DEBT SUSTAINABILITY ANALYSIS REPORT

2017/18

DECEMBER 2018

MINISTRY OF FINANCE, PLANNING AND ECONOMIC DEVELOPMENT

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Preface

Section 42 of the Public Finance Management Act (2015) mandates the Minister responsible for Finance with managing public debt. An important facet of debt management is the assessment of current and future debt levels with a view to ascertaining the risks and vulnerabilities associated with the country's debt trajectory. The Debt Sustainability Analysis (DSA) exercise is undertaken periodically in discharge of that mandate.

Government's deliberate decision to frontload infrastructure spending in the medium term means that there will be a higher rate of debt accumulation than in previous years thereby exposing the country to vulnerabilities which could compromise its capacity to service debt in the event of a major shock to the economy. This underscores the need for continuous prudent macroeconomic management and robust economic growth so as to safeguard against any such vulnerabilities. This in addition; calls for Government to ensure that public investments are efficiently managed in order to yield their expected benefits of enhanced productivity and higher economic growth. This notwithstanding, this DSA Report shows that Uganda's public debt remains sustainable over both the medium and long term, and is faced with low risk of debt distress. The rate of debt accumulation is expected to reduce after the medium term with the major infrastructure projects coming to completion.

I wish to thank the team which put this report together. The team was led by the Macroeconomic Policy Department and also comprised Officers from the Directorate of Debt and Cash Management, Accountant General's Office, the Bank of Uganda and the Parliament Budget Office.

Patrick Ocailap

For: PERMANENT SECRETARY / SECRETARY TO THE TREASURY

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List of Acronyms

ADB/F	African Development Bank/Fund
ATM	Average Time to Maturity
ATR	Average Time to Re-fixing
CPIA	Country Policy and Institutional Assessment
CI	Composite Indicator
DOD	Disbursed and Outstanding Debt
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
LIBOR	London Interbank Offered Rate
LICs	Low Income Countries
MDAs	Ministries, Departments and Agencies
MEPD	Macroeconomic Policy Department.
NDP	National Development Plan
PDMF	Public Debt Management Framework
PPG	Public and Publically Guaranteed
PV	Present Value
SOEs	State Owned Enterprises
UGX	Uganda Shillings
WEO	World Economic Outlook

Executive Summary

The stock of total public debt grew from USD 9.4 billion at end June 2017 to USD 10.74 billion by end June 2018, of which external debt was USD 7.29 billion (UGX 28.29 Trillion), while domestic debt was USD 3.45 billion (UGX 13.39Trillion). This represents an increase from 37% of GDP to 41.5%. This increase was largely on account of external debt which grew from USD 6.2 billion to USD 7.29 billion over the period. Domestic debt also grew from USD 3.2 billion to USD 3.45 billion. In shilling terms, domestic debt increased from UGX 11,595 Billion in June 2017 to UGX 13,386 Billion in June 2018. Measured in present value terms, the total stock of debt amounted to 30.7% of GDP up from 27.1% the previous financial year.

Nominal total public debt is projected to increase to 42.2% of GDP in FY2018/19, before peaking at 49.0% in FY2021/22. In **Present Value terms,** total public debt will follow a similar trend, increasing to 32.0% of GDP in FY2018/19, and then peaking at 38.5% in FY2022/23.

This Debt Sustainability Analysis (DSA) finds that Uganda's debt trajectory is faced with low risk of external debt distress. Although debt is sustainable over the medium to long term, there are a number of risks that still need to be carefully monitored to ensure prevalence of debt sustainability.

The major risks to the debt outlook relate to the slow growth and diversification of exports; the increased rate of debt accumulation, particularly on non-concessional terms; low domestic revenues (average of 13.9% of GDP over the last four fiscal years which is below the sub-Saharan average of about 18% of GDP); the increase in domestic borrowing, with its relatively higher cost; and challenges in the project management cycle, which delay project benefits and often lead to cost overruns. The DSA findings also reveal some risks related to other non-debt variables, particularly interest rates and the exchange rate.

In order to keep debt sustainable, Government aims to ensure that the recent improvement in economic performance is sustained. This will be achieved, in part, by ensuring that borrowed resources are used for projects with a growth dividend, and that projects are implemented in the most efficient manner. To this end, Government has put in place a number of measures aimed at improving the project cycle, including the development of a user manual for project development and appraisal, the preparation of an integrated bank of ready projects, strengthening the Development Committee which is responsible for reviewing the feasibility of projects and approving them for inclusion in the Public Investment Plan, as well as capacity building in MDAs to equip officers with project management skills in order to enhance efficiency in project implementation.

Government also needs to fast track the implementation of the Domestic Revenue Mobilization Strategy which once effected is expected to address major bottlenecks / inefficiencies in tax administration and also expand the tax base. This will result into more revenue collections and consequently reduce the borrowing need.

Exports are a key concern for debt sustainability since they represent an important source of foreign currency. Government has continuously focused on enhancing export growth with most of public investment expenditure being directed towards projects aimed at bridging infrastructure gaps to production and transportation. Such projects include roads and Hydro power plants among others. It has also put in place export programs aimed at boosting particular exports for example the 2020 coffee Roadmap.

SECTION ONE: INTRODUCTION

The Government of Uganda conducts an annual Debt Sustainability Analysis (DSA) exercise, with a view to ascertaining the sustainability of the country's current and future debt, as well as identifying the key risks and vulnerabilities associated with the public debt portfolio. The annual DSA is also a requirement under the Charter for Fiscal Responsibility, and is therefore provided for under the Public Finance Management Act, 2015.

Public investment in physical infrastructure is critical if Uganda is to transform from a peasant to a modern and prosperous country as envisaged in the Vision 2040. Both NDP I and NDP II contain a number of flagship projects aimed at achieving the Vision 2040. The majority of these projects require external financing, largely through borrowed resources. Despite these development aspirations, Government remains cognizant of the need to ensure that public debt remains sustainable.

As part of efforts to monitor debt, Government conducts an annual Debt Sustainability Analysis (DSA), where it uses a consistent macroeconomic framework to assess Uganda's current and future debt levels, as well as the country's ability to meet its debt service obligations.

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 Expenditure 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.

The report captures external debt stock as disbursed outstanding debt (DOD). Undisbursed debt feeds into the projections for future years. Domestic debt is captured at cost value.

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

SECTION TWO: METHODOLOGY

Methodology

This DSA was conducted using the revised World Bank/IMF Low-Income Countries' Debt Sustainability Framework (LIC-DSF) analytical tool[1]. The DSF 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 as determined by the Composite Indicator.

Countries have different abilities to handle debt, depending on their policy and institutional strengths; macroeconomic performance; and buffers to absorb shocks. Such abilities are also influenced by the global environment through demand for LICs' exports and remittance inflows into LICs. The Composite Indicator is therefore arrived at by using country specific information on the different factors that impact on the country's debt carrying capacity, i.e through a weighted average of the World Bank's Country Policy and Institutional Assessment (CPIA)[2] score, the country's real GDP growth, remittances, international reserves, and world growth.

The framework provides results for the baseline assumptions and stress test scenarios against the applicable threshold/benchmark. Based on this new criteria, Uganda has now been reclassified from a medium to a strong performer, with the latest CI score of 3.11 as shown in Table 1 below.

Table1: Calculation of the CI Index for Uganda.

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	3.658	1.41	45%
Real growth rate (%)	2.719	272	0.14	5%
Import coverage of reserves (%)	4.052	41.271	1.67	54%
Import coverage of reserves^2 (%)	-3.990	17.033	-0.68	-22%
Remittances (%)	2.022	4.196	0.08	3%
World economic growth (%)	13.520	3.579	0.48	16%
CI Score			3.11	100%
CI rating			Strong	

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

[1] The World Bank and IMF recently revised the LIC DSF, with the revised framework taking effect in mid-2018. This replaced the old framework, which had been in operation since 2012.
[2] 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.

Consequently, the relevant applicable debt burden thresholds for external PPG debt and benchmark for Total Public debt for Uganda are those for a strong performer as highlighted in Table 2 below.

Table 2: Debt Burden Thresholds/ Benchmark by Classification.

