



CAMEROON

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION, SECOND REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT, REQUESTS FOR WAIVERS OF NONOBSERVANCE OF PERFORMANCE CRITERIA AND MODIFICATION OF PERFORMANCE CRITERIA—DEBT SUSTAINABILITY ANALYSIS

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Cameroon's risk of external debt distress remains high. Fiscal consolidation and the Fund-supported envisaged reforms, coupled with the increasing share of concessional new borrowing, would improve the debt profile over time. However, at present, Cameroon's external debt remains highly vulnerable to exogenous shocks: the policy-dependent threshold for the present value of debt to exports and debt service to exports are breached in the baseline program scenario as well as under standard stress tests. Mitigating risks to public debt thus requires a number of policy actions including: (i) a resolute and effective fiscal consolidation; (ii) a shift in the composition of new borrowing towards concessional loans; (iii) enhanced controls on externally-financed investment projects at all levels of government; (iv) implementation of policies to boost growth and non-oil exports; and (v) a strengthening of public debt management

BACKGROUND

1. Public debt increased to 38.2 percent of GDP in 2017, a full 5 percent higher than what was reported at the time of the 1st ECF Review (Text Table 1, Text Figure 1). The increase can be explained by two factors: (i) a broadening of the definition of public debt to include all SONARA debt due to third parties (1.8 percent); and (ii) a larger-than-expected fiscal deficit at end-2017, financed by higher external disbursement and higher expenditure float. As a result, total public and publicly guaranteed debt (external plus domestic) increased from a revised 33.3 percent of GDP in 2016 to 38.2 percent in 2017.¹

2. The stock of contracted-but-undisbursed debt also increased. A 2017

study by the National Debt Committee (CNDP) found that the large stock of undisbursed loans reflects a number of factors, including (i) normal project execution lags; (ii) delays in large infrastructure projects; (iii) non-performing projects with very low or nil disbursements, owing to lack of maturation or lack of available counterpart funds. This stock reached CFAF 4.5 trillion or 23 percent of GDP, up from 20 percent of GDP at end-2016. China's share in undisbursed loans is still the largest, but dropped from 36 percent at end-2016 to 28 percent at end-2017, as new borrowing agreements were signed mostly with multilateral creditors, which now account for over 40 percent of undisbursed debt. Commercial loans account for 15.6 percent of the undisbursed amount.

3. The share of external concessional and semi-concessional debt has increased, in line with the objectives of the ECF-supported program.

Multilateral and Paris Club (PC) debt represented almost half of total debt. Bilateral non-PC debt is dominated by China, while commercial debt mostly reflects a \$750 million Eurobond issued in 2015 (Text Table 2).

Text Table 1. Cameroon: Public and Publicly Guaranteed Debt, 2016–17
(percent of GDP)

	2016	2016	2017
	First	Revised	Est.
	Review	perimeter	
Public debt contracted and	27.9	27.4	31.6
External debt	20.7	20.7	23.4
Domestic Debt	5.6	5.1	8.0
BEAC statutory advances	1.2	1.2	...
Publicly guaranteed debt	0.4	0.4	0.3
SONARA debt	0.4	2.8	3.0
o/w external	...	1.5	1.9
Expenditure float	3.2	3.1	3.6
Total PPG debt	31.5	33.3	38.2
Domestic	10.4	10.7	12.6
External	21.1	22.7	25.6
Memo:			
<i>Stock of contracted but undisbursed debt</i>	<i>20.1</i>	<i>20.1</i>	<i>21.9</i>
Domestic	1.3	1.3	0.9
External	18.8	18.8	21.0

Sources: Cameroonian authorities; and IMF staff calculations.

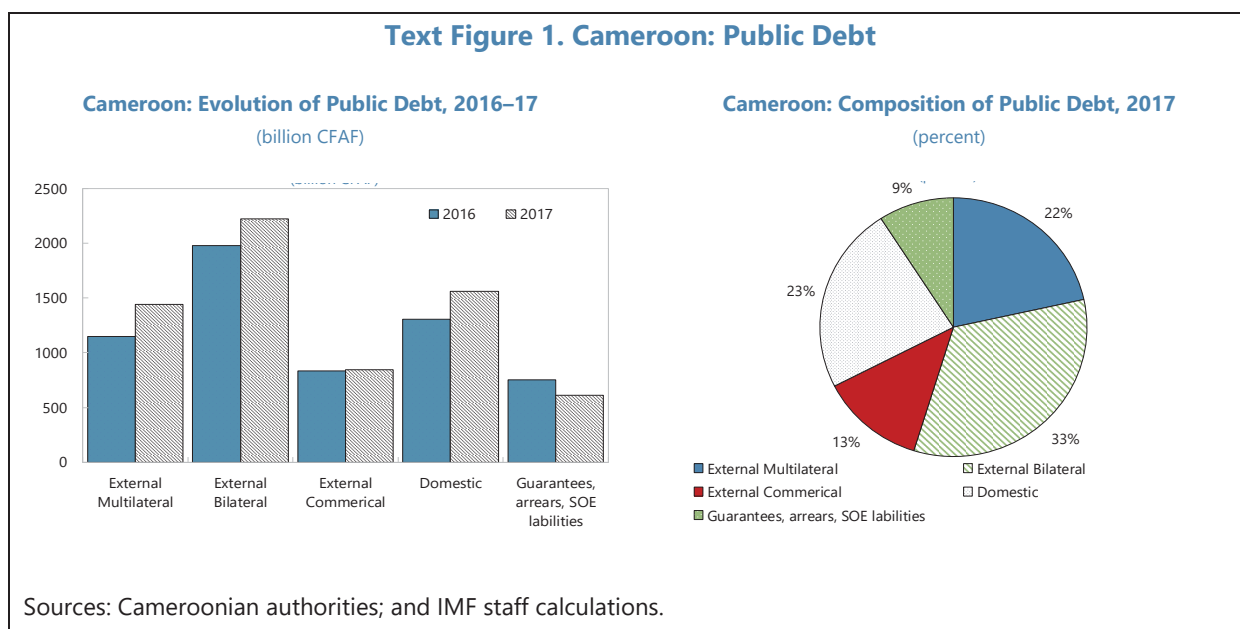
Text Table 2. Cameroon: Composition of External Debt by Creditor, 2016–17
(percent of GDP)

	2016	2017
Multilateral	6.0	7.3
Bilateral PC	3.2	3.7
Bilateral non-PC	7.2	7.9
Commercial	5.9	6.4
o/w SONARA	1.5	1.9
n/a (guaranteed)	0.4	0.3
Total	22.7	25.6

Sources: Cameroonian authorities; and IMF staff calculations.

