



# CÔTE D'IVOIRE

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## STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION— DEBT SUSTAINABILITY ANALYSIS<sup>1</sup>

Approved by

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*Côte d'Ivoire remains at moderate risk of external debt distress. The external debt service to revenue indicator remains below but close to the threshold, and the other projected external debt burden indicators are below their thresholds under the baseline, with the most extreme shock being the one related to exports. Several indicators exceed their thresholds in the case of the most severe standard shocks. The space to absorb shocks remains limited. The overall risk of public debt distress is also moderate, with public debt expected to remain generally stable over the projection horizon.*

Côte d'Ivoire: Joint Bank-Fund Debt Sustainability Analysis	
<b>Risk of external debt distress</b>	Moderate
<b>Overall risk of debt distress</b>	Moderate
<b>Granularity in the risk rating</b>	Limited space to absorb shocks
<b>Application of judgement</b>	No

<sup>1</sup>Under the revised Debt Sustainability Framework for Low-Income Countries, Côte d'Ivoire's Composite Indicator (CI) is 2.96 based on the April 2022 WEO and the 2020 CPIA, corresponding to a medium debt carrying capacity.

## PUBLIC DEBT COVERAGE

**1. Public debt covers both the debt of the central government, as well as the guarantees provided by the central government, including those guarantees that pertain to state-owned enterprises (SOEs) debt** (Text Table 1). The DSA classifies external and domestic debt based on the currency criterion, given data constraints that prevent the use of the residency criterion.<sup>2</sup> The debt of local governments is excluded from the DSA coverage. Local governments are authorized to borrow within limits and under conditions set by decree. There is no available information on this debt. On SOE debt, the authorities continue to improve debt coverage and monitoring in past years. At end-2021, SOE guaranteed and non-guaranteed commercial debt amounted to respectively 1.3 and 0.8 percent of GDP. In the context of the current DSA, the following approach is taken:

- All *guaranteed* SOE debt and *on-lent* debt is included in the debt stock in the baseline.
- *Non-guaranteed* SOE debt is captured as a contingent liability shock - this shock is set at the default 2 percent of GDP.<sup>3</sup>

**Text Table 1. Côte d'Ivoire: Coverage of Public Sector Debt**

Subsectors of the public sector	Check box
1 Central government	X
2 State and local government	
3 Other elements in the general government	
4 o/w: Social security fund	
5 o/w: Extra budgetary funds (EBFs)	
6 Guarantees (to other entities in the public and private sector, including to SOEs)	X
7 Central bank (borrowed on behalf of the government)	X
8 Non-guaranteed SOE debt	

**2. Efforts to increase the government's capacity to record and monitor public debt and contingent liabilities continue.** Further work is needed to enhance data coverage of SOEs in the DSA baseline, including consolidating the general government fiscal accounts with the financial statements of the SOEs (both on the revenue, expenditure, and financing sides) and corresponding 20-year projections. The authorities see this consolidation as a prerequisite for incorporating SOE debt into total debt (in the baseline) and have received technical assistance (TA) to advance this task. Additionally, further work on data reconciliation with the World Bank Debt Reporting System is ongoing. As part of the IDA Sustainable Development Finance Policy (SDFP), authorities have

<sup>2</sup>The debt owed to the West-African Development Bank (BOAD) was reclassified from domestic to external debt to harmonize the treatment of BOAD debt in the WAEMU region. The CFAF issuance in the regional market is still classified as domestic due to lack of data. This DSA continues to exclude external private debt from external debt due to limited information on the outstanding stock of external private debt and related payments. The SDR use is recorded as domestic debt due to the lending arrangement between the government and the BECAO.

<sup>3</sup>Non-guaranteed SOE debt is not included in the baseline because of limited information.

created a new portal providing updated information on public debt, including the quarterly debt bulletins, increasing transparency.

**3. The magnitude of the shock in the contingent liability stress test applied in the sensitivity analysis reflects potential additional liabilities.** The LIC-DSF default settings are applied for the contingent liabilities shock. They could emanate from SOE debt not captured in the data coverage, especially from non-guaranteed debt and domestic arrears, public-private partnership agreements, and the financial sector. Total contingent liabilities for the CL test are estimated at 9.3 percent of GDP (Text Table 2). The stock of public private partnerships represents about 6.6 percent of GDP at end-2021, with more than half of investment commitments in the energy sector.

**Text Table 2. Côte d'Ivoire: Magnitude of the Contingent Liability Stress Test**

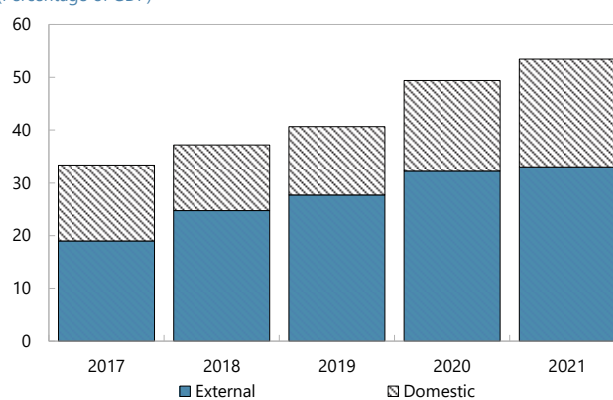
1 The country's coverage of public debt	The central government, central bank, government-guaranteed debt		
	Default	Used for the analysis	Reasons for deviations from the default settings
2 Other elements of the general government not captured in 1.	0 percent of GDP	0	
3 SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	2	
4 PPP	35 percent of PPP stock	2.30	
5 Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5	
<b>Total (2+3+4+5) (in percent of GDP)</b>		<b>9.3</b>	

1/ The default shock of 2% of GDP will be triggered for countries whose government-guaranteed debt is not fully captured under the country's public debt definition (1.). If it is already included in the government debt (1.) and risks associated with SoE's debt not guaranteed by the government is assessed to be negligible, a country team may reduce this to 0%.

## DEBT BACKGROUND

**4. Public debt increased significantly over the last few years with external debt growing as a share of total debt.**<sup>4</sup> The increase in indebtedness over 2017-2021 was driven by higher recourse to external debt including to finance an increase in investment and social spending in the context of the National Development Plan 2015-2020 and the COVID-19 crisis. The medium-term debt strategy 2019-2023 updated in the 2022 finance law envisaged that 64 percent of new financing would come from external sources and favor borrowing in euros and CFA francs to limit exchange rate risk. Already a large share of external borrowing

**Text Figure 1. Côte d'Ivoire: Evolution of Public Debt**  
(Percentage of GDP)



<sup>4</sup>In this DSA, Public and Publicly Guaranteed external debt excludes claims under Debt Reduction-Development Contract (C2D), which were cancelled in the context of HIPC debt relief. The C2D is a debt restructuring tool under which Côte d'Ivoire continues to service its bilateral debts to France and Spain until repayment. The amount corresponding to this bilateral debt service is transferred back to the country as grants to finance poverty reduction programs. Flows associated with the C2D process are included by IMF staff in the external and fiscal accounts to capture gross cash flows (debt service and grants). See IMF Country Report no14/358 and Supp.1, 11/21/2014 for a detailed discussion.

is denominated in euros. Public debt stood at 53.5 percent of GDP at end-2021, compared with 33.3 percent in 2017. External debt stood at 33 percent of GDP, compared to 19 percent in 2017—representing 62 percent of total debt in end-2021 as opposed to 57 percent in 2017.

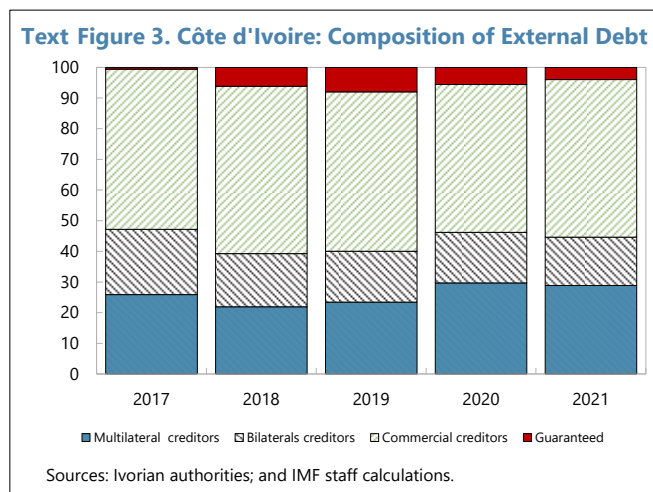
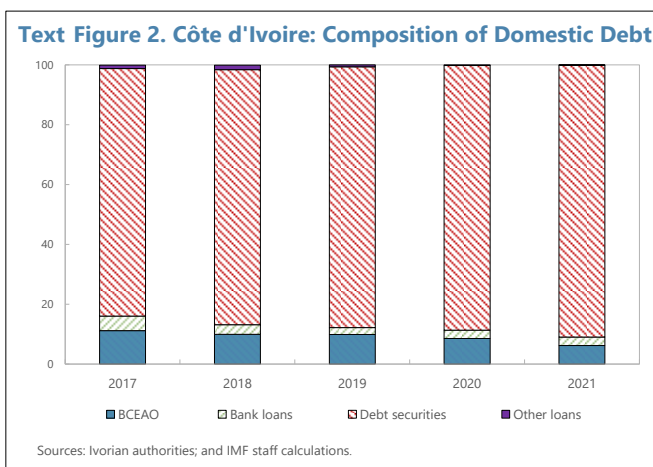
**5. Most of the domestic debt is in the form of CFAF-denominated securities.** Those securities have a maturity between 3 months and 15 years and are held by domestic and other WAEMU investors. The authorities are mindful of the fact that an excessive recourse to the regional market would run the risk of a tightening of financing constraints and a crowding-out of private sector credit, given the financing needs across WAEMU countries.

