



CABO VERDE

STAFF REPORT FOR THE 2018 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS

March 13, 2018

Approved By
**Roger Nord and Gavin
Gray (IMF) and Paloma
Anos
Casero (IDA)**

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

Based on the Staff baseline scenario, Cabo Verde's risk of external debt distress rating is assessed as high, unchanged from the rating in the previous Debt Sustainability Analysis (DSA).¹ Total public and publicly guaranteed debt declined for the first time in a decade in 2017. However, it is expected to reach higher levels over the medium term than projected in the previous DSA, as a result of a more gradual fiscal consolidation than previously envisaged reflecting the spending plans in the authorities' latest Medium-Term Fiscal Framework (MTFF). While public debt is elevated, it remains on highly concessional terms. Contingent financial liabilities related to state-owned enterprises (SOEs) represent an additional source of risk. The authorities are taking important steps to reduce the risk of debt distress, including progress in restructuring SOEs and revenue mobilization efforts. These steps should be complemented with efforts to contain fiscal risks, including by strengthening public investment management and prudently managing SOE contingent liabilities.

¹ Cabo Verde's three-year average CPIA score is 3.8, placing the country in the category of a strong policy performers.

BACKGROUND

1. This DSA reflects official debt stock data for end-2016, and additional information available at end December 2017. Staff fiscal projections for 2018–22 (Table 4a in the Staff Report) are used to project debt-creating flows. Debt coverage of this DSA includes central government external and domestic debt, and external debt contracted by the central government on behalf of SOEs (also referred to as "onlending"), and external debt contracted directly by SOEs that carry a central government guarantee. The data do not include domestic debt contracted directly by SOEs and by local governments that carry a central-government guarantee; at end-2016, total publicly guaranteed debt (domestic and external) was estimated at about 7 percent of GDP. Non-guaranteed external debt contracted by SOEs is also not included. Information for 2017 is not yet fully reconciled, but outstanding guarantees at end-September 2017 were estimated at about 8.5 percent GDP (Text Table 2). The majority of the guarantees is for domestic debt (7.4 percent of GDP), with an average interest rate of 6.5 percent. The 2018 budget envisages issuance of guarantees as follows:

Entities	Public	Private	Total 2018	Description
AEB	3.53	-	3.53	External
TACV	2.20	-	2.20	Domestic
INCV	0.13	-	0.13	Domestic
TRANSPORTES MARÍTIMOS	0.77	-	0.77	N.A
ENAPOR	1.10	-	1.10	Mixed
ELECTRA	0.50	-	0.50	Mixed
IFH	0.80	-	0.80	N.A
START UP	-	0.18	0.18	Domestic
MICRO FINANÇAS	-	0.05	0.05	Domestic
MEDIAS EMPRESAS	-	0.56	0.56	Domestic
GRANDES EMPRESAS	-	0.63	0.63	N.A
INTERNACIONALIZAÇÃO	-	0.06	0.06	N.A
LINHA SUPLEMENTAR	0.50	-	0.50	N.A
TOTAL	9.53	1.48	11.01	
In percent of GDP	5.3%	0.8%	6.1%	

Source: Cabo Verdean authorities.

2. Private external debt is relatively low. Private external debt is estimated using non-bank private sector debt data, and balance of payments data on bank liabilities to non-residents. On this basis, private external debt was about 9.5 percent of GDP at end-2016. The authorities compile non-bank private sector debt, but there is a need for a more systematic monitoring of the repayment flows.

Text Table 2. Cabo Verde: External Debt Profile by Type of Creditor (2015-2017)

	2015		2016		2017 1/	
	In USD million	Percent of GDP	In USD million	Percent of GDP	In USD million	Percent of GDP
Total Public Debt and Publicly-Guarantee External Debt		126.5		129.9		123.5
Public and Publicly-Guarantee External Debt	1,525.6	97.5	1,525.9	97.7	1,694.9	91.6
Public External Debt--General Government	1,519.3	97.0	1,520.2	97.3	1,675.1	90.5
Multilaterals	716.8	45.8	716.2	45.8	754.2	40.8
Of which to: World Bank	342.5	21.9	332.8	21.3	345.8	18.7
African Development Bank	39.9	2.5	39.9	2.6	41.1	2.2
Bilaterals 1/	342.2	21.9	342.4	21.9	389.4	21.0
Paris Club	139.1	8.9	140.2	9.0	169.2	9.1
Non-Paris Club	203.1	13.0	202.2	12.9	220.2	11.9
Of which to: Portugal	156.8	10.0	152.0	9.7	168.0	9.1
China	25.8	1.6	24.0	1.5	22.8	1.2
Commercial	460.3	29.4	461.6	29.5	531.5	28.7
Publicly-Guarantee External Debt	6.3	0.4	5.7	0.4	19.8	1.1
TACV	3.9	0.3	3.8	0.2	18.1	1.0
Cabo Verde Fast Ferry	2.4	0.2	1.9	0.1	1.7	0.1
	In CVE billion	Percent of GDP	In CVE billion	Percent of GDP	In CVE billion	Percent of GDP
Public Domestic Debt	46.0	29.0	52.6	32.2	54.2	31.9
Domestic Debt Guarantees	10.1	6.3	10.8	6.6	24.6	14.5
<i>Memo item:</i>						
Other Contingent Liabilities	24.5	15.4	23.8	14.6	25.7	15.1
Nominal GDP (billions of Escudos)	158.7		163.4		170.1	
Exchange rate (Avg. CPV/USD)	99.4		99.6		97.7	
Exchange rate (end period CPV/USD)	101.4		104.6		91.9	

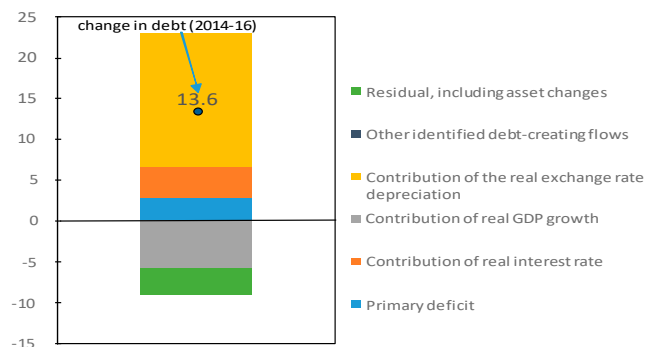
1/ For 2017, data on public and publicly-guaranteed external debt is as of end September.

