INTERNATIONAL MONETARY FUND AND
INTERNATIONAL DEVELOPMENT ASSOCIATION

CAMEROON

Joint IMF/World Bank Debt Sustainability Analysis

Prepared by the Staffs of the International Monetary Fund and
the World Bank

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This note assesses the sustainability of Cameroon's external public debt and total public debt based on the joint IMF-World Bank debt sustainability framework for low-income countries.[1] *Although Cameroon has been downgraded to a "weak policy performer" based on the most recent CPIA data, its external debt remains at a low risk of debt distress. Public debt indicators are also expected to remain low throughout the projection period.*

I. Background

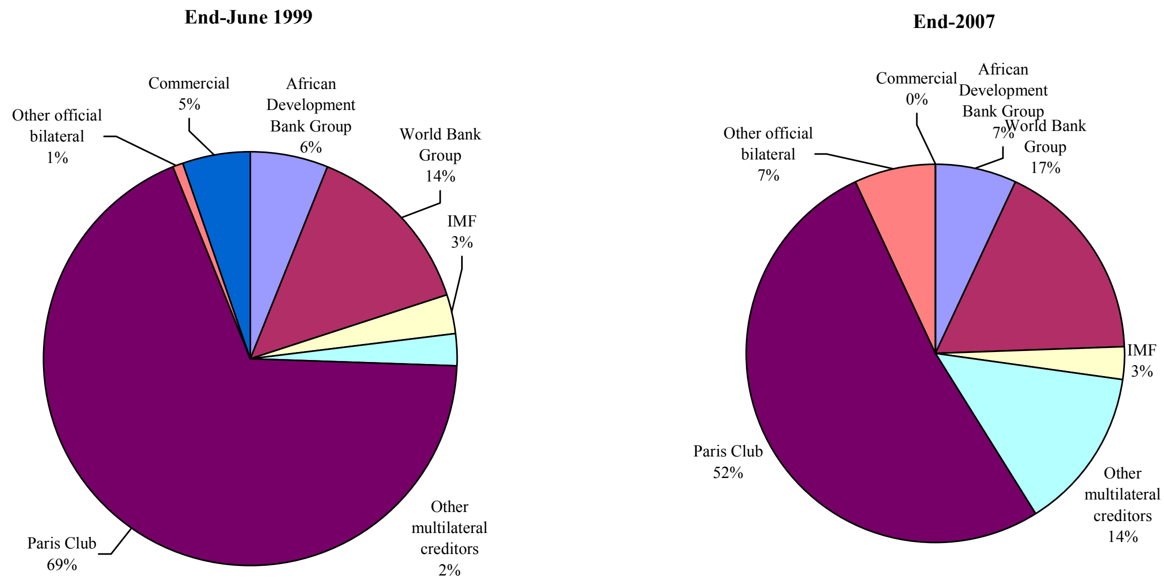
1 **Following debt relief under the enhanced HIPC initiative and MDRI, Cameroon's debt-related indicators fell substantially below the indicative policy-dependent thresholds.** Cameroon reached the completion point under the enhanced HIPC Initiative in April 2006. As a result, total public debt—external and domestic—declined from US$ 8.5 billion in 2005 to US$ 2.8 billion in 2006 (or from 51.5 to 15.5 percent of GDP). At end-2007, Cameroon's external and domestic debt amounted to at US$ 2.6 billion (or 12.4 percent of GDP); external debt continues to be dominated by official bilateral creditors (chart).

Cameroon: Stock of Public Debt, 2006-2007

	In million of US$		In percent of total		In percent of GDP	
	2006	2007	2006	2007	2006	2007
Total	2,779	2,563	100.0	100.0	15.5	12.4
External debt	1,069	1,131	38.5	44.1	6.0	5.5
Domestic debt	1,710	1,432	61.5	55.9	9.5	6.9

[1] "Operational Framework for Debt Sustainability Assessments in Low-Income Countries – Further Considerations".

Cameroon: External Debt Structure



Sources: Cameroonian authorities; and IDA and IMF staff estimates and projections.

2 **The DSA is based on data provided by Cameroon's main multilateral creditors and by the authorities on the remaining creditors.** Data quality on Cameroon's public debt has improved but remains uneven, in particular on private sector and non-guaranteed public enterprise debt (Figure 1). The DSA does not take into account contingent liabilities due to data limitations. The existence of such liabilities for public enterprises and parastatals would increase Cameroon's domestic debt stock.

3 **The authorities have signed debt-relief agreements with bilateral and commercial creditors.** All bilateral agreements with Paris Club and non-Paris Club creditors have been signed following the completion point. Significant progress was also made with the London Club of commercial creditors. Agreements are still pending with three commercial creditors holding claims totaling about US$91 million, which the authorities expect to finalize in 2008, in line with Cameroon's commitment s to the Paris Club. The government is seeking to obtain terms comparable to those of the enhanced HIPC Initiative. Nevertheless, some private creditors have insisted on the full repayment of the principal while agreeing to forgo accumulated interest and penalties.

4 **Cameroon's public debt has declined considerably in recent years.** The decrease is driven by large cancellations of external debt and frontloaded domestic debt repayments. Building on the results of comprehensive audit for the end-2004 stock of domestic debt, the government repaid substantial amounts, which helped reduce domestic debt from 17 percent of GDP in 2004 to 7 percent of GDP by end-2007. The debt repayment plan prepared by the authorities implies substantial additional repayments of domestic debt in the next several years,

lowering further the domestic debt to 4 percent of GDP. This outstanding stock of domestic debt is conducive to developing a domestic debt market, as suggested in the recent FSAP.

