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TOGO

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STAFF REPORT FOR THE 2013 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

Approved By
Michael Atingi-Ego and Peter Allum (IMF) and Jeffrey Lewis and Marcelo Giugale (IDA)

The Debt Sustainability Analysis (DSA) has been prepared jointly by the staffs of the International Monetary Fund and the International Development Association, using the debt sustainability framework for low-income countries approved by the Boards of both institutions.

The analysis based on the joint IMF-World Bank debt sustainability framework for low-income countries shows that Togo remains at moderate risk of debt distress. After full HIPC assistance, MDRI and beyond HIPC assistance, Togo's external and public debt indicators improved significantly in 2010/11, and remained stable under the previous ECF-supported program. In 2012, Togo contracted significant external debt. While debt indicators are projected to remain below the policy-relevant indicative thresholds in the 20-year period under the baseline scenario, Togo remains vulnerable to certain shocks and could breach the policy-relevant thresholds for the PV of debt-to-GDP, PV of debt-to-exports, PV of debt-to-revenue and debt service-to-revenue ratios under some alternative scenarios in the outer years.

INTRODUCTION

1. The last joint DSA for Togo was prepared in November 2010 and updated in August 2011, and both concluded that Togo was at moderate risk of debt distress. This debt sustainability analysis (LIC-DSA) for Togo assesses its external and public debt using the forward-looking debt sustainability framework (DSF) for low-income countries.[1] The outcome of this analysis was in line with the previous DSAs. Togo reached the completion point of the HIPC Initiative in December 2010 and was granted debt relief from several multilateral and bilateral creditors. The nominal total debt stock, which fell from US$2.5 billion at end-2009 to below US$1.5 billion at end-2010, was US$1.9 billion at end-2012.

2. In the LIC-DSA framework, the present value of Togo's public and publicly guaranteed (PPG) external debt is US$724 million at end-2012. Around 45 percent of this stock of debt is owed to multilateral creditors and the remainder to bilateral and commercial creditors of which around 28 percent is owed to non-Paris Club bilateral creditors (Text Table 1). Non-Paris Club debt has increased almost by five percentage points of GDP since 2010. Concurrently, domestic debt decreased from 30 percent in 2010 to 27 percent of GDP in 2012.

Text Table 1: Togo. Composition of External Debt Stock

Debto Creditor	End-2010 (billions of CFAF)	End-2010 (in percent)	End-2012 (billions of CFAF)	End-2012 (in percent)
Government				
Multilateral	137.5	50.8	164.1	45.4
of which:				
World Bank	0.0	0.0	6.9	3.0
AfDB	0.0	0.0	0.0	0.0
Bilateral				
Paris Club	16.3	6.0	14.4	4.0
Non-Paris Club	61.7	22.8	100.3	27.7
of which:				
China	36.7	19.7	82.0	22.7
Kuwait	23.1	12.4	16.0	4.4
Saudi Arabia	1.8	1.1	2.3	0.6
Others				
Commercial Banks	1.4	0.5	0.0	0.0
GDF-Suez	0.0	0.0	29.5	8.2
State-owned Enterprises	54.0	19.9	53.5	14.8
Total				
In billions of CFAF	270.9	100	361.8	100
in millions of US$	546.1		724.3	
in percent of GDP	17.2		18.1	

Source: Country authorities and Staff calculations

BASELINE ASSUMPTIONS

3. The baseline macroeconomic assumptions for the present DSA are the following:

a. Real GDP growth is projected to be 5.6 percent in 2013 and average about 5.9 percent over 2014-18, driven by public and private investments in key sectors including agriculture, mining industry and infrastructure (especially in transport). The estimated potential growth rate exceeds historical rates, which were depressed by the dislocations caused by the protracted social, political, and

[1] This DSA has been prepared by Fund staff using the Debt Sustainability Framework (DSF) for Low Income Countries (see "Applying the Debt Sustainability Framework for Low-Income Countries Post Debt Relief", (http://siteresources.worldbank.org/INTDEBTDEPT/PolicyPapers/21154573/DMSDR1S3149398v1DSFPaperforweb.pdf). Togo's quality of policies and institutions, as measured by the average World Bank's Country Policy and Institutional Assessment (CPIA) for the period 2010–12 (2.95), 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 18 percent for the debt service-to-revenue ratio.

economic crisis that the country experienced up to the mid-2000s.The main downside risks to growth projections are related to the country's weak management capacity. These may deter the implementation of the planned public investments, which would be one of the main drivers of growth over the medium term. Additionally, while in the short run, public and private investments in key sectors rely on electricity generated by their own resources, the supply of electricity remains a binding constraint in the medium and long run,

b. Public investment is projected to accelerate starting in 2013, reaching 10.4 percent of GDP in 2013 and 10.9 percent in 2014 and retain this upward trend until 2017, slightly slowing down in 2018. Upon completion of the planned investments, it is expected to stabilize around 9.5 percent. About 35 percent of public investments will be financed domestically while the remaining 65 percent will be via external financing. Public investment projects are expected to be mostly directed to infrastructure and will lead GDP growth to increase above its long-term trend for these years. Togo has weak public investment management capacity as documented by the IMF's 2013 Public Investment Management Index (PIMI).[2]

c. The projections for key commodity prices (oil, cotton, cocoa, and coffee) through 2018 are based on WEO projections of August 2013 and are assumed constant in real terms afterwards.

