INTERNATIONAL DEVELOPMENT ASSOCIATION
INTERNATIONAL MONETARY FUND

SÃO TOMÉ AND PRÍNCIPE Joint World Bank-IMF Debt Sustainability Analysis

July 2020

Prepared Jointly by the staffs of the International Development Association (IDA)

and the International Monetary Fund (IMF)

Approved by Marcello Estevão (IDA), David Owen and Kevin Fletcher (IMF)

São Tomé and Príncipe: Joint Bank-Fund Debt Sustainability Analysis[1]	
Risk of external debt distress	In debt distress
Overall risk of debt distress	In debt distress
Granularity in the risk rating	Sustainable
Application of judgement	No

The country remains in debt distress due to prolonged unsettled external arrears. In addition, the significant domestic arrears of the large loss-making state-owned utility company (EMAE) reflect the severe liquidity constraints of the public sector. Staff assesses that the country has the capacity to repay the external arrears over time, as indicated by the external debt ratios. While the present value (PV) of external public and publicly guaranteed (PPG) debt-to-exports ratio breaches its threshold in 2020 due to the COVID-19 shock, all other external PPG debt burden indicators remain well below their thresholds throughout the projection horizon in the baseline scenario.[2, 3] While the PV of total PPG debt is currently above the high-risk benchmark, it can be deemed sustainable since the PV of PPG debt falls below the benchmark when accounting for the terms of formalized concessional debt of EMAE and the government to the country's fuel supplier, ENCO. Furthermore, the country is committed to implement EMAE's planned reforms and borrow externally only on concessional terms at a measured pace. The likelihood of contingent liabilities materializing, particularly ENCO's arrears to its parent company Sonangol (a state-owned company of Angola), remains relatively low

[1] The DSA follows the IMF and World Bank Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework (DSF) for Low-Income Countries (LICs) (February 2018). The country's Composite Indicator score is 2.685, which is based on the October 2019 WEO and the 2018 CPIA, and its debt carrying capacity is assessed to be medium.

[2] World Bank staff simulated a scenario assuming full disbursement of annual IDA allocations under credit terms, which did not affect the risk of external debt distress rating.

[3] São Tomé and Príncipe has requested participation in the DSSI from all its official bilateral creditors. As of July 13, 2020, none of the creditors had yet formally responded to this request. The DSA baseline assumes the application of DSSI terms to eligible debt from G20/Paris Club creditors and other bilateral creditors that may associate with the Paris Club Memorandum of Understanding. Pending confirmation, DSSI terms are not applied to eligible debt from other bilateral creditors (Equatorial Guinea and Angola).

PUBLIC DEBT COVERAGE

1. In the DSA framework for São Tomé and Príncipe, PPG debt coverage includes the central government and EMAE, a state-owned enterprise (SOE) providing utility.[4] [5] EMAE has been accumulating arrears over the years to its fuel supplier, ENCO, totaling over 26 percent of GDP at end-2019.[6] [7] Three SOEs besides EMAE— ENAPORT, ENASA, and Correios—are not included in the analysis due to lack of reliable data. Nevertheless, the potential liabilities from these SOEs are modeled by using the default value of 2 percent of GDP. Contingent liabilities from financial markets are also set at their default value of 5 percent of GDP. In addition, the contingent liability stress test further includes disputed debt of $30 million from Nigeria. The authorities maintain that its repayment was conditional on oil revenues, which have no near-term prospect for materialization. Finally, for the external DSA, the contingent liability shock also includes ENCO's external arrears to Sonangol, which reached an estimated $205 million (around 51 percent of GDP) in end-2019 as well as an estimated fine of $12.4 million (around 3 percent of GDP) imposed by the Permanent Court of Arbitration regarding country's improper seizure of a Maltese ship in 2013.

Text Table 1. São Tomé and Príncipe: Public Debt Coverage Under The Baseline Scenario[1]

	Subsectors of the public sector	Subsectors covered
1	Central government	X
2	State and local government	
3	Other elements in the general government	X
4	o/w: Social security fund	X
5	o/w: Extra budgetary funds (EBFs)	X
6	Guarantees (to other entities in the public and private sector, including to SOEs)	X
7	Central bank (borrowed on behalf of the government)	X
8	Non-guaranteed SOE debt	

Sources: IMF and World Bank staff.
[1] Include the large loss-making utility company EMAE.

[4] The country's debt stocks are zero for some new elements covered under the revised DSA framework, including the social security fund and central bank debt borrowed on behalf of the government. There is no other government guaranteed debt that is excluded from this DSA.

[5] Consistent with the previous DSA, pre-HIPC initiative arrears (13.5 percent of GDP) are excluded, on the assumption of debt forgiveness. One pre-HIPC PPP debt of 11.2 percent of GDP is excluded, consistent with the treatment of other pre-HIPC debt. Details about this loan are presented in Text Table 4.

[6] ENCO registers domestically in São Tomé and Príncipe, with 77.6 percent of its shares owned by Sonangol (an Angolan SOE) and 16.0 percent owned by São Tomé and Príncipe's government. The government's arrears to ENCO were regularized in 2016, and EMAE's arrears of $111 million as of end-2019 were regularized in August 2019.

[7] As the DSA uses the residency-based assumption on debt, the dollar-denominated EMAE arrears are classified as domestic since ENCO, majority-owned by an Angolan SOE, registers domestically.

Text Table 2. São Tomé and Príncipe: Coverage of the Contingent Liabilities' Stress Test

1	**The country's coverage of public debt**	The central government, central bank, and government-guaranteed debt. There is no debt by social security or borrowing by extra budgetary entities.		
		Default	**Used for the analysis**	**Reasons for deviations from the default settings**
2	**Other elements of the general government not captured in 1.**	0 percent of GDP	Inclusion of the disputed Nigeria loan (7.1) for both public and external DSA, and ENCO's arrears to Sonangol (51.4) and Permanent Court of Arbitration fine (3.1) in external DSA. 2/	These are potential risks.
3	**SoE's debt (guaranteed and not guaranteed by the government) 1/**	2 percent of GDP	2	
4	**PPP**	35 percent of PPP stock	0	The PPP project is pre-HIPC and is excluded from the DSA analysis.
5	**Financial market (the default value of 5 percent of GDP is the minimum value)**	5 percent of GDP	5	
	Total (2+3+4+5) (in percent of GDP)		14.1 for public DSA, and 68.7 for external DSA.	

1/ The default shock of 2 percent of GDP will be triggered for countries whose government-guaranteed debt is not fully captured under the country's public debt definition (1.).

2/ The ENCO to Sonangol arrears shock is not applied to the public DSA because ENCO's claims on the government and EMAE are already included in the domestic PPG debt.

Sources: IMF and World Bank staff.

BACKGROUND

Debt

2. **Total PPG debt increased by around 14 percentage points of GDP in 2019 relative to 2015 to around 98 percent, while Central government debt increased by close to 2.5 percentage points over the same time period.** PPG debt includes the arrears of the state-owned utility company, EMAE, to its fuel supplier ENCO, which rose to around $111 million in

2019 from $43 million in 2015. The expansion of the electricity distribution network and the associated large losses are key drivers for the rise in PPG debt.