**6. Within external debt (excluding guarantees), commercial creditors hold more than half of the external debt stock.**

Close to 90 percent of commercial debt is in the form of eurobonds. The authorities undertook a liability management operation in 2020 to reduce exchange rate risks and lengthen maturity. Multilateral creditors have increased their share of debt since 2020 and represented 29 percent of external debt in 2021, as Côte d'Ivoire mobilized substantial

concessional external financing to fund its response to the pandemic. The IMF and the World Bank jointly satisfied more than a third of the country's financing needs in 2021. On the other hand, the share of bilateral creditors has decreased since 2016, accounting for less than 16 percent of the external debt stock at end-2021 compared to 21 percent in 2017. The remaining shares are associated with commercial creditors (51 percent) and guaranteed debt (4 percent).

**7. The authorities joined the Debt Service Suspension Initiative (DSSI) in 2020.** The authorities received positive answers from the Paris Club creditors and Eximbank India for 2020 and 2021 and the Kuwait fund for 2020. Nevertheless, since a significant share of external debt falling due in 2020 and 2021 has been forgiven by bilateral creditors under the C2D (see footnote 4), the benefit of DSSI is limited. Suspended payments amounted to around 5 percent of total debt service (including C2D) in 2020 and 0.4 percent in 2021.



## RECENT DEVELOPMENTS AND UNDERLYING ASSUMPTIONS

### 8. Côte d'Ivoire continues to show resilience to the pandemic and signs of recovery.

Growth in 2021 is estimated at about 7 percent, which is higher than in most Sub-Saharan African frontier market economies. This economic performance was underpinned by strong pre-crisis fundamentals, a rapid policy response, and a relatively lower dependency on sectors most vulnerable to the pandemic. The country experienced a short-lived spike of Omicron in 2021 and beginning 2022, but the fatalities remain modest compared to peers with about 800 deaths since the beginning of the pandemic until beginning of May 2022. Vaccination began in March 2021 and adoption rate of the vaccine by the population has picked up, after a slow start. As mid-May 2022, 12.6 million doses have been administered with about 40 percent of the targeted population (12 years-old and over) having received a first dose. Inflation reached to 4.2 percent in 2021 reflecting mostly surge in global prices.

9. **The assumptions in the baseline scenario are consistent with the macroeconomic framework outlined below** (Text Tables 2 and 3). These include a growth path converging to 6 percent over the medium term from 7 percent in 2021, inflation returning to subdued level in the medium term thanks to the exchange rate peg to the euro, a gradual improvement in the external position, and a gradual fiscal consolidation to reach the 3 percent of GDP regional fiscal deficit norm by 2024. Projections also assume a balanced recourse to domestic and external debt.

- **GDP growth trajectory fluctuating between 6 and 6.7 percent through the medium term similarly to the previous DSA.** Real GDP recovered from 2 percent in 2020 to 7 percent in 2021 as global conditions improve and domestic demand recovered from the COVID shock, despite short-term electricity shortages. Staff projects output growth to slow to 6 percent in 2022 as a result of war in Ukraine, to rebound to around 6½ in the following years, and to converge to 6 percent over the medium term. The cumulative path is comparable to what projected at the time of the 2021 Article IV. The implementation of a strong reform agenda from the National Development Plan (NDP) and recent oil discovery could however catalyze stronger confidence and investment and further lift productivity and growth, while persistent insecurity in the north of the country and uncertain global developments represent downside risks.
- **Gradual return to subdued inflation over the medium term.** Annual average inflation is projected to reach 5.5 percent in 2022, reflecting an increase in commodity prices, supply chain disruptions following containment measures, and border closures along with the impact of electricity rationing in some sectors in 2021. However, it is expected to remain low at around 2 percent in the medium term, benefiting from the exchange rate peg to the euro.
- **Wider budget deficits in the short term.** The need for a continued policy response to counter the pandemic and insecurity in the north led to a widening of the primary and overall fiscal deficits to respectively 3 and 5.1 percent of GDP in 2021. A wider deficit in 2022 of 5.3 percent

of GDP is expected due to the response of the effects of the war in Ukraine and higher security spending to respond to insecurity in the north and the public investment plan fueled by the implementation of NDP over the next few years. While the NDP prominently focuses on an increase in private sector investment, it also has goals for public investment and debt financed public investment projects. The authorities still plan to converge to the 3 percent of GDP regional target over the medium term.

- **Similar tax revenue projections.** The tax revenue projection is broadly similar to the previous DSA, which takes into consideration the relatively weak revenue mobilization. However, 2021 revenue outcome was better than forecasted due to strengthened digitalization and tax administration. Tax revenue is assumed to increase from 12.3 percent of GDP in 2022 to above 13 percent of GDP from 2024 onwards and remain at that level. Efforts to strengthen domestic revenue mobilization are expected to continue. They should focus on eliminating VAT tax exemptions, accelerating the removal of business tax exemptions, streamlining the personal income tax regime, improving property regime, fully rolling out new IT system and pursuing public finances management reforms.
- **A narrowing current account deficit.** The external current account deficit is expected to moderately narrow from 4.8 percent of GDP in 2022 to 3.6 percent of GDP in 2027. Exports are expected to grow more than imports thanks to the implementation of NDP and Côte d'Ivoire 2030 policies, especially on private sector development and export diversification.
- **Risks.** These assumptions are subject to downside risks including from possible unfavorable terms-of-trade shocks and weaker-than-expected global growth in the context of the pandemic, war in Ukraine and rising protectionism. The upside risks consist mainly of the confirmation of the oil discovery potential and the strict implementation of the NDP.

**Text Table 3. Côte d'Ivoire: LIC DSA Macroeconomic Assumptions**

	2019	2020	2021	2022	2023	2024	2025	2026	2027
	Est.			Projections					
(Annual percentage changes, unless otherwise indicated)									
<b>National income</b>									
GDP at constant prices	6.2	2.0	7.0	6.0	6.7	6.4	6.2	6.0	6.0
GDP deflator	0.2	1.0	2.8	3.8	1.8	1.4	1.3	1.2	1.5
<b>External sector (on the basis of CFA francs)</b>									
Exports of goods, f.o.b., at current prices	11.8	-2.9	15.3	8.8	3.3	8.2	6.9	7.0	7.7
Imports of goods, f.o.b., at current prices	2.9	-1.5	22.5	14.1	1.5	4.8	5.6	6.1	7.4
Export volume	16.7	-1.9	6.2	-5.9	7.4	11.6	7.3	7.2	7.2
Import volume	-1.8	10.5	2.5	-5.6	4.5	7.6	5.9	6.7	7.3
(Percent of GDP unless otherwise indicated)									
<b>Central government operations</b>									
Total revenue and grants	15.0	15.0	15.8	14.7	15.2	15.6	15.5	15.5	15.4
Total revenue	14.2	14.4	15.3	14.2	14.7	15.2	15.2	15.2	15.1
Total expenditure	17.3	20.5	20.9	20.0	19.2	18.6	18.6	18.5	18.4
Primary expenditure	15.8	18.7	18.8	18.0	17.1	16.5	16.5	16.4	16.4
Primary balance	-0.8	-3.7	-3.0	-3.3	-1.9	-0.9	-1.0	-1.0	-0.9
Overall balance, incl. grants, payment order basis	-2.3	-5.6	-5.1	-5.3	-4.0	-3.0	-3.0	-3.0	-3.0
<b>External Sector</b>									
Current account balance	-2.3	-3.2	-3.8	-4.8	-4.6	-4.1	-3.9	-3.7	-3.6
Non-interest current account balance	-1.4	-2.1	-2.6	-3.7	-3.6	-3.1	-2.9	-2.7	-2.6

Sources: Ivorian authorities, World Bank, and IMF staff estimates and projections.

**10. The authorities' debt management strategy aims to meet gross financing needs while ensuring debt sustainability, based on a balanced mix of external and domestic financing instruments.**

Consistent with the authorities' medium-term debt management strategy, Côte d'Ivoire's financing needs are expected to be met by relying on a mix of sources in domestic and foreign currencies in 2022. The authorities communicated their aim to borrow externally in line with their medium-term debt strategy. The level of external commercial borrowing is set close to projected external commercial debt service. Multilateral and bilateral financing is projected to gradually decline from 2 percent of GDP in 2022 to 1.5 percent in 2042. Those numbers account for the most recent IDA disbursement projections, whose share of total multilateral financing is projected to increase in the short run from 70 percent in 2022 to 79 percent in 2026, before declining to 23 percent in 2042. In the short term, the government is expected to rely on both concessional and non-concessional borrowing to meet its financing needs. The authorities also intend to balance the recourse to the international and regional markets given the potential crowding-out effect at the regional level. Domestic financing is assumed to rely on issuances of CFAF securities with the following maturities: less than one-year (12 percent of issuances), one to three years (8 percent), three to seven years (46 percent) and more than seven years (34 percent).<sup>5</sup> The regional and eurobonds' interest rates are projected to average 5.4 and 5.5 percent respectively over the projections' period, which are above historical paths. The authorities are continuing to strengthen processes related to debt management, with World Bank support.

