INTERNATIONAL MONETARY FUND

DEMOCRATIC REPUBLIC OF SÃO TOMÉ AND PRÍNCIPE

REQUEST FOR A 40-MONTH ARRANGEMENT UNDER THE EXTENDED CREDIT FACILITY—DEBT SUSTAINABILITY ANALYSIS[1]

September 18, 2019

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

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, the same rating as in the previous debt sustainability analysis (DSA). *In addition, the significant domestic arrears of the large loss-making state-owned utility company (EMAE) reflect severe liquidity constraints of the public sector. Staff assesses that the country has the capacity to repay the external arrears (2.6 percent of GDP) over time, as external debt ratios under the baseline scenario remain well below the high-risk thresholds throughout. While total public and publicly guaranteed (PPG) debt is currently above the high-risk benchmark, it can be deemed sustainable as the present value of total PPG debt falls below the benchmark with the terms of formalized arrears of EMAE to its fuel supplier (ENCO) and the government to ENCO taken into account, and the country is committed to borrow externally only at concessional terms at a measured pace and implement EMAE's planned reforms.*

[1] The DSA update was prepared by IMF and World Bank staffs in collaboration with the authorities of São Tomé and Príncipe. The analysis updates the previous Joint DSA dated July 9, 2018 (IMF Country Report No. 18/251). 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 was 2.698 and its debt carrying capacity was assessed at to be medium under the revised LIC DSF and the cross-country assessment updated in April 2019.

PUBLIC DEBT COVERAGE

1. In line with the revised DSA framework, the coverage of total PPG debt relative to the previous DSA has been expanded to include the arrears of a state-owned enterprise (SOE)—a utility company (EMAE), to its oil supplier ENCO (Text Table 1).[2] [3] There are three other fully state-owned enterprises: ENAPORT that runs the country's ports, ENASA that runs the country's airport, and Correios that provides postal service. ENASA and ENAPORT have been able to cover their expenses in recent years and seem to be able to service their own debt (although no reliable data is available); Correios is much smaller and no data is available about its debt either. Therefore, their commercial borrowings are not included under the baseline scenario in the public debt. To account for the potential contingent liabilities associated with SOEs other than EMAE, the default value of 2.0 percent of GDP is used.[4] The complete coverage of the contingent liability stress test is presented in Text Table 2.[5] Contingent liabilities from financial markets are set at their default value of 5 percent of GDP, representing the average cost to the government of a financial crisis since 1980 in LICs.[6] The $30 million disputed loan from Nigeria is covered in the contingent liability stress tests for prudence. Finally, an additional contingent liability shock is also considered for the *external* DSA, where ENCO's external arrears of $189.4 million (46.5 percent of GDP) at end-2018 to its parent company Sonangol in Angola are included in the country's external PPG debt and are assumed to be fully repaid in 20 years, starting from 2019.[7]

[2] 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.

[3] 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 $104.4 million as of end-July 2019 were regularized in August 2019.

[4] Based on preliminary data, at end-2018, ENAPORT had commercial loans amounting to about $2.2 million that mature in August 2028; ENASA had two commercial loans of $0.3 million (maturing in September 2028) and $2.0 million (maturing in June 2029), respectively. In total, these loans amount to $4.5 million, or about 1 percent of GDP. There are four other profitable enterprises, in which the government has a minority stake.

[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] "Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries," February 2018, Paragraph 68.

[7] In the event that ENCO is liquidated, its claims on the government, EMAE, and other elements of the public sector could be transferred mostly to Sonangol, which may demand repayments. Note that ENCO's claims on EMAE and the government are not included in the baseline external debt stock even though they are denominated in USD, as the DSA uses the residency-based assumption (these claims are regarded as domestic debt in the baseline). The size of the Sonangol shock (46.5 percent of GDP) is calibrated to capture the maximum amount of liabilities that would need to be assumed by the government should the contingency materializes; this is a worst-case scenario given that ENCO is a joint venture that is majority (77.6 percent) owned by Sonangol, an Angolan company. The government and private entities of São Tomé and Príncipe hold 16.0 and 6.4 percent of stakes, respectively.

Text Table 1. São Tomé and Príncipe: Public Debt Coverage under The Baseline Scenario

	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.

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

		Default		Used for the analysis	Reasons for deviations from the default settings
1	The country's coverage of public debt	The central government plus social security and extra budgetary funds, central bank, government-guaranteed debt			
2	Other elements of the general government not captured in 1.	0	percent of GDP	Inclusion of the disputed Nigeria loan (7.4) for both public and external DSA, and ENCO's arrears to Sonangol (46.5) 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)	14.4 for public DSA, and 60.9 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

A. Debt

2. Central government direct and guaranteed debt declined by 2 percent of GDP during the recently-expired program (2015-18); but total PPG debt increased by 6 percent of GDP to 96 percent (Text Table 3).[8] The decline is attributed to steady GDP growth, repayment of past oil price subsidy debt using yields from higher domestic than import prices, no new debt contracting, and delayed disbursements of some existing loans. However, this decline was more than offset by EMAE's arrears to its fuel supplier, ENCO, accumulated during the same period.[9] In 2018, such arrears rose by US$16 million, at a higher pace than the US$14 million accumulation in 2017. The arrears increased further by US$9.4 million during the first half of 2019 and may rise by a higher amount in the second half based on seasonality. In addition, a comprehensive review by the Ministry of Finance identified additional government arrears to domestic suppliers of about US$25 million (around 6 percent of GDP), due to poor budgetary planning and a shortfall of project grants and loans. Total PPG debt also includes debt by some central public entities (such as the parliament and the court), which borrowed with the approval by the Ministry of Finance.

3. The country continues to engage actively with bilateral creditors to regularize post-HIPC arrears. In total, such arrears stood at 2.6 percent of 2018 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 actively sought debt rescheduling agreements with Angola and Equatorial Guinea. These arrears are reflected in the debt stock.

[8] Due to the broadened debt coverage discussed above, the "central government direct and guaranteed debt" in this DSA has the same coverage as the "total PPG debt" in the previous DSA. Consistent with the new DSF framework, the term "total PPG debt" refers to the broadened coverage that includes the central government and EMAE (the government's arrears to EMAE are excluded during the consolidation).

