INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

COTE D'IVOIRE

Joint World Bank-IMF Debt Sustainability Analysis[1]

December 2020

Prepared Jointly by the staffs of the International Development Association (IDA)

and the International Monetary Fund (IMF)

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

Côte d'Ivoire remains at moderate risk of **external debt** distress. All the projected external debt burden indicators are below their thresholds under the baseline, but the debt service-to-revenue ratio exceeds its threshold in the case of a market financing shock. In addition, the debt service-to-revenue ratio remains below but close to its threshold throughout the medium-term under the baseline scenario. The space to absorb shocks is therefore limited and has further shrunk with the advent of the COVID-19 shock, reinforcing the urgent need to boost domestic revenue mobilization. The overall risk of **public debt** distress is also moderate, with public debt expected to gradually decrease over the projection horizon. The PV of public debt-to-GDP ratio remains below its prudent benchmark in both the baseline and shock scenarios.

[1]Under the revised Debt Sustainability Framework for Low-Income Countries, Côte d'Ivoire's Composite Indicator is 2.97 based on the October 2019 WEO and the 2018 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. On SOE debt, the authorities have made progress in collecting further financial information and improving monitoring in past years. For end-2019, SOE non-guaranteed commercial debt amounted to 0.9 percent of GDP (0.1 external and 0.8 domestic). 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.
- N*on-guaranteed* SOE debt is captured as contingent liability shock – this shock is set at the default 2 percent of GDP.

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

	Subsectors of the public sector	Sub-sectors covered
1	Central government	X
2	State and local government	
3	Other elements in the general government	
4	o/w: Social security fund	X
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 step up the government's capacity to record and monitor public debt and contingent liability 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 and expenditure sides). The authorities see this consolidation as a prerequisite for incorporating SOE debt into total debt (in the baseline) and have received a technical assistance (TA) mission in February to advance this task. Further IMF TA will continue as needed.

3. **The magnitude of the shock of the contingent liability test applied in the context of the sensitivity analysis of this DSA reflects potential additional liabilities**. They could emanate from SOE debt not captured in the data coverage, public-private partnership agreements. and the financial sector. Total contingent liabilities for the CL test are estimated at 8.2 percent (Text Table 2 and paragraph 11).

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

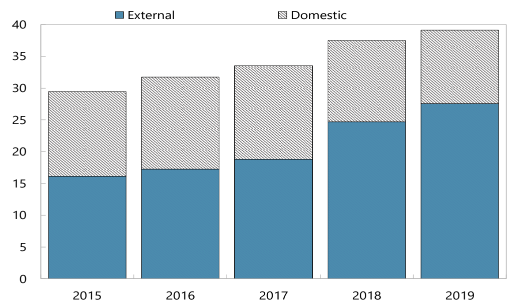
		Default	Used for the analysis	Reasons for deviations from the default settings
1	The country's coverage of public debt	The central government plus social security, central bank, government-guaranteed debt		
2	Other elements of the general government not captured in 1.	0 percent of GDP	0	
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	2.00	
4	PPP	35 percent of PPP stock	1.24	
5	Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5	
	Total (2+3+4+5) (in percent of GDP)		8.2	

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 by 10 percentage points of GDP over the last 5 years with external debt growing as a share of total debt.[2] Public debt stood at 39.1 percent of GDP at end-2019, compared with 29.5 percent in 2015. External debt stood at 27.6 percent of GDP, compared to 16.1 in 2015—representing 70 percent of total debt in end-2019 as opposed to 55 percent in 2015 (Text Figure 1). All ratios in percent of GDP are nonetheless lower than presented in the December 2019 Debt Sustainability Assessment (DSA), due to a rebasing of National Accounts that resulted in a 34 percent higher nominal GDP in 2018. (Box 1).

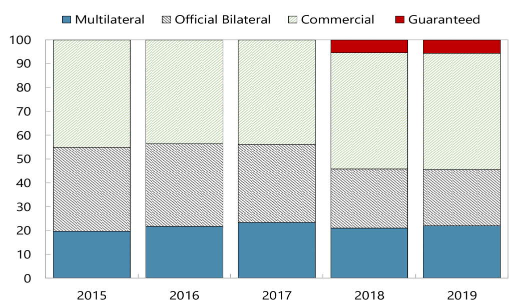
Text Figure 1. Côte d'Ivoire: Evolution of Public Debt 2015–19



Sources: Authorities data

5. Within external debt, commercial creditors have grown and represent now almost half of external debt stock. Reflecting largely Eurobond issuances, commercial credit increased by 5 percentage points in 2018 to reach 49 percent of external debt. (Text Figure 2). This share remained broadly unchanged in 2019 and close to 90 percent of commercial debt is in the form of Eurobonds. The authorities undertook a liability management operation in 2019 to reduce exchange rate risks and lengthen maturity. Multilateral creditors have maintained a fairly constant share over the last

Text Figure 2. Côte d'Ivoire: Composition of Public Debt 2015–19



Sources: IMF with authorities data

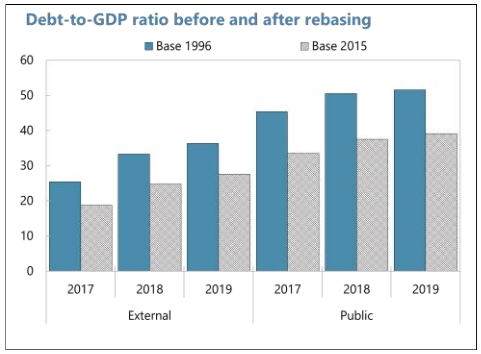
[2] In this DSA, Public and Publicly Guaranteed external debt excludes claims under Debt Reduction-Development Contract (C2D), which were cancelled in the context of beyond HIPC debt relief. The C2D is a debt restructuring tool under which Côte d'Ivoire continues to service its bilateral debts to France and Spain until repayment, but the amounts are 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.

5 years and represented 22 percent of external debt in 2019. On the other hand, the share of bilateral creditors has decreased, accounting for 23 percent of the external debt stock at end-2019 compared to 35 percent in 2015.

6. **The authorities joined the Debt Service Suspension Initiative (DSSI) in 2020**. The authorities sent formal letters to the Paris Club, with an expected reduction in debt service of 0.24 percent of GDP for the May-December 2020 period.

Box 1. Implications of GDP Rebasing on Debt and Investments Ratios

Côte d'Ivoire updated the base year for the calculation of its national accounts from 1996 to 2015. Rebased series for 2015-2017, as well as preliminary accounts for 2018-19 were reflected into the macroeconomic framework. The rebasing increased 2015 nominal GDP by 38 percent. Downward revisions to real growth rates and lower GDP deflators in 2016-2018, however, brought the overall increase in 2018 to 34 percent. As a result, debt-to-GDP ratios are now lower over the entire 2015–19 period.



Regarding investment, historical levels of private (and to a less extent public) investment were revised up in the context of the national account rebasing, as elements such as new processes and new technology are now included in the computation of investment. As a result, the private investment-to-GDP ratio is higher than in the old base, whereas the public investment-to-GDP ratio is slightly lower (as the upward revision to GDP was larger than the one to public investment).

Source: Ivoirien Authorities, Institut National de la Statistique.

UNDERLYING ASSUMPTIONS

7. **The assumptions in the baseline scenario are consistent with the macroeconomic framework outlined in the staff report for the seventh and eighth reviews under the EFF/ECF blended arrangements** (Text Table 3). These include lower growth in 2020 than projected at the time of the sixth review and a recovery back to a 6½ percent growth trend from 2021 onward, subdued inflation thanks to the exchange rate peg to the Euro, a gradual improvement in the external position due to higher value-added of exports, gradual fiscal consolidation to the 3 percent of GDP regional fiscal deficit norm by 2023, and lower tax revenue than in the previous DSA, reflecting both the underperformance in 2019 and 2020 relative to program expectations as well as lower incremental increases in the tax-to-GDP ratio over the medium-term. Projections also assume a balanced recourse to domestic and external debt.