3. **The country continues to engage actively with bilateral creditors to regularize post-HIPC arrears, with the amount remaining unchanged.** The arrears add up to $10.7 million, or 2.3 percent of 2019 GDP, and are owed to Angola (US$4.8 million), Brazil (US$4.3 million), and Equatorial Guinea (US$1.7 million). An agreement with the Brazilian government was reached, pending ratification by the Brazilian Senate. The government has also actively sought debt rescheduling agreements with Angola and Equatorial Guinea. These post-HIPC arrears are reflected in the debt stock.

Text Table 3. São Tomé and Príncipe: PPG Debt Stock

(As of end 2019)	Million USD		Share of GDP (%)	
	End 2015	End 2019	End 2015	End 2019
Total PPG debt (incl. EMAE's arrears to ENCO, but excl. gov's arrears to EMAE)	**262.8**	**408.9**	**83.8%**	**97.7%**
Central government direct and guaranteed debt (excl. EMAE's arrears to ENCO, but incl. gov's arrears to EMAE)	**219.5**	**303.3**	**70.0%**	**72.4%**
Total PPG external debt	**167.2**	**191.2**	**53.3%**	**45.7%**
Multilateral Creditors	**44.6**	**54.2**	**14.2%**	**13.0%**
IDA	13.8	11.6	4.4%	2.8%
BADEA	9.4	11.8	3.0%	2.8%
FIDA	6.7	5.0	2.1%	1.2%
AfDB	5.2	15.4	1.7%	3.7%
IMF	6.7	9.0	2.1%	2.2%
OPEC	2.8	1.4	0.9%	0.3%
Bilateral Creditors	**115.7**	**125.1**	**36.9%**	**29.9%**
Portugal	54.5	55.9	17.4%	13.3%
Angola[1]	44.4	52.5	14.2%	12.5%
China	10.0	10.0	3.2%	2.4%
Brazil	4.3	4.3	1.4%	1.0%
Equatorial Guinea	1.6	1.7	0.5%	0.4%
Belgium	0.8	0.8	0.3%	0.2%
Government's arrears to external suppliers	**6.9**	**11.6**	**2.2%**	**2.8%**
Domestic debt	**52.3**	**112.1**	**16.7%**	**26.8%**
ENCO (oil importing company; regularized arrears)	**48.4**	**37.4**	**15.4%**	**8.9%**
Government's arrears to domestic suppliers[2]	**3.5**	**33.6**	**1.1%**	**8.0%**
CST (telecom)	3.5	6.6	1.1%	1.6%
EMAE (water and electricity)	0.0	5.0	0.0%	1.2%
Other suppliers	0.0	22.0	0.0%	5.3%
Central Government T-bills	**0.0**	**29.6**	0.0%	7.1%
Credit of ODC to Central Government (excl. T-bills)	**0.4**	**11.4**	**0.1%**	**2.7%**
Arrears from EMAE to ENCO[3]	**43.4**	**110.5**	**13.8%**	**26.4%**
Memorandum items:				
Pre-HIPC legacy arrears	**46.3**	**54.9**	**14.8%**	**13.1%**
Italy[4]	24.3	24.3	**7.8%**	**5.8%**
Angola	22.0	30.6	**7.0%**	**7.3%**
Nigeria Loan	**30.0**	**30.0**	**9.6%**	**7.2%**

Sources: Country authorities, EMAE, ENCO, and IMF staff estimates

[1] Including the 4.8 million USD debt with Angola contracted after the 2007 HIPC debt relief.

[2] Commitment-based, and these suppliers reside domestically in the country.

[3] Including the arrears from HidroEquador S.A. to ENCO.

[4] Commercial debt guaranteed by the government.

Text Table 4. São Tomé and Príncipe: Arrears and Disputed Debt (As of end-2019)		
Type	Description	DSA Treatment
Pre-HIPC legacy arrears (13 percent of GDP)	São Tomé and Príncipe has pre-HIPC legacy arrears to Angola ($30.6 million) and Italy ($24.3 million), in total $54.9 million. São Tomé and Príncipe is making best efforts to reach an agreement consistent with the representative Paris Club agreement. In 2017 São Tomé and Príncipe was able to secure relief from pre-HIPC legacy arrears to China of $18.4 million.	Not included in the DSA on the assumption of expected forgiveness.
Post-HIPC bilateral arrears (2.5 percent of GDP)	São Tomé and Príncipe has post-HIPC arrears to Angola ($4.8 million), Brazil ($4.3 million), and Equatorial Guinea ($1.7 million), in total $10.7 million.[1] The government has actively sought debt rescheduling agreements with Angola and Equatorial Guinea through correspondence and high-level meetings. However, responses are pending from these two countries on continuing the negotiations. These arrears are the result of weak debt management, and staff assesses that São Tomé and Príncipe has the capacity to repay them over time.	Included in the DSA.
Domestic arrears (9.1 percent of GDP)	São Tomé and Príncipe has domestic arrears to the telecom company CST ($6.6 million), the water and electricity company EMAE ($5 million), and other private suppliers ($25.2 million, mostly construction companies). In total, the domestic arrears amount to $36.8 million.	Included in the DSA.
Disputed debt (7.1 percent of GDP)	A loan from Nigeria in the amount of $30 million was excluded from the debt stock, as there is no signed contract with repayment conditions between the two countries. Nonetheless, the authorities acknowledged the receipt of the funds, which were spent as evidenced by budget documents. This loan was extended as advances on oil revenues in the context of the joint development zone between these two countries, but this project has stalled. According to São Tomé and Príncipe authorities, this loan is under dispute since it should only be repaid in case revenues from oil materialize.	Included in the contingent liability stress tests for both the public DSA and external DSA.
[1/]These amounts remained unchanged as of end-June 2019.		

Macroeconomic Forecast

4. The COVID-19 shock is causing a contraction of the economy in 2020 with the recovery expected over a few years. GDP in 2020 is projected to decline by 6.5 percent, compared with pre-crisis projections of a 3.5 percent increase. Average real growth and inflation are both revised down to 4 percent and 3.1 percent, respectively (compared with 4.3 percent and 4 percent in the September 2019

DSA), throughout the 2020-40 projection horizon. Export and import growth have also been revised slightly downward throughout the projection horizon. The domestic primary budget deficit now averages 1.3 percent of GDP through the projection horizon compared with 0.9 percent in the previous DSA. The larger financing needs in 2020 are expected to be covered by the RCF disbursement and other external grants.[8] The economy is expected to recover in 2022 to close to 2019 levels with the implementation of long- delayed construction projects and a recovery in tourism and global demand.

