

CREDIT OPINION

22 September 2026

Update



Send Your Feedback

Contacts

Mickaël Gondrand +44.20.7772.1085
 VP-Ratings
 mickael.gondrand@moody's.com

Samia Benkirane +33.1.5330.1020
 Sr Ratings Associate
 samia.benkirane@moody's.com

Lucie Villa +33.1.5330.1042
 SVP-Ratings
 lucie.villa@moody's.com

Marie Diron +44.20.7772.1968
 MD-Global Sovereign Risk
 marie.diron@moody's.com

CLIENT SERVICES

Americas 1-212-553-1653

Asia Pacific 852-3551-3077

Japan 81-3-5408-4100

EMEA 44-20-7772-5454

Government of Côte d'Ivoire – Ba2 stable

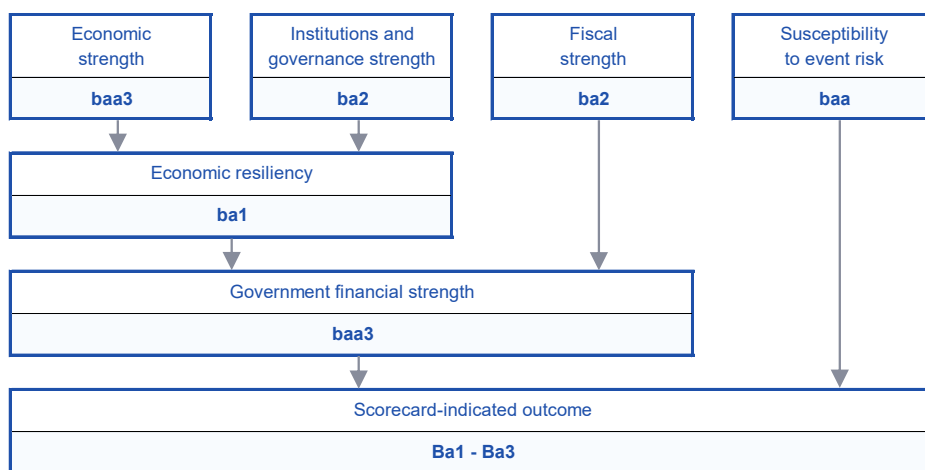
Regular Update

Summary

Côte d'Ivoire's credit profile is supported by the economy's robust growth prospects, relatively strong fiscal fundamentals, and stability derived from participation in the West African Economic and Monetary Union (WAEMU). Institutions and governance strength is improving, albeit still a constraint on creditworthiness, while susceptibility to event risk is driven in part by political risk. Côte d'Ivoire's exposure to social risk remains elevated due to high youth unemployment and relatively poor social indicators, notwithstanding ongoing progress in human development.

Exhibit 1

Côte d'Ivoire's credit profile is determined by four factors



Source: Moody's Ratings

Credit strengths

- » An increasingly resilient, diversified economy with strong growth supported by structural reforms
- » Macroeconomic stability with low external vulnerability due to WAEMU membership
- » Prudent fiscal management

Credit challenges

- » Low per-capita incomes and social indicators relative to peers, despite improvements
- » Weak, although improving, institutional strength and governance indicators
- » High youth unemployment, regional disparities, and a history of political tension

Rating outlook

The stable outlook reflects balanced upside and downside risks. In our central scenario we expect robust economic growth and continued political stability to support a steady, albeit gradual, convergence in income levels and social indicators with rating peers. Revenue improvements and prudent spending management will support an equally gradual decline in the debt burden over the medium term from 57.1% of GDP in 2025. Downside risks arise from exposure to the troubled security situation across the Sahel and climate and terms of trade shocks. Upside risks stem from the country's strong extractive sector potential, which could accelerate economic and social convergence with rating peers.