d. Inflation over the long-term is projected to remain stable at around 2.5 percent, reflecting sound monetary policy at the regional level.

e. The current account deficit is expected to remain at levels above 10 percent, after a slight improvement in 2013 from 11.8 percent in 2012 to about 10.6 percent. The underlying reason for high projections of the deficit in the first projection years is higher levels of capital imports needed for the planned public and private investments. From 2016 onwards, the current account balances are projected to improve and would fluctuate around 7 percent over the long run.

f. The domestic primary fiscal balance is projected to return to positive territory and remain above 1 percent in the projection period, thereby providing a fiscal anchor to create the fiscal room to generate reductions in the debt-to-GDP stock and thereby ensuring fiscal sustainability over the long term.[3]

g. The overall balance is expected to improve by 2 percentage points of GDP to a deficit of 3 percent by 2017 and to gradually decline to around 2 percent, reflecting lower infrastructure investment needs in the medium to long term.

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[2] Togo received a rating of 0.92 in the IMF's Public Investment Management Index on a scale from 0 to 4 Togo's rating is lower than those of its WAEMU peers (Benin, Burkina Faso, Cote d'Ivoire, Mali and Senegal).

[3] The domestic primary fiscal balance is the authorities' primary tool for short term fiscal policy, given interest payments and multi-year infrastructure investment plans.

h. FDI flows are expected to increase over the medium-term reflecting improvements in the investment climate and overall governance as the SCAPE program is expected to address these areas. However, given Togo's weak track record in governance, these flows, as well as grants, are subject to significant risks, and this may hinder Togo's concessional financing. FDI is expected to increase from 1.7 percent of GDP in 2012 to 2.5 percent of GDP by 2018, as a result of public and private investments, better infrastructure and improved investment climate.

i. Initially, external financing will be mostly on grant terms, with less concessional financing gradually picking up, leading to a decrease in the grant element of new financing (as shown in Figure 1). The sources of concessional external financing are expected to consist of Togo's traditional multilateral donors, as well as the recently-increased financing from non-Paris Club creditors (especially China and India). Since the completion of the previous ECF program in 2011, Togo's creditor profile changed somewhat. As of end-2012, the loans from non-Paris Club (NPC) creditors constituted about 28 percent of total debt stock compared to 24 percent at end-2011. External borrowing by state-owned enterprises totaled 15 percent of total debt stock in 2012.

j. The DSA is based on the new unified discount rate of five percent.[4]

EXTERNAL DEBT SUSTAINABILITY ANALYSIS

Baseline

4. Under the baseline scenario, Togo's external debt indicators remain below their relevant indicative policy relevant thresholds (Table 1a, Figure 1). The present value (PV) of public and publicly guaranteed (PPG) debt equals to 20.4 percent of GDP in 2013 and remains below the 30 percent threshold until the end of the projected period. Furthermore, both the PV of external debt relative to revenues and exports stay relatively stable and below their respective indicative threshold until 2033. The share of concessional loans in new financing is projected to decline, which results in the concessionality of new loans to decrease from nearly 50 percent to around 18 percent over the period 2013 to 2033. The rate of debt accumulation is projected to stabilize around 1.5 percent per annum in the long run.[5,6]

Alternative Scenarios and Stress Tests

[4] On October 11, 2013, the Executive Boards of the IMF and the World Bank approved the reform of the discount rates presented in SM/12/271, resulting in a unique, unified 5 percent rate to be applied both to DSAs and to the calculation of the grant element (Board Decision N. 15462-(13–97)).

[5] The residual for endogenous debt dynamics presented in Table 1a is largely due to exceptional financing, price and exchange rate changes, and debt flow relief. For the period 2013-17, the ECF financing has also been taken into account, as well as other identified donor financing.

[6] The accumulation of nominal external debt as a percentage of GDP throughout the projection period is largely driven by project loans (remaining around 2.5-3 percent of GDP), which can be attributed to Togo's long-term investment needs.

5. Togo's external debt outlook remains vulnerable to shocks especially toward the end of the projection period (Table 1b, Figure 1). The policy thresholds for four key ratios are breached under the most extreme stress tests. First, the PV of external debt to GDP' indicators deteriorate under the terms shock scenario in which new loans are obtained on less favorable terms. In this case, the threshold is breached in 2023. Secondly, the PV of debt-to-exports ratio surpasses the indicative threshold in 2033 under the terms shock scenario. The PV of debt-to-revenue ratio breaches the 200 percent threshold in 2029 under the same scenario. Lastly, the PV of debt service-to-revenue ratio surpasses the indicative thresholds in 2026 under the one-time 30 percent nominal depreciation shock.

