

Federal Republic of Germany

Ratings

Federal Republic of Germany					
Action: Affirmed	15 Sept 23				
Foreign Currency LT	AAA				
Local Currency LT	AAA				
Action: Affirmed	15 Sept 23				
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						
	2022					
Per Capita Income (US\$, PPP)	63,815					
Real GDP Growth (% Change)	1.8					
Inflation Rate (Average %)	8.7					
Budget Balance (% GDP)	-2.6					
Current Account Balance (% GDP)	4.2					
External Debt (% GDP)	156					
Level of Economic Development	High					
Default History	None recent					

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Executive Summary

KBRA affirms the long-term issuer and the 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, 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, tightening monetary policy, and their impact on economic growth and the 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 one of the most comfortable of all major 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 increased 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 while the country faces demographic challenges. 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 prioritise 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. For more on this theme please consider the following research pieces: European ESG Regulation Part 1 An Overview of the European Green Deal and The Glasgow Financial Alliance for Net Zero (GFANZ): Two Years Later

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 products 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. The German government issued EUR14.5 billion of green securities in 2022, up from EUR11.5 billion in 2020 and EUR12.5 billion in 2021, with planned annual issuance for 2023 expected to increase to between EUR15 billion to EUR17 billion (EUR13.75 billion issued as at July 2023). At end of June 2023, there were over EUR53 billion of green bonds outstanding. 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 2021, coming in second place in 2022.



Governance Factors

Germany is active 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, a first draft of the IT Security Act 3.0 which will implement NIS 2 is expected soon and 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.

Germany adopted its first ever national security strategy entitled 'Integrated Security for Germany' on 14 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

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023e	2024f
Gross Domestic Product USD bn	3890.1	3357.9	3468.9	3689.5	3976.2	3888.7	3886.6	4262.8	4075.4	4308.9	4446.5
Real GDP Growth	2.2	1.5	2.2	2.7	1.0	1.1	-3.7	2.6	1.8	-0.3	1.3
Population m ns	81.0	81.7	82.3	82.7	82.9	83.1	83.2	83.2	83.3	83.4	83.4
Total Credit/GDP	0.0	185.4	192.3	187.7	186.8	187.2	208.9	205.9	190.0	-	-
to Government	-	0.0	69.1	64.6	61.2	58.8	68.1	68.8	66.3	-	-
to Households	0.0	53.7	53.4	52.9	52.6	53.3	57.1	56.8	55.2	-	-
to Private Corp.	0.0	0.0	64.2	65.4	67.9	69.2	74.1	73.4	72.9	-	-
Savings/GDP	27.6	28.3	28.6	28.8	29.9	30.3	29.1	31.0	29.0	28.4	28.8
Investment/GDP	20.4	19.7	20.0	21.0	21.9	22.1	22.1	23.3	24.8	23.8	23.7
Current Account Balance/GDP	7.2	8.6	8.6	7.8	8.0	8.2	7.1	7.7	4.2	4.7	5.1
Net International Investment Position/GDP	29.4	34.9	39.5	44.6	52.3	58.5	63.8	70.1	72.2	-	-
Inflation (HICP) YoY	0.8	0.7	0.4	1.7	1.9	1.4	0.4	3.2	8.7	6.2	3.1
Unemployment Rate	4.7	4.4	3.9	3.6	3.2	3.0	3.6	3.6	3.1	3.3	3.3
ECB Refinancing Rate - Year-end	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	2.5		
10-Year Bonds % - Year-end	0.5	0.6	0.2	0.4	0.2	-0.2	-0.6	-0.2	2.6	-	-
General Government Revenues/GDP	44.9	45.1	45.5	45.5	46.3	46.5	46.1	47.5	47.1	47.0	46.9
General Government Expenditures/GDP	44.3	44.1	44.4	44.2	44.3	45.0	50.4	51.3	49.7	50.7	48.8
Fiscal Interest/Revenues	2.7	2.4	2.1	1.8	1.6	1.2	1.0	0.9	1.2	1.7	1.9
General Government Balance/GDP	0.6	1.0	1.2	1.3	2.0	1.5	-4.3	-3.7	-2.6	-3.7	-1.9
General Government Structural Balance/Potential GDP	1.2	1.2	1.2	1.1	1.6	1.3	-2.9	-3.0	-2.6	-3.2	-1.4
General Government Cyclically Adjusted Balance/Potential GDP	0.8	1.2	1.1	0.8	1.5	1.3	-2.9	-3.1	-2.8	-3.2	-1.4
Primary Balance/GDP	1.8	2.0	2.1	2.2	2.7	2.1	-3.9	-3.3	-2.1	-2.9	-1.0
Gross Government Debt/GDP	75.3	71.9	69.0	64.6	61.3	58.9	68.0	68.6	66.5	67.2	66.5
Gross Government Debt/Revenues	167.7	159.5	151.5	142.0	132.5	126.7	147.6	144.4	141.3	143.0	141.9
Net Government Debt/GDP	54.9	52.2	49.3	45.0	42.2	40.1	45.4	45.6	45.1	46.7	46.8
Net Government Debt/Revenues	122.2	115.7	108.3	98.8	91.2	86.1	98.5	95.9	95.7	99.4	99.9

