INTERNATIONAL MONETARY FUND

TOGO

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION AND REQUEST FOR A THREE-YEAR ARRANGEMENT UNDER THE EXTENDED CREDIT FACILITY—DEBT SUSTAINABILITY ANALYSIS

April 27, 2017

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Prepared by the International Monetary Fund and the World Bank

Risk of external debt distress:	*Moderate*[1]
Augmented by significant risks stemming from domestic public debt?	*Yes*

Togo's risk of external debt distress continues to be moderate with heightened overall risk of debt distress—unchanged from the previous Debt Sustainability Analysis (DSA) published in October 2015. A return to historical levels of growth and fiscal deficits would lead to a rapid accumulation of debt. Though less extreme, a shock to growth combined with a reduction in FDI and capital transfers would push Togo above the external debt-distress threshold for the PV of debt-to-GDP. Togo's overall public debt dynamics also highlight heightened vulnerabilities, with the debt-to-GDP ratio remaining above the indicative benchmark for a significant part of the projection period. The analysis highlights the need for sustained fiscal consolidation, improved debt management, and macroeconomic policies to reduce the level of public debt to prudent levels over the medium term.

[1] Togo's Country Policy and Institutional Assessment (CPIA) rating averaged 2.98 over 2013-2015 and the country is classified as having weak policy performance.

INTRODUCTION

1. The debt sustainability analysis (DSA) for Togo's public debt is the result of collaborative efforts of the International Monetary Fund (IMF) and the World Bank.[2] It updates the 2015 DSA (IMF Country Report No. 15/309), based on the most recent external debt data from the authorities, and the macroeconomic framework derived from the 2017 discussions on a program supported by the IMF's Extended Credit Facility (ECF). It uses the latest template of the debt sustainability analysis for low-income countries. Debt data includes external and domestic debts of the central government, as well as external debt of public enterprises and government guaranteed debt. Domestic debt is defined as debt denominated in *franc de la Communauté financière d'Afrique* (FCFA).

2. The previous DSA assessed the level of Togo's risk of external debt distress to be moderate owing to the large increase in government debt to finance infrastructure projects following the HIPC completion point. (Text Table 1). Togo's public and publicly guaranteed (PPG) external debt dropped from 52.6 percent of GDP in 2009 to 18 percent in 2010 as the country reached the completion point of the enhanced HIPC Initiative in December 2010. Since then, the external debt stock has remained broadly the same, reaching 19.7 percent of GDP at end–2016. The composition of the central government external debt has, however, changed significantly between 2010 and 2016: the share of multilateral debt fell to 32 percent (from 65 percent) while the share of bilateral debt rose to 65 percent (from 34 percent). This reflects recent large borrowing from China and India Exim-Banks to finance development projects, including the extension of the Port and the Lomé airport.

Text Table 1. Togo: Composition of Public Debt, 2010-2016

	End-2010			End-2013			End-2016		
	Billions of CFAF	Percent of public debt	Percent of GDP	Billions of CFAF	Percent of public debt	Percent of GDP	Billions of CFAF	Percent of public debt	Percent of GDP
Total Public Debt	**767.3**	**100**	**48.8**	**1,193.3**	**100**	**56.4**	**2,122.8**	**100**	**80.8**
External Debt	**283.6**	**37**	**18.0**	**295.8**	**25**	**14.0**	**518.8**	**24**	**19.7**
Central Government	**237.7**	**31**	**15.1**	**294.8**	**25**	**13.9**	**518.8**	**24**	**19.7**
Multilateral	154.4	20	9.8	146.5	12	6.9	168.2	8	6.4
Bilateral	81.3	11	5.2	124.8	10	5.9	336.6	16	12.8
Paris Club	16.3	2	1.0	6.6	1	0.3	5.8	0	0.2
Non-Paris Club	65.0	8	4.1	118.1	10	5.6	330.8	16	12.6
Commercial Banks	2.1	0	0.1	23.6	2	1.1	14.0	1	0.5
SOEs[1]	**45.9**	**6**	**2.9**	**1.0**	**0**	**0.0**	**0.0**	**0**	**0.0**
Multilateral	...	...	...						
Other	...	...	...	1.0					
Domestic Debt	**483.7**	**63**	**30.8**	**897.5**	**75**	**42.4**	**1,604.1**	**76**	**61.1**
T-Bills + Bonds	151.9	20	9.7	324.2	27	15.3	764.7	36	29.1
Domestic Arrears	275.2	36	17.5	249.1	21	11.8	294.9	14	11.2
Liquidated SOEs	4.9	1	0.3	52.6	4	2.5	39.2	2	1.5
Banking System	48.2	6	3.1	164.0	14	7.8	424.0	20	16.1
SOEs	3.5	0	0.2	107.7	9	5.1	81.3	4	3.1

Sources: Togolese authorities and Staff calculations.

[1]Details for SOEs' 2010 external debt have not been communicated by the authorities.

[2] The DSA follows the IMF and World Bank Staff Guidance Note on the Application of the Joint IMF-World Bank Debt Sustainability Framework for Low-Income Countries, dated November 7, 2013 (SM/13/292).

