INTERNATIONAL MONETARY FUND AND
INTERNATIONAL DEVELOPMENT ASSOCIATION

TOGO

Joint IMF/World Bank Debt Sustainability Analysis

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

Approved by Mark Plant and Dominque Desruelle (IMF) and
Sudhir Shetty and Carlos Braga (World Bank)

November 11, 2009

The low-income country debt sustainability analysis (LIC DSA) shows that Togo is in debt distress, demonstrating the need for reaching the completion point of the HIPC Initiative debt relief.[1] *Despite some accelerating growth in the medium-term, projected to reach close to 4 percent on average, key debt sustainability indicators are above the relevant indicative thresholds over the next few years. An alternative scenario illustrating the impact of additional HIPC, MDRI and beyond-HIPC debt relief at the completion point suggests strong improvements in debt burden indicators. The inclusion of Togo's large domestic public debt in the analysis generally reinforces the conclusions of the external DSA.*

[1] This DSA has been prepared jointly by the World Bank and Fund staffs using the Debt Sustainability Framework (DSF) for Low Income Countries (see "Applying the Debt Sustainability Framework for Low-Income Countries Post Debt Relief", (IDA/SecM2006-0564, 8/11/06). Togo's quality of policies and institutions, as measured by the average World Bank's Country Policy and Institutional Assessment (CPIA) for the period 2006-2008 (2.6), places it as a "weak performer". The corresponding indicative thresholds for the external debt indicators are 30 percent for the NPV of debt-to-GDP ratio, 100 percent of the debt-to-export ratio, 200 percent for NPV of debt-to-revenue ratio, 15 percent for the debt service-to-exports ratio and 25 percent for the debt service-to-revenue ratio.

A. Background

1. **The last DSA for Togo was prepared in 2008 and concluded that Togo was in debt distress**. The outcome of both the current analysis and the previous DSA differed from previous results for the country, suggesting an improvement in debt dynamics. This came as a consequence of expected improvements in the macroeconomic policy framework, notably greater fiscal discipline and solid implementation of growth-promoting structural reforms, large domestic arrears clearance operations and the HIPC initiative interim debt relief. However, the key indicative ratios for the current DSA are slightly worse than in the 2008 DSA, mostly because the revised real GDP growth estimates for 2009 are not as strong as projected during the previous exercise due to the impact of the global crisis and the fall in the discount rate from 5 to 4 percent.

2. **Since November 2008, Togo has been in the interim period of the HIPC Initiative.** Upon reaching of the decision point, Togo was granted Cologne terms debt relief[2] by the Paris Club and negotiated rescheduling agreement with several multilateral and non Paris Club creditors. Also, the nominal debt stock fell from US$2.2 billion at end-2007 to US$1.7 billion end-2008 reflecting the arrears clearance operations.

Nominal debt stock as of end-2008

	(in million of US$)	percent of total debt
Total	1,740.3	100%
Multilateral creditors	960.1	55%
of which		
IDA	598.4	34%
AfDB	126.2	7%
Bilateral creditors	750.9	43%
Paris Club	665.6	38%
of which		
France	142.9	8%
Switzerland	141.9	8%
Belgium	116.3	7%
Non Paris Club	85.3	5%
Commercial	29.4	2%

Source: Togolese authorities and staff estimates

[2] Cologne terms represent a 90 percent reduction of debt service falling due during the interim period and the remaining 10 percent are rescheduled with 6 year-grace and 23 years of maturity for non ODA debt and 16 year-grace and 40 years of maturity for ODA debt.

B. Baseline Assumptions

3. **The baseline scenario is consistent with the three-year PRGF arrangement**. It is based on a continuation of steady growth averaging 3.4 percent from 2009 to 2019 and 4 percent from 2020 to 2029. Growth will be driven by donor-financed public investment, as donors continue to re-engage with the country after a long period of internal social-political turmoil, as well as: an improved investment climate (including an increase in Togo's attractiveness to foreign investors); growing regional integration accompanied by an increase in Togo's role in regional trade given its strategic geographical location and the role of the port of Lomé; a rebound in phosphate and cotton production following the restructuring of these sectors; and deeper financial intermediation after the ongoing restructuring of the banking sector. The scenario assumes a stable political and social situation that should lead to a durable improvement in business confidence and larger investment over the medium term (e.g. in the banking, telecom and phosphate sectors as well as the port). An important element of the baseline scenario is the reengagement of the international community. The GDP deflator is projected at 2.4 percent on average over 2015-2029, which is in line with Togo's historical experience and with WAEMU convergence criteria.

4. **Macroeconomic stability will be anchored on a prudent fiscal policy and structural reforms.** The domestic primary deficit is assumed to stay close to zero during the projected period. It is expected that resources freed up by HIPC and MDRI relief will be allocated to priority sectors such as health, education, and infrastructure. The revenue to GDP ratio is expected to stabilize at 18 percent reflecting mainly a successful strategy of increasing tax revenues by reducing relatively high tax rates and broadening the tax base.

5. **Under the assumption that FDI and donor flows are robust over the medium term, the external position is projected to remain manageable**. Togo's current account deficit is not expected to decline much over the medium term. Imports are projected to increase as foreign aid is absorbed and FDI increases. Exports are expected to pick up, largely on the account of higher phosphate exports. Sustained export growth will require enhancing competitiveness through reforms to improve the business environment. External financing is expected to come primarily from debt relief, FDI flows, remittances and aid. FDI is expected to increase during this period whereas international reserves are expected to fall moderately.

6. **The baseline scenario reflects the multilateral arrears clearance operations completed in 2008 and assumes full delivery of traditional debt relief as well as interim HIPC assistance**.[3] Consistent with the DSF guidelines, the baseline does not reflect the

---

[3] Arrears to IDA and AfDB were cleared in 2008. Togo has reached an agreement on arrears clearance with IFAD, OPEC and EIB. Togo is negotiating with BADEA. The IsDB has agreed in principle to provide relief but the modalities have not been defined yet. Togo has contacted FEGECE to ask for HIPC relief.

delivery of HIPC, MDRI and bilateral or multilateral beyond-HIPC assistance after the completion point.[4] Since the evolution of Togo's debt indicators reflects the full impact of debt relief under the HIPC Initiative, full HIPC, MDRI and bilateral or multilateral beyond-HIPC assistance is presented in a country-specific alternative scenario.

