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STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION, SIXTH REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT, AND REQUESTS FOR MODIFICATION OF A PERFORMANCE CRITERION, EXTENSION OF THE ARRANGEMENT AND AUGMENTATION OF ACCESS—DEBT SUSTAINABILITY ANALYSIS

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This joint World Bank/IMF Debt Sustainability Analysis (DSA) has been prepared in the context of the 6th Review under the program supported by the IMF's Extended Credit Facility (ECF). It is based on new end-2015 debt data. The major change since the last DSA update in June 2016 is the updated CPIA rating, which places Burkina Faso into the medium-strength policies and institutions category and results in lower debt sustainability thresholds. Nonetheless, Burkina Faso remains at moderate risk of debt distress, as higher WEO projections for gold and cotton prices and improved prospects for domestic gold production have improved the export and current account paths.[1]

[1] Burkina Faso's three-year average CPIA score is 3.68, which yields a policy performance category of medium.

BACKGROUND AND UNDERLYING DSA ASSUMPTIONS

1. **Burkina Faso's nominal stock of debt as of end-2015 was 32.5 percent of GDP (Text Table 1)**. This is in line with the estimates from the 4th/5th ECF Review (32.2 percent) and the 2014 DSA (31.2 percent). The composition of debt has continued to shift slowly towards domestic debt as external support has not kept pace with GDP growth and there has been a pronounced increase in domestic borrowing during the period of political uncertainty. External debt still comprised approximately 73 percent of the total debt stock at end-2015, down slightly from 75 percent in 2013.

Text Table 1. Burkina Faso: Public Debt Stock (2013–15)

(percent of GDP)

	2013	2014	2015	Percent (2015)
Public Debt	29.3	30.6	32.5	100
External Debt	21.9	22.0	23.8	73.2
Domestic Debt	7.4	8.6	8.7	26.8
Memorandum items:				
Overall Fiscal balance	-3.6	-1.9	-2.1	
GDP Growth	5.7	4.2	4.0	

Sources: Burkinabè authorities; and IMF staff estimates and projections.

2. **The most important change since the June 2016 DSA update is the incorporation of updated CPIA ratings that now run until 2015.** While Burkina Faso has consistently been assessed as having strong policy and institutional frameworks through 2013, the popular uprising and political transition in 2014 and 2015 have led to some deterioration in this overall assessment. The annual CPIA rating declined from 3.77 in 2013 to 3.61 in 2015, with the rolling three-year average declining from 3.77 at the time of the last joint DSA to 3.67 in the current DSA (Text Table 2). It must be noted that the transition authorities were able to maintain macroeconomic stability under difficult circumstances, and that the political transition ended successfully. Peaceful and fair elections were held in November 2015 and a new government was in place by early 2016, with political stability maintained since then. Against this background, policies and institutions are expected to improve, which should translate into higher CPIA ratings going forward.

Text Table 2. Burkina Faso: CPIA Rating, 2010–2015

CPIA Rating	2010	2011	2012	2013	2014	2015	Average 2011-2013	2014 DSA Policy Performance Rating*	Average 2013-15	Current DSA Policy Performance Rating*
Burkina Faso	3.78	3.77	3.77	3.77	3.65	3.61	3.77	Strong	3.68	Medium

Burkina Faso CPIA score	CPIA Assessment	PV of External debt to: GDP	Exports	Revenues	PV of external debt expressed as percent of: Exports	Revenues
	Weak	30	100	200	15	18
Current DSA	Medium	40	150	250	20	20
2014 A-IV , 4th/5th ECF Review	Strong	50	200	300	25	22

*The DSF uses the CPIA index to classify countries into one of three policy performance categories according to the strength of their policies and institutions. Countries with a CPIA score less than or equal to 3.25 are considered to have weak policies and institutions. Those with a CPIA score greater than 3.25 and less than 3.75 have medium policies and institutions. Countries with a CPIA score greater than or equal to 3.75 have strong policies and institutions.

Source: World Bank.

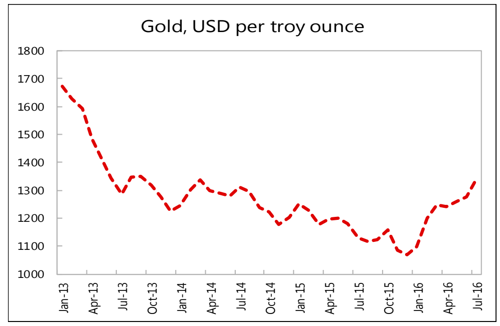
3. Text Table 3 and Box 1 summarize the main differences in macroeconomic assumptions between the previous full DSA (2014), the June 2016 DSA update for the 4th/5th ECF Review and the current DSA. The most significant changes come from the volatility in the international price of gold, Burkina Faso's primary export. While gold price forecasts remain below the estimates for the 2014 DSA, they have meaningfully rebounded from their end-2015 lows and are on a higher trajectory than at the time of the 4th/5th ECF review. Real GDP growth is projected to remain broadly similar to previous projections and to converge to about 6 percent over the long term.

Text Table 3. Burkina Faso: Changes in Assumptions for Current DSA compared with April 2014 and 4th/5th ECF Review DSAs

			2015	2016	2017	2018	2019	2020	2025	2030
	↑	Current DSA (WEO)	1160	1282	1357	1374	1391	1404	1404	1404
Gold (USD/ounce)		4th/5th ECF Review DSA	1160	1219	1231	1234	1243	1255	1255	1255
		2014 AIV DSA	1343	1370	1398	1438	1487	1487	1487	1487
	↑	Current DSA (WEO)	70	74	79	78	78	78	78	78
Cotton Prices (cts/lb)		4th/5th ECF Review DSA	70	58	59	62	62	62	62	62
		2014 AIV DSA	79	78	72	68	58	58	58	58
	↑	Current DSA	21.3	21.3	23.1	23.0	22.5	22.2	21.6	20.8
Exports of goods (% of GDP)		4th/5th ECF Review DSA	21.6	21.4	21.7	21.9	21.8	20.3	17.3	14.9
		2014 AIV DSA	18.3	17.9	17.2	17.2	16.6	16.3	15.1	15.6
	↑	Current DSA	4.0	5.4	6.1	6.3	6.5	6.5	6.2	6.0
Real GDP Growth (y/y)		4th/5th ECF Review DSA	4.0	5.2	5.9	6.1	6.2	6.0	6.0	6.0
		2014 AIV DSA	6.8	7.0	6.8	6.7	6.6	6.4	6.2	6.0
	↓	Current DSA	-8.0	-7.6	-6.7	-6.5	-6.8	-7.0	-5.4	-4.8
Current Account (% of GDP)		4th/5th ECF Review DSA	-6.4	-5.9	-5.3	-5.7	-6.0	-8.0	-10.1	-7.4
		2014 AIV DSA	-7.0	-7.0	-7.0	-7.1	-7.2	-7.5	-7.6	-7.4
	↓	Current DSA	-2.1	-2.5	-3.6	-3.5	-3.5	-3.5	-4.5	-4.5
Overall Fiscal balance (% of GDP)		4th/5th ECF Review DSA	-2.1	-3.1	-3.0	-3.0	-3.0	-3.1	-5.2	-6.4
		2014 AIV DSA	-3.1	-3.0	-3.6	-3.8	-4.0	-4.0	-5.9	-6.1

Sources: IMF staff estimates and projections. World Economic Outlook, October, 2016.