3. Public domestic debt has continuously increased, sustained by large issuance of securities (Text Table 1). Between 2010 and 2016, domestic debt nearly doubled reaching 61 percent of GDP, as its share in total public debt increased by 13 percentage points to 76 percent of public debt. A key driver of the increase in domestic debt has been the extended recourse to the regional financial market and direct borrowing from the banking system. The stock of government securities on the regional market has increased from 9.7 percent of GDP to 29.1 percent of GDP between 2010 and 2016, with an increasing use of both Treasury bills and bonds. Consequently, Togo had the highest levels of domestic debt-to-GDP and total debt-to-GDP ratios within the WAEMU at end–2016.[3]

4. The government's infrastructure financing tools had directly increased the stock of domestic debt by about 7½ percent of GDP by end-2016, further deteriorating the fiscal situation and weakening the stability of the financial sector. Beginning in 2013, the government of Togo initiated a new financing tool that consists of private sector contractors prefinancing public infrastructure development through domestic commercial bank loans to be repaid by the government. The capital spending reported in the budget and in the fiscal accounts consisted mostly of payment of debt service of prefinancing loans to banks rather than the execution of the investment involved. Furthermore, the debt obligations inherent in prefinancing arrangements were not included in public debt. The size and the scope of the pre-financing contracts, generally obtained through direct negotiations (not through competitive bids), averaged 7 percent of GDP annually over 2013-16, peaking at 10½ percent in 2015. This added pressure to the already weak fiscal prospects and banks' exposure to public borrowing. The government has now discontinued this problematic public financial management practice.

5. Togo is considered a weak policy performer for the purpose of determining the debt burden thresholds under the DSA framework. Togo's rating on the World Bank's Country Policy and Institutional Assessment (CPIA) averaged 2.98 from 2013 to 2015, classifying the country as a weak policy performer for purposes of this DSA analysis. The relevant external public debt burden thresholds are as shown in Text Table 2.

[3] See the 2016 IMF Staff Report on WAEMU common policies: http://www.imf.org/external/pubs/ft/scr/2016/cr1696.pdf

Text Table 2. Togo: External Debt Burden Threshold[1]

External Debt Burden Thresholds	Without Remittances
PV of debt in % of	
Exports	100
GDP	30
Revenue	200
Debt service in % of	
Exports	15
Revenue	18
Total Public Debt Benchmark	
PV of total public debt in percent of GDP	38

Source: DSA template.

[1] With remittances being low in Togo, the scenario with remittances will not be considered.

BASELINE ASSUMPTIONS

6. The baseline macroeconomic assumptions for the present DSA are as follows:

a. Real GDP growth is expected to increase from 5.2 percent in 2014-16 to 5.6 percent by 2021. In the long-run, real GDP growth is estimated to settle at 5 percent, slightly above the historical average of 4.5 percent, which was depressed by dislocations caused by protracted social, political, and economic crisis that the country experienced up to the mid-2000s. The main downside risks to growth include capacity constraints in implementation of structural reforms, resistance to reform from interest groups, and further slowdown in Togo's main regional trading partners. Additionally, severe weather conditions and failure to address the energy gap will add to the downside risks.

b. Public investment reached 13 percent of GDP in 2015 and is estimated to have reached 14 percent of GDP in 2016. It is expected to decline in 2017 and 2018 before stabilizing at around 8 percent by 2019-21. Public investment financing is expected to tilt toward external concessional sources, as external financing remains around current levels. Public investment projects are expected to be mostly directed to infrastructure, with increasing portions dedicated to social spending.

Text Table 3. Togo: Key Macroeconomic Assumptions (DSA 2017 vs DSA 2015)

	2014-16	2014-20	2021-35
Real GDP Growth (percent)			
DSA 2017	5.2	5.3	5.2
DSA 2015	5.5	5.6	4.6
Total Revenue (percent of GDP)[1]			
DSA 2017	21.4	25.5	26.0
DSA 2015	20.7	21.7	21.9
Exports of goods and services (percent of GDP)			
DSA 2017	36.8	37.1	41.0
DSA 2015	40.6	43.6	43.5

Sources: Togo authorities; and IMF staff estimate.

[1]Total revenue, including grants.

c. Key commodity price projections (i.e., for oil, phosphates, cotton, cocoa, and coffee) through 2021 are sourced from the WEO prepared in January 2017, and are assumed to remain constant in real terms for the remainder of the forecast period.

d. Inflation declined to 0.9 percent in 2016 from 1.8 percent in 2015, owing to the fact that domestic oil prices partly followed international oil price movements. Inflation is projected to increase slightly to 1.5 percent in 2017 and remain stable afterwards at 2 percent, below the WAEMU convergence criteria.

e. Total revenue reached 21.7 percent of GDP in 2016 and is projected to reach 26 percent by 2037, higher than assumed in the previous DSA due to the recent improvement in revenue collection, which is carried through the projection period as well as a higher level of grants.

f. The domestic primary fiscal deficit is expected to improve to 3.5 percent of GDP in 2017 from 4.5 percent of GDP in 2016. The overall primary balance (cash basis, including grants) is expected to reach 2 percent of GDP by 2019, an improvement of 9.2 percentage points from 2016.

g. The current account deficit is projected to narrow from 9.8 percent in 2016 to 7.3 percent by 2019, this predicated upon an increase in private sector-led growth which will boost Togo's exports. At the same time, imports would be contained following slowdown in public sector investment and improvements in agricultural production. The other components of the current account (i.e., services, primary and secondary income) are expected to remain around their current levels.

h. Foreign direct investment (FDI) flows are very volatile in Togo with an alternation of net inflows and outflows. FDI is expected to stabilize around an inflow of about 4.7 percent of GDP per year in the long run. However, given Togo's weak track record in governance, these flows, as well as grants, are subject to significant risks, which may, as a result, alter the debt dynamics assumed in the baseline.

