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STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION AND FOURTH REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT—DEBT SUSTAINABILITY ANALYSIS

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- *Côte d'Ivoire continues to face a moderate risk of debt distress. The DSA includes a Eurobond equivalent to US$500 million in 2014 that was not in the last DSA.*
- *All debt indicators are below their policy-dependent thresholds under the baseline scenario. However, stress tests and a low-growth DSA point to vulnerability to macroeconomic shocks to exports and growth, and to fiscal performance.*
- *The issuance of a Eurobond in 2014 would lead to a slight deterioration in external public debt indicators, but at the same time help reduce financing risks associated with domestic debt and lengthen the average maturity of overall debt.*
- *A low-growth DSA in which the rate of GDP growth is on average lower by 1.4 percent than in the baseline, would increase public debt from 2013 by 1.5 and 18.5 percentage points to 29.2 and 46.2 percent of GDP by 2018 and 2033, respectively.*
- *A sustainable external position can be maintained through sound macroeconomic policies, the selection of sound projects, and prudent debt management. The low-growth DSA underscores the importance of further strengthening the business climate and investing in sound projects, to crowd in private sector investment and foster activity.*
- *The profile of debt indicators suggests that the buildup of nonconcessional (commercial) debt should be accompanied by prudent debt management; caution is also needed to avoid a bunching of maturities to prevent sizeable peaks, albeit temporary, in debt service payments. Recent steps to strengthen debt management, the adoption of a Medium-Term Debt Strategy, and the reorganization of the Debt Department should help in this regard.*

INTRODUCTION

1. **This debt sustainability analysis (DSA) updates the May 23, 2013 IMF LIC DSA, which was appended to the staff report for the 3rd review under the ECF arrangement; the last joint Bank-Fund DSA was considered by the Board in November 2012 at the 2nd review under the ECF arrangement.**[1] Côte d'Ivoire continues to be assessed at a moderate risk of debt distress. A Eurobond issue in 2014 equivalent to $500 million would lead to a slight deterioration in external public debt indicators, but would reduce domestic financing risks and lengthen the average maturity of debt. An additional DSA shows that if growth rates were lower than projected in the baseline, external debt vulnerability indicators would deteriorate significantly.

BACKGROUND AND ASSUMPTIONS

2. **The stock of public and publicly guaranteed external debt amounted to $7.73 billion at end-2012.** Compared to previous DSAs for Côte d'Ivoire, external debt is defined on a currency basis rather than on a residency basis; this definition is also followed in the DSAs of other WAMU countries.[2] The stock of debt declined from 54.6 percent of GDP at end-2011 to 30.5 percent of GDP at end-2012 (Table 2), primarily reflecting Côte d'Ivoire reaching the Heavily Indebted Countries Initiative (HIPC) completion point in June 2012, and the impact of debt relief under the HIPC and Multilateral Debt Relief Initiatives (MDRI). At end-2012, official bilateral creditors accounted for about half of public and publicly guaranteed external debt, and of this 78 percent is French ODA claims converted into C2D debt-for-development swaps (*Contrats de Désendettement et Développement),* commercial creditors accounted for 34 percent, and multilateral creditors the remainder (Table 1). In late 2012, Côte d'Ivoire had normalized its relations with all its external creditors when commercial creditors agreed to a repayment plan for remaining arrears.

3. **Domestic debt amounted to 18.4 percent of GDP at end-2012.** The stock of domestic debt has trended upward over recent years from 11.2 percent of GDP in 2007 to 18.6 percent at end-2011, of which 5.3 percent of GDP (about CFAF 607 billion) represents the amount of the outstanding stock of T-bills that the BCEAO had rolled over during the post-election crisis. In November 2011 and March 2012, the government and the T-bill holders agreed to restructure this stock into 2-year T-bills, and 3- and 5-year bonds.

4. **The baseline macroeconomic assumptions underlying this DSA are summarized in Box 1 and Text Table 1.** In the staff's baseline projection, growth would be driven by a broad-based increase of private investment, in agriculture, mining, and housing, as well as in food processing and services, supported by public investment in infrastructure and an improvement of the business climate. The expansion in supply would contribute to a continued strong export performance as a result of measures to support agricultural production and processing, and of higher mining output (gold in particular).

[1] The DSA was prepared jointly by the staff of the IMF and World Bank, in collaboration with the authorities of Côte d'Ivoire. The 2012 DSA can be found in (IMF Country Report No. 12/232, Supp. 2, December 12, 2012), and the previous 2013 DSA in (IMF Country Report No. 13/171, Appendix II, June 23, 2013).

[2] For the purposes of the DSA, external debt is defined as debt borrowed or serviced in a currency other than the franc of the African Financial Union (*Communauté Financière Africaine*, FCFA). If defined on the basis of residency external debt at end-2012 would amount to $7.81 billion.

Text Table 1. Côte d'Ivoire LIC DSA Macroeconomic Assumptions: Comparison with the Third ECF Review LIC

(Percent of GDP, unless otherwise indicated)

	3rd ECF Review LIC DSA					Current LIC DSA Update				
	2013	2014	2015	2018	2019-33	2013	2014	2015	2018	2019-33
Nominal GDP ($ billion)[1]	28.4	31.2	34.3	44.2	120.3	28.5	32.1	35.9	48.6	99.4
Real GDP (percentage change)	8.0	8.0	8.1	7.0	5.1	8.7	8.2	8.1	7.0	5.2
Fiscal (central government)										
Revenue and grants	21.3	22.2	22.9	23.1	23.2	21.3	22.0	21.5	22.1	24.1
of which: grants	1.6	1.7	1.6	1.2	0.8	1.7	2.4	2.2	1.8	1.0
Primary expenditure	23.1	24.0	24.7	24.4	25.0	22.6	23.0	23.1	23.9	25.7
of which: Capital expenditure	7.9	8.2	9.0	8.6	9.0	7.2	7.7	8.0	8.7	8.9
Primary fiscal deficit	1.8	1.8	1.8	1.3	2.1	1.3	1.0	1.6	1.7	1.6
Domestic debt	13.3	12.5	12.0	11.5	10.7	14.8	12.7	12.8	12.1	8.6
Balance of payments										
Exports of goods and services	50.5	49.7	47.9	47.4	54.3	51.2	50.7	50.2	53.3	66.8
Imports of goods and services	48.3	47.5	46.7	46.4	56.3	48.0	49.6	50.0	56.1	71.4
Current account, incl. official transfers	-2.9	-2.6	-3.6	-4.2	-6.1	-1.8	-3.1	-3.9	-6.7	-7.0
New external borrowing[2]	2.2	3.8	3.5	2.6	3.0	1.8	3.5	2.7	3.0	2.8
Of which: commercial new borrowing	0.6	0.7	0.7	1.6	1.9	0.0	1.6	0.0	1.3	1.5
Grant element of new external borrowing (%)	14.5	18.6	13.8	1.9	-18.5	49.7	7.9	38.7	27.5	17.0
Net Foreign direct investment	3.0	3.0	3.0	2.9	2.0	3.0	3.0	3.0	2.9	2.2

Sources: Ivoirien authorities; and IMFstaff estimates.

