

Federal Republic of Germany

Ratings

Federal Republic of Germany					
Action: Affirmed	06 Sept 24				
Foreign Currency LT	AAA				
Local Currency LT	AAA				
Action: Affirmed	06 Sept 24				
Foreign Currency ST	K1+				
Local Currency ST	K1+				

Ratings are based on KBRA's <u>Sovereigns</u>
<u>Rating Methodology</u>, published 20
December 2021 and utilise the <u>ESG</u>
<u>Global Rating Methodology</u> published 16
June 2021. KBRA's rating scales and definitions are found here.

Outlook/Watch

Federal Republic of G	Germany
Long-Term Ratings	Stable

Economic Snapshot

Economic Snapshot					
	2023				
Per Capita Income (US\$, PPP)	65,584				
Real GDP Growth (% Change)	-0.2				
Inflation Rate (Average %)	6.1				
Budget Balance (% GDP)	-2.5				
Current Account Balance (% GDP)	6.1				
External Debt (% GDP)	149				
Level of Economic Development	Very High				
Default History	None recent				

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Executive Summary

KBRA affirms the long-term and short-term issuer ratings of the Federal Republic of Germany.

Ratings Outlook: Germany's long-term ratings carry a Stable Outlook. The Outlook reflects Germany's large, diversified and globally important economy, tremendous access to liquidity, economic resilience, strong governance, institutional framework, prudent policy environment and healthy public finance position. The sovereign's fiscal capacity and financial flexibility allow it to respond comfortably to external shocks. The government is financially prudent and has a standing commitment to fiscal rules. The Outlook considers risks around energy supply, inflation, monetary policy, and their impact on economic growth and public finances.

Key Credit Considerations

The ratings were affirmed because of the following key credit considerations:

- Germany's large, advanced, high income, and globally important economy. Germany's economic resiliency is underpinned by its highly diversified economy, its status as a leading global exporter, and its position as the largest European economy.
- Germany's robust institutional profile is backed by its pragmatic and consensus-based policymaking environment, strong governance metrics, long-standing political stability, and its central role in the European Union (EU) and geopolitical importance.
- Germany's strong public finance position, both in gross and net terms, is among the most comfortable of all advanced economies and is backed by a robust fiscal framework, with renewed commitment to fiscal rules.
- Tighter euro area financing conditions, higher energy and labour costs and lower export demand are among the short- and medium-term growth challenges.
- Germany's resilience to the energy crisis is credit supportive. Germany
 cut its dependence on Russian gas and diversified its energy supply to
 adapt to recent challenges.
- The Bund's status as Europe's benchmark fixed income instrument ensures Germany has a high degree of financing flexibility while its affordable debt burden benefits from robust investor demand. In KBRA's view, the country has extremely strong access to liquidity.
- Germany's large structural current account surplus and positive net international investment position highlight robust external account metrics in trade and income accounts.
- Notwithstanding the labour shortages, Germany benefits from a highly skilled workforce and plans to increase labour supply through immigration and other initiatives.

Rating Sensitivities	
There is no upward pressure on Germany's ratings at the highest rating level.	+
Negative rating pressure could arise if Germany reports persistent budget deficits and is unable to stabilise or reduce its government debt-to-GDP burden. A significant and prolonged recession could also exert downward pressure on the rating. A deterioration in Germany's access to liquidity would be a serious rating consideration. A structural shift in the current account balances over time and/or a significant deterioration in foreign direct investment could also exert downward pressure on the rating.	-

ESG Management

KBRA typically analyses Environmental, Social, and Governance (ESG) factors through the lens of how the sovereign plans for and manages relevant ESG risks and opportunities. More information on KBRA's approach to ESG risk management in sovereign ratings can be found here. Over the medium-term, governments will need to prioritize ESG risk management and disclosure with the likelihood of expansions in global ESG-related regulations, including adherence to the commitments of the Paris Agreement, and rising investor focus on ESG issues.

KBRA analyses many sector- and issuer-specific ESG issues but our analysis is often anchored around three core topics: climate change, with particular focus on greenhouse gas emissions; stakeholder preferences; and cybersecurity. Under environmental, as the effects of climate change evolve and become more severe, issuers are increasingly facing an emerging array of challenges and potential opportunities that can influence financial assets, operations, and capital planning. Under social, the effects of stakeholder preferences on ESG issues can impact the demand for an issuer's product and services, the strength of its global reputation and branding, its relationship with employees, consumers, regulators, and lawmakers, and, importantly, its cost of and access to capital. Under governance, as issuers continue to become more reliant on technology, cybersecurity planning and information management are necessary for most issuers, regardless of size and industry.



Environmental Factors

Germany is a leader in addressing the issue of climate change although its progress has been negatively impacted by the energy crisis arising from the war in Ukraine. The Climate Change Act amendment enacted the commitment made by its government at the World Economic Forum in January 2023 to tighten climate regulations beyond EU targets and to achieve greenhouse gas (GHG) neutrality by 2045. Germany has committed to reduce GHG emissions by 65% by 2030 (with 55% achieved to date) and by 88% by 2040.

