INTERNATIONAL MONETARY FUND AND
INTERNATIONAL DEVELOPMENT ASSOCIATION

CAMEROON

Joint Fund-Bank Debt Sustainability Analysis[1]

Prepared by the Staffs of the International Monetary Fund and
the International Development Association

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The joint IMF-World Bank low-income country debt sustainability analysis (LIC DSA) indicates that Cameroon's risk of debt distress continues to be classified as low. All external debt ratios remain well below the policy-dependent thresholds under the baseline scenario and the stress tests; public debt indicators also remain at comfortable levels. The low risk rating opens the possibility for some limited non-concessional borrowing. The lower capacity assessment however implies that concessionality of any new borrowing should continue to be assessed loan by loan. Strengthening debt management practices, enhancing nonoil revenue mobilization, and widening the export base remain advisable in light of the anticipated long-run decline of oil revenues.

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[1] Prepared by IMF and IDA staffs in collaboration with the Cameroonian authorities. Debt data, sustainability issues, and the new debt limit policy were discussed with the authorities in the course of the 2010 article IV consultation. This DSA follows the IMF and World Bank Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-Income Countries, January 22, 2010 (available at http://www.imf.org/external/pp/longres.aspx?id=4419 and http://go.worldbank.org/JBKAT4BH40). The analysis updates the 2009 DSA (IMF Country Report for Cameroon 09/318, available at http://www.imf.org/external/pubs/cat/longres.cfm?sk=23423.0). This DSA is conservatively undertaken on gross (as opposed to net) basis as no data on Cameroon's claims are available.

I. BACKGROUND

1. **This report updates the debt sustainability analysis (DSA) prepared in 2009 (IMF Country Report No. 09/318).** The baseline scenario reflects the latest IMF Article IV discussions with the authorities (March-April 2010). Since the 2009 DSA, Cameroon has been adversely affected by the global crisis through lower exports and a drop in prices for commodities. These developments have adversely affected GDP growth, with a sizable effect on both the balance of payments and the fiscal accounts. The impact of the crisis was however less than anticipated, thanks to the Cameroonian authorities' policy response as well as Fund assistance under the Rapid Access Component of the Exogenous Shocks Facility (RAC-ESF).

2. **The DSA is based on end-2009 data provided by Cameroon's authorities.** The debt data currently covers central government external debt, public-guaranteed debt, and an estimate of domestic debt. Despite efforts to improve debt statistics, the coverage of public enterprises' liabilities, contingent liabilities of financial institutions, and overdue claims of public enterprise and parastatal entities of the government remains uneven.

3. **Debt relief agreements with bilateral and most commercial creditors have been finalized.** To date, all bilateral agreements with Paris Club and non-Paris Club creditors have been signed. Agreements were also finalized with most London Club commercial creditors, whereby the stock of debt was reduced to US$1.24 million in 2009. The authorities are making every effort to settle the outstanding debt (0.06 percent of GDP), but are experiencing difficulties in engaging with some creditors either because of a lack of response from them or because they no longer exist as ongoing commercial entities.

4. **Cameroon's debt situation has sharply improved in recent years.** Its public debt-to-GDP ratio declined from 51.8 percent in 2005 to 9.6 percent in 2009 (US$2.16 billion), thanks to HIPC and MDRI relief in 2006 and prudent borrowing policies since then (Text Table 1).[2] Since the HIPC Initiative and MDRI debt relief, a further decline in external debt has reflected the following factors: (i) a reduction in net borrowing by public enterprises; (ii) the settlement of most outstanding loans by commercial creditors; and (iii) valuation effects due to changes in exchange rates. On domestic debt, substantial repayments were also made possible by the use of windfall gains from higher-than-expected

[2] Debt data, after the HIPC and MDRI, exclude the debt service to France under the Debt Settlement and Development Contract (C2D). A reassessment by Cameroon authorities of C2D related debt service accounts for most of the decline in external debt excluding C2D between 2008 and 2009.

oil prices in 2008. In 2009 however, a partial audit resulted in an upward revision of the stock of domestic debt.[3]

Text Table 1. Cameroon: Stock of Public Debt, 2008-09

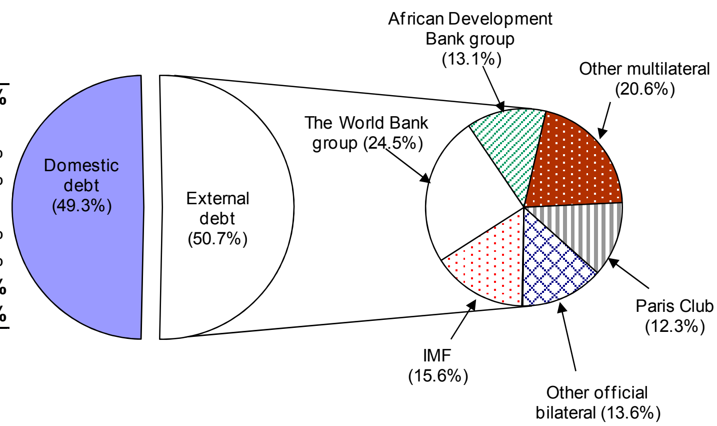
	Million of US $		Percent of total		Percent of GDP	
	2008	2009	2008	2009	2008	2009
Total	2,107.1	2,163.0	100.0	100.0	9.5	9.6
External	1,199.9	1,095.8	56.9	50.7	5.4	4.9
Domestic	907.2	1,067.1	43.1	49.3	4.1	4.8

Sources: Cameroonian authorities; and Bank-Fund staff estimates.

Figure 1. Cameroon: Public- and Publicly-Guaranteed Debt Structure, End-2009

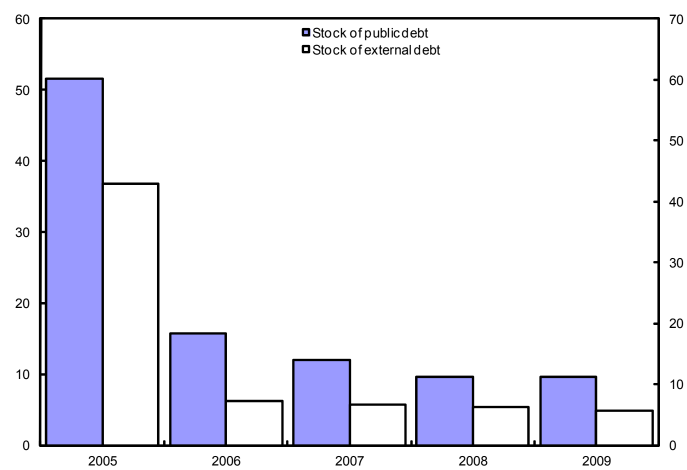
Domestic debt components

Structured debt	**62.0%**
Debt to banking sector	*18.8%*
Securitized debt to commercial banks	18.6%
Securitized debt to BEAC	0.1%
Non banking sector debt	*43.2%*
Securitized debt	14.0%
Non-securitized debt	29.2%
Non structured debt (arrears)	**19.9%**
New audited debt (2009)	**18.1%**



Sources: Cameroonian authorities; and Bank-Fund staff estimates.

