DEBT SUSTAINABILITY ANALYSIS REPORT FY2022/23

DECEMBER 2023

MINISTRY OF FINANCE, PLANNING AND ECONOMIC DEVELOPMENT

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Preface

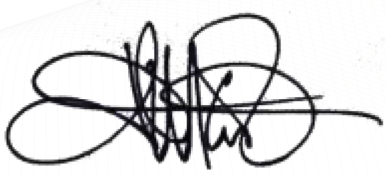
The level of Government debt can have significant implications for a country's economic stability and future growth. The Government of Uganda is mindful of the risks associated with unsustainable debt levels and makes deliberate effort to prudently manage and monitor the size and cost of public debt. This is partly done by periodically undertaking a Debt Sustainability Analysis (DSA). The forward-looking nature of the DSA allows it to serve as an "early warning system" of the potential risks of debt distress so that timely preventive actions can be taken.

This DSA examines the financing landscape to gauge the sustainability of existing debt, taking into consideration the country's economic indicators, fiscal policies and global developments. The report provides an overview of the current state of public debt in Uganda, including its historical trends, major drivers, potential risks and challenges, as well as projections for the evolution of key public debt metrics in the medium term.

Uganda's public debt remains sustainable in the medium to long term, although faced with moderate risk of debt distress. The outlook assumes prudent fiscal policy and continued pick-up in the economic growth momentum for the foreseeable future. As a share of GDP, public debt is projected to decline after FY2023/24, largely supported by improved revenue performance on the back of successful implementation of the Domestic Revenue Mobilization Strategy (DRMS) and the realisation of oil revenues.

The major challenge to debt management relates to the high debt service burden on domestic revenue which has been driven by increases in costly domestic debt as well as external commercial loans. Going forward, Government will contract less domestic debt in an effort to reduce the debt service burden on the budget and minimize crowding out of the private sector from the domestic money market. On the external front, priority will continue to be given to concessional loans, which carry low interest rates and have longer maturity periods, easing the debt service burden. Government will also continue to pursue the fiscal consolidation agenda in order to control the budget deficit and hence the need to borrow.

The report was prepared by a team led by the Macroeconomic Policy Department of the Ministry. The team also included officials from the Directorate of Debt and Cash Policy, Accountant General's Office, Bank of Uganda and Parliament Budgetary Office.



Ramathan Ggoobi

PERMANENT SECRETARY / SECRETARY TO THE TREASURY

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List of Acronyms

ATM	Average Time to Maturity
ATR	Average Time to Re-fixing
CFR	Charter for Fiscal Responsibility
COVID-19	Corona Virus Disease-2019
CPIA	Country Policy and Institutional Assessment
CI	Composite Indicator
DSA	Debt Sustainability Analysis
DSF	Debt Sustainability Framework
EAC	East African Community
EAMU	East African Community Monetary Union
FDI	Foreign Direct Investment
FY	Financial Year
GDP	Gross Domestic Product
IDA	International Development Association
IMF	International Monetary Fund
LICs	Low Income Countries
SOFR	Secured Overnight Financing Rate
MEPD	Macroeconomic Policy Department.
NDP	National Development Plan
PDMF	Public Debt Management Framework
PPG	Public and Publicly Guaranteed
PV	Present Value
UGX	Uganda Shillings
USD	United States Dollar
WAIR	Weighted Average Interest Rate
WEO	World Economic Outlook

Executive Summary

Uganda's stock of public debt increased from USD 20.99 billion (UGX 78,833.4 billion) in FY2021/22 to USD 23.66 billion (UGX 86,779.87 billion) in FY2022/23. External public debt increased from USD 12.82 billion (UGX 48,171.8 billion) to USD 14.23 billion (UGX 52,206.07) between June 2022 and June 2023, while domestic public debt increased from USD 8.16 billion (UGX 30,661.6 billion) to USD 9.43 billion (UGX 34,573.80 billion) over the same period. As a share of GDP, public debt reduced to 46.9 percent in June 2023 from 48.4 percent in June 2022. Measured in present value terms, the stock of public debt amounted to 36.7 percent down from 39.5 percent of GDP the previous financial year.

The reduction in the ratio of public debt to GDP was on account of a number of factors, including; - continued recovery in GDP growth with the economy expanding by 5.2 percent in FY2022/23 compared to growth of 4.7 percent the previous financial year; Government's deliberate efforts towards fiscal consolidation with the primary deficit reducing from 4.3 percent in FY2021/22 to 2.3 percent in FY2022/23; and an appreciation of the end period exchange rate.

Debt to GDP is projected to increase to 49.2 percent by end June 2024, before starting to decline over the medium term. The decline will be supported by Government's continuous efforts towards fiscal consolidation over the medium term appropriately based on both revenue and expenditure measures. Debt in present value terms is projected to follow a similar trend, increasing to a peak of 39.4 percent of GDP in FY2023/24.

This DSA finds Uganda's public debt to be sustainable over the medium to long-term mainly supported by;- continuous improvement in GDP growth (Government's ambition is to grow the economy tenfold over the next ten years); Onset of oil production and realisation of its associated revenues alongside strong revenue growth following the implementation of the Domestic Revenue Mobilisation Strategy; and a reduction in borrowing as some major infrastructure projects come to completion in the long-term.

Nonetheless, the debt outlook continues to be faced with **moderate risk of debt distress**, with the major vulnerabilities to the outlook relating to the slow growth of exports and the increasing debt service burden on revenues. As of June 2023, debt service as a percentage of revenue amounted to 32.6 percent. This ratio is expected to remain above 20 percent by the end of the medium term especially due to high domestic interest rates as well as the increasing cost of external debt as global financing conditions continue to tighten. Although the ratio of domestic debt interest payments to revenue reduced from 19.1 percent in FY2021/22 to 18.4 percent in FY2022/23, it is projected to remain above the targets set out in the charter for fiscal responsibility, pointing to the urgent need for reducing domestic borrowing.

The analysis also indicates that Uganda has limited space to absorb shocks, meaning that an extreme economic shock could potentially lead to a deterioration in the rating to high risk of debt distress. This underscores the need for Government to limit the budget deficit (fiscal consolidation)

Measures to maintain debt at sustainable levels over the medium term will include: increasing domestic revenue collections through the full operationalization of the Domestic Revenue Mobilization Strategy, prudent management of the oil resource so as to achieve the envisaged revenue gains, increasing the efficiency and effectiveness of Government expenditure particularly by allocating more resources to sectors that generate a higher multiplier effect on growth, and implementation of Government interventions aimed at supporting private sector production.

1.0 INTRODUCTION

The Government of Uganda conducts an annual Debt Sustainability Analysis (DSA) exercise in fulfilment of requirements of the Charter for Fiscal Responsibility and the Public Finance Management Act (2015).

The DSA exercise is done with a view to ascertaining the sustainability of public debt over the medium to long term. Emphasis is placed on key debt burden indicators, such as the size of debt relative to GDP as well as the share of domestic revenues needed to meet debt service obligations. The forward-looking nature of the DSA allows it to serve as an "early warning system" of the potential risks of debt distress so that preventive action can be taken in time.

Undertaking the DSA involves a number of steps including: the preparation of baseline assumptions for macroeconomic and debt variables; projecting the evolution of key debt burden ratios over the medium to long term; and comparing the projections to country-specific thresholds/benchmarks to assess the risk of debt distress.

The DSA informs decision making at different levels of Government and is a key input into Government's Medium Term Debt Strategy, the National Budget Strategy, the Medium-Term Fiscal Framework, and the Fiscal Risks Statement. It is also used to track progress on Government's commitments under the Charter for Fiscal Responsibility and the East African Monetary Union (EAMU) Protocol.

In this report, public debt considers both domestic and Public and Publicly Guaranteed (PPG) external debt. External debt stock is captured as disbursed and outstanding debt (DOD), with undisbursed debt feeding into the projections for future years. Domestic debt is captured at cost value. The distinction between domestic and external debt is based on the currency of issuance, rather than the residence of the creditor. This means that all debt issued in Uganda shillings is defined as domestic debt, while all debt issued in foreign currency is defined as external debt.

The rest of this report is structured as follows: Section 2 sets the context for the report, highlighting the existing levels of debt and its cost and risk profile. Section 3 discusses the assumptions underpinning the baseline projections, Section 4 provides an overview of the methodology used while Section 5 discusses the results of the analysis. Section 6 concludes.

2.0 DEBT PORTFOLIO REVIEW

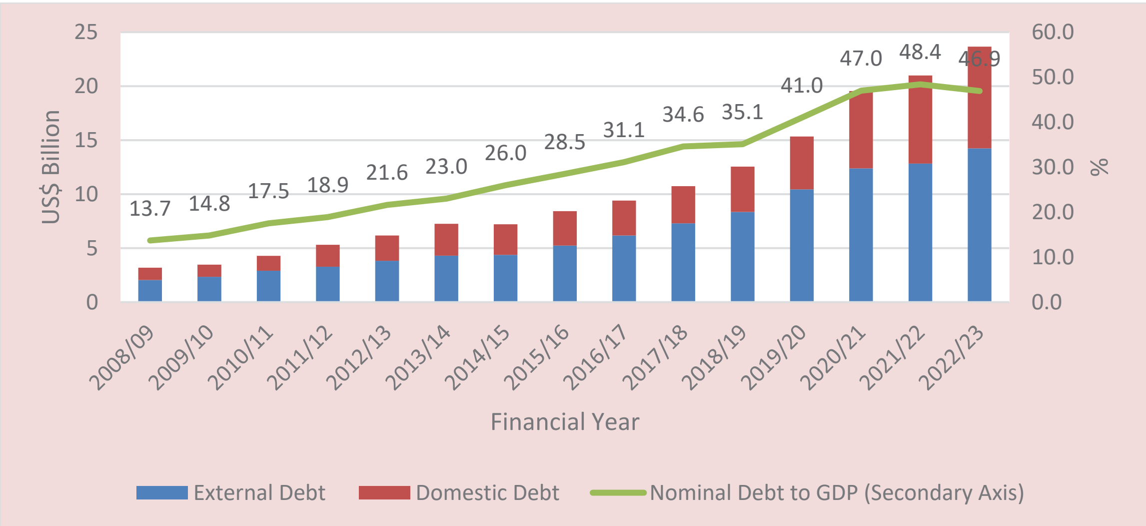
2.1 Overview of Uganda's Debt Profile

The stock of public sector debt increased from USD 20.99 billion in FY 2021/22 to USD 23.66 billion in FY2022/23. External debt increased from USD 12.82 billion in FY 2021/22 to USD14.24 billion in FY2022/23, while domestic debt measured in US Dollars increased from USD 8.16 billion to USD 9.43 billion over the same period.

As a percentage of GDP, public sector debt reduced from 48.4 percent in FY 2021/22 to 46.9 percent in FY2022/23. External debt accounted for 28.2 percent of GDP, while domestic debt contributed 18.7 percent of GDP. In Present Value (PV) terms[1], public sector debt reduced to 36.7 percent of GDP at end June 2023 from 39.5 percent of GDP the year before.

While nominal debt continued on an upward trend in FY2022/23, the ratio of public debt to GDP declined. The decline was largely on account of high inflation over the year which impacted on nominal GDP, coupled with the appreciation of the shilling from 3,756.65 /USD at end June 2022 to 3,667.39 /USD at end June 2023. Figure 1 below shows the evolution of the public debt to GDP ratio as well as the stock of debt (in billions of US Dollars) from FY 2008/09 to FY 2022/23.

Figure 1: Evolution of Public Debt



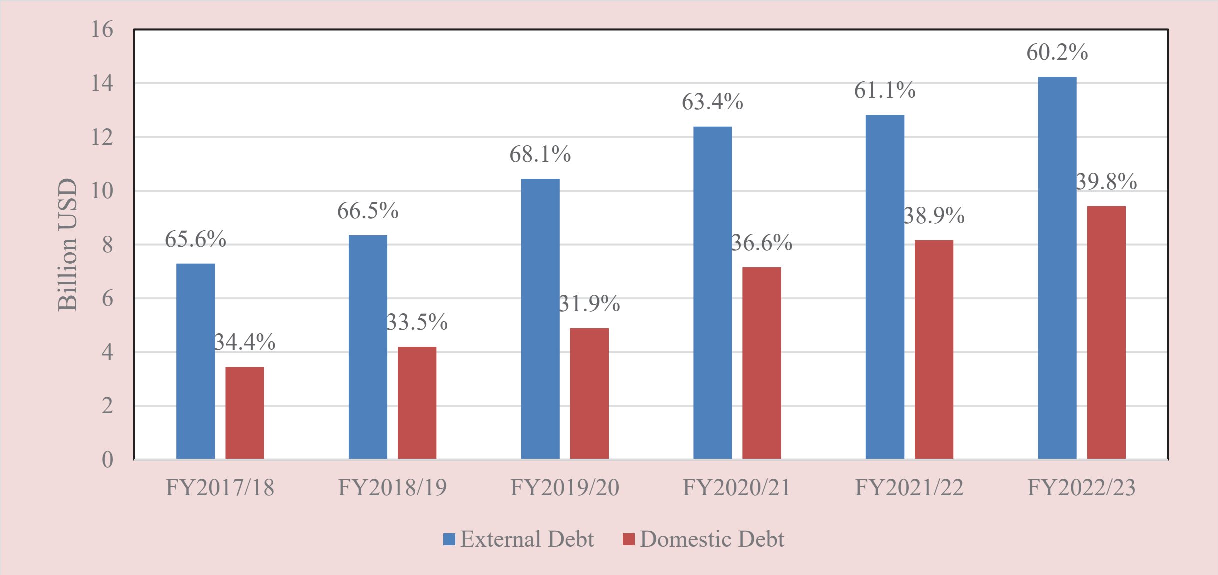
Source: Ministry of Finance, Planning and Economic Development

[1] PV captures the degree of concessionality of the debt stock. The more concessional the debt, the lower the PV compared to the nominal value.