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

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

SECTION THREE: RECENT DEVELOPMENTS IN PUBLIC AND PUBLICLY GUARANTEED DEBT

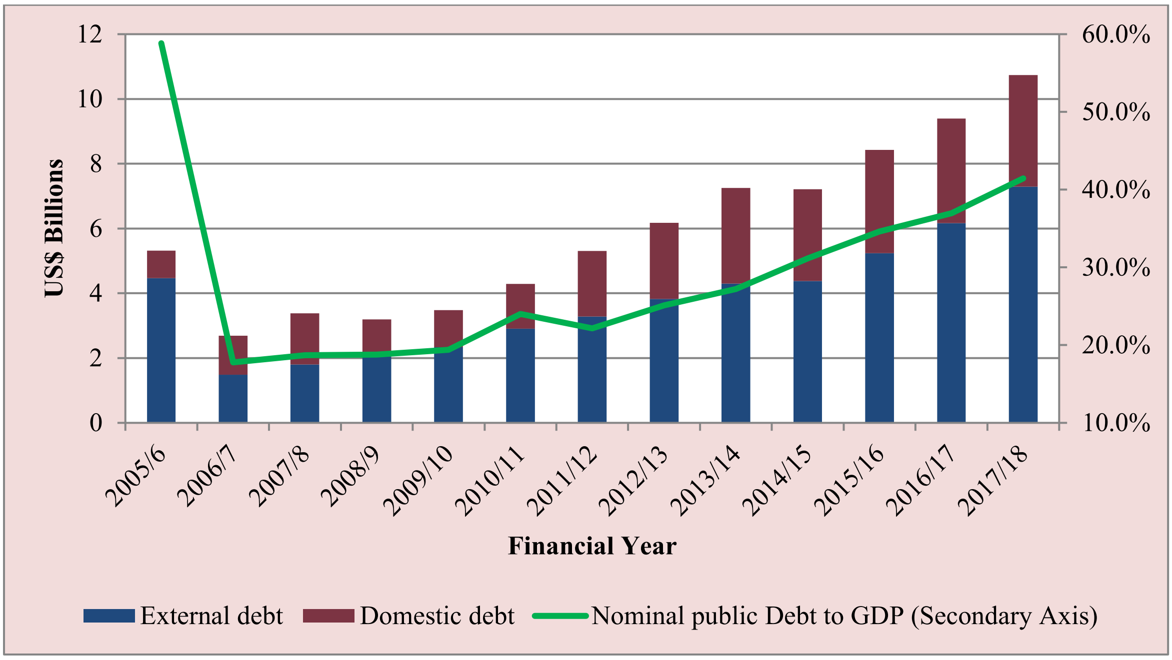
Overview of Uganda's debt

The stock of public sector debt grew from US$ 9.4 billion in FY 2016/17 to US$ 10.74 billion in FY 2017/18, largely driven by the increase in external debt. External debt increased from US$ 6.2 billion in FY 2016/17 to US$ 7.29 billion in FY 2017/18. Domestic debt measured in US Dollars also increased from US$ 3.2 billion to US$ 3.45 billion over the same period.

Public sector debt rose from 37% of GDP in FY 2016/17 to 41.5% in FY 2017/18. Of this, external debt contributed 28.2%, while domestic debt contributed 13.3% of GDP. In Present Value (PV) terms, public sector debt to GDP increased from 27.1% in FY 2016/17 to 30.7% in FY2017/18.

Figure 1 shows the evolution of public debt (both external and domestic) in billions of US Dollars between 2005/6 and 2017/18. The figure also plots trends in total nominal debt to GDP.

Figure 1: Evolution of Public Debt

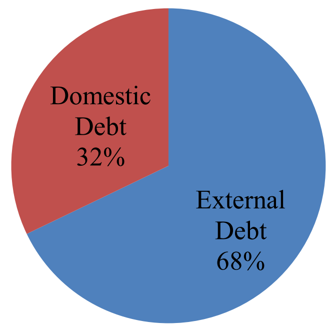


Source: Ministry of Finance, Planning and Economic Development (MEPD)

Composition of Public Debt[3]

In FY2017/18, external debt comprised 68% of total public debt, while the remainder was domestic debt, as shown in Figure 2. The share of domestic debt declined from 34.4% in FY2016/17 to 32.0% in FY2017/18.

Figure 2: Public Debt Composition 2017/18



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

Composition of External Public Debt

Of the total external disbursed and outstanding debt, 67.8% is owed to multilateral creditors; 31.5% to bilateral creditors and 0.7% to commercial banks. Multilateral lenders are dominated by the International Development Association (IDA) of the World Bank, a concessional lender. China (non-concessional lender) dominates the bilateral creditors.

As in recent years, there has been a reduction in the stock of debt owed to multilateral lenders (particularly IDA) in favour of bilateral lenders (particularly China). This is occasioned by the insufficiency of concessional resources to finance the country's development aspirations, occasioning increased recourse to non-concessional borrowing, which is more expensive. Table 3 provides the distribution of external debt by creditor category.

Table 3: Distribution of External Debt Stock by Creditor Category (%)

Creditor Category	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Multilateral Creditors	90	88	87	87	86	77	71	68
o/w IDA	62	59	59	58	56	48.9	45	42
Bilateral Creditors	10	12	13	13	14	23	27	32
Non Paris Club	8	10	11	11	12	20	23	25
o/w China	3	7	8	8	10	18	20	24
Paris Club	2	2	2	2	2	3	4	7
o/w Japan	1	1	1	1	2	2	3	4
Commercial Bank	-	-	-	-	-	-	3	1

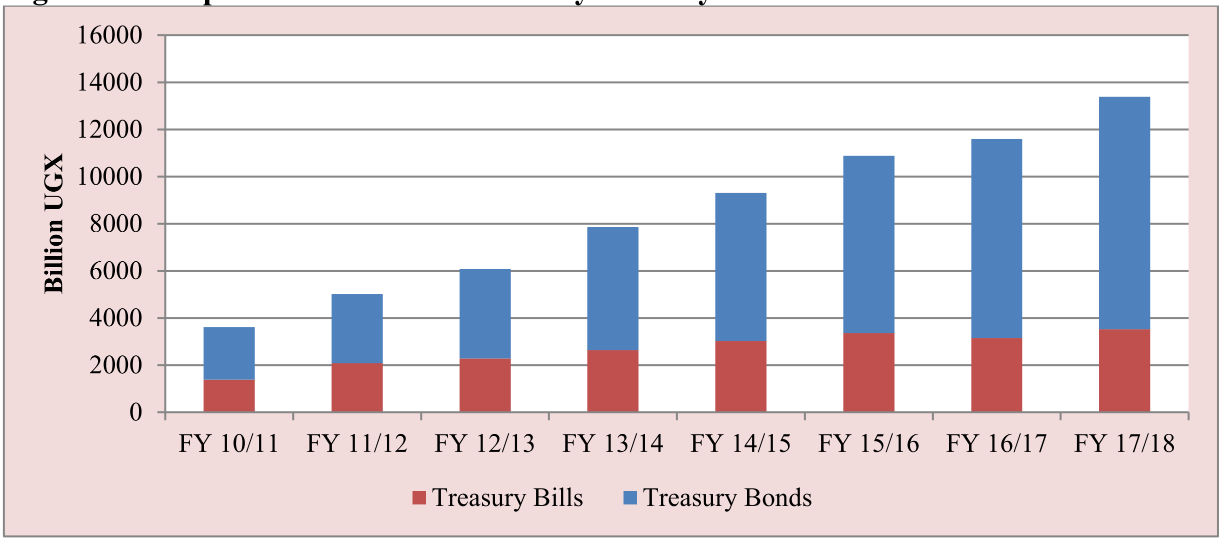
Source: Ministry of Finance, Planning and Economic Development (MEPD)

[3] 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.

Composition of Domestic Debt

The share of longer term dated treasury instruments (treasury bonds) in public domestic debt has been gradually increasing over the years (Figure 3). This is consistent with Government's decision to issue more long-term debt so as to reduce the refinancing risk associated with the portfolio, and to smoothen the redemption profile. As at June 2018, short-term debt (treasury bills) constituted 26.3% of total domestic debt while long-term debt (treasury bonds) accounted for the remaining 73.7%. Figure 3 plots the distribution of domestic debt between treasury bills and treasury bonds.

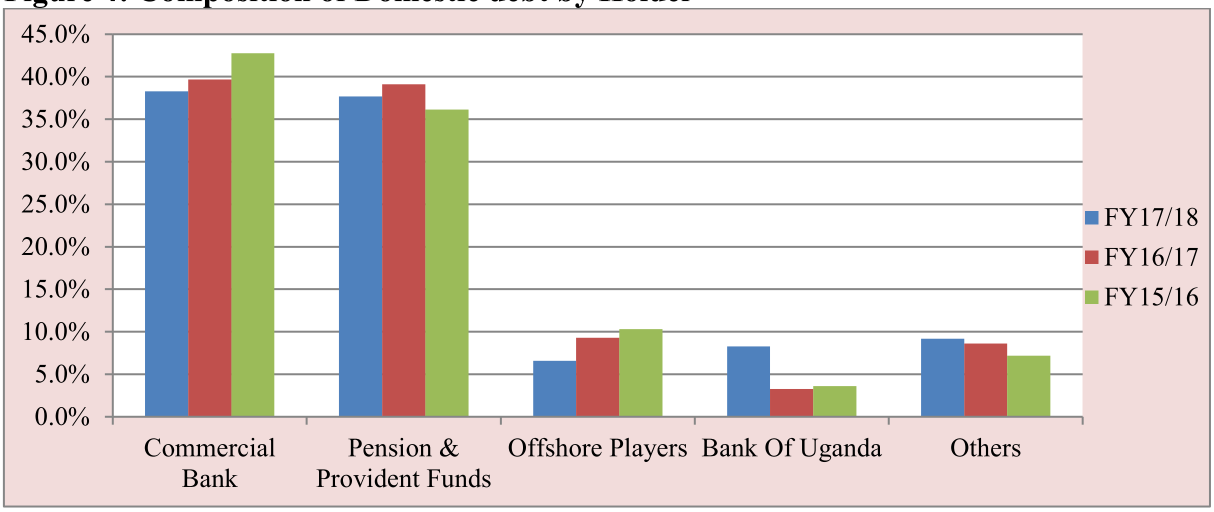
Figure 3: Composition of Domestic debt by treasury instrument



Source: Bank of Uganda

Composition of Domestic Debt by Holder

Figure 4: Composition of Domestic debt by Holder



Source: Bank of Uganda
Note: "Others" includes Retail Investors, Institutional Investors, Insurance Companies, Deposit Protection Funds, and Other Market Intermediaries.

