THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF FINANCE AND PLANNING

TANZANIA NATIONAL DEBT SUSTAINABILITY ANALYSIS

DECEMBER, 2019

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Abbreviations and Acronyms

AfDB	African Development Bank
BoT	Bank of Tanzania
CI	Composite Indicator
CPIA	Country Policy and Institutional Assessment
DOD	Disbursed Outstanding Debt
DSA	Debt Sustainability Analysis
DSF	Debt Sustainability Framework
EAC	East African Community
ECA	Export Credit Agency
FDI	Foreign Direct Investment
FYDP	Five Year Development Plan
GDP	Gross Domestic Product
GE	Grant Element
IDA	International Development Association
IMF	International Monetary Fund
LIC-DSF	Debt Sustainability Framework for Low-Income Countries
MEFMI	Macroeconomic and Financial Management Institute of Eastern and Southern Africa
MoFP	Ministry of Finance and Planning
MTDS	Medium-Term Debt Management Strategy
NCB	Non-Concessional Borrowing
OECD	Organization for Economic Co-operation and Development
PPG	Public and Publicly Guaranteed
PV	Present Value
SOEs	State-Owned Enterprises
WB	World Bank
WEO	World Economic Outlook

Executive Summary

The Government of Tanzania in collaboration with Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI) conducted Debt Sustainability Analysis (DSA) exercise from 2nd to 13th December 2019. The exercise is in line with Regulation 38 (d) of the Government Loans, Guarantees and Grants Act CAP 134, which requires the Government to conduct DSA on annual basis.

The main objective of the DSA was to assess the impact of existing Government debt level and prospective new external and domestic borrowing to finance major strategic infrastructure projects on the country's fiscal sustainability. The analysis covered 10 years' historical and 20 years' projections of macroeconomic and debt data using 2018/19 as the base year. The Low-Income Countries Debt Sustainability Framework (LIC-DSF) was employed in the analysis.

The underlying assumptions for the analysis is that real GDP growth will remain strong at around seven (7) percent in the medium to long term, average inflation rate is projected to range between 3 – 5 percent in the medium to long term, domestic revenue will continue to increase to an average of 15.1 percent of GDP in the medium term (2019/20 - 2023/24) from the actual average performance of 13.9 percent between 2014/15 and 2018/19. Furthermore, total expenditure is projected to widen to an average of 18.4 percent of GDP in the medium term from 17.0 percent recorded between 2014/15 and 2018/19 as government is scaling up public investment to finance large flagship projects. In the medium term, current account deficit is projected to narrow from an average of 5.6 percent of GDP recorded between 2014/15 and 2018/19 to an average of 3.7 percent and there after widen to an average of 4.1 percent in the long run. Foreign Direct Investment (FDI) is projected to record an average of 2.0 percent of GDP in the medium term in line with improving business environment. The overall fiscal deficit has been maintained below 3.0 percent of GDP consistent with EAC convergence criteria.

On new financing, it is assumed that Government will continue to source a blend of concessional loans from both multilateral and bilateral official lenders and semi-concessional loans. Nevertheless, in the short to medium term, the Government will gradually increase commercial borrowing to finance strategic infrastructure projects. For domestic, it is assumed that, the Government will roll over maturing principal amount while paying interest using domestic revenue; and financing of budget will be through marketable long-term instruments.

Based on the above assumptions, under baseline and alternative scenarios, the findings of the DSA shows that the country's debt is sustainable as all debt burden indicators remain below specified policy determined thresholds. However, stress tests depict that export and contingent liabilities shocks pose risks to the external and total debt sustainability respectively. This suggests that, continued effort to promote exports and strengthening the supervision of Public Corporation will be key to continue keeping debt at sustainable level.

Furthermore, the structure of the debt portfolio has been gradually changing, as the proportion of commercial loans has been rising. The Government will continue directing proceeds from commercial sources into projects that accelerate high economic returns and those which can boost export base.

Chapter 1 : INTRODUCTION

1. The Government Loans, Guarantees, and Grants Act, Cap 134 is the core legislation that guides all matters related to public debt management in Tanzania. Regulation 38 (d) of the Act requires the Government to conduct Debt Sustainability Analysis (DSA) on annual basis to determine the risks of debt distress and evaluate the country's capacity to meet current and future debt obligations without recourse to exceptional financing or compromising economic growth and development.

2. The main objective of the DSA 2019 was to assess the fiscal sustainability of prospective borrowings to finance major strategic infrastructure projects under the Second Five Year National Development Plan (FYDP II) 2016/17-2020/21.

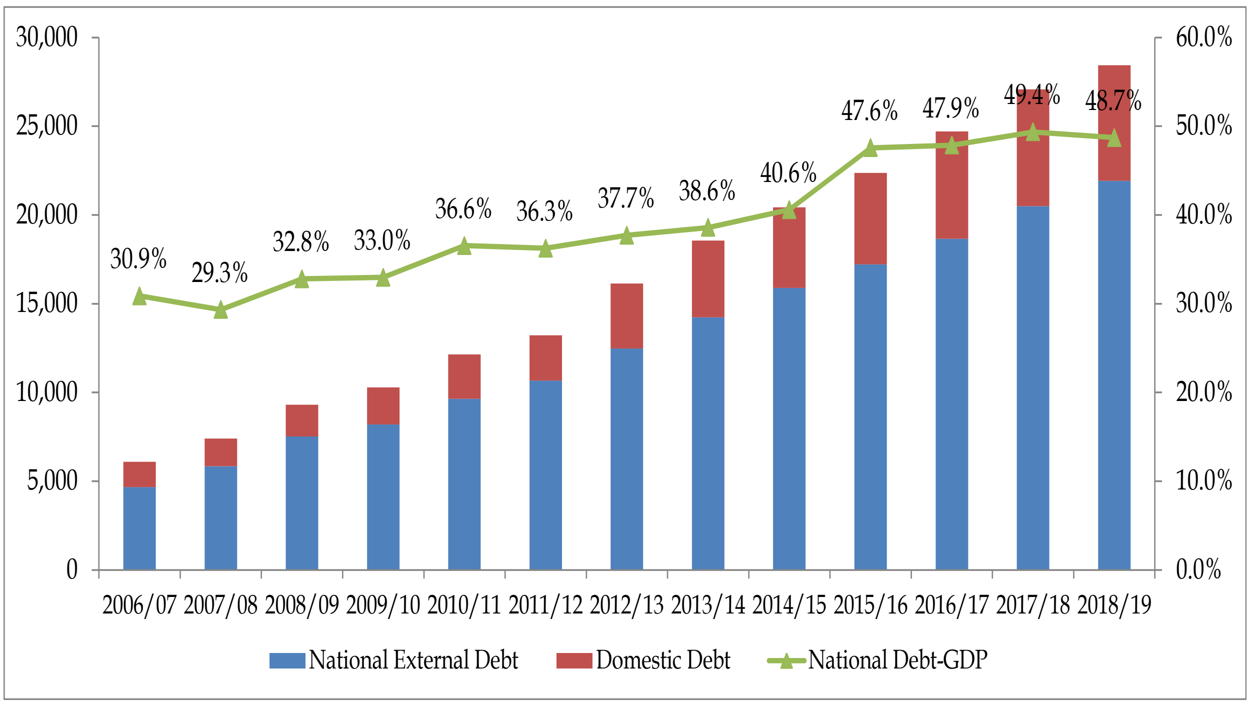
3. The DSA 2019 analysed debt indicators under baseline macroeconomic assumptions and alternative scenarios. The exercise was based on the recent developments; in particular, the 2015 rebased GDP series and the reclassification of Tanzania as a strong policy performer by the World Bank and IMF using the composite indicator. The analysis used the Low-Income Countries Debt Sustainability Framework (LIC-DSF).

4. The debt data used for DSA 2019 comprised public and publicly guaranteed (PPG) external debt, private sector external debt, and public domestic debt. The analysis covered 10 years' historical data and 20 years' projections, using 2018/19 as the base year and 2019/20 as the first year of projection.

Chapter 2 : DEBT PORTFOLIO REVIEW

5. National debt stock recorded at the end of June 2019 was USD 28,432.12 million (48.7 per cent of GDP in nominal terms). Out of total national debt, External debt (public and private) was USD 21,920.9 million, equivalent to 37.52 percent of GDP in nominal terms and Domestic debt was 11.16 percent of GDP. The stock of national debt increased from USD 27,071.47 million recorded at the end of June 2018, equivalent to an increase of 5.03 percent (**Chart 1**).

