

CREDIT OPINION

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Update



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Government of the United Kingdom – Aa3 stable

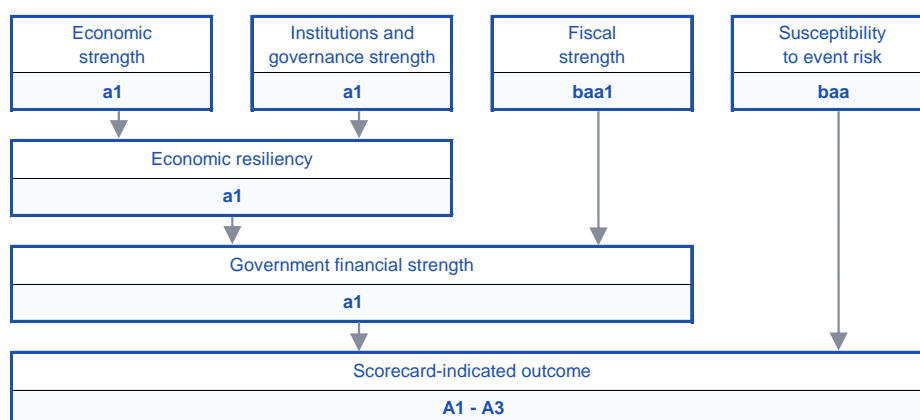
Regular update

Summary

The credit profile of the [United Kingdom](#) (UK) is supported by its wealthy, competitive and diversified economy as well as a strong institutional framework, although Brexit has weakened the economy's medium-term growth prospects and weighed on the effectiveness of policymaking. Strong social and political pressures to raise government spending will slow the pace of fiscal consolidation and keep government debt elevated at just above 100% of GDP, in line with rating peers such as [France](#) (Aa2 negative). We also expect the affordability of government debt will settle at a weaker level compared to before the pandemic, similar to other advanced economies. Political event risks mainly emanate from a volatile and polarised domestic political environment and geopolitical risk from Russia's invasion of [Ukraine](#) (Ca stable).

Exhibit 1

The UK's credit profile is determined by four factors



Source: Moody's Ratings

Credit strengths

- » A wealthy, diversified and competitive economy;
- » Strong institutional framework benefitting from sound and highly credible monetary policy;

This publication provides an update on the sovereign credit profile and may also discuss the likely credit implications of a new development or trend for the sovereign. It does not announce a credit rating action.

- » Deep and diverse investor base providing strong market access.

Credit challenges

- » Weaker potential growth since the Brexit vote;
- » Weakened (albeit now stabilised) effectiveness of policymaking since the Brexit vote;
- » Elevated government debt and debt interest expenditures relative to pre-pandemic which reduces capacity to absorb shocks.

Rating outlook

The stable outlook reflects our view that the UK's institutions will continue to operate in effective and predictable ways under the new government. In particular, the UK's overall strong institutional framework supports the country's ability to navigate shocks amidst the heightened polarisation and volatility of the domestic political environment.

Given social and political spending pressures, we expect government indebtedness will remain elevated and in line with similarly rated peers, while debt affordability, similar to other advanced economies, will settle weaker than its pre-pandemic level. We expect efforts to improve the UK's growth potential, including through higher public investment, will be hindered by structural constraints, including labour market inactivity that has worsened since the pandemic and persistent lacklustre productivity growth. The long-term economic losses arising from Brexit are also largely captured in the Aa3 rating.

The UK's rating is one notch above the scorecard-indicated rating range of A1-A3. While political risk has materially increased following Russia's invasion of Ukraine, we assess that the impact of political risk on the UK's credit profile and rating is not as significant as indicated by the scorecard.

Factors that could lead to an upgrade

The UK's outlook and ultimately its rating would improve if there were indications that the erosion in economic and institutional strength since Brexit is reversing. In particular, indications that policymaking is reverting to the capability and predictability that characterised UK institutions prior to Brexit would be positive for the UK's rating. The prospect for economic policies which boost growth potential, including measures that sustainably improve the investment environment, and support a decline in government indebtedness, would also be positive for the UK's rating. Continued confidence in the UK's long-standing institutional framework to help navigate shocks without further detriment to the UK's economic and fiscal strength would be a prerequisite for any improvement in the rating.