Box 1. Burkina Faso: Macroeconomic Assumptions Underlying the DSA



Gold and cotton prices have continued to recover since the last DSA. WEO gold price projections have rebounded 25 percent since their end-2015 lows and approximately 8 percent when compared to the previous DSA. Cotton price projections have also improved since the previous DSA, with 2016 prices about 28 percent higher in the current DSA.

Gold production is expected to rise steadily over the medium term as new mines start operating. The coming on stream of new gold mines and upward revisions in estimated gold reserves have led to an improved outlook for the sector. Nevertheless, mining revenues are inherently volatile and subject to uncertainties regarding both volume and prices.

GDP growth assumptions are somewhat higher than the baseline forecast during the 4th/5th ECF review, largely resulting from an expected rebound in agricultural output, improved prospects in the gold sector, and a significant scaling up of public investment.

The overall fiscal deficit (including grants) has increased slightly in the near term and is based on relatively stable, but higher recurrent spending levels, but also a planned scaling up in domestically financed public investment to tackle high infrastructure needs. The authorities are committed to improve domestic revenue mobilization and to moderate recurrent spending to increase available fiscal space that can be devoted to more growth-friendly spending and investment. Domestic revenue is expected to reach about 20 percent of GDP in 2019, from 15.9 percent in 2015. This along with upwardly revised assumptions on gold revenue mitigate the increase in expenditures and lead to only moderately higher deficits through to 2020.

Debt composition: Domestic debt is assumed to continue to increase consistently throughout the forecast horizon, reflecting the authorities' efforts to deepen the domestic financial market and to continue to tap into the regional market. The remainder of the deficit is financed via external debt, but on less generous terms to reflect some non-concessional financing and a cautious assumption about the availability of concessional financing going forward.

The current account deficit is forecast to continue shrinking from the unusually high level of 11.3 percent of GDP in 2013 and eventually stabilize around its long-run expected average of about 5-6 percent by 2022. Nevertheless, upside and downside risks to the current account are high and mainly relate to the evolution of international commodity, hydrocarbon, and mineral prices.

4. **This DSA assumes continued modest use of non-concessional financing over the forecast horizon.** Text Table 4 depicts the authorities' non-concessional borrowing plan for 2016. If all the planned loan conventions are signed within the year, non-concessional borrowing should rise to close to the program ceiling of CFAF 230 million.

5. **The DSA includes both already-contracted and anticipated borrowing on a disbursement basis.** The authorities have reiterated their ongoing commitment to rely as much as

Text Table 4. Burkina Faso: Planned Concessional and Non-Concessional Borrowing 2016

Project	Donor	Sector	Amount (CFAF billions)	Terms	Type
Economic governance and citizen involvement project (signed April 15, 2016)	WB	Governance	18.6	Interest rate: 0.75% Term: 40 years Grace period: 10 years	Concessional
Transport and urban infrastructure development project (signed July 7, 2016)	WB	Transport	57.6	Interest rate: 0.75% Term: 40 years Grace period: 10 years	Concessional
Project for construction and asphalting of national road between Guiba and Garango (signed May 17, 2016)	IsDB	Agricultural development	29.6	Interest rate: 2.5% Term: 11 years Grace period: 4 years	Non-concessional
Agricultural Development Project of Pensa and Liptougou (signed May 17, 2016)	IsDB	Agricultural development	8.6	Interest rate: 2.5% Term: 19 years Grace period: 4 years	Non-concessional
			3	Interest rate: 1.5% Term: 25 years Grace period: 7 years	Concessional
Soum Agricultural Development Project (NANORO) (signed May 17, 2016)	IsDB	Hydro-agricultural development	10.8	Interest rate: 1.5% Term: 20 years Grace period: 5 years	Non-concessional
			6.3	Interest rate: 1.5% Term: 25 years Grace period: 7 years	Concessional
Electrification of the periurban district of Ouagadougou and Bobo Dioulasso (to be signed in November 2016)	IsDB	Energy	16.9	Interest rate: 2% Term: 20 years Grace period: 10 years	Non-concessional
			5.9	Interest rate: 1.5% Term: 25 years Grace period: 7 years	Concessional
Project for the recovery and distribution of surface water in the	WADB	Rural development	10	Interest rate: 3.6% Term: 18 years	Concessional

central plateau (signed September 26, 2016)				Grace period: 5 years	
Electrification of the periurban district of Ouaga and Bobo (signed October 18, 2016)	**AfDB**	Energy	19.9	Interest rate: 2% Term: 20 years Grace period: 10 years	Concessional
Electric interconnection project "Zano-Koupela" (to be signed in December 2016)	**OFID**	Energy	7.7	Interest rate: 1.25% Administrative fees: 1% Term: 20 years Grace period: 5 years	Non-concessional
Supply of drinking water to Bobo-Dioulasso (signed April 5, 2016)	**AFD**	Water	19.7	Interest rate: 1.25% Term: 20 years Grace period: 06 years	Concessional
Drinking water supply project for the populations displaced due to the construction of Donsin airport (signed November 10, 2016)	**Belgium**	Water	2.5	Interest rate: 0% Term: 30 years Grace period: 10 years	Concessional
GRAND TOTAL			**217.15**		

**Concessionality based on 35 percent grant element threshold for being classified as concessional financing.*

possible on available concessional financing, but, in light of limited concessional resources, this DSA includes an assumption that nonconcessional borrowing will be continued, at modest levels, through the DSA horizon. Consistent with this and the conservative assumption of less concessional financing going forward, the grant element of new borrowing is assumed to decrease gradually over the forecast horizon. For 2017 it is assumed the authorities investment plans are constrained by a lack of available affordable financing, thereby reducing public investment, the government deficit, and gross borrowing requirements compared to the PNDES and the authorities draft 2017 budget.

6. **Strengthening debt management capacity will be essential to ensure that the planned investment scaling up remains consistent with medium-term debt sustainability.** The capacity of the debt office to oversee the build up of external and domestic debt, as well as contingent liabilities related to public-private partnerships implied by the government's investment program needs to be urgently strengthened. In particular, the authorities are invited to seek support to design and implement a comprehensive debt management strategy, and to provide additional resources to the debt office.

DSA RESULTS

A. External Debt

7. Compared with the previous DSA update, the DSA results are mainly affected by the use of lower thresholds, though Burkina Faso remains at moderate risk of debt distress. A less pessimistic external environment, in particular more favorable price projections for commodity exports, along with the prospects of increased gold production help offset the additional borrowing caused by a looser fiscal stance. Thus the baseline debt profile remains similar to that projected at the time of the $4^{th}/5^{th}$ ECF review, and remains below all risk thresholds. There are however several threshold breaches in the alternative scenarios caused by the move to the lower DSA thresholds.

8. In particular, under the standardized stress tests, the debt-to-exports ratio breaches the debt distress threshold in 2031 under the historical scenario and 2026 under the most extreme scenario. The breach is wider than that under the 2014 DSA as the risk threshold for the debt-to-exports ratio is revised from 200 to 150 percent under the current DSA, consistent with the change in Burkina Faso's CPIA rating. The volatility and sensitivity of exports can be largely attributed to the volatility of gold prices in international markets, which is exacerbated by Burkina Faso's narrow export base.