Figure 2. Cameroon: Stock of public debt, 2005–2009
(Percent of GDP)



Sources: Cameroonian authorities; and IMF staff estimates.

[3] Until 2009 domestic debt primarily represented domestic arrears that were audited and rescheduled or securitized in 2005.

The composition of external public debt is currently skewed toward multilateral debt. Following HIPC and MDRI debt relief in 2006, the share of bilateral debt had become predominant. However, the share of multilateral lenders has increased in 2009 with the provision of Fund assistance under the RAC-ESF facility as well as IDA disbursements (Figure 1).

II. THE DSA BASELINE SCENARIO

5. **Relative to the previous DSA, the macroeconomic framework incorporates the impact of the crisis, but remains broadly unchanged regarding the medium and long-term perspectives.** More specifically, real GDP growth is expected to pick up over the medium term, reflecting increased investment and structural reform implementation. However, the aftermath of the international financial crisis has led to a downward revision of real growth projections. The export profile has been revised up, reflecting higher oil output projections and higher prices for key exports. The current account deficit is projected to remain volatile over the medium term, but then gradually improve over the longer term. The assumption is maintained that fiscal revenue will remain relatively flat, with improved nonoil revenue partly offsetting the projected decline in oil revenue. Over the medium term the nonoil primary balance is expected to deteriorate, reflecting the need to address considerable social and infrastructure needs. This deterioration would however occur against the background of windfalls from a temporary rebound in oil output, thus limiting borrowing requirements. New public borrowing (both domestic and external) is assumed to increase gradually over the medium term to help finance infrastructure investments. Growth-enhancing investment projects are also expected to be partly financed through foreign direct investment and other private capital flows.

Text Table 2. Cameroon: Key Macroeconomic Assumptions, 2010–30 (updated vs. previous DSA)[1]

	2010-11	2012–30
Real GDP growth (percent)		
Updated	2.7	4.6
Previous	3.3	5.1
Fiscal revenue (percent of GDP)[2]		
Updated	17.2	17.0
Previous	18.6	17.6
Exports (percent of GDP)		
Updated	25.6	25.2
Previous	23.5	23.5
Oil price (U.S. dollars per barrel)		
Updated	68.9	75.1
Previous	73.3	73.8

Sources: Cameroonian authorities; and IMF and World Bank staffs estimates.

[1] Previous DSA covers the period 2009-29.

[2] Total revenue including grants.

Box 1. Macroeconomic Assumptions for the Baseline Scenario[4]

Against the backdrop of a volatile oil production profile, the baseline annual growth, which is expected to be driven by the nonoil sector, has been revised downward in 2010-11 to around 2 ¾ percent (3.4 percent for the nonoil sector growth). Growth is expected to increase gradually to 4¾ percent by 2014 on assumptions of a temporary rebound in oil output, increased capital spending and structural reforms in the areas of business climate, provision of public goods and infrastructure, as well as more efficient public finance management. Longer-term growth is expected to average 4½ percent for 2016-30, driven by the nonoil sectors (agriculture, mining, and services). Consumer price-based inflation has eased in 2009 and is expected to hold steady at or slightly below 3 percent over the medium-term, in line with recent historical trend, and CEMAC convergence criteria.

Government revenues are projected to reflect the volatility of oil proceeds in the medium term. Non-oil revenues are expected to rise from about 13½ percent of non-oil GDP in 2009 to about 16 percent at the end of the projection period, reflecting sustained implementation of measures to strengthen tax and customs administrations. Government expenditures are expected to rise in 2010-11, but stabilize around 18 percent of GDP in the longer-term. 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. The projected path is also assumed to be supported by improvements in public financial management, including expenditure allocation and execution in priority areas.

Current account deficit, including grants, is expected to rise in 2010-11 and narrow temporarily in 2012-14 in relation with an oil export peak. A constant real exchange rate is assumed over the long term projection period. The volume growth of nonoil exports (in particular timber, cocoa) is projected to remain high (close to 9 percent in 2011–30), offsetting petroleum exports gradual decline. Import volumes are projected to increase, as the acceleration of growth in 2011-16 would be associated with imports of equipment and intermediate goods, in relation with the implementation of infrastructure investment planned in the latest PRSP. The current account deficit is expected to be financed through foreign direct investment, external public loans, and other private capital inflows.

After a peak around 2½ percent of GDP in 2010-12 (reflecting in part the projected financing gaps for these years), new external borrowing is expected to slow down and remain around 1½ percent of GDP in the longer-term. The rate of debt accumulation remains well below the "speed bump" (5 percent of GDP annually) suggested by IMF debt policy guidelines.

A relatively high concessionality of new borrowing is assumed. IDA borrowing is assumed to constitute initially ¼ of new borrowing per year, with the remainder originating from other multilateral and bilateral creditors on less concessional terms. It is assumed that Cameroon will cross the IDA-only threshold by 2012, implying that disbursements from the Bank will also be on less concessional terms. In addition, it is expected that Cameroon will use in full the recent 2009 SDR allocations for the purpose of settling domestic arrears. While this does not impact the stock of debt, it does however impact the trajectory of interest payments.

[4] Estimates and projections are in CFA francs unless otherwise indicated. The baseline is consistent with the latest IMF *World Economic Outlook* assumptions and projections (May 2010).