6. In light of the results from the baseline and alternative scenarios as well as the stress tests, staff concludes that Togo still is at moderate risk of debt distress.

PUBLIC SECTOR DEBT SUSTAINABILITY

Baseline

7. 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 years of weak fiscal management and domestic arrears accumulation, as well as the need to recapitalize ailing banks. Much of the debt burden stemmed from the government's recognition of liabilities arising from liquidated loss-making SOEs. Under the baseline scenario, the PV of total public debt ratios are projected to decrease over the projection period. On average, the PV of debt to GDP ratio amounts to around 23 percent over 2013-2033. For debt ratios to remain at a reasonable level over the long-run, both an improvement in the macroeconomic outlook and a more cautious debt strategy are critical factors.

Alternative Scenarios and Stress Tests

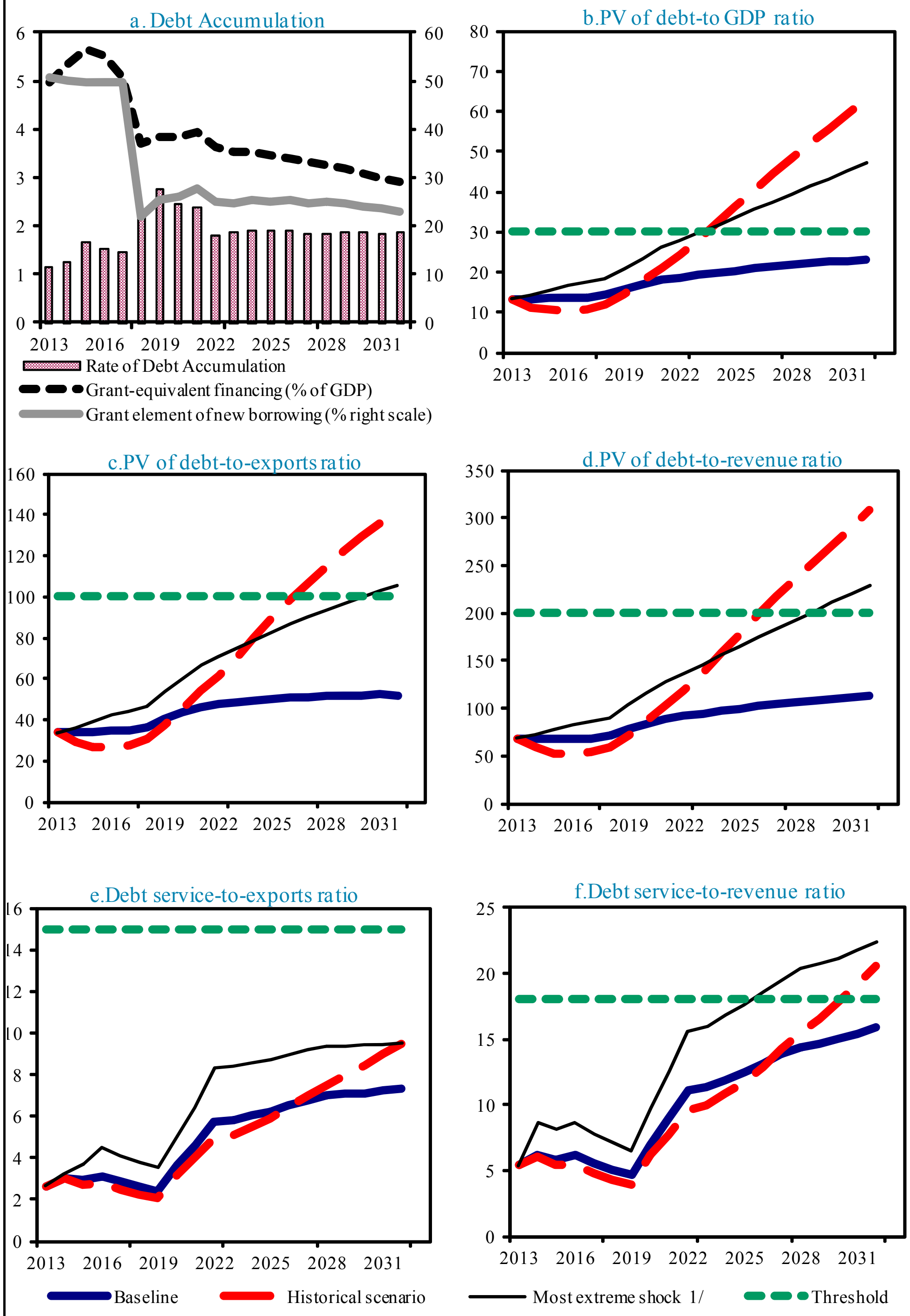
8. The evolution of the debt indicators would be highly sensitive to growth shocks, which would increase the debt level and debt service over the long run. Total public debt dynamics are particularly vulnerable to a growth shock (Table 2b, Figure 2). This highlights the importance of a reform agenda that improves the business environment to support public and foreign investment for growth.

