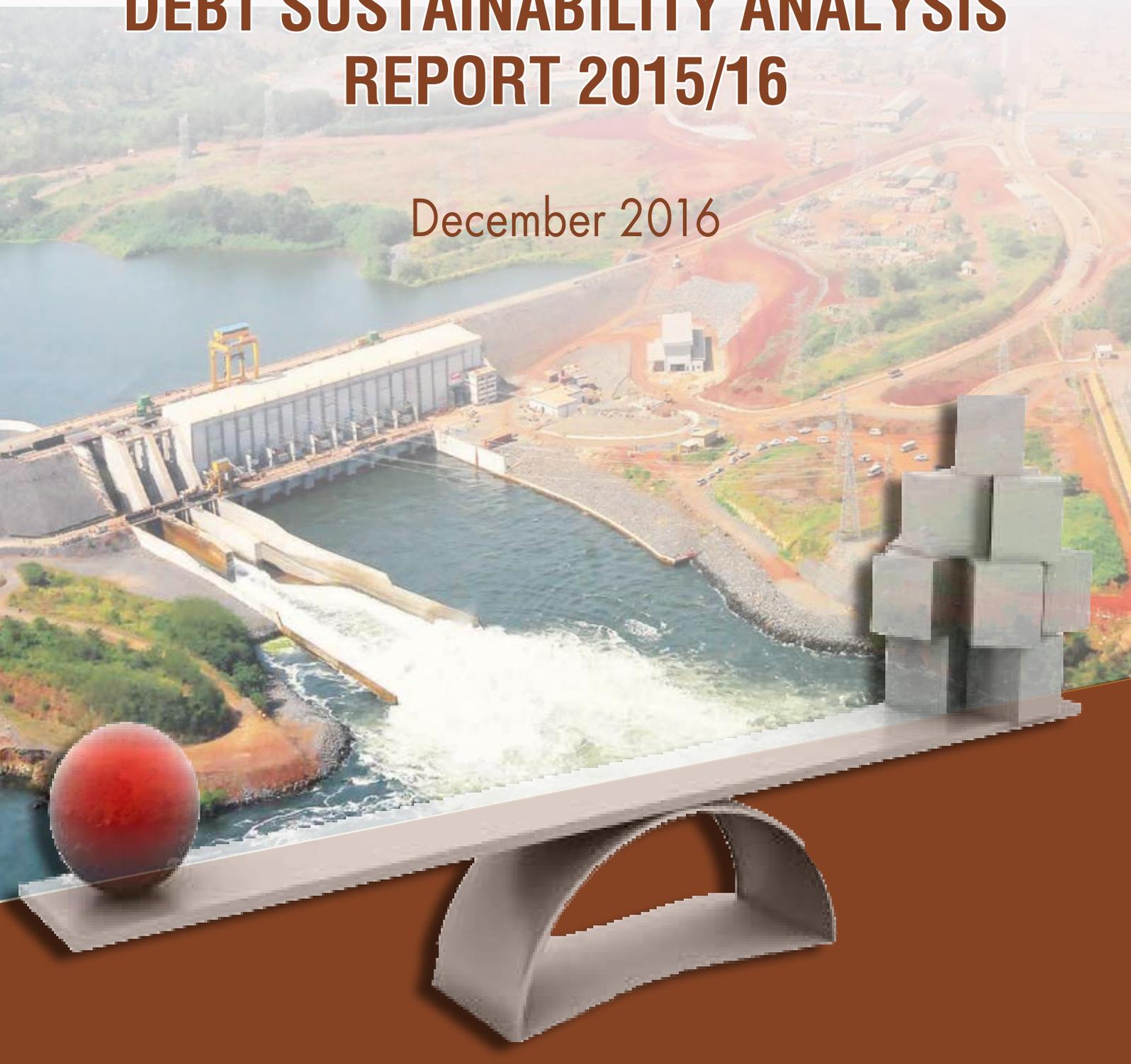




THE REPUBLIC OF UGANDA

DEBT SUSTAINABILITY ANALYSIS REPORT 2015/16

December 2016





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Ministry of Finance, Planning and Economic Development

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Preface

Section 42 of the Public Finance Management Act (2015) charges 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 different borrowing options. This is the purpose of conducting a Debt Sustainability Analysis (DSA).

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. Despite this, this DSA Report shows that Uganda remains at low risk of debt distress, with both domestic and external debt found to be sustainable over the medium to long term. This is due to prudent economic management and robust economic growth, even in the face of a largely unfavourable external environment.

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

Comments aimed at improving subsequent versions are welcome.



Keith Muhakanizi
For: Permanent Secretary / Secretary to the Treasury

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List of Abbreviations

ADB/F	African Development Bank/Fund
ATM	Average Time to Maturity
ATR	Average Time to Re-fixing
CPIA	Country Policy and Institutional Assessment
DOD	Debt Outstanding and Disbursed
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
NDP	National Development Plan
PDMF	Public Debt Management Framework
PPG	Public and Publically Guaranteed
PV	Present Value
WEO	World Economic Outlook

Executive Summary

Uganda remains at a low risk of debt distress, with external public and publicly guaranteed (PPG) debt found to be sustainable in the medium and long term. Despite this, there has been an increase in vulnerabilities compared to previous Debt Sustainability Analysis (DSA) assessments. The major risks to the outlook relate to the poor performance of exports as well as an increased rate of debt accumulation, particularly on non-concessional terms.

The stock of total public debt grew from US\$ 7.2 billion at the end of June 2015 to US\$ 8.4 billion in June 2016. This represents an increase from 30.6% of GDP to 33.8% over the two periods. The increase was largely on account of external debt, which grew from US\$ 4.4 billion to US\$ 5.2 billion over the period. Domestic debt increased from US\$ 2.8 billion to US\$ 3.2 billion.

The **present value of external** public and publicly guaranteed (PPG) debt to GDP is projected to increase from 11.7% in FY2015/16 to 15.1% in FY2016/17, and to peak at 22.9% in FY2019/20.

Nominal total public debt is projected to increase from 33.8% of GDP in FY2015/16 to 37% in FY2016/17, before peaking at 42.6% in FY2019/20. The **Present Value** of total public debt will follow a similar trend, increasing from 24.6% in FY2015/16 to peak at 33.8% in FY2019/20.

Stress tests on total public debt indicate significant risks related to non-debt variables, particularly interest rates and the exchange rate. This underscores the need to borrow on concessional terms as much as possible.

A key concern is the slow growth in exports, which represent an important source of foreign exchange with which Government meets its external debt service obligations. The stress test on the PV of External Debt to Exports breaches its threshold in FY2019/20. Despite this, Uganda remains at low risk of debt distress because the breach is small in magnitude and of short duration.

Government will continue efforts towards improving project implementation across the entire project cycle, including the production of high quality feasibility studies and proper, timely management of the land acquisition process. Untimely project implementation tends to lead to cost overruns and delays as well as reducing the benefits of infrastructure projects, which undermines economic growth and affects the country's ability to repay its debts.

1.0 Introduction

Uganda aspires to transform from a peasant to a modern and prosperous country within 30 years, as set out in the Vision 2040. The NDP II, the second in a series of development plans through which the Vision will be achieved, identifies infrastructure development as a critical way of unlocking the binding constraints to Uganda's development. The Plan lists a number of priority infrastructure projects that will accelerate the country's transformation.

The financing for these projects is expected to be mainly external borrowing. As such, it is critical that debt sustainability is a key consideration in the decision making process with respect to these and other public projects. To this end, Government prepares an annual Debt Sustainability Analysis (DSA) Report. The report 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 obligations and any risks and vulnerabilities that might arise therefrom.