Factors that could lead to a downgrade

Downward pressure on the rating would arise if we expected institutional strength to weaken materially further, impairing the UK's ability to respond to shocks. The expectation that the affordability or size of the government debt burden will deteriorate durably and tangibly relative to peers would also be negative for the rating. A significant weakening in our view of the UK's economic prospects, including its growth potential, would also undermine the UK's credit profile.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

United Kingdom	2019	2020	2021	2022	2023	2024F	2025F	2026F
Real GDP (% change)	1.6	-10.3	8.6	4.8	0.3	1.1	1.8	1.7
Inflation rate (% change average)	1.7	1.0	2.5	7.9	6.8	2.5	2.5	2.3
Gen. gov. financial balance/GDP (%)	-2.5	-13.2	-7.7	-4.6	-5.8	-5.1	-4.5	-4.3
Gen. gov. primary balance/GDP (%)	-0.3	-11.2	-5.0	-0.3	-2.6	-2.0	-1.2	-1.0
Gen. gov. debt/GDP (%)	85.7	105.8	105.1	99.6	100.0	102.0	102.5	103.0
Gen. gov. debt/revenues (%)	222.9	269.7	259.6	237.6	244.1	245.8	245.5	249.3
Gen. gov. interest payment/revenues (%)	5.7	5.1	6.7	10.2	7.8	7.3	7.8	8.0
Current Account Balance/GDP (%)	-2.7	-2.9	-0.4	-2.1	-2.0	-2.4	-2.3	-2.1

Source: Moody's Ratings

Detailed credit considerations

We assess the UK's **economic strength** to be "a1", reflecting the UK's wealthy, diversified and competitive economy, especially in its large services sector, and flexible labour market, which has historically resulted in lower unemployment levels than many rating peers.

The uncertainty generated by Brexit has impacted business investment in the years following the referendum. The ambitious capital spending agenda outlined in the new government's first budget in October 2024 seeks to crowd-in private investment and improve long-term growth prospects. According to the Office for Budget Responsibility (OBR), sustaining the increase in public investment outlined in the budget could permanently raise potential output by between 0.6%-3.0% in the very long term. Nevertheless, structural constraints, including labour market inactivity that has worsened since the pandemic and persistent lacklustre productivity growth, are likely to keep the UK's economic growth potential, which we estimate at around 1.5%, broadly unchanged and in line with other advanced economy peers such as France, even as higher government spending lifts growth somewhat in short-term. The government's legislative agenda also includes reforms to the planning system which can potentially, for limited fiscal cost, boost the supply side of the economy.

The [OBR estimates](#) a long-term loss in productivity of around 4% from Brexit compared with remaining in the [European Union](#) (EU, Aaa stable), which is largely already captured in the UK's Aa3 rating. While the Trade and Cooperation Agreement (TCA) signed at the end of 2020 allows for tariff-free and quota-free goods exports between the UK and the EU, significant non-tariff barriers will continue to hinder trade, particularly for small firms now facing higher exporting costs. We expect the UK's trade openness to be structurally lower given that the EU is by far its largest trading partner.

We expect the new government will continue to improve upon the enhanced co-operation with the EU seen in recent years following the signing of the Windsor Framework in February 2023. The government has said it intends to sign new agreements with the EU to smooth trade in goods and services, including on veterinary standards and the mutual recognition of professional qualifications. This would help to smooth the implementation of Brexit and reduce Brexit-related uncertainty, even as the overall long-term economic cost arising from the decision to leave the single market and customs union remains largely unchanged. Greater certainty for business from a smoother Brexit process could help support sustainably higher investment. A more constructive relationship with the EU may also encourage agreement in the many areas left unsettled by the TCA, particularly around services.

We assess the UK's **institutions and governance** strength to be "a1". Many aspects of the UK's institutional strength remain very strong, such as the rule of law, a highly credible central bank which has engendered confidence in policymaking, and a professional and highly qualified civil service. The OBR, as an independent fiscal oversight body, enhances the country's fiscal policy framework and helps to increase transparency around the longer-term fiscal outlook. Over the past decade, the UK also moved to strengthen its domestic banking system by increasing bank capital requirements and improving bank supervision.

