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**THE UNITED REPUBLIC OF TANZANIA**  
**MINISTRY OF FINANCE AND PLANNING**



**TANZANIA NATIONAL DEBT SUSTAINABILITY ANALYSIS**

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**DECEMBER, 2018**

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## **Executive Summary**

The 2018 debt sustainability analysis (DSA) exercise is in line with Regulation 38 (d) of the Government Loans, Guarantees and Grant Act CAP 134, which requires the Government to conduct DSA on annual basis. The main objective of this exercise was to assess the impact of existing Government debt level and prospective new borrowing on current and future debt service. The exercise was also meant to incorporate the recent developments, in particularly the newly rebased GDP figures in 2017/18, as well as the reclassification of the country from medium to strong policy performer. The analysis used the revised Low-Income Countries Debt Sustainability Framework (LIC-DSF).

The exercise took into account recent Government financing need to invest into major strategic infrastructure projects as elaborated in the Second Five Year National Development Plan (FYDP II) 2016/17- 2020/21. These projects require large financing in the form of semi-concessional and commercial terms.

The 2018 DSA is based on the assumptions that real GDP growth rates would remain strong, averaging 7.5 percent in the medium term, but stabilize at an average of 7.0 percent in the long term. Overall, fiscal deficit is projected at an average of 2.1 percent of GDP; out of which foreign financing will account for 1.3 percent and 0.8 percent is domestic financing. The current account deficit is expected to record a deficit of 4.3 percent of GDP in 2018/19, from 3.5 percent in 2017/18. This development is largely due to the projected increase in imports relative to exports. Foreign Direct Investment (FDI) inflows are projected to increase to an average of 2.0 percent of GDP in the medium term in line with improving business environment

On financing side, the government is expected to continue borrowing a mix of concessional and commercial loans in the medium term. For domestic, it is assumed that, the Government will roll over maturing principal while paying interest through domestic revenue; and financing of budget will be through marketable long-term instruments.

In regard to the above assumptions, the external risk of debt distress for Tanzania is low, an improvement from the moderate risk of debt distress recorded in the DSA conducted in 2017. All external debt burden indicators are projected to remain below their indicative thresholds under the baseline scenario. The low risk rating is underpinned by several factors, which include among other things, the high nominal GDP and Export numbers following the recent GDP rebasing. The low risk rating is also underpinned by the reclassification of Tanzania from a medium to a strong performer. The change in the classification improved Tanzania debt carrying capacity as reflected in applicable debt burden thresholds. Whereas previous Tanzania debt were gauged against Debt to GDP ratio and Debt to Exports ratio of 40 and 150, respectively, the upgrading of the country into a strong policy performer has resulted in Tanzania risk of debt distress being gauged using higher debt thresholds of 55 and 240, respectively.

The finding of the standard stress tests shows that although public external debt remains sustainable in the medium to long-term, it is sensitive to export and commodity shocks. However, the DSA suggests that Tanzania has sufficient space to absorb a shock, supported by sustenance of projected higher fiscal buffers to enhance resilience against shocks. In this regard, the Government aims at pursuing both stronger revenue mobilization measures and expenditure rationalization, which are key to the sustenance of these fiscal buffers.

The present value of public and publicly guaranteed (PPG) external debt-to-exports and external debt service-to exports, remain below their respective thresholds in the baseline, as in the DSA 2017. In addition, the debt service-to-revenue indicators remain below the threshold in 2019/20-2020/21 in the stress test scenario. Although the new Debt Sustainability Framework for Low-Income Countries resulted in a further tightening of the thresholds of the debt service indicators, Tanzania's debt burden indicators remained well within the applicable thresholds. Overall, the final risk of debt distress remains low.

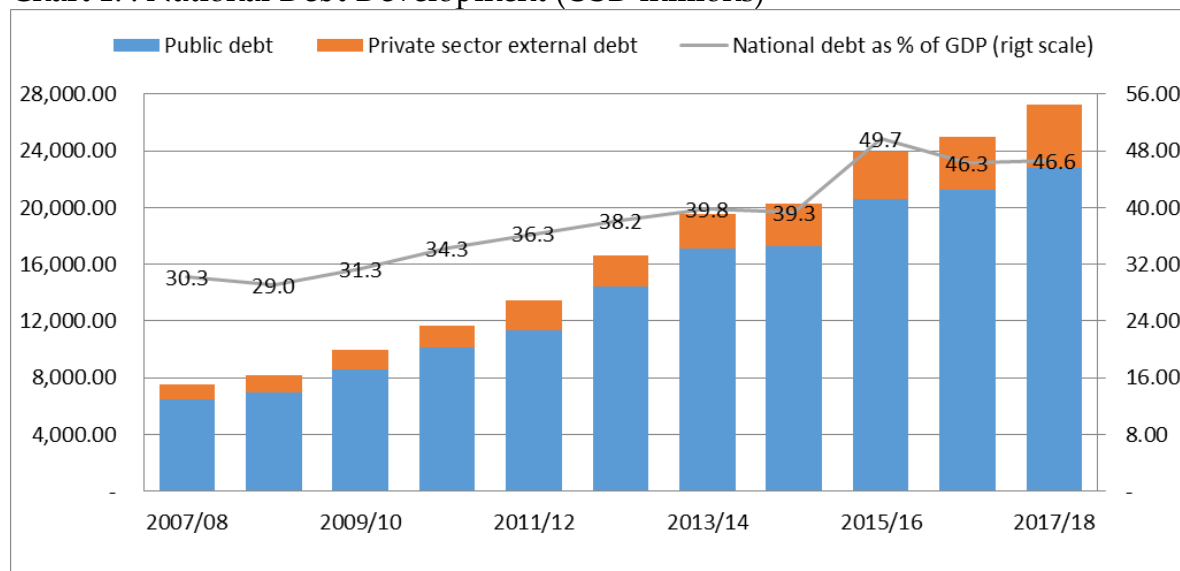
## **Chapter 1: Introduction**

1. The Government of Tanzania conducted a debt sustainability analysis (DSA) in line with Regulation 38 (d) of the Government Loans, Guarantees and Grant Act CAP 134, which requires the Government to conduct DSA on annual basis. The DSA evaluates the capacity of the country to meet current and future debt obligations without recourse to exceptional financing or compromising growth and development. The exercise involves assessing the trend of various debt indicators subjected to different macroeconomic scenarios and recommends measures for maintaining debt at sustainable levels.
2. The main objective of the DSA 2018 was to assess the impact of existing Government debt level and prospective new external and domestic borrowing to finance major strategic infrastructure projects as elaborated in the Second Five Year National Development Plan (FYDP II) 2016/17- 2020/21. The projects include power generation and transportation that are expected to promote GDP growth in the long run. The exercise was also meant to incorporate the recent developments, in particular, the newly rebased GDP figures in 2017/18, as well as the reclassification of the country from medium to strong policy performer. The analysis used the revised Low-Income Countries Debt Sustainability Framework (LIC-DSF).
3. The DSA 2018 covered external (public and private sector) and domestic debt. The scope of the analysis was 10-year historical data and 20 years projections, using 2017/18 as the base year and 2018/19 as the first year of projection.

## Chapter 2: Debt Portfolio Review

- The national debt stock, comprising public and private sector external debt, amounted to USD 27,261.62 million (46.58 per cent of GDP) at the end of June 2018, which was an increase of 9.1 percent, from USD 24,987.5 million (46.6 per cent of GDP) end June 2017 (Chart 4). Total public debt amounted to USD 22,793.82 million, accounting for 38.94 percent of GDP. Expressed in domestic currency, public debt increased by 8.34 percent to TZS 51,660,597.46 million during the period ending June, 2018.

Chart 1: : National Debt Development (USD millions)



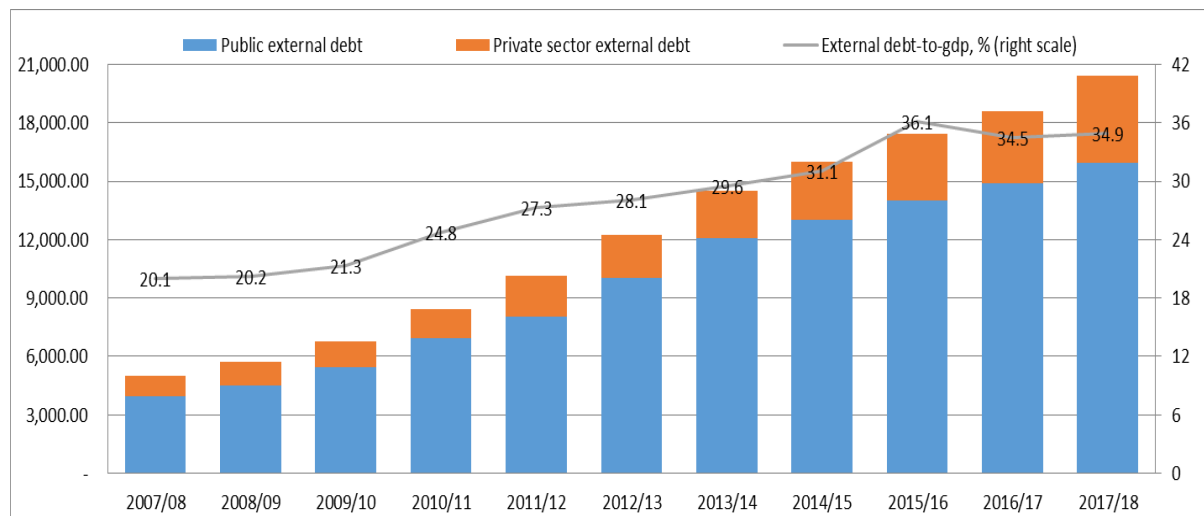
Source: Ministry of Finance and Planning and Bank of Tanzania

### 2.1 Evolution of External Debt

- Total external debt stock increased by 10.2 percent to USD 20,503.0 million at the end of June 2018 from USD 18,612.2 million end June 2017 (Chart 2). The increase was mainly due to disbursements of loans to finance public infrastructure. The total public external debt stock increased by 7.7 percent to USD 16,035.2 million from the level recorded at the end of June 2017, (Chart 2).