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.

The report captures external debt stock as debt outstanding and disbursed (DOD), rather than debt committed. Debt committed includes both disbursed and undisbursed debt, and is reported in other publications of the Ministry, such as the annual Report on Loans, Grants and Guarantees.

The rest of this report is structured as follows: Section 2 sets the context for the report, highlighting the current levels of debt and discussing the assumptions underpinning the DSA. Section 3 presents and discusses the results of the analysis while Section 4 concludes.

2.0 Setting the Context

2.1 Evolution of Public Debt

The stock of total public debt grew from US\$ 7.2 billion at the end of June 2015 to US\$ 8.4 billion in June 2016. The increase was largely on account of external debt, which grew from US\$ 4.4 billion to US\$ 5.2 billion over the period. Domestic debt increased from US\$ 2.8 billion to US\$ 3.2 billion. The annual nominal increase in debt between June 2015 and June 2016, of US\$ 1.2 billion, was the highest since Uganda received debt relief in 2005/6. This trend is expected to continue, with total debt expected to grow to US\$ 9.8 billion by the end of June 2017.

As a percentage of GDP, total nominal public debt rose from 30.6% in June 2015 to 33.8% in June 2016, of which external and domestic comprised of 21% and 12.8% respectively. In the medium term the nominal debt to GDP is projected to peak at 42.6% in 2019/20 before declining to 28.4% in 2024/25. The decline in this ratio after the medium term will be due to lower borrowing following the completion of key infrastructure projects, as well as higher GDP growth as the economy becomes more productive.

In Present Value (PV) terms¹, public sector debt to GDP is projected to increase from 24.6% in 2015/16 to peak at 33.8% in 2019/20. This is below all the requisite thresholds of: 56% for CPIA medium performers in the LIC DSF and 50% for both the Public Debt Management Framework (PDMF) and the East African Monetary Union (EAMU) Protocol.

In Uganda shillings, the stock of domestic debt (at cost²) increased from Shs 4,619.4 billion at the end of 2011/12 to Shs FY10,884.1 billion at the end of FY2015/16.

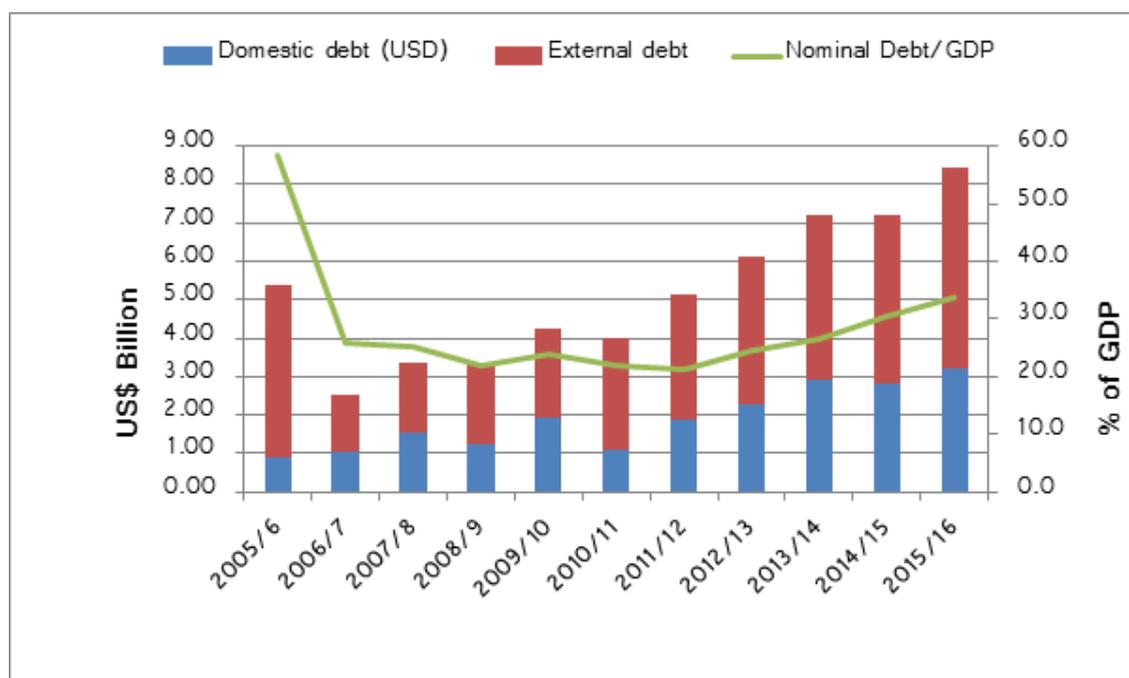
This higher than usual rate of increase in debt is occasioned by the need to achieve Uganda's development aspirations as contained in the Vision 2040. This debt will help finance the country's infrastructure expansion, particularly in the energy and transport sectors. Better infrastructure will enhance the country's productive capacity and help to unlock Uganda's growth potential. This will generate higher growth, which will help to repay the loans.

Figure 1 below shows the evolution of domestic and external public debt in billions of US dollars between FY2005/06 and FY2015/16. The figure also plots the trends in total nominal debt to GDP, and reveals a steady increase in this indicator since FY2011/12.

¹ The Present Value (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.

² Previous DSA reports reported domestic debt at face value. Going forward, the authorities have agreed to report cost value, as face value includes discount interest on domestic debt, which is already accounted for in the fiscal framework of Government and a provision made for interest payments.

Figure 1: Evolution of Public Debt



Source: Ministry of Finance, Planning and Economic Development

Of the external disbursed and outstanding debt, 77% and 23% is owed to multilateral and bilateral creditors, respectively. There has been a noticeable shift from multilateral to bilateral lenders. In June 2013, multilateral and bilateral lenders were owed 87% and 13% of the outstanding external debt stock. Table 1 below provides a detailed distribution of external debt by creditor category.

Table 1: Distribution of External Debt Stock by Creditor Category

	Jun-11	Jun-12	Jun-13	Jun-14	Jun-15	Jun-16
Bilateral (A)	9.9%	12.1%	13.1%	12.6%	14.5%	23.4%
o/w Paris Club	1.9%	1.6%	1.8%	2.2%	2.2%	3.0%
o/w Non-Paris Club	8.0%	10.5%	11.3%	10.4%	12.3%	20.4%
o/w China	3.3%	7.0%	8.0%	7.7%	9.6%	17.8%
Multilateral (B)	90.1%	87.9%	86.9%	87.4%	85.5%	76.6%
o/w IDA	61.9%	59.4%	58.6%	58.3%	55.8%	48.9%
o/w ADF	16.3%	18.8%	19.5%	20.8%	20.9%	19.3%
Total (A+B)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Ministry of Finance, Planning and Economic Development

Multilateral lenders are dominated by the International Development Association (IDA) of the World Bank and the African Development Fund (ADF), both of which lend on concessional terms. Bilateral lenders, on the other hand, are dominated by China, a non-concessional lender. As the percentage of debt owed to non-concessional lenders grows, the total debt stock becomes less concessional. Less concessional debt comes with higher interest costs as well as shorter grace and repayment periods, increasing the debt service burden. Debt owed to China has grown

rapidly as a percentage of the total external debt stock, increasing from 3.3% in June 2011 to 17.8% in June 2016. The twelve months between June 2015 and June 2016 recorded particularly rapid growth in debt owed to China, largely due to significant disbursements for the construction of hydropower dams.