EXTERNAL DEBT SUSTAINABILITY ANALYSIS

Baseline

7. Under the baseline scenario, Togo's external debt indicators remain below their indicative policy-relevant thresholds (Table 1a, Figure 1). The present value (PV) of public and publicly guaranteed (PPG) debt is projected at 15.1 percent of GDP in 2016 and will increase to 21.9 by 2037 owing to higher external borrowing. However, aided by an absence of non-concessional financing through 2019, the ratio will remain below the 30 percent threshold under the baseline throughout the projection period, with a moderate increase in evidence over the forecast period. Both ratios of the PV of external debt relative to revenues and to exports remain relatively stable and below their respective indicative thresholds through the end of the projection period. Similarly, debt service measures remain well below thresholds and on a broadly downward trend. Improvements in debt-management practices envisaged in the authorities' ECF-supported program will give further resilience to shocks affected debt service needs (Figure 1).

Alternative Scenarios and Stress Tests

8. Alternative scenarios reveal multiple breaches of relevant thresholds (Figure 1)**.** Under the most extreme shock scenario, the present value (PV) of debt-to-GDP ratio breaches the relevant thresholds, however other debt indicators remain under their relevant thresholds. Under the historical scenario, which sets key macroeconomic parameters to their historical values, the three PV debt ratios breach their relevant policy dependent thresholds while the debt service-to-exports and the debt-service-to-revenue ratios remain broadly below their relevant policy dependent thresholds. This highlights the importance for Togo to improve macroeconomic policies. On the stress tests, the results are the following:

- The most extreme shock that affects the PV of external debt-to-GDP ratio (Figure 1, Table 1b) is a combination shock of low growth and large reduction in non-debt creating flows (FDI and public transfers, both set at historical average minus one standard deviation for 2017 and 18). In this case the ratio will breach the threshold in 2019 and remain above for about a decade before declining below the threshold. This indicator is mostly vulnerable to non-debt creating flows, and highlights the importance of FDI and the need for stability in such flows to maintain a stable profile for Togo's debt;

- The most extreme shock that affects the PV of external debt-to-export ratio (Figure 1, Table 1b) is an export shock. This ratio is also vulnerable to a non-debt creating flow shock and to a combined growth and non-debt creating flow shock;

- Finally, under the most extreme shock, the debt service ratios remain under their policy relevant thresholds.

PUBLIC SECTOR DEBT SUSTAINABILITY

9. **The inclusion of Togo's domestic public debt in the analysis emphasizes the vulnerability of the baseline scenario (Table 2a, Figure 2).** Togo's domestic debt burden reflects persistently high deficits, recognition as debt of accumulated liabilities from liquidated loss-making SOEs, and weak public financial management, including very limited debt management capacity. Domestic debt is projected to decline to 58.4 percent of GDP in 2017 from a record high of 61 percent of GDP in 2016. By 2037, repayment of arrears coupled with significant fiscal consolidation is expected to significantly reduce domestic debt and total public and publicly guaranteed debt.

Baseline scenario

10. **Under the baseline and alternative scenarios, indicators of overall public debt burden (external plus domestic) show significant vulnerabilities**. The PV of public debt–to-GDP stands at fully twice the benchmark level of 38 percent in 2016. The authorities' ECF-supported program will lead to a substantial fiscal adjustment due to a combination of spending restraint and strengthened revenue. The overall primary balance will reach 2 percent of GDP by 2019 and, if maintained, will allow Togo's PV of public debt-to-GDP to reach the 38 percent benchmark by 2025, and to decline gradually below thereafter (Figure 2). However, under the historical scenario and the scenario that keeps the primary balance unchanged from 2017, the PV of public debt-to-GDP stays above the benchmark throughout the projection period as the country accumulates more debt to finance larger fiscal deficits.