2.2 Composition of Public Debt[2]

The share of domestic debt in the total public debt stock continued to increase amounting to 39.8 percent at end June 2023 from 38.9 percent the previous financial year. Consequently, the share of external debt in total public debt reduced to 60.2 percent in financial year 2022/23 from 61.1 percent in financial year 2021/22.

Figure 2: Public Debt Composition



Source: Ministry of Finance, Planning and Economic Development

2.2.1 Composition of External Public Debt

The share of external debt owed to commercial creditors continued to increase pointing to more reliance on commercial borrowing for deficit financing. Commercial creditors held a total of 13.6 percent of all public external debt in FY2022/23 up from 10.4 percent the previous financial year.

The share of debt owed to multilateral lenders remained fairly unchanged at 61.8 percent in FY2022/23 compared to 61.7 percent in FY2021/22. Nonetheless, the share of public debt owed to IDA, the concessional lending arm of the World Bank, reduced further to 31.9 percent in FY2022/23 from 34.5 percent in FY 2021/22. Bilateral creditors accounted for 24.6 percent of the total external disbursed and outstanding debt stock in FY2021/22, with China alone accounting for 18.1 percent of that. Table 1 presents the distribution of external debt by creditor category.

[2] This DSA Report defines domestic and external debt based on the currency of issuance, rather than the residence of the creditor. This means that all debt issued in Uganda shillings is defined as domestic debt, while all debt issued in foreign currency is defined as external debt.

Table 1: Distribution of External Debt Stock by Creditor Category (percent)

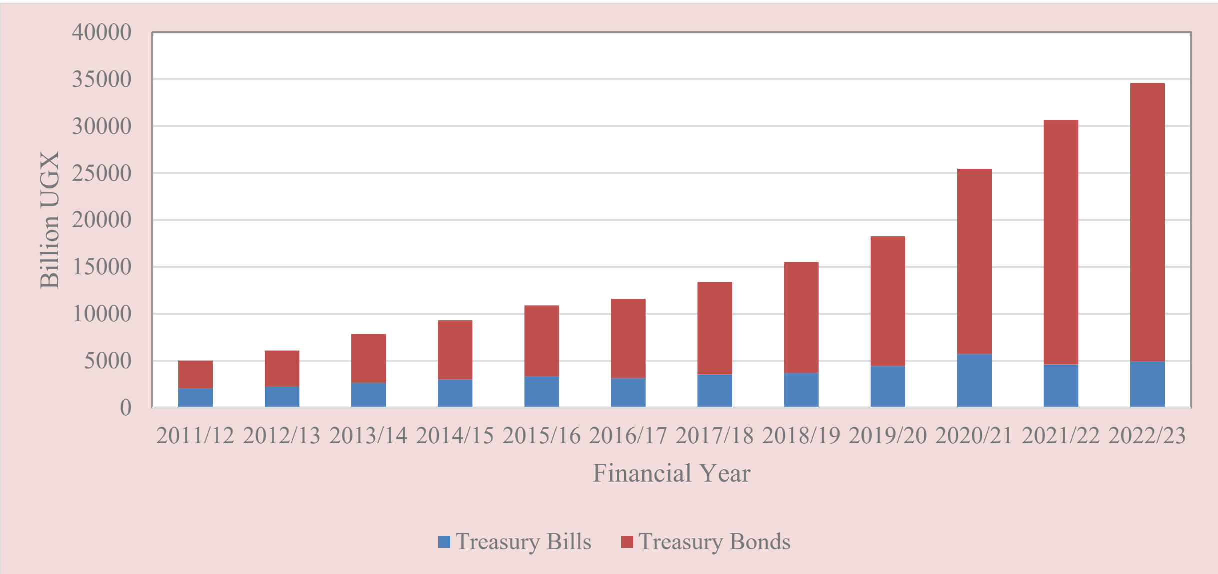
Creditor Category	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Multilateral Creditors	87.4	85.5	76.6	70.8	67.8	64.5	61.9	62.5	61.7	61.8
o/w IDA	58.3	55.8	48.9	45.2	42.2	40.1	34.6	35.3	34.5	31.9
Bilateral Creditors	12.6	14.5	23.4	26.6	31.5	33.7	30.9	28.6	27.9	24.6
Non Paris Club	10.4	12.3	20.4	22.8	25.1	27.5	23.6	21.6	21.4	20.2
o/w China	7.7	9.6	17.8	20.3	24.2	26.5	22.6	20.9	20.7	18.1
Paris Club	2.2	2.2	3	3.8	6.5	6.2	7.3	7	6.5	4.4
o/w Japan	1.3	1.7	2.4	3	4	2.5	3	2.3	1.9	1.5
Commercial Banks				2.6	0.7	1.8	7.2	8.9	10.4	13.6

Source: Ministry of Finance, Planning and Economic Development

2.2.2 Composition of Domestic Debt

Consistent with Government's deliberate decision to issue more long-term debt, the share of longer term dated instruments (treasury bonds) in public domestic debt continued to increase, accounting for 85.7 percent at end June 2023 from 85.0 percent the previous year. Short-term debt (treasury bills) constituted only 14.3 percent of total domestic debt down from 15.0 percent over the same period. Increasing the maturity of domestic debt reduces the refinancing risk associated with the portfolio and smoothens the redemption / repayment profile. Figure 3 shows the trend in domestic debt stock, broken down into treasury bills and treasury bonds.

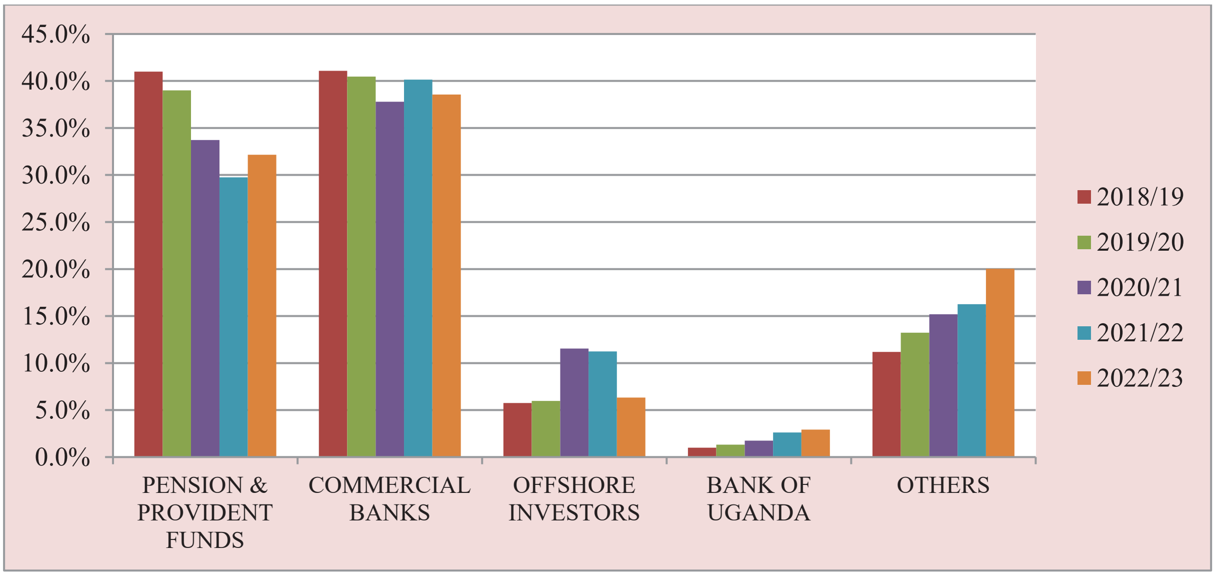
Figure 3: Composition of Domestic Debt Stock by Treasury Instrument Type



Source: Bank of Uganda

Composition of Domestic Debt by Holder

Figure 4: Composition of Domestic Debt by Holder[3]



Source: Bank of Uganda

Commercial banks continued to hold the largest share of domestic public debt by end June 2023 at 38.6 percent, closely followed by pension and provident funds whose share picked up to 32.2 percent from 29.8 percent the year before. Offshore investors' holding of domestic debt declined significantly from 11.2 percent in June 2022 to 6.3 percent in June 2023 following the persistent increase of interest rates in more advanced economies.

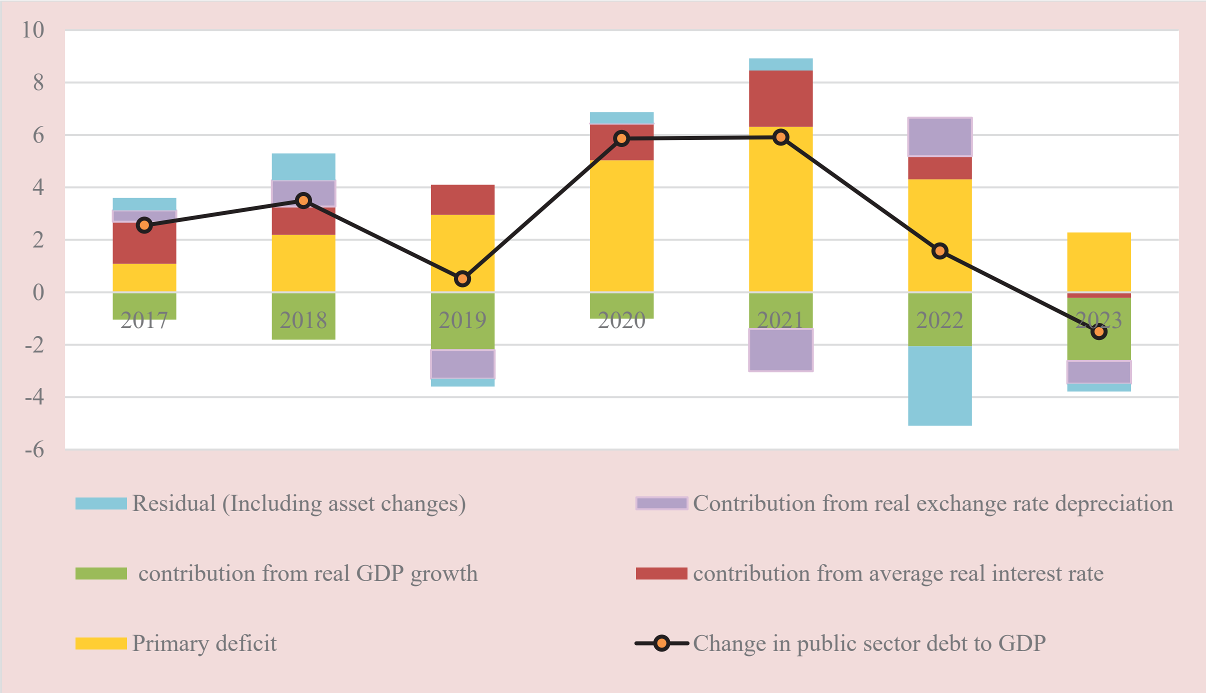
2.3 Drivers of Debt Accumulation

FY2022/23 saw a reduction in the ratio of debt to GDP by 1.5 percentage points, largely supported by real GDP growth and the appreciation of the end period real exchange rate. These debt mitigating factors outweighed the effect of the primary balance. It is also important to note the significant reduction in the effect of the primary balance on debt creation as Government continues to pursue the fiscal consolidation agenda (see Figure 5).

The contribution from real GDP growth in mitigating the increase in the debt to GDP ratio continued to pick up compared to the most recent years that were heavily impacted by the COVID pandemic. This follows further improvement in real GDP growth from 3.5 percent in FY2020/21 to 5.2 percent in FY2022/23.

[3] "Others" includes Retail Investors, Institutional Investors, Insurance Companies and Deposit Protection Funds, Other Financial Institutions and Other Market Intermediaries.

Figure 5: Contributions to Changes in Public Debt



Source: Ministry of Finance, Planning and Economic Development

2.4 Cost and Risk Profile of the Existing Debt

2.4.1 Cost of Debt

Interest payments as a percentage to GDP

Total interest payments as a share of GDP increased from 3.0 percent in FY21/22 to 3.8 percent in FY22/23 driven by a significant increase in the domestic debt stock and commercial external borrowing which are both typically characterized by high interest rates. Domestic interest payments continue to form the bulk of interest payments given their high cost of issuance as compared to external interest payments that continue to be predominantly concessional rates.

Weighted average interest rate (WAIR)

The WAIR rose by 1.8 percentage points, from 6.3 percent in June 2022 to 8.1 percent in June 2023 largely driven by the increase in the external debt WAIR. This was explained by the increased take-up of non-concessional loans, mainly commercial loans from private banks whose rates were higher given the unfavorable global financial conditions. The domestic debt WAIR increased by 1.4 percentage points between June 2022 and June 2023 mainly driven by the rise in yields as market conditions were tighter in 22/23.