2.2 Cost and Risk Profile of Uganda's Existing Debt

Uganda's external debt, which is nearly 62% of the total debt stock, largely comprises concessional loans characterised by long repayment periods and very low fixed interest rates. Table 2 below compares the cost and risk indicators of the debt portfolio in June 2015 and June 2016.

Table 2: Cost & Risk Indicators

Risk Indicators		Jun-15			Jun-16		
		External	Domestic	Total debt	External	Domestic	Total debt
Cost of debt	Interest payment as % of GDP	0.2	1.7	1.9	0.2	2.0	2.2
	Weighted Av. IR (%)	0.9	13.6	5.9	1.2	15.3	6.5
Refinancing Risks	ATM (years)	18.4	3.1	12.4	17.4	3.3	12.1
	Debt maturing in 1yr (% of total)	1.1	45.1	18.4	1.1	44.6	17.4
	Debt maturing in 1yr (% of GDP)	0.2	5.6	5.9	0.2	5.7	5.9
Interest rate risk	ATR (years)	18.4	3.1	12.4	17.4	3.3	12.1
	Debt refixing in 1yr (% of total)	1.2	45.1	18.4	1.1	44.6	17.4
	Fixed rate debt (% of total)	100.0	100.0	100.0	100.0	100.0	100.0
FX risk	FX debt (% of total debt)	60.8			62.5		
	ST FX debt (% of reserves)	1.7			2.0		

Source: Ministry of Finance, Planning and Economic Development

Cost of Debt

Interest Payment as a percentage of GDP stood at 2.2% as at end June 2016, up from 1.9% as at June 2015. The increase is largely explained by interest payments on domestic debt, which grew from Shs 1,077 billion in FY2014/15 to 1,470 billion in FY2015/16.

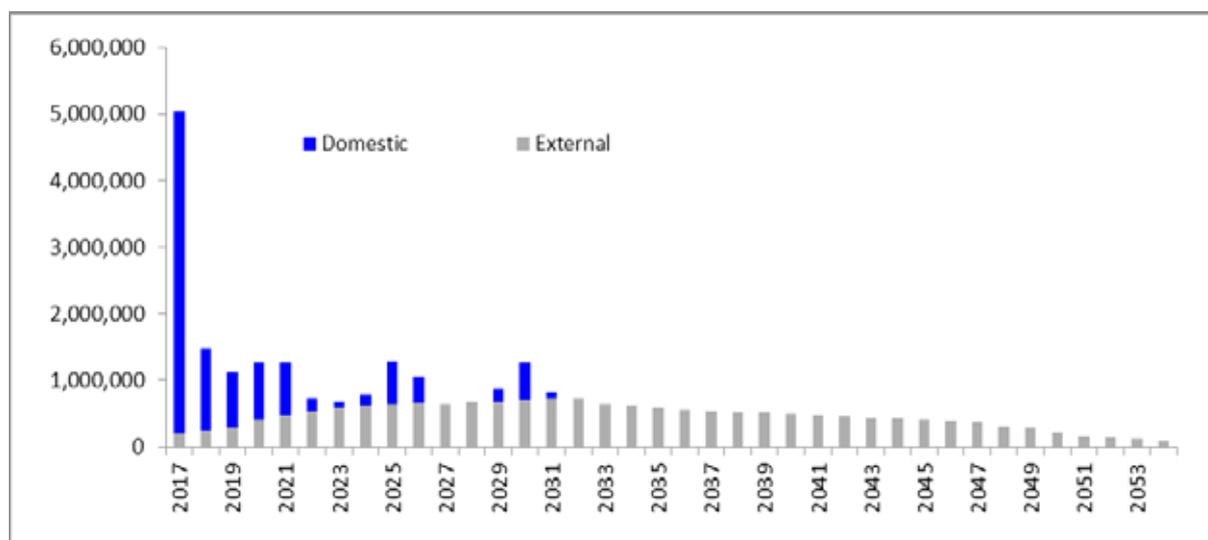
There was a significant increase in the weighted average interest rate of Government debt; from 5.9% to 6.5% in June 2015/16. This followed increases in the weighted interest rates for both domestic and external debt, from 13.6% to 15.3% for domestic debt and from 0.9% to 1.2% external debt. As interest rates increase, so do the debt service obligations of Government.

Refinancing Risks

The average time to maturity (ATM) for total public debt deteriorated slightly from 12.4 to 12.1 years between June 2015 and June 2016. This was mainly driven by a decline in the ATM of external debt arising from the contracting of less concessional external debt. The ATM for domestic debt improved from 3.1 years to 3.3 years as a result of deliberate effort by Government to lengthen its maturity profile.

Figure 2 below depicts the redemption profile of total public debt, and highlights the significant refinancing risk related to domestic debt, 44.6% of which matures in 2017.

Figure 2: Redemption Profile of Public Debt, June 2016



Source: Ministry of Finance, Planning and Economic Development

Debt maturing in one year as a percentage of total debt

This indicator improved from 18.4% in June 2015 to 17.4% at end June 2016. This was mainly driven by a slight improvement in the domestic debt maturing in one year from 45.1% to 44.6% largely on account of the issuance of more longer dated securities. Despite this improvement, Uganda still has a very high percentage of its domestic debt maturing in one year, exposing the country to significant refinancing risks. Assessing refinancing risk is particularly important for Uganda’s case, given Government’s policy of rolling over all maturing debt.

Average Time to Re-fixing (ATR)

ATR is the average time public debt is subjected to new interest rates. When all debt is contracted on fixed terms, as in our case, the ATR is the same as the ATM.

The ATR for the public debt reduced from 12.4 years to 12.1 years between June 2015 and June 2016 largely on account of the decline in the ATR of external debt arising from the contracting of external debt on less concessional terms.

Foreign Exchange Risk

The share of external debt (foreign currency denominated debt) to total debt increased from 60.8% to 62.5%. This implies increased exposure to changes in exchange rates which could increase debt service costs. Despite this, the indicator remains below its threshold of 80% as set out in the Public Debt Management Framework.

2.3 Assumptions

This section provides the key assumptions underlying the analysis in the report. The assumptions are derived from a consistent macroeconomic framework, and take into account Government’s medium term fiscal strategy

2.3.1 Macroeconomic Assumptions

Real GDP is projected to grow at 5.0% in FY 2016/17 slightly above the 4.8% growth registered in FY 2015/16. This growth will be driven by: a recovery in the industrial sector, particularly manufacturing and construction; improved efficiency in implementation of public investments; and a recovery in private sector credit growth due to supportive monetary policy. In the medium term, growth will average about 6.0% before peaking at 6.7% in the long run. This growth will be driven by improved productive capacity as investments in public infrastructure especially power and roads are completed. Enhancing efficiency in resource allocation is also expected to boost growth in the long run.

Annual headline inflation is projected to drop to 5.4 % in FY 2016/17 from 6.6% in FY 2015/16. This is on account of a relatively stable exchange rate, low imported inflation and subdued aggregate demand. Thereafter inflation is expected to stabilize around the 5.0% target in the medium to the long run.

The shilling is projected to depreciate slightly, at an annual average of 2.6% in FY 2016/17 from the outturn of 22.0% in FY 2015/16. This will be driven by a recovery in FDI inflows especially in the oil sector following the issuance of the production licenses. In the medium term, the exchange rate is projected to depreciate at an average of 3.0% reflecting the inflation differential with the USA. In the long run, the rate of depreciation is expected to drop to 2.0% as oil comes upstream.