II. Methodology and Key Macroeconomic Assumptions

5 **The staff examined Cameroon's external public debt stock and debt service profile under a baseline scenario and a series of stress tests,** following the guidelines of the LIC debt sustainability framework.[2] The stress tests are designed to assess the probability of a country facing debt distress in the future under standard shocks.

6 **The analysis is guided by indicative, performance-based debt burden thresholds for external debt.** The latter take into account the empirical finding that the debt levels that a low-income country can sustain increase with the quality of its policies and institutions. The quality of policies and institutions is measured by the Country Policy and Institutional Assessment (CPIA) index, compiled annually by the World Bank. Cameroon now ranks as a 'weak performer' under the joint IMF/World Bank debt sustainability framework, based on its three-year moving average CPIA score.[3] The indicative external debt burden thresholds for countries in this category are an NPV of debt-to-exports ratio of 100 percent, NPV of debt-to-revenue ratio of 200 percent, a NPV of debt-to-GDP ratio of 30 percent, and debt-service-to-exports and revenues ratios of 15 and 25 percent, respectively.

7 **Cameroon's medium-term framework assumptions are described in Box 1.** Real GDP growth will continue to pick up over the medium term, reflecting increased investment and structural reform implementation. The current account deficit will deteriorate over the medium-term, but will then gradually improve over the longer term. Fiscal policy would be supportive of economic growth and poverty reduction, although over the medium-term the nonoil primary balance (program definition) is expected to deteriorate, reflecting considerable social and infrastructure needs. New public borrowing is assumed to increase gradually over the medium term to help finance new investment.

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[2] "Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-Income Countries."

[3] Cameroon's CPIA declined from 3.3 to 3.2 in 2006 and remained at that level in 2007, thus bringing the country in the group of 'weak' policy performers. The downgrade is the result of deterioration in the following criteria: business regulatory environment; policies and institutions for environmental sustainability; and efficiency of revenue mobilization.

Box 1. Main Macroeconomic Assumptions, 2008-28

Real GDP growth is expected to accelerate to just over 5 percent in 2012 reflecting economic stimulus from increased capital spending, and the implementation of structural reforms. Over the longer-term, growth in the non-oil economy is expected to stabilize at about 5 ½ percent, while oil GDP will gradually decline. Investment is expected to rise to about 22 percent of GDP over the medium term, a level supportive of long-term economic growth. The average non-oil growth rate over the entire projection period is 5½ percent, somewhat higher than the 10-year average of about 4 percent during 1997-2007.

Inflation is assumed to hold steady at 2 percent over the long-term, in line with recent historical experience and reflecting the regional central bank's commitment to keep inflation under control.

Government revenues are projected to decline over time as a result of declining oil proceeds. Non-oil revenues are expected to rise from about 12½ percent of GDP in 2007 to about 16 percent at the end of the projection period, reflecting sustained implementation of measures to strengthen tax and customs administrations.

Government expenditure is expected to rise over the medium-term to about 19 percent of GDP. This path is consistent with a gradual increase in capital expenditure over the medium-term, control of current spending growth, and a rise in pro-poor spending.

Current account deficit, including grants, is expected to rise gradually to about 5 percent of GDP by 2019 and then gradually decline, in part driven by higher imports. Despite a gradual decline in petroleum exports, overall exports are expected to remain high. The deficit is expected to be financed through foreign direct investment and loans, a mixture of which will be from IDA and the rest from other creditors on less concessional terms

External borrowing is expected to rise gradually to 1.8 percent of GDP over the medium term (compared to an average of 0.8 percent of GDP during 2001-07) and then to decline gradually to about 1 percent in the outer years. IDA borrowing is assumed to constitute 24 percent of new borrowing per year, with the remainder originating from other multilateral and bilateral creditors on less concessional terms. Assuming that Cameroon will cross the IDA-only threshold in 2010, disbursements from the Bank will also be on less concessional terms.

III. External Debt Sustainability

8 **Cameroon' external debt indicators are expected to remain below their respective indicative thresholds throughout the projection period** (Table 1b and Figure 2). Although debt indicators would increase over the longer term, reflecting additional borrowing to meet the country's development needs and reduced concessionality from 2011 onwards, the sustainability thresholds on external debt are not breached under the baseline scenario

throughout the projection period.[4] The same conclusion holds for the other alternative scenarios. While the baseline scenario appears to be rather conservative relative to the historical scenario, it should be noted that the historical scenario reflects past current account surpluses that are not likely in the future given the expected decline in oil production. Consequently, the country's external debt burden indicators seem more optimistic under the historical average scenario than under the baseline scenario. Results under the historical scenario were therefore excluded from Figure 2, as they are less informative about possible sources of debt distress. Under the scenario of new borrowing on less concessional terms, which assumes that the interest rate on new borrowing through 2028 is two percentage points higher than in the baseline, all debt ratios will start deteriorating, but none of them, will exceed the indicative thresholds.