C. External Debt Sustainability Analysis

Baseline

7. **Under the baseline scenario, Togo's external debt indicators remain above their relevant indicative thresholds demonstrating that the country is in debt distress** (Table 1a, Figure 1). The present value (PV) of public and publicly guaranteed (PPG) debt equals to 49 percent of GDP in 2009 and remains above the 30 percent threshold until 2017. Both the PV of external debt relative to revenues and exports exceed their respective indicative threshold in 2014. Even if debt service ratios remain below their respective indicative thresholds over the whole projection period, the debt service-to-exports ratio comes close to the threshold in 2014 and 2015, stressing the need to reach the completion point and keep a high degree of concessionality of Togo's future debt.

Alternative Scenarios and Stress Tests

8. **Togo's external debt outlook remains vulnerable to numerous shocks** (Table 1b, Figure 1). The PV of external debt to revenue and exports indicators deteriorate significantly under a variety of shocks, in particular the ones that assume a depreciation of the exchange rate and lower export growth. The most relevant test appears to be the B5 scenario, which combines a GDP shock and lower non-debt creating flows. Under the most extreme shock scenario, the PV-based indicators breach the indicative thresholds over a long period and the debt service indicators stay above the respective threshold for several years even with Togo's new borrowing assumed on highly concessional terms. The historical scenario shows all PV of debt indicators increasing strongly starting in 2018 and breaching the thresholds in the latter years. The U-shape of the historical scenario demonstrates that starting in 2018 the current macroeconomic projections, supported by the current reform agenda, have a better outlook than the past figures, especially in terms of current account deficit and real growth rate.

9. **Alternative scenarios assume additional delivery of debt relief at the completion point, which would significantly improve Togo's debt sustainability outlook** (Figure 2). Debt relief under the HIPC Initiative, MDRI and possible bilateral and multilateral beyond-

---

[4] See "Staff Guidance Note on the Application of the Joint Bank-Fund Debt Sustainability Framework for Low-Income Countries" (www.imf.org and IDA/SECM2007/0226, 03/05/2007).

HIPC assistance would significantly improve Togo's external debt outlook. Reaching the completion point, which is assumed to occur in 2010, and the resulting irrevocable debt relief would reduce all external debt indicators to levels below the relevant indicative thresholds.

D. Public Sector Debt Sustainability

Baseline

10. **The inclusion of Togo's large domestic public debt in the analysis emphasizes the vulnerability of the baseline scenario** (Table 2a, Figure 2). Togo's domestic debt burden is comparatively large, reflecting years of weak fiscal management and domestic arrears accumulation, as well as the need to recapitalize ailing banks. In addition, the recent BCEAO credit linked to the SDR allocation that will be used to clear domestic arrears will worsen key indicative ratios. This occurs despite the fact that the BCEAO credit is on better terms than the market terms originally planned for the securities that were supposed to be issued to clear these arrears. The PV of total public debt is projected to remain relatively high over the next five year, hovering around 50 percent of GDP and 200 percent of revenues, respectively. Given the assumed improvement in the macroeconomic outlook and the projected high degree of concessionality of financing in the baseline scenario, debt ratios would nevertheless fall steadily over the long run.

Alternative Scenarios and Stress Tests

11. **The evolution of the debt indicators would be sensitive to a variety of shocks, which would increase the debt level and debt service over the long run**. Total public debt dynamics are particularly vulnerable to a real depreciation, increases in debt-creating flows and to a lesser extent to a growth shock (Table 2b, Figure 2). This highlights the importance of a reform agenda that improves the business environment to support foreign investment and growth.

12. **Full delivery of HIPC relief, MDRI and beyond-HIPC relief at the assumed completion point reduces these vulnerabilities as shown in the alternative scenario.** All three PV-based indicators would be substantially lower than under the baseline and would decline further over the projection period.