2.3.2 Fiscal Assumptions

Uganda, like many countries in sub-Saharan Africa, faces a critical balancing act between increased fiscal spending to bridge large infrastructure gaps and the need to ensure debt sustainability. Getting this balance right is a key objective of Government, as elaborated in the Charter for Fiscal Responsibility.

In light of these considerations, Uganda's fiscal expansion in the medium term – occasioned by the need to strengthen the country's infrastructure especially in the energy and transport sectors – will be done in a carefully phased manner so as not to jeopardize debt sustainability.

Government expenditure is projected to increase from of 19.7% of GDP in FY2015/16 to 21.9% in FY2016/17 before falling to 19.4% in FY2020/21, with an average of 20.5% over this period. The fiscal deficit including grants will follow a similar pattern, and is projected to increase from 4.8% of GDP in FY2015/16 to 6.0% in FY2016/17 before decreasing to 2.8% in FY2020/21; with an average of 4.5% in the medium term. Domestic revenues (tax, non-tax and oil revenues) are projected to increase by an average of 0.5% of GDP on an annual basis from 13.5% in FY2015/16 to 15.9% in FY2020/21.

2.3.3 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 term. As such, the deficit will be largely financed using external resources during this period. In the long term, as domestic markets become more developed, Government will turn more to domestic resources for financing.

Government shall continue to prioritize concessional³ financing as the preferred means of meeting external financing requirements. However, given Uganda's infrastructure expansion program, it is unlikely that concessional resources will be sufficient. Uganda, therefore, will have to rely increasingly on non-concessional resources to finance its budget. This notwithstanding, debt sustainability remains a key objective of Government and will continue to be a major component of Government's borrowing decisions. Table 3 summarizes the fiscal assumptions used in the DSA.

Table 3: Fiscal Assumptions

	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Fiscal Projections (Shs Bn)						
Revenues and Grants	12,646	14,868	16,451	18,507	21,092	23,774
Primary Expenditure	15,067	18,277	19,187	21,166	22,664	24,621
Total Interest Expenditure	1,682	2,188	2,703	2,809	3,115	3,166
Total Expenditure	16,749	20,465	21,890	23,976	25,779	27,786
Primary Deficit	2,422	3,409	2,736	2,659	1,571	847
Overall Budget Deficit	4,103	5,597	5,439	5,468	4,686	4,012
As a Percentage of GDP						
Revenue and Grants	14.9	15.9	15.9	16.1	16.3	16.6
Total Expenditure	19.7	21.9	21.2	20.8	20	19.4
Primary Deficit	2.9	3.6	2.6	2.3	1.2	0.6
Overall Budget Deficit	5.2	6.2	4.9	4.6	4.6	3.52
Memorandum Items						
Real GDP Growth	4.8%	5.0%	5.5%	6.0%	6.3%	6.5%
Nominal GDP (Shs Bn)	84,907	93,639	103,400	115,261	129,209	143,383

Source: Ministry of Finance, Planning and Economic Development

³ 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.

2.3.4 Balance of Payments Assumptions

In the medium term, commodity prices of exports and imports are taken from the IMF's World Economic Outlook (WEO) while volumes are based on real growth rates of the relevant sub-sectors. In the outer years, the value of exports and imports of goods and services are forecast as a constant share of GDP.

Income inflows/outflows in the medium term are projected as the stock of financial assets/liabilities in the previous period, multiplied by LIBOR. LIBOR 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.

FDI and capital inflows are projected to grow in line with Uganda's nominal GDP growth in dollar terms in the medium term. The stock of gross reserves is fixed at 4.5 months of future import cover for outer years in line with the East African Community (EAC) Monetary Union convergence criteria.



3.0 Results of Debt Sustainability Analysis

This section presents the findings of the analysis. The main finding is that Uganda remains at low risk of debt distress, but Government needs to adopt a cautious approach to future borrowing if this rating is to be maintained.

3.1 Sustainability of External Public and Publicly Guaranteed Debt

External public and publicly guaranteed debt is found to be sustainable over both the medium and long term. In the baseline scenario, all liquidity and solvency ratios fall below their indicative thresholds throughout the projection period. However, stress tests reveal important vulnerabilities related to a depreciation of the shilling, a worsening / hardening of borrowing terms and the low growth of exports.

Solvency Ratios

The PV of **external** public and publicly guaranteed (PPG) debt to GDP is projected to increase from 11.7% in FY2015/16 to 15.1% in FY2016/17. The ratio will continue to increase throughout the medium term and will peak at 22.9% in FY2019/20, before declining to 14.3% in FY2026/27. Despite the increased rate of external debt accumulation over the medium term, this ratio will remain well below its threshold over the projection period, as highlighted in Table 4.

The PV of external debt to exports of goods and services is projected to remain below its threshold for the duration of the projection period. Despite this, the ratio will experience a faster increase, particularly in the medium term. The ratio will more than double from 64.1% in FY2015/16 to 138.5% in FY2020/21, before dropping thereafter. The faster increase in the ratio is indicative of Uganda's poor export performance, both in the recent past as well as the medium term projections. Exports constitute an important variable in the analysis of external debt sustainability as they are a critical source of foreign exchange, which a country needs to pay off its foreign currency denominated debts. As the performance of this ratio shows, Uganda needs to significantly improve its export performance over the medium term.

The PV of external debt to domestic budget revenue remains well below its threshold throughout the projection period. However, the rate at which it increases in the medium term, from 85.8% in FY2015/16 to peak at 149% in FY2019/20, indicates that external debt is expected to grow much faster than domestic budget revenues, and underscores the importance of Government's current efforts towards improving its revenue collections⁴.

Liquidity Ratios

The LIC-DSF uses two liquidity ratios for external debt: the external debt service to exports of goods and services and the external debt service to domestic budget revenue. Both domestic budget revenues and exports of goods and services constitute important indications of a country's ability to service its debt without creating an undue burden on other sectors of the economy. Whereas both ratios increase more than three fold in the medium term, both remain well below the 20% threshold throughout the projection period. The increase in the medium term reflects

⁴ These measures, as highlighted in the June 2016 Budget Speech, are aimed at improving efficiency in tax administration through enforcement of collections; increasing the tax base by reducing the size of the informal sector; and increasing investment in tax collection infrastructure.

the increasingly non-concessional nature of Uganda's external debt portfolio, which increases the country's debt service obligations in the near term.

The sharp increase in the ratio of external debt service to revenue shows that debt service is growing much faster than revenue. This implies that debt service will take up an increasing percentage of domestic revenues, which will reduce the proportion of domestic revenue that is allocated to other sectors in the national budget.