3. Total public debt in Cabo Verde declined for the first time in a decade in 2017, after having doubled over that period. During 2012-15, low economic growth as a consequence of the crisis in Europe, a significant scaling-up of public investment, and the support of loss-making state-owned enterprises (SOEs) led to a rapid accumulation of public debt (Text Table 3). Despite the impressive fiscal consolidation in recent years reducing public debt proved difficult, owing in part to the depreciation of the escudo vis-à-vis the US dollar but also reflecting the continued support to SOEs. Between 2014-16 the increase in the stock of debt is largely explained by the depreciation of the escudo. The debt stock is estimated to have declined to 126 percent of GDP at end-2017 from 129.5 percent owing to fiscal consolidation and favorable exchange rate developments.

4. While external public debt is high, its terms are highly concessional. Multilateral institutions, in particular the World Bank Group and the African Development Bank, are the main external creditors. Portugal is by far the largest bilateral creditor and also subsidizes the largest commercial loan. Cabo Verde's external public debt—including commercial debt—has a long maturity profile and low average interest rate (Text Table 4).

Text Figure 1. Cabo Verde: Decomposition of Debt Accumulated

(2014-2016, in percent of GDP)



Source: Cabo Verdean authorities and IMF staff estimates.

Text Table 3. Cabo Verde: Stock of Total Public Debt at End-Year, 2005–17

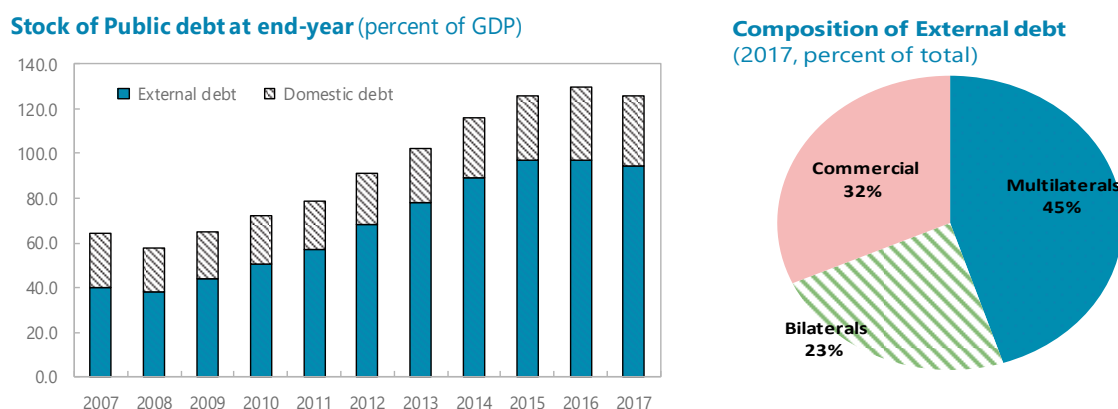
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 (prel.)
	(Percent of GDP)												
External debt	49.6	46.2	39.9	38.4	43.9	50.7	57.2	68.1	78.3	89.0	97.0	97.3	94.1
Domestic debt	35.7	31.7	24.7	19.1	21.3	21.7	21.6	23.0	24.2	26.9	29.0	32.2	31.9
Total public debt	85.3	77.9	64.6	57.4	65.2	72.4	78.8	91.1	102.5	115.9	126.0	129.5	126.0

Sources: Cabo Verdean authorities and IMF staff calculations.

Text Table 4. Cabo Verde: External Debt Profile by Type of Creditor, 2017

	Percent of Total External Debt	Average Grace Period	Average Amortization Period	Average Interest Rate
Multilateral	45	9	32	0.9%
Bilateral	23	8	19	1.1%
Commercial	32	9	20	1.6%

Source: Cabo Verdean authorities and IMF staff estimates.

Text Figure 2. Cabo Verde: Public Debt and its Composition

Source: Cabo Verdean authorities and IMF staff estimates.

5. Cabo Verde's domestic public debt has risen in recent years, but its structure and maturity remain favorable. The government's ability to finance the PIP through concessional external loans has helped keep domestic debt at about 32 percent of GDP at end-2017. The banking system holds the majority of domestic debt, at about 60 percent; the remainder is held by the National Social Security Institute (INPS). Treasury bonds make up about 94 percent of domestic debt. The average maturity of outstanding domestic debt at end-2017 was about 5 years and the average interest rate was 5.1 percent. According to the 2018 budget, the government's overall borrowing strategy for the medium and long-term is 60 percent external and 40 percent domestic borrowing. The large surpluses projected for the INPS over the medium term (the current surplus exceeds 4 percent of GDP) and the excess liquidity in the banking system (exceeding 10 percent of GDP) suggest that the projected domestic borrowing is feasible.

6. Cabo Verde is a strong policy performer for the purpose of determining the thresholds under the Debt Sustainability Framework (DSF). Cabo Verde's rating on the World Bank's Country Policy and Institutional Assessment (CPIA) averaged 3.8 (on a scale of 1 to 6) during 2014–16. Based on its 2016 CPIA score, Cabo Verde ranks third among IDA-recipient countries in the sub-Saharan African (SSA) region. The corresponding external public debt burden thresholds for high risk are shown in Text Table 5.

Text Table 5. Cabo Verde: External Public Debt Thresholds for High Risk for Strong Policy Performers Under the Debt Sustainability Framework

Present value of external debt, percent of:	
GDP	50
Exports	200
Revenue	300
External debt service in percent of:	
Exports	25
Revenue	22

Sources: 2013 Staff Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries.