AUTHORITIES' VIEWS

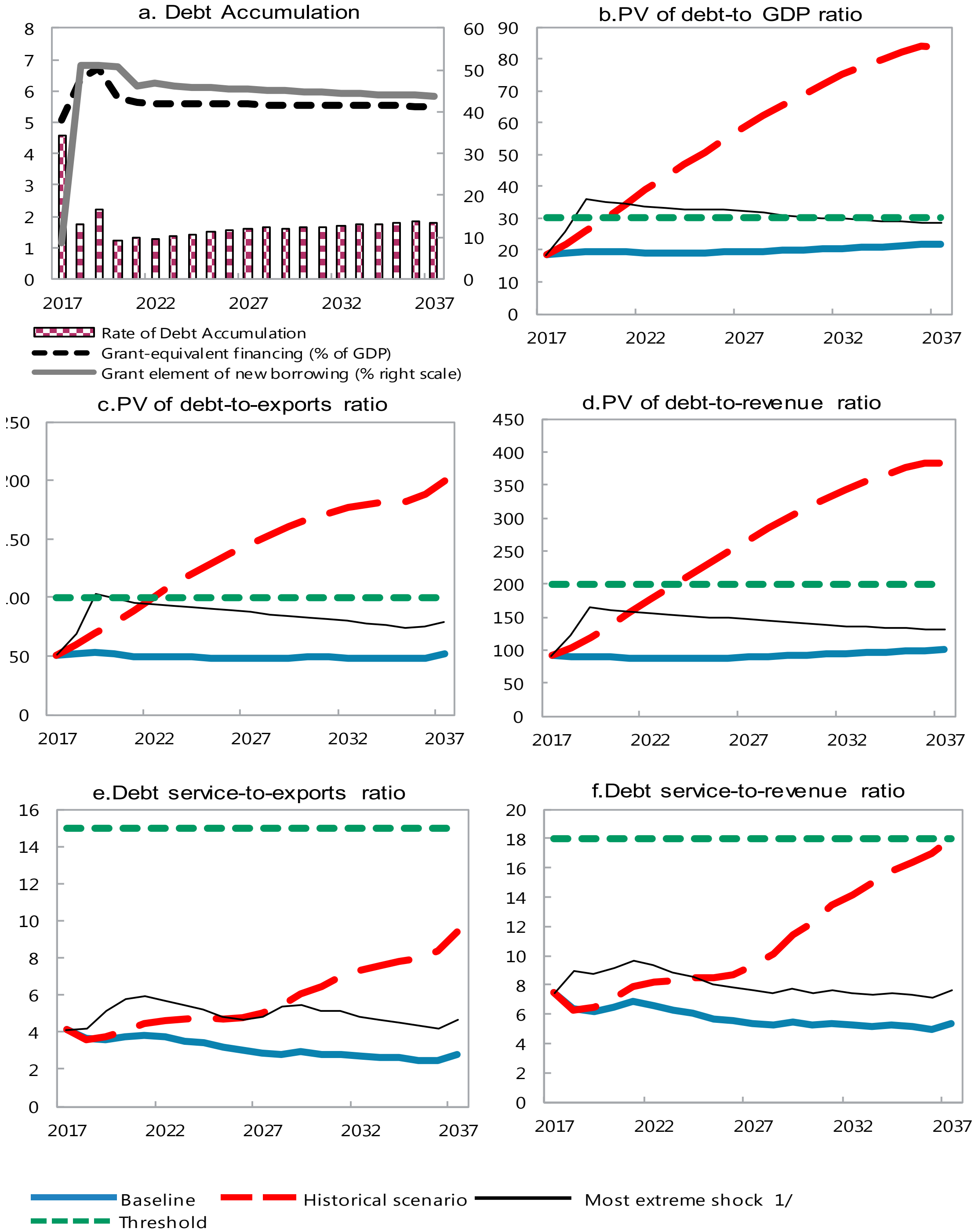
11. **The authorities broadly agreed with staff's assessment of Togo's debt situation and recommendations on debt management policy, but preferred a more narrow coverage of public debt.** They recognized that Togo's current level of debt poses risks to the country and that the recent pace of debt accumulation is not sustainable. Fiscal measures to place the country's debt on a downward path are a key element of the authorities' ECF-supported program. The authorities' program also aligns with the staff's recommendations on debt management. They intend to make full use of IMF technical assistance and training resources to strengthen their capacity in this area. The authorities, however, would have preferred to exclude public institutions of an industrial or commercial nature from public sector debt, if possible, as they think that this debt does not represent a fiscal risk to the central government. Following Fund policy, the coverage of public debt in the debt sustainability analysis includes all public enterprises that the government controls, such as by owning more than half of the voting shares.

CONCLUSION

12. Togo remains at a moderate risk of external public debt distress but has a heightened risk of overall public debt distress, reflecting vulnerabilities in domestic debt. Togo had the largest debt-to-GDP ratio in WAEMU in 2016, 80.8 percent of GDP (76.2 percent excluding public enterprise debt), composed largely of non-concessional loans. Under the baseline scenario, all external debt sustainability indicators are expected to remain below their indicative thresholds throughout the projection period (2017–37). However, under the historical scenario and several other shock scenarios, several debt indicators breach their respective thresholds. As shown by the deterioration of the debt indicators, Togo's external debt remains vulnerable to adverse shocks: on exports stemming from low external demand or decline in commodity prices, and on non-debt creating flows. Also, Togo's overall public debt dynamics present heightened vulnerabilities, with the debt-to-GDP ratio currently standing at twice prudential levels, and remaining above the indicative benchmark through 2024.

13. Togo's debt burden calls for the authorities' commitment to improve debt management significantly, supported by solid macroeconomic policies. Debt management should be strengthened through the creation of good information systems capable of feeding a comprehensive borrowing plan. The latter should include well-defined development objectives for investment projects and their financing options so that sound financing decisions can be undertaken. The zero ceiling on external nonconcessional borrowing should help improve the financing mix. Moreover, efforts should be made to strengthen revenue mobilization and to improve the efficiency of public spending, especially capital investment, to identify saving and foster growth.