III. External Debt Sustainability

Baseline Scenario

6. **The LIC debt sustainability framework is guided by country-specific debt burden thresholds for external debt, based on the strength of a country's policies and institutions.** These thresholds reflect the empirical findings that sustainable debt levels for a low-income country increase with the quality of its policies and institutions. Such quality 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.[5] The indicative external debt burden thresholds for countries in this category are a present value (PV) of debt-to-exports ratio of 100 percent, a PV of debt-to-revenue ratio of 200 percent, a PV 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 external debt appears sustainable.** Under the baseline scenario, all debt indicators remain below their thresholds through 2030 (Text Table 3 and Figure 3). However they increase significantly compared with the 2009 DSA as higher present value of debt reflects the fact that the current DSA template uses a lower discount rate than previously[6]. The gradual rise in the PV of debt-to-exports ratio reflects the assumption that Cameroon's borrowing policy will continue to be prudent and limited by absorption capacity.[7]

Text Table 3. Cameroon: Baseline Debt Ratios, 2010–30

	Thres-hold	2010	Medium term 2010–15	Long run 2016–30
External				
PV of debt-to GDP	30.0	5.5	8.1	12.3
PV of debt-to-exports	100.0	21.1	29.5	50.9
PV of debt-to-revenue	200.0	33.2	46.0	74.7
Debt service-to-exports	15.0	0.9	1.0	2.5
Debt service-to-revenue	25.0	1.4	1.6	3.7
Fiscal				
PV of debt-to-GDP		12.4	12.2	14.7
PV of debt-to-revenue		73.1	68.2	89.2
Debt service-to-revenue		7.1	8.3	8.2

[5] Cameroon's CPIA declined from 3.3 to 3.2 between 2005 and 2006 and remained at that level in 2007 and 2008, thus the average CPIA rating for Cameroon for the last three years is 3.2—a rating corresponding to weak performance. The downgrade was the result of deterioration in the following criteria: business regulatory environment; policies and institutions for environmental sustainability; structural policy cluster; and efficiency of revenue mobilization.

[6] The discount rate has been reduced from 5 percent in the 2009 DSA to 4 percent currently, in accordance with the latest LIC-DSA template.

[7] Insufficient institutional and administrative capacity has so far kept Cameroon from scaling up foreign-financed investment above 0.5 to 1 percentage point of GDP annually.

- The DSA baseline scenario assumes a combination of concessional external borrowing and BEAC financing to help fill the financing gaps associated with the resolution of domestic arrears. Repayment of external debt could cluster in 2015-19 as the 2009 ESF-RAC is amortized. Figure 3 shows that debt service ratios would further increase after 2020 but the debt situation would still be manageable.

Alternative Scenario and Stress Tests

8. Alternative scenarios and bound tests show that debt indicators remain below their thresholds through 2030.

- The historical average scenario, which is associated with past current account surpluses, is unlikely to occur, as oil production is expected to taper off in the next 20 years. This scenario shows a more optimistic debt ratio trajectory relative to the baseline. Thus, in terms of the risk assessment the historic scenario is not relevant and is therefore omitted from Figure 3.

- An export shock would be the primary source of increased debt vulnerability. The export stress-test suggested in the DSA template (exports growth in US$ terms in 2011-12 at 1 standard deviation below the 10 year historical average) represents a major shock in the case of Cameroon. Indeed, the 2000-09 reference period is volatile and incorporates a sizeable export decline in 2009. Hence, that stress scenario has exports declining by more than 8% in US$ terms in both 2011 and 2012 before returning to baseline. As a consequence, the PV of external debt to export ratio rises dramatically in the stress-test scenario (Figure 3.c.), without however breaching the 100 percent threshold.

IV. Public Sector Debt Sustainability

9. **The DSA baseline shows that public debt sustainability will be preserved.** It is assumed that new domestic debt will only be generated by issuance of government securities and BEAC financing. New government securities issuance in the domestic markets is assumed to start in 2010 (consistent with Government plans), at conditions similar to the issuance by Gabon of 2007. Issuance is thus projected to amount to about 1.8 percent of GDP in 2010, 0.9 percent in 2011 and at most ½ percent of GDP annually during 2012-18, before increasing again in outer years. In the baseline scenario, the public debt ratio will rise gradually over the long-term. This is initially driven by external borrowing, with domestic debt issuance picking up over the longer run. In sum, the PV of debt-to-GDP and debt-to-revenue ratios is expected to rise over time, yet debt service would stay at a comfortable level through 2030.

10. **Alternative scenarios and bound tests indicate that all debt sustainability indicators remain on stable paths and do not reveal particular vulnerabilities** (Table 2a). However, the scenario of a permanently lower GDP growth and the bound test

that stresses growth at one standard deviation below its historical average show the most sensitive debt dynamics relative to the baseline.

11. **Despite its low risk of debt distress, Cameroon has stepped up efforts to strengthen its debt management framework**. Following joint Bank-Fund technical assistance, the authorities are working to implement a new debt management strategy aligned with CEMAC guidelines. The authorities have themselves started producing a DSA and have formulated a medium-term debt management strategy for central government debt, which has been annexed to the budget law. A National Debt Committee has been instituted but remains to be installed. A partial audit of domestic arrears was conducted in 2009, and another one is planned in 2010.

V. Scope for Non-Concessional Borrowing

12. **Cameroon has some limited scope for non-concessional borrowing.** Small amounts of non-concessional borrowing are already incorporated in the baseline, as some commitments have been signed in 2009 and early 2010, for which disbursements are expected to be spread out over several years. Beyond that, staff has explored the possibility for Cameroon to borrow more on non concessional terms. In particular, under an alternative scenario (Figure 5), additional non-concessional borrowing is assumed to be required in order to accelerate the financing and execution of already identified infrastructure projects (as presented in the latest PRSP). Additional borrowing is set at FCFA 70 billion in 2010 (about 0.65 percent of GDP), and this amount of non-concessional borrowing is maintained until 2015. Cameroon is thus expected to continuously borrow on non-concessional terms over the medium-term, a realistic assumption in accordance with the new Fund debt limit policy. The terms and conditions of new non-concessional borrowing are assumed to be similar to those recently offered by a major bilateral lender, and still involve a significant grant element, although less than 35 percent. To be prudent, the new borrowing is not assumed to impact the DSA measures of repayment capacity (e.g. the growth rate is the same as in the baseline scenario).

13. **In that alternative baseline scenario, all debt indicators remain below their thresholds through 2030.** The bound test for the PV of debt-to-exports ratio reaches the threshold but avoids a breach in the export shock stress test. Cameroon's low risk rating is therefore not affected in this scenario, supporting the case for a non-zero limit on non-concessional borrowing in the context of World Bank operations (No such limit is required by the IMF in the absence of a Fund-supported program). Non-concessional borrowing should however remain linked to adequate evaluation of the underlying investment projects.

