INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

UGANDA

JOINT BANK-FUND DEBT SUSTAINABILITY ANALYSIS – 2018 UPDATE

Prepared jointly by the staff of the International Development Association (IDA) and the International Monetary Fund (IMF)

Approved by Paloma Anos-Casero (IDA) and Annalisa Fedelino and Vitaly Krabmarenko (IMF)

With debt-carrying capacity updated to 'strong' in the revised Low-Income Country Debt Sustainability Framework (LIC DSF), Uganda remains at low risk of external debt distress and overall debt distress, despite significantly higher debt burden trajectories than anticipated in the last DSA.[1] *The authorities are scaling up public investment in infrastructure to prepare for oil exports expected to start in FY2023/24 and to lay the foundation for growth over the longer term. All external debt and total public debt burden trajectories remain below their respective indicative thresholds under the baseline and stress test scenarios. That said, total debt service is expected to average around 41 percent of government revenue until oil revenues ensue, underscoring the importance of raising tax revenues, reducing tax expenditures, and reining in current spending. Key risks include political pressures for higher current spending, and new ad-hoc tax exemptions in addition to existing exemptions that put downward pressure on already low tax revenues. Further delays in oil exports beyond FY2023/24 could result in liquidity pressures, given the current heavy borrowing for oil sector-related infrastructure that is relying on enhanced repayment capacity from oil exports— especially if more non-concessional borrowing materializes. Maintaining public debt on a sustainable path will require strengthening the budget process to ensure that budget targets become more binding, effective public spending and public debt management, as well as comprehensive monitoring of fiscal risks.*

[1] The last Debt Sustainability Analysis (DSA) update was conducted in December 2016 (IMF Country Report No. 17/7), while the last full DSA was conducted in June 2015 (IMF Country Report No. 15/175). Uganda's debt carrying capacity is classified as "Strong" according to the composite indicator score determined by the World Bank's Country Policy and Institutional Assessment (CPIA) Index (2017 update) and other key fundamentals including real GDP growth, import coverage of reserves, remittances as percent of GDP, and growth rate of the world economy. The relevant thresholds for external debt under this category are: 55 percent for PV of debt-to-GDP ratio, 240 percent for PV of debt-to-exports ratio, 21 percent for debt service-to-exports ratio, and 23 percent for debt service-to-revenue ratio. The benchmark on total public debt (sum of public and publicly guaranteed external debt and public domestic debt) is 70 percent for PV of total debt-to-GDP ratio.

PUBLIC DEBT COVERAGE

1. **Public and publicly guaranteed (PPG) external and domestic debt covers debt contracted and guaranteed by the central government, state and local government, social security fund, and central bank (Text Table 1).** The Uganda Public Debt Management Framework 2013 gives the Ministry of Finance Planning and Economic Development the mandate to prepare and publish quarterly Debt Statistical Bulletins. The published data covers public and publicly-guaranteed debt with information on domestic and external debt. In addition, the Bank of Uganda provides data on locally issued debt held by non-residents, which allows a residency-based analysis. Due to data limitations, debt data does not cover several elements of the general government debt including extra budgetary funds and non-guaranteed debt issued by state-owned enterprise (SOE). That said, SOEs issue debt only in the domestic market. The authorities are committed to strengthening the oversight and monitoring of other elements in the general government and SOEs, which will further broaden the public debt coverage. Here we use estimates of SOE debt at 9.1 percent of GDP, based on a preliminary report. We also use the default PPP shock which equals 2.8 percent of GDP. Public expenditure captures spending to gradually pay off the domestic arrears. Based on the recent Auditor General's report, the amount of domestic arrears as of end-FY2017/18 increased by Ush 230 billion and stood at Ush 3.14 trillion, which is around 3 percent of GDP. The authorities have engaged the external auditor (Ernst &Young) to conduct a verification of the arrears.

2. **Uganda's debt-carrying capacity is classified as strong.** The classification of debt carrying capacity is guided by the composite indicator (CI) score, which is determined by the World Bank's

Table 1. Uganda: Coverage of Public and Publicly Guaranteed Debt and Parameters for Contingent Liability Shocks for the Tailored Stress Test

Public debt coverage

Subsectors of the public sector	Check box
Central government	X
State and local government	X
Other elements in the general government	
o/w: Social security fund	X
o/w: Extra budgetary funds (EBFs)	
Guarantees (to other entities in the public and private sector, including to SOEs)	X
Central bank (borrowed on behalf of the government)	X
Non-guaranteed SOE debt	

The contingent liability tailored stress test

	Default	Used for the analysis
Other elements of the general government not captured in 1.	0 percent of GDP	
SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	9.1
PPP	35 percent of PPP stock	2.78
Financial market (a minimum starting value of 5 percent of GDP)	5 percent of GDP	5
Total (in percent of GDP)		16.9

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

Source: Uganda authorities. IMF staff calculation.
Notes: Previous Debt Sustainability Analysis in Article IV staff reports have been done using currency-based approach.
The estimate of non-guaranteed SOE's debt is preliminary which is based on the Aide-Mémoire of Uganda Management of Contingent Liabilities where the source is from MoFPED (Consolidated Financial Statements FY 2016/17; Draft Fiscal Risk Statement FY 2019/20 November 2018; The Parastatal Monitoring Report on the Performance of Public Enterprises FU 2016/17). We also use the default PPP shock of 35 percent of the PPP stock, which equals 2.78 percent of GDP.