B. Total Public Debt DSA Results

9. The current DSA assumes continued increases in domestic financing, consistent with the desire to deepen the domestic financial market and further tapping regional markets. The region benefits from the ECB's easy monetary stance and financing terms are historically fairly favorable. In addition, the authorities continue to extend the maturities of domestic and regional borrowing and are gradually working towards a goal of issuances of up to 6 years on regional bonds in 2017. However, the projected increase in domestic debt remains modest. Nonetheless, in the current environment of weak private sector credit growth, larger public debt issuances by the authorities could further limit the availability of loanable funds and thus hamper private sector development. The public debt-to-GDP ratio slowly rises over time and is estimated to peak at 50.9 percent of GDP in 2036.

C. An Alternative Scenario

Staff and the authorities collaborated to develop an alternative scenario that is more optimistic than the baseline, but still constrained by the level of available financing and implementation capacity (Text Table 5). The alternative scenario begins in 2017 with a more optimistic assumption on external financial support, which includes higher grants and concessional financing amounting to 1.9 percent of GDP. The increase is predicated on a successful December 7-8 round table in Paris and potentially higher commitments by development partners during 2017. Domestically-financed investment is increased to 9.2 percent of GDP, up from 7.3 percent in the baseline. GDP growth in 2017 rises to 6.8 percent, compared with 6.1 percent in the baseline, and over the medium term trends at 7 percent versus 6.5 percent in the baseline. Steps taken by the authorities to boost project execution in 2017, including streamlining and acceleration of procurement processes, as well as close monitoring of the largest infrastructure projects, are expected to facilitate the large increase in public investment.

Text Table 5. Burkina Faso: Baseline and Alternative Scenarios (2016–19)

	2016	2017		2018		2019	
	Proj.	Baseline	Scen.	Baseline	Scen.	Baseline	Scen
	(Annual percentage change, unless otherwise indicated)						
GDP at constant prices	5.4	6.1	6.8	6.3	7.0	6.5	7.0
Consumer prices (annual average)	0.7	1.5	1.5	2.0	2.0	2.0	2.0
Credit to the private sector	9.4	12.9	14.0	14.7	15.4	15.4	18.0
Terms of trade	8.7	0.4	0.4	1.9	2.0	0.2	0.2
	(Percent of GDP, unless otherwise indicated)						
Current Account	-7.6	-6.7	-7.2	-6.5	-7.4	-6.8	-7.6
Overall fiscal balance, incl. grants (commitments)	-2.5	-3.6	-4.2	-3.5	-3.5	-3.5	-3.0
Total public debt	31.7	32.6	33.0	32.9	33.2	33.1	32.7

Sources: Burkinabè authorities; and IMF staff estimates and projections.

10. **Under the alternative scenario, Burkina Faso's debt sustainability improves slightly as increases in GDP, revenues, and exports offset additional borrowing over the medium term.** The additional external support is assumed to consist mostly of grants and highly concessional borrowing, resulting in a very moderate impact on the present value of debt. The alternative scenario maintains the same assumptions as in the baseline regarding investment efficiency and growth multipliers, taking into account the authorities' efforts to improve investment execution and prioritization. Furthermore, PNDES priority investments are heavily tilted towards filling key physical infrastructure gaps, in particular in the energy sector, and are thus anticipated to have a positive growth impact. Figure 1b plots the evolution of key debt sustainability indicators under the alternative scenario. A caveat on the analysis remains that changes to key assumptions on the terms and volume of additional financing, as well as the execution capacity during a scaling up of public investment, can alter the results. In this regard other tools are better equipped to investigate the long-term fiscal and debt sustainability implications of investment scaling up episodes, in particular the debt-investment-growth nexus. The analysis in the Selected Issues Paper on scaling up public investment makes use of the DIGNAR[2] model to better capture the impact of higher capital spending on growth, execution efficiency, fiscal space and debt sustainability.

CONCLUSION

11. **The DSA results indicate that Burkina Faso's risk of debt distress remains "moderate."** The baseline scenario shows no breach of debt distress thresholds for any of the indicators, despite a reduction in the thresholds compared to the last DSA due to a change in Burkina Faso's CPIA categorization, but there are meaningful and sustained breaches under shock scenarios, which, taken together, form the basis of maintaining a debt distress rating of 'moderate'. Going forward, the

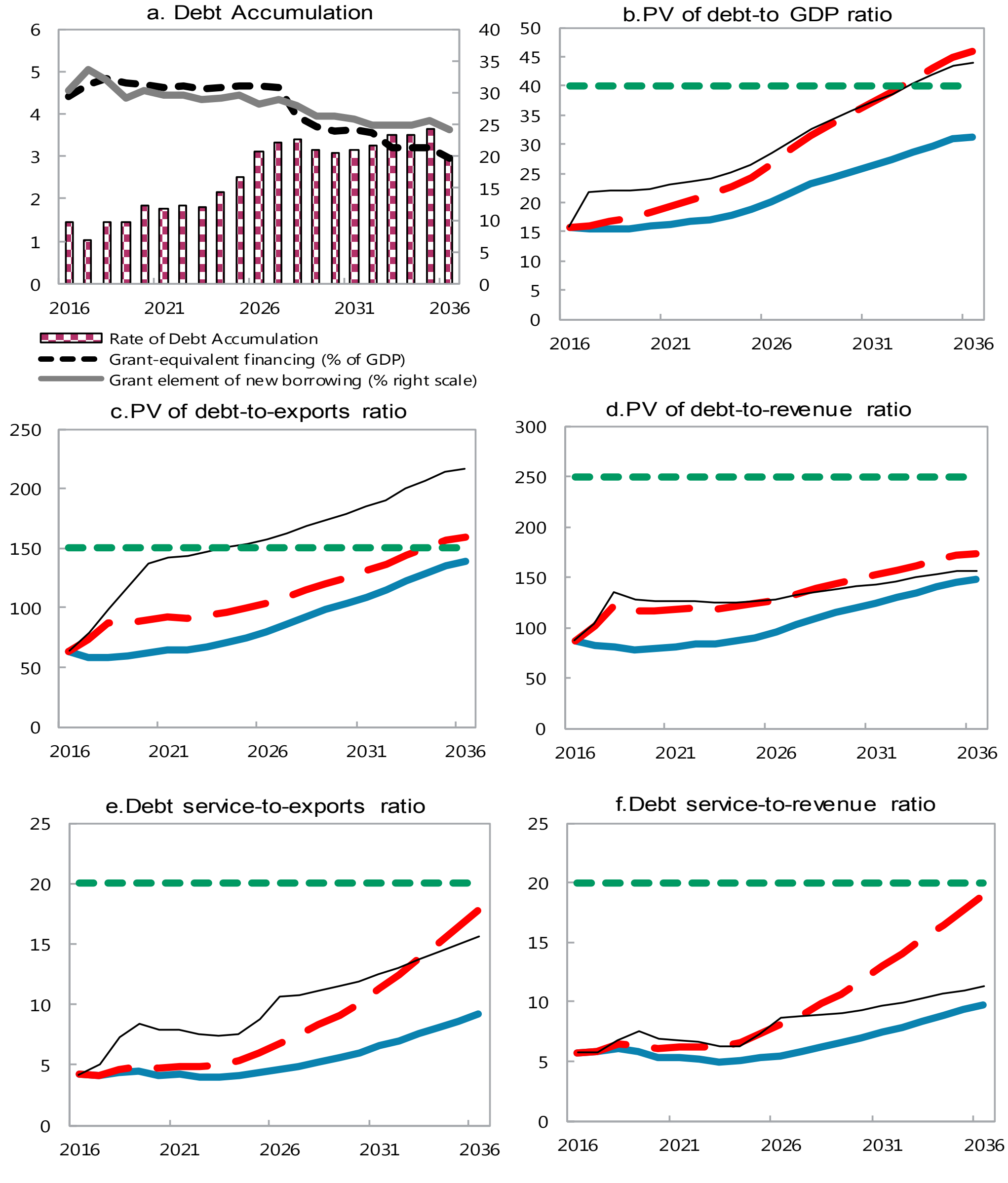
[2] Debt Investment, Growth and Natural Resources (DIGNAR) model developed by Melina, Yang and Zanna (2014) http://www.imf.org/external/pubs/ft/wp/2014/wp1450.pdf.