Factors that could lead to an upgrade

We would consider upgrading Côte d'Ivoire's ratings as a result of a combination of the following factors: (1) a continuation of robust and balanced growth that leads over time to higher income levels and social development, and supports sustained debt reduction; (2) further material improvements in governance and competitiveness; and (3) a durable further reduction in political risk while public demands for improved social services are addressed without material fiscal costs.

Factors that could lead to a downgrade

We would consider downgrading Côte d'Ivoire's ratings if we were to conclude that: (1) the authorities are unable to keep the fiscal deficit at a moderate level, resulting in a material deterioration in fiscal strength; or (2) the re-emergence of significant political and social tensions would hinder the country's medium-term growth prospects; or (3) rising macroeconomic imbalances would jeopardise the sustainability of growth.

Key indicators

Exhibit 2

Cote d'Ivoire	2020	2021	2022	2023	2024	2025	2026F	2027F
Real GDP (% change) [1]	0.7	7.1	6.4	6.6	6.0	6.5	6.1	6.3
Inflation rate (% change average)	2.4	4.2	5.2	4.4	3.5	0.1	1.6	1.9
Gen. gov. financial balance/GDP (%)	-5.4	-4.9	-6.7	-5.1	-4.0	-3.0	-3.8	-3.5
Gen. gov. primary balance/GDP (%)	-3.6	-2.9	-4.5	-2.6	-1.3	-0.2	-1.1	-0.8
Gen. gov. debt/GDP (%)	46.3	50.2	56.0	56.7	59.5	57.1	57.7	57.8
Gen. gov. debt/revenues (%)	309.8	322.1	370.9	357.5	362.5	336.0	339.8	330.5
Gen. gov. interest payment/revenues (%)	12.2	12.5	14.5	15.9	16.2	16.3	15.7	15.5
Current account balance/GDP (%)	-3.1	-3.9	-7.6	-8.0	-4.5	-0.6	-2.4	-2.2
External debt/CA receipts (%) [2]	179.1	172.2	165.2	176.7	161.0	130.1	127.7	123.5
External vulnerability indicator (EVI) [3] [4]	47.7	50.0	64.5	92.7	153.2	132.6	61.8	86.1

[1] A rebasing exercise from 2015 explains the large GDP growth number that year.

[2] Current Account Receipts

[3] (Short-Term External Debt + Currently Maturing Long-Term External Debt + Total Nonresident Deposits Over One Year)/Official Foreign Exchange Reserves

[4] At WAEMU level; Public only for long-term debt; Excludes Total nonresident deposits over one year

Source: Moody's Ratings

Profile

Côte d'Ivoire is a lower middle income country and the largest economy in the West African Economic and Monetary Union (WAEMU). Strong and sustained economic growth has been supported by macroeconomic stability derived from WAEMU membership. Agriculture remains a key pillar, with cocoa and coffee accounting for a significant share of exports, alongside a growing extractive sector driven by rising mining output and hydrocarbon production. Strong public and private investment are supporting economic diversification and transformation efforts.

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.

Detailed credit considerations

Côte d'Ivoire's **economic strength** score is set at "baa3," reflecting the economy's growing size with a nominal GDP of approximately \$100 billion in 2025; relatively low per-capita incomes (\$8,165 in 2025 on a purchasing power parity basis, compared to a median of around \$23,500 for Ba-rated peers); and high and sustained growth. We expect Côte d'Ivoire to grow at around 6-7% in real terms annually through to the end of the decade, underpinned by the continued dynamism of the extractive industries and rising mining and hydrocarbon production, steadfast investment, and robust activity in the secondary and services sectors.

The final score is above the initial "ba1" score, reflecting ongoing progress on structural transformation that will gradually enhance value addition and economic resilience. Transformation is a central policy priority, through increased local processing, the development of higher value-added activities, private-sector-led growth and capital deepening. Meanwhile, the structure of growth is gradually shifting as extractive industries - particularly gold mining and hydrocarbons - along with agro industry and services, gain prominence and support gradual diversification away from primary agricultural output.