Text Table 5. Macroeconomic Assumptions

	Historical			Forecasts	
	2018 DSA	2019 DSA[1]	Last 4 years	2019 DSA[1]	This DSA
	2008-17	2009-18	2016-19	2018-38	2020-40
Real GDP growth (percent)	4.8	4.3	3.1	4.3	4.0
Inflation (percent average)	11.9	9.5	6.9	4.0	3.1
GDP deflator (percent)	5.8	4.1	4.1	2.8	2.4
Domestic primary balance (percent of GDP)	-3.9	-3.7	-3.1	-0.9	-1.2
Grants (percent of GDP)	16.7	15.9	10.1	5.2	4.4
New borrowing (percent of GDP)	7.5	7.4	2.0	1.4	2.0
FDI (percent of GDP)	13	8.9	6.7	11.8	6.8
USD export growth (percent)	24.6	20.8	2.5	8.3	7.4
USD import growth (percent)	10.3	7.1	1.0	5.9	4.9
Current account balance, excluding grants (percent of GDP)	-36.3	-33.6	-21.1	-11.8	-13.1
Current account balance, including grants (percent of GDP)	-19.6	-17.7	-11.0	-6.8	-8.7

[1] IMF Country Report No. 19/325

Country Classification

5. **The country's debt carrying capacity is assessed to be medium under the new Composite Index.** The debt-carrying capacity in the DSA is captured by a Composite Index (CI), introduced in 2019, that reflects macroeconomic variables, such as real GDP growth, remittances, reserves, and world growth in addition to the previously used CPIA. The CI classifies São Tomé and Príncipe as a medium debt-carrying capacity country (Text table 6). The applicable thresholds for the ratios of the present value (PV) of PPG external debt relative to GDP and exports are 40 percent and 180 percent, compared with 30 and 100 percent respectively in the 2018 DSF that assessed the country as having a weak debt-carrying capacity. The threshold for the PV of total PPG debt is now 55 percent of GDP (compared to the lower value of 38 percent in 2018). The thresholds for PPG external debt service to exports and revenue remain unchanged.

[8] The World Bank is providing additional support through a $2.5 million emergency response project focused on strengthening the health system, accelerating disbursement of existing projects (including on social protection), and increasing in the expected budget support grant in 2020 (from $5 million to $10 million). Budget support grants from the World Bank and African Development Bank in 2020 are expected to amount to around $20 million.

Text Table 6. São Tomé and Príncipe: Classification of Debt Carrying Capacity			
Final	Classification based on current vintage	Classification based on the previous vintage	Classification based on the two previous vintages
Medium	Weak	Medium	Medium
	2.685	2.705	2.780

DEBT SUSTAINABILITY

External Debt Sustainability

6. **The DSA indicates that total external PPG debt is sustainable under the program (Figure 1).** Under the baseline scenario, the external PPG debt stock and debt service ratios remain below their threshold values throughout the projection horizon, except for a one-time breach of the debt-to-exports ratio. The PV of PPG external debt-to-GDP ratio remains 7-18 percentage points below its threshold of 40 percent. The PV of PPG external debt-to-exports ratio remains 40-70 percentage points below its threshold of 180 percent of GDP apart from 2020 and 2021 when the threshold is breached due to an estimated fall in GDP growth caused by the pandemic. Moreover, these solvency indicators improve over time due to fiscal consolidation, cautious external borrowing, economic growth, and an improved current account balance. The liquidity indicators remain well below their threshold values of 15 and 18 percent for the debt service-to-exports and debt service-to-revenue ratios respectively. Like the solvency indicators, the liquidity ratios also improve over time reflecting higher exports and revenues.

7. **While the baseline scenario is sustainable, the solvency of external debt is of concern in the presence of extreme shocks.** The solvency indicators breach their threshold values under the most extreme shock scenario, while the liquidity indicators remain below the threshold. The shocks in this scenario are an exports shock and a combined contingent liability shock. The latter includes the potential repayment of the Nigeria loan (7.1 percent of GDP), payment of Permanent Court of Arbitration fine (3.1 percent of GDP), ENCO's arrears to Sonangol (51.4 percent of GDP) which may ultimately fall on the government, as well as the standard assumption of a financial market bailout. The PV of debt-to-GDP ratio and PV of debt-to-exports ratio breach their respective thresholds throughout either all or most of the projection horizon but decline over time. As Text Table 2 indicates, ENCO's external arrears to Sonangol (51.4 out of 68.7 percent of GDP) represent the primary contingent liability in this extreme shock scenario.[9] These results highlight the importance of developing a clearance plan for EMAE's arrears to ENCO, as well as promoting strong export growth.

[9] The size of the Sonangol shock (51.4 percent of GDP) is calibrated to capture the maximum amount of liabilities that would be assumed by the government should the contingency materialize. The payment terms are assumed to have a grant element of about 37 percent, broadly consistent with the concessionality of PPG external debt.

Public Debt Sustainability

8. Total PPG debt is deemed sustainable under the baseline scenario (Figure 2). The PV of discounted PPG debt remains below the threshold of 55 percent throughout the projection horizon if the agreed repayment terms of debt owed to ENCO by EMAE and the government are taken into account (where the grant element is over 80 percent), reforms to EMAE are implemented, and the country continues to borrow externally only at concessional terms at a measured pace. The PV of discounted PPG debt is around 50 percent of GDP in 2020 and is projected to decrease over time to around 33 percent of GDP by 2030. Compared with the DSA issued on April 2020 in the context of RCF, PPG debt/ GDP has declined further due to an increase in grants of over 4 percent of GDP in financing COVID-19 related spending.

9. All the three total PPG debt ratios (PV of debt-to-GDP, PV of debt-to-revenue, and debt service-to-revenue) are most sensitive to a primary balance shock. Under such a shock, the three ratios would rise in the near term before declining in the medium-to-long term. In addition, given that EMAE's arrears to ENCO are denominated in foreign currency, the country's debt is subject to currency risk, even though such arrears are treated as domestic debt under the residency-based definition.

DEBT DISTRESS QUALIFICATION AND CONCLUSIONS

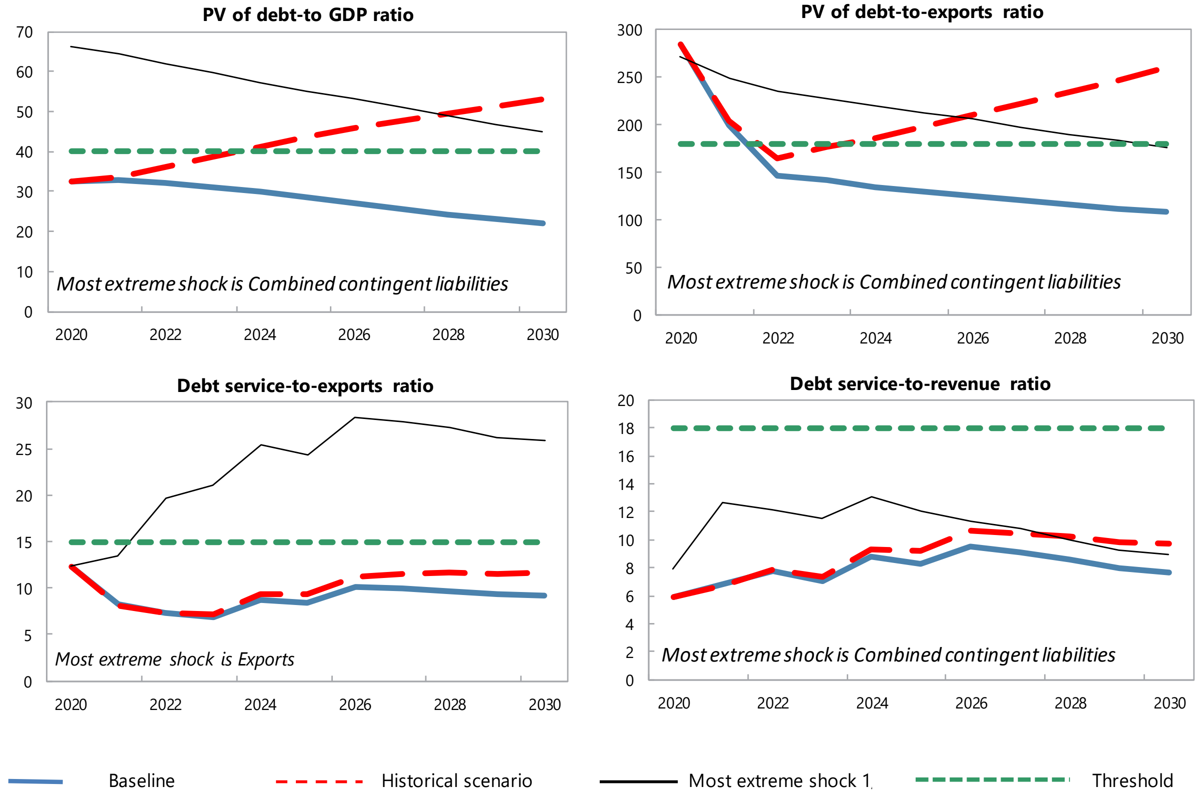
10. São Tomé and Príncipe' remains in debt distress as in the previous DSA. This is because the regularization of São Tomé and Príncipe's post-HIPC sovereign arrears (to Angola, Brazil, and Equatorial Guinea) is still ongoing. The significant arrears of EMAE to its supplier also reflect the severe liquidity constraints of the public sector. Staff assesses that São Tomé and Príncipe has the capacity to repay these arrears over time as long as the country implements reforms to the loss-making SOE, EMAE, and continues to borrow externally at concessional terms. São Tomé and Príncipe continues to actively seek rescheduling agreements with the creditors.