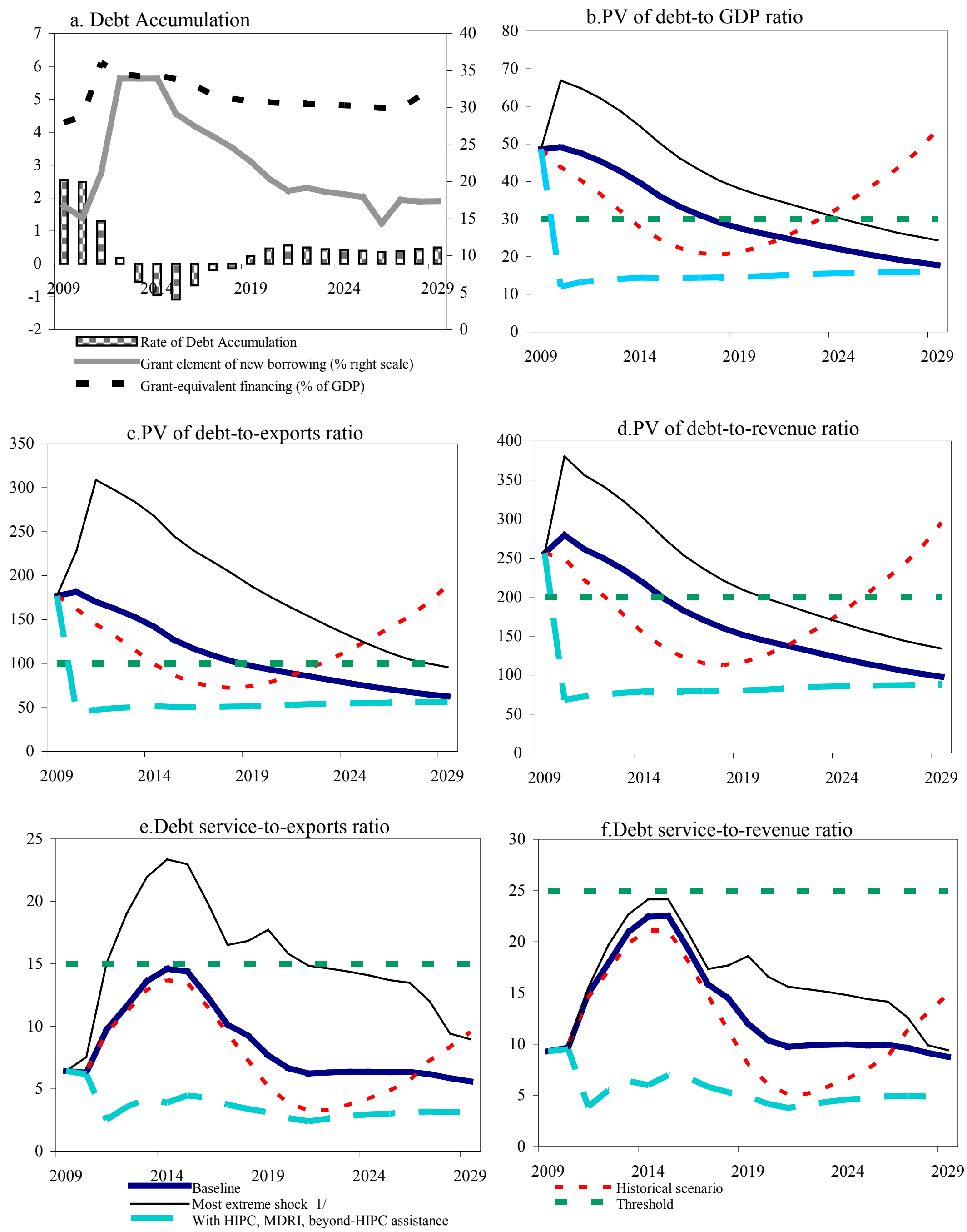
E. Conclusion

13. **The DSA shows that Togo remains in debt distress, despite the large debt reduction achieved through recent arrears clearance and by reaching the decision point of the HIPC Initiative.** Togo has benefited from the HIPC interim assistance and large arrears clearance operations. Under the baseline scenario, the PV-based indicators remain well above their indicative thresholds for most of the projection period, emphasizing the importance for additional debt relief, which is expected upon reaching the completion point.

Debt relief under the HIPC Initiative, MDRI and beyond-HIPC assistance significantly improves Togo's external debt outlook.

14. **Achieving a robust external debt outlook will depend on a sustained pick-up of real GDP growth, exports and foreign direct investment, as well as prudent debt management and solid fiscal performance.** Alternative scenarios and bound tests highlight the vulnerability of Togo's current external debt outlook. The inclusion of Togo's large domestic debt in the analysis reinforces the conclusions of the external DSA and stresses the risks to Togo's debt prospects. In this context, it is essential that the Togolese authorities continue current efforts to strengthen public finance management, restructure the banking system and promote financial development, reform state-owned enterprises, and improve the investment climate, hence laying the foundation for accelerating growth prospects.

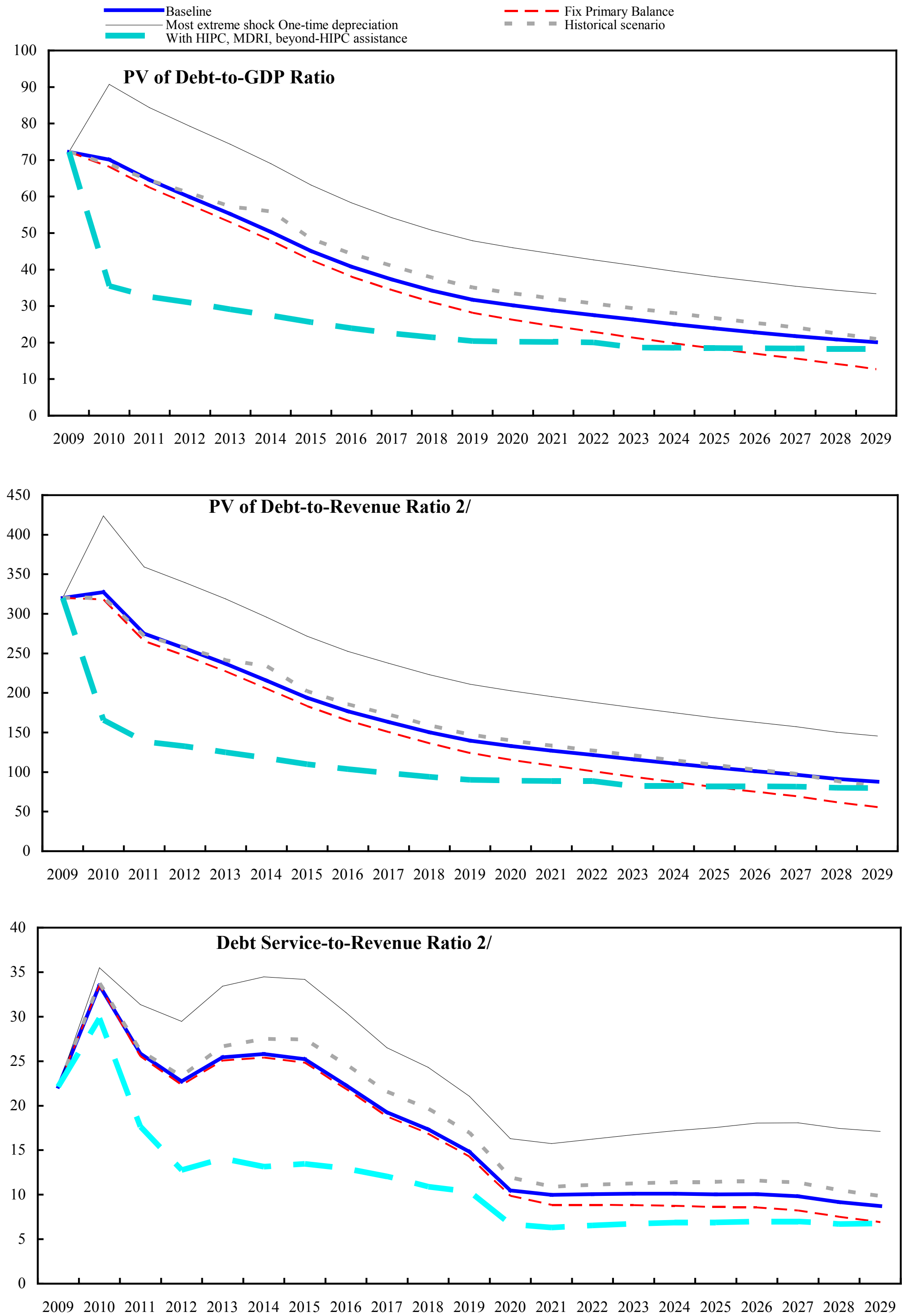
Figure 1. Togo: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2009-2029 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2019. In figure b. it corresponds to a With HIPC, MDRI, beyond-HIPC assistance shock; in c. to a With HIPC, MDRI, beyond-HIPC assistance shock; in d. to a With HIPC, MDRI, beyond-HIPC assistance shock; in e. to a With HIPC, MDRI, beyond-HIPC assistance shock and in figure f. to a With HIPC, MDRI, beyond-HIPC assistance shock