return to political stability ought to lead to improvements in the CPIA ratings. Nonetheless, even in staff's relatively conservative baseline scenario, there are risks associated with steadily rising external and public debt levels. A reversal of the favorable external conditions including domestic and regional financing terms and availability would raise the costs of domestic debt, and a terms of trade shock would affect the current account and fiscal deficits. Other shocks (weather, security) could lead growth or revenue collection to underperform and would lead to a more rapid debt accumulation.

Authorities' Views

12. The authorities generally concurred with the DSA results and noted that the change in CPIA score, and associated DSA thresholds, comes at an inopportune time given their ambitious medium-term development strategy. The authorities felt that the deterioration in Burkina Faso's CPIA score was a result of the political transition of 2014-15. Going forward, they noted that the return to political stability in a fair and free election, together with their comprehensive structural reform agenda ought to lead to fairly rapid improvements in their CPIA ratings. The authorities also emphasized their strong track record of macroeconomic management, with prudent deficits and a relatively low level of indebtedness. Given the high expectations from the population for swift reforms, the authorities saw the necessity to utilize some fiscal space to finance public investment and catalyze sustainable economic growth. They nevertheless reiterated their commitment to maintaining prudent debt levels and keep their assessed level of debt distress at a 'moderate' rating. The authorities maintained that the more optimistic alternative scenario better reflects the likely path of the economy and have an expectation that this can even be exceeded, provided additional external support, along with improvements in public investment execution, in line with the PNDES' objectives.

Figure 1a. Burkina Faso: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2016–36[1] (*Baseline Scenario*)

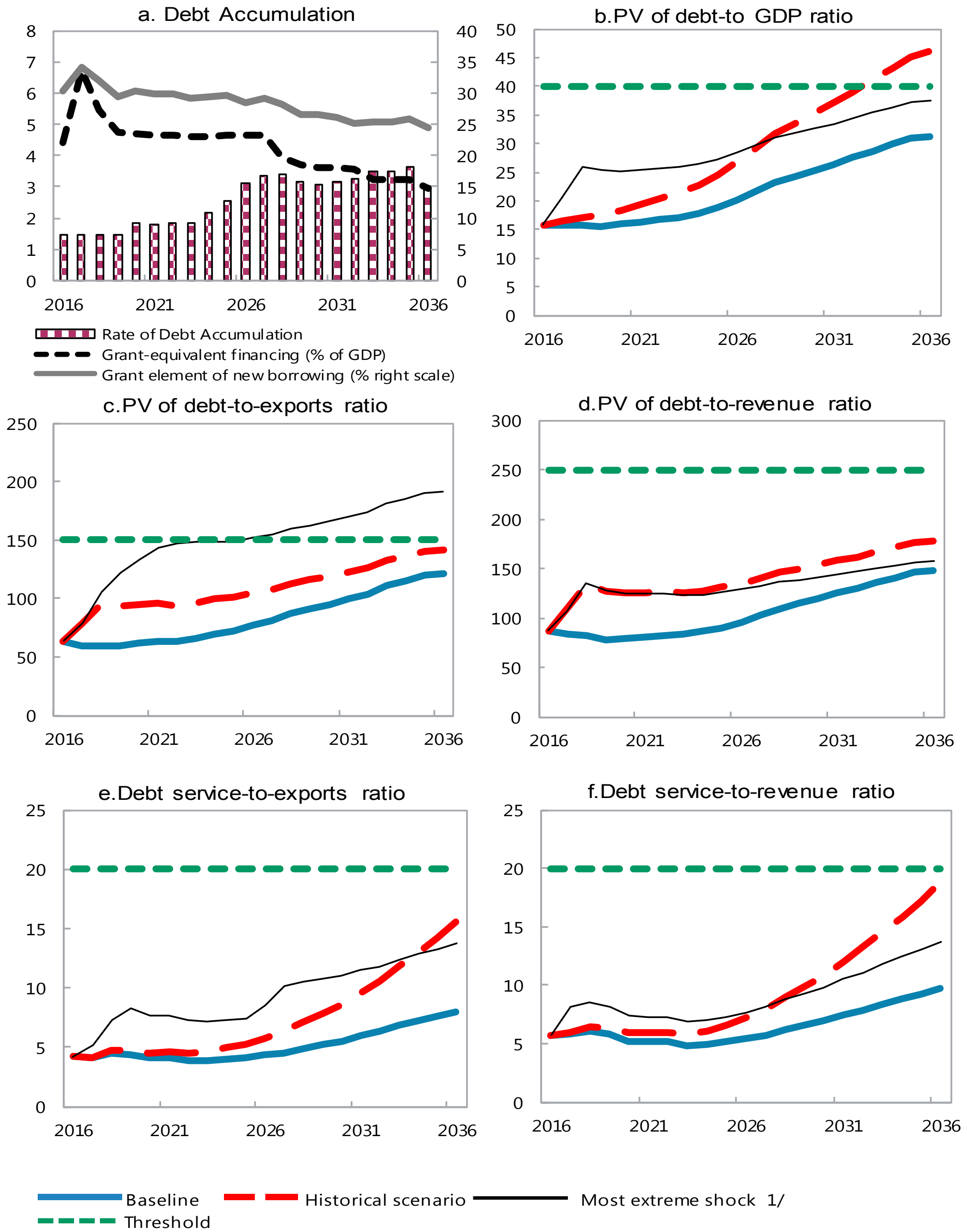


Baseline
Historical scenario
Most extreme shock 1/
Threshold

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2026. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a Exports shock; in e. to a Exports shock and in figure f. to a Exports shock