CONCLUSION

9. The DSA indicates that Togo is at moderate risk of debt distress, though is susceptible to macroeconomic developments and any changes in its debt management strategy and capacity. The authorities generally agreed with the assessment while considering staff's long-term growth projections to be conservative. Under the baseline scenario, the debt ratios remain below the thresholds for the projected period, but under alternative scenarios thresholds would be breached in the outer years. These dynamics highlight the vulnerability of the Togolese economy to certain shocks (in particular less favorable terms on new financing), and stress the need for a prudent approach to new borrowing. This also pronounces the importance of improving debt management capacity in Togo to have a realistic and overall assessment of the risks posed by various sectors including fiscal. While heavy public investment is expected to lead to sustained growth, Togo's weak public investment management capacity may impose risks on the underlying public investment-growth nexus. Additionally, public investments based on a public-private partnership framework would imply a higher risk of potential fiscal liabilities.

10. Maintaining a robust external debt outlook will depend on a sustained pick-up of real GDP growth, and foreign direct investment, as well as prudent debt management and solid fiscal performance. The inclusion of Togo's 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 ensure efforts to strengthen public finance management and debt 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.

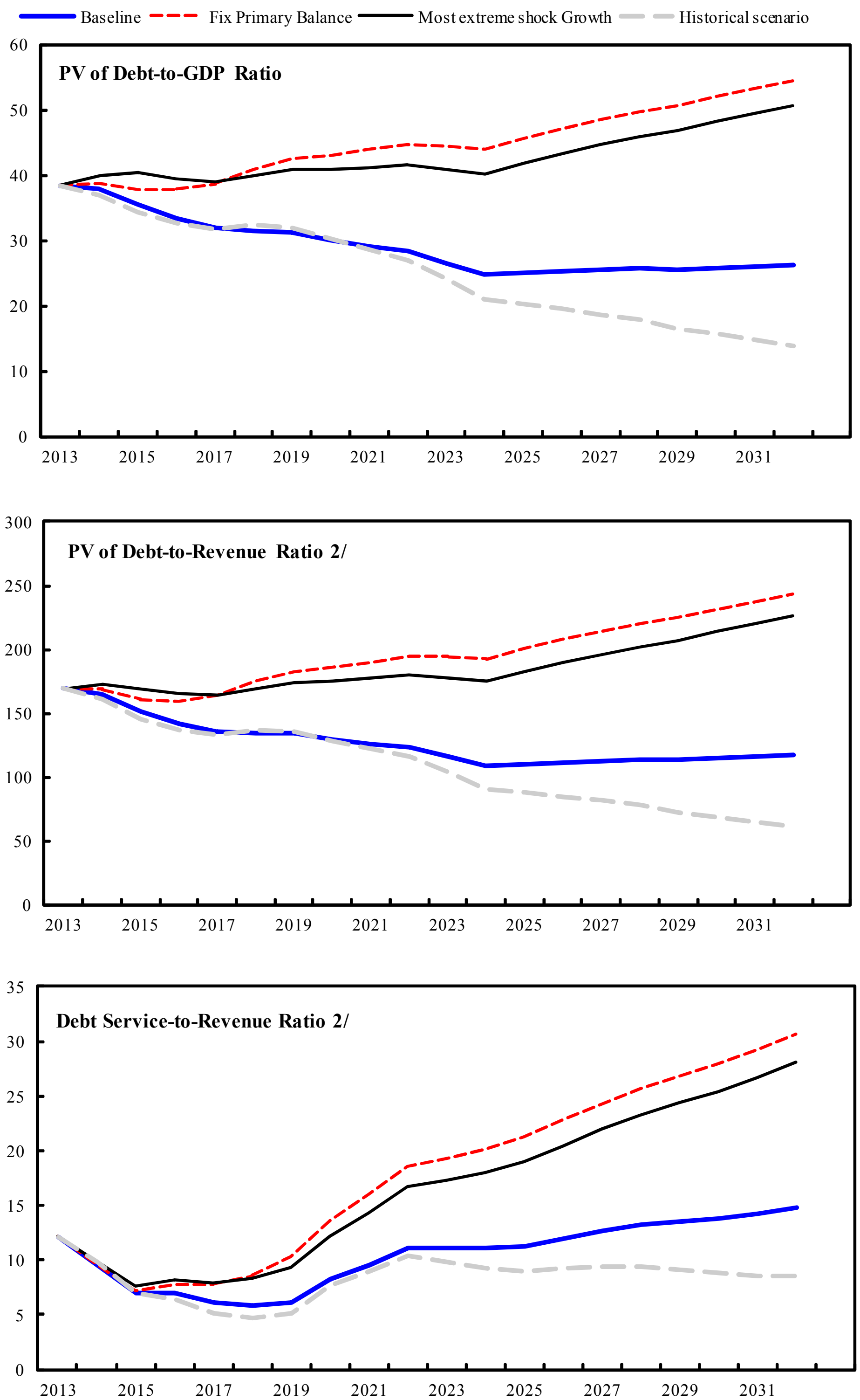
Figure 1. Togo: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2013-2033 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2023. In figure b. it corresponds to a Terms shock; in c. to a Terms shock; in d. to a Terms 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, 2013-2033 1/



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in 2023.