9 **In the presence of adverse exogenous shocks, all debt indicators remain below their indicative thresholds.** Under the scenario of new borrowing on less concessional terms, which assumes that the interest rate on new borrowing in 2008-2028 is two percentage points higher than in the baseline, all debt ratios will start deteriorating, but none of them will exceed the indicative thresholds. Applying the standardized bound tests to the baseline scenario, under the most extreme stress tests, debt indicators would remain below their thresholds throughout the 2008-28 period, while debt service indicators remain below their indicative threshold throughout the 2008-28 period. In particular, if real growth in 2009-10 were one standard deviation below its historical average, the government would be assumed to close the ensuing financing need through borrowing. Hence, the NPV of debt-to-GDP ratio rises steadily over time and eventually levels off. If export growth in 2009-10 were one standard deviation below its historical average, the NPV of debt-to-exports and the debt service-to-exports ratios would rise above the baseline leveling off towards the end of the projection period.

10 **The risk of debt distress in Cameroon remains low as in the previous DSA,** based on the results of the alternative scenarios and bound tests, and the fact that the policy indicative thresholds are not exceeded.

IV. Public Debt Sustainability

11 **The long-term fiscal strategy is consistent with preserving the overall public debt sustainability.** Under the program agreed with the authorities, the nonoil primary deficit is expected to deteriorate over the medium term in support of the country’s development needs. New borrowing will amount to 1.7 percent of GDP annually during 2008-16, consistent with the country’s absorption capacity and will then gradually decline over the long-term.

12 **Cameroon’s public debt under the baseline scenario will rise gradually over the long-term.** Under the assumptions in the baseline scenario, the NPV of public debt in percent

[4] The residual mainly captures private capital flows.

of revenues is expected to rise over time with some reduction in the outer years. Debt service is expected to rise modestly over time but will remain at comfortable levels. However, any debt that has not been identified by the authorities would increase the risk of debt distress. This could include unaccounted quasi-fiscal liabilities from loss making public enterprises. A new comprehensive audit may be necessary to update the stock of domestic debt.

13 **Cameroon's public debt outlook is robust in case of shocks** (Table 2b and Figure 3)**.** Under the permanently lower GDP scenario, the NPV of debt-to-revenue ratio is considerably higher compared to the baseline scenario. Similarly, if GDP growth in 2009-10 is assumed to be below the historical average by one standard deviation, the long-term debt indicators deteriorate significantly, but remain below the threshold. These outcomes highlight the importance of stepped up efforts to improve growth performance.

14 **The absence of a comprehensive public debt strategy and weak domestic debt management may pose risks to the outlook.** The authorities have already prepared a preliminary draft debt strategy, which is expected to be finalized by end-2008; they will benefit from technical assistance in this regard from the IMF and World Bank. The debt strategy and thus risk assessments are likely to gain in importance, as nonresident investors may increasingly be involved in trading in Cameroon's domestic debt on the secondary market, although so far such transactions have not been significant.

V. Conclusion

15 **The LIC-DSA framework indicates that Cameroon faces a low risk of debt distress.** All external debt indicators remain below the relevant country-specific debt burden thresholds. Alternative scenarios and stress tests reveal an upward trend for the debt indicators but do not result in a breach of the thresholds during the projection period. The risk to public debt is also low, although debt indicators can worsen in the presence of adverse shocks. The lack of a debt management policy may pose a risk to the outlook. However, weak GDP and export growth in the nonoil sector would undermine the recent progress made in achieving macroeconomic and debt sustainability. Thus, maintaining prudent fiscal and borrowing policies, together with the development of a comprehensive public debt management strategy that includes public enterprises and contingent liabilities should be a priority.

