INTERNATIONAL MONETARY FUND

DEMOCRATIC REPUBLIC OF SÃO TOMÉ AND PRÍNCIPE

FIFTH REVIEW UNDER THE EXTENDED CREDIT FACILITY, FINANCING ASSURANCES REVIEW AND REQUEST FOR WAIVER OF NONOBSERVANCE OF PERFORMANCE CRITERION

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

São Tomé and Príncipe: Joint Bank-Fund Debt Sustainability Analysis	
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 of more than 2 percent of GDP. Staff assesses that the country has the capacity to repay the external arrears over time, despite of the mechanical risk rating of high risk for debt distress for external and public debt. While the present value (PV) of the external public and publicly guaranteed (PPG) debt-to-exports ratio breaches its threshold from 2021 to 2022 due to the COVID-19 shock, all other external PPG debt burden indicators remain below their thresholds throughout the projection horizon in the baseline scenario. The PV of total PPG debt (after accounting for the concessional terms of EMAE (a state-owned utility company) and central government debt and arrears to the country's fuel supplier, ENCO) is projected to breach the benchmark associated with a weak debt-carrying capacity[1] (35 percent of GDP) through 2024. As the downward trajectory of the public debt remains intact, predicated on the authorities' commitment to implement EMAE's planned reforms, to borrow externally only on concessional terms at a measured pace, to a gradual fiscal consolidation, and to the planned energy reforms, public debt sustainability is preserved but subject to large risks. The likelihood of contingent liabilities materializing is elevated.

[1] The thresholds are determined by the Composite Indicator (CI). São Tomé and Príncipe's CI score based on the April 2022 World Economic Outlook (WEO) and the 2020 World Bank Country Policy Institutional Assessment (CPIA) data is 2.68, corresponding to a *weak* debt-carrying capacity.

PUBLIC DEBT AND BACKGROUND

1. **Macroeconomic assumptions underlying this DSA update are consistent with the macroframework in the staff report and broadly in line with the previous DSA**. Real GDP growth is estimated at 1.9 percent in 2021, weighed down by power outages. Headline inflation rose to 9.5 percent (y-o-y) by end-December, driven by high food prices. In 2022, sharp increases in imported commodities, higher freight, and maritime costs are expected to weaken transportation and commercial services and slow fishing and agriculture activities. As a result, the growth is expected to decline to 1.4 percent in 2022 and headline inflation to reach about 17 percent (y-o-y) in 2022. Gross financing needs are projected to increase in 2022, mainly reflecting reconstruction needs in the aftermath of the end-December 2021 floods, which have been largely supported by grants from donors. GDP growth rates are expected to average 3.7 percent over the long term, reflecting development in tourism and infrastructure. In the medium-term, inflation is expected to decline with global prices stabilizing, and the projected average is 3.0 percent over the long term. Projections for grants over the long run are 7.4 percent of GDP on average, and domestic primary deficits are expected to average 0.4 percent of GDP. Higher projections for FDI inflows over the long run, reflecting higher projected oil related FDI based on higher oil prices. As a result of higher international food and fuel prices, imports are projected to be higher compared to the April 2022 DSA. There are some upward revisions to exports to reflect higher food prices and continued recovery in tourism with the good performance of tourism in 2022Q1. With the revisions to trade values, current account deficits are projected to be higher than the previous DSA with an average of 8 percent of GDP over the long term. With the fifth tranche of the IMF's Catastrophe and Containment Relief Trust (CCRT) covering the period of January to April 2022, São Tomé and Príncipe has received debt service relief of SDR 0.1 million. The total debt service relief received under CCRT amounted to SDR 0.7 million from April 2020 through April 2022. STP has participated in the DSSI and has formally requested participation in the final extension[2].

[2] Under DSSI, the deferred debt service was estimated at USD 4.6 million between May and December 2020 as reported by creditors in November 2020. Actual reported deferrals as per WBD/IDS as of end-2020 published in October 2021, are USD 0.6 million. The debt service to be deferred is estimated at USD 0.0 million between January to June 2021 as reported by creditors at end-June 2021. For the final extension, potential DSSI savings are estimated at USD 2.8 million, which are defined as the total debt service to all official bilateral creditors based on DOD as of end-2020 (WB IDS).

Text Table 1. São Tomé and Príncipe: Macroeconomic Assumptions

	Historical		Forecasts	
	Apr 2022 DSA	Last 4 years	Apr 2022 DSA[1]	This DSA
	2017-20	2017-20	2021-41	2021-41
Real GDP growth (percent)	3.0	3.0	3.7	3.7
Inflation (percent average)	4.3	4.3	2.8	3.0
Domestic primary balance (percent of GDP)	-4.6	-4.7	-0.6	-0.4
Grants (percent of GDP)	8.9	8.9	7.2	7.4
FDI (percent of GDP)	6.6	6.6	5.4	10.6
USD export growth (percent)	-11.9	-11.3	8.5	9.9
USD import growth (percent)	-1.7	-1.8	5.7	6.5
Current account balance, including grants (percent of GDP)	-12.0	-12.2	-5.9	-8.0
Current account balance, excluding grants (percent of GDP)	-21.1	-21.3	-9.6	-15.9

1 IMF Country Report No. 2022/95

2. **Public debt coverage remains the same as in the April 2022 DSA**. For the purpose of the DSA for São Tomé and Príncipe, PPG debt includes central government and EMAE (Empresa de Água e Electricidade, a state-owned utility company) debt.[3,4] EMAE has been accumulating arrears over the years to its fuel supplier, ENCO (Empresa Nacional de Combustíveis e Óleos), totaling 26.3 percent of GDP at end-2021 The public-sector debt coverage is comprehensive albeit not yet complete (Text Table 2). Three state owned enterprises (SOEs) besides EMAE— ENAPORT, ENASA,

Text Table 2. 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.

[3] The DSA includes the concessional terms of the recent restructuring of EMAE's debt to the country's fuel supplier, ENCO. ENCO is a private company owned by Sonangol (77.6 percent of capital), an Angolan state-owned company, with the government of Sao Tome and Principe owning about 16 percent of the company's share capital. In 2019, EMAE and ENCO signed an agreement on the regularization of EMAE's arrears to ENCO in the amount of $104.4 million.