¹ In line with the previous DSA, the figures reported in the current DSA are higher than those reported by the authorities (and reported in the accompanying Policy Note), because of SONARA debt (see paragraph 6).

4. Domestic² bank debt remains low at 8 percent of GDP in 2017. The composition of bank debt remained tilted towards the long term, with T-bills only accounting for 20 percent of domestic debt.



5. The coverage of public debt for the purposes of this DSA has expanded compared to the 2016 DSA. Specifically, the entire debt to the private sector of the oil refinery SONARA, estimated at 3 percent of GDP, is included. As in the previous DSA, other liabilities linked to other SOEs are small and limited to their external debt (0.1 percent of GDP).

6. However, the debt of State-Owned Enterprises (SOEs) not yet covered by the DSA remains significant. According to a recent report by the authorities, SOE debt stood at 12.5 percent of GDP at end-2016 (see Box 1). For most of SOEs, data for 2017 is not available and further work is needed to clarify the nature of certain liabilities. Staff has agreed with authorities not to include SOEs ex-SONARA in the debt definition, but to work towards expanding it in the future to include all non-financial SOEs. Given that SONARA's debt (4 percent of GDP) is already included in the DSA analysis, and the significant cross-debts between SOEs and the state and across SOEs, the existing stock of SOE debt not included in this DSA (about 8.5 percent of GDP) could give rise to much lower contingent liabilities.

7. Cameroon's capacity to monitor and manage public debt for the purposes of IMF's debt limit policy is adequate and is improving, but further improvements are needed. Discrepancies in reporting persist between the ministry of finance and the debt agency. While progress has been made in making the approval of National Public Debt Committee (CNDP) a requirement for all externally financed projects, some proposals still move forward to relatively advanced stages without preliminary authorization by the CNDP. The tracking of project loan disbursements remains inadequate, often leading to significant ex-post revisions in external debt data. Rapid and concrete actions to reduce the SENDs, particularly those related to loans signed over four years ago and that have very low or zero disbursement rates, is needed to

² Domestic and external debt are defined on a currency-basis. Preliminary data shared by the authorities show that changing the definition to a residency basis would not materially change the split between domestic and external debt.

provide a clearer picture of the existing commitments' overhang and space for new borrowing. On the other hand, progress has been made in the monitoring of SOE debt and other contingent liabilities (see Box 1).

Box 1. Public Debt and State-Owned Enterprises

Improved monitoring. The authorities took a decisive step in improving monitoring of SOEs by publishing, at the end of 2017, a “livre vert” listing all companies where the state or public entity is a shareholder, and all Public Establishments with an Industrial or Commercial Character (EPIC), which are legally distinct from SOEs but imply the same modalities of operation and state control. It is expected that the livre vert will be updated and published yearly.

Coverage. This analysis employs data from SOEs with a state participation above 50 percent and the EPICs for which reliable financial data are available. Financial companies (such as public banks) are excluded.

SOE gross debt is sizeable. Total SOE debt reached 12.5 percent of GDP in 2016, up from 11.7 percent in 2014.

Over two thirds of outstanding SOE debt is financial (banks, securitized debt and other loans) and suppliers' debt.

Cross-debts with the central government are significant. Anecdotal evidence suggests liabilities across SOEs are significant. A substantial portion of gross SOE debt, exceeding 2 percent of GDP, is owed to the state. At the same time SOE claims on the state declined to 0.3 percent of GDP at end-2016, (1.5 percent in 2014).

The public oil refinery SONARA is a concern.

Total SONARA debt reached 5 percent of GDP in 2014, before gradually declining to 4 percent of GDP at end-2017, as lower oil prices triggered higher-than-expected profits. However, the increase in international oil prices has already started to strain SONARA's finances again in 2018. At end-2017, reported state debt vis-à-vis the refinery stood at 0.5 percent of GDP; the refinery's debt to the state, mainly in the form of tax and customs arrears, stood at 1.2 percent of GDP.

Text Table. A census of public enterprises

	Financial data Livre Vert available	
SOEs	38	26
Development companies	2	1
EPIC	17	10
Total	57	37

Text Table: SOEs and EPIC debt, 2014-16

	(percent of GDP)		
	2014	2015	2016
Dividends	0.0	0.0	0.0
Subsidies	0.7	1.0	1.2
Claims on the state	1.5	1.3	0.3
Financial Debt	4.5	5.1	6.4
Suppliers	4.0	3.2	2.6
Tax debt	1.8	2.6	2.3
Social debt	0.2	0.2	0.3
Other	1.3	1.2	0.9
Total debt	11.7	12.4	12.5

SONARA DEBT	In percent of GDP			
	2014	2015	2016	2017
Financial	0.6	0.6	0.6	0.8
Suppliers	3.1	2.1	1.6	1.7
Tax	1.1	1.7	1.6	1.2
Social security	0.0	0.0	0.0	...
Other	0.2	0.2	0.4	0.3
Total debt	5.0	4.5	4.2	4.0

ASSUMPTIONS

8. The macroeconomic framework reflects recent economic developments and the policies underpinning the ECF-supported program.