Figure 2.Togo: Indicators of Public Debt Under Alternative Scenarios, 2009-2029 1/



Sources: Country authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio in 2019.
2/ Revenues are defined inclusive of grants.

Table 1a.: External Debt Sustainability Framework, Baseline Scenario, 2006-2029 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical 0 Average	0 Standard Deviation	Projections																						
	2006	2007	2008			2009	2010	2011	2012	2013	2014	2009-2014 Average	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2015-2029 Average
External debt (nominal) 1/	**89.7**	**82.1**	**61.3**			**59.5**	**60.2**	**58.9**	**56.9**	**54.4**	**51.3**		**47.8**	**44.9**	**42.7**	**40.6**	**39.0**	**37.7**	**36.5**	**35.3**	**34.1**	**33.0**	**31.9**	**30.9**	**29.8**	**29.0**	**28.2**	
o/w public and publicly guaranteed (PPG)	89.7	82.1	60.6			58.1	58.2	56.4	53.9	50.9	47.5		43.6	40.6	38.1	35.9	34.2	32.8	31.5	30.3	29.2	28.0	26.9	26.0	25.0	24.3	23.6	
Change in external debt	-0.5	-7.5	-20.9			-1.7	0.6	-1.3	-2.0	-2.5	-3.1		-3.5	-2.8	-2.3	-2.1	-1.6	-1.3	-1.2	-1.2	-1.2	-1.2	-1.1	-1.0	-1.0	-0.8	-0.8	
Identified net debt-creating flows	-5.6	-8.8	-6.0			4.7	5.4	2.5	1.8	1.9	1.7		0.2	0.0	-0.4	-0.8	-1.2	-1.7	-2.1	-2.6	-3.0	-3.5	-4.0	-4.1	-4.8	-6.0	-7.7	
Non-interest current account deficit	**1.0**	**2.0**	**6.6**	**2.6**	**5.3**	**6.6**	**6.8**	**5.7**	**5.4**	**5.6**	**5.6**		**4.5**	**4.0**	**3.5**	**3.1**	**2.6**	**2.2**	**1.7**	**1.3**	**0.8**	**0.4**	**-0.1**	**-0.5**	**-1.0**	**-2.3**	**-4.0**	1.1
Deficit in balance of goods and services	12.5	13.7	17.3			17.7	18.3	16.6	16.0	15.8	15.2		14.0	13.5	12.9	12.4	11.9	11.4	10.9	10.5	10.0	9.5	9.0	8.7	8.2	6.5	4.8	
Exports	24.7	26.3	27.5			27.5	27.0	27.9	28.0	28.0	28.0		28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	28.5	
Imports	37.2	40.0	44.8			45.2	45.4	44.5	44.0	43.7	43.2		42.4	41.9	41.4	40.9	40.4	39.9	39.4	38.9	38.5	38.0	37.5	37.1	36.6	34.9	33.2	
Net current transfers (negative = inflow)	-12.6	-11.5	-10.7	-10.3	2.5	-11.1	-11.4	-10.1	-9.7	-9.3	-8.9		-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-8.9	-9.0	-8.7	-8.6	-8.9
o/w official	-1.4	-1.7	-1.6			-2.2	-2.7	-4.3	-4.2	-4.2	-4.1		-4.1	-4.0	-4.0	-4.0	-3.9	-3.9	-3.9	-3.8	-3.8	-3.8	-3.7	-3.7	-3.7	-4.0	-4.0	
Other current account flows (negative = net inflow)	1.1	-0.2	0.0			0.0	-0.1	-0.8	-0.9	-0.8	-0.7		-0.6	-0.6	-0.5	-0.4	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.1	-0.1	
Net FDI (negative = inflow)	**-4.1**	**-2.5**	**-1.5**	**-3.0**	**1.2**	**-0.8**	**-0.4**	**-2.0**	**-2.5**	**-2.6**	**-2.8**		**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	-3.0
Endogenous debt dynamics 2/	**-2.5**	**-8.3**	**-11.1**			**-1.1**	**-1.0**	**-1.1**	**-1.2**	**-1.1**	**-1.1**		**-1.2**	**-1.0**	**-1.0**	**-0.8**	**-0.8**	**-0.8**	**-0.8**	**-0.8**	**-0.8**	**-0.8**	**-0.8**	**-0.7**	**-0.8**	**-0.7**	**-0.7**	
Contribution from nominal interest rate	2.0	1.8	0.4			0.4	0.4	1.0	1.1	1.0	0.9		0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	
Contribution from real GDP growth	-3.4	-1.6	-1.2			-1.6	-1.4	-2.1	-2.3	-2.2	-2.0		-2.1	-1.8	-1.7	-1.5	-1.4	-1.4	-1.4	-1.4	-1.3	-1.3	-1.3	-1.1	-1.2	-1.0	-1.1	
Contribution from price and exchange rate changes	-1.1	-8.6	-10.3			…	…	…	…	…	…		…	…	…	…	…	…	…	…	…	…	…	…	…	…	…	
Residual (3-4) 3/	**5.2**	**1.3**	**-14.9**			**-6.4**	**-4.7**	**-3.8**	**-3.8**	**-4.4**	**-4.8**		**-3.8**	**-2.8**	**-1.8**	**-1.3**	**-0.4**	**0.3**	**0.9**	**1.4**	**1.8**	**2.3**	**2.8**	**3.2**	**3.8**	**5.2**	**6.9**	
o/w exceptional financing	0.0	0.0	-34.9			-4.1	-4.7	-2.9	-1.9	-1.9	-2.0		-1.8	-1.6	-1.1	-1.1	-1.0	-1.0	-1.0	-1.0	-1.0	-1.1	-1.0	-1.1	-1.1	-1.3	-1.3	
PV of external debt 4/	...	...	49.2			50.0	51.1	50.0	48.4	46.2	43.5		40.2	37.7	35.6	33.8	32.4	31.3	30.2	29.2	28.1	27.0	26.0	25.0	24.0	23.3	22.5	
In percent of exports	...	...	179.0			182.1	188.8	179.3	172.7	165.0	155.2		141.3	132.3	125.2	118.8	113.8	109.8	106.2	102.5	98.7	95.0	91.3	88.0	84.5	81.7	79.0	
PV of PPG external debt	**...**	**...**	**48.5**			**48.6**	**49.1**	**47.5**	**45.4**	**42.7**	**39.6**		**36.1**	**33.3**	**31.1**	**29.1**	**27.6**	**26.4**	**25.3**	**24.2**	**23.1**	**22.1**	**21.0**	**20.1**	**19.2**	**18.5**	**17.8**	