Figure 1. Cameroon: Simplified Debt Structure

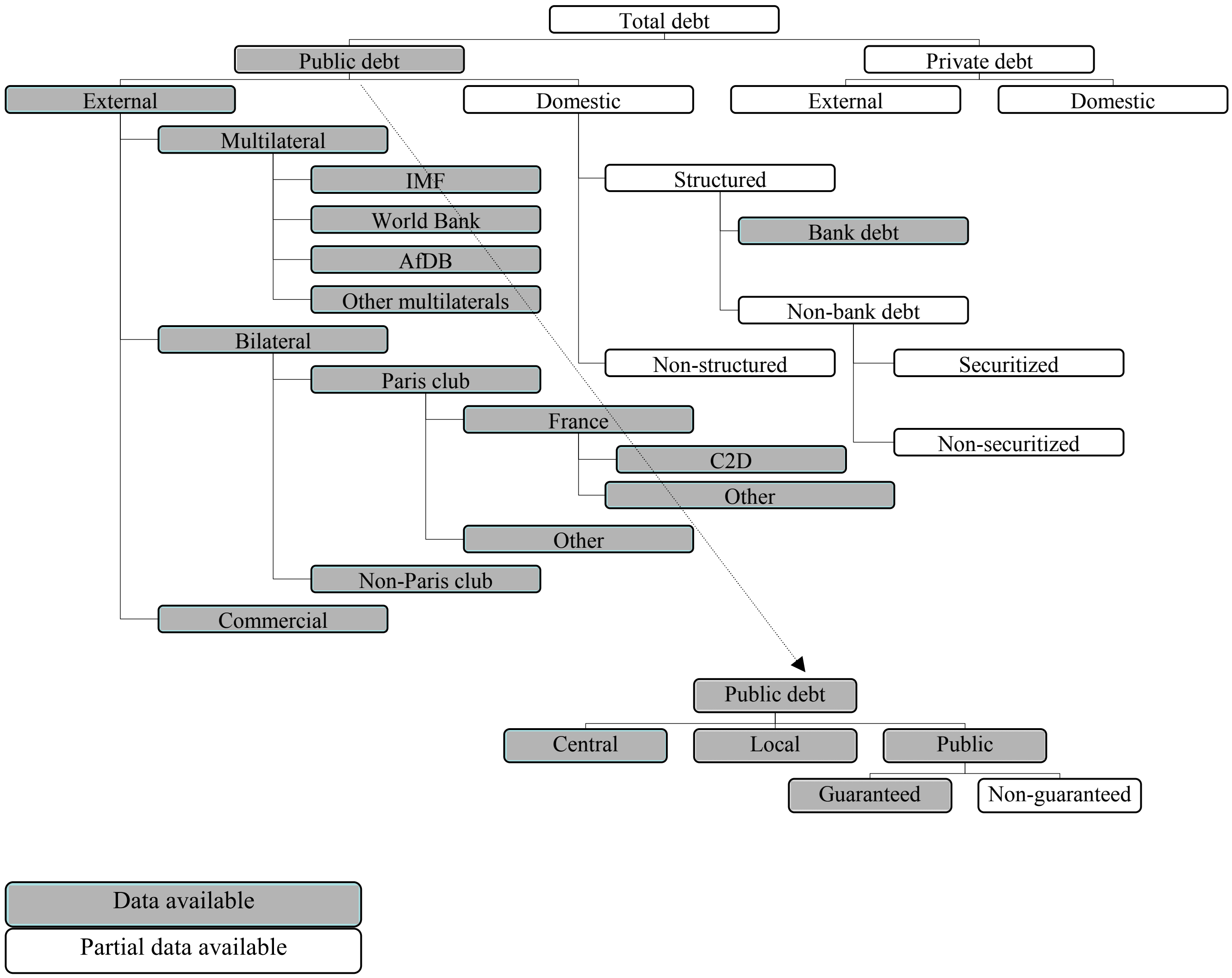


Table 1a.. Cameroon: External Debt Sustainability Framework, Baseline Scenario, 2008-2028 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections									
	2005	2006	2007			2008	2009	2010	2011	2012	2013	2007-12 Average	2018	2028	2013-27 Average
External debt (nominal) 1/	**37.4**	**6.0**	**5.5**			**6.1**	**7.0**	**7.7**	**8.6**	**9.5**	**10.4**		**13.6**	**10.8**	
o/w public and publicly guaranteed (PPG)	37.4	6.0	5.5			6.1	7.0	7.7	8.6	9.5	10.4		13.6	10.8	
Change in external debt	-6.8	-31.4	-0.5			0.6	0.9	0.7	0.9	0.9	0.8		0.3	-0.6	
Identified net debt-creating flows	1.1	-4.2	-2.0			-2.6	-1.4	-0.4	0.5	1.2	2.0		3.3	2.7	
Non-interest current account deficit	**2.8**	**-1.0**	**-0.5**	**1.0**	**2.1**	**-1.8**	**-0.6**	**0.4**	**1.3**	**2.0**	**2.7**		**4.1**	**3.2**	3.8
Deficit in balance of goods and services	5.0	1.1	1.8			0.5	1.7	2.6	3.5	4.0	4.6		5.7	4.2	
Exports	24.5	28.1	26.8			28.5	27.5	26.0	24.5	23.2	21.9		17.5	14.0	
Imports	29.5	29.2	28.6			29.0	29.2	28.6	28.0	27.2	26.6		23.2	18.2	
Net current transfers (negative = inflow)	-1.3	-1.4	-1.9	-1.4	0.4	-1.8	-1.9	-1.8	-1.7	-1.5	-1.5		-1.1	-0.6	-0.9
o/w official	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other current account flows (negative = net inflow)	-0.9	-0.7	-0.4			-0.5	-0.5	-0.5	-0.5	-0.5	-0.5		-0.5	-0.5	
Net FDI (negative = inflow)	**-0.1**	**-0.7**	**-0.8**	**-0.3**	**0.3**	**-0.7**	**-0.6**	**-0.6**	**-0.5**	**-0.5**	**-0.4**		**-0.3**	**-0.2**	-0.3
Endogenous debt dynamics 2/	**-1.6**	**-2.5**	**-0.7**			**-0.1**	**-0.2**	**-0.2**	**-0.2**	**-0.3**	**-0.3**		**-0.4**	**-0.3**	
Contribution from nominal interest rate	0.5	0.4	0.1			0.1	0.1	0.1	0.1	0.2	0.2		0.2	0.2	
Contribution from real GDP growth	-1.0	-1.1	-0.2			-0.2	-0.3	-0.3	-0.4	-0.4	-0.5		-0.7	-0.6	
Contribution from price and exchange rate changes	-1.2	-1.7	-0.6			…	…	…	…	…	…		…	…	
Residual (3-4) 3/	**-7.9**	**-27.2**	**1.6**			**3.2**	**2.3**	**1.1**	**0.4**	**-0.3**	**-1.1**		**-3.0**	**-3.3**	
o/w exceptional financing	-2.6	-1.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
NPV of external debt 4/	...	...	4.3			4.6	5.2	5.5	6.2	6.8	7.5		10.3	8.9	
In percent of exports	...	...	16.0			16.1	18.8	21.2	25.2	29.5	34.2		59.0	63.6	
NPV of PPG external debt	**...**	**...**	**4.3**			**4.6**	**5.2**	**5.5**	**6.2**	**6.8**	**7.5**		**10.3**	**8.9**	
In percent of exports	**...**	**...**	**16.0**			**16.1**	**18.8**	**21.2**	**25.2**	**29.5**	**34.2**		**59.0**	**63.6**	
In percent of government revenues	**...**	**...**	**21.6**			**21.6**	**23.3**	**25.3**	**29.0**	**33.1**	**36.7**		**56.0**	**51.6**	
Debt service-to-exports ratio (in percent)	**8.6**	**5.2**	**1.0**			**1.0**	**1.1**	**1.0**	**1.3**	**1.4**	**1.6**		**2.8**	**5.7**	
PPG debt service-to-exports ratio (in percent)	**8.6**	**5.2**	**1.0**			**1.0**	**1.1**	**1.0**	**1.3**	**1.4**	**1.6**		**2.8**	**5.7**	
PPG debt service-to-revenue ratio (in percent)	**11.6**	**3.1**	**1.4**			**1.3**	**1.3**	**1.2**	**1.5**	**1.6**	**1.7**		**2.7**	**4.6**	
Total gross financing need (billions of U.S. dollars)	0.8	0.0	-0.2			-0.5	-0.2	0.0	0.3	0.6	0.9		2.1	3.9	
Non-interest current account deficit that stabilizes debt ratio	9.7	30.4	0.0			-2.4	-1.5	-0.3	0.3	1.1	1.9		3.7	3.8	
Key macroeconomic assumptions															
Real GDP growth (in percent)	2.3	3.2	3.3	3.7	1.0	4.5	4.6	4.8	5.3	5.3	5.3	5.0	5.3	5.3	5.3
GDP deflator in US dollar terms (change in percent)	2.8	4.8	11.3	5.3	8.5	13.6	1.3	1.7	2.5	2.8	3.1	4.2	2.0	2.0	2.0
Effective interest rate (percent) 5/	1.2	1.1	1.5	3.7	2.2	2.2	1.8	1.6	2.0	2.0	2.0	1.9	2.0	2.2	2.0
Growth of exports of G&S (US dollar terms, in percent)	13.2	24.4	9.4	9.5	10.3	26.6	2.1	0.7	1.7	2.5	2.6	6.0	3.3	6.7	4.3
