INTERNATIONAL MONETARY FUND AND
INTERNATIONAL DEVELOPMENT ASSOCIATION

BURKINA FASO

Joint IMF/World Bank Debt Sustainability Analysis 2010 [1]

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

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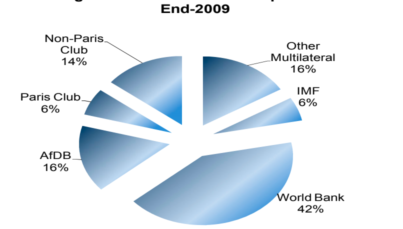
The results of this debt sustainability analysis (DSA) are consistent with those from the previous DSA. Burkina Faso is classified as a medium performer[2] *and its risk of debt distress is high, because under the baseline scenario, the present value (PV) of debt-to-exports ratio is breached starting in 2015. All other indicators remain below their indicative thresholds. Under a less favorable scenario, with higher fiscal deficits and lower growth, there would be a significant deterioration in the PV of debt-to-GDP and PV of debt-to-revenue ratios. An alternative scenario assuming scaled-up aid shows a significant improvement in debt indicators, reducing the risk of debt distress from high to moderate. Fiscal consolidation and export diversification are critical to support long-term debt sustainability.*

I. Background

1. **The analysis presented in this document is based on Burkina Faso's stock of debt at end-2009.** Financing from multilateral creditors account for about

Figure 1: External Debt Composition End-2009



[1] Prepared by the IMF and World Bank staff, in collaboration with the Burkinabè authorities and staff of the African Development Bank. The previous joint DSA, carried out in June 2009 (IMF Country Report No. 09/222, IDA Report No.48468-BF (Ninth Poverty Reduction Support Grant to Burkina Faso) was updated by IMF staff in November 2009 (IMF Country Report No.10/7).

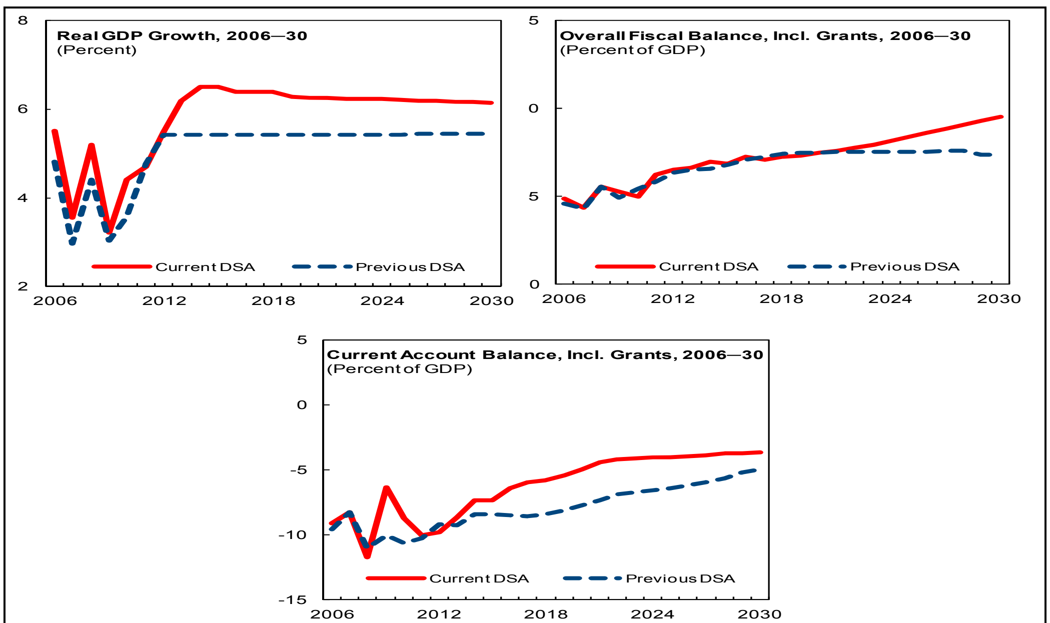
[2] With a three-year backward moving average CPIA (Country Policy and Institutional Assessment) for 2006-2008 of 3.71 that is below the 3.75 benchmark for strong performers. The threshold of the PV of debt-to-exports ratio is 150 percent for medium performers and 200 percent for strong performers.

80 percent of the stock of debt outstanding at end-2009. Burkina Faso's loans have long maturities, with an overall grant element of about 40 percent. Furthermore, grants amounted to 64 percent of financing in 2009.

2. **The government has consistently demonstrated its commitment to stay current on its external payment obligations,** including during the pre-HIPC period, when the PV of debt-to-exports ratio was well above 200 percent, and the debt-service-to-exports ratio close to 25 percent. The 35 percent grant element is strictly enforced for all central-government foreign-currency borrowings, and projects are consistently scrutinized by a National Public Debt Committee before negotiations are concluded.

3. **The assumptions used for this analysis are broadly comparable to those of the previous joint DSA.** They are outlined in Box 2 below. Compared to the macroeconomic assumptions described in the June 2009 document, the main changes relate to: (i) a more positive growth and export outlook; and (ii) stronger fiscal consolidation. The stronger growth and export outlook is driven by the sharp increase in gold mining activities in the near term and, in the medium and long term, by the authorities' accelerated growth strategy, which will notably focus on infrastructure investments and faster diversification of agricultural output. Stronger fiscal consolidation will stem from the stabilization of expenditures and, on the revenue side, from: (i) the implementation of the recently adopted tax reform strategy; (ii) greater efficiency in revenue collection from the Tax and Customs Directorates; and (iii) continued efforts to enlarge the tax base through census activities that will help reduce the size of the informal sector. Taken together, these changes lead to a moderate improvement in Burkina Faso's debt indicators over the long run.