BASELINE SCENARIO UNDERLYING THE DEBT SUSTAINABILITY ANALYSIS

7. The assumptions underlying the current DSA differ from those used in the 2016 Article IV Consultation mainly in regards to the path of fiscal consolidation (Text Table 6 and Box 1). The current baseline scenario still assumes a rebound in economic activity in the medium term, with the growth forecast for 2018–22 in line with the previous DSA. The GDP deflator remains the same compared to the last DSA, reflecting low inflation in the country and in the Euro area. However, the baseline scenario assumes a different profile for the fiscal path, reflecting the authorities' most recent MTFP for expenditure plans, which includes a higher public investment, and staff's projections of revenue in line with current policies. At the end of the medium-term projection, the current account deficit is projected to be wider compared to the last DSA, reflecting the larger pipeline of FDI for the next few years and a less ambitious fiscal consolidation path.

Text Table 6. Cabo Verde: Assumptions for Key Economic Indicators, 2016–23
(Percent of GDP)

	2016	2017	2018	2019	2020	2021	2022	2023
Real GDP growth								
Current DSA	3.8	4.0	4.3	4.0	4.0	4.0	4.0	4.0
2016 Article IV DSA	3.2	3.7	4.1	4.1	4.1	4.1	4.0	n.a.
GDP Deflator								
Current DSA	-0.8	0.1	1.4	1.6	2.0	2.0	2.0	2.0
2016 Article IV DSA	0.1	1.2	1.8	2.0	2.0	2.0	2.0	n.a.
Fiscal balance (including grants)								
Current DSA	-3.1	-3.0	-3.2	-5.9	-5.2	-4.6	-4.1	-4.1
2016 Article IV DSA	-3.3	-3.0	-1.9	-2.0	0.0	-1.4	-2.1	n.a.
Overall financing needs (including onlending)								
Current DSA	-6.6	-4.2	-8.9	-8.6	-6.3	-5.3	-4.7	-4.7
2016 Article IV DSA	-7.8	-7.0	-5.6	-3.9	-1.0	-1.4	-2.1	n.a.
Current account balance (including grants)								
Current DSA	-2.8	-8.8	-9.5	-10.0	-10.0	-9.9	-9.9	-9.9
2016 Article IV DSA	-7.2	-8.8	-8.4	-7.9	-7.1	-3.0	2.6	n.a.
Cv\$/USD exchange rate (e-o-y)								
Current DSA	104.6	91.9	90.7	90.3	90.3	90.4	90.6	90.8
2016 Article IV DSA	100.7	100.5	100.3	99.7	99.6	99.6	99.6	n.a.

Sources: Cabo Verdean authorities and IMF staff estimates.

1/ All data for 2017–23 are IMF staff projections.

Box 1. Macroeconomic Assumptions of the Baseline Scenario, 2017–37

Real GDP growth is expected to keep the momentum reflecting a more favorable external environment and the payoff of recent economic reforms, and settle at about 4 percent per year in the long term. Growth assumptions are based on continued good performance in the tourism sector, better conditions in the euro area, resumption of private credit growth, some product diversification into areas like agriculture and fisheries, and an increase in productivity owing to payoffs from the PIP and from structural reforms.

Fiscal policy. In the medium term (2018–22), the fiscal deficit is expected to widen to more than 4 percent of GDP under the baseline. Total financing needs are expected to increase initially to near 9 percent of GDP in 2018 and 2019, due to the upfront costs associated with the restructuring of loss-making SOEs; then decline to below 5 percent of GDP in the medium term in line with the fiscal deficit path. In the long run (2023–37), with gradual fiscal consolidation and on-lending coming to an end, total financing needs are projected to stay below 4 percent of GDP per year.

The non-interest current account deficit is projected to widen in the medium term owing to the expected increase in economic activity, public investment and FDI (which will drive up imports) and decline gradually afterwards, as the Public Investment Program winds down.

Consumer price inflation and the GDP deflator are projected not to exceed 2 percent.

Financing. Total financing needs are assumed to be covered domestically up to the ceiling of domestic borrowing of 3 percent of GDP and the remainder with external financing. For the long term, financing is assumed with 40 percent domestic borrowing and 60 percent external. Within the external financing envelope, 65 percent is assumed coming from multilateral and bilateral new borrowing and 35 percent commercial borrowing for the rest of projection period.

DEBT SUSTAINABILITY ANALYSIS

A. External Public Debt

8. Under the staff baseline scenario, the PV of external debt to GDP breaches the 50 percent threshold significantly. In the baseline, the PV of public external debt is expected to decrease gradually, falling below 50 percent only by 2032 (Figure 1). The debt service indicators remain below the threshold throughout 2037.

9. Cabo Verde’s ability to service its debt is sensitive to lower growth and a one-time depreciation shock. The PV of the debt-to-exports and debt-to-revenue ratio, and the debt service to revenue ratio would breach the threshold under the historical growth scenario. The PV of the debt-to-revenue ratio would breach the threshold under a bound test that entails a 30 percent nominal depreciation shock in 2018, and so would the debt-service-to-revenue ratio in 2020 (Table 1b, scenario B6).

B. Total Public Debt

10. Total public debt also remains above the high-risk benchmark, but is projected to decline gradually over the period (Table 2a, Figure 2). The PV of total public debt exceeds the 74 percent benchmark and remains above it throughout most of the projection period. The debt outlook is vulnerable to a prolonged economic slowdown; developments in the Euro zone, which would affect growth by depressing remittances and tourism income; and realization of losses on contingent liabilities associated with SOEs.

11. Public debt sustainability is sensitive to various alternative scenarios and stress tests

(Table 2b). The expansion of public debt is most pronounced under the scenario which keeps real growth and the primary balance at historical averages. However, a primary balance as high as that over the past decade seems unlikely, given that the primary balance over 2007-16 reflects a temporarily high level of public investment.

12. Public debt sustainability is also vulnerable to contingent liabilities associated with the debt of state-owned enterprises (SOEs).