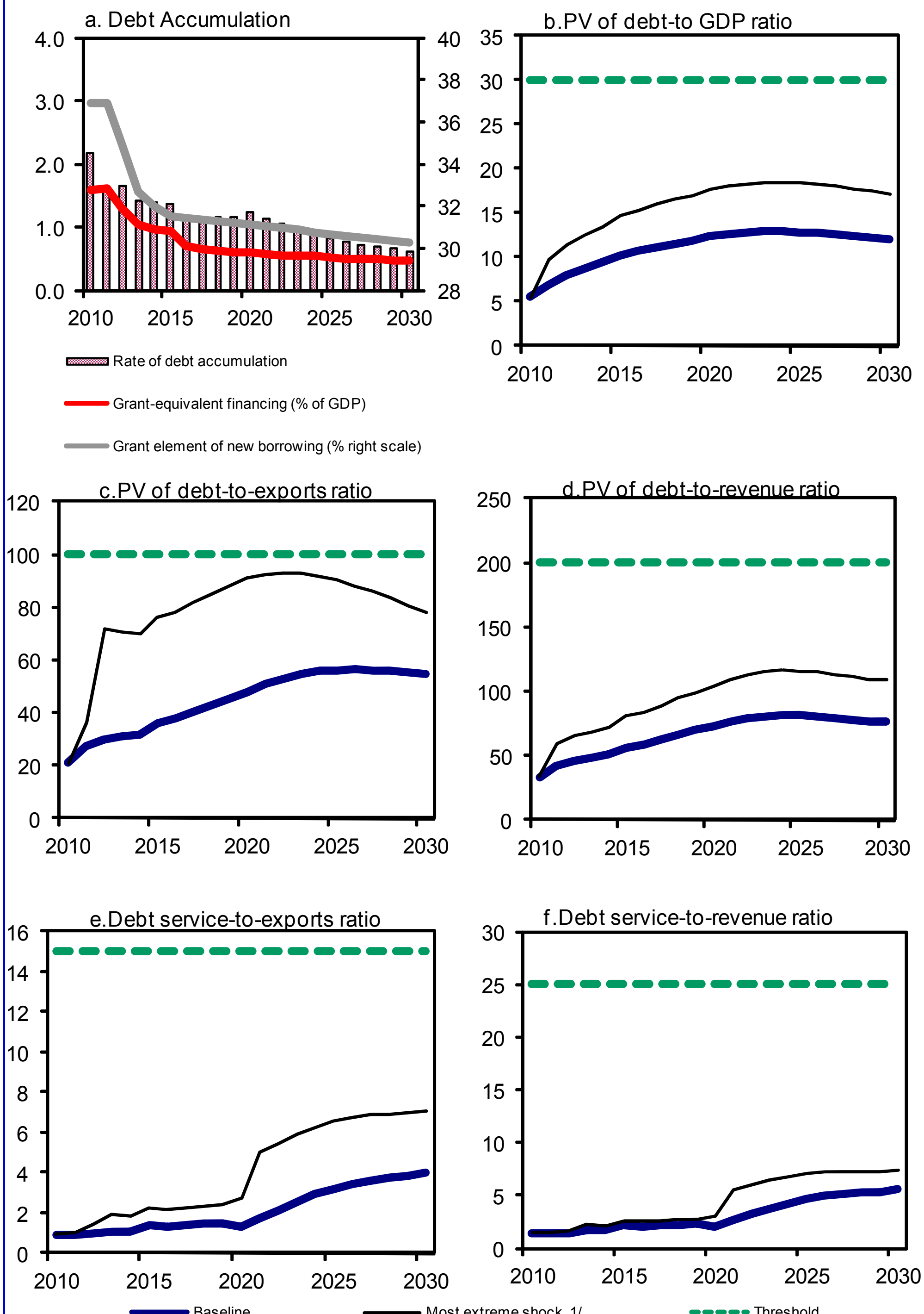
VI. Conclusion

14. **Cameroon's risk of debt distress remains low.** All external debt ratios remain well below the policy-dependent thresholds. However, because of the reassessment of the stock of domestic debt and ongoing new external borrowing, debt indicators are somewhat higher than in the 2009 DSA. Debt indicators rise under alternative scenario and bound tests, but not beyond country-specific debt burden thresholds, when assessing external sustainability, and remain at a comfortable level in regards to public debt sustainability.

15. **The authorities shared the low risk assessment.** As the removal of infrastructure deficiencies is considered a key priority, the authorities see the low debt vulnerability as providing some space for a reasonable increase in debt-financed investment. In that context, a moderate use of non-concessional borrowing is being considered for projects where concessional financing may not be available.

16. **However, persistent weakness in public finance management and insufficient data coverage suggest caution in assessing Cameroon's debt vulnerabilities.** These vulnerabilities include quasi-fiscal liabilities of state-owned enterprises and the build-up of new arrears since the 2005 audit, only partly quantified in a 2009 audit follow-up. The authorities' efforts to improve debt management could be reinforced by steps to ensure better coverage of public sector liabilities and by a new and more comprehensive audit of domestic unsettled payment obligations. In addition, continued efforts to achieve greater nonoil revenue mobilization and to widen the export base would be advisable, given the expected long-run decline in oil revenue.

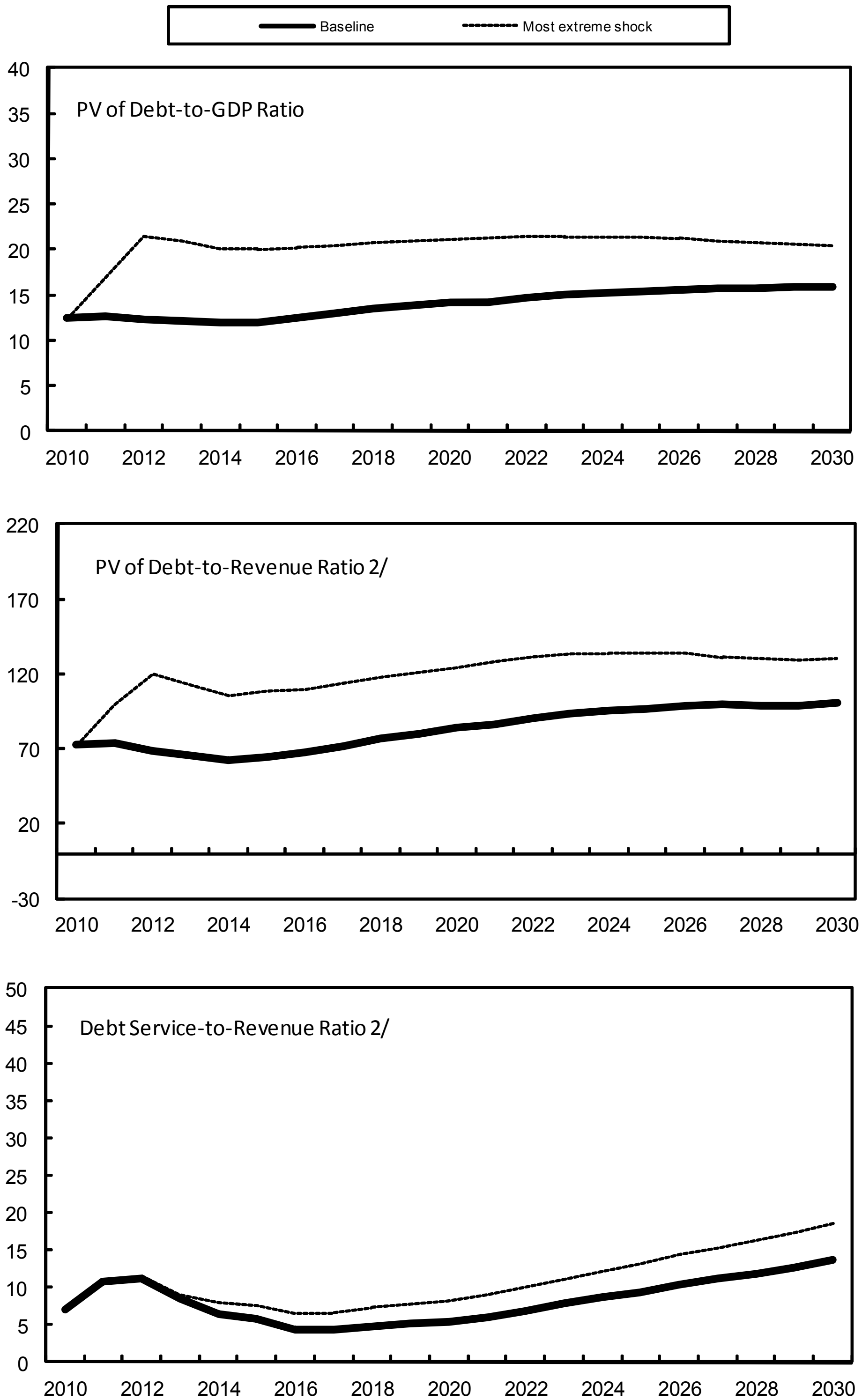
Figure 3. Cameroon: Indicators of Public- and Publicly-Guaranteed External Debt under Alternatives Scenarios, 2010-2030 1/