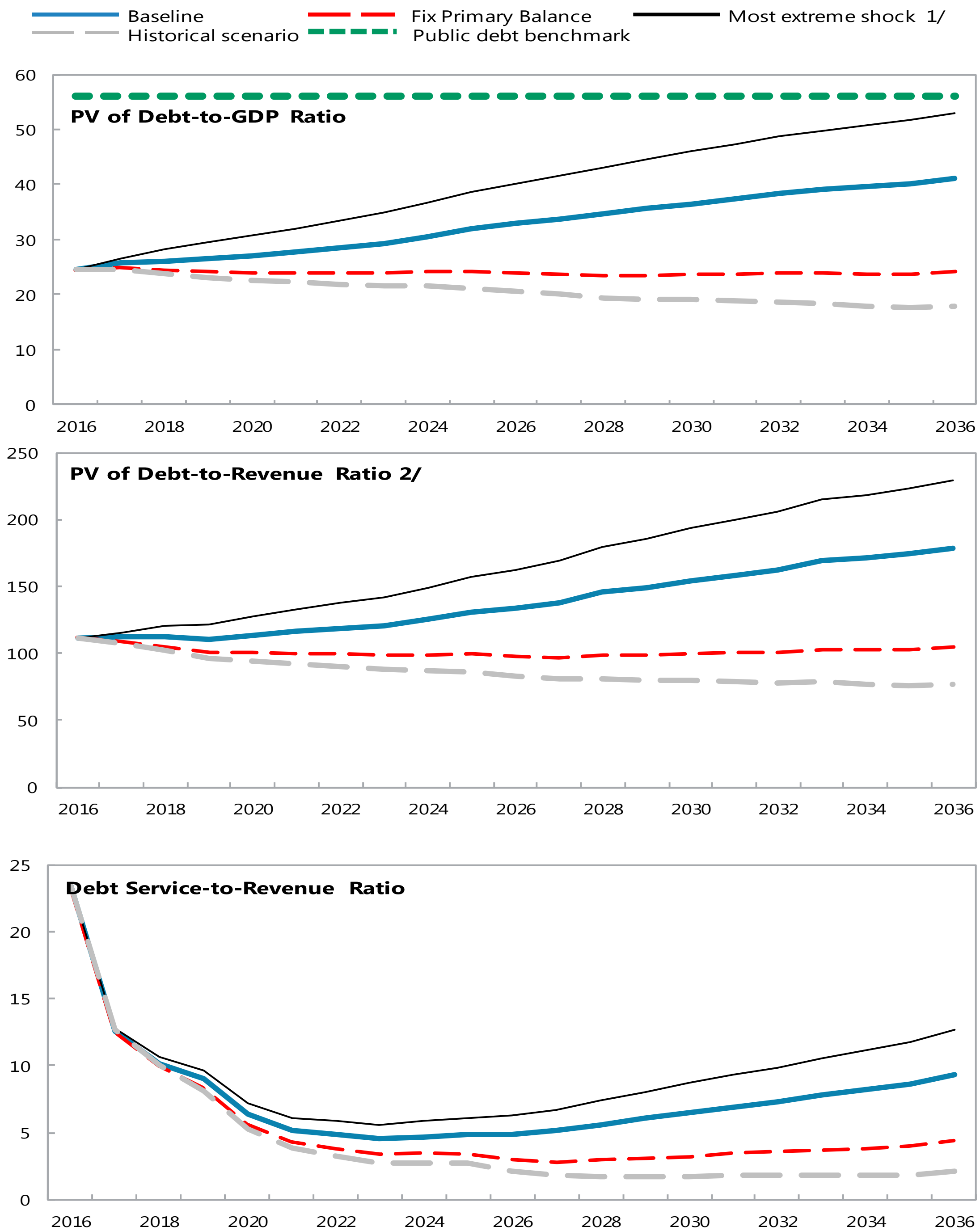
Figure 1b. Burkina Faso: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2016–36[1] **(*Alternative Scenario*)**



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2026. In figure b. it corresponds to a Combination shock; in c. to a Exports shock; in d. to a Exports shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

Figure 2. Burkina Faso: Indicators of Public Debt Under Alternative Scenarios, 2016–36[1]



Sources: Country authorities; and staff estimates and projections.
1/ The most extreme stress test is the test that yields the highest ratio on or before 2026.
2/ Revenues are defined inclusive of grants.

Table 1. Burkina Faso: External Debt Sustainability Framework, Baseline Scenario, 2013–36[1]

(Percent of GDP, unless otherwise indicated)