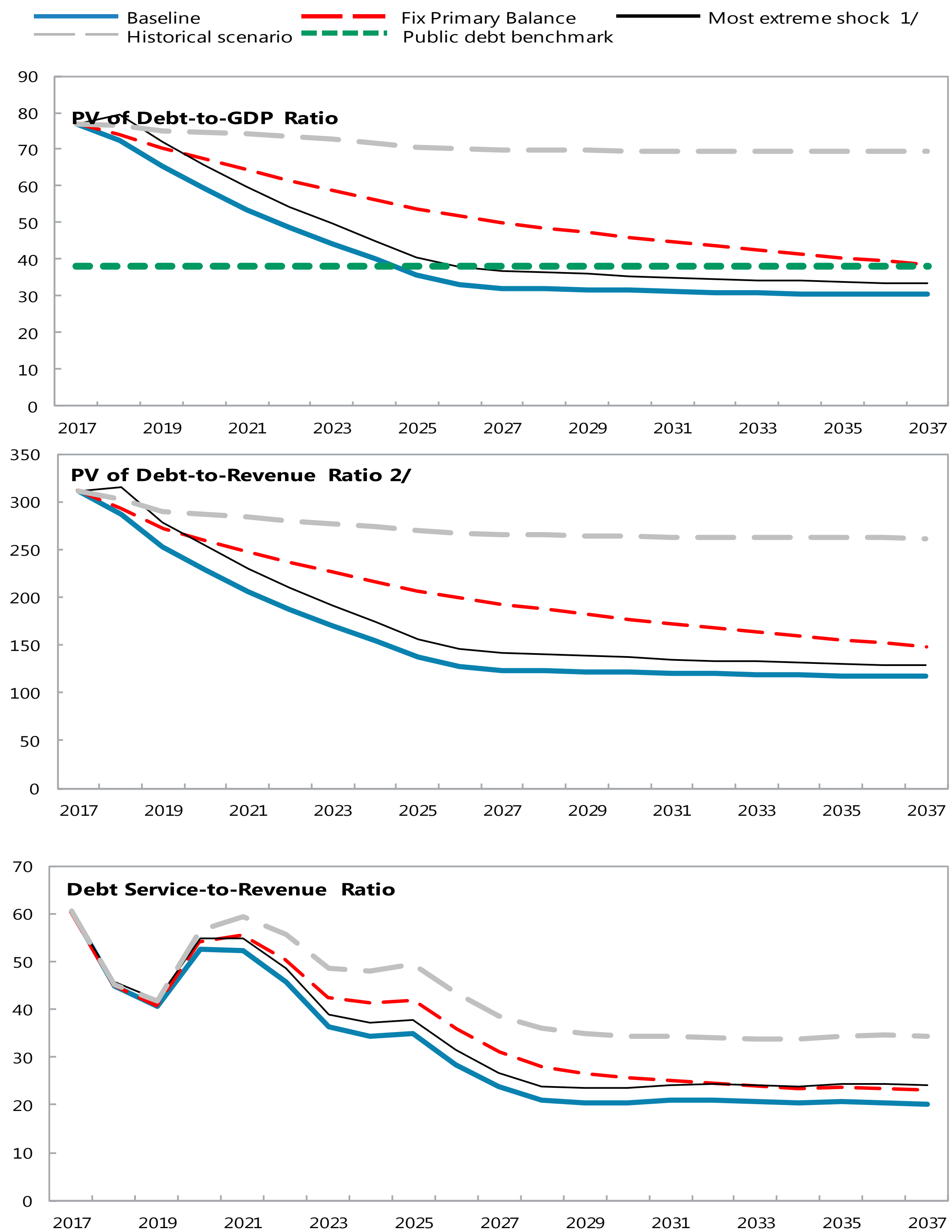
Figure 1. Togo: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2017-2037 1/



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 2027. 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. Togo: Indicators of Public Debt Under Alternative Scenarios, 2017-2037 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 2027.
2/ Revenues are defined inclusive of grants.

Table 1a. Togo: External Debt Sustainability Framework, Baseline Scenario, 2014-2037 1/

(In Percent of GDP, unless otherwise indicated)