Chart 1: Evolution of National Debt (USD Millions)



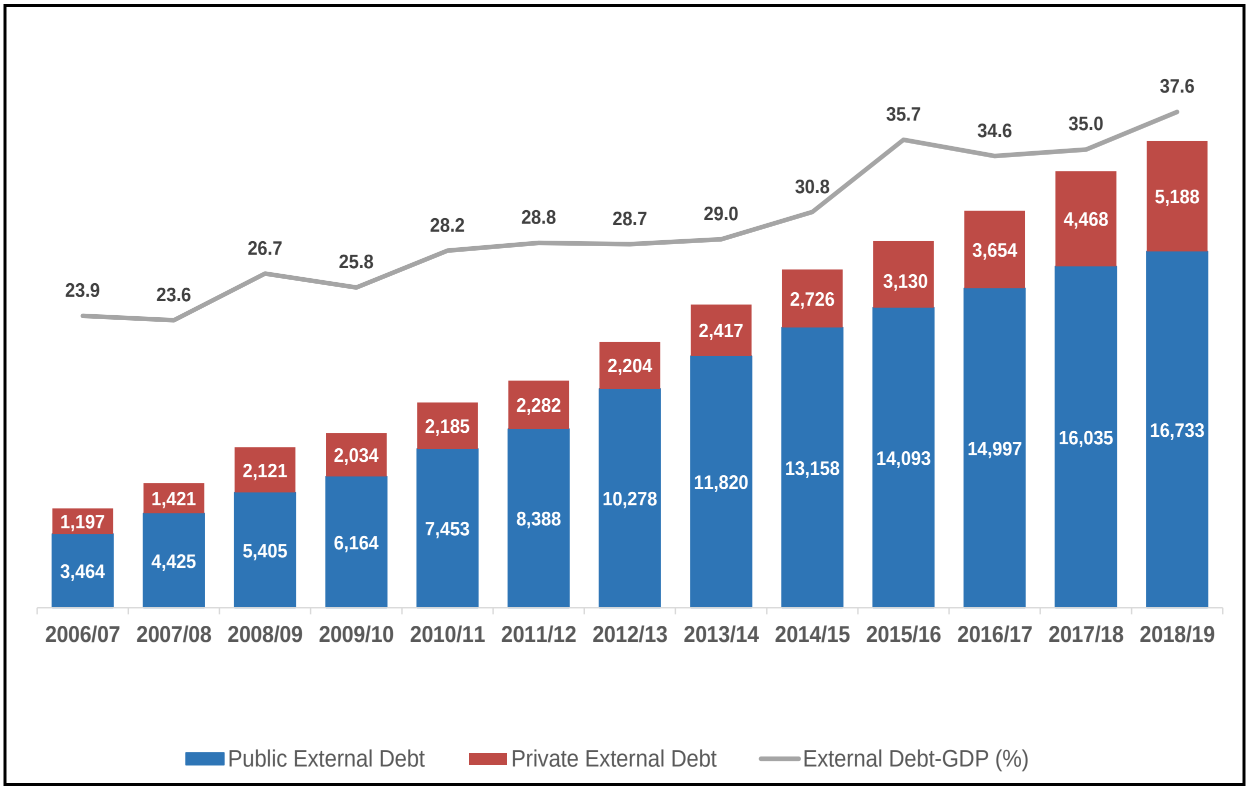
Source: Ministry of Finance and Planning, and Bank of Tanzania

2.1 Evolution of External Debt

6. Total external debt stock the end of June 2019 was USD 21,920.9 of which public sector external debt was USD 16,732.70 million and private sector debt was USD 5,188.20 million. Both public and private sector external debt stock increased by 4.35 and 16.13 percent respectively compared to the amount

recorded in 2018/2019 **(Chart 2).** The increase was mainly due to net inflows and depreciation of the USD against other currencies in which the external debt is denominated.

Chart 2: Evolution of External Debt (USD millions)



Source: Ministry of Finance and Planning, and Bank of Tanzania

2.1.1 External Debt Stock by Creditor Category

7. Despite the recent changes in development financing landscape, the proportion of debt owed to multilateral institutions remained dominant at end June 2019, accounting for 45.6 percent of the external debt stock, followed by debt from commercial creditors, export credit, and bilateral accounting for 34 percent, 11.5 percent and 8.9 percent, respectively (**Table 1**).

Table 1: External Debt Stock by Creditor Category

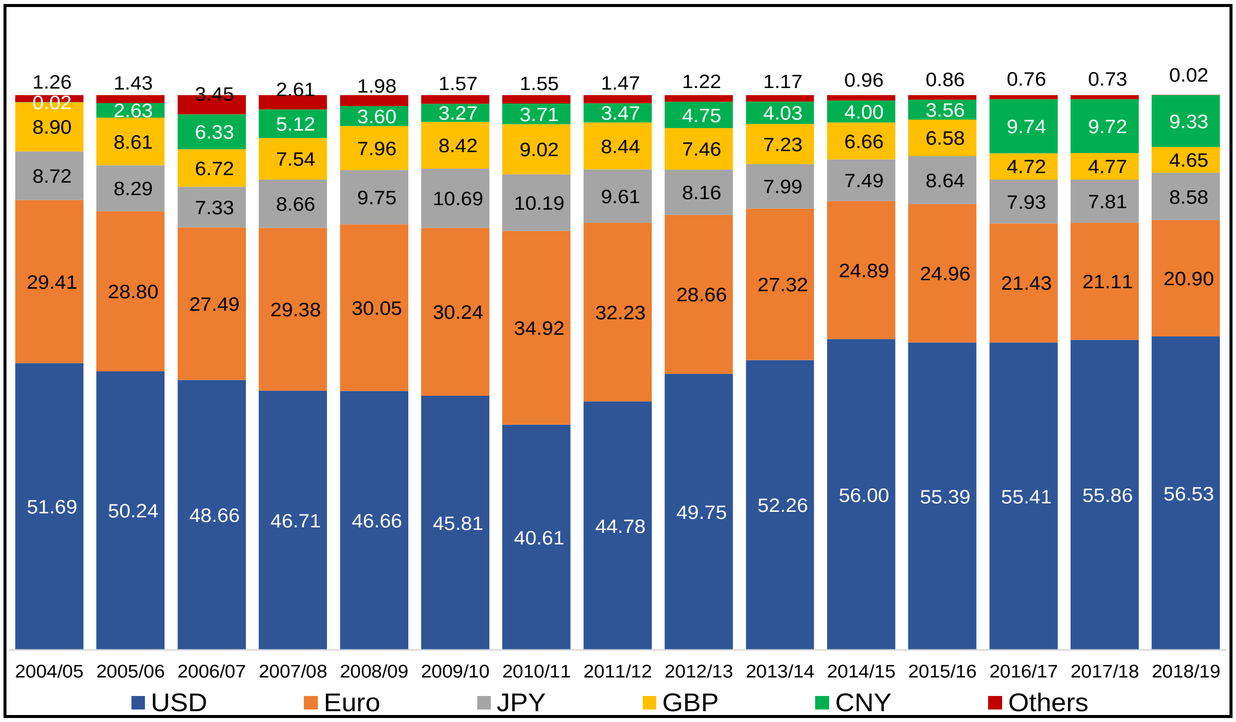
Creditor category	Jun-17		Jun-18		Jun-19	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Multilateral	8,726.0	46.8%	9,538.6	46.5%	9,991.60	45.6%
Bilateral	1,940.7	10.4%	1,822.6	8.9%	1,958.50	8.9%
Commercial	6,245.5	33.5%	6,858.4	33.5%	7,459.00	34.0%
Export credit	1,739.0	9.3%	2,283.4	11.1%	2,511.90	11.5%
External debt stock	**18,651.1**	**100.0**	**20,503.0**	**100.0**	**21,920.90**	**100.0**

Source: Ministry of Finance and Planning and Bank of Tanzania

2.1.2 External Public debt by Currency Composition

8. The currency composition of the outstanding public debt shows that a large proportion of debt was denominated in USD, at 56.5 percent in June 2019 compared to 55.9 percent recorded at end of June 2018. The proportion of debt denominated in Euro and Chinese Yuan was 20.9 percent and 9.3 percent, respectively (**Chart 4**). Therefore, the debt portfolio is more exposed to risk associated with USD exchange rate fluctuations. Chart 4 further shows that, over recent years, the share of CNY has been increasing with declining in shares of Euro and GBP indicating changes of borrowings from traditional lenders to non-traditional lenders.

Chart 3: Composition of Disbursed Outstanding Debt by Currency (Percent)