**Text Table 4. Côte d'Ivoire: Changes in Economic Assumptions**

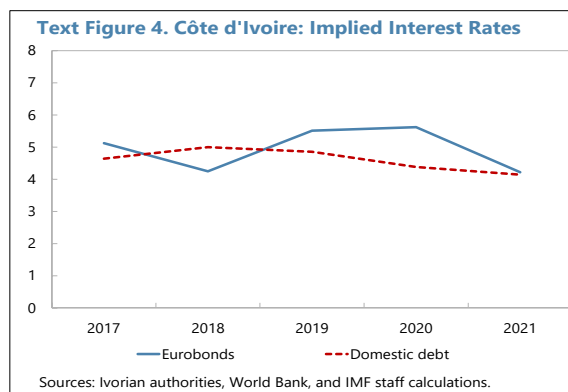
	Previous DSA			Current DSA		
	2022-2027	2028-2032	2033-2041	2022-2027	2028-2032	2033-2041
Nominal GDP (USD Billion)	95.6	144.6	241.1	91.2	137.7	227.9
Real GDP (y/y % change)	6.2	5.9	5.6	6.2	5.9	5.6
(Percent of GDP unless otherwise noted)						
<b>Fiscal (central government)</b>						
Revenue and grants	15.3	15.2	15.5	15.3	15.6	15.9
of which grants	0.3	0.0	0.0	0.4	0.3	0.3
Primary expenditure	16.6	16.2	16.5	16.6	16.6	17.0
Primary balance	-1.4	-1.0	-1.0	-1.4	-1.0	-1.0
<b>Balance of payments</b>						
Exports of goods and services	19.3	18.4	17.7	20.2	19.5	18.6
Imports of goods and services	15.1	14.1	13.3	16.4	15.8	14.9
Non-interest current account balance	-5.3	-5.2	-5.0	-5.4	-5.8	-5.7
Current account balance	-3.7	-3.6	-3.3	-4.1	-4.2	-3.9
Foreign direct investment (net inflows)	1.2	1.5	1.9	1.2	1.5	1.9

Sources: Ivorian authorities, World Bank, and IMF staff estimates and projections.

<sup>5</sup>The projected increase in domestic financing would require significant purchases of Ivorian securities by WAEMU residents, with potential crowding out of smaller borrowers. Though the share of Côte d'Ivoire in the regional market would only increase slightly from 36 in 2021 to 38 percent in 2026. If those purchases were not to happen, external commercial financing would have to increase to fill the gap. Domestic borrowing assumptions hinge on Côte d'Ivoire's capacity to increase by 35 percent the volume of domestic issuances with the next 4 years (from around CFAF billion 2,600 projected in 2022 to 3,500 in 2026) at the current yields.



**11. The macroeconomic framework is broadly plausible** (Figure 4). The projected medium-term debt-creating flows are below those observed in the past five years which were driven by a sizable residual. The 1.2 percent of GDP residual calculated for 2021 mostly reflects a different recording of project loan disbursements in the fiscal accounts and the debt statistics, as well as the non-integration in the fiscal accounts of the flows associated with new debt contracted by the government and on-lent to SOEs, which is included in public debt.



## COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

**12. Côte d'Ivoire is assessed to have medium debt-carrying capacity.** Based on the April 2022 WEO macroeconomic framework and the World Bank's 2020 CPIA index, Côte d'Ivoire's composite indicator is 2.96 (above the lower cut-off of 2.69 but below the strong capacity cut-off value of 3.05) confirming the medium debt carrying capacity assessment used in previous DSA.<sup>6</sup> The relevant thresholds are used to assess debt risk rating.

Text Table 5. Côte d'Ivoire: CI Score

Debt Carrying Capacity		Medium	
Final	Classification based on current vintage	Classification based on the previous vintage	Classification based on the two previous vintage
Medium	Medium 2.96	Medium 2.97	Medium 2.92
APPLICABLE		APPLICABLE	
EXTERNAL debt burden thresholds		TOTAL public debt benchmark	
PV of debt in % of		PV of total public debt in percent of GDP	
Exports	180	55	
GDP	40		
Debt service in % of			
Exports	15		
Revenue	18		

**13. Given Côte d'Ivoire's reliance on global capital markets, a tailored test for international market financing was conducted.** Côte d'Ivoire issued sizeable eurobonds both in 2020 and early 2021 (for about US\$1.2 billion and US\$1 billion, respectively) and used about half of the 2020 issuance

<sup>6</sup>The other variables from the macroeconomic framework consist of five variables: real GDP growth, remittances, import coverage of reserves, the square of import coverage of reserves, and world economic growth. The composite indicator uses ten years of data (5 years of history and 5 years of projections) to smooth out economic cycles.



to buy back bonds with shorter maturities and reduce the currency risk. Its debt management strategy aims at leveraging global capital markets to finance part of the country's gross financing needs over the next five years. A tailored test for market financing assumes a temporary increase in the cost of new commercial external borrowing by 400 basis points combined with a nominal depreciation of 15 percent of the CFAF vis-à-vis the US\$ and a shortening of maturities and of grace periods.<sup>7</sup>

**14. A contingent liability tailored shock was conducted to capture potential fiscal risks arising from SOEs, PPPs, and the financial market.** This tailored stress test includes the standardized 2 percent of GDP for risks related to SOEs, a 2.3 percent of GDP shock to accommodate potential fiscal risks on 35 percent of the PPP capital stock, and a financial sector shock of 5 percent of GDP.

**15. Standard stress tests on real GDP growth, primary balance, exports, current transfers, foreign exchange (FX) depreciation, and a tailored test on commodity prices have also been applied.** The first four shocks set each of the above variables to the lower of its historical average minus one standard deviation, or its baseline projection minus one standard deviation. The FX depreciation considers a nominal depreciation of 30 percent of the CFAF vis-à-vis the US\$ in the first year of the projection. The commodity price shock captures the impact of a sudden one standard deviation decline in commodity prices.

## EXTERNAL DEBT SUSTAINABILITY ANALYSIS

**16. The country remains at moderate risk of debt distress despite remaining very close to the threshold of debt service to revenue ratio.** The debt service-to-revenue ratio remains below the 18 percent threshold during the projection period. It peaks at 17.9 percent in 2024 before decreasing to 14.3 percent in 2027. On the one hand, the deterioration of the ratio came mainly from the exchange rate depreciation and to a lesser extent from the BOAD reclassification from domestic to external creditor. On the other hand, an offsetting factor arose from the positive effect of inflation on revenues as well as an upward revision of revenue projections.

**Text Table 6. Explanation of Deterioration of Debt Service to Revenue Ratio**  
(2022 AIV vs 2021 AIV)

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Ratio of DS/ revenue (22AIV - 21AIV)	2.0	1.2	0.4	0.7	0.7	-0.2	0.0	0.0	1.2	0.3
Change from DS	0.6	0.2	-0.1	0.1	0.2	-0.8	-0.6	-0.6	0.4	-0.4
of which: BOAD	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1
others 1/	0.2	-0.2	-0.4	-0.2	0.0	-1.0	-0.8	-0.7	0.3	-0.5
Change from revenue	1.3	0.9	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
of which: exchange rate	1.7	1.8	1.9	1.9	1.6	1.4	1.6	1.6	1.8	1.7
revenue in LC	-0.4	-0.9	-1.4	-1.3	-1.1	-0.8	-1.0	-0.9	-1.1	-1.0

Sources: Ivorian authorities, World Bank, and IMF staff estimates and projections.

1/ assumptions of debt service repayment and new borrowing.

<sup>7</sup>The share of USD denominated debt is estimated to be decreasing over time. The considered shortening of maturities of commercial external borrowing are as follows: if the original maturity is greater than 5 years, the new maturity is set to 5 years; if the original maturity is less than 5 years, the new maturity is shortened by 2/3.

**17. All PPG debt indicators are below their corresponding thresholds for the next ten years in the baseline scenario.** The PV of external debt-to-GDP is expected to decrease from 28.3 percent in 2022 to 21.3 percent in 2032 (Table 1 and Figure 1), well below the relevant threshold of 40.<sup>8</sup> The PV of external debt to exports peaks at 127.1 percent at the beginning of the projection period before decreasing and the debt service-to-exports ratio is expected to reach 11.9 percent in 2032, with thresholds respectively at 180 and 15 percent. After the 2024-25 spike, the debt-service-to-revenue ratio is expected to remain below the threshold throughout the following years. The trajectory of the debt-service-to-revenue ratio underscores the criticality of improving domestic revenue mobilization to provide the authorities with a sustainable source of funding for their important development needs and to provide buffers on debt service.