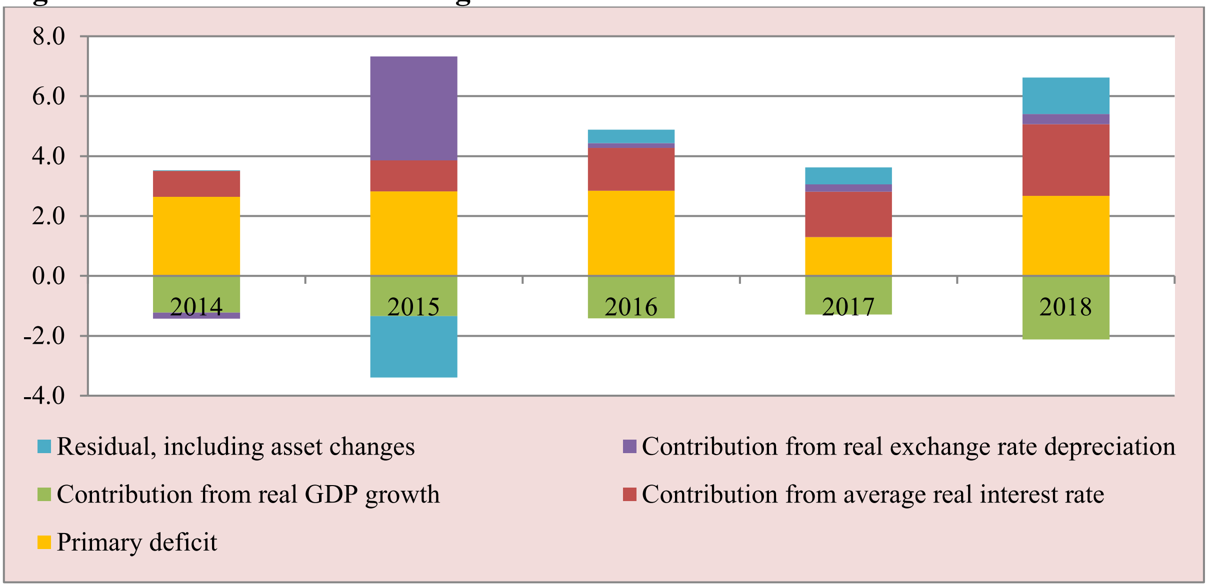
As at end June 2018, the largest share of domestic debt was owed to commercial banks (42.8%) followed closely by pension and provident funds at 36.1%. The holding by commercial banks largely comprised of short-term instruments (treasury bills), while pension and provident funds held the largest share of treasury bonds.

Drivers of Debt Accumulation

The primary deficit has been the major factor contributing to the increase in Uganda's debt in recent years. This is consistent with Government's policy of frontloading infrastructure spending to enhance the country's productive capacities. More recently, we observe that the real interest rate is gaining prominence in contributing to rising debt levels. This is due to the higher average real interest rate on public debt, largely explained by increasingly less concessional external debt.

The main factor mitigating the increase in debt has been growth in real GDP. For debt to remain sustainable, it is critical that real GDP continues to grow at a rate higher than the average real interest rate on Government debt. A situation where the real interest rate on public debt is consistently higher than the real GDP growth rate would result in unsustainable debt dynamics.

Figure 5: Contributions to Changes in Public Debt



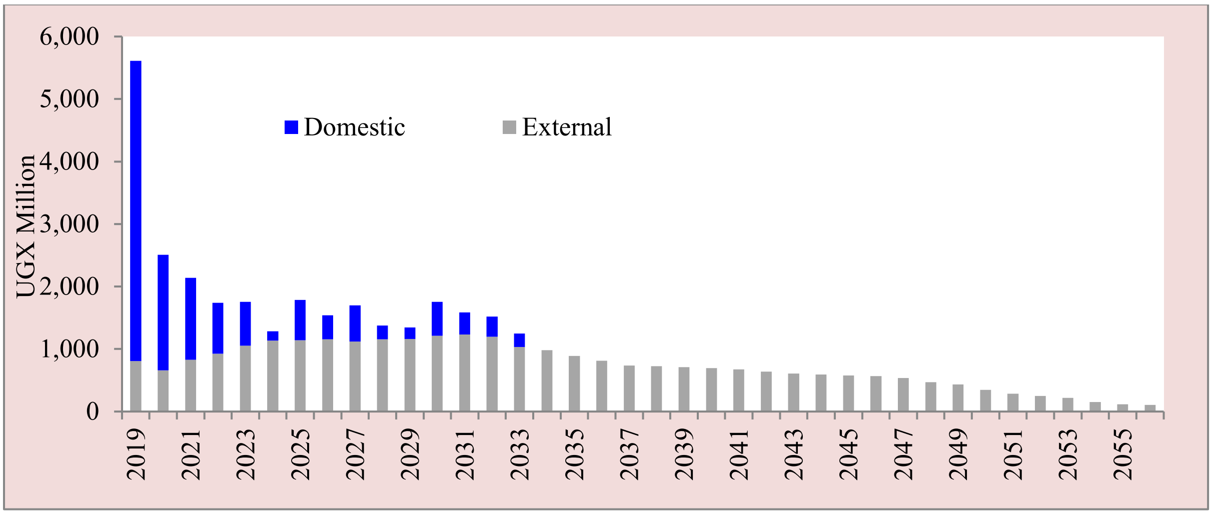
Source: Ministry of Finance, Planning and Economic Development (MEPD)

Redemption Profile

As shown in Figure 6, UGX 5.67 Trillion (13.6% of total disbursed and outstanding public debt) will fall due in the next year (FY2018/19). Whereas this is below the PDMF threshold of 20%, it represents a major risk associated with Government's ability to refinance maturing debt. This is particularly the case with domestic debt, 36.8% of which matures in the next year.

In a bid to reduce the refinancing risk, Government has put in place measures to increase issuance of longer dated instruments on the domestic debt market.

Figure 6: Redemption Profile as at end June 2018



Source: Ministry of Finance, Planning and Economic Development

Cost and Risk Profile of the Existing Debt

Cost of Debt

Interest Payments to GDP

Although total interest payments to GDP remained stable at 2.3% between June 2017 and June 2018, interest payments on domestic debt to GDP declined by 0.2 percentage points from 2.0% in June 2017 to 1.8% in June 2018. Over the same period, however, interest payments on external debt increased from 0.3% to 0.5% of GDP. Table 4 summarizes the cost and risk profile of the existing debt portfolio.

Table 4: Cost and risk profile of the existing debt.

Cost and Risk indicators		Jun-17			Jun-18		
		External	Domestic	Total	External	Domestic	Total
Cost of debt	Interest payment as % GDP	0.3	2.0	2.3	0.5	1.8	2.3
	Weighted Av. IR (%)	1.4	15.6	6.3	1.7	14.0	5.5
Refinancing risk	ATM (years)	16.1	3.7	11.9	15.0	3.8	11.5
	Debt maturing in 1yr (% of total)	2.7	38.4	14.8	2.9	36.8	13.6
	Debt maturing in 1yr (% of GDP)	0.6	4.8	5.4	0.8	4.8	5.6
Interest rate risk	ATR (years)	15.8	3.7	11.7	14.6	3.8	11.2
	Debt refixing in 1yr (% of total)	6.0	38.4	17.0	8.9	36.8	17.7
	Fixed rate debt (% of total)	96.6	100.0	97.8	93.9	100.0	95.8
FX risk	FX debt (% of total debt)			66.0			68.4
	ST FX debt (% of reserves)			4.8			6.5

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

Weighted Average Interest Rate

The external Weighted Average Interest Rate (WAIR) has undergone a steady rise over the years, increasing from 0.9% in June 2015 to 1.7% in June 2018. This is attributed to the gradual shift from traditional concessional financing to non-concessional modes of financing. The decline in the WAIR for total debt from 6.3% in June 2017 to 5.5% in June 2018 was largely on account of the declining domestic interest rates during the period.