[4] Consistent with the previous DSA, pre-HIPC initiative arrears to Angola ($36 million) and to Italy ($24.3 million) are excluded, since the country is making best efforts to reach an agreement consistent with the representative Paris Club agreement. It also excludes the disputable Nigeria debt (30 million), as there is no signed contract with repayment conditions between the two countries.

and *Correios*—are not included in the analysis due to lack of reliable data.[5] The DSA uses the residency-based classification on external debt. Contingent liabilities are captured in the contingent liability stress test (Text Table 3). Contingent liabilities from the other SOEs and financial markets are set at their default values. In addition, the contingent liability stress test includes disputed debt of

Text Table 3. 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	52 for external and public DSA; 18 for a customized shock for public DSA	Includes the loan from Nigeria (5.8 percent of GDP), which is under dispute and Permanent Court of Arbitration fine (2.4 percent of GDP) for public and external DSAs to be prudent. Includes assumptions of ENCO's debt to Sonangol (43.6 percent of GDP)[2/] for external DSA and public DSA. We also show a customized ENCO shock scenario of 9.7 percent of GDP for Public DSA[3/].
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)	59 percent of GDP for external DSA and public DSA; alternative shock of 25 percent of GDP for public 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/] Here we include the full size of ENCO's debt and arrears to its parent company Sonangol to capture the extreme shock of total debt of ENCO to Sonangol. While STP's government currently only owns 16 percent shares of ENCO, and Sonangol (an Angola SOE) owns around 78 percent shares of ENCO.

[3/] The customized ENCO shock scenario is based on staff estimates of the potential burden on general government finances arising from the assumption of ENCO's debt to Sonangol, after netting out any related debts that are already included in the baseline, which is shown as the pink dotted lines in Figure 2.

Sources: IMF and World Bank staff.

[5] ENAPORT and ENASA continue to improve data collection efforts, and the scope of the debt coverage is expected to be expanded in the DSAs in the future.

$30 million owed to Nigeria. The authorities maintain that its repayment was conditional on oil revenues, which have no near-term prospect for materialization. Estimated fines of $12.4 million (2.4 percent of GDP) imposed by the Permanent Court of Arbitration after its ruling on the country's seizure of a Maltese ship in 2013 are also included in the shock. Pre-HIPC arrears are excluded. Finally, the contingent liability shock also includes assumptions on ENCO's external debt and arrears to Sonangol, estimated at $226 million (43.6 percent of GDP) in 2021. Total PPG debt reached around 92 percent of GDP in 2021, including external debt of 45 percent of GDP (Text Table 4).

Text Table 4. São Tomé and Príncipe: Decomposition of Public Debt and Debt Service by Creditor, 2020-22[1]

	2021			Debt Service					
				2020	2021	2022	2020	2021	2022
	(In US$ mil)	*(Percent total debt)*	*(Percent GDP)*	*(In US$ mil)*			*(Percent GDP)*		
Total	475.1	100.0	91.7	5.1	3.2	12.2	1.1	0.6	2.4
External	231.1	48.6	44.6	2.6	0.0	7.6	0.5	0.0	1.5
Multilateral creditors[2]	82.6	17.4	15.9	1.7	0.0	2.8	0.4	0.0	0.5
IMF	31.9	6.7	6.2						
World Bank	11.3	2.4	2.2						
ADB/AfDB/IADB	19.0	4.0	3.7						
Other Multilaterals	20.5	4.3	4.0						
o/w: Arab Bank for Economic Development in Africa	13.4	2.8	2.6						
o/w : International Fund for Agricultural Development	4.8	1.0	0.9						
Bilateral Creditors	114.2	24.0	22.1	0.8	0.1	4.8	0.2	0.0	0.9
Paris Club	5.1	1.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
o/w: Belgium	0.8	0.2	0.2						
Non-Paris Club	109.1	23.0	21.1	0.8	0.1	4.8	0.2	0.0	0.9
o/w: Angola	52.7	11.1	10.2						
o/w: Portugal	56.4	11.9	10.9						
o/w: Nigeria[3]	0.0	0.0	0.0						
Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial creditors	34.3	7.2	6.6	0.0	0.0	0.0	0.0	0.0	0.0
o/w: China	10.0	2.1	1.9						
o/w: Italy [4]	24.3	5.1	4.7						
Domestic	244.0	51.4	47.1	2.5	3.2	4.7	0.5	0.7	1.0
Held by residents, total	NA	NA	NA						
Held by non-residents, total	NA	NA	NA						
T-Bills	27.6	5.8	5.3						
Bonds	0.0	0.0	0.0						
Loans	216.3	45.5	41.8						
Memo Items:									
Collateralized debt[5]	0.0	0.0	0.0						
o/w: Related	0.0	0.0	0.0						
o/w: Unrelated	0.0	0.0	0.0						
Contingent liabilities[6]	119.3	25.1	25.0						
o/w: Public guarantees	0.0	0.0	0.0						
o/w: Other explicit contingent liabilities[7]	0.0	0.0	0.0						
Nominal GDP	518			477	518	506			

1/As reported by Country authorities according to their classification of creditors, including by official and commercial. Debt coverage is the same as the DSA.

2/ "Multilateral creditors" are simply institutions with more than one official shareholder and may not necessarily align with creditor classification under other IMF policies (e.g. Lending Into Arrears)

3/ Individual creditors accounting for more than 5 percent of total debt. The debt with Nigerian is disputed so it is not included in the DSA.

4/ Commercial loans with Italy are classified as technical external arrears and excluded in the DSA.

5/ Debt is collateralized when the creditor has rights over an asset or revenue stream that would allow it, if the borrower defaults on its payment obligations, to rely on the asset or revenue stream to secure repayment of the debt. Collateralization entails a borrower granting liens over specific existing assets or future receivables to a lender as security against repayment of the loan. Collateral is "unrelated" when it has no relationship to a project financed by the loan. An example would be borrowing to finance the budget deficit, collateralized by oil revenue receipts. See the joint IMF-World Bank note for the G20 "Collateralized Transactions: Key Considerations for Public Lenders and Borrowers" for a discussion of issues raised by collateral.

6/ As defined in the customized contingent liabilities stress test, contingent liabilities are estimated at 25 percent of GDP for public DSA. Contingent liabilities are estimated at 59 percent of GDP for the extreme shock scenarios for external and public DSA.

7/ Includes other-one off guarantees not included in publicly guaranteed debt (e.g. credit lines) and other explicit contingent liabilities not elsewhere classified (e.g. potential legal claims, payments resulting from PPP arrangements).

3. **São Tomé and Príncipe continues to be assessed as having weak debt-carrying capacity.** Based on the April 2022 WEO macroeconomic indicators and World Bank's 2020 Country Policy and Institutional Assessment (CPIA), the country's Composite Indicator (CI) score is 2.675, below the lower cut-off value of 2.69, indicating a weak debt-carrying capacity rating[6] (Text Table 5).

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[6] The authorities are strengthening debt management. As part of the World Bank's SDFP (Sustainable Development Finance Policy) framework, one of the performance and policy actions (PPA) was to not enter into any contractual obligations for new external non-concessional debt. This has been implemented successfully. Moreover, to strengthen domestic revenue, the authorities has approved the excise tax code and issues the VAT refund regulations.