Growth of imports of G&S (US dollar terms, in percent)	11.4	7.3	12.4	8.4	4.2	20.5	6.6	4.4	5.5	5.2	5.9	8.0	4.4	4.8	4.8
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	36.0	36.3	35.6	32.6	31.8	31.5	33.9	28.2	24.3	27.1
Aid flows (in billions of US dollars) 7/	0.5	0.5	0.6			0.8	0.8	0.8	0.8	0.8	0.8		0.9	0.3	
o/w Grants	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
o/w Concessional loans	0.0	0.1	0.1			0.3	0.3	0.4	0.5	0.5	0.5		0.5	0.3	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			0.7	0.7	0.6	0.6	0.5	0.6		0.4	0.2	0.4
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			39.5	41.6	38.7	34.9	31.8	31.5		28.2	24.3	27.1
Memorandum items:															
Nominal GDP (billions of US dollars)	16.6	18.0	20.6			24.5	26.0	27.7	29.9	32.3	35.1		50.4	103.1	
(NPVt-NPVt-1)/GDPt-1 (in percent)						1.2	0.9	0.7	1.2	1.2	1.3	1.1	1.1	0.3	0.8

Source: Staff simulations.

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 NPV of private sector debt is equivalent to its face value.

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

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

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

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

Table 1b. Cameroon: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2008-2028
(In percent)

	Projections							
	2008	2009	2010	2011	2012	2013	**2018**	2028
NPV of debt-to-GDP ratio								
Baseline	5	5	6	6	7	7	**10**	9
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-28 1/	5	6	7	8	8	7	**0**	0
A2. New public sector loans on less favorable terms in 2009-28 2/	5	6	6	7	8	9	**13**	13
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009-10	5	5	6	6	7	8	**11**	9
B2. Export value growth at historical average minus one standard deviation in 2009-10 3/	5	6	7	8	8	9	**11**	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-10	5	5	6	7	8	8	**11**	10
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-10 4/	5	6	8	8	9	9	**11**	9
B5. Combination of B1-B4 using one-half standard deviation shocks	5	5	5	6	7	7	**10**	9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	5	7	8	9	10	11	**15**	13
NPV of debt-to-exports ratio								
Baseline	16	19	21	25	30	34	**59**	64
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-28 1/	16	23	28	32	33	32	**1**	0
A2. New public sector loans on less favorable terms in 2009-28 2/	16	20	24	30	35	42	**77**	92
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009-10	16	19	21	25	30	34	**59**	64
B2. Export value growth at historical average minus one standard deviation in 2009-10 3/	16	22	28	32	37	42	**66**	67
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-10	16	19	21	25	30	34	**59**	64
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-10 4/	16	23	30	34	38	43	**65**	64
B5. Combination of B1-B4 using one-half standard deviation shocks	16	19	18	22	26	30	**54**	60
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	16	19	21	25	30	34	**59**	64
NPV of debt-to-revenue ratio								
Baseline	22	23	25	29	33	37	**56**	52
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-28 1/	22	29	34	36	37	35	**1**	0
A2. New public sector loans on less favorable terms in 2009-28 2/	22	25	29	34	40	45	**73**	75
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009-10	22	24	26	30	34	38	**58**	54
B2. Export value growth at historical average minus one standard deviation in 2009-10 3/	22	26	32	35	39	43	**60**	52
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-10	22	24	28	32	36	40	**62**	57
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-10 4/	22	28	35	39	43	46	**62**	52
B5. Combination of B1-B4 using one-half standard deviation shocks	22	24	23	27	32	35	**56**	53
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	22	33	36	41	47	52	**79**	73