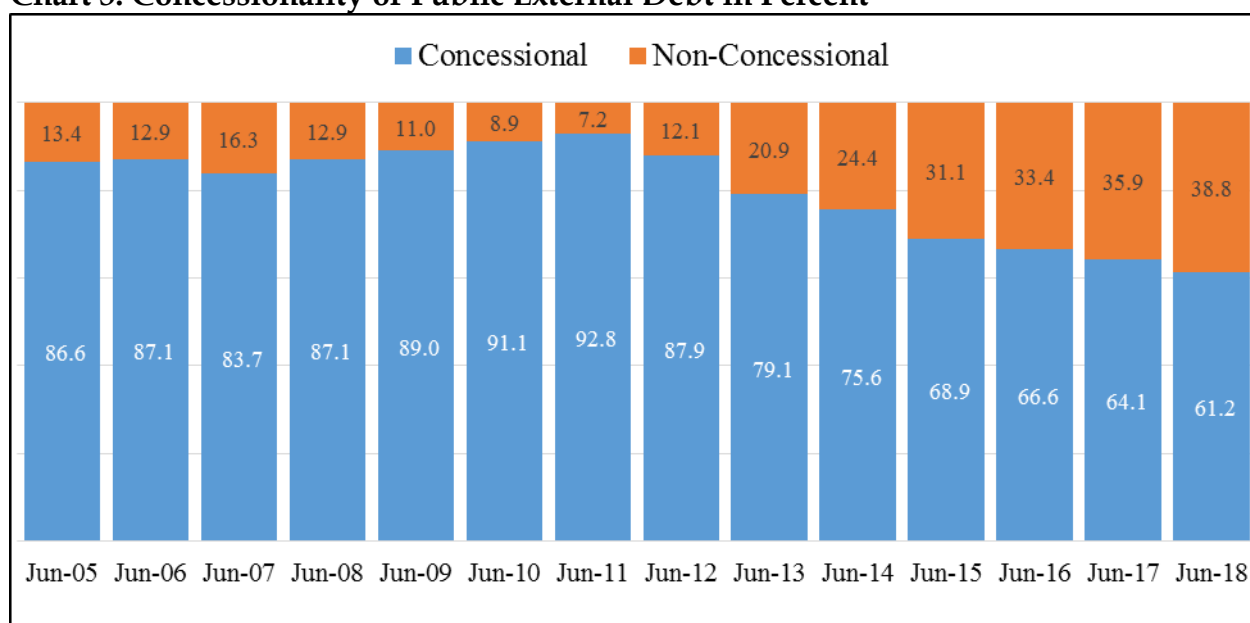
**Chart 2: External Debt Development (Millions of USD)**



Source: Ministry of Finance and Planning and Bank of Tanzania

6. In terms of concessionality, public external debt portfolio consisted predominantly of loans contracted on concessional terms, mainly from multilateral creditors. However, due to declining resources from traditional creditors and the quest to finance development projects, the Government has recently been borrowing from non-concessional sources. Accordingly, the share of concessional debt has declined from about 79.1 percent in 2012/13, to around 61.2 percent in June 2018 (**Chart 6**) as Government continues to borrow from non-concessional sources,

**Chart 3: Concessionality of Public External Debt in Percent**



Source: Ministry of Finance and Planning and Bank of Tanzania

7. Despite the recent change in the development financing landscape, the proportion of debt owed to multilateral institutions remained dominant, accounting for 46.5 percent of the external debt stock, followed by debt from commercial creditors 33.5percent, export credit 11.1 percent and bilateral 8.9 percent (**Table 1**).

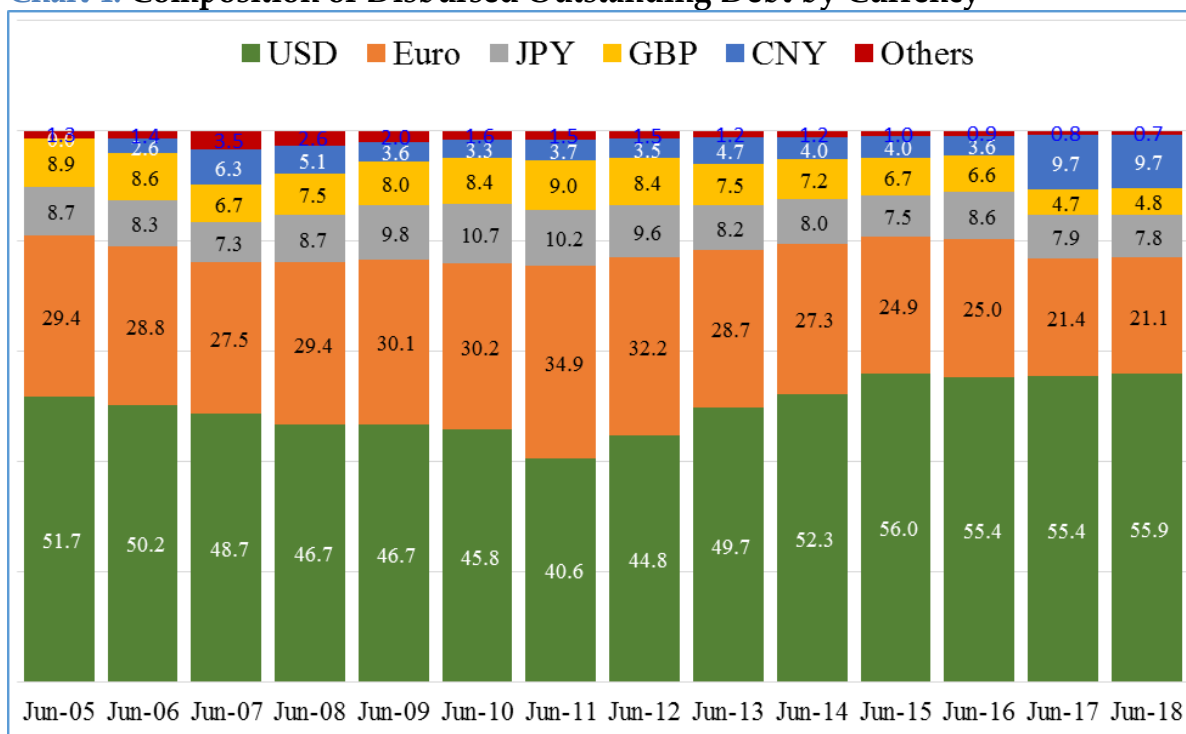
**Table 1: External Debt by Creditor Category (Millions of USD)**

Creditor Category	2015/16		2016/17		2017/18	
	Amount	Share(%)	Amount	Share(%)	Amount	Share(%)
Multilateral	8,172.80	46.9	8,756.00	47.0	9,538.60	46.5
DOD	8,165.10	46.8	8,741.10	47.0	9,509.20	46.4
Interest arrears	7.70	0.0	14.90	0.1	29.40	0.1
Bilateral	1,842.90	10.6	1,918.20	10.3	1,822.60	8.9
DOD	1,112.50	6.4	1,133.40	6.1	981.70	4.8
Interest arrears	730.40	4.2	784.80	4.2	840.90	4.1
Commercial	5,991.20	34.4	6,210.90	33.4	6,858.40	33.5
DOD	5,592.90	32.1	5,845.20	31.4	6,498.50	31.7
Interest arrears	398.30	2.3	365.70	2.0	359.90	1.8
Export Credit	1,427.60	8.2	1,727.10	9.3	2,283.40	11.1
DOD	1,218.30	7.0	1,492.50	8.0	1,775.70	8.7
Interest arrears	209.30	1.2	234.60	1.3	507.70	2.5
<b>Total</b>	<b>17,434.50</b>	<b>100.00</b>	<b>18,612.20</b>	<b>100.00</b>	<b>20,503.00</b>	<b>100.00</b>

Note: DOD denotes disbursed outstanding debt

8. The currency composition of outstanding public debt shows that a large proportion of debt was denominated in USD, at 55.9 percent in June 2018 compared to 55.4 percent recorded at end of June 2017. The proportion of debt denominated in Euro and Chinese Yuan was 21.1 percent and 9.7 percent, respectively (**Chart 4**). The total debt portfolio exposure to risk is mainly driven by USD exchange rate fluctuations.