Text Table 5. 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
Weak	Weak	Weak	Weak
	2.675	2.673	2.663

Applicable thresholds

APPLICABLE	
EXTERNAL debt burden thresholds	
PV of debt in % of	
Exports	140
GDP	30
Debt service in % of	
Exports	10
Revenue	14

APPLICABLE	
TOTAL public debt benchmark	
PV of total public debt in percent of GDP	35

4. **The DSA incorporates the costs and risks of natural disasters in the tailored natural disaster stress test.** São Tomé and Príncipe is vulnerable to natural disasters that are influenced by climatic factors. Floods frequently affect this island nation with heavy rainfall events and storms, which could cause soil erosion, landslides, increase the risk of waterborne diseases, and decrease crop production. The tailored stress test assumes a one-off natural disaster shock of 10 percent of GDP to external PPG debt-GDP ratio in the second year of the projection period, with associated real GDP growth shock of 1.5 percent of GDP and associated exports growth shock of 3.5 percent of GDP. The results of our analysis indicate that, by the end of 2026, a natural disaster shock may increase PV of public debt-to-GDP ratio from 56 percent of GDP under the baseline scenario to 62 percent of GDP under the stress-test scenario, and PV of external debt-to-GDP ratio will increase from 21 percent of GDP under the baseline scenario to 26 percent of GDP under the stress-test scenario.

RISK RATING AND DEBT SUSTAINABILITY

5. **São Tomé and Príncipe continues to engage actively with bilateral creditors to regularize post-HIPC arrears, the debt distress rating reflects the ongoing regularization of external arrears.** In total, post-HIPC arrears stood at 2.1 percent of 2021 GDP (US$10.7 million), which are 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 through correspondence and high-level meetings and reached some progress with technical steps. These post-HIPC arrears are reflected in the debt stock. 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 lossmaking state-owned enterprise, EMAE, and continues to borrow externally at concessional terms.

6. Despite the debt distress rating, the DSA indicates that total external PPG debt is sustainable under the program baseline. Under the baseline scenario[7], the external PPG debt stock and debt service ratios remain below the DSA threshold values throughout the projection horizon, except for some temporary breaches (Figure 1). The PV of PPG external debt-to-GDP ratio remains below the threshold of 30 percent throughout the period, and the PV of PPG external debt-to-exports ratio remains below the threshold of 140 percent of GDP from 2023 onward. The improvement of the solvency indicators and liquidity indicators over the medium term reflect fiscal consolidation, cautious external borrowing, economic growth, and an improved current account balance. The positive medium-term macroeconomic outlook helps to support debt sustainability, as growth is projected to recover and reach 4 percent in the medium term, supported by better infrastructure and a stronger potential for tourism. Fiscal consolidation is also an essential element to maintain debt sustainability. The authorities remain committed to a gradual fiscal consolidation, including implementation of revenue measures and expenditure measures aimed at achieving DPB goals, such as improving management of capital spending projects, curtailing non-essential administrative spending, and VAT reforms. In addition, energy reforms[8] with continued reliance on the fuel price adjustment mechanism with price smoothing would help to prevent implicit fuel subsidies and contain fiscal and debt risks. The liquidity indicators remain below their threshold values of 10 and 14 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. Compared to the previous DSA, the upwards revisions to exports have lowered PV of debt-to-exports and debt service-to-exports ratios, which help to lower liquidity risks and have led to smaller debt threshold breaches. These results suggest that the external PPG debt is sustainable. However, risks of external debt are considerable as the indicator of external debt-service-to-exports ratio of the baseline scenario is dangerously close to its threshold, and baseline scenarios diverge considerably from historical scenarios, as historical scenarios suggesting an upward trend of debt path without fiscal consolidation and energy reforms.

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[7] Consistent with the Guidance Note, IDA financing in the LIC DSA is assumed to be under the credit terms for an IDA-small economy for all years in the projection period for which grant finance has not already been committed. External financing assumptions are 5 percent for the discount rate, 0.25 percent interest rate for IMF financing, 0.75 percent interest rate with 40-year maturity and 10-year grace period for IDA small economy financing, and 2 percent for loans from other creditors. Domestic financing assumptions include the usage of T-bills and ODC's credit to government based on the macroframework.

[8] Resolving energy sector inefficiencies requires a multi-pronged reform approach. Key measures include: i) implement short-term measures to contain EMAE's losses such as installing new meters, improving payment discipline, rolling out LED bulbs program (SB), and fostering a transition to renewable energy sources; ii) rely on the automatic fuel price adjustment mechanism and maintaining retail fuel prices aligned with international markets (continuous SB) to prevent implicit fuel subsidies and contain fiscal risks; and iii) strengthen targeted social transfer programs for the most vulnerable, supported by development partners.

7. While the baseline scenario of external debt is sustainable, stress tests suggest the vulnerability of external debt in the presence of extreme shocks. The solvency indicators breach their threshold values under the most extreme shock scenario. Stress tests suggest the vulnerability of external debt. One of the most extreme shock scenarios is the combined contingent liability shock (for debt-to-GDP and debt service-to-revenue ratio), suggesting the importance of developing plans to reduce contingent liabilities and arrears. The likelihood of contingent liabilities materializing is elevated. With significant increases in commodity prices, especially fuel prices, it highlights the importance of energy reforms to mitigate negative impacts of high commodity prices on contingent liabilities. The most extreme shock for debt-to-exports ratio and for debt service-to-exports ratio is an exports shock, which suggests the importance of promoting strong export growth.

8. Total PPG debt is deemed sustainable under the baseline scenario, after discounting EMAE's and the central government's debt and arrears to ENCO and accounting for essential fiscal and energy reforms. Under the baseline, the PV of PPG debt is projected to have a downward trajectory, while the levels breach the DSA benchmark of 35 percent through 2030. After accounting for the concessional terms of EMAE's and central government's debt to ENCO governed by a 2019 repayment agreement[9] (with fixed annual payments, no interest and a grant element over 80 percent), the PV of PPG debt is projected to breach the DSA threshold of 35 percent through 2024 before gradually declining to around 14 percent of GDP by 2031 (Figure 2). As its downward trajectory remains intact, predicated on the authorities' commitment to continue its fiscal consolidation, implement EMAE's planned reforms, and borrow externally only on concessional terms at a measured pace, public debt sustainability is preserved but now subject to large risks. As suggested by the realism tool (Figure 3 and 4), the worsening in the primary balance over the next 3-years is in the bottom quartile of the distribution[10], reflecting the unwinding of temporary external support which supported the fiscal surplus in 2020. The projected scaling-ups of public investment will be supported by the authorities' intentions to improve public investment management and enact reforms which will allow for additional domestic financing. Higher private investments, driven by higher oil related investments, are expected to yield a growth dividend in line with historical factors. In this regard, it would be important to develop an active plan to gradually strengthen São Tomé and Príncipe's debt-carrying capacity against a very uncertain global economic backdrop and preserve debt sustainability. Should downside risks materialize and lead to a further deterioration of the debt situation (compared to staff's baseline), additional fiscal efforts and an improved financing mix (geared toward more grants and highly concessional borrowing) would be needed to safeguard debt sustainability.

[9] Presented as the black dash line in Figure 2.

[10] The realism tool outputs compared the projections to cross-country experiences and to São Tomé and Príncipe's own historical experience. The results of the projected 3-year adjustment in primary balance are calculated based on data of 2023 compared to 2020. The results will be quite different when using 2025 compared to 2022, which will show an improvement of 4.2 percent of GDP in primary balances.