[1] The changes from the third ECF review LIC DSA reflect mostly the revised exchange rate assumptions of CFAF/USD.

[2] Includes publicly guaranteed external borrowing.

Box 1. Côte d'Ivoire: Key Baseline Macroeconomic Assumptions

The baseline macroeconomic framework assumes a stable socio-political situation, high levels of public investment, and a sustained structural reform effort, which would translate into stronger private investment.

- Real GDP is projected to grow by 8.7 percent in 2013, and by 8 percent per year on average over the medium term, before moderating to about 5 percent over the long run. Higher public investment (mainly in infrastructure) and reforms to improve the business climate would crowd in private investment and drive growth.
- Inflation is expected to remain moderate.
- The fiscal position would remain solid, with a primary fiscal deficit of about 1.5 percent of GDP over the period. Total revenue and grants is projected to increase over time from 21.3 percent of GDP in 2013 to 24.1 percent of GDP in 2019–33, as fiscal reforms are brought to fruition. Primary (non-interest) expenditures are projected to increase from 22.6 percent of GDP in 2013 to 25.7 percent of GDP over the long term.

Box 1. Côte d'Ivoire: Key Baseline Macroeconomic Assumptions (concluded)

- The external current account deficit would widen over time, rising to 7 percent of GDP on average in 2019–33 from 1.8 percent of GDP in 2013. This would be partly financed by higher FDI inflows (3 percent of GDP over the medium term, and 2.2 percent of GDP in the long term). Exports of goods and services are expected to increase on average by 11–12 percent per annum and imports by more than 13 percent.
- New external borrowing is projected to average 2.6 percent of GDP in the medium term, and 2.8 percent of GDP in the long run. Grants are expected to decline from 1.7 percent of GDP in 2013 to 0.5 percent of GDP by the end of the projection period, as income per capita grows. The residual external financing need is assumed to be covered by concessional borrowing (from multilateral and bilateral creditors) and commercial borrowing. In addition to a Eurobond equivalent to US$500 million the authorities plan to issue in 2014, 3 large concessional loans amounting to $2.1 billion to finance infrastructure projects (expansion of access to potable water and extension of the Port of Abidjan) and energy (rehabilitation and expansion of the electricity transmission network) are incorporated as new borrowing (disbursements) during 2013–17 (a total equivalent to 5.6 percent of average annual GDP, primarily disbursed in 2015 (1.8 percent of GDP), 2016 (1.6 percent of GDP), and in 2017 (0.9 percent of GDP.) For 2015–18, the main other source of new borrowing is multilateral and official bilateral creditors, but thereafter this source gradually declines to 25 percent by 2033, while borrowing from commercial creditors steadily rises to about 75 percent of total new borrowing during 2029–33.

5. The key changes in the baseline macroeconomic assumptions relative to the third ECF review LIC DSA are as follows:

- Revenue projections have been slightly revised down over the medium term to take into account the higher-than-anticipated cost of tax and customs duties exemptions under the 2012 investment code.
- Expenditure projections have been revised down to reflect: (i) a lower-than-anticipated execution rate of C2D projects; and (ii) the authorities' objectives of reducing the wage bill as a share of tax revenue over the medium term (to meet the WAEMU convergence criterion), and reducing electricity subsidies.
- External borrowing has been revised down on average based on commitments for new external loans under negotiation. In addition, borrowing includes a Eurobond issue equivalent to US$500 million in 2014.
- The composition of external borrowing has been changed to reflect: (i) a Eurobond issue in 2014, which is assumed to be in dollars with a 10-year bullet maturity;[3] (ii) alignment with the authorities Medium-Term Debt Strategy, which includes lower commercial borrowing during 2013–16 than previously assumed, even after taking into account the 2014 Eurobond;

[3] The authorities are exploring options for a Eurobond issuance denominated in a number of different currencies.

and (iii) projected greater access to financing from non-traditional official bilateral creditors, which would result in a lower share of new commercial borrowing over the long term.

- Exports have been revised up based on measures to support agricultural production and processing, and on higher mining prospects. Imports have been revised up based on revised import elasticity assumptions. As a result, the external current account deficit is now projected to be higher than previously expected.

6. **Another change compared to the last DSA is that the discount rate used for calculating present values is higher (5 percent against 3 percent).** This reflects the decision of the IMF and World Bank Boards on October 11, 2013 to use a unified discount rate of 5 percent to calculate the present value of external debt and assess conditionality.

7. **An additional DSA was done to illustrate the impact of a lower growth path on debt indicators (Text Table 2).** This DSA assumes lower growth than in the baseline as a result of a lower efficiency of public investment that also leads to a weaker private sector investment response. In addition, no policy response to the growth shock is assumed. The low-growth DSA shows that under this scenario debt vulnerability would increase considerably: if the rate of GDP growth per year were to be on average lower by 1.7 percent during 2014-2018 and 1.3 percent during the period beyond than in the baseline, then external public debt would increase from 2013 by 1.5 and 18.5 percentage points to 29.2 and 46.2 percent of GDP by 2018 and 2033, respectively. By contrast, under the baseline scenario external public debt as a share of GDP would steadily decline over the projection period.

Text Table 2. Selected Economic Indicators, 2013–33

	Baseline					Lower-growth scenario				
	2013	2014	2015	2018	2019-33	2013	2014	2015	2018	2019-33
Real sector										
Nominal GDP ($ billion)	28.5	32.1	35.9	48.6	99.4	28.5	31.8	35.0	44.6	89.8
Real GDP (percentage change)	8.7	8.2	8.1	7.0	5.2	8.7	7.5	6.5	5.2	3.9
Fiscal (central government)										
Revenue and grants	21.3	22.0	21.5	22.1	24.1	21.3	21.6	21.3	21.0	20.4
Primary expenditure	22.6	23.0	23.1	23.9	25.7	22.6	23.0	23.3	24.8	25.1
Primary fiscal deficit	1.3	1.0	1.6	1.7	1.6	1.3	1.4	2.0	3.8	4.7
Domestic debt	14.8	12.7	12.8	12.1	8.6	14.8	13.0	13.4	14.8	12.4
Balance of payments										
Exports of goods and services	51.2	50.7	50.2	53.3	66.8	51.2	52.1	50.3	46.5	53.7
Imports of goods and services	48.0	49.6	50.0	56.1	71.4	49.5	52.3	49.1	44.9	52.0
Current account, incl. official transfers	-1.8	-3.1	-3.9	-6.7	-7.0	-3.4	-4.4	-3.0	-3.1	-3.0
New external borrowing[1]	1.8	3.5	2.7	3.0	2.8	1.8	3.6	3.1	5.2	6.1
Of which: commercial new borrowing	0.0	1.6	0.0	1.3	1.5	0.0	1.6	0.0	1.4	1.6
Grant element of new external borrowing (%)	49.7	7.9	38.7	27.5	17.0	49.7	7.9	40.3	38.0	33.4
Net Foreign direct investment	3.0	3.0	3.0	2.9	2.2	3.0	2.9	2.7	2.1	1.7

Sources: Ivoirien authorities; and IMFstaff estimates.
[1] Includes publicly guaranteed external borrowing.