11. Compared with the 2019 DSA, the PPG external and total debt indicators have improved, while nominal total PPG debt has increased. The PV of discounted PPG debt remains around 5-22 percentage points below its threshold of 55 percent throughout the projection horizon. All external PPG debt indicators also remain below their respective thresholds under the baseline scenario. However, for total PPG debt, additional government arrears to suppliers identified recently and a more comprehensive coverage of public sector liabilities, including the inclusion of EMAE's arrears, have revealed previously uncaptured debt vulnerabilities and led to a large breach of the PV of debt-to-GDP indicator benchmark. While this ratio becomes sustainable if the PV of the repayments to ENCO by the government and EMAE are taken into account, EMAE's losses and associated arrears nonetheless highlight the importance of reforming EMAE to contain fiscal risk.

12. The baseline is subject to substantial external risks. Stress tests indicate that the country's debt is especially vulnerable to shocks to exports, combined contingent liabilities, and the fiscal primary balance. A particular stress test based on an extreme scenario, which accounts for ENCO's significant external arrears to Sonangol, reveals that the associated risks could be high in the near term, even though key external debt ratios recover to below their threshold values in the medium term and the strong diplomatic tie between São Tomé and Príncipe and Angola could be a potential mitigating factor.

13. Overall, the DSA highlights the importance of continuing to reform the loss-making enterprise EMAE and progressing with other structural reforms to ensure debt sustainability. To mitigate fiscal risks, the country needs to continue with policies including deepening and prioritizing EMAE reforms, continuing fiscal consolidation and revenue mobilization, eschewing non-concessional loans, improving the business environment to attract non-debt flows, strengthening macroeconomic policies to support the exchange rate peg, and promoting tourism and private sector-led growth. In addition, non-concessional loans should be eschewed. To balance debt sustainability concerns while address the country's large investment needs, contracting of new concessional loans should be limited to 3 percent of GDP, and external debt disbursements should not exceed 2 percent of GDP. These parameters can be adjusted according to debt developments and relaxed as debt vulnerability decreases. To further aid in debt sustainability, the financing of large projects in the near- and medium-terms should be through non-debt generating means, including through grants.

Figure 1. São Tomé and Príncipe: Indicators of Public and Publicly Guaranteed External Debt Under Alternatives Scenarios, 2020-2030



Customization of Default Settings	Size	Interactions
Tailored Tests		
Combined CLs	Yes	
Natural Disasters	No	No
Commodity Prices 2/	n.a.	n.a.
Market Financing	n.a.	n.a.

Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	1.8%	1.8%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	23	23
Avg. grace period	9	9

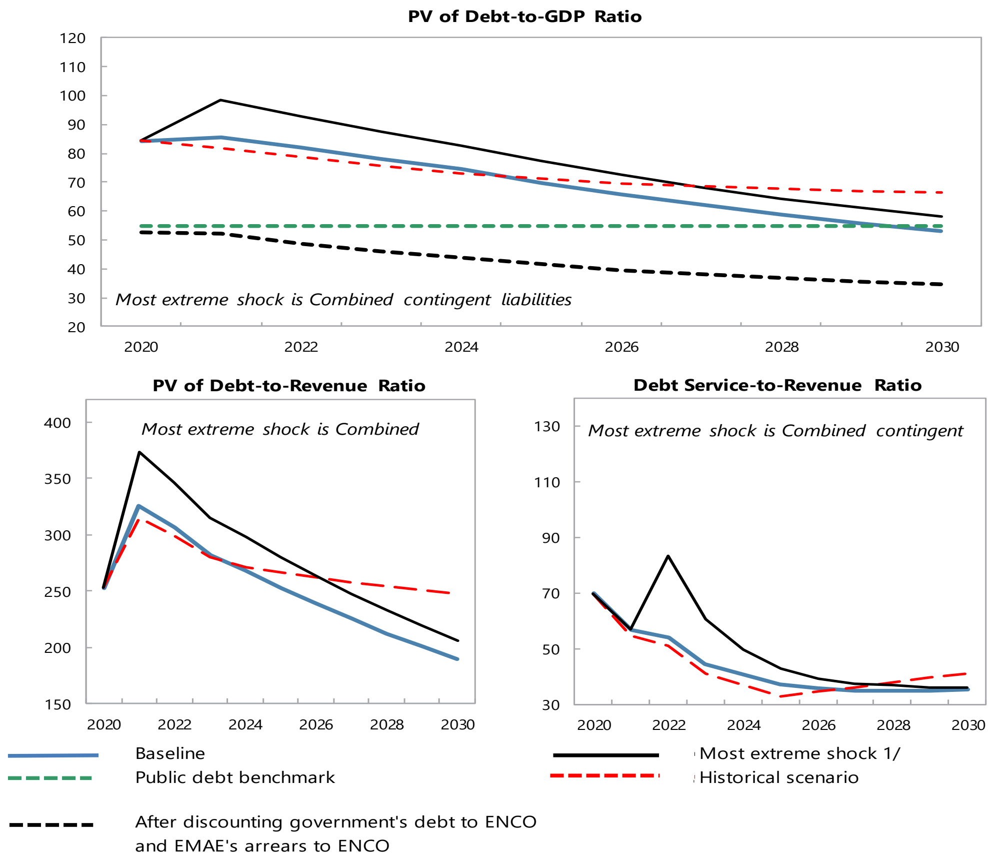
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2030. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

2/ The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.