Germany is progressing a wide range of initiatives to address climate change including improving the energy efficiency of its housing stock by offering tax incentives for upgrades. From 2024, new heating systems in private houses will be required to run with at least 65% of their energy from renewable sources. The transport sector also is set to undergo significant change, including a digitalisation strategy and investment in railways, expanding cycle routes and the electrification of vehicles. Germany has an ambition to become a global leader in green hydrogen set out in its National Hydrogen Strategy including the establishment of a green hydrogen market and related value chains and a target of becoming the leading provider of hydrogen technologies by 2030. The German cabinet has also approved the creation of a national core hydrogen pipeline.

Germany is investing heavily to promote the decarbonisation of industry. Its cabinet approved a EUR58 billion green investment plan for 2024 with the majority going to the building sector, including EUR18.9 billion for subsidies in renovations and new construction, EUR12.6 billion to renewable energy subsidies, and EUR4.7 billion to expanding its electric charging infrastructure. A subsidy of EUR4.1 billion has been allocated for Germany to develop local production capacity for raw materials and transformation technology such as solar power components, in effort to shift its reliance on Chinese imports.



Social Factors

KBRA focuses on social factor risk in terms of stakeholder preferences. In recent years, there has been a surge in demand across Europe for green bonds and in a short space of time, Germany has become the second largest issuer of green euro bonds, actively constructing a green curve that now has eight tenors. The German government has roughly EUR71 billion in outstanding green issuance currently, having raised EUR15.5 billion of the planned EUR17-19 billion this year. This type of funding will be crucial for green investment strategies, in order for the sovereign to reach its climate action targets. The proceeds of the green issuance are allocated to initiatives like climate change mitigation and adaption, protection of marine resources, pollution control and protection of biodiversity. The Finance Agency works to ensure transparency for investors with regard to green spending and it acts prudently with its issuance in order to foster reliable, liquid markets for investors in green bonds. Transparency is provided in the Treasury's Green Bond Allocation Report. Germany was named the "Most Impressive Government Green/SRI Bond Issuer" in the Global Capital Bond Awards 2023, after coming in second place in 2022.



Governance Factors

Germany is actively improving governance structures including its national cyber security strategy which has been updated to implement new EU directives. Recently it has become more focussed on its defence strategy given the threats arising from Russia and the war in Ukraine. In January 2023 the new Network and Infrastructure EU directive (NIS 2) came into force to protect the European economy from cyber-attacks. In Germany's case, the IT Security Act 3.0, which will implement NIS 2, will apply to companies that have at least 50 people employed and annual turnover of EUR10 million and will have mandatory application to 18 sectors. This will apply to all member states as an EU Directive.

Germany adopted its first ever national security strategy entitled 'Integrated Security for Germany' in June 2023. The strategy emphasises the need to boost its defence preparedness, resilience and sustainable use of natural resources. Germany has identified Russia as the largest threat to European security and has enshrined its NATO commitment to spend 2% of GDP on defence. The strategy also discusses a growing opposition with China, although this is an issue that will be dealt with in a separate strategy paper in the coming months. Germany has also recently implemented the Whistleblower Protection Act which introduces a duty to establish internal whistle-blowing systems for all companies with 50 or more employees.

K-Sov and Rating Methodology Steps

Germany Sovereign Credit Rating K-Sov	
Rating Determinant	Equivalent Rating Range
Macroeconomic Performance	AA/A
Government Financial Strength	AAA
External Vulnerability	AAA
Structural Robustness	AAA/AA
K-Sov Germany	AAA range

Determining the K-Sov is the first step of KBRA's Sovereign Ratings Methodology. Germany's K-Sov stands at the top end of the rating scale. This strong performance reflects the large size and global importance of the German economy, healthy public finance position, high degree of financing flexibility, and robust external account position. The macroeconomic performance rating determinant reflects a stable environment overall, although in recent years modest real GDP growth and higher inflation have weighed down this determinant. Germany's access to liquidity is overweighted in the K-Sov. Its structural robustness indicators are characterised by a centrist and consensus-based policy framework, central role in the EU, and global geostrategic importance.

The second step considers trend analysis, peer comparisons, additional metrics and factors influencing credit risk that may not be included in the K-Sov analytics, as well as willingness to pay. These items are highlighted within each section. Finally, the alignment of foreign currency and local currency sovereign ratings is determined.