[9] These arrears include those by HidroEquador, which belongs to the EMAE parent company but reports losses separately. EMAE's arrears to ENCO have increased substantially since 2016 due to an expansion of the electricity distribution network.

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

(As of end 2018)	Million USD		Share of GDP (%)	
	End 2015	End 2018	End 2015	End 2018
Total PPG debt (incl. EMAE's arrears to ENCO, but excl. gov's arrears to EMAE)	**280.9**	**388.7**	**89.6%**	**95.5%**
Central government direct and guaranteed debt (excl. EMAE's arrears to ENCO, but incl. gov's arrears to EMAE)	**237.5**	**300.2**	**75.8%**	**73.7%**
Total PPG external debt	**185.2**	**194.5**	**59.1%**	**47.8%**
Multilateral Creditors	**44.6**	**49.5**	**14.2%**	**12.2%**
IDA	13.8	11.8	4.4%	2.9%
BADEA	9.4	12.0	3.0%	2.9%
FIDA	6.7	5.4	2.1%	1.3%
AfDB	5.2	11.8	1.7%	2.9%
IMF	6.7	6.9	2.1%	1.7%
OPEC	2.8	1.7	0.9%	0.4%
Bilateral Creditors	**115.7**	**133.2**	**36.9%**	**32.7%**
Portugal	54.5	57.2	17.4%	14.0%
Angola[1]	44.4	55.6	14.2%	13.7%
China	10.0	10.0	3.2%	2.5%
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%
Other[2]	0.0	3.7	0.0%	0.9%
Government's arrears to external suppliers	**6.9**	**11.7**	**2.2%**	**2.9%**
Domestic debt	**52.3**	**105.7**	**16.7%**	**26.0%**
ENCO (oil importing company; regularized arrears)	**48.4**	**37.8**	**15.4%**	**9.3%**
Government's arrears to domestic suppliers[3]	**3.5**	**36.9**	**1.1%**	**9.1%**
CST (telecom)	3.5	6.7	1.1%	1.7%
EMAE (water and electricity)	0.0	4.9	0.0%	1.2%
Other suppliers	0.0	25.3	0.0%	6.2%
Central Government T-bills	**0.0**	**19.3**	**0.0%**	**4.7%**
Credit of ODC to Central Government (excl. T-bills)	**0.4**	**11.7**	**0.1%**	**2.9%**
Arrears from EMAE to ENCO[4]	**43.4**	**93.4**	**13.8%**	**22.9%**
Memorandum items:				
Pre-HIPC legacy arrears		**54.9**		**13.5%**
Italy[5]		24.3		6.0%
Angola		30.6		7.5%
Nigeria Loan		**30.0**		**7.4%**

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] Due to the statistical discrepancy in the authorities' debt data.

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

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

[5] Commercial debt guaranteed by the government.

Text Table 4. São Tomé and Príncipe: Arrears and Disputed Debt
(As of end-2018)

Type	Description	DSA Treatment
Pre-HIPC legacy arrears (13.5 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 (2.6 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.[10] 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 ($6.7 million), the water and electricity company EMAE ($4.9 million), and other private suppliers ($25.3 million, mostly construction companies). In total, the domestic arrears amount to $36.9 million.	Included in the DSA.
Disputed debt (7.4 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.

[10] These amounts remained unchanged as of end-June 2019.

B. Macroeconomic Forecast

4. The macroeconomic assumptions are updated. The current DSA assumes slightly slower real GDP growth (4.3 percent) and a more moderate GDP deflator (2.8) than the previous DSA (Text Table 5), reflecting recent developments, including the revision of GDP that lowered the GDP deflator in recent years. Inflation is revised upwards to capture the high inflation at end-2018 and end-June 2019, as well as the one-off impact of the introduction of the VAT that is expected in 2020. Meanwhile, FDI remains similar as that in the July 2018 DSA, reflecting still high external interest in the country's oil explorations. In addition, exports are expected to accelerate as the tourism strategy is being implemented with World Bank support, and the sector boosted gradually by improvement of infrastructure, a new international payment system (currently expected to be completed in about three years), and a new tourism school. In line with an IMF Extended Credit Facility arrangement requested by the government, it is assumed that the budget deficit will be mainly financed by grants and concessional loans. In addition, the current account will also be financed by FDI. The realism tools indicate that the baseline fiscal adjustment is optimistic. This is mainly because the primary deficit includes EMAE's loss, which stood at 3.8 percent of GDP in 2018 and is expected to decline significantly (to 1.0 percent of GDP by 2023) as the company is being revamped under a program supported by the World Bank and European Investment Bank.

Text Table 5. São Tomé and Príncipe: Macroeconomic Assumptions

	Historical			Forecasts	
	2017 DSA[1]	2018 DSA[1]	Last 4 years	July 2018 DSA[1]	This DSA
	2007-16	2008-17	2014-17	2018-38	2018-38
Real GDP growth (percent)	4.3	4.8	4.6	4.9	4.3
Inflation (percent average)	13.2	11.9	5.8	3.4	4.0
GDP deflator (percent)	5.6	5.8	2.4	2.9	2.8
Domestic primary balance (percent of GDP)	-4.5	-3.9	-3.1	-1.0	-0.9
Grants (percent of GDP)	17.3	16.7	11.8	7.4	5.2
New borrowing (percent of GDP)	7.6	7.5	5.5	2.3	1.4
FDI (percent of GDP)	15.7	13.0	7.8	11.9	11.8
USD export growth (percent)	21.9	24.6	24.3	6.2	8.3
USD import growth (percent)	9.6	10.3	3.3	6.3	5.9
Current account balance, excluding grants (percent of GDP)	-38.7	-36.3	-24.2	-17.1	-11.8
Current account balance, including grants (percent of GDP)	-21.4	-19.6	-12.4	-9.7	-6.8

[1] IMF Country Report No. 18/251

C. Country Classification

5. The country's debt carrying capacity is assessed to be medium under the new LIC DSF and the cross-country assessment updated in April 2019. The new Composite Index (CI) of debt carrying capacity reflects macroeconomic variables, such as real GDP growth, remittances, reserves, and world growth (Text Table 6), in addition to CPIA, which was the only indicator under the previous framework. This along with other revisions to the framework confirms São Tomé and Príncipe as a medium debt-carrying capacity country. 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 last DSA that assessed the country as having a weak debt-carrying capacity. The threshold for the PV of total PPG debt also rose to 55 percent (from 38) of GDP. The thresholds for PPG external debt service (to exports and to revenue) remain unchanged.