Refinancing / Rollover risk

Average Time to Maturity

The weighted average time to maturity (ATM) of all the principal payments in the debt portfolio remained relatively stable at 11.5 years in June 2018 from 11.9 years in June 2017 despite a more than one percentage point drop in the external debt ATM, from 16.1% in June 2017 to 15.0% in June 2018. The ATM of the external debt stock has declined over time, largely due to the increased non-concessional borrowing characterized by shorter maturities. Domestic debt continues to pose noticeable refinancing risks despite the improvement in its ATM, which increased from 3.7 years in June 2017 to 3.8 years in June 2018. This increase is attributed to the scaled-up issuance of longer-dated Government paper.

Debt Maturing in One Year

Debt maturing in one year as a percentage of total debt improved slightly, declining to 13.6% in June 2018 from 14.8% in June 2017. The improvement was largely driven by the increased issuance of longer dated securities as reflected in the decline in domestic debt maturing in one year by 1.6 percentage points during this period. In contrast, the external debt maturing in one year as a percentage of the total debt increased from 2.7% to 2.9% largely on account of shorter maturities on new external debt.

Interest Rate Risk

As at June 2018, 95.8% of Uganda's debt portfolio was on fixed interest rates, indicating limited exposure to interest rate risk. However, the ratio declined by two percentage points from 97.8% in June 2017, on account of the recent contraction of debt on variable interest rates. All variable rate debt is externally sourced as domestic debt is exclusively contracted on fixed interest rates.

Also, some variable rate loans have recently been hedged against the interest rate fluctuation, which further reduces the interest rate risk exposure of the public debt portfolio.

Average Time to Re-fixing

The Average Time to Re-fixing (ATR) of the total debt declined slightly to 11.2 years in June 2018 compared to 11.7 years in June 2017. This was largely on account of the reduction in the average time external debt would be subjected to new interest rates, 14.6 years down from 15.8 years in June 2017, consistent with the aforementioned reduction of the external debt ATM. This is further consistent with the decline in the fixed rate external debt as a percentage of total external debt, from 96.6% in June 2017 to 93.9% in June 2018.

Exchange Rate Risk

A greater share of Uganda's public debt is denominated in foreign currency, 68.4% of the total portfolio compared to 66% in June 2017. This indicates that Uganda is more exposed to risks associated with exchange rate shocks. In addition, foreign debt maturing in one year as a percentage of reserves increased from 4.8% in June 2017 to 6.5% in June 2018.

SECTION FOUR: BASELINE ASSUMPTIONS

Macroeconomic Assumptions

Real GDP is projected to grow at 6.3% in FY 2018/19, slightly over the 6.1% growth registered in FY 2017/18. Growth will be supported by both public and private consumption and investment. The accommodative monetary policy as well as a reduction in non-performing loans are expected to lead to a further recovery in private sector credit which will subsequently support economic growth. In the medium term, real GDP will grow at an average of 6.4%, before increasing to an annual average of 6.9% in the long run. Growth over the medium to long term will be driven by the commencement of oil and gas production, as well as increased general productivity in the economy following the completion of major infrastructure projects.

Annual headline inflation is projected to decrease to 3.1% in FY 2018/19 from 3.4% in FY 2017/18. Inflation will remain below the medium term target of 5% largely due to subdued food crop prices and a relatively stable exchange rate.

Fiscal Assumptions

Total domestic revenues are projected to increase by 0.8% of GDP in FY 2018/19 due to improved efficiency in tax administration, introduction of new tax measures as well as reforms in the tax system. In the medium term, domestic revenue to GDP is projected to increase on average by 0.6 % of GDP per annum before peaking at 23.3% in the long run. This increase in revenue will be supported by efficiency gains from implementation of the medium-term Domestic Revenue Mobilization Strategy (DRMS) and oil and gas related revenues.

Consistent with the Vision 2040, a number of development projects are expected to be implemented to transform the economy from a peasant to a prosperous country. Government expenditure is therefore projected to increase from 20.1% of GDP in FY2017/18 to an average of 23.5 % in the medium term, before averaging 24.8% of GDP in the long run. The fiscal deficit including grants will expand from 4.9% of GDP in FY2017/18 to 5.2% in FY2018/19. Thereafter, the deficit is projected to average at 5.6% in the medium term. In the long run, the deficit is projected to average at 2.6% due to an increase in domestic revenue from oil receipts, as well as the completion of major infrastructure projects. Table 5 summaries the fiscal assumptions used in the DSA.

Table 5: Summary of Fiscal Assumptions.

FY	2017/18 (Outturns)	2018/19	2019/20	2020/21	2021/22	2022/23
Fiscal projections (Shs Bn)						
Revenue and Grants	15,281	17,949	22,267	24,011	27,038	30,733
Primary Expenditure	17,923	21,022	29,110	29,237	31,066	33,311
Total Interest Expenditure	2,260	2,696	3,091	3,186	3,320	3,524
Total Expenditure	20,183	23,718	32,201	32,423	34,386	36,835
Primary Deficit	2,642	3,073	6,843	5,226	4,027	2,578
Overall Budget Deficit	4,902	5,769	9,934	8,412	7,348	6,103
As a percentage of GDP						
Revenue and Grants	15.2%	16.3%	18.3%	17.6%	17.8%	18.1%
Total Expenditure	20.1%	21.6%	26.4%	23.8%	22.7%	21.7%
Primary Deficit	2.6%	2.8%	5.6%	3.8%	2.7%	1.5%
Overall Budget Deficit	4.9%	5.2%	8.2%	6.2%	4.8%	3.6%
Memorandum Items						
Real GDP Growth	6.1%	6.3%	6.3%	6.2%	6.0%	6.5%
Nominal GDP (Shs Bn)	100,531	110,024	121,858	136,115	151,776	169,621

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

Financing Assumptions

In light of the high interest costs associated with domestic borrowing; and with a view to ensuring adequate growth of private sector credit, Government will scale back on domestic financing in the medium to long term to no more than 1% of GDP. As such, the deficit will be largely financed using external resources during this period.

Despite the desirability and continued preference for concessional external resources, Government is cognizant of the fact that such resources are insufficient to meet Uganda's development financing needs. As such, Uganda will continue to utilize some non-concessional financing, although this will be done in a manner that does not jeopardize debt sustainability.

Balance of Payments Assumptions

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

In the long run, the values of both exports (non-oil) and imports of goods and services were forecast as a constant share of GDP based on the average of the last four years of the medium term. In addition, oil exports were forecast to start in 2023/24, in line with oil revenue projections from the macroeconomic assumptions.

The income inflows/outflows forecasts in the medium term were based on LIBOR, and computed as the stock of financial assets/liabilities in the previous period, multiplied by the LIBOR rate for the current period. LIBOR rate projections were taken from the IMF's WEO.

Inflows of private transfers were forecast to grow in line with nominal GDP growth of advanced economies in the medium term. In the outer years, these flows were assumed to grow at an average rate of 2.6%.

Foreign Direct Investment (FDI) inflows were projected to grow in line with Uganda's nominal GDP growth in dollar terms in the medium term, and were forecast as a constant share of GDP in the long run.

The stock of gross reserves was fixed at 4.5 months of future import cover throughout the long run, in line with the EAMU convergence criteria.

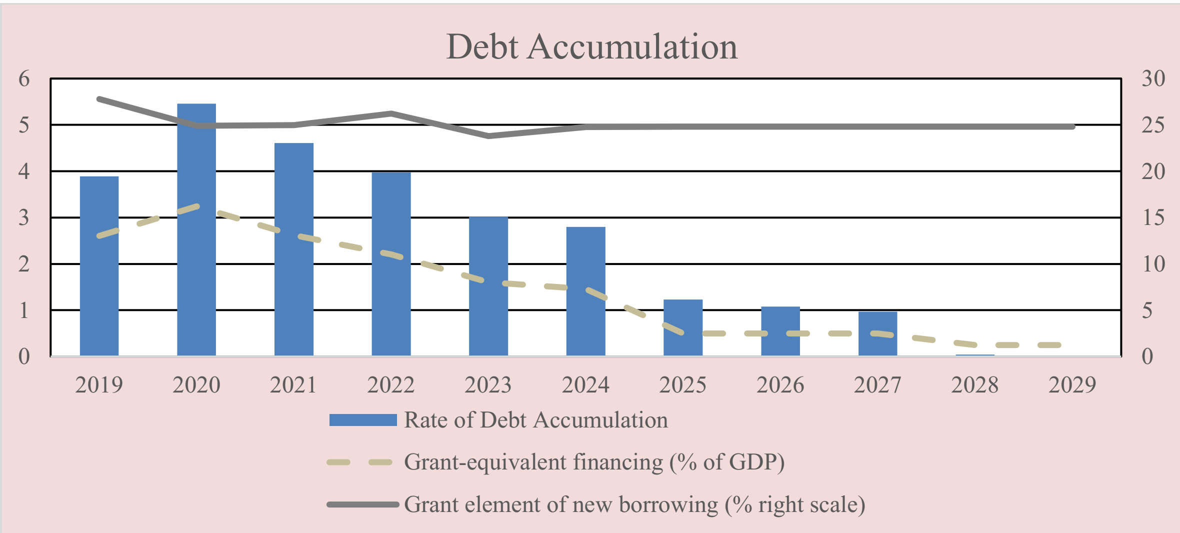
SECTION FIVE: DSA RESULTS AND ANALYSIS

This section presents the findings of the analysis. The main finding is that Uganda's external public and publicly guaranteed debt is at low risk of debt distress and total public debt-to-GDP ratio remains below its benchmark under both the baseline and the most extreme shock, which culminates into low overall risk of debt distress. Total public debt is found to be sustainable over the medium and long term.