We assess Côte d'Ivoire's **institutional and governance strength** at "ba2", which includes a "-1" adjustment due to the country's 2011 default. Our assessment takes into account the generally positive trend in Côte d'Ivoire's governance indicators in recent years from relatively low levels, the successful handling of social demands, strong fiscal management, and the ability to maintain reform momentum during a series of shocks. The government has also put in place a series of measures designed to boost private sector activity, including establishing a commercial court, encouraging lending to small and medium enterprises (SMEs), and privatising the remaining state-owned enterprises. WAEMU membership and the credibility of the currency peg to the euro have supported macroeconomic stability and helped to limit inflationary pressures.

We score Côte d'Ivoire's **fiscal strength** as "ba2". Fiscal consolidation is progressing and the budget structure is also improving, with spending more geared towards infrastructure and tax intake strengthening. However, overall revenue and grants, at 17% of GDP in 2025, continues to remain below the median of Ba-rated peers of 27.2% of GDP.

We expect the government debt burden to gradually decline from its peak of 59% of GDP in 2024 to around 55% of GDP by the end of 2030. The debt ratio has increased by around 30 percentage points of GDP since 2015, driven by large investments under successive development plans as well as the spillovers of recent global shocks. In line with other WAEMU members, Côte d'Ivoire has also recorded persistent stock-flow adjustments, pushing the debt to a higher level than implied by measured fiscal deficits, and we incorporate this historical pattern into our projections.¹

The score is two notches above the initial score of "b1" to offset the negative impact of the foreign-currency denominated debt by discounting the euro-denominated share (more than two-thirds of foreign currency debt). The WAEMU peg to the euro is credible, in part due to the guarantee of the French Treasury which minimises the risk of rapid currency depreciation inflating the debt burden.

We score Côte d'Ivoire's **susceptibility to event risk** at "baa", driven by political risk, banking sector risk and government liquidity risk. Growing inequality, as well as the possible re-emergence of lasting political tensions, inform our "baa" assessment of political risk. In particular, exposure to social risks remains significant in Côte d'Ivoire due to the persistence of relatively weak social indicators, including poverty rates and access to basic services, despite noticeable improvements. The country's substantial exposure to social risks continues to shape economic policy. This is evident in the annual increase in government expenditures targeted at alleviating poverty and the ongoing efforts to enhance the social safety net for the most vulnerable households. Social spending accounts for around a third of total government spending. Risks also arise from exposure to the troubled security situation across the Sahel, which may increase spending pressures.

Our assessment of banking sector risk is at "baa". The financial sector is more developed than in neighbouring countries, and is able to absorb an increasingly large share of government debt. Financial soundness indicators, though weak, are improving. However, the nexus between banks and sovereigns is elevated at the regional level and has intensified since the pandemic.

The government liquidity risk score at "baa" reflects the country's reliable access to a relatively deep regional market and to foreign currency financing. Innovative financial instruments have broadened financing options and diversified the international investor base.

External vulnerability risk is scored "a". The external account is relatively robust and a balance of payments crisis is very unlikely due to WAEMU membership, in which the CFA franc's convertibility is guaranteed by the French Treasury and based on a fixed exchange rate