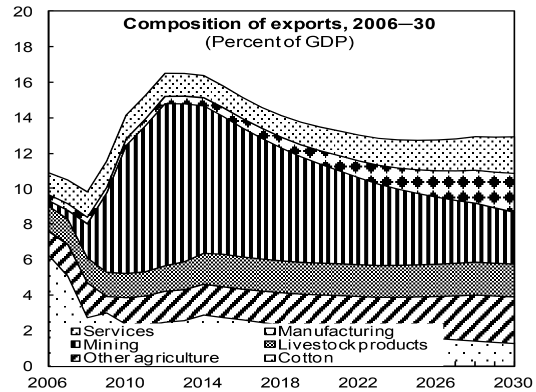
Box 1. Changes from the June 2009 Joint DSA



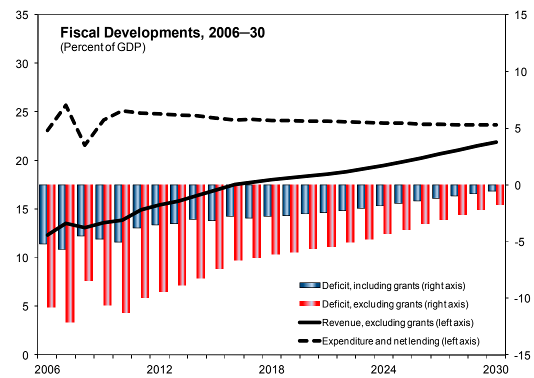
Source: Country authorities; and staff estimates and projections.

Box 2. Underlying Macroeconomic Assumptions

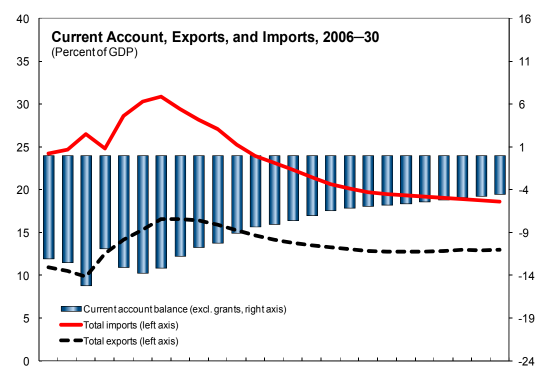
The outlook for growth assumes a return to pre-crisis trends in the medium-term and a clear upward trend for the long term. Because of recent shocks, including drought, higher prices for imported commodities, reduced global demand for cotton, and the 2009 floods, real GDP growth has been lackluster since 2007, averaging about 4 percent annually during the last three years. Projections for the medium-term point to a gradual return to the annual average of 6 percent observed between 1997 and 2006 and an increase to 6.5 percent by 2014. This outlook is supported by the expected increase in mining activities, higher agricultural production, an increase in public investment from 2009 onwards, and further improvement in the business environment. Inflation should remain below 3 during the projection period.



Fiscal developments over the medium term reflect the authorities' commitment to a prudent fiscal policy and macroeconomic stability. Following an increase in expenditure in 2009 and 2010 to cope with the impact of external shocks and support economic recovery, the authorities plan to gradually withdraw the fiscal stimulus and consolidate the fiscal position through revenue-enhancing measures and expenditure restraint. They intend to boost revenue performance through administrative measures that would generate efficiency gains and implementation of the newly adopted tax strategy. Tax revenue is expected to increase from 12.5 percent of GDP in 2009 to 17.0 percent by 2020, and 20.2 percent by 2030. Total expenditure would stabilize around 24 percent of GDP over the long run thanks to a prudent wage policy, a better targeting of investment spending, and enhanced control of non-priority spending.



The current account deficit is expected to narrow in the medium and long run. Export growth is driven by the projected increase in gold exports from 2010 onwards and, in the long- term by efforts to diversify away from cotton. The authorities have pointed to prospects for exports to neighboring countries for fruits, vegetables, and cereals. The current account deficit (excluding grants) is projected to narrow from about 13 percent of GDP in 2010 to 7 percent in 2020, and 4.5 percent in 2030. A more pronounced improvement in Burkina Faso's external position could result from faster realization of the country's mining potential. Exploration activities are under way for zinc and manganese in particular. To maintain prudent assumptions, the potential output from prospective mining activities have not been incorporated into the DSA projections.



Sources: Country authorities and staff estimates and projections.

II. External Debt Sustainability Analysis

4. **Under the baseline scenario, all but one of the external debt and debt service ratios remain below the policy-dependent thresholds throughout the projection period** (Figure 3). The PV of debt-to-exports ratio breaches the indicative threshold of 150 percent for medium performers, elevating the risk of debt distress for Burkina Faso. The ratio increases over the medium term mainly because of the sustained level of the public investment program, and the decline in the share of grant financing with the final grant disbursement under the Millennium Challenge Account in 2013. It reaches 154 percent in 2015 and peaks at 180 percent in 2022, before declining to 135 percent in 2030 as the improvement in the fiscal position and export diversification efforts start to affect the debt dynamics. Other debt indicators deteriorate in the short and medium term, but stay comfortably below their indicative thresholds.

5. **The rate of external debt accumulation under the baseline scenario declines steadily over time, in line with fiscal consolidation.** [4] While the PV of public external debt increases in the short term, it stabilizes at about 24 percent of GDP in 2015 and declines thereafter, reaching about 17 percent of GDP at the end of the projection period.