9. **Public debt ratios are sensitive to a combined contingent liabilities shock.** Under such shocks, the total PPG debt ratios (PV of debt-to-GDP, PV of debt-to-revenue) and debt service-to-revenue ratio would rise in the near term before declining gradually in the medium-to-long term. The high public debt service-to-revenue ratio under the stress test of the combined contingent liabilities indicate substantial liquidity risks under such shocks. The dotted pink lines in Figure 2 show the customized combined contingent liability shock scenario with calculated amount of ENCO's debt to Sonangol, which result in smaller shock than the most extreme shock, but the debt levels will also rise to above the benchmarks. 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. The results of stress tests on public debt also highlight the importance of proper management of contingent liabilities and implementation of energy reforms to mitigate risks of contingent liabilities.

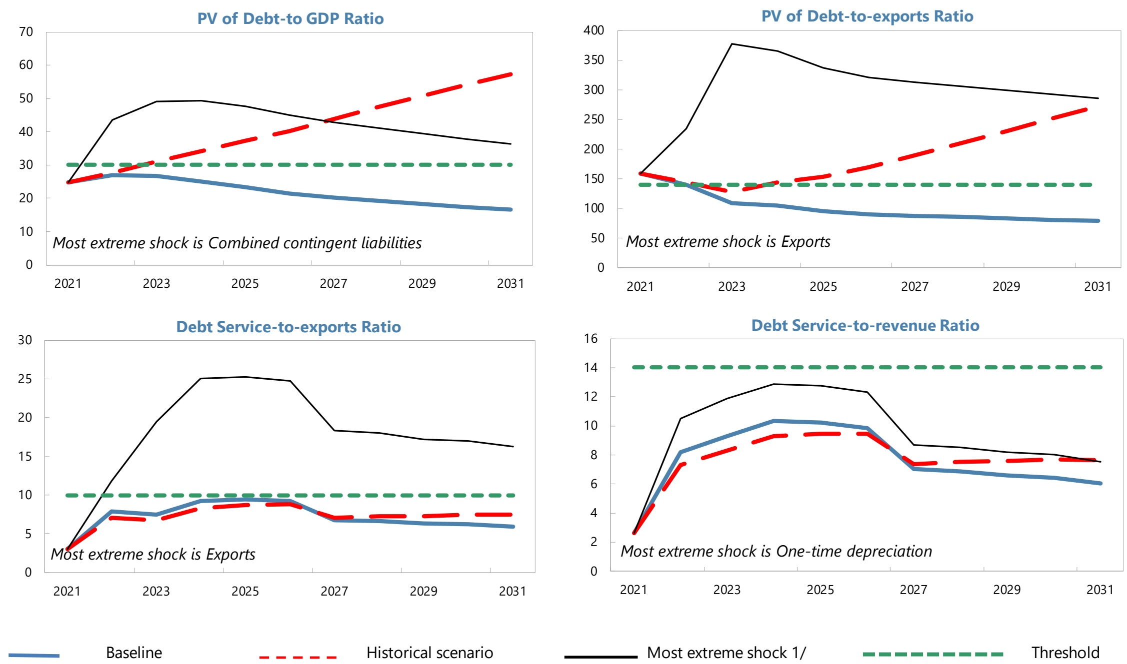
CONCLUSIONS

10. **Overall, the DSA analysis highlights the importance of continuing fiscal reforms and maintaining strong policies to ensure debt sustainability.** Stress tests indicate that the country's debt is especially vulnerable to shocks to exports and combined contingent liabilities. Also, the likelihood of contingent liabilities materializing is elevated though timing and impact remain uncertain. However, key external debt ratios are expected to recover to below their thresholds in the medium term. 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, and promoting growth. In addition, contracting new concessional loans and external debt disbursements need to be carefully planned to balance debt sustainability concerns while addressing the country's large investment needs. In this context, the country should strive to finance large projects with non-debt generating means, including by grants. The authorities agree with the staff's assessment and are committed to making good efforts to regularize arrears and maintaining debt sustainability.

AUTHORITIES' VIEWS

11. **The authorities broadly agreed with the assessment.** They are committed to continuing the effort to regularize the long-standing external arrears. They also recognized the significant risk to debt sustainability from the large and persistent loss by EMAE, which have translated to large arrears to ENCO, and are committed to implementing EMAE reforms to achieve debt sustainability. They also pledge to borrow only at concessional terms and at a measured pace to reduce debt vulnerability over time.

Figure 1. São Tomé and Príncipe: Indicators of Public and Publicly Guaranteed External Debt Under Alternatives Scenarios, 2021– 2031



Customization of Default Settings	Size	Interactions
Tailored Tests		
Combined CLs	Yes	
Natural Disasters	Yes	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	0.8%	0.8%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	35	35
Avg. grace period	9	9

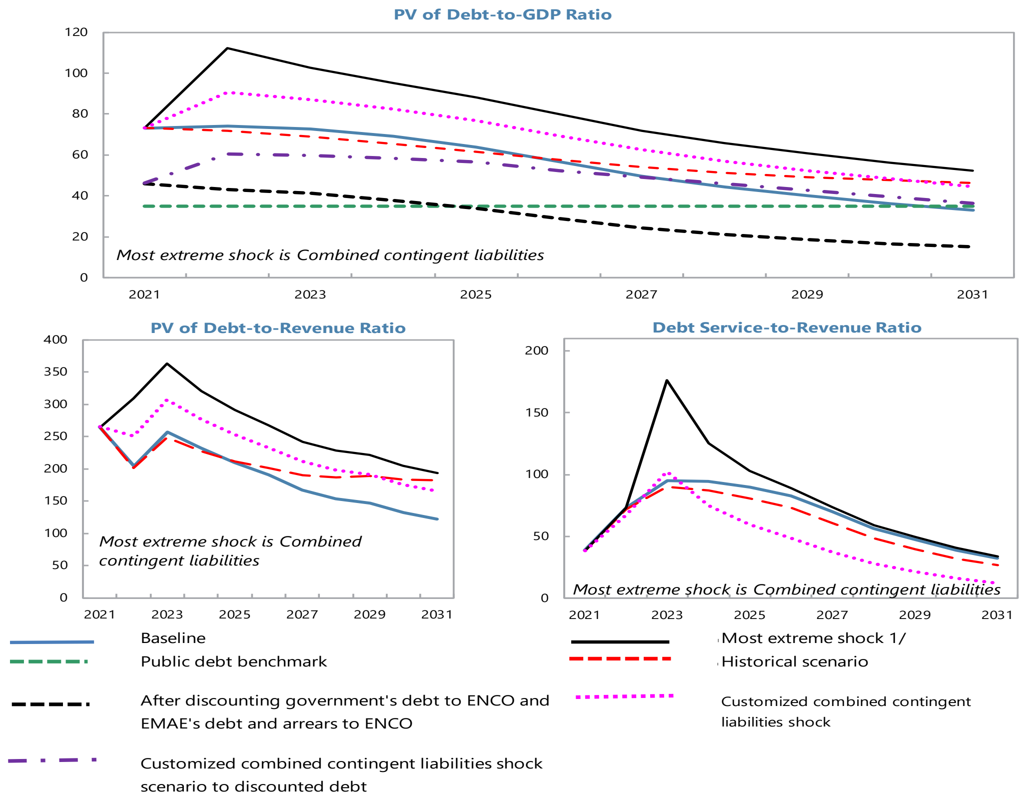
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 2031. 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, 2021– 2031