Figure 2. São Tomé and Príncipe: Indicators of Public Debt Under Alternative Scenarios, 2020-2030



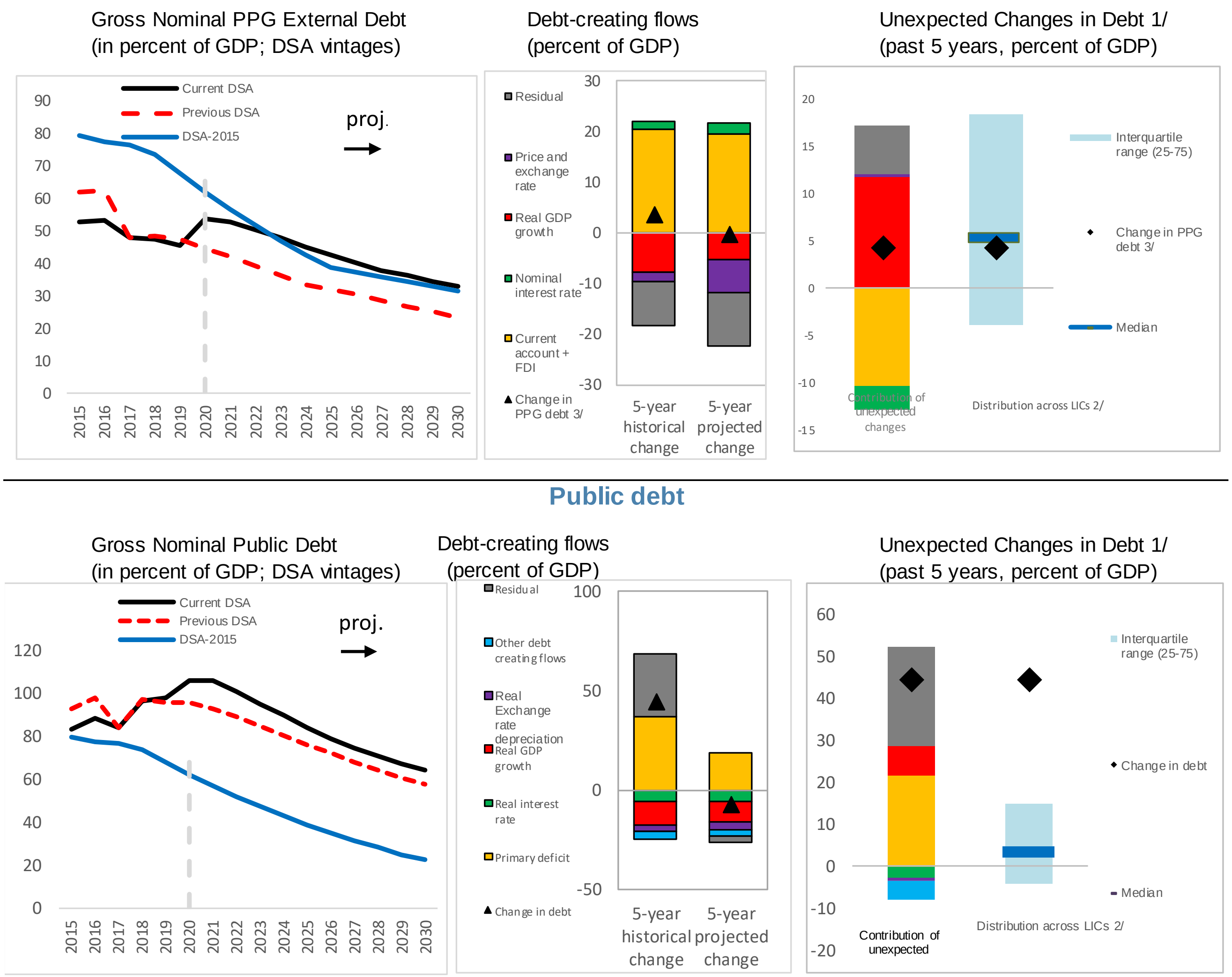
Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	31%	31%
Domestic medium and long-term	10%	10%
Domestic short-term	126%	59%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.8%	1.8%
Avg. maturity (incl. grace period)	23	23
Avg. grace period	9	9
Domestic MLT debt		
Avg. real interest rate on new borrowing	-3.0%	-3.0%
Avg. maturity (incl. grace period)	100	100
Avg. grace period	99	99
Domestic short-term debt		
Avg. real interest rate	-2.0%	-2.0%

* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2030. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Figure 3. São Tomé and Príncipe: Drivers of Debt Dynamics – Baseline Scenario–External Debt



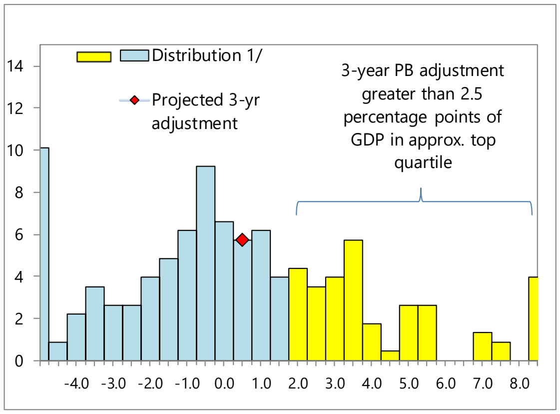
1/ Difference between anticipated and actual contributions on debt ratios.

2/ Distribution across LICs for which LIC DSAs were produced.

3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

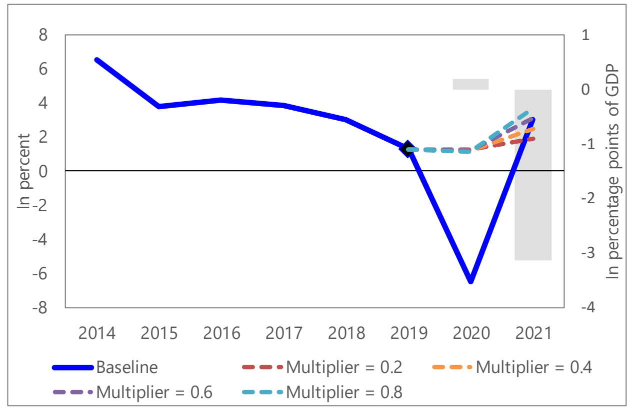
Figure 4. São Tomé and Príncipe: Realism Tools

3-Year Adjustment in Primary Balance
(Percentage points of GDP)



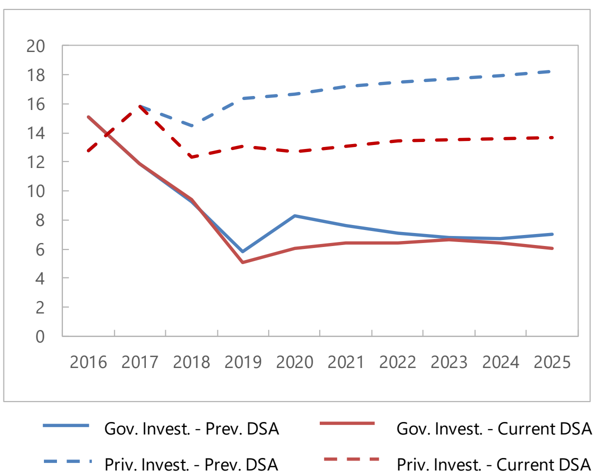
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

Public and Private Investment Rates
(% of GDP)



Contribution to Real GDP growth
(percent, 5-year average)