In percent of exports	**...**	**...**	**176.5**			**176.9**	**181.5**	**170.3**	**162.0**	**152.7**	**141.6**		**126.8**	**117.0**	**109.2**	**102.2**	**96.9**	**92.6**	**88.8**	**85.0**	**81.2**	**77.5**	**73.9**	**70.7**	**67.5**	**65.0**	**62.6**	
In percent of government revenues	**...**	**...**	**285.1**			**256.2**	**279.3**	**261.2**	**249.3**	**234.9**	**217.8**		**198.4**	**182.9**	**170.8**	**159.9**	**151.5**	**144.8**	**138.9**	**132.9**	**127.0**	**121.2**	**115.6**	**110.7**	**105.6**	**101.6**	**97.9**	
Debt service-to-exports ratio (in percent)	**14.5**	**13.6**	**8.7**			**6.4**	**6.3**	**9.7**	**11.6**	**13.6**	**14.6**		**14.4**	**12.4**	**10.1**	**9.3**	**7.7**	**6.6**	**6.2**	**6.3**	**6.4**	**6.4**	**6.3**	**6.3**	**6.2**	**5.8**	**5.6**	
PPG debt service-to-exports ratio (in percent)	**14.5**	**13.6**	**8.7**			**6.4**	**6.3**	**9.7**	**11.6**	**13.6**	**14.6**		**14.4**	**12.4**	**10.1**	**9.3**	**7.7**	**6.6**	**6.2**	**6.3**	**6.4**	**6.4**	**6.3**	**6.3**	**6.2**	**5.8**	**5.6**	
PPG debt service-to-revenue ratio (in percent)	**21.1**	**21.0**	**14.0**			**9.3**	**9.7**	**14.9**	**17.9**	**20.9**	**22.5**		**22.5**	**19.3**	**15.8**	**14.5**	**12.0**	**10.4**	**9.7**	**9.9**	**10.0**	**10.0**	**9.9**	**9.9**	**9.6**	**9.1**	**8.7**	
Total gross financing need (Billions of U.S. dollars)	0.0	0.1	0.2			0.2	0.3	0.2	0.2	0.3	0.3		0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	-0.1	-0.3	
Non-interest current account deficit that stabilizes debt ratio	1.5	9.5	27.5			8.3	6.2	7.0	7.4	8.1	8.7		8.0	6.8	5.8	5.1	4.2	3.5	2.9	2.5	2.0	1.5	1.0	0.5	0.1	-1.5	-3.2	
Key macroeconomic assumptions																												
Real GDP growth (in percent)	3.9	1.9	1.8	1.5	2.2	2.5	2.6	3.8	4.0	4.0	3.9	3.4	4.3	3.9	4.0	3.7	3.8	3.8	3.9	4.0	4.0	4.1	4.2	3.6	4.3	3.7	4.1	4.0
GDP deflator in US dollar terms (change in percent)	1.2	10.6	14.3	5.5	8.6	-5.4	4.4	2.0	0.6	0.4	1.0	0.5	1.6	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.6	2.4	2.6	2.5	2.4
Effective interest rate (percent) 5/	2.3	2.3	0.6	1.9	0.7	0.7	0.7	1.8	1.9	1.9	1.8	1.5	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4	1.4	1.3	1.5
Growth of exports of G&S (US dollar terms, in percent)	-29.7	20.3	21.4	7.4	19.5	-3.0	5.4	9.2	5.1	4.3	4.9	4.3	7.6	6.5	6.5	6.3	6.4	6.4	6.5	6.6	6.6	6.7	6.7	6.3	6.8	6.4	6.6	6.6
Growth of imports of G&S (US dollar terms, in percent)	-3.9	21.3	30.3	7.7	17.8	-2.3	7.6	3.8	3.5	3.7	3.6	3.3	4.0	5.1	5.2	5.0	5.1	5.1	5.2	5.3	5.3	5.3	5.3	5.3	5.4	1.4	1.5	4.6
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	16.7	15.1	21.2	33.9	33.9	33.9	25.8	29.1	27.4	26.1	24.6	22.7	20.4	18.7	19.2	18.6	18.3	17.9	14.4	17.5	17.3	17.4	20.6
Government revenues (excluding grants, in percent of GDP)	16.9	17.0	17.0			19.0	17.6	18.2	18.2	18.2	18.2		18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
Aid flows (in Billions of US dollars) 7/	0.0	0.1	0.1			0.1	0.1	0.2	0.2	0.2	0.2		0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	
o/w Grants	0.0	0.0	0.1			0.1	0.1	0.2	0.2	0.2	0.2		0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	
o/w Concessional loans	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			4.3	4.5	6.1	5.8	5.7	5.7		5.6	5.4	5.1	5.0	4.9	4.9	4.9	4.9	4.8	4.8	4.8	4.7	4.7	5.1	5.1	5.0
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			55.5	55.7	66.5	82.8	83.1	83.1		80.0	78.8	78.1	78.2	76.9	75.4	73.8	73.9	73.3	72.7	72.1	68.4	71.4	72.5	72.7	74.6
Memorandum items:																												
Nominal GDP (Billions of US dollars)	2.2	2.5	2.9			2.8	3.0	3.2	3.3	3.5	3.7		3.9	4.1	4.4	4.7	5.0	5.3	5.6	6.0	6.4	6.8	7.3	7.7	8.3	8.8	9.4	
Nominal dollar GDP growth	5.2	12.7	16.3			-3.1	7.1	5.8	4.7	4.3	4.9	4.0	5.9	6.5	6.5	6.3	6.4	6.4	6.5	6.6	6.6	6.7	6.7	6.3	6.8	6.4	6.6	6.5
PV of PPG external debt (in Billions of US dollars)			1.3			1.4	1.4	1.5	1.5	1.5	1.4		1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.7	
(PVt-PVt-1)/GDPt-1 (in percent)						2.5	2.5	1.3	0.2	-0.5	-1.0	0.8	-1.1	-0.7	-0.2	-0.1	0.2	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.2