EXTERNAL DEBT SUSTAINABILITY ANALYSIS

8. **The results of the external DSA confirm that Côte d'Ivoire's debt dynamics are sustainable (Figures 1 and 2; Tables 2 and 3).**[4] Compared to the last two DSAs, the main change to the results reflects the assumption of a Eurobond issuance in 2014. However, this change does not change Côte d'Ivoire's risk of debt distress, which remains at a moderate level. The stress tests illustrate, as in the last DSA, that Côte d'Ivoire is vulnerable to economic shocks, in particular to negative shocks to growth, exports, net FDI and fiscal performance.[5] This is most clearly illustrated by the historical average scenario and the export and combination shock stress tests. Compared with the last DSA, the baseline debt stock indicators show a slight improvement, while debt service indicators show a deterioration through 2025. This reflects the net impact of (i) an improvement due to the higher discount rate as well as the assumption of lower overall external borrowing and a lower share of commercial borrowing over the long run; and (ii) a deterioration during 2020–25 because of the onset of the amortization payments, stemming from sizeable external borrowing in 2013–17, largely reflecting the financing for large-scale infrastructure and energy projects, as well as the 2014 Eurobond bullet repayment in 2024. While debt service payment debt indicators increase considerably to peak in 2024, debt liabilities from C2D claims potentially offer Côte d'Ivoire some flexibility for managing its debt service during this period.[6] The share in total external debt service paid under C2D is substantial—just over 16 percent of total projected external debt service during 2020-25. However, the profile of C2D debt service can be reviewed periodically by the authorities and the French Development Agency (AFD) to take into account Côte d'Ivoire's capacity to pay and project implementation capacity.

9. **The somewhat worse outlook for external debt service indicators in the baseline and many of debt indicators in the stress tests compared to the last DSA can be attributed in large part to the expected 2014 Eurobond issuance.** For the debt service indicators the deterioration is concentrated in the mid-2020s. The authorities intend to issue the Eurobond in order to lengthen the average maturity of debt, and reduce potential rollover risks for domestic debt—the 10 year Eurobond would be used to substitute for short-term (2–5 year) financing in domestic currency. To offset exchange rate risk on the Eurobond, the authorities intend to hedge against this risk on the bullet repayment. Also, the authorities have sought to increase the average maturity of domestic debt by contracting longer term CFA franc debt from bilateral creditors.

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[4] In the LIC DSA framework Côte d'Ivoire is rated as a weak performer with a Country Policy and Institutional Assessment (CPIA) average rating for 2010–12 of 2.72.

[5] For the alternative scenarios and stress tests, the historical average for the growth rate was adjusted upward, because the period 2000–11 was a period of prolonged political instability and episodes of destructive conflict; the growth rate was abnormally low, on average 1.8 percent per annum.

[6] Under the C2D existing ODA debt service claims (as of the HIPC completion point) are assumed to be re-profiled over 15 years (2012–27), and when they are paid to France an equivalent amount is channeled back to Côte d'Ivoire through matching grants for development spending. Total payments during 2014–27 are projected to amount to $3.86 billion.

10. Under the low-growth DSA both the baseline and stress tests show much worse debt indicators (Figure 3)**.** In the low-growth baseline, the combination of lower growth and fiscal revenues with no offsetting policy adjustments to contain the fiscal deficit results in higher levels of external debt. The impact of this is exacerbated by lower assumed FDI, reflecting less crowding in of private investment, and higher debt service payments, in line with the larger fiscal financing gap. Notably, the ratio of debt service-to-fiscal revenues under the low-growth baseline breaches its threshold, albeit temporarily. Moreover, this debt indicator and the PV of debt-to-GDP ratio remain close to their respective thresholds for much of the projection period. Under the stress tests, debt indicators are again most vulnerable to negative shocks to growth, exports, net FDI and fiscal performance: levels of the indicators are higher with sustained breaches of the policy thresholds observed. Indeed, the vulnerability of debt dynamics to adverse shocks to growth is brought out more strongly in the historical average scenario, where the reduction in the growth rate relative to the baseline non-low-growth DSA is 2.3 percent per year during 2014–18 compared with a shortfall of 1.7 percent per year under the low-growth baseline DSA; in the combination shock stress test the shortfall is 3.9 percent a year. In sum, without any policy adjustment, not only does a weaker growth outlook worsen Côte d'Ivoire's external debt dynamics but also makes its vulnerability to negative shocks to growth much more severe.

PUBLIC DEBT SUSTAINABILITY ANALYSIS

11. With the inclusion of domestic public debt in the analysis, Côte d'Ivoire's debt situation deteriorates modestly. Public debt ratios would look better over the long term owing to the projected improvement in the macroeconomic outlook. Under the baseline scenario, the PV of total public debt would gradually decline from 42.4 percent of GDP in 2013 to 23 percent of GDP at the end of the projection period. As in the external debt analysis, debt service indicators would rise in the medium term before coming down in the long term. Under the low-growth DSA, the baseline value PV of total public debt-to-GDP would be higher by about 3.4 percent of GDP on average during 2014–18, and 15.1 percent during 2019–33, while total debt service-to-revenue ratio would be higher by 1.8 percent of revenue and 5.7 percent, respectively.

CONCLUSIONS

12. Côte d'Ivoire remains at a moderate risk of debt distress. This assessment is similar to that reached under the last DSA in May 2013. In the baseline scenario all debt indicators remain below their respective policy-dependent thresholds. However, the alternative scenarios and stress tests under the baseline reveal the vulnerability of Côte d'Ivoire's external debt outlook to adverse macroeconomic shocks, in particular to exports and growth, as well as to fiscal performance. At the same time, while the 2014 Eurobond pushes up the external debt ratios, it should help reduce vulnerabilities associated with short-term debt and a periodic bunching of maturities arising from restructured post-election crisis arrears. The low-growth DSA illustrates that a failure to realize the projected baseline growth rates would markedly raise Côte d'Ivoire's debt vulnerabilities creating the potential for destabilizing debt dynamics.