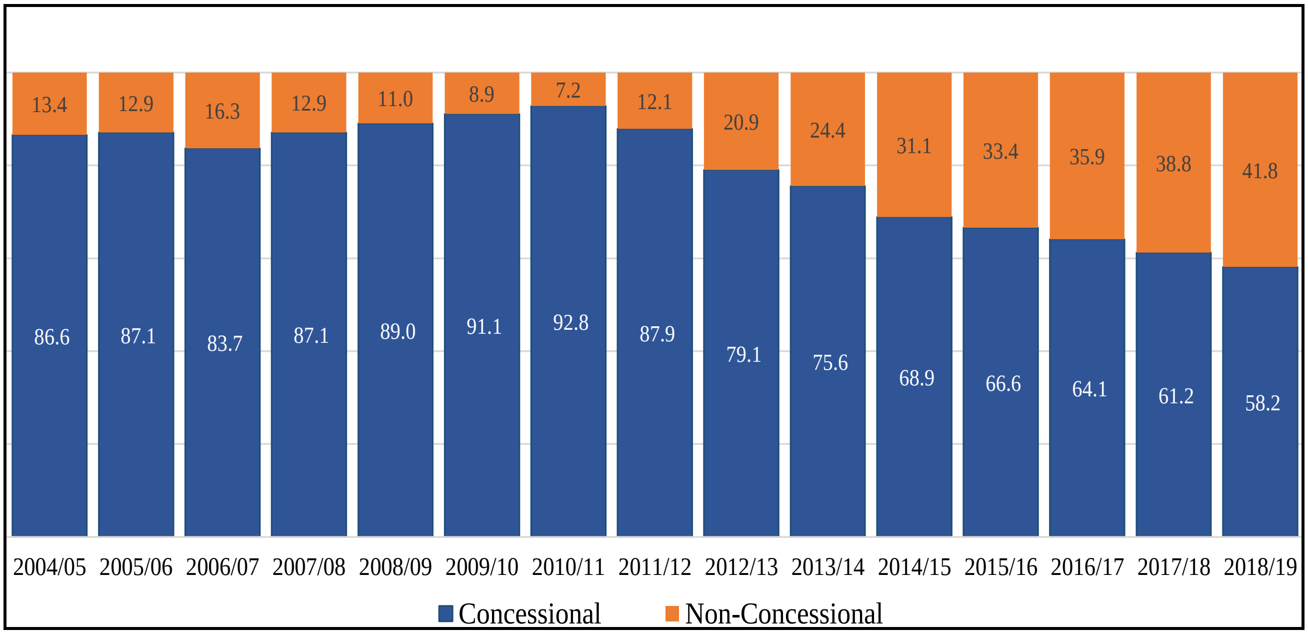


Source: Ministry of Finance and Planning, and Bank of Tanzania

2.1.3 External Public debt by Concessionality

9. Concessional loans from multilateral and bilateral creditors continue to dominate the public external debt portfolio accounting for 58.2 percent as at end of June 2019. However, the continuous declining trend of financing from these creditors and Government's commitments to finance development projects, necessitated increased access to non-concessional sources in the recent years. Consequently, the share of concessional debt has declined from 75.6 percent in June 2014 to 58.2 percent of total public external debt as at end June 2019 **(Chart 3).**

Chart 4: Concessionality of Public External Debt (Percent)



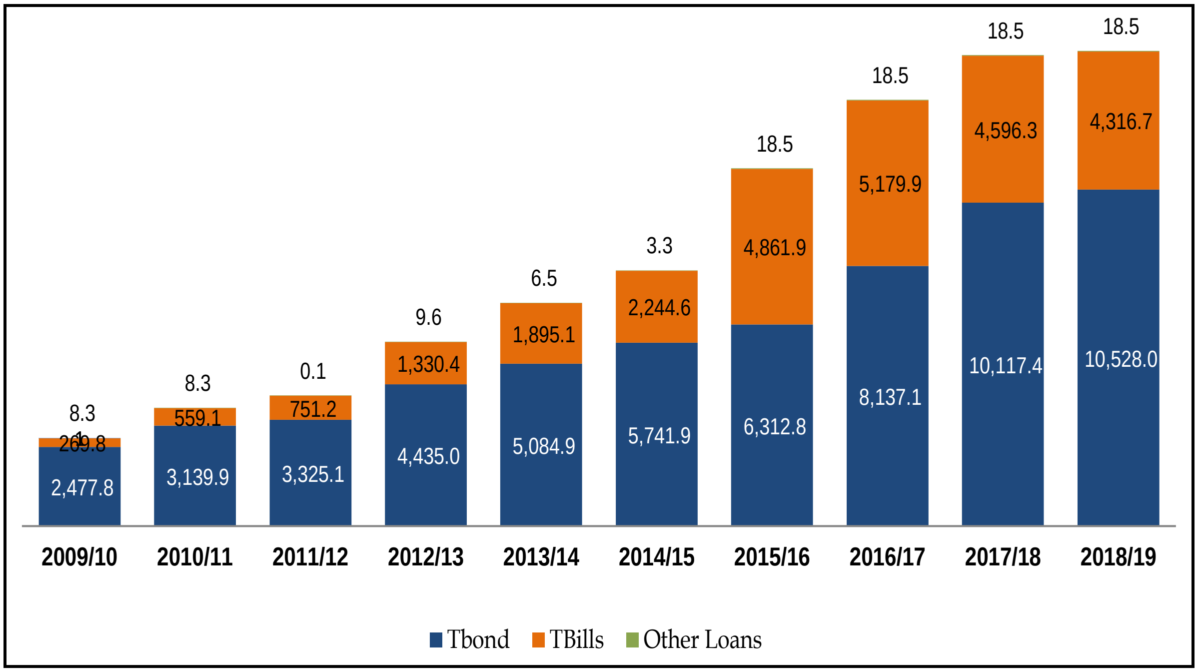
Source: Ministry of Finance and Planning, and Bank of Tanzania

2.2 Evolution of Domestic Debt

10. The stock of domestic debt at the end of June 2019 was TZS 14,863.1 billion equivalent to 11.1 percent of GDP in nominal terms. The debt stock has increased by 1.0 percent from TZS 14,732.2 billion recorded at end June 2018 **(Chart 5).** The increase was mainly on account of new borrowing to finance development projects and rollover matured securities.

11. The profile of domestic debt by instrument shows that, the share of Government bonds has been increasing gradually from 50 percent recorded in June 2010 to 62 percent recorded in June 2019 **(Chart 5).** The increase is consistent with implementation of Government's strategy of lengthening maturity profile of domestic debt through gradual leveraging of long-term instruments for financing.

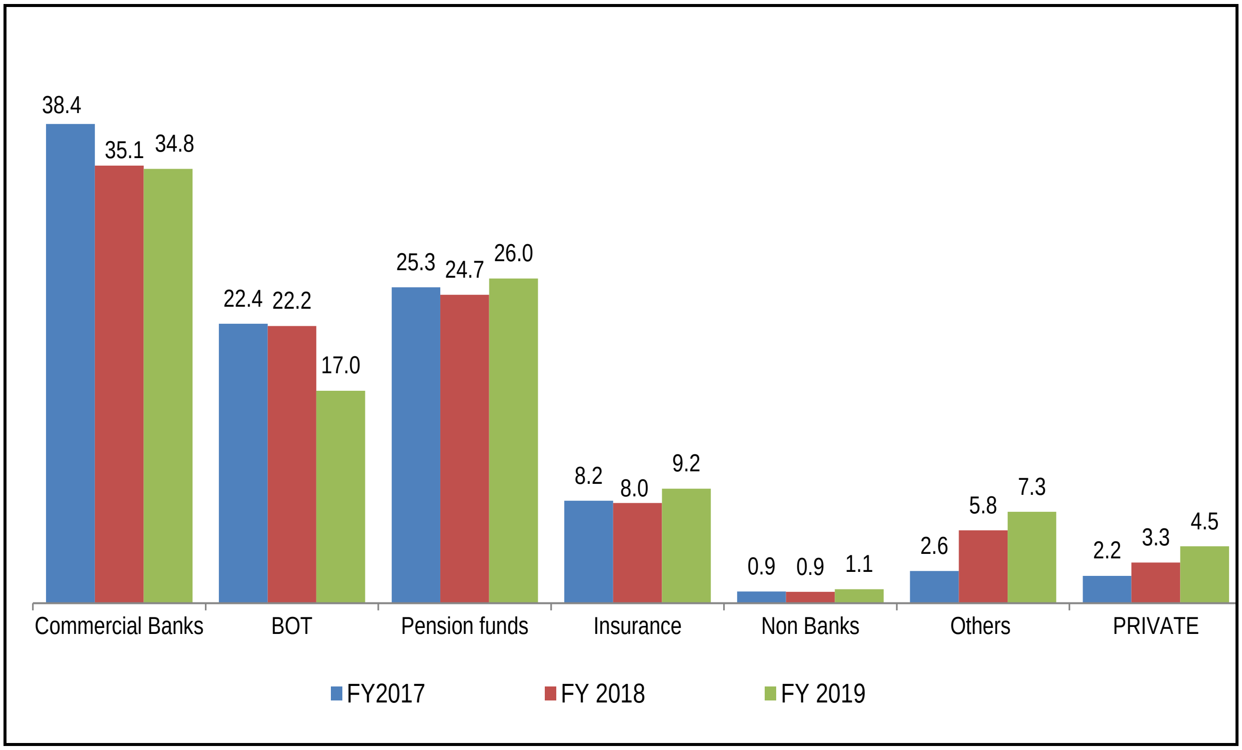
Chart 5: Evolution of Domestic Debt (TZS billions)



Source: Ministry of Finance and Planning, and Bank of Tanzania

12. Commercial banks remained the leading investors, accounting for 34.8 percent of total domestic debt followed by Pension funds, which accounted for 26.0 percent. Private individuals' participation in the market has been growing from 2.2 percent to 4.5 percent in a period of 3 years, as presented in **Chart 6**. The increase is a result of Government sensitization campaign through various channels (**Chart 6**).