Sustainability of External Public and Publicly Guaranteed Debt

External debt is projected to increase in the medium term, in line with the infrastructure expansion discussed in the previous section. As shown in Figure 7, debt accumulation after the medium term is projected to decline significantly, as major infrastructure projects are completed and oil revenues become available, leading to a reduction in Government's borrowing requirements. Throughout the projection period, there will be a reduction in both the grant-equivalent financing as a percentage of GDP and the grant element of new borrowing, as the country is expected to graduate to middle income status and have less access to grants and concessional loans.

Figure 7: Debt Accumulation



Source: Ministry of Finance Planning and Economic Development. (MEPD)

External PPG Debt Burden Indicators

All PPG external debt burden indicators remain below their indicative thresholds over the projection period under both the baseline and most extreme shock case. Likewise, the debt service indicators are projected to remain comfortably below their respective indicative thresholds, reflecting low risk of liquidity challenges, despite the recent increase in the rate of debt accumulation. This is largely due to the biggest portion of Uganda's external debt being on concessional terms. Table 6 shows the external DSA results.

Table 6: Summary of External PPG Debt Sustainability Indicators (%)

	LIC DSF Thresholds	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25
SOLVENCY RATIOS										
PV of External Debt to GDP	55	14.4	16.4	19.2	22.6	24.5	25.9	26.4	26.5	25.1
PV of External Debt to Exports	240	77.5	84.6	101.2	121.0	137.7	140.5	143.2	141.0	117.7
LIQUIDITY RATIOS										
External Debt Service to Exports	21	5.6	5.8	5.3	4.9	6.4	6.8	7.6	8.0	7.5
External Debt Service to Revenue	23	7.3	7.8	6.7	5.5	6.9	7.4	8.0	8.5	8.3

Source: Ministry of Finance Planning and Economic Development (MEPD)

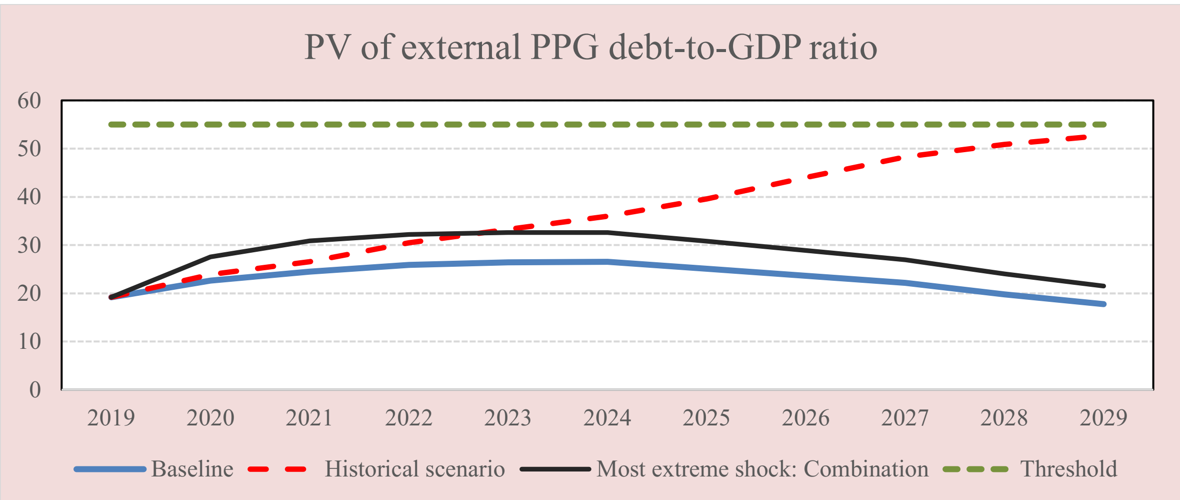
Solvency Indicators

PV of External PPG Debt to GDP Ratio.

The PV of External Public and Publicly Guaranteed (PPG) debt to GDP is projected to increase from 16.4% in FY2017/18 to 19.2% in FY2018/19. This ratio will continue to increase throughout the medium term and will peak at 26.5% in FY2023/24, before declining to 19.8% in FY 2027/28. Despite the increased rate of external debt accumulation, this ratio is forecast to remain well below its indicative threshold all through the projection period as highlighted in Figure 8.

In nominal terms, the external PPG debt to GDP ratio is projected to increase from 28.2% in FY2017/18 to 28.6% the following year and then peak at 36.3% in FY2021/22 & FY2022/23. This ratio will gradually decline thereafter.

Figure 8: PV of External PPG Debt to GDP (%)



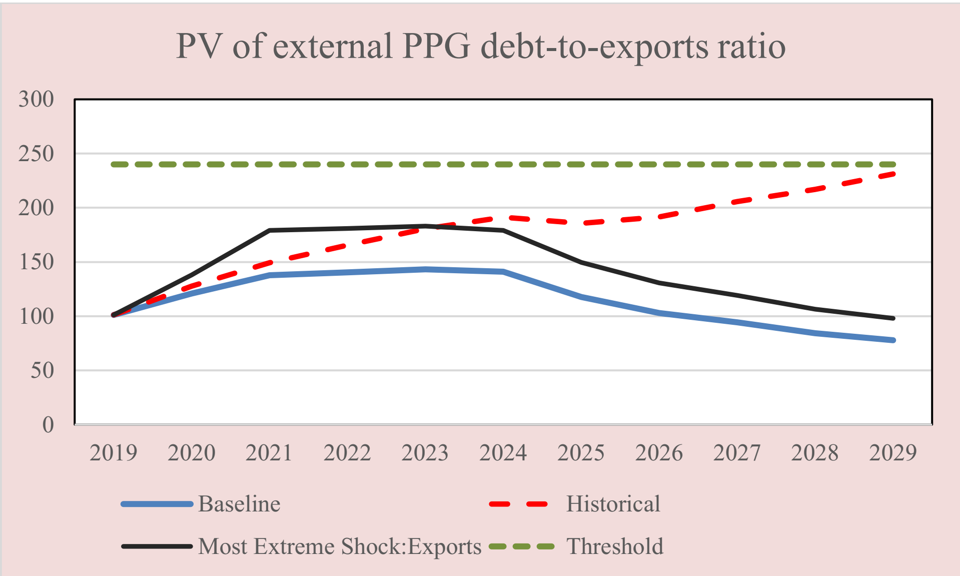
Source: Ministry of Finance Planning & Economic Development (MEPD

PV of External PPG Debt to Exports

The PV of external PPG debt to exports of goods and services is projected to remain below it's in indicative threshold of 240 under the baseline case. A shock to exports[4] raises the PV of external PPG debt to exports to a peak of 183.1% in FY2022/23, which still remains below the indicative threshold.

It is however important to note that exports constitute an important variable in the analysis of external debt sustainability since they are a critical source of foreign currency, which a country needs to service its foreign currency denominated debt. This therefore implies that Uganda needs to continuously improve its export performance especially in the medium term so as to enhance her 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 (%)



Source: Ministry of Finance Planning and Economic Development (MEPD)

Liquidity Indicators

The LIC-DSF uses two liquidity indicators for external debt service: external debt service to exports of goods and services; and external debt service to domestic revenue.