2/ Revenues are defined inclusive of grants.

Table 1a.: External Debt Sustainability Framework, Baseline Scenario, 2010-2033 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections									
	2010	2011	2012			2013	2014	2015	2016	2017	2018	2013-2018 Average	2023	2033	2019-2033 Average
External debt (nominal) 1/	**18.5**	**17.2**	**20.1**			**21.2**	**22.2**	**23.5**	**24.4**	**25.0**	**25.4**		**31.7**	**37.6**	
o/w public and publicly guaranteed (PPG)	17.2	15.6	18.1			18.9	19.7	20.8	21.6	22.1	22.4		28.5	34.6	
Change in external debt	-34.7	-1.3	3.0			1.0	1.0	1.3	0.9	0.6	0.4		0.8	0.4	
Identified net debt-creating flows	4.6	4.5	9.5			7.9	7.2	6.2	5.1	4.6	4.6		0.7	-2.7	
Non-interest current account deficit	**5.9**	**8.9**	**11.5**	**8.3**	**1.9**	**10.4**	**10.6**	**9.9**	**8.9**	**8.4**	**8.1**		**3.7**	**0.4**	3.4
Deficit in balance of goods and services	17.1	20.7	21.5			22.7	23.3	22.6	21.0	19.3	17.3		12.5	8.4	
Exports	40.2	40.7	39.6			39.5	39.2	39.4	39.4	39.5	39.2		39.8	44.7	
Imports	57.3	61.4	61.1			62.2	62.5	62.0	60.4	58.8	56.5		52.4	53.1	
Net current transfers (negative = inflow)	-11.2	-9.7	-8.3	-10.1	1.2	-9.4	-9.1	-8.8	-8.3	-7.8	-6.7		-6.5	-6.2	-6.5
o/w official	-2.0	-2.3	-1.8			-3.4	-3.6	-3.6	-3.6	-3.3	-3.0		-2.5	-1.7	
Other current account flows (negative = net inflow)	0.0	-2.1	-1.7			-2.9	-3.6	-4.0	-3.8	-3.1	-2.4		-2.4	-1.8	
Net FDI (negative = inflow)	**-1.5**	**-1.7**	**-1.6**	**-2.3**	**1.3**	**-1.7**	**-2.5**	**-2.5**	**-2.5**	**-2.5**	**-2.5**		**-2.5**	**-2.5**	-2.5
Endogenous debt dynamics 2/	**0.3**	**-2.7**	**-0.4**			**-0.8**	**-0.9**	**-1.2**	**-1.2**	**-1.2**	**-1.0**		**-0.5**	**-0.6**	
Contribution from nominal interest rate	0.4	0.2	0.3			0.2	0.3	0.1	0.1	0.0	0.2		0.6	0.8	
Contribution from real GDP growth	-2.2	-0.7	-1.0			-1.0	-1.2	-1.2	-1.3	-1.3	-1.3		-1.2	-1.4	
Contribution from price and exchange rate changes	2.0	-2.1	0.3			…	…	…	…	…	…		…	…	
Residual (3-4) 3/	**-39.3**	**-5.8**	**-6.5**			**-6.8**	**-6.2**	**-4.9**	**-4.3**	**-4.1**	**-4.2**		**0.2**	**3.1**	
o/w exceptional financing 9/	-2.6	-2.6	-0.8			-0.8	-0.5	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	15.3			15.6	15.7	16.1	16.3	16.5	17.3		22.4	26.2	
In percent of exports	...	...	38.5			39.4	40.1	40.9	41.5	41.7	44.2		56.2	58.5	
PV of PPG external debt	**...**	**...**	**13.2**			**13.3**	**13.2**	**13.4**	**13.5**	**13.6**	**14.4**		**19.2**	**23.2**	
In percent of exports	**...**	**...**	**33.4**			**33.6**	**33.6**	**34.1**	**34.4**	**34.4**	**36.7**		**48.3**	**52.0**	
In percent of government revenues	**...**	**...**	**72.5**			**68.7**	**68.0**	**67.5**	**67.3**	**67.1**	**70.8**		**94.4**	**113.0**	
Debt service-to-exports ratio (in percent)	**4.7**	**2.0**	**2.8**			**2.6**	**3.0**	**2.9**	**3.1**	**2.8**	**2.6**		**5.8**	**7.3**	
PPG debt service-to-exports ratio (in percent)	**4.7**	**2.0**	**2.8**			**2.6**	**3.0**	**2.9**	**3.1**	**2.8**	**2.6**		**5.8**	**7.3**	
PPG debt service-to-revenue ratio (in percent)	**10.3**	**4.7**	**6.1**			**5.4**	**6.1**	**5.8**	**6.1**	**5.5**	**5.1**		**11.3**	**15.9**	
Total gross financing need (Billions of U.S. dollars)	0.2	0.3	0.5			0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.4	
Non-interest current account deficit that stabilizes debt ratio	40.6	10.2	8.5			9.4	9.6	8.5	8.0	7.8	7.7		2.8	0.0	
Key macroeconomic assumptions															
Real GDP growth (in percent)	4.1	4.8	5.9	3.5	1.5	5.6	6.0	6.0	6.1	5.8	5.5	5.8	4.0	4.0	4.2
GDP deflator in US dollar terms (change in percent)	-3.7	12.9	-1.6	6.8	8.6	4.6	3.3	3.5	3.5	3.3	3.3	3.6	2.2	2.2	2.2
Effective interest rate (percent) 5/	0.7	1.2	2.0	0.5	0.6	1.1	1.4	0.3	0.4	0.2	1.1	0.8	2.2	2.2	2.2
Growth of exports of G&S (US dollar terms, in percent)	9.6	19.8	1.5	11.6	10.7	10.2	8.5	10.4	9.7	9.6	8.2	9.4	7.4	8.3	7.4
Growth of imports of G&S (US dollar terms, in percent)	9.7	26.7	3.8	13.2	11.6	12.5	10.0	8.9	7.0	6.4	4.7	8.2	5.4	6.7	6.0
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	50.8	50.1	49.6	49.6	49.6	22.1	45.3	24.8	22.8	23.4
Government revenues (excluding grants, in percent of GDP)	18.4	17.3	18.2			19.3	19.4	19.9	20.1	20.2	20.3		20.4	20.6	20.4
Aid flows (in Billions of US dollars) 7/	0.4	0.3	0.3			0.3	0.3	0.4	0.4	0.4	0.3		0.5	0.7	
o/w Grants	0.1	0.1	0.1			0.1	0.2	0.2	0.2	0.2	0.2		0.2	0.3	
o/w Concessional loans	0.3	0.2	0.2			0.1	0.2	0.2	0.2	0.2	0.1		0.2	0.4	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			5.0	5.3	5.6	5.5	5.1	3.7		3.5	2.9	3.3
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			77.2	75.5	73.1	73.4	73.7	59.8		52.9	42.6	49.2
Memorandum items:															
Nominal GDP (Billions of US dollars)	3.2	3.8	3.9			4.3	4.7	5.2	5.7	6.2	6.8		9.5	16.4	
Nominal dollar GDP growth	0.2	18.3	4.3			10.5	9.4	9.7	9.8	9.3	9.0	9.6	6.3	6.3	6.5
PV of PPG external debt (in Billions of US dollars)			0.5			0.6	0.6	0.7	0.8	0.9	1.0		1.9	3.9	
(PVt-PVt-1)/GDPt-1 (in percent)						1.2	1.3	1.7	1.5	1.5	2.3	1.6	1.9	1.9	2.0
Gross workers' remittances (Billions of US dollars)	0.3	0.3	0.2			0.3	0.3	0.3	0.3	0.3	0.3		0.4	0.7	
PV of PPG external debt (in percent of GDP + remittances)	...	...	12.4			12.5	12.5	12.8	12.9	13.0	13.9		18.5	22.2	
PV of PPG external debt (in percent of exports + remittances)	...	...	28.8			29.2	29.5	30.2	30.6	30.8	33.5		43.9	47.3	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	2.4			2.3	2.7	2.6	2.8	2.5	2.4		5.3	6.6	