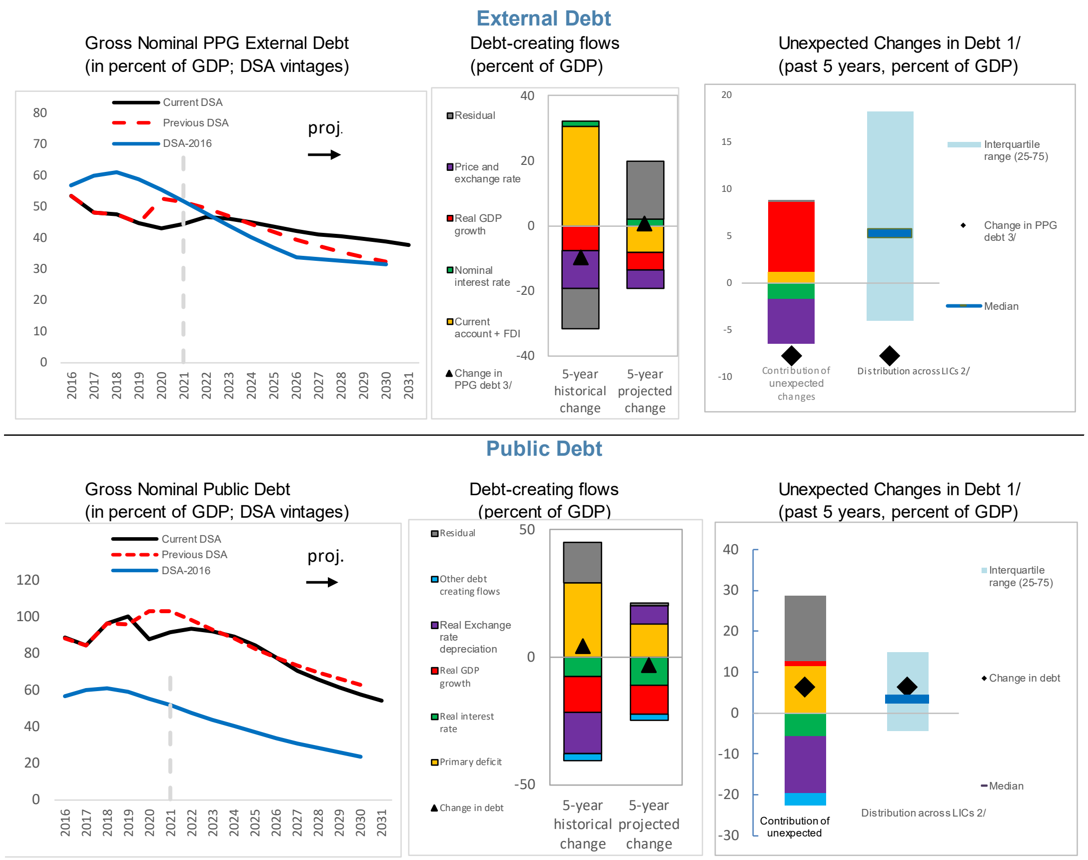


Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	15%	60%
Domestic medium and long-term	0%	0%
Domestic short-term	85%	40%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	0.8%	0.8%
Avg. maturity (incl. grace period)	35	35
Avg. grace period	9	9
Domestic MLT debt		
Avg. real interest rate on new borrowing	0.0%	0.0%
Avg. maturity (incl. grace period)	1	1
Avg. grace period	0	0
Domestic short-term debt		
Avg. real interest rate	-1.0%	-1.0%

* 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 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 2031. 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



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

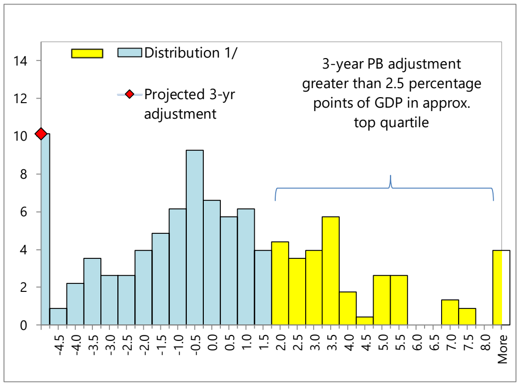
2/ Distribution across LICs for which LIC DSAs were produced.

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.

Sources: Country authorities; and staff estimates and projections.

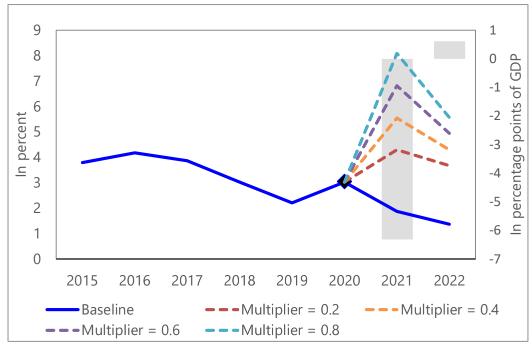
Figure 4. São Tomé and Príncipe: Realism Tools

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



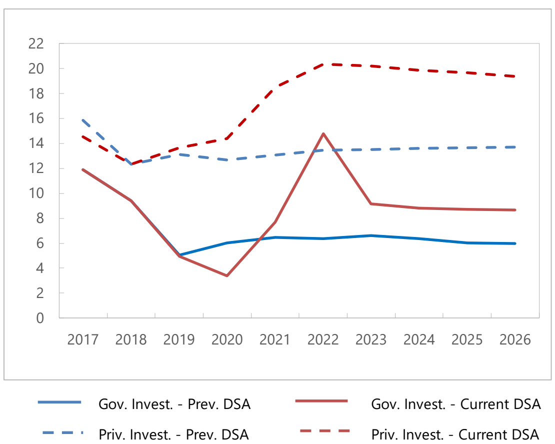
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/

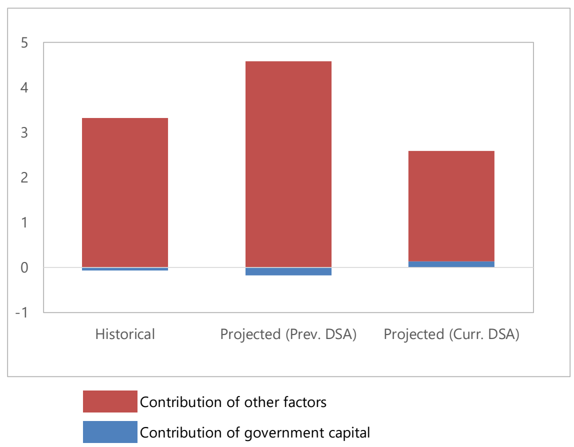


1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

Public and Private Investment Rates
(% of GDP)



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



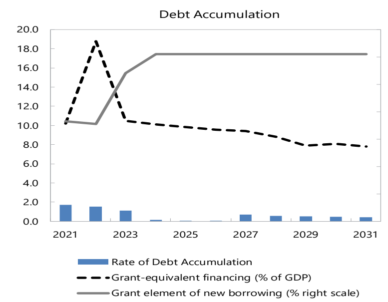
Sources: Country authorities; and staff estimates and projections.