**Chart 4: Composition of Disbursed Outstanding Debt by Currency**



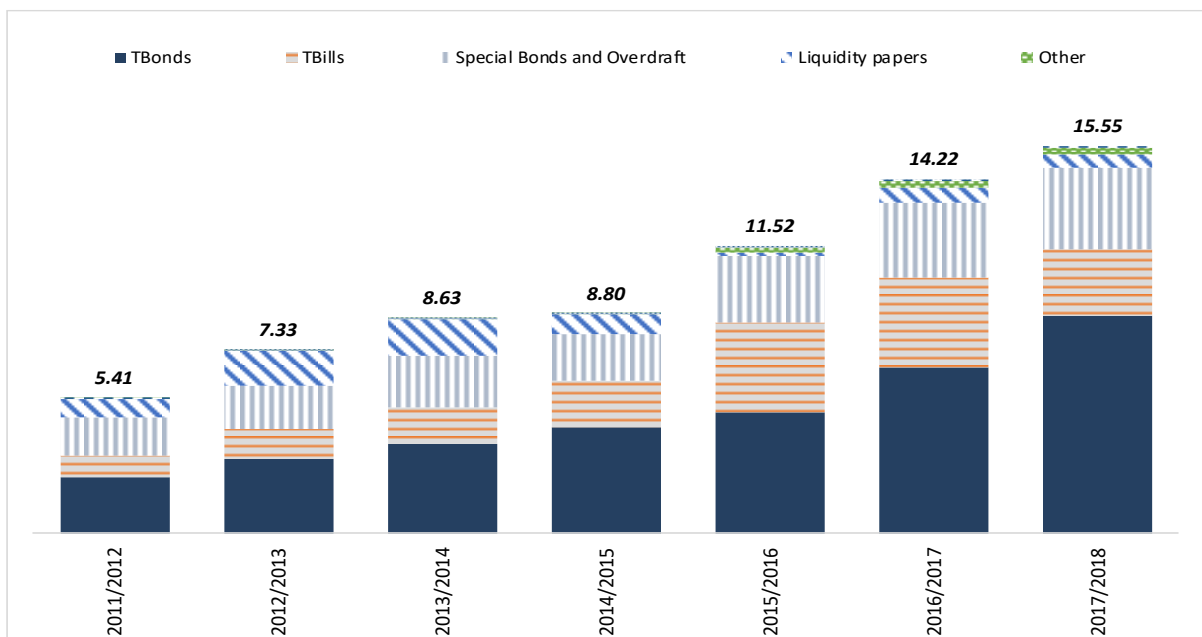
Source: Ministry of Finance and Planning and Bank of Tanzania

## 2.2: Evolution of Domestic Debt

9. The stock of domestic debt at the end of June 2018 was TZS 15,546.16 billion equivalents to 11.84 percent of GDP. This is an increase of 9.34 percent from TZS 14,217.83 billion recorded at end June 2017. The increase was mainly on account of government borrowing to refinance matured securities and development projects.

10. The profile of domestic debt by instrument shows that the proportion of Government bonds was the largest, accounting for 56 percent compared to 38 percent recorded in June 2017 (**Chart 5**). The greater share of Treasury bonds is consistent with the Government's strategy of lengthening debt maturity through issuance of long-term instruments.

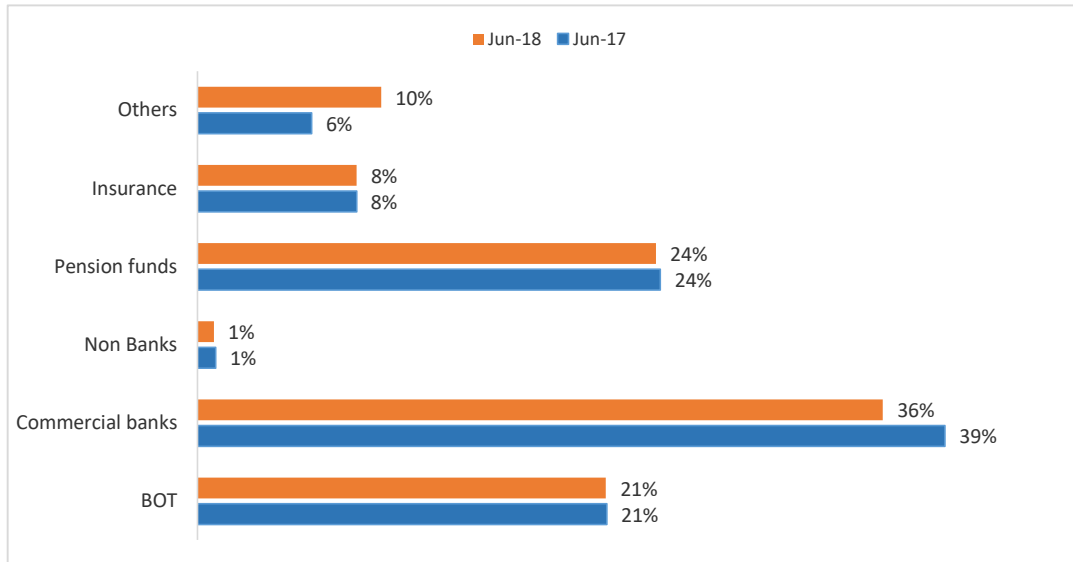
**Chart 5: Evolution of Domestic Debt in TZS billion**



Source: Ministry of Finance and Planning and Bank of Tanzania

11. Considering domestic debt by holder category, commercial banks remained the leading investors in domestic debt, accounting for 36 percent of total domestic debt compared with 39 percent as at end June 2017, followed by Pension funds, which accounted for 24 percent of the total domestic debt (**Chart 6**).

**Chart 6: Domestic Debt by Holder Category**

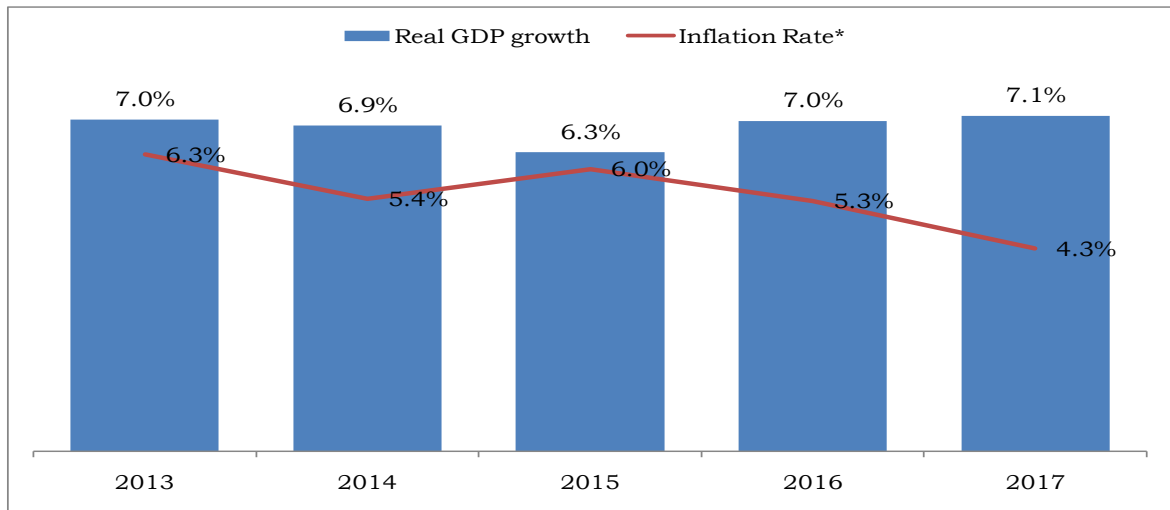


Source: Ministry of Finance and Planning and Bank of Tanzania

### **Chapter 3: Recent Economic Developments**

12. The Government of Tanzania through the National Bureau of Statistics (NBS) is finalizing rebasing of GDP series by updating the national accounts base year from 2007 to 2015, to better reflect changes in the economy due to social, technological and economic transformations. Preliminary results show that the average nominal value of the rebased GDP is 6.3 percent higher than that of the previous base year. There has not been substantial change in the structure of the economy with agriculture, trade and construction remaining the top GDP contributors and manufacturing, financial intermediation and transport gaining significance.
  
13. Tanzania's economic growth has remained resilient, growing at an average rate of 6.9 percent over the past five years (2013 - 2017). In 2017, the economy grew by 7.1 percent compared to 7.0 percent in 2016; supported by the expansion of construction activities, transport and agriculture, which together accounted for about half of total growth.
  
14. Headline inflation has been low and declining in the recent past, reaching an average of 4.3 percent in 2017/18 compared to 5.3 percent recorded in 2016/17. In the recent months, inflation has continued to decline, reaching 3.0 percent in November 2018 due to adequate domestic food supply, continued implementation of prudent monetary policy, exchange rate steadiness and streamlined fiscal policy measures.