- **Lower GDP growth in 2020 but a rebound to strong growth from 2021 onward**. Real GDP is projected to grow by 1.8 percent in 2020 and recover to 6.5 percent over

2021–25 as global conditions improve, and domestic demand recovers to pre-COVID trend.[3]

- **Subdued inflation**. Annual average inflation picked up from 0.8 percent at end-2019 to 2.1 percent in September 2020, reflecting the impact of containment measures and border closures. It is expected to remain subdued at around 2 percent in the medium term, reflecting the exchange rate peg to the euro.
- **Wider budget deficits in the short term**. The need for a decisive policy response to counter the pandemic led to a projected widening of the budget deficit to 5.9 percent of GDP in 2020. The authorities committed to a fiscal deficit of 4.6 percent of GDP in 2021 and to a gradual consolidation to return the regional norm of 3 percent of GDP in 2023.
- **Lower tax revenue projections**. Given the weaker performance in terms of tax revenues over 2016–19 compared to projections at the onset of the IMF program, the assumptions on the incremental increase of the tax-to-GDP ratio going forward have been adjusted downward compared to the December 2019 DSA. Tax revenues are now assumed to increase from 12.3 percent of GDP in 2019 to 13.7 percent in 2030. Revenue mobilization still presents downside risks.
- **A narrowing current account deficit**. The external current account deficit is expected to gradually narrow from -3.9 percent of GDP in 2020 to -2.5 percent of GDP in 2025. These assumptions are subject to downside risks including from possible unfavorable terms-of-trade shocks and weaker-than-expected global growth in the pandemic and rising protectionism context.

8. 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 2020. The country is expected to continue to increasingly rely on commercial debt as the country transitions toward an emerging market economy. However, in the short term, the government is expected to rely on both concessional and non-concessional lending to meet its financing needs. The authorities also intend to carefully balance the recourse to the international and regional markets given the potential crowding-out effect at the regional level. The authorities are continuing to strengthen processes related to debt management, with World Bank support.

9. The realism of the macroeconomic framework is confirmed by several checks (Figure 6). The projected medium-term debt-creating flows do not deviate significantly from the historical outturns. The projected fiscal adjustment for the next three years is below the top quartile of the distribution of approved Fund-supported programs for LICs since 1990. The difference in 2020 between the expected fiscal impulse and the baseline is explained by necessary response to the unprecedented Covid-19 shock.

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[3]Relative to the DSA from the sixth review, the public and private investment-to-GDP ratios are higher, reflecting the base effect from the rebasing for private investment and higher forecasts for public investment in the years 2020-22.

Text Table 3. Côte d'Ivoire: LIC DSA Macroeconomic Assumptions	Previous DSA			Current DSA (based on old GDP)			Current DSA		
	2018-23	2024-29	2030-38	2018-23	2024-29	2030-38	2018-23	2024-29	2030-38
Nominal GDP (USD Billion)	51.6	82.7	143.4	51.6	82.7	143.4	68.0	108.5	186.2
Real GDP (y/y % change)	7.1	5.9	5.6	7.1	5.9	5.6	5.7	6.0	5.6
Fiscal (central government)									
Revenue and grants 1/	20.1	20.5	22.7	18.9	18.6	19.7	15.1	15.4	16.5
of which: grants	0.9	0.1	0.0	0.9	0.1	0.0	0.7	0.1	0.0
Primary expenditure	21.4	21.7	23.9	21.4	20.1	21.4	17.1	16.7	17.9
Primary basic balance (excluding C2D grants)	0.5	0.7	0.8	-0.73	0.4	0.3	-0.61	0.4	0.3
Balance of payments									
Exports of goods and services	28.8	27.6	25.4	27.7	29.3	29.0	21.2	22.2	22.4
Imports of goods and services	27.4	24.8	22.7	26.9	25.4	24.2	20.6	19.4	18.7
Non-interest current account deficit 2/	1.7	0.6	0.8	2.1	-0.9	-1.8	1.6	-0.6	-1.4
New foreign direct investment (net inflows)	1.4	1.7	2.1	1.0	1.5	2.0	0.7	1.1	1.5

Sources: Ivoirien authorities, and IMF staff estimates
1/ C2D grants are excluded from revenue and grants.
2/ C2D grants are excluded from official transfers.

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

10. **Côte d'Ivoire is assessed to have medium debt carrying capacity**. Based on the October 2019 WEO macroeconomic framework and the World Bank's 2018 CPIA index, Côte d'Ivoire's composite indicator is 2.97 (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.[4] The relevant thresholds are used to assess external debt risk rating.

Text Table 4. Côte d'Ivoire: CI Score

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	3.386	1.30	44%
Real growth rate (in percent)	2.719	7.562	0.21	7%
Import coverage of reserves (in percent)	4.052	39.075	1.58	53%
Import coverage of reserves^2 (in percent)	-3.990	15.269	-0.61	-21%
Remittances (in percent)	2.022	0.446	0.01	0%
World economic growth (in percent)	13.520	3.499	0.47	16%
CI Score			2.97	100%
CI rating			Medium	

11. **Given Côte d'Ivoire's continuous reliance on global capital markets, a tailored test for international market financing was conducted**. Côte d'Ivoire issued sizeable Eurobonds in 2017 and 2018 and tapped international markets for smaller amounts in 2019. 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

[4]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 CI uses ten years of data (5 years of history and 5 years of projections) to smooth out economic cycles.

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.[5]

12. A contingent liability tailored shock was conducted to capture potential fiscal risks arising from SOEs, PPPs, and the financial market. This tailored stress tests include the standardized 2 percent of GDP, a 1¼ 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.

13. Standard stress tests on real GDP growth, primary balance, exports, current transfers, foreign exchange (FX) depreciation, and tailored test on commodity price have also been applied. The first four shocks set each of the above variables to its historical average minus one standard deviation, or to its baseline projection minus one standard deviation, whichever is lower, for 2020 and 2021. 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

14. External debt indicators have improved relative to the previous DSA on account of the rebased GDP, but vulnerabilities associated with debt service remain significant. The external DSA assessment indicates that 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 29.1 percent in 2020 to 19.9 percent in 2030 (Table 1 and Figure 3), well below the relevant threshold of 40. However, the debt-service-to-revenue ratio is now projected to come just short of its threshold in 2025 and remain just below it 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 sustainable source of funding for their important development needs and to provide buffers on debt service.

15. Exports and market financing shocks would have a significant negative impact on Côte d'Ivoire's external debt sustainability. An exports shock would cause the debt service-to-export ratio to breach the threshold starting in 2021 while a market financing shock would cause the debt-service-to-revenue indicator to breach the threshold starting in 2025. 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.

[5] 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.

PUBLIC DEBT SUSTAINABILITY ANALYSIS

16. 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 remain constant over the projection period, around 40 percent. Meanwhile, the PV of debt-to-revenue ratio would go from 281.1 percent in 2020 to 254.9 percent in 2030. Finally, the debt service-to-revenue ratio, at 36.1 in 2020, is projected to increase and reach 48.8 in 2030. This also underscores the importance of strengthening domestic revenue mobilization.

17. Stress tests highlight that Côte d'Ivoire's most extreme public debt vulnerability would emerge from a shock to commodity price (Figure 4 and Table 4). Under the standard stress test of commodity price, the PV of public debt-to-GDP would breach its corresponding threshold of 55 percent starting in 2024 and would continue growing afterwards. This shock would lead to an explosive pattern of the three debt and debt service indicators.