	Actual			Historical 6/ Average	Standard 6/ Deviation	Projections									
	2014	2015	2016			2017	2018	2019	2020	2021	2022	2017-2022 Average	2027	2037	2023-2037 Average
External debt (nominal) 1/	**18.4**	**23.0**	**21.5**			**25.5**	**27.7**	**30.4**	**31.0**	**31.6**	**32.0**		**34.2**	**37.2**	
of which: public and publicly guaranteed (PPG)	17.1	21.1	19.7			22.9	24.8	27.4	27.9	28.4	28.6		30.8	34.4	
Change in external debt	3.2	4.6	-1.5			4.0	2.2	2.8	0.6	0.6	0.3		0.5	0.2	
Identified net debt-creating flows	15.4	11.4	6.2			5.6	4.3	2.8	1.2	-0.2	0.0		-0.2	3.0	
Non-interest current account deficit	**9.7**	**10.8**	**9.4**	**8.5**	**2.3**	**8.6**	**7.8**	**6.8**	**5.7**	**4.7**	**4.9**		**5.9**	**9.3**	6.0
Deficit in balance of goods and services	17.9	22.1	20.0			18.8	18.0	17.0	15.9	14.8	15.0		16.1	19.2	
Exports	39.4	36.0	35.1			36.4	36.7	37.4	37.8	39.0	38.8		40.3	42.0	
Imports	57.3	58.0	55.1			55.2	54.6	54.4	53.7	53.8	53.8		56.4	61.2	
Net current transfers (negative = inflow)	-6.9	-7.6	-7.0	-8.4	2.1	-6.7	-6.7	-6.7	-6.7	-6.6	-6.6		-6.6	-6.7	-6.6
of which: official	-1.8	-1.8	-1.7			-1.7	-1.7	-1.7	-1.7	-1.7	-1.7		-1.7	-1.7	
Other current account flows (negative = net inflow)	-1.2	-3.7	-3.5			-3.5	-3.5	-3.5	-3.5	-3.5	-3.5		-3.5	-3.3	
Net FDI (negative = inflow)	**6.4**	**-1.7**	**-2.2**	**1.4**	**6.0**	**-2.4**	**-2.7**	**-3.1**	**-3.4**	**-3.8**	**-3.8**		**-5.0**	**-5.0**	-4.7
Endogenous debt dynamics 2/	**-0.7**	**2.3**	**-1.1**			**-0.6**	**-0.8**	**-0.9**	**-1.1**	**-1.1**	**-1.1**		**-1.1**	**-1.3**	
Contribution from nominal interest rate	0.2	0.3	0.3			0.4	0.5	0.5	0.5	0.5	0.5		0.4	0.5	
Contribution from real GDP growth	-0.8	-1.1	-1.1			-1.0	-1.3	-1.4	-1.6	-1.6	-1.6		-1.6	-1.7	
Contribution from price and exchange rate changes	-0.2	3.1	-0.3			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	**-12.2**	**-6.8**	**-7.6**			**-1.6**	**-2.1**	**-0.1**	**-0.6**	**0.8**	**0.4**		**0.6**	**-2.9**	
of which: exceptional financing	-0.3	-0.4	-1.2			-0.7	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	16.9			21.1	21.8	22.7	22.5	22.6	22.4		22.9	24.7	
In percent of exports	...	...	48.2			58.1	59.4	60.6	59.6	57.9	57.8		56.8	58.8	
PV of PPG external debt	**...**	**...**	**15.1**			**18.5**	**18.9**	**19.6**	**19.4**	**19.3**	**19.1**		**19.5**	**21.9**	
In percent of exports	**...**	**...**	**43.1**			**50.9**	**51.5**	**52.4**	**51.2**	**49.4**	**49.1**		**48.3**	**52.1**	
In percent of government revenues	**...**	**...**	**80.1**			**91.7**	**89.9**	**90.1**	**88.6**	**88.1**	**87.1**		**89.0**	**100.0**	
Debt service-to-exports ratio (in percent)	**2.9**	**3.1**	**4.0**			**4.1**	**3.6**	**3.6**	**3.7**	**3.8**	**3.7**		**2.9**	**2.8**	
PPG debt service-to-exports ratio (in percent)	**2.9**	**3.1**	**4.0**			**4.1**	**3.6**	**3.6**	**3.7**	**3.8**	**3.7**		**2.9**	**2.8**	
PPG debt service-to-revenue ratio (in percent)	**6.4**	**5.7**	**7.4**			**7.5**	**6.3**	**6.2**	**6.4**	**6.8**	**6.6**		**5.3**	**5.3**	
Total gross financing need (Billions of U.S. dollars)	0.8	0.5	0.4			0.4	0.4	0.3	0.3	0.2	0.3		0.3	1.3	
Non-interest current account deficit that stabilizes debt ratio	6.5	6.2	10.9			4.6	5.6	4.0	5.1	4.1	4.6		5.5	9.1	
Key macroeconomic assumptions															
Real GDP growth (in percent)	5.4	5.3	5.0	4.5	1.4	5.0	5.3	5.4	5.6	5.6	5.6	5.4	5.0	5.0	5.1
GDP deflator in US dollar terms (change in percent)	1.2	-14.2	1.4	3.1	10.4	-2.2	1.7	2.0	2.1	1.7	2.0	1.2	2.0	2.0	2.0
Effective interest rate (percent) 5/	1.6	1.6	1.5	1.1	0.7	2.0	2.1	2.0	1.9	1.8	1.7	1.9	1.4	1.3	1.4
Growth of exports of G&S (US dollar terms, in percent)	-9.5	-17.5	3.8	7.3	14.2	6.5	7.9	9.7	8.9	10.7	7.1	8.5	8.6	0.6	7.8
Growth of imports of G&S (US dollar terms, in percent)	-7.8	-8.5	1.0	8.2	15.5	3.0	6.0	7.1	6.4	7.6	7.7	6.3	8.6	7.2	8.1
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	8.7	51.0	51.0	50.9	46.2	46.7	42.4	45.4	43.7	44.9
Government revenues (excluding grants, in percent of GDP)	18.2	19.6	18.9			20.2	21.0	21.8	21.8	21.9	21.9		21.9	21.9	21.9
Aid flows (in Billions of US dollars) 7/	0.4	0.3	0.4			0.3	0.4	0.5	0.4	0.4	0.4		0.6	1.2	
of which: Grants	0.1	0.1	0.1			0.2	0.2	0.2	0.2	0.2	0.3		0.4	0.8	
of which: Concessional loans	0.3	0.2	0.2			0.1	0.2	0.3	0.2	0.2	0.2		0.2	0.5	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			5.1	6.4	6.7	5.8	5.6	5.6		5.6	5.5	5.5
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			49.6	75.2	72.7	78.2	75.8	76.6		76.0	75.2	75.8
Memorandum items:															
Nominal GDP (Billions of US dollars)	4.6	4.2	4.4			4.6	4.9	5.2	5.7	6.1	6.5		9.3	18.4	
Nominal dollar GDP growth	6.7	-9.7	6.5			2.7	7.1	7.5	7.8	7.4	7.7	6.7	7.1	7.1	7.2
PV of PPG external debt (in Billions of US dollars)			0.6			0.8	0.9	1.0	1.1	1.2	1.2		1.8	4.0	
(PVt-PVt-1)/GDPt-1 (in percent)						4.6	1.8	2.2	1.2	1.3	1.3	2.1	1.6	1.8	1.6
Gross workers' remittances (Billions of US dollars)	0.2	0.2	0.2			0.2	0.3	0.2	0.3	0.3	0.3		0.4	0.9	
PV of PPG external debt (in percent of GDP + remittances)	...	...	14.3			17.7	18.0	18.7	18.4	18.4	18.1		18.6	20.9	
PV of PPG external debt (in percent of exports + remittances)	...	...	37.2			45.0	45.1	46.5	45.0	44.1	43.4		43.3	46.8	
Debt service of PPG external debt (in percent of exports + remittance	...	...	3.4			3.7	3.2	3.2	3.3	3.4	3.3		2.6	2.5	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

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

5/ Current-year interest payments divided by previous period 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 1a. Togo: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2017-2037 (continued)

(In Percent)