	Actual			Historical Average 6/	Standard Deviation 6/	Projections																						
	2013	2014	2015			2016	2017	2018	2019	2020	2021	2016-2021 Average	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2022-2036 Average
External debt (nominal) 1/	**21.9**	**22.0**	**23.8**			**23.2**	**22.4**	**22.3**	**22.1**	**22.5**	**23.0**		**23.5**	**23.8**	**24.6**	**25.8**	**27.7**	**29.7**	**31.6**	**33.0**	**34.2**	**35.4**	**36.6**	**38.0**	**39.3**	**40.7**	**41.1**	
of which: public and publicly guaranteed (PPG)	21.9	22.0	23.8			23.2	22.4	22.3	22.1	22.5	23.0		23.5	23.8	24.6	25.8	27.7	29.7	31.6	33.0	34.2	35.4	36.6	38.0	39.3	40.7	41.1	
Change in external debt	-0.7	0.1	1.8			-0.6	-0.7	-0.1	-0.2	0.4	0.4		0.5	0.3	0.8	1.2	1.9	2.0	1.9	1.4	1.2	1.2	1.2	1.4	1.3	1.4	0.4	
Identified net debt-creating flows	6.2	5.0	8.5			3.9	2.9	2.6	2.9	3.0	3.1		2.0	1.6	1.6	1.2	0.6	0.2	0.2	0.1	0.0	-0.1	-0.2	0.1	-0.5	-0.5	-0.8	
Non-interest current account deficit	**11.1**	**7.9**	**7.8**	**7.0**	**3.4**	**7.4**	**6.4**	**6.2**	**6.5**	**6.6**	**6.7**		**5.5**	**5.2**	**5.2**	**4.8**	**4.3**	**4.0**	**4.1**	**4.0**	**3.9**	**3.9**	**3.9**	**4.2**	**3.7**	**3.7**	**3.5**	4.3
Deficit in balance of goods and services	13.4	9.0	9.2			9.0	8.3	8.5	8.9	9.2	9.4		8.4	8.3	8.2	7.9	7.4	7.0	7.0	6.9	6.8	6.8	6.7	7.0	6.9	6.8	6.5	
Exports	26.5	26.1	24.9			25.1	26.8	26.7	26.2	25.9	25.4		26.1	25.6	25.3	25.3	25.4	25.4	25.1	24.8	24.5	24.2	23.9	23.3	23.1	22.8	22.6	
Imports	39.8	35.1	34.1			34.1	35.1	35.2	35.2	35.0	34.8		34.5	33.9	33.5	33.2	32.8	32.4	32.1	31.7	31.3	31.0	30.6	30.3	29.9	29.6	29.1	
Net current transfers (negative = inflow)	-3.7	-3.8	-4.1	-4.8	0.8	-3.3	-3.4	-3.6	-3.6	-3.5	-3.5		-3.6	-3.7	-3.6	-3.4	-3.3	-3.3	-3.1	-3.0	-2.9	-2.9	-2.8	-2.7	-2.5	-2.4	-2.4	-3.0
of which: official	-2.2	-1.8	-2.1			-1.4	-1.6	-1.8	-1.8	-1.8	-1.8		-1.9	-1.9	-1.8	-1.7	-1.6	-1.6	-1.4	-1.3	-1.3	-1.2	-1.2	-1.1	-0.9	-0.9	-0.9	
Other current account flows (negative = net inflow)	1.4	2.7	2.8			1.6	1.5	1.3	1.1	0.9	0.8		0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.0	0.0	-0.1	-0.1	-0.7	-0.7	-0.7	
Net FDI (negative = inflow)	**-3.6**	**-2.3**	**-2.0**	**-1.9**	**1.5**	**-2.5**	**-2.6**	**-2.6**	**-2.6**	**-2.7**	**-2.7**		**-2.7**	**-2.7**	**-2.8**	**-2.8**	**-2.8**	**-2.8**	**-2.9**	**-2.9**	**-2.9**	**-3.0**	**-3.0**	**-3.0**	**-3.0**	**-3.1**	**-3.1**	-2.9
Endogenous debt dynamics 2/	**-1.2**	**-0.5**	**2.6**			**-0.9**	**-1.0**	**-1.0**	**-0.9**	**-0.9**	**-0.9**		**-0.8**	**-0.9**	**-0.8**	**-0.9**	**-0.9**	**-0.9**	**-1.0**	**-1.0**	**-1.0**	**-1.0**	**-1.1**	**-1.1**	**-1.1**	**-1.2**	**-1.2**	
Contribution from nominal interest rate	0.2	0.2	0.2			0.3	0.3	0.3	0.4	0.4	0.4		0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0	
Contribution from real GDP growth	-1.2	-0.9	-1.0			-1.2	-1.3	-1.3	-1.3	-1.3	-1.3		-1.3	-1.3	-1.4	-1.4	-1.5	-1.6	-1.7	-1.8	-1.8	-1.9	-2.0	-2.0	-2.1	-2.2	-2.2	
Contribution from price and exchange rate changes	-0.3	0.2	3.4			...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Residual (3-4) 3/ with changes in project grants	**-6.9**	**-4.9**	**-6.8**			**-1.9**	**-0.6**	**0.0**	**-0.4**	**-0.1**	**-0.1**		**0.9**	**1.1**	**1.5**	**2.3**	**3.4**	**3.9**	**3.2**	**2.8**	**2.7**	**2.8**	**2.9**	**2.5**	**2.9**	**2.9**	**2.2**	
of which: exceptional financing	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	
PV of external debt 4/	...	...	16.1			15.9	15.5	15.6	15.6	16.0	16.4		16.8	17.1	17.8	18.7	20.1	21.6	23.1	24.3	25.3	26.3	27.4	28.6	29.7	30.8	31.2	
In percent of exports	...	...	64.5			63.3	58.0	58.5	59.3	61.7	64.4		64.3	66.9	70.4	74.0	79.1	85.2	92.1	97.7	103.1	108.9	114.6	122.5	128.6	134.8	138.1	
PV of PPG external debt	**...**	**...**	**16.1**			**15.9**	**15.5**	**15.6**	**15.6**	**16.0**	**16.4**		**16.8**	**17.1**	**17.8**	**18.7**	**20.1**	**21.6**	**23.1**	**24.3**	**25.3**	**26.3**	**27.4**	**28.6**	**29.7**	**30.8**	**31.2**	
In percent of exports	**...**	**...**	**64.5**			**63.3**	**58.0**	**58.5**	**59.3**	**61.7**	**64.4**		**64.3**	**66.9**	**70.4**	**74.0**	**79.1**	**85.2**	**92.1**	**97.7**	**103.1**	**108.9**	**114.6**	**122.5**	**128.6**	**134.8**	**138.1**	
In percent of government revenues	**...**	**...**	**101.2**			**86.9**	**82.4**	**80.7**	**77.8**	**79.4**	**81.0**		**83.1**	**83.3**	**86.0**	**90.1**	**95.0**	**102.1**	**109.0**	**113.9**	**119.3**	**124.1**	**129.1**	**134.8**	**140.0**	**145.2**	**147.2**	
Debt service-to-exports ratio (in percent)	**2.8**	**3.1**	**3.9**			**4.2**	**4.1**	**4.4**	**4.5**	**4.1**	**4.2**		**4.1**	**4.1**	**4.2**	**4.4**	**4.6**	**4.9**	**5.2**	**5.6**	**6.0**	**6.6**	**7.0**	**7.6**	**8.1**	**8.6**	**9.1**	
PPG debt service-to-exports ratio (in percent)	**2.8**	**3.1**	**3.9**			**4.2**	**4.1**	**4.4**	**4.5**	**4.1**	**4.2**		**4.1**	**4.1**	**4.2**	**4.4**	**4.6**	**4.9**	**5.2**	**5.6**	**6.0**	**6.6**	**7.0**	**7.6**	**8.1**	**8.6**	**9.1**	
PPG debt service-to-revenue ratio (in percent)	**4.0**	**4.6**	**6.2**			**5.7**	**5.8**	**6.1**	**5.8**	**5.3**	**5.3**		**5.3**	**5.0**	**5.2**	**5.4**	**5.6**	**5.9**	**6.2**	**6.6**	**7.0**	**7.5**	**7.9**	**8.3**	**8.8**	**9.3**	**9.7**	
Total gross financing need (Billions of U.S. dollars)	1.0	0.8	0.8			0.7	0.6	0.7	0.8	0.9	0.9		0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.9	0.9	1.0	1.1	1.4	1.3	1.4	1.5	
Non-interest current account deficit that stabilizes debt ratio	11.8	7.7	6.1			8.0	7.2	6.3	6.7	6.2	6.2		5.0	4.8	4.4	3.6	2.5	2.0	2.2	2.6	2.7	2.7	2.7	2.7	2.3	2.3	3.1	
Key macroeconomic assumptions																												
Real GDP growth (in percent)	5.7	4.2	4.0	5.5	1.6	5.4	6.1	6.3	6.5	6.5	6.5	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.1
GDP deflator in US dollar terms (change in percent)	1.1	-0.9	-13.4	2.1	8.8	2.5	3.0	2.5	2.6	2.8	1.8	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.0
Effective interest rate (percent) 5/	1.0	1.0	0.9	1.0	0.2	1.4	1.5	1.7	1.8	2.0	2.1	1.8	2.2	2.3	2.4	2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.6
Growth of exports of G&S (US dollar terms, in percent)	19.4	2.0	-14.2	20.4	27.7	8.8	16.7	8.6	7.5	8.0	6.4	9.3	11.3	6.4	6.7	8.6	8.9	8.2	6.9	7.0	6.9	6.5	6.8	5.6	7.0	7.1	7.2	7.4
Growth of imports of G&S (US dollar terms, in percent)	22.7	-8.9	-12.7	12.0	18.9	8.2	12.4	9.2	9.3	9.2	7.5	9.3	7.5	6.4	7.1	7.3	7.1	7.1	7.1	7.0	6.9	6.9	6.9	6.9	6.9	7.2	6.5	7.0
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	32.0	30.9	30.5	29.2	30.3	29.7	30.4	29.7	28.9	29.1	29.5	28.3	28.9	28.0	26.3	26.2	25.8	24.9	25.0	25.0	25.5	24.1	27.0
Government revenues (excluding grants, in percent of GDP)	19.0	17.5	15.9			18.3	18.9	19.3	20.0	20.1	20.2		20.2	20.6	20.7	20.8	21.2	21.2	21.2	21.3	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.0
Aid flows (in Billions of US dollars) 7/	0.8	0.7	0.6			0.5	0.6	0.6	0.7	0.7	0.8		0.8	0.9	0.9	1.0	1.0	1.1	0.9	1.0	1.0	1.1	1.2	1.1	1.1	1.2	1.4	
of which: Grants	0.7	0.5	0.4			0.5	0.5	0.6	0.6	0.6	0.7		0.8	0.8	0.9	0.9	0.9	1.0	0.8	0.9	0.9	1.0	1.1	0.9	1.0	1.0	1.1	
of which: Concessional loans	0.1	0.2	0.2			0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			4.5	4.6	4.8	4.7	4.7	4.6		4.6	4.6	4.6	4.6	4.6	4.6	3.9	3.7	3.6	3.6	3.5	3.2	3.2	3.2	2.9	3.9
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			73.2	77.6	72.5	72.8	69.8	70.1		69.9	70.5	67.4	64.1	59.5	57.8	53.4	53.4	53.0	52.0	50.5	46.0	45.9	44.7	46.1	55.6
Memorandum items:																												
Nominal GDP (Billions of US dollars)	11.9	12.3	11.1			12.0	13.1	14.3	15.6	17.1	18.5		20.1	21.7	23.6	25.5	27.6	29.9	32.4	35.1	37.9	41.0	44.3	47.9	51.8	56.1	60.8	
Nominal dollar GDP growth	6.9	3.3	-9.9			8.1	9.2	9.0	9.3	9.5	8.4	8.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.1	8.1	8.1	8.1	8.1	8.3	8.3	8.2
PV of PPG external debt (in Billions of US dollars)			1.7			1.9	2.0	2.2	2.4	2.7	3.0		3.4	3.7	4.2	4.8	5.6	6.5	7.5	8.5	9.6	10.8	12.1	13.7	15.4	17.3	19.0	
(PVt-PVt-1)/GDPt-1 (in percent)						1.5	1.1	1.5	1.4	1.8	1.8	1.5	1.8	1.8	2.1	2.5	3.1	3.3	3.4	3.1	3.1	3.2	3.3	3.5	3.5	3.7	3.0	3.0
Gross workers' remittances (Billions of US dollars)	0.2	0.2	0.2			0.2	0.3	0.3	0.3	0.3	0.3		0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.9	
PV of PPG external debt (in percent of GDP + remittances)	...	...	15.8			15.6	15.2	15.3	15.3	15.7	16.1		16.5	16.8	17.5	18.4	19.8	21.3	22.7	23.9	24.9	25.9	26.9	28.1	29.2	30.3	30.8	
PV of PPG external debt (in percent of exports + remittances)	...	...	59.8			58.8	54.2	54.6	55.3	57.5	60.1		60.1	62.5	65.8	69.2	74.1	79.8	86.3	91.6	96.6	102.0	107.4	114.7	120.6	126.7	130.0	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	3.7			3.9	3.8	4.1	4.2	3.9	3.9		3.9	3.8	3.9	4.1	4.3	4.6	4.9	5.3	5.6	6.1	6.6	7.1	7.6	8.1	8.6	