RISK RATING AND VULNERABILITIES

18. The debt sustainability analysis under the new DSA indicates that Côte d'Ivoire remains at moderate risk of external debt distress as in the December 2019 DSA, but with limited capacity to absorb shocks. While none of the external debt indicators breaches their corresponding threshold under the baseline scenario, standard stress tests show that the PV of external debt-to-exports ratio would cross the threshold in the most extreme shock scenarios. Moreover, the ratio of the external debt service-to-revenue in the baseline would almost reach its threshold in 2025 and remain below but close to it subsequently. This reinforces the need 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.

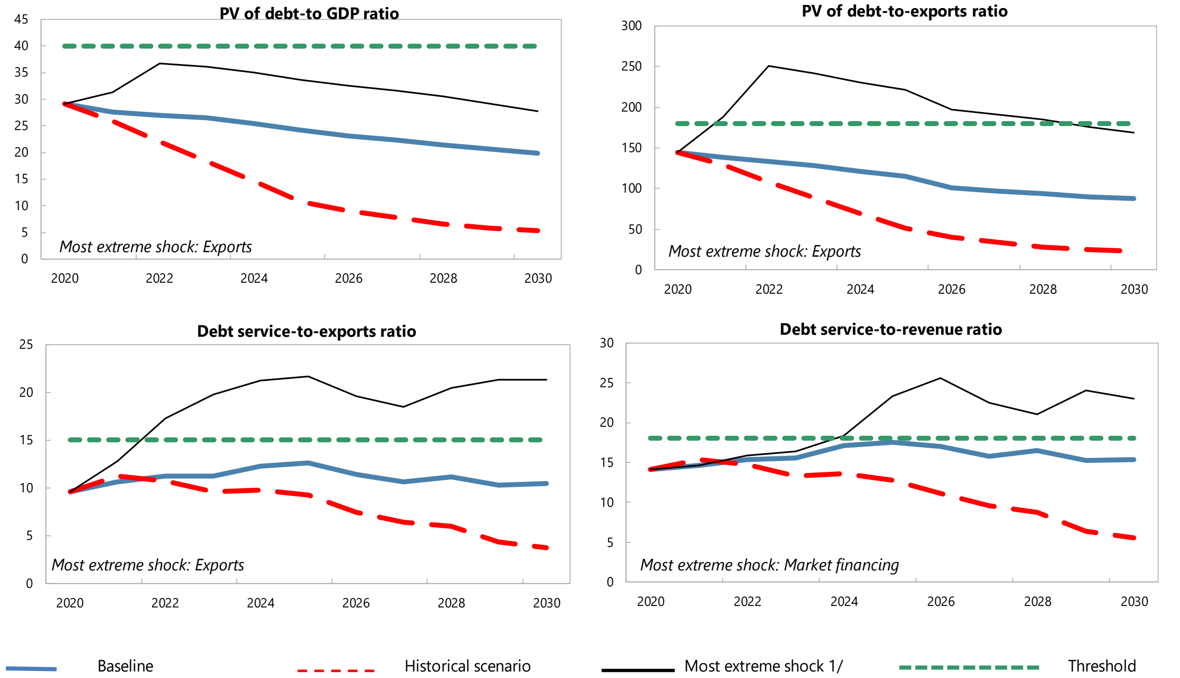
19. This DSA also indicates that the overall risk of debt distress remains moderate, but stress tests highlight high vulnerabilities of external and total debt to shocks. While the overall debt sustainability risk is moderate, the PV of public debt-to-GDP breaches its threshold of 55 percent starting in 2021 under the most extreme shock (growth) arising from the standard stress tests. Three out of four external debt indicators would breach their threshold under the most extreme shock (exports and market financing). Risks have been exacerbated by the COVID environment, as the global growth recovery, and hence that of Ivorien exports, could prove more protracted than currently projected.

20. 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, 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 at mobilizing domestic revenue while remaining committed to containing medium-term public expenditure.

AUTHORITIES' VIEWS

21. The authorities agreed that Côte d'Ivoire remains at moderate risk of debt distress with a limited ability to weather shocks. Their own debt sustainability assessment leads to similar conclusions. They concurred with the importance of balancing recourse to international market and to the regional market. They stressed that their medium-term debt strategy aims at reducing the refinancing and exchange rate risks while lengthening maturities and achieving a balanced portfolio structure in terms of external and domestic debt. They acknowledged the potential crowding-out effect of increasing recourse to the regional market at this time but also flagged concerns with the possible increase in the cost of borrowing in the international capital markets in the current uncertain global context.

Figure 1. Côte d'Ivoire: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2020–30[1/]



Customization of Default Settings	Size	Interactions
Tailored Stress		
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.

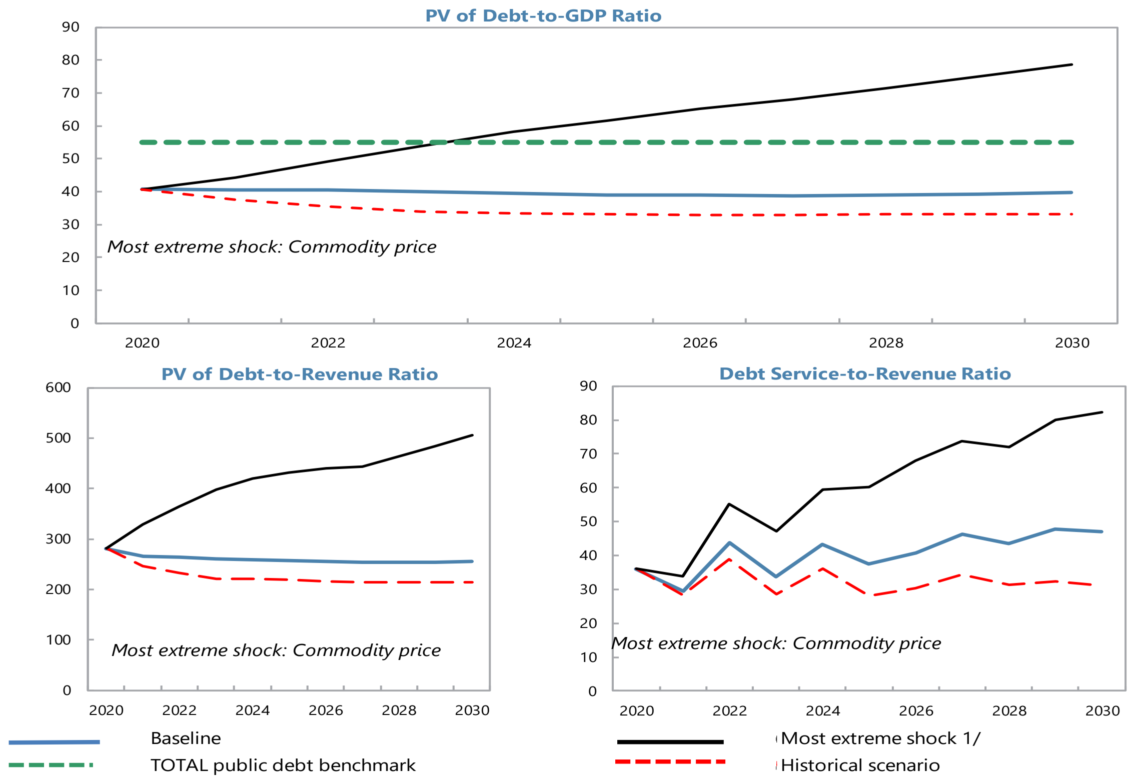
Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	3.2%	7.0%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	16	16
Avg. grace period	6	6

* 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 2030. 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 exterme 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, 2020–30



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	40%	46%
Domestic medium and long-term	54%	42%
Domestic short-term	6%	12%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	3.2%	7.0%
Avg. maturity (incl. grace period)	16	16
Avg. grace period	6	6
Domestic MLT debt		
Avg. real interest rate on new borrowing	4.7%	4.4%
Avg. maturity (incl. grace period)	4	4
Avg. grace period	3	3
Domestic short-term debt		
Avg. real interest rate	4.3%	3.0%

* 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.