Contingent liabilities of the six largest SOEs represented 38.1 percent of GDP at end-2016, of which onlending and guarantees on externally-contracted debt represent 23.5 percent of GDP and are included in the DSA numerical exercise. The remainder, consisting of guarantees on domestically-contracted debt and other liabilities, represents 14.6 percent of GDP. As part of the restructuring and in preparation for the privatization of the SOEs the government will need to assume a portion of this obligations. However, in cases like the national airline (TACV) the government has approached creditors to renegotiate these obligations.

C. The Authorities' Views**13. The authorities concurred with the results of the DSA based on the fiscal path assumed by staff.**

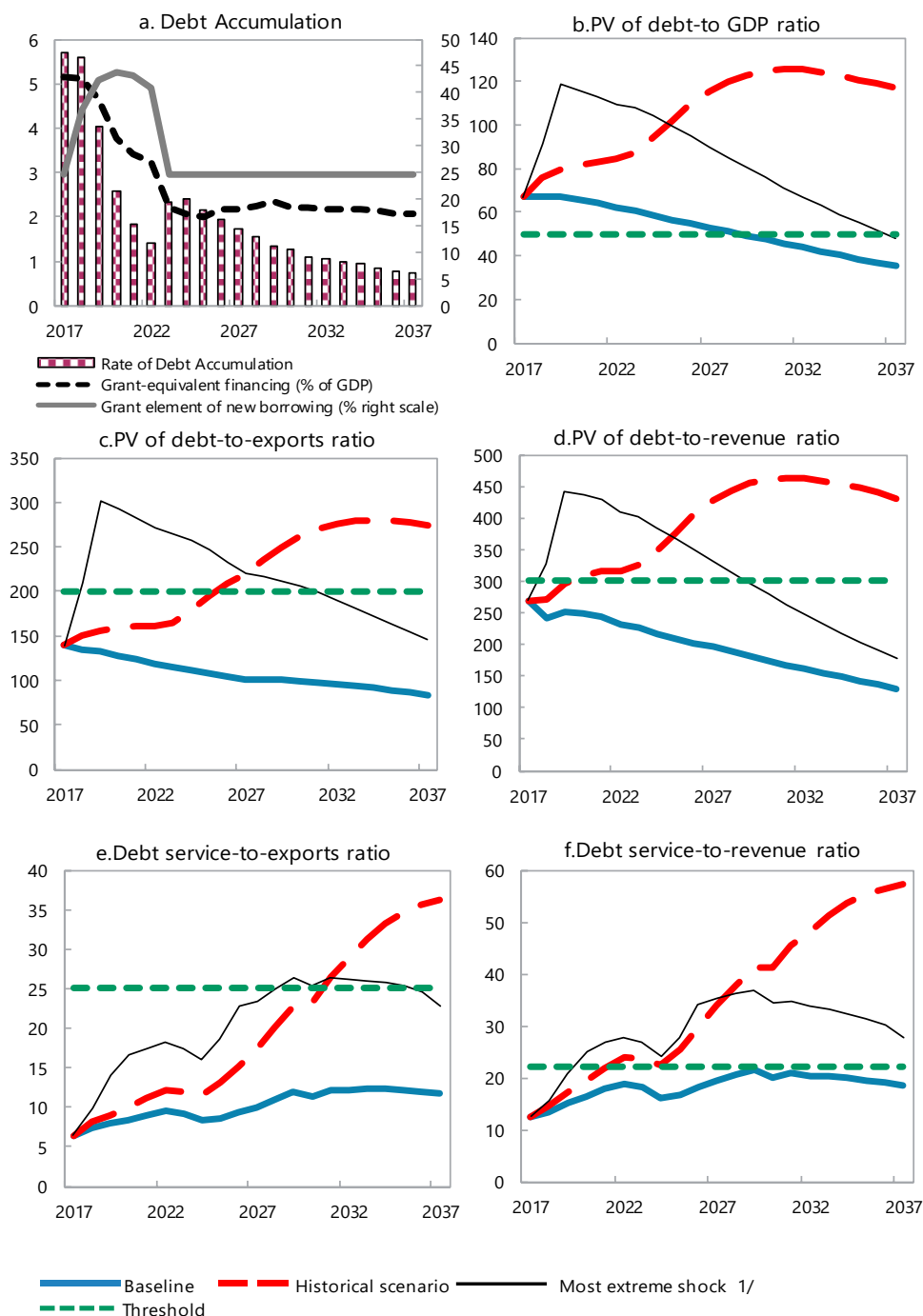
However, they expect to achieve a more ambitious fiscal consolidation path over the medium term as a result of their revenue mobilization and expenditure rationalization efforts. They stressed their commitment to such fiscal consolidation and their intention to cut expenditures as needed to achieve it. The authorities also expressed a different view with regard to the external commercial borrowing assumption and concessionality of the loans for the long-term projection. They reiterated that commercial borrowing will remain very low (below 10 percent of the envelope) and expressed confidence in being able to secure commercial external borrowing on highly-concessional terms. The current significantly-lower-than market commercial borrowing rate reflects a special credit facility with back up and subsidy from Portugal, which will not be unwound anytime soon.

DEBT DISTRESS CLASSIFICATION**14. Based on the external debt burden indicators, the current DSA finds that the risk of external debt distress remains high, but Cabo Verde retains its capability to service its debt.**

The PV of external debt to GDP threshold is breached over an 11-year period under the baseline scenario, and the breach is significant.² Debt service indicators remain below their respective thresholds in the baseline scenario, but are sensitive to growth or exchange rate shocks.

² Staff Guidance Note on the Application of the Joint Bank-Fund Debt Sustainability Framework for Low-Income Countries, International Monetary Fund, November 2013.

Figure 1. Cabo Verde: Indicators of Public and Publicly Guaranteed External Debt Under Alternatives Scenarios, 2017–37 ^{1/}



Sources: Country authorities; and staff estimates and projections.