Table 1b. Cameroon: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2007-27 (continued)
(In percent)

Debt service-to-exports ratio

Baseline	1	1	1	1	1	2	**3**	6
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-28 1/	1	1	1	1	2	2	**2**	0
A2. New public sector loans on less favorable terms in 2009-28 2/	1	1	1	1	2	2	**5**	10
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009-10	1	1	1	1	1	2	**3**	6
B2. Export value growth at historical average minus one standard deviation in 2009-10 3/	1	1	1	2	2	2	**4**	6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-10	1	1	1	1	1	2	**3**	6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-10 4/	1	1	1	2	2	2	**4**	6
B5. Combination of B1-B4 using one-half standard deviation shocks	1	1	1	1	1	1	**2**	5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	1	1	1	1	1	2	**3**	6

Debt service-to-revenue ratio

Baseline	1	1	1	1	2	2	**3**	5
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2009-28 1/	1	1	1	2	2	2	**1**	0
A2. New public sector loans on less favorable terms in 2009-28 2/	1	1	1	2	2	2	**5**	8
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2009-10	1	1	1	2	2	2	**3**	5
B2. Export value growth at historical average minus one standard deviation in 2009-10 3/	1	1	1	2	2	2	**3**	5
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-10	1	1	1	2	2	2	**3**	5
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-10 4/	1	1	1	2	2	2	**3**	5
B5. Combination of B1-B4 using one-half standard deviation shocks	1	1	1	1	2	2	**3**	5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009 5/	1	2	2	2	2	2	**4**	7
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	25	25	25	25	25	25	**25**	25

Source: Staff projections and simulations.

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.

Figure 2. Cameroon: Indicators of Public and Publicly Guaranteed External Debt
Under Alternative Scenarios, 2007-2027

Source: Staff projections and simulations.

Table 2a. Cameroon: Public Sector Debt Sustainability Framework, Baseline Scenario, 2008-2028
(In percent of GDP, unless otherwise indicated)

