

INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

REPUBLIC OF MOZAMBIQUE

Joint World Bank-IMF Debt Sustainability Analysis

April 2020

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

and the International Monetary Fund (IMF)

Approved by Marcello Estevão (IDA) David Owen and Mark Flanagan (IMF)

Republic of Mozambique: 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 judgment	No

Mozambique's debt remains in distress, which is unchanged from the previous DSA published in June 2019. Considering that, to a large extent, future borrowing and government guarantees reflect state participation in the sizable liquified natural gas (LNG) development, debt is deemed sustainable in a forward-looking sense. Participation in the recently announced G20 initiative would provide debt service relief in the near term, thus flattening the projected sharp deterioration in debt liquidity indicators due to the COVID-19 pandemic. The possibility of an extension of the G20 initiative into 2021 would be a further mitigating factor for the debt sustainability assessment. The present value (PV) of external public and publicly guaranteed (PPG) debt relative to GDP is projected to remain above the prudent threshold with a gradual declining path dropping below the threshold by 2028. The PV of PPG external debt relative to exports would drop below the prudent threshold in 2024. The ratio of external public debt service to fiscal revenues would drop below the prudent threshold temporarily in 2020 but would breach again the threshold until 2030. The debt service-to-exports ratio would remain around the prudent threshold until 2023, when it drops and remains below the threshold for the rest of the projection period.

PUBLIC DEBT COVERAGE

1. Compared to the last DSA,¹ the coverage of public and publicly guaranteed debt remains unchanged (Text Table 1). The scope of Mozambique's public debt covers data on external and domestic obligations of the central and local governments. The authorities also provided debt data on state-owned enterprises (SOEs) and SOE debt guarantees.² The debt covered by the DSA excludes Hidroeléctrica de Cahora Bassa (HCB).³ Domestic debt is denominated in local currency and, for the purposes of the analysis, domestic debt is assessed by currency and not by residence as data capturing the residency of creditors are unavailable.

Text Table 1. Mozambique: Public Debt Coverage Under the Baseline Scenario

Subsectors of the public sector	Sub-Sectors covered
1 Central government	X
2 State and local government	X
3 Other elements in the general government	
4 o/w: Social security fund	
5 o/w: Extra budgetary funds (EBFs)	
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	X

BACKGROUND

Recent Economic and Debt Developments

2. Before the COVID-19 pandemic, the Mozambican economy was recovering from Tropical Cyclones (TCs) Idai and Kenneth which struck in 2019. GDP growth decelerated to 2.2 percent in 2019 driven by the adverse supply shock of the TCs and a contraction in the extractive industry. However, despite the supply shock, inflation declined to 3.1 percent (y/y) in March, from 3.5 percent (y/y) in December 2018, due to subdued aggregate demand, well anchored inflation expectations, and a broadly stable exchange rate. The current account deficit improved to 20.8 percent of GDP in 2019, from 30.9 percent of GDP in 2018, mainly due to: (1) a much lower-than-expected megaproject imports of services; and (2) a large payment (US\$880 million) of one-off capital gains taxes related to the sale to Total of Occidental's LNG operations in the country. This payment was only partially offset by lower coal exports (mine flooding and lower export prices) and higher emergency relief imports. The (underlying) overall fiscal deficit, after grants and excluding one-off capital gains taxes, was contained at about 5½ percent

¹ IMF Country Report 19/136, May 16, 2019.

² This includes Mozambique's National Hydrocarbons Company (ENH) borrowing to finance its equity participation in the LNG megaprojects, along with any sovereign guarantees issued to cover ENH's share in the LNG megaprojects' financing package.

³ HCB meets the criteria for exclusion set out in the 2017 Staff Guidance Note on the Debt Sustainability Framework for LICs (Appendix III) because it is run on commercial terms, has a good financial performance, enjoys managerial independence, and borrows without government guarantee.

of GDP in 2019, from about 6 percent of GDP in 2018, as lower (underlying) revenue collections were more than offset by lower public spending.

3. Compared with the previous DSA, the debt stocks used are updated from 2017 to 2018. This DSA also accounts for Mozambique's recent GDP rebasing which has led to downward revisions to the historical (until 2017) debt-to-GDP indicators (Text Table 2).

Text Table 2. Mozambique: Debt, Public and Publicly Guaranteed (Percent of GDP)					
	2014	2015	2016	2017	2018
				Prel.	Prel.
Public sector debt	64.3	87.4	126.9	106.6	110.0
Public sector external debt (incl. guarantees)	58.1	76.6	104.3	87.4	92.4
A. Bank of Mozambique-IMF	1.1	1.8	2.0	1.3	1.1
B. General Government	47.5	63.6	89.4	72.8	75.0
Multilateral creditors, excl IMF	19.9	26.2	35.9	29.5	30.0
Bilateral creditors	19.9	28.6	39.0	32.3	33.1
Paris Club	3.1	4.7	7.1	7.1	8.1
Banks	3.0	3.0	6.9	5.1	5.0
EMATUM/Mozam Eurobond	3.0	3.0	6.9	5.1	5.0
Other public sector: <i>ENH (LNG project)</i>	4.6	5.7	7.6	5.9	7.0
C. Government guaranteed external debt	9.5	11.2	11.2	8.3	8.1
EMATUM	2.1	2.5	0.0	0.0	0.0
Proindicus	3.8	4.5	5.7	4.2	4.1
MAM	3.2	3.9	5.1	3.8	3.7
Other guarantees	0.4	0.4	0.4	0.3	0.2
D. External arrears	0.0	0.0	1.7	5.0	8.2
Public sector domestic debt (incl. guarantees)	6.3	10.9	22.6	19.1	17.7

4. The authorities' legal and debt restructuring strategy is being implemented. It reached an important milestone in October 2019 with the Eurobond swap that has lowered interest payments and extended maturities broadly in line with the baseline scenario in the last DSA. While the authorities were conducting due diligence on whether corruption may have been involved in contracting the VTB loan to MAM, that bank filed in December 2019 a civil lawsuit in the U.K. against Mozambique, arguing that the government guarantee remained valid. Recently, the authorities have informed staff that in their defense against the VTB lawsuit, the government has disputed the validity of the government guarantee on the VTB loan—which was deemed illegal by Mozambique's Assembly of the Republic—and does not intend to support MAM.

5. Mozambique continues to accumulate external debt service arrears on the defaulted loans. The overall stock of external arrears on public and publicly guaranteed external debt service is estimated to have reached US\$1,375 million (9.3 percent of GDP) at end-2019 (Text Table 3).

Macroeconomic Forecasts

6. While the COVID-19 pandemic is expected to hit Mozambique hard and the macroeconomic assumptions underlying the baseline scenario, particularly for the next two years, have worsened relative to the last DSA, the medium-term outlook remains positive due to the LNG megaprojects (Text Table 4). GDP growth projections for 2020 and 2021 have been revised to 2.2 percent and 4.7 percent, respectively, owing to COVID-19 related disruptions within the economy and much worse external environment. Risks to growth in 2020 are on the downside, as the impact of the COVID-19 pandemic could be more pronounced and significant delays could happen in the Area 1 LNG project. The overall fiscal deficit is expected to increase significantly in 2020 owing to lower revenues—resulting from lower activity and fiscal measures to support the private sector—and higher spending on health and social transfers to the poorest segments in society. From 2021 onward, the overall fiscal deficit is expected to improve as the authorities implement gradual fiscal consolidation, with the objective to largely eliminate the primary fiscal deficit after grants by 2022. The current account deficit is expected to increase until 2022, reflecting a surge in imports of goods and services mainly related to the construction of processing facilities for the LNG megaprojects. Approximately one-third of all imports related to such projects will be financed by (frontloaded) FDI, with the remainder financed by Export Credit Agencies (ECAs) and private banks. With the start of LNG production in 2023, real GDP growth will pick up significantly and fiscal and external indicators will start improving dramatically.

Text Table 3. Mozambique: Evolution of the Stock of External Arrears
(Millions of U.S. dollars)¹

	End-2017 Est.	End-2018 Est.	End-2019 Est.
Commercial debt	592.86	970.61	1080.24
Mozam/ EMATUM	97.90	174.18	-
MAM	343.06	499.12	644.02
Proindicus	151.90	297.31	436.22
Bilateral debt	116.80	207.33	295.29
Paris Club: Brazil	22.93	37.65	51.86
Non-Paris Club ²	93.87	169.68	243.43
Total	709.66	1177.94	1375.53

¹ Staff estimates based on information received by the authorities on their debt strategy. Contractual penalty fees or rates have not been included.

² Data reported by the authorities for Libya, Iraq, Angola, Poland and Bulgaria on the reconciled debt.

7. The severe impact of the COVID-19 pandemic has created additional financial needs. The authorities are seeking US\$700 million from the international community to fight the adverse economic effects of the COVID-19 pandemic. An RCF disbursement is expected to close about 45 percent of the external and fiscal financing gaps whereas the rest is expected to come from other development partners of Mozambique, including US\$170 million from the World Bank and US\$54 million from the EU.

**Text Table 4. Mozambique: Evolution of Selected Macroeconomic Indicators
Between DSA Updates**

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2029	2038	2039
	Projections											
Real GDP growth (Percent)												
Previous DSA: RCF (April 2019)	3.7	3.3	1.8	6.0	4.0	4.0	9.2	11.5	26.9	2.6	2.7	...
Current DSA	3.7	3.4	2.2	2.2	4.7	4.0	8.6	11.0	11.2	2.7	2.6	2.0
Nominal GDP (US\$ billion)												
Previous DSA: RCF (April 2019)	12.6	14.4	15.1	16.7	17.9	19.0	21.3	24.2	31.3	43.3	72.8	...
Current DSA	13.2	14.6	14.9	14.8	15.7	17.3	19.9	22.6	25.6	40.2	67.7	70.4
Overall fiscal deficit (Percent of GDP)												
Previous DSA: RCF (April 2019)	3.4	5.5	6.5	4.8	3.7	2.6	1.9	0.1	-1.4	-2.3	-14.0	...
Current DSA	3.2	7.2	0.2	5.6	3.8	2.9	1.2	0.8	0.5	-1.8	-11.3	-12.1
Current account deficit (Percent of GDP)												
Previous DSA: RCF (April 2019)	20.0	30.4	58.0	66.7	62.9	75.6	61.6	39.3	11.3	-1.9	-5.8	...
Current DSA	19.1	30.9	20.7	63.3	66.1	78.3	64.1	43.0	31.3	-6.1	-9.5	-9.6
FDI (Percent of GDP)												
Previous DSA: RCF (April 2019)	18.2	18.7	18.5	21.2	20.1	23.9	17.1	13.5	4.4	3.7	6.0	...
Current DSA	17.4	18.5	14.9	20.4	23.5	27.9	20.7	15.5	12.3	4.9	9.0	9.8

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

8. The baseline assumes a standstill on all interest and principal payments, as well as arrears due in 2020 to G20 official bilateral creditors. This is in line with the G20 initiative to help poor countries channel resources reserved for debt service payments to policy responses to the COVID-19 pandemic. It considers rescheduling debt service payments due from May 1 to end-2020 to G20 official lenders at the existing interest rates in the loans with one-year grace period and a repayment over the next three years.

9. Considering the recent communication to staff that the government does not intend to support MAM, which will follow the normal course of commercial bankruptcy without backing, the VTB loan to MAM has been removed from the DSA baseline. Further, given the authorities' representation to staff that the validity of the government guarantee on that loan is in dispute, the guarantee has also been removed from the DSA baseline as of 2020 and is instead treated as a contingent liability in accordance to IMF policy. Together with the government guarantee on the loan contracted by Proindicus, which is in dispute as well, the contingent liability from SOE's debt now amounts to 7.6 percent of GDP (Text Table 5).

Text Table 5. Mozambique: Calibration of the contingent liability stress test

1 The country's coverage of public debt		The central, state, and local governments plus social security, central bank, government-guaranteed debt, non-guaranteed SOE debt		
		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		
3 SoE's debt (guaranteed and not guaranteed by the government) 1/		2 percent of GDP	7.60	SOE sovereign guarantee in dispute
4 PPP		35 percent of PPP stock	3.21	
5 Financial market (the default value of 5 percent of GDP is the minimum)		5 percent of GDP	5.00	
Total (2+3+4+5) (in percent of GDP)			15.81	

1/ The default shock of 2% of GDP will be triggered for countries whose government-guaranteed debt is not fully captured under the country's public debt definition (1.). If it is already included in the government debt (1.) and risks associated with SoE's debt not guaranteed by the government is assessed to be negligible, a country team may reduce this to 0%.

10. With regards to the LNG sector, relative to the last DSA, the baseline scenario assumes a delay of the ExxonMobil-led LNG megaproject by two years. ExxonMobil and its partners have yet to reach a final investment decision (FID) on this project. Under the challenging global environment of lower energy prices and tighter financing conditions, it is plausible to assume that ExxonMobil and its partners will delay the FID to 2021 and start LNG production only in 2026. The LNG megaprojects led by Total and ENI, however, are assumed to move ahead as scheduled because their FIDs have already been reached, contracts to deliver LNG have been signed and financial penalties for non-delivery are substantial.

11. Risks are tilted to the downside, although larger than expected LNG production and revenues constitute an important upside risk. The main risks include (i) a more pronounced than envisaged COVID-19 pandemic in Mozambique, (ii) delays in the implementation of the LNG megaprojects that have already reached their FID, and (iii) delayed normalization of the global economy and protracted trade disruptions. Previously identified risks remain, including (i) a deterioration in the security situation in the North, (ii) backtracking of peace negotiations with the main opposition party, Renamo, and (iii) extreme climate events.

12. According to the debt sustainability framework's realism tools, the baseline projections are reasonable (Figures 3 and 4). The growth projections are relatively lower than suggested by the alternative fiscal-growth multiplier analysis due to the adverse growth effects related to COVID-19. The baseline fiscal adjustment in the primary balance seems credible as it does not fall in the upper quartile of the distribution of past adjustments of LICs. The contribution of public investment to growth seems reasonable in comparison to historical contributions and the gradual economic recovery following the 2016 economic downturn.

COUNTRY CLASSIFICATION

13. Mozambique's debt carrying capacity is assessed as weak, unchanged from the last DSA. Mozambique's Composite Indicator score is 2.60, indicating that the country's debt-carrying capacity is weak. The reason for the weak debt carrying capacity assessment is the huge scale of LNG megaprojects

under development (these projects amount to over three times Mozambique's GDP) and their related imports.⁴ Accordingly, the relevant indicative thresholds for the weak category are 30 percent for the PV of debt-to-GDP ratio, 140 percent for the PV of debt-to-exports ratio, 10 percent for the debt service-to-exports ratio, and 14 percent for the debt service-to-revenue ratio. These thresholds are applicable to the public and publicly guaranteed external debt.

DEBT SUSTAINABILITY

External Debt Sustainability Analysis

14. Under the baseline scenario, all external debt indicators breach the policy relevant thresholds in the near and medium term (Table 1, Text Table 6 and Figure 1).⁵

- **The PV of external public debt in terms of GDP** would reach 68 percent at end-2020 and is projected to remain above the prudent threshold until 2027. This is partially driven by ENH borrowing to finance its equity participation in the LNG megaprojects, and the issuance of a sovereign guarantee to ENH to cover its share in the borrowing package for Area 1 Golfinho project.⁶ The ratios would drop below the prudent threshold by 2028, as the sovereign guarantee contractually lapses in 2026 (after the start of LNG production).
- After worsening in 2020, **the PV of external public debt in terms of exports** would gradually decline, albeit above the 140 percent prudent threshold until 2023. It would improve rapidly thereafter as LNG exports pick up over the long term.
- **External public debt service in terms of revenue** would drop below the prudent threshold temporarily in 2020 but would breach again the threshold the following year and up to 2030. The uptick around 2025 is a result of ENH starting to service its debt as LNG production is expected to start.
- **External public debt service in terms of exports** would drop below the prudent threshold in 2024 and would remain below it during the rest of the projection period.

⁴ Mozambique's debt carrying capacity assessment would have been medium if only non-megaproject imports were considered in the calculation of the Composite Indicator. Megaproject imports are fully financed through special investment vehicles outside the country and included in the balance of payments statistics, with no potential bearing on international reserves. This argues for the exercise of judgment in assessing sustainability.

⁵ As in the last DSA, the historical scenario has been excluded from Figure 1. Such a scenario shows unrealistically fast declines in the public debt-to-GDP ratio, as the non-interest current account deficit at the historical average is much lower than projected because of LNG investments. Meanwhile, private debt accumulation is assumed to remain unchanged compared to the baseline.

⁶ In the baseline, the guarantee is phased-in in line with the expected flow of disbursements as the LNG megaproject led by Total (Golfinho project) is implemented, and that contractually the guarantee does not give rise to debt service payments and it ceases to exist in the first year after LNG production starts.

Text Table 6. Mozambique: PPG of External Debt (Percent of GDP)									
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	Prel.	Prel.				Projections			
Public sector debt									
Nominal stock of total debt	106.6	110.0	108.4	113.7	113.1	106.2	101.1	91.9	81.7
Of which: external	87.4	92.4	89.4	97.1	97.4	91.4	88.3	80.8	72.6
Nominal stock of total debt, excl. ENH's debt	100.6	103.1	98.6	98.8	93.4	83.0	74.9	66.7	59.1
Of which: external debt, excl. ENH's debt	81.5	85.4	79.6	82.1	77.7	68.2	62.1	55.6	50.0
Sources: Mozambican authorities; and IMF staff calculations and projections.									

15. External public debt and public debt service ratios are most sensitive to exchange rate and export shocks (Table 3). The stress tests illustrate that a nominal export growth (in U.S. dollars) set to its historical average minus one standard deviation, or the baseline projection minus one standard deviation (whichever is the lower) in 2020 and 2021, would increase the PV of external public debt-to-GDP ratio by 26 percentage points (to 93 percent) in 2021. Similarly, the PV of external public debt-to-export ratio would double to 369 percent in 2021 (compared to 180 percent under the baseline). The export shock has a similar effect on the two debt service ratios. Vulnerability to exchange rate movements is an expected outcome for a commodity exporter like Mozambique with a relatively low export-to-exchange-rate elasticity and a relatively high share of external public debt in the total. External debt service indicators are also sensitive to the assumptions around ENH's future debt service profile.

A. Public Sector Debt Sustainability Analysis

16. The PV of debt-to-GDP ratio is projected to surpass the 35 percent of GDP benchmark until 2028 (Table 2 and Figure 2). Total public and publicly guaranteed debt amounted to about 110 percent of GDP as of end-2019, with external debt accounting for about four-fifths of the total. The evolution of public debt is driven mainly by the same factors influencing external debt, including those related to ENH's share in the LNG megaprojects. The debt service (including rollover of T-bills for cash flow management) is expected to absorb nearly 37 percent of expected revenues and grants in 2020 and decline in the following years.

17. The standardized sensitivity analysis shows public debt indicators are highly sensitive to primary balance, exports as well as changes in current transfers and FDI (Table 4). A shock to the primary balance would lead the PV of debt-to-GDP ratio to reach 107 percent (compared to 84 percent under the baseline scenario) by 2021. A shock to exports or current transfers-to-GDP and FDI-to-GDP ratios would increase the PV of debt-to-GDP ratio to about 100 percent in 2021.

RISK RATING AND VULNERABILITIES

18. Mozambique's debt is assessed to remain in distress, but sustainable in a forward-looking sense. This assessment is unchanged relative to the last DSA. Considering that, to a large extent, future borrowing and government guarantees reflect state participation in the sizable LNG developments, debt is deemed sustainable in a forward-looking sense. Participation in the recently announced G20 initiative would provide debt service relief in the near term, thus flattening the projected sharp deterioration in debt liquidity indicators due to the COVID-19 pandemic. The possibility of an extension of the G20 initiative into 2021 would be a further mitigating factor for the debt sustainability assessment. Moreover, as noted above, debt carrying capacity is likely to be stronger than signaled by the CI rating because international reserves do not need to cover imports related to megaprojects (which are fully funded through special investment vehicles outside the country). This assessment is also anchored in the authorities' strong commitment to implement fiscal consolidation and a prudent borrowing strategy. Together with the coming on-stream of the LNG projects, this is expected to put public debt indicators on a firmly downward trajectory over the medium term. In line with the previous DSA, stress test results underscore the downside risks for debt sustainability originating from negative export and primary fiscal balance shocks that could hit the Mozambican economy. These results further emphasize the need to diversifying the economy and broadening the export base as well as implementing a prudent borrowing strategy.

19. Debt management and oversight needs to be strengthened further. While the authorities have already taken important steps, including to improve the transparency of the process of considering and granting sovereign guarantees, the MEF debt unit needs to be strengthened with respect to both its capacity and clout to exercise effective oversight over the entire public debt portfolio and to implement stronger safeguards. In addition, building on the new SOE Law, oversight over the entire SOE sector needs to be substantially strengthened.

Authorities' Views

20. The authorities broadly agree with the analysis and recommendations above. They noted that their debt strategy is being implemented with the aim to bring Mozambique's debt risk to moderate levels over the medium term. This would be achieved through debt reduction as well as medium-term fiscal consolidation. The authorities emphasized their commitment to strengthen governance, transparency, and accountability along the lines of the Government's Diagnostic Report prepared with IMF technical assistance. In addition, the authorities expressed their intention to request forbearance from creditors under the recently-announced G20 initiative, which would deliver debt service relief in the near term, thus providing an additional cushion to respond to the COVID-19 pandemic and flattening the projected sharp deterioration in debt liquidity indicators due to the COVID-19 pandemic.

Table 1. Mozambique: External Debt Sustainability Framework, Baseline Scenario, 2016–2039
(In percent of GDP, unless otherwise indicated)

(In percent of GDP, unless otherwise indicated)

	Actual			Projections										Average 8/ Historical Projections	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2029	2039	Historical	Projections	
External debt (nominal) 1/ of which: public and publicly guaranteed (PPG)	164.2 104.3	143.9 87.4	154.9 92.4	160.0 89.4	197.5 97.1	230.8 97.4	263.3 91.4	277.1 88.3	273.7 80.8	262.1 72.6	158.2 36.8	16.9 11.2	104.5 59.4	222.0 72.9	
Change in external debt	42.6	-20.3	11.0	5.1	37.5	33.3	32.5	13.8	-3.4	-11.6	-14.4	-7.7			
Identified net debt-creating flows	50.6	-13.5	-1.7	2.4	39.3	33.8	41.9	23.7	0.7	-8.0	-15.4	-19.8	6.3	3.2	
Non-interest current account deficit	32.5	16.8	28.7	18.0	59.6	62.5	74.8	60.6	39.8	27.7	-11.3	-11.1	27.5	29.6	
Deficit in balance of goods and services	34.4	21.5	31.2	26.7	65.1	67.5	79.1	64.4	42.4	24.9	-18.4	-21.6	32.8	31.3	
Exports	31.6	41.1	41.0	38.0	29.2	37.2	37.7	40.5	45.7	49.6	60.5	57.7			
Imports	66.0	62.6	72.1	64.7	94.3	104.6	116.8	104.9	88.1	74.5	42.1	36.0			
Net current transfers (negative = inflow)	-2.0	-4.8	-2.3	-8.4	-5.3	-4.8	-3.8	-3.1	-1.7	-1.5	-0.5	-0.4	-5.7	-3.6	
of which: official	-1.3	-3.5	-0.7	-6.6	-3.6	-3.2	-2.3	-1.7	-0.4	-0.3	-0.2	0.0			
Other current account flows (negative = net inflow)	0.1	0.1	-0.1	-0.3	-0.2	-0.2	-0.5	-0.7	-1.0	4.2	7.6	10.9	0.4	1.9	
Net FDI (negative = inflow)	-25.9	-17.4	-18.5	-14.9	-20.4	-23.5	-27.9	-20.7	-15.5	-12.3	-4.9	-9.8	-22.6	-14.6	
Endogenous debt dynamics 2/	44.0	-12.8	-12.0	-0.7	0.1	-5.2	-4.9	-16.1	-23.5	-23.4	0.8	1.1			
Contribution from nominal interest rate	3.1	2.3	2.2	2.7	3.7	3.6	3.5	3.5	3.3	3.6	5.3	1.6			
Contribution from real GDP growth	-6.2	-5.6	-4.4	-3.4	-3.5	-8.7	-8.4	-19.6	-26.8	-27.0	-4.5	-0.5			
Contribution from price and exchange rate changes	47.1	-9.6	-9.7	...	...	...	...	...	...	...	...	...			
Residual 3/ of which: exceptional financing	-7.9 -1.5	-6.8 -2.8	12.7 -2.2	2.7 -1.6	-1.8 -0.6	-0.6 -0.5	-9.4 -0.5	-9.9 -0.4	-4.1 -0.2	-3.6 -0.2	1.1 -0.1	12.1 0.0	2.6	-2.9	
Sustainability indicators															
PV of PPG external debt-to-GDP ratio	...	...	60.1	62.6	68.1	66.9	64.6	59.4	53.7	46.5	25.8	8.6			
PV of PPG external debt-to-exports ratio	...	...	146.6	164.9	233.2	180.0	171.3	146.8	117.6	93.7	42.7	15.0			
PPG debt service-to-exports ratio	12.2	10.3	12.2	10.8	9.6	10.7	10.4	10.1	8.0	8.1	5.8	2.0			
PPG debt service-to-revenue ratio	17.5	16.9	20.8	13.9	12.7	16.3	15.5	15.7	14.7	16.7	16.6	3.3			
Gross external financing need (Million of U.S. dollars)	1662.9	709.0	2432.6	1534.5	6896.8	7452.0	9504.3	9556.9	7127.7	5834.3	-107.3	-8894.2			
Key macroeconomic assumptions															
Real GDP growth (in percent)	3.8	3.7	3.4	2.2	2.2	4.7	4.0	8.6	11.0	11.2	2.7	2.0	6.0	7.6	
GDP deflator in US dollar terms (change in percent)	-27.9	6.2	7.2	-0.2	-2.7	1.6	5.5	6.3	2.2	2.0	2.0	1.9	-3.4	2.2	
Effective interest rate (percent) 4/	1.9	1.6	1.7	1.8	2.3	1.9	1.7	1.5	1.3	1.5	3.2	6.7	1.4	2.1	
Growth of exports of G&S (US dollar terms, in percent)	-8.9	43.4	10.5	-5.5	-23.6	35.5	11.4	24.0	28.0	23.1	2.8	3.2	8.2	15.9	
Growth of imports of G&S (US dollar terms, in percent)	-25.8	4.5	27.9	-8.5	44.9	18.0	22.5	3.7	-4.8	-4.0	1.7	-1.2	11.9	5.5	
Grant element of new public sector borrowing (in percent)	...	...	...	19.6	45.2	49.2	43.8	38.4	43.2	38.2	47.8	47.8	...	41.7	
Government revenues (excluding grants, in percent of GDP)	22.0	25.1	24.0	29.5	22.1	24.5	25.4	26.1	24.8	24.1	21.2	34.4	21.5	24.0	
Aid flows (in Million of US dollars) 5/	671.1	1450.0	558.3	337.6	1620.0	1616.0	1574.3	1498.2	1104.8	906.9	394.1	236.3			
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.1	10.6	9.1	8.0	6.6	4.1	3.0	0.9	0.3	...	4.5	
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	31.9	66.7	68.1	60.9	55.8	58.9	57.2	84.5	75.7	...	62.5	
Nominal GDP (Million of US dollars)	11,937	13,150	14,583	14,870	14,782	15,723	17,251	19,923	22,598	25,625	40,208	70,379			
Nominal dollar GDP growth	-25.2	10.2	10.9	2.0	-0.6	6.4	9.7	15.5	13.4	13.4	4.8	4.0	2.4	10.0	
Memorandum items:															
PV of external debt 7/	...	...	122.6	133.2	168.5	200.3	236.5	248.2	246.6	236.0	147.3	14.4			
In percent of exports	...	...	299.3	350.8	577.5	539.0	627.1	613.2	540.0	475.8	243.6	24.9			
Total external debt service-to-exports ratio	23.3	14.8	15.7	18.9	25.5	22.6	22.0	20.1	16.0	14.8	26.3	14.4			
PV of PPG external debt (in Million of US dollars)	...	...	8758.6	9310.3	10059.8	10516.7	11142.9	11836.2	12142.1	11913.4	10376.4	6085.5			
(Pvt-Pvt-1)/GDPt-1 (in percent)	...	...	...	3.8	5.0	3.1	4.0	4.0	1.5	-1.0	-1.7	-0.5			
Non-interest current account deficit that stabilizes debt ratio	-10.1	37.1	17.7	12.9	22.1	29.2	42.3	46.8	43.2	39.2	3.0	-3.4			

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - p(1+g)] / (1+g+p+g)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and p = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

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.

Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	No

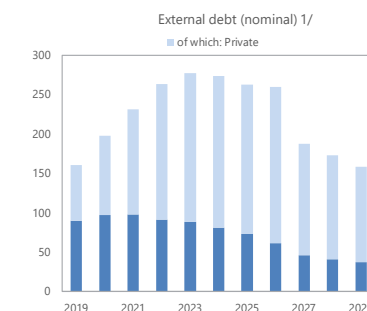
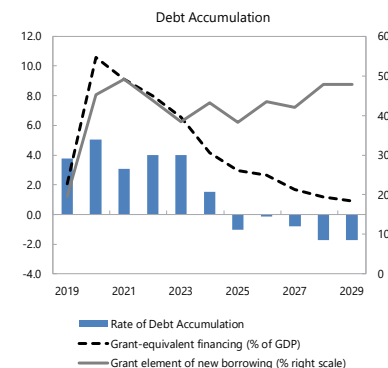


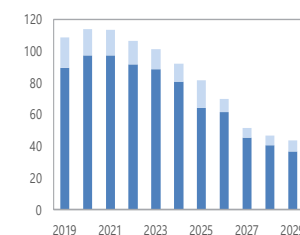
Table 2. Mozambique: Public Sector Debt Sustainability Framework, Baseline Scenario, 2016–2039
(In percent of GDP, unless otherwise indicated)

	Actual			Projections										Average 6/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2029	2039	Historical	Projections	
Public sector debt 1/	126.9	106.6	110.0	108.4	113.7	113.1	106.2	101.1	91.9	81.7	43.6	18.1	69.6	84.3	
of which: external debt	104.3	87.4	92.4	89.4	97.1	97.4	91.4	88.3	80.8	72.6	36.8	11.2	59.4	72.9	
Change in public sector debt	39.5	-20.3	3.5	19.0	16.6	15.7	14.8	12.9	11.1	9.1	6.8	6.9			
Identified debt-creating flows	27.3	-25.9	4.1	-5.0	7.6	-3.1	-10.5	-9.5	-11.5	-10.9	-4.4	-13.4	-14.1	-6.9	
Primary deficit	1.8	0.0	2.3	-3.3	2.4	0.8	0.1	-1.6	-1.8	-2.6	-4.1	-13.4	-14.7	-1.8	
Revenue and grants	23.9	27.1	26.0	30.4	28.3	29.5	29.4	29.4	26.7	25.7	21.9	34.6	25.9	26.5	
of which: grants	1.9	1.9	2.0	1.0	6.2	5.0	4.0	3.3	1.9	1.6	0.8	0.2			
Primary (noninterest) expenditure	25.7	27.0	28.3	27.2	30.7	30.3	29.6	27.8	24.9	23.1	17.9	21.2	11.2	24.6	
Automatic debt dynamics	25.5	-25.9	1.7	-1.7	5.2	-3.9	-10.7	-7.9	-9.7	-8.3	-0.4	0.0			
Contribution from interest rate/growth differential	-2.9	-3.5	-1.4	-1.9	-2.0	-4.5	-3.8	-7.9	-9.6	-8.3	-0.3	0.0			
of which: contribution from average real interest rate	0.3	1.1	2.1	0.5	0.3	0.6	0.5	0.5	0.4	0.9	0.9	0.4			
of which: contribution from real GDP growth	-3.2	-4.6	-3.5	-2.4	-2.3	-5.1	-4.3	-8.4	-10.0	-9.2	-1.2	-0.4			
Contribution from real exchange rate depreciation	28.4	-22.4	3.1	...	...	...	...	...	...	...	...	...			
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0			
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0			
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	0.0	0.0			
Residual	12.2	5.5	-0.6	3.5	4.9	3.0	-3.3	4.5	2.1	0.7	1.3	10.2	21.8	0.8	
Sustainability indicators															
PV of public debt-to-GDP ratio 2/	...	...	78.4	80.9	85.9	84.0	78.0	73.5	66.1	56.6	33.1	15.7			
PV of public debt-to-revenue and grants ratio	...	...	301.7	265.6	303.9	285.2	264.9	249.7	247.0	220.2	150.8	45.3			
Debt service-to-revenue and grants ratio 3/	22.6	25.1	31.7	31.9	37.0	37.7	33.5	28.8	28.7	28.9	25.9	11.0			
Gross financing need 4/	4.5	3.4	10.6	8.0	13.5	12.5	10.5	7.3	6.0	5.0	1.7	-9.6			
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	3.8	3.7	3.4	2.2	2.2	4.7	4.0	8.6	11.0	11.2	2.7	2.0	6.0	7.6	
Average nominal interest rate on external debt (in percent)	1.9	2.5	2.5	1.7	1.2	1.3	1.3	1.5	1.6	2.5	3.3	2.2	1.3	2.1	
Average real interest rate on domestic debt (in percent)	-2.6	-1.4	9.0	6.1	6.6	7.3	7.2	6.0	5.5	5.5	6.6	6.1	3.1	6.2	
Real exchange rate depreciation (in percent, + indicates depreciation)	38.2	-22.0	3.7	...	...	...	...	...	...	...	...	...	7.3	...	
Inflation rate (GDP deflator, in percent)	13.7	7.6	2.1	3.4	6.0	5.6	5.5	6.4	6.8	6.7	5.3	5.2	5.1	6.0	
Growth of real primary spending (deflated by GDP deflator, in percent)	-14.2	9.0	8.5	-2.0	15.5	3.3	1.6	2.2	-0.6	2.9	3.2	5.0	1.1	3.0	
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-37.7	20.3	-1.1	-1.7	-2.9	1.5	7.1	3.4	7.5	7.6	-1.0	-10.2	-6.2	4.2	
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	0.0	0.0			

Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	No

Public sector debt 1/

■ of which: local-currency denominated
■ of which: foreign-currency denominated



Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central, state, and local governments plus social security, central bank, government-guaranteed debt, non-guaranteed SOE debt. Definition of external debt is Currency-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.

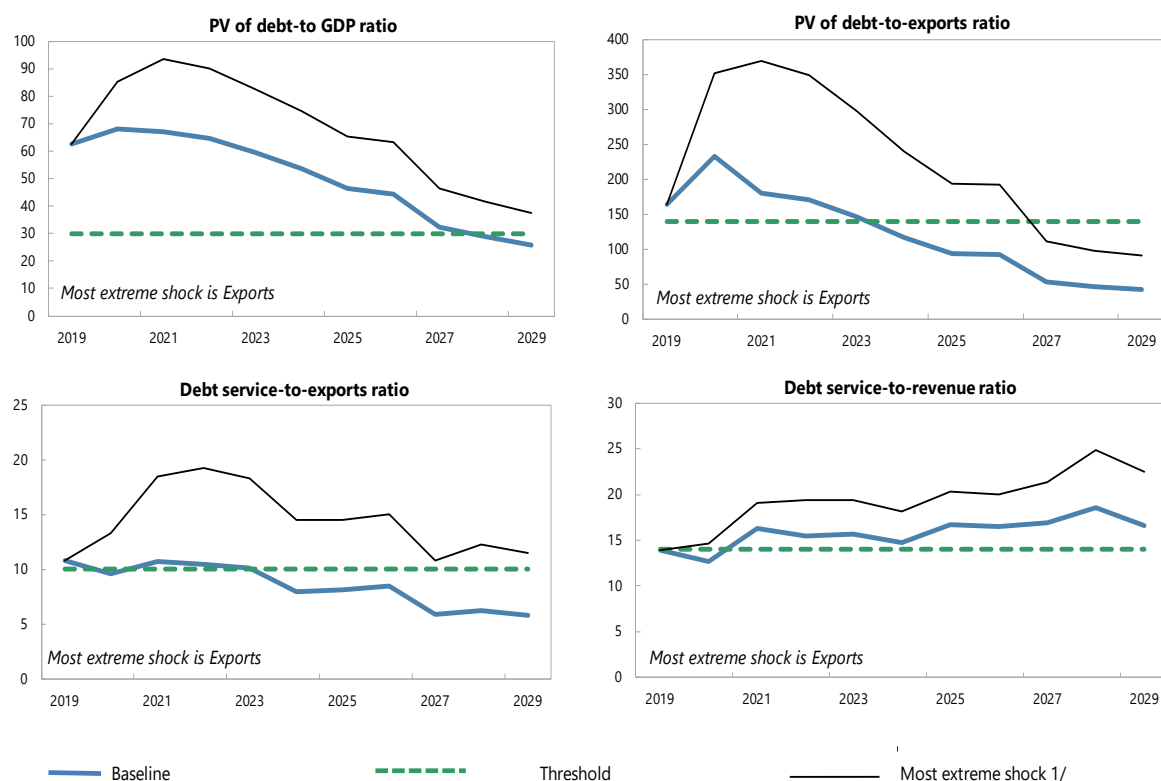
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

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 stabilize 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. Mozambique: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2019–2029



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	2.2%	2.2%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	30	24
Avg. grace period	10	6

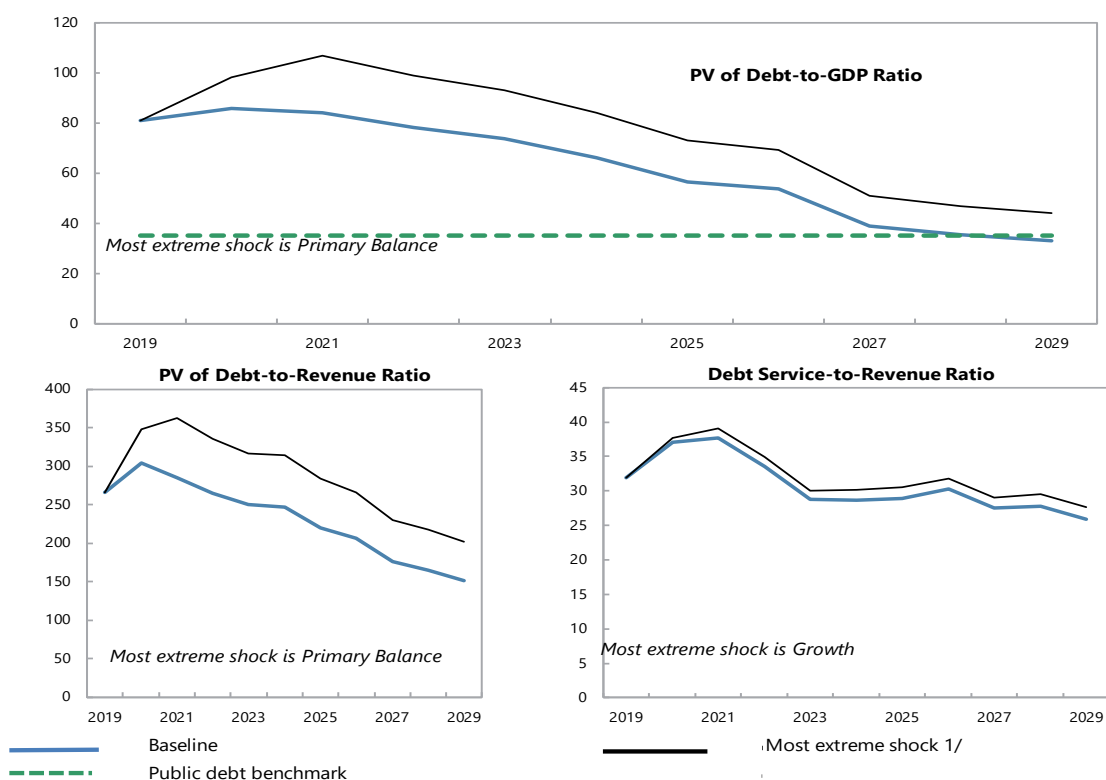
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 extreme 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. Mozambique: 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	53%	99%
Domestic medium and long-term	36%	1%
Domestic short-term	11%	0%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	2.2%	2.2%
Avg. maturity (incl. grace period)	30	24
Avg. grace period	10	6
Domestic MLT debt		
Avg. real interest rate on new borrowing	6.1%	10.7%
Avg. maturity (incl. grace period)	4	3
Avg. grace period	2	2
Domestic short-term debt		
Avg. real interest rate	3%	12.0%

* 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 extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Table 3. Mozambique: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2019–2029 (In percent)

	Projections										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
PV of debt-to GDP ratio											
Baseline	62.6	68.1	66.9	64.6	59.4	53.7	46.5	44.5	32.4	28.8	25.8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	62.6	42.3	18.8	-12.4	-43.3	-65.5	-84.5	-96.8	-71.7	-53.9	-30.8
B. Bound Tests											
B1. Real GDP growth	62.6	69.9	70.4	68.0	62.5	56.6	48.9	46.8	34.2	30.3	27.2
B2. Primary balance	62.6	78.2	87.0	83.3	76.2	69.1	60.5	58.4	43.1	38.9	35.7
B3. Exports	62.6	85.3	93.4	89.9	82.4	74.7	65.4	63.1	46.4	41.5	37.5
B4. Other flows 2/	62.6	76.5	83.6	80.5	73.7	66.9	58.6	56.5	41.5	37.1	33.6
B5. One-time 30 percent nominal depreciation	62.6	86.8	70.4	68.2	63.0	56.8	48.5	45.9	33.0	29.0	25.8
B6. Combination of B1-B5	62.6	87.5	85.9	82.8	76.0	68.9	59.9	57.6	42.0	37.4	33.7
C. Tailored Tests											
C1. Combined contingent liabilities	62.6	78.8	77.1	74.0	67.7	61.2	53.3	51.1	37.6	33.7	30.7
C2. Natural disaster	62.6	76.0	74.5	71.8	66.0	59.9	52.3	50.4	37.2	33.5	30.7
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	164.9	233.2	180.0	171.3	146.8	117.6	93.7	92.5	53.0	46.7	42.7
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	164.9	145.1	50.5	-33.0	-107.0	-143.4	-170.4	-201.4	-117.1	-87.5	-51.0
B. Bound Tests											
B1. Real GDP growth	164.9	233.2	180.0	171.3	146.8	117.6	93.7	92.5	53.0	46.7	42.7
B2. Primary balance	164.9	267.9	234.0	221.0	188.1	151.2	121.9	121.5	70.4	63.2	59.1
B3. Exports	164.9	351.8	368.7	349.6	298.4	239.9	193.4	192.6	111.3	98.8	91.1
B4. Other flows 2/	164.9	262.3	225.1	213.4	182.2	146.5	118.1	117.7	67.9	60.2	55.6
B5. One-time 30 percent nominal depreciation	164.9	233.2	148.5	141.8	122.0	97.5	76.7	74.9	42.3	37.0	33.4
B6. Combination of B1-B5	164.9	306.5	200.7	240.7	205.8	165.2	132.5	131.4	75.2	66.5	61.0
C. Tailored Tests											
C1. Combined contingent liabilities	164.9	270.2	207.4	196.1	167.2	134.0	107.4	106.4	61.4	54.8	50.8
C2. Natural disaster	164.9	268.8	207.1	196.6	168.4	135.4	108.9	108.3	62.8	56.2	52.4
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	10.8	9.6	10.7	10.4	10.1	8.0	8.1	8.4	5.8	6.2	5.8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	10.8	9.3	8.9	7.4	6.2	3.3	4.0	3.6	1.5	1.7	-1.4
B. Bound Tests											
B1. Real GDP growth	10.8	9.6	10.7	10.4	10.1	8.0	8.1	8.4	5.8	6.2	5.8
B2. Primary balance	10.8	9.5	11.4	11.9	11.2	8.9	8.9	9.1	6.8	7.6	7.2
B3. Exports	10.8	13.3	18.5	19.2	18.3	14.5	14.5	15.0	10.8	12.2	11.5
B4. Other flows 2/	10.8	9.6	11.4	11.7	11.1	8.8	8.8	9.1	6.7	7.5	7.0
B5. One-time 30 percent nominal depreciation	10.8	9.6	10.7	9.6	9.4	7.4	7.6	8.0	5.6	5.3	4.9
B6. Combination of B1-B5	10.8	11.2	14.4	13.9	13.3	10.5	10.6	11.0	8.2	8.5	8.0
C. Tailored Tests											
C1. Combined contingent liabilities	10.8	9.5	11.5	11.1	10.6	8.4	8.5	8.8	6.0	6.4	6.0
C2. Natural disaster	10.8	9.9	11.7	11.4	10.9	8.6	8.7	9.1	6.3	6.7	6.2
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	13.9	12.7	16.3	15.5	15.7	14.7	16.7	16.5	16.9	18.5	16.6
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	13.9	12.3	13.5	11.0	9.7	6.0	8.2	7.0	4.4	5.1	-4.1
B. Bound Tests											
B1. Real GDP growth	13.9	13.0	17.1	16.3	16.5	15.5	17.6	17.3	17.8	19.5	17.4
B2. Primary balance	13.9	12.5	17.4	17.6	17.4	16.4	18.2	17.7	19.6	22.7	20.5
B3. Exports	13.9	14.7	19.1	19.4	19.4	18.2	20.3	20.0	21.4	24.9	22.4
B4. Other flows 2/	13.9	12.7	17.3	17.3	17.3	16.2	18.1	17.8	19.4	22.3	20.0
B5. One-time 30 percent nominal depreciation	13.9	16.2	20.8	18.1	18.5	17.4	20.0	19.8	20.5	20.3	18.0
B6. Combination of B1-B5	13.9	14.4	20.0	18.8	18.9	17.7	20.0	19.7	21.7	23.3	20.9
C. Tailored Tests											
C1. Combined contingent liabilities	13.9	12.5	17.4	16.5	16.5	15.5	17.4	17.1	17.5	19.1	17.1
C2. Natural disaster	13.9	12.5	17.0	16.1	16.2	15.2	17.2	16.9	17.4	19.0	17.0
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/ 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.

2/ Includes official and private transfers and FDI.

Table 4. Mozambique: Sensitivity Analysis for Key Indicators of Public Debt, 2019–2029

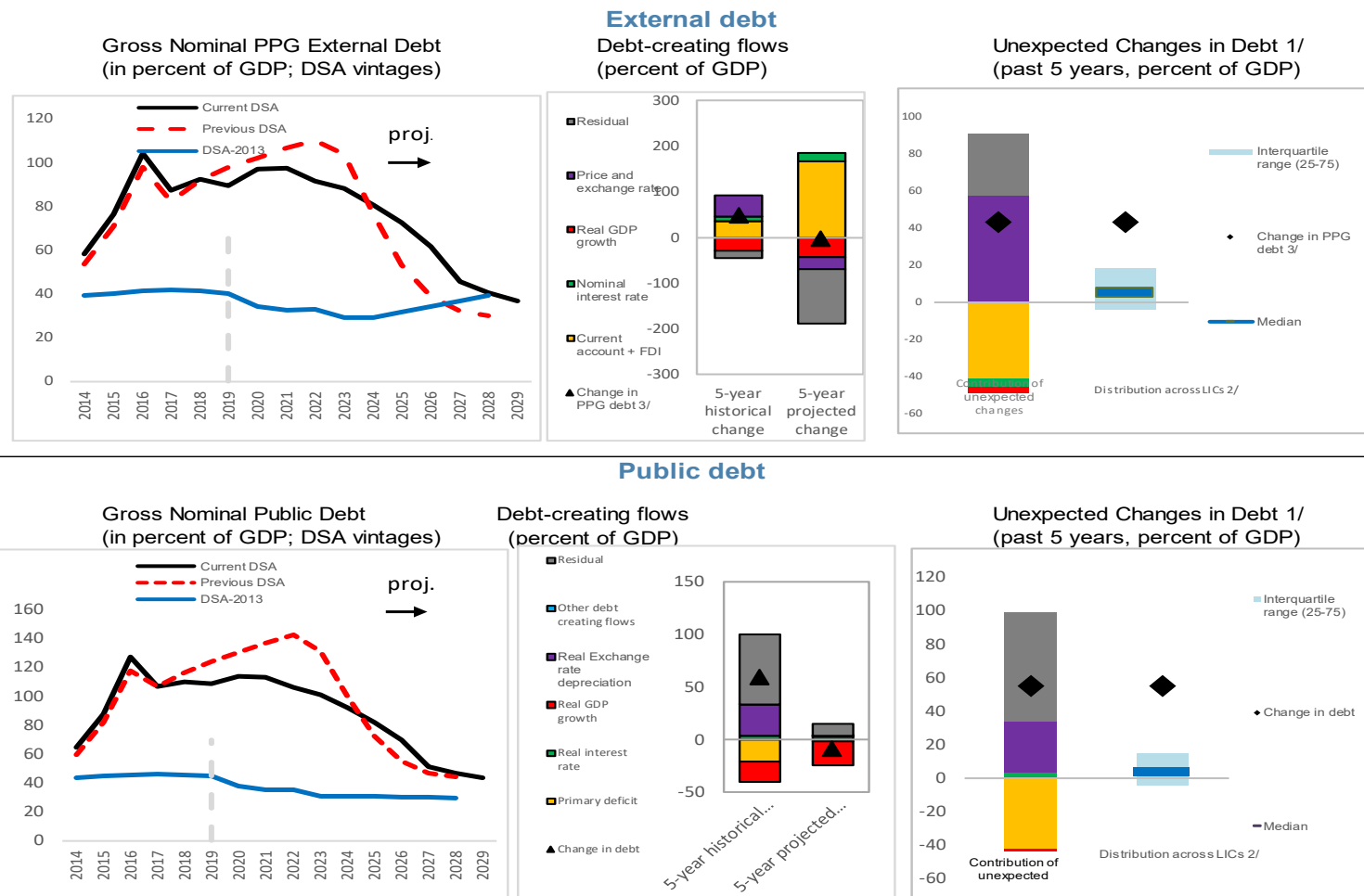
	Projections										
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
PV of Debt-to-GDP Ratio											
Baseline	80.9	85.9	84.0	78.0	73.5	66.1	56.6	53.7	38.9	35.4	33.1
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	81	72	59	44	33	22	8	-4	-15	-24	-32
B. Bound Tests											
B1. Real GDP growth	81	93	94	88	84	76	67	64	47	44	42
B2. Primary balance	81	98	107	99	93	84	73	69	51	47	44
B3. Exports	81	92	100	93	88	79	69	66	48	44	41
B4. Other flows 2/	81	95	101	94	88	80	69	66	48	44	41
B5. One-time 30 percent nominal depreciation	81	100	95	85	78	68	57	55	39	34	31
B6. Combination of B1-B5	81	92	91	77	73	66	56	53	39	35	33
C. Tailored Tests											
C1. Combined contingent liabilities	81	99	97	90	84	76	66	62	45	42	39
C2. Natural disaster	81	96	94	88	83	75	65	61	45	41	39
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	265.6	303.9	285.2	264.9	249.7	247.0	220.2	206.1	176.2	164.6	150.8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	266	256	201	149	113	81	31	-16	-65	-110	-146
B. Bound Tests											
B1. Real GDP growth	266	326	316	297	284	284	258	244	214	205	193
B2. Primary balance	266	348	362	336	316	314	283	266	230	218	201
B3. Exports	266	325	341	316	298	296	267	252	217	203	186
B4. Other flows 2/	266	334	343	318	299	297	268	253	218	204	187
B5. One-time 30 percent nominal depreciation	266	358	326	293	268	258	224	211	176	160	141
B6. Combination of B1-B5	266	328	311	264	249	247	220	204	174	163	149
C. Tailored Tests											
C1. Combined contingent liabilities	266	350	328	305	287	284	255	238	205	193	179
C2. Natural disaster	266	340	320	298	282	280	252	236	204	193	179
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	31.9	37.0	37.7	33.5	28.8	28.7	28.9	30.3	27.5	27.8	25.9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	32	36	35	30	25	25	26	26	26	23	18
B. Bound Tests											
B1. Real GDP growth	32	38	39	35	30	30	30	32	29	30	28
B2. Primary balance	32	37	39	35	31	31	30	31	30	32	30
B3. Exports	32	37	38	35	30	30	30	32	29	31	29
B4. Other flows 2/	32	37	38	35	30	30	30	32	30	31	29
B5. One-time 30 percent nominal depreciation	32	36	38	34	30	29	30	31	28	29	26
B6. Combination of B1-B5	32	36	37	33	28	28	28	30	27	27	25
C. Tailored Tests											
C1. Combined contingent liabilities	32	37	39	34	30	29	30	31	28	28	26
C2. Natural disaster	32	37	39	34	30	30	30	31	28	29	27
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/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

2/ Includes official and private transfers and FDI.

Figure 3. Mozambique: Drivers of Debt Dynamics – Baseline Scenario



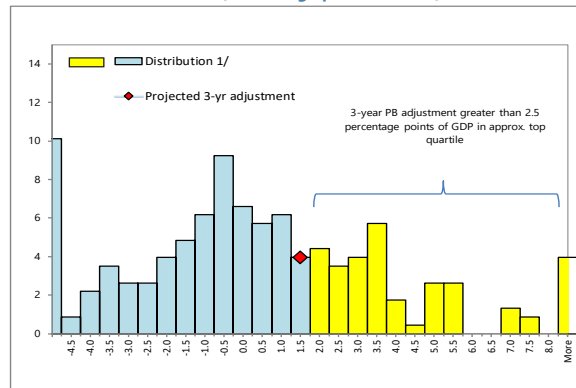
1/ Difference between anticipated and actual contributions on debt ratios.

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.

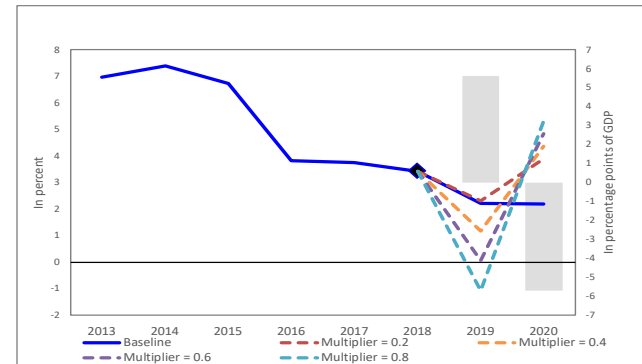
Figure 4. Mozambique: Realism Tools

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



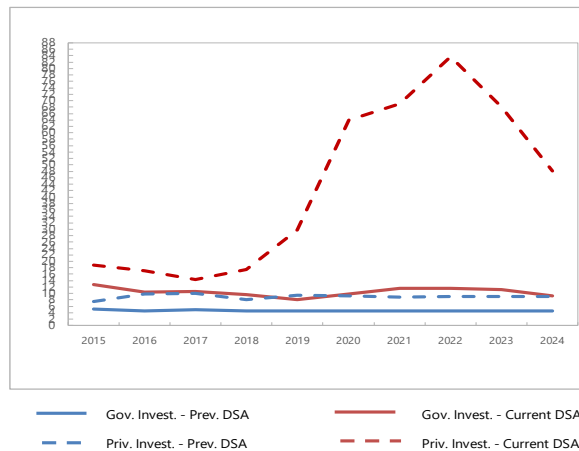
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

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)**