Table 2: Cost and Risk Profile of Public Debt

		FY2021/22			FY2022/23		
		External	**Domestic**	**Total**	**External**	**Domestic**	**Total**
cost of debt	Interest payment as percent of GDP	0.5	2.6	3.0	0.9	2.8	3.8
	Weighted Av. Interest Rate (percent)	1.6	14.1	6.3	3.3	15.5	8.1
Refinancing risk	Av Time to Maturity (years)	11.2	6.7	9.5	10.7	6.8	9.4
	Debt maturing in 1 yr (percent of total)	4.1	23.2	11.0	3.8	23.9	10.3
	Debt maturing in 1 yr (percent of GDP)	1.3	4.2	5.5	1.4	4.3	5.8
Interest rate risk	Av Time to Re-fixing (years)	10.4	6.7	9.0	9.6	6.8	8.7
	Debt re-fixing in 1 yr (percent of total)	18.7	23.2	20.3	24.5	23.9	24.3
	Fixed rate debt incl T-bills (percent of total)	84.5	100.0	90.1	77.8	100.0	85.0
	T-bills (Percent of total)	-	23.0	7.9	-	14.7	4.8
Forex risk	Forex debt (Percent of total debt)			61.1			60.2
	Short Term forex debt (Percent of reserves)			14.2			17.0

Source: Bank of Uganda & Ministry of Finance, Planning and Economic Development

2.4.2 Refinancing Risk

Average time to maturity (ATM)

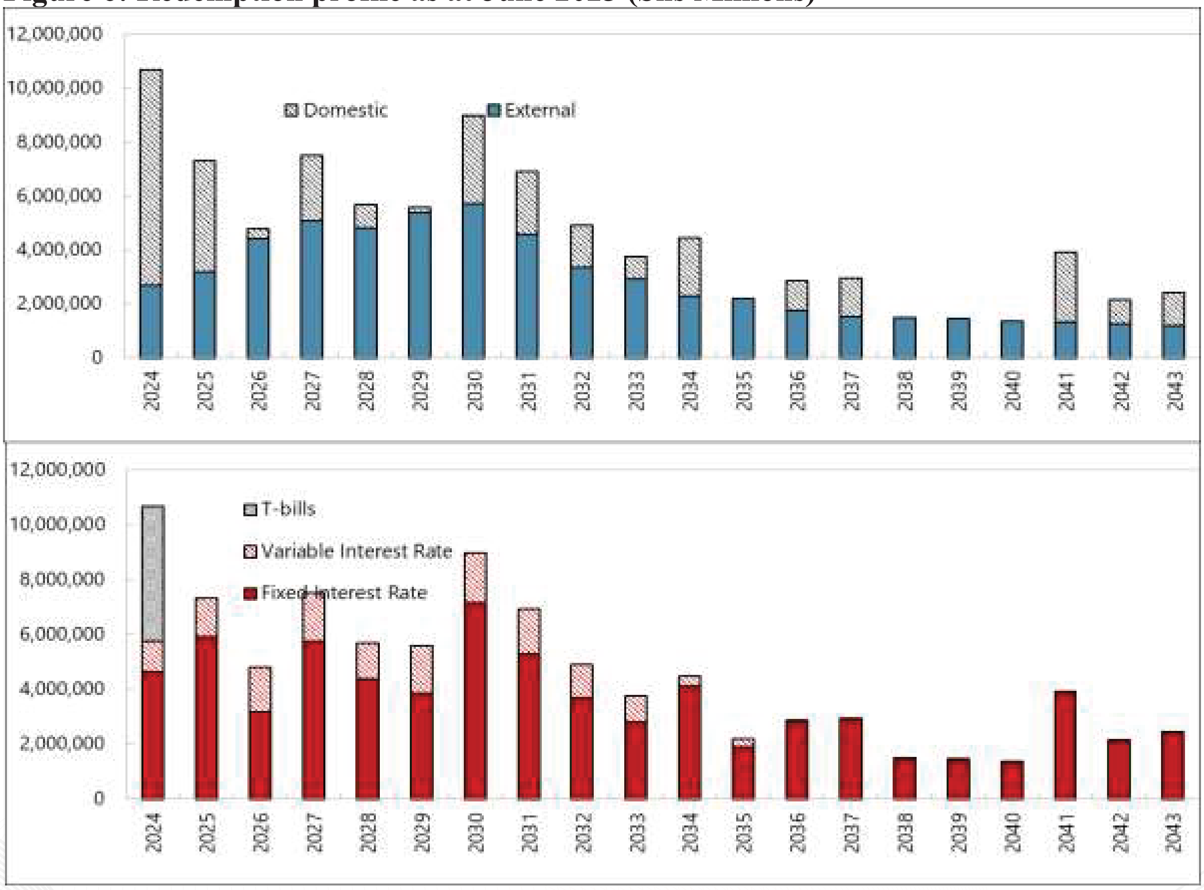
The ATM of the total public debt portfolio declined slightly from 9.5 years at end June 2022 to 9.4 years at end June 2023. This was largely driven by the decline in external debt ATM, from 11.2 years at end June 2022 to 10.7 years in June 2023 as Government contracted significant amounts from commercial lenders whose loans typically have shorter maturities compared to the concessional loans. The increase in the domestic debt ATM, from 6.7 years at end June 2022 to 6.8 years at end June 2023, was consistent with Government strategy of lengthening the ATM of domestic debt. However, the increase was insufficient to cause an improvement in the portfolio ATM given that external debt still forms the bulk of the portfolio (over 60 percent of the portfolio).

Debt maturing in one year (as percent of total debt and GDP)

Debt maturing in one year as a percentage of total debt improved from 11.0 percent in June 2022 to 10.3 percent in June 2023. This was largely due to the reduction in the volume of external debt maturing in one year as a percentage of total debt, from 4.1 percent in June 2022 to 3.8 percent in June 2023.

The redemption profile (see Figure 6) shows the large maturity of domestic debt in the first year of projection, which increases the refinancing risks of Government, but the maturities reduce significantly in the medium term. In contrast, external debt maturities follow a smoother path which peaks in the medium term, driven by principal repayments of commercial debt contracted in the last few years.

Figure 6: Redemption profile as at June 2023 (Shs Millions)



Source: Bank of Uganda & Ministry of Finance, Planning and Economic Development

2.4.3 Interest Rate Risk

Average time to re-fixing (ATR)

ATR which is the average time it takes the portfolio to be subjected to changes in interest rates slightly deteriorated from 9.0 years in June 2022 to 8.7 years in June 2023. This was largely on account of the deterioration in the external debt ATR which declined from 10.4 years in June 2022 to 9.6 years in June 2023. This is explained by the Government contracting more non-concessional loans, particularly from commercial lenders whose loans are largely variable rate loans to finance budget support and key projects. This can also be seen in the ratio of fixed rate debt (including Treasury bills) to total debt which declined from 90.1 percent in June 2022 to 85.0 percent in June 2023. This trend raises government's exposure to risks associated with changes in interest rates.

2.4.4 Exchange Rate Risk

External debt as a percentage of total debt

The share of external debt to total public debt declined from 61.1 percent in June 2022 to 60.2 percent in June 2023, an indication of lowered exposure to exchange rate risks.

Short-term external debt (maturing in one year), as a share of reserves

This measures the liquidity risk international reserves will be subjected to in meeting short term external debt liabilities. The ratio rose from 14.2 percent in June 2022 to 17.0 percent in June 2023 partly due to the large take up of commercial loans with short grace periods in recent years.

3.0 BASELINE ASSUMPTIONS[4]

3.1 Macroeconomic Assumptions

Economic growth continued on an upward trend with real GDP increasing by 5.2 percent in FY 2022/23 compared to growth of 4.6 percent the previous Fiscal year. This performance was mainly attributed to recovery in the services and agriculture, forestry & fishing sectors, along with consistent growth in the industry sector, supported by Government-driven initiatives targeted at strengthening private sector involvement and advancing increased regional trade.

The economy is projected to grow by 6.0 percent in FY 2023/24 mainly driven by higher output in the services, industry and agriculture sectors, supported by recovery in aggregate demand as inflation slows down; continued implementation of the Parish Development Model which is expected to increase production and productivity in agriculture; increased oil and gas sector activities; growth in regional trade as well as general improvement in global growth. Over the medium term, real GDP growth is projected to lie between 7 to 10 percent mainly due to increased activity in the oil and gas sector, higher productivity in agriculture and manufacturing sectors and improved efficiency in public investments.

However, the growth forecasts are faced with a number of risks which include; unpredictable weather patterns which could affect agriculture production and agro-processing, potential delays in rolling out planned government interventions and projects, escalation in global and regional geo-political tensions which could adversely affect global trade and growth, fluctuations in global commodity prices, and tighter global financial conditions.

Headline inflation is projected to decline significantly from an average of 8.8 percent in FY2022/23 to an average of 3.4 percent in FY2023/24, following a combination of the prudent monetary policy stance by the Central Bank in response to the earlier inflationary pressures and the decline in international oil prices compared to the previous fiscal year. The inflation level is expected to remain below the 8 percent stipulated in the EAMU convergence criteria in the medium term supported by an appropriate monetary policy stance.

3.1.1 Fiscal Assumptions

As a share of GDP, domestic revenue is projected to increase by 0.5 percentage points per annum in the near term before increasing to an average growth of 1 percentage point per annum

[4] Please note, these assumptions are as at December 2023.

for the rest of the medium term. In the near term, the increase in revenue will mainly result from gains from the implementation of the Domestic Revenue Mobilization Strategy (DRMS) while the longer-term period will majorly benefit from oil and gas related revenues.

Public expenditure as a share of GDP is projected to remain largely unchanged over the medium term, increasing slightly to 20.1 percent in FY2023/24 from 19.9 percent the previous financial year, and averaging at 20.8 percent over the medium term. This will be supported by Government's deliberate ambition to pursue fiscal consolidation.

The fiscal deficit including grants is projected to decline from 5.5 percent of GDP in FY2022/23 to 4.2 percent in FY2023/24, before reducing further to an average of 3.0 percent per annum over the rest of the medium term. Table 3 summarizes the medium-term fiscal assumptions used for this DSA.

Table 3: Summary of Fiscal Assumptions.

FY	2022/23 Outturns	2023/24	2024/25	2025/26	2026/27	2027/28
Fiscal projections (Shs Bn)						
Revenue and Grants	26,596	32,143	35,912	43,930	51,242	58,964
o/w Revenue	25,567	29,072	33,041	41,514	49,199	57,218
o/w Grants	1,028	3,071	2,870	2,417	2,044	1,746
Primary Expenditure	30,811	34,306	36,506	43,168	50,253	58,473
Total Interest Expenditure	5,912	6,377	7,323	8,084	9,017	9,038
Total Expenditure	36,723	40,683	43,829	51,252	59,270	67,511
Primary Balance	-4,215	-2,162	-594	763	990	491
Overall Balance	-10,127	-8,540	-7,917	-7,322	-8,027	-8,547
As a percentage of GDP						
Revenue and Grants	14.4	15.9	16.2	17.7	18.5	19.1
o/w Revenue	13.8	14.4	14.9	16.8	17.8	18.5
o/w Grants	0.6	1.5	1.3	1.0	0.7	0.6
Total Expenditure	19.9	20.1	19.7	20.7	21.4	21.8
Primary Balance	-2.3	-1.1	-0.3	0.3	0.4	0.2
Overall Balance	-5.5	-4.2	-3.6	-3.0	-2.9	-2.8
Memorandum Items						
Real GDP Growth (percent)	5.2	6.0	6.4	7.0	7.1	7.0
Nominal GDP (Shs Bn)	184,895.4	201,986.8	222,334.2	247,626.9	276,935.3	309,336.9

Source: Ministry of Finance, Planning and Economic Development, December 2023

3.1.2 Financing Assumptions

Deficit financing will continue to largely rely on external resources, given the higher risks and costs associated with domestic debt. Consequently, Government will scale back on domestic borrowing in the medium to long term to no more than 1 percent of GDP per annum.

Priority will be given to the use of available concessional credit to the extent possible before considering non-concessional options. However, Government is cognizant of the fact that concessional resources alone are insufficient to fully meet Uganda's development financing needs as the country aims to achieve the transformation envisaged in the Vision 2040. Therefore, Uganda will continue to utilize some non-concessional financing, although this will be pursued with caution so as to safeguard debt sustainability.

3.2 Balance of Payments Assumptions

In the medium term, commodity prices for both exports and imports are taken from the IMF's World Economic Outlook (WEO), while growth in volumes is based on real growth rates of the relevant sub-sectors. Exports of services are projected to grow in line with nominal GDP growth of advanced economies, while imports of services are broadly forecast to grow in line with imports of goods.

In the outer years, the values of both exports and imports of goods and services are forecast as a constant share of GDP based on the value of the last year of the medium term. Both imports and exports were adjusted to account for activities in the oil and gas sector.

Interest income inflows/outflows throughout the projection period were derived as the stock of financial assets/liabilities in the previous period, multiplied by the Secured Overnight Financing Rate (SOFR). SOFR projections are taken from the IMF's WEO.

Inflows of private transfers are forecast to grow in line with nominal GDP growth of advanced economies in the medium term, and thereafter grow at an average rate of 2.6 percent per year.

Foreign Direct Investment (FDI) inflows are projected to steadily grow by an average of 32 percent in the medium term, before peaking at US$3 billion by FY2024/25, as investment in the oil sector increases in preparation for the year of oil production. In the outer years FDI is forecast as a constant share of Uganda's nominal GDP growth in dollar terms.

The stock of gross reserves is fixed at 4.5 months of future import cover throughout the outer years in line with the East African Community (EAC) Monetary Union convergence criteria.