The baseline scenario is predicated on full implementation of program consolidation and reforms, as well as completion of ongoing infrastructure projects, which should lead to higher FDI and exports. Compared to the 2016 DSA, growth is projected to be lower in 2017 and 2018 following a slower-than-expected recovery and declining oil production; economic activity is expected to gradually pick up and growth to average 4.4 percent in 2018–22. Higher-than-expected spending weakened fiscal consolidation in 2017; corrective measures should ensure more tightening in 2018, but revenues are projected to be on average 1 percent of GDP lower than in the 2016 DSA over the long term due to more conservative assumptions about organic revenue growth. Non-oil exports are projected to remain dynamic and support the current account even as oil exports decline (Text Table 3).

Text Table 3. Cameroon: Key Macroeconomic Assumptions, 2016–38

	2016–17 ^{1/}	2018–22 ^{2/}	2023–38 ^{3/}
Real GDP growth (percent)			
DSA 2017	3.8	4.4	5.1
DSA 2016	5.2	4.9	5.5
DSA 2015	5.9	5.2	4.8
Total revenue excluding grants (percent of GDP)			
DSA 2017	15.0	16.0	17.2
DSA 2016	16.9	17.1	18.1
DSA 2015	17.7	16.6	15.6
Exports of goods and services (percent of GDP)			
DSA 2017	18.9	16.1	14.6
DSA 2016	22.5	22.3	21.9
DSA 2015	25.6	21.7	15.8
Oil price (US dollars per barrel)			
DSA 2017	47.8	56.7	53.6
DSA 2016	46.8	54.6	55.2
DSA 2015	69.2	56.3	61.1

1/ 2015 DSA referred to 2014–15 and 2016 DSA referred to 2015–16.

2/ 2015 DSA referred to 2016–20 and 2016 DSA referred to 2017–21.

3/ 2015 DSA referred to 2021–35 and 2016 DSA referred to 2022–36

9. The financing assumptions have been adjusted to reflect a higher concessionality than in the 2016 DSA.

The financing gap during 2018–20 is assumed to be fully covered by IMF financing and budget support from donors. In line with 2017 disbursements and the government's intention to shift the composition of new project borrowing towards concessional loans, the projected new debt will be skewed towards multilaterals creditors and the grant element of new borrowing is assumed to remain relatively high through the projection horizon.

EXTERNAL DEBT SUSTAINABILITY

10. Cameroon is classified in the category of weak policy performers based on the World Bank Country Policy and Institutional Assessment (CPIA).

With a three-year average CPIA score of 3.2 on a scale of 1 (low) to 6 (high), Cameroon falls within the range of 1 to 3.25 for weak policy performers. However, Cameroon fares better than the average of CEMAC countries (2.9) and its score is comparable to the SSA average. The policy-dependent thresholds applicable to this category are the following: (i) a present value (PV) of debt-to-exports ratio of 100 percent; (ii) a PV of the debt-to-revenue ratio of 200 percent; (iii) a PV of the debt service-to-exports ratio of 30 percent; (iv) a debt service-to-exports ratio of 15 percent; and (v) a debt service-to-revenue ratio of 18 percent.

11. The PV of external PPG debt-to-exports breaches its threshold for a prolonged period of time under the baseline scenario. The PV of debt-to exports ratio—which is the most critical ratio for Cameroon—reached 103 percent in 2017, breaching its policy dependent threshold, and would remain above it until 2035. Its average deviation to the threshold is about 16 percent throughout the period. The path has further deteriorated compared to that projected in the 2016 DSA, reflecting recent export trends and more conservative projections over the medium term, in spite of the fact that the baseline trajectory rests on the assumption of continued access to highly concessional financing and limited use of non-concessional loans.³

12. Other debt stock indicators remain well below their thresholds. The PV of external debt stood at 19.8 percent of GDP and 132 percent of government revenues (excluding grants) at end-2017. After peaking in 2019, ratios are expected to decline steadily during the projected period. The PV of debt-to-GDP ratios has declined by about 15 percent compared to the 2016 DSA reflecting the rebasing of the GDP that occurred in July 2017. These ratios remain well below their thresholds throughout the horizon under the baseline.

13. Debt service payment increase substantially in 2023–25, and liquidity ratios need to be monitored carefully. The external debt service to export ratio remains comfortably below the threshold over the program horizon, but rises to 15.4 percent, slightly above its threshold, in 2023–25 due to the repayment (in three yearly instalments) of the US\$750 million 2015 Eurobond. It then quickly declines after the last installment of the Eurobond is repaid in 2025. Despite an increase in 2023–25, The PV of external debt service to revenue remains below its threshold through the projection horizon.

14. Standard stress tests underline the broad scope of risks to the debt outlook. The ratios of PV of debt-to-exports exports breaches threshold under all eight standardized stress tests, while debt-service-to-exports breaches under four of eight tests. The most severe of these shocks are those that diminish export growth for a short interval (figure 1). Under the combined scenario, the PV of debt-to-GDP ratio briefly and marginally breaches its threshold, and the PV of debt to revenue ratio approaches it (without breaching it) in 2020, before declining. The debt-service-to-revenue ratio marginally breaches its threshold in 2019–25 under the scenario of 30 percent nominal depreciation.

PUBLIC SECTOR DEBT SUSTAINABILITY

15. Public debt is projected to lie on a downward trajectory in the medium to long term. Public debt is projected to peak at 38.7 percent of GDP in 2018 and gradually decline to below 30 percent of GDP by 2030. The incidence of public external debt would increase temporarily as the government relies on external financing to support key infrastructure and pro-poor projects. In the baseline scenario, the PV of total public sector debt as a share of GDP is expected to reach 33 percent in 2018, close to the DSF benchmark level of 38 percent of GDP associated with heightened public debt vulnerabilities for weak policy performers, but is then expected to decline steadily over time to 15 percent of GDP in the long term.

³ The large residual over the projection horizon reported in Table 1 is due to the gradually improving current account, which would turn positive over the medium term, buoyed by dynamic non-oil exports.