13. A sustainable external position can be maintained through sound macroeconomic policies and prudent debt management. The low-growth DSA in particular highlights the need to further strengthen the business climate to increase the potential for a crowding in of complementary private sector investment and activity, as well as the need to ensure public investment in sound projects and improve implementation capacity. The steps being taken to strengthen debt management, notably the adoption of a Medium-Term Debt Strategy and a reorganization of the debt department, are welcome.[7] While Côte d'Ivoire is expected to gradually shift to nonconcessional borrowing as it moves to emerging market status, it should do so as cautiously as possible, to support medium- and long-term sustainability, taking into account in particular the sensitivity of this type of debt to unfavorable changes in interest rates. Côte d'Ivoire should seek to limit the significant bunching of debt service payments as currently projected in the mid-2020s by seeking terms (maturities) on new loans that do not exacerbate this situation.

14. The Côte d'Ivoire authorities broadly agree with the DSA and the tentative conclusions therein. However, they consider that the baseline macroeconomic assumptions presented in this report are on the low side. In particular, the authorities would have appreciated the inclusion of another scenario based on a higher economic growth driven by a stronger level of private and public investments more in line with their objective to transform Côte d'Ivoire into an emerging country by 2020 and halving poverty by 2015. The authorities feel that they are implementing appropriate measures in order to improve the business climate, domestic and external resource mobilization, broaden the tax base, increase the fiscal revenues, and ultimately increase the investment's absorption capacity while adopting a prudent attitude vis-à-vis current spending. They are convinced that their policies will lead to higher public revenue and investment expenditure while building at the same time a solid macroeconomic environment and debt sustainability.

The authorities welcome the staff' suggestions and policy recommendations made in the present DSA exercise. The authorities are committed to following a sustainable public debt management policy, maintaining a solid macroeconomic environment, and continuing to implement far-reaching structural policies.

[7] The reorganization of the Debt department entails the establishment of a back-, middle-, and front-office structure.

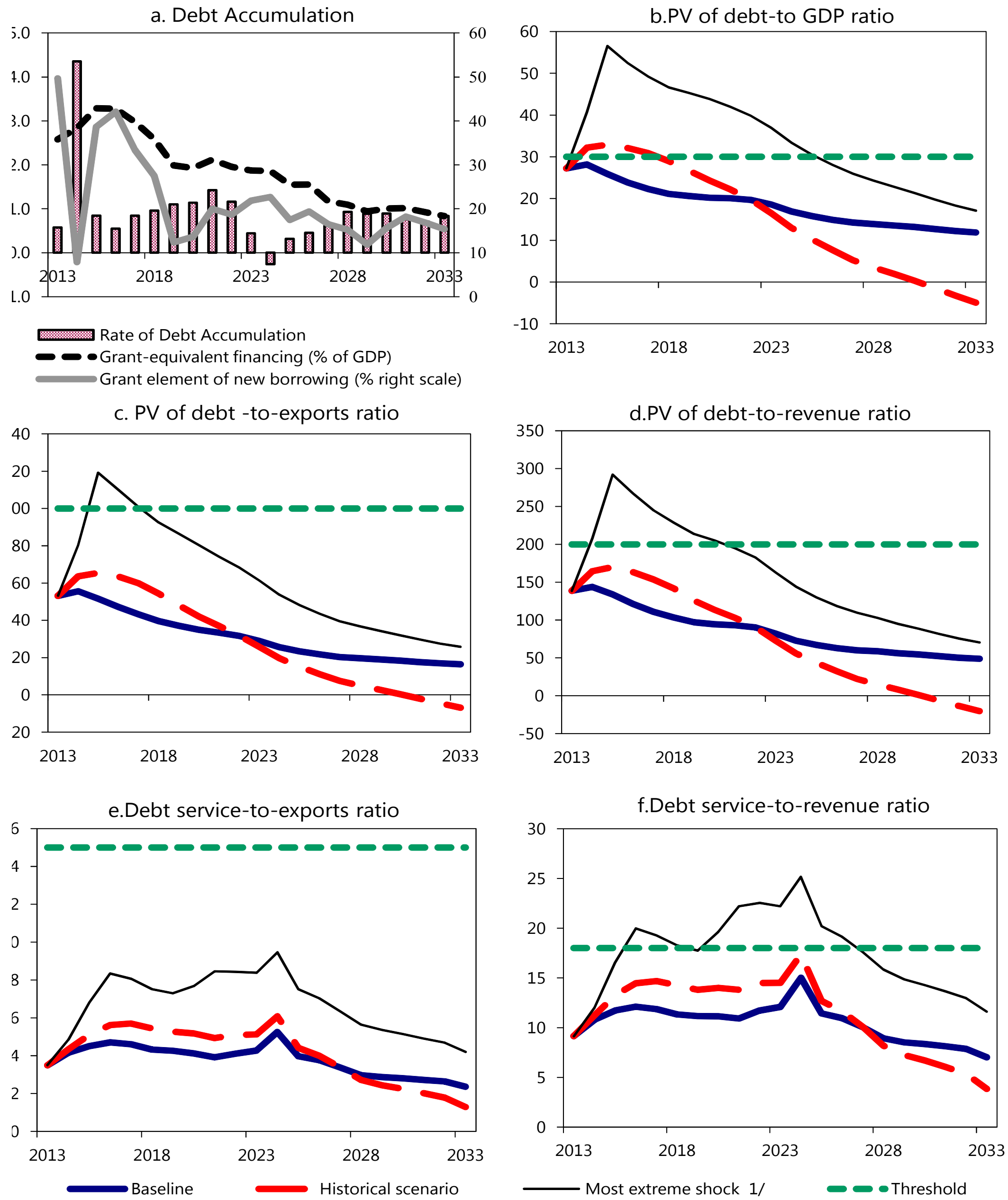
Table 1. Côte d'Ivoire: Structure of External Debt

(As of end-2012, nominal)

	Million US dollars	Percent of total	Percent of GDP
Total	**7,730**	**100.0**	**30.5**
Multilateral creditors	**1,265**	**16.4**	**5.0**
IMF	774	**10.0**	**3.1**
World Bank	119	**1.5**	**0.5**
AfDB group	44	**0.6**	**0.2**
Other multilaterals	328	**4.2**	**1.3**
Official bilateral creditors	**3,845**	**49.7**	**15.2**
Paris Club	3,693	**47.8**	**14.6**
Non-Paris Club	153	**2.0**	**0.6**
Commercial creditors	**2,619**	**33.9**	**10.3**
Eurobond	2,604	**33.7**	**10.3**
Other commercials	15	**0.2**	**0.1**

Sources : Ivoirien authorities; and IMF staff estimates.