Table 4: Summary of External Debt Sustainability Assessment

	LIC DSF Thresholds (%)	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Medium Term Average
Solvency Ratios									
PV of External Debt to GDP	40	11.7	15.1	18.6	21.0	22.9	22.8	21.3	20.3
PV of External Debt to Export of Goods & Services	150	64.1	74.8	101.4	115.7	128.9	138.5	106.4	111.0
PV of External Debt to Domestic Budget Revenue	250	85.8	106.3	127.7	141.6	149.0	143.9	130.1	133.1
Liquidity Ratios									
External Debt Service to Export of Goods & Services	20	2.1	2.5	4.0	5.8	8.0	9.7	8.3	6.4
External Debt Service to Domestic Budget Revenue	20	2.8	3.5	5.0	7.1	9.2	10.1	10.1	7.5

Source: Ministry of Finance, Planning and Economic Development

Stress Tests

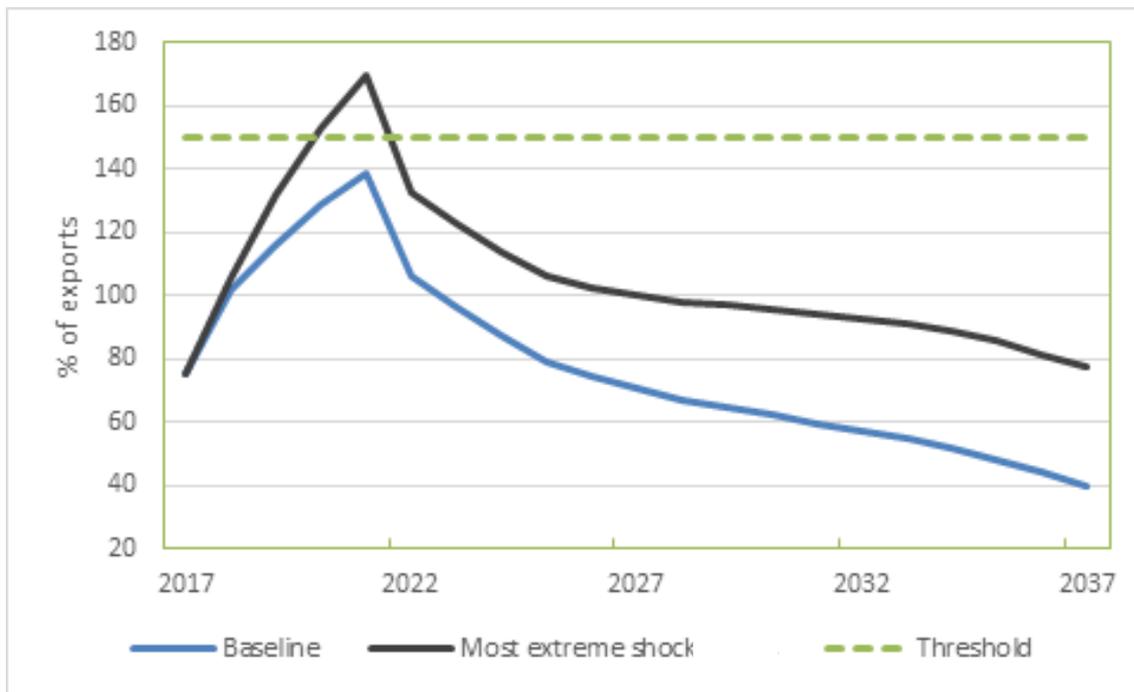
The LIC-DSF contains standardized stress tests that help to understand the evolution of debt ratios under assumptions that are typically more pessimistic than those in the baseline.

Applying these stress tests reveals that whereas Uganda's debt is sustainable all through the projection period, there are important vulnerabilities related to a depreciation of the Shilling, a worsening / hardening of borrowing terms and low growth of exports.

It is particularly worthy of note that under standardized stress tests, the PV of external debt to exports breaches its threshold in FY2019/20 and FY2020/21. A breach of the thresholds under stress tests would typically affect a country's risk rating. However, given the small magnitude and temporary nature of this breach, Uganda continues to be rated as being at low risk of debt distress⁵. Figure 3 below shows the evolution of the PV of external debt to exports through the projection period.

⁵ The LIC-DSF allocates a risk rating to a country as a key output of the DSA. A country may be rated as being at low, moderate or high risk of debt distress. Countries with debt arrears are considered to be in debt distress. A rating of low risk of debt distress is awarded if all debt ratios are below their thresholds under the baseline and stress tests. Moderate risk is when at least one of the thresholds is breached under stress tests; while a rating of high risk of debt distress is awarded when at least one of the thresholds is breached under baseline assumptions. However, a breach of small magnitude and short duration may not necessarily indicate serious vulnerabilities, and the country may retain its previous, more favourable rating, as in this case.

Figure 3: PV of External Debt to Exports



Source: Ministry of Finance, Planning and Economic Development

3.2 Sustainability of Public Debt

Public debt is a more comprehensive measure of the country’s indebtedness, as it encompasses both domestic and external PPG debt. Public debt ratios, as with external PPG debt, show that Uganda’s debt remains sustainable over the medium to long term.

Nominal public debt is projected to increase from 33.8% of GDP in FY2015/16 to 37% in FY2016/17, before peaking at 42.6% in FY2019/20. The **Present Value** of public debt will follow a similar trend, increasing from 24.6% in FY2015/16 to peak at 33.8% in FY2019/20. Throughout the projection period, the PV of public debt will be below the 50% threshold contained both in the Public Debt Management Framework of 2013 and the EAMU Protocol. Despite this, the higher rate of debt accumulation in the medium term compared to previous years underscores the need for Government to carefully assess the risks and vulnerabilities associated with its growing debt portfolio.

The increase in both nominal and PV debt in the medium term will be driven by higher external borrowing. The stock of external debt to GDP, in nominal terms, is projected to increase from 21% in FY2015/16 to 31.6% in FY2019/20. In PV terms, it will double from 11.7% of GDP in FY2015/16 to 22.9% in FY2019/20. Domestic debt stock, on the other hand, is projected to decline from 12.8% to 11% over the same period, as shown in Table 5.

Table 5: Summary of Public Debt Sustainability Assessment

	Debt Strategy Thresholds (%)	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	Medium Term Average
Nominal Public Debt to GDP		33.8	37.0	40.3	41.7	42.6	41.2	38.0	40.1
o/w External		21.0	24.1	27.7	29.9	31.6	31.0	28.7	28.8
o/w Domestic		12.8	12.9	12.6	11.8	11.0	10.3	9.3	11.3
PV of Public Debt to GDP	50	24.6	28.0	31.2	32.8	33.8	33.1	30.6	31.6
o/w External	30	11.7	15.1	18.6	21.0	22.9	22.8	21.3	20.3
o/w Domestic	20	12.8	12.9	12.6	11.8	11.0	10.3	9.3	11.3

Source: Ministry of Finance, Planning and Economic Development

The increase in external debt over the medium term reflects Government's commitment to enhance the productive capacities of the economy by closing Uganda's large infrastructure gap, with particular focus on the energy and transport sectors. A significant proportion of this infrastructure will be built using project loans from external development partners, on both concessional and non-concessional terms. Over the medium term, there will be a decline in domestic debt to GDP, in line with Government's commitment to reduce its domestic borrowing levels to spur higher growth in private sector credit.

Stress tests on total public debt indicate risks related to non-debt variables, particularly interest rates and the exchange rate. This underscores the need to borrow on concessional terms as much as possible.

4.0 Conclusion

Uganda remains at a low risk of debt distress, with external public and publicly guaranteed debt remaining sustainable over the medium to long term. Total public debt also remains sustainable over the 20-year projection period. The PV of total debt is projected to increase from 24.6% of GDP in FY2015/16 to peak at 33.8% in FY2019/20, well below the threshold of 56% in the LIC DSF for CPIA medium performers; as well as the 50% agreed in the EAMU Protocol and the Public Debt Management Framework (2013). Nominal debt is projected to increase from 33.8% of GDP in FY2015/16 to a peak of 42.6% in FY2019/20, before reducing thereafter.

Despite being sustainable, standardized stress tests in the LIC DSF reveal important vulnerabilities related to a depreciation of the Shilling, a worsening / hardening of borrowing terms and a reduction in exports. All of these have a direct impact on the debt service burden, which has increased markedly in nominal terms over recent years.