These institutions serve as an important backstop to institutional quality amidst the heightened polarisation and volatility of the UK domestic political environment which has weakened policy effectiveness, particularly since the Brexit vote. The erosion in policymaking has been most clearly reflected in the conduct of fiscal policy in recent years, including frequent changes to fiscal rules, lack of full

disclosure on spending pressures, and large permanent fiscal measures announced outside the normal calendar without detailed policy plans and independent scrutiny from the OBR. Furthermore, reduced institutional capacity to manage change in a predictable and confidence-building manner is also evident with regard to the UK's approach to Brexit and the ongoing uncertainty it continues to create. Nevertheless, the UK's long-standing institutional framework has proved pivotal in helping steer policymaking in a more credible direction, especially in disruptive periods such as around the mini-budget in October 2022.

The new government has taken steps to improve the predictability of the fiscal framework, including through its commitment to simplify the budget timetable to reduce uncertainty around the timing of fiscal announcements and to bolster the independent oversight provided by the OBR through a new "fiscal lock" which gives the OBR power to make an independent assessment of any single major tax and spending announcement. The government's new fiscal framework also commits to set department spending limits for a minimum of three years and capital budgets for five years on a regular basis. A demonstrated commitment to maintaining and remaining compliant with the new fiscal framework would support the credibility of policymaking.

We assess the UK government's **fiscal strength** at "baa1", which reflects the government's elevated general government debt burden, albeit still in line with advanced economy rating peers, and weak debt affordability, reflecting in part the substantial share of inflation-linked debt and the higher cost inherent in the UK's longer-dated debt.

The combination of a muted longer term growth outlook and a long list of spending demands will keep general government debt stable at just above 100% of GDP in the coming years, limiting capacity to absorb shocks, although indebtedness remains in line with similarly rated France and [Belgium](#) (Aa3 negative). We expect fiscal policy to gradually tighten over the medium term given the strong political consensus to fiscal prudence. That said, structural spending pressures given the legacy of a decade of austerity and the pandemic, political ambitions to raise defence and development aid spending, and commitments to higher longer-term spending on health will still keep deficits elevated.

The structure of the UK's debt burden means it is also very exposed to inflation and monetary policy developments. The cost of close to half of the debt stock is directly affected by inflation and Bank Rate given the substantial share of inflation-linked gilts and the large stock of gilts held by the Bank of England (BoE) through its Asset Purchase Facility (APF) whose cost to the UK Treasury is directly impacted by Bank Rate.

The UK's debt affordability metrics have improved as the inflation shock has dissipated, although we expect debt affordability to settle weaker than prior to the pandemic, in line with other advanced economies. Debt affordability assumes a greater importance in our assessment of the UK's overall fiscal strength, given the sterling's status as a reserve currency and the inherent demand this creates for sterling-denominated debt.

The inflationary shock and associated tightening in monetary policy led to a substantial deterioration in debt affordability with interest costs absorbing 10.2% of revenue in 2022. However, the interest to revenue ratio fell to 7.8% in 2023 as the sharp spike in inflation dissipated and we expect it to fall further to 7.3% in 2024 as the cost of index-linked debt is markedly reduced by the disinflation process this year. Debt affordability metrics will still deteriorate slightly in the coming years, as maturing debt is refinanced at higher rates and higher deficits from the Autumn 2024 budget further push up borrowing costs.

The final fiscal strength score of "baa1" is one-notch above the initial score of "baa2", to reflect our forward-looking view of debt affordability over the coming years as the historically high volatility in interest costs subside. We will continue to monitor how debt affordability develops with the uncertain path for inflation and monetary policy, and may adjust the final score further if our expectations for macroeconomic and monetary developments change.

We currently assess the country's **susceptibility to event risk** as "baa", driven by political risks.

Our assessment of **political risks** at "baa" reflects the polarisation and volatility of the domestic political environment which has weakened the effectiveness of economic and fiscal policymaking since the Brexit vote.

Policy predictability has improved in the last couple of years after a prolonged period of political volatility which resulted in frequent changes in government and uncertainty around policy, including the heightened volatility around the mini-budget in 2022. After extensive strike action in 2023, social discontent has receded with the various pay deals that the government has concluded. We

expect the gradual trend of improving policy predictability to continue under the new government. However, the extent to which it can address long-standing structural issues in the economy, such as the high cost of housing and inadequate health services, is likely to be limited, such that the domestic political environment will continue to be volatile and polarized. Furthermore, the electorate's political views are expanding beyond the two main parties, which together only achieved around 60% of the vote share in the 2024 general election, with the potential for support for populist parties to grow and influence policy.