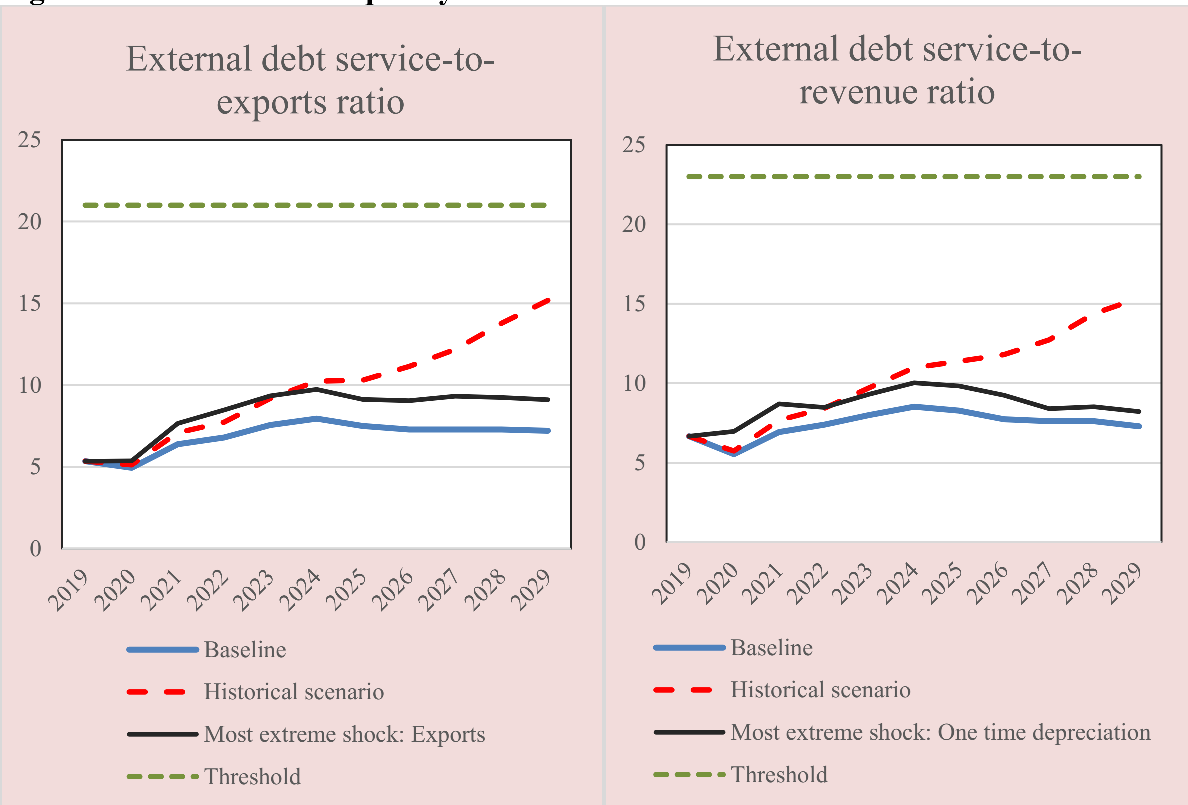
As shown in Figure 10, the two liquidity ratios remain below their respective thresholds throughout the projection period in both the baseline and most extreme shock scenarios. This means that the country will be in position to meet its debt obligations when they fall due, even

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

in the event of drastic shocks to the economy. However, the ratios increase gradually throughout the medium-term, indicating an increase in the debt service burden.

The increase in the ratio of external debt service to revenue implies that external debt service is growing faster than revenue and that consequently debt service will continuously take up an increasing share of revenue at the expense of allocations to the other sectors in the economy that actually enhance economic growth and poverty alleviation. This, therefore, underscores the importance of Government's current efforts towards improving revenue collections through the implementation of the Domestic Revenue Mobilization Strategy.

Figure 10: Evolution of Liquidity Indicators for External PPG Debt



Source: Ministry of Finance, Planning and Economic development (MEPD)

Sustainability of Total Public Debt

Total Public debt is a more comprehensive measure of the country's indebtedness, as it encompasses both domestic and external PPG debt. The DSF uses 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 CI classification, helps to highlight the risks that could be stemming from domestic debt. Public debt ratios (Table 7) show that despite the increased rate of debt accumulation in the medium term, Uganda's public debt will remain sustainable over the medium and long term.

Table 7: Summary of Public Debt Sustainability Indicators.

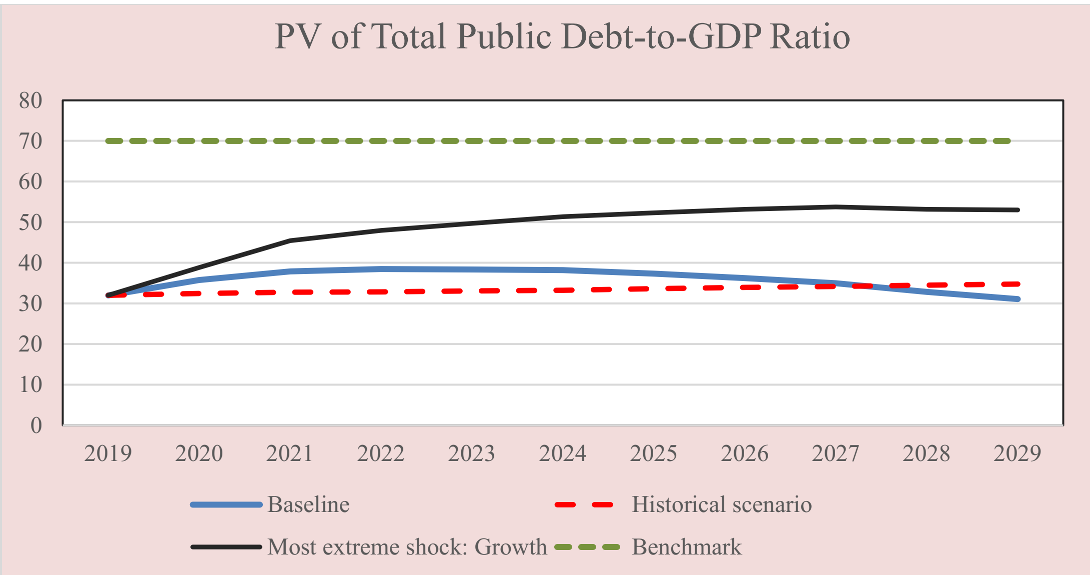
Financial Year	LIC DSF Benchmark	16/17	17/18	18/19	19/20	20/21	21/22	22/23
Nominal debt to GDP		37.0	41.5	42.2	46.4	48.6	49.0	48.4
PV of Debt to GDP	70	27.1	30.7	32.0	35.8	37.9	38.5	38.4

Source: Ministry of Finance Planning and Economic Development (MEPD)

Nominal public sector debt is projected to increase from 41.5% of GDP in FY2017/18 and peak at 49.0% of GDP in FY2021/22. The PV of public sector debt to GDP is projected to increase from 30.7% in FY2017/18 to a peak of 38.5% in FY2021/22. This still remains below the threshold of 50% contained in the Charter for Fiscal Responsibility, Public Debt Management Framework (PDMF) and the East African Monetary Union (EAMU) Protocol.

Despite this, the high rate of debt accumulation in the medium term compared to previous years highlights the need for Government to exercise caution when taking on new debt. Also important to note is that a shock to economic growth could result in the ratio of PV of total public debt to GDP breaching the 50% threshold contained in the PDMF, the EAMU protocol and Charter for Fiscal Responsibility. Figure 11 maps the evolution of the PV of total public debt to GDP over the projection horizon against the applicable LIC DSF benchmark. The Black line maps the trajectory of this ratio in the event of the most extreme shock to Growth, and this surpasses the 50% mark in FY2023/24.

Figure 11: PV of Public Debt to GDP

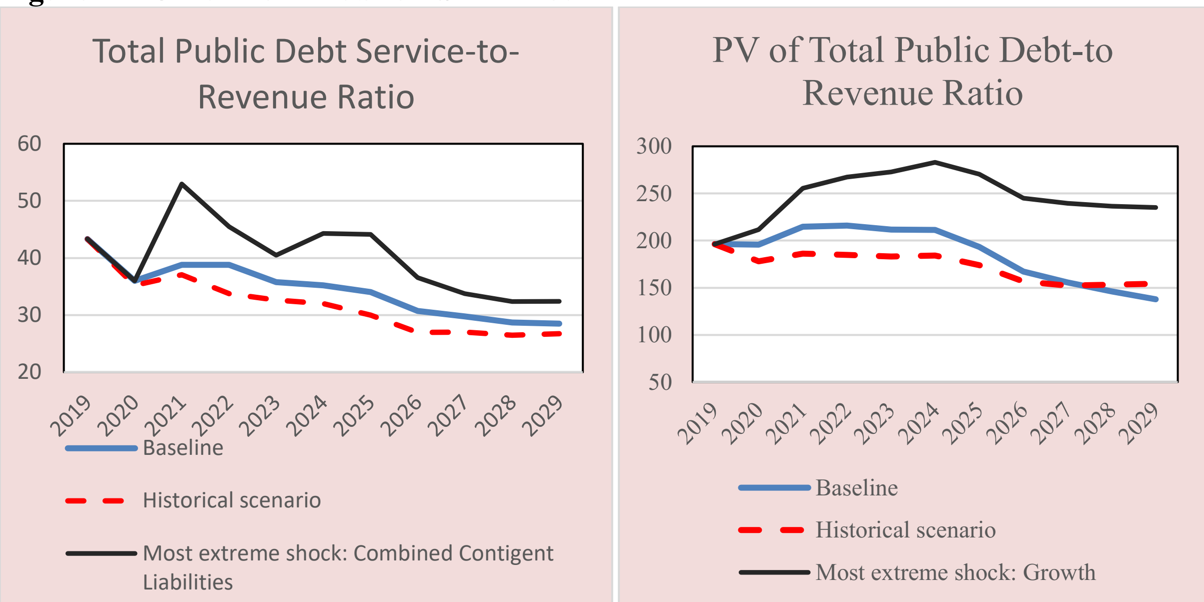


Source: Ministry of Finance, Planning and Economic Development (MEPD)

The increase in public debt over the medium term is consistent with Government's commitment to enhance the productive capacity of the economy by closing the large infrastructural gap, with particular focus on the energy and transport sectors. A significant proportion of these infrastructure projects will be financed using loans from external development partners, on both concessional and non-concessional terms. Government will continue to prioritize the use of concessional financing over non-concessional resources.