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.
The large amount in 2008 reflects the arrears clearance operation.
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 1b.Togo: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2009-2029
(In percent)

	Projections																				
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	**2019**	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
PV of debt-to GDP ratio																					
Baseline	49	49	48	45	43	40	36	33	31	29	**28**	26	25	24	23	22	21	20	19	18	18
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2009-2029 1/	49	44	40	37	32	28	25	22	21	21	**21**	23	25	27	30	33	36	40	44	48	54
A2. New public sector loans on less favorable terms in 2009-2029 2	49	50	50	48	46	43	40	37	36	34	**33**	33	32	32	32	32	32	32	33	33	33
A3. Alternative Scenario :full delivery of HIPC, MDRI, and beyond HIPC debt relief	49	12	13	14	14	14	14	14	14	14	**15**	15	15	15	15	16	16	16	16	16	16
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	49	49	50	48	45	42	39	36	33	31	**29**	28	27	26	25	23	22	21	20	20	19
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	49	51	58	56	53	50	47	44	41	39	**36**	33	31	29	27	25	23	22	20	19	18
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	49	52	55	52	49	46	42	39	36	34	**32**	31	29	28	27	26	24	23	22	21	21
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	49	47	45	43	40	38	34	32	29	28	**26**	25	24	23	22	21	20	19	19	18	17
B5. Combination of B1-B4 using one-half standard deviation shocks	49	52	58	56	53	50	46	43	40	37	**35**	33	31	30	28	26	25	23	22	21	20
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	49	67	65	62	59	55	50	46	43	40	**38**	36	35	33	32	30	29	28	26	25	24
PV of debt-to-exports ratio																					
Baseline	177	181	170	162	153	142	127	117	109	102	**97**	93	89	85	81	77	74	71	67	65	63
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2009-2029 1/	177	162	145	131	115	99	86	78	74	72	**74**	79	86	95	105	116	128	140	153	169	189
A2. New public sector loans on less favorable terms in 2009-2029 2	177	184	179	173	164	154	140	131	125	120	**116**	115	114	113	113	112	112	114	115	116	117
A3. Alternative Scenario :full delivery of HIPC, MDRI, and beyond HIPC debt relief	177	44	47	49	50	51	50	50	51	51	**51**	52	53	54	54	55	55	55	56	56	56
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	177	176	166	158	150	139	126	116	108	101	**95**	91	87	83	80	76	72	69	66	63	61
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	177	228	309	297	284	267	245	229	215	202	**187**	175	163	152	142	131	121	113	105	100	96
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	177	176	166	158	150	139	126	116	108	101	**95**	91	87	83	80	76	72	69	66	63	61
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	177	173	161	153	145	134	121	111	103	97	**92**	88	85	81	78	74	71	68	65	63	61
B5. Combination of B1-B4 using one-half standard deviation shocks	177	193	220	211	201	188	171	158	148	139	**130**	123	117	110	104	98	92	87	82	78	75
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	177	176	166	158	150	139	126	116	108	101	**95**	91	87	83	80	76	72	69	66	63	61
PV of debt-to-revenue ratio																					
Baseline	256	279	261	249	235	218	198	183	171	160	**152**	145	139	133	127	121	116	111	106	102	98
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2009-2029 1/	256	249	222	201	177	153	135	122	115	113	**116**	124	135	148	164	181	200	219	239	264	295
A2. New public sector loans on less favorable terms in 2009-2029 2	256	283	275	266	252	236	219	205	195	187	**182**	179	178	177	177	176	176	178	179	181	184
A3. Alternative Scenario :full delivery of HIPC, MDRI, and beyond HIPC debt relief	256	68	73	76	77	79	79	79	79	80	**80**	81	83	84	85	86	86	87	87	88	88
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	256	280	275	263	249	232	212	196	182	171	**161**	154	148	141	135	128	122	117	112	107	103
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	256	293	318	307	293	276	257	240	226	212	**197**	184	172	160	149	138	128	118	110	105	101
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	256	298	300	287	272	253	232	214	199	186	**176**	168	161	154	147	140	134	128	122	117	113
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	256	266	246	236	222	207	189	174	162	151	**144**	138	132	127	122	117	112	107	102	99	95
B5. Combination of B1-B4 using one-half standard deviation shocks	256	296	319	307	292	273	252	234	219	206	**193**	182	172	163	154	145	136	128	121	116	111
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	256	380	356	341	323	300	275	254	237	221	**209**	200	191	183	175	167	159	152	145	139	134

