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UNITED REPUBLIC OF TANZANIA

Joint World Bank-IMF Debt Sustainability Analysis

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Prepared Jointly by the staffs of the International Development Association (IDA) and the International Monetary Fund (IMF)

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Tanzania								
Joint Bank-Fund Debt Sustainability Analysis								
Risk of external debt distress	Moderate							
Overall risk of debt distress	Moderate							
Cuantilavitaria tha viels vatina	Moderate risk tool, limited space to absorb							
Granularity in the risk rating	shocks							
Application of judgment	No							

The Debt Sustainability Analysis (DSA) indicates that Tanzania's risk of external debt distress has increased to moderate, mainly due to the effects of the pandemic on exports, which has weakened Tanzania's ability to service its external debt, and to the lower debt burden thresholds that correspond to the new medium debt carrying capacity classification.² ³ Tanzania's macroeconomic conditions have been resilient despite the COVID-19 shock. Although uncertainty is high, and risks are tilted to the downside, the macroeconomic outlook is stable. The results of the external DSA show that, with the exception of a one-off breach in the debt service to exports ratio caused by the collapse in tourism receipts due to the pandemic, all external debt burden indicators continue to remain below the policydetermined thresholds under the baseline. However, in the short-term Tanzania has limited space to absorb shocks, and the ongoing effect of the pandemic on the tourism sector is highly uncertain. The public DSA analysis shows that the present value of the public debtto-GDP ratio remains contained at around 30 percent, well below the 55 percent threshold. The results of the DSA underscore the importance of accessing, to the extent possible, external financing on concessional terms. Also, to maintain fiscal and debt sustainability, the authorities should improve public investment management and proceed only with investment projects with clear socioeconomic payoffs. Finally, it will be important to continue improving the coverage and transparency of public sector debt statistics, including non-guaranteed debt.

¹ Prepared by the IMF and the World Bank. This DSA follows the <u>Guidance Note of the Join Bank-Fund Debt Sustainability</u> <u>Framework for Low Income Countries</u>, February 2018.

² This Debt Sustainability Analysis (DSA) replaces the previous joint IMF/IDA DSA prepared in March 2019 in the context of the last Article IV Consultation (The Country Report was not published).

³ Under the revised Debt Sustainability Framework for Low-Income Countries, Tanzania's Composite Indicator is 2.92 based on the April 2021 WEO and the 2019 World Bank's CPIA, corresponding to a medium debt carrying capacity.

Background

- 1. Tanzania's public and publicly guaranteed (PPG) debt remains relatively low. At the end of FY 2019/20, the level of public debt stood at 38.8 percent of GDP, down from 41.4 percent in 2017/18.⁴ However, over the past decade the debt to GDP ratio increased by more than 13 percent of GDP. While domestic debt rose over the period, most of the increase was related to external debt which accounts for 73 percent of the total debt.⁵
- 2. Non-concessional borrowing has increased in recent years to finance the public infrastructure agenda. Multilateral and official bilateral creditors continue to be the major financiers, accounting for about 70 percent of the stock of external PPG debt as of end-FY2019/20. However, in recent years, commercial borrowing as a share of new disbursement has increased to about 50 percent, and in FY2020/21 it is expected to reach 68 percent, as the authorities borrowed US\$1.3 billion through commercial loans to finance the Standard Gauge Railway project.
- 3. Domestic public debt has also increased but remains small. Domestic debt stood at 10.8 percent of GDP at end-FY2019/20, with about a fifth of that stemming from short-term instruments. Commercial banks continue to hold the largest share of government debt, followed by pension funds. If government arrears were counted as part of the domestic debt stock, the above figure would increase further by about 3 percent of GDP.⁶

	Subsectors of the public sector	Sub-sectors covered
1	Central government	X
2	State and local government	
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)	Х
7	Central bank (borrowed on behalf of the government)	Х
8	Non-guaranteed SOE debt	

1	The country's coverage of public debt	The central government, central bank, government-guaranteed debt							
			Used for the	Reasons for deviations from					
		Default	analysis	the default settings					
2	Other elements of the general government not captured in 1.	0 percent of GDP	0.0						
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	3.6	Includes known contingent liabilities					
4	PPP	35 percent of PPP stock	0.0						
5	Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5.0						
	Total (2+3+4+5) (in percent of GDP)		8.6						

 $^{^4}$ All the figures and tables in the DSA follow the fiscal year (July-June). In the figures and tables, for example the year 2021 corresponds to FY2020/21.

⁵ The government fully settled external arrears to Wallis Trading in July 2021 and with Belgium in October 2019 and has no external arrears.

⁶ It was estimated that at end-2017/18, government arrears to pension funds and TANESCO's arrears to its suppliers, amounted to about 3.1 percent of GDP.