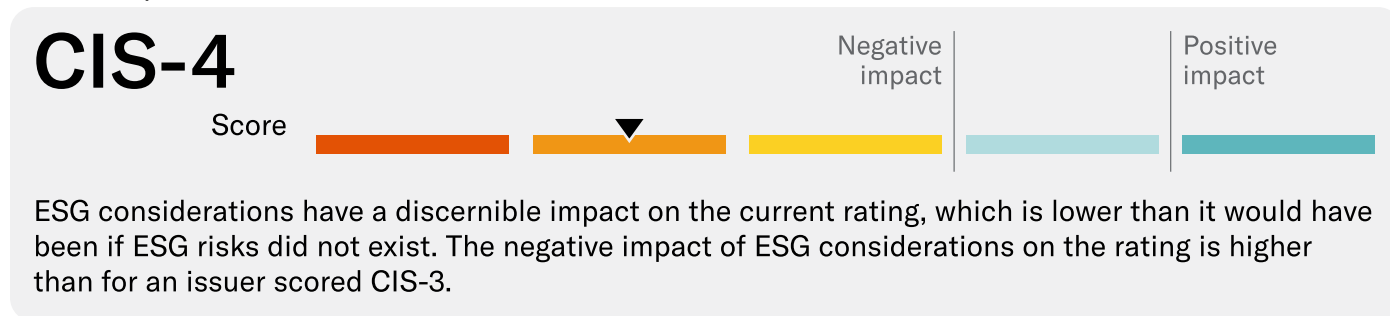
with the euro. The current account deficit has narrowed since the significant deterioration observed in 2022-23, driven by gains across agricultural commodities, the sharp increase in cocoa and gold prices, and growing crude oil exports.

ESG considerations

Cote d'Ivoire's ESG credit impact score is CIS-4

Exhibit 3

ESG credit impact score

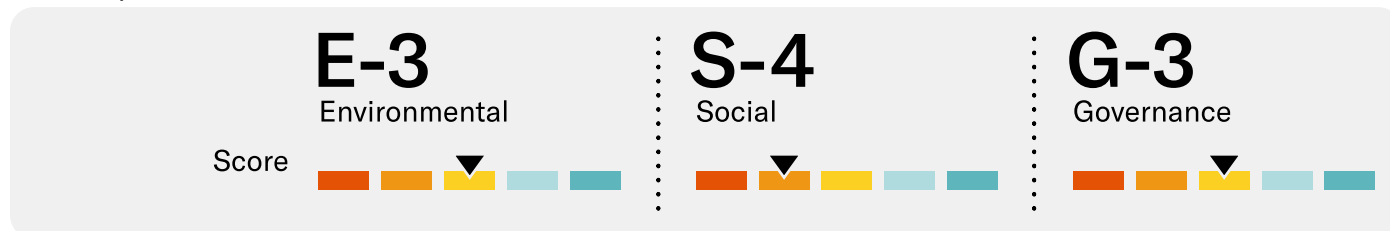


Source: Moody's Ratings

Côte d'Ivoire's ESG Credit Impact Score **CIS-4** indicates that ESG considerations have a discernible impact on the current rating, which is lower than it would have been if ESG risks were not present. This score reflects a high exposure to social risk, a moderate exposure to environmental risk, and moderate governance that, along with low-income levels, hinder the country's resilience to social and environmental risks.

Exhibit 4

ESG issuer profile scores



Source: Moody's Ratings

Environmental

Côte d'Ivoire's **E-3** issuer profile score reflects a moderate exposure to environmental risks. The country's status as a leading exporter of agricultural products with a large part of the population that still relies on agriculture for livelihoods. As a result, Côte d'Ivoire is vulnerable to climate change, including droughts, deforestation, and land degradation. A significant environmental shock could influence some key credit metrics such as GDP growth, household income, and agricultural export earnings.

Social

Côte d'Ivoire's **S-4** issuer profile score reflects the country's high exposure to social risks, mainly related to poverty, health and safety, low education outcomes, and relatively poor albeit improving access to basic services. Safety issues have significantly improved since the 2010-11 civil conflict, and the successive electoral cycles have allowed for the polarized political scene to ease gradually. Notwithstanding high levels of growth over the last decade, low wealth levels, and high, albeit improving, levels of poverty remain. Additionally, growing income inequality could threaten political stability in the future.

Governance

Côte d'Ivoire's **G-3** issuer profile score reflects the country's moderate governance. The country's overall institutional framework was severely damaged by the civil conflict in 2010-11. Nonetheless, governance has improved throughout the past decade, demonstrated

by sustained economic and social development and the capacity to maintain reform momentum during a series of shocks. This is also reflected in gradually improving Worldwide Governance Indicators, reaching on average the 29th percentile of our rated universe in 2024.