Continued polarisation around Brexit will also make it difficult for the UK to materially progress on the many economic and security issues left unsettled by the TCA, which weighs on medium term growth. That said, co-operation with the EU has improved in the aftermath of the Windsor Framework agreement in 2023 which, while unlikely to change the fundamentals of the economic relationship with the EU, can help to smooth the implementation of Brexit and support investor confidence.

Finally, the political risk assessment captures the UK's exposure to geopolitical risks. Although the UK's NATO membership is ultimately a guarantor of national security, the country also faces contagion risks from Russia's invasion of Ukraine as it is bound by NATO's Article 5 collective defense clause, which treats an attack on any NATO member as an attack on all treaty signatories. While this is not our base case because of the deterrent effect of this clause, there is a heightened risk that this treaty obligation could ultimately result in the UK needing to use armed force to restore and maintain stability in Europe. Nevertheless, the probability of such risks materialising have increased in light of the ongoing military conflict between Russia and Ukraine. Increased scepticism of NATO by the [US](#) (Aaa stable) under a forthcoming Trump administration would make existing conflicts more unpredictable.

Despite the significant increase in the government's debt burden, we consider the **government liquidity risks** to be very low and assessed at "aaa". The structure of the UK's government debt burden is a supportive factor in our assessment, given that the long average maturity of the outstanding debt stock keeps annual refinancing needs low relative to other highly rated and indebted sovereigns. In addition, there has been consistent strong demand for UK debt, including during periods of market stress, as demonstrated by relatively stable bid-to-cover ratios at auctions. Furthermore, the deep domestic investor base has, in our view, sufficient capacity to absorb new government debt.

We assess **banking sector risk** at "a". While the banking sector is very large, we believe that the related contingent liability risk for the government's balance sheet has materially declined as a result of the measures implemented by the UK authorities. The government's willingness to use its new powers in a systemic crisis remain to be tested, but the UK's bank resolution and bail-in regimes and the ring-fencing framework are very advanced.

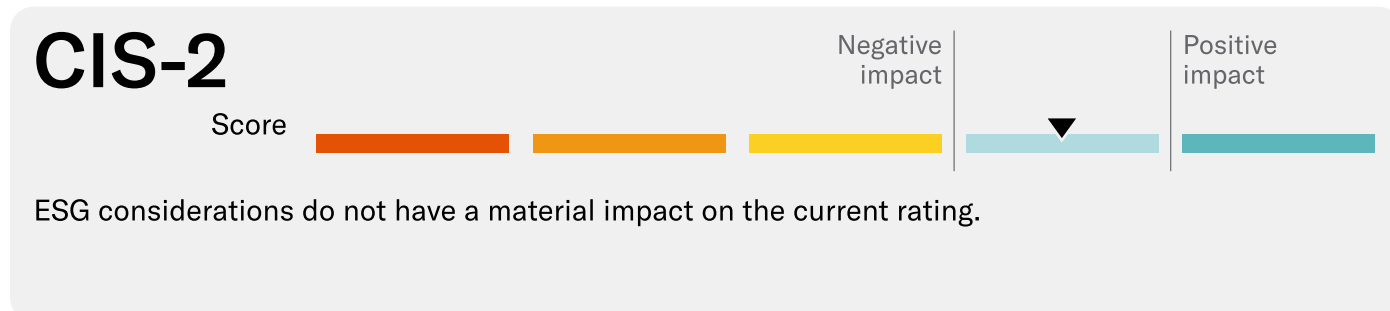
We assess **external vulnerability risks** at "aa" with the UK's sizeable current-account deficit posing a potential source of vulnerability. That said, its flexible exchange rate acts as a key shock absorber and limits the accumulation of large external liabilities. The emergence of sustained pressures on the exchange rate in the context of substantial and persistent capital outflows could raise questions in the long-run about the funding of the current-account deficit and more fundamentally about the role of sterling as one of the few global reserve currencies.