^{1/} The most extreme stress test is the test that yields the highest ratio on or before 2027. In figure b. it corresponds to a Combination shock; in c. to a Exports shock; in d. to a Combination shock; in e. to a Exports shock and in figure f. to a Combination shock

Table 1a. Cabo Verde: External Debt Sustainability Framework, Baseline Scenario, 2014–37 ^{1/}
(Percent of GDP, unless otherwise indicated)

	Actual			Historical ^{6/} Standard ^{6/}		Projections									
	2014	2015	2016	Average	Deviation	2017	2018	2019	2020	2021	2022	2017-2022		2023-2037	
												Average	2027		2037
External debt (nominal) ^{1/}	102.1	109.8	106.8			103.6	102.0	101.3	98.5	94.9	91.0			72.4	48.7
<i>of which: public and publicly guaranteed (PPG)</i>	89.0	97.0	97.3			95.0	94.9	94.8	92.7	89.7	86.4			69.5	47.2
Change in external debt	2.3	7.7	-3.0			-3.2	-1.6	-0.7	-2.8	-3.5	-3.9			-3.0	-1.5
Identified net debt-creating flows	1.6	13.2	-6.5			-1.1	-2.8	-2.3	-2.1	-1.9	-1.6			-5.5	-0.1
Non-interest current account deficit	5.9	1.1	-0.2	7.6	4.9	5.7	6.2	6.7	6.7	6.7	6.6			-0.9	3.3
Deficit in balance of goods and services	18.4	15.4	16.7			20.2	19.4	19.9	20.0	20.1	20.3			10.7	11.8
Exports	48.1	41.3	44.9			48.0	50.3	51.0	51.5	51.9	52.4			52.9	42.6
Imports	66.4	56.7	61.6			68.2	69.7	70.8	71.5	72.1	72.7			63.6	54.4
Net current transfers (negative = inflow)	-14.3	-15.9	-17.6	-17.2	2.3	-15.6	-13.7	-13.9	-14.2	-14.5	-14.7			-12.7	-9.2
<i>of which: official</i>	-3.0	-3.4	-3.0			-2.2	-1.2	-1.2	-1.2	-1.2	-1.2			-1.2	-1.4
Other current account flows (negative = net inflow)	1.8	1.6	0.7			1.1	0.6	0.8	1.0	1.0	1.1			1.1	0.7
Net FDI (negative = inflow)	-6.8	-7.0	-6.4	-7.1	2.9	-6.1	-8.2	-8.5	-8.3	-8.1	-7.9			-4.8	-4.0
Endogenous debt dynamics ^{2/}	2.5	19.1	0.1			-0.7	-0.8	-0.5	-0.5	-0.4	-0.3			0.2	0.6
Contribution from nominal interest rate	3.1	2.2	3.0			3.3	3.1	3.3	3.3	3.3	3.2			3.4	2.8
Contribution from real GDP growth	-0.6	-1.2	-4.1			-4.0	-3.9	-3.8	-3.8	-3.7	-3.6			-3.2	-2.1
Contribution from price and exchange rate changes	0.1	18.1	1.2			—	—	—	—	—	—			—	—
Residual (3-4) ^{3/}	0.6	-5.5	3.5			-2.2	1.2	1.6	-0.8	-1.6	-2.4			2.5	-1.5
<i>of which: exceptional financing</i>	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/}	...	...	82.8			75.5	74.4	73.9	71.7	69.2	66.3			55.9	36.8
In percent of exports	...	...	184.6			157.4	147.9	144.9	139.4	133.2	126.5			105.7	86.2
PV of PPG external debt	...	...	73.3			66.9	67.4	67.3	65.9	64.0	61.7			53.0	35.3
In percent of exports	...	...	163.4			139.5	133.9	132.1	128.1	123.1	117.8			100.2	82.7
In percent of government revenues	...	...	302.5			269.2	241.6	250.8	248.5	243.0	231.0			195.8	130.3
Debt service-to-exports ratio (in percent)	9.3	8.9	10.0			10.6	11.3	11.9	12.5	13.1	13.7			14.1	16.0
PPG debt service-to-exports ratio (in percent)	5.3	6.4	5.9			6.5	7.4	7.9	8.4	9.0	9.6			9.9	11.8
PPG debt service-to-revenue ratio (in percent)	12.1	10.9	10.9			12.5	13.3	15.0	16.3	17.8	18.8			19.4	18.6
Total gross financing need (Billions of U.S. dollars)	0.1	0.0	0.0			0.1	0.1	0.1	0.1	0.1	0.1			0.1	0.4
Non-interest current account deficit that stabilizes debt ratio	3.7	-6.6	2.8			8.9	7.9	7.4	9.5	10.2	10.6			2.1	4.8
Key macroeconomic assumptions															
Real GDP growth (in percent)	0.6	1.0	3.8	2.7	3.2	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.5	4.5	4.6
GDP deflator in US dollar terms (change in percent)	-0.1	-15.0	-1.1	0.5	8.5	2.2	8.9	2.0	2.3	1.9	1.9	3.2	2.0	2.0	2.0
Effective interest rate (percent) ^{5/}	3.1	1.9	2.8	3.7	1.2	3.2	3.4	3.4	3.5	3.5	3.6	3.4	4.8	5.8	5.0
Growth of exports of G&S (US dollar terms, in percent)	2.8	-26.2	11.5	5.3	16.8	13.6	19.2	7.4	7.4	6.9	6.9	10.2	6.9	5.9	5.2
Growth of imports of G&S (US dollar terms, in percent)	6.4	-26.7	11.5	3.7	17.6	17.5	16.1	7.8	7.3	6.8	6.9	10.4	4.9	5.0	4.7
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	24.6	36.7	42.2	43.8	43.2	40.8	38.6	24.6	24.6	24.6
Government revenues (excluding grants, in percent of GDP)	21.1	24.4	24.2			24.9	27.9	26.8	26.5	26.3	26.7			27.1	27.1
Aid flows (in Billions of US dollars) ^{7/}	0.2	0.2	0.1			0.1	0.1	0.1	0.1	0.1	0.2			0.1	0.2
<i>of which: Grants</i>	0.0	0.0	0.0			0.1	0.0	0.0	0.0	0.0	0.0			0.0	0.1
<i>of which: Concessional loans</i>	0.2	0.1	0.1			0.0	0.1	0.1	0.1	0.1	0.1			0.1	0.2
Grant-equivalent financing (in percent of GDP) ^{8/}	...	...	...			5.1	5.1	4.7	3.8	3.4	3.2			2.2	2.1
Grant-equivalent financing (in percent of external financing) ^{8/}	...	...	...			50.4	48.0	50.0	51.1	50.9	49.2			33.7	34.1
Memorandum items															
Nominal GDP (Billions of US dollars)	1.9	1.6	1.6			1.7	2.0	2.1	2.2	2.4	2.5			3.5	6.6
Nominal dollar GDP growth	0.6	-14.2	2.7			6.2	13.6	6.1	6.3	5.9	6.0	7.4	6.6	6.6	6.7
PV of PPG external debt (in Billions of US dollars)	...	...	1.1			1.2	1.3	1.4	1.5	1.5	1.5			1.8	2.3
(PVt-P/t-1)/GDPt-1 (in percent)	...	...	...			5.7	5.6	4.0	2.6	1.8	1.4	3.5	1.7	0.7	1.4
Gross workers' remittances (Billions of US dollars)	0.2	0.2	0.2			0.2	0.2	0.2	0.2	0.2	0.3			0.3	0.4
PV of PPG external debt (in percent of GDP + remittances)	...	...	66.1			60.9	61.8	61.5	60.0	58.0	55.8			48.4	33.0
PV of PPG external debt (in percent of exports + remittances)	...	...	131.4			115.5	113.4	111.4	107.4	102.7	97.8			85.0	71.5
Debt service of PPG external debt (in percent of exports + remittances)	...	...	4.7			5.3	6.2	6.7	7.1	7.5	7.9			8.4	10.2