4.0 DSA METHODOLOGY

This DSA was conducted using the revised (2017) World Bank/IMF Low-Income Countries Debt Sustainability Framework (LIC-DSF) analytical tool. The LIC-DSF is the main tool relied upon by multilateral institutions and other creditors to assess risks to debt sustainability in low-income countries. It uses a benchmark for total public debt and indicative thresholds for external Public and Publicly Guaranteed (PPG) debt burden indicators, which depend on each country's debt carrying capacity. Countries differ significantly in their ability to carry debt, depending on their policy and institutional strengths; macroeconomic performance; and buffers to absorb shocks.

The LIC DSF uses the Composite Indicator (CI) to determine each country's debt - carrying capacity. The CI is computed using country specific information, specifically: Country Policy and Institutional Assessment (CPIA)[5] score, the country's real GDP growth, remittances, international reserves, and world growth. Using the CI score, countries are clustered into one of three categories, namely: strong performer, medium and weak performer. Each category has different thresholds for the DSF's debt burden indicators, with the weak performers having the most stringent thresholds and vice versa.

Table 4 shows that Uganda's CI is 2.929, placing the country within the medium performer category. Table 5 provides the thresholds / benchmarks applicable to each category.

Table 4: Calculation of the CI Index

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	3.587	1.38	47%
Real growth rate (in percent)	2.719	5.605	0.15	5%
Import coverage of reserves (in percent)	4.052	35.660	1.44	49%
Import coverage of reserves^2 (in percent)	-3.990	12.716	-0.51	-17%
Remittances (in percent)	2.022	3.297	0.07	2%
World economic growth (in percent)	13.520	2.898	0.39	13%
CI Score			2.929	100%
CI rating			Medium	

Source: IMF/World Bank Low-Income Countries' Debt Sustainability Framework

[5] The CPIA is an index computed annually by the World Bank for Low Income Countries. It uses 16 indicators and assigns countries a score ranging from 1 to 6, with higher figures representing better institutional capacity.

The LIC-DSF provides results for the baseline assumptions and stress test scenarios against the applicable thresholds / benchmark. The lower the country's debt carrying capacity, the lower (more stringent) the thresholds for sustainability assessment.

Table 5: Debt Burden Thresholds/ Benchmark by Classification.

	Weak Performer CI < 2.69	**Medium Performer 2.69 ≤ CI ≤ 3.05**	**Strong Performer CI > 3.05**
External Debt Burden Thresholds			
Solvency Ratios			
PV of debt in percent of Exports	140	180	240
PV of debt in percent of GDP	30	40	55
Liquidity Ratios			
Debt service in percent of Exports	10	15	21
Debt service in percent of Revenue	14	18	23
Total Public Debt Benchmark			
PV of total public debt in percent of GDP	35	55	70

Source: IMF/World Bank Low-Income Countries' Debt Sustainability Framework.

5.0 DSA RESULTS

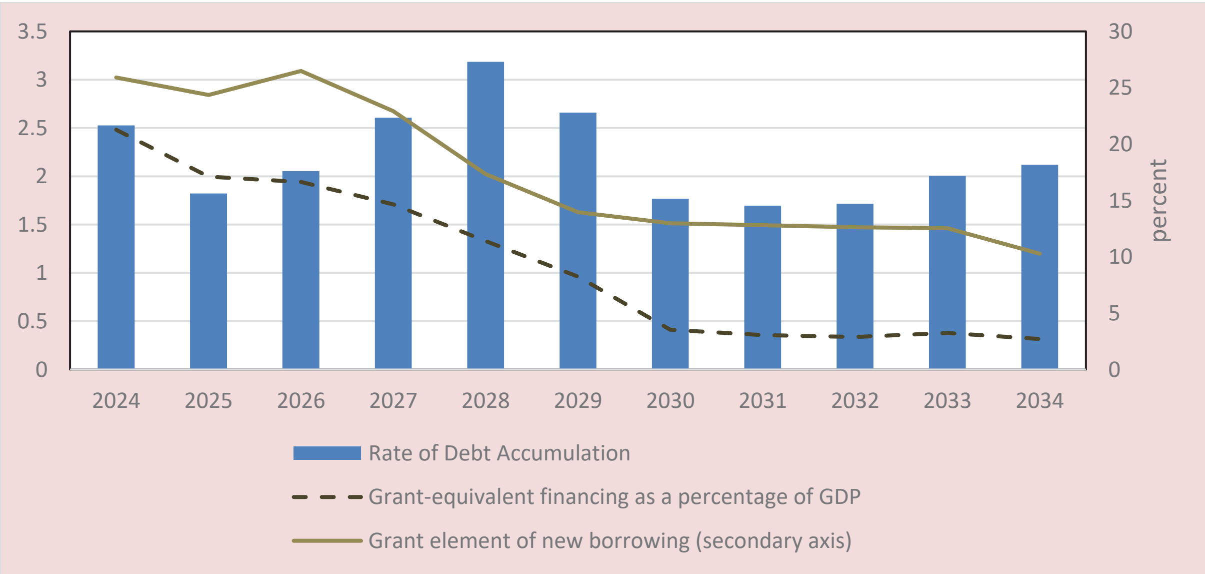
This chapter presents the results of the DSA, broken down into external debt, total public debt and some additional analysis done outside of the LIC-DSF, which mostly relates to domestic debt. The main finding is that Uganda's overall risk of debt distress remains **moderate**, but with limited fiscal space for absorption of extreme shock occurrences. **Public debt was found to be sustainable in the medium to long term**. Nonetheless, a number of vulnerabilities were identified, particularly relating to the increasing debt service burden on revenues and the slow growth of exports which are the major source of foreign currency for the country.

5.1 Sustainability of Public and Publicly Guaranteed External Debt

Government will continue to rely on external borrowing over the medium term as the main avenue to finance the budget deficit. This is consistent with the policy of reducing domestic debt which is typically costlier, to no more than 1 percent of GDP and also with the intention of reducing crowding out of the private sector which is the engine of growth.

Both the grant element of new external borrowing and grant-equivalent financing as a percentage of GDP are projected to follow a downward trend as oil production commences in the medium term and the country progresses towards middle income status and thus have less access to concessional loans.

Figure 7: External Debt Accumulation



Source: Ministry of Finance Planning and Economic Development

5.1.1 External Debt Burden Indicators

Both solvency and liquidity (debt service) indicators are projected to remain below their respective indicative thresholds in the baseline scenario as shown in Table 6. This implies that Uganda's external debt is projected to remain sustainable, as the country is unlikely to face liquidity challenges in servicing her external debt obligations as they fall due. This is largely explained by the fact that the bulk of Uganda's external debt stock continues to be held by concessional lenders, with multilateral lenders holding over 60% of the external debt stock. While the ratio of external debt service to exports will remain below its indicative threshold, it is projected to increase over the medium term. This underscores the importance of current government efforts to boost exports growth.

Table 6: Summary of External Debt Sustainability Indicators (percent)

	LIC-DSF Thresholds	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29
Solvency indicators									
PV of External Debt to GDP	40	19.6	18.4	19.2	19.1	18.8	19.2	20.2	20.5
PV of External Debt to Exports	180	160.2	122.6	115.5	121.5	116.7	118.4	125.9	138.3
Liquidity indicators									
External Debt Service to Exports	15	11.5	10.8	7.6	9.2	11.0	11.5	11.2	13.3
External Debt Service to Revenue	18	10.6	11.7	8.8	9.8	10.6	10.5	9.7	10.5

Source: Ministry of Finance Planning and Economic Development

Scenario Description

In the charts that follow (Figure 8 to Figure 12), the baseline scenario captures the most likely outcome based on current projections; the most extreme shock scenario captures the worst performing shock from several others computed by the model; and the historical scenario produces the debt path that would result from key macroeconomic variables in the baseline projection being replaced by their 10-year historical averages. These variables are: real GDP growth; primary balance to GDP ratio; GDP deflator; non-interest current account and net FDI flows.

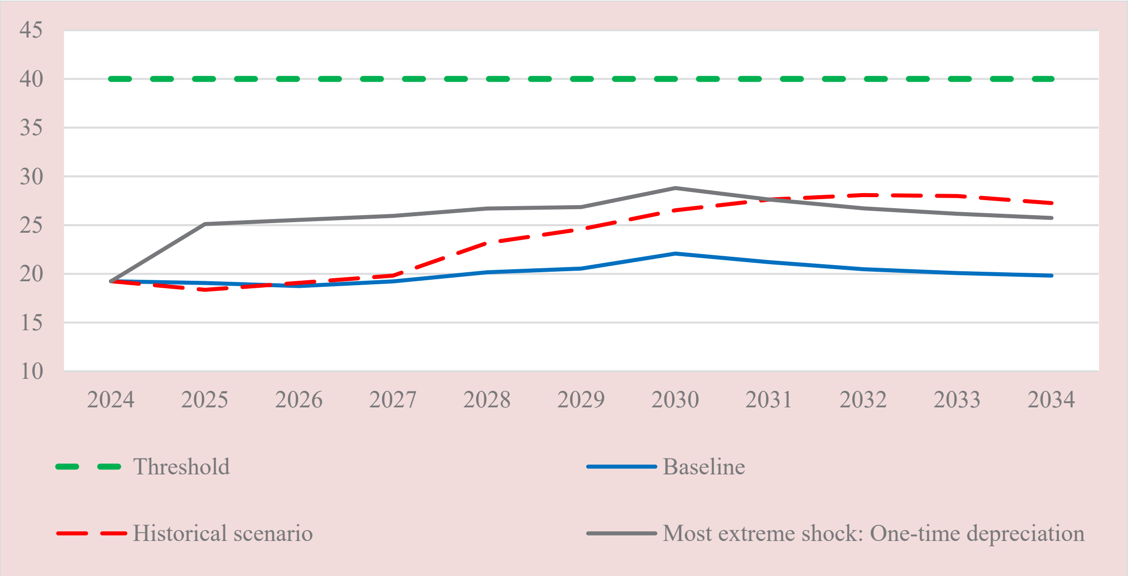
Solvency Indicators

PV of External Debt to GDP Ratio.

The PV of external debt to GDP is projected to increase from 18.4 percent in FY2022/23 to 19.2 percent in FY2023/24. This ratio is forecast to remain well below its indicative threshold of 40 percent throughout the projection period (See Figure 8), largely supported by a reduction in borrowing as Government revenue will be significantly increased following oil production.

In nominal terms, the external debt to GDP ratio is projected to increase from 28.2 percent in FY2022/23 to a peak of 29.3 percent in FY2023/24 before beginning to decline. This ratio is forecast to remain below 30 percent of GDP over the projection horizon, in line with the overarching goal of minimising debt accumulation.

Figure 8: PV of External Debt to GDP (percent)



Source: Ministry of Finance Planning & Economic Development

PV of External Debt to Exports

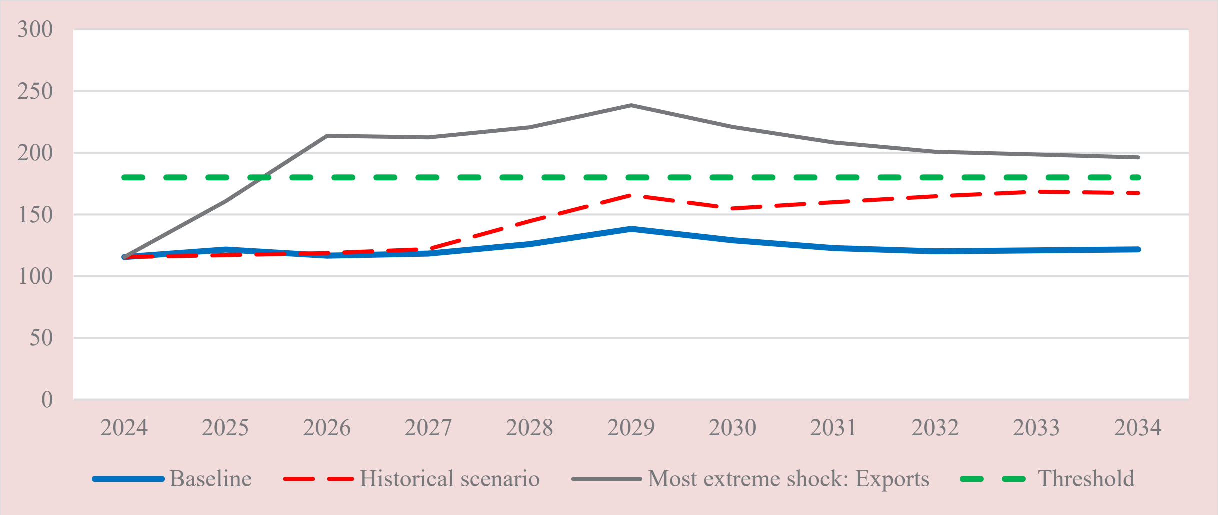
The PV of external debt to exports of goods and services is projected to remain below its indicative threshold under the baseline but breach it under the most extreme shock scenarios[6]. This breach which starts as early as FY2025/26 points to heightened risk of external debt distress in the event of an economic shock that significantly dampens export growth.

Exports constitute an important variable in the analysis of external debt sustainability since they are a crucial source of foreign currency which a country needs to service its foreign

[6] The most extreme shock in this case is that exports grow at their historical average minus one standard deviation. When we say, "grow by an average minus one standard deviation", we are referring to a statistical concept. The average is the central value of a dataset, while the standard deviation measures how spread out the values are in the dataset relative to the mean. If we grow by an average minus one standard deviation, it means that we are growing by an amount that is one standard deviation below the mean. This implies that we are growing by an amount that is less than the average.

currency- denominated debt. A breach in this indicator in the shock scenario underscores the need for immediate reinforcement of Government's efforts towards export promotion to enhance debt sustainability. Figure 9 shows the evolution of the PV of external debt to exports through the projection period.