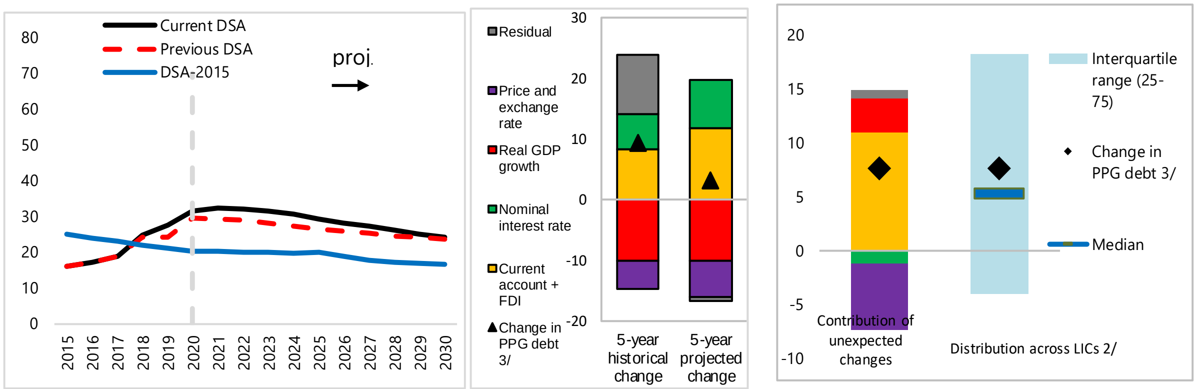
Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2030. 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 exterme 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

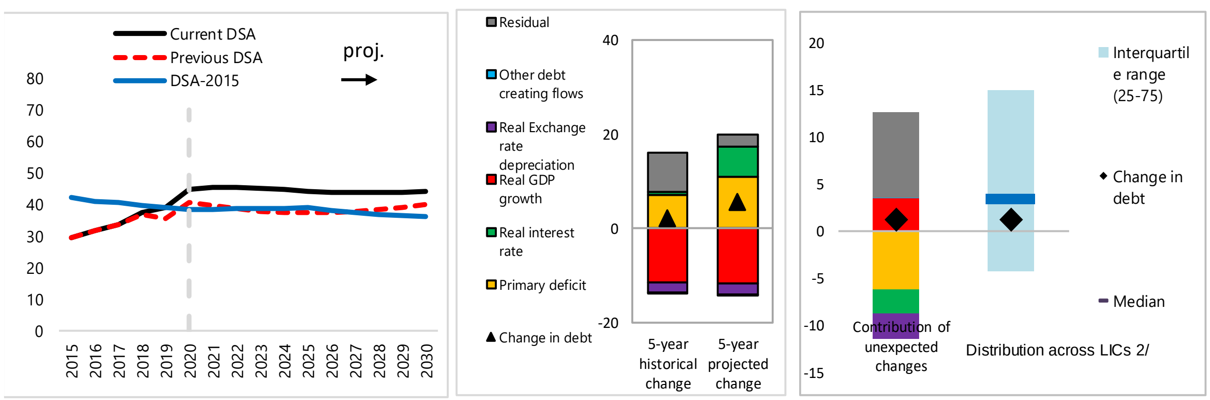
External debt

Gross Nominal PPG External Debt (in percent of GDP; DSA vintages) | Debt-creating flows (percent of GDP) | Unexpected Changes in Debt 1/ (past 5 years, percent of GDP)



Public debt

Gross Nominal Public Debt (in percent of GDP; DSA vintages) | Debt-creating flows (percent of GDP) | Unexpected Changes in Debt 1/ (past 5 years, percent of GDP)

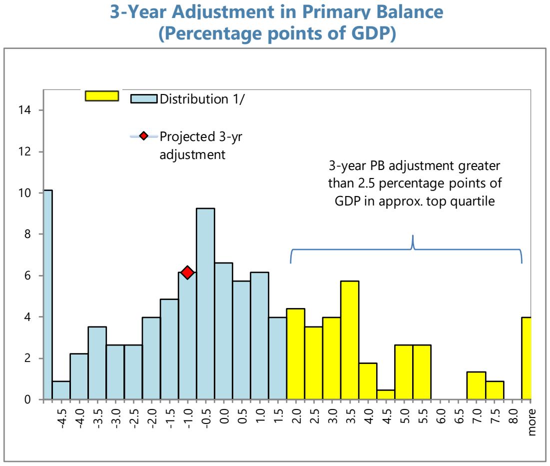


1/ Difference between anticipated and actual contributions on debt ratios.

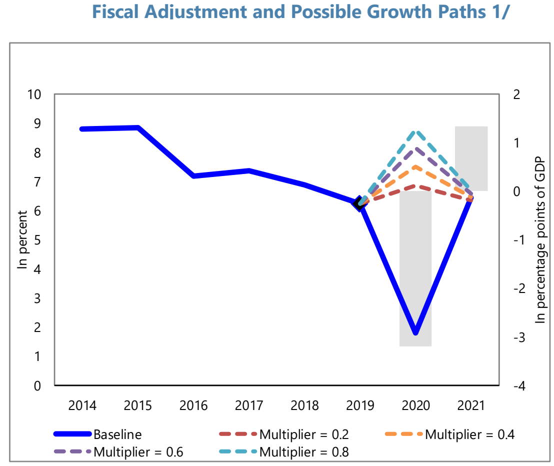
2/ Distribution across LICs for which LIC DSAs were produced.

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.

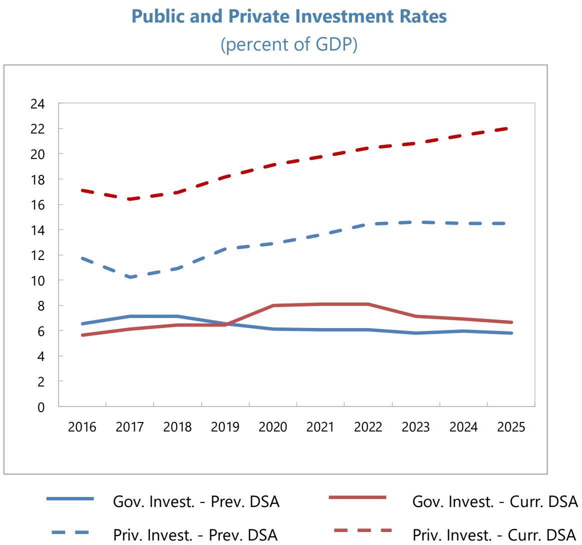
Figure 4. Côte d'Ivoire: Realism Tools



1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.



1/ Bars refer to annual projected fiscal adjustment in terms of primary balance (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).