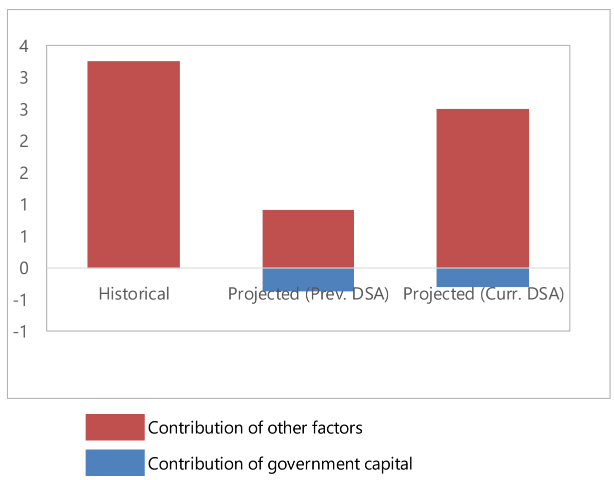


Table 1. São Tomé and Príncipe: External Debt Sustainability Framework, Baseline Scenario, 2018-2040

(In percent of GDP, unless otherwise indicated)

	Actual		Projections								Average 8/	
	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
External debt (nominal) 1/	47.7	45.7	53.8	52.6	50.5	48.0	45.3	42.8	33.0	27.6	**41.8**	**43.2**
of which: public and publicly guaranteed (PPG)	47.7	45.7	53.8	52.6	50.5	48.0	45.3	42.8	33.0	27.6	**41.8**	**43.2**
Change in external debt	-0.5	-2.0	8.1	-1.1	-2.1	-2.5	-2.7	-2.5	-1.6	0.2		
Identified net debt-creating flows	2.6	5.3	14.4	4.1	0.0	-0.6	-1.2	-1.1	-0.3	0.1	**4.8**	**1.2**
Non-interest current account deficit	12.1	11.9	17.1	11.6	8.6	7.5	7.0	7.4	8.2	6.8	**16.1**	**9.1**
Deficit in balance of goods and services	24.9	22.4	27.9	21.3	18.0	16.9	16.1	15.7	14.8	13.2	**35.2**	**17.4**
Exports	23.6	22.8	11.4	16.4	21.8	21.9	22.2	22.0	20.4	18.6		
Imports	48.5	45.2	39.3	37.6	39.9	38.8	38.3	37.8	35.1	31.8		
Net current transfers (negative = inflow)	-12.6	-10.3	-11.3	-9.8	-9.3	-9.3	-8.9	-8.3	-6.7	-6.4	**-18.8**	**-8.4**
of which: official	-8.7	-6.6	-9.3	-6.7	-6.1	-6.1	-5.7	-5.2	-3.5	-3.2		
Other current account flows (negative = net inflow)	-0.2	-0.2	0.5	0.2	-0.1	-0.1	-0.2	0.0	0.1	0.0	**-0.4**	**0.1**
Net FDI (negative = inflow)	-5.1	-6.4	-5.7	-6.3	-6.7	-6.7	-6.9	-7.1	-7.4	-6.0	**-8.7**	**-6.9**
Endogenous debt dynamics 2/	-4.4	-0.1	3.0	-1.2	-2.0	-1.5	-1.4	-1.4	-1.0	-0.8		
Contribution from nominal interest rate	0.2	0.6	-0.1	0.3	0.7	0.7	0.6	0.5	0.4	0.4		
Contribution from real GDP growth	-1.3	-0.6	3.1	-1.5	-2.7	-2.1	-2.0	-1.9	-1.4	-1.2		
Contribution from price and exchange rate changes	-3.3	-0.1	...	...	...	...	...	...	...	...		
Residual 3/	-3.1	-7.3	-6.3	-5.2	-2.1	-1.9	-1.5	-1.4	-1.3	0.1	**-3.4**	**-2.3**
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators												
PV of PPG external debt-to-GDP ratio	...	**27.0**	**33.2**	**33.4**	**32.5**	**31.4**	**29.9**	**28.7**	**22.0**	**16.8**		
PV of PPG external debt-to-exports ratio	...	**118.5**	**290.9**	**204.0**	**148.7**	**143.4**	**134.9**	**130.0**	**108.2**	**90.2**		
PPG debt service-to-exports ratio	**2.6**	**4.5**	**7.8**	**8.3**	**8.4**	**7.8**	**9.6**	**8.6**	**9.2**	**5.5**		
PPG debt service-to-revenue ratio	**3.7**	**5.6**	**3.7**	**6.9**	**8.9**	**7.9**	**9.6**	**8.4**	**7.6**	**3.4**		
Gross external financing need (Million of U.S. dollars)	31.8	27.4	48.8	28.4	17.4	12.7	12.0	12.8	21.8	29.2		
Key macroeconomic assumptions												
Real GDP growth (in percent)	3.0	1.3	-6.5	3.0	5.5	4.5	4.5	4.5	4.5	4.5	**4.2**	**3.5**
GDP deflator in US dollar terms (change in percent)	7.3	0.2	1.0	3.8	2.9	2.7	2.6	2.7	2.9	2.0	**4.4**	**2.8**
Effective interest rate (percent) 4/	0.4	1.2	-0.2	0.6	1.4	1.4	1.4	1.2	1.2	1.6	**0.9**	**1.1**
Growth of exports of G&S (US dollar terms, in percent)	13.9	-1.8	-52.7	53.1	44.9	7.5	8.7	6.8	5.8	5.6	**19.5**	**8.9**
Growth of imports of G&S (US dollar terms, in percent)	4.3	-5.3	-17.9	2.2	15.1	4.4	5.9	6.0	6.5	4.9	**7.5**	**4.1**
Grant element of new public sector borrowing (in percent)	...	...	36.6	35.7	35.6	34.5	34.5	34.5	34.5	34.5	**...**	**34.9**
Government revenues (excluding grants, in percent of GDP)	16.8	18.5	24.1	19.7	20.6	21.6	22.1	22.5	24.6	30.1	**17.7**	**22.7**
Aid flows (in Million of US dollars) 5/	40.5	31.1	54.7	33.7	33.8	30.5	30.4	29.5	28.7	49.9		
Grant-equivalent financing (in percent of GDP) 6/	...	...	11.7	7.8	7.3	6.8	6.4	5.8	4.2	3.9	**...**	**6.3**
Grant-equivalent financing (in percent of external financing) 6/	...	...	74.1	78.9	78.2	83.9	83.0	81.7	76.2	74.7	**...**	**79.1**
Nominal GDP (Million of US dollars)	416	422	398	426	463	497	533	572	822	1,569		
Nominal dollar GDP growth	10.6	1.5	-5.5	7.0	8.6	7.3	7.2	7.4	7.5	6.6	**8.7**	**6.3**
Memorandum items:												
PV of external debt 7/	...	27.0	33.2	33.4	32.5	31.4	29.9	28.7	22.0	16.8		
In percent of exports	...	118.5	290.9	204.0	148.7	143.4	134.9	130.0	108.2	90.2		
Total external debt service-to-exports ratio	2.6	4.5	7.8	8.3	8.4	7.8	9.6	8.6	9.2	5.5		
PV of PPG external debt (in Million of US dollars)		114.1	132.4	142.2	150.2	155.7	159.2	163.8	181.0	263.5		
(PVt-PVt-1)/GDPt-1 (in percent)			4.4	2.4	1.9	1.2	0.7	0.9	0.5	1.2		
Non-interest current account deficit that stabilizes debt ratio	12.6	13.9	9.0	12.7	10.7	10.0	9.7	10.0	9.7	6.6		

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g) + Ɛα (1+r)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, ρ = growth rate of GDP deflator in U.S. dollar terms, Ɛ=nominal appreciation of the local currency, and α= share of local currency-denominated external debt in total external debt.