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



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. A high reliance on exports to drive growth leave 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 the US (2.4%), largely due to structural issues common across the euro area, such as labour market slack and relatively low 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, tightening 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 Slowdown May Prove Temporary

The German economy has slowed considerably in recent quarters, entering recession at the start of the year and underperforming the rest of the euro area. 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 continues to pose challenges, 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 anticipate a 0.3% contraction of GDP this year. However, this slowdown could prove temporary, and the IMF forecasts the German economy will expand by 1.7% on average over the next three years. In KBRA's view, the German economy is resilient to headwinds and certain underlying drivers of growth are still evident. For example, Germany remains productive, having averaged higher GDP per hour worked 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. German inflation rate reduced to 6.1% in August 2023 benefiting from a combination of government intervention, price caps and energy supply diversification. Inflation is materially below peak levels but, similar to other economies globally, remains well above the central bank's target. Private consumption is expected to remain depressed for the rest of 2023 as persistent inflation continues to weigh on consumer purchasing power and savings. German retail sales have been slower than expected and recent economic confidence indicators have been weak. Construction activity is also down and is expected to contract by 3.6% in real terms in 2023. The Government's recently announced 10-point plan will help alleviate some of the cost pressures on the construction industry by introducing tax incentives to support the sector (which accounts for 12% of GDP and employs 1 million people). The slowing economy could help to further stall price growth, but a tight labour market underpins inflationary pressure.

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. Storage levels were required to reach 85% by October 1st in order to secure sufficient gas supply for the coming winter. That said, the principal unknown risk relates to the weather for this coming winter, although Germany is in a much better position than prior to Russia's invasion of 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 a reduction in gas consumption. Pipeline gas has not flowed from Russia to Germany since September 2022. However, KBRA acknowledges the energy situation is fragile, demonstrated by the impact on the price of natural gas futures from industrial unrest in Australian LNG facilities in recent weeks.



Wages have increased substantially since the pre-pandemic period, which illustrates the extent to which external pressures are now impacting the underlying economy. Being part of a monetary union, Germany's autonomy to react to inflation is subordinated to the European Central Bank (ECB) notwithstanding that eurozone economies with different energy sensitivities can each recover at a different pace. That said, the cost-cutting measures in Germany's draft 2024 Budget coupled with the impact of recent interest rate increases should help dampen persistent inflation. The German labour market remains tight despite economic headwinds and tighter credit conditions and has been an important driver of its economic resilience over the last few years. However, unemployment is expected to increase marginally from 3.1% in June 2023 (Destatis) to 3.3% in 2024. Tightness within the German labour market will persist, largely stemming from a lack of worker supply.

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 2024 plans. Germany adhered to EU fiscal rules with regard to debt and deficits (60% of GDP for government debt and 3% of GDP for the government deficit) in the pre-pandemic era. It also imposes a net new 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. The German government's draft 2024 Budget and its financial plan to 2027, dubbed "Back to fiscal normality", includes a 6.4% YoY reduction in overall spending in 2024, before rising incrementally through to 2027. The plan assumes EUR16.6 billion of net new debt (0.35% of GDP) will be added in 2024, adhering to its national debt brake rule.

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 current energy crisis. The budget deficit declined to 2.6% in 2022 and complied with the Maastricht deficit limit for the first time since 2019. It is expected to increase to 3.7% in 2023 reflecting the EUR15 billion one off expenditure related to the Economic Stabilisation Fund (ESF- Energy) but to fall again to 2.6% in 2024 and incrementally decrease in later years.