ESG considerations

United Kingdom's ESG credit impact score is CIS-2

Exhibit 3

ESG credit impact score

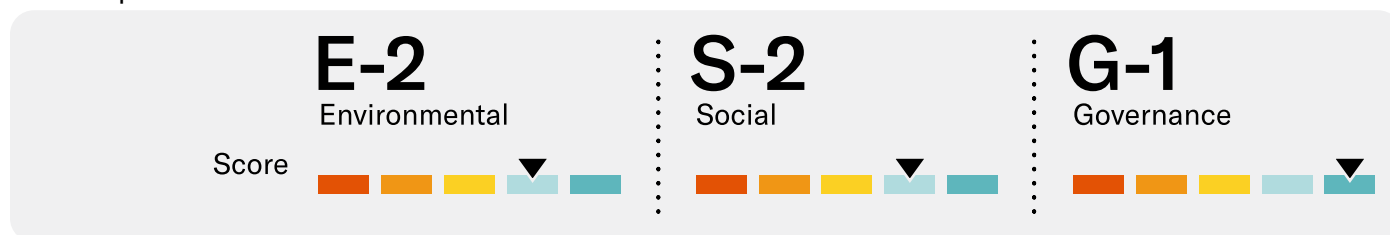


Source: Moody's Ratings

The UK's ESG Credit Impact Score is **CIS-2**, reflecting low exposure to environmental and social risks and, like many other advanced economies, a strong governance profile and in general capacity to respond to shocks.

Exhibit 4

ESG issuer profile scores



Source: Moody's Ratings

Environmental

The UK's **E-2** environmental issuer profile score is in line with that of other advanced economies, marked by low exposure to environmental risks across all categories. Extreme climate events such as flooding and drought will increase in severity and frequency, but the associated direct economic impact appears manageable.

Social

The UK's **S-2** social issuer profile score reflects its limited exposure to most sources of social risks, with widely available high quality education, high quality healthcare and basic services. The UK's demographic pressures are less pronounced than many other advanced economy peers but population ageing is a longer-term challenge that will increasingly weigh on public finances and growth potential, particularly stemming from healthcare. While a flexible labour market results in lower unemployment than many peers, there are large disparities between the various regions of the country in terms of wealth and income levels, which may give rise to social and political discontent.

Governance

The UK's governance issuer profile score (**G-1**) is supported by its strong institutions and governance profile. Although policy predictability has weakened, the UK continues to score highly on international surveys, reflecting high-quality and transparent institutions, and a strong civil society. As a result, the UK's institutional setup supports a high degree of resilience, mitigating E and S risks.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

All of these considerations are further discussed in the "Detailed credit considerations" section above. Our approach to ESG is explained in our report on how the [scores depict varied and largely credit-negative impact of ESG factors](#) and our cross-sector methodology [General Principles for Assessing Environmental, Social and Governance Risks Methodology](#).

Recent developments

Fiscal loosening supported by revised fiscal rules will complicate future consolidation, keeping debt elevated

On 30 October, the UK Chancellor of the Exchequer Rachel Reeves presented the first budget of the new Labour government. The budget will increase government spending by about £70 billion (around 2.2% of GDP) a year over the next five years, with significant increases in both current and capital departmental spending that aim to improve public services and stimulate investment activity. As a result, we continue to expect acute spending pressures will make it politically and socially difficult for the UK government to materially reduce its debt burden, similar to many other large economies in Europe.

While the government has announced large revenue raising measures to balance day-to-day departmental spending, almost half of the increase in spending (including additional capital spending) will be financed by additional borrowing amounting to about £28 billion (around 0.9% of GDP) a year over the next five years. As a result, the fiscal loosening set out in this budget will be the most aggressive since the March-July 2020 measures announced during the pandemic. In our view, the increase in borrowing, which is in part supported by a new measure of debt under the fiscal framework, will pose an additional challenge for what are already difficult fiscal consolidation prospects.

The decisions taken in the budget mean that public sector net borrowing will be higher in each year of the official 5 year forecast. At the same time, official forecasts show debt on a general government basis will be on a slow upward trajectory over the forecast horizon. With the government's fiscal loosening financed by new borrowing, spending on debt interest will also increase. The increase in debt and borrowing under this budget is also due to higher-than-expected expenditures in the current year as well as an upward revision to inflation and interest rate forecasts compared to what the OBR had assumed at the time of the last budget in March 2024.

As a result, we have revised up our fiscal deficit forecast for 2024 to 5% of GDP from 4.3%. We forecast deficits to decline to around 4.3-4.5% of GDP in 2025-26 and continue to expect fiscal consolidation will proceed more gradually than official forecasts given acute spending pressures. As a result, we continue to expect general government debt to remain just above 100% of GDP (reaching 105% by 2030), with the debt burden at a similar level as France and Belgium.