4. The public sector debt covers central government debt, central government-guaranteed debt, and central bank debt. Owing to data constraints, the coverage of the public sector debt is limited. With assistance from development partners, the authorities have been working on broadening the coverage of the fiscal data, including local governments and public corporations. The Ministry of Financing and Planning has a wide mandate over debt management, as any domestic debt issuance by local governments and parastatals with weak financials is subject to its approval, and all external financing requires government guarantees.^{7,8}

Macroeconomic and policy assumptions

- 5. The macroeconomic outlook is stable, but hinges on the extent of changes to COVID-19 policies as well as the broader policy and reform agenda. The impact of the COVID-19 pandemic on Tanzania's economy continues to be subject to considerable uncertainties, with significant downside risks on the horizon. The third wave of the virus and/or new coronavirus variants might prolong the COVID-19 pandemic and worsen the impact on Tanzania's external demand and domestic activity. Resumption of travel restrictions by source markets, or a delayed vaccine roll-out could undermine the slow recovery in tourism and add to external pressures. Conditional on satisfactorily implementation of the authorities' National Tanzania COVID-19 Socioeconomic Response Plan (see main text), growth is expected to recover to 4 percent in 2021 and further pick up over the medium-term. The medium- and long-term macroeconomic outlook assumes a moderate and steady implementation of the authorities' reform agenda. Scarring from the COVID-19 pandemic is expected to have a persistent negative impact on Tanzania. In particular, the tourism sector is not anticipated to fully recover over the medium-term.
 - **Real GDP growth:** GDP growth is projected at $4\frac{1}{2}$ – $5\frac{1}{2}$ percent in the medium- and long-term. The authorities project higher medium-term growth in the order of 7 percent, but in staff's view such a robust level of potential growth is not warranted. Despite the impetus from the new administration of President Hassan, the past reform implementation track record, the poor business climate over the last few years that will take time to recover from, and the lasting effects of the pandemic suggest a slightly more moderate rate of growth.
 - Inflation (CPI): CPI inflation is projected at about 3½ percent over the medium-term, in line with the authorities' inflation target, and with current trends that seemed to have anchored inflation expectations at around 3½.
 - **Fiscal balance:** The overall fiscal deficit is projected to increase temporarily to 3.9 percent of GDP to accommodate about 1 percent of GDP in COVID-related spending in FY2021/22. The deficit will linger close to 3 percent of GDP over the medium-term reflecting the authorities' ambitious infrastructure plans to close

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⁷ The contingent liability stress test is calibrated to 3.6 percent of GDP. The shock is estimated to include the arrears to pension funds and TANESCO's arrears to suppliers (see footnote 6), and 0.5 percent of GDP that local governments and public non-financial corporations had in outstanding loans from banks at end-March 2021. The central government's strong control over public sector debt limits the risk of other uncaptured contingent liabilities.

⁸ Tanzania's PPP capital stock is relatively small and represents a very small risk, hence it is not considered as part of the stress test.

development gaps in energy and transportation. As revenues recover over time from their hit during the pandemic, the long-term fiscal deficit is projected to remain below the 3 percent of GDP ceiling required by the convergence criterion of the East African Community.

- Gross financing needs: Gross financing needs are projected to peak in FY2021/22 at about 7.2 percent of GDP and remain at 6¾ percent of GDP over the medium term. External non-concessional borrowing (ENCB) is projected to remain above 40 percent of annual foreign financing over the next five years, while access to grants is assumed to taper. Compared with the previous DSA, the current one includes higher projected disbursements from the World Bank of about US\$500 million per year over the medium-term.
- Current account balance: In FY2020/21 tourism receipts declined by 55 percent (or almost 2 percent of GDP) as travel froze across the world, but the balance of payments proved resilient as higher gold exports, and lower oil imports helped offset the decline in tourism. The current account deficit is estimated to widen to 4.½ percent of GDP in FY2021/22 as imports of medical equipment, medicines and vaccines pick-up steam to fight the pandemic. ¹⁰ As exports of tourism services slowly improve over the medium-term, the current account deficit is expected to narrow to about 3 percent of GDP. However, over the next five years exports are projected to be on average about 1½ percent of GDP lower than in the last DSA (Text Table 1), which is reflected in a deterioration of key debt burden indicators (see below). FDI inflows are expected to remain subdued over the medium-term at about 1½ percent of GDP.
- **Debt Service Suspension Initiative (DSSI):** Tanzania benefited from the DSSI in FY2020/21 to the tune of US\$102 million from the Exim Bank of China (US\$99.5 million) and the French Development Agency (US\$2.6 million). Consequently, the DSA includes a corresponding reduction in debt service payments in 2021, and reflects the higher debt service over the period 2022-27 to repay the rescheduled debt.
- 6. The first realism tool suggests some small changes in the decomposition of debt-creating flows (Figure 3). The decomposition of debt-creating flows indicates that the projected contribution of the current account deficit and FDI flows will have a higher impact on external debt dynamics. Similarly, lower growth and the impact of an increase in nominal interest rates will contribute to higher debt accumulation compared to historical drivers. For the total

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⁹ Development spending is projected to peak at 7.4 percent of GDP in 2022/23 and then slowly decline to about 6.5 percent of GDP over the long run.

¹⁰ The reluctance of the previous government to acknowledge and confront the extent of the pandemic has left the current administration with a weak foundation to tackle the health crisis. The new administration of President Hassan plans to rapidly implement an aggressive plan to contain the spread of the virus, which requires a significant increase in imports for the health sector.

¹¹ The Tanzanian government has also received debt relief from South Korea, Japan, Belgium and Austria, but the total amount to be rescheduled will be determined after concluding bilateral agreements. The Tanzanian authorities have not yet requested to participate in the second DSSI extension.

public debt, higher primary deficits, and a lower growth rate than in the past, will be key drivers of debt-creating flows.