Macroeconomic Credit Metrics

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024e	2025f
Gross Domestic Product USD bn	3357.9	3468.9	3689.5	3976.2	3889.6	3884.6	4281.3	4085.7	4457.4	4591.1	4772.3
Real GDP Growth	1.5	2.2	2.7	1.0	1.1	-3.8	3.2	1.8	-0.2	0.3	1.1
Population mns	81.7	82.3	82.7	82.9	83.1	83.2	83.2	83.8	84.5	84.6	84.6
Total Credit/GDP	185.4	192.3	187.7	186.8	187.2	208.9	205.9	190.0	182.8	-	-
to Government	0.0	69.1	64.6	61.2	58.8	68.1	68.8	66.3	64.8	-	-
to Households	53.7	53.4	52.9	52.6	53.3	57.1	56.8	55.2	52.8	-	-
to Private Corp.	0.0	64.2	65.4	67.9	69.2	74.1	73.4	72.9	70.8	-	-
Savings/GDP	28.3	28.6	28.8	29.9	30.0	29.0	30.9	29.4	30.4	29.6	29.6
Investment/GDP	19.7	20.0	21.0	21.9	21.9	22.0	23.2	25.0	23.6	22.6	22.7
Current Account Balance/GDP	8.6	8.6	7.8	8.0	8.2	7.1	7.7	4.4	6.1	6.6	6.4
Net International Investment Position/GDP	34.6	39.2	44.2	52.3	58.5	63.7	68.3	69.5	70.2	-	-
Inflation (HICP) YoY	0.7	0.4	1.7	1.9	1.4	0.4	3.2	8.7	6.1	2.8	2.7
Unemployment Rate	4.4	3.9	3.6	3.2	3.0	3.6	3.6	3.1	3.0	3.3	3.1
ECB Refinancing Rate - Year-end	0.05	0.05	0.0	0.0	0.0	0.0	0.0	2.5	4.5	-	-
10-Year Bonds % - Year-end	0.6	0.2	0.4	0.2	-0.2	-0.6	-0.2	2.6	2.0	-	-
General Government Revenues/GDP	45.1	45.5	45.5	46.3	46.5	46.1	47.4	47.0	46.1	46.3	46.5
General Government Expenditures/GDP	44.1	44.4	44.2	44.3	45.0	50.5	50.9	49.5	48.3	47.8	47.8
Fiscal Interest/Revenues	2.4	2.1	1.8	1.6	1.3	1.0	1.0	1.1	1.5	1.7	1.9
General Government Balance/GDP	1.0	1.2	1.3	2.0	1.5	-4.3	-3.6	-2.5	-2.5	-1.5	-1.3
General Government Cyclically Adjusted Balance/Potential GDP	1.2	1.1	0.8	1.5	1.3	-2.9	-3.0	-2.9	-1.9	-0.9	-0.8
Primary Balance/GDP	2.0	2.1	2.2	2.7	2.1	-3.9	-3.1	-2.0	-1.4	-0.7	-0.4
Gross Government Debt/GDP	71.9	69.0	65.2	61.9	59.5	68.7	69.0	66.1	64.3	63.7	62.3
Gross Government Debt/Revenues	159.5	151.5	143.3	133.8	128.0	149.1	145.7	140.7	139.3	137.8	134.0
Net Government Debt/GDP	52.2	49.3	45.5	42.8	40.7	46.1	46.8	47.1	46.4	46.4	45.7
Net Government Debt/Revenues	115.7	108.3	100.0	92.5	87.4	100.0	98.8	100.2	100.5	100.4	98.3

Sources: National Sources, IMF World Economic Outlook, IMF Fiscal Monitor, UN, World Bank, World Economic Forum, EC, Eurostat, BIS, Bloomberg

Step I: K-Sov Scorecard Analysis

Macroeconomic Performance

Germany's large, advanced, and highly diversified economy, being Europe's largest, status as a leading exporter and its globally important industrial sector underpin its macroeconomic strength. It is the 4th largest economy in the world, providing for substantial economic strength as well as diversification. Distinguishing it from other large advanced economies, Germany has a very vibrant merchandise export sector that contributes to growth and employment. This high reliance on exports to drive growth, however, leaves it exposed to global trade developments as evidenced during the pandemic and more recently in the reduction in export demand from the US and China. Real GDP growth averaged 1.7% over the period 2015-19, which was slower than Canada (1.9%) and the US (2.4%), two of its main peer comparatives, largely due to structural issues common across the euro area, such as labour market slack and rigidities, as well as comparatively lower productivity and wage growth. Germany's growth performance, while lower than peers, is underpinned by moderate leverage economy wide that underscores efficiencies and reduces credit risk. That said, the war in Ukraine, inflationary pressures, tight monetary policy and residual effects from the pandemic have challenged its underlying macroeconomic credit metrics.

Rating Determinant 1: Macroeconomic Performance (20%)	Equivalent Rating Range
Nominal GDP (\$B)	AAA/AA
Nominal GDP Growth (%)	A/BBB
Real GDP Growth (%)	A/BBB
Inflation (%)	A/BBB
Unemployment (%)	AAA/AA
K-Sov Macroeconomic Performance	AA/A

Economic Conditions Hampering German Growth Model

The German economy has slowed considerably in recent quarters, essentially idling in recession since the start of last year and underperforming the rest of the euro area. The German economy contracted by 0.2% in 2023. This largely stems from the steep rise in the cost of credit, which when coupled with impediments for investment associated with the sovereign, such as high taxation, curbs economic activity. Adding to this, Germany's reliance on Russian fossil fuels

and its diversification away from these inputs has been a sore point, although not as severe as initially anticipated. Finally, inflation still lingers, while labour costs in particular have risen, and the supply of labour also remains an issue. Weakness can be observed in factory orders data, while manufacturing PMI readings further highlight the sluggish performance of the sovereign's key industrial sector this year. The Bundesbank anticipates the economy will grow by 0.3% this year. However, this stagnation could prove temporary, and the IMF forecasts the German economy will expand by 1.2% on average over the next three years. German exports should receive a boost, as global demand picks up, when monetary policy eases, in line with inflation subsiding. KBRA notes that German economic performance is also somewhat dependent on Chinese demand, whereby a sluggish economic recovery in China will hamper the prospects for German industry. In KBRA's view, the German economy is resilient to headwinds and certain underlying drivers of growth are still evident. For example, Germany remains more productive, having averaged higher GDP per hour worked and multifactor productivity growth in recent years (2016-22) than the G7 and EU averages.