CPIA and other variables, such as real GDP growth, import coverage of foreign exchange reserves, remittances as percent of GDP, and growth of the world economy. The CI also incorporates forward-looking elements with the calculation based on 10-year average (5 recent years of historical data and 5 years of projection). The CI rating could change if growth and reserves are significantly lower than the forecast. Uganda's CI is 3.11, which lies above the threshold value of 3.05, and categorizes the country as having "strong" capacity. The four external indicative thresholds and the total public debt benchmark are determined by this classification of the debt carrying capacity (Text Table 2).

Table 2. Composite Indicator and Threshold Tables

Debt Carrying Capacity and Thresholds

Country	Uganda
Country Code	746

Debt Carrying Capacity	Strong

Final	Classification based on current vintage	Classification based on the previous vintage	Classification based on the two previous vintages 1/
Strong	Strong 3.11	Strong 3.13	Medium 3.70

Applicable thresholds

EXTERNAL debt burden thresholds	
PV of debt in % of	
Exports	240
GDP	55
Debt service in % of	
Exports	21
Revenue	23

TOTAL public debt benchmark	
PV of total public debt in % of	
GDP	70

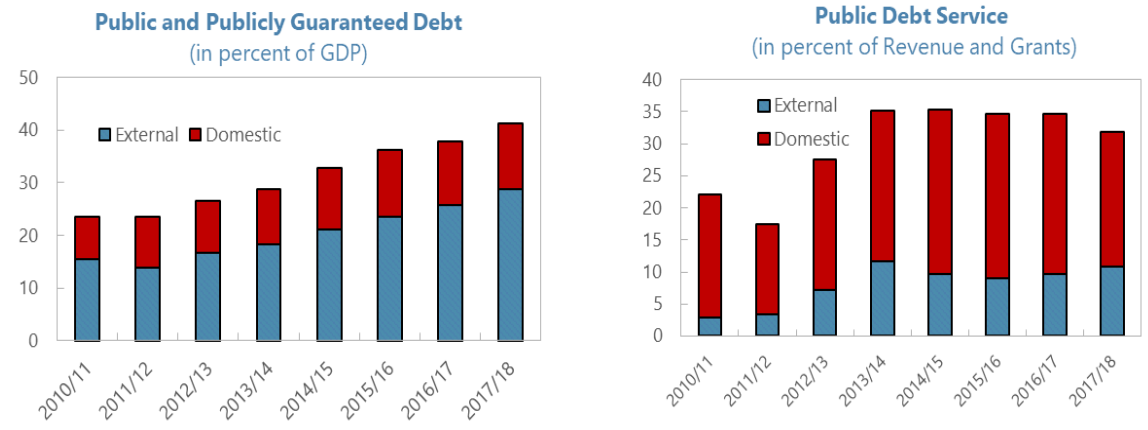
Notes: The current vintage refers to the 2018 Oct WEO vintage; The previous vintage refers to the 2018 April WEO vintage.
1/ Until the April 2019 WEO vintage is released, the two previous vintages refer to classification and corresponding score based solely on the CPIA per the previous framework.

BACKGOUND AND RECENT DEVELOPMENTS

3. **Over the past five years, Uganda's economic performance moderated and was driven in part by low productivity in the agricultural sector and two weather-related shocks.** Average real GDP growth declined from close to 8 percent in the five years to FY2011/12 to 5 percent over the last five years (FY2013/14 to FY2017/18). The growth slowdown was in part caused by two severe droughts and pest infestations, such as the fall army worm. Meanwhile, inflation decelerated to around 5 percent, on average, since the spike in inflation in FY2011/12 of close to 21 percent. During the past six years, the current account deficit averaged 6 percent of GDP, declining steadily from a peak of 8.7 percent of GDP in FY2011/12 to around 3.7 percent in FY2016/17 and then widened again to 6.1 percent in FY2017/18. The external deficit was largely driven by hydro project-related imports, which are winding down as the dams approach completion. Recent increases in imports were driven by oil related projects. Exports of goods and services increased from US$3.8

billion in FY2010/11 to US$5.4 billion in FY2017/18, while imports increased from US$6.8 in FY2010/11 to US$7.9 billion in FY2017/18, resulting in a larger trade deficit of 9.2 percent of GDP in FY2017/18. Over the past five years, the real exchange rate depreciated cumulatively by around 25 percent, with a stronger drop in the value of the domestic currency in FY2014/15 at around 27 percent mainly due to global liquidity concerns and negative shocks in neighboring countries and trading partners.