	Actual			Estimate	Projections								
	2007	Historical Average 5/	Standard Deviation 5/	2008	2009	2010	2011	2012	2013	2008-13 Average	2018	2028	2014-28 Average
Public sector debt 1/	12.4			10.3	11.2	11.9	12.9	13.8	14.6		17.9	15.0	
o/w foreign-currency denominated	5.5			6.1	7.0	7.7	8.6	9.5	10.4		13.6	10.8	
Change in public sector debt	-3.1			-2.1	0.9	0.7	0.9	0.9	0.8		0.3	-0.6	
Identified debt-creating flows	-6.3			-5.9	-5.4	-4.6	-3.8	-3.2	-2.9		-1.0	0.9	
Primary deficit	-4.7	-6.2	9.6	-4.2	-4.7	-3.9	-3.1	-2.4	-2.1	-3.4	0.0	1.7	0.4
Revenue and grants	20.1			21.4	22.3	21.8	21.4	20.7	20.4		18.5	17.2	
of which : grants	1.2			0.8	0.9	0.7	0.6	0.4	0.3		0.2	0.0	
Primary (noninterest) expenditure	15.4			17.2	17.7	18.0	18.3	18.3	18.3		18.5	18.9	
Automatic debt dynamics	-1.1			-1.3	-0.3	-0.4	-0.6	-0.6	-0.7		-0.8	-0.7	
Contribution from interest rate/growth differential	-0.6			-0.7	-0.4	-0.4	-0.5	-0.6	-0.6		-0.8	-0.7	
of which : contribution from average real interest rate	-0.1			-0.2	0.1	0.1	0.1	0.1	0.1		0.1	0.1	
of which : contribution from real GDP growth	-0.5			-0.5	-0.5	-0.5	-0.6	-0.6	-0.7		-0.9	-0.8	
Contribution from real exchange rate depreciation	-0.4			-0.6	0.0	0.0	0.0	-0.1	-0.1		...	...	
Other identified debt-creating flows	-0.6			-0.5	-0.4	-0.3	-0.2	-0.2	-0.1		-0.1	0.0	
Privatization receipts (negative)	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	
Debt relief (HIPC and other)	-0.6			-0.5	-0.4	-0.3	-0.2	-0.2	-0.1		-0.1	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	
Residual, including asset changes	3.2			3.8	6.3	5.2	4.8	4.1	3.8		1.3	-1.5	
NPV of public sector debt	11.2			8.8	9.4	9.7	10.4	11.1	11.7		14.6	13.1	
o/w foreign-currency denominated	4.3			4.6	5.2	5.5	6.2	6.9	7.5		10.3	8.9	
o/w external	4.3			4.6	5.2	5.5	6.2	6.9	7.5		10.3	8.9	
NPV of contingent liabilities (not included in public sector debt)	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	-3.1			-3.0	-3.3	-2.7	-2.0	-1.5	-1.2		0.8	2.6	
in billions of U.S. dollars	-0.6			-0.7	-0.9	-0.8	-0.6	-0.5	-0.4		0.4	2.7	
NPV of public sector debt-to-revenue and grants ratio (in percent)	56.0			41.2	42.1	44.5	48.7	53.5	57.4		78.8	76.1	
NPV of public sector debt-to-revenue ratio (in percent)	59.5			42.8	43.9	46.1	50.1	54.6	58.4		79.5	76.1	
o/w external 3/	22.8			22.4	24.2	26.1	29.8	33.8	37.3		56.5	51.6	
Debt service-to-revenue and grants ratio (in percent) 4/	2.1			1.9	1.9	1.8	2.1	2.2	2.4		3.4	5.4	
Debt service-to-revenue ratio (in percent) 4/	2.2			2.0	2.0	1.8	2.2	2.3	2.4		3.5	5.4	
Primary deficit that stabilizes the debt-to-GDP ratio	-1.6			-2.1	-5.6	-4.5	-4.0	-3.3	-2.9		-0.4	2.2	
Key macroeconomic and fiscal assumptions													
Nominal GDP (local currency)	9894			10929	11560	12242	13102	14028	15061		21517	44039	
Real GDP growth (in percent)	3.3	3.7	1.0	4.5	4.6	4.8	5.3	5.3	5.3	5.0	5.3	5.3	5.3
Average nominal interest rate on public debt (in percent)	1.5	3.2		2.1	2.5	2.3	2.5	2.5	2.4	2.4	2.3	2.5	2.4
Average nominal interest rate on forex debt (in percent)	1.4	3.6	2.3	2.0	1.8	1.6	2.0	1.9	1.9	1.9	2.0	2.2	2.0
Average nominal interest rate on domestic debt (in percent)	1.6	1.9	0.4	2.2	3.4	3.4	3.5	3.5	3.5	3.3	3.5	3.5	3.5
Average real interest rate (in percent)	-0.7	0.3	2.0	-1.7	0.9	0.7	0.7	0.6	0.5	0.3	0.3	0.5	0.4
Real discount rate on foreign-currency debt (in percent)	2.4	2.7	0.7	3.3	3.0	3.1	3.1	3.1	3.0	3.1	2.9	2.9	2.9
Average real interest rate on domestic currency debt (in percent)	-0.5	-0.5	1.4	-3.3	2.3	2.3	1.8	1.8	1.5	1.1	1.5	1.4	1.5
Exchange rate (LC per US dollar)	479	605.7	95.5	446	445	442	438	434	429	439.2	427	427	426.9
Nominal depreciation of local currency (percentage change in LC per dollar)	-8.3	-1.9	9.0	-6.9	-0.2	-0.6	-0.9	-1.0	-1.1	-1.8	0.0	0.0	0.0
Exchange rate (US dollar per LC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nominal appreciation (increase in US dollar value of local currency, in percen	9.1	2.7	9.3	7.5	0.2	0.6	0.9	1.0	1.1	1.9	0.0	0.0	0.0
Real exchange rate depreciation (in percent, + indicates depreciation)	-7.9	-2.1	8.3	-10.6	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	2.0	2.4	1.1	5.7	1.1	1.1	1.6	1.7	2.0	2.2	2.0	2.0	2.0
US Inflation rate (GDP deflator, in percent)	2.6	2.3	0.7	1.6	1.9	1.9	1.9	1.9	1.9	1.8	2.0	2.0	2.0
Growth of real primary spending (deflated by GDP deflator, in percent)	13.3	6.6	10.4	17.1	7.4	6.5	7.1	5.3	5.7	8.2	5.5	5.6	5.5
Grant element of new external borrowing (in percent)	...			0.3	0.2	0.3	0.3	0.4	0.4	0.3	0.5	0.6	...

Sources: Country authorities; and Fund staff estimates and projections.

1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]

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.

5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 2b. Cameroon: Sensitivity Analysis for Key Indicators of Public Debt 2008-2028