Inflation in Germany peaked at 11.6% in October 2022 largely driven by the energy price surge, with food prices substantially higher than in other advanced economies. Since then, the inflation rate has slowly declined, reducing back to target of 2% in August of this year, benefiting from a combination of tighter monetary policy, government intervention, price caps, base effects of prices, and energy supply diversification. Although inflation is materially below its peak, it remains somewhat sticky around current levels and structural pressures, stemming from demographics or energy, could potentially push prices back above target level. Goods price growth has receded, but services price growth has gained momentum and might prove harder to unwind. In KBRA's view, weakness within the economy, led by an industrial slowdown, will help constrict price growth. Year over year domestic producer price readings have been in decline since July last year for example. On the other hand, wages have increased substantially since the pre-pandemic period, illustrating the extent to which external pressures are now impacting the underlying economy. A tight labour market underpins inflationary pressure. The German labour market remains tight, largely stemming from a lack of supply and despite economic headwinds and tighter credit conditions, it has been an important driver of economic resilience over the last few years. Employment continues to climb, quarter on quarter. Although unemployment has gradually crept higher over the last year, it is expected to remain contained around 5.6% in 2025, according to the Bundesbank.

German industry, which typically contributes around 30% of GDP, continues to face high input and energy costs. To avert the risk of energy supply emergencies the government has introduced the new Gas Storage Act (Gasspeichergesetz) which requires that gas stores be well filled at the beginning of the heating period. For example, storage levels were required to reach 85% by October 1st in order to secure sufficient gas supply for the coming winter. Milder winters in recent years have certainly helped ease the energy supply constraint, although KBRA notes that higher energy input costs could likely be a feature of the industrial economy going forward, given that forecasts suggest sharply higher gas and oil prices over the next few years, relative to their pre-pandemic average level. However, Germany is in a much better position than prior to the war in Ukraine when Russian imports accounted for circa 35% of its oil, 50% of its coal and 54% of its natural gas. Germany has successfully diversified its energy dependency with increased natural gas deliveries from Norway and the Netherlands and there has been a substantial reduction in gas consumption.

Government Financial Strength

Germany's long-standing prudent budgetary stance is underpinned by a robust fiscal framework including a constitutionally mandated debt brake rule and a commitment to a balanced budget position. It suspended its national fiscal rules in response to the Covid-19 pandemic but announced its return to these judicious measures in its Budget for 2024. Germany adhered to EU fiscal rules with regard to debt and deficits (60% of GDP for government debt and 3% of GDP for government deficit) in the pre-pandemic era. It also imposes a net debt limit of 0.35% of GDP. Its solid budget surpluses and falling government debt burden pre-pandemic left the public finances in a strong position to respond to successive external shocks, including the Covid-19 pandemic and the energy crisis. In KBRA's view, the sovereign has made clear its intentions towards fiscal consolidation. KBRA believes the benchmark status of German bonds, and the ease at which it can fund itself through capital markets, are crucial to its sovereign rating. In this regard, KBRA views the Germany's access to liquidity as extremely strong, and as such provides overweighting of this Rating Sub-determinant in our K-SOV scorecard.

Rating Determinant 2: Government Financial Performance (50%)	Equivalent Rating Range
General Government Revenues % GDP	AAA/AA
General Government Balance % GDP	AAA/AA
General Government Cyclically Adjusted Balance % Potential GDP	AAA/AA
General Government Debt % GDP	AA/A
General Government Debt % Revenue	AAA/AA
General Government Interest % Revenue	AAA/AA
Access to Liquidity/Vulnerability to Sell-off	AAA
Contingent Liabilities	AAA/AA
Fiscal Arrears	AAA/AA
K-Sov Government Financial Performance	AAA

Germany Commits to Sustainable Long Term Fiscal Prudence

Germany's healthy public finances afford it tremendous flexibility to respond to external shocks, evidenced by its significant fiscal support package in response to the pandemic and the energy crisis. The budget deficit declined to 2.5% in 2023 and now complies with the Maastricht threshold of 3%. The German government has responded decisively to various crises in recent times. It has adopted three comprehensive and fast-acting relief packages with a total volume of around EUR100 billion for the years 2022 and 2023. Also, through the reactivation of the Economic Stabilisation Fund-Energy, it also created a "protective shield" for the economy up to EUR200 billion for measures to temporarily cushion the economic consequences of the energy crisis. In KBRA's view, this illustrates the fiscal capacity and strength of the sovereign to accommodate for external shock. Recent judicial rulings over the reallocation of unused emergency funding could slow fiscal consolidation efforts, but nonetheless, the IMF anticipates the budget deficit will average 0.9% of GDP over the next three years, the second lowest in the G7.