Table 1. São Tomé and Príncipe: External Debt Sustainability Framework, Baseline Scenario, 2019-2041

(In percent of GDP, unless otherwise indicated)

	Actual		Projections								Average 8/	
	2019	2020	2021	2022	2023	2024	2025	2026	2031	2041	Historical	Projections
External debt (nominal) 1/	44.7	43.1	44.5	46.8	46.0	45.0	43.7	42.1	37.8	33.4	**43.7**	**42.4**
of which: public and publicly guaranteed (PPG)	44.7	43.1	44.5	46.8	46.0	45.0	43.7	42.1	37.8	33.4	**43.7**	**42.4**
Change in external debt	-2.9	-1.7	1.4	2.3	-0.7	-1.1	-1.2	-1.6	-0.9	-0.4		
Identified net debt-creating flows	3.5	-0.2	-0.5	0.4	-2.8	-4.1	-4.3	-4.5	-5.3	-1.3	**4.9**	**-3.9**
Non-interest current account deficit	11.6	10.8	11.2	13.5	10.4	9.0	8.8	8.5	6.5	-0.2	**14.9**	**8.6**
Deficit in balance of goods and services	22.0	-10.8	22.8	33.0	21.9	20.8	19.9	19.0	16.2	0.0	**29.2**	**20.0**
Exports	22.3	10.8	15.7	19.3	24.4	23.9	24.3	23.7	21.0	0.0		
Imports	44.3	...	38.5	52.2	46.2	44.6	44.2	42.7	37.2	0.0		
Net current transfers (negative = inflow)	-10.2	-12.4	-10.9	-18.5	-10.4	-10.5	-10.1	-9.8	-9.2	0.0	**-17.5**	**-10.6**
of which: official	-6.4	-10.5	-9.7	-17.1	-8.6	-8.4	-8.0	-7.7	-7.1	0.0		
Other current account flows (negative = net inflow)	-0.2	34.1	-0.6	-1.0	-1.1	-1.2	-1.0	-0.8	-0.5	-0.2	**3.1**	**-0.8**
Net FDI (negative = inflow)		-6.8	-11.0	-12.9	-12.6	-12.3	-12.1	-11.8	-10.7	0.0	**-6.8**	**-11.6**
Endogenous debt dynamics 2/	-1.1	-4.2	-0.6	-0.2	-0.5	-0.9	-1.0	-1.2	-1.1	-1.1		
Contribution from nominal interest rate	0.6	0.2	0.1	0.4	0.6	0.6	0.5	0.4	0.3	0.2		
Contribution from real GDP growth	-1.0	-1.2	-0.7	-0.6	-1.1	-1.5	-1.5	-1.6	-1.4	-1.3		
Contribution from price and exchange rate changes	-0.6	-3.2	...	...	...	...	...	...	...	...		
Residual 3/	-6.4	-1.4	1.9	1.9	2.0	3.1	3.1	2.9	4.4	0.9	**-4.6**	**3.5**
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	...	25.3	24.9	27.0	26.7	25.0	23.3	21.4	16.5	12.4		
PV of PPG external debt-to-exports ratio	...	233.0	158.5	140.2	109.6	105.0	95.8	90.2	78.7	...		
PPG debt service-to-exports ratio	4.5	5.0	3.0	7.9	7.5	9.3	9.4	9.2	6.0	...		
PPG debt service-to-revenue ratio	5.6	2.9	2.6	8.2	9.3	10.3	10.2	9.9	6.1	...		
Gross external financing need (Million of U.S. dollars)	24.2	21.5	3.4	10.8	-2.1	-6.1	-6.3	-7.6	-29.2	8.2		
Key macroeconomic assumptions												
Real GDP growth (in percent)	2.2	3.0	1.9	1.4	2.6	3.4	3.7	4.0	3.9	4.1	**3.9**	**3.3**
GDP deflator in US dollar terms (change in percent)	1.4	7.6	6.5	-3.5	2.8	3.6	4.0	5.0	3.8	2.0	**5.4**	**3.5**
Effective interest rate (percent) 4/	1.2	0.5	0.3	0.9	1.4	1.4	1.3	1.0	0.8	0.6	**0.8**	**0.9**
Growth of exports of G&S (US dollar terms, in percent)	-1.9	-46.2	57.1	20.1	33.3	4.9	9.8	6.6	5.4	-100.0	**12.4**	**14.5**
Growth of imports of G&S (US dollar terms, in percent)	-5.3	-11.7	18.2	32.8	-6.6	3.4	6.7	5.6	6.5	-100.0	**4.6**	**7.8**
Grant element of new public sector borrowing (in percent)	...	...	36.6	35.6	54.1	61.0	61.0	61.0	61.0	53.5	**...**	**55.8**
Government revenues (excluding grants, in percent of GDP)	18.0	18.3	18.0	18.5	19.8	21.4	22.3	22.2	20.7	18.6	**17.2**	**20.8**
Aid flows (in Million of US dollars) 5/	33.8	89.8	55.1	95.1	59.7	64.2	67.7	72.3	86.2	125.5		
Grant-equivalent financing (in percent of GDP) 6/	...	...	10.2	18.8	10.5	10.1	9.8	9.5	7.8	6.7	**...**	**10.1**
Grant-equivalent financing (in percent of external financing) 6/	...	...	91.8	91.1	86.6	90.2	89.4	88.9	90.2	89.5	**...**	**89.5**
Nominal GDP (Million of US dollars)	431	477	518	506	534	572	617	674	997	1,798		
Nominal dollar GDP growth	3.6	10.8	8.5	-2.2	5.5	7.2	7.9	9.2	7.9	6.2	**9.5**	**7.0**
Memorandum items:												
PV of external debt 7/	...	25.3	24.9	27.0	26.7	25.0	23.3	21.4	16.5	12.4		
In percent of exports	...	233.0	158.5	140.2	109.6	105.0	95.8	90.2	78.7	...		
Total external debt service-to-exports ratio	4.5	5.0	3.0	7.9	7.5	9.3	9.4	9.2	6.0	...		
PV of PPG external debt (in Million of US dollars)		120.5	128.8	136.9	142.5	143.3	143.6	144.0	165.1	223.8		
(PVt-PVt-1)/GDPt-1 (in percent)			1.7	1.6	1.1	0.1	0.0	0.1	0.4	0.8		
Non-interest current account deficit that stabilizes debt ratio	14.5	12.5	9.8	11.2	11.1	10.1	10.0	10.1	7.5	0.2		

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



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) + Εα (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, Ε=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.