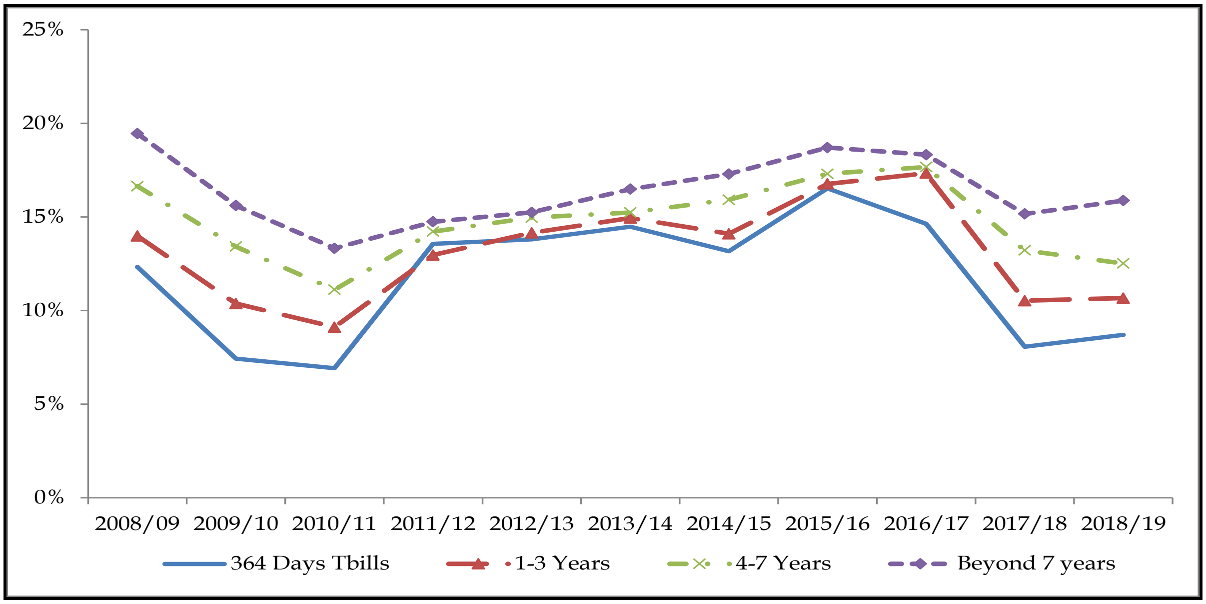
Chart 6: Domestic Debt by Holder's Category (Percent)



Source: Ministry of Finance and Planning, and Bank of Tanzania

13. The yields for the past two consecutive years have declined across all maturities as compared to previous years (**Chart 7**). The decrease reflects increased competition that emanated from broadened investors base following Government's sensitization programs.

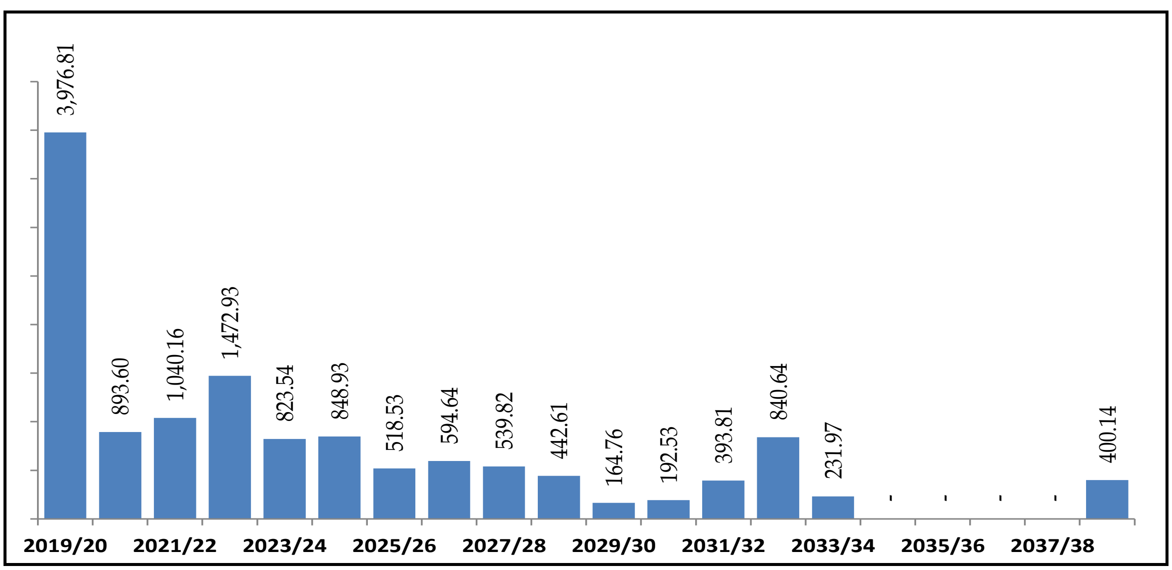
Chart 7: Yields Trend



Source: Ministry of Finance and Planning and Bank of Tanzania

14. Domestic debt redemption depicts that large proportion matures in the next twelve months, owing to Treasury bills amounting to TZS 2,828.9 billion, which are expected to be rolled over. The recently introduced 20-year bond will mature in 2038/39 (**Chart 8**).

Chart 8: Domestic Debt Redemption Profile (TZS Billions)



Source: Ministry of Finance and Planning, and Bank of Tanzania.

Chapter 3 : RECENT ECONOMIC DEVELOPMENTS

15. Over the past decade, Tanzania has enjoyed robust macroeconomic performance with real GDP growing at an annual average of 6.4 percent. In 2018, real GDP recorded a growth of 7.0 percent against 6.8 percent growth recorded in 2017. During the first half of 2019, GDP grew by 6.9 percent. The robust growth of the economy was mainly driven by construction, agriculture, transport and storage, and manufacturing activities. Headline inflation continued to be single digit averaging at 3.2 percent for the year ending June 2019, mainly on account of adequate supply of food in the market. The recorded inflation is within the medium-term target of 5.0 percent, as well as within the EAC and SADC convergence criteria of less than 8 percent and 3 - 7 percent, respectively.

16. During 2018/2019, the Government continued to pursue prudent fiscal policies through improvement in resources mobilization and effective public expenditure management. Specifically, the focus has been on widening tax base, strengthening management of existing sources especially by intensifying the use of electronic collection systems and other administrative measures. Expenditure policies focused on aligning revenue with identified priorities as well as management of public expenditure through enforcement of Budget Act, CAP 439. Following implementation of these fiscal policies and strategies, fiscal deficit including grants was maintained below EAC convergence target of 3.0 percent, averaging at 2.2 percent of GDP over the last four years.

17. The overall Balance of Payments recorded a deficit of USD 1,059.6 million in the year ending June 2019 compared to a surplus of USD 627.9 million in 2017/18. The current account deficit widened to USD 2,257.3 million equivalents to 3.9 percent of GDP in 2018/19 from 3.2 percent in 2017/18 largely attributable to increased imports of goods and services that offset the

improvements in exports of goods and services. Imports of goods increased partly driven by capital goods for infrastructure projects, oil and industrial raw materials.

18. Gross official reserves amounted to USD 4,401.8 million at the end of June 2019, sufficient to cover 4.3 months of projected import of goods and services, which is above the country's target of 4 months.

19. During 2018/19, the Bank of Tanzania continued to pursue an accommodative monetary policy stance using a range of instruments aimed at stimulating growth of credit to the private sector and the entire economy. Consequently, credit to private sector grew by 7.6 percent in the year ending June 2019, higher than 4.0 percent in 2018. The banking sector also remained sound, stable and profitable; with levels of capital and liquidity above regulatory requirements. Further, the quality of the banking sector's assets improved following decrease in Non-Performing Loans (NPLs) to 10.7 percent in June 2019 from 11.3 percent in June 2018.

Chapter 4 : UNDERLYING DSA ASSUMPTIONS

4.1 Macroeconomic assumptions

20. Economic growth: The strong base for solid growth is expected to sustain, benefiting from sturdy increase in public and private investments. In particular, recovery of credit growth to the private sector; enhanced capacity utilization in manufacturing industry; agricultural modernization; improved business/investment environment; and legal and policy reforms will support growth in the medium term. The real GDP growth is expected to remain strong around 7.0 percent in the medium-term. In the long run, growth will maintain mixed trend, portraying a seasonality pattern. However, the uncertainties surrounding Brexit, trade tensions among the global superpowers, regional political instability, global market developments (price volatility) and natural calamities remain the key risks to the outlook.

21. Headline inflation: The projected inflation will range between 3 – 5 percent in the medium to long term, consistent with the EAC convergence criterion of 8 percent. The lower and stable inflation forecast is anchored on reduction of production costs on account of reliable and affordable power supply which is expected to lower oil imports for power generation. Likewise, favorable weather conditions in domestic and neighboring countries as well as implementation of prudent monetary and fiscal policies will sustain low inflation.

22. Fiscal policy: The Government will continue to implement prudent fiscal policy through improving domestic resource mobilization and public expenditure management. This will allow the Government to fund social and economic infrastructures in line with National Development Vision 2025 aiming at enhancing growth and drive the country to middle income status.

23. Domestic revenue will continue to increase to an average of 15.1 percent of GDP in the medium term (2019/20 - 2023/24) from the average performance of 13.9 percent between 2014/15 and 2018/19. The projected increase in revenue will be supported by improvement in tax administration and new revenue policy measures. Further, as the economy industrializes, the tax base is expected to widen hence increase in domestic revenue in the long run. Likewise, expenditure is projected to widen to an average of 18.4 percent of GDP in the medium term from 17.0 percent recorded between 2014/15 and 2018/19. Grants and concessional loans are expected to continue financing the domestic investment gap though with a gradual declining as the country graduates into middle income status.