Source: Staff projections and simulations.

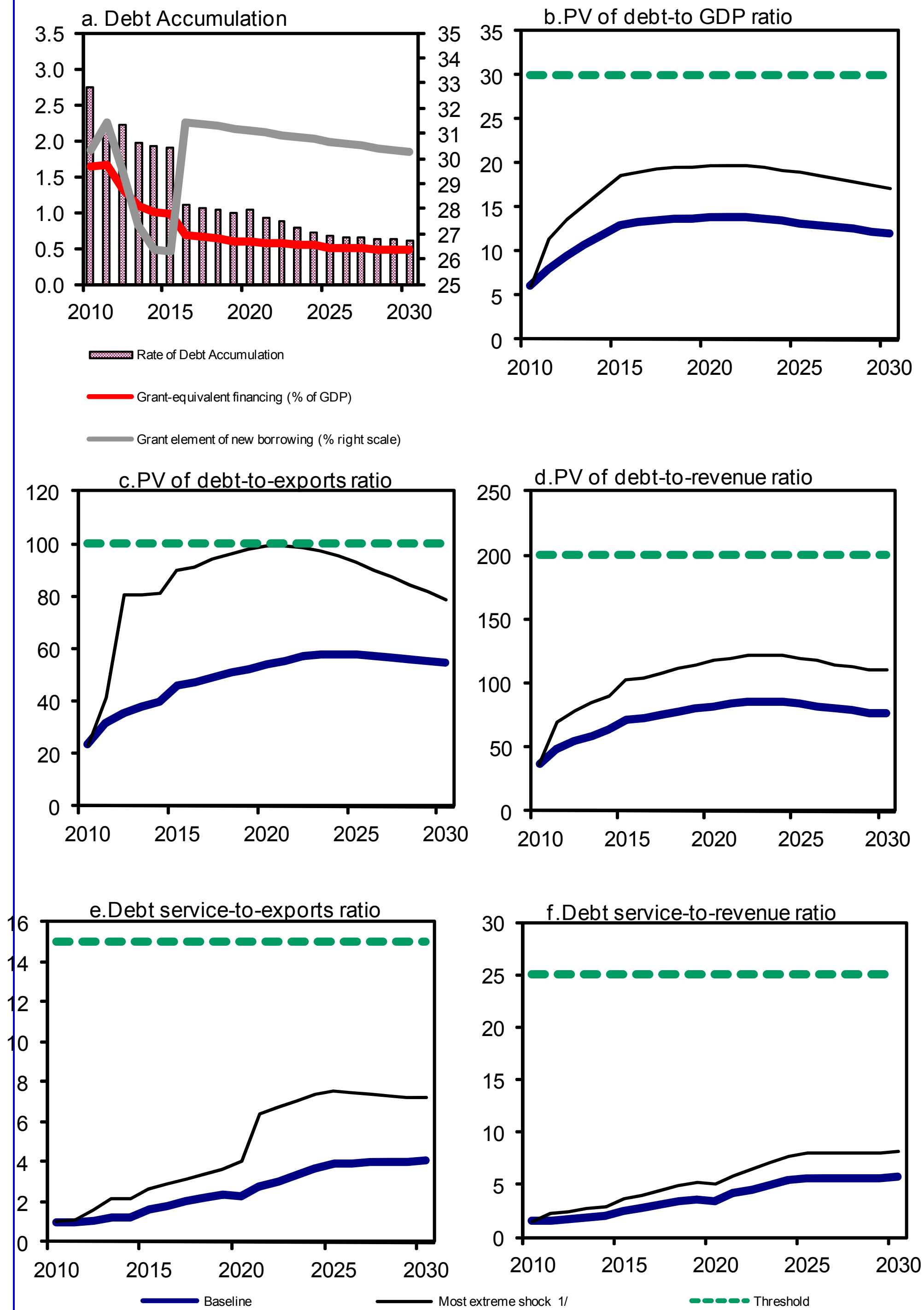
1/ The most extreme stress test is the test that yields the highest ratio in 2020. It corresponds to an Exports shock, except in (b) and (d) w here it is a One-time depreciation shock.

Figure 4. Cameroon: Indicators of Public Debt Under Alternative Scenarios, 2010-2030 1/



Sources: Country authorities; and Fund staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio in 2020.
2/ Revenues are defined inclusive of grants.

Figure 5. Cameroon: Indicators of Public and Publicly Guaranteed External Debt under Non-Concessional Borrowing Scenarios, 2010-2030



Source: Staff projections and simulations.

1/ The most extreme stress test is the test that yields the highest ratio in 2020. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in picture f. to a One-time depreciation shock.