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).

Table 2. Burkina Faso: Public Sector Debt Sustainability Framework, Baseline Scenario, 2013–36

(Percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2013	2014	2015	Average 5/	Standard Deviation 5/	2016	2017	2018	2019	2020	2021	2016-21 Average	2026	2036	2022-36 Average
Public sector debt 1/	29.3	30.6	32.5			31.7	32.6	32.9	33.1	33.7	34.5		40.3	50.9	
of which: foreign-currency denominated	21.9	22.0	23.8			23.2	22.4	22.3	22.1	22.5	23.0		27.7	41.1	
Change in public sector debt	1.0	1.3	1.9			-0.8	0.8	0.3	0.2	0.6	0.7		1.5	0.9	
Identified debt-creating flows	1.7	3.3	2.6			-0.4	1.0	0.8	0.7	0.8	0.9		1.5	0.7	
Primary deficit	3.1	1.3	1.6	1.1	6.5	1.9	2.9	2.9	2.9	2.9	3.0	2.7	3.8	3.4	3.5
Revenue and grants	24.5	21.7	19.4			22.0	22.9	23.3	24.0	23.9	24.0		24.6	23.0	
of which: grants	5.5	4.2	3.5			3.8	4.0	4.0	4.0	3.8	3.8		3.4	1.9	
Primary (noninterest) expenditure	27.5	23.0	20.9			23.9	25.8	26.2	26.9	26.8	27.0		28.4	26.5	
Automatic debt dynamics	-1.4	2.1	1.1			-2.2	-1.9	-2.1	-2.2	-2.2	-2.1		-2.3	-2.7	
Contribution from interest rate/growth differential	-0.4	-0.3	-1.7			-1.5	-1.7	-2.0	-2.1	-2.1	-2.1		-2.3	-2.7	
of which: contribution from average real interest rate	1.1	0.9	-0.5			0.1	0.1	0.0	-0.1	-0.1	-0.1		-0.1	0.1	
of which: contribution from real GDP growth	-1.5	-1.2	-1.2			-1.7	-1.8	-1.9	-2.0	-2.0	-2.0		-2.3	-2.8	
Contribution from real exchange rate depreciation	-0.9	2.4	2.8			-0.7	-0.1	-0.1	-0.2	0.0	0.0		...	...	
Other identified debt-creating flows	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
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)	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	-0.7	-2.0	-0.7			-0.4	-0.2	-0.5	-0.5	-0.2	-0.1		0.0	0.2	
Other Sustainability Indicators															
PV of public sector debt	...	...	24.8			24.4	25.7	26.2	26.6	27.1	27.8		32.8	41.1	
of which: foreign-currency denominated	...	...	16.1			15.9	15.5	15.6	15.6	16.0	16.4		20.1	31.2	
of which: external	...	...	16.1			15.9	15.5	15.6	15.6	16.0	16.4		20.1	31.2	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	4.9	3.6	4.1			7.0	5.8	5.3	5.1	4.5	4.2		5.1	5.6	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	128.0			111.0	112.3	112.3	110.8	113.5	116.0		133.4	178.2	
PV of public sector debt-to-revenue ratio (in percent)	...	...	156.3			133.9	136.3	135.6	133.0	135.0	137.9		154.8	193.8	
of which: external 3/	...	...	101.2			86.9	82.4	80.7	77.8	79.4	81.0		95.0	147.2	
Debt service-to-revenue and grants ratio (in percent) 4/	7.5	11.0	13.2			23.3	12.6	10.2	9.0	6.4	5.2		5.0	9.3	
Debt service-to-revenue ratio (in percent) 4/	9.6	13.7	16.1			28.1	15.3	12.3	10.8	7.6	6.2		5.7	10.1	
Primary deficit that stabilizes the debt-to-GDP ratio	2.1	0.0	-0.3			2.6	2.0	2.5	2.7	2.4	2.2		2.4	2.5	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	5.7	4.2	4.0	5.5	1.6	5.4	6.1	6.3	6.5	6.5	6.5	6.2	6.2	6.0	6.1
Average nominal interest rate on forex debt (in percent)	1.0	1.0	0.9	1.0	0.2	1.4	1.5	1.7	1.8	2.0	2.1	1.8	2.5	2.8	2.6
Average real interest rate on domestic debt (in percent)	7.3	6.6	0.8	2.8	3.9	2.8	2.8	0.4	-0.3	-1.1	-1.2	0.6	-1.6	-1.2	-1.5
Real exchange rate depreciation (in percent, + indicates depreciation)	-4.3	11.1	13.4	1.2	8.6	-3.1	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	-2.1	-0.9	3.7	3.0	3.6	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0
Growth of real primary spending (deflated by GDP deflator, in percent)	16.5	-13.1	-5.1	-0.1	7.2	20.1	14.5	8.2	9.4	6.2	7.0	10.9	7.2	5.5	6.0
Grant element of new external borrowing (in percent)	...	...	...	...	...	32.0	30.9	30.5	29.2	30.3	29.7	30.4	28.3	24.1	...