In KBRA's view, Germany's commitment to fiscal prudence is evident in recent budgets, with Budget 2025 roughly EUR8 billion lower than last year and net borrowing EUR6.5 billion lower. Although the government plans to limit spending to remain within its borrowing limits, investment will see a significant increase in next year's budget, while the aforementioned crisis supports fall away. Moreover, government prioritised extrabudgetary spending, not bound by the debt brake rule, on climate and defence in its 2024 Budget plan, and this could remain a more durable feature of German public finances going forward. Germany will meet NATO's annual 2% of GDP target on military spending for example. The government is committed to saving money under its fiscal plan and is averse to raising taxes. However, the economic consequences of the Russia-Ukraine war and the related energy crisis, which weighs on revenue generation, coupled with capital spending requirements, could result in a budget deficit position persisting for longer than expected. Nevertheless, Germany's low debt, tremendous ease of funding and budgetary flexibility affords it the capability to deal with unforeseen and undesirable circumstances, while the reinstalment of fiscal rules aids consolidation efforts. For example, net borrowing is forecast to decline further over the coming years in line with the national debt brake rule. Gross government debt is expected to decline to 64% of GDP this year, ultimately falling below the Maastricht threshold of 60% by 2027, according to the IMF.

KBRA notes that although German public debt is elevated relative to its recent past (and is expected to stabilise in the medium-term at such levels), it stands at a much lower level than that of European and major advanced economic peers. Furthermore, Germany can comfortably meet its higher borrowing requirement due to its very strong access to liquidity. Germany's flight to quality dynamics reflects the Bund's European benchmark fixed income status as well as the very sound management and performance of the economy. Germany has very low net government debt relative to GDP, which averaged 46% over the last five years, and is forecast to fall to 44% over the next five years. This compares favourably to France, the UK, Italy and Spain whereby net debt is more than double the level of Germany.

Being a euro area member, Germany avails of ECB policies that safeguard liquidity and maintain credit provision and ECB support during periods of stress provides euro area sovereigns with a substantial safety net. Germany's cost of issuance is easily affordable. Germany's average cost of debt has risen marginally but is contained at 1.5% and this allows greater flexibility to increase spending in the face of an external shock. This also helps illustrate the ease and flexibility of funding the sovereign enjoys on the capital markets. The average maturity on German government debt is 7.5 years, which helps to minimise refinancing risks. Fiscal tightening ensures public finance is on a progressive and sustainable path, also supporting lower inflation.

External Vulnerability

KBRA views Germany's external vulnerabilities as low, underpinned by structurally large surpluses on its current account averaging 8% of GDP from 2010 to 2020 and its large positive net international investment position (NIIP) which reflects its large industrial sector, status as a leading global exporter, and high savings rate compared to many peers. Germany recorded a substantially larger average current account surplus than any other G20 country during the pre-pandemic period (2015-19) and despite a slowdown in trade last year, where goods exports have stalled, the IMF forecasts that the sovereign will continue to maintain a strong current account surplus of 6.5% on average through 2025-29, still the highest forecasted amongst the G20. In KBRA's view, fundamentals supporting German trade often provide a path to recovery for the sovereign, following temporary downturns. Germany had the highest value of services exports and imports among EU member states in 2022, while it also has a high domestic savings rate at 10.4% of disposable income. Germany also produces consistently large primary income account surpluses reflecting a NIIP of 70.2% of GDP in Q4 2023 (down from a record high of 75.5% in June 2022), due to direct, portfolio and other investment positions.

Germany is vulnerable to external economic slowdown, evidenced by the recent reduction in demand from weakness in the US and China. Germany is China's largest European trading partner and technology provider. In addition, Poland, Czech Republic, Slovakia, and Hungary are another big export market for Germany. Despite external shocks in recent years, Germany's trade account has remained robust although a shift to deglobalisation could impact Germany's vibrant export sectors and pose challenges to its current account dynamics. However, it is clear that the current economic environment is not conducive to German trade, as exports were down 1.4% in 2023 compared to the previous year for example. A weak industrial performance underpins this, with monthly industrial production averaging -0.4% through 2023, while factory order data also struggles to shine. Aside from higher interest rates and low global demand, weakness can also be observed in automotive sector, where competition from China and the slow shift towards electric vehicles continues to put pressure on German auto manufacturing. More of this in Step II.

Rating Determinant 3: External Vulnerability (10%)	Equivalent Rating Range
Current Account Balance % GDP	AAA
K-Sov External Vulnerability	AAA

Structural Robustness

Germany's structural characteristics are important factors underpinning its sovereign rating. The country's robust institutional framework, high degree of government effectiveness, consensus-based policymaking environment, central role in the EU and euro area and significant geopolitical influence substantiate its structural robustness, in KBRA's view. Germany's advanced and globally competitive economy, coupled with its status as Europe's largest economy and one of the leading global exporters, underscores its economic resiliency. Germany's significant and timely financial and public health response to the coronavirus pandemic and its efforts to deal with the recent energy crisis highlight its robust institutional capacity.