	Projections							
	2017	2018	2019	2020	2021	2022	**2027**	2037
PV of debt-to GDP ratio								
Baseline	19	19	20	19	19	19	**19**	22
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	19	22	26	30	34	39	**59**	84
A2. New public sector loans on less favorable terms in 2017-2037 2	19	20	22	23	23	24	**28**	36
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	19	19	21	20	20	20	**20**	23
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	19	22	28	28	27	27	**26**	24
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	19	21	24	23	23	23	**23**	26
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	19	25	32	31	31	30	**29**	25
B5. Combination of B1-B4 using one-half standard deviation shocks	19	26	36	35	34	34	**32**	29
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	19	27	28	27	27	27	**28**	31
PV of debt-to-exports ratio								
Baseline	51	52	52	51	49	49	**48**	52
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	51	59	69	79	88	100	**145**	199
A2. New public sector loans on less favorable terms in 2017-2037 2	51	55	59	60	60	62	**69**	85
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	51	52	52	51	49	49	**48**	52
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	51	69	103	100	95	94	**88**	79
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	51	52	52	51	49	49	**48**	52
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	51	68	85	82	78	77	**71**	61
B5. Combination of B1-B4 using one-half standard deviation shocks	51	71	101	98	93	92	**84**	72
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	51	52	52	51	49	49	**48**	52
PV of debt-to-revenue ratio								
Baseline	92	90	90	89	88	87	**89**	100
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	92	103	118	136	157	177	**267**	382
A2. New public sector loans on less favorable terms in 2017-2037 2	92	95	102	104	107	110	**127**	162
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	92	92	94	93	92	91	**93**	104
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	92	104	129	126	124	122	**119**	111
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	92	99	109	107	106	105	**107**	120
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	92	119	146	142	140	137	**131**	116
B5. Combination of B1-B4 using one-half standard deviation shocks	92	121	165	161	158	155	**147**	130
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	92	128	128	126	125	123	**126**	142

Table 1a. Togo: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2017-2037 (concluded)
(In Percent)

Debt service-to-exports ratio								
Baseline	4	4	4	4	4	4	**3**	3
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	4	4	4	4	4	5	**5**	9
A2. New public sector loans on less favorable terms in 2017-2037 2	4	4	3	4	3	3	**3**	5
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	4	4	4	4	4	4	**3**	3
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	4	4	5	6	6	6	**5**	5
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	4	4	4	4	4	4	**3**	3
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	4	4	4	4	5	4	**4**	4
B5. Combination of B1-B4 using one-half standard deviation shocks	4	4	5	5	5	5	**5**	4
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	4	4	4	4	4	4	**3**	3
Debt service-to-revenue ratio								
Baseline	7	6	6	6	7	7	**5**	5
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	7	6	6	7	8	8	**9**	18
A2. New public sector loans on less favorable terms in 2017-2037 2	7	6	5	6	6	6	**6**	9
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	7	6	6	7	7	7	**6**	6
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	7	6	6	7	8	7	**6**	7
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	7	7	7	8	8	8	**6**	6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	7	6	7	8	8	8	**7**	7
B5. Combination of B1-B4 using one-half standard deviation shocks	7	7	8	9	9	9	**8**	8
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	7	9	9	9	10	9	**8**	8
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	42	42	42	42	42	42	**42**	42

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline., while grace and maturity periods are the same as in the baseline.
3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming
an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 2a. Togo: Public Sector Debt Sustainability Framework, Baseline Scenario, 2014 – 2037