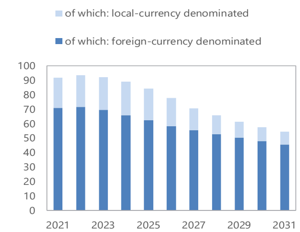
Table 2. São Tomé and Príncipe: Public Sector Debt Sustainability Framework, Baseline Scenario, 2019-2041

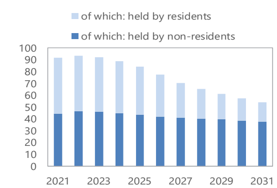
(In percent of GDP, unless otherwise indicated))

	Actual		Projections								Average 6/	
	2019	2020	2021	2022	2023	2024	2025	2026	2031	2041	Historical	Projections
Public sector debt 1/	**99.9**	**87.6**	**91.6**	**93.4**	**92.2**	**89.0**	**84.2**	**77.6**	**54.3**	**34.6**	**76.4**	**76.2**
of which: external debt	**44.7**	**43.1**	**44.5**	**46.8**	**46.0**	**45.0**	**43.7**	**42.1**	**37.8**	**33.4**	**43.7**	**42.4**
Change in public sector debt	3.8	-12.3	4.0	1.7	-1.1	-3.2	-4.8	-6.6	-3.3	-2.9		
Identified debt-creating flows	**0.3**	**-16.5**	**4.9**	**1.1**	**-0.9**	**-3.9**	**-5.6**	**-7.4**	**-4.0**	**-3.3**	**0.0**	**-3.5**
Primary deficit	**6.9**	**-2.6**	**3.7**	**3.1**	**4.3**	**1.6**	**0.2**	**-0.8**	**0.0**	**-1.2**	**6.5**	**0.8**
Revenue and grants	24.4	28.7	27.7	36.2	28.3	29.8	30.3	29.9	27.1	24.4	**29.3**	**29.3**
of which: grants	6.4	10.5	9.7	17.8	8.6	8.4	8.0	7.7	6.5	5.8		
Primary (noninterest) expenditure	31.4	26.1	31.4	39.3	32.7	31.4	30.5	29.1	27.1	23.2	**35.8**	**30.2**
Automatic debt dynamics	**-5.8**	**-13.6**	**1.4**	**-1.5**	**-4.7**	**-5.0**	**-5.3**	**-6.1**	**-3.8**	**-2.0**		
Contribution from interest rate/growth differential	-4.1	-4.8	-4.5	-6.0	-3.9	-3.8	-4.0	-4.3	-3.0	-2.0		
of which: contribution from average real interest rate	-2.0	-1.8	-2.9	-4.8	-1.6	-0.8	-0.8	-1.1	-0.8	-0.6		
of which: contribution from real GDP growth	-2.1	-2.9	-1.6	-1.2	-2.3	-3.0	-3.2	-3.2	-2.2	-1.5		
Contribution from real exchange rate depreciation	-1.7	-8.8	...	...	...	...	...	...	...	...		
Denominator = 1+g	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
Other identified debt-creating flows	**-0.8**	**-0.4**	**-0.2**	**-0.5**	**-0.6**	**-0.5**	**-0.5**	**-0.5**	**-0.3**	**-0.1**	**-0.7**	**-0.4**
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)	-0.8	-0.4	-0.2	-0.5	-0.6	-0.5	-0.5	-0.5	-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	**3.4**	**4.2**	**5.0**	**5.2**	**-1.0**	**-0.4**	**-0.6**	**-0.9**	**-0.1**	**0.4**	**4.9**	**0.5**
Sustainability indicators												
PV of public debt-to-GDP ratio 2/	**...**	**68.2**	**73.2**	**74.0**	**72.8**	**69.1**	**63.7**	**56.8**	**33.0**	**13.6**		
PV of public debt-to-revenue and grants ratio	**...**	**237.4**	**264.4**	**204.1**	**257.2**	**231.8**	**210.0**	**190.1**	**121.8**	**55.7**		
Debt service-to-revenue and grants ratio 3/	**...**	**...**	**38.8**	**73.3**	**95.2**	**94.4**	**90.1**	**82.9**	**32.2**	**-6.7**		
Gross financing need 4/	7.4	-2.1	14.2	29.2	30.7	29.1	27.0	23.5	8.5	-2.9		
Key macroeconomic and fiscal assumptions												
Real GDP growth (in percent)	2.2	3.0	1.9	1.4	2.6	3.4	3.7	4.0	3.9	4.1	**3.9**	**3.3**
Average nominal interest rate on external debt (in percent)	1.3	0.5	0.3	0.9	1.4	1.4	1.3	1.0	0.8	0.6	**0.9**	**0.9**
Average real interest rate on domestic debt (in percent)	-6.5	-5.2	-2.1	-5.0	-2.1	-1.8	-1.9	-2.7	-2.7	-3.8	**-6.1**	**-2.6**
Real exchange rate depreciation (in percent, + indicates depreciation)	-2.5	-12.4	...	...	...	...	...	...	...	...	**-3.7**	**...**
Inflation rate (GDP deflator, in percent)	7.0	5.5	2.7	5.9	3.5	3.2	3.4	4.3	3.8	2.0	**6.8**	**3.9**
Growth of real primary spending (deflated by GDP deflator, in percent)	-3.4	-14.2	22.3	27.1	-14.8	-0.7	1.0	-1.1	3.1	-2.0	**-1.3**	**4.2**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	3.2	9.7	-0.3	1.4	5.5	4.8	5.1	5.7	3.3	1.7	**3.0**	**3.9**
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	2.4	-9.2	3.1	0.5	-0.2	-1.8	-2.1	-2.3	-0.3	-1.3	**3.5**	**-0.7**
EMAE loss	3.7	6.3	0.3	2.1	3.9	2.8	1.8	1.1	0.0	0.0	**1.7**	**1.1**