**18. Exports and market financing shocks would have a significant negative impact on Côte d'Ivoire's external debt sustainability.** An export shock would cause the PV of external debt-to-export ratio and debt service-to-export ratio to breach the threshold from 2024 onward, while most shocks would cause the debt-service-to-revenue indicator to breach the threshold starting in 2024. Exports of cocoa products represent more than one third of total exports, which makes Côte d'Ivoire particularly sensitive to its price fluctuation. This highlights the importance of accelerating policies aiming at diversification, in order to strengthen the resilience of the Ivorian economy to shocks. The market financing risk analysis suggests that the EMBI spread has increased to 365 bpm from 350 bpm in the last staff report. While GFN and EMBI spread remain below the benchmarks, the debt service-to-revenue indicator would breach the threshold for prolonged periods should market financing risk materialize (Figure 6). These results underscore downside risks for debt sustainability from potential exports shocks or rollover risks that could result from a deterioration in global risk sentiment or from a shortening of maturities of new external commercial borrowing.

## PUBLIC DEBT SUSTAINABILITY ANALYSIS

**19. Under the baseline scenario, the PV of public debt-to-GDP ratio is below its threshold of 55 percent** (Figure 4). The PV of public debt-to-GDP is expected to slightly decline over the projection period, to around 45 percent by 2032. Meanwhile, the PV of debt-to-revenue and grants ratio would decline marginally from around 339 percent in 2022 to 285 percent in 2032. Finally, the debt service-to-revenue and grants ratio is projected to soar to 57.5 percent in 2024 and remain above 54 percent for the projection period (from 34 percent in 2021). This again underscores the importance of strengthening domestic revenue mobilization.

**20. Stress tests highlight that Côte d'Ivoire's most extreme public debt vulnerability would emerge from a shock to commodity prices** (Figure 2 and Table 4). Under the standard commodity price stress test, the PV of public debt-to-GDP would breach its corresponding

<sup>8</sup>The November 2020 liability management operation, which involved the buy-back of USD 486 million dollar-denominated bonds maturing in 2028 and 2032 and EUR 85 million euro-denominated bonds maturing in 2025, led to a small improvement in liquidity indicators.

threshold of 55 percent starting in 2025 and would continue growing afterwards. This shock would lead to an explosive pattern of the three debt and debt service indicators, which could be exacerbated if commodity prices were to increase even further. A contingent liability shock would trigger a temporary breach of the PV of debt-to-GDP threshold for five years.

## RISK RATING AND VULNERABILITIES

**21. The new debt sustainability analysis indicates that Côte d'Ivoire remains at moderate risk of external debt distress as in the July 2021 DSA and with limited capacity to absorb shocks.** The debt service-to-revenue ratio remains still below but very close to its corresponding threshold under the baseline scenario, and the other debt indicators stay below their thresholds. Standard stress tests show that the PV of external debt-to-exports ratio, debt service-to-export ratio, and debt service-to-revenue ratio would cross the threshold in the most extreme shock scenarios. The granularity analysis confirms limited space to absorb shocks with the external debt-service-to-revenue ratio breaching and then remaining below but very close to the threshold during the projection period (Figure 5). This reinforces the urgency to intensify revenue mobilization and diversify the export base through structural transformation over the medium term. It is also crucial to have a prudent external borrowing strategy aimed at balancing the costs and risks of new loans to preserve Côte d'Ivoire's borrowing space and medium-term debt sustainability. The authorities will have to evaluate the desirability and timing of tapping the external market, as the EMBI spread deteriorated since the 2021 DSA as well as limiting the issuance amount. They are also looking at alternative sources of external borrowings such as IFIs guaranteed commercial loans.

**22. This DSA also indicates that the overall risk of debt distress remains moderate, but stress tests highlight high vulnerabilities of external and total debt to shocks.** While the overall debt sustainability risk remains moderate, the PV of public debt-to-GDP breaches its threshold of 55 percent starting in 2025 under the most extreme shock (commodity price) arising from the standard stress tests. Three out of four external debt indicators would breach their threshold under the most extreme shocks (exports and market financing). Risks have been exacerbated by the COVID environment and now the war in Ukraine, as the global growth recovery, and hence that of Ivorian exports, could prove weaker than currently projected.

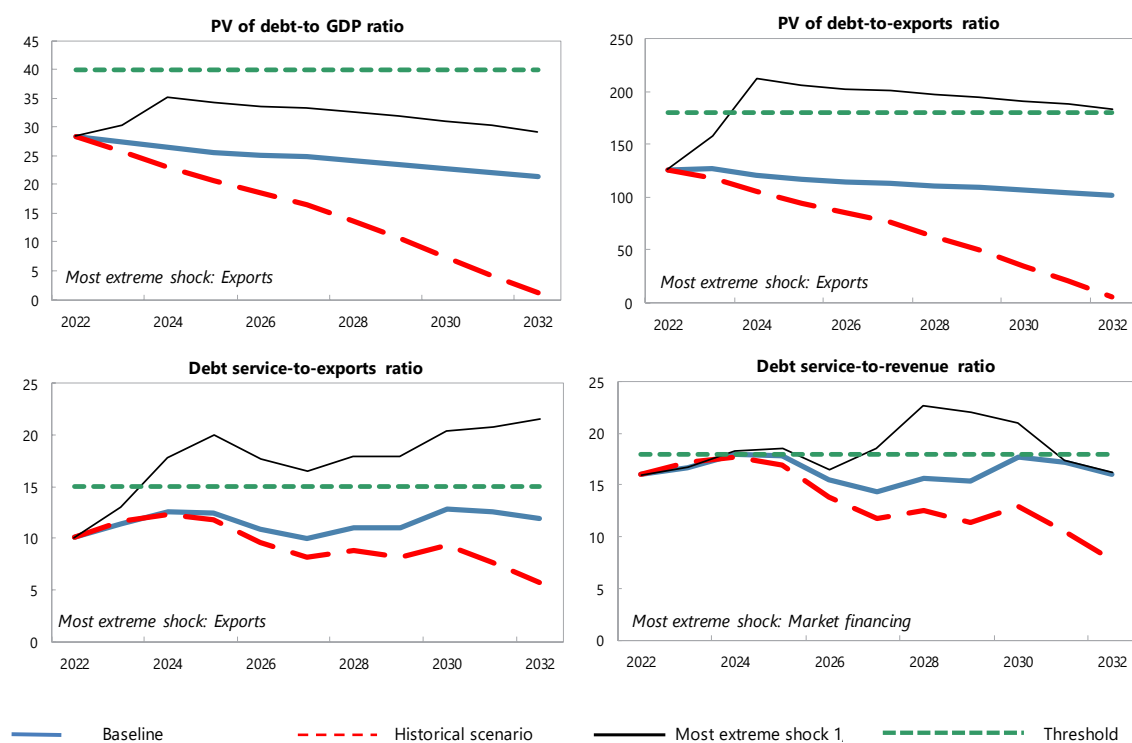
**23. The authorities need to build resilience against shocks to debt sustainability.** The DSA results highlight the need to carefully monitor debt indicators, conduct prudent GDP growth projections, create fiscal space, implement judicious policies to preserve macroeconomic stability and have full oversight of SOE debt contracting. Within this context, the authorities should work toward fully integrating SOE debt in their debt sustainability assessment. To create fiscal space, the authorities also critically need to accelerate efforts to mobilize domestic revenue while remaining committed to containing medium-term public expenditure. A careful debt management, including balancing domestic and external debt equilibrium, will be crucial to preserve debt sustainability.

## AUTHORITIES' VIEWS

**24. The authorities agreed that Côte d'Ivoire remains at moderate risk of debt distress.**

The authorities are strongly committed to keeping the country at moderate risk of debt distress. They are aware that the external debt service to revenue ratio is extremely close to the threshold. To that extent, they are monitoring closely the concessionality of new contracts and the pace of disbursement to remain in the same debt distress category. They expressed discontent regarding what they saw as a sudden reclassification of the BOAD debt (issued in CFAF) from domestic to external debt which could affect the capacity to borrow externally. They noted that this reclassification will be addressed by a forthcoming Council of Ministers of the WAEMU. Given the increasing costs of borrowing in the markets, they are looking for alternative sources of financing, including increasing fiscal revenue mobilization, to keep their debt sustainable.