Sources: Country authorities; and staff estimates and projections.

1/ Central Government Gross 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 3. Burkina Faso: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2016–36

(Percent)

	Projections							
	2016	2017	2018	2019	2020	2021	**2026**	2036
PV of debt-to GDP ratio								
Baseline	16	15	15	15	16	16	**20**	31
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	16	17	18	19	20	22	**27**	46
A2. New public sector loans on less favorable terms in 2016-2036 2	16	16	17	17	18	19	**27**	46
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	16	16	16	16	17	17	**21**	33
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	16	20	26	25	25	25	**27**	33
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	16	17	19	19	19	20	**24**	38
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	16	17	18	18	18	18	**22**	32
B5. Combination of B1-B4 using one-half standard deviation shocks	16	19	24	23	24	24	**27**	37
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	16	22	22	22	22	23	**28**	44
PV of debt-to-exports ratio								
Baseline	63	58	58	59	61	64	**79**	138
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	63	62	67	72	79	85	**137**	159
A2. New public sector loans on less favorable terms in 2016-2036 2	63	60	63	66	71	76	**105**	203
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	63	58	58	59	61	64	**79**	138
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	63	92	144	143	144	147	**157**	216
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	63	58	58	59	61	64	**79**	138
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	63	62	68	68	70	73	**86**	140
B5. Combination of B1-B4 using one-half standard deviation shocks	63	73	87	87	89	92	**104**	159
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	63	58	58	59	61	64	**79**	138
PV of debt-to-revenue ratio								
Baseline	87	82	80	77	79	81	**95**	147
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	87	88	93	95	101	107	**127**	173
A2. New public sector loans on less favorable terms in 2016-2036 2	87	85	86	86	91	96	**126**	217
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	87	84	84	81	83	84	**100**	154
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	87	104	135	128	126	126	**128**	156
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	87	91	97	94	96	98	**115**	178
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	87	88	93	90	90	91	**103**	149
B5. Combination of B1-B4 using one-half standard deviation shocks	87	101	123	117	117	118	**127**	173
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	87	116	113	110	111	114	**134**	208

Table 3. Burkina Faso: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2016–36 (concluded)

(Percent)

				Debt service-to-exports ratio				
Baseline	4	4	4	4	4	4	**5**	9
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	4	4	5	5	5	5	**7**	18
A2. New public sector loans on less favorable terms in 2016-2036 2	4	4	4	4	4	4	**6**	14
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	4	4	4	4	4	4	**5**	9
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	4	5	7	8	8	8	**11**	16
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	4	4	4	4	4	4	**5**	9
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	4	4	5	5	4	4	**5**	9
B5. Combination of B1-B4 using one-half standard deviation shocks	4	4	5	6	5	5	**7**	11
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	4	4	4	4	4	4	**5**	9
				Debt service-to-revenue ratio				
Baseline	6	6	6	6	5	5	**5**	10
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2016-2036 1/	6	6	6	6	6	6	**8**	19
A2. New public sector loans on less favorable terms in 2016-2036 2	6	6	6	6	6	6	**7**	15
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	6	6	6	6	6	6	**6**	10
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	6	6	7	7	7	7	**9**	11
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	6	6	7	7	6	6	**7**	12
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	6	6	6	6	6	6	**6**	10
B5. Combination of B1-B4 using one-half standard deviation shocks	6	6	7	8	7	7	**8**	12
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	6	8	9	8	7	7	**8**	14
Memorandum item:								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	24	24	24	24	24	24	**24**	24

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 4. Burkina Faso: Sensitivity Analysis for Key Indicators of Public Debt, 2016–36

	Projections							
	2016	2017	2018	2019	2020	2021	2026	2036
PV of Debt-to-GDP Ratio								
Baseline	24	26	26	27	27	28	33	41
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	24	24	24	23	23	22	21	18
A2. Primary balance is unchanged from 2016	24	25	25	24	24	24	24	24
A3. Permanently lower GDP growth 1/	24	26	26	27	28	29	37	53
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2017-20	24	27	28	29	31	32	40	53
B2. Primary balance is at historical average minus one standard deviations in 2017-201	24	29	33	33	33	34	38	44
B3. Combination of B1-B2 using one half standard deviation shocks	24	27	29	30	31	32	39	49
B4. One-time 30 percent real depreciation in 2017	24	32	32	32	31	32	35	42
B5. 10 percent of GDP increase in other debt-creating flows in 2017	24	33	34	33	34	34	38	44
PV of Debt-to-Revenue Ratio 2/								
Baseline	112	112	112	111	113	116	134	178
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	112	107	102	96	94	92	83	77
A2. Primary balance is unchanged from 2016	112	109	105	101	100	100	97	105
A3. Permanently lower GDP growth 1/	112	113	113	113	117	121	148	230
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2017-20	112	116	121	122	127	133	162	229
B2. Primary balance is at historical average minus one standard deviations in 2017-201	112	128	143	139	140	141	154	191
B3. Combination of B1-B2 using one half standard deviation shocks	112	118	124	124	128	132	157	214
B4. One-time 30 percent real depreciation in 2017	112	139	136	131	132	132	143	182
B5. 10 percent of GDP increase in other debt-creating flows in 2017	112	146	144	139	141	142	155	192
Debt Service-to-Revenue Ratio 2/								
Baseline	23	13	10	9	6	5	5	9
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	23	13	10	8	5	4	2	2
A2. Primary balance is unchanged from 2016	23	13	10	8	6	4	3	4
A3. Permanently lower GDP growth 1/	23	13	10	9	7	5	6	12
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2017-20	23	13	11	10	7	6	6	13
B2. Primary balance is at historical average minus one standard deviations in 2017-201	23	13	11	12	9	6	6	11
B3. Combination of B1-B2 using one half standard deviation shocks	23	13	11	10	7	6	6	12
B4. One-time 30 percent real depreciation in 2017	23	14	12	11	9	7	7	15
B5. 10 percent of GDP increase in other debt-creating flows in 2017	23	13	11	14	7	6	7	11

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.