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	Medium	Medium	Medium
	2.698	2.780	2.800

DEBT SUSTAINABILITY

D. External Debt Sustainability

6. **Under the baseline scenario, all external PPG debt stock and debt service ratios stay well below their thresholds** (Figure 1). This is an improvement relative to the last DSA, where the PV of debt-to-exports breached its threshold. This improvement is mostly driven by the aforementioned increases of the thresholds. Solvency indicators improve over time under the baseline and the most extreme shock scenarios due to economic growth, fiscal consolidation, slow debt accumulation, expansion of the tourism sector, and constrained imports, while liquidity indicators remain steady and comfortably below their associated thresholds throughout the projection horizon. These results suggest that the external PPG debt is sustainable.

7. **Under the most extreme shocks, two indicators breach their associated thresholds** (Figure 1). The PV of debt service-to-exports ratio and the debt-service-to-revenue ratio remain below their thresholds under the most extreme shocks, which are an exports shock and a combined contingent liabilities shock, respectively. By contrast, the PV of debt-to-GDP ratio and PV of debt-to-exports ratio breach their respective thresholds from 2019 to 2029 but decline gradually under the most extreme shocks, both of which are also a combined contingent liabilities shock. As Text Table 2 shows, the main contingent liabilities in this extreme scenario is ENCO's external arrears to Sonangol (46.5 out of 60.9 percent of GDP), which may ultimately fall on the government.[11] These results highlight the importance of developing a clearance plan for EMAE's arrears to ENCO, as well as promoting strong export growth.

[11] The size of the Sonangol shock (46.5 percent of GDP) is calibrated to capture the maximum amount of liabilities that would need to be assumed by the government should the contingency materializes.

E. Public Debt Sustainability

8. **Total PPG debt can be deemed sustainable under programmed policies**.[12] Under the baseline, the PV of the total PPG debt-to-GDP ratio breaches the benchmark, mainly because of the inclusion of EMAE's arrears to ENCO[13] and newly identified government arrears to private suppliers (see ¶2) (Figure 2). Note that the DSF uses the nominal value of domestic PPG debt while calculating the PV of total PPG debt. The PV of PPG debt as calculated, taking into account the PV of the terms of payments to ENCO by the government and EMAE is also presented (the black dash line in Figure 2).[14] Both agreements have extended payment periods and bring the PV of total PPG debt-to-GDP ratio below the benchmark of 55 percent of GDP starting in 2019. Hence, staff assesses that total PPG debt is sustainable provided EMAE's planned reforms are implemented and the country continues to borrow externally only at concessional terms at a measured pace.

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 gradually 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's classification remains to be in debt distress**. This is because the regularization of São Tomé and Príncipe's post-HIPC sovereign arrears (to Angola, Brazil, and Equatorial Guinea, totaling around 2.6 percent of GDP) 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. São Tomé and Príncipe continues to actively seek rescheduling agreements with the creditors.

11. **Compared with the last DSA, there are fewer threshold breaches of external PPG debt indicators, while the total PPG debt indicators have deteriorated**. All external PPG debt indicators remain below their respective thresholds under the baseline scenario. These results can be attributed largely to a stronger debt-carrying capacity based on the revised Composite Indicator under the new DSF and the associated higher indicator thresholds. 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

---

[12] As in the previous DSA template, only one of the three total PPG debt ratios (debt-to-GDP ratio) has a benchmark (instead of a strict threshold) in the new template. In addition, the negative real interest rates on domestic debt in Figure 2 are due to the low nominal interest rates (relative to inflation), which are in turn due to the excess liquidity in the banking system.

[13] After an expansion of the electricity network, EMAE's losses rose to about 4 percent of GDP on average annually during 2016-18, compared with an average of 1.5 percent of GDP in Sub-Saharan Africa.

[14] The repayment schedule for EMAE to ENCO covers both the existing stock of debt and any new arrears that may arise until EMAE returns to an operating surplus.

uncaptured debt vulnerabilities and led to a large baseline breach of the PV of debt-to-GDP indicator benchmark. While this ratio falls below the benchmark if the PV of the repayments to ENCO by the government and EMAE are taken into account, EMAE's large losses and associated arrears nonetheless highlight the importance of reforming EMAE to containing fiscal risk.

12. Risks around the baseline are substantial. In particular, stress tests show that the country's debt is especially vulnerable to shocks to exports, combined contingent liabilities, and the fiscal primary balance. The stress test based on a customized extreme scenario reveals that the risk stemming from ENCO's large external arrears to Sonangol could be high in the near term, even though some key external debt ratios fall below the thresholds in the medium term and the strong diplomatic tie between São Tomé and Príncipe and Angola could be a potential mitigating factor to this extreme scenario.

13. Overall, the analysis highlights the importance of containing EMAE's losses and maintaining strong policies in order to reduce debt-related risks. Such policies include deepening EMAE reforms, continuing fiscal consolidation and revenue mobilization, eschewing non-concessional loans, improving the business climate to attract non-debt flows, strengthening macroeconomic policies as envisaged under the program to support the exchange rate peg, and promoting tourism and private sector-led growth. In addition, the country should eschew non-concessional loans. To balance debt sustainability concerns while address the country's large investment need, contracting of new concessional loans should be limited to 3 percent of GDP, and external debt disbursements should not exceed 1.5 percent of GDP. These parameters can be adjusted according to the development of debt vulnerability and can be relaxed once the vulnerability decreases. In this context, the country should strive to finance large projects with non-debt generating means, including by grants.

Authorities' Views

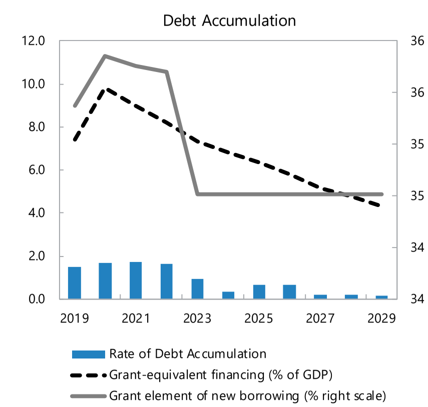
14. The authorities broadly agreed with the assessment. They are committed to continuing the effort to regularize the long-standing external arrears. They also recognized the significant risk to debt sustainability from the large and persistent loss by EMAE, which have translated to large arrears to 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.