**Figure 1. Côte d'Ivoire: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2022–32<sup>1/</sup>**



Customization of Default Settings		
	Size	Interactions
<b>Tailored Stress</b>		
Combined CL	No	
Natural disaster	n.a.	n.a.
Commodity price	No	No
Market financing	No	No

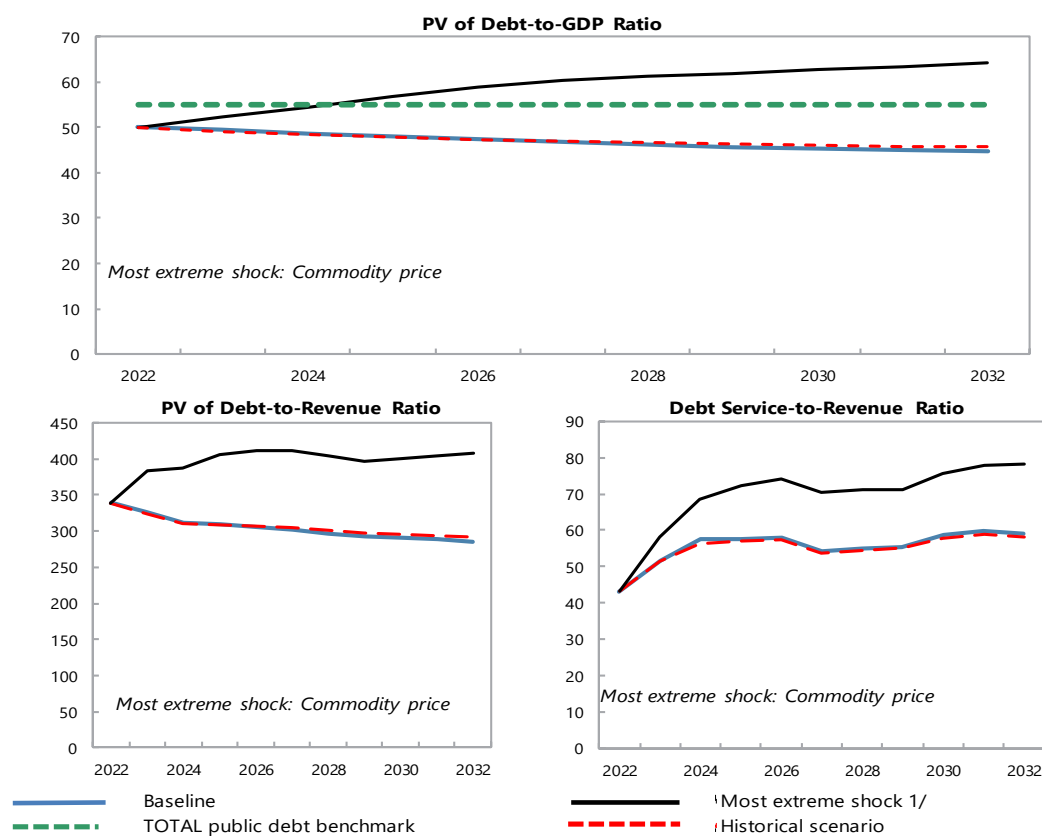
Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

Borrowing assumptions on additional financing needs resulting from the stress tests*		
	Default	User defined
<b>Shares of marginal debt</b>		
External PPG MLT debt	100%	
<b>Terms of marginal debt</b>		
Avg. nominal interest rate on new borrowing in USD	3.5%	7.0%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	19	19
Avg. grace period	7	7

\* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

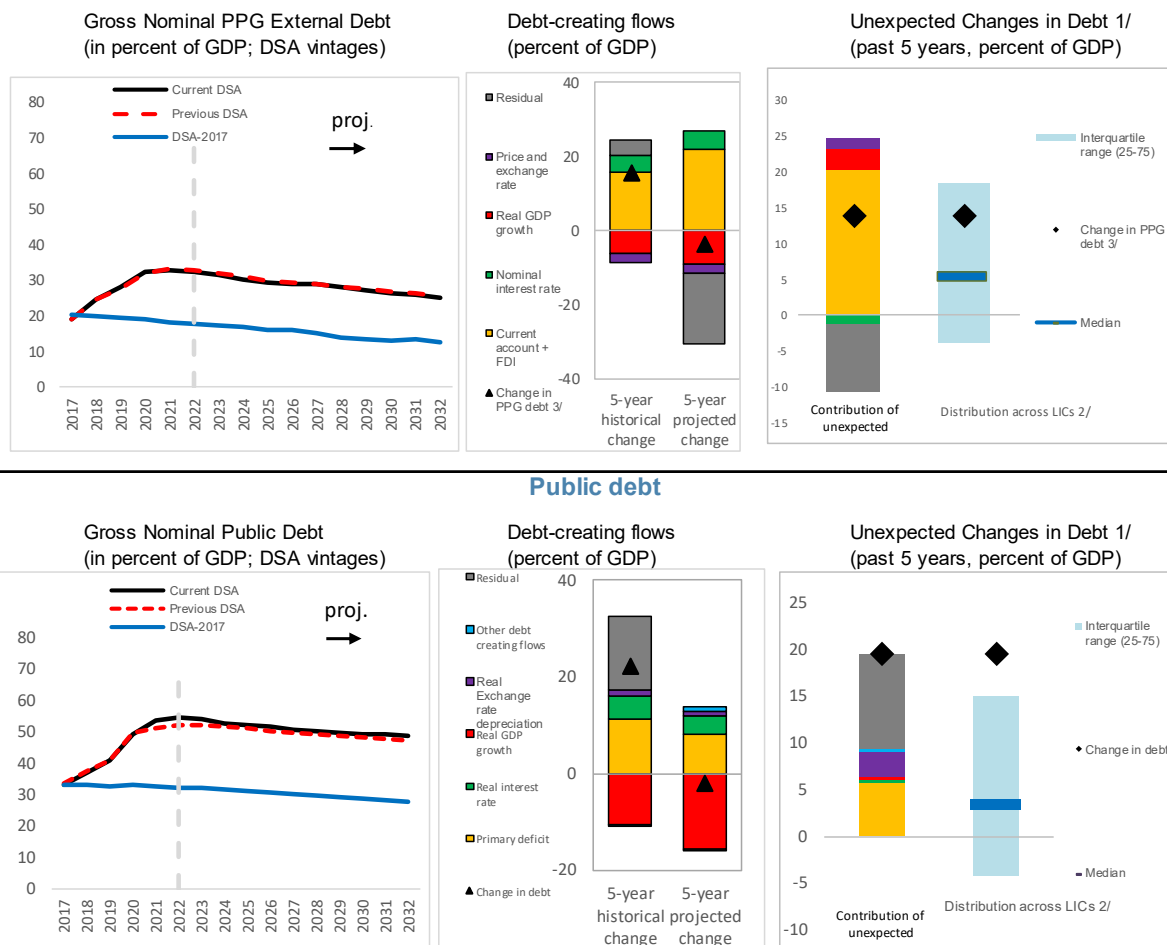
**Figure 2. Côte d'Ivoire: Indicators of Public Debt Under Alternative Scenarios, 2022–32**

Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
<b>Shares of marginal debt</b>		
External PPG medium and long-term	31%	46%
Domestic medium and long-term	55%	42%
Domestic short-term	15%	12%
<b>Terms of marginal debt</b>		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	3.5%	7.0%
Avg. maturity (incl. grace period)	19	19
Avg. grace period	7	7
Domestic MLT debt		
Avg. real interest rate on new borrowing	4.1%	4.1%
Avg. maturity (incl. grace period)	7	7
Avg. grace period	0	0
Domestic short-term debt		
Avg. real interest rate	1.4%	1.4%

\* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

**Figure 3. Côte d'Ivoire: Drivers of Debt Dynamics – Baseline Scenario**

1/ Difference between anticipated and actual contributions on debt ratios.

2/ Distribution across LICs for which LIC DSAs were produced.

3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.



Figure 4. Côte d'Ivoire: Realism Tools

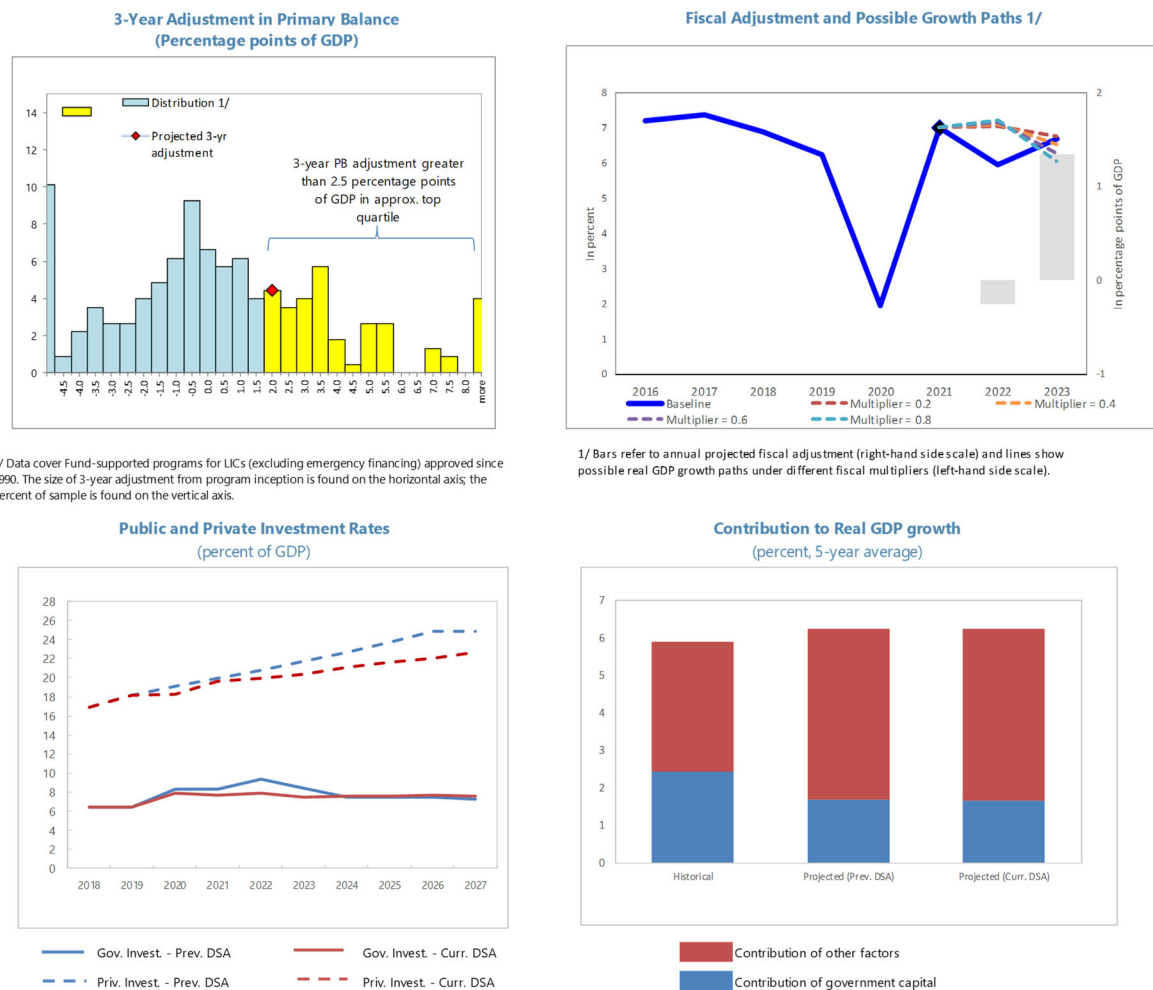


Figure 5. Côte d'Ivoire: Qualification of the Moderate Category, 2021-31<sup>1/</sup>

Sources: Country authorities; and staff estimates and projections.