Rating Determinant 4: Structural Robustness (20%)	Equivalent Rating Range
Socio-Political Risk	AAA/AA
Security Risk	AAA/AA
Geostrategic Importance	AAA/AA
Systemic and Economic Risk	AAA/AA
Per Capita GDP (PPP Basis)	AAA/AA
Institutional Indicators	AAA/AA
K-Sov Structural Robustness	AAA/AA

Coalition Government Navigates Through Headwinds

Germany's three-party coalition, which comprises the Social Democrats, the Greens, and the Free Democratic Party, have been tested by many challenges including the Covid-19 pandemic, the war in Ukraine and the related energy crisis. The coalition has committed to the sovereign's longstanding fiscal rules in its last two budgets, notwithstanding political pressure to do otherwise, particularly with regard to capital spending. Ultimately, the government is expected to push for a greener, more digital future, edging it even more firmly to the global forefront on climate action, which is especially meaningful given Germany's leadership role in the EU. Many players in government and the mainstream opposition now agree that significant changes are needed which bodes well for the outlook for reforms. Recently there have been signs of stress within the government coalition as the economy has come under pressure including reported disagreements



over defence spending, legislation to address fossil fuel emissions, retention of nuclear power plants and climate policy. These disputes have dented the popularity of the ruling coalition, while the far-right Alternative for Germany (AfD) have gained in the polls, nearly doubling their percentage of voters in recent years. KBRA notes the next election does not take place until October 2025. Nevertheless, themes such as defence, immigration and the fiscal prudence of EU member states continue to dominate the political agenda in Germany and test the fragility of the coalition.

Sound Banking Sector but Asset Quality Risks Rising

The German banking sector remains resilient overall, in KBRA's view, despite persistent macroeconomic and geopolitical risks. The sector's liquidity and capitalisation are sound, with a Liquidity Coverage Ratio (LCR) of 145% (lower than EU average) and a common equity tier 1 (CET1) ratio of 16.5% (above EU average) at end-March 2024, according to the European Banking Authority (EBA). German banks have structurally low profitability due to higher costs, strong competition, and outdated IT systems relative to other European banks that pose an operational risk due to exposure to potential cyberattacks, which have increased in 2023. Over the past 18 months the banks' revenues have benefited from a higher interest rate environment, with net interest income initially boosted from a delay in passing the benefit of higher interest rates on to depositors. That said, an increase in credit costs could weigh on profitability. KBRA expects asset quality to moderately deteriorate over the coming quarters as the effects of higher interest rates continue to impact the economy and borrowers' affordability, especially construction and commercial real estate (CRE) sectors, as well as small enterprises. Although the non-performing loan (NPL) ratio has risen since 2023, primarily due to stresses in CRE, it remains relatively low at 1.3% at end-March 2024, per the EBA.

The German banking sector, particularly the larger banks, has significant exposure to CRE, with over a fifth of this exposure being to cross-border CRE. According to the EBA, CRE loans accounted for nearly 10% of total loans in end-March 2024, almost double the average for European peer countries, with NPL ratio increasing by 309 basis points year on year to 5.9% at end-March 2024. Although CRE exposures are not currently considered to present a systemic risk to the German financial sector, considering that banks have sound capitalisation ratios, these exposures account for 16% of Germany's GDP (moderately higher than other European countries) and include foreign exposures, mainly in the US. Residential mortgages make up nearly three-quarters of German household debt, although a high proportion of borrowers have not seen a deterioration in affordability given the prevalence of long-term fixed rate mortgages.

Deutsche Bank is Germany's only global systemically important bank (G-SIB), with nearly 13% of sector assets¹. Landesbanken (regional banks), which account for 8.5% of banking sector assets at end-March 2024², are important to the German real economy because of their support to small and mid-sized companies through corporate and asset-based finance. Risks to Landesbanken include their low profitability and CRE exposure although, in case of need, support would likely be coming from their owners (the savings bank associations, federal states and municipalities). Deutsche Pfandbriefbank, a specialist bank for real estate and public sector financing, with around 15% of its portfolio in US real estate, increased its provisioning expenses in Q1 2024 and is likely to report materially increased CRE credit losses although its total assets accounted for only 0.5% of German banking sector³. Aareal Bank, one of Germany's largest CRE lending specialist, reported that 25% of its US office loans went into default last year. That said, the US office portfolio accounted for around 10% of its total CRE portfolio, and the bank has sound capitalisation with a CET1 ratio of 20.1% as of end-June 2024 and benefits from a stable funding base.

Step II: Peer Comparatives, Trends, Willingness to Pay

In Step II of the sovereign rating approach, KBRA evaluates peer comparisons, recent trends and outlook, and its evaluation of willingness to pay.