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - p(1+g)] / (1+g+p+gp)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and p = 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. Large residuals for historical data is owing to differences in changes in the exchange rate of the euro-USD exchange rate (given the local currency is pegged to the Euro) compared to changes in the various currencies in which external debt is denominated vis-à-vis USD. About 60 percent of external debt is denominated in Euro.

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

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

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

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

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

Table 1b. Cabo Verde: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2017–37

(In percent)

	Projections							2037
	2017	2018	2019	2020	2021	2022	2027	
PV of debt-to GDP ratio								
Baseline	67	67	67	66	64	62	53	35
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	67	76	79	82	83	84	116	117
A2. New public sector loans on less favorable terms in 2017-2037 2	67	70	72	72	71	70	68	63
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	67	71	74	72	70	68	58	39
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	67	78	94	92	90	87	71	38
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	67	80	89	87	84	81	70	46
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	67	70	73	71	69	67	56	36
B5. Combination of B1-B4 using one-half standard deviation shocks	67	91	118	116	113	109	90	48
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	67	93	93	91	88	85	73	49
PV of debt-to-exports ratio								
Baseline	140	134	132	128	123	118	100	83
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	140	150	156	159	160	161	219	274
A2. New public sector loans on less favorable terms in 2017-2037 2	140	139	141	139	137	133	128	149
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	140	134	133	128	123	118	100	83
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	140	209	302	292	282	271	220	145
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	140	134	133	128	123	118	100	83
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	140	139	142	138	132	127	107	84
B5. Combination of B1-B4 using one-half standard deviation shocks	140	190	249	241	233	224	182	121
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	140	134	133	128	123	118	100	83
PV of debt-to-revenue ratio								
Baseline	269	242	251	249	243	231	196	130
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	269	271	296	308	316	315	427	432
A2. New public sector loans on less favorable terms in 2017-2037 2	269	250	267	270	270	261	250	234
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	269	254	276	272	266	253	214	142
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	269	280	350	347	340	325	264	140
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	269	287	331	327	320	304	257	171
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	269	251	270	267	261	249	208	132
B5. Combination of B1-B4 using one-half standard deviation shocks	269	326	441	436	429	410	332	178
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	269	335	348	344	336	319	270	180

Table 1b. Cabo Verde: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2017–37 (concluded)

(Percent)

	Projections							2027	2037
	2017	2018	2019	2020	2021	2022			
Debt service-to-exports ratio									
Baseline	6	7	8	8	9	10	10	12	
A. Alternative Scenarios									
A1. Key variables at their historical averages in 2017-2037 1/	6	8	9	10	11	12	17	36	
A2. New public sector loans on less favorable terms in 2017-2037 2	6	7	7	8	9	10	10	17	
B. Bound Tests									
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	6	7	8	8	9	10	10	12	
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	6	10	14	17	17	18	23	23	
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	6	7	8	8	9	10	10	12	
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	6	7	8	9	9	10	11	12	
B5. Combination of B1-B4 using one-half standard deviation shocks	6	9	12	14	14	15	19	19	
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	6	7	8	8	9	10	10	12	
Debt service-to-revenue ratio									
Baseline	12	13	15	16	18	19	19	19	
A. Alternative Scenarios									
A1. Key variables at their historical averages in 2017-2037 1/	12	15	17	19	22	24	34	57	
A2. New public sector loans on less favorable terms in 2017-2037 2	12	13	14	15	17	19	19	27	
B. Bound Tests									
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	12	14	16	18	20	21	21	20	
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	12	13	16	20	21	22	28	22	
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	12	16	20	21	23	25	26	24	
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	12	13	15	17	18	19	21	19	
B5. Combination of B1-B4 using one-half standard deviation shocks	12	16	21	25	27	28	35	28	
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	12	18	21	23	25	26	27	26	
<i>Memorandum item:</i>									
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	19	19	19	19	19	19	19	19	