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

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

6/ 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).

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

8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

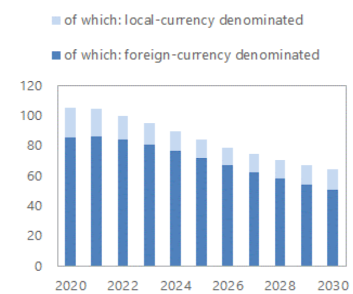
Table 2. São Tomé and Príncipe: Public Sector Debt Sustainability Framework, Baseline Scenario, 2018-2040

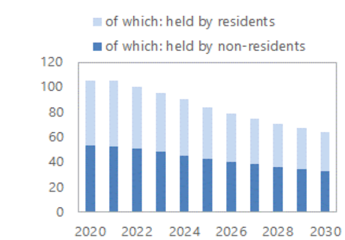
(In percent of GDP, unless otherwise indicated)

	Actual		Projections								Average 6/	
	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
Public sector debt 1/	**96.2**	**97.7**	**105.2**	**105.1**	**100.3**	**95.0**	**90.1**	**84.2**	**64.3**	**60.6**	**65.0**	**85.1**
of which: external debt	**47.7**	**45.7**	**53.8**	**52.6**	**50.5**	**48.0**	**45.3**	**42.8**	**33.0**	**27.6**	**41.8**	**43.2**
Change in public sector debt	11.9	1.5	7.5	-0.1	-4.8	-5.3	-4.9	-5.9	-3.1	10.2		
Identified debt-creating flows	**6.0**	**-0.4**	**7.5**	**0.6**	**-4.1**	**-4.6**	**-4.4**	**-5.5**	**-3.2**	**9.8**	**3.1**	**-2.8**
Primary deficit	**8.0**	**4.3**	**4.1**	**7.2**	**3.7**	**1.8**	**1.6**	**0.4**	**1.2**	**12.5**	**7.6**	**2.1**
Revenue and grants	25.2	25.0	33.4	26.3	26.7	27.7	27.8	27.6	28.1	33.2	**30.8**	**28.0**
of which: grants	8.3	6.6	9.3	6.7	6.1	6.1	5.7	5.2	3.5	3.2		
Primary (noninterest) expenditure	33.2	29.3	37.5	33.5	30.4	29.5	29.4	28.0	29.3	45.7	**38.4**	**30.1**
Automatic debt dynamics	**-1.7**	**-3.9**	**4.3**	**-5.9**	**-7.1**	**-5.8**	**-5.4**	**-5.3**	**-4.1**	**-2.6**		
Contribution from interest rate/growth differential	-4.2	-2.9	5.3	-4.6	-6.5	-5.2	-4.9	-4.8	-3.6	-2.6		
of which: contribution from average real interest rate	-1.7	-1.7	-1.5	-1.5	-1.0	-0.9	-0.8	-0.9	-0.7	-0.4		
of which: contribution from real GDP growth	-2.5	-1.2	6.8	-3.1	-5.5	-4.3	-4.1	-3.9	-2.9	-2.2		
Contribution from real exchange rate depreciation	2.5	-1.0	...	...	...	...	...	...	...	...		
Denominator = 1+g	1.0	1.0	0.9	1.0	1.1	1.0	1.0	1.0	1.0	1.0		
Other identified debt-creating flows	**-0.3**	**-0.8**	**-0.8**	**-0.7**	**-0.6**	**-0.6**	**-0.6**	**-0.6**	**-0.3**	**-0.1**	**-0.8**	**-0.5**
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	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)	-0.3	-0.8	-0.8	-0.7	-0.6	-0.6	-0.6	-0.6	-0.3	-0.1		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	**5.9**	**1.9**	**-1.0**	**-2.0**	**-1.4**	**-1.2**	**-1.1**	**-1.0**	**-0.3**	**0.4**	**3.5**	**-0.9**
Sustainability indicators												
PV of public debt-to-GDP ratio 2/	**...**	**79.2**	**84.6**	**85.9**	**82.3**	**78.4**	**74.7**	**70.1**	**53.3**	**49.8**		
PV of public debt-to-revenue and grants ratio	**...**	**316.3**	**253.4**	**326.1**	**307.8**	**282.7**	**268.8**	**253.7**	**189.7**	**149.8**		
Debt service-to-revenue and grants ratio 3/	**...**	**...**	**68.2**	**54.9**	**53.4**	**44.6**	**41.3**	**38.0**	**35.7**	**34.7**		
Gross financing need 4/	8.5	5.3	26.0	21.0	17.3	13.5	12.5	10.4	10.9	23.9		
Key macroeconomic and fiscal assumptions												
Real GDP growth (in percent)	3.0	1.3	-6.5	3.0	5.5	4.5	4.5	4.5	4.5	4.5	**4.2**	**3.5**
Average nominal interest rate on external debt (in percent)	0.4	1.3	-0.2	0.6	1.4	1.4	1.4	1.2	1.2	1.6	**0.9**	**1.1**
Average real interest rate on domestic debt (in percent)	-2.5	-5.4	-2.8	-2.9	-2.9	-2.9	-2.7	-2.7	-2.8	-2.0	**-6.4**	**-2.8**
Real exchange rate depreciation (in percent, + indicates depreciation)	3.8	-1.4	...	...	...	...	...	...	...	...	**-2.3**	**...**
Inflation rate (GDP deflator, in percent)	2.6	5.7	3.5	3.0	3.0	2.9	2.8	2.8	2.9	2.0	**7.3**	**3.0**
Growth of real primary spending (deflated by GDP deflator, in percent)	-0.2	-10.4	19.4	-7.8	-4.4	1.4	4.1	-0.3	6.1	40.0	**-0.2**	**3.6**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-3.9	2.8	-3.4	7.3	8.5	7.1	6.5	6.3	4.2	2.3	**3.1**	**5.1**
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Memorandum Item												
Primary deficit with HIPC grants and without EMAE loss	4.4	-0.3	-1.0	1.6	-0.7	-1.3	-0.4	-1.4	0.8	12.4	**5.6**	**-0.1**
EMAE loss	3.3	3.8	4.3	5.0	3.7	2.5	1.4	1.2	0.0	0.0	**1.2**	**1.6**

Definition of external/domestic debt	**Residency-based**
Is there a material difference between the two criteria?	**Yes**

Public sector debt 1/





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government plus social security and extra budgetary funds, central bank, government-guaranteed debt. Definition of external debt is Residency-based.

2/ The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

4/ 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 and other debt creating/reducing flows.

5/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio ((-): a primary surplus), which would stabilizes the debt ratio only in the year in question.