Table 1a.Cameroon: Public Sector Debt Sustainability Framework, Baseline Scenario, 2007–30
(In percent of GDP, unless otherwise indicated)

	Actual			2000-2009 Average	Standard Deviation	Estimate	Projections								
	2007	2008	2009			2010	2011	2012	2013	2014	2015	2010-15 Average	2020	2030	2016-30 Average
Public sector debt 1/	11.9	9.5	9.6			13.4	14.4	14.5	14.8	14.7	15.1		17.5	18.7	
o/w foreign-currency denominated	5.7	5.4	4.9			6.6	8.6	10.2	11.3	12.3	13.4		15.6	14.8	
Change in public sector debt	-3.8	-2.4	0.1			3.8	1.0	0.1	0.2	-0.1	0.3		0.4	0.0	
Identified debt-creating flows	-5.7	-3.2	0.0			4.0	2.0	0.6	-0.9	-1.5	-0.6		-0.3	0.1	
Primary deficit	-4.8	-2.4	-0.1	-6.2	9.8	2.1	1.6	0.7	-0.3	-0.9	-0.1	0.5	0.4	0.9	0.8
Revenue and grants	20.3	20.8	18.4			17.3	17.1	17.8	18.5	19.1	18.5		17.0	15.7	
of which: grants	1.2	0.9	0.8			0.8	0.7	0.5	0.4	0.4	0.3		0.1	0.0	
Primary (noninterest) expenditure	15.5	18.4	18.3			19.4	18.7	18.5	18.2	18.2	18.4		17.4	16.6	
Automatic debt dynamics	-0.9	-0.8	0.1			0.1	-0.5	-0.6	-0.6	-0.6	-0.5		-0.8	-0.8	
Contribution from interest rate/growth differential	-0.5	-0.6	0.0			-0.3	-0.4	-0.6	-0.6	-0.6	-0.5		-0.8	-0.8	
of which: contribution from average real interest rate	0.0	-0.3	0.2			0.0	0.0	0.0	0.1	0.1	0.0		0.0	0.0	
of which: contribution from real GDP growth	-0.5	-0.3	-0.2			-0.2	-0.4	-0.6	-0.6	-0.7	-0.5		-0.7	-0.9	
Contribution from real exchange rate depreciation	-0.4	-0.1	0.1			0.4	-0.1	-0.1	0.0	0.0	0.0		...	...	
Other identified debt-creating flows	0.0	0.0	0.0			1.7	0.9	0.5	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			0.8	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 (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.9	0.9	0.5	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	1.9	0.8	0.1			-0.2	-1.1	-0.4	1.1	1.5	0.9		0.7	-0.1	
Other Sustainability Indicators															
PV of public sector debt	9.4	6.2	4.1			12.4	12.7	12.3	12.2	11.9	12.0		14.3	15.9	
o/w foreign-currency denominated	0.0	0.0	0.0			5.6	6.9	8.0	8.8	9.5	10.3		12.3	12.0	
o/w external	...	...	...			5.6	6.9	8.0	8.8	9.5	10.3		12.3	12.0	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	-28.3	-2.2	-0.6			3.3	3.5	2.7	1.2	0.4	1.0		1.3	3.0	
PV of public sector debt-to-revenue and grants ratio (in percent)	46.6	29.8	22.4			72.0	74.2	68.9	65.7	62.3	64.8		84.1	101.0	
PV of public sector debt-to-revenue ratio (in percent)	49.5	31.1	23.4			75.6	77.3	70.8	67.2	63.5	66.0		84.7	101.2	
o/w external 3/	…	…	…			34.1	41.9	46.0	48.3	50.7	56.7		73.2	76.6	
Debt service-to-revenue and grants ratio (in percent) 4/	11.1	12.5	8.9			7.1	10.9	11.2	8.4	6.5	5.9		5.4	13.6	
Debt service-to-revenue ratio (in percent) 4/	27.5	13.3	9.2			7.4	11.3	11.5	8.6	6.6	6.0		5.4	13.6	
Primary deficit that stabilizes the debt-to-GDP ratio	-1.0	-0.1	-0.2			-1.7	0.7	0.6	-0.5	-0.8	-0.5		0.0	0.9	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	3.2	3.3	2.9	3.5	1.0	2.6	2.9	4.5	4.6	4.7	3.5	3.8	4.6	4.9	4.6
Average nominal interest rate on forex debt (in percent)	1.1	1.4	1.4	3.1	2.0	1.6	1.5	1.5	1.4	1.4	1.3	1.5	1.3	1.2	1.2
Average real interest rate on domestic debt (in percent)	-2.7	0.5	-4.5	-0.9	2.3	-1.7	-0.1	1.2	2.5	3.4	4.4	1.6	5.5	4.2	4.9
Real exchange rate depreciation (in percent, + indicates depreciation)	-2.9	-6.5	-2.2	-2.5	7.5	4.2	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	3.9	1.0	5.5	2.7	2.0	3.2	3.1	3.0	2.8	2.6	2.4	2.9	2.0	2.0	2.0
Growth of real primary spending (deflated by GDP deflator, in percent)	0.0	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grant element of new external borrowing (in percent)	...	...	...	…	…	36.9	36.9	35.0	32.7	32.0	31.5	34.1	31.1	30.2	...

Sources: Country authorities; and Fund staff estimates and projections.
1/ Central government excluding C2D (in gross basis).
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 2a.Cameroon: Sensitivity Analysis for Key Indicators of Public Debt, 2010–30

	Projections							
	2010	2011	2012	2013	2014	2015	2020	2030
				PV of Debt-to-GDP Ratio				
Baseline	12	13	12	12	12	12	14	16
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	12	10	8	7	7	6	5	0
A2. Primary balance is unchanged from 2009	12	11	10	10	11	11	14	6
A3. Permanently lower GDP growth[1]	12	13	12	12	12	13	16	22
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	12	13	13	13	14	14	18	22
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	12	17	21	21	20	20	21	20
B3. Combination of B1-B2 using one half standard deviation shocks	12	13	13	13	13	14	17	20
B4. One-time 30 percent real depreciation in 2011	12	15	14	14	13	13	15	16
B5. 10 percent of GDP increase in other debt-creating flows in 2011	12	21	21	20	20	19	21	20
				PV of Debt-to-Revenue Ratio[2]				
Baseline	73	74	69	66	62	65	84	101
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	72	58	44	38	34	0	0	0
A2. Primary balance is unchanged from 2009	72	67	58	56	57	60	82	35
A3. Permanently lower GDP growth[1]	72	75	70	67	65	68	96	139
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	72	75	74	73	71	76	107	141
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	72	99	120	113	106	108	124	130
B3. Combination of B1-B2 using one half standard deviation shocks	72	74	74	72	70	74	100	127
B4. One-time 30 percent real depreciation in 2011	72	86	78	73	69	70	88	104
B5. 10 percent of GDP increase in other debt-creating flows in 2011	72	125	116	108	102	105	122	129
				Debt Service-to-Revenue Ratio[2]				
Baseline	7	11	11	8	6	6	5	14
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	7	11	11	1	1	0	0	0
A2. Primary balance is unchanged from 2009	7	10	6	4	2	4	6	4
A3. Permanently lower GDP growth[1]	7	11	11	9	7	6	7	18
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	7	11	12	9	8	8	8	19
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	7	11	12	20	20	12	8	19
B3. Combination of B1-B2 using one half standard deviation shocks	7	11	11	9	8	7	7	17
B4. One-time 30 percent real depreciation in 2011	7	11	12	9	7	7	7	19
B5. 10 percent of GDP increase in other debt-creating flows in 2011	7	11	14	33	10	17	7	19
				Debt Service-to-GDP Ratio				
Baseline	1	2	2	2	1	1	1	2
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	1	2	2	0	0	0	0	0
A2. Primary balance is unchanged from 2006	1	2	1	1	0	1	1	1
A3. Permanently lower GDP growth[1]	1	2	2	2	1	1	1	3
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008-2009	1	2	2	2	2	1	1	3
B2. Primary balance is at historical average minus one standard deviations in 2008-2009	1	2	2	4	4	2	1	3
B3. Combination of B1-B2 using one half standard deviation shocks	1	2	2	2	2	1	1	3
B4. One-time 30 percent real depreciation in 2008	1	2	2	2	1	1	1	3
B5. 10 percent of GDP increase in other debt-creating flows in 2008	1	2	2	6	2	3	1	3