24. The overall fiscal deficit (including grants) is, therefore, projected to expand to an average of 2.6 percent of GDP in the medium term from an average of 2.4 percent recorded between 2014/15 and 2018/19 on account of scaling up public infrastructure investment. Subsequently, the deficit is projected to decrease to an average of 2.3 percent in the long term following the completion of key infrastructure projects as well as improvement in domestic revenue mobilization. The overall fiscal deficit will remain below 3.0 percent of GDP consistent with EAC convergence criteria.

25. The current account balance: In the medium term, current account deficit is projected to narrow from 5.6 percent of GDP recorded between 2014/15 and 2018/19 to an average of 3.7 percent and thereafter widen to an average of 4.1 percent in the long run. The medium-term trend reflects the projected increase in the exports of manufactured goods and minerals as well as expected increase in trade and service following the implementation of African Continental Free Trade Area (AfCFTA). Importation of capital goods to support infrastructure projects will have impact on the current account balance in both the medium term and long run.

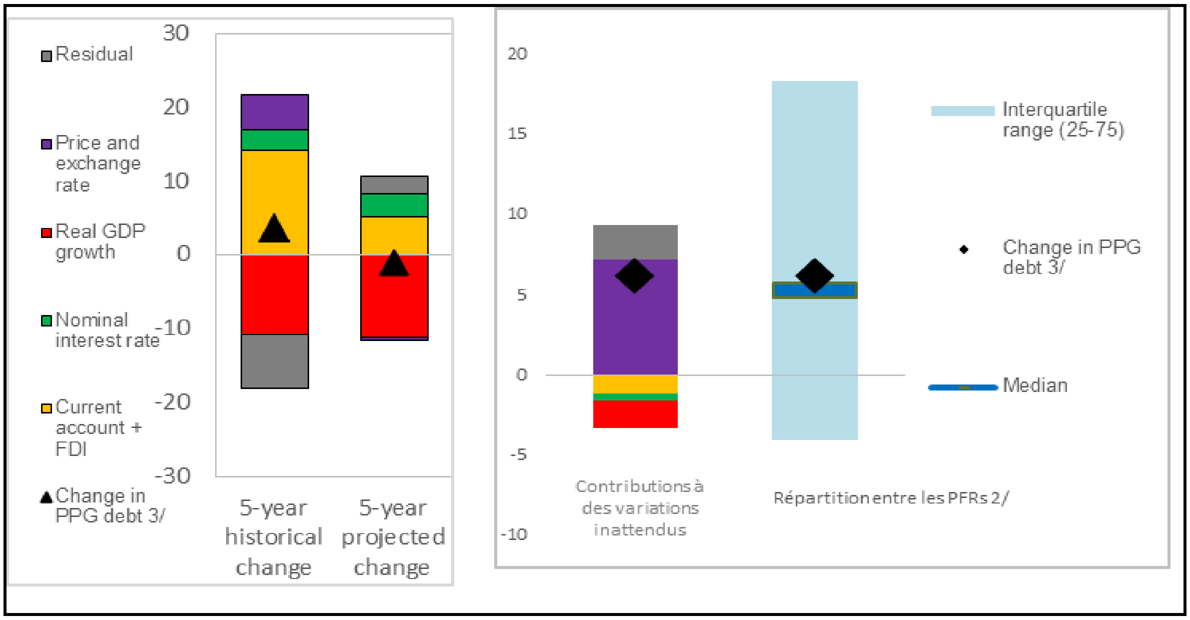
26. Foreign Direct Investment (FDI): Inflows are projected to record an average of 2.0 percent of GDP in the medium term in line with improving business environment (Blueprint for Regulatory Reforms). In addition, the ongoing infrastructure projects and expected stable power supply provides bright prospects for investment in the country.

4.2 Debt Development and Realism of Projections

27. The projections of both macroeconomic and debt variables in the DSA 2019 are not significantly different from the previous projections. External debt accumulation in the last five (5) years has been mainly driven by the current account deficit and foreign direct investment. Primary deficit and real exchange rate depreciation were the main factors behind the accumulation of public debt in the past five (5) years. The impact of these variables was partly mitigated by strong performance of GDP growth **(Chart 9)**. For the next five years, public debt is expected to decline slightly on account of robust GDP growth, which will offset the impact of the primary balance, real exchange rate depreciation and higher real interest rates. However, if the projected GDP is not realized, public debt will increase, largely driven by increased cost of borrowing, particularly from foreign commercial creditors.

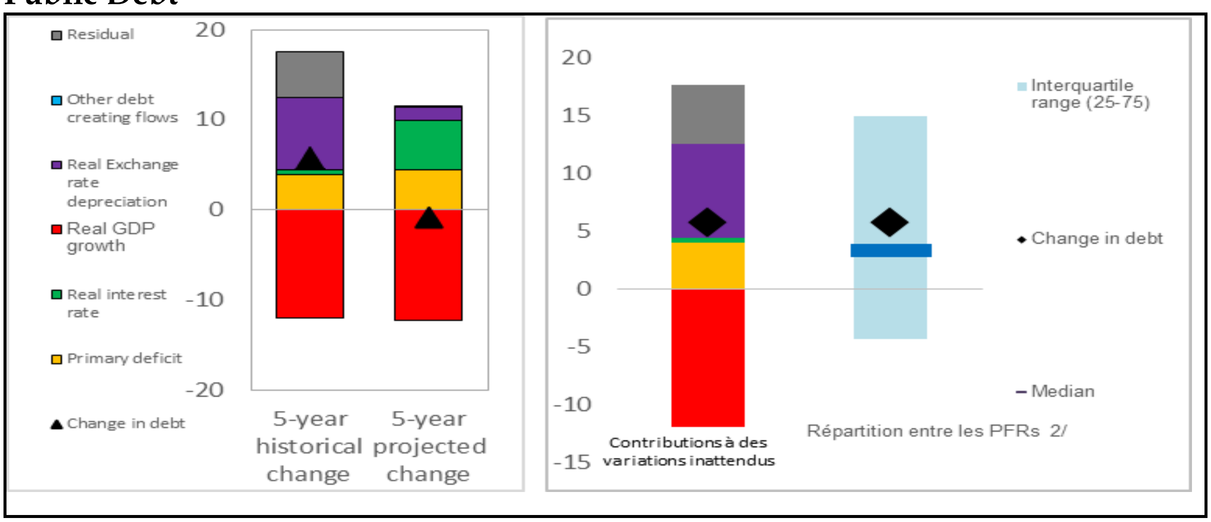
Chart 9: Drivers of External Debt Dynamics- Baseline

External Debt



Source: Ministry of Finance and Planning

Public Debt

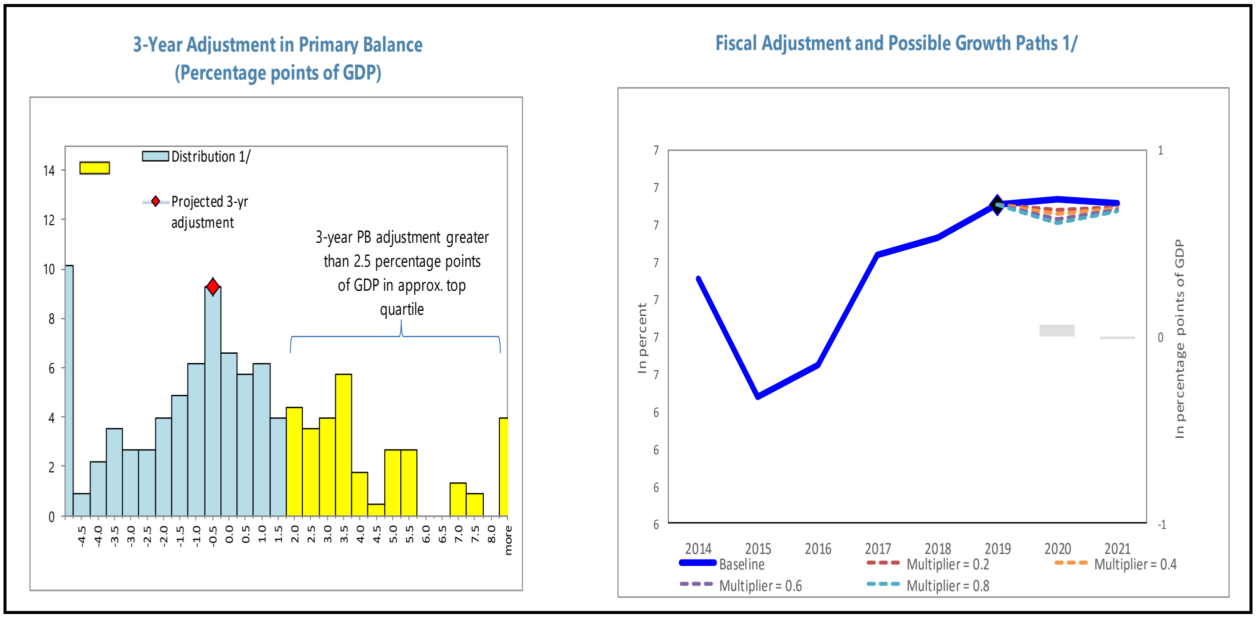


Source: Ministry of Finance and Planning

28. The fiscal projection in the DSA 2019 indicates no significant deviation from the historical pattern and those observed in other Low-Income Countries (LICs) **(Chart 10).** The projected amount of fiscal adjustment is close to the median observed for LICs historically and in line with the deficits recorded by Tanzania over the past years. Public investment is projected to contribute

more to growth based on assumption of scaling up of new infrastructure projects.