Enhanced revenue mobilization would also help reduce the PV of total public debt as a share of revenue from 216 percent in 2017 to 169 percent in 2023 and 91 percent in the long term.

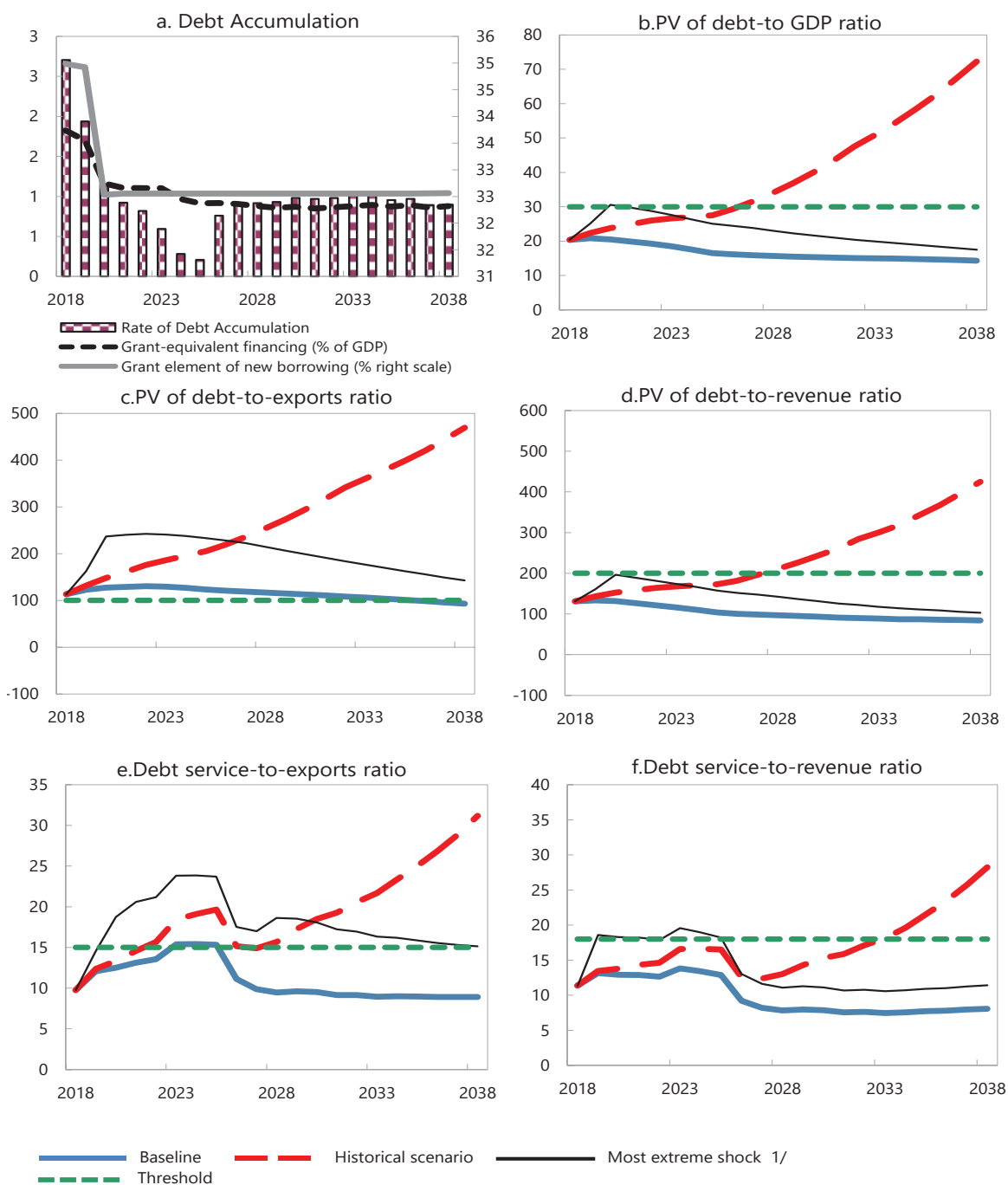
16. The threshold for the PV of debt to GDP ratio would be breached under the real depreciation and contingent liabilities scenario. A 30-percent real depreciation would push the PV of public debt to 40 percent of GDP (the policy threshold) next year, before declining steadily. The same results are obtained under a 10 percent contingent liabilities shock (however, this shock is larger than the total stock of SOE debt not included in the DSA plus the realization of existing contingent liabilities on existing PPPs).

CONCLUSION

17. The assessed risk of debt distress remains high. The present value (PV) of debt-to exports ratio and debt-service-to-exports ratio breach the policy dependent thresholds over several years. This results in the categorization of risk of debt distress as “high”. Steadfast implementation of ambitious fiscal and structural reforms supported by the IMF program is crucial to mitigate risks. The weaknesses presented in all debt burden indicators which are expressed as a proportion to exports points to the need for deep structural reforms to improve competitiveness and achieve economic diversification, while fiscal consolidation and a prudent borrowing policy, skewed towards concessional loans, remain crucial to keep public debt dynamics on a sustainable path and rebuild buffers ahead of upcoming high debt repayments.