6. **Stress tests and alternative scenarios show that Burkina Faso's debt outlook is vulnerable to a large shock to exports and to less favorable financing terms.** The main vulnerabilities are linked to: (i) lower exports; (ii) a combination of lower GDP growth and lower net non-debt-creating flows; and (iii) a lower share of grants in external financing. In particular, the PV of debt-to-exports ratio deteriorates significantly if exports growth stays low and below historical levels (Table 2).

7. **Because Burkina Faso's risk of debt distress is high, and because of weaknesses in debt management capacity, the country does not qualify for nonconcessional borrowing in the context of the new debt limits policy.** Consequently, under the new ECF-supported program, the authorities have agreed to refrain from contracting or guaranteeing any loan with a grant element lower than 35percent, and to improve debt management capacity, in the context of a national plan to strengthen public debt management capacity published in September 2009. To support the implementation of this plan, Burkina Faso would benefit from TA from AFRITAC in 2010-11 and from UNCTAD in 2010–14. The authorities also indicated that they plan to request an update of the 2008 World Bank Debt Management Performance Assessment (DeMPA) to assess progress in strengthening debt management capacity and identify priority areas for further improvement.

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[4] Projections assume that 50 percent of overall financing needs are met through grants. The remaining 50 percent is met through loans that incorporate a grant element of at least 35 percent, growing over time as the relative share of multilateral creditors in the overall stock of outstanding debt increases.

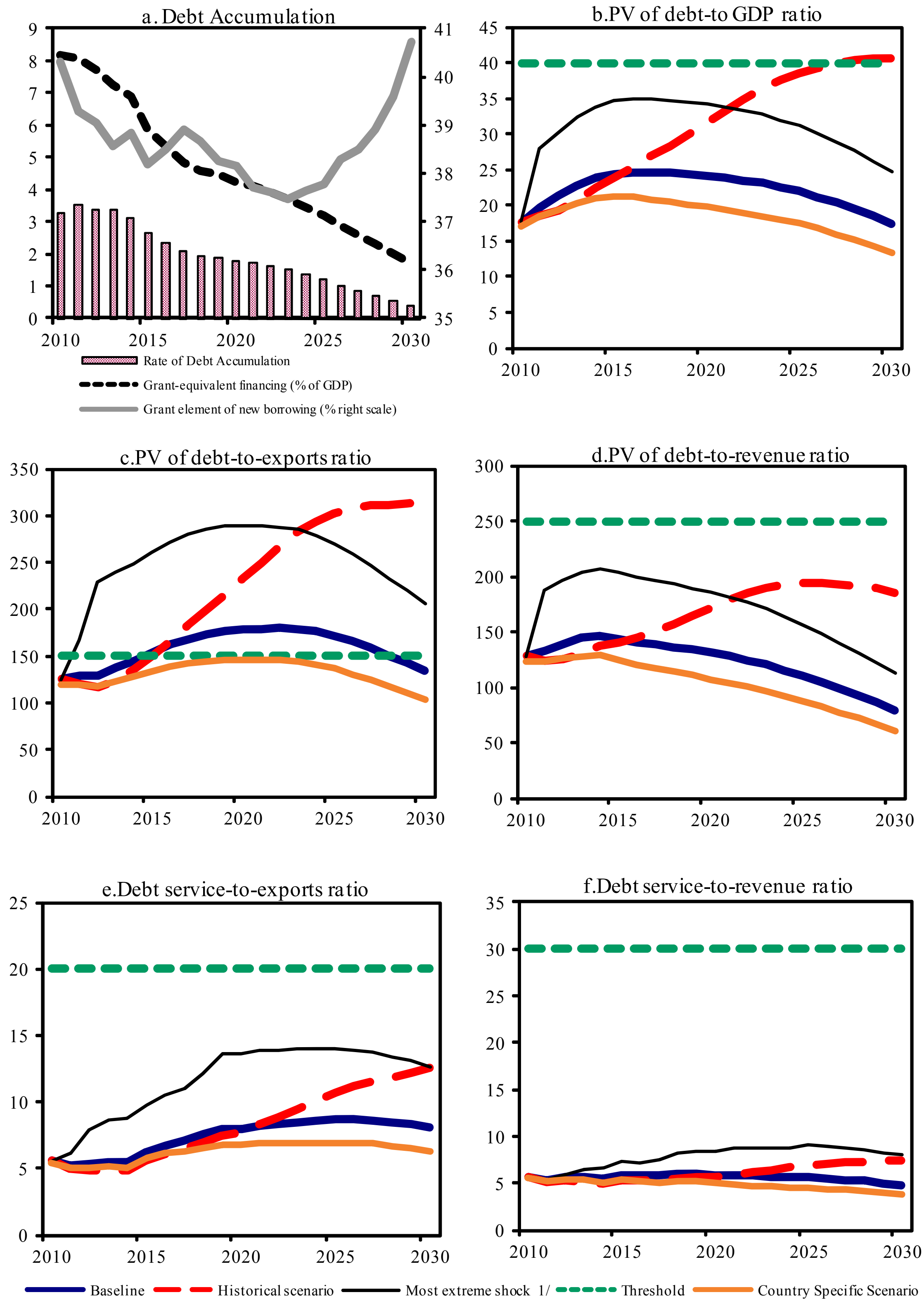
8. **The authorities noted the importance of stabilizing and reducing the stock of external debt, while underscoring that this should not come at the expense of the country's accelerated growth objectives.** They wished to emphasize that what mattered most from their perspective was the efficient use of external financial support for essential infrastructure investments, as these could play a key role in generating faster GDP growth and raising per capita income. In addition, they insisted on the importance of ensuring the predictability of donor disbursements, and of budgetary support in particular, because unexpected shortfalls could lead to the costlier domestic financing of priority expenditures.