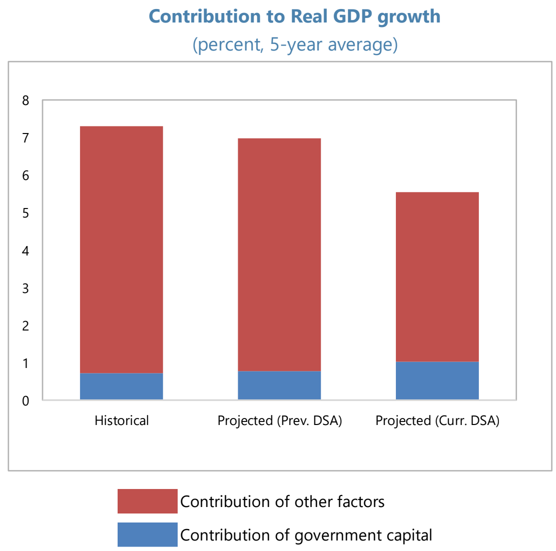
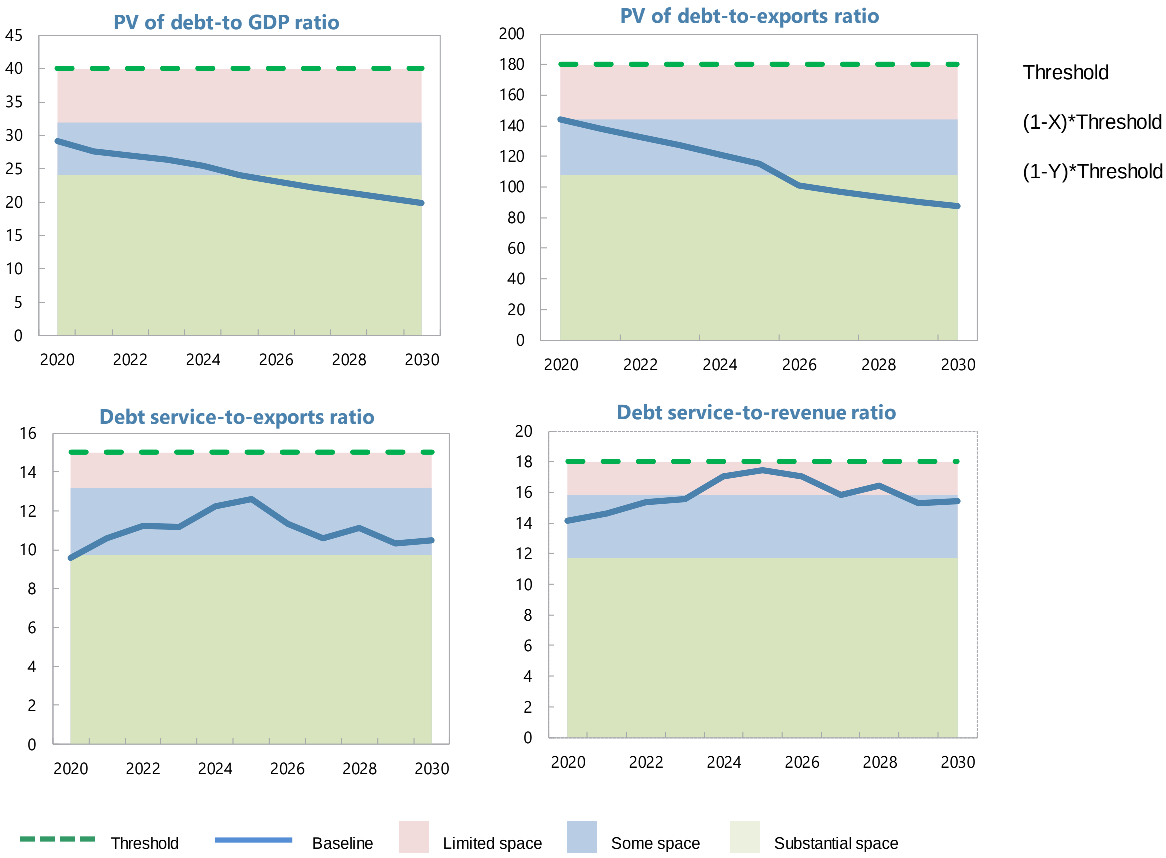


Figure 5. Côte d'Ivoire: Qualification of the Moderate Category, 2020-30[1/]



Sources: Country authorities; and staff estimates and projections.

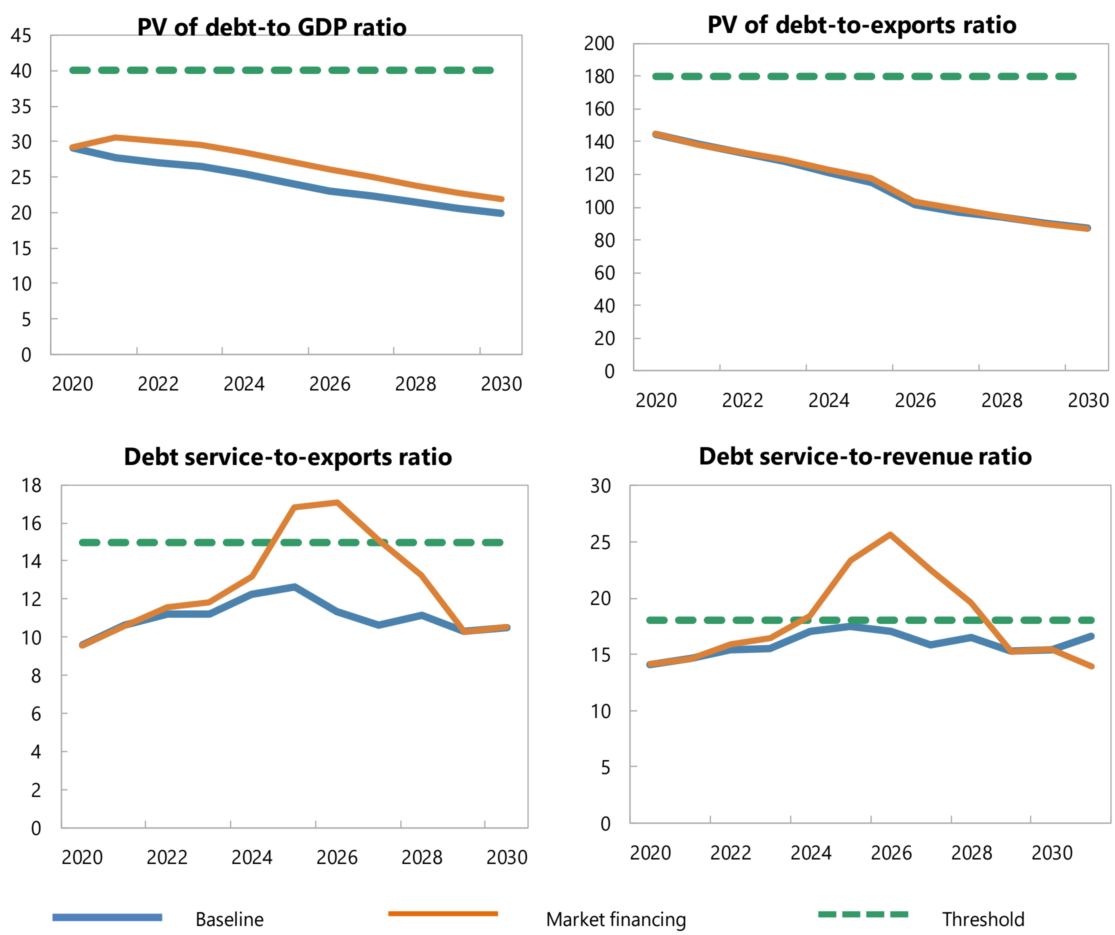
1/ For the PV debt/GDP and PV debt/exports thresholds, x is 20 percent and y is 40 percent. For debt service/Exports and debt service/revenue thresholds, x is 12 percent and y is 35 percent.

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

	GFN 1/	EMBI 2/
Benchmarks	14	570
Values	9	447
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.



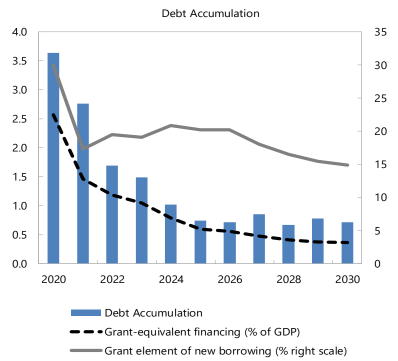
Sources: Country authorities; and staff estimates and projections.