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 length of the projection period.

2/ Revenues are defined inclusive of grants.

Table 3a.: External Debt Sustainability Framework, Baseline Scenario, 2007–30[1]
(In percent of GDP, unless otherwise indicated)

	Actual			2000-2009 Average	Standard Deviation	Projections									
	2007	2008	2009			2010	2011	2012	2013	2014	2015	2010-2015 Average	2020	2030	2016-2030 Average
External debt (nominal)[1]	**5.7**	**5.4**	**4.9**			**6.6**	**8.6**	**10.2**	**11.3**	**12.3**	**13.4**		**15.6**	**14.8**	
o/w public and publicly guaranteed (PPG)	5.7	5.4	4.9			6.6	8.6	10.2	11.3	12.3	13.4		15.6	14.8	
Change in external debt	-0.6	-0.3	-0.6			1.7	2.0	1.6	1.1	1.0	1.1		0.4	-0.3	
Identified net debt-creating flows	-3.0	0.6	1.4			3.1	3.1	1.6	0.2	-0.7	0.1		1.8	2.3	
Non-interest current account deficit	**-1.5**	**1.7**	**2.6**	**1.4**	**2.0**	**4.2**	**4.2**	**2.9**	**1.4**	**0.6**	**1.3**		**3.0**	**3.3**	3.4
Deficit in balance of goods and services	1.3	4.7	5.2			6.6	6.8	5.3	3.7	2.7	3.4		4.7	4.8	
Exports	31.0	31.1	24.0			25.9	25.3	26.7	28.4	29.7	28.4		25.7	21.9	
Imports	32.3	35.8	29.2			32.5	32.1	32.0	32.1	32.4	31.8		30.4	26.8	
Net current transfers (negative = inflow)	-2.3	-2.6	-2.2	-1.7	0.6	-2.0	-2.2	-2.0	-1.8	-1.7	-1.7		-1.2	-0.8	-1.1
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)	-0.4	-0.3	-0.4			-0.4	-0.4	-0.4	-0.5	-0.5	-0.5		-0.4	-0.7	
Net FDI (negative = inflow)	**-0.9**	**-0.4**	**-1.6**	**-0.4**	**0.5**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-0.9**	**-0.9**		**-0.8**	**-0.5**	-0.7
Endogenous debt dynamics[2]	**-0.7**	**-0.7**	**0.5**			**-0.1**	**-0.1**	**-0.2**	**-0.3**	**-0.4**	**-0.3**		**-0.5**	**-0.5**	
Contribution from nominal interest rate	0.1	0.1	0.1			0.1	0.1	0.1	0.1	0.1	0.2		0.2	0.2	
Contribution from real GDP growth	-0.2	-0.1	-0.1			-0.1	-0.2	-0.4	-0.4	-0.5	-0.4		-0.6	-0.7	
Contribution from price and exchange rate changes	-0.6	-0.7	0.5			…	…	…	…	…	…		…	…	
Residual (3-4)[3]	**2.4**	**-0.9**	**-2.0**	**-4.7**	**9.8**	**-1.4**	**-1.1**	**0.0**	**1.0**	**1.7**	**0.9**	0.2	**-1.4**	**-2.6**	-2.1
o/w exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt[4]	...	...	3.3			5.5	6.9	7.9	8.7	9.5	10.3		12.3	12.0	
In percent of exports	...	...	13.7			21.1	27.1	29.7	30.8	31.9	36.2		48.1	54.7	
PV of PPG external debt	**...**	**0.0**	**3.3**			**5.5**	**6.9**	**7.9**	**8.7**	**9.5**	**10.3**		**12.3**	**12.0**	
In percent of exports	**...**	**0.0**	**13.7**			**21.1**	**27.1**	**29.7**	**30.8**	**31.9**	**36.2**		**48.1**	**54.7**	
In percent of government revenues	**...**	**...**	**18.7**			**33.2**	**41.8**	**45.9**	**48.2**	**50.6**	**56.5**		**73.2**	**76.6**	
Debt service-to-exports ratio (in percent)	**0.9**	**0.8**	**1.3**			**0.9**	**0.9**	**1.0**	**1.1**	**1.0**	**1.4**		**1.3**	**4.0**	
PPG debt service-to-exports ratio (in percent)	**0.9**	**0.8**	**1.3**			**0.9**	**0.9**	**1.0**	**1.1**	**1.0**	**1.4**		**1.3**	**4.0**	
PPG debt service-to-revenue ratio (in percent)	**1.4**	**1.2**	**1.8**			**1.4**	**1.4**	**1.5**	**1.7**	**1.6**	**2.1**		**2.0**	**5.6**	
Total gross financing need (Billions of U.S. dollars)	-0.4	0.4	0.3			0.8	0.8	0.5	0.2	0.0	0.2		1.1	2.9	
Non-interest current account deficit that stabilizes debt ratio	-0.9	2.0	3.2			2.4	2.2	1.2	0.3	-0.4	0.3		2.7	3.6	
Key macroeconomic assumptions															
Real GDP growth (in percent)	3.3	2.9	2.0	3.3	1.1	2.6	2.9	4.5	4.6	4.7	3.5	3.8	4.6	4.9	4.6
GDP deflator in US dollar terms (change in percent)	10.2	12.9	-8.3	5.9	8.6	-2.8	0.2	2.5	2.3	2.1	1.9	1.0	2.0	2.0	2.0
Effective interest rate (percent)[5]	1.4	1.4	1.6	2.6	1.6	1.5	1.5	1.5	1.4	1.4	1.3	1.4	1.3	1.2	1.2
Growth of exports of G&S (US dollar terms, in percent)	20.4	16.3	-27.7	8.1	16.3	7.6	0.6	13.1	13.5	11.9	0.8	7.9	4.1	6.2	4.9
Growth of imports of G&S (US dollar terms, in percent)	24.7	28.5	-23.5	9.0	14.1	10.8	1.7	6.9	7.1	8.0	3.6	6.4	5.3	5.8	5.5
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	36.9	36.9	35.0	32.7	32.0	31.5	34.1	31.1	30.2	30.8
Government revenues (excluding grants, in percent of GDP)	19.1	20.0	17.6			16.5	16.4	17.3	18.1	18.7	18.2		16.8	15.7	16.5
Aid flows (in Billions of US dollars)[6]	0.2	0.2	0.2			0.6	0.6	0.6	0.5	0.5	0.5		0.5	0.8	
o/w Grants	0.2	0.2	0.2			0.2	0.2	0.1	0.1	0.1	0.1		0.0	0.0	
o/w Concessional loans	0.0	0.0	0.0			0.4	0.5	0.5	0.4	0.4	0.4		0.4	0.7	
Grant-equivalent financing (in percent of GDP)[7]	...	...	...			1.6	1.6	1.3	1.0	1.0	0.9		0.6	0.5	0.6
Grant-equivalent financing (in percent of external financing)	...	...	...			54.5	50.6	45.8	44.2	43.0	41.3		36.0	32.1	35.0
Memorandum items:															
Nominal GDP (Billions of US dollars)	20.4	23.7	22.2			22.1	22.8	24.4	26.1	27.9	29.4		40.3	78.0	
Nominal dollar GDP growth	13.8	16.1	-6.5			-0.3	3.1	7.1	7.0	6.9	5.5	4.9	6.7	7.0	6.7
PV of PPG external debt (in Billions of US dollars)			0.7			1.2	1.6	1.9	2.3	2.6	3.0		5.0	9.4	
(PVt-PVt-1)/GDPt-1 (in percent)						2.2	1.6	1.6	1.4	1.4	1.4	1.6	1.2	0.6	0.9