9. **A country-specific scenario assuming a scaled-up aid points to a significant improvement in Burkina Faso's debt outlook.**[5] In particular, the medium performer threshold for the PV of debt-to-exports ratio is no longer breached, as its maximum value in 2020 reaches 146 percent, bringing Burkina Faso's risk of debt distress to a moderate level (Figure 4). The Burkinabè authorities welcomed the inclusion of this scenario, while underscoring their commitment to achieve debt sustainability through policy-driven factors. They indicated that despite worrisome signals concerning a possible reduction in official development assistance, they would continue to make efforts to secure a higher share of grant financing, including for much-needed infrastructure investments.

10. **A continued improvement in policies and strengthening of institutions that would lead to a higher CPIA rating would also move Burkina Faso to a lower risk of debt distress.** This would come because of Burkina Faso being considered as a strong performer, with the corresponding threshold for the PV of debt-to-exports ratio increasing to 200 percent. If such a scenario were to materialize in 2012, it is worth emphasizing that IDA and AfDB allocation volumes would only be reduced by 10 percent, rather than 20 percent, as is currently the case.

[5] The scenario assumes that 60 percent of financing needs are met through grants, which is lower than the 65 percent observed in 2009. Such a level of grant financing still implies that aid per capita for Burkina Faso would remain significantly below the level required to meet Gleneagles commitments. In 2009, aid per capita amounted to US$30.5 in real terms compared with the 2005 target of US$85 by 2010.

Figure 2. Burkina Faso: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2010-2030 1/



Sources: Country authorities; and staff estimates and projections.

a Country Specific Scenario shock; in c. to a Country Specific Scenario shock; in d. to a Country Specific Scenario shock; in e. to a Country Specific Scenario shock and in figure f. to a Country Specific Scenario shock

III. PUBLIC SECTOR DEBT SUSTAINABILITY ANALYSIS

11. **The results for the fiscal DSA are similar to those for the external DSA. Notwithstanding an increase in 2009, domestic debt remains low,** amounting to approximately 4 percent of GDP at end-2009. Moreover, it is assumed to decline rapidly over the projection period as the authorities seek to contain financing from the regional bond market because of its high cost (Table 3). As a result, public debt dynamics are largely determined by changes in the external debt.

12. **Public debt indicators would considerably worsen in the absence of fiscal consolidation and prudent borrowing policies.** The standard sensitivity tests show that public debt outlook is particularly vulnerable to persistent large primary deficits, leading to a significant deterioration in the PV of debt-to-GDP and the PV of debt-to-revenue ratios (Table 4, scenario A2, and Figure 4). Thus, failure to reduce the current level of budget deficits would lead to ever-increasing debt indicators. In this regard, the authorities' commitment to unwind the fiscal stimulus provided in 2009 and 2010 will contribute to debt sustainability from 2011 onward.

IV. Conclusion

13. **Burkina Faso's risk of debt distress is high because of its narrow export base, which leads to a breach of the PV of debt-to-exports ratio.** All other debt indicators remain well-below their policy-dependent thresholds in the baseline scenario. The high risk of distress underscores the importance of limiting external borrowing to highly concessional loans, maintaining a prudent fiscal policy to limit the accumulation of new debt, including by sustaining the ongoing tax reforms, and making continued efforts to diversify and increase exports. Efforts to secure a higher share of grant financing to reach the same level as in 2009 would lower the risk of debt distress.

Table 1. Burkina Faso: External Debt Sustainability Framework, Baseline Scenario, 2007-2030 1/

(In percent of GDP, unless otherwise indicated)