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.

Recent developments

Growth prospects remain robust and marked by favourable terms of trade, notwithstanding the spillovers of the Middle East conflict

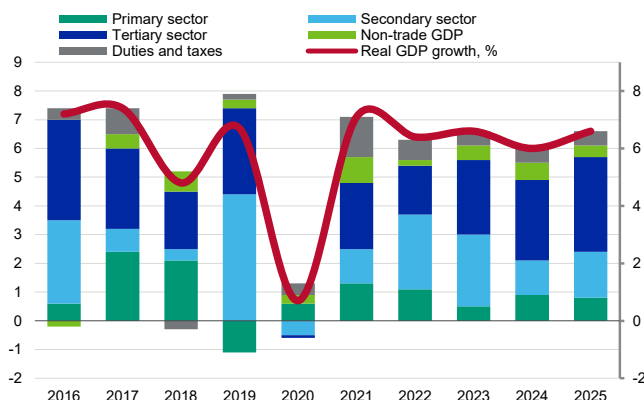
Economic activity will remain broad-based through the rest of the decade and supported by the continued dynamism of the extractive industries and rising mining and hydrocarbon production, steadfast investment, and robust activity in the secondary and services sectors. These factors will offset the spillovers of the Middle East conflict and the decline in farmgate cocoa prices observed over the first half of this year. We project economic growth of 6.1% for 2026 and 6.3% next year.

An updated National Development Plan (NDP) adopted in February, covering the period between 2026 and 2030, will anchor the mobilisation of investment with the goal of turning Côte d'Ivoire into an upper-middle income country by 2030. Private investment will remain the main driver of the NDP's investment envelope: out of the plan's total cost of CFAF 115 trillion (\$206 billion), 70% is expected to be mobilised from the private sector. Although the mobilisation of private sector investment has previously tended to fall short of targets, the successive NDPs have anchored pledges from the international community and supported infrastructure investments and structural reform efforts.

Key ongoing public infrastructure projects include the Abidjan Metro – a 37-kilometer rapid transit electric rail project – the Abidjan bypass highway (Y4), and other road development and urban infrastructure projects across the country. In parallel, mining operations and the development of the oil and gas sector will continue expanding over the remainder of the decade. Key projects continue to make progress, including the Kone gold deposit (with production scheduled for 2027), the Tanda and Doropo gold projects (2028), the third phase of the Baleine oil development (2029), and the Paon and Kossipo oil fields (2030). The country's external position is likely to continue to benefit from expanding extractive exports, supporting the regional reserve pool, even if higher global energy prices will add to the import bill and drive a current account deficit of 2-3% of GDP this year and next.²

Exhibit 5

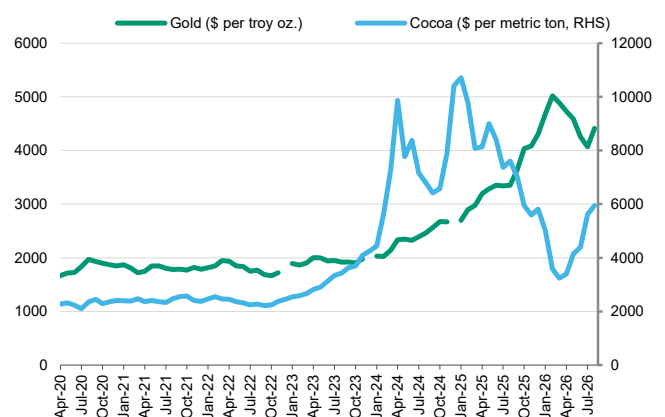
Growth has remained broad-based...
Contribution to real GDP growth, pp



Sources: Ministry of Economy, Moody's Ratings

Exhibit 6

... as transformation and diversification efforts anchor sustained momentum and commodity prices remain generally supportive
Gold and cocoa prices, \$