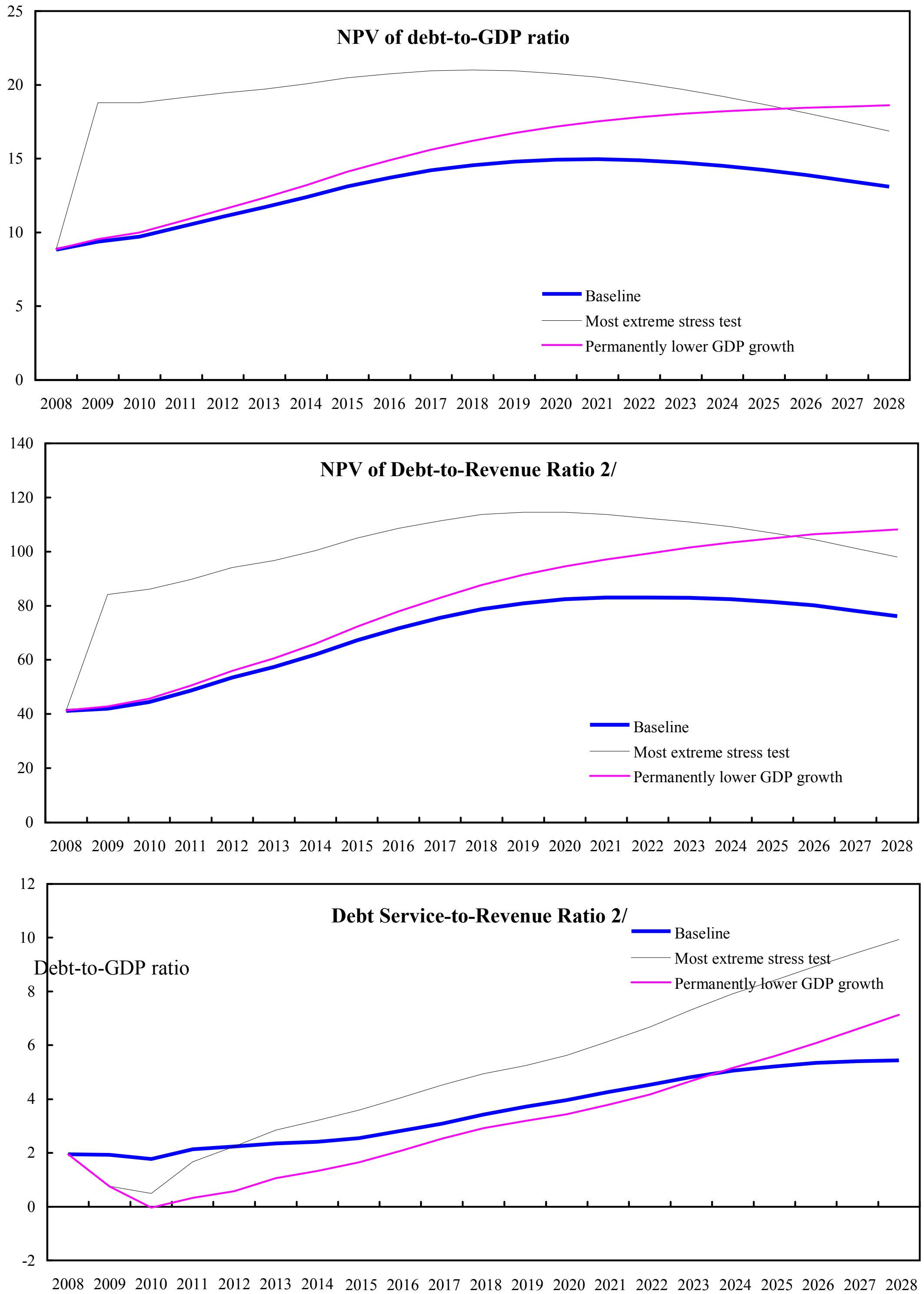
	Projections							
	2008	2009	2010	2011	2012	2013	2018	2028
NPV of Debt-to-GDP Ratio								
Baseline	9	9	10	10	11	12	15	13
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	9	11	11	12	12	11	3	0
A2. Primary balance is unchanged from 2008	9	10	10	10	9	7	0	0
A3. Permanently lower GDP growth 1/	9	10	10	11	12	12	16	19
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009-2010	9	10	11	13	14	15	20	22
B2. Primary balance is at historical average minus one standard deviations in 2009-2010	9	12	14	15	15	16	17	14
B3. Combination of B1-B2 using one half standard deviation shocks	9	11	13	14	14	15	17	14
B4. One-time 30 percent real depreciation in 2009	9	11	11	12	12	12	14	13
B5. 10 percent of GDP increase in other debt-creating flows in 2009	9	19	19	19	19	20	21	17
NPV of Debt-to-Revenue Ratio 2/								
Baseline	41	42	45	49	54	57	79	76
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	41	47	52	55	56	0	0	0
A2. Primary balance is unchanged from 2008	41	44	45	0	0	0	0	0
A3. Permanently lower GDP growth 1/	41	43	46	50	56	61	88	108
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009-2010	41	45	52	60	68	75	111	129
B2. Primary balance is at historical average minus one standard deviations in 2009-2010	41	54	65	69	73	76	94	83
B3. Combination of B1-B2 using one half standard deviation shocks	41	51	60	64	69	73	91	80
B4. One-time 30 percent real depreciation in 2009	41	49	51	54	58	60	77	74
B5. 10 percent of GDP increase in other debt-creating flows in 2009	41	84	86	90	94	97	114	98
Debt Service-to-Revenue Ratio 2/								
Baseline	2	2	2	2	2	2	3	5
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	2	1	2	1	0	0	0	0
A2. Primary balance is unchanged from 2008	2	1	1	0	0	0	0	0
A3. Permanently lower GDP growth 1/	2	1	0	0	1	1	3	7
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2009-2010	2	1	0	2	2	3	5	10
B2. Primary balance is at historical average minus one standard deviations in 2009-2010	2	1	4	5	3	2	3	5
B3. Combination of B1-B2 using one half standard deviation shocks	2	1	3	3	2	2	3	4
B4. One-time 30 percent real depreciation in 2009	2	1	0	0	1	1	2	4
B5. 10 percent of GDP increase in other debt-creating flows in 2009	2	1	15	6	4	3	4	8

Sources: Country authorities; and Fund staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of 20 (i.e., the length of the projection period).

2/ Revenues are defined inclusive of grants.

Figure 3. Cameroon: Indicators of Public Debt Under Alternative Scenarios, 2008-2028 1/



Source: Staff projections and simulations.
1/ Most extreme stress test is test that yields highest ratio in 2018.
2/ Revenue including grants.