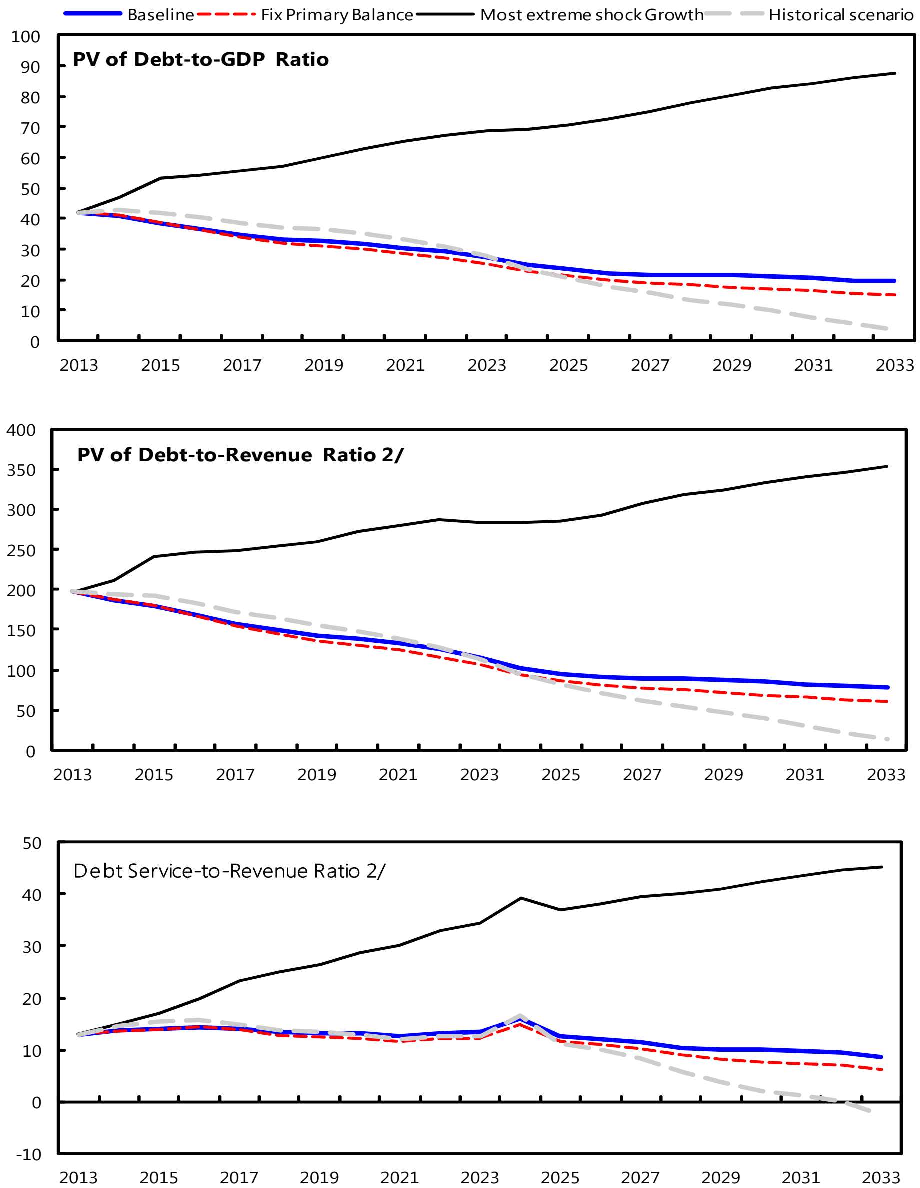
Figure 1. Côte d'Ivoire: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2013–33[1]



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2023. In figure b. it corresponds to a Combination shock; in c. to a Exports shock; in d. to a Combination shock; in e. to a Exports shock and in figure f. to a Combination shock

Figure 2 : Côte d'Ivoire: Indicators of Public Debt Under Alternative Scenarios, 2013–33[1]



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2023.

2/ Revenues are defined inclusive of grants.

Table 2a. Côte d'Ivoire: External Debt Sustainability Framework, Baseline Scenario, 2010–33[1]