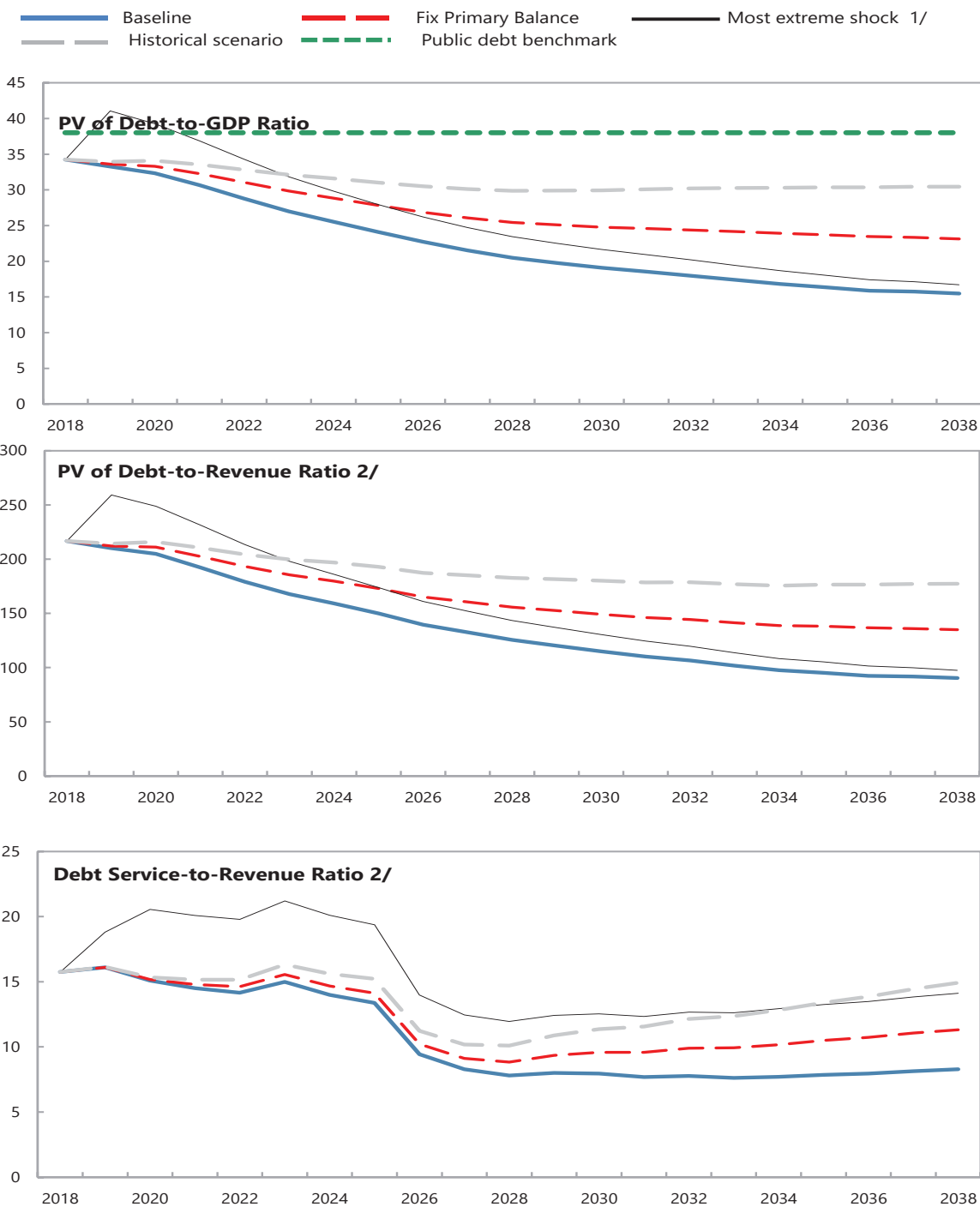
18. Authorities’ view. The authorities noted that large infrastructure needs, including for the upcoming African Cup of Nations (CAN) are an exceptional factor driving the recent increase in debt. As several large projects come to fruition in the coming months, the upward pressure on debt would start easing. They were also confident that steady improvements in non-oil exports and higher growth in the medium term would ensure external sustainability over the projection horizon. Going forward, the authorities also plan to continue prioritizing concessional loans and contract new debt only to fund critical projects with proven strong growth or social potential. The authorities also maintain that only a fraction of SONARA’s debt to the private sector (that came under distress following the refinery’s losses due to the fixed pump prices) should be included in the definition of public debt.

Figure 1. Cameroon: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2018–38 /¹



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2028. 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 One-time depreciation shock

Figure 2. Cameroon: Indicators of Public Debt Under Alternative Scenarios, 2018–38 ^{1/}


Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2028.

2/ Revenues are defined inclusive of grants.

Table 1. Cameroon: External Debt Sustainability Framework, Baseline Scenario, 2015–38
(percent of GDP, unless otherwise indicated)