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).

9/ Budget support

Table 1b.Togo: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2013-2033
(In percent)

	Projections							
	2013	2014	2015	2016	2017	2018	**2023**	2033
PV of debt-to GDP ratio								
Baseline	13	13	13	14	14	14	**19**	23
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	13	11	11	11	11	12	**28**	63
A2. New public sector loans on less favorable terms in 2013-2033 2	13	14	16	17	18	18	**30**	47
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	13	14	15	15	15	16	**22**	26
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	13	16	21	21	21	21	**25**	26
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	13	14	15	15	15	16	**22**	27
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	13	15	16	16	16	17	**22**	25
B5. Combination of B1-B4 using one-half standard deviation shocks	13	15	19	19	19	20	**25**	27
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	13	19	19	19	20	21	**28**	34
PV of debt-to-exports ratio								
Baseline	34	34	34	34	34	37	**48**	52
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	34	29	27	27	27	31	**71**	142
A2. New public sector loans on less favorable terms in 2013-2033 2	34	36	39	42	44	47	**75**	105
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	34	34	35	35	35	38	**50**	54
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	34	43	62	62	61	64	**74**	69
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	34	34	35	35	35	38	**50**	54
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	34	38	41	42	42	44	**55**	56
B5. Combination of B1-B4 using one-half standard deviation shocks	34	39	48	48	48	50	**61**	60
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	34	34	35	35	35	38	**50**	54
PV of debt-to-revenue ratio								
Baseline	69	68	67	67	67	71	**94**	113
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	69	59	53	52	54	59	**138**	308
A2. New public sector loans on less favorable terms in 2013-2033 2	69	73	78	82	87	90	**146**	229
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	69	71	74	74	74	79	**106**	127
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	69	81	105	103	101	104	**122**	126
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	69	72	76	76	76	81	**109**	131
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	69	77	82	81	81	85	**107**	121
B5. Combination of B1-B4 using one-half standard deviation shocks	69	79	97	96	95	99	**121**	133
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	69	97	96	97	97	103	**138**	166