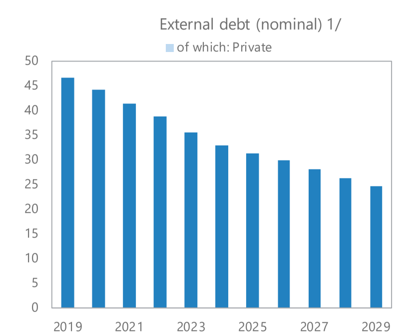
Table 1. São Tomé and Príncipe: External Debt Sustainability Framework, Baseline Scenario, 2017–2039

(In percent of GDP, unless otherwise indicated)

	Actual		Projections								Average 8/	
	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
External debt (nominal) 1/	48.2	47.8	46.5	44.1	41.5	38.8	35.6	33.0	24.7	15.9	48.3	34.5
of which: public and publicly guaranteed (PPG)	48.2	47.8	46.5	44.1	41.5	38.8	35.6	33.0	24.7	15.9	48.3	34.5
Change in external debt	-14.4	-0.5	-1.2	-2.4	-2.7	-2.6	-3.2	-2.6	-1.6	-0.1		
Identified net debt-creating flows	-0.5	-1.3	1.3	-1.9	-3.5	-3.8	-4.9	-5.6	-7.0	-8.9	4.8	-4.5
Non-interest current account deficit	12.9	10.4	11.2	8.6	7.6	7.6	6.6	6.0	5.5	6.0	17.4	6.9
Deficit in balance of goods and services	28.5	23.7	21.7	20.4	17.9	17.1	15.6	14.4	11.4	11.4	33.1	15.5
Exports	22.9	23.2	25.3	26.4	27.9	28.5	28.4	28.0	27.7	27.2		
Imports	51.4	46.9	47.0	46.8	45.9	45.5	44.0	42.4	39.1	38.6		
Net current transfers (negative = inflow)	-15.5	-12.4	-10.3	-12.4	-11.6	-10.8	-10.2	-9.7	-7.4	-7.0	-19.6	-9.6
of which: official	-11.1	-8.5	-6.7	-8.9	-8.1	-7.3	-6.8	-6.3	-3.9	-3.6		
Other current account flows (negative = net inflow)	-0.1	-0.9	-0.2	0.6	1.2	1.3	1.3	1.3	1.4	1.6	4.0	1.1
Net FDI (negative = inflow)	-9.0	-6.8	-9.1	-9.3	-9.8	-10.1	-10.3	-10.4	-11.7	-14.6	-9.4	-10.5
Endogenous debt dynamics 2/	-4.4	-4.9	-0.8	-1.1	-1.2	-1.3	-1.2	-1.1	-0.8	-0.4		
Contribution from nominal interest rate	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2		
Contribution from real GDP growth	-2.2	-1.1	-1.3	-1.5	-1.6	-1.7	-1.6	-1.5	-1.1	-0.7		
Contribution from price and exchange rate changes	-2.5	-4.2	...	...	...	...	...	...	...	...		
Residual 3/	-13.9	0.8	-2.5	-0.5	0.8	1.2	1.7	3.0	5.3	8.8	-1.9	2.5
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	...	27.8	28.8	28.3	27.8	27.2	26.1	24.5	18.8	10.4		
PV of PPG external debt-to-exports ratio	...	119.4	113.8	107.4	99.6	95.6	91.9	87.4	67.7	38.2		
PPG debt service-to-exports ratio	3.8	4.2	5.1	5.3	4.8	4.8	5.0	6.8	5.5	2.8		
PPG debt service-to-revenue ratio	5.1	5.9	7.7	8.2	7.5	7.2	7.3	9.5	6.9	2.8		
Gross external financing need (Million of U.S. dollars)	27.8	19.4	14.5	2.9	-4.6	-6.3	-13.3	-16.1	-41.6	-139.4		
Key macroeconomic assumptions												
Real GDP growth (in percent)	3.9	2.7	2.7	3.5	4.0	4.5	4.5	4.5	4.5	4.5	4.3	4.2
GDP deflator in US dollar terms (change in percent)	4.1	9.5	-1.0	4.0	3.8	3.7	3.2	3.3	2.6	2.6	4.3	2.7
Effective interest rate (percent) 4/	0.6	1.1	0.9	1.0	1.0	1.1	1.1	1.2	1.4	1.6	0.8	1.2
Growth of exports of G&S (US dollar terms, in percent)	-10.8	14.1	10.5	12.3	14.4	10.4	7.6	6.5	7.0	7.0	21.6	8.8
Growth of imports of G&S (US dollar terms, in percent)	4.5	2.6	1.8	7.2	5.8	7.6	4.1	4.2	5.8	7.1	7.7	5.3
Grant element of new public sector borrowing (in percent)	...	...	35.4	35.9	35.8	35.7	34.5	34.5	34.5	34.5	...	34.9
Government revenues (excluding grants, in percent of GDP)	17.0	16.6	16.9	17.2	18.0	18.9	19.3	19.9	22.2	26.9	13.7	19.7
Aid flows (in Million of US dollars) 5/	50.7	42.6	31.3	46.5	45.6	44.9	39.7	39.7	35.1	64.6		
Grant-equivalent financing (in percent of GDP) 6/	...	...	7.4	9.8	9.0	8.2	7.3	6.8	4.3	4.0	...	6.8
Grant-equivalent financing (in percent of external financing) 6/	...	...	84.2	85.6	84.5	83.7	87.8	87.0	85.4	84.4	...	85.0
Nominal GDP (Million of US dollars)	376	423	430	463	499	541	584	630	893	1,796		
Nominal dollar GDP growth	8.1	12.4	1.7	7.6	7.9	8.4	7.9	8.0	7.2	7.3	8.8	7.0
Memorandum items:												
PV of external debt 7/	...	27.8	28.8	28.3	27.8	27.2	26.1	24.5	18.8	10.4		
In percent of exports	...	119.4	113.8	107.4	99.6	95.6	91.9	87.4	67.7	38.2		
Total external debt service-to-exports ratio	3.8	4.2	5.1	5.3	4.8	4.8	5.0	6.8	5.5	2.8		
PV of PPG external debt (in Million of US dollars)		117.3	123.6	130.9	138.9	147.2	152.3	154.3	167.5	186.1		
(PVt-PVt-1)/GDPt-1 (in percent)			1.5	1.7	1.7	1.7	0.9	0.4	0.1	0.5		
Non-interest current account deficit that stabilizes debt ratio	27.3	10.9	12.4	11.0	10.2	10.2	9.8	8.6	7.1	6.2		

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.