	Actual			Historical Average ^{6/}	Standard Deviation ^{6/}	Projections							2018-2038		2024-2038	
	2015	2016	2017			2018	2019	2020	2021	2022	2023	Average	2028	2038	Average	
External debt (nominal) 1/	21.6	25.4	28.2			28.9	29.9	29.5	29.0	28.5	27.8			25.0	23.0	
<i>of which: public and publicly guaranteed (PPG)</i>	19.9	22.6	25.6			26.3	27.3	27.0	26.4	25.9	25.2			22.4	20.4	
Change in external debt	7.0	3.7	2.9			0.6	1.0	-0.4	-0.5	-0.5	-0.7			-0.2	-0.2	
Identified net debt-creating flows	3.8	-0.6	-4.9			-1.9	-1.8	-2.0	-2.1	-2.1	-1.9			-4.3	-9.4	
Non-interest current account deficit	3.5	2.5	2.0	2.6	0.8	2.0	2.0	1.9	1.9	1.9	2.0			-0.3	-7.1	
Deficit in balance of goods and services	3.4	2.6	2.0			2.7	2.9	3.0	3.2	3.3	3.2			0.7	-6.3	
Exports	21.8	19.4	19.2			18.0	17.0	16.1	15.4	14.8	14.3			13.4	15.4	
Imports	25.2	22.0	21.2			20.8	19.8	19.1	18.6	18.1	17.5			14.1	9.1	
Net current transfers (negative = inflow)	-1.0	-1.1	-1.2	-1.2	0.5	-1.3	-1.3	-1.3	-1.2	-1.2	-1.2			-1.1	-0.9	
<i>of which: official</i>	-0.2	-0.2	-0.3			-0.3	-0.3	-0.3	-0.3	-0.3	-0.3			-0.2	-0.2	
Other current account flows (negative = net inflow)	1.1	1.0	1.2			0.5	0.4	0.1	-0.1	-0.1	0.1			0.0	0.1	
Net FDI (negative = inflow)	-1.9	-3.0	-6.3	-2.6	1.4	-3.9	-3.5	-3.5	-3.5	-3.6	-3.3			-3.4	-1.8	
Endogenous debt dynamics 2/	2.2	-0.2	-0.6			0.0	-0.3	-0.3	-0.5	-0.5	-0.6			-0.6	-0.5	
Contribution from nominal interest rate	0.3	0.7	0.8			1.0	0.9	1.0	0.9	0.9	0.8			0.7	0.7	
Contribution from real GDP growth	-0.9	-0.9	-0.8			-1.0	-1.2	-1.3	-1.4	-1.4	-1.4			-1.3	-1.2	
Contribution from price and exchange rate changes	2.9	0.1	-0.6			...	...	...	...	...	...			...	...
Residual (3-4) 3/	3.2	4.3	7.8			2.6	2.8	1.6	1.5	1.7	1.2			4.0	9.2	
<i>of which: exceptional financing</i>	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/	...	...	22.5			22.9	23.4	23.0	22.5	21.8	21.0			18.2	16.9
In percent of exports	...	...	117.5			127.3	137.7	143.1	145.6	147.5	147.1			136.0	109.6
PV of PPG external debt	...	...	19.8			20.4	20.8	20.5	19.9	19.3	18.5			15.7	14.3
In percent of exports	...	...	103.5			113.0	122.6	127.2	129.0	130.2	129.2			116.9	93.0
In percent of government revenues	...	...	132.0			131.4	133.3	131.5	126.6	121.5	116.3			96.9	84.2
Debt service-to-exports ratio (in percent)	3.4	9.4	11.0			16.2	16.4	16.5	16.7	17.4	19.3			13.7	12.6	
PPG debt service-to-exports ratio (in percent)	3.4	6.6	7.1			9.8	12.1	12.5	13.1	13.6	15.4			9.5	8.9	
PPG debt service-to-revenue ratio (in percent)	4.5	8.7	9.1			11.3	13.2	12.9	12.9	12.6	13.8			7.8	8.1	
Total gross financing need (Billions of U.S. dollars)	0.7	0.4	-0.8			0.4	0.6	0.5	0.5	0.5	0.8			-1.5	-11.1	
Non-interest current account deficit that stabilizes debt ratio	-3.5	-1.2	-0.9			1.3	1.0	2.2	2.4	2.4	2.8			-0.1	-6.9	
Key macroeconomic assumptions																
Real GDP growth (in percent)	5.7	4.5	3.2	4.2	1.2	4.0	4.5	4.8	5.0	5.2	5.4	4.8	5.4	5.5	5.4	
GDP deflator in US dollar terms (change in percent)	-16.3	-0.2	2.4	0.4	8.3	10.3	2.4	2.7	2.2	2.3	2.1	3.7	1.7	1.8	1.8	
Effective interest rate (percent) 5/	1.8	3.4	3.4	2.9	0.5	4.0	3.3	3.5	3.4	3.5	3.1	3.5	2.9	3.1	3.0	
Growth of exports of G&S (US dollar terms, in percent)	-21.7	-7.1	4.3	1.8	17.8	7.9	0.9	1.9	3.0	3.3	3.9	3.5	7.6	8.9	7.8	
Growth of imports of G&S (US dollar terms, in percent)	-19.5	-9.1	2.0	3.1	17.0	12.4	2.2	3.8	4.6	4.6	3.8	5.2	3.1	2.3	2.7	
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	35.0	34.9	32.5	32.6	32.6	32.6	33.3	32.6	32.6	32.6
Government revenues (excluding grants, in percent of GDP)	16.4	14.7	15.0			15.5	15.6	15.6	15.7	15.9	15.9			16.2	17.0	
Aid flows (in Billions of US dollars) 7/	1614.8	3.1	4.0			1.1	1.1	0.6	0.7	0.7	0.8			0.9	1.9	
<i>of which: Grants</i>	0.0	0.1	0.1			0.1	0.1	0.1	0.1	0.1	0.1			0.1	0.2	
<i>of which: Concessional loans</i>	1614.7	3.0	3.9			0.9	1.0	0.5	0.6	0.6	0.7			0.8	1.6	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			1.8	1.7	1.2	1.1	1.1	1.1			0.9	0.9
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			39.4	38.4	37.4	37.4	37.1	36.9			37.1	36.5
Memorandum items:																
Nominal GDP (Billions of US dollars)	30.9	32.2	34.1			39.1	41.9	45.0	48.4	52.1	56.0			79.2	160.8	
Nominal dollar GDP growth	-11.6	4.2	5.7			14.8	7.1	7.6	7.4	7.7	7.6	8.7	7.2	7.4	7.3	
PV of PPG external debt (in Billions of US dollars)	...	...	7.1			8.0	8.8	9.2	9.7	10.1	10.4			12.4	23.1
(Pvt-Pvt-1)/GDPt-1 (in percent)	...	...	...			2.7	1.9	1.1	0.9	0.8	0.6	1.4	0.9	0.9	0.8
Gross workers' remittances (Billions of US dollars)	0.5	0.5	0.6			0.7	0.7	0.8	0.8	0.8	0.9			1.1	1.8	
PV of PPG external debt (in percent of GDP + remittances)	...	...	19.5			20.0	20.5	20.1	19.6	19.0	18.2			15.5	14.2
PV of PPG external debt (in percent of exports + remittances)	...	...	95.1			102.8	111.2	115.1	116.6	117.4	116.3			105.7	86.5
Debt service of PPG external debt (in percent of exports + remittances)	...	...	6.6			8.9	11.0	11.3	11.9	12.2	13.8			8.5	8.3

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - \rho(1+g)] / (1+g+\rho+g)$ 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 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 PV of new debt).