Table 1b.Togo: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2013-2033 (continued)

(In percent)

				Debt service-to-exports ratio				
Baseline	3	3	3	3	3	3	**6**	7
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	3	3	3	3	2	2	**5**	9
A2. New public sector loans on less favorable terms in 2013-2033 2	3	3	3	3	3	3	**3**	10
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	3	3	3	3	3	3	**6**	7
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	3	3	4	4	4	4	**8**	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	3	3	3	3	3	3	**6**	7
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	3	3	3	3	3	3	**6**	8
B5. Combination of B1-B4 using one-half standard deviation shocks	3	3	3	4	3	3	**7**	8
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	3	3	3	3	3	3	**6**	7
				Debt service-to-revenue ratio				
Baseline	5	6	6	6	6	5	**11**	16
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2013-2033 1/	5	6	5	5	5	4	**10**	21
A2. New public sector loans on less favorable terms in 2013-2033 2	5	6	6	7	6	6	**7**	21
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2014-2015	5	6	6	7	6	5	**12**	17
B2. Export value growth at historical average minus one standard deviation in 2014-2015 3/	5	6	6	7	7	6	**14**	18
B3. US dollar GDP deflator at historical average minus one standard deviation in 2014-2015	5	6	6	7	6	6	**13**	18
B4. Net non-debt creating flows at historical average minus one standard deviation in 2014-2015 4/	5	6	6	7	6	5	**12**	17
B5. Combination of B1-B4 using one-half standard deviation shocks	5	6	7	7	7	6	**14**	18
B6. One-time 30 percent nominal depreciation relative to the baseline in 2014 5/	5	9	8	9	8	7	**16**	22
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	15	15	15	15	15	15	**15**	15

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, 2010-2033
(In percent of GDP, unless otherwise indicated)

	Actual			Average 5/	Standard Deviation 5/	Estimate					Projections				
	2010	2011	2012			2013	2014	2015	2016	2017	2018	2013-18 Average	2023	2033	2019-33 Average
Public sector debt 1/	47.3	44.0	45.2			44.0	44.3	42.9	41.5	40.3	39.4		35.8	23.3	
o/w foreign-currency denominated	17.2	15.6	18.1			18.9	19.7	20.8	21.6	22.1	22.4		28.5	20.3	
Change in public sector debt	-26.0	-3.4	1.2			-1.1	0.3	-1.5	-1.4	-1.2	-0.9		-1.5	0.0	
Identified debt-creating flows	-40.0	-1.9	1.6			2.1	0.9	-0.3	-0.9	-1.4	-1.5		0.9	0.5	
Primary deficit	1.1	2.6	5.6	1.4	2.4	4.2	3.3	2.5	1.9	1.4	0.9	2.4	2.3	1.2	2.3
Revenue and grants	20.4	20.4	19.8			22.7	23.0	23.5	23.7	23.5	23.3		22.9	22.6	
of which: grants	2.0	3.1	1.6			3.4	3.6	3.6	3.6	3.3	3.0		2.5	1.9	
Primary (noninterest) expenditure	21.5	23.1	25.5			27.0	26.3	26.1	25.6	24.9	24.2		25.2	23.8	
Automatic debt dynamics	2.6	-4.6	-4.0			-2.1	-2.4	-2.8	-2.8	-2.8	-2.4		-1.3	-0.7	
Contribution from interest rate/growth differential	-2.6	-4.6	-4.1			-2.1	-2.2	-2.6	-2.5	-2.4	-2.1		-1.3	-0.7	
of which: contribution from average real interest rate	0.2	-2.5	-1.6			0.3	0.3	0.0	-0.1	-0.2	0.0		0.1	0.2	
of which: contribution from real GDP growth	-2.9	-2.2	-2.5			-2.4	-2.5	-2.5	-2.5	-2.3	-2.1		-1.4	-0.9	
Contribution from real exchange rate depreciation	5.3	0.1	0.0			-0.1	-0.3	-0.3	-0.3	-0.3	-0.3		...	...	
Other identified debt-creating flows	-43.7	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	
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)	-43.7	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	
Residual, including asset changes	14.0	-1.4	-0.4			-3.2	-0.6	-1.2	-0.5	0.2	0.7		-2.4	-0.5	
Other Sustainability Indicators															
PV of public sector debt	...	...	40.3			38.4	37.8	35.5	33.4	31.8	31.4		26.5	19.8	
o/w foreign-currency denominated	...	...	13.2			13.3	13.2	13.4	13.5	13.6	14.4		19.2	16.8	
o/w external	...	...	13.2			13.3	13.2	13.4	13.5	13.6	14.4		19.2	16.8	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	3.2	4.2	9.3			7.0	5.5	4.2	3.6	2.8	2.3		4.8	4.2	
PV of public sector debt-to-revenue and grants ratio (in percent)	…	…	203.2			169.0	164.8	150.8	141.1	135.0	134.5		116.0	87.9	
PV of public sector debt-to-revenue ratio (in percent)	…	…	220.8			199.2	195.4	178.0	166.1	157.1	154.3		130.2	95.9	
o/w external 3/	…	…	72.5			68.7	68.0	67.5	67.3	67.1	70.8		94.4	81.0	
Debt service-to-revenue and grants ratio (in percent) 4/	10.6	7.5	18.4			12.2	9.6	7.0	7.0	6.2	5.8		11.0	13.1	
Debt service-to-revenue ratio (in percent) 4/	11.8	8.9	20.0			14.3	11.4	8.2	8.3	7.2	6.7		12.4	14.3	
Primary deficit that stabilizes the debt-to-GDP ratio	27.1	6.0	4.4			5.4	3.0	4.0	3.3	2.6	1.8		3.8	1.2	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	4.1	4.8	5.9	3.5	1.5	5.6	6.0	6.0	6.1	5.8	5.5	5.8	4.0	4.1	4.2
Average nominal interest rate on forex debt (in percent)	0.7	1.3	2.2	0.6	0.7	1.3	1.6	0.4	0.4	0.2	1.2	0.9	2.5	3.4	2.4
Average real interest rate on domestic debt (in percent)	2.1	-5.2	-3.7	-1.3	6.4	1.8	1.9	1.5	1.5	1.5	1.4	1.6	0.2	-1.2	-0.7
Real exchange rate depreciation (in percent, + indicates depreciation)	10.5	0.4	0.3	-2.0	10.1	-0.5	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	1.1	7.6	6.5	3.4	6.3	2.0	2.4	2.5	2.5	2.5	2.5	2.4	2.2	2.1	2.2
Growth of real primary spending (deflated by GDP deflator, in percent)	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Grant element of new external borrowing (in percent)	...	...	...	…	…	50.8	50.1	49.6	49.6	49.6	22.1	45.3	24.8	2.4	...