	Actual			Historical 0 Average	Standard 0 Deviation	Projections									
	2007	2008	2009			2010	2011	2012	2013	2014	2015	2010-2015 Average	2020	2030	2016-2030 Average
External debt (nominal) 1/	**18.5**	**21.7**	**23.8**			**26.4**	**28.9**	**30.8**	**32.4**	**33.5**	**34.5**		**34.3**	**24.7**	
o/w public and publicly guaranteed (PPG)	18.5	21.7	23.8			26.4	28.9	30.8	32.4	33.5	34.5		34.3	24.7	
Change in external debt	-0.5	3.2	2.1			2.6	2.5	1.9	1.6	1.1	0.9		-0.3	-1.5	
Identified net debt-creating flows	1.2	7.1	5.8			7.3	8.8	8.2	6.8	5.3	5.2		2.8	2.1	
Non-interest current account deficit	**8.0**	**11.5**	**6.1**	**9.8**	**1.8**	**8.5**	**9.8**	**9.5**	**8.3**	**6.9**	**6.9**		**4.5**	**3.3**	4.1
Deficit in balance of goods and services	14.2	16.6	12.3			14.4	14.9	14.3	12.8	11.7	11.2		7.9	5.6	
Exports	10.5	9.8	12.6			14.2	15.3	16.6	16.6	16.5	15.9		13.5	13.0	
Imports	24.7	26.5	24.8			28.6	30.3	30.9	29.4	28.2	27.0		21.5	18.6	
Net current transfers (negative = inflow)	-5.9	-5.0	-6.0	-4.7	0.7	-5.8	-5.0	-4.7	-4.4	-4.6	-4.1		-3.3	-2.3	-3.0
o/w official	-4.3	-3.4	-4.5			-4.3	-3.7	-3.4	-3.1	-3.4	-2.8		-2.1	-0.9	
Other current account flows (negative = net inflow)	-0.2	-0.2	-0.2			-0.1	-0.1	-0.1	-0.1	-0.2	-0.2		-0.1	0.0	
Net FDI (negative = inflow)	**-5.1**	**-1.3**	**-1.0**	**-1.1**	**1.4**	**-0.4**	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**-0.1**		**-0.1**	**-0.1**	-0.1
Endogenous debt dynamics 2/	**-1.8**	**-3.1**	**0.8**			**-0.7**	**-0.9**	**-1.2**	**-1.4**	**-1.6**	**-1.6**		**-1.6**	**-1.1**	
Contribution from nominal interest rate	0.2	0.2	0.3			0.3	0.2	0.3	0.3	0.4	0.4		0.4	0.3	
Contribution from real GDP growth	-0.6	-0.8	-0.7			-1.0	-1.2	-1.5	-1.8	-1.9	-2.0		-2.0	-1.5	
Contribution from price and exchange rate changes	-1.4	-2.6	1.2			…	…	…	…	…	…		…	…	
Residual (3-4) 3/	**-1.7**	**-3.8**	**-3.8**			**-4.8**	**-6.3**	**-6.3**	**-5.2**	**-4.2**	**-4.3**		**-3.2**	**-3.6**	
o/w exceptional financing	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	15.7			17.7	19.8	21.4	22.8	23.9	24.4		24.1	17.4	
In percent of exports	...	...	124.6			124.8	128.9	129.1	137.8	145.2	153.8		178.1	134.1	
PV of PPG external debt	**...**	**...**	**15.7**			**17.7**	**19.8**	**21.4**	**22.8**	**23.9**	**24.4**		**24.1**	**17.4**	
In percent of exports	**...**	**...**	**124.6**			**124.8**	**128.9**	**129.1**	**137.8**	**145.2**	**153.8**		**178.1**	**134.1**	
In percent of government revenues	**...**	**...**	**115.3**			**127.9**	**132.6**	**138.8**	**144.1**	**145.9**	**143.9**		**130.9**	**79.4**	
Debt service-to-exports ratio (in percent)	**6.4**	**5.8**	**4.8**			**5.6**	**5.2**	**5.3**	**5.4**	**5.5**	**6.2**		**8.0**	**8.1**	
PPG debt service-to-exports ratio (in percent)	**6.4**	**5.8**	**4.8**			**5.6**	**5.2**	**5.3**	**5.4**	**5.5**	**6.2**		**8.0**	**8.1**	
PPG debt service-to-revenue ratio (in percent)	**5.0**	**4.3**	**4.5**			**5.7**	**5.3**	**5.7**	**5.7**	**5.5**	**5.8**		**5.9**	**4.8**	
Total gross financing need (Billions of U.S. dollars)	0.2	0.9	0.5			0.8	1.0	1.0	1.0	0.9	1.0		1.1	1.8	
Non-interest current account deficit that stabilizes debt ratio	8.6	8.3	4.0			5.9	7.3	7.6	6.7	5.8	6.0		4.8	4.8	
Key macroeconomic assumptions															
Real GDP growth (in percent)	3.6	5.2	3.2	5.2	1.9	4.4	4.7	5.5	6.2	6.5	6.5	5.6	6.3	6.1	6.2
GDP deflator in US dollar terms (change in percent)	8.0	16.0	-5.3	5.5	10.2	2.4	2.4	2.5	2.0	2.0	2.0	2.2	2.0	2.0	2.0
Effective interest rate (percent) 5/	1.2	1.4	1.1	0.9	0.3	1.2	1.0	1.1	1.2	1.3	1.4	1.2	1.4	1.4	1.4
Growth of exports of G&S (US dollar terms, in percent)	7.6	14.3	24.7	14.8	18.0	20.7	15.9	16.8	8.2	7.9	4.8	12.4	6.1	8.4	6.9
Growth of imports of G&S (US dollar terms, in percent)	13.9	31.1	-8.4	11.6	15.2	23.2	13.4	10.3	3.1	4.1	4.2	9.7	4.3	7.4	5.7
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	40.3	39.3	39.0	38.6	38.8	38.2	39.0	38.1	40.7	38.5
Government revenues (excluding grants, in percent of GDP)	13.5	13.1	13.6			13.9	14.9	15.4	15.9	16.4	17.0		18.4	21.9	19.4
Aid flows (in Billions of US dollars) 7/	114.9	115.6	124.4			0.8	0.8	0.8	0.8	0.9	0.8		0.9	0.8	
o/w Grants	0.4	0.3	0.5			0.5	0.6	0.6	0.6	0.6	0.5		0.6	0.5	
o/w Concessional loans	114.5	115.3	123.9			0.2	0.2	0.2	0.2	0.2	0.2		0.3	0.3	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			8.2	8.1	7.7	7.3	6.9	5.9		4.2	1.7	3.6
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			74.4	73.2	73.1	72.1	72.8	69.5		69.5	70.8	69.6
Memorandum items:															
Nominal GDP (Billions of US dollars)	6.8	8.3	8.1			8.7	9.3	10.0	10.9	11.8	12.8		19.3	42.8	
Nominal dollar GDP growth	11.9	22.1	-2.3			6.9	7.2	8.1	8.3	8.6	8.6	8.0	8.4	8.3	8.4
PV of PPG external debt (in Billions of US dollars)			1.3			1.5	1.8	2.2	2.5	2.8	3.1		4.7	7.5	
(PVt-PVt-1)/GDPt-1 (in percent)						3.3	3.5	3.4	3.3	3.1	2.6	3.2	1.8	0.4	1.4
Gross remittances (Billions of US dollars)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.1	0.3	
PV of PPG external debt (in percent of GDP + remittances)	...	...	15.7			17.7	19.8	21.4	22.8	23.9	24.4		24.0	17.3	
PV of PPG external debt (in percent of exports + remittances)	...	...	124.5			123.7	127.9	128.2	137.0	144.3	152.9		174.4	127.7	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	4.8			5.5	5.1	5.3	5.4	5.5	6.2		7.9	7.7	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - \rho(1+g)]/(1+g+\rho+g\rho)$ 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, capital transfers are included--in particular project grants and private, non debt-creating capital inflows. For projections also includes contribution from price and exchange rate changes.