Figure 2. Public and Publicly Guaranteed Debt

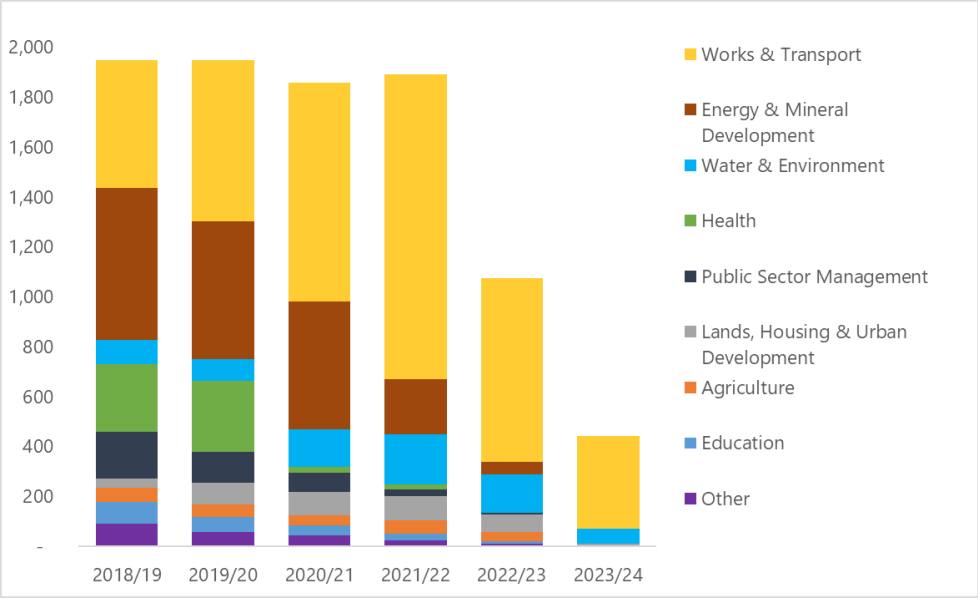


Sources: Uganda authorities and IMF calculations.

4. **With one of the largest oil reserves in Sub-Saharan Africa, Uganda is expected to start extracting and exporting oil in FY2023/24, and reserves are expected to last for 25 years.** Fiscal oil revenues are estimated in the range of ½ to 4 percent of GDP per annum during this period, based on a price for Brent of US$60 in constant 2018 prices. To export oil, a share of the extracted oil will be transferred to the port of Tanga in Tanzania through a pipeline that needs to be built and is estimated to cost around US$8 billion. The domestic oil refinery will use the other share of extracted oil and is expected to be built through a PPP arrangement with a consortium of U.S. and Italian companies. The total investment in the oil refinery is estimated at US$3-4 billion. The PPP gives rise to contingent liabilities, but estimates need to wait until negotiations are firmed up. In addition to the refinery and pipeline, oil-related road infrastructure will be built in the western region of Uganda as well as an international airport and storage facilities.

5. **Uganda continues to scale up public investment to lay the foundation for future growth, and to prepare for oil exports, although implementation has been slow.** Forecast disbursements for externally financed projects over the medium term is concentrated in sectors of Works & Transport, Energy & Mineral Development and Water & Environment (Text Figure 1). The two largest infrastructure projects, the Karuma and Isimba dams, are largely completed, and are set to start producing electricity in 2019 or next. Other planned large infrastructure projects include building access roads to oil wells, a pipeline to Tanga in Tanzania, a domestic refinery, an international airport in Kabaale, transmission lines, and the Lubowa hospital. Strong project selection and implementation frameworks that safeguard high quality of spending will be key to realizing the envisaged growth dividend. Investment in human capital is needed in parallel.

Figure 1. Forecast disbursements of externally financed projects, by sector (Millions of U.S. dollars)



Sources: Uganda authorities and IMF calculations.

Note: The years are fiscal years.

6. **The focus of government finances remains on raising tax revenues and increasing capital spending.** The primary deficits averaged 2.4 percent of GDP over the past five years. Starting from a low base, tax revenue collection has strengthened over the last few years, on average by 0.4 percent of GDP yearly. Going forward the authorities target an annual improvement in tax revenues by ½ percent of GDP and are in process of preparing a 5-year domestic revenue mobilization strategy to that end. On the expenditure side, the authorities focus on capital spending, although this has been challenging with capital spending below budgeted amounts due to difficulties in government co-financing, land issues, and broader absorption capacity in terms of procurement.