New fiscal framework can improve the predictability of fiscal policymaking

The new fiscal rules, including a change to the measure of debt required to be falling as a share of GDP, open up the possibility for higher borrowing. Still, we expect the government will continue to formulate its medium-term fiscal plans with independent oversight from the OBR and broader changes to the fiscal framework can help support the predictability of fiscal policy making. The UK's fiscal policy effectiveness has been eroded in previous years, particularly since the Brexit vote, with frequent revisions to the UK's fiscal rules weakening their effectiveness as a credible policy anchor.

The change in the measure of debt for the fiscal rule from public sector net debt excluding Bank of England (PSND ex BoE) to public sector net financial liabilities (PSNFL) allows the government to increase borrowing for capital investments, but also takes greater regard of the government's financial assets and liabilities. The new fiscal rules also require the current budget, including interest costs, to be in surplus which will ensure that increases in day-to-day spending are met by equivalent revenue raising measures, adding credibility to the budget process.

Furthermore, the government has chosen a more strict formulation with an eventual move to a three-year rolling target for its current budget and debt rules. The commitment to set department spending limits for a minimum of three years and capital budgets for five years on a regular basis will also improve the predictability of policymaking. A demonstrated commitment to maintaining and remaining compliant with these fiscal rules and frameworks would support the credibility of the policymaking.

Economic growth to benefit from higher government spending, though long-term impact remains uncertain

We forecast real GDP growth of 1.1% in 2024, given stronger than expected outturns earlier in the year and higher government spending. Quarter-on-quarter GDP grew by an average of 0.6% of GDP in the first two quarters of the year, benefiting from strong growth in private consumption in the first quarter of the year, and higher government consumption and capital spending in the second quarter. In the third quarter, government and private consumption remained strong, though a weakening in investment growth, likely in anticipation of the budget, weighed down on growth. At the same time, a relatively weak external environment has resulted in three successive quarter-on-quarter declines in real exports.

The fiscal loosening set out in the budget is likely to boost growth in the near-term. As such, we have revised up our 2025 growth forecast to 1.8% from 1.1% and we expect growth to remain at a similar level in 2026 (1.7%). The fiscal loosening will also push up on demand in a context of relatively limited spare capacity. As a result, we have slightly raised our average inflation forecast for 2025 to 2.5% and expect inflation to average 2.3% in 2026.

We consider a scenario where aggregate investment growth is efficient and is sustained at a high level to pose an upside risk to our long-term growth forecasts. The government has focused the budget on raising capital investment to boost growth potential, with average annual real growth in capital spending by the government estimated to grow by 2.6%, which is a marked contrast from the previous budget forecasts of a 1.1% decline. According to the OBR, sustaining the increase in public investment could permanently raise potential output by between 0.6%-3.0% in the very long term.

Furthermore, public investment that crystallises additional private investment would durably reduce the capital spending burden on the government. The new National Wealth Fund, with a planned additional £5.8 billion in capitalisation taking total capitalisation to £27.8 billion (1% of GDP), aims to crystallise over £70 billion (2.5% of GDP) of private investment in infrastructure and green sectors. In addition, the introduction of a new set of guardrails, such as greater transparency on capital spending, robust annual reporting and audits by the National Audit Office and new dedicated government units such as the Office for Value for Money, can help to ensure the value and effectiveness of new investments.

However, we expect long-term growth in our baseline to remain muted until structural constraints, including labour market inactivity that has worsened since the pandemic and persistent lacklustre productivity growth, are durably addressed, which will prove difficult. The decision to raise employers national insurance contributions will also increase costs for business and reduce labour supply in the medium-term, while the government's focus on reducing immigration means net migration is unlikely to support labour supply to the extent it has in the past. At the same time, significant regional disparities in productivity and earnings across the UK remain a drag on long-term growth. As such, we expect the UK's growth potential to remain unchanged at around 1.5%, weaker than before Brexit but broadly in line with France and stronger than [Germany](#) (Aaa stable).