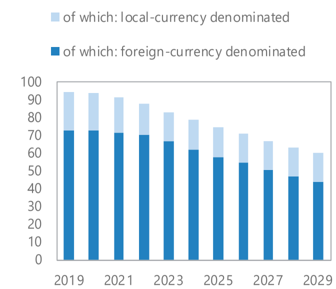
Table 2. São Tomé and Príncipe: Public Sector Debt Sustainability Framework, Baseline Scenario, 2017–2039

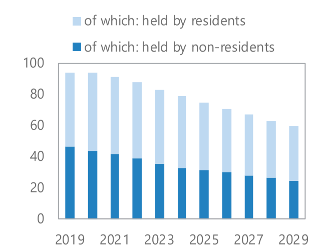
(In percent of GDP, unless otherwise indicated)

	Actual		Projections								Average 6/	
	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
Public sector debt 1/	84.3	95.5	94.2	93.8	91.3	87.6	83.1	78.7	59.9	36.6	67.8	78.6
of which: external debt	48.2	47.8	46.5	44.1	41.5	38.8	35.6	33.0	24.7	15.9	48.3	34.5
Change in public sector debt	-13.3	11.1	-1.3	-0.4	-2.5	-3.7	-4.5	-4.4	-3.4	-1.7		
Identified debt-creating flows	-8.2	4.8	-0.6	-1.9	-3.4	-4.5	-4.0	-4.9	-3.5	-1.4	7.4	-3.6
Primary deficit	6.7	7.9	4.7	4.8	3.1	2.1	2.1	0.8	0.3	0.6	12.9	1.7
Revenue and grants	27.6	24.7	23.5	26.1	26.1	26.3	26.1	26.2	26.1	30.5	27.6	25.9
of which: grants	10.5	8.2	6.7	8.9	8.1	7.3	6.8	6.3	3.9	3.6		
Primary (noninterest) expenditure	34.3	32.6	28.2	31.0	29.3	28.4	28.2	27.0	26.4	31.1	40.5	27.6
Automatic debt dynamics	-14.1	-2.7	-4.5	-6.0	-5.9	-6.0	-5.5	-5.1	-3.4	-1.9		
Contribution from interest rate/growth differential	-4.9	-3.7	-3.8	-4.5	-5.0	-5.2	-4.8	-4.5	-3.3	-1.8		
of which: contribution from average real interest rate	-1.3	-1.5	-1.3	-1.3	-1.4	-1.3	-1.0	-0.9	-0.5	-0.2		
of which: contribution from real GDP growth	-3.6	-2.2	-2.5	-3.2	-3.6	-3.9	-3.8	-3.6	-2.7	-1.6		
Contribution from real exchange rate depreciation	-9.2	1.0	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	-0.8	-0.4	-0.8	-0.7	-0.7	-0.6	-0.6	-0.6	-0.3	-0.1	-1.0	-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)	-0.8	-0.4	-0.8	-0.7	-0.7	-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	-5.1	6.4	-1.3	0.0	0.0	0.0	-1.1	-0.1	-0.1	-0.3	0.2	-0.2
Sustainability indicators												
PV of public debt-to-GDP ratio 2/	...	76.5	76.4	77.9	77.6	75.9	73.5	70.1	53.9	31.0		
PV of public debt-to-revenue and grants ratio	...	309.3	324.8	298.3	297.2	289.0	281.9	267.2	206.2	101.6		
Debt service-to-revenue and grants ratio 3/	...	...	85.8	66.1	69.3	67.1	64.0	66.4	63.5	41.5		
Gross financing need 4/	9.9	8.8	24.0	21.4	20.6	19.1	18.2	17.6	16.5	13.2		
Key macroeconomic and fiscal assumptions												
Real GDP growth (in percent)	3.9	2.7	2.7	3.5	4.0	4.5	4.5	4.5	4.5	4.5	4.3	4.2
Average nominal interest rate on external debt (in percent)	0.7	1.0	1.0	1.0	1.0	1.0	1.1	1.2	1.4	1.6	0.8	1.2
Average real interest rate on domestic debt (in percent)	-1.9	-4.5	-3.1	-2.8	-2.2	-2.0	-1.5	-1.1	-0.8	-0.3	-6.7	-1.6
Real exchange rate depreciation (in percent, + indicates depreciation)	-11.8	1.5	...	...	...	...	...	...	...	...	-2.1	...
Inflation rate (GDP deflator, in percent)	2.0	4.7	3.7	3.5	3.0	3.0	2.6	2.6	2.6	2.6	7.7	2.8
Growth of real primary spending (deflated by GDP deflator, in percent)	-13.4	-2.3	-11.3	13.7	-1.7	1.3	3.7	0.2	5.3	6.2	8.4	2.4
Primary deficit that stabilizes the debt-to-GDP ratio 5/	20.0	-3.3	5.9	5.2	5.6	5.8	6.6	5.2	3.7	2.3	7.6	5.0
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	0.5	4.2	0.1	-0.5	-1.0	-1.5	-1.2	-0.9	-0.1	0.5	10.9	-0.5
EMAE loss	5.4	3.2	3.7	4.6	3.4	3.0	2.6	1.1	0.0	0.0	1.0	1.7

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.