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

5/ Current-year interest payments divided by previous period debt stock.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

7/ Defined as grants, concessional loans, and debt relief.

8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

Table 2.Burkina Faso: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2010-2030
(In percent)

	Projections							
	2010	2011	2012	2013	2014	2015	**2020**	2030
PV of debt-to GDP ratio								
Baseline	18	20	21	23	24	24	**24**	17
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030 1/	18	19	19	21	22	24	**31**	41
A2. New public sector loans on less favorable terms in 2010-2030 2	18	21	24	27	29	31	**34**	29
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	18	20	22	24	25	25	**25**	18
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	18	21	26	27	28	29	**27**	19
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	18	21	25	26	28	28	**28**	20
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	18	21	23	24	25	26	**25**	18
B5. Combination of B1-B4 using one-half standard deviation shocks	18	21	26	27	28	29	**28**	19
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	18	28	30	32	34	35	**34**	25
PV of debt-to-exports ratio								
Baseline	125	129	129	138	145	154	**178**	134
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030 1/	125	121	116	124	137	150	**233**	314
A2. New public sector loans on less favorable terms in 2010-2030 2	125	138	146	162	176	193	**249**	221
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	125	129	129	138	145	154	**178**	134
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	125	167	229	240	248	260	**289**	207
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	125	129	129	138	145	154	**178**	134
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	125	135	139	147	154	163	**186**	137
B5. Combination of B1-B4 using one-half standard deviation shocks	125	150	179	189	197	207	**233**	169
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	125	129	129	138	145	154	**178**	134
PV of debt-to-revenue ratio								
Baseline	128	133	139	144	146	144	**131**	79
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030 1/	128	124	125	130	137	140	**171**	186
A2. New public sector loans on less favorable terms in 2010-2030 2	128	142	157	170	177	180	**183**	131
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	128	135	144	149	151	149	**136**	82
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	128	144	170	173	173	169	**147**	85
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	128	143	161	167	169	167	**152**	92
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	128	139	149	154	155	152	**136**	81
B5. Combination of B1-B4 using one-half standard deviation shocks	128	144	169	173	173	169	**150**	88
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	128	188	197	204	207	204	**186**	113

Table 2.Burkina Faso: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2010-2030 (continued)
(In percent)

Debt service-to-exports ratio

Baseline	6	5	5	5	5	6	**8**	8
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030 1/	6	5	5	5	5	6	**8**	13
A2. New public sector loans on less favorable terms in 2010-2030 2	6	5	6	6	7	8	**11**	13
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	6	5	5	5	5	6	**8**	8
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	6	6	8	9	9	10	**14**	13
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	6	5	5	5	5	6	**8**	8
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	6	5	5	6	6	6	**8**	8
B5. Combination of B1-B4 using one-half standard deviation shocks	6	6	7	7	7	8	**11**	10
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	6	5	5	5	5	6	**8**	8

Debt service-to-revenue ratio

Baseline	6	5	6	6	6	6	**6**	5
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2010-2030 1/	6	5	5	5	5	5	**6**	7
A2. New public sector loans on less favorable terms in 2010-2030 2	6	5	6	6	7	7	**8**	8
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2011-2012	6	5	6	6	6	6	**6**	5
B2. Export value growth at historical average minus one standard deviation in 2011-2012 3/	6	5	6	6	6	6	**7**	5
B3. US dollar GDP deflator at historical average minus one standard deviation in 2011-2012	6	6	7	7	6	7	**7**	6
B4. Net non-debt creating flows at historical average minus one standard deviation in 2011-2012 4/	6	5	6	6	6	6	**6**	5
B5. Combination of B1-B4 using one-half standard deviation shocks	6	5	6	6	6	6	**7**	5
B6. One-time 30 percent nominal depreciation relative to the baseline in 2011 5/	6	8	8	8	8	8	**8**	7
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	36	36	36	36	36	36	**36**	36

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 (implicitl
an offsetting adjustment in import levels).
4/ Includes official and private transfers and FDI.
5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.
6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 3.Burkina Faso: Public Sector Debt Sustainability Framework, Baseline Scenario, 2007-2030
(In percent of GDP, unless otherwise indicated)