Table 2. Cameroon: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2018–38
(percent)

	Projections							2038
	2018	2019	2020	2021	2022	2023	2028	
PV of debt-to GDP ratio								
Baseline	20	21	20	20	19	18	16	14
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	20	22	24	25	26	27	34	72
A2. New public sector loans on less favorable terms in 2018-2038 2	20	22	22	22	22	22	22	24
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	20	21	21	21	20	19	16	15
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	20	23	26	25	25	24	20	15
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	20	23	25	25	24	23	20	18
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	20	23	24	24	23	22	19	15
B5. Combination of B1-B4 using one-half standard deviation shocks	20	25	31	30	29	28	23	17
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	20	30	29	28	27	26	22	20
PV of debt-to-exports ratio								
Baseline	113	123	127	129	130	129	117	93
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	113	132	148	161	176	186	254	469
A2. New public sector loans on less favorable terms in 2018-2038 2	113	129	138	144	150	154	161	154
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	113	123	128	130	131	130	117	93
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	113	163	237	240	242	241	214	143
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	113	123	128	130	131	130	117	93
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	113	135	152	154	156	155	138	96
B5. Combination of B1-B4 using one-half standard deviation shocks	113	150	195	198	200	199	177	117
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	113	123	128	130	131	130	117	93
PV of debt-to-revenue ratio								
Baseline	131	133	131	127	122	116	97	84
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	131	143	153	158	164	167	211	425
A2. New public sector loans on less favorable terms in 2018-2038 2	131	140	142	142	140	139	134	140
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	131	136	136	131	126	120	100	87
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	131	147	168	162	155	149	122	89
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	131	149	164	158	151	145	121	105
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	131	147	157	152	145	139	114	87
B5. Combination of B1-B4 using one-half standard deviation shocks	131	161	196	189	181	174	142	103
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	131	190	187	180	172	165	137	119

Table 2. Cameroon: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2018–38 (concluded)
(percent)

	Projections							
	2018	2019	2020	2021	2022	2023	2028	2038
Debt service-to-exports ratio								
Baseline	10	12	13	13	14	15	9	9
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	10	12	13	15	16	18	16	31
A2. New public sector loans on less favorable terms in 2018-2038 2	10	12	12	13	13	15	12	13
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	10	12	13	13	14	15	9	9
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	10	15	19	21	21	24	19	15
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	10	12	13	13	14	15	9	9
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	10	12	13	14	14	16	12	10
B5. Combination of B1-B4 using one-half standard deviation shocks	10	13	15	17	17	20	15	12
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	10	12	13	13	14	15	9	9
Debt service-to-revenue ratio								
Baseline	11	13	13	13	13	14	8	8
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2018-2038 1/	11	13	14	14	15	17	13	28
A2. New public sector loans on less favorable terms in 2018-2038 2	11	13	12	12	12	13	10	11
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2019-2020	11	13	13	13	13	14	8	8
B2. Export value growth at historical average minus one standard deviation in 2019-2020 3/	11	13	13	14	14	15	11	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2019-2020	11	15	16	16	16	17	10	10
B4. Net non-debt creating flows at historical average minus one standard deviation in 2019-2020 4/	11	13	13	14	13	14	10	9
B5. Combination of B1-B4 using one-half standard deviation shocks	11	14	15	16	16	17	12	11
B6. One-time 30 percent nominal depreciation relative to the baseline in 2019 5/	11	19	18	18	18	20	11	11
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	28	28	28	28	28	28	28	28

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 a 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 3. Cameroon: Public Sector Debt Sustainability Framework Baseline Scenario, 2015–38
(percent of GDP, unless otherwise indicated)