(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average	Standard Deviation	Projections								
	2010	2011	2012			2013	2014	2015	2016	2017	2018	2013-2018 Average	2023	2033	2019-2033 Average
External debt (nominal) 1/	**76.1**	**76.4**	**50.9**			**45.0**	**43.5**	**40.0**	**37.0**	**34.5**	**32.5**		**27.1**	**16.5**	
o/w public and publicly guaranteed (PPG)	50.4	54.6	30.5			27.6	28.2	26.6	25.2	24.1	23.2		21.5	15.3	
Change in external debt	-4.9	0.3	-25.5			-5.9	-1.6	-3.5	-3.0	-2.5	-2.1		-1.4	-0.7	
Identified net debt-creating flows	-5.4	-17.5	-2.3			-4.9	-3.1	-2.1	-0.6	0.5	1.7		3.6	4.2	
Non-interest current account deficit	**-4.1**	**-14.9**	**-0.2**	**-5.9**	**4.0**	**0.2**	**1.7**	**2.5**	**3.8**	**4.7**	**5.6**		**6.3**	**6.2**	6.1
Deficit in balance of goods and services	-8.3	-19.8	-5.2			-3.2	-1.1	-0.3	1.0	1.9	2.8		4.5	5.9	
Exports	54.2	57.7	52.8	51.0		51.2	50.7	50.2	50.5	51.6	53.3	51.3	64.1	71.9	
Imports	45.9	37.9	47.6	41.4		48.0	49.6	50.0	51.5	53.5	56.1	51.4	68.6	77.8	
Net current transfers (negative = inflow)	1.6	2.5	2.4	2.2	1.1	1.2	0.4	0.5	0.6	0.6	0.6		0.2	-0.6	0.0
o/w official	-0.7	-0.1	-0.1			-1.4	-2.2	-1.9	-1.8	-1.7	-1.5		-1.0	-0.2	
Other current account flows (negative = net inflow)	2.6	2.4	2.6			2.3	2.4	2.2	2.2	2.2	2.2		1.7	0.9	
Net FDI (negative = inflow)	**-1.4**	**-1.1**	**-1.8**	**-1.7**	**0.3**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-2.9**		**-2.5**	**-1.7**	-2.2
Endogenous debt dynamics 2/	**0.1**	**-1.5**	**-0.3**			**-2.2**	**-1.9**	**-1.6**	**-1.4**	**-1.3**	**-1.0**		**-0.2**	**-0.3**	
Contribution from nominal interest rate	1.7	2.1	1.6			1.7	1.4	1.5	1.4	1.2	1.2		1.1	0.5	
Contribution from real GDP growth	-1.9	3.4	-7.3			-3.9	-3.3	-3.1	-2.8	-2.5	-2.2		-1.3	-0.8	
Contribution from price and exchange rate changes	0.3	-7.0	5.4			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**0.5**	**17.8**	**-23.1**			**-1.0**	**1.5**	**-1.4**	**-2.4**	**-2.9**	**-3.8**		**-5.0**	**-4.9**	
o/w exceptional financing	-2.6	-0.1	-20.5			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	50.8			44.7	43.4	39.3	35.7	32.7	30.4		24.1	13.1	
In percent of exports	...	...	96.3			87.3	85.7	78.3	70.7	63.4	57.0		37.6	18.2	
PV of PPG external debt	**...**	**...**	**30.4**			**27.2**	**28.1**	**25.9**	**23.8**	**22.3**	**21.1**		**18.6**	**11.9**	
In percent of exports	**...**	**...**	**57.6**			**53.2**	**55.6**	**51.6**	**47.2**	**43.1**	**39.6**		**29.0**	**16.5**	
In percent of government revenues	**...**	**...**	**150.7**			**138.8**	**143.8**	**133.9**	**121.4**	**111.0**	**103.5**		**82.0**	**48.8**	
Debt service-to-exports ratio (in percent)	**14.3**	**26.5**	**10.1**			**7.5**	**7.5**	**7.7**	**8.0**	**7.6**	**6.9**		**5.9**	**3.2**	
PPG debt service-to-exports ratio (in percent)	**3.3**	**5.0**	**1.9**			**3.5**	**4.2**	**4.5**	**4.7**	**4.6**	**4.3**		**4.3**	**2.4**	
PPG debt service-to-revenue ratio (in percent)	**9.2**	**19.4**	**5.1**			**9.1**	**10.8**	**11.7**	**12.1**	**11.9**	**11.3**		**12.1**	**7.0**	
Total gross financing need (Billions of U.S. dollars)	1.5	0.8	1.7			1.2	1.7	2.0	2.8	3.3	3.9		6.1	12.2	
Non-interest current account deficit that stabilizes debt ratio	0.8	-15.3	25.3			6.1	3.3	5.9	6.8	7.2	7.6		7.8	6.9	
Key macroeconomic assumptions															
Real GDP growth (in percent)	2.4	-4.7	9.8	1.8	3.7	8.7	8.2	8.1	7.8	7.5	7.0	7.9	5.1	5.1	5.2
GDP deflator in US dollar terms (change in percent)	-0.4	10.1	-6.6	6.5	9.5	6.0	4.0	3.6	3.1	3.1	2.9	3.8	2.9	5.0	3.5
Effective interest rate (percent) 5/	2.2	2.9	2.1	2.9	0.6	3.8	3.5	3.9	3.8	3.7	3.7	3.7	4.2	3.3	3.8
Growth of exports of G&S (US dollar terms, in percent)	8.6	11.6	-6.1	8.8	8.2	11.9	11.4	11.0	11.6	13.3	13.6	12.1	11.7	10.2	11.1
Growth of imports of G&S (US dollar terms, in percent)	20.0	-13.4	28.7	12.7	14.7	16.3	16.4	12.7	14.6	15.1	15.4	15.1	12.0	10.5	11.3
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	49.7	7.9	38.7	42.1	33.4	27.5	33.2	21.9	15.4	17.0
Government revenues (excluding grants, in percent of GDP)	19.2	14.9	20.2			19.6	19.6	19.4	19.6	20.1	20.4		22.7	24.3	23.1
Aid flows (in Billions of US dollars) 6/	0.1	0.1	0.2			0.9	1.2	1.1	1.3	1.5	1.7		1.9	2.7	
o/w Grants	0.1	0.1	0.2			0.5	0.8	0.8	0.8	0.9	0.9		0.9	0.9	
o/w Concessional loans	0.0	0.0	0.0			0.4	0.4	0.3	0.5	0.6	0.8		1.0	1.8	
Grant-equivalent financing (in percent of GDP) 7/	...	...	...			2.6	2.8	3.3	3.3	3.0	2.6		1.9	0.8	1.5
Grant-equivalent financing (in percent of external financing) B99	...	...	...			73.7	37.3	65.2	65.9	59.1	54.5		45.6	30.5	37.9
Memorandum items:															
Nominal GDP (Billions of US dollars)	23.0	24.1	24.7			28.5	32.1	35.9	39.9	44.2	48.6		70.9	173.9	
Nominal dollar GDP growth	2.1	4.9	2.5			15.3	12.6	11.9	11.1	10.8	10.1	12.0	8.1	10.3	8.9
PV of PPG external debt (in Billions of US dollars)			7.7			7.8	9.1	9.4	9.5	9.9	10.3		13.2	20.5	
(PVt-PVt-1)/GDPt-1 (in percent)						0.6	4.4	0.8	0.5	0.8	1.0	1.4	0.4	0.8	0.8
Gross remittances (Billions of US dollars)	-0.5	-0.6	-0.6			-0.7	-0.8	-0.9	-0.9	-1.0	-1.0		-0.8	0.7	
PV of PPG external debt (in percent of GDP + remittances)	...	...	31.2			28.0	28.9	26.6	24.4	22.8	21.6		18.8	11.8	
PV of PPG external debt (in percent of exports + remittances)	...	...	60.5			56.0	58.5	54.3	49.5	45.1	41.2		29.5	16.4	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	2.0			3.7	4.4	4.7	4.9	4.8	4.5		4.4	2.4	

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

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

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

7/ 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).

Table 2b. Côte d'Ivoire: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2013–33

(In Percent)

	Projections							
	2013	2014	2015	2016	2017	2018	**2023**	2033
PV of debt-to GDP ratio								
Baseline	27	28	26	24	22	21	**19**	12
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 [1/]	27	32	33	32	31	29	**17**	-5
A2. New public sector loans on less favorable terms in 2013-2033 [2/]	27	28	27	26	24	24	**26**	23
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	27	30	29	27	25	24	**21**	13
B2. Export value growth at historical average minus one standard deviation in 2014-2015 [3/]	27	35	44	41	39	36	**29**	14
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	27	32	32	30	28	26	**23**	14
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 [4/]	27	32	34	31	29	28	**23**	12
B5. Combination of B1-B4 using one-half standard deviation shocks	27	41	57	52	49	47	**37**	17
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 [5/]	27	40	36	33	31	29	**26**	16
PV of debt-to-exports ratio								
Baseline	53	56	52	47	43	40	**29**	16
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 [1/]	53	64	65	64	60	54	**26**	-7
A2. New public sector loans on less favorable terms in 2013-2033 [2/]	53	54	54	51	47	45	**40**	32
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	53	56	52	47	43	39	**28**	16
B2. Export value growth at historical average minus one standard deviation in 2014-2015 [3/]	53	80	119	110	101	93	**61**	26
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	53	56	52	47	43	39	**28**	16
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 [4/]	53	64	67	62	56	52	**36**	17
B5. Combination of B1-B4 using one-half standard deviation shocks	53	81	114	105	96	88	**58**	24
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 [5/]	53	56	52	47	43	39	**28**	16
PV of debt-to-revenue ratio								
Baseline	139	144	134	121	111	104	**82**	49
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 [1/]	139	165	170	163	154	142	**73**	-20
A2. New public sector loans on less favorable terms in 2013-2033 [2/]	139	141	139	130	122	118	**113**	94
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	139	154	151	137	125	116	**91**	54
B2. Export value growth at historical average minus one standard deviation in 2014-2015 [3/]	139	178	229	209	192	179	**128**	56
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	139	161	167	150	137	128	**100**	59
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 [4/]	139	166	175	159	145	135	**101**	51
B5. Combination of B1-B4 using one-half standard deviation shocks	139	208	292	267	245	229	**163**	70
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 [5/]	139	203	188	170	155	144	**113**	67