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

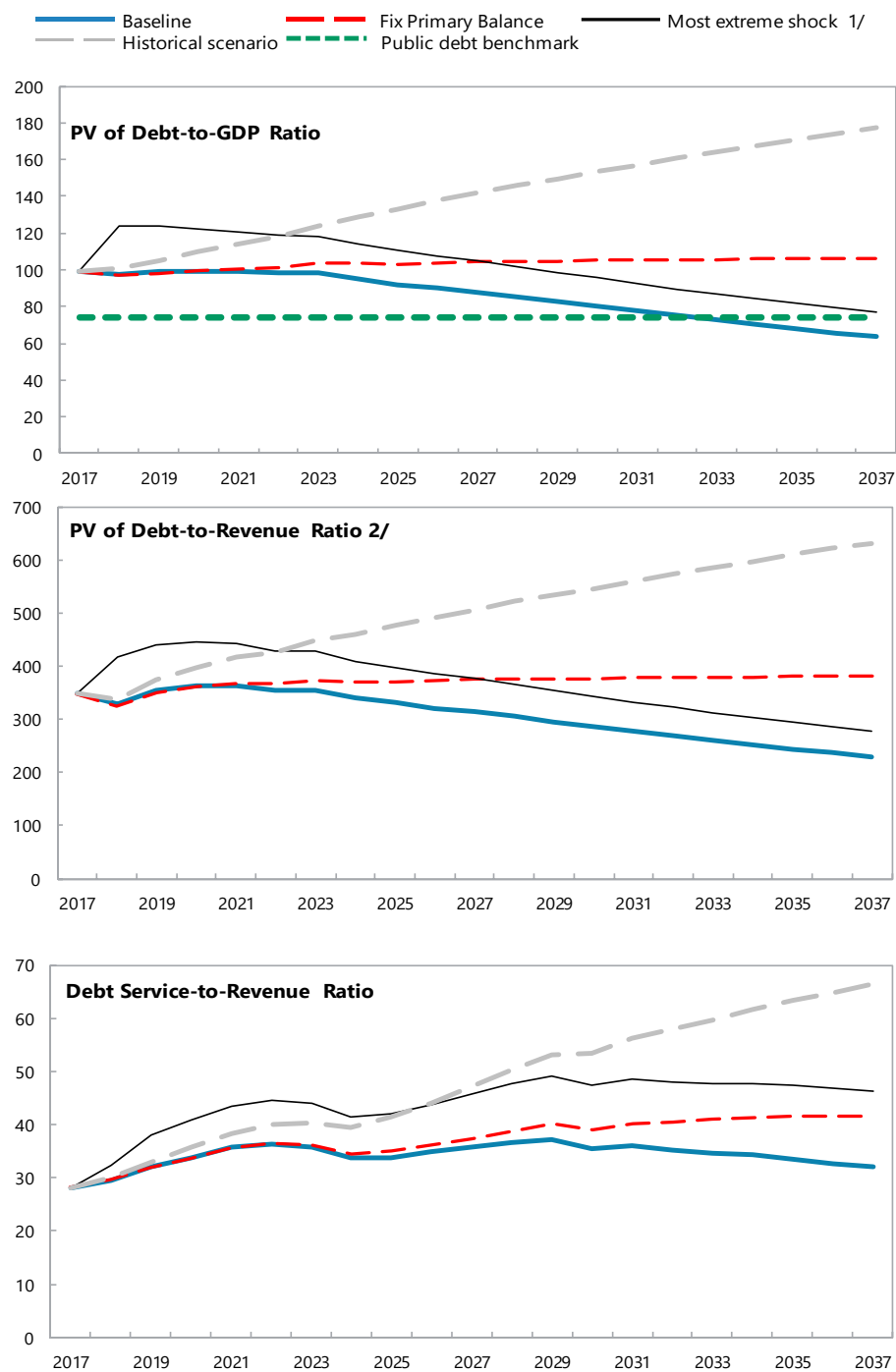
an offsetting adjustment in import levels).

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.

Figure 2. Cabo Verde: Indicators of Public Debt Under Alternatives Scenarios, 2017–37 ^{1/}



Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2027.

2/ Revenues are defined inclusive of grants.

Table 2a. Cabo Verde: Public Sector Debt Sustainability Framework, Baseline Scenario, 2014–37
(Percent of GDP, unless otherwise indicated)