	Actual			Average ^{5/}	Standard Deviation ^{5/}	Estimate			Projections						
	2015	2016	2017			2018	2019	2020	2021	2022	2023	2018-23 Average	2028	2038	2024-38 Average
Public sector debt 1/	32.0	33.3	38.2			38.7	38.6	37.9	36.6	35.1	33.6		27.3	21.6	
<i>of which: foreign-currency denominated</i>	19.9	22.6	25.6			26.3	27.3	27.0	26.4	25.9	25.2		22.4	20.4	
Change in public sector debt	10.4	1.4	4.9			0.4	-0.1	-0.7	-1.4	-1.5	-1.5		-1.1	-0.3	
Identified debt-creating flows	10.4	6.7	3.2			0.4	0.2	-0.5	0.0	-0.1	-0.1		-0.5	0.1	
Primary deficit	4.0	5.3	4.1	2.2	2.3	1.8	1.2	0.7	0.7	0.7	0.8	1.0	1.0	1.2	1.1
Revenue and grants	16.5	15.0	15.4			15.8	15.8	15.8	15.9	16.1	16.1		16.3	17.1	
<i>of which: grants</i>	0.1	0.3	0.3			0.3	0.2	0.2	0.2	0.2	0.2		0.2	0.1	
Primary (noninterest) expenditure	20.5	20.3	19.5			17.6	17.0	16.5	16.7	16.8	16.9		17.4	18.4	
Automatic debt dynamics	1.0	0.1	-2.6			-2.0	-1.5	-1.6	-1.7	-1.7	-1.8		-1.5	-1.1	
Contribution from interest rate/growth differential	-1.3	-1.1	-0.6			-1.0	-1.3	-1.4	-1.6	-1.6	-1.7		-1.6	-1.1	
<i>of which: contribution from average real interest rate</i>	-0.1	0.2	0.5			0.5	0.3	0.3	0.2	0.2	0.1		-0.1	0.0	
<i>of which: contribution from real GDP growth</i>	-1.2	-1.4	-1.0			-1.5	-1.7	-1.8	-1.8	-1.8	-1.8		-1.5	-1.1	
Contribution from real exchange rate depreciation	2.3	1.2	-2.0			-1.0	-0.1	-0.1	-0.1	-0.1	0.0		...	...
Other identified debt-creating flows	5.4	1.3	1.7			0.5	0.5	0.4	0.9	0.9	0.8		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	2.1	1.3	1.1			1.0	1.0	1.0	0.9	0.9	0.8		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)	3.3	0.0	0.6			-0.5	-0.5	-0.5	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	0.0	-5.3	1.6			0.1	-0.3	-0.2	-1.3	-1.4	-1.4		-0.6	-0.4	
Other Sustainability Indicators															
PV of public sector debt	...	...	32.5			32.7	32.1	31.4	30.1	28.4	26.9		20.5	15.5
<i>of which: foreign-currency denominated</i>	...	...	19.8			20.4	20.8	20.5	19.9	19.3	18.5		15.7	14.3
<i>of which: external</i>	...	...	19.8			20.4	20.8	20.5	19.9	19.3	18.5		15.7	14.3
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...
Gross financing need 2/	5.5	7.8	5.9			4.3	3.7	3.1	3.1	3.0	3.2		2.3	2.6	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	211.6			206.8	202.4	199.2	188.6	177.0	167.1		125.5	90.3
PV of public sector debt-to-revenue ratio (in percent)	...	...	216.2			210.9	205.5	202.1	191.1	179.2	169.1		126.7	91.1
<i>of which: external 3/</i>	...	...	132.0			131.4	133.3	131.5	126.6	121.5	116.3		96.9	84.2
Debt service-to-revenue and grants ratio (in percent) 4/	8.7	17.2	11.3			15.7	16.1	15.1	14.5	14.2	15.0		7.8	8.3	
Debt service-to-revenue ratio (in percent) 4/	8.7	17.6	11.6			16.1	16.3	15.3	14.7	14.3	15.2		7.9	8.3	
Primary deficit that stabilizes the debt-to-GDP ratio	-6.4	3.9	-0.8			1.4	1.2	1.3	2.1	2.2	2.3		2.1	1.5	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	5.7	4.5	3.2	4.2	1.2	4.0	4.5	4.8	5.0	5.2	5.4	4.8	5.4	5.5	5.4
Average nominal interest rate on forex debt (in percent)	1.8	3.6	3.4	3.0	0.5	2.4	2.5	2.4	2.4	2.4	2.1	2.4	1.7	1.8	1.7
Average real interest rate on domestic debt (in percent)	1.3	1.1	2.8	-0.5	2.2	2.6	1.4	1.7	0.7	0.8	0.3	1.2	-1.5	4.7	0.5
Real exchange rate depreciation (in percent, + indicates depreciation)	16.8	6.4	-9.0	2.7	8.6	-4.0
Inflation rate (GDP deflator, in percent)	0.2	0.0	0.4	2.0	1.9	0.5	1.3	1.5	1.5	1.6	1.6	1.3	1.7	1.8	1.8
Growth of real primary spending (deflated by GDP deflator, in percent)	6.4	3.1	-0.7	0.9	2.2	-6.0	0.9	1.4	6.5	5.8	6.2	2.5	5.7	4.8	6.0
Grant element of new external borrowing (in percent)	35.0	34.9	32.5	32.6	32.6	32.6	33.3	32.6	32.6	...

Sources: Country authorities; and staff estimates and projections.

1/ Coverage includes the central government and certain SOEs. 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 4. Cameroon: Sensitivity Analysis for Key Indicators of Public Debt, 2018–38

	Projections							
	2018	2019	2020	2021	2022	2023	2028	2038
PV of Debt-to-GDP Ratio								
Baseline	33	32	31	30	28	27	21	15
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	33	33	33	33	33	32	30	30
A2. Primary balance is unchanged from 2018	33	32	32	32	31	30	26	23
A3. Permanently lower GDP growth 1/	33	32	31	30	29	27	22	21
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2019-2020	33	33	33	32	30	29	24	21
B2. Primary balance is at historical average minus one standard deviations in 2019-2020	33	34	36	35	33	31	24	18
B3. Combination of B1-B2 using one half standard deviation shocks	33	34	35	34	32	31	25	20
B4. One-time 30 percent real depreciation in 2019	33	40	38	36	34	32	24	17
B5. 10 percent of GDP increase in other debt-creating flows in 2019	33	39	38	37	35	33	26	18
PV of Debt-to-Revenue Ratio 2/								
Baseline	207	202	199	189	177	167	125	90
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	207	207	211	207	203	200	183	178
A2. Primary balance is unchanged from 2018	207	205	206	199	192	186	156	135
A3. Permanently lower GDP growth 1/	207	202	199	189	179	170	135	123
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2019-2020	207	206	207	198	188	179	145	121
B2. Primary balance is at historical average minus one standard deviations in 2019-2020	207	217	230	218	205	194	148	102
B3. Combination of B1-B2 using one half standard deviation shocks	207	213	223	213	201	191	152	117
B4. One-time 30 percent real depreciation in 2019	207	252	244	228	212	198	144	98
B5. 10 percent of GDP increase in other debt-creating flows in 2019	207	248	243	230	217	205	156	107
Debt Service-to-Revenue Ratio 2/								
Baseline	16	16	15	15	14	15	8	8
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	16	16	15	15	15	16	10	15
A2. Primary balance is unchanged from 2018	16	16	15	15	15	16	9	11
A3. Permanently lower GDP growth 1/	16	16	15	15	14	15	8	10
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2019-2020	16	16	16	15	15	16	9	10
B2. Primary balance is at historical average minus one standard deviations in 2019-2020	16	16	16	16	15	16	9	10
B3. Combination of B1-B2 using one half standard deviation shocks	16	16	16	16	15	16	9	10
B4. One-time 30 percent real depreciation in 2019	16	19	21	20	20	21	12	14
B5. 10 percent of GDP increase in other debt-creating flows in 2019	16	16	16	17	15	16	11	10

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.