Table 2b. Côte d'Ivoire: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2013–33 (concluded)

(In percent)

Debt service-to-exports ratio								
Baseline	4	4	5	5	5	4	**4**	2
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	4	4	5	6	6	5	**5**	1
A2. New public sector loans on less favorable terms in 2013-2033 2/	4	4	4	4	4	4	**3**	3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	4	4	5	5	5	4	**4**	2
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	4	5	7	8	8	8	**8**	4
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	4	4	5	5	5	4	**4**	2
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	4	4	5	5	5	5	**5**	3
B5. Combination of B1-B4 using one-half standard deviation shocks	4	5	6	8	8	7	**8**	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	4	4	5	5	5	4	**4**	2
Debt service-to-revenue ratio								
Baseline	9	11	12	12	12	11	**12**	7
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	9	11	13	14	15	14	**15**	4
A2. New public sector loans on less favorable terms in 2013-2033 2/	9	11	11	11	11	11	**10**	10
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	9	11	13	14	13	13	**14**	8
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	9	11	13	16	15	15	**18**	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	9	12	15	15	15	14	**15**	9
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	9	11	13	14	13	13	**14**	8
B5. Combination of B1-B4 using one-half standard deviation shocks	9	12	17	20	19	18	**22**	12
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	9	15	16	17	17	16	**17**	10
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	7	7	7	7	7	7	**7**	7

Sources: Country authorities; and staff estimates and projections.

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

2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.

3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

4/ Includes official and private transfers and FDI.

5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.

6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 3a. Côte d'Ivoire: Public Sector Debt Sustainability Framework, Baseline Scenario, 2010–33

(In percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2010	2011	2012	Average	Standard Deviation	2013	2014	2015	2016	2017	2018	2013-18 Average	2023	2033	2019-33 Average
Public sector debt [1/]	68.2	73.2	48.9			42.4	41.0	39.4	38.0	36.5	35.3		30.3	23.0	
o/w foreign-currency denominated	50.6	54.9	30.7			27.6	28.2	26.6	25.2	24.1	23.2		21.5	15.3	
Change in public sector debt	0.8	5.1	-24.3			-6.5	-1.5	-1.5	-1.4	-1.5	-1.2		-1.5	-0.4	
Identified debt-creating flows	-1.0	4.3	-24.4			-2.9	-2.1	-1.1	-0.7	-0.5	-0.2		0.2	0.5	
Primary deficit	1.3	2.5	2.4	0.5	1.3	1.3	1.0	1.6	1.7	1.8	1.7	1.5	1.3	1.8	1.6
Revenue and grants	19.7	15.2	20.8			21.3	22.0	21.5	21.7	22.0	22.1	21.8	23.9	24.8	24.1
of which: grants	0.5	0.3	0.6			1.7	2.4	2.2	2.0	1.9	1.8		1.2	0.5	
Primary (noninterest) expenditure	21.0	17.7	23.2			22.6	23.0	23.1	23.4	23.8	23.9	23.3	25.2	26.5	25.7
Automatic debt dynamics	0.3	1.9	-6.2			-4.2	-3.1	-2.7	-2.4	-2.2	-1.9		-1.1	-1.3	
Contribution from interest rate/growth differential	-1.4	3.6	-6.7			-3.4	-2.6	-2.2	-2.0	-2.0	-1.7		-0.9	-0.9	
of which: contribution from average real interest rate	0.2	0.2	-0.2			0.5	0.7	0.9	0.8	0.7	0.6		0.6	0.2	
of which: contribution from real GDP growth	-1.6	3.4	-6.5			-3.9	-3.2	-3.1	-2.8	-2.6	-2.4		-1.5	-1.1	
Contribution from real exchange rate depreciation	1.6	-1.7	0.5			-0.7	-0.5	-0.5	-0.4	-0.3	-0.2		...	...	
Other identified debt-creating flows	-2.6	-0.1	-20.5			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
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 implicit or contingent liabilities	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)	-2.6	-0.1	-20.5			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, 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	
Residual, including asset changes	1.7	0.8	0.0			-3.6	0.6	-0.4	-0.7	-1.0	-1.0		-1.6	-0.9	
Other Sustainability Indicators															
PV of public sector debt	...	...	48.8			42.0	40.9	38.8	36.7	34.7	33.2		27.4	19.6	
o/w foreign-currency denominated	...	...	30.6			27.2	28.1	25.9	23.8	22.3	21.1		18.6	11.9	
o/w external	...	...	30.4			27.2	28.1	25.9	23.8	22.3	21.1		18.6	11.9	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need [2/]	4.2	6.8	4.4			4.0	4.0	4.6	4.8	4.8	4.7		4.5	3.9	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	234.6			197.4	185.9	180.0	169.2	157.6	150.0		114.4	79.0	
PV of public sector debt-to-revenue ratio (in percent)	...	...	242.1			214.2	208.9	200.3	186.8	172.9	162.9		120.7	80.6	
o/w external [3/]	...	...	150.7			138.8	143.8	133.9	121.4	111.0	103.5		82.0	48.8	
Debt service-to-revenue and grants ratio (in percent) [4/]	14.3	27.9	9.7			12.9	13.7	13.9	14.2	13.9	13.4		13.5	8.6	
Debt service-to-revenue ratio (in percent) [4/]	14.7	28.4	10.0			14.0	15.4	15.4	15.7	15.3	14.6		14.2	8.8	
Primary deficit that stabilizes the debt-to-GDP ratio	0.6	-2.5	26.7			7.8	2.5	3.1	3.1	3.3	3.0		2.7	2.2	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	2.4	-4.7	9.8	1.8	3.7	8.7	8.2	8.1	7.8	7.5	7.0	7.9	5.1	5.1	5.2
Average nominal interest rate on forex debt (in percent)	0.7	1.9	0.9	1.7	0.6	2.7	2.3	3.0	3.0	2.9	2.9	2.8	3.9	3.1	3.4
Average real interest rate on domestic debt (in percent)	2.6	-0.5	2.7	1.1	2.0	1.3	3.2	3.9	3.9	3.6	3.8	3.3	2.5	1.1	2.3
Real exchange rate depreciation (in percent, + indicates depreciation)	3.1	-3.2	1.0	-0.5	7.4	-2.6	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	1.8	5.0	1.1	2.9	2.4	2.9	2.2	2.2	2.0	2.1	1.9	2.2	2.9	5.0	3.5
Growth of real primary spending (deflated by GDP deflator, in percent)	0.1	-0.2	0.4	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Grant element of new external borrowing (in percent)	...	...	...	...	...	49.7	7.9	38.7	42.1	33.4	27.5	33.2	21.9	15.4	...

Sources: Country authorities; and staff estimates and projections.

[1/] The public sector includes the central government and select public enterprises.

[2/] 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.

[3/] Revenues excluding grants.