Sources: World Bank, Moody's Ratings

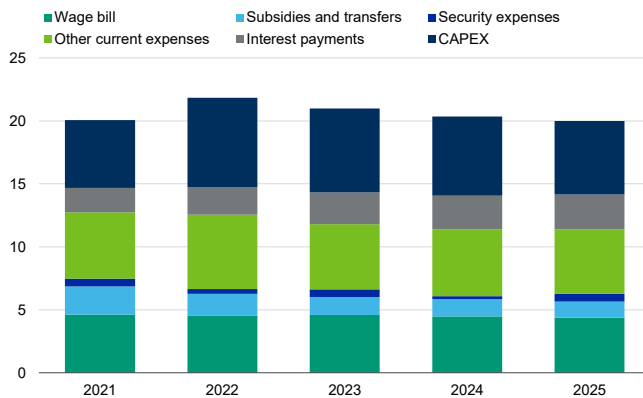
Fiscal loosening in 2026 will slow debt reduction but does not derail the medium-term consolidation path

The temporary widening of the budget deficit in 2026 will slow debt reduction, but continued revenue reform and the return to the regional deficit ceiling from 2028 will preserve the medium-term fiscal consolidation path. We expect this year's deficit to reach 3.8% of GDP from the 3% targeted in the initial budget, reflecting the negative revenue impact stemming from weaker cocoa export proceeds and reduced fuel tax receipts, in addition to temporary support for vulnerable households and affected sectors. The authorities have responded by raising domestic fuel prices – albeit this is expected to only partially offset the revenue losses associated with the rise in international prices – and we also expect some reduction of public investment, which has averaged around 6% of GDP in recent years (see Exhibit 7). We expect the deficit to narrow marginally to 3.5% of GDP in 2027, before returning to 3% from 2028 onward.

Continued progress on the medium-term revenue mobilisation strategy in place since May 2024, which targets a 0.5 pp of GDP annual gain in tax and customs revenues, will be key to fiscal consolidation efforts. The revenue ratio reached 17.0% of GDP in 2025, the highest level in recent years, albeit remaining lower than the Ba-rated median of 27.2%. Key measures adopted in recent years have included a reduction of VAT exemptions and tax holidays in the Investment Code, stricter controls and enforcement of tax liabilities, and the development of property taxation. Scope for further gains remains, given a number of tax expenditures already identified at present³ and ongoing reforms focused on the implementation of electronic invoicing and the revision of tax procedures.

Exhibit 7

Large capital expenditure provides some adjustment capacity Government spending as % of GDP

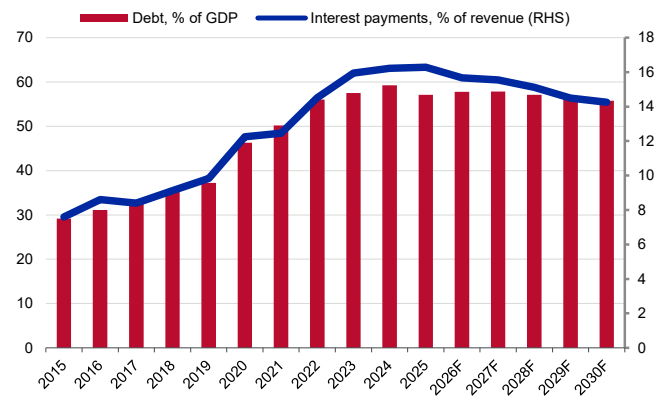


Sources: Ministry of Finance, Moody's Ratings

Exhibit 8

Debt declined in 2025, and will gradually fall towards 55% of GDP by the end of the decade

Government debt, % of GDP (LHS), interest payments as % of revenue (RHS)



Note: 2026 to 2030 are our own projections.