**Chart 7: GDP Growth and Inflation**



**Source:** National Bureau of statistics \*data are indicated in fiscal years

15. Implementation of the Government budget in the recent years has been characterized by improved domestic revenue mobilization and tax administration, coupled with streamlined expenditure management in favour of development project. As a result, fiscal deficit including grants narrowed to an average of 2.6 percent of GDP in the past three years compared to an average of 3.6 percent in the preceding three years. In the same period, foreign grants declined to an average of 0.8 percent from 2.4 percent.
16. The external sector of the economy has remained in good shape despite global challenges of trade tensions and increasing oil prices. The overall balance of payments recorded a surplus of USD 627.8 million in 2017/18, compared to USD 1,202.5 million recorded in 2016/17, partly explained by the widening of current account deficit. The current account deficit widened by 38.1 percent largely explained by increase in imports of goods and services that offset the improvements in exports of goods and services. Imports of goods increased partly on account of more importation of capital goods for infrastructure projects, oil and industrial raw materials, while improvement in export was recorded in traditional goods, gold, manufactured goods and services receipts.

17. Gross official reserves amounted to USD 5,483.9 million at the end of June 2018 compared to USD 5,000.4 million at end of June 2017 – sufficient to cover about 5.6 months of projected import of goods and services, above the EAC convergence criteria of at least 4.5 months of import cover.



## Chapter 4: Underlying DSA Assumptions

### 4.1 Macroeconomic assumptions

18. The assumptions of DSA 2018 remain broadly similar to DSA 2017. GDP growth is projected to remain strong at 7 percent and above, while the primary fiscal deficit excluding grants is projected to remain relatively lower (not exceeding 1.5 percent of GDP), consistent with recent revenue mobilization efforts, expenditure streamlining and decline in foreign grants. For the same reasons, the current account deficit to GDP ratio is projected to be relatively lower.
  
19. **Economic growth:** is expected to remain strong in the medium to long-term. Transformation of the economy through industrialization strategy with great focus on manufacturing industries to promote diversification and value addition in output will add momentum to growth. GDP growth for 2018 is projected at 7.2 percent and pick up further in the medium term, averaging at 7.5 percent and subsequently stabilizing at an average of 7.0 percent in the long term. This growth will be supported by implementation of projects to stabilize power supply, particularly construction of the Rufiji basin hydropower plant and scaling-up of onshore and offshore gas production. Other factors include continued implementation of major infrastructural projects namely; the standard gauge railway, roads, bridges and airports and expansion of capacity and efficiency at the Dar es Salaam, Mtwara and Tanga Ports. Other medium-term projects include construction of special economic zones; agricultural modernization through improved agro inputs, irrigation schemes and enhancement of extension services.
  
20. **Headline inflation:** is projected to increase to an average of 5.0 percent in 2018/19 from 3.4 percent in 2017/18 following the anticipated increase in global oil prices as a result of market expectations on declining capacity in Venezuela and US

sanctions on Iran. Inflation is projected to remain at the same levels in the medium to long term. The projected stability of inflation around 5.0 percent is consistent with the EAC convergence criterion and is expected to be supported by reduction in the production costs on account of reliable and affordable power supply as well as cost reduction in oil imports for power generation; prudent monetary and fiscal policy including public expenditure management.

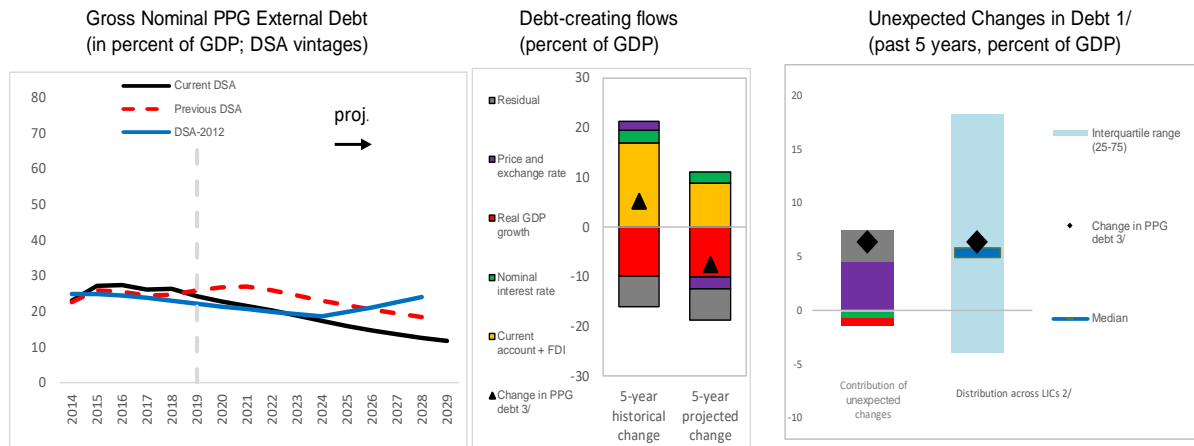
21. **Fiscal policy:** the Government recognizes the need to implement prudent fiscal policy through improving domestic resource mobilization and public expenditure. This will allow the Government to fund critical social and economic infrastructure in line with the Five Years Development Plan (2015/16 -2020/21) as well as Vision 2025 aiming at enhancing growth and drive the country to middle income status.
22. Government revenue as a percentage of GDP is projected at 14.2 percent of GDP in 2018/19 and increase to an average of 16.7 percent in the medium and further to 20.0 percent in the long-term. The expected improvement in revenue collection is supported by government initiatives including: widening the tax base; enforcement of proper usage of EFDs and enhancement of voluntary tax compliance through public awareness programs. Foreign grants are expected to continue declining in the medium and long term as the country aspires to reach the middle income status.
23. Expenditure policies are expected to remain aligned with revenue targets and streamlined fiscal balance through overall management of public expenditure. Total expenditure is estimated to increase from 15.6 percent in 2017/18 to 17.8 percent of GDP in 2018/19 and 22.5 percent in the medium term to support major infrastructure projects and decrease to an average of 19.3 percent in the long-term.

24. **The primary deficit:** is projected to expand to 1.4 percent of GDP in 2018/19 from 0.2 percent 2017/18 on account of scaling up public infrastructure investment. Subsequently, the deficit is projected to average at 0.7 percent in the medium term, and narrow to an average of 0.4 percent in the long term, supported by completion of major infrastructure projects and less dependence on foreign grants. Overall fiscal deficit is projected at an average of 2.1 percent of GDP; out of which foreign financing will account for 1.3 percent and 0.8 percent is domestic financing.
25. **The current account balance:** is expected to record a deficit of 4.3 percent of GDP in 2018/19, from 3.5 percent in 2017/18. This development is largely due to an increase in imports relative to exports. Imports are projected to increase consistent with the expansion of economic activities such as implementation of infrastructure projects. Meanwhile, the value of oil imports is expected to increase driven by prices in the world market and import volume to match with domestic demand as the economy continue to grow. In the medium term, current account is projected at an average of 4.3 percent of GDP and narrow to an average of 3.6 percent over the long term, owing to expected increase exports of goods and services particularly manufacture exports resulting from envisaged industrial investment coupled with the completion of major investments projects, which will reduce the pressure on the import bill.
26. **Foreign Direct Investment (FDI):** inflows are projected to increase to an average of 2.0 percent of GDP in the medium term in line with improving business environment (Blueprint for Regulatory Reforms), which includes measures to increase transparency in doing business and management of natural resources. In addition, the ongoing infrastructure projects and expected stable power supply provides bright prospects for investment in the country. FDIs are forecasted to remain at 2.0 percent of GDP in the long run.

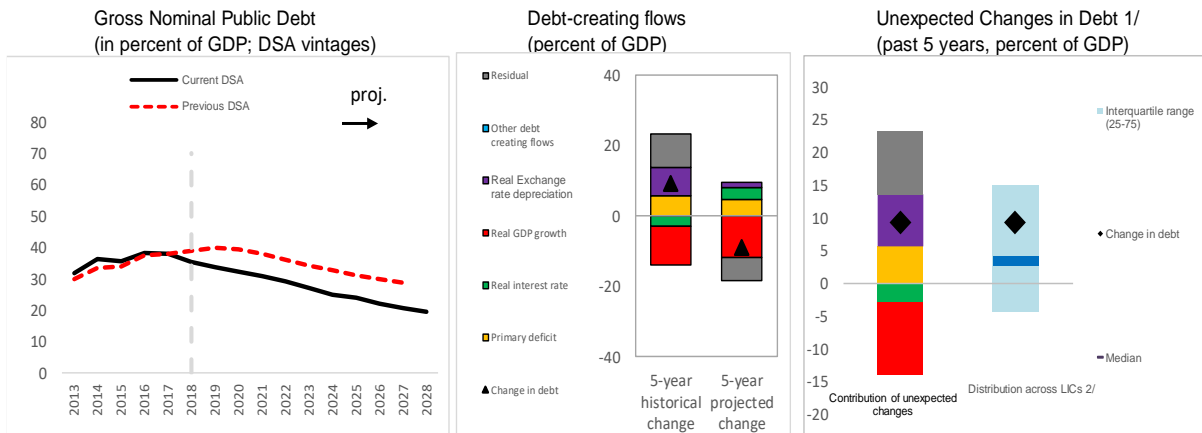
27. **The stock of gross official reserves:** is projected at an average of 5.0 months of imports in the medium term. Gross official reserves are expected to stabilize at an average of 4.5 months of future import cover in the remaining years of projection, in line with the East African Community (EAC) convergence criterion.