[4/] Debt service is defined as the sum of interest and amortization of medium and long-term debt.

Table 3b. Côte d'Ivoire: Sensitivity Analysis for Key Indicators of Public Debt, 2013–33

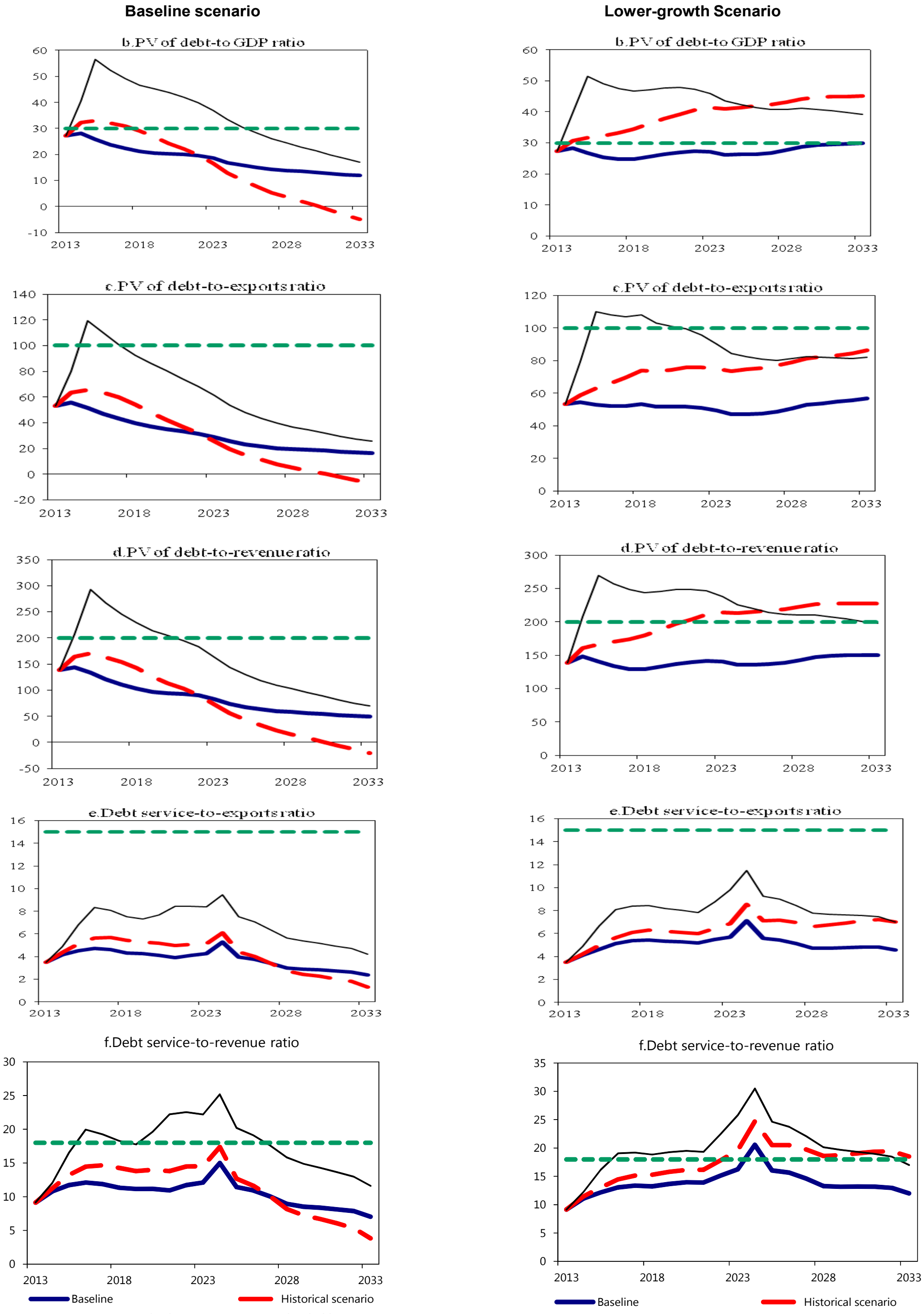
	Projections							
	2013	2014	2015	2016	2017	2018	2023	2033
PV of Debt-to-GDP Ratio								
Baseline	42	41	39	37	35	33	27	20
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	42	43	42	40	39	37	28	4
A2. Primary balance is unchanged from 2013	42	41	39	36	34	32	25	15
A3. Permanently lower GDP growth [1/]	42	41	40	38	37	37	38	54
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-2015	42	47	53	54	56	57	69	88
B2. Primary balance is at historical average minus one standard deviations in 2014-2015	42	42	40	37	35	34	28	20
B3. Combination of B1-B2 using one half standard deviation shocks	42	44	45	45	46	48	56	71
B4. One-time 30 percent real depreciation in 2014	42	52	48	45	43	40	34	26
B5. 10 percent of GDP increase in other debt-creating flows in 2014	42	50	48	45	43	41	34	24
PV of Debt-to-Revenue Ratio [2/]								
Baseline	197	186	180	169	158	150	114	79
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	197	194	192	183	172	164	113	14
A2. Primary balance is unchanged from 2013	197	187	180	167	154	145	106	61
A3. Permanently lower GDP growth [1/]	197	188	184	176	168	165	157	217
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-2015	197	212	242	246	248	254	284	353
B2. Primary balance is at historical average minus one standard deviations in 2014-2015	197	189	184	173	161	153	117	80
B3. Combination of B1-B2 using one half standard deviation shocks	197	199	204	207	207	212	233	286
B4. One-time 30 percent real depreciation in 2014	197	235	225	209	193	183	141	105
B5. 10 percent of GDP increase in other debt-creating flows in 2014	197	229	222	208	194	184	141	96
Debt Service-to-Revenue Ratio [2/]								
Baseline	13	14	14	14	14	13	13	9
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	13	15	15	16	15	14	13	-3
A2. Primary balance is unchanged from 2013	13	14	14	14	14	13	12	6
A3. Permanently lower GDP growth [1/]	13	14	14	15	15	15	18	26
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-2015	13	15	17	20	23	25	34	45
B2. Primary balance is at historical average minus one standard deviations in 2014-2015	13	14	14	15	15	14	14	9
B3. Combination of B1-B2 using one half standard deviation shocks	13	15	16	16	16	19	28	36
B4. One-time 30 percent real depreciation in 2014	13	16	18	19	20	20	22	19
B5. 10 percent of GDP increase in other debt-creating flows in 2014	13	14	16	24	23	17	17	11

Sources: Country authorities; and staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.

2/ Revenues are defined inclusive of grants.

Figure 3. Côte d'Ivoire: External LLIC DSA: Baseline Versus Lower-Growth DSA Scenarios



Sources: The Cote d'Ivoire authorities; and IMF staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio in 2023. For both the LIC DSA shown, figures b, c, d, e. and f correspond to a combination shock.