Text Table	Text Table 1. Selected Macroeconomic Indicators, Current vs Previous DSA ¹												
		2020	2021	2022	2023	2024	2025	2026	Long-term				
			proj.	proj.	proj.	proj.	proj.	proj. L	ast 15 years ²				
Real GDP growth	Current	5.9	4.4	4.6	5.3	5.7	5.9	6.0	5.1				
(percent)	Previous	4.1	4.3	4.6	4.9	4.9	4.7	4.5	4.5				
Inflation	Current	3.5	3.2	3.4	3.5	3.5	3.5	3.5	3.5				
(average)	Previous	4.1	4.8	5.0	5.0	5.0	5.0	5.0	5.0				
Fiscal Balance	Current	-1.0	-2.5	-3.9	-2.9	-2.9	-2.9	-2.6	-2.7				
(percent of GDP)	Previous	-2.8	-3.2	-3.4	-3.5	-3.5	-3.5	-3.4	-2.4				
Current Account	Current	-1.6	-1.9	-4.5	-3.3	-3.1	-2.8	-2.7	-2.6				
(percent of GDP)	Previous	-4.2	-4.4	-4.7	-4.7	-4.6	-4.4	-4.5	-4.3				
Exports of Good & Services	Current	14.9	13.3	13.4	13.6	13.9	14.2	14.5	14.5				
(percent of GDP)	Previous	14.9	15.2	15.4	15.6	15.8	16.3	16.5	16.8				
FDI	Current	1.5	1.2	1.3	1.3	1.4	1.5	1.6	1.7				
(percent of GDP)	Previous	1.7	1.7	1.6	1.6	1.8	2.0	2.1	2.5				

Sources: Tanzanian authorities; and IMF staff estimates and projections

- 7. The other realism tools indicate that the projections are reasonable (Figure 4). The projected scaling-up of public investment is expected to yield a growth dividend in line with historical factors. This will be supported by the authorities' intentions to improve the business environment and public investment management. The authorities also expect to enact reforms to support financial intermediation and the development of domestic markets, which, in turn, will allow for additional levels of domestic financing.
- 8. The country's debt-carrying capacity applied in this DSA is categorized as medium. The calculated Composite Indicator (CI) Index is 2.92 based on the April 2021 WEO and the 2019 World Bank's CPIA, corresponding to a medium debt carrying capacity. The CI is lower than the 3.07 in the 2019 Article IV DSA, which corresponded to a strong debt carrying capacity. The corresponding indicative thresholds are: 40 percent for the net present value (NPV) of external debt-to-GDP ratio; 180 percent for the NPV of debt-to-exports ratio; 15 percent for the debt service-to-exports ratio; and 18 percent for the debt service-to-revenue ratio. The benchmark of the PV of total public debt for medium debt-carrying capacity is 55 percent.

¹ The previous DSA was conducted in the context of the 2019 Article IV Consultation (The Country Report was not published).

² For the current projections it covers the period 2027-2041, and for the previous DSA the period 2026-2040.

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution component	
CPIA	0.385	3.539	1.36	47%	
Real growth rate (in percent)	2.719	5.108	0.14	5%	
Import coverage of reserves (in					
percent)	4.052	42.413	1.72	59%	
mport coverage of reserves^2 (in					
percent)	-3.990	17.989	-0.72	-25%	
Remittances (in percent)	2.022	0.043	0.00	0%	
World economic growth (in					
percent)	13.520	3.078	0.42	14%	
CI Score			2.92	100%	
CI rating			Medium		

External DSA

- **9. Based on the baseline projections and borrowing assumptions, Tanzania's risk of external debt distress is assessed as moderate**. The present value of the PPG external debt-to-GDP ratio is projected to peak at about 19 percent in 2022 and remain below the corresponding threshold. The debt service-to-export ratio has a one-off marginal breach of the 15 percent threshold in 2022 under the baseline (Figure 1), and would have also breached it in 2021 if it wasn't for the debt rescheduling of US\$102 million in FY2020/21 under the DSSI. Due to the different scenario breaches (see below), the DSA rating for the external risk of debt distress is assessed as moderate. The change compared to the low risk rating in the last DSA is mainly due to the collapse of tourism exports during the COVID-19 pandemic, and the lower debt burden thresholds that correspond to the new medium debt carrying capacity classification
- 10. Furthermore, a number of debt indicators are sensitive to shocks (Figure 1). A decline in exports is the most extreme scenario among bound tests for half of the ratios, confirming the sensitivity of the Tanzanian economy to a narrowing of its exports base, as the one experienced with the COVID-19 shock. This is especially conspicuous for the debt service to exports ratio, which is projected to remain elevated, and in breach of the threshold, under this shock. A one-time 30 percent depreciation shock is the biggest impact on the debt service-to-revenue ratio and results in a one-off breach. The shocks underscore the importance of enhancing revenue mobilization and seeking concessional loans where possible. Furthermore, the historical scenario breaches two thresholds, highlighting the risks of past behavior.
- 11. Tanzania has limited space to absorb shocks due to the effect of the pandemic on tourism exports (Figure 5). The debt-service to export ratio suggests that over the medium-term Tanzania has limited space to absorb shocks, but over the long-term Tanzania will regain some space to absorb shocks, and that towards the end of the projection period it would have substantial space. There are two countervailing factors that qualify this assessment; on the one hand Tanzania has and is projected to maintain healthy levels of reserves above 5 months of imports, but on the other hand the ongoing effect

of the pandemic on the tourism sector is highly uncertain and could continue to worsen the capacity of the country to earn foreign exchange, which then serves to pay down debt. ¹² Given the relatively large fiscal needs (about 1 percent of GDP) to fight the pandemic, the government will need to carefully balance their COVID-19 response with their broader development agenda to preserve debt sustainability.