Moody's rating methodology and scorecard factors: United Kingdom - Aa3 stable

Factor / Sub-Factor	Metric	Indicator Year	Indicator	Initial Factor Score	Final Factor Score	Weights
Factor 1: Economic strength						
Growth dynamics	Average real GDP growth (%)	2019-2028F	1.3	b1	a1	25%
	MAD Volatility in Real GDP Growth (%)	2014-2023	0.9	baa1		10%
Scale of the economy	Nominal GDP (\$ billion)	2023	3,380.9	aaa		30%
National income	GDP per capita (PPP, Int\$)	2023	60,735.4	aaa		35%
Adjustment to factor 1	# notches				0	max ±9
Factor 2: Institutions and governance strength						
Quality of institutions	Quality of legislative and executive institutions			a		20%
	Strength of civil society and the judiciary			aaa		20%
Policy effectiveness	Fiscal policy effectiveness			baa		30%
	Monetary and macroeconomic policy effectiveness			aa		30%
Specified adjustment	Government default history and track record of arrears				0	max -3
Other adjustment to factor 2	# notches				0	max ±3
F1 x F2: Economic resiliency						
Factor 3: Fiscal strength						
Debt burden	General government debt/GDP (%)	2023	100.0	b3		5%
	General government debt/revenue (%)	2023	244.1	ba1		5%
Debt affordability	General government interest payments/revenue (%)	2023	7.8	a1		45%
	General government interest payments/GDP (%)	2023	3.2	ba1		45%
Specified adjustments	Total of specified adjustment (# notches)			0	0	max ±6
	Debt Trend - Historical Change in Debt Burden	2015-2023	12.2	0	0	
	Debt Trend - Expected Change in Debt Burden	2023-2025F	2.4	0	0	
	General Government Foreign Currency Debt/ GDP	2023	0.0	0	0	
	Other non-financial public sector debt/GDP	2023	1.3	0	0	
	Government Financial Assets including Sovereign Wealth Funds / GDP	2023	1.1	0	0	
	Other adjustment to factor 3	# notches			1	max ±3
F1 x F2 x F3: Government financial strength						
Factor 4: Susceptibility to event risk						
Political risk	Domestic political risk and geopolitical risk			baa	baa	
Government liquidity risk				aaa	aaa	
Specified adjustment	Ease of access to funding			aaa		
	High refinancing risk				0	max -2
Banking sector risk	Risk of banking sector credit event (BSCE)	Latest available	a3	aaa-a3		
	Total domestic bank assets/GDP	2023	337.4	230-400		
Adjustment to F4 BSR	# notches				0	max ±2
External vulnerability risk	External vulnerability risk			aa	aa	
	# notches				0	max ±2
Overall adjustment to F4	# notches				0	max -2
F1 x F2 x F3 x F4: Scorecard-indicated outcome						
				A1 - A3	A1 - A3	

Note: While information used to determine the grid mapping is mainly historical, our ratings incorporate expectations around future metrics and risk developments that may differ from the ones implied by the scorecard-indicated outcome. Thus, the rating process is deliberative and not mechanical, meaning that it depends on peer comparisons and should leave room for exceptional risk factors to be taken into account that may result in an assigned rating outside the scorecard-indicated outcome. For more information please see our Sovereign Ratings Methodology.

Footnotes: (1) **Initial factor score:** scorecard indicators combine with the automatic adjustments to produce an initial factor score for every rating factor, as detailed in Moody's Sovereign Ratings Methodology. (2) **Final factor score:** where additional analytical considerations exist, initial factor scores are augmented to produce a final factor score. Guidance on additional factors typically considered can be found in Moody's Sovereign Ratings Methodology; details on country-specific considerations are provided in Moody's research. (3) **Scorecard-indicated outcome:** Factor 1: Economic Strength, and Factor 2: Institutions and Governance Strength, combine with equal weight into a construct we designate as Economic Resiliency (ER). An aggregation function then combines ER and Factor 3: Fiscal Strength, following a non-linear pattern where Fiscal Strength has higher weight for countries with moderate ER and lower weight for countries with high or low ER. As a final step, Factor 4, a country's Susceptibility to Event Risk, is a constraint which can only lower the government financial strength as given by combining the first three factors.

(4) **There are 20 ranking categories for quantitative sub-factors:** aaa, aa1, aa2, aa3, a1, a2, a3, baa1, baa2, baa3, ba1, ba2, ba3, b1, b2, b3, caa1, caa2, caa3, ca and 8 ranking categories for qualitative sub-factors: aaa, aa, a, baa, ba, b, caa, ca (5) **Indicator value:** if not explicitly stated otherwise, the indicator value corresponds to the latest data available.

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