Source: Staff simulations.

[1] Includes both public and private sector external debt.
[2] Derived as [r - g - r(1+g)]/(1+g+r+gr) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and r = growth rate of GDP deflator in U.S. dollar terms.
[3] For 2009-2014, includes mostly changes in gross foreign assets and other valuation effects and contributions from prices. Marginal changes in the outer years include also 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 debt 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 3b.Cameroon: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2010–30
(In percent)

	Projections							
	2010	2011	2012	2013	2014	2015	**2020**	2030
				PV of debt-to GDP ratio				
Baseline	5	7	8	9	9	10	**12**	12
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030[1]	5	6	8	10	13	15	**19**	**9**
A2. New public sector loans on less favorable terms in 2010-2030[2]	5	7	8	9	9	10	**12**	12
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	5	7	8	9	10	11	**13**	12
B2. Export value growth at historical average minus one standard deviation in 2011-2012[3]	5	8	14	15	15	16	**17**	13
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	5	7	9	9	10	11	**13**	13
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012[4]	5	8	11	11	12	13	**14**	12
B5. Combination of B1-B4 using one-half standard deviation shocks	5	8	13	13	14	15	**16**	13
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011[5]	5	10	11	12	14	15	**18**	17
				PV of debt-to-exports ratio				
Baseline	21	27	30	31	32	36	**48**	55
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030 [1]	21	25	30	36	44	53	**72**	42
A2. New public sector loans on less favorable terms in 2010-2030 [2]	21	27	30	31	32	36	**46**	55
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	21	27	30	31	32	36	**48**	55
B2. Export value growth at historical average minus one standard deviation in 2011-2012[3]	21	36	72	71	70	76	**91**	78
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	21	27	30	31	32	36	**48**	55
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012[4]	21	33	40	40	41	45	**61**	59
B5. Combination of B1-B4 using one-half standard deviation shocks	21	32	53	52	52	58	**70**	65
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011[5]	21	27	30	31	32	36	**48**	55
				PV of debt-to-revenue ratio				
Baseline	33	42	46	48	51	57	**73**	77
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030 [1]	33	39	46	57	70	83	**110**	59
A2. New public sector loans on less favorable terms in 2010-2030 [2]	33	42	46	48	50	56	**70**	77
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	33	42	47	50	52	58	**75**	79
B2. Export value growth at historical average minus one standard deviation in 2011-2012[3]	33	51	82	82	82	88	**103**	81
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	33	43	50	52	55	61	**79**	83
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012[4]	33	51	62	63	65	71	**85**	76
B5. Combination of B1-B4 using one-half standard deviation shocks	33	49	72	73	74	80	**95**	81
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011[5]	33	60	65	69	72	81	**105**	109

Table 3b.Cameroon: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2010-2030 (continued)
(In percent)

	Projections							
	2010	2011	2012	2013	2014	2015	2020	2030
	Debt service-to-exports ratio							
Baseline	1	1	1	1	1	1	**1**	4
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030[1]	1	1	1	1	1	1	**1**	5
A2. New public sector loans on less favorable terms in 2010-2030[2]	1	1	1	1	1	2	**2**	2
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	1	1	1	1	1	1	**1**	4
B2. Export value growth at historical average minus one standard deviation in 2011-2012[3]	1	1	1	2	2	2	**3**	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	1	1	1	1	1	1	**1**	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012[4]	1	1	1	1	1	1	**2**	5
B5. Combination of B1-B4 using one-half standard deviation shocks	1	1	1	1	1	2	**2**	6
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011[5]	1	1	1	1	1	1	**1**	4
	Debt service-to-revenue ratio							
Baseline	1	1	1	2	2	2	**2**	6
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030[1]	1	1	1	2	2	2	**2**	6
A2. New public sector loans on less favorable terms in 2010-2030[2]	1	1	2	2	2	3	**3**	3
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	1	1	2	2	2	2	**2**	6
B2. Export value growth at historical average minus one standard deviation in 2011-2012[3]	1	1	2	2	2	3	**3**	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	1	1	2	2	2	2	**2**	6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012[4]	1	1	2	2	2	2	**3**	6
B5. Combination of B1-B4 using one-half standard deviation shocks	1	1	2	2	2	3	**3**	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011[5]	1	2	2	2	2	3	**3**	8
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline)[6]	30	30	30	30	30	30	**30**	30

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.