Figure 9: PV of External Debt to Exports (percent)



Source: Ministry of Finance Planning and Economic Development

Liquidity Indicators

The LIC-DSF uses two liquidity indicators for external debt service i.e. external debt service to exports of goods and services; and external debt service to domestic revenue. The latter highlights the availability of liquid resources (cash or near cash) to meet the external debt service obligations when they fall due.

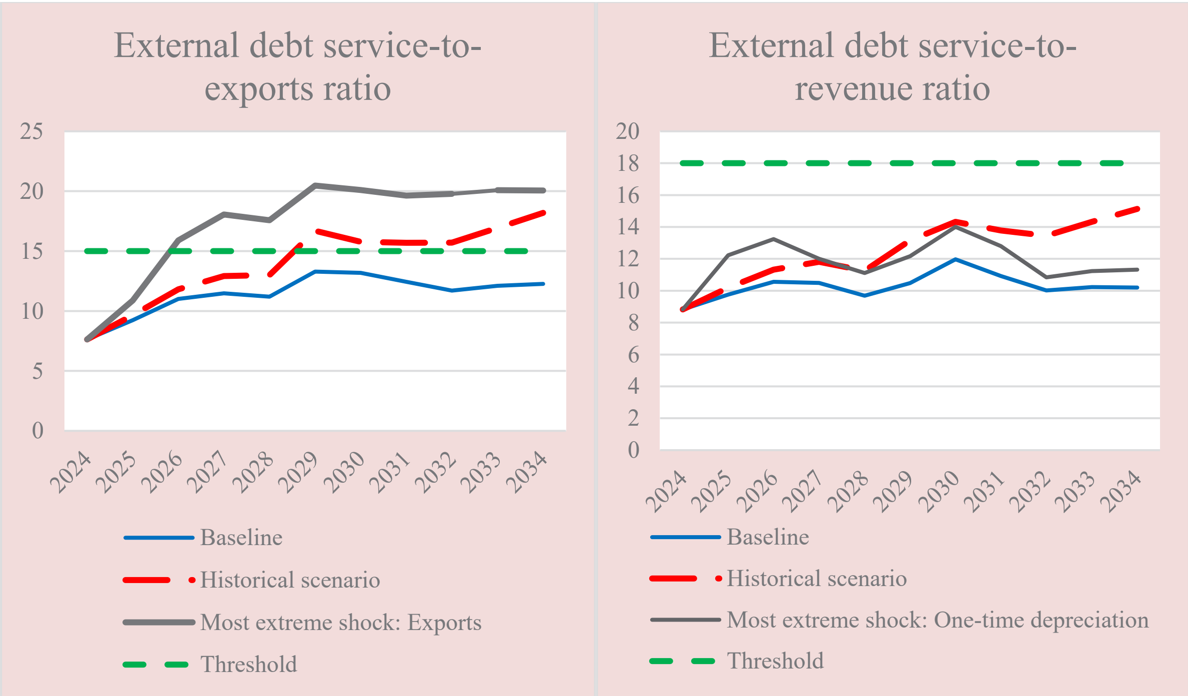
Similar to the solvency indicator of PV of external debt to exports, the ratio of external debt service to exports remains below its indicative threshold under the baseline scenario but breaches it under the most extreme shock[7] scenario. This breach further emphasizes that the external debt portfolio is vulnerable to export shocks which underscores the need to foster export growth. The threshold is also breached under the historical scenario, which suggests that if projected improvements in the economy as well as fiscal consolidation do not occur, the risk of debt distress in the medium term could worsen from moderate to high.

[7] The shock in this case is that exports grow at their historical average minus one standard deviation.

External debt service to domestic revenue remains below its threshold throughout the projection period in both the baseline and most extreme shock scenarios largely benefiting from the expected increase in revenue growth over the projection period. However, this ratio still averages at over 10 percent in the medium term, indicating that over a tenth of all revenues received each fiscal year will be locked up for external debt service alone since debt service takes the first call on resources.

This highlights the importance of current Government efforts towards fiscal consolidation through rationalisation of expenditures while enhancing domestic revenue mobilization. The aim is to reduce the fiscal deficit and consequently the rate of debt accumulation, especially on non-concessional / commercial terms.

Figure 10: Evolution of Liquidity Indicators for External Debt



Source: Ministry of Finance, Planning and Economic Development

5.2 Sustainability of Total Public Debt

Total Public debt is a more comprehensive measure of the country's indebtedness, as it comprises both domestic and external debt. The DSF provides a benchmark for PV of total public debt to GDP to help flag risks from broader debt exposures. This benchmark, which is dependent on the country's debt carrying capacity, helps to highlight the risks stemming from a combination of domestic and external debt.

Table 7: Summary of Public Debt Sustainability Indicators (percent)

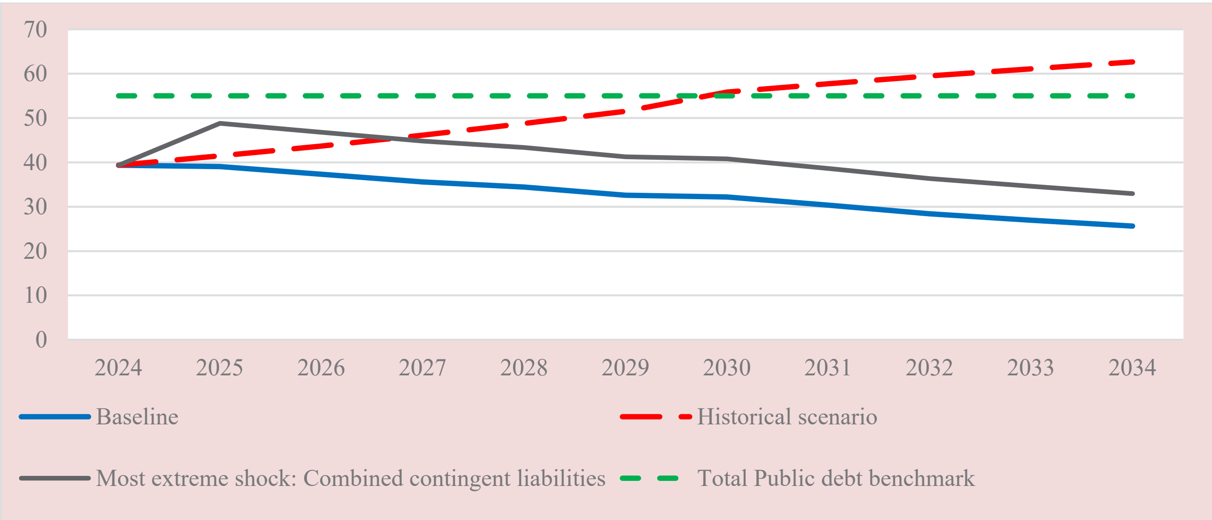
Financial Year	LIC DSF Benchmark	20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28
Nominal debt to GDP		46.9	48.4	46.9	49.2	47.8	45.4	43.3	41.6
Charter for Fiscal Responsibility (Nominal debt/GDP)			52.7	53.1	52.4	51.2	49.3		
PV of Debt to GDP	55	37.5	39.5	36.7	39.4	39.1	37.3	35.6	34.4

Source: Ministry of Finance Planning and Economic Development

Note: The targets in the Charter for Fiscal Responsibility are only available for years 2021/22 to 2025/26.

This DSA finds that the PV of debt to GDP is projected to remain below its associated benchmark of 55 percent throughout the forecast period (see Table 7 and Figure 11). This ratio will also remain below the more stringent threshold of 50 percent stipulated in both the Public Debt Management Framework and the convergence criteria of the EAMU Protocol. In nominal terms, debt to GDP is forecast to increase slightly to 49.2 percent in FY2023/24 before embarking on a downward trend, reducing to as low as 41.6 percent by FY2027/28. This public debt path is well within the requirements of the Charter for Fiscal Responsibility. Figure 11 maps the evolution of the PV of total public debt to GDP over the next ten years against the applicable LIC-DSF benchmark.

Figure 11: PV of Public Debt to GDP

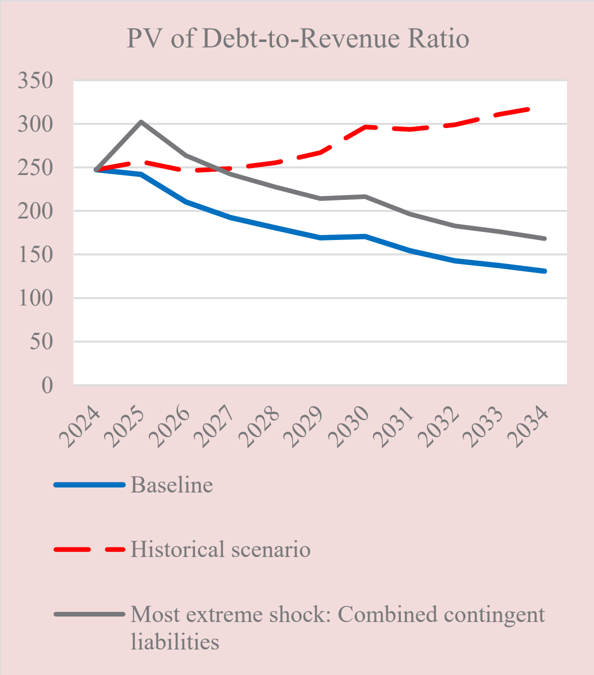


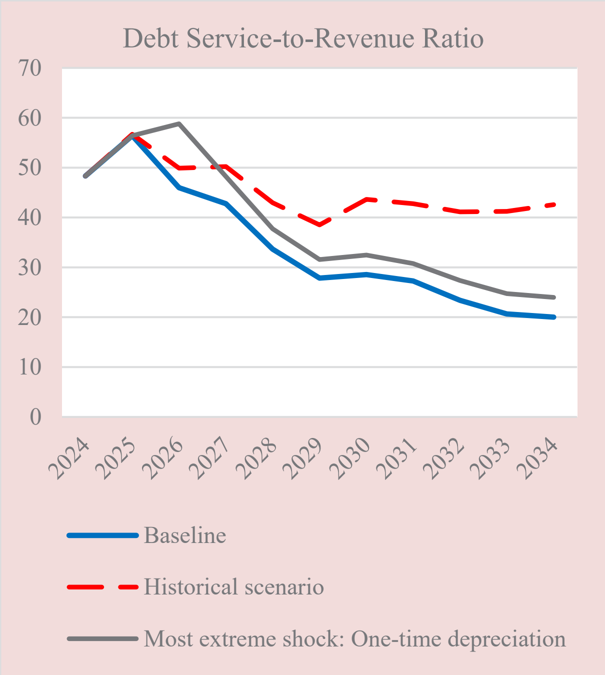
Source: MEPD, Ministry of Finance, Planning and Economic Development

The projected decrease in the public debt to GDP ratio over the medium term will be largely driven by continued pickup in GDP growth as the country overcomes the earlier effects of the Covid-19 pandemic; improved tax revenue performance through implementation of the Domestic Revenue Mobilization Strategy (DRMS); fiscal consolidation through rationalization of expenditure to prioritize the most productive areas; and the onset of oil production and its associated revenues. Over the long-term, this downward trend will also be supported by the completion of several major infrastructure projects especially in the energy and transport sector which will then reduce the fiscal deficit. The historical scenario breaches the benchmark starting from FY2029/30, implying that if Government failed on its commitments to accelerate economic growth and reduce the fiscal deficit, the overall risk of debt distress would deteriorate from moderate to high.

The Public DSA also provides ratios for total public debt service-to-revenue and PV of public debt service-to-revenue as shown in Figure 12. However, these ratios do not have any associated thresholds / benchmarks. The ratio of debt service to revenue is projected to increase over the first year of projection following tightening global financing conditions that have resulted into a surge in the cost of credit. Nonetheless, both ratios are projected to decline over the medium term as domestic revenues increase and Government's borrowing significantly reduces.

Figure 12: Other Total Public DSA Ratios





Source: MEPD, Ministry of Finance, Planning and Economic Development

5.3 Uganda's Risk Rating

The signal for the risk of public external debt distress is derived by comparing the projected external debt indicators with their indicative thresholds for the first 10 years of projection both under the baseline and most extreme shock scenario and this is determined as in Table 8.

Table 8: Mechanical Approach for Risk Rating (Criteria)

	Number of Debt burden indicators breaching threshold under baseline assumptions	Number of Debt burden Indicators breaching threshold under stress tests
Low Risk	0	0
Moderate Risk	0	1 or more
High Risk	1 or more	1 or more
In debt Distress	Country is already having problems servicing its debt (Having debt arrears)	

Source: IMF/WB LIC-DSF Guidance Note.

Based on these criteria, Uganda is assessed as being at **Moderate risk of external debt distress.** This is because all external debt burden indicators remain below their respective thresholds in the baseline, but there are breaches under the most extreme shock scenario for the PV of external debt to exports and the external debt service to exports ratios.

The DSF also provides a signal for the overall risk of public debt distress. This signal is derived based on joint information from the five debt burden indicators: the four from the external block, which are compared with their indicative thresholds, and the PV of total public debt-to-GDP, which is compared to its indicative benchmark. The risk signal is determined as follows:

• **Low overall risk of public debt distress** if the external debt has a low risk signal and the PV of total public debt-to-GDP ratio remains below its benchmark under the baseline and the most extreme shock.

• **Moderate overall risk of public debt distress** if the external debt has a moderate risk signal or if the external debt has low risk signal but the public debt burden indicator breaches its benchmark under the stress test.