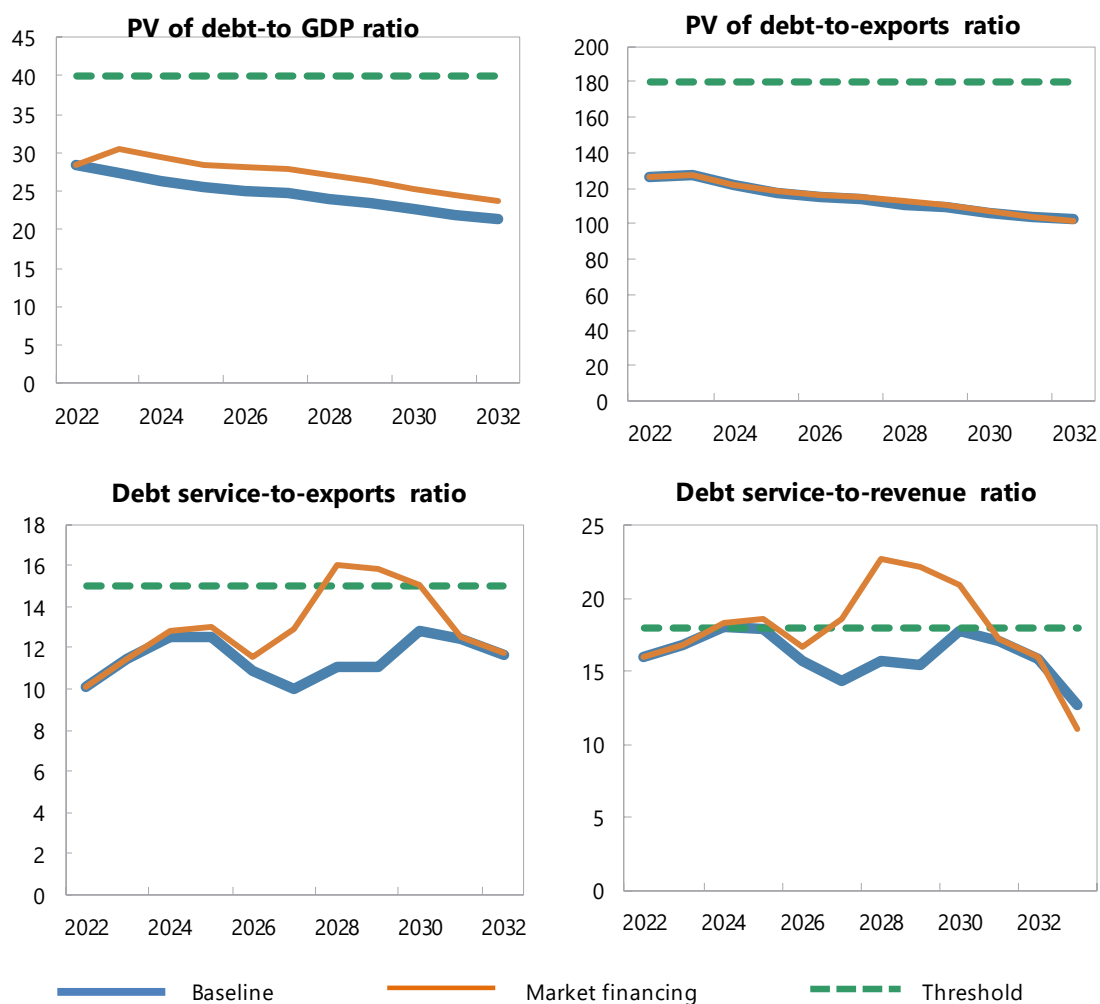
1/ For the PV debt/GDP and PV debt/exports thresholds, x is 20 percent and y is 40 percent. For debt service/Exports and debt service/revenue thresholds, x is 12 percent and y is 35 percent.

**Figure 6. Côte d'Ivoire: Market-Financing Risk Indicators**

	GFN 1/	EMBI 2/
Benchmarks	14	570
Values	10	365
Breach of benchmark	No	No
Potential heightened liquidity needs	Low	

1/ Maximum gross financing needs (GFN) over 3-year baseline projection horizon.

2/ EMBI spreads correspond to the latest available data.



Sources: Country authorities; and staff estimates and projections.

**Table 1. Côte d'Ivoire: External Debt Sustainability Framework, Baseline Scenario, 2019–42**  
(Percent of GDP; unless otherwise indicated)

	Actual			Projections								Average 8/ Historical Projections	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
External debt (nominal) 1/ of which: public and publicly guaranteed (PPG)	28.1	32.3	33.0	32.6	31.5	30.4	29.5	29.1	28.7	25.1	19.4	13.7	28.6
	28.1	32.3	33.0	32.6	31.5	30.4	29.5	29.1	28.7	25.1	19.4	13.7	28.6
Change in external debt	3.4	4.2	0.7	-0.4	-1.1	-1.1	-0.9	-0.4	-0.3	-0.7	-0.5		
Identified net debt-creating flows	3.3	3.0	0.9	3.9	3.8	3.4	3.4	3.3	3.3	4.4	6.4	2.5	3.8
Non-interest current account deficit	1.4	2.1	2.6	3.7	3.6	3.1	2.9	2.7	2.6	3.4	4.7	1.3	3.2
Deficit in balance of goods and services	-1.6	-0.9	-0.1	0.8	0.6	0.1	0.0	-0.2	-0.2	0.5	1.9	-1.8	0.3
Exports	23.6	21.5	22.6	22.5	21.6	21.7	21.7	21.8	21.8	20.9	19.6		
Imports	22.0	20.6	22.6	23.3	22.2	21.9	21.7	21.6	21.6	21.4	21.5		
Net current transfers (negative = inflow)	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.1
of which: official	-0.3	-0.1	-0.2	-0.3	-0.3	-0.2	-0.1	-0.1	-0.1	0.0	0.0		
Other current account flows (negative = net inflow)	2.0	1.9	1.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.1	1.8
Net FDI (negative = inflow)	1.3	1.2	1.1	1.1	1.2	1.2	1.2	1.3	1.4	1.6	2.1	1.0	1.3
Endogenous debt dynamics 2/	0.6	-0.2	-2.8	-0.9	-1.0	-0.8	-0.7	-0.7	-0.7	-0.6	-0.4		
Contribution from nominal interest rate	0.9	1.1	1.2	1.0	1.0	1.0	1.0	1.0	1.0	0.8	0.6		
Contribution from real GDP growth	-1.5	-0.5	-2.0	-1.9	-2.0	-1.8	-1.7	-1.6	-1.6	-1.4	-1.0		
Contribution from price and exchange rate changes	1.3	-0.8	-2.0	...	...	...	...	...	...	...	...		
Residual 3/	0.0	1.1	-0.2	-4.3	-4.9	-4.5	-4.3	-3.7	-3.7	-5.1	-6.9	1.0	-4.5
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Sustainability indicators</b>													
PV of PPG external debt-to-GDP ratio	...	...	27.2	28.3	27.4	26.4	25.5	25.0	24.7	21.3	16.2		
PV of PPG external debt-to-exports ratio	...	...	120.4	126.0	127.1	121.3	117.4	115.0	113.6	102.1	82.7		
PPG debt service-to-exports ratio	6.9	8.2	9.4	10.1	11.4	12.5	12.5	10.8	9.9	11.9	8.6		
PPG debt service-to-revenue ratio	11.4	12.3	13.9	16.0	16.7	17.9	17.8	15.6	14.3	16.1	11.1		
Gross external financing need (Million of U.S. dollars)	2528.7	3093.0	4083.8	5102.4	5774.9	6113.1	6471.7	6500.7	6788.3	11749.0	27124.8		
<b>Key macroeconomic assumptions</b>													
Real GDP growth (in percent)	6.2	2.0	7.0	6.0	6.7	6.4	6.2	6.0	6.0	5.8	5.6	7.4	6.1
GDP deflator in US dollar terms (change in percent)	-5.0	2.9	6.6	-2.3	3.2	2.8	2.2	1.9	1.5	1.5	1.5	-0.2	1.5
Effective interest rate (percent) 4/	3.6	4.1	4.1	3.3	3.4	3.5	3.5	3.5	3.5	3.5	3.3	4.0	3.5
Growth of exports of G&S (US dollar terms, in percent)	5.4	-4.1	19.9	2.9	5.6	10.2	8.4	8.2	7.7	6.2	5.3	1.8	6.9
Growth of imports of G&S (US dollar terms, in percent)	-2.3	-1.7	24.8	6.8	5.0	7.7	7.6	7.6	7.5	6.7	13.9	5.8	7.1
Grant element of new public sector borrowing (in percent)	...	...	...	15.8	15.7	16.2	16.7	17.0	16.0	15.3	17.9	...	15.9
Government revenues (excluding grants, in percent of GDP)	14.2	14.4	15.3	14.2	14.7	15.2	15.2	15.2	15.1	15.4	15.3	13.8	15.1
Aid flows (in Million of US dollars) 5/	469.2	336.3	333.1	1049.9	1091.0	1201.0	1220.7	1310.3	1060.0	1172.0	1650.1		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	1.1	1.0	1.0	0.9	0.9	0.8	0.7	0.6	...	0.8
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	27.0	25.5	25.9	24.6	24.8	24.2	23.9	29.0	...	24.6
Nominal GDP (Million of US dollars)	58,539	61,437	70,080	72,546	79,884	87,365	94,861	102,438	110,214	157,992	317,378		
Nominal dollar GDP growth	0.9	5.0	14.1	3.5	10.1	9.4	8.6	8.0	7.6	7.4	7.2	7.2	7.7
<b>Memorandum items:</b>													
PV of external debt 7/	...	...	27.2	28.3	27.4	26.4	25.5	25.0	24.7	21.3	16.2		
In percent of exports	...	...	120.4	126.0	127.1	121.3	117.4	115.0	113.6	102.1	82.7		
Total external debt service-to-exports ratio	6.9	8.2	9.4	10.1	11.4	12.5	12.5	10.8	9.9	11.9	8.6		
PV of PPG external debt (in Million of US dollars)	...	...	19090.9	20563.6	21910.3	23041.7	24161.5	25618.3	27250.9	33651.7	51563.4		
(Pvt-Pvt-1)/GDPt-1 (in percent)	...	...	...	2.1	1.9	1.4	1.3	1.5	1.6	0.9	0.7		
Non-interest current account deficit that stabilizes debt ratio	-1.9	-2.0	1.9	4.1	4.7	4.1	3.8	3.1	3.0	4.1	5.3		