Germany Attempts to Plug Energy Supply Gap

Higher cost of energy, tighter financial conditions and continued geopolitical uncertainty could challenge growth over the medium-term. The war in Ukraine and its spillover effects have dented the economic outlook for Germany, while also highlighting energy as a particularly sore point for the sovereign. Prior to Russia's invasion of Ukraine in 2022, Germany had a significant reliance on Russian energy. By comparison, sovereigns such as Spain, Portugal and Ireland, for example, are also big gas importers but only a fraction, if any, of their supply came from Russia. Therefore, economic performance over the last 18 months has been varied across the euro area given the diverging reliance on Russian fossil fuels amongst member states. However, Germany has made tremendous progress in diversifying its energy supply, increasing its storage capacity and reducing demand. The supply side improvement after the disruption caused by the conflict has supported a decrease in energy prices from peak levels. Germany has successfully redirected its gas supply source away from Russia and is building five new floating storage and regasification units (FSRUs) as well as two

¹ KBRA calculation based on total sector's assets as per Bundesbank.

² KBRA calculation based on total sector's assets as per Bundesbank.

³ KBRA calculation based on total sector's assets as per Bundesbank.



permanent onshore LNG facilities. Gas storage has been consistently higher than target, while favourable weather conditions and a significant reduction of consumer usage have helped to ease the energy burden. In KBRA's view, the sovereign remains somewhat vulnerable to global energy dynamics, however it has made sufficient progress and the initial concerns surrounding supply and the associated economic fallout have eased significantly. For more on this theme, please consider this KBRA research piece: European Energy Prices Stabilise, but Risks Remain

Deglobalisation Trends and Changing Demographics Present Challenges

In terms of intra-EU competitiveness, Germany's industrial sector is deeply embedded in global and European supply chains and risks could emerge for German trade over the medium-term horizon. A shift towards deglobalisation or structural changes in China could exert pressure on export performance outside of the EU as slower growth and deflation in Asia could hamper German economic prospects. The global evolution towards both a greener, more sustainable future and digitalisation presents a challenge, albeit German industry has been adaptive to such challenges in the past. More specifically, KBRA continues to monitor trade developments with regard to China. Within this, the automotive industry appears to be most at risk. There are 800,000 workers in the automative sector in Germany, with many jobs relying on Chinese demand, which has been slowing noticeably in recent years. There are several contributing factors. The rise of artificial intelligence threatens workers in production, while Chinese market share in the automotive industry has grown, particularly with regard to electric vehicles, which Germany has been slow to respond to. The German car industry has experienced somewhat tepid demand for electric vehicles, and this has allowed rivals in China and the US to progress in this space. Industrial reforms are likely, and are needed, in order to maintain German competitiveness. More broadly, the Bundesbank has warned that the German economy could take a huge hit should a sharp decoupling of trade between China and Germany take place, but even a gradual retreat would still prove costly.

Adding to this, Germany has demographic pressures common to many advanced economies. Its old-age dependency ratio has increased from around 22% in 2000 to around 35% in 2022 and is expected to increase further until 2040. The Federal Statistical Office predicts that by the mid-2030s the number of people of retirement age (over 67) will have risen by around 4 million to 20 million. The number of people of working age is also anticipated to fall by around 3.2 million to about 50 million in the period up to the mid-2030s, although this could develop more favourably with higher immigration. Low birth rates and an aging society have caused a reliance on immigration to support growth. Germany has the second-oldest EU population after Italy, with 21% of the population over 65. Destatis forecasts that there will be considerably more people entering retirement in Germany by 2035. There are also knock-on effects from an aging population on innovation and investment. Recently Germany has benefited from inward migration from Ukraine. Germany had 1.2 million Ukrainian refugees registered in July 2023 (1.4% of the German population), the majority of them being women and children. This compares to approximately 1.6 million Ukrainians in Poland, 4.4% of its population. Furthermore, the government has launched initiatives to train refugees and migrants in order to boost the labour supply. Plans to augment the Skilled Immigration Act should also help alleviate the shortage due to ageing population. Overall, expectations are that the workforce will shrink and the country's ability to achieve the same level of output from a reduced labour force may prove difficult. Germany's population grew by 1.3% in 2022 having increased by only 0.1% the previous year with the increase reflecting a substantial increase in net immigration mainly reflecting refugee movements from Ukraine.

Important measures have been implemented to address these foreseeable demographic challenges. For example, the incremental increase of the standard retirement age to 67 by 2031 will contribute to an intergenerational balance between those receiving a pension and those paying contributions. KBRA notes that Germany's position and ability to withstand its demographic challenges is supported by its relatively low gross and net debt. Its relative substantial funding of its public pension system and support for immigration and refugees.