	Actual			Average ^{5/}	Standard Deviation ^{5/}	Estimate					Projections				
	2014	2015	2016			2017	2018	2019	2020	2021	2022	2017-22 Average		2027	2037	2023-37 Average
Public sector debt 1/	115.9	126.0	129.5			126.9	125.2	126.7	126.2	124.7	122.8		103.8	75.6	
<i>of which: foreign-currency denominated</i>	89.0	97.0	97.3			95.0	94.9	94.8	92.7	89.7	86.4		69.5	47.2	
Change in public sector debt	13.4	10.1	3.5			-2.5	-1.8	1.6	-0.5	-1.5	-1.9		-3.5	-2.4	
Identified debt-creating flows	19.7	16.3	6.2			-9.7	1.5	1.7	-0.8	-1.8	-2.3		-3.9	-2.8	
Primary deficit	8.6	4.3	3.3	6.3	4.6	3.6	4.3	4.1	2.7	1.7	1.0	2.9	-0.4	-0.6	
Revenue and grants	22.9	26.9	27.0			28.4	29.8	28.1	27.5	27.2	27.7		27.8	27.8	
<i>of which: grants</i>	1.8	2.5	2.8			3.5	1.9	1.3	1.0	0.9	0.9		0.8	0.8	
Primary (noninterest) expenditure	31.4	31.2	30.3			31.9	34.1	32.2	30.2	28.9	28.7		27.5	27.2	
Automatic debt dynamics	11.1	11.1	2.0			-13.7	-5.0	-4.1	-4.2	-4.1	-4.0		-3.5	-2.2	
Contribution from interest rate/growth differential	0.2	-0.1	-3.0			-3.8	-4.6	-4.4	-4.2	-4.2	-3.9		-3.3	-2.1	
<i>of which: contribution from average real interest rate</i>	0.8	1.1	1.6			1.1	0.6	0.4	0.6	0.7	0.9		1.3	1.2	
<i>of which: contribution from real GDP growth</i>	-0.6	-1.2	-4.6			-4.9	-5.2	-4.8	-4.9	-4.8	-4.8		-4.6	-3.4	
Contribution from real exchange rate depreciation	10.9	11.1	5.0			-9.9	-0.4	0.3	0.0	0.1	0.0		...	...
Other identified debt-creating flows	0.1	0.9	0.9			0.5	2.2	1.6	0.7	0.6	0.6		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)	0.1	0.9	0.9			0.5	2.2	1.6	0.7	0.6	0.6		0.0	0.0	
Residual, including asset changes	-6.3	-6.2	-2.7			7.2	-3.3	-0.1	0.3	0.3	0.4		0.4	0.4	
Other Sustainability Indicators															
PV of public sector debt	...	...	105.5			98.8	97.6	99.3	99.5	98.9	98.1		87.3	63.6
<i>of which: foreign-currency denominated</i>	...	...	73.3			66.9	67.4	67.3	65.9	64.0	61.7		53.0	35.3
<i>of which: external</i>	...	...	73.3			66.9	67.4	67.3	65.9	64.0	61.7		53.0	35.3
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...
Gross financing need 2/	14.1	11.7	10.7			11.6	13.1	13.1	12.0	11.4	11.1		9.6	8.3	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	390.7			348.5	327.6	353.4	361.8	363.5	354.6		313.5	228.6
PV of public sector debt-to-revenue ratio (in percent)	...	...	435.2			397.5	349.9	369.9	374.9	376.0	367.0		322.6	235.1
<i>of which: external 3/</i>	...	...	302.5			269.2	241.6	250.8	248.5	243.0	231.0		195.8	130.3
Debt service-to-revenue and grants ratio (in percent) 4/	24.2	27.7	27.6			28.2	29.6	32.0	33.9	35.6	36.3		35.9	32.0	
Debt service-to-revenue ratio (in percent) 4/	26.3	30.5	30.8			32.2	31.6	33.5	35.1	36.8	37.6		36.9	32.9	
Primary deficit that stabilizes the debt-to-GDP ratio	-4.9	-5.8	-0.2			6.1	6.1	2.5	3.3	3.2	2.9		3.1	1.8	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	0.6	1.0	3.8	2.7	3.2	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.5	4.5	4.6
Average nominal interest rate on forex debt (in percent)	1.5	1.1	1.2	1.3	0.4	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.7	2.1	1.8
Average real interest rate on domestic debt (in percent)	4.2	3.9	6.2	3.1	1.6	5.0	4.6	4.4	4.0	3.9	3.9	4.3	3.9	3.9	3.9
Real exchange rate depreciation (in percent, + indicates depreciation)	14.0	12.6	5.4	2.7	7.9	-10.7
Inflation rate (GDP deflator, in percent)	-0.1	1.7	-0.8	1.4	1.4	0.1	1.4	1.6	2.0	2.0	2.0	1.5	2.0	2.0	2.0
Growth of real primary spending (deflated by GDP deflator, in percent)	-11.3	0.1	0.8	-1.0	3.6	9.7	11.4	-1.7	-2.6	-0.4	3.2	3.2	4.2	4.7	4.2
Grant element of new external borrowing (in percent)	24.6	36.7	42.2	43.8	43.2	40.8	38.6	24.6	24.6	...

Sources: Country authorities; and staff estimates and projections.

1/ Coverage is central government. Data refers to 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 2b. Cabo Verde: Sensitivity Analysis for Key Indicators of Public Debt, 2017–37

	Projections							
	2017	2018	2019	2020	2021	2022	2027	2037
PV of Debt-to-GDP Ratio								
Baseline	99	98	99	99	99	98	87	64
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	99	101	105	109	114	118	142	177
A2. Primary balance is unchanged from 2017	99	97	98	99	100	101	104	106
A3. Permanently lower GDP growth 1/	99	98	101	102	103	104	101	101
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	99	103	112	114	115	116	113	101
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	99	103	110	110	109	108	96	70
B3. Combination of B1-B2 using one half standard deviation shocks	99	104	112	113	114	114	108	90
B4. One-time 30 percent real depreciation in 2018	99	124	124	122	121	119	105	77
B5. 10 percent of GDP increase in other debt-creating flows in 2018	99	105	107	107	106	105	94	69
PV of Debt-to-Revenue Ratio 2/								
Baseline	349	328	353	362	364	355	314	229
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	349	337	374	398	417	427	506	631
A2. Primary balance is unchanged from 2017	349	326	350	361	368	366	374	381
A3. Permanently lower GDP growth 1/	349	330	360	372	378	374	362	362
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	349	346	396	413	422	419	405	362
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	349	345	391	400	401	391	345	250
B3. Combination of B1-B2 using one half standard deviation shocks	349	348	398	412	418	412	386	323
B4. One-time 30 percent real depreciation in 2018	349	416	441	445	443	429	376	276
B5. 10 percent of GDP increase in other debt-creating flows in 2018	349	353	379	388	389	380	338	248
Debt Service-to-Revenue Ratio 2/								
Baseline	28	30	32	34	36	36	36	32
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	28	30	33	36	38	40	47	66
A2. Primary balance is unchanged from 2017	28	30	32	34	36	36	37	42
A3. Permanently lower GDP growth 1/	28	30	32	35	37	38	39	42
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-2019	28	31	35	37	40	41	42	43
B2. Primary balance is at historical average minus one standard deviations in 2018-2019	28	30	33	35	37	38	39	35
B3. Combination of B1-B2 using one half standard deviation shocks	28	30	34	37	39	40	41	40
B4. One-time 30 percent real depreciation in 2018	28	32	38	41	43	45	46	46
B5. 10 percent of GDP increase in other debt-creating flows in 2018	28	30	33	36	37	38	40	35

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.