Table 1b.Togo: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2009-2029 (continued)
(In percent)

Debt service-to-exports ratio																					
Baseline	6	6	10	12	14	15	14	12	10	9	**8**	7	6	6	6	6	6	6	6	6	6
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2009-2029 1/	6	6	9	11	13	14	13	12	9	7	**5**	4	3	3	4	4	5	6	7	8	10
A2. New public sector loans on less favorable terms in 2009-2029 2	6	6	10	12	14	15	14	13	12	11	**9**	9	9	9	9	9	10	10	11	11	12
A3. Alternative Scenario :full delivery of HIPC, MDRI, and beyond HIPC debt relief	6	6	3	4	4	4	4	4	4	3	**3**	3	2	3	3	3	3	3	3	3	3
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	6	6	10	12	14	15	14	12	10	9	**8**	7	6	6	6	6	6	6	6	6	5
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	6	8	15	19	22	23	23	20	17	17	**18**	16	15	15	14	14	14	13	12	9	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	6	6	10	12	14	15	14	12	10	9	**8**	7	6	6	6	6	6	6	6	6	5
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	6	6	10	11	13	14	14	12	10	9	**7**	6	6	6	6	6	6	6	6	6	5
B5. Combination of B1-B4 using one-half standard deviation shocks	6	7	12	15	17	18	18	15	13	12	**11**	10	9	9	9	9	9	9	8	7	7
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	6	6	10	12	14	15	14	12	10	9	**8**	7	6	6	6	6	6	6	6	6	5
Debt service-to-revenue ratio																					
Baseline	9	10	15	18	21	22	23	19	16	14	**12**	10	10	10	10	10	10	10	10	9	9
A. Alternative Scenarios																					
A1. Key variables at their historical averages in 2009-2029 1/	9	10	15	17	20	21	21	18	15	11	**8**	6	5	5	6	7	8	9	11	13	15
A2. New public sector loans on less favorable terms in 2009-2029 2	9	10	15	19	22	24	23	21	19	17	**15**	14	14	14	14	13	16	15	17	18	19
A3. Alternative Scenario :full delivery of HIPC, MDRI, and beyond HIPC debt relief	9	10	4	5	6	6	7	7	6	5	5	4	4	4	4	5	5	5	5	5	5
B. Bound Tests																					
B1. Real GDP growth at historical average minus one standard deviation in 2010-2011	9	10	16	19	23	24	24	21	17	16	**13**	11	10	11	11	11	11	11	10	10	9
B2. Export value growth at historical average minus one standard deviation in 2010-2011 3/	9	10	16	20	23	24	24	21	17	18	**19**	17	16	15	15	15	14	14	13	10	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2010-2011	9	11	18	21	25	26	27	23	19	17	**14**	12	11	12	12	12	11	12	11	11	10
B4. Net non-debt creating flows at historical average minus one standard deviation in 2010-2011 4/	9	10	15	18	21	22	22	19	16	14	**11**	10	9	9	9	9	9	9	9	9	8
B5. Combination of B1-B4 using one-half standard deviation shocks	9	10	17	21	25	26	26	23	19	18	**17**	15	14	14	14	14	13	13	13	11	10
B6. One-time 30 percent nominal depreciation relative to the baseline in 2010 5/	9	14	21	25	29	31	32	27	22	20	**17**	14	14	14	14	14	14	14	13	13	12
Memorandum item:																					
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	14	14	14	14	14	14	14	14	14	14	**14**	14	14	14	14	14	14	14	14	14	14

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, 2006-2029
(In percent of GDP, unless otherwise indicated)