While German government plans to limit spending in order to remain within its borrowing limits, which could help curb persistent inflation, this could also constrain its full growth potential as public investment is needed. Nevertheless, the government has prioritised extrabudgetary spending, not bound by the debt brake rule, on climate and defence in its draft 2024 Budget plan. Germany has indicated it will meet NATO's annual 2% of GDP target on military spending. The government is committed to saving money under this plan and is averse to raising taxes. However, the economic consequences of the Russia-Ukraine war and the related energy crisis, could result in the German budget deficit 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. Gross government debt is expected to increase to 67.2% of GDP in 2023 and to reduce again to 66.5% in 2024 and it remains to be seen when debt will move back towards the Maastricht level of 60%.

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 43.7% over the last five years, although the IMF forecasts it at 46.7% and 46.8% in 2023 and 2024 respectively. This compares favourably to France, Italy and Spain at 99.4%, 129.3% and 96.63% respectively.

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 but is stable at 1.36% 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 9.8 years, which helps to minimise refinancing risks. Fiscal tightening ensures public finance is on a progressive and sustainable path, supporting lower inflation.

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 ESF-Energy, it has created an "protective shield" for the economy up to EUR200 billion for measures to temporarily cushion the economic consequences of the energy crisis. The shield is proportionate and fiscally sustainable over the longer term given the size of the German economy and extent of the dependence it had on gas imports from Russia.

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 this year, where goods exports have stalled, the IMF forecasts that the sovereign will continue to maintain a strong current account surplus of 5.8% on average through 2024-28, 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. Its high domestic savings rate of 20% at March 2023 compared to an EU average of 11.2% and produces consistently large primary income account surpluses reflecting a NIIP of 70.7% of GDP in Q1 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. Sanctions on Russia continue to impact German production and exports with the value of German exports to Russia down more than 47% YoY in Q1 2023. Russia accounted for 2.3% of total German trade in 2021. Exports from Germany to countries bordering Russia rose sharply again in Q1 2023, adding concerns that re-exportation of goods from neighbour states is helping Russians circumvent sanctions imposed over Russia's war in Ukraine. Factory orders are averaging -0.5% per month so far this year, while industrial production was sharply lower through the summer months compared to last year. Much of this weakness is driven by a decline in auto manufacturing, reflecting weaker demand from key customers like China and also the growing share of electric vehicles where the competitive position of the German automakers is not as strong. There is a risk that these trends persist and continue to put pressure on German auto manufacturing.

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

Government Focus on Renewed Fiscal and Social Challenges

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 now committed to reduced spending in the 2024 Budget notwithstanding political pressure to do otherwise. 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 that 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 legislation to address fossil fuel emissions, retention of nuclear power plants and climate policy. These disputes have reduced the poll ratings of the ruling coalition while the popularity of the far right Alternative for Germany (AfD) has increased while the largest opposition party, the CDU/CSU alliance has failed to benefit in the polls. That said, the ruling coalition was elected in Q4 2021 so that the next federal elections do not need to take place until the second half of 2025.

Banking Sector Resilient to Macro Challenges

The German banking sector remains resilient overall, in KBRA's view, despite increased macroeconomic risks and uncertainties. The sector has avoided the liquidity issues experienced by some US regional banks and the main challenge facing German banks is their structurally low profitability due to their higher costs and the strong competition in the market. The banks' revenues should benefit from higher interest rates, although an increase in credit costs could weigh on profitability. The sector benefits from strong liquidity and a resilient capital position, with an average CET1 ratio of 16.1% at end-March 2023, according to the European Banking Authority (EBA). That said, certain smaller banks are more vulnerable with less capital and would benefit from increase buffers. According to the recent EU stress test, the banking system is resilient to liquidity shocks although shortfalls of capital and US dollar liquidity at some individual banks were identified under severe adverse scenarios. KBRA expects asset quality to deteriorate over the coming quarters as the implications of inflationary pressures feed through to the economy and customers' affordability comes under pressure. That said, the non-performing loan (NPL) ratio stood at a low 1.1% at end-March 2023, according to the EBA. The IMF notes that, following continued rapid house price gains, the recently activated capital-based measures should be supplemented with borrower-based measures, such as supervisory guidance on a loan-to-value cap.

Germany has one global systemically important bank (G-SIB), Deutsche Bank, which accounted for over 14% of banking sector assets in 2022 and has not been without its own share of headline troubles in recent years, despite improving fundamentals. Landesbanken (regional banks), which account for almost 9% of banking sector assets, according to KBRA calculations, are important to the real economy in Germany through their support of small and mid-sized companies. Landesbanken are owned by the savings bank associations, federal states and municipalities, and focus on corporate and asset-based finance through their wholesale banking model. Risks to Landesbanken include their low profitability and exposure to commercial real estate although support from their owners is likely should issues arise. In addition, since 2021 Landesbanken benefit from improved reformed Sparkassen-Finanzgruppe's institutional protection scheme, which provides additional reliable funding and a liquidity source.