(In Percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections												
	2014	2015	2016	Average 5/	Standard Deviation 5/	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2017-22 Average	2027	2037	2023-37 Average
Public sector debt 1/	65.2	75.6	80.8			81.3	78.1	73.0	67.8	62.7	58.3	54.3	50.4	46.5	44.2		43.4	42.9	
of which: foreign-currency denominated	17.1	21.1	19.7			22.9	24.8	27.4	27.9	28.4	28.6	28.9	29.3	29.8	30.3		30.8	34.4	
Change in public sector debt	8.9	10.3	5.2			0.5	-3.2	-5.1	-5.2	-5.2	-4.4	-4.0	-3.9	-3.9	-2.2		-0.8	-0.1	
Identified debt-creating flows	4.8	6.1	5.5			-0.6	-2.9	-5.7	-5.7	-5.2	-4.5	-4.2	-4.3	-4.2	-2.6		-1.1	-0.1	
Primary deficit	5.3	6.5	6.8	4.1	2.2	1.4	-1.0	-3.2	-3.2	-3.1	-2.3	-2.1	-2.1	-2.1	-0.6	-1.9	1.0	2.0	0.9
Revenue and grants	20.5	21.9	21.7			24.7	25.2	25.9	26.0	26.0	26.0	26.0	26.0	26.0	26.0		26.0	26.0	
of which: grants	2.3	2.3	2.9			4.6	4.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1		4.1	4.1	
Primary (noninterest) expenditure	25.8	28.4	28.5			26.1	24.2	22.7	22.8	22.9	23.7	23.9	23.9	23.9	25.4		26.9	28.0	
Automatic debt dynamics	-0.5	-0.4	-1.3			-2.0	-1.8	-2.5	-2.6	-2.1	-2.2	-2.1	-2.2	-2.2	-2.1		-2.1	-2.1	
Contribution from interest rate/growth differential	-2.0	-2.5	-1.9			-1.9	-1.9	-2.5	-2.6	-2.2	-2.2	-2.1	-2.2	-2.2	-2.1		-2.1	-2.1	
of which: contribution from average real interest rate	0.9	0.8	1.6			1.9	2.2	1.5	1.3	1.4	1.1	0.9	0.5	0.3	0.1		0.0	-0.1	
of which: contribution from real GDP growth	-2.9	-3.3	-3.6			-3.8	-4.1	-4.0	-3.9	-3.6	-3.3	-3.0	-2.7	-2.5	-2.2		-2.1	-2.0	
Contribution from real exchange rate depreciation	1.5	2.2	0.6			-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0		...	...	
Other identified debt-creating flows	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		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	0.0	0.0		0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	4.1	4.2	-0.3			1.2	-0.3	0.6	0.5	0.0	0.1	0.3	0.4	0.3	0.4		0.3	0.0	
Other Sustainability Indicators																			
PV of public sector debt	...	...	76.1			77.0	72.2	65.2	59.3	53.6	48.7	44.3	40.0	35.7	33.2		32.1	30.4	
of which: foreign-currency denominated	...	...	15.1			18.5	18.9	19.6	19.4	19.3	19.1	19.0	19.0	19.1	19.3		19.5	21.9	
of which: external	...	...	15.1			18.5	18.9	19.6	19.4	19.3	19.1	19.0	19.0	19.1	19.3		19.5	21.9	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...	...	...	...	...		...	...	
Gross financing need 2/	20.5	27.5	23.0			16.3	10.3	7.3	10.5	10.5	9.6	7.3	6.8	7.0	6.8		7.1	7.2	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	350.3			311.0	286.4	252.0	228.6	206.3	187.5	170.6	154.0	137.6	127.8		123.6	117.0	
PV of public sector debt-to-revenue ratio (in percent)	...	...	403.7			381.3	343.5	299.5	271.6	245.0	222.7	202.6	182.9	163.4	151.7		146.8	139.0	
of which: external 3/	...	...	80.1			91.7	89.9	90.1	88.6	88.1	87.1	86.8	86.8	87.3	88.0		89.0	100.0	
Debt service-to-revenue and grants ratio (in percent) 4/	74.2	96.0	74.5			60.3	44.9	40.6	52.5	52.3	45.8	36.2	34.4	34.9	28.5		23.7	20.2	
Debt service-to-revenue ratio (in percent) 4/	83.7	107.4	85.9			74.0	53.8	48.2	62.4	62.1	54.4	43.0	40.9	41.4	33.8		28.1	24.0	
Primary deficit that stabilizes the debt-to-GDP ratio	-3.6	-3.9	1.6			0.9	2.1	1.9	2.0	2.0	2.1	1.9	1.8	1.8	1.7		1.8	2.1	
Key macroeconomic and fiscal assumptions																			
Real GDP growth (in percent)	5.4	5.3	5.0	4.5	1.4	5.0	5.3	5.4	5.6	5.6	5.6	5.5	5.3	5.2	5.0	5.4	5.0	5.0	5.1
Average nominal interest rate on forex debt (in percent)	1.7	1.7	1.6	1.1	0.7	2.2	2.4	2.3	2.1	2.0	1.9	1.8	1.7	1.7	1.6	2.1	1.6	1.4	1.5
Average real interest rate on domestic debt (in percent)	2.1	2.0	3.2	-1.0	4.4	3.2	3.8	2.9	2.9	3.7	3.5	3.3	2.6	1.9	1.6	3.4	1.2	1.5	1.9
Real exchange rate depreciation (in percent, + indicates depreciation	11.1	13.4	3.2	2.6	7.9	-0.6	...	...	...	...	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	1.2	2.7	1.7	4.0	4.3	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Growth of real primary spending (deflated by GDP deflator, in percer	6.3	16.0	5.6	2.8	5.2	-3.8	-2.6	-1.2	6.1	6.0	9.3	6.2	5.4	5.3	11.6	2.3	11.3	5.0	6.3
Grant element of new external borrowing (in percent)	...	...	...	...	...	8.7	51.0	51.0	50.9	46.2	46.7	46.1	45.9	45.7	45.6	42.4	45.4	43.7	...

Sources: Country authorities; and 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. Togo: Sensitivity Analysis for Key Indicators of Public Debt 2017-2037

	Projections							
	2017	2018	2019	2020	2021	2022	2027	2037
PV of Debt-to-GDP Ratio								
Baseline	77	72	65	59	54	49	32	30
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	77	76	75	75	74	73	70	70
A2. Primary balance is unchanged from 2017	77	74	70	67	64	62	50	39
A3. Permanently lower GDP growth 1/	77	72	66	60	55	50	35	40
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-20	77	74	69	64	58	54	39	41
B2. Primary balance is at historical average minus one standard deviations in 2018-201	77	77	77	71	64	59	40	35
B3. Combination of B1-B2 using one half standard deviation shocks	77	78	78	72	66	60	43	42
B4. One-time 30 percent real depreciation in 2018	77	79	71	64	57	52	33	29
B5. 10 percent of GDP increase in other debt-creating flows in 2018	77	79	72	66	60	54	37	33
PV of Debt-to-Revenue Ratio 2/								
Baseline	311	286	252	229	206	187	124	117
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	311	303	290	287	283	280	265	262
A2. Primary balance is unchanged from 2017	311	293	271	259	248	237	193	148
A3. Permanently lower GDP growth 1/	311	287	254	231	210	192	135	152
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-20	311	293	265	244	223	206	149	157
B2. Primary balance is at historical average minus one standard deviations in 2018-201	311	307	298	272	247	226	154	137
B3. Combination of B1-B2 using one half standard deviation shocks	311	308	299	274	251	231	166	160
B4. One-time 30 percent real depreciation in 2018	311	314	273	246	221	200	126	111
B5. 10 percent of GDP increase in other debt-creating flows in 2018	311	315	278	253	230	209	141	128
Debt Service-to-Revenue Ratio 2/								
Baseline	60	45	41	53	52	46	24	20
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	60	45	42	57	59	56	39	34
A2. Primary balance is unchanged from 2017	60	45	41	54	55	50	31	23
A3. Permanently lower GDP growth 1/	60	45	41	53	53	47	25	24
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-20	60	46	42	55	55	48	27	24
B2. Primary balance is at historical average minus one standard deviations in 2018-201	60	45	41	56	58	52	26	22
B3. Combination of B1-B2 using one half standard deviation shocks	60	45	42	57	59	52	27	24
B4. One-time 30 percent real depreciation in 2018	60	46	43	55	55	49	27	24
B5. 10 percent of GDP increase in other debt-creating flows in 2018	60	45	42	56	56	49	25	21

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.