Chart 10: Tanzania Realism Tools



Source: Ministry of Finance and Planning

4.3 New Financing Assumptions

29. **External financing** projections in the DSA 2019 are based on the historical trends of loans available to the Low-Income Countries, undisbursed amount of contracted loans, and pipeline loans. The projections are also aligned with government's Medium-Term Debt Management Strategy (MTDS) of 2018/19.

30. Accordingly, it is assumed that, in the medium term the Government will continue to maximize blend of concessional loans from both multilateral and bilateral official lenders and semi-concessional loans mainly from Export Credit Agencies (ECAs). Commercial borrowings will continue to be restricted to projects with higher economic returns and which promote exports.

31. **Domestic debt financing**, 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 and reduce refinancing risk. The main assumptions are:

(i) Net Domestic Financing (NDF) limit for year 2019/20 is 0.8 percent of GDP and will be maintained at 1.0 percent from 2020/21 to 2022/23 and thereafter reduced and maintained at an average of 0.6 percent.

(ii) Long term Securities have been grouped into three categories with tenure of 1-3 years, 4-7 years and beyond 7 years (**Table 2**).

(iii) Treasury bills will continue to be rolled over and projected to account for 42 percent of total domestic financing during the period 2020 – 2025 and thereafter decline to an average of 39 percent starting in 2026.

Table 2: Domestic financing strategy

	2020 - 2025	2026 - 2030	2031 - 2035	2036 - 2040
364 Days T-bills	42%	39%	39%	39%
Bonds (1 to 3 years)	7%	8%	8%	8%
Bonds (4 to 7 years)	7%	8%	8%	8%
Bonds (beyond 7 years)	44%	45%	45%	45%

Source: Ministry of Finance and Planning, and Bank of Tanzania

(iv) Interest rates are projected to rise slightly in the medium and thereafter ease marginally across all maturities in line with low and stable inflation as well as developments in the financial sector (**Table 3).**

Table 3: Interest rate in the medium term

	2019 – 2020	2020 - 2021	2021 - 2022	2022 - 2023	2023 - 2024	2024 - 2025
364 Days T-bills	8.5%	8.6%	8.5%	8.2%	8.0%	8.0%
Bonds (1 to 3 years)	12.0%	12.2%	12.0%	11.8%	11.5%	11.0%
Bonds (4 to 7 years)	12.9%	13.2%	13.0%	13.0%	12.8%	12.5%
Bonds (beyond 7 years)	16.0%	16.5%	16.0%	15.5%	15.2%	15.0%

Source: Ministry of Finance and Planning, and Bank of Tanzania

Chapter 5 : DSA METHODOLOGY AND RESULTS

5.1 Methodology

32. The DSA 2019 employed the Low-Income Countries Debt Sustainability Framework (LIC-DSF), whose indicative debt burden thresholds are based on the Composite Indicator (CI). The CI index is computed using country-specific information that includes the Country Policy and Institutional Assessment (CPIA) and a number of relevant macroeconomic variables, specifically: real GDP growth, foreign reserves, remittances and global economic growth.

33. The LIC-DSF assesses the risk of debt distress by comparing the evolution of selected debt burden indicators against predetermined thresholds that are set according to countries' debt carrying capacities. Relevant solvency and liquidity thresholds of debt burden indicators in the framework are summarized in **Table 4**.

Table 4: Indicative External debt burden thresholds

Category	Composite Indicator Range	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	CI < 2.69	30	140	10	14	35
Medium	2.69 ≤ CI ≤ 3.05	40	180	15	18	55
Strong	CI > 3.05	55	240	21	23	70

Source: International Monetary Fund (2019)

34. The CI index, calculated based on the October 2019 World Economic Outlook (WEO) for Tanzania is 3.07. This indicates that the county's debt-carrying capacity is rated as strong **(Table 5)**.

Table 5: 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^2 (%)	-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			**3.07**	1.00
Composite Indicator rating			**Strong**	

Source: International Monetary Fund /World Bank (2019)

5.2 External Public Debt Burden Indicators Under Baseline Scenario

35. The DSA results show that Tanzania remains at a low risk of external debt distress, with all debt burden indicators being below their thresholds throughout the projection period. The present value (PV) of external public debt to GDP in 2019/20 is projected at 16.3 percent and will increase moderately to a maximum of 18.2 percent in 2022/23 and thereafter decline gradually to 9.1 percent by 2039/2040. Likewise, the PV of external public debt-to-exports is projected to increase from 103.9 percent in 2019/20 to 116.7 percent in 2022/23 and thereafter decline to 53.5 percent by 2039/40.

36. The liquidity indicators as measured by the ratios of debt service to exports are projected to decrease from 11.9 percent in 2019/20 to 9.5 percent in 2021/22 and 8.1 percent in the long-run. The debt service to revenue is projected to decline from 11.9 percent in 2019/20 to 10.1 percent in 2021/22 and thereafter decline to 7.9 percent by 2039/2040 (**Table 6**).

Table 6: External Public Debt Sustainability Indicators

External DSA	Threshold	2019/20	2020/21	2021/22	2022/23	2023/24	2029/2030	2039/40
PV of debt-to GDP ratio	**55**	16.3	16.8	17.6	18.2	18.0	13.7	9.1
PV of debt-to-exports ratio	**240**	103.9	105.5	110.9	116.7	115.4	83.9	53.5
Debt service-to-exports ratio	**21**	11.9	11.1	9.5	10.3	11.2	11.7	8.1
Debt service-to-revenue ratio	**23**	11.9	11.9	10.1	10.7	11.6	11.8	7.9

Source: Ministry of Finance and Planning

5.2.1 Total Public Debt Burden Indicators Under Baseline Scenario

37. The DSA results for total Public (External and Domestic) debt show that the PV of debt to GDP is projected to increase moderately from 27.1 percent in 2019/20 to 33.2 percent in 2029/30 and thereafter declining to 28.2 percent by 2039/2040. It is therefore expected to remain well below the benchmark level of 70 percent throughout the projection period. The PV of public debt-to-revenue and grant is projected to increase gradually from 163.7 percent in 2019/20 to 202.5 percent in 2029/30 and thereafter decreasing to 160.9 percent by 2039/40.

38. The ratio of debt service to revenue and grants is projected to decrease from 33.4 percent[1] in 2019/20 to 27.5 percent in 2021/22 and increase to 46.8 percent in 2029/30. However, the ratio is projected to reach 44.8 percent in the long run (**Table 7**).

Table 7: Evolution of Public Debt Sustainability Indicators

Public DSA	Benchmark	2019/20	2020/21	2021/22	2022/23	2023/24	2029/2030	2039/40
PV of debt-to GDP ratio	**70**	27.1	27.5	28.1	29.2	29.6	33.2	28.2
PV of debt-to-Revenue and grant	**N/A**	163.7	175.6	178.4	185.3	187.8	202.5	160.9
Debt service-to-revenue and grant ratio	**N/A**	33.4	29.7	27.5	29.3	29.9	46.8	44.8

Source: Ministry of Finance and Planning

[1] The debt service amount includes principal amounts of the domestic debt securities that are rolled over; thus, it will not create unnecessary pressure to the budget.

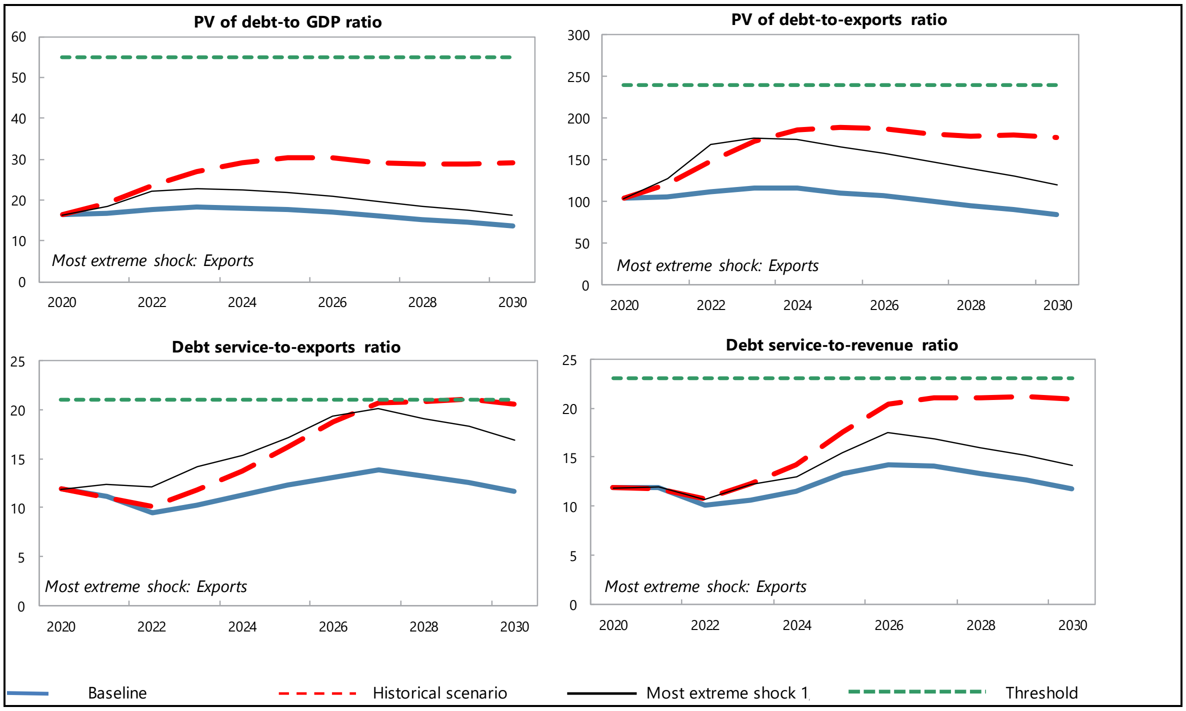
5.2.2 External Public Debt Burden Indicators Under Stress Test Scenario

39. The findings show that the debt remains below thresholds even under standard stress tests, though sensitive to exports shocks. As chart 12 shows, external debt ratios based on historical scenarios are higher relative to the baseline.