28. **Realism of Projections:** the projections for the macroeconomic and debt variables underpinning the current DSA are not significantly different from the previous as well as 2012 vintage (**Chart 4.1**). The drivers of debt accumulation in Tanzania over the last 5 years have been the primary deficit incurred to finance public expenditure. The current account deficit was the main factor behind the worsened external debt dynamics in the most recent 5-year period, which was partly offset by favorable contributions from growth. Looking forward, GDP gains and a narrowing current account deficit should underpin improvement in external debt. Higher domestic interest rates will likely weigh on future domestic (and hence overall) debt dynamics.

Chart 8: Drivers of External Debt Dynamics- Baseline



Public debt

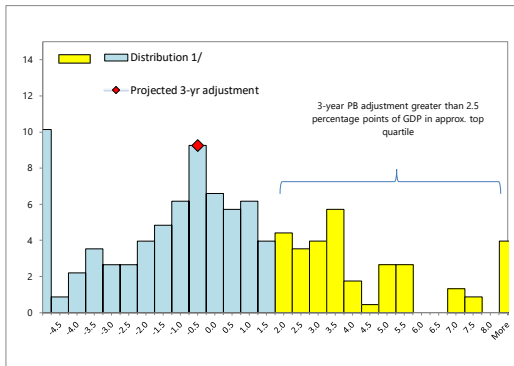


Source: Ministry of Finance and Planning

29. The fiscal projections underpinning the current DSA are consistent with historical patterns and those observed in other LICs (Chart 4.2). In particular, the amount of fiscal adjustment assumed is close to the median observed for LICs historically and is consistent with the historical fiscal deficits recorded by Tanzania over the past years. Public investment is projected to contribute more to growth compared to history. This is assumed to be attributed by efficient execution of public sector projects and the implementation of new infrastructure projects. The Government will continue with efforts to sustain the desired macroeconomic framework to safeguard debt sustainability.

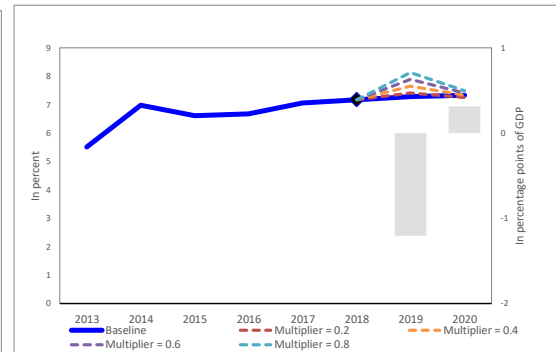
## Chart 9: Tanzania Realism Tools

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



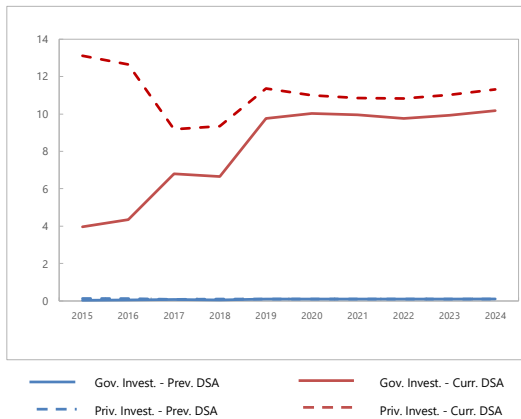
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/

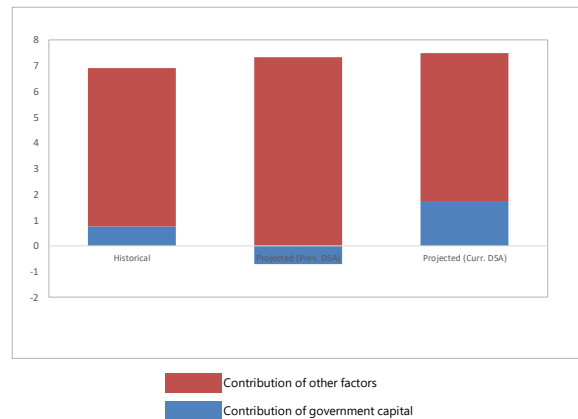


1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

Public and Private Investment Rates  
(percent of GDP)



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

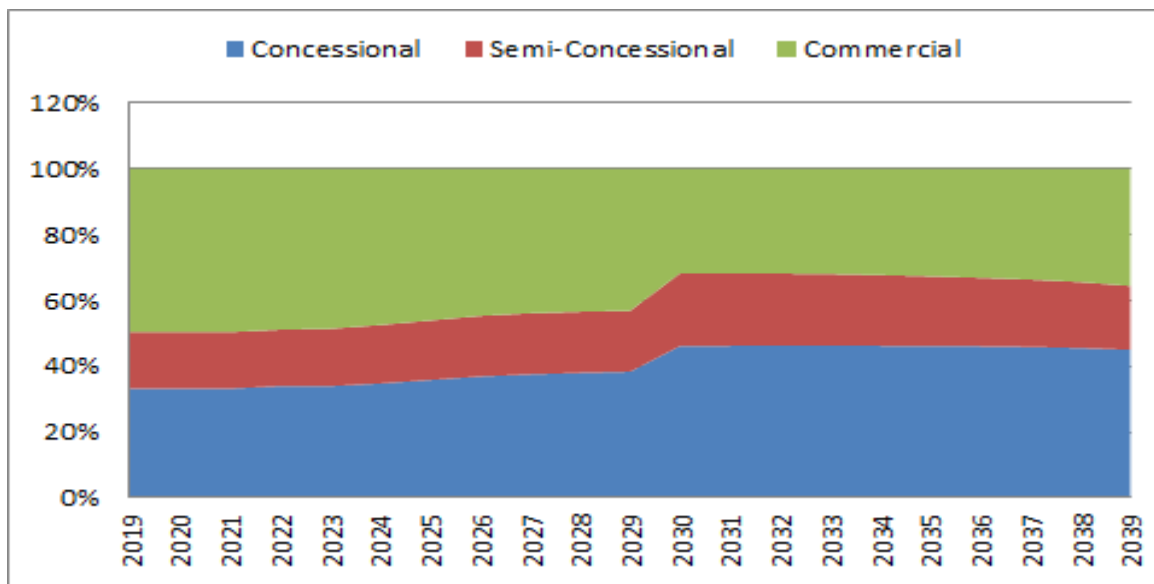


Source: Ministry of Finance and Planning

## 4.2 New Financing Assumptions

30. **External financing**, projections in the DSA 2018 is based on the recent Government financing need and historical trend of loans available to the Low Income Countries such as Tanzania. In the medium term, the government will continue to borrow a mix of concessional and non-concessional loans. The Government expects to borrow from multilateral creditors and commercial lenders. The projection indicates a gradual decline in concessional borrowings and increase of commercial borrowings (**Chart 10**).

**Chart 11: External borrowing Projections**



Source: Ministry of Finance and Planning

31. **Domestic debt financing**, the government will finance budget deficit through borrowing marketable long-term instruments and in the long term, the composition of domestic borrowing is expected to shift towards medium and long-term instruments as the Government intensifies efforts to develop the domestic debt market. The main assumptions includes:

- (i) Net Domestic Financing limit for financial year 2018/19 is 0.9 percent of GDP and will be maintained in the medium to long term to ensure adequate resources to private sector.
- (ii) Short term instruments and long term instruments will continue to be used for liquidity management and financing purposes, respectively;
- (iii) Short term instruments will constitute 45 percent while long term instruments will constitute 55 percent of total domestic borrowing The proportion of short term instruments is expected to continue declining reaching 35 percent;
- (iv) Advances from the central Bank were included on 364 Treasury bills;

- (v) Maturing special bonds and stocks will continue to be rolled over into non-marketable Treasury bonds;
- (vi) Treasury Registrar debt emanated from defaulted Government guarantees amounted to TZS 228.18 billion will be amortized evenly for a period of five Years commencing 2018/19.



## Chapter 5 : DSA Results and Analysis

32. The 2018 DSA employed the revised Low Income Countries Debt Sustainability Framework (LIC-DSF), whose indicative debt burden thresholds is based on Composite Indicator (CI) index that combined relevant macroeconomic data (real GDP growth, foreign reserve import cover, remittance and global economic growth) and CPIA. The revised LIC-DSF assesses the risk of debt distress by observing the evolution of selected indicators against predetermined thresholds that are set according to countries' debt carrying capacities. The PV of debt-to-Government revenues has been removed in the new framework. Relevant solvency thresholds of external debt for revised framework is summarized in **Table 2**.

**Table 2 : Indicative External debt burden thresholds**

	PV of external debt in percent of		External Debt service in percent of		PV of total public debt in percent of
	GDP	Exports	Exports	Revenue	GDP
Weak	30	140	10	14	35
Medium	40	180	15	18	55
Strong	55	240	21	23	70

Source: International Monetary Fund (2018)

33. The Composite Indicator (CI) index, calculated based on the IMF/World Bank Debt Sustainability Framework (DSF) for Tanzania is 3.07. Tanzania is classified as 'strong performer' in debt-carrying capacity, graduating from 'medium performer' status. Thus, Tanzania is classified as a country with strong policies, institutions and economic growth (**Table 3**).

$$CI = \beta_1CPIA + \beta_2g + \beta_3Reserve /Imports + \beta_4(Reserve /Imports)^2 + \beta_5Remittance /GDP + \beta_6gw$$

Whereas: g is growth in domestic economy and gw is growth in world economy and coefficient  $\beta_1 = 0.39$ ,  $\beta_2 = 2.72$ ,  $\beta_3 = 4.05$ ,  $\beta_4 = -3.99$ ,  $\beta_5 = 2.02$ ,  $\beta_6 = 13.52$

**Table 3: Composite Indicator Table for Tanzania**

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.39	3.68	1.42	0.46
Real growth rate (%)	2.72	6.59	0.18	0.06
Import coverage of reserves (%)	4.05	40.77	1.65	0.54
Import coverage of reserves <sup>2</sup> (%)	-3.99	16.62	-0.66	-0.22
Remittances (%)	2.02	0.08	0.00	0.00
World economic growth (%)	13.52	3.58	0.48	0.16
Composite Indicator Score			<b>3.07</b>	1.00
Composite Indicator rating			<b>Strong</b>	

Source: International Monetary Fund /World Bank (2018)

**Table 4: Classifications of Country Based on Debt Carrying Capacity**

Debt Carrying Capacity	Cut-off Values
Weak	CI < 2.69
Medium	2.69 ≤ CI ≤ 3.05
Strong	CI > 3.05

Source: International Monetary Fund /World Bank (2018)

## 5.1 Debt Burden Indicators

### 5.1.1 External Debt

34. The findings of the DSA show that Tanzania remains at a low risk of debt distress, with all relevant debt ratios below their thresholds throughout the projection

period. The present value (PV) of external (Public and Private) debt to GDP in 2018/19 is projected at 15.9 percent and is projected to decrease moderately in the medium term to long term, reaching 4.7 percent by 2038/2039. The long-term projection is supported by strong GDP growth and expected slowdown of borrowing after completion of major projects under the FYDP II. The PV of external debt-to-export is projected to decrease from 112.4 percent in 2018/19 to 95.8 percent in 2021/22 and thereafter to 30.4 percent by 2038/39.

35. The liquidity indicators as measured by the ratios of debt service to exports are projected to decrease from 15.0 percent in 2018/19 to 10.4 percent in 2021/22 and thereafter stabilize at around 4.8 percent in the long-run (**Table 5**).

**Table 5: Public External Debt Sustainability Indicators**

Public External DSA	Threshold	2018/19	2019/20	2020/21	2021/22	202/23	2028/2029	2038/39
PV of debt-to GDP ratio	55	15.9	15.0	14.4	13.6	12.8	8.6	4.7
PV of debt-to-exports ratio	240	112.4	105.9	101.4	95.8	85.4	56.4	30.4
Debt service-to-exports ratio	23	15.0	12.6	10.7	10.4	8.8	6.8	4.8
Debt service-to-revenue ratio	22	15.0	12.3	10.4	10.4	9.1	6.4	3.7

Source: Ministry of Finance and Planning

### 5.1.2 External Public Debt

36. The DSA results show that Public and Publicly Guaranteed (PPG) debt indicators are below the threshold throughout the projection period, implying low risk of debt distress. The present value (PV) of external debt to GDP in 2018/19 is projected at 15.9 percent to 13.6 percent in 201/22 and thereafter is projected to decrease moderately to 4.7 percent by 2038/2039. The PV of external debt-to-export is projected to decrease from 112.4 percent in 2018/19 to 95.8 percent in 2021/22 and thereafter to 30.4 percent by 2038/39.

37. The liquidity indicators as measured by the ratios of debt service to exports and revenue are projected to decrease gradually from 15.0 percent in 2018/19 to 10.4

percent in 2021/22 and thereafter to 4.8 percent and 3.7 percent respectively in 2038/39 (Table 6).

### 5.1.3 Total Public debt

38. The DSA results for total Public (External and Domestic) debt shows that all debt indicators remain below the threshold throughout the projection period. The present value (PV) of debt to GDP in 2018/19 is projected to decline moderately from 27.2 percent in 2018/19 to 24.3 percent in 2021/22 and 10.7 percent by 2038/2039. The PV of public debt-to-revenue and grant is projected to decrease gradually from 182.5 percent in 2018/19 to 162.0 percent in 2021/22 and thereafter to 52.8 percent by 2038/39.
39. The ratio of debt service to revenue and grant is projected to decrease sharply from 49.6<sup>1</sup> percent in 2018/19 to 30.0 percent in 2021/22 and further to 16.5 percent in 2038/39 (Table 7). The sharp decrease reflects the assumption that central bank advances will be repaid within the first year of projections.

**Table 6: Evolution of Public Debt Sustainability Indicators**

Public DSA	Benchmark	2018/19	2019/20	2020/21	2021/22	2022/23	2028/2029	2038/39
PV of debt-to GDP ratio	70	27.2	26.0	25.2	24.3	23.2	16.3	10.7
PV of debt-to-Revenue and grant	N/A	182.5	170.6	165.1	162.0	152.7	97.2	52.8
Debt service-to-revenue ratio	N/A	49.6	38.1	31.8	30.0	30.9	19.4	16.5

Source: Ministry of Finance and Planning

40. The lower ratios compared to the benchmark are explained by a number of factors among them being the recent GDP rebasing and also the reclassification of Tanzania from a medium policy performer to a strong policy performer. The rebasing improved the country debt carrying capacity as measured by GDP and exports.

<sup>1</sup> The debt service amount include principal amount of the securities that is rolled over, thus it will not create unnecessary pressure to the budget. The assumption is that the market continue to be liquid enough to support the rollovers.

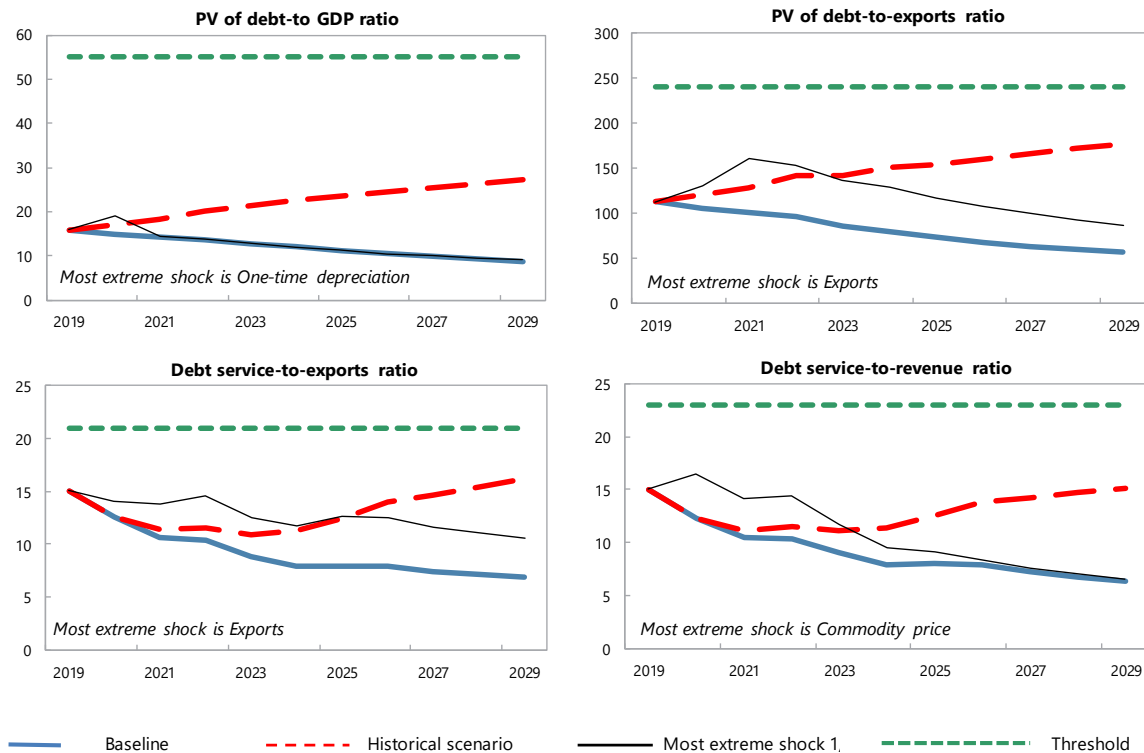
## 5.2 Sensitivity Analysis of Debt Sustainability

### 5.2.1 Public External Debt

41. The finding of the standard stress tests shows that although public external debt remains sustainable in the medium to long-term, it is sensitive to export and commodity shocks. In a historical scenario where the key variables are set at their average of the past 10 years, external debt ratios are projected to increase relative to the baseline. The deviation reflects favourable economic outlook anchored by major strategic projects coupled with the recent rebasing of GDP (**Chart 12**).
42. Based on historical scenario, the PV of public external debt-to-GDP ratio is projected to remain below its threshold throughout the projection period, though increasing from 15.9 percent in 2018/19 to 20.1 percent in 2021/22 and further to 27.1 percent in 2028/29.
43. A shock of 30 percent shock to exchange rate in 2019/20 and 2020/21 raises PV of public external debt-to-GDP and exports by 4 percent and about 50 percent in the medium term and thereafter by 2 percent and about 35 percent respectively in the long-run. The same shock raises external service-to-export ratio by an average of 4 percent throughout the projections, whereas the debt service revenue increases by an average of 1 percent and 2 percent in the medium and long-term, respectively. This signifies that, the debt service cost is highly vulnerable to exchange rate movements.
44. A shock of a one standard deviation on commodity prices raises the debt indicators in the medium term with the impacts dissipating in the long-run. In the

medium term PV of debt to GDP and exports increases by averages of 1 percent and 4 percent above the baseline, respectively.

**Chart 12: External Public Burden Indicators**



Source: Ministry of Finance and Planning

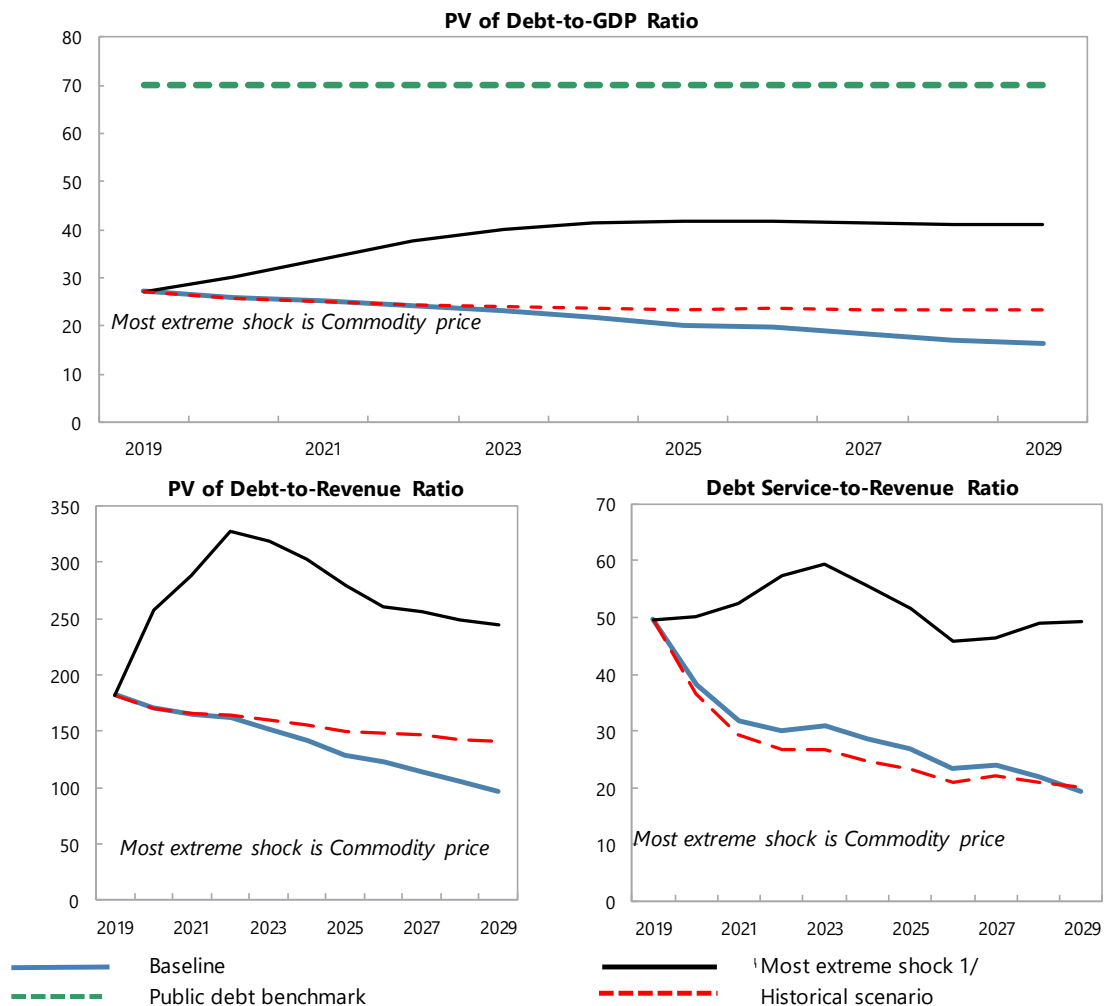
### 5.2.2 Public Debt

45. Shocks on public (external and domestic) debt do not flag significant risks to those stemming from the external debt (Chart 14) though remain sensitive to volatility on commodity prices. The present value of total public debt stays well below the threshold of 70 percent of GDP in the baseline and under all scenarios considered throughout the projection period.

46. A one standard deviation shock on commodity prices raises public debt to GDP ratio by 4 percent in the medium term and 25 percent in the long run. The PV of debt to revenue ratio increases significantly by 166 percent in 2020/21 and

thereafter declines to 140 percent by 2028/29. Similarly, the shock raises debt service to revenue by averages of 22 percent and 26 percent above the baseline in the medium and long-term, respectively.

**Chart 13: Public Debt Burden Indicators**



Source: Ministry of Finance and Planning

### 5.3 Risk Rating

47. The external DSA confirms that country is at low risk of debt distress. The main vulnerabilities arise from volatility of export prices and narrow export base. The commodity price shock results in a significant rise in debt burden indicators.

## **Chapter 6: Conclusion and Way Forward**

### **6.1 Conclusion**

48. The 2018 Debt Sustainability Analysis assess the impact of existing Government debt level and prospective new external and domestic borrowing to finance major strategic infrastructure projects as elaborated in the Second Five Year National Development Plan (FYDP II) 2016/17- 2020/21. The 2018 DSA covered external (public and private sector) and domestic debt.
49. The DSA suggests that overall risk of debt distress for Tanzania is low, reflecting the recent GDP rebasing and reclassification of the country from a medium policy performer to a strong policy performer, which raised its debt carrying capacity and accompanying debt burden thresholds. All debt burden indicators remain below the thresholds under stress tests, though depicts sensitivity to export and commodity price shocks.

### **6.2 Way Forward**

50. The Government will continue with efforts to build and sustain fiscal buffers in order to safeguard the capacity to repay debt in the medium and long-term;
51. All current and future borrowing, particularly from commercial loans will continue to be directed to projects with higher economic and social returns.



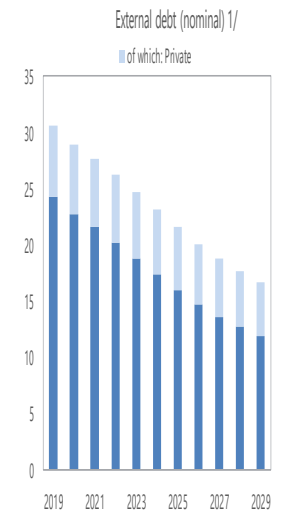
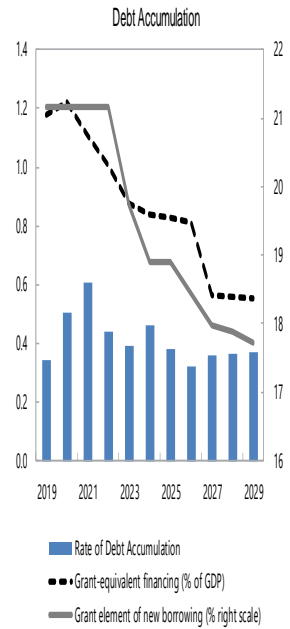
# ANNEX I

Table 1. Tanzania: External Debt Sustainability Framework, Baseline Scenario, 2016-2039

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
External debt (nominal) 1/	33.5	32.7	32.9	30.6	29.0	27.6	26.3	24.7	23.1	16.7	10.0	26.9	23.3
of which: public and publicly guaranteed (PPG)	27.5	26.2	26.4	24.3	22.7	21.5	20.2	18.8	17.4	11.8	6.2	22.1	17.6
Change in external debt	1.6	-0.9	0.2	-2.3	-1.6	-1.3	-1.4	-1.6	-1.6	-1.0	-0.4		
Identified net debt-creating flows	6.0	-2.4	-0.8	0.7	0.2	0.5	-0.5	0.2	0.3	0.7	0.6	2.4	0.4
Non-interest current account deficit	5.5	2.2	3.0	4.0	3.9	3.5	2.5	3.6	3.6	3.5	3.0	7.3	3.5
Deficit in balance of goods and services	5.0	1.9	2.5	3.4	3.1	2.7	1.7	2.7	2.7	2.8	2.8	8.0	2.6
Exports	18.6	16.1	14.8	14.1	14.2	14.1	14.2	15.0	15.0	15.3	15.3		
Imports	23.6	18.0	17.4	17.5	17.3	16.8	15.9	17.7	17.7	18.1	18.1		
Net current transfers (negative = inflow)	-0.7	-0.8	-0.7	-0.6	-0.6	-0.6	-0.6	-0.4	-0.3	-0.2	-0.2	-1.8	-0.4
of which: official	-0.1	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	0.0	0.0		
Other current account flows (negative = net inflow)	1.3	1.2	1.2	1.2	1.4	1.4	1.4	1.3	1.2	0.9	0.4	1.1	1.3
Net FDI (negative = inflow)	-2.4	-1.7	-1.7	-1.6	-2.1	-1.4	-1.5	-2.0	-2.0	-2.0	-2.0	-3.4	-1.9
Endogenous debt dynamics 2/	2.9	-2.9	-2.1	-1.7	-1.6	-1.5	-1.5	-1.4	-1.3	-0.8	-0.4		
Contribution from nominal interest rate	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.2		
Contribution from real GDP growth	-2.3	-2.1	-2.2	-2.2	-2.1	-2.0	-2.0	-1.8	-1.7	-1.1	-0.6		
Contribution from price and exchange rate changes	4.4	-1.4	-0.4	...	...	...	...	...	...	...	...		
Residual 3/	-4.4	1.6	1.1	-3.0	-1.8	-1.9	-0.9	-1.8	-1.9	-1.7	-1.0	-0.8	-1.9
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Sustainability indicators</b>													
PV of PPG external debt-to-GDP ratio	...	...	17.2	15.9	15.0	14.4	13.6	12.8	12.0	8.6	4.7		
PV of PPG external debt-to-exports ratio	...	...	115.7	112.4	105.9	101.4	95.8	85.4	80.3	56.4	30.4		
PPG debt service-to-exports ratio	5.5	8.2	10.9	15.0	12.6	10.7	10.4	8.8	7.9	6.8	4.8		
PPG debt service-to-revenue ratio	7.6	9.5	11.8	15.0	12.3	10.4	10.4	9.1	7.9	6.4	3.7		
Gross external financing need (Million of U.S. dollars)	2397.4	1156.9	1703.0	2934.7	2520.2	2779.3	2090.6	2680.6	2828.5	4245.1	7425.1		
<b>Key macroeconomic assumptions</b>													
Real GDP growth (in percent)	6.7	7.1	7.2	7.3	7.3	7.5	7.7	7.7	7.6	7.2	6.5	6.5	7.5
GDP deflator in US dollar terms (change in percent)	-12.2	4.3	1.3	2.9	1.8	1.1	0.8	1.6	2.5	3.0	3.0	2.5	2.3
Effective interest rate (percent) 4/	2.1	1.9	1.6	1.6	1.6	1.7	1.7	1.8	1.9	2.1	2.2	1.6	1.8
Growth of exports of G&S (US dollar terms, in percent)	1.1	-3.3	-0.2	4.9	9.6	8.6	9.1	15.4	10.3	10.4	9.7	6.1	10.3
Growth of imports of G&S (US dollar terms, in percent)	-14.4	-14.9	4.7	11.1	8.1	5.7	2.6	21.4	10.3	13.0	9.7	3.8	10.4
Grant element of new public sector borrowing (in percent)	...	...	...	21.2	21.2	21.2	21.2	19.7	18.9	17.7	12.7	...	19.5
Government revenues (excluding grants, in percent of GDP)	13.5	14.0	13.7	14.2	14.4	14.5	14.3	14.6	14.8	16.4	20.0	12.5	15.0
Aid flows (in Million of US dollars) 5/	800.9	1125.0	1099.5	885.8	984.4	970.5	950.6	908.1	942.7	1071.8	2336.4		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	1.2	1.2	1.1	1.0	0.9	0.8	0.6	0.5	...	0.9
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	41.6	45.1	45.7	46.6	46.5	47.5	38.7	37.1	...	44.0
Nominal GDP (Million of US dollars)	48,265	53,917	58,533	64,609	70,582	76,675	83,185	91,008	100,348	166,028	425,732		
Nominal dollar GDP growth	-6.3	11.7	8.6	10.4	9.2	8.6	8.5	9.4	10.3	10.4	9.7	9.2	9.9
<b>Memorandum items:</b>													
PV of external debt 7/	...	...	23.7	22.2	21.2	20.5	19.7	18.7	17.8	13.5	8.4		
In percent of exports	...	...	159.7	157.3	149.7	144.7	138.2	124.7	118.4	88.1	54.7		
Total external debt service-to-exports ratio	9.8	10.2	11.1	15.2	12.7	10.8	10.6	9.0	8.0	7.0	4.9		
PV of PPG external debt (in Million of US dollars)	...	...	1005.17	1025.14	1057.73	1100.56	1134.32	1166.78	1208.1	1432.17	19819.7		
(Pvt-Pvt-1)/GDPt-1 (in percent)	...	...	...	0.3	0.5	0.6	0.4	0.4	0.5	0.4	0.3		
Non-interest current account deficit that stabilizes debt ratio	4.0	3.0	2.8	6.3	5.5	4.8	3.9	5.2	5.2	4.5	3.3		

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



# ANNEX II

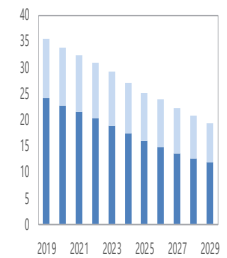
Table 2. Tanzania: Public Sector Debt Sustainability Framework, Baseline Scenario, 2016-2039  
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
	<b>Public sector debt 1/</b>	35.7	38.3	38.1	35.4	33.7	32.2	30.8	29.1	27.1	19.4	12.3	31.2
of which: external debt	27.5	26.2	26.4	24.3	22.7	21.5	20.2	18.8	17.4	11.8	6.2	22.1	17.6
<b>Change in public sector debt</b>	-0.7	2.6	-0.2	-2.6	-1.8	-1.4	-1.5	-1.7	-1.9	-1.2	0.0		
<b>Identified debt-creating flows</b>	0.3	-2.4	-1.6	-1.1	-0.4	-0.2	-0.2	-0.5	-0.6	-0.1	0.2	0.5	-0.4
Primary deficit	1.9	-0.1	0.2	1.4	1.1	0.9	0.7	0.5	0.4	0.4	0.3	2.2	0.7
Revenue and grants	14.0	15.0	14.4	14.9	15.2	15.2	15.0	15.2	15.5	16.8	20.3	14.5	15.6
of which: grants	0.5	0.9	0.7	0.7	0.8	0.8	0.8	0.7	0.6	0.6	0.4	0.4	0.4
Primary (noninterest) expenditure	15.8	14.9	14.6	16.3	16.4	16.1	15.7	15.7	15.9	17.2	20.6	16.7	16.3
<b>Automatic debt dynamics</b>	-1.6	-2.3	-1.8	-2.5	-1.6	-1.1	-0.9	-1.0	-1.0	-0.5	-0.1		
Contribution from interest rate/growth differential	-3.5	-2.9	-2.2	-2.9	-1.9	-1.4	-1.2	-1.3	-1.1	-0.5	-0.1		
of which: contribution from average real interest rate	-1.2	-0.6	0.3	-0.3	0.6	0.9	1.1	0.9	0.9	0.9	0.6		
of which: contribution from real GDP growth	-2.3	-2.4	-2.6	-2.6	-2.4	-2.3	-2.3	-2.2	-2.0	-1.4	-0.7		
Contribution from real exchange rate depreciation	1.9	0.6	0.4	...	...	...	...	...	...	...	...		
<b>Other identified debt-creating flows</b>	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		
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		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	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		
<b>Residual</b>	-0.9	5.0	1.4	-1.2	-1.1	-0.9	-1.0	-1.0	-1.2	-1.2	-0.1	2.0	-1.1
<b>Sustainability indicators</b>													
<b>PV of public debt-to-GDP ratio 2/</b>	...	...	29.0	27.2	26.0	25.2	24.3	23.2	21.8	16.3	10.7		
<b>PV of public debt-to-revenue and grants ratio</b>	...	...	201.8	182.5	170.6	165.1	162.0	152.7	141.2	97.2	52.8		
<b>Debt service-to-revenue and grants ratio 3/</b>	34.1	42.3	43.8	49.6	38.1	31.8	30.0	30.9	28.7	19.4	16.5		
Gross financing need 4/	6.6	6.2	6.5	8.8	6.9	5.7	5.2	5.2	4.9	3.6	3.6		
<b>Key macroeconomic and fiscal assumptions</b>													
Real GDP growth (in percent)	6.7	7.1	7.2	7.3	7.3	7.5	7.7	7.7	7.6	7.2	6.5	6.5	7.5
Average nominal interest rate on external debt (in percent)	1.7	1.7	2.0	2.0	2.0	2.1	2.2	2.3	2.4	2.9	3.4	1.2	2.4
Average real interest rate on domestic debt (in percent)	2.2	7.4	5.7	3.7	7.8	10.0	11.3	11.0	11.0	12.3	11.5	2.0	10.3
Real exchange rate depreciation (in percent, + indicates depreciation)	7.8	2.4	1.6	...	...	...	...	...	...	...	...	6.9	...
Inflation rate (GDP deflator, in percent)	7.7	6.5	3.3	4.8	3.2	2.5	2.2	3.0	3.9	4.4	4.4	8.9	3.8
Growth of real primary spending (deflated by GDP deflator, in percent)	13.2	0.5	5.3	19.8	7.6	5.9	4.8	7.8	8.9	9.2	8.5	4.7	9.1
Primary deficit that stabilizes the debt-to-GDP ratio 5/	2.5	-2.7	0.4	4.1	2.9	2.3	2.2	2.2	2.4	1.6	0.2	0.1	2.3
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		

Definition of external/domestic debt	Residency-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



■ of which: held by residents  
■ of which: held by non-residents