	Actual			Average	Standard Deviation	Estimate	Projections								
	2006	2007	2008			2009	2010	2011	2012	2013	2014	2009-14 Average	2019	2029	2015-29 Average
Public sector debt 1/	117.8	110.2	85.7			81.7	79.3	73.4	68.4	63.5	58.1		38.3	25.8	
o/w foreign-currency denominated	89.7	82.1	60.6			58.1	58.2	56.4	53.9	50.9	47.5		34.2	23.6	
Change in public sector debt	3.0	-7.5	-24.6			-3.9	-2.5	-5.8	-5.0	-4.9	-5.3		-2.7	-0.8	
Identified debt-creating flows	-10.0	-10.8	-21.2			-4.1	-1.7	-3.3	-2.4	-2.1	-2.3		-1.7	-0.9	
Primary deficit	1.7	-0.3	-0.6	-0.3	2.0	-0.3	1.7	-0.1	-0.1	-0.1	-0.2	0.1	0.2	0.5	0.2
Revenue and grants	18.3	18.7	19.4			22.6	21.4	23.5	23.3	23.3	23.3		22.7	22.9	
of which: grants	1.4	1.7	2.4			3.6	3.8	5.3	5.1	5.1	5.1		4.5	4.7	
Primary (noninterest) expenditure	20.0	18.4	18.8			22.3	23.1	23.4	23.2	23.2	23.2		22.9	23.4	
Automatic debt dynamics	-11.6	-10.5	-0.9			-2.8	-2.4	-3.2	-2.3	-1.9	-2.2		-1.9	-1.3	
Contribution from interest rate/growth differential	-2.5	-1.5	-7.8			-1.9	-2.9	-3.6	-2.8	-2.5	-2.7		-1.9	-1.3	
of which: contribution from average real interest rate	1.8	0.8	-5.9			0.2	-0.9	-0.7	0.0	0.1	-0.3		-0.4	-0.3	
of which: contribution from real GDP growth	-4.4	-2.3	-1.9			-2.1	-2.1	-2.9	-2.8	-2.6	-2.4		-1.5	-1.0	
Contribution from real exchange rate depreciation	-9.1	-9.1	6.9			-0.9	0.5	0.4	0.6	0.5	0.5		...	...	
Other identified debt-creating flows	-0.1	0.0	-19.7			-1.0	-1.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	-0.1	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	0.0	0.0	-19.7			-1.0	-1.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes	13.0	3.3	-3.4			0.2	-0.8	-2.6	-2.6	-2.8	-3.0		-1.0	0.0	
Other Sustainability Indicators															
PV of public sector debt	28.1	28.1	73.5			72.2	70.1	64.6	59.9	55.3	50.3		31.7	20.1	
o/w foreign-currency denominated	0.0	0.0	48.5			48.6	49.1	47.5	45.4	42.7	39.6		27.6	17.8	
o/w external	...	...	48.5			48.6	49.1	47.5	45.4	42.7	39.6		27.6	17.8	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	6.3	4.3	4.2			4.7	8.9	6.0	5.2	5.8	5.8		3.6	2.5	
PV of public sector debt-to-revenue and grants ratio (in percent)	153.8	150.5	379.5			320.1	327.5	274.8	256.4	237.0	215.8		139.7	87.7	
PV of public sector debt-to-revenue ratio (in percent)	166.4	165.5	432.6			380.8	399.2	354.7	328.9	303.7	276.5		174.3	110.4	
o/w external 3/	…	…	285.1			256.2	279.3	261.2	249.3	234.9	217.8		151.5	97.9	
Debt service-to-revenue and grants ratio (in percent) 4/	25.1	24.9	24.8			22.1	33.5	25.8	22.7	25.4	25.8		14.8	8.7	
Debt service-to-revenue ratio (in percent) 4/	27.1	27.4	28.2			26.3	40.9	33.4	29.2	32.6	33.1		18.5	11.0	
Primary deficit that stabilizes the debt-to-GDP ratio	-1.3	7.2	24.0			3.7	4.2	5.7	4.9	4.8	5.1		2.9	1.3	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	3.9	1.9	1.8	1.5	2.2	2.5	2.6	3.8	4.0	4.0	3.9	3.4	3.8	4.1	4.0
Average nominal interest rate on forex debt (in percent)	2.3	2.3	0.6	1.9	0.7	0.7	0.8	1.8	2.0	1.9	1.8	1.5	1.7	1.5	1.6
Average real interest rate on domestic debt (in percent)	0.5	-0.2	-5.3	-1.7	3.2	2.1	0.5	-0.3	0.6	0.8	0.1	0.6	-1.9	-1.6	-1.3
Real exchange rate depreciation (in percent, + indicates depreciation)	-10.3	-10.2	9.0	-4.4	10.9	-1.5	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	0.3	1.3	6.5	2.4	5.4	1.3	2.6	3.0	2.2	1.9	2.5	2.2	2.5	2.5	2.5
Growth of real primary spending (deflated by GDP deflator, in percent)	0.1	-0.1	0.0	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Grant element of new external borrowing (in percent)	...	...	...	…	…	16.7	15.1	21.2	33.9	33.9	33.9	25.8	22.7	17.4	...

Sources: Country authorities; and staff estimates and projections.

1/ Covers public and publicly guaranteed debt including state-owned enterprises debt.

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 2009-2029

	Projections							
	2009	2010	2011	2012	2013	2014	2019	2029
PV of Debt-to-GDP Ratio								
Baseline	72	70	65	60	55	50	32	20
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	72	69	64	61	57	56	35	21
A2. Primary balance is unchanged from 2009	72	68	62	58	53	48	28	13
A3. Permanently lower GDP growth 1/	72	71	65	61	57	53	38	39
A4. Alternative Scenario :With HIPC, MDRI, Beyond-HIPC assistance	72	35	35	35	35	35	35	35
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2010-2011	72	73	72	68	65	61	47	45
B2. Primary balance is at historical average minus one standard deviations in 2010-2011	72	70	66	62	57	52	33	21
B3. Combination of B1-B2 using one half standard deviation shocks	72	71	68	64	60	56	41	36
B4. One-time 30 percent real depreciation in 2010	72	91	84	79	74	69	48	33
B5. 10 percent of GDP increase in other debt-creating flows in 2010	72	80	74	70	65	60	40	27
PV of Debt-to-Revenue Ratio 2/								
Baseline	320	327	275	256	237	216	140	88
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	320	321	272	258	241	234	147	82
A2. Primary balance is unchanged from 2009	320	318	266	247	227	206	124	56
A3. Permanently lower GDP growth 1/	320	329	278	261	244	225	165	165
A4. Alternative Scenario :With HIPC, MDRI, Beyond-HIPC assistance	320	166	139	133	125	118	90	80
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2010-2011	320	339	300	287	272	256	203	192
B2. Primary balance is at historical average minus one standard deviations in 2010-2011	320	327	283	264	245	223	147	93
B3. Combination of B1-B2 using one half standard deviation shocks	320	328	286	271	255	237	178	156
B4. One-time 30 percent real depreciation in 2010	320	424	359	339	319	296	211	146
B5. 10 percent of GDP increase in other debt-creating flows in 2010	320	374	317	298	278	257	177	117
Debt Service-to-Revenue Ratio 2/								
Baseline	22	34	26	23	25	26	15	9
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	22	34	26	23	27	28	17	10
A2. Primary balance is unchanged from 2009	22	34	26	22	25	25	14	7
A3. Permanently lower GDP growth 1/	22	34	26	23	26	26	16	13
A4. Alternative Scenario :With HIPC, MDRI, Beyond-HIPC assistance	22	30	18	13	14	13	10	7
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2010-2011	22	34	28	24	28	28	18	15
B2. Primary balance is at historical average minus one standard deviations in 2010-2011	22	34	26	23	26	26	15	9
B3. Combination of B1-B2 using one half standard deviation shocks	22	34	27	24	27	27	17	13
B4. One-time 30 percent real depreciation in 2010	22	35	31	29	33	34	21	17
B5. 10 percent of GDP increase in other debt-creating flows in 2010	22	34	27	25	27	27	16	12

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.