Sources: Ministry of Finance, Moody's Ratings

The government debt burden will gradually decline to around 55% of GDP by 2030 in our projections, which factor in a track record of stock-flow adjustments. The debt ratio declined last year by around two percentage points of GDP to 57%, while Côte d'Ivoire's risk of external debt distress was upgraded from moderate to low under the IMF Debt Sustainability Analysis conducted in July 2026. The debt structure continues to benefit from the WAEMU currency peg, mitigating the large share of external debt. Although 51% of government debt is denominated in foreign currency as of the first half of 2026, euro-denominated debt accounts for 67% of that share.

Senegal's debt treatment plan shields domestic creditors, but risks would heighten if perimeter widens

The government's financing needs — which we estimate at around 12% of GDP for 2026 and 10% of GDP for 2027 — are contained through the fiscal consolidation implemented in recent years and proactive debt management. Côte d'Ivoire's regional market issuances have remained well subscribed throughout the year, a reflection of supportive liquidity conditions helped by strong regional foreign-exchange reserve levels. The average maturity of domestic debt was 4.2 years as of June 2026, while that of external debt was 8.8 years.

On 1 September, [Senegal](#) (Caa2 negative) announced the Senegal Debt Treatment Plan (PTDS). The [PTDS excludes CFA franc-denominated obligations accounting for around one-third of Senegal's total central government debt](#), including debt issued in the WAEMU regional market. That said, neither the Senegalese authorities nor the IMF have yet disclosed details regarding the scope, modalities, timetable or expected creditor losses associated with the PTDS. We expect Côte d'Ivoire to retain dependable access to regional financing, although funding costs would increase if the Senegalese restructuring process became more disruptive than currently anticipated and heightened investor risk aversion towards the region.

Interlinkages on the regional market present a risk, with subscriptions from Côte d'Ivoire standing at 44% of Senegal's government securities issued on the auction segment of the regional market as of June 2026 according to UMOA-Titres data. This reflects both Côte d'Ivoire's position as the region's largest economy and banking market, and the role of Ivorian banks in providing international investors with access to regional sovereign debt markets. Should Senegalese sovereign debt issuance denominated in CFA francs be included in the debt treatment, [the potential adjustments to the repayment terms would likely materially weaken the profitability and capitalisation of regional banks](#). In addition, the resulting potential repricing of sovereign risk in the region as well as the high level of interconnectedness among regional banks, could amplify the treatment's effect beyond the measurable exposure to Senegalese sovereign debt. The Ivorian banking sector's capital adequacy and asset performance metrics are generally above the regional average, with a reported Common Equity Tier 1 (CET1) ratio of 15.4% as of December 2025 based on provisional data, and a gross NPL ratio of 6.1%.