• **High overall risk of public debt distress** if any of the four external debt burden indicators or the total public debt burden indicator breach their corresponding thresholds/benchmark under the baseline.

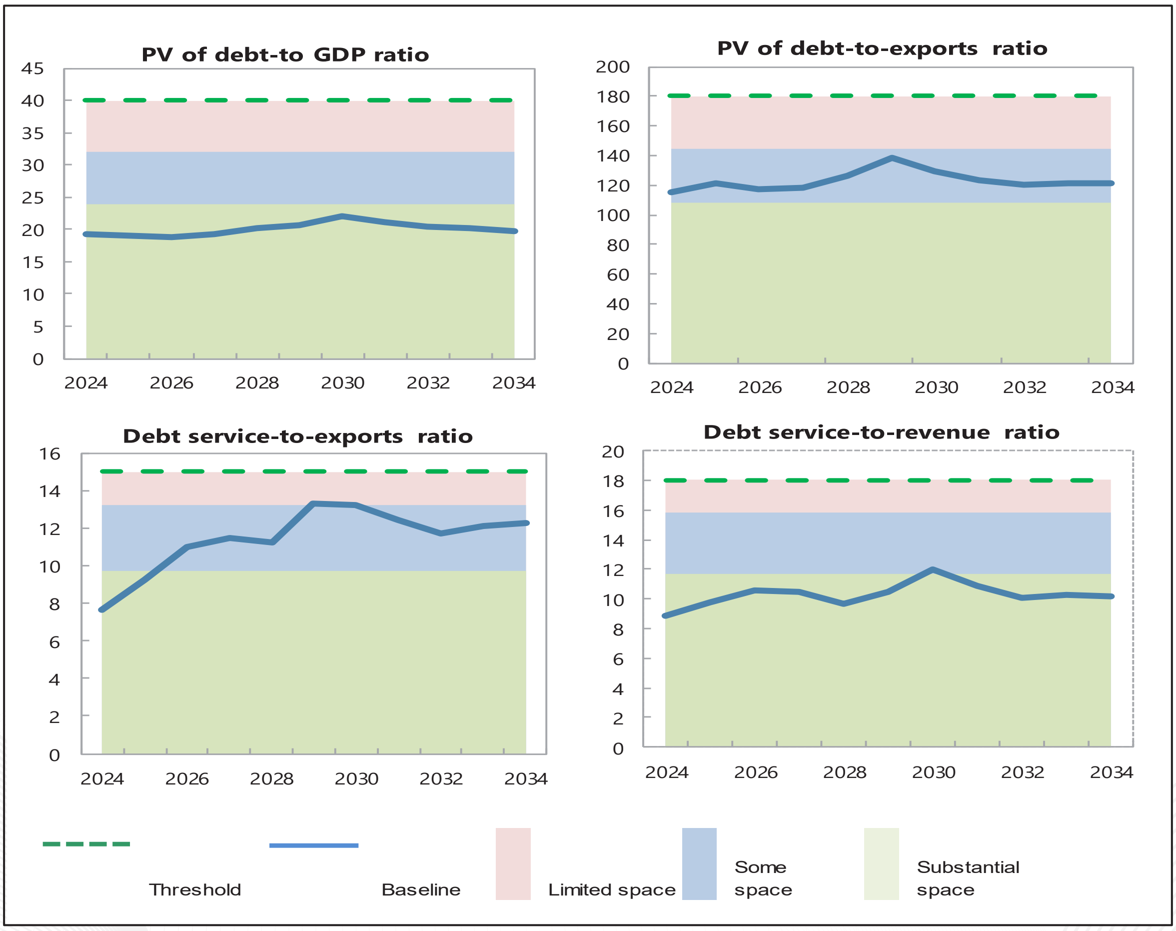
Although the PV of total public debt-to-GDP ratio remains below its indicative benchmark under both the baseline and the most extreme shock (figure 11), external debt has a moderate risk signal following the breach of the thresholds in the most extreme shock for the PV of external debt to GDP as well as external debt service to exports ratios. This results into an **overall rating of Moderate risk of debt distress.**

Evaluation of Available Space to Absorb Shock

For countries rated as being at moderate risk of debt distress, the LIC-DSF provides a tool for assessing how much space is left to reach the high risk of debt distress category. Countries are assessed as having limited space, some space or substantial space, depending on how far their baseline debt burden ratios are from their respective thresholds.

Figure 13 shows that Uganda is assessed as having limited space to reach the high risk category. This assessment is driven by the ratio of PV of debt to exports, which is in the "limited space" area in FY 2023/24 and FY 2024/25. This means that a shock to the country's debt or to exports could lead to a deterioration of the risk rating from moderate to high.

Figure 13: Moderate Risk Assessment



Source: IMF/WB LIC-DSF Tool

5.4 Further Analysis of Public Debt

In Uganda, public debt management is guided by, among other considerations, the provisions of the Public Debt Management Framework PDMF (2018), which provides a number of benchmarks associated with public debt. Government's fiscal objectives are implemented through the Charter for Fiscal Responsibility which sets out an acceptable path for a number of fiscal variables to ensure compliance to the provisions of the PDMF among other requirements. One such objective of the current Charter for fiscal responsibility is to reduce the ratio of domestic interest payments to total revenue (excluding grants) to the PDMF benchmark of 12.5 percent by FY2025/26.

Table 9 below provides the performance of public debt service against both domestic revenues and total public expenditure in comparison to the PDMF benchmarks and the committed path under the current Charter for Fiscal Responsibility.

Table 9: Domestic Debt Sustainability Benchmarks (percent)

	PDMF Benchmark	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27
Total Debt Service[8]/Domestic Revenue (Excluding grants)		27.4	30.6	32.6	31.0	31.8	29.4	28.1
Domestic interest /Domestic revenue (excluding grants)	<12.5	15.5	19.1	18.4	18.1	16.3	14.7	14.2
Charter Target (domestic interest to total revenue)			15.2	14.6	14.1	13.6	12.5	12.5
Total Debt Service / Total Government Expenditure		15.4	19.1	22.7	22.1	24.0	23.8	23.3
Domestic interest /Total Government Expenditure	<10	8.8	11.9	12.8	13.0	12.3	11.9	11.8

Source: MEPD, Charter for Fiscal Responsibility FY2021/22 – FY2025/26, Public Debt Management Framework (2018)

Total debt service continued on an upward trend, increasing from 30.6 percent of the country's domestic revenue in FY2021/22 to 32.6 percent in FY2022/23. Since debt service takes the first call on resources, this implies that nearly a third of the country's domestic revenue is utilized for servicing debt at the expense of allocation for government services. This ratio is projected to remain above 20 percent all through the medium term pointing to a high debt service burden, which constrains fiscal space in the budget. Consequently, this accentuates the need for more

[8] This does not include domestic debt amortization.

borrowing, which in turn implies more debt service expenses for the future periods resulting into a viscous cycle of debt.

The analysis of domestic debt service over the recent years against some of the benchmarks contained in the PDMF reveals vulnerabilities relating to the high domestic debt interest burden on the budget and domestic revenues. The indicator of domestic interest cost to domestic revenue measures the extent to which locally collected revenues are allocated to domestic interest payment alone. Although this ratio is projected to slightly decline over the medium, its performance remains above the targets set out in the charter for fiscal responsibility. This underscores the need for Government to adhere to its commitment of reducing domestic borrowing for budget financing, since this type of debt comes at relatively higher interest costs and is associated with higher refinancing risk because of its relatively shorter maturities. To mitigate the vulnerabilities relating to external debt service, Government will also continue to pursue concessional credit over non concessional loans to the extent possible, so as to keep the cost of external debt service at a minimum.

6.0 CONCLUSION

This DSA finds that Uganda's debt remains sustainable in the medium to long term but still faced with **moderate risk of debt distress.** This follows a breach of the threshold for the PV of external debt to exports ratio and external debt service to exports ratio under the most extreme shock scenario. This breach means that in the event of a major shock that would negatively impact export growth, Uganda's risk rating could deteriorate from moderate to high risk of debt distress.

Whereas there was an increase in the stock of public debt from USD 20.99 billion in FY 2021/22 to USD 23.66 in FY2022/23, the debt to GDP ratio reduced from 48.4 percent to 46.9 percent over the same period mainly due to a significant growth of nominal GDP alongside the appreciation of the end period exchange rate between June 2022 and June 2023. Public debt as share of GDP is projected to increase in FY2023/24, but decline over the rest of the medium term majorly on account of increased revenues benefiting from the onset of oil production and an improvement in tax administration through the implementation of the Domestic Revenue Mobilisation Strategy; as well continued improvement in GDP growth. The reduction in the debt to GDP ratio will also be supported by Government's deliberate efforts towards fiscal consolidation through reduction of public expenditures which will reduce the budget deficit.

The debt service burden still remains a key area of concern for debt sustainability with the ratio of total debt service to domestic revenue amounting to 32.6 percent in FY 2022/23. This implies that debt service continues to take up a bigger share of resources, hence constraining the allocations to other areas of the budget. While the share of debt service to domestic revenue is projected to decline over the medium term, it still remains above 25 percent (quarter of revenues) by the end of the medium term.

Other major risks to debt sustainability relate to: the slow growth of exports; the increased recourse to commercial external and domestic debt for deficit financing; lower than anticipated GDP growth; lower than projected tax revenues; delays in oil production; and challenges in the project management cycle, which delay project benefits and often lead to cost overruns.

To mitigate these risks, a number of initiatives have been put in place to enhance export promotion and import substitution in order to increase foreign currency inflows and reduce the outflows. These among many others include the development of several industrial parks around the country as outlined in the NDP III.

In order to reduce the cost of debt, Government will continue to prioritise concessional financing to the extent possible before considering non-concessional credit. Government will also work towards reducing domestic debt for deficit financing to not more than 1 percent of GDP so as to reduce on the high interest payments arising out of domestic debt.

Government is currently implementing the medium-term Domestic Revenue Mobilisation Strategy (DRMS), which targets to increase domestic revenue to GDP by 0.5 percentage points per annum. An increase in domestic revenue will reduce the country's gross financing needs and hence the need to borrow. Further efforts aimed at fiscal consolidation will involve reducing the ratio of expenditure to GDP in the medium term.

Government is also keen on improving effectiveness and efficiency of public investments through the implementation of the Public Investment Management Strategy (PIMS) framework that requires projects to go through the four stage gates of: concept, profile, pre-feasibility and feasibility study. This is aimed at ensuring that only ready projects that are technically and economically viable are included in the Public Investment Plan (PIP), thereby maximizing returns on investment.

GLOSSARY

1. **Average Time to Maturity:** ATM gives information on how long it takes on average to rollover or refinance the debt portfolio. Low value of ATM indicates that a high share of debt will be due for payment or roll over in the near future, implying a substantial exposure to refinancing risk if resources are not available to meet or roll over maturing debt. On the other hand, a high value of ATM indicates that a low proportion of debt will be maturing soon, implying low exposure to refinancing risk.

2. **Average Time to Re-fixing:** ATR provides a measure for the average length of time it takes for interest rates to be reset. The longer the period, the lower the interest rate exposure.

3. **Concessionality:** Concessional loans are those whose grant element is not less than 35 percent. These typically come from multilateral creditors such as the IDA and the African Development Fund/African Development Bank.

4. **Debt Sustainability:** A country's public debt is considered sustainable if the government can meet all its current and future debt payment obligations without exceptional financial assistance/ debt relief of restructuring or going into default (accumulation of debt arrears).

5. **External Debt Service/ Domestic Budget Revenue:** This ratio describes the ratio of domestic revenue inflows to external outflows used for servicing external debt. An indicator used to measure liquidity risk.

6. **External Debt Service/ Exports (goods & services):** This ratio describes the share of foreign exchange earning inflows from exports to external outflows used for servicing external debt. This indicator is used to measure liquidity risk.

7. **External Debt/ Domestic Budget Revenue:** This ratio describes the share of total domestic budget revenues that is directed to pay external debt.

8. **Grant equivalent Financing**: Grants have a grant element of 100 percent as they are fully provided as "gifts". By contrast, a loan offered at market terms has a grant element of 0 percent. However, this becomes a positive percentage if the lender adds an element of generosity. The grant element measure of aid provides a more accurate estimate of the donor's effort. In short, the grant equivalent is an estimate, at today's value of money, of how much is being given away over the life of a financial transaction, compared with a

transaction at market terms. The grant equivalent is the grant element multiplied by the amount of money extended.

9. **Liquidity Risk:** A situation where available financing and liquid assets are insufficient to meet maturing obligations. The DSF includes indicative thresholds that facilitate the assessment of solvency and liquidity risk (Staff Guidance note on the DSF for LICs, IMF 2013).

10. **Percent Maturing in any year after year one**: To avoid refinancing requirements being particularly concentrated in any single year, it is recommended to spread maturities evenly over the maturity curve. This risk control measure helps prevent rollover risk from being simply shifted to a later period, for example from year one to year two.

11. **Percent Maturing in One Year:** This is the share of debt maturing in the next twelve months. High proportions are indicative of high levels of interest rate or rollover risk. The risk is more pronounced in less liquid markets.

12. **Present Value (PV):** PV captures the degree of concessionality of the debt stock. The more concessional the debt, the lower the PV compared to the nominal value. It particularly accounts for the time value of money.

13. **Public and Publicly Guaranteed Debt**: Total Public Debt plus debt guaranteed by Government. However, in regard to guaranteed debt, the DSA only includes guaranteed debt that has become a liability to Government upon default by the responsible debtor.

14. **Public Debt/GDP (Nominal):** A measure of the level of total public/Government debt (external & domestic) relative to the size of the economy.