	Actual			Average	Standard Deviation	Estimate	Projections								
	2007	2008	2009			2010	2011	2012	2013	2014	2015	2010-15 Average	2020	2030	2016-30 Average
Public sector debt 1/	21.9	24.4	27.9			29.7	31.3	32.5	33.6	34.2	34.8		34.3	24.7	
o/w foreign-currency denominated	18.5	21.7	23.8			26.4	28.9	30.8	32.4	33.5	34.5		34.3	24.7	
Change in public sector debt	0.3	2.4	3.5			1.8	1.7	1.1	1.1	0.6	0.6		-0.3	-1.5	
Identified debt-creating flows	-0.9	3.3	2.2			3.1	1.8	1.2	0.9	0.3	0.4		-0.1	-1.5	
Primary deficit	5.3	4.1	4.3	1.9	6.5	4.5	3.4	3.1	2.9	2.5	2.7	3.2	2.1	0.2	1.5
Revenue and grants	20.0	17.1	19.4			20.1	21.1	21.3	21.3	21.6	21.2		21.5	23.2	
of which: grants	6.5	4.0	5.9			6.3	6.2	5.9	5.5	5.2	4.3		3.1	1.2	
Primary (noninterest) expenditure	25.3	21.2	23.7			24.7	24.4	24.4	24.3	24.2	23.9		23.6	23.3	
Automatic debt dynamics	-1.9	-0.7	-1.4			-1.3	-1.5	-1.9	-2.0	-2.2	-2.2		-2.2	-1.7	
Contribution from interest rate/growth differential	-0.1	-2.3	-1.3			-1.2	-1.4	-1.8	-2.0	-2.2	-2.2		-2.2	-1.7	
of which: contribution from average real interest rate	0.6	-1.2	-0.5			0.0	-0.1	-0.1	-0.1	-0.2	-0.2		-0.2	-0.1	
of which: contribution from real GDP growth	-0.7	-1.1	-0.8			-1.2	-1.3	-1.6	-1.9	-2.0	-2.1		-2.0	-1.5	
Contribution from real exchange rate depreciation	-1.8	1.5	-0.1			-0.1	-0.1	-0.1	0.0	0.0	0.0		...	...	
Other identified debt-creating flows	-4.3	-0.1	-0.8			-0.2	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	-4.3	-0.1	-0.8			-0.2	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	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	1.2	-0.9	1.3			-1.3	-0.1	0.0	0.2	0.3	0.2		-0.2	0.0	
Other Sustainability Indicators															
PV of public sector debt	3.4	2.6	19.7			21.0	22.2	23.1	24.0	24.5	24.8		24.1	17.4	
o/w foreign-currency denominated	0.0	0.0	15.7			17.7	19.8	21.4	22.8	23.9	24.4		24.1	17.4	
o/w external	...	...	15.7			17.7	19.8	21.4	22.8	23.9	24.4		24.1	17.4	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	6.4	5.0	5.3			6.1	5.0	4.7	4.4	4.0	4.0		3.2	1.2	
PV of public sector debt-to-revenue and grants ratio (in percent)	17.2	15.4	101.6			104.4	105.5	108.3	112.3	113.5	116.6		112.2	75.1	
PV of public sector debt-to-revenue ratio (in percent)	25.3	20.1	145.4			151.7	149.0	149.7	151.2	149.9	146.0		130.9	79.4	
o/w external 3/	…	…	115.3			127.9	132.6	138.8	144.1	145.9	143.9		130.9	79.4	
Debt service-to-revenue and grants ratio (in percent) 4/	5.5	5.4	5.4			8.0	7.7	7.9	7.1	6.6	6.3		5.1	4.5	
Debt service-to-revenue ratio (in percent) 4/	8.1	7.0	7.7			11.6	10.9	10.9	9.5	8.8	7.8		5.9	4.8	
Primary deficit that stabilizes the debt-to-GDP ratio	5.0	1.7	0.8			2.7	1.7	1.9	1.8	1.9	2.0		2.4	1.7	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	3.6	5.2	3.2	5.2	1.9	4.4	4.7	5.5	6.2	6.5	6.5	5.6	6.3	6.1	6.2
Average nominal interest rate on forex debt (in percent)	1.2	1.4	1.1	0.9	0.3	1.2	1.0	1.1	1.2	1.3	1.4	1.2	1.4	1.4	1.4
Average real interest rate on domestic debt (in percent)	8.8	-3.5	4.3	2.9	3.9	3.7	3.9	4.5	4.8	4.9	5.1	4.5	...	...	546.2
Real exchange rate depreciation (in percent, + indicates depreciation)	-9.4	9.1	-0.5	-2.4	10.5	-0.4	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	-1.0	7.8	4.2	2.7	2.8	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 percent)	0.2	-0.1	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Grant element of new external borrowing (in percent)	...	...	...	…	…	40.3	39.3	39.0	38.6	38.8	38.2	39.0	38.1	40.7	...