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as  $[r - g - p(1+g)] / (1+g+p+gp)$  times previous period debt ratio, with  $r$  = nominal interest rate;  $g$  = real GDP growth rate, and  $p$  = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ Current-year interest payments divided by previous period debt stock.

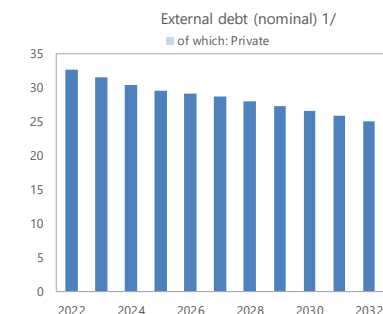
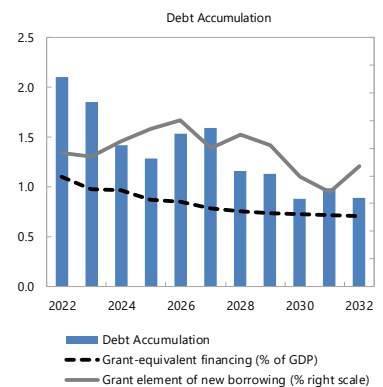
5/ Defined as grants, concessional loans, and debt relief.

6/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

7/ Assumes that PV of private sector debt is equivalent to its face value.

8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	Yes



**Table 2. Côte d'Ivoire: Public Sector Debt Sustainability Framework, Baseline Scenario, 2019–42**  
(Percent of GDP; unless otherwise indicated)

	Actual			Projections								Average 6/	
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
<b>Public sector debt 1/</b>	<b>41.0</b>	<b>49.4</b>	<b>53.5</b>	<b>54.4</b>	<b>53.8</b>	<b>52.8</b>	<b>52.0</b>	<b>51.5</b>	<b>50.8</b>	<b>48.7</b>	<b>47.2</b>	<b>27.9</b>	<b>51.1</b>
of which: external debt	28.1	32.3	33.0	32.6	31.5	30.4	29.5	29.1	28.7	25.1	19.4	13.7	28.6
Change in public sector debt	3.9	8.4	4.1	0.9	-0.6	-1.1	-0.8	-0.6	-0.6	-0.3	0.0		
Identified debt-creating flows	0.9	2.2	2.9	-0.1	-0.4	-1.0	-0.7	-0.6	-0.8	-0.4	-0.1	1.8	-0.6
Primary deficit	0.8	3.7	3.0	3.3	1.9	0.9	1.0	1.0	0.9	1.0	1.1	1.6	1.3
Revenue and grants	15.0	15.0	15.8	14.7	15.2	15.6	15.5	15.5	15.4	15.7	15.6	14.7	15.5
of which: grants	0.8	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3		
Primary (noninterest) expenditure	15.8	18.7	18.8	18.0	17.1	16.5	16.5	16.4	16.4	16.7	16.7	16.3	16.7
Automatic debt dynamics	0.1	-1.5	-0.2	-3.7	-2.6	-2.1	-1.8	-1.6	-1.7	-1.5	-1.2		
Contribution from interest rate/growth differential	-1.1	0.7	-2.9	-3.7	-2.6	-2.1	-1.8	-1.6	-1.7	-1.5	-1.2		
of which: contribution from average real interest rate	1.0	1.4	0.3	-0.7	0.8	1.1	1.3	1.3	1.2	1.2	1.3		
of which: contribution from real GDP growth	-2.2	-0.8	-3.2	-3.0	-3.4	-3.2	-3.1	-2.9	-2.9	-2.7	-2.5		
Contribution from real exchange rate depreciation	1.3	-2.1	2.7	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.1
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0		
<b>Residual</b>	<b>3.0</b>	<b>6.1</b>	<b>1.2</b>	<b>1.1</b>	<b>-0.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>3.3</b>	<b>0.2</b>
<b>Sustainability indicators</b>													
<b>PV of public debt-to-GDP ratio 2/</b>	<b>...</b>	<b>...</b>	<b>49.0</b>	<b>50.0</b>	<b>49.6</b>	<b>48.7</b>	<b>47.9</b>	<b>47.4</b>	<b>46.8</b>	<b>44.9</b>	<b>43.9</b>		
<b>PV of public debt-to-revenue and grants ratio</b>	<b>...</b>	<b>...</b>	<b>310.0</b>	<b>339.3</b>	<b>326.9</b>	<b>311.6</b>	<b>308.8</b>	<b>306.1</b>	<b>302.8</b>	<b>285.5</b>	<b>281.2</b>		
<b>Debt service-to-revenue and grants ratio 3/</b>	<b>30.7</b>	<b>32.9</b>	<b>34.0</b>	<b>43.2</b>	<b>51.7</b>	<b>57.5</b>	<b>57.5</b>	<b>58.0</b>	<b>54.1</b>	<b>59.0</b>	<b>64.6</b>		
Gross financing need 4/	5.4	8.6	8.4	9.9	10.0	10.1	10.0	10.0	9.3	10.3	11.2		
<b>Key macroeconomic and fiscal assumptions</b>													
Real GDP growth (in percent)	6.2	2.0	7.0	6.0	6.7	6.4	6.2	6.0	6.0	5.8	5.6	7.4	6.1
Average nominal interest rate on external debt (in percent)	3.6	4.1	3.9	3.4	3.4	3.4	3.5	3.5	3.5	3.5	3.3	3.9	3.5
Average real interest rate on domestic debt (in percent)	5.3	5.1	2.6	1.2	3.5	3.9	4.0	4.1	3.9	4.0	4.2	3.7	3.7
Real exchange rate depreciation (in percent, + indicates depreciation)	5.4	-7.5	9.1	...	...	...	...	...	...	...	...	2.2	...
Inflation rate (GDP deflator, in percent)	0.2	1.0	2.8	3.8	1.7	1.4	1.3	1.2	1.5	1.5	1.5	1.3	1.7
Growth of real primary spending (deflated by GDP deflator, in percent)	2.6	20.4	8.0	1.4	1.3	2.7	5.9	5.7	5.5	6.4	3.8	12.9	4.9
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-3.1	-4.7	-1.0	2.3	2.5	2.0	1.7	1.5	1.5	1.3	1.1	-2.9	1.7
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government, central bank, government-guaranteed debt. Definition of external debt is Currency-based.

2/ The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

4/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period and other debt creating/reducing flows.

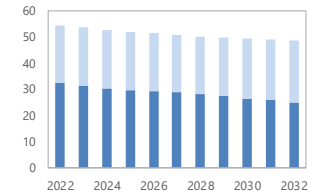
5/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio (-): a primary surplus, which would stabilize the debt ratio only in the year in question.