15. **Refinancing Risk:** Refinancing risk is the possibility of having the debt to be rolled over at a higher interest rate. In this report, two measures are used to assess the exposure of Uganda's public debt to refinancing risk: Redemption profile of debt and Average Time to Maturity (ATM) of debt stock.

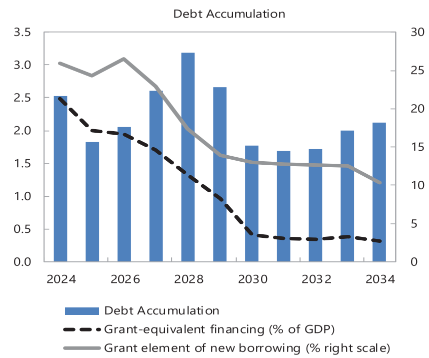
16. **Solvency:** An economic agent (or a sector of an economy, or a country as a whole) is solvent if the present value of its income stream is at least as large as the PV of its expenditure plus any initial debt.

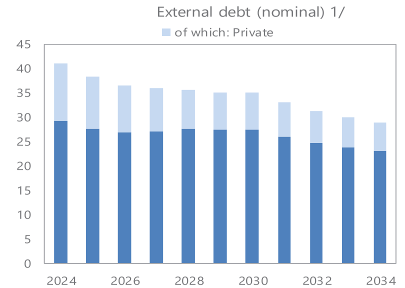
Table 1. Uganda: External Debt Sustainability Framework, Baseline Scenario, 2021-2044

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2034	2044	Historical	Projections
External debt (nominal) 1/	44.3	42.8	40.8	41.0	38.4	36.6	35.9	35.7	35.0	28.9	24.4	37.5	34.6
of which: public and publicly guaranteed (PPG)	29.7	29.6	28.2	29.3	27.6	26.9	27.0	27.6	27.5	23.2	21.4	23.0	26.4
Change in external debt	1.0	-1.5	-2.1	0.3	-2.6	-1.8	-0.7	-0.2	-0.7	-1.1	-0.2		
Identified net debt-creating flows	3.2	-0.6	0.8	1.8	1.9	0.3	0.9	-1.0	0.6	3.2	6.8	0.6	1.1
Non-interest current account deficit	9.5	7.2	6.7	6.9	6.9	5.4	5.8	3.7	4.9	5.9	7.9	6.0	5.3
Deficit in balance of goods and services	12.1	9.9	10.0	9.6	9.3	7.4	9.7	7.8	8.8	9.0	9.8	8.9	8.6
Exports	16.7	12.4	15.0	16.7	15.7	16.1	16.2	16.0	14.8	16.3	15.5		
Imports	28.8	22.2	25.0	26.2	25.0	23.5	25.9	23.8	23.6	25.3	25.3		
Net current transfers (negative = inflow)	-4.4	-4.0	-4.1	-4.1	-3.9	-3.7	-3.6	-3.5	-3.2	-2.2	-0.9	-4.5	-3.2
of which: official	-0.5	-0.5	-0.4	-0.6	-0.5	-0.4	-0.3	-0.3	-0.2	-0.1	0.0		
Other current account flows (negative = net inflow)	1.8	1.3	0.9	1.4	1.5	1.6	-0.3	-0.5	-0.6	-0.9	-0.9	1.6	-0.1
Net FDI (negative = inflow)	-3.9	-3.4	-3.7	-3.4	-3.3	-3.2	-3.2	-3.3	-3.0	-2.2	-0.9	-3.9	-3.0
Endogenous debt dynamics 2/	-2.3	-4.3	-2.2	-1.6	-1.7	-1.8	-1.6	-1.4	-1.3	-0.5	-0.3		
Contribution from nominal interest rate	0.8	0.6	1.0	0.7	0.7	0.6	0.7	0.8	1.0	1.1	1.1		
Contribution from real GDP growth	-1.4	-1.8	-2.1	-2.2	-2.4	-2.4	-2.3	-2.3	-2.3	-1.7	-1.4		
Contribution from price and exchange rate changes	-1.7	-3.1	-1.1	...	...	...	...	...	...	...	...		
Residual 3/	-2.2	-1.0	-2.8	-1.6	-4.5	-2.1	-1.6	0.8	-1.3	-4.3	-7.0	0.9	-2.2
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	...	...	18.4	19.2	19.1	18.8	19.2	20.2	20.5	19.8	19.8		
PV of PPG external debt-to-exports ratio	...	...	122.6	115.5	121.5	116.7	118.4	125.9	138.3	121.7	127.7		
PPG debt service-to-exports ratio	10.9	11.5	10.8	7.6	9.2	11.0	11.5	11.2	13.3	12.3	12.4		
PPG debt service-to-revenue ratio	13.6	10.6	11.7	8.8	9.8	10.6	10.5	9.7	10.5	10.2	9.0		
Gross external financing need (Billion of U.S. dollars)	3.3	2.8	2.9	3.3	3.8	3.3	4.0	2.7	4.4	9.7	45.2		
Key macroeconomic assumptions													
Real GDP growth (in percent)	3.5	4.6	5.2	6.0	6.4	7.0	7.0	7.1	7.0	6.2	6.2	4.7	6.6
GDP deflator in US dollar terms (change in percent)	4.0	7.5	2.7	2.6	3.8	5.3	3.8	3.8	3.9	5.5	5.7	0.9	3.6
Effective interest rate (percent) 4/	1.9	1.6	2.4	1.7	1.8	1.7	2.1	2.6	3.0	4.2	4.9	1.6	2.9
Growth of exports of G&S (US dollar terms, in percent)	25.5	-16.7	31.2	20.7	4.1	15.4	12.3	9.6	3.0	9.9	12.1	5.1	11.3
Growth of imports of G&S (US dollar terms, in percent)	28.2	-13.2	21.4	14.3	5.3	5.6	22.8	1.9	10.4	12.0	12.3	6.1	10.6
Grant element of new public sector borrowing (in percent)	...	...	...	25.9	24.4	26.5	22.9	17.3	14.0	10.3	10.3	...	17.5
Government revenues (excluding grants, in percent of GDP)	13.4	13.4	13.8	14.4	14.9	16.8	17.8	18.5	18.8	19.6	21.4	12.1	18.1
Aid flows (in Billion of US dollars) 5/	0.5	0.3	0.3	1.4	1.3	1.5	1.4	1.2	0.8	0.3	0.9		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.5	2.0	1.9	1.7	1.3	1.0	0.3	0.3	...	1.1
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	47.4	47.7	42.0	34.4	26.7	22.7	10.3	10.3	...	25.7
Nominal GDP (Billion of US dollars)	41	46	49	54	59	67	74	82	91	145	462		
Nominal dollar GDP growth	7.7	12.5	8.1	8.7	10.4	12.6	11.1	11.1	11.1	12.0	12.3	5.7	10.4
Memorandum items:													
PV of external debt 7/	...	...	30.9	31.0	29.9	28.5	28.1	28.3	28.0	25.6	22.8		
In percent of exports	...	...	206.1	185.9	190.3	177.2	173.0	176.5	188.8	156.9	147.1		
Total external debt service-to-exports ratio	15.1	19.2	19.9	16.3	17.5	17.8	17.8	17.4	20.3	18.2	17.6		
PV of PPG external debt (in Billion of US dollars)			9.1	10.3	11.3	12.5	14.2	16.6	18.8	28.8	91.3		
(PVt-PVt-1)/GDPt-1 (in percent)				2.5	1.8	2.1	2.6	3.2	2.7	2.1	2.5		
Non-interest current account deficit that stabilizes debt ratio	8.5	8.7	8.8	6.6	9.6	7.2	6.5	3.9	5.6	7.0	8.1		

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





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = growth rate of GDP deflator in U.S. dollar terms.
3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.
4/ Current-year interest payments divided by previous period debt stock.
5/ Defined as grants, concessional loans, and debt relief.
6/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).
7/ Assumes that PV of private sector debt is equivalent to its face value.
8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

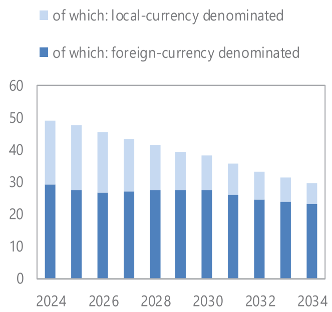
Table 2. Uganda: Public Sector Debt Sustainability Framework, Baseline Scenario, 2021-2044

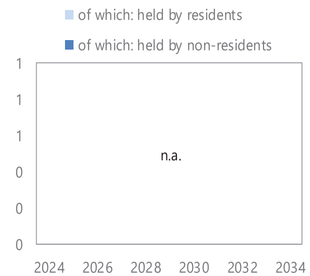
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2034	2044	Historical	Projections
Public sector debt 1/	46.9	48.4	46.9	49.2	47.8	45.4	43.3	41.6	39.2	29.6	13.4	36.1	39.5
of which: external debt	29.7	29.6	28.2	29.3	27.6	26.9	27.0	27.6	27.5	23.2	21.4	23.0	26.4
Change in public sector debt	5.9	1.6	-1.5	2.3	-1.5	-2.4	-2.1	-1.7	-2.4	-1.8	-1.8		
Identified debt-creating flows	5.4	4.6	-1.2	3.8	-1.5	-2.4	-2.1	-1.7	-2.5	-1.7	-1.8	2.8	-1.4
Primary deficit	6.3	4.3	2.3	2.8	0.9	-0.3	-0.4	-0.2	-0.9	-0.3	-0.1	3.1	-0.1
Revenue and grants	14.7	14.1	14.4	15.9	16.2	17.7	18.5	19.1	19.3	19.6	21.4	13.0	18.6
of which: grants	1.3	0.7	0.6	1.5	1.3	1.0	0.7	0.6	0.4	0.0	0.0		
Primary (noninterest) expenditure	21.0	18.4	16.7	18.7	17.0	17.4	18.1	18.9	18.3	19.2	21.3	16.1	18.5
Automatic debt dynamics	-0.9	0.3	-3.5	1.0	-2.3	-2.1	-1.8	-1.5	-1.6	-1.4	-1.6		
Contribution from interest rate/growth differential	0.7	-1.2	-2.6	-0.2	-1.4	-1.5	-1.5	-1.2	-1.2	-0.6	-0.9		
of which: contribution from average real interest rate	2.1	0.9	-0.2	2.4	1.5	1.6	1.5	1.6	1.5	1.2	0.0		
of which: contribution from real GDP growth	-1.4	-2.1	-2.4	-2.6	-3.0	-3.1	-3.0	-2.9	-2.7	-1.8	-0.9		
Contribution from real exchange rate depreciation	-1.6	1.5	-0.9	...	...	...	...	...	...	...	...		
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	0.5	-3.0	-0.3	-0.3	-0.9	-0.5	-0.3	-0.3	-0.3	-0.8	-0.8	-0.2	-0.5
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	36.7	39.4	39.1	37.3	35.6	34.4	32.6	25.6	11.1		
PV of public debt-to-revenue and grants ratio	...	...	254.8	247.3	241.8	210.3	192.4	180.6	169.3	130.9	51.9		
Debt service-to-revenue and grants ratio 3/	59.4	63.0	56.4	48.3	56.4	46.0	42.8	33.6	27.8	20.0	0.0		
Gross financing need 4/	15.0	13.2	10.4	10.5	10.0	7.8	7.6	6.3	4.4	3.6	-0.1		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	3.5	4.6	5.2	6.0	6.4	7.0	7.0	7.1	7.0	6.2	6.2	4.7	6.6
Average nominal interest rate on external debt (in percent)	2.7	1.6	1.8	0.0	0.5	0.9	1.4	2.0	2.5	3.9	4.8	1.7	2.3
Average real interest rate on domestic debt (in percent)	13.9	10.4	6.5	10.9	10.8	9.9	9.6	10.5	10.2	10.7	9.7	10.8	10.3
Real exchange rate depreciation (in percent, + indicates depreciation)	-5.9	5.3	-3.2	...	...	...	...	...	...	...	...	1.8	...
Inflation rate (GDP deflator, in percent)	2.5	4.9	8.0	3.1	3.5	4.1	4.5	4.3	4.4	4.4	4.7	4.5	4.3
Growth of real primary spending (deflated by GDP deflator, in percent)	19.3	-8.2	-4.9	19.0	-3.3	9.6	11.4	11.5	3.8	6.3	7.5	9.1	8.1
Primary deficit that stabilizes the debt-to-GDP ratio 5/	0.4	2.7	3.8	0.5	2.3	2.1	1.8	1.5	1.5	1.4	1.7	2.3	1.5
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?	**No**

Public sector debt 1/





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government plus social security, central bank, government-guaranteed debt . Definition of external debt is Currency-based.