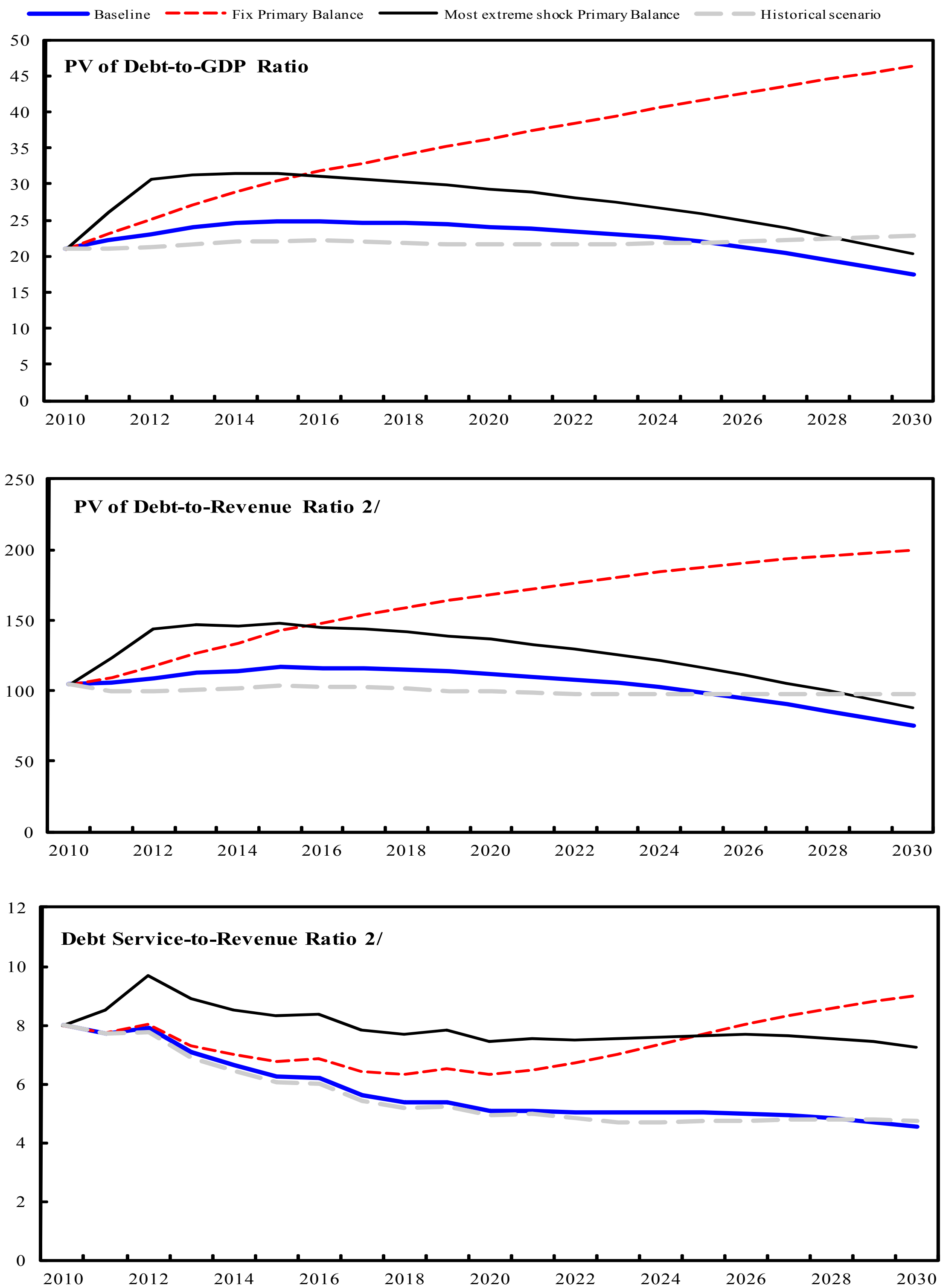
Sources: Country authorities; and staff estimates and projections.
1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]
2/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term 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 4.Burkina Faso: Sensitivity Analysis for Key Indicators of Public Debt 2010-2030

	Projections							
	2010	2011	2012	2013	2014	2015	2020	2030
PV of Debt-to-GDP Ratio								
Baseline	21	22	23	24	25	25	24	17
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	21	21	21	22	22	22	22	23
A2. Primary balance is unchanged from 2010	21	23	25	27	29	30	36	46
A3. Permanently lower GDP growth 1/	21	22	23	25	25	26	28	29
0	21	22	24	26	29	30	32	24
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	21	23	24	26	27	27	28	24
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	21	26	31	31	31	31	29	20
B3. Combination of B1-B2 using one half standard deviation shocks	21	24	26	27	28	28	28	22
B4. One-time 30 percent real depreciation in 2011	21	29	29	29	29	28	26	18
B5. 10 percent of GDP increase in other debt-creating flows in 2011	21	30	30	31	31	31	29	20
PV of Debt-to-Revenue Ratio 2/								
Baseline	104	105	108	112	114	117	112	75
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	104	100	99	101	102	103	99	98
A2. Primary balance is unchanged from 2010	104	110	118	127	134	143	169	200
A3. Permanently lower GDP growth 1/	104	106	110	115	117	122	128	124
0	104	108	116	123	132	134	139	94
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	104	107	114	120	123	128	132	106
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	104	123	144	147	146	148	136	88
B3. Combination of B1-B2 using one half standard deviation shocks	104	112	123	127	129	132	129	93
B4. One-time 30 percent real depreciation in 2011	104	137	136	136	134	134	119	78
B5. 10 percent of GDP increase in other debt-creating flows in 2011	104	141	142	144	144	146	135	87
Debt Service-to-Revenue Ratio 2/								
Baseline	8	8	8	7	7	6	5	5
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	8	8	8	7	6	6	5	5
A2. Primary balance is unchanged from 2010	8	8	8	7	7	7	6	9
A3. Permanently lower GDP growth 1/	8	8	8	7	7	6	5	6
0	8	8	8	7	6	6	4	4
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2011-2012	8	8	8	7	7	7	6	6
B2. Primary balance is at historical average minus one standard deviations in 2011-2012	8	8	8	8	8	7	6	6
B3. Combination of B1-B2 using one half standard deviation shocks	8	8	8	7	7	7	5	5
B4. One-time 30 percent real depreciation in 2011	8	9	10	9	8	8	7	7
B5. 10 percent of GDP increase in other debt-creating flows in 2011	8	8	9	8	7	7	6	6

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.

Figure 3.Burkina Faso: Indicators of Public Debt Under Alternative Scenarios, 2010-2030 1/



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