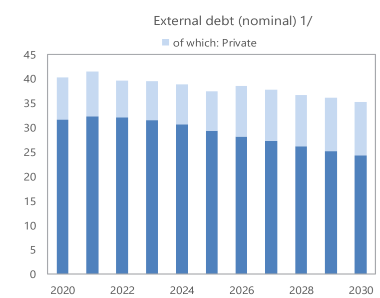
Table 1. Côte d'Ivoire: External Debt Sustainability Framework, Baseline Scenario, 2017–40

(Percent of GDP; unless otherwise indicated)

	Actual			Projections								Average 8/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
External debt (nominal) 1/	**29.4**	**34.0**	**35.2**	**40.2**	**41.5**	**39.5**	**39.5**	**38.8**	**37.4**	**35.2**	**28.0**	**40.9**	**38.3**
of which: public and publicly guaranteed (PPG)	**18.8**	**24.7**	**27.6**	**31.6**	**32.2**	**32.0**	**31.5**	**30.6**	**29.3**	**24.3**	**15.7**	**25.4**	**28.9**
Change in external debt	1.0	4.6	1.2	5.0	1.3	-2.0	-0.1	-0.7	-1.4	-0.9	0.1		
Identified net debt-creating flows	**0.6**	**1.1**	**3.4**	**3.4**	**1.9**	**1.8**	**1.5**	**1.2**	**1.2**	**-0.6**	**0.0**	**-2.2**	**0.7**
Non-interest current account deficit	**0.9**	**2.4**	**1.4**	**2.3**	**2.0**	**1.7**	**1.3**	**1.0**	**1.1**	**-1.4**	**-1.4**	**-1.5**	**0.3**
Deficit in balance of goods and services	-2.0	-0.2	-1.3	0.1	-0.2	-0.7	-1.1	-1.4	-1.5	-3.7	-3.2	**-4.4**	**-2.1**
Exports	24.9	22.5	23.3	20.2	20.0	20.3	20.7	21.0	21.0	22.8	21.2		
Imports	23.0	22.3	22.0	20.3	19.7	19.6	19.5	19.5	19.5	19.1	18.0		
Net current transfers (negative = inflow)	1.0	1.0	1.1	0.9	1.1	1.2	1.2	1.2	1.2	1.1	1.1	**1.3**	**1.1**
of which: official	-0.3	-0.3	-0.5	-0.3	-0.4	-0.4	-0.4	-0.1	0.0	0.0	0.0		
Other current account flows (negative = net inflow)	1.8	1.7	1.6	1.3	1.2	1.2	1.2	1.2	1.3	1.2	0.7	**1.6**	**1.2**
Net FDI (negative = inflow)	**0.6**	**0.8**	**1.0**	**0.1**	**0.5**	**1.0**	**1.0**	**1.0**	**1.0**	**1.3**	**1.8**	**1.1**	**1.0**
Endogenous debt dynamics 2/	**-0.8**	**-2.1**	**1.0**	**1.0**	**-0.6**	**-0.9**	**-0.8**	**-0.8**	**-0.9**	**-0.5**	**-0.4**		
Contribution from nominal interest rate	1.2	1.1	1.3	1.6	1.6	1.6	1.6	1.6	1.4	1.4	1.1		
Contribution from real GDP growth	-1.9	-1.8	-2.1	-0.6	-2.3	-2.5	-2.4	-2.4	-2.3	-1.9	-1.5		
Contribution from price and exchange rate changes	-0.1	-1.5	1.8	...	...	...	...	...	...	...	...		
Residual 3/	**0.3**	**3.4**	**-2.2**	**1.6**	**-0.6**	**-3.7**	**-1.5**	**-1.9**	**-2.6**	**-0.2**	**0.1**	**-2.1**	**-0.7**
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		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	**...**	**...**	**26.9**	**29.1**	**27.6**	**27.0**	**26.4**	**25.4**	**24.2**	**19.9**	**13.0**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**115.1**	**144.5**	**138.3**	**133.0**	**127.8**	**121.2**	**115.2**	**87.3**	**61.1**		
PPG debt service-to-exports ratio	**5.2**	**5.9**	**9.0**	**9.6**	**10.6**	**11.2**	**11.2**	**12.3**	**12.6**	**10.5**	**9.7**		
PPG debt service-to-revenue ratio	**9.0**	**9.5**	**14.8**	**14.1**	**14.6**	**15.4**	**15.6**	**17.1**	**17.5**	**15.4**	**12.7**		
Gross external financing need (Million of U.S. dollars)	3344.6	4463.7	3783.7	2866.4	4094.6	5070.1	3853.1	4489.7	5241.6	7624.8	17751.9		
Key macroeconomic assumptions													
Real GDP growth (in percent)	7.4	6.9	6.2	1.8	6.5	6.5	6.5	6.5	6.5	5.6	5.6	**6.3**	**5.7**
GDP deflator in US dollar terms (change in percent)	0.2	5.2	-5.0	2.7	8.4	2.0	1.2	1.4	1.6	1.6	1.6	**3.0**	**2.3**
Effective interest rate (percent) 4/	4.4	4.4	3.9	4.7	4.7	4.2	4.4	4.4	4.0	4.1	4.1	**3.8**	**4.2**
Growth of exports of G&S (US dollar terms, in percent)	9.0	1.5	4.7	-9.6	14.4	10.4	9.8	9.5	8.3	6.7	4.7	**1.2**	**8.1**
Growth of imports of G&S (US dollar terms, in percent)	10.5	9.2	-0.4	-3.7	12.4	7.6	7.6	8.0	8.2	6.8	7.0	**3.4**	**6.8**
Grant element of new public sector borrowing (in percent)	...	...	...	30.0	17.3	19.5	19.0	20.8	20.2	14.9	14.3	**...**	**19.3**
Government revenues (excluding grants, in percent of GDP)	14.2	14.0	14.2	13.7	14.5	14.8	14.9	15.0	15.1	15.5	16.2	**15.5**	**15.0**
Aid flows (in Million of US dollars) 5/	577.8	589.6	580.3	1905.4	1163.2	1009.1	940.7	697.6	539.3	165.3	18.6		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.6	1.5	1.2	1.0	0.8	0.6	0.4	0.3	**...**	**0.9**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	38.4	31.0	31.8	30.4	26.0	21.9	15.1	14.5	**...**	**24.3**
Nominal GDP (Million of US dollars)	51,588	58,011	58,539	61,213	70,660	76,741	82,733	89,341	96,668	138,209	279,326		
Nominal dollar GDP growth	7.6	12.5	0.9	4.6	15.4	8.6	7.8	8.0	8.2	7.3	7.3	**9.5**	**8.2**
Memorandum items:													
PV of external debt 7/	...	...	34.5	37.8	36.9	34.6	34.4	33.6	32.3	30.9	25.3		
In percent of exports	...	...	148.0	187.5	184.7	170.2	166.2	160.3	153.8	135.3	119.3		
Total external debt service-to-exports ratio	20.2	19.8	17.3	11.4	16.6	19.4	11.6	14.4	15.7	24.8	28.3		
PV of PPG external debt (in Million of US dollars)			15717.9	17843.5	19533.2	20727.9	21867.5	22704.8	23362.4	27532.0	36177.4		
(PVt-PVt-1)/GDPt-1 (in percent)				3.6	2.8	1.7	1.5	1.0	0.7	0.7	0.4		
Non-interest current account deficit that stabilizes debt ratio	-0.1	-2.1	0.1	-2.7	0.7	3.6	1.3	1.6	2.5	-0.6	-1.5		

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





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = 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.