Public DSA

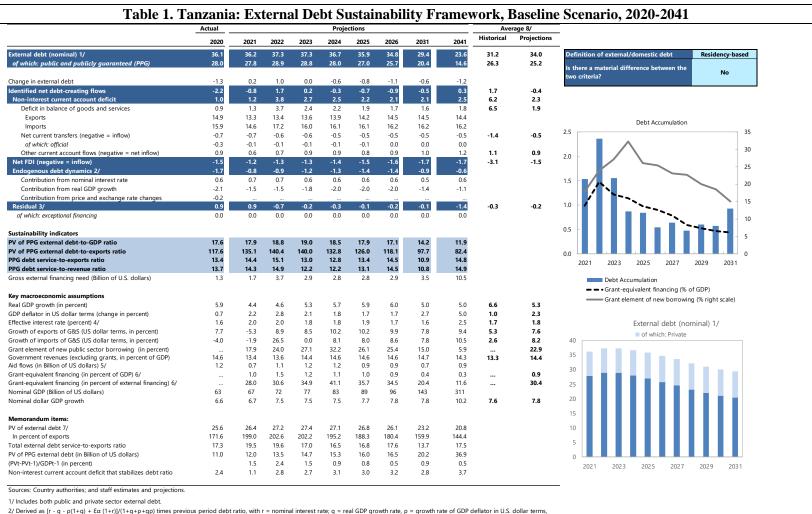
- 12. The risk of overall public debt distress is assessed as moderate, in line with the moderate risk of external debt distress rating. Under the baseline scenario, the PV of public debt remains below the indicative threshold under the baseline and most extreme stress scenario and is expected to increase modestly in the medium-term and peak at 30.5 percent of GDP in 2022. After that, the ratio is projected to decline gradually and continue to remain below both the threshold associated with heightened public debt vulnerabilities and the EAC convergence criterion of 50 percent (Figure 2).
- 13. Bound tests indicate the importance of public investment management. A one-time materialization of contingent liabilities is the most extreme scenario among bound tests for all the ratios, highlighting again the importance of improving public investment management processes and the proper prioritization of investment projects, as well as proper public financial management processes. It will also be important to improve the coverage and transparency of public sector debt statistics, including non-guaranteed debt, to minimize the risk of unexpected debt surprises.

Conclusions

- **14.** The DSA indicates that the external and the overall risk of debt distress for Tanzania are moderate. The pandemic's devastating effect on tourism inflows brought to light Tanzania's vulnerability to export shocks that threaten its capacity to service external debt. However, the healthy level of reserves of 5 months of imports serves as a significant buffer against these types of shocks. Other than a marginal breach in the debt service-to-export ratio, all other external debt burden indicators remain below the policy-dependent thresholds under the baseline scenario, but are breached under different shocks and stress tests, highlighting the increase in risk of debt distress since the last DSA. In particular, a narrow export base and one-time depreciation pose risks. The results highlight the importance of raising domestic revenue, improving public investment management, and leveraging concessional financing sources when available, while carefully selecting projects to be financed by commercial loans.
- 15. Authorities' views. The authorities agreed on the economic outlook and risks and indicated economic growth will be supported by their ambitious public investment program. On the overall assessment, the authorities agreed with the characterization of Tanzania's risks of debt distress and noted their intention to maintain prudent debt management policies and to undertake debt sustainability analysis every year. They plan to continue prioritizing borrowing on concessional terms, including seeking financing from export credit agencies, while carefully venturing to non-concessional sources for

¹² The new SDR allocation will increase reserves to about 5.6 month of imports, providing more space for Tanzania to absorb possible shocks.

projects of significant importance to the economy. To anchor fiscal consolidation in the long-term, the authorities reiterated their commitment to the EAC guidelines. The authorities also indicated that they are currently preparing a report on contingent liabilities that will help broaden the perimeter of debt covered, which is expected to be completed by end-2021.



 $[\]epsilon$ =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.

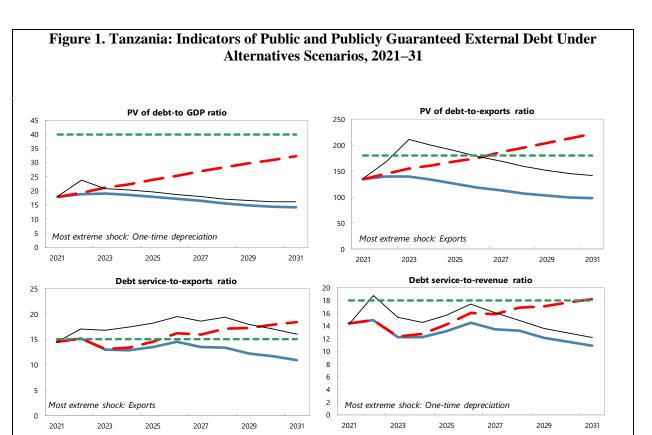
^{6/} Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

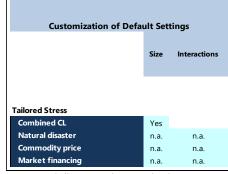
^{7/} Assumes that PV of private sector debt is equivalent to its face value.