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 permanent onshore LNG facilities. The interim gas storage target for October 1st was 85% and this was reached in July. However, the favourable conditions last winter, when demand for gas was 25% lower than the 2019-2021 average may not be repeated in the year ahead when demand could overshoot expectations due to colder conditions. 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. Moreover, the trade surplus has narrowed in recent years, while slower growth and deflation in Asia could hamper growth prospects. The global evolution towards both a greener, more sustainable future and digitalisation presents a challenge, albeit that German industry has been adaptive to such challenges in the past.

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 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 1.08 million Ukrainian refugees registered in June 2023 (1.3% of the German population), the majority of them being women and children. This compares to approximately 1.64 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.

¹ According to data from The UN Refugee Agency (https://data.unhcr.org/en/situations/ukraine).

Macroeconomic Forecasts

Macroeconomic Forecasts (2023-2028 average)									
Trends and Projections	Germany	France	UK	Canada	US				
GDP Growth	1.2	1.4	1.4	1.7	1.8				
Inflation	2.9	2.4	2.9	2.3	2.5				
Current Account Balance % GDP	5.6	-0.7	-4.0	-1.5	-2.4				
Government Revenues % GDP	47.0	51.8	37.5	40.7	31.7				
Government Balance % GDP	-1.4	-4.4	-4.3	-0.2	-6.8				
Government Primary Balance % GDP	-0.4	-2.4	-2.3	-0.5	-3.9				
Government Interest Payments % Revenues	2.0	4.0	5.3	-0.7	9.1				
Government Gross Debt % Revenues	135.0	218.6	297.4	240.3	409.3				
Government Gross Debt % GDP	63.5	113.2	111.3	97.9	129.9				
Government Net Debt % Revenues	95.5	195.4	266.2	32.5	327.0				
Government Net Debt % GDP	44.9	101.2	99.6	13.2	103.8				

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

Comparative Statistics

Comparative Statistics								
2022 Data	Germany	France	UK	Canada	US			
Gross Domestic Product (USD bn)	4,075.4	2,784.0	3,070.6	2,139.8	25,464.5			
Nominal GDP Growth (%)	7.4	5.7	9.3	11.0	9.2			
Real GDP Growth (%)	1.8	2.6	4.0	3.4	2.1			
Consumer Price Inflation (%)	8.7	5.9	9.1	6.8	8.0			
Unemployment Rate - Latest Read	5.7	7.2	4.2	5.5	3.8			
General Government Revenues % GDP	47.1	53.6	38.9	40.8	33.0			
General Government Balance % GDP	-2.6	-4.9	-6.3	-0.7	-5.5			
General Government Cyclically Adjusted Balance % Potential GDP	-2.8	-4.4	-7.2	-1.0	-5.9			
General Government Gross Debt % GDP	66.5	111.1	102.6	106.6	121.7			
General Government Gross Debt % Revenues	141.3	207.1	264.0	261.4	368.8			
General Government Interest % Revenues	1.2	3.4	9.1	-1.4	6.4			
General Government Net Debt % GDP	45.1	99.0	91.9	13.9	94.2			
General Government Net Debt % Revenues	95.7	184.7	236.2	34.2	285.4			
Current Account Balance % GDP	4.2	-1.7	-5.6	-0.4	-3.6			
Per Capita GDP (PPP) - USD (World Bank)	63,816	56,426	54,795	58,292	76,348			
Average Institutional Indicators (KBRA Ranking)	1.25	1.75	1.50	1.00	1.50			
Average Institutional Indicators (KBRA Ranking)	AAA/AA	AA	AA	AAA	AA			
Human Development Index (Ranking)	6	26	13	16	17			

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 demonstrated resilience to both domestic and global headwinds, such as inflation, interest rates and energy supply. However, 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 expects a return to fiscal restraint, which is 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.

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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+	

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)

- <u>European Energy Prices Stabilise</u>, but Risks Remain
- European ESG Regulation Part 1: An Overview of the European Green Deal
- Podcast: Sovereign Outlook Amid Upward Growth Revisions
- European Sovereigns Demonstrate Shrewd Debt Management
- Global Inflation: More Thematic Impulses

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