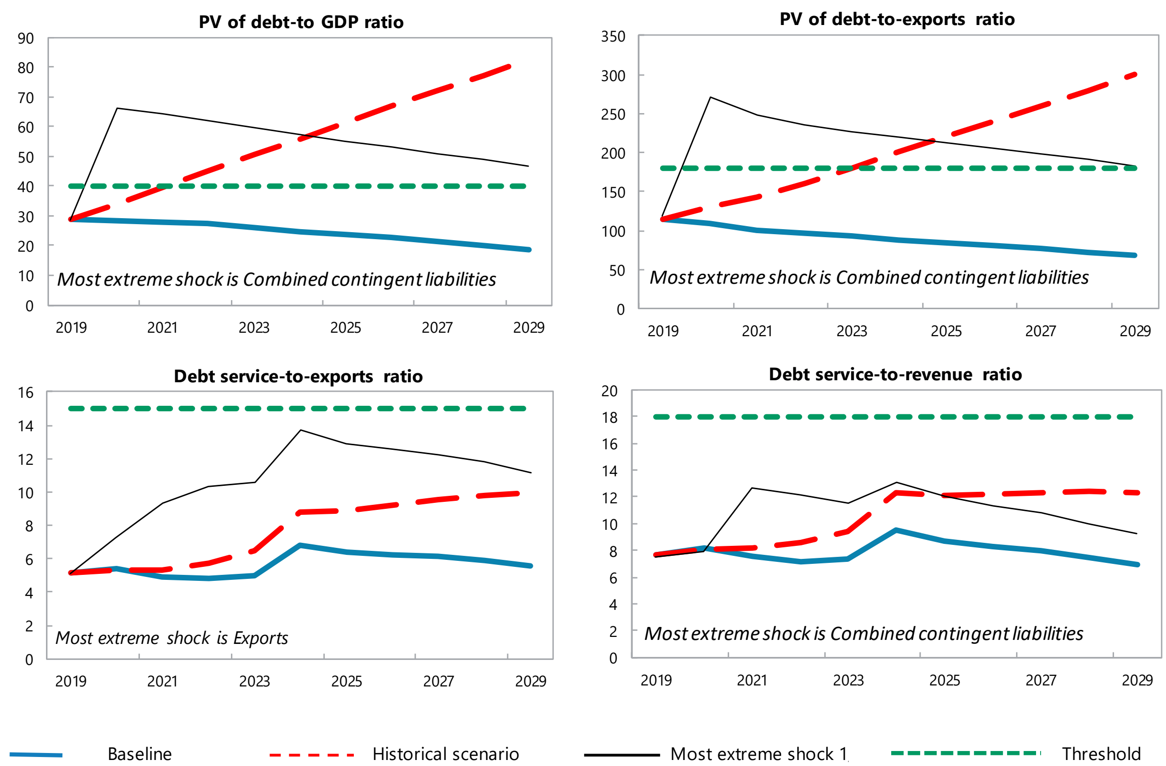
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

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.

Figure 1. São Tomé and Príncipe: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2019–2029[1/]



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

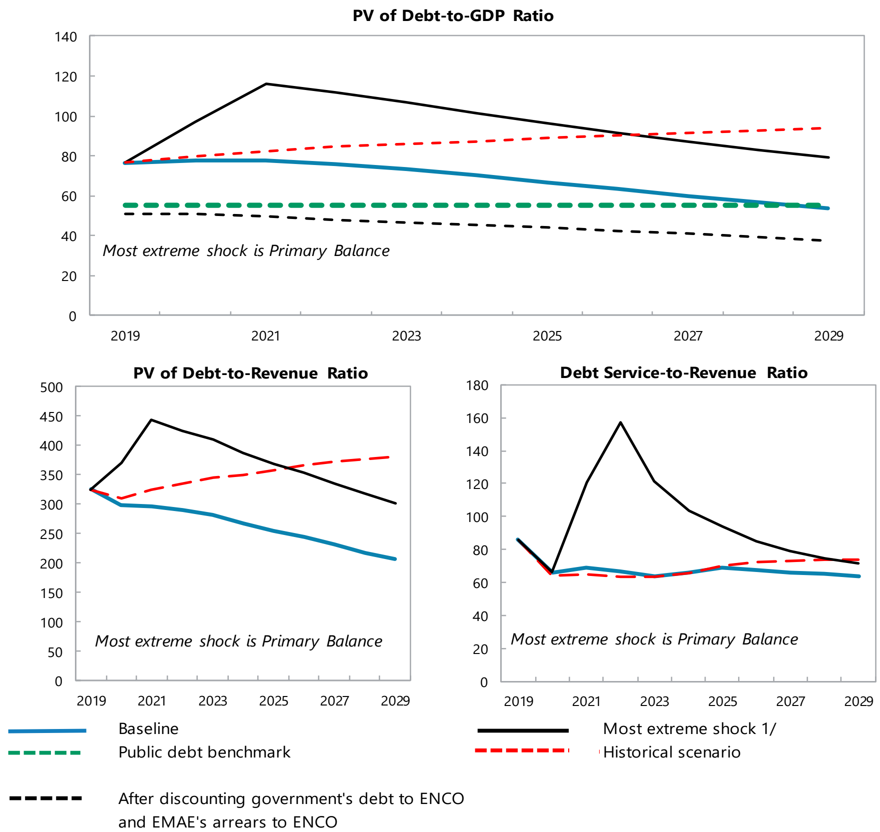
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 2029. 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, 2019–2029



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	25%	25%
Domestic medium and long-term	10%	10%
Domestic short-term	234%	64%
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	-2.8%	-2.8%
Avg. maturity (incl. grace period)	100	100
Avg. grace period	99	99
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 2029. 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.