^{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.

_	Actual				Proje	ctions				Aver	age 6/		
	2020	2021	2022	2023	2024	2025	2026	2031	2041	Historical	Projections		
Public sector debt 1/	38.8	38.5	40.4	40.0	39.5	38.8	37.7	32.6	26.6	36.0	37.0	Definition of external/domestic	Residen
of which: external debt	28.0	27.8	28.9	28.8	28.0	27.0	25.7	20.4	14.6	26.3	25.2	debt	based
Change in public sector debt	-0.8	-0.2	1.9	-0.4	-0.6	-0.7	-1.1	-0.8	-0.9			to the one of market of the control of	
dentified debt-creating flows	-1.5	-0.5	0.9	-0.5	-0.7	-0.8	-1.1	-0.7	-0.5	-0.1	-0.6	Is there a material difference	No
Primary deficit	-0.6	0.9	2.1	0.8	0.7	0.7	0.4	0.2	0.2	1.4	0.6	between the two criteria?	
Revenue and grants	15.3	13.8	14.0	14.7	14.9	14.9	14.9	14.8	14.4	14.9	14.7		
of which: grants	0.7	0.4	0.4	0.4	0.4	0.4	0.3	0.1	0.1			Public sector debt 1	/
Primary (noninterest) expenditure	14.7	14.7	16.1	15.6	15.6	15.6	15.2	15.0	14.6	16.3	15.3		
utomatic debt dynamics	-0.9	-1.3	-1.2	-1.4	-1.4	-1.4	-1.4	-0.9	-0.7			of which: local-currency deno	minated
Contribution from interest rate/growth differential	-1.0	-1.3	-1.2	-1.4	-1.4	-1.4	-1.4	-0.9	-0.7			- 6 101 6 0	
of which: contribution from average real interest rate	1.2	0.3	0.5	0.7	0.7	8.0	0.8	0.7	0.6			of which: foreign-currency der	nominated
of which: contribution from real GDP growth	-2.2	-1.6	-1.7	-2.0	-2.2	-2.2	-2.2	-1.6	-1.3			45	
Contribution from real exchange rate depreciation	0.2											40	
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	35	100
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			30	
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			25	
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			20	
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			15	
Residual	0.7	0.2	1.0	0.2	0.1	0.1	0.0	-0.1	-0.4	1.4	0.1	10	
Sustainability indicators												0	
V of public debt-to-GDP ratio 2/	28.4	28.7	30.5	30.4	30.1	29.9	29.3	26.5	24.0			2021 2023 2025 2027	2029 2
V of public debt-to-revenue and grants ratio	185.3	207.8	217.3	205.9	201.6	200.3	196.6	179.4	166.9				
Debt service-to-revenue and grants ratio 3/	37.7	39.0	37.1	37.4	35.8	39.3	42.4	43.3	47.8				
ross financing need 4/	5.2	6.2	7.3	6.4	6.0	6.5	6.7	6.6	7.1			of which: held by resider	nts
ey macroeconomic and fiscal assumptions												of which: held by non-re	sidents
eal GDP growth (in percent)	5.9	4.4	4.6	5.3	5.7	5.9	6.0	5.0	5.0	6.6	5.3	45	
verage nominal interest rate on external debt (in percent)	2.2	1.6	1.8	1.9	2.0	2.1	2.1	2.3	4.0	1.6	2.1	40	
verage real interest rate on domestic debt (in percent)	8.7	7.4	7.5	7.0	7.5	7.3	7.1	5.3	2.8	4.6	6.5	35 30	
eal exchange rate depreciation (in percent, + indicates depreciation)	0.6									0.6		25	
flation rate (GDP deflator, in percent)	1.0	2.6	3.7	4.0	4.0	4.0	4.0	5.0	7.3	6.8	4.3	20	
rowth of real primary spending (deflated by GDP deflator, in percent)	5.1	4.1	14.8	1.9	6.1	5.6	3.6	4.7	2.6	3.6	5.6	15	
rimary deficit that stabilizes the debt-to-GDP ratio 5/	0.2	1.1	0.2	1.2	1.3	1.3	1.4	1.0	1.1	0.4	1.2	10	
V 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	•••		5	
												2021 2023 2025 2027	2029 20

- 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.





-- - Historical scenario

Baseline

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 on additional financing needs tests*	esulting fr	om the stress
	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	3.8%	3.8%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	19	19
Avg. grace period	4	4

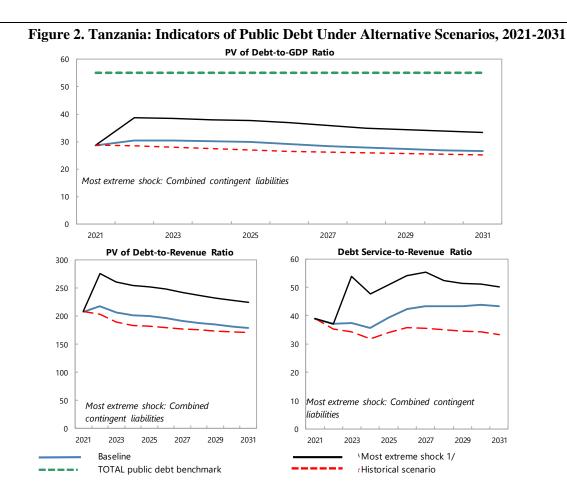
Most extreme shock 1,

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

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2031. 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.