Uganda, like many countries in sub-Saharan Africa, is experiencing a shift from highly concessional social sector borrowing from international development banks and organizations to non-concessional / commercial borrowing for infrastructure spending. Non-concessional borrowing is typically more costly and offers shorter grace and repayment periods, increasing the debt service burden on the budget. This has implications for the resources available to other sectors, such as health and education.

Infrastructure spending, while critical for national development and poverty alleviation, should be done in a manner that does not jeopardize debt sustainability. To this end, Government has been cautious in its infrastructure program, ensuring that projects are phased appropriately so as not to overburden the existing capacities. Government will continue its efforts towards improving project implementation across the entire project cycle, including the production of high quality feasibility studies and proper, timely management of the land acquisition process. Untimely project implementation tends to lead to cost overruns and delays as well as reducing the benefits of infrastructure projects, which undermines economic growth and affects the country's ability to repay its debts.

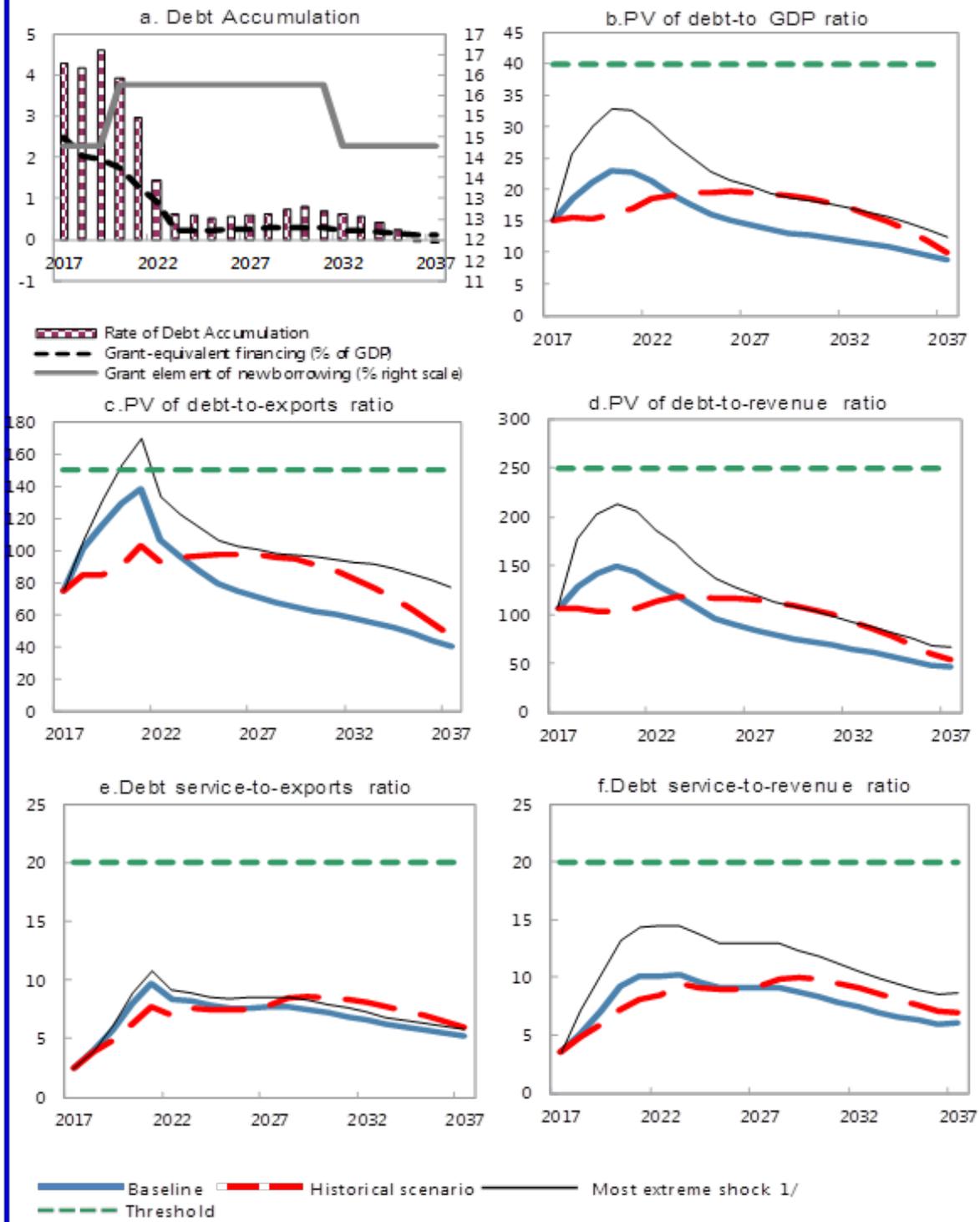
Glossary

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. **Concessional:** 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 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.

