficient digitalisation and investment in schooling. Demographic pressures are rising and are more adverse when compared with peers.
- ➤ Governance: Germany benefits from the high quality of its institutions and a stable political environment. While the latest elections delivered a highly fragmented parliament, a three-way coalition consisting of the centre-left Social Democratic Party, the Greens and the liberal Free Democratic Party a first for the country's history was quickly established.

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

CVS indicative rating	Analytical component	Assessment	Notch adjustment	Rationale
	Environmental risks	Weak	-1/3	Structural challenges related to transition risks in view of carbon neutrality targets amid economic importance of energy-intensive key industries
aa+	Social risks	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
	Institutional and political risks	Neutral	0	High-quality institutions and stable political environment

CO2 emissions per GDP, mtCO2e

Old age dependency ratio, %



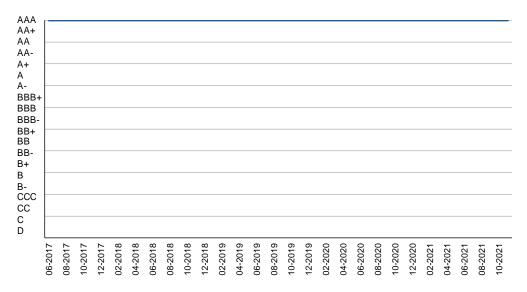
Source: European Commission, Scope Ratings GmbH

Source: United Nations, Scope Ratings GmbH

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Appendix I. Rating history



Appendix II. Rating peers

Rating peers are related to sovereigns with an indicative rating in the same rating category or in adjacent categories per our Core Variable Scorecard (CVS).



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

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Appendix III. Statistical table for selected CVS indicators¹

	2016	2017	2018	2019	2020	2021F	2022F		
Domestic Economic Risk									
GDP per capita, USD 000s'	42.1	44.6	48.0	46.8	46.2	50.8	54.7		
Nominal GDP, USD bn	3,468.9	3,689.6	3,979.1	3,888.8	3,843.3	4,230.2	4,557.4		
Real growth, % ¹	2.2	2.7	1.1	1.1	-4.6	2.4	4.4		
CPI inflation, %	0.4	1.7	1.9	1.4	0.4	2.9	1.5		
Unemployment rate, %1	4.1	3.8	3.4	3.2	3.8	3.6	3.5		
	Pι	ublic Finance	Risk						
Public debt, % of GDP ¹	69.3	65.0	61.6	59.2	69.1	72.4	69.8		
Interest payment, % of government revenue	2.1	1.8	1.5	1.2	0.9	0.7	0.7		
Primary balance, % of GDP ¹	2.1	2.2	2.6	2.0	-3.9	-6.5	-1.5		
	Exte	rnal Econom	nic Risk						
Current account balance, % of GDP	8.5	7.8	7.8	7.4	6.9	6.8	6.9		
Total reserves, months of imports	1.5	1.5	1.3	1.6	2.1	-	-		
Net international investment position, % of GDP	37.3	44.6	50.9	59.0	66.3	-	-		
	Fina	ancial Stabili	ty Risk						
Non-performing loan ratio, % of total loans	1.7	1.5	1.2	1.1	-	-	-		
Tier 1 ratio, % of risk weighted assets	16.3	16.9	16.6	16.5	17.2	17.2	-		
Credit to private sector, % of GDP	77.5	77.6	78.1	79.6	85.7	-	-		
		ESG Risk							
CO ² per EUR 1,000 of GDP, mtCO ² e	185.8	177.7	170.9	157.5	150.2	-	-		
Income quintile share ratio (\$80/\$20), x	5.2	-	-	-	-	-	-		
Labour-force participation rate, %	77.8	78.1	78.5	79.1	-	-	-		
Old-age dependency ratio, %	32.6	32.8	33.1	33.4	33.7	34.3	35.0		
Composite governance indicator ²	1.5	1.5	1.5	1.5	1.1	-	-		

* Average of the six World Bank Governance Indicators Source: European Commission, IMF, World Bank, UN, Scope Ratings GmbH

Appendix IV. Economic development and default indicators

IMF Development Classification
5y USD CDS spread (bps) as of 3 December 2021

Advanced economy

9.0

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¹ This table presents a selection of the indicators (24 out of 29) used in our quantitative model, the Core Variable Scorecard.



Scope Ratings GmbH

Headquarters Berlin

Lennéstraße 5 D-10785 Berlin

Phone +49 30 27891 0

Oslo

Karenslyst allé 53 N-0279 Oslo

Phone +47 21 62 31 42

Frankfurt am Main

Neue Mainzer Straße 66-68 D-60311 Frankfurt am Main

Phone +49 69 66 77 389 0

Madrid

Paseo de la Castellana 141 E-28046 Madrid

Phone +34 91 572 67 11

Paris

23 Boulevard des Capucines F-75002 Paris

Phone +33 6 62 89 35 12

Milan

Regus Porta Venezia Via Nino Bixio, 31 20129 Milano MI

Phone +39 02 8295 8254

Scope Ratings UK Limited

London

52 Grosvenor Gardens London SW1W 0AU

Phone +44 20 7824 5180

info@scoperatings.com www.scoperatings.com

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