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.



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	38%	38%
Domestic medium and long-term	49%	49%
Domestic short-term	14%	14%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	3.8%	3.8%
Avg. maturity (incl. grace period)	19	19
Avg. grace period	4	4
Domestic MLT debt		
Avg. real interest rate on new borrowing	6.6%	6.6%
Avg. maturity (incl. grace period)	5	5
Avg. grace period	0	0
Domestic short-term debt		
Avg. real interest rate	1.7%	1.7%

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

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2031. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Table 3. Tanzania: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2021-2031 (In percent)

	2021	2022	2023	2024	2025	ections 2026	2027	2028	2029	2030	203
	PV of debt-to	GDP rat	io								
Baseline	18	19	19	18	18	17	16	16	15	14	1-
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	18	19	21	22	24	25	27	28	30	31	3.
3. Bound Tests											
31. Real GDP growth	18	19	19	19	18	17	17	16	15	15	1
32. Primary balance	18	19	20	20	19	19	18	17	17	16	1
33. Exports 34. Other flows 3/	18 18	20 21	23 23	22 22	22 21	21 21	20 20	19 18	18 18	17 17	1
35. Depreciation	18	24	21	20	20	19	18	17	17	16	1
36. Combination of B1-B5	18	22	21	21	20	19	18	17	17	16	1
C. Tailored Tests											
C1. Combined contingent liabilities C2. Natural disaster	18 n.a.	22 n.a.	23 n.a.	22 n.a.	22 n.a.	22 n.a.	21 n.a.	20 n.a.	20 n.a.	19 n.a.	1 n.:
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.
Threshold	40	40	40	40	40	40	40	40	40	40	4
	PV of debt-to-ex	orts r	atio								
Baseline	135	140	140	133	126	118	113	107	103	99	9
A. Alternative Scenarios A1. Key variables at their historical averages in 2021-2031 2/	135	144	155	161	168	175	186	195	205	213	22
B. Bound Tests B1. Real GDP growth	135	140	140	133	126	118	113	107	103	99	g
32. Primary balance	135	144	149	143	136	129	124	119	115	111	10
33. Exports	135	169	211	200	190	178	170	160	152	145	14
B4. Other flows 3/	135	155	168	159	151	142	135	127	121	115	11
35. Depreciation	135	140	122	116	110	103	98	94	91	88	8
36. Combination of B1-B5 C. Tailored Tests	135	166	151	166	157	147	140	132	127	121	11
C1. Combined contingent liabilities	135	162	166	161	156	149	146	141	137	134	13
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.
Threshold	180	180	180	180	180	180	180	180	180	180	18
	Debt service-to-e	-									
Baseline	14	15	13	13	13	15	13	13	12	12	1
A. Alternative Scenarios A1. Key variables at their historical averages in 2021-2031 2/	14	15	13	13	14	16	16	17	17	18	1
B. Bound Tests											
B1. Real GDP growth	14	15	13	13	13	15	13	13	12	12	1
B2. Primary balance	14	15	13	13	14	15	14	14	13	13	1
B3. Exports	14	17	17	17	18	19	19	19	18	17	1
B4. Other flows 3/ B5. Depreciation	14 14	15 15	14 13	14 12	14 13	15 14	15 13	15 12	14 11	14 10	1
36. Combination of B1-B5	14	16	16	15	16	17	17	16	15	14	1
C. Tailored Tests											
C1. Combined contingent liabilities	14	15	14	14	15	16	15	15	14	13	1
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.
C3. Commodity price 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. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n. n.
Fhreshold	15	15	15	15	15	15	15	15	15	15	1
illesiloid				13	13	13	13	13	13	13	
Baseline Baseline	Debt service-to-r	evenue 15	12	12	13	14	13	13	12	12	1
A. Alternative Scenarios A1. Key variables at their historical averages in 2021-2031 2/	14	15	12	13	14	16	16	17	17	18	1
B. Bound Tests	14	15	12	12	13	15	14	13	12	12	1
31. Real GDP growth	14	15	12	13	13	15	14	14	13	12	1
32. Primary balance		15	13	13	14	15	15	15	14	13	1
32. Primary balance 33. Exports	14		13	13	14 16	15 17	15 16	15	14	13	1
32. Primary balance 33. Exports 34. Other flows 3/	14 14	15 10	4.5			17	16	15	14	13	
32. Primary balance 33. Exports 44. Other flows 3/ 55. Depreciation	14 14 14	19	15 13	15 13			15	15	14	13	1
32. Primary balance 33. Exports 44. Other flows 3/ 55. Depreciation 36. Combination of B1-B5	14 14		15 13	13	14	16	15	15	14	13	1
32. Primary balance 33. Exports 34. Other flows 3/ 35. Depreciation 66. Combination of B1-B5 52. Tailored Tests	14 14 14 14	19 16	13	13	14	16					
32. Primary balance 33. Other flows 3/ 35. Depreciation 36. Combination of B1-B5 C. Tailored Tests C1. Combined contingent liabilities	14 14 14	19					15 15 n.a.	15 14 n.a.	14 13 n.a.	13 13 n.a.	1
81. Real GDP growth 32. Primary balance 33. Exports 34. Other flows 3/ 35. Depreciation 36. Combination of B1-B5 C. Tailored Tests C1. Combined contingent liabilities C2. Natural disaster C3. Commodity price	14 14 14 14	19 16	13	13	14 14	16 16	15	14	13	13	1 n.:
32. Primary balance 33. Exports 44. Other flows 3/ 35. Depreciation 36. Combination of B1-B5 C. Tailored Tests C1. Combined contingent liabilities C2. Natural disaster	14 14 14 14 14 n.a.	19 16 15 n.a.	13 13 n.a.	13 13 n.a.	14 14 n.a.	16 16 n.a.	15 n.a.	14 n.a.	13 n.a.	13 n.a.	1 n. n. n.