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, 2021–2031

	Projections 1/										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
PV of debt-to GDP ratio											
Baseline	25	27	27	25	23	21	20	19	18	17	17
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	25	28	**31**	**34**	**37**	**40**	**44**	**47**	**51**	**54**	**57**
B. Bound Tests											
B1. Real GDP growth	25	28	28	26	24	22	21	20	19	18	17
B2. Primary balance	25	29	**32**	**31**	29	27	26	25	23	22	21
B3. Exports	25	**31**	**38**	**36**	**34**	**32**	30	29	27	26	25
B4. Other flows 3/	25	**34**	**37**	**35**	**33**	**30**	29	28	26	25	24
B5. One-time 30 percent nominal depreciation	25	**35**	30	28	26	24	22	21	20	19	18
B6. Combination of B1-B5	25	**35**	**36**	**34**	**32**	29	28	27	25	24	23
C. Tailored Tests											
C1. Combined contingent liabilities	25	**43**	**48**	**47**	**45**	**42**	**40**	**38**	**37**	**35**	**34**
C2. Natural disaster	25	**30**	**31**	29	28	26	25	24	23	22	21
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	30	30	30	30	30	30	30	30	30	30	30
PV of debt-to-exports ratio											
Baseline	**158**	**140**	110	105	96	90	88	86	83	81	79
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	**158**	**143**	128	**144**	**153**	**169**	**190**	**211**	**231**	**252**	**272**
B. Bound Tests											
B1. Real GDP growth	**158**	**140**	110	105	96	90	88	86	83	81	79
B2. Primary balance	**158**	**152**	130	129	120	114	111	109	106	104	101
B3. Exports	**158**	**235**	**378**	**366**	**337**	**321**	**313**	**306**	**300**	**293**	**286**
B4. Other flows 3/	**158**	**177**	**151**	**146**	135	128	125	123	120	117	114
B5. One-time 30 percent nominal depreciation	**158**	**140**	96	91	83	78	75	73	71	69	67
B6. Combination of B1-B5	**158**	**222**	**141**	**236**	**217**	**206**	**202**	**197**	**193**	**188**	**183**
C. Tailored Tests											
C1. Combined contingent liabilities	**158**	**225**	**196**	**197**	**184**	**177**	**174**	**170**	**167**	**164**	**160**
C2. Natural disaster	**158**	**160**	129	125	116	110	108	106	104	102	100
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	140	140	140	140	140	140	140	140	140	140	140
Debt service-to-exports ratio											
Baseline	3	8	8	9	9	9	7	7	6	6	6
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	3	7	7	8	9	9	7	7	7	7	8
B. Bound Tests											
B1. Real GDP growth	3	8	8	9	9	9	7	7	6	6	6
B2. Primary balance	3	8	8	10	10	10	7	7	7	7	6
B3. Exports	3	**12**	**20**	**25**	**25**	**25**	**18**	**18**	**17**	**17**	**16**
B4. Other flows 3/	3	8	8	10	**10**	10	7	7	7	7	6
B5. One-time 30 percent nominal depreciation	3	8	8	9	9	9	7	6	6	6	6
B6. Combination of B1-B5	3	10	**14**	**17**	**17**	**17**	**12**	**12**	**12**	**12**	**11**
C. Tailored Tests											
C1. Combined contingent liabilities	3	8	9	**11**	**11**	**11**	8	8	8	7	7
C2. Natural disaster	3	8	8	10	10	10	7	7	7	7	6
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	10	10	10	10	10	10	10	10	10	10	10
Debt service-to-revenue ratio											
Baseline	3	8	9	10	10	10	7	7	7	6	6
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	3	7	8	9	9	9	7	8	8	8	8
B. Bound Tests											
B1. Real GDP growth	3	8	10	11	11	10	7	7	7	7	6
B2. Primary balance	3	8	9	11	11	10	7	7	7	7	6
B3. Exports	3	8	10	12	11	11	8	8	7	7	7
B4. Other flows 3/	3	8	10	11	11	11	8	7	7	7	7
B5. One-time 30 percent nominal depreciation	3	10	12	13	13	12	9	9	8	8	8
B6. Combination of B1-B5	3	8	10	11	11	11	8	8	7	7	7
C. Tailored Tests											
C1. Combined contingent liabilities	3	8	11	12	12	11	8	8	8	8	7
C2. Natural disaster	3	8	10	11	11	10	7	7	7	7	6
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	14	14	14	14	14	14	14	14	14	14	14

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, 2021–2031

	Projections 1/										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
PV of Debt-to-GDP Ratio											
Baseline	**73**	**74**	**73**	**69**	**64**	**57**	**50**	**44**	**40**	**36**	**33**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	**73**	**72**	**69**	**65**	**62**	**58**	**54**	**51**	**49**	**48**	**46**
B. Bound Tests											
B1. Real GDP growth	**73**	**74**	**75**	**72**	**67**	**60**	**53**	**48**	**44**	**40**	**37**
B2. Primary balance	**73**	**78**	**81**	**76**	**70**	**63**	**55**	**50**	**45**		**38**
B3. Exports	**73**	**77**	**83**	**79**	**73**	**66**	**58**	**52**	**48**	**44**	**40**
B4. Other flows 3/	**73**	**81**	**83**	**79**	**73**	**66**	**58**	**53**	**48**	**44**	**41**
B5. One-time 30 percent nominal depreciation	**73**	**74**	**72**	**67**	**60**	**52**	**44**	**38**	33	28	24
B6. Combination of B1-B5	**73**	**76**	**74**	**67**	**61**	**54**	**47**	**42**	**38**	34	31
C. Tailored Tests											
C1. Combined contingent liabilities	**73**	**112**	**103**	**95**	**88**	**80**	**72**	**66**	**61**	**56**	**52**
C2. Natural disaster	**73**	**80**	**78**	**74**	**69**	**62**	**55**	**49**	**45**	**41**	**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.
Public debt benchmark	35	35	35	35	35	35	35	35	35	35	35
PV of Debt-to-Revenue Ratio											
Baseline	264	204	257	232	210	190	167	154	146	132	122
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	264	201	249	227	211	201	190	187	189	183	182
B. Bound Tests											
B1. Real GDP growth	264	202	262	238	218	199	178	165	159	146	137
B2. Primary balance	264	216	286	254	230	210	186	173	166	151	140
B3. Exports	264	213	292	264	240	219	196	182	175	159	149
B4. Other flows 3/	264	224	293	265	241	220	197	183	175	160	149
B5. One-time 30 percent nominal depreciation	264	213	259	229	202	178	152	135	122	105	92
B6. Combination of B1-B5	264	213	264	227	202	181	159	146	139	125	115
C. Tailored Tests											
C1. Combined contingent liabilities	264	309	363	320	291	268	242	228	221	205	193
C2. Natural disaster	264	220	275	248	226	206	183	170	164	149	139
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	39	73	95	94	90	83	70	56	47	39	32
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	39	72	90	87	81	73	61	49	40	32	27
B. Bound Tests											
B1. Real GDP growth	39	74	98	98	94	87	74	60	51	42	35
B2. Primary balance	39	73	107	109	96	85	71	57	48	39	33
B3. Exports	39	73	95	95	91	83	70	57	48	39	33
B4. Other flows 3/	39	73	96	95	91	83	70	57	48	39	33
B5. One-time 30 percent nominal depreciation	39	71	92	90	87	80	67	55	46	38	31
B6. Combination of B1-B5	39	72	93	99	90	81	68	55	46	38	32
C. Tailored Tests											
C1. Combined contingent liabilities	39	73	176	125	103	89	74	59	50	41	34
C2. Natural disaster	39	74	110	101	94	86	72	58	49	40	34
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.