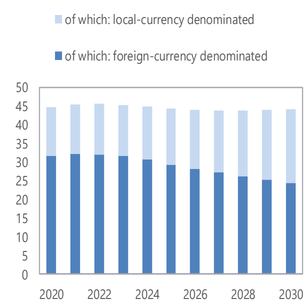
Table 2. Côte d'Ivoire: Public Sector Debt Sustainability Framework, Baseline Scenario, 2017–40

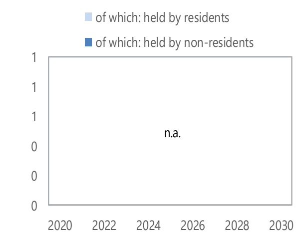
(Percent of GDP; unless otherwise indicated)

	Actual			Projections								Average 6/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
Public sector debt 1/	33.5	37.5	39.1	44.7	45.4	45.6	45.2	44.8	44.3	44.1	48.3	41.0	44.5
of which: external debt	18.8	24.7	27.6	31.6	32.2	32.0	31.5	30.6	29.3	24.3	15.7	25.4	28.9
Change in public sector debt	1.8	4.0	1.6	5.6	0.7	0.2	-0.4	-0.4	-0.5	0.2	0.9		
Identified debt-creating flows	-0.3	1.4	0.5	3.2	0.4	0.3	-0.1	-0.8	-0.7	-0.6	-0.1	-0.8	-0.1
Primary deficit	2.1	1.6	0.8	4.0	2.6	1.8	1.3	1.2	1.3	1.4	1.9	1.3	1.7
Revenue and grants	15.1	14.8	15.0	14.5	15.3	15.4	15.4	15.2	15.2	15.5	16.2	16.4	15.3
of which: grants	0.9	0.8	0.8	0.8	0.8	0.6	0.5	0.2	0.1	0.0	0.0		
Primary (noninterest) expenditure	17.2	16.4	15.8	18.5	18.0	17.1	16.6	16.5	16.5	16.9	18.1	17.7	17.0
Automatic debt dynamics	-2.3	-0.1	-0.2	-0.8	-1.9	-1.5	-1.4	-2.0	-2.0	-2.0	-2.0		
Contribution from interest rate/growth differential	-0.9	-1.3	-1.1	0.9	-1.5	-1.6	-1.1	-2.0	-1.9	-1.5	-1.7		
of which: contribution from average real interest rate	1.3	0.8	1.1	1.6	1.2	1.2	1.7	0.8	0.8	0.8	0.8		
of which: contribution from real GDP growth	-2.2	-2.2	-2.2	-0.7	-2.7	-2.8	-2.8	-2.8	-2.7	-2.3	-2.5		
Contribution from real exchange rate depreciation	-1.4	1.2	0.8	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	-0.1	0.0	0.0	0.0	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Privatization receipts (negative)	-0.1	0.0	0.0	0.0	-0.3	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	2.1	2.5	1.1	2.4	0.3	-0.1	-0.3	0.3	0.2	1.0	1.1	-1.8	0.6
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	38.3	40.8	40.6	40.5	40.0	39.5	39.1	39.7	45.5		
PV of public debt-to-revenue and grants ratio	...	...	254.9	281.2	265.2	263.8	260.5	259.3	257.2	255.5	280.3		
Debt service-to-revenue and grants ratio 3/	13.2	29.1	34.0	36.1	29.5	43.8	33.6	43.2	37.4	47.1	63.2		
Gross financing need 4/	4.0	5.9	5.9	9.2	6.8	8.5	6.4	7.8	7.0	8.7	12.1		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	7.4	6.9	6.2	1.8	6.5	6.5	6.5	6.5	6.5	5.6	5.6	6.3	5.7
Average nominal interest rate on external debt (in percent)	4.1	3.9	3.9	4.4	4.1	4.1	4.0	4.0	3.6	3.6	3.0	3.1	3.8
Average real interest rate on domestic debt (in percent)	7.2	4.3	5.3	7.0	4.8	4.8	4.6	4.5	4.4	4.5	4.5	0.1	4.8
Real exchange rate depreciation (in percent, + indicates depreciation)	-8.8	6.6	3.5	...	...	...	...	...	...	...	...	-0.4	...
Inflation rate (GDP deflator, in percent)	-1.8	0.6	0.2	0.6	0.8	1.0	1.2	1.4	1.6	1.6	1.6	5.7	1.3
Growth of real primary spending (deflated by GDP deflator, in percent)	11.9	1.9	2.6	18.8	3.6	1.7	3.4	5.5	6.6	6.7	9.4	5.5	6.4
Primary deficit that stabilizes the debt-to-GDP ratio 5/	0.3	-2.4	-0.9	-1.6	2.0	1.6	1.6	1.7	1.8	1.1	1.0	-1.0	1.2
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		

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

Public sector debt 1/





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government plus social security, 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 stabilizes 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.

Table 3. Côte d'Ivoire: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2020–30

(Percent)

	Projections 1/										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of debt-to GDP ratio											
Baseline	29.1	27.6	27.0	26.4	25.4	24.1	23.1	22.2	21.4	20.6	19.9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	29.1	25.9	21.9	18.3	14.6	10.7	9.0	7.7	6.4	5.8	5.2
B. Bound Tests											
B1. Real GDP growth	29.1	29.7	31.2	30.5	29.4	27.9	26.7	25.8	24.7	23.9	23.0
B2. Primary balance	29.1	27.9	27.8	27.2	26.2	25.0	24.0	23.2	22.3	21.6	20.8
B3. Exports	29.1	31.3	36.7	36.0	34.9	33.6	32.4	31.6	30.4	29.1	27.8
B4. Other flows 3/	29.1	29.1	29.3	28.7	27.7	26.4	25.3	24.5	23.5	22.6	21.8
B5. Depreciation	29.1	34.2	30.5	29.8	28.6	27.1	25.8	24.8	23.7	22.9	22.2
B6. Combination of B1-B5	29.1	34.8	33.6	32.9	31.8	30.3	29.1	28.1	26.9	25.9	24.9
C. Tailored Tests											
C1. Combined contingent liabilities	29.1	31.9	31.6	31.0	29.9	30.0	29.1	28.3	27.4	27.0	26.4
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	29.1	28.2	28.5	28.3	27.5	26.5	25.6	24.9	24.2	23.6	23.0
C4. Market Financing	29.1	30.6	30.0	29.5	28.5	27.2	26.1	25.0	23.8	22.8	21.8
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	144.4	138.2	132.8	127.5	121.0	114.9	101.1	97.2	93.7	89.9	87.2
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	144.4	129.6	107.9	88.2	69.4	50.8	39.6	33.8	28.3	25.2	22.8
B. Bound Tests											
B1. Real GDP growth	144.4	138.2	132.8	127.5	121.0	114.9	101.1	97.2	93.7	89.9	87.2
B2. Primary balance	144.4	139.6	136.7	131.4	124.7	119.0	105.3	101.3	97.8	94.0	91.4
B3. Exports	144.4	**187.3**	**250.2**	**241.2**	**230.6**	**221.4**	**196.9**	**190.9**	**184.7**	175.7	168.7
B4. Other flows 3/	144.4	145.7	144.3	138.8	132.0	125.8	111.0	107.0	103.1	98.7	95.4
B5. Depreciation	144.4	138.2	121.1	116.1	109.8	103.9	91.1	87.2	83.7	80.6	78.5
B6. Combination of B1-B5	144.4	**183.2**	143.8	**181.9**	173.0	165.0	145.6	140.4	134.5	128.8	124.6
C. Tailored Tests											
C1. Combined contingent liabilities	144.4	159.6	155.7	150.0	142.8	142.7	127.7	123.7	120.1	117.9	115.8
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	144.4	141.6	140.5	136.8	131.4	126.2	112.3	109.0	106.1	102.8	100.7
C4. Market Financing	144.4	138.2	133.3	128.7	122.8	117.3	103.3	98.6	94.2	89.8	86.5
Threshold	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0	180.0
Debt service-to-exports ratio											
Baseline	9.6	10.6	11.2	11.2	12.2	12.6	11.4	10.6	11.1	10.3	10.5
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	9.6	11.2	10.7	9.6	9.7	9.2	7.4	6.4	5.9	4.3	3.7
B. Bound Tests											
B1. Real GDP growth	9.6	10.6	11.2	11.2	12.2	12.6	11.4	10.6	11.1	10.3	10.5
B2. Primary balance	9.6	10.6	11.3	11.5	12.5	12.9	11.6	10.9	11.5	10.7	10.9
B3. Exports	9.6	12.8	17.3	19.8	21.2	21.6	19.5	18.4	20.4	21.3	21.3
B4. Other flows 3/	9.6	10.6	11.7	11.9	13.0	13.3	12.0	11.2	12.1	11.5	11.7
B5. Depreciation	9.6	10.6	11.2	10.4	11.5	11.9	10.7	9.9	10.5	9.0	9.3
B6. Combination of B1-B5	9.6	12.4	16.3	15.7	17.1	17.5	15.8	14.8	16.7	15.1	15.3
C. Tailored Tests											
C1. Combined contingent liabilities	9.6	10.6	12.6	12.6	13.7	14.0	13.0	12.3	12.8	12.0	12.3
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	9.6	10.8	11.6	11.9	13.1	13.6	12.3	11.5	12.2	11.6	11.8
C4. Market Financing	9.6	10.6	11.6	11.8	13.1	16.8	17.1	15.1	13.2	10.3	10.6
Threshold	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Debt service-to-revenue ratio											
Baseline	14.1	14.6	15.4	15.5	17.1	17.5	17.0	15.8	16.4	15.3	15.4
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	14.1	15.4	14.7	13.3	13.5	12.8	11.1	9.6	8.8	6.3	5.5
B. Bound Tests											
B1. Real GDP growth	14.1	15.7	17.8	18.0	**19.8**	**20.2**	**19.7**	**18.3**	**19.0**	17.7	17.8
B2. Primary balance	14.1	14.6	15.6	15.9	17.5	17.8	17.4	16.2	17.0	15.9	16.0
B3. Exports	14.1	14.7	17.1	**19.8**	**21.3**	**21.6**	**21.1**	**19.9**	**21.8**	**22.8**	**22.6**
B4. Other flows 3/	14.1	14.6	16.0	16.5	**18.1**	**18.4**	18.0	16.8	18.0	17.1	17.1
B5. Depreciation	14.1	**18.1**	**19.1**	18.0	**19.9**	**20.4**	**19.9**	**18.4**	**19.2**	16.6	16.9
B6. Combination of B1-B5	14.1	16.2	**19.6**	**19.1**	**20.8**	**21.3**	**20.7**	**19.3**	**21.7**	**19.6**	**19.6**
C. Tailored Tests											
C1. Combined contingent liabilities	14.1	14.6	17.2	17.6	**19.1**	**19.4**	**19.5**	**18.4**	**19.0**	17.8	**18.1**
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	14.1	16.9	**18.2**	**18.8**	**20.1**	**20.0**	**19.0**	17.2	**18.1**	17.2	17.4
C4. Market Financing	14.1	14.6	15.9	16.4	**18.3**	**23.3**	**25.6**	**22.5**	**19.5**	15.2	15.5
Threshold	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0