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.

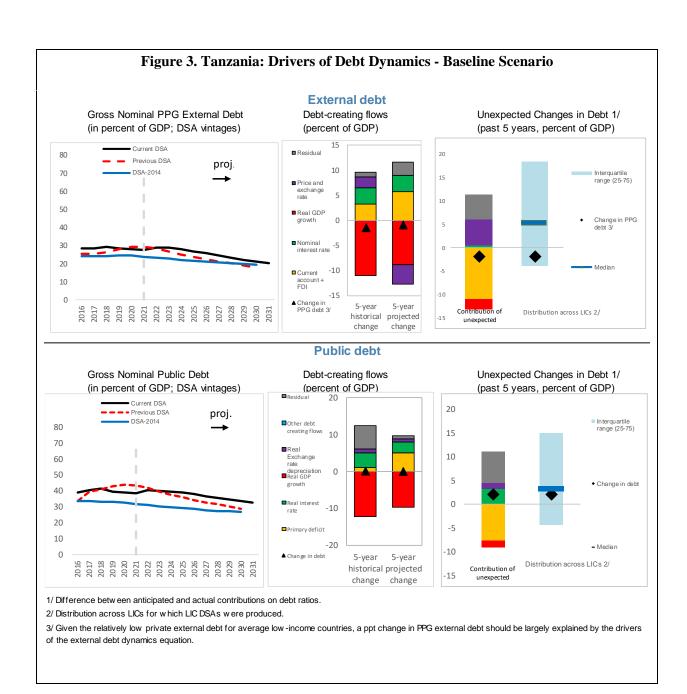
		2022	2022	202.		ections 1/	202-	2022	2022	2022	
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	203
Baseline	29	of Debt-	to-GDP Ra	tio 30	30	29	29	28	27	27	2
	23	31	30	30	30	23	23	20	21	21	۷.
A. Alternative Scenarios	20	20	20	27	27	27	26	20	26	25	21
A1. Key variables at their historical averages in 2021-2031 2/	29	29	28	27	27	27	26	26	26	25	25
B. Bound Tests											
B1. Real GDP growth	29	31	31	31	31	30	30	29	29	29	2
B2. Primary balance	29	32	33	33	33	32	31	30	30	29	29
B3. Exports	29	32	34	34	33	33	32	31	30	29	29
B4. Other flows 3/	29	32	34	34	33	33	32	31	30	29	29
B5. Depreciation	29	33	32	30	29	27	25	24	23	21	2
B6. Combination of B1-B5	29	30	30	29	29	28	27	26	26	25	2
C. Tailored Tests											
C1. Combined contingent liabilities	29	39	38	38	38	37	36	35	34	34	33
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a
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
TOTAL public debt benchmark	55	55	55	55	55	55	55	55	55	55	55
	PV c	of Debt-to	-Revenue	Ratio							
Baseline	208	217	206	202	200	197	192	188	185	182	179
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	208	204	190	184	182	179	177	175	174	172	171
B. Bound Tests											
B1. Real GDP growth	208	219	210	207	207	204	201	198	196	194	192
B2. Primary balance	208	228	226	221	219	215	210	206	202	199	196
B3. Exports	208	227	232	226	224	220	214	208	203	198	194
B4. Other flows 3/	208	231	232	226	224	220	214	208	203	198	194
B5. Depreciation	208	239	216	203	194	183	172	161	152	144	136
B6. Combination of B1-B5	208	215	204	194	191	187	182	179	175	172	169
	200	2.5	201				.02	5	5		.03
C. Tailored Tests	200	276	261	255	252	240	242	227	222	220	225
C1. Combined contingent liabilities	208	276	261	255	253	248	242	237	232	228	225
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
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.
		Service-to									
Baseline	39	37	37	36	39	42	43	43	43	44	43
A. Alternative Scenarios A1. Key variables at their historical averages in 2021-2031 2/	39	35	34	32	34	36	36	35	35	34	33
AT. Key variables at their historical averages in 2021-2031 2/	33	33	34	32	34	30	30	33	33	34	33
B. Bound Tests											
B1. Real GDP growth	39	37	38	37	41	44	45	45	46	46	46
B2. Primary balance	39	37	40	41	44	47	48	48	47	47	47
B3. Exports	39	37	38	37	40	43	45	45	45	46	45
B4. Other flows 3/	39	37	38	37	40	43	45	45	45	46	45
B5. Depreciation	39	37	39	36	40	43	43	43	43	43	42
B6. Combination of B1-B5	39	36	36	36	39	41	43	43	42	43	42
C. Tailored Tests						_	_				
C1. Combined contingent liabilities	39	37	54	48	51	54	55	52	51	51	50
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
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.