2/ The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

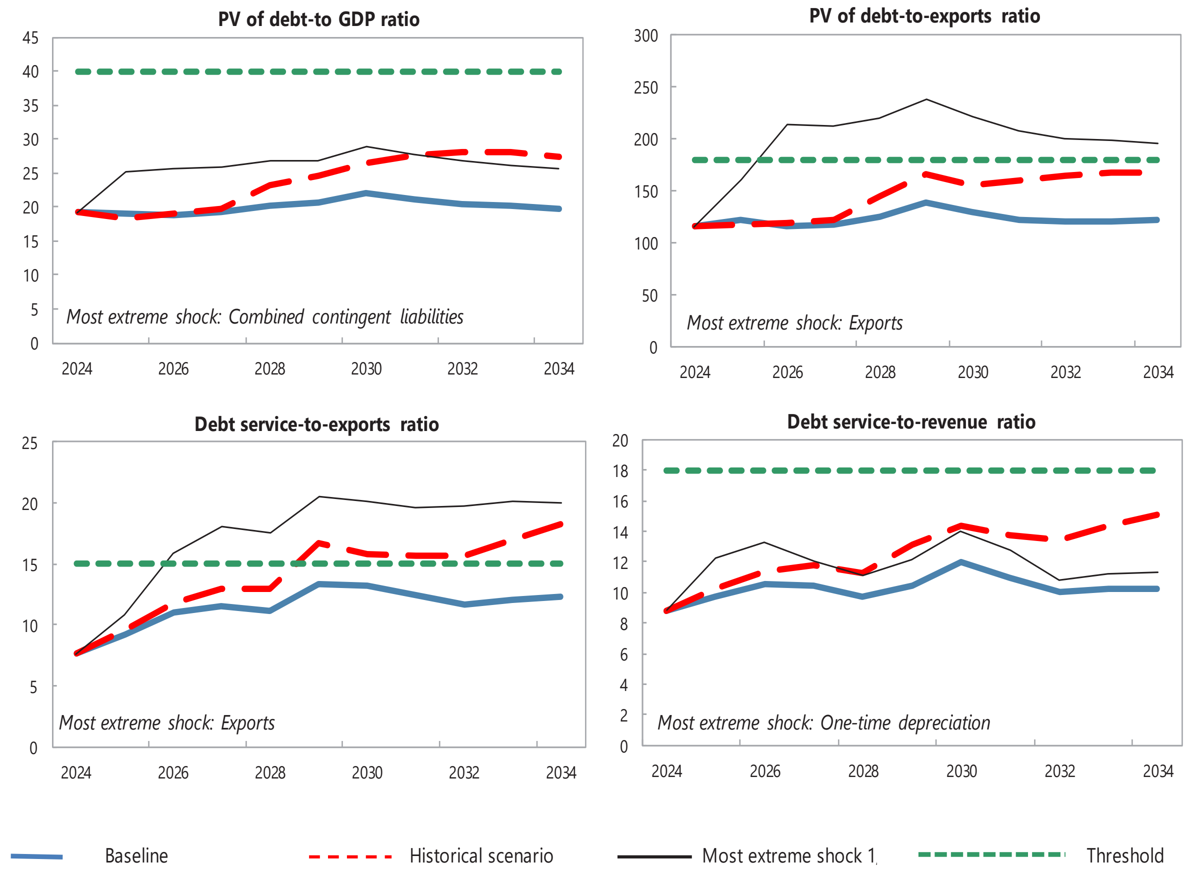
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

4/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period and other debt creating/reducing flows.

5/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio ((-): a primary surplus), which would stabilizes the debt ratio only in the year in question.

6/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

Figure 1. Uganda: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2024-2034



Customization of Default Settings		
	Size	Interactions
Tailored Stress		
Combined CL	No	
Natural disaster	n.a.	n.a.
Commodity price	No	No
Market financing	n.a.	n.a.

Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

Borrowing assumptions on additional financing needs resulting from the stress tests*		
	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	4.9%	4.9%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	20	20
Avg. grace period	5	5

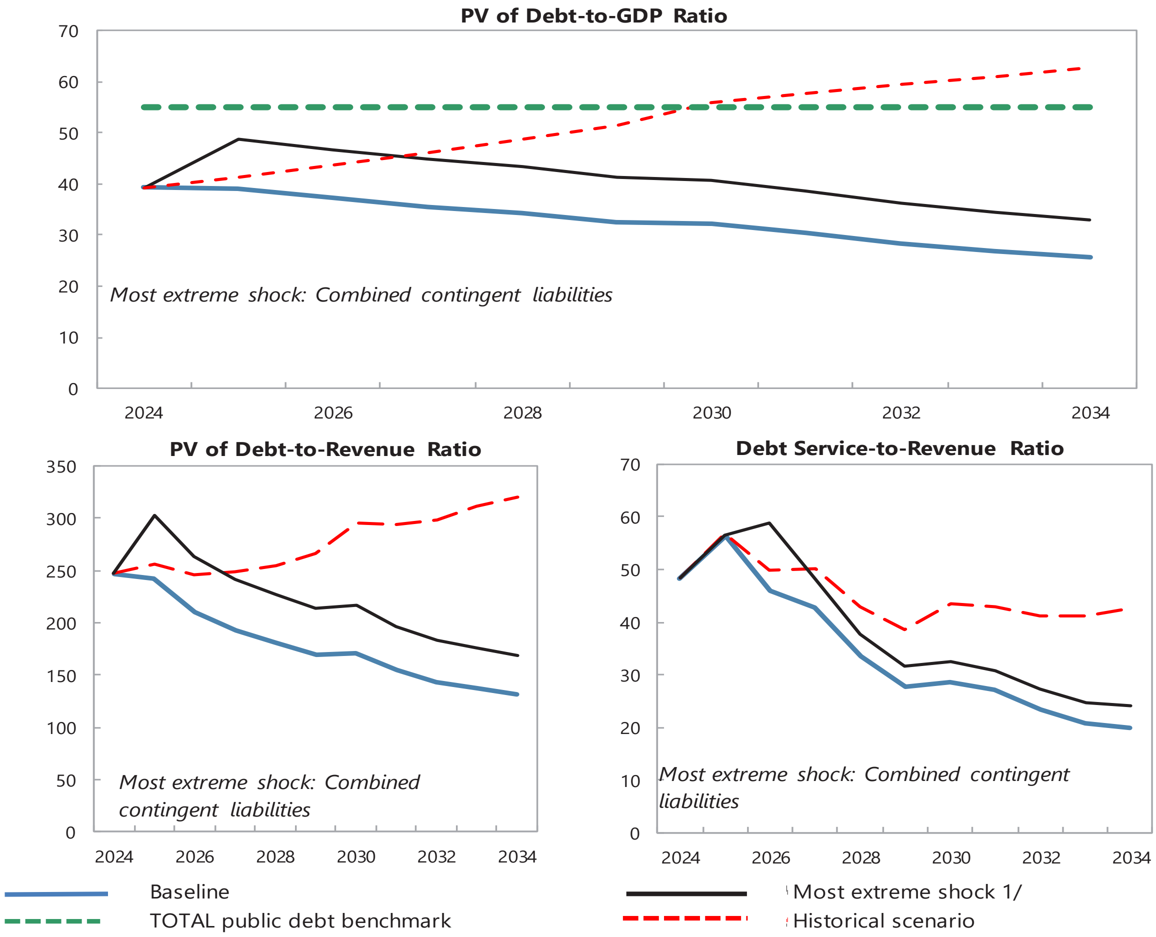
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 2034. 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.

Figure 2. Uganda: Indicators of Public Debt Under Alternative Scenarios, 2024-2034



Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	62%	62%
Domestic medium and long-term	20%	20%
Domestic short-term	18%	18%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	4.9%	4.9%
Avg. maturity (incl. grace period)	20	20
Avg. grace period	5	5
Domestic MLT debt		
Avg. real interest rate on new borrowing	10.7%	10.7%
Avg. maturity (incl. grace period)	13	13
Avg. grace period	6	6
Domestic short-term debt		
Avg. real interest rate	9.0%	9.0%

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

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2034. 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. Uganda: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2024-2034

(In percent)

	Projections 1/										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
PV of debt-to GDP ratio											
Baseline	19	19	19	19	20	21	22	21	20	20	20
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2024-2034 2/	19	18	19	20	23	25	27	28	28	28	27
B. Bound Tests											
B1. Real GDP growth	19	20	21	21	22	23	24	23	23	22	22
B2. Primary balance	19	21	25	25	26	26	28	27	26	26	25
B3. Exports	19	22	26	26	26	26	28	27	25	25	24
B4. Other flows 3/	19	20	21	21	22	22	24	23	22	21	21
B5. Depreciation	19	24	19	20	21	22	24	23	22	22	22
B6. Combination of B1-B5	19	23	22	23	24	24	26	25	24	23	23
C. Tailored Tests											
C1. Combined contingent liabilities	19	25	26	26	27	27	29	28	27	26	26
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	19	19	19	19	20	21	22	21	20	20	20
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	116	122	117	118	126	138	129	123	120	121	122
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2024-2034 2/	116	117	119	122	145	166	155	160	165	168	167
B. Bound Tests											
B1. Real GDP growth	116	122	117	118	126	138	129	123	120	121	122
B2. Primary balance	116	137	153	156	164	178	166	157	154	154	154
B3. Exports	116	161	**214**	**212**	**221**	**238**	**221**	**208**	**201**	**199**	**196**
B4. Other flows 3/	116	128	128	129	136	149	138	131	128	128	128
B5. Depreciation	116	122	94	97	106	118	110	105	105	107	109
B6. Combination of B1-B5	116	146	123	144	153	167	156	148	144	145	145
C. Tailored Tests											
C1. Combined contingent liabilities	116	160	159	160	167	**181**	168	160	157	157	158
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	116	122	117	118	126	138	129	123	120	121	122
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio											
Baseline	8	9	11	11	11	13	13	12	12	12	12
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2024-2034 2/	8	10	12	13	13	17	16	16	16	17	18
B. Bound Tests											
B1. Real GDP growth	8	9	11	11	11	13	13	12	12	12	12
B2. Primary balance	8	9	12	13	13	15	15	15	15	15	15
B3. Exports	8	11	16	18	18	20	20	20	20	20	20
B4. Other flows 3/	8	9	11	12	12	14	14	13	12	13	13
B5. Depreciation	8	9	11	10	10	12	12	12	10	11	11
B6. Combination of B1-B5	8	10	13	14	13	16	16	15	14	15	15
C. Tailored Tests											
C1. Combined contingent liabilities	8	9	13	13	13	15	15	14	13	14	14
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	8	9	11	11	11	13	13	12	12	12	12
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio											
Baseline	9	10	11	10	10	10	12	11	10	10	10
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2024-2034 2/	9	10	11	12	11	13	14	14	13	14	15
B. Bound Tests											
B1. Real GDP growth	9	10	12	12	11	12	13	12	11	11	11
B2. Primary balance	9	10	11	12	11	12	14	13	12	13	13
B3. Exports	9	10	11	12	11	12	14	13	13	13	12
B4. Other flows 3/	9	10	11	11	10	11	12	11	11	11	11
B5. Depreciation	9	12	13	12	11	12	14	13	11	11	11
B6. Combination of B1-B5	9	11	13	12	11	12	14	13	12	12	12
C. Tailored Tests											
C1. Combined contingent liabilities	9	10	12	12	11	12	14	12	11	12	12
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	9	10	11	10	10	10	12	11	10	10	10
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	18	18	18	18	18	18	18	18	18	18	18

Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the threshold.
2/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.
3/ Includes official and private transfers and FDI.

Table 4. Uganda: Sensitivity Analysis for Key Indicators of Public Debt , 2024-2034

	Projections 1/										
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
PV of Debt-to-GDP Ratio											
Baseline	39	39	37	36	34	33	32	30	28	27	26
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2024-2034 2/	39	41	44	46	49	52	**56**	**58**	**59**	**61**	**63**
B. Bound Tests											
B1. Real GDP growth	39	42	44	43	44	44	45	45	44	44	44
B2. Primary balance	39	43	46	44	43	41	40	38	36	34	33
B3. Exports	39	41	44	42	40	38	38	35	33	31	29
B4. Other flows 3/	39	40	39	37	36	34	34	32	30	28	27
B5. Depreciation	39	42	39	35	32	29	28	25	22	19	17
B6. Combination of B1-B5	39	41	43	38	36	34	34	32	30	29	27
C. Tailored Tests											
C1. Combined contingent liabilities	39	49	47	45	43	41	41	39	36	35	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	39	40	40	40	41	41	42	42	42	42	42
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 of Debt-to-Revenue Ratio											
Baseline	247	242	210	192	181	169	171	154	143	137	131
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2024-2034 2/	247	257	246	249	255	267	296	293	299	311	320
B. Bound Tests											
B1. Real GDP growth	247	256	244	233	229	226	239	227	222	225	225
B2. Primary balance	247	265	259	238	224	211	213	194	180	174	166
B3. Exports	247	256	247	225	211	198	200	180	165	157	149
B4. Other flows 3/	247	248	221	202	189	177	179	162	149	143	136
B5. Depreciation	247	263	218	190	170	152	147	125	109	97	86
B6. Combination of B1-B5	247	256	241	207	191	179	180	163	152	146	139
C. Tailored Tests											
C1. Combined contingent liabilities	247	302	264	242	227	214	216	196	183	176	168
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	247	247	226	217	215	212	225	214	210	213	214
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Debt Service-to-Revenue Ratio											
Baseline	48	56	46	43	34	28	29	27	23	21	20
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2024-2034 2/	48	57	50	50	43	39	44	43	41	41	43
B. Bound Tests											
B1. Real GDP growth	48	59	51	49	40	35	37	36	33	31	31
B2. Primary balance	48	56	51	51	38	31	32	31	28	26	25
B3. Exports	48	56	47	44	35	29	30	29	26	23	22
B4. Other flows 3/	48	56	46	43	34	28	29	28	24	21	21
B5. Depreciation	48	54	46	43	34	29	29	28	24	21	20
B6. Combination of B1-B5	48	55	49	49	36	30	30	29	26	23	22
C. Tailored Tests											
C1. Combined contingent liabilities	48	56	59	48	38	32	32	31	27	25	24
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	48	56	47	46	38	33	34	34	31	29	29
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.