Moody's rating methodology and scorecard factors: Côte d'Ivoire – Ba2 stable

Factor / Sub-Factor	Metric	Indicator Year	Indicator	Initial Factor Score	Final Factor Score	Weights
Factor 1: Economic strength				ba1	baa3	50%
Growth dynamics	Average real GDP growth (%)	2021-2030F	6.5	aaa		25%
	MAD Volatility in Real GDP Growth (%)	2016-2025	0.6	a2		10%
Scale of the economy	Nominal GDP (\$ billion)	2025	99.8	ba1		30%
National income	GDP per capita (PPP, Int\$)	2025	8,165.3	caa2		35%
Adjustment to factor 1	# notches				1	max ±9
Factor 2: Institutions and governance strength				ba1	ba2	50%
Quality of institutions	Quality of legislative and executive institutions			ba		20%
	Strength of civil society and the judiciary			ba		20%
Policy effectiveness	Fiscal policy effectiveness			baa		30%
	Monetary and macroeconomic policy effectiveness			ba		30%
Specified adjustment	Government default history and track record of arrears				-1	max -3
Other adjustment to factor 2	# notches				0	max ±3
F1 x F2: Economic resiliency				ba1	ba1	
Factor 3: Fiscal strength				b1	ba2	
Debt burden	General government debt/GDP (%)	2025	57.1	baa2		25%
	General government debt/revenue (%)	2025	336.0	b1		25%
Debt affordability	General government interest payments/revenue (%)	2025	16.3	b1		25%
	General government interest payments/GDP (%)	2025	2.8	baa2		25%
Specified adjustments	Total of specified adjustment (# notches)			-3	-1	max ±6
	Debt Trend - Historical Change in Debt Burden	2017-2025	24.5	0	0	
	Debt Trend - Expected Change in Debt Burden	2025-2027F	0.7	0	0	
	General Government Foreign Currency Debt/ GDP	2025	31.3	-3	-1	
	Other non-financial public sector debt/GDP	2025	1.0	0	0	
	Government Financial Assets including Sovereign Wealth Funds / GDP	2025	0.0	0	0	
	Other adjustment to factor 3	# notches			0	max ±3
F1 x F2 x F3: Government financial strength				baa3	baa3	
Factor 4: Susceptibility to event risk				baa	baa	Min
Political risk	Domestic political risk and geopolitical risk			baa	baa	
				baa	baa	
Government liquidity risk	Ease of access to funding			baa	baa	
	High refinancing risk			baa	0	max -2
Specified adjustment				baa	baa	
Banking sector risk	Risk of banking sector credit event (BSCE)	Latest available	--	ba3-b3		
	Total domestic bank assets/GDP	2025	43.4	<80		
Adjustment to F4 BSR	# notches				0	max ±2
External vulnerability risk	External vulnerability risk			a	a	
				a		
Adjustment to F4 EVR	# notches				0	max ±2
Overall adjustment to F4	# notches				0	max -2
F1 x F2 x F3 x F4: Scorecard-indicated outcome				Ba1 - Ba3	Ba1 - Ba3	

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.

Endnotes

- Our [analysis](#) finds that stock-flow adjustments have contributed an average of 2% of GDP annually to debt since 2015. This is similar to the [IMF's findings](#) of the average stock-flow adjustment over the period from 2013 to 2021. We incorporate a degree of stock-flow adjustments, equivalent to around 1% of GDP annually, in our forward-looking projections to reflect this track record.
- We assume an average price for the benchmark Brent crude oil in the range of \$90-110/barrel for 2026 and \$80/barrel for 2027. Our broad expectations are that prices will fluctuate within a range of \$55-\$75/b in the medium term.
- The 2026 Budget lists CFA550 billion in tax and customs exemptions, equivalent to around 1% of GDP or 6.7% of fiscal revenue.

© 2026 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE LEGAL, COMPLIANCE, INVESTMENT, FINANCIAL OR OTHER PROFESSIONAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating or assessment is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating or assessment process or in preparing its Materials.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating or assessment assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and all MCO entities that issue ratings under the "Moody's Ratings" brand name ("Moody's Ratings"), also maintain policies and procedures to address the independence of Moody's Ratings' credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at ir.moody.com under the heading "Investor Relations — Corporate Governance — Charter and Governance Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V., I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., Moody's Local PA Clasificadora de Riesgo S.A., Moody's Local CR Clasificadora de Riesgo S.A., Moody's Local ES S.A. de CV Clasificadora de Riesgo, Moody's Local RD Sociedad Clasificadora de Riesgo S.R.L. and Moody's Local GT S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions and Net Zero Assessments (as defined in Moody's Ratings Rating Symbols and Definitions): Please note that neither a Second Party Opinion ("SPO") nor a Net Zero Assessment ("NZA") is a "credit rating". The issuance of SPOs and NZAs is not a regulated activity in many jurisdictions, including Singapore.

EU: In the European Union, each of Moody's Deutschland GmbH and Moody's France SAS provide services as an external reviewer in accordance with the applicable requirements of the EU Green Bond Regulation. JAPAN: In Japan, development and provision of SPOs and NZAs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used

within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

REPORT NUMBER 1495912

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454