The Public DSA also provides ratios for Total Public debt service-to-Revenue ratio and PV of Public debt service-to-Revenue ratio as shown in Figure 12 below. These however do not have any associated thresholds/benchmarks. The sharp increase in the debt service ratio to revenue in the first years of the medium term implies that the cost of debt will be rising faster than the growth in revenue. Debt service will therefore be taking up a greater share of revenue.

Figure 12: Other Total Public DSA Ratios



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

Uganda's Overall Risk Rating

The model-based signal for the risk of public external debt distress is derived by comparing the projected PPG external debt indicators with their indicative thresholds for the first 10 years of the projection both under the baseline and stress-test scenarios 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 (Arrears)	

Source: IMF/WB LIC-DSF Guidance Notes.

With reference to the mechanical approach for external risk rating outlined in Table 8 above, Uganda's **External PPG debt is rated as being at low risk of debt distress**.

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, plus the PV of total public debt-to-GDP, which is compared with its indicative benchmark. The risk signal is determined as follows:

• **Low overall risk of public debt distress** if the PPG 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 PPG external debt has a moderate risk signal or if the PPG 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.

This therefore means that Uganda's debt profile is faced with **Low overall risk of public debt distress**, since it's PPG external debt has a low risk signal and the PV of total public debt-to-GDP ratio remains below its indicative benchmark under both the baseline and the most extreme shock (see figure 11).

Further Analysis of Domestic Debt

In Uganda, Public debt Management is guided by the provisions of the Public Debt Management Framework (PDMF) of 2013, and this provides a number of benchmarks associated with domestic debt. These benchmarks, along with the performance in recent years, are provided in Table 9.

Table 9: Domestic Debt Sustainability Benchmarks

	Benchmark	FY13/14	FY14/15	FY15/16	FY16/17	FY17/18
Domestic Debt/GDP	<20%	10.4%	12.2%	13.1%	12.8%	13.2%
Domestic Debt Interest Payments/Revenue (excl grants)	<15%	10.7%	11.4%	13.1%	15.1%	13.3%
Domestic Debt Interest Payments/Total expenditure	<10%	7.5%	8.0%	9.0%	11.7%	10.5%
Domestic Debt Stock/ Private Sector Credit	<75%	79%	85%	95%	95.7%	99.9%

Source: MEPD, Public Debt Management Framework (2013)

Further analysis of domestic debt reveals vulnerabilities relating to domestic interest costs as well as a possibility of crowding out the private sector. The indicator of domestic interest cost to Government expenditure measures the extent to which budgetary resources are allocated to debt service. The results indicate that interest payments for domestic debt are putting an increasing burden on the budget (10.5% of total expenditure in FY17/18), and thereby depriving resources from sectors that have a direct impact on welfare

One other indicator that needs to be monitored closely is the ratio of the domestic debt stock to private sector credit (PSC). This is a particularly important indicator because it captures the crowding-out effect of Government borrowing on the private sector. The private sector plays a key role in investment growth, and requires a healthy supply of credit to enhance its contribution to economic growth and development. Government actions that hamper private sector credit growth also hamper private investment growth. This highlights the need for Government to continue efforts aimed at moderating domestic borrowing.

To address these vulnerabilities, Government is committed to reducing domestic borrowing to not more than 1% of GDP per year, in the medium term.

SECTION SIX: CONCLUSION AND POLICY RECOMMENDATIONS

To achieve Uganda's development aspirations, Government has put in place a program to bridge the country's significant infrastructure deficit, particularly in the transport and energy sectors. This has led to some increase in debt levels and thus exposure to a number of vulnerabilities. This notwithstanding, this DSA finds that Uganda's debt remains sustainable with low risk of debt distress.

The PV of total public debt is below the threshold of 50% of GDP stipulated by the Charter for Fiscal Responsibility and the EAMU Protocol. Moreover, projections indicate that this threshold will not be breached at any point during the next 20 years, except in the most extreme shock to economic Growth. Even then, this would still remain below the LIC DSF indicative benchmark of 70%.

In addition, the external debt liquidity ratios (debt service to revenue and debt service to exports) also remain below their respective thresholds in both the baseline and shock scenarios, meaning that Uganda is unlikely to face challenges with regard to servicing its debt.

The major risks to the debt outlook relate to the slow growth and diversification of exports; the increased rate of debt accumulation, particularly on non-concessional terms; low tax revenues; the increase in domestic borrowing; and challenges in the project management cycle, which delay project benefits and often lead to cost overruns.

Slow export growth, in particular, is a major risk for external debt sustainability. Exports are a major source of foreign currency, which is required to service external debt. Government has therefore increased focus on export promotion programs, such as the 2020 Coffee Roadmap. In a bid to boost GDP growth, which contributes significantly to debt sustainability, Government will concentrate on borrowing only for projects which generate significant income and offer a high growth dividend.

Government will also continue to promote efforts aimed at enhancing domestic revenue mobilisation, which will reduce the need to borrow resources to finance the budget. In particular, Government is expediting the implementation of the new Domestic Revenue Mobilization Strategy.

Finally, Government has also instituted a number of public investment management reforms, including the development of a user manual for project development and appraisal, the preparation of an integrated bank of ready projects, as well as capacity building in MDAs to equip officers with project management skills in order to enhance efficiency in project implementation.

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 in the near future, implying a 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%. These typically come from multilateral creditors such as the IDA and the ADF/B.

4. **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.

5. **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.

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

7. **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).

8. **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.

9. **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.

10. **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. The benchmarks by which Uganda is assessed, such as those in the LIC-DSF; the PDMF and the EAMU convergence criteria, are all specified in PV terms.

11. **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.

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

13. **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.

14. **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.

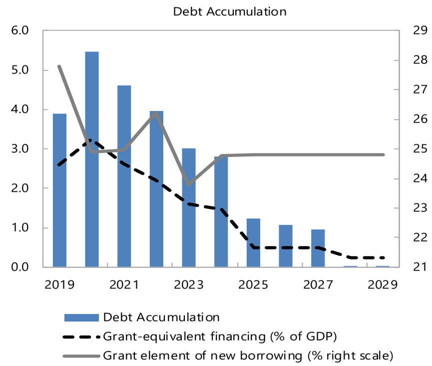
APPENDICES

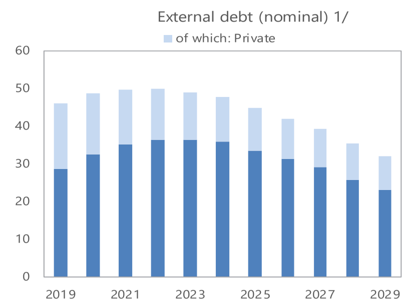
Table 1. Uganda: External Debt Sustainability Framework, Baseline Scenario, 2016-2039