6/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

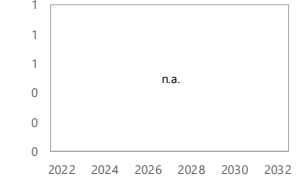
Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	Yes

Public sector debt 1/

■ of which: local-currency denominated  
■ of which: foreign-currency denominated



■ of which: held by residents  
■ of which: held by non-residents



**Table 3. Côte d'Ivoire: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2022–32**  
(Percent)

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>PV of debt-to GDP ratio</b>											
<b>Baseline</b>	28.3	27.4	26	25	25	25	24	23	23	22	21.3
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2022-2032 2/	28	26	23	21	19	17	14	11	7	4	1
<b>B. Bound Tests</b>											
B1. Real GDP growth	28	28	28	27	27	27	26	25	24	24	23
B2. Primary balance	28	28	28	27	27	26	26	25	24	24	23
B3. Exports	28	30	35	34	34	33	33	32	31	30	29
B4. Other flows 3/	28	28	27	26	26	26	25	24	23	23	22
B5. Depreciation	28	34	30	29	28	28	27	26	25	25	24
B6. Combination of B1-B5	28	31	29	28	27	27	26	26	25	24	23
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	28	32	31	31	30	30	30	29	29	28	28
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	28	28	28	27	27	27	26	25	24	24	23
C4. Market Financing	28	31	29	29	28	28	27	26	25	25	24
<b>Threshold</b>	40	40	40	40	40	40	40	40	40	40	40
<b>PV of debt-to-exports ratio</b>											
<b>Baseline</b>	126	127	121	117	115	114	111	109	106	104	102
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2022-2032 2/	126	119	106	95	85	76	63	49	34	20	5
<b>B. Bound Tests</b>											
B1. Real GDP growth	126	127	121	117	115	114	111	109	106	104	102
B2. Primary balance	126	129	128	124	122	121	119	117	114	112	110
B3. Exports	126	158	<b>213</b>	<b>207</b>	<b>203</b>	<b>201</b>	<b>198</b>	<b>195</b>	<b>191</b>	<b>188</b>	<b>183</b>
B4. Other flows 3/	126	129	125	121	119	117	115	113	110	108	106
B5. Depreciation	126	127	110	106	104	102	100	98	95	93	91
B6. Combination of B1-B5	126	146	121	144	141	139	136	134	130	127	125
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	126	147	144	141	139	139	138	137	136	134	133
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	126	130	127	124	123	122	120	118	115	112	110
C4. Market Financing	126	127	122	118	116	115	113	111	107	104	102
<b>Threshold</b>	180	180	180	180	180	180	180	180	180	180	180
<b>Debt service-to-exports ratio</b>											
<b>Baseline</b>	10	11	13	12	11	10	11	11	13	13	12
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2022-2032 2/	10	12	12	12	10	8	9	8	9	8	6
<b>B. Bound Tests</b>											
B1. Real GDP growth	10	11	13	12	11	10	11	11	13	13	12
B2. Primary balance	10	11	13	13	11	10	12	12	13	13	13
B3. Exports	10	13	<b>18</b>	<b>20</b>	<b>18</b>	<b>17</b>	<b>18</b>	<b>18</b>	<b>20</b>	<b>21</b>	<b>22</b>
B4. Other flows 3/	10	11	13	13	11	10	11	11	13	13	12
B5. Depreciation	10	11	13	12	10	9	10	10	12	12	11
B6. Combination of B1-B5	10	12	<b>16</b>	<b>15</b>	13	12	14	14	<b>16</b>	<b>16</b>	15
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	10	11	14	14	12	12	13	13	15	14	14
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	10	12	13	13	11	11	12	12	14	13	13
C4. Market Financing	10	11	13	13	11	13	<b>16</b>	<b>16</b>	<b>15</b>	13	12
<b>Threshold</b>	15	15	15	15	15	15	15	15	15	15	15
<b>Debt service-to-revenue ratio</b>											
<b>Baseline</b>	16.0	16.7	17.9	17.8	15.6	14.3	15.6	15.4	17.7	17.2	16.1
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2022-2032 2/	16	17	18	17	14	12	13	11	13	11	8
<b>B. Bound Tests</b>											
B1. Real GDP growth	16	17	<b>19</b>	<b>19</b>	17	15	17	17	<b>19</b>	<b>18</b>	17
B2. Primary balance	16	17	<b>18</b>	<b>19</b>	16	15	16	16	<b>18</b>	<b>18</b>	17
B3. Exports	16	17	<b>19</b>	<b>22</b>	<b>19</b>	<b>18</b>	<b>19</b>	<b>19</b>	<b>21</b>	<b>22</b>	<b>22</b>
B4. Other flows 3/	16	17	<b>18</b>	<b>18</b>	16	15	16	16	<b>18</b>	18	17
B5. Depreciation	16	<b>21</b>	<b>23</b>	<b>21</b>	<b>18</b>	17	<b>18</b>	<b>18</b>	<b>21</b>	<b>20</b>	18
B6. Combination of B1-B5	16	18	<b>20</b>	<b>20</b>	17	16	17	17	<b>19</b>	<b>19</b>	18
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	16	17	<b>20</b>	<b>20</b>	18	17	18	18	<b>20</b>	<b>20</b>	<b>19</b>
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	16	<b>19</b>	<b>21</b>	<b>21</b>	18	16	17	16	<b>19</b>	<b>18</b>	17
C4. Market Financing	16	17	<b>18</b>	<b>18</b>	17	<b>19</b>	<b>23</b>	<b>22</b>	<b>21</b>	17	16
<b>Threshold</b>	18	18	18	18	18	18	18	18	18	18	18

Sources: Country authorities; and staff estimates and projections.

1/ A bold value indicates a breach of the threshold.

2/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.

3/ Includes official and private transfers and FDI.

**Table 4. Côte d'Ivoire: Sensitivity Analysis for Key Indicators of Public Debt, 2022–32**  
(Percent)

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
<b>PV of Debt-to-GDP Ratio</b>											
<b>Baseline</b>	50	50	49	48	47	47	46	46	45	45	45
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2022-2032 2/	50	49	49	48	47	47	47	46	46	46	46
<b>B. Bound Tests</b>											
B1. Real GDP growth	50	52	54	54	55	<b>55</b>	<b>56</b>	<b>57</b>	<b>57</b>	<b>58</b>	<b>59</b>
B2. Primary balance	50	51	51	50	50	49	49	48	48	47	47
B3. Exports	50	52	<b>57</b>	<b>56</b>	<b>55</b>	55	54	53	53	53	52
B4. Other flows 3/	50	50	49	49	48	48	47	47	46	46	46
B5. Depreciation	50	<b>56</b>	53	51	49	47	45	43	42	40	39
B6. Combination of B1-B5	50	49	49	48	47	46	45	44	44	43	43
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	50	<b>59</b>	<b>58</b>	<b>57</b>	<b>56</b>	<b>55</b>	55	54	54	54	53
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	50	52	54	<b>57</b>	<b>59</b>	<b>60</b>	<b>61</b>	<b>62</b>	<b>63</b>	<b>63</b>	<b>64</b>
C4. Market Financing	50	50	49	48	48	47	47	46	46	45	45
<b>TOTAL public debt benchmark</b>	55	55	55	55	55	55	55	55	55	55	55
<b>PV of Debt-to-Revenue Ratio</b>											
<b>Baseline</b>	339	327	312	309	306	303	297	293	291	288	286
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2022-2032 2/	339	324	311	309	306	305	300	298	296	294	292
<b>B. Bound Tests</b>											
B1. Real GDP growth	339	342	346	350	355	358	359	362	366	370	374
B2. Primary balance	339	334	327	324	322	318	312	308	306	303	300
B3. Exports	339	344	363	360	357	353	347	343	340	336	331
B4. Other flows 3/	339	330	317	314	311	308	303	299	296	293	290
B5. Depreciation	339	367	340	326	314	302	288	276	266	256	247
B6. Combination of B1-B5	339	321	313	308	303	298	291	285	280	276	271
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	339	388	370	366	363	359	353	348	345	342	338
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	339	384	387	407	411	411	404	397	401	405	408
C4. Market Financing	339	327	312	310	308	305	300	295	292	288	285
<b>Debt Service-to-Revenue Ratio</b>											
<b>Baseline</b>	43	52	57	58	58	54	55	56	59	60	59
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2022-2032 2/	43	52	56	57	57	54	55	55	58	59	58
<b>B. Bound Tests</b>											
B1. Real GDP growth	43	54	63	64	66	62	65	66	71	73	73
B2. Primary balance	43	52	59	60	60	56	57	58	61	62	61
B3. Exports	43	52	59	61	61	57	58	59	62	64	64
B4. Other flows 3/	43	52	58	58	58	54	55	56	59	60	60
B5. Depreciation	43	51	60	60	59	55	56	56	60	60	59
B6. Combination of B1-B5	43	50	57	57	57	53	54	54	57	58	57
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	43	52	71	66	66	63	64	64	68	67	66
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	43	58	68	72	74	70	71	71	76	78	78
C4. Market Financing	43	52	58	58	59	58	62	62	62	60	59

Sources: Country authorities; and staff estimates and projections.

1/ A bold value indicates a breach of the benchmark.

2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

3/ Includes official and private transfers and FDI.