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, 2020–30

(Percent)

	Projections 1/										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of Debt-to-GDP Ratio											
Baseline	40.7	40.6	40.5	40.0	39.4	39.0	38.8	38.8	39.0	39.2	39.6
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	40.7	37.5	35.5	33.8	33.5	33.1	32.9	32.9	33.0	33.1	33.2
B. Bound Tests											
B1. Real GDP growth	40.7	44.9	50.5	52.3	54.7	**56.9**	**59.6**	**62.7**	**66.1**	**69.5**	**73.1**
B2. Primary balance	40.7	41.2	41.9	41.4	41.4	41.3	41.7	42.2	43.1	44.0	45.1
B3. Exports	40.7	44.0	49.6	49.1	48.5	48.0	47.7	47.6	47.6	47.3	47.1
B4. Other flows 3/	40.7	42.1	42.8	42.3	41.7	41.3	41.1	41.0	41.1	41.2	41.5
B5. Depreciation	40.7	47.1	45.2	43.2	41.7	40.2	39.1	38.4	38.0	37.7	37.6
B6. Combination of B1-B5	40.7	40.1	41.4	41.0	41.2	41.3	41.7	42.4	43.4	44.4	45.6
C. Tailored Tests											
C1. Combined contingent liabilities	40.7	49.9	49.6	49.0	48.9	48.7	48.9	49.5	50.3	51.2	52.2
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	40.7	44.3	49.2	53.7	**58.1**	**61.6**	**65.0**	**68.0**	**71.4**	**74.8**	**78.4**
C4. Market Financing	40.7	40.6	40.6	40.2	39.8	39.5	39.3	39.1	39.1	39.2	39.5
TOTAL public debt benchmark	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
PV of Debt-to-Revenue Ratio											
Baseline	281.1	265.0	263.4	260.0	258.8	256.7	254.3	252.4	252.8	253.6	254.9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	281.1	245.6	231.7	220.8	220.0	218.1	216.0	214.3	214.2	214.1	213.7
B. Bound Tests											
B1. Real GDP growth	281.1	291.6	327.1	338.6	358.1	374.2	390.7	408.2	428.5	449.2	470.3
B2. Primary balance	281.1	269.0	272.8	269.2	271.7	271.8	273.0	275.2	279.6	284.6	290.1
B3. Exports	281.1	287.1	323.3	319.4	318.1	315.5	312.5	310.0	308.7	305.5	303.0
B4. Other flows 3/	281.1	274.7	278.6	275.1	273.9	271.6	269.1	267.0	266.8	266.5	266.9
B5. Depreciation	281.1	309.0	295.2	281.5	273.7	264.3	256.5	250.2	246.5	243.7	241.7
B6. Combination of B1-B5	281.1	262.3	269.6	267.0	270.4	271.4	273.4	276.4	281.6	287.2	293.4
C. Tailored Tests											
C1. Combined contingent liabilities	281.1	325.7	322.9	318.6	320.8	320.3	320.7	322.3	326.3	330.8	335.9
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	281.1	328.5	364.0	396.6	418.9	431.5	439.2	443.1	463.1	483.4	504.2
C4. Market Financing	281.1	265.1	264.1	261.6	261.3	259.9	257.4	254.5	253.7	253.4	253.8
Debt Service-to-Revenue Ratio											
Baseline	36.1	34.5	45.1	39.6	44.5	44.3	45.7	44.4	46.0	47.9	48.8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	36.1	33.0	40.0	33.9	37.2	33.6	34.3	33.0	33.1	32.5	32.1
B. Bound Tests											
B1. Real GDP growth	36.1	37.0	53.3	48.9	55.9	59.3	65.1	65.5	69.2	74.2	78.2
B2. Primary balance	36.1	34.5	45.8	40.7	45.3	46.3	48.0	45.6	47.1	49.5	50.5
B3. Exports	36.1	34.5	46.5	43.5	48.4	48.1	49.5	48.2	51.1	55.1	55.7
B4. Other flows 3/	36.1	34.5	45.7	40.6	45.5	45.3	46.7	45.3	47.6	49.7	50.5
B5. Depreciation	36.1	34.9	47.4	42.0	47.3	47.0	47.4	46.4	47.1	48.1	49.1
B6. Combination of B1-B5	36.1	33.9	46.3	40.9	45.7	45.4	47.8	46.0	47.5	49.3	50.7
C. Tailored Tests											
C1. Combined contingent liabilities	36.1	34.5	55.2	44.2	48.6	67.2	54.9	50.3	51.4	59.1	56.3
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	36.1	39.7	56.5	54.3	61.0	67.9	73.4	71.9	74.6	80.2	84.2
C4. Market Financing	36.1	34.5	45.5	40.4	45.8	50.1	54.2	51.1	49.1	47.9	48.9

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.