Sources: Country authorities; and staff estimates and projections.
1/ Central Government.
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 2013-2033

	Projections							
	2013	2014	2015	2016	2017	2018	2023	2033
PV of Debt-to-GDP Ratio								
Baseline	38	38	35	33	32	31	27	26
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	38	37	34	33	32	32	24	14
A2. Primary balance is unchanged from 2013	38	39	38	38	39	41	44	54
A3. Permanently lower GDP growth 1/	38	38	36	34	33	33	30	38
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-2015	38	40	40	39	39	40	41	51
B2. Primary balance is at historical average minus one standard deviations in 2014-2015	38	38	37	35	33	33	28	27
B3. Combination of B1-B2 using one half standard deviation shocks	38	38	37	36	35	36	36	44
B4. One-time 30 percent real depreciation in 2014	38	42	39	36	34	33	27	28
B5. 10 percent of GDP increase in other debt-creating flows in 2014	38	47	44	42	40	39	33	32
PV of Debt-to-Revenue Ratio 2/								
Baseline	169	165	151	141	135	134	116	117
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	169	160	145	136	132	136	103	61
A2. Primary balance is unchanged from 2013	169	168	161	160	164	175	194	244
A3. Permanently lower GDP growth 1/	169	165	152	144	139	140	132	168
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-2015	169	173	169	165	164	169	177	226
B2. Primary balance is at historical average minus one standard deviations in 2014-2015	169	167	158	148	142	141	122	122
B3. Combination of B1-B2 using one half standard deviation shocks	169	166	156	151	149	153	158	198
B4. One-time 30 percent real depreciation in 2014	169	185	166	152	143	141	120	123
B5. 10 percent of GDP increase in other debt-creating flows in 2014	169	204	188	176	169	167	145	141
Debt Service-to-Revenue Ratio 2/								
Baseline	12	10	7	7	6	6	11	15
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	12	10	7	6	5	5	10	9
A2. Primary balance is unchanged from 2013	12	10	7	8	8	9	19	31
A3. Permanently lower GDP growth 1/	12	10	7	7	6	6	12	20
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2014-2015	12	10	8	8	8	8	17	28
B2. Primary balance is at historical average minus one standard deviations in 2014-2015	12	10	7	8	7	7	12	16
B3. Combination of B1-B2 using one half standard deviation shocks	12	10	7	7	6	7	15	24
B4. One-time 30 percent real depreciation in 2014	12	11	9	9	8	8	17	26
B5. 10 percent of GDP increase in other debt-creating flows in 2014	12	10	9	11	11	10	15	19

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.