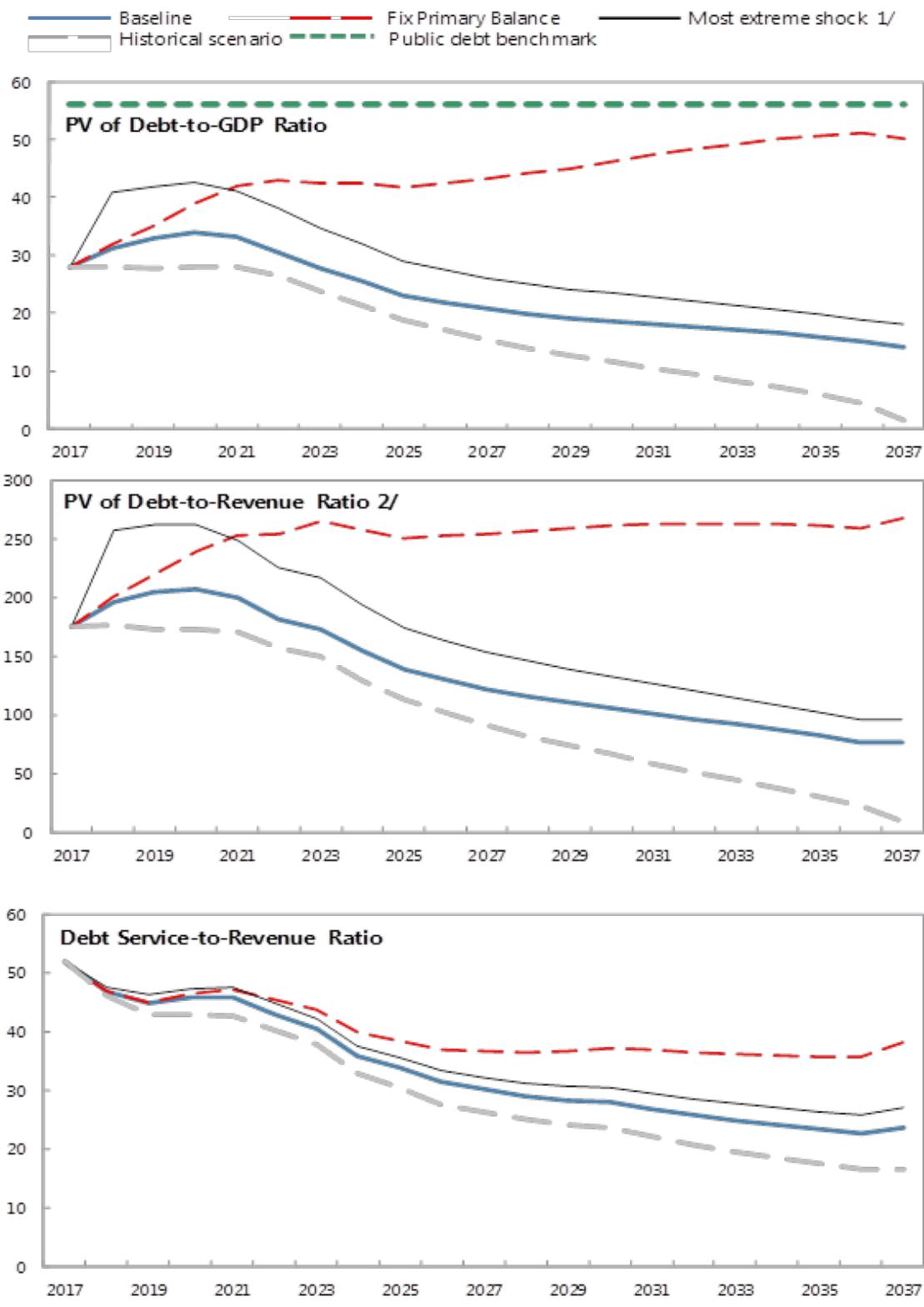
APPENDICES

Figure 1a. Uganda: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2017-2037 1/



1/ The most extreme stress test is the test that yields the highest ratio on or before 2027. In figure b. it corresponds to a One-time depreciation shock; in c. to a Terms shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

Figure 1b. Uganda: Indicators of Public Debt Under Alternative Scenarios, 2017-2037 1/



1/ The most extreme stress test is the test that yields the highest ratio on or before 2027.
 2/ Revenues are defined inclusive of grants.

Table 2a. Uganda: External Debt Sustainability Framework, Baseline Scenario, 2014-2037 1/
(In percent of GDP, unless otherwise indicated)

	Actual			Historical ^{6/} Standard ^{6/}		Projections									
	2014	2015	2016	Average	Deviation	2017	2018	2019	2020	2021	2022	2017-2022		2023-2037	
												Average	2027	2037	Average
External debt (nominal) 1/	28.5	33.2	39.2			41.8	45.3	47.2	48.7	47.1	43.6			32.0	25.5
<i>of which: public and publicly guaranteed (PPG)</i>	15.9	18.6	21.0			24.1	27.7	29.9	31.6	31.0	28.7			19.0	11.7
Change in external debt	0.8	4.6	6.0			2.6	3.6	1.9	1.5	-1.6	-3.5			-1.1	-0.7
Identified net debt-creating flows	2.0	5.4	8.1			4.0	4.3	4.0	3.0	1.6	-0.6			1.0	3.1
Non-interest current account deficit	7.3	6.9	5.5	6.7	1.8	7.1	8.1	8.9	8.4	6.8	3.8			5.2	7.1
Deficit in balance of goods and services	9.7	10.6	10.3			8.4	11.2	11.8	11.3	9.6	7.9			7.7	8.5
Exports	18.2	18.1	18.3			20.1	18.3	18.2	17.7	16.5	20.0			20.2	21.8
Imports	27.9	28.7	28.6			28.5	29.6	30.0	29.0	26.1	27.9			27.9	30.2
Net current transfers (negative = inflow)	-4.3	-5.1	-6.3	-7.3	2.5	-5.2	-4.7	-4.5	-4.1	-3.6	-3.2			-2.0	-1.1
<i>of which: official</i>	-0.7	-0.8	-1.0			-1.1	-0.8	-0.7	-0.5	-0.4	-0.3			-0.1	0.0
Other current account flows (negative = net inflow)	1.9	1.3	1.4			3.9	1.6	1.6	1.2	0.8	-1.0			-0.5	-0.3
Net FDI (negative = inflow)	-2.9	-1.9	-1.7	-3.5	1.8	-1.8	-2.3	-3.3	-3.7	-3.7	-3.0			-3.0	-3.2
Endogenous debt dynamics 2/	-2.4	0.5	4.3			-1.4	-1.5	-1.6	-1.7	-1.5	-1.4			-1.2	-0.8
Contribution from nominal interest rate	0.3	0.3	0.4			0.4	0.7	1.0	1.2	1.4	1.3			0.9	0.7
Contribution from real GDP growth	-1.3	-1.5	-1.8			-1.8	-2.2	-2.5	-2.9	-2.9	-2.8			-2.1	-1.5
Contribution from price and exchange rate changes	-1.4	1.7	5.7			...	...	...	...	...	...			...	...
Residual (3-4) 3/	-1.2	-0.8	-2.1			-1.4	-0.7	-2.1	-1.5	-3.2	-2.9			-2.1	-3.8
<i>of which: exceptional financing</i>	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0
PV of external debt 4/	...	...	29.9			32.8	36.2	38.4	40.0	39.0	36.2			27.3	22.6
In percent of exports	...	...	163.3			162.6	197.3	211.2	225.5	236.7	181.2			135.2	103.6
PV of PPG external debt	...	...	11.7			15.1	18.6	21.0	22.9	22.8	21.3			14.3	8.7
In percent of exports	...	...	64.1			74.8	101.4	115.7	128.9	138.5	106.4			70.7	40.0
In percent of government revenues	...	...	85.8			106.3	127.7	141.6	149.0	143.9	130.1			83.8	46.4
Debt service-to-exports ratio (in percent)	8.5	8.7	7.8			8.1	10.5	12.7	15.7	18.3	15.3			13.9	11.4
PPG debt service-to-exports ratio (in percent)	2.3	1.8	2.1			2.5	4.0	5.8	8.0	9.7	8.3			7.7	5.2
PPG debt service-to-revenue ratio (in percent)	3.9	2.5	2.8			3.5	5.0	7.1	9.2	10.1	10.1			9.1	6.0
Total gross financing need (Billions of U.S. dollars)	1.7	1.8	1.3			1.9	2.2	2.4	2.5	2.4	1.7			3.8	11.2
Non-interest current account deficit that stabilizes debt ratio	6.5	2.2	-0.5			4.5	4.5	7.0	6.9	8.4	7.3			6.3	7.8
Key macroeconomic assumptions															
Real GDP growth (in percent)	5.2	5.1	4.8	7.3	3.2	5.0	5.5	6.0	6.7	6.7	6.7	6.1	6.8	6.0	6.3
GDP deflator in US dollar terms (change in percent)	5.5	-5.5	-14.7	3.5	11.3	2.4	1.0	1.1	1.9	6.1	6.8	3.2	2.5	1.7	3.3
Effective interest rate (percent) 5/	1.2	0.9	1.0	1.1	0.2	1.2	1.7	2.3	2.8	3.2	3.3	2.4	2.9	2.8	2.9
Growth of exports of G&S (US dollar terms, in percent)	-0.1	-1.2	-9.3	11.8	13.8	18.1	-3.0	6.2	6.1	5.1	38.4	11.8	9.6	9.0	10.4
Growth of imports of G&S (US dollar terms, in percent)	2.2	2.3	-10.8	11.1	14.5	7.1	10.4	8.7	5.1	1.9	21.9	9.2	9.7	9.1	10.4
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	14.3	14.3	14.3	15.8	15.8	15.8	15.0	15.8	14.3	15.2
Government revenues (excluding grants, in percent of GDP)	10.8	13.0	13.7			14.2	14.6	14.9	15.4	15.9	16.4			17.0	17.9
Aid flows (in Billions of US dollars) 7/	0.4	0.3	0.3			0.8	0.7	0.8	0.8	0.7	0.5			0.4	0.3
<i>of which: Grants</i>	0.4	0.3	0.3			0.5	0.4	0.4	0.3	0.3	0.2			0.0	0.0
<i>of which: Concessional loans</i>	0.0	0.0	0.0			0.3	0.4	0.4	0.5	0.4	0.3			0.4	0.3
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			2.5	2.0	2.0	1.7	1.3	0.9			0.3	0.1
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			39.3	33.8	30.2	29.9	29.2	33.0			15.8	14.3
<i>Memorandum items:</i>															
Nominal GDP (Billions of US dollars)	27.8	27.6	24.7			26.5	28.2	30.3	32.9	37.3	42.5			74.3	172.8
Nominal dollar GDP growth	11.0	-0.7	-10.6			7.5	6.5	7.2	8.7	13.2	13.9	9.5	9.5	7.8	9.8
PV of PPG external debt (in Billions of US dollars)			2.9			4.0	5.1	6.4	7.6	8.6	9.1			10.7	15.1
(PVt-PVt-1)/GDPT-1 (in percent)						4.3	4.2	4.6	3.9	3.0	1.4			3.6	0.6
Gross workers' remittances (Billions of US dollars)	0.9	1.0	1.1			1.0	1.0	1.0	1.1	1.1	1.2			1.4	2.0
PV of PPG external debt (in percent of GDP + remittances)	...	...	11.2			14.5	18.0	20.3	22.2	22.2	20.7			14.0	8.6
PV of PPG external debt (in percent of exports + remittances)	...	...	51.5			63.4	85.0	97.4	108.9	117.3	93.7			64.7	37.9
Debt service of PPG external debt (in percent of exports + remittances)	...	...	1.7			2.1	3.3	4.9	6.8	8.2	7.3			7.0	4.9