Macroeconomic Forecasts

Macroeconomic Forecasts (2025-2029 average)								
Trends and Projections	Germany	France	UK	Canada	US			
GDP Growth	1.1	1.5	1.6	1.8	2.1			
Inflation	2.0	1.8	2.0	1.9	2.1			
Current Account Balance % GDP	6.5	-0.4	-2.8	-0.1	-2.3			
Government Revenues % GDP	46.9	51.8	39.7	41.1	31.0			
Government Balance % GDP	-0.8	-4.3	-3.6	-0.7	-6.4			
Government Primary Balance % GDP	0.2	-1.8	-1.0	-0.2	-3.1			
Government Interest Payments % Revenues	2.0	5.0	6.6	1.1	10.8			
Government Gross Debt % Revenues	127.8	220.0	272.8	240.1	420.8			
Government Gross Debt % GDP	59.9	114.0	108.3	98.7	130.5			
Government Net Debt % Revenues	94.6	204.1	242.8	32.0	337.0			
Government Net Debt % GDP	44.3	105.8	96.4	13.2	104.5			

Sources: IMF World Economic Outlook, IMF Fiscal Monitor, UN, World Bank, World Economic Forum

Comparative Statistics

Comparative Statistics									
2023 Data	Germany	France	UK	Canada	US				
Gross Domestic Product (USD bn)	4,457.4	3,031.8	3,344.7	2,140.1	27,357.8				
Nominal GDP Growth (%)	6.3	6.2	7.3	2.7	6.3				
Real GDP Growth (%)	-0.3	0.9	0.1	1.1	2.5				
Consumer Price Inflation (%)	6.0	5.7	7.3	3.9	4.1				
Unemployment Rate - Latest Read	3.4	7.3	4.2	6.4	4.3				
General Government Revenues % GDP	46.1	51.9	38.6	41.8	29.3				
General Government Balance % GDP	-2.1	-5.5	-6.0	-0.6	-8.8				
General Government Cyclically Adjusted Balance % Potential GDP	-1.9	-4.9	-6.1	-0.6	-8.6				
General Government Gross Debt % GDP	64.3	110.6	101.1	107.1	122.1				
General Government Gross Debt % Revenues	139.3	213.4	261.6	256.0	417.2				
General Government Interest % Revenues	1.5	3.2	6.4	1.2	10.3				
General Government Net Debt % GDP	46.4	102.4	92.5	12.8	96.3				
General Government Net Debt % Revenues	100.5	197.5	239.4	30.5	328.9				
Current Account Balance % GDP	6.8	-0.8	-2.2	-0.6	-3.0				
Per Capita GDP (PPP) - USD (World Bank)	65,584	58,647	57,492	59,712	81,632				
Average Institutional Indicators (KBRA Ranking)	AA	Α	AA	AAA/AA	AA/A				
Human Development Index (Ranking)	9	28	18	15	21				

Sources: IMF World Economic Outlook, IMF Fiscal Monitor, UN, World Bank, World Economic Forum

Finally, KBRA believes that Germany has a very high willingness to honour its debt obligations.

Step III: Local Currency vs. Foreign Currency Government Bond Ratings

KBRA has aligned the Federal Republic of Germany's foreign and local currency sovereign ratings based on its membership of the euro area and financing in euro, a reserve currency.

Conclusion

The German economy has struggled with both domestic and global headwinds, such as inflation, interest rates and energy supply. Furthermore, its diversification from Russian energy imports has presented a major challenge, notwithstanding the significant progress it has made in this regard. As a global exporter, Germany is also exposed to the risk of further geo-economic fragmentation, particularly as it relates to its key trading partners, while a slowdown in global demand also hinders economic recovery. However, Germany's growth outlook, albeit weakened, is underpinned by steady employment and robust productivity, while investment targeted towards sustainability could also provide uplift. KBRA views the return to fiscal restraint as credit positive, while the sovereign's debt burden remains extremely affordable. KBRA also acknowledges that the sovereign's tremendous funding flexibility and extremely strong access to liquidity underpin the rating.

Federal Republic of Germany Rating History		
Date	Action	Rating/Outlook/Watch Status
13-Nov-20	Assigned	LT Ratings: AAA (Stable) ST Ratings K1+
7-May-21	Affirmed	LT Ratings: AAA (Stable) ST Ratings K1+
5-Nov-21	Affirmed	LT Ratings: AAA (Stable) ST Ratings K1+
8-Apr-22	Affirmed	LT Ratings: AAA (Stable) ST Ratings K1+
23-Sep-22	Affirmed	LT Ratings: AAA (Stable) ST Ratings K1+
24-Mar-23	Affirmed	LT Ratings: AAA (Stable) ST Ratings K1+
15-Sep-23	Affirmed	LT Ratings: AAA (Stable) ST Ratings K1+
15-Mar-24	Affirmed	LT Ratings: AAA (Stable) ST Ratings K1+
6-Sep-24	Affirmed	LT Ratings: AAA (Stable) ST Ratings K1+

Disclosures (for EU Sovereigns)

Further disclosures relating to this rating action are available in the <u>EU/UK Information Disclosure Form</u>. Additional information regarding KBRA policies, methodologies, rating scales and disclosures are available at www.kbra.com.

The ratings of Federal Republic of Germany are unsolicited ratings. The rated entity or related third party did participate in the rating process and KBRA did not have access to the accounts and other relevant internal documents.

Related Publications: (available at www.kbra.com)

- European Climate Transition: Cost Burden and Risk of Slowing Progress
- European Sovereigns Demonstrate Shrewd Debt Management
- European Energy Prices Stabilise, but Risks Remain
- European ESG Regulation Part 1: An Overview of the European Green Deal
- Current European Labour Dynamics to Impact Core Economies

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