6/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

Table 3. São Tomé and Príncipe: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2020–2030

	Projections 1/										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of debt-to GDP ratio											
Baseline	33	33	32	31	30	29	27	26	24	23	22
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	33	33	36	39	**41**	**44**	**46**	**48**	**49**	**51**	**53**
B. Bound Tests											
B1. Real GDP growth	33	34	34	33	31	30	28	27	26	24	23
B2. Primary balance	33	36	**40**	39	37	36	34	33	31	30	28
B3. Exports	33	37	**45**	**44**	**42**	**40**	38	37	35	33	32
B4. Other flows 3/	33	**40**	**47**	**46**	**44**	**42**	**40**	39	37	35	34
B5. One-time 30 percent nominal depreciation	33	**41**	35	34	33	32	30	28	27	25	24
B6. Combination of B1-B5	33	**43**	**45**	**44**	**42**	**40**	38	37	35	33	32
C. Tailored Tests											
C1. Combined contingent liabilities	33	**77**	**75**	**72**	**70**	**68**	**65**	**62**	**60**	**57**	**55**
C2. Natural disaster	33	40	39	38	37	36	34	33	31	30	29
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	**285**	**200**	147	142	135	130	125	120	116	112	108
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	**285**	**205**	165	177	**186**	**198**	**211**	**223**	**235**	**247**	**260**
B. Bound Tests											
B1. Real GDP growth	**285**	**200**	147	142	135	130	125	120	116	112	108
B2. Primary balance	**285**	**218**	**184**	178	169	164	158	153	148	143	139
B3. Exports	**285**	**367**	**512**	**497**	**472**	**456**	**441**	**428**	**414**	**403**	**392**
B4. Other flows 3/	**285**	**247**	**216**	**210**	**199**	**193**	**187**	**181**	176	171	166
B5. One-time 30 percent nominal depreciation	**285**	**200**	129	126	119	114	110	105	101	97	94
B6. Combination of B1-B5	**285**	**352**	**192**	**362**	**344**	**332**	**321**	**311**	**301**	**292**	**284**
C. Tailored Tests											
C1. Combined contingent liabilities	**285**	**472**	**342**	**332**	**316**	**307**	**299**	**291**	**284**	**278**	**271**
C2. Natural disaster	**285**	**246**	**181**	176	168	163	159	154	150	147	144
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio											
Baseline	12	8	7	7	9	8	10	10	10	9	9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	12	8	7	7	9	9	11	11	12	12	12
B. Bound Tests											
B1. Real GDP growth	12	8	7	7	9	8	10	10	10	9	9
B2. Primary balance	12	8	8	8	10	9	11	11	10	10	10
B3. Exports	12	13	**20**	**21**	**25**	**24**	**28**	**28**	**27**	**26**	**26**
B4. Other flows 3/	12	8	8	9	10	10	12	11	11	11	10
B5. One-time 30 percent nominal depreciation	12	8	7	6	8	8	10	10	9	9	9
B6. Combination of B1-B5	12	12	**16**	**16**	**19**	**18**	**22**	**21**	**21**	**20**	**20**
C. Tailored Tests											
C1. Combined contingent liabilities	12	8	12	12	13	13	14	14	14	13	13
C2. Natural disaster	12	8	8	8	10	9	11	11	11	10	10
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio											
Baseline	6	7	8	7	9	8	10	9	9	8	8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	6	7	8	7	9	9	11	10	10	10	10
B. Bound Tests											
B1. Real GDP growth	6	7	8	7	9	9	10	10	9	8	8
B2. Primary balance	6	7	8	8	10	9	10	10	9	9	8
B3. Exports	6	7	8	9	10	10	11	10	10	9	9
B4. Other flows 3/	6	7	9	9	10	10	11	10	10	9	9
B5. One-time 30 percent nominal depreciation	6	9	10	8	10	10	12	11	10	10	9
B6. Combination of B1-B5	6	7	9	9	11	10	11	11	10	9	9
C. Tailored Tests											
C1. Combined contingent liabilities	6	7	13	12	13	12	13	13	12	11	11
C2. Natural disaster	6	7	9	8	9	9	10	10	9	9	8
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	18	18	18	18	18	18	18	18	18	18	18

Sources: Country authorities; and staff estimates and projections.

1/ A bold value indicates a breach of the threshold.

2/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.

3/ Includes official and private transfers and FDI.

Table 4. São Tomé and Príncipe: Sensitivity Analysis for Key Indicators of Public Debt, 2020–2030

	Projections 1/										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of Debt-to-GDP Ratio											
Baseline	**84**	**86**	**82**	**78**	**74**	**70**	**66**	**62**	**59**	**56**	53
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	**84**	**82**	**79**	**76**	**73**	**71**	**70**	**68**	**68**	**67**	**67**
B. Bound Tests											
B1. Real GDP growth	**84**	**88**	**87**	**84**	**80**	**76**	**72**	**69**	**66**	**63**	**61**
B2. Primary balance	**84**	**90**	**92**	**87**	**82**	**77**	**72**	**68**	**64**	**61**	**58**
B3. Exports	**84**	**90**	**95**	**90**	**86**	**81**	**77**	**73**	**69**	**66**	**63**
B4. Other flows 3/	**84**	**93**	**97**	**93**	**89**	**84**	**79**	**75**	**71**	**68**	**65**
B5. One-time 30 percent nominal depreciation	**84**	**90**	**84**	**79**	**74**	**68**	**62**	**57**	52	48	44
B6. Combination of B1-B5	**84**	**85**	**86**	**77**	**72**	**66**	**62**	**58**	**55**	52	49
C. Tailored Tests											
C1. Combined contingent liabilities	**84**	**98**	**93**	**87**	**83**	**77**	**72**	**68**	**64**	**61**	**58**
C2. Natural disaster	**84**	**96**	**91**	**86**	**82**	**77**	**72**	**68**	**65**	**62**	**59**
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public debt benchmark	55	55	55	55	55	55	55	55	55	55	55
PV of Debt-to-Revenue Ratio											
Baseline	253	325	307	282	268	253	239	225	212	201	189
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	253	315	299	280	272	267	262	258	254	251	247
B. Bound Tests											
B1. Real GDP growth	253	333	322	298	285	272	259	247	235	226	215
B2. Primary balance	253	341	346	314	296	278	262	246	231	219	205
B3. Exports	253	341	354	326	310	294	278	264	249	237	224
B4. Other flows 3/	253	355	364	335	319	303	287	272	257	245	231
B5. One-time 30 percent nominal depreciation	253	350	321	291	270	250	229	209	190	174	157
B6. Combination of B1-B5	253	327	322	278	260	242	227	213	199	188	176
C. Tailored Tests											
C1. Combined contingent liabilities	253	373	347	315	298	280	263	248	232	220	206
C2. Natural disaster	253	364	340	310	294	278	262	248	233	222	209
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Debt Service-to-Revenue Ratio											
Baseline	70	57	54	45	41	37	36	35	35	35	35
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	70	55	51	41	37	33	35	36	38	40	41
B. Bound Tests											
B1. Real GDP growth	70	58	57	49	46	43	42	42	42	42	42
B2. Primary balance	70	57	64	66	53	45	40	38	37	37	36
B3. Exports	70	57	55	46	42	38	37	36	36	36	36
B4. Other flows 3/	70	57	55	46	42	38	37	36	36	36	36
B5. One-time 30 percent nominal depreciation	70	54	53	42	41	37	36	35	35	35	35
B6. Combination of B1-B5	70	55	53	49	42	36	35	34	34	34	34
C. Tailored Tests											
C1. Combined contingent liabilities	70	57	83	60	50	43	39	38	37	36	36
C2. Natural disaster	70	57	76	57	49	43	40	39	38	38	38
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the benchmark.
2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.
3/ Includes official and private transfers and FDI.