40. 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 16.3 percent in 2019/20 to 23.4 percent in 2022/23 and further to 29.0 percent in 2029/30.

41. A shock of one standard deviation to exports in 2020/21 raises PV of public external debt-to-GDP and PV of public external debt-to-exports by 1.0 percent and 22 percent respectively in the medium term. The same shock raises external debt service-to-exports ratio and debt service-to-revenue by 5.0 percent and about 2 percent respectively in the long run. This signifies that, the debt service cost is highly vulnerable to exports movement.

Chart 11: External Public Debt Burden Indicators



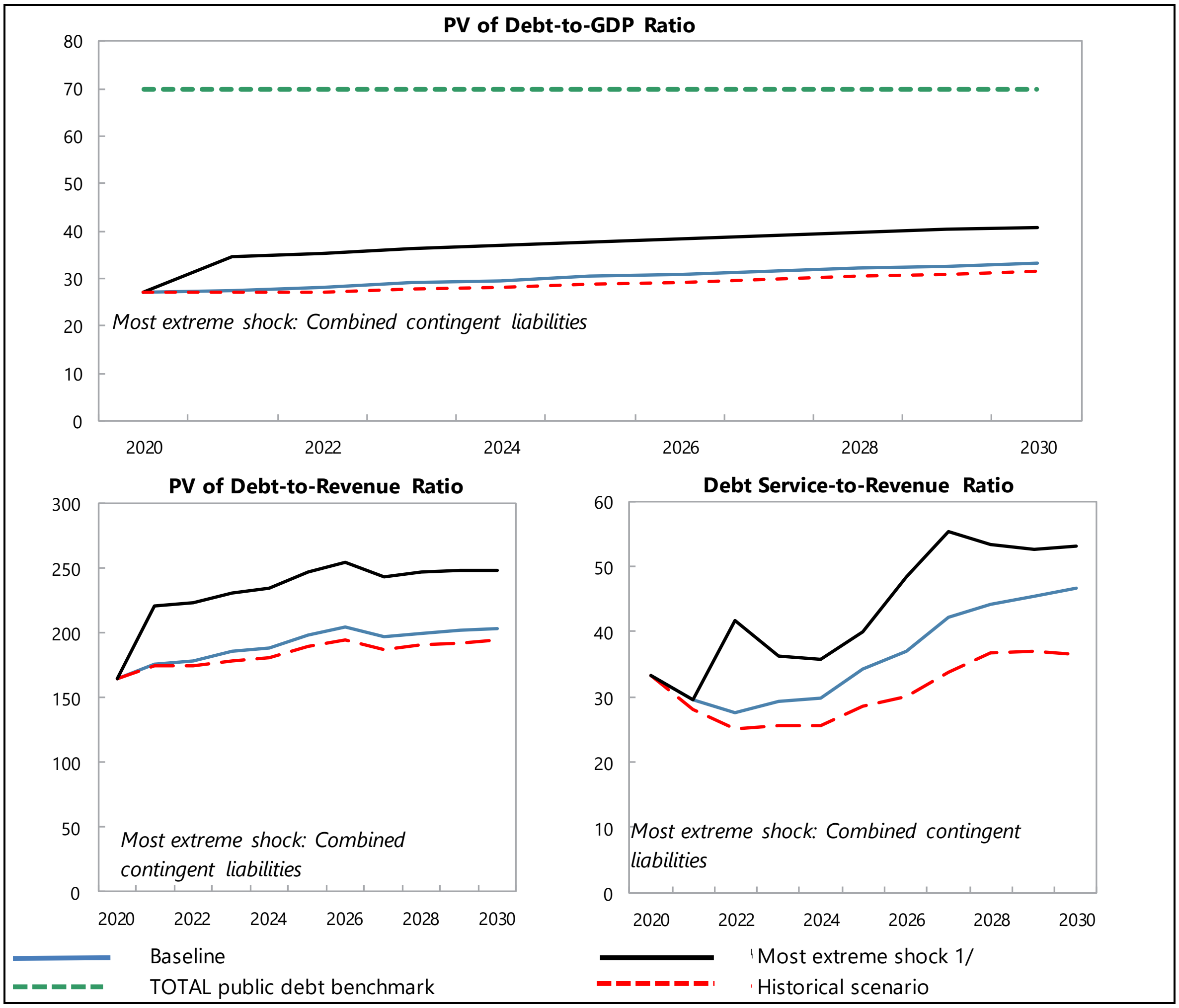
Source: Ministry of Finance and Planning

5.2.3 Total Public Debt Burden Indicators Under Stress Test Scenario

42. The present value of total public debt stays well below the threshold of 70 percent of GDP throughout the projection period under baseline and shock scenario **(Chart 13)**.

43. Nonetheless, the portfolio is sensitive to combined contingent liabilities shocks. The shock raises PV of public debt to GDP ratio by an average of 7.0 percent in the medium term and to 8.0 percent in the long run. Likewise, the shock raises the PV of debt to revenue ratio by about 45 percent, above the baseline, starting in 2020/21 through 2029/30. Similarly, the shock raises debt service to revenue by 14 percent and 6 percent above the baseline in the 2021/22 and 2029/30, respectively.

Chart 12: Total Public Debt Burden Indicators under Shock Scenarios



Source: Ministry of Finance and Planning

Chapter 6 : CONCLUSION

44. The 2019 Debt Sustainability Analysis assessed the 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 DSA 2019 covered public external and domestic debt.

45. The DSA suggests that the external and overall risk of debt distress for Tanzania is low (indicating that the country's debt is sustainable), reflecting robust economic growth and prudent implementation of monetary and fiscal policies. All debt burden indicators remain below the thresholds under baseline and stress tests, though depicts sensitivity to export and contingent liabilities shocks.

46. In order to sustain debt, the Government will continue directing proceeds from commercial sources into projects that accelerate economic returns and those which boost export base. In addition, the Government will continue to strengthen supervision of both financial institution and state-owned enterprises with a view to minimizing risks associated with contingent liabilities.

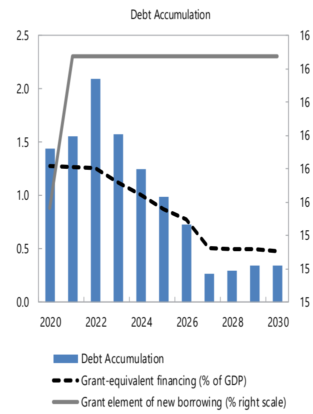
ANNEX No: - I

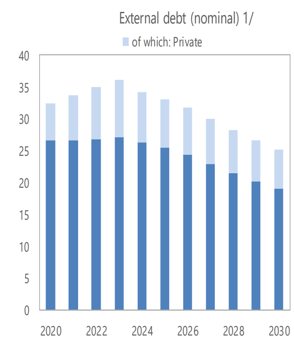
Table 1. Tanzania: External Debt Sustainability Framework, Baseline Scenario, 2017-2040