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 8/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
External debt (nominal) 1/	41.0	43.8	46.6	46.1	48.7	49.7	49.8	49.0	47.8	32.1	17.9	33.1	44.0
of which: public and publicly guaranteed (PPG)	21.5	24.3	28.1	28.6	32.5	35.1	36.3	36.3	35.9	23.0	12.3	18.0	31.6
Change in external debt	5.5	2.8	2.8	-0.5	2.6	1.0	0.2	-0.9	-1.2	-3.2	-4.8		
Identified net debt-creating flows	7.3	-1.2	1.0	1.4	1.1	2.4	-0.2	-0.1	-0.6	-2.7	4.2	2.8	-1.5
Non-interest current account deficit	4.4	2.7	5.0	6.4	7.3	8.3	4.6	4.9	4.6	2.3	7.8	6.2	3.8
Deficit in balance of goods and services	8.7	7.0	8.6	10.6	11.0	11.9	9.5	9.5	9.0	6.6	9.3	10.6	8.2
Exports	19.4	18.7	19.4	19.0	18.7	17.8	18.4	18.4	18.8	22.8	19.0		
Imports	28.1	25.7	28.0	29.6	29.7	29.7	27.9	27.9	27.8	29.4	28.3		
Net current transfers (negative = inflow)	-5.9	-6.0	-5.2	-5.5	-5.0	-4.6	-4.2	-3.9	-3.6	-2.3	-1.0	-5.9	-3.7
of which: official	-4.9	-5.3	-4.7	-4.8	-4.4	-4.1	-3.8	-3.5	-3.3	-2.2	-1.0		
Other current account flows (negative = net inflow)	1.6	1.7	1.6	1.2	1.3	1.0	-0.6	-0.7	-0.8	-2.0	-0.5	1.6	-0.7
Net FDI (negative = inflow)	-2.0	-1.7	-2.0	-2.9	-4.4	-4.3	-3.0	-3.0	-3.0	-3.1	-3.0	-2.6	-3.3
Endogenous debt dynamics 2/	4.8	-2.2	-1.9	-2.0	-1.7	-1.7	-1.8	-2.0	-2.2	-1.8	-0.5		
Contribution from nominal interest rate	0.4	0.6	0.6	0.8	0.9	1.0	0.9	1.0	1.0	0.7	0.4		
Contribution from real GDP growth	-1.9	-1.5	-2.5	-2.8	-2.7	-2.7	-2.7	-3.0	-3.1	-2.6	-0.9		
Contribution from price and exchange rate changes	6.3	-1.4	0.0	...	...	...	...	...	...	...	...		
Residual 3/	-1.8	3.9	1.8	-2.0	1.5	-1.4	0.3	-0.7	-0.6	-0.6	-9.0	0.2	0.1
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	19.2	22.6	24.5	25.9	26.4	26.5	17.8	9.8		
PV of PPG external debt-to-exports ratio	...	...	84.6	101.2	121.0	137.7	140.5	143.2	141.0	77.8	51.4		
PPG debt service-to-exports ratio	4.3	5.6	5.8	5.3	4.9	6.4	6.8	7.6	8.0	7.2	4.5		
PPG debt service-to-revenue ratio	6.0	7.3	7.8	6.7	5.5	6.9	7.4	8.0	8.5	7.3	6.0		
Gross external financing need (Billion of U.S. dollars)	1.1	0.8	1.5	1.7	1.6	2.3	1.6	1.9	2.0	1.5	15.7		
Key macroeconomic assumptions													
Real GDP growth (in percent)	4.8	3.9	6.1	6.3	6.3	6.2	6.0	6.5	7.0	8.1	5.7	6.4	7.1
GDP deflator in US dollar terms (change in percent)	-15.1	3.5	0.1	-0.4	2.5	4.6	3.8	2.8	2.8	3.1	29.0	-1.2	2.9
Effective interest rate (percent) 4/	1.0	1.7	1.5	1.7	2.2	2.3	2.0	2.1	2.2	2.3	2.4	1.2	2.2
Growth of exports of G&S (US dollar terms, in percent)	-5.0	3.6	10.4	3.4	7.5	5.7	13.9	9.6	12.4	8.4	10.1	7.1	11.9
Growth of imports of G&S (US dollar terms, in percent)	-11.3	-1.8	15.7	12.0	9.4	11.1	3.2	9.6	9.7	13.3	10.5	5.6	10.7
Grant element of new public sector borrowing (in percent)	...	...	...	27.8	24.9	25.0	26.2	23.8	24.8	24.8	21.4	...	25.1
Government revenues (excluding grants, in percent of GDP)	13.9	14.2	14.4	15.2	16.7	16.4	16.9	17.4	17.6	22.5	14.4	12.5	19.0
Aid flows (in Billion of US dollars) 5/	0.3	0.3	0.2	0.8	0.9	0.8	0.8	0.6	0.6	0.2	0.5		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.6	3.2	2.6	2.2	1.6	1.5	0.2	0.3	...	1.4
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	40.0	39.1	38.1	37.1	35.1	34.0	24.8	21.4	...	31.6
Nominal GDP (Billion of US dollars)	24	26	27	29	32	35	39	42	47	79	232		
Nominal dollar GDP growth	-11.0	7.5	6.2	5.9	9.0	11.1	10.0	9.5	10.0	11.4	36.3	5.0	10.1
Memorandum items:													
PV of external debt 7/	...	...	34.9	36.7	38.8	39.0	39.4	39.1	38.4	26.8	15.4		
In percent of exports	...	...	179.7	193.6	207.3	219.5	214.0	212.1	204.0	117.6	80.9		
Total external debt service-to-exports ratio	10.7	11.0	12.4	12.7	12.6	14.1	13.1	13.7	13.8	12.0	10.7		
PV of PPG external debt (in Billion of US dollars)			4.5	5.6	7.2	8.6	10.0	11.2	12.4	14.1	22.7		
(PVt-PVt-1)/GDPt-1 (in percent)				3.9	5.5	4.6	4.0	3.0	2.8	0.0	1.0		
Non-interest current account deficit that stabilizes debt ratio	-1.0	-0.1	2.1	6.9	4.6	7.4	4.5	5.7	5.7	5.6	12.6		

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.

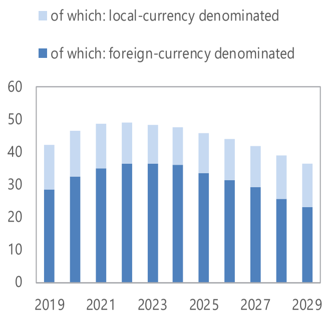
Table 2. Uganda: Public Sector Debt Sustainability Framework, Baseline Scenario, 2016-2039

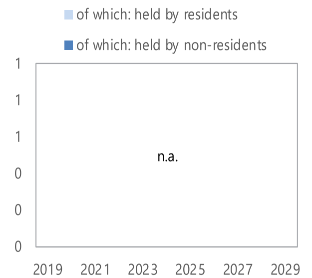
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections
Public sector debt 1/	34.6	37.0	41.5	42.2	46.4	48.6	49.0	48.4	47.7	36.4	23.7	28.1	44.5
of which: external debt	21.5	24.3	28.1	28.6	32.5	35.1	36.3	36.3	35.9	23.0	12.3	18.0	31.6
Change in public sector debt	3.5	2.3	4.5	0.7	4.2	2.2	0.4	-0.6	-0.6	-2.5	-6.0		
Identified debt-creating flows	3.0	1.8	3.3	0.9	4.4	2.2	0.4	-0.6	-0.6	-2.5	-6.0	2.1	-0.4
Primary deficit	2.8	1.3	2.7	4.2	5.6	3.8	2.7	1.5	1.8	-0.5	0.2	2.3	1.9
Revenue and grants	15.3	15.2	15.2	16.3	18.3	17.6	17.8	18.1	18.1	22.5	14.4	14.1	19.5
of which: grants	1.4	1.0	0.8	1.1	1.6	1.2	0.9	0.7	0.5	0.0	0.0		
Primary (noninterest) expenditure	18.1	16.5	17.9	20.5	23.9	21.5	20.5	19.6	19.8	22.1	14.6	16.3	21.4
Automatic debt dynamics	0.2	0.5	0.7	-3.3	-1.2	-1.6	-2.2	-2.2	-2.4	-2.1	-6.2		
Contribution from interest rate/growth differential	0.0	0.2	0.3	-1.4	-1.4	-1.6	-1.6	-1.9	-2.1	-1.8	-3.1		
of which: contribution from average real interest rate	1.4	1.5	2.4	1.1	1.1	1.1	1.2	1.1	1.1	1.1	-1.5		
of which: contribution from real GDP growth	-1.4	-1.3	-2.1	-2.5	-2.5	-2.7	-2.8	-3.0	-3.2	-2.9	-1.6		
Contribution from real exchange rate depreciation	0.2	0.2	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	0.4	0.6	1.2	-2.1	0.0	0.0	-0.7	-0.3	-0.3	-0.2	-3.1	0.1	-0.4
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	30.7	32.0	35.8	37.9	38.5	38.4	38.2	31.1	21.2		
PV of public debt-to-revenue and grants ratio	...	...	202.2	196.2	195.8	214.7	216.0	211.7	211.4	137.8	146.7		
Debt service-to-revenue and grants ratio 3/	53.9	58.3	51.5	43.3	36.0	38.8	38.8	35.8	35.2	28.5	32.3		
Gross financing need 4/	11.1	10.2	10.5	11.3	12.2	10.7	9.6	8.0	8.1	6.0	4.9		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	4.8	3.9	6.1	6.3	6.3	6.2	6.0	6.5	7.0	8.1	5.7	6.4	7.1
Average nominal interest rate on external debt (in percent)	1.4	2.2	1.4	1.3	1.5	1.7	1.9	2.0	2.1	2.2	2.4	1.2	1.9
Average real interest rate on domestic debt (in percent)	12.1	11.2	12.5	10.3	9.5	8.8	9.2	9.3	9.2	8.5	-11.5	7.9	9.0
Real exchange rate depreciation (in percent, + indicates depreciation)	0.9	1.2	1.4	...	...	...	...	...	...	...	...	4.4	...
Inflation rate (GDP deflator, in percent)	3.6	6.1	3.8	3.0	4.2	5.2	5.2	4.9	4.9	5.2	29.0	6.5	4.8
Growth of real primary spending (deflated by GDP deflator, in percent)	9.8	-5.3	14.9	22.0	23.8	-4.5	1.0	2.2	8.1	8.3	-30.4	9.5	9.5
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-0.6	-1.0	-1.8	3.5	1.4	1.6	2.2	2.2	2.4	2.1	6.2	-1.2	2.3
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Definition of external/domestic debt	**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 . 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.

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