1/ Includes both public and private sector external debt.

2/ Derived as $[r - g - \rho(1+g)] / (1+g+\rho+g)$ 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/ Assumes that PV of private sector debt is equivalent to its face value.

5/ Current-year interest payments divided by previous period debt stock.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

7/ Defined as grants, concessional loans, and debt relief.

8/ 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).

Table 2b. Uganda: Public Sector Debt Sustainability Framework, Baseline Scenario, 2014-2037

(In percent of GDP, unless otherwise indicated)

	Actual			Average ^{5/}	Standard Deviation ^{5/}	Estimate					Projections						
	2014	2015	2016			2017	2018	2019	2020	2021	2022	2017-22 Average		2023-37 Average			
Public sector debt 1/	26.6	30.6	33.8			37.0	40.3	41.7	42.6	41.2	38.0					25.4	17.2
<i>of which: foreign-currency denominated</i>	15.9	18.6	21.0			24.1	27.7	29.9	31.6	31.0	28.7					19.0	11.7
Change in public sector debt	2.1	4.0	3.2			3.2	3.4	1.3	0.9	-1.3	-3.3					-1.4	-1.0
Identified debt-creating flows	0.9	2.2	2.7			3.5	3.2	0.7	-0.1	-2.0	-2.4					0.5	3.3
Primary deficit	1.8	-1.0	2.7	-0.1	1.9	3.4	2.7	1.7	0.4	-0.7	-0.9	11	0.6	2.7	0.7		
Revenue and grants	12.1	14.2	15.0			16.0	15.9	16.1	16.3	16.6	16.9					17.0	18.7
<i>of which: grants</i>	1.3	1.2	1.4			1.8	1.4	1.2	1.0	0.7	0.6					0.0	0.0
Primary (noninterest) expenditure	13.9	13.2	17.7			19.5	18.6	17.8	16.7	15.9	16.0					17.6	21.5
Automatic debt dynamics	-0.9	3.2	0.0			0.0	0.5	-1.0	-0.5	-1.3	-1.5					0.0	0.6
Contribution from interest rate/growth differential	-0.8	-0.7	-0.8			-0.6	-0.8	-0.8	-1.0	-0.7	16.1					0.0	0.5
<i>of which: contribution from average real interest rate</i>	0.4	0.6	0.6			1.0	1.1	1.4	1.6	2.0	18.7					1.7	1.5
<i>of which: contribution from real GDP growth</i>	-1.2	-1.3	-1.4			-1.6	-1.9	-2.3	-2.6	-2.7	-2.6					-1.7	-1.0
Contribution from real exchange rate depreciation	0.0	3.9	0.8			0.6	1.3	-0.2	0.5	-0.6	-17.6				...	...
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
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 implicit or contingent liabilities	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 (specify, 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
Residual, including asset changes	1.2	1.8	0.6			-0.3	0.1	0.6	1.0	0.7	-0.9					-1.9	-4.3
Other Sustainability Indicators																	
PV of public sector debt	...	...	24.6			28.0	31.2	32.8	33.8	33.1	30.6					20.7	14.3
<i>of which: foreign-currency denominated</i>	...	...	11.7			15.1	18.6	21.0	22.9	22.8	21.3					14.3	8.7
<i>of which: external</i>	...	...	11.7			15.1	18.6	21.0	22.9	22.8	21.3					14.3	8.7
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...					...	...
Gross financing need 2/	12.8	11.0	15.5			16.9	14.4	12.5	11.2	10.0	9.3					7.3	8.7
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	163.4			174.7	196.0	204.5	207.3	199.5	180.6					121.7	76.3
PV of public sector debt-to-revenue ratio (in percent)	...	...	179.5			197.3	214.3	221.0	220.4	208.6	187.1					121.7	76.3
<i>of which: external 3/</i>	...	...	85.8			106.3	127.7	141.6	149.0	143.9	130.1					83.8	46.4
Debt service-to-revenue and grants ratio (in percent) 4/	54.1	51.5	52.0			51.8	46.8	44.8	45.6	45.6	42.9					30.2	23.6
Debt service-to-revenue ratio (in percent) 4/	60.7	56.2	57.1			58.5	51.1	48.4	48.5	47.7	44.5					30.2	23.6
Primary deficit that stabilizes the debt-to-GDP ratio	-0.3	-5.0	-0.5			0.3	-0.7	0.4	-0.5	0.6	2.4					2.0	3.7
Key macroeconomic and fiscal assumptions																	
Real GDP growth (in percent)	5.2	5.1	4.8	7.3	3.2	5.0	5.5	6.0	6.7	6.7	6.7	6.1	6.8	6.0	6.3		
Average nominal interest rate on forex debt (in percent)	1.1	0.9	1.1	0.9	0.2	1.5	2.2	2.7	3.0	3.2	3.2	2.6	3.2	3.3	3.3		
Average real interest rate on domestic debt (in percent)	7.2	11.3	11.8	3.7	11.0	12.3	12.4	14.7	17.0	21.5	21.9	16.6	24.4	26.5	24.6		
Real exchange rate depreciation (in percent, + indicates depreciation)	-0.2	27.0	4.5	6.6	12.4	3.3	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	3.4	5.1	4.0	10.9	14.2	5.1	4.7	5.2	5.1	4.0	4.6	4.8	4.6	3.8	4.6		
Growth of real primary spending (deflated by GDP deflator, in percent)	12.6	0.2	40.6	5.4	13.0	15.1	0.9	1.4	0.2	1.4	7.7	4.5	8.4	9.4	8.4		
Grant element of new external borrowing (in percent)	...	...	...	...	...	14.3	14.3	14.3	15.8	15.8	15.8	15.0	15.8	14.3	...		

1/ [Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.]

2/ 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.

3/ Revenues excluding grants.

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

5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.



Ministry of Finance, Planning and Economic Development
Apollo Kaggwa Road
P.O.Box 8147, Kampala
www.finance.go.ug