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
External debt (nominal) 1/	35.1	35.8	34.2	32.5	33.8	35.0	36.1	34.2	33.1	25.2	15.1	**29.7**	**31.5**
of which: public and publicly guaranteed (PPG)	27.7	28.3	27.3	26.6	26.6	26.8	27.2	26.3	25.5	19.1	12.1	**24.3**	**24.3**
Change in external debt	-0.4	0.8	-1.6	-1.7	1.3	1.2	1.1	-1.9	-1.1	-1.4	-2.2		
Identified net debt-creating flows	-1.6	-0.6	0.5	-0.7	-0.2	-1.0	-0.9	-0.1	0.5	0.9	1.4	**2.6**	**0.4**
Non-interest current account deficit	2.7	2.7	3.9	2.7	3.0	2.8	3.0	3.8	4.2	3.8	2.9	**7.2**	**3.8**
Deficit in balance of goods and services	2.5	2.3	3.8	2.5	2.8	2.6	2.9	3.8	4.3	4.2	3.5	**7.7**	**3.9**
Exports	16.3	15.7	14.7	15.7	15.9	15.9	15.6	15.6	16.1	16.4	17.0		
Imports	18.8	17.9	18.5	18.2	18.7	18.5	18.5	19.4	20.4	20.5	20.6		
Net current transfers (negative = inflow)	-0.9	-0.8	-0.6	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	**-1.6**	**-0.7**
of which: official	-1.0	-0.8	-0.3	-0.8	-0.8	-0.8	-0.7	-0.6	-0.5	-0.2	0.0		
Other current account flows (negative = net inflow)	1.1	1.2	0.8	0.9	0.9	0.9	0.7	0.6	0.5	0.2	-0.1	**1.1**	**0.6**
Net FDI (negative = inflow)	-1.7	-1.8	-1.9	-1.7	-1.7	-2.2	-2.2	-2.2	-2.2	-1.8	-0.9	**-3.2**	**-2.0**
Endogenous debt dynamics 2/	-2.5	-1.5	-1.5	-1.7	-1.5	-1.6	-1.6	-1.6	-1.4	-1.1	-0.5		
Contribution from nominal interest rate	0.6	0.6	0.6	0.5	0.6	0.6	0.7	0.8	0.8	0.6	0.5		
Contribution from real GDP growth	-2.2	-2.3	-2.3	-2.2	-2.1	-2.2	-2.3	-2.3	-2.2	-1.7	-1.0		
Contribution from price and exchange rate changes	-1.0	0.2	0.2	...	...	...	...	...	...	...	...		
Residual 3/	1.2	1.4	-2.1	-1.1	1.5	2.2	2.0	-1.8	-1.7	-2.3	-3.7	**-1.1**	**-1.2**
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		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	**...**	**...**	**16.4**	**16.3**	**16.8**	**17.6**	**18.2**	**18.0**	**17.7**	**13.7**	**9.1**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**111.3**	**103.9**	**105.5**	**110.9**	**116.7**	**115.4**	**110.3**	**83.9**	**53.5**		
PPG debt service-to-exports ratio	**7.6**	**10.0**	**11.7**	**11.9**	**11.1**	**9.5**	**10.3**	**11.2**	**12.3**	**11.7**	**8.1**		
PPG debt service-to-revenue ratio	**8.5**	**10.8**	**12.3**	**11.9**	**11.9**	**10.1**	**10.7**	**11.6**	**13.3**	**11.8**	**7.9**		
Gross external financing need (Million of U.S. dollars)	1440.4	1519.9	2590.5	2170.0	2500.7	1991.1	2338.8	3268.8	4001.8	5645.0	9713.0		
Key macroeconomic assumptions													
Real GDP growth (in percent)	6.8	6.9	7.0	7.0	7.0	7.0	7.1	7.0	6.8	6.8	6.1	**6.5**	**6.9**
GDP deflator in US dollar terms (change in percent)	2.8	-0.6	-0.5	1.9	-0.5	0.1	-1.3	1.0	0.3	0.9	0.9	**1.1**	**0.6**
Effective interest rate (percent) 4/	1.9	1.7	1.9	1.6	1.9	2.0	2.2	2.3	2.4	2.5	3.1	**1.5**	**2.3**
Growth of exports of G&S (US dollar terms, in percent)	0.3	1.9	-0.1	16.6	7.8	7.0	3.5	8.1	10.4	10.0	7.0	**5.6**	**8.6**
Growth of imports of G&S (US dollar terms, in percent)	-14.9	1.5	9.6	7.5	9.1	5.9	5.7	13.5	12.5	10.0	7.0	**4.0**	**8.5**
Grant element of new public sector borrowing (in percent)	...	...	...	15.5	15.9	15.9	15.9	15.9	15.9	15.9	15.9	**...**	**15.9**
Government revenues (excluding grants, in percent of GDP)	14.7	14.6	13.9	15.8	14.9	15.0	15.1	15.1	14.8	16.2	17.5	**13.0**	**15.4**
Aid flows (in Million of US dollars) 5/	1125.0	1099.5	912.7	997.7	1042.0	1128.7	1044.9	1015.5	968.7	821.4	743.3		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	1.3	1.3	1.3	1.1	1.0	0.9	0.5	0.2	**...**	**0.9**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	34.3	34.3	32.6	34.4	34.4	31.5	24.8	15.9	**...**	**30.1**
Nominal GDP (Million of US dollars)	51,631	54,838	58,369	63,626	67,708	72,533	76,664	82,837	88,756	128,835	243,837		
Nominal dollar GDP growth	9.8	6.2	6.4	9.0	6.4	7.1	5.7	8.1	7.1	7.8	7.0	**7.7**	**7.5**
Memorandum items:													
PV of external debt 7/	...	...	23.2	22.3	24.0	25.8	27.1	25.9	25.3	19.9	12.1		
In percent of exports	...	...	158.0	141.5	150.4	162.4	173.7	166.0	157.5	121.5	70.9		
Total external debt service-to-exports ratio	11.2	12.3	16.2	15.3	15.0	13.5	14.8	15.6	16.2	14.8	12.2		
PV of PPG external debt (in Million of US dollars)			9550.4	10391.1	11379.0	12799.1	13940.4	14895.0	15715.5	17701.9	22244.6		
(PVt-PVt-1)/GDPt-1 (in percent)				1.4	1.6	2.1	1.6	1.2	1.0	0.3	0.2		
Non-interest current account deficit that stabilizes debt ratio	3.1	1.9	5.5	4.5	1.8	1.6	1.9	5.6	5.3	5.2	5.1		

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





ANNEX No: - II

Table 2. Tanzania: Public Sector Debt Sustainability Framework, Baseline Scenario, 2017-2040

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
Public sector debt 1/	39.5	40.3	38.5	37.3	37.1	37.2	38.0	37.7	37.9	38.3	31.1	33.6	37.8
of which: external debt	27.7	28.3	27.3	26.6	26.6	26.8	27.2	26.3	25.5	19.1	12.1	24.3	24.3
Change in public sector debt	0.0	0.8	-1.8	-1.2	-0.2	0.1	0.8	-0.3	0.2	0.0	-0.8		
Identified debt-creating flows	-2.2	-1.3	-0.3	-1.2	-0.2	0.1	0.7	-0.3	0.2	0.1	-0.8	0.5	0.0
Primary deficit	-0.1	-0.3	0.7	0.7	0.7	1.2	0.9	0.9	1.0	0.5	-1.1	1.9	0.8
Revenue and grants	15.6	15.3	14.3	16.6	15.7	15.8	15.8	15.8	15.3	16.4	17.5	14.8	15.9
of which: grants	1.0	0.8	0.3	0.8	0.8	0.8	0.7	0.6	0.5	0.2	0.0		
Primary (noninterest) expenditure	15.5	15.0	15.0	17.3	16.3	17.0	16.7	16.7	16.3	16.8	16.4	16.7	16.7
Automatic debt dynamics	-2.1	-1.0	-1.1	-1.9	-0.9	-1.1	-0.2	-1.2	-0.8	-0.4	0.3		
Contribution from interest rate/growth differential	-2.7	-1.4	-1.3	-2.1	-1.3	-1.3	-1.0	-1.1	-1.0	-0.4	0.3		
of which: contribution from average real interest rate	-0.2	1.1	1.3	0.4	1.1	1.2	1.5	1.4	1.4	2.0	2.1		
of which: contribution from real GDP growth	-2.5	-2.5	-2.6	-2.5	-2.4	-2.4	-2.5	-2.5	-2.4	-2.4	-1.8		
Contribution from real exchange rate depreciation	0.6	0.4	0.3	...	...	...	...	...	...	...	...		
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
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		
Residual	2.2	2.2	-1.5	0.2	0.4	0.1	0.8	-0.1	0.2	0.0	0.0	1.2	0.2
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	27.6	27.1	27.5	28.1	29.2	29.6	30.4	33.2	28.2		
PV of public debt-to-revenue and grants ratio	...	...	193.4	163.7	175.6	178.4	185.3	187.8	198.6	202.5	160.9		
Debt service-to-revenue and grants ratio 3/	40.8	42.8	40.1	33.4	29.7	27.5	29.3	29.9	34.3	46.8	44.8		
Gross financing need 4/	6.3	6.3	6.5	6.2	5.3	5.5	5.5	5.6	6.3	8.1	6.7		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	6.8	6.9	7.0	7.0	7.0	7.0	7.1	7.0	6.8	6.8	6.1	6.5	6.9
Average nominal interest rate on external debt (in percent)	1.7	2.0	2.0	1.6	1.8	2.0	2.3	2.5	2.7	2.8	3.1	1.3	2.4
Average real interest rate on domestic debt (in percent)	5.8	8.4	9.6	6.6	9.3	9.7	10.8	8.9	9.9	10.0	10.4	4.0	9.5
Real exchange rate depreciation (in percent, + indicates depreciation)	2.4	1.6	1.0	...	...	...	...	...	...	...	...	6.0	...
Inflation rate (GDP deflator, in percent)	4.9	1.4	1.3	2.6	0.9	1.2	0.7	3.0	2.3	2.9	2.9	7.2	2.3
Growth of real primary spending (deflated by GDP deflator, in percent)	2.0	3.4	6.7	23.1	1.3	11.0	5.5	7.0	4.3	6.1	7.3	4.5	8.1
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-0.1	-1.2	2.5	1.9	0.8	1.1	0.2	1.2	0.8	0.4	-0.3	0.4	0.8
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	Currency-based
Is there a material difference between the two criteria?	Yes