Table 3. São Tomé and Príncipe: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2019–2029

	Projections 1/										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
PV of debt-to GDP ratio											
Baseline	29	28	28	27	26	24	23	23	21	20	19
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	29	34	40	**45**	**51**	**56**	**61**	**67**	**72**	**77**	**82**
B. Bound Tests											
B1. Real GDP growth	29	29	29	28	27	26	25	24	22	21	20
B2. Primary balance	29	**42**	**55**	**53**	**51**	**49**	**47**	**46**	**44**	**42**	40
B3. Exports	29	34	**42**	**41**	39	37	36	34	33	31	30
B4. Other flows 3/	29	35	**41**	**40**	39	37	35	34	32	31	29
B5. One-time 30 percent nominal depreciation	29	35	30	30	28	27	25	24	23	21	20
B6. Combination of B1-B5	29	37	39	38	36	34	33	32	30	29	27
C. Tailored Tests											
C1. Combined contingent liabilities	29	**68**	**66**	**64**	**61**	**58**	**56**	**55**	**52**	**50**	**48**
C2. Natural disaster	29	35	35	34	33	31	30	29	28	27	26
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	114	109	100	96	92	88	85	81	77	72	68
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	114	129	143	160	179	**200**	**220**	**240**	**260**	**280**	**299**
B. Bound Tests											
B1. Real GDP growth	114	109	100	96	92	88	85	81	77	72	68
B2. Primary balance	114	160	**199**	**189**	**182**	175	170	164	157	151	145
B3. Exports	114	167	**253**	**242**	**232**	**223**	**215**	**207**	**198**	**188**	179
B4. Other flows 3/	114	135	150	143	137	132	127	123	117	112	106
B5. One-time 30 percent nominal depreciation	114	109	87	84	80	76	73	70	66	62	58
B6. Combination of B1-B5	114	151	131	163	157	150	145	140	133	126	120
C. Tailored Tests											
C1. Combined contingent liabilities	114	**260**	**237**	**225**	**217**	**210**	**203**	**197**	**189**	**182**	175
C2. Natural disaster	114	138	128	123	119	114	111	107	103	99	94
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	5	5	5	5	5	7	6	6	6	6	6
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	5	5	5	6	6	9	9	9	10	10	10
B. Bound Tests											
B1. Real GDP growth	5	5	5	5	5	7	6	6	6	6	6
B2. Primary balance	5	5	6	7	7	9	8	8	8	8	7
B3. Exports	5	7	9	10	11	14	13	13	12	12	11
B4. Other flows 3/	5	5	6	6	6	8	7	7	7	7	6
B5. One-time 30 percent nominal depreciation	5	5	5	4	5	7	6	6	6	6	5
B6. Combination of B1-B5	5	6	7	7	7	10	9	9	9	8	8
C. Tailored Tests											
C1. Combined contingent liabilities	5	5	8	8	8	10	9	9	9	8	8
C2. Natural disaster	5	6	6	6	6	8	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	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio											
Baseline	8	8	8	7	7	10	9	8	8	7	7
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	8	8	8	9	9	12	12	12	12	12	12
B. Bound Tests											
B1. Real GDP growth	8	8	8	7	8	10	9	9	8	8	7
B2. Primary balance	8	8	9	11	11	13	12	11	10	10	9
B3. Exports	8	8	9	9	9	11	10	10	9	9	8
B4. Other flows 3/	8	8	8	9	9	11	10	10	9	9	8
B5. One-time 30 percent nominal depreciation	8	10	9	8	9	11	10	10	10	9	8
B6. Combination of B1-B5	8	9	9	9	9	11	10	10	9	9	8
C. Tailored Tests											
C1. Combined contingent liabilities	8	8	13	12	12	14	13	12	11	11	10
C2. Natural disaster	8	8	8	8	8	10	9	9	9	8	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.

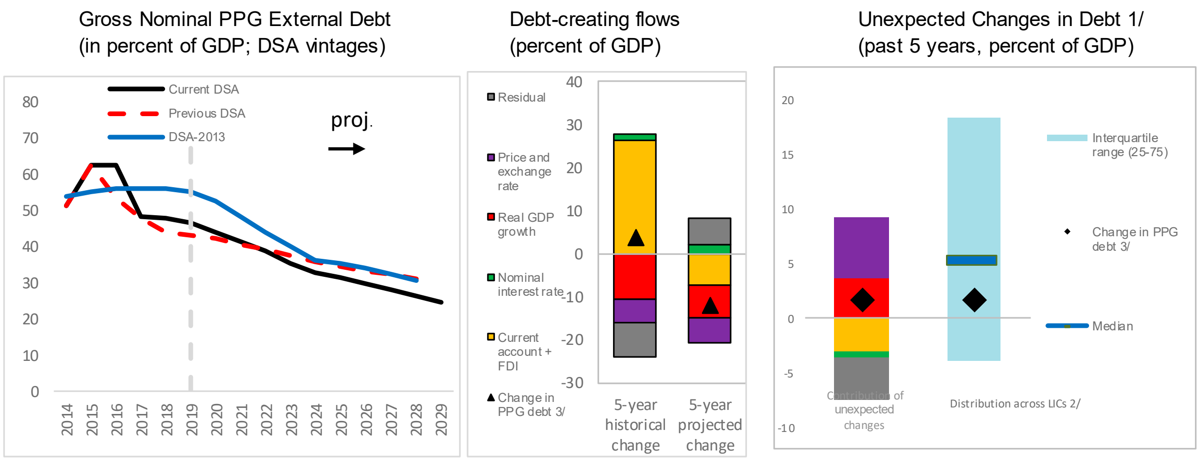
3/ Includes official and private transfers and FDI.

Table 4. São Tomé and Príncipe: Sensitivity Analysis for Key Indicators of Public Debt, 2019–2029

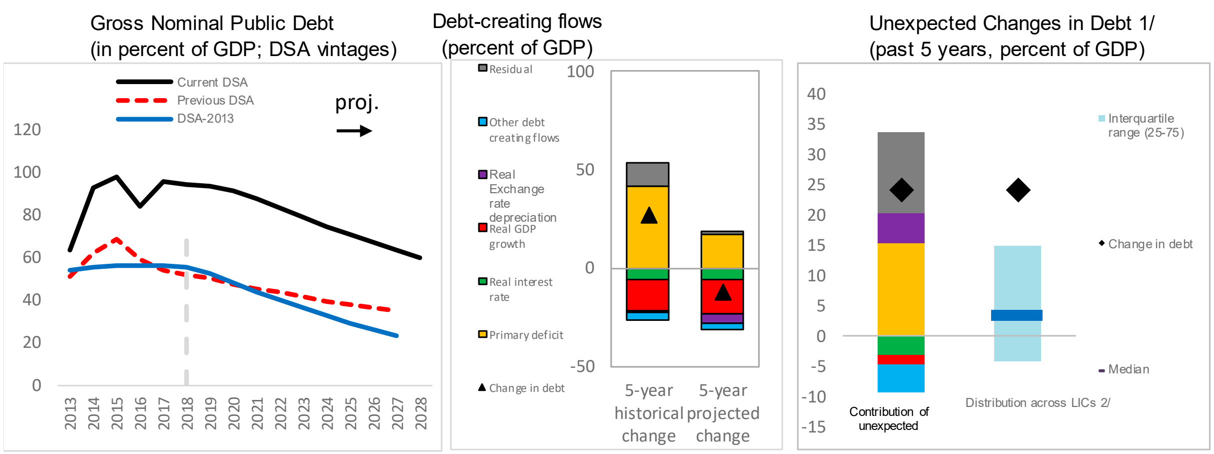
	Projections 1/										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
						PV of Debt-to-GDP Ratio					
Baseline	**76**	**78**	**78**	**76**	**74**	**70**	**67**	**63**	**60**	**57**	54
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	**76**	**80**	**82**	**85**	**86**	**87**	**89**	**90**	**92**	**93**	**94**
B. Bound Tests											
B1. Real GDP growth	**76**	**80**	**82**	**82**	**80**	**77**	**74**	**71**	**69**	**66**	**63**
B2. Primary balance	**76**	**97**	**116**	**112**	**107**	**101**	**96**	**92**	**87**	**83**	**79**
B3. Exports	**76**	**82**	**89**	**87**	**85**	**81**	**77**	**73**	**70**	**66**	**63**
B4. Other flows 3/	**76**	**85**	**91**	**89**	**86**	**82**	**78**	**75**	**71**	**68**	**64**
B5. One-time 30 percent nominal depreciation	**76**	**82**	**80**	**78**	**75**	**71**	**66**	**61**	**57**	53	49
B6. Combination of B1-B5	**76**	**90**	**97**	**89**	**83**	**77**	**72**	**67**	**63**	**59**	**56**
C. Tailored Tests											
C1. Combined contingent liabilities	**76**	**91**	**90**	**87**	**84**	**80**	**76**	**72**	**69**	**65**	**62**
C2. Natural disaster	**76**	**88**	**88**	**85**	**83**	**79**	**76**	**72**	**69**	**66**	**63**
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	325	298	297	289	282	267	255	244	231	218	206
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	325	310	324	335	345	350	359	366	373	377	381
B. Bound Tests											
B1. Real GDP growth	325	304	311	306	303	291	281	272	261	250	240
B2. Primary balance	325	371	443	425	409	386	369	353	335	318	302
B3. Exports	325	314	343	332	324	308	294	282	268	254	241
B4. Other flows 3/	325	325	349	339	330	314	300	288	274	259	246
B5. One-time 30 percent nominal depreciation	325	324	316	304	294	274	257	240	223	205	189
B6. Combination of B1-B5	325	348	375	343	321	296	276	260	244	228	216
C. Tailored Tests											
C1. Combined contingent liabilities	325	349	343	331	322	305	291	278	264	250	237
C2. Natural disaster	325	337	334	324	316	301	289	277	264	250	239
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	86	66	69	67	64	66	69	67	66	65	64
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2029 2/	86	64	65	63	63	66	70	72	73	74	74
B. Bound Tests											
B1. Real GDP growth	86	67	72	72	70	73	76	75	74	73	72
B2. Primary balance	86	66	121	157	121	103	94	85	79	75	71
B3. Exports	86	66	70	68	65	67	70	68	67	66	64
B4. Other flows 3/	86	66	70	68	65	68	70	69	67	66	64
B5. One-time 30 percent nominal depreciation	86	64	67	63	62	65	67	65	64	63	61
B6. Combination of B1-B5	86	65	85	116	93	82	77	71	66	64	62
C. Tailored Tests											
C1. Combined contingent liabilities	86	66	103	88	77	75	74	71	69	67	65
C2. Natural disaster	86	67	94	83	75	74	75	73	71	69	67
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.

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



Public debt



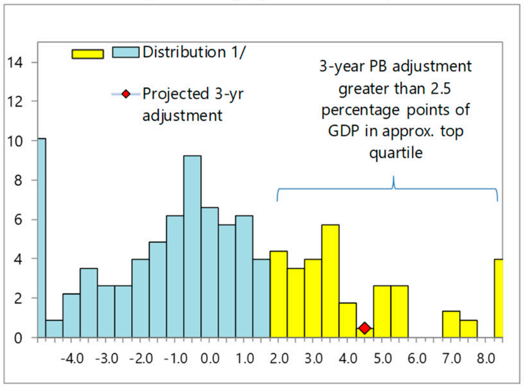
1/ Difference between anticipated and actual contributions on debt ratios.

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.

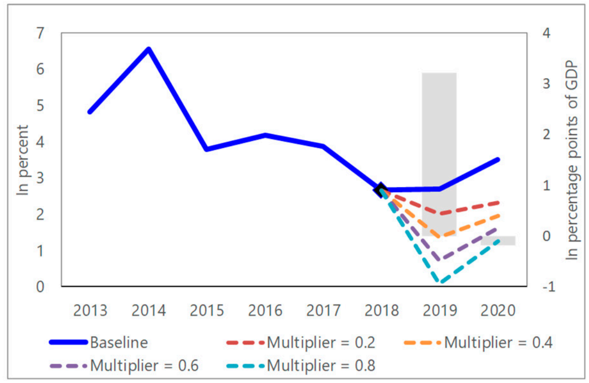
Figure 4. São Tomé and Príncipe: Realism Tools

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



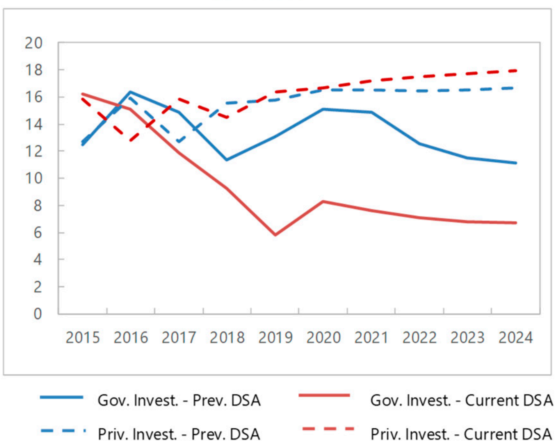
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

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)