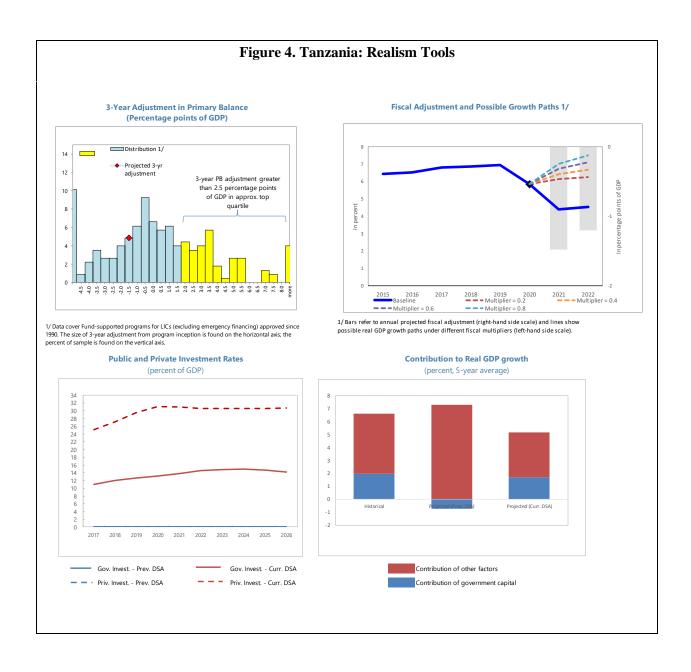
Sources: Country authorities; and staff estimates and projections.

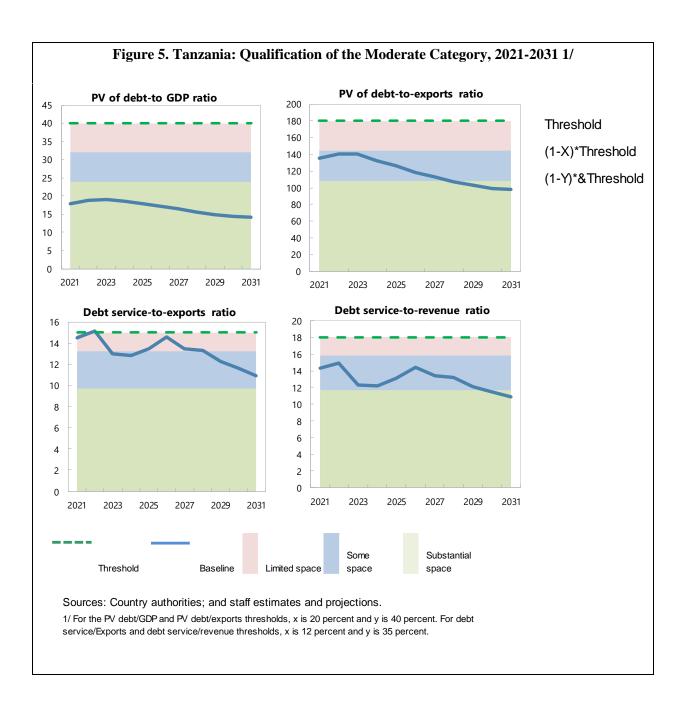
1/ A bold value indicates a breach of the benchmark.

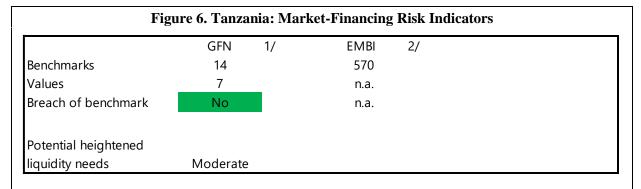
2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

3/ Includes official and private transfers and FDI.

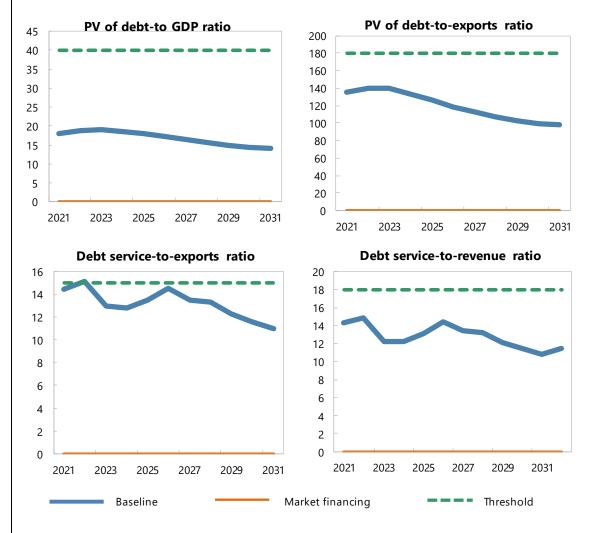








- 1/ Maximum gross financing needs (GFN) over 3-year baseline projection horizon.
- 2/ EMBI spreads correspond to the latest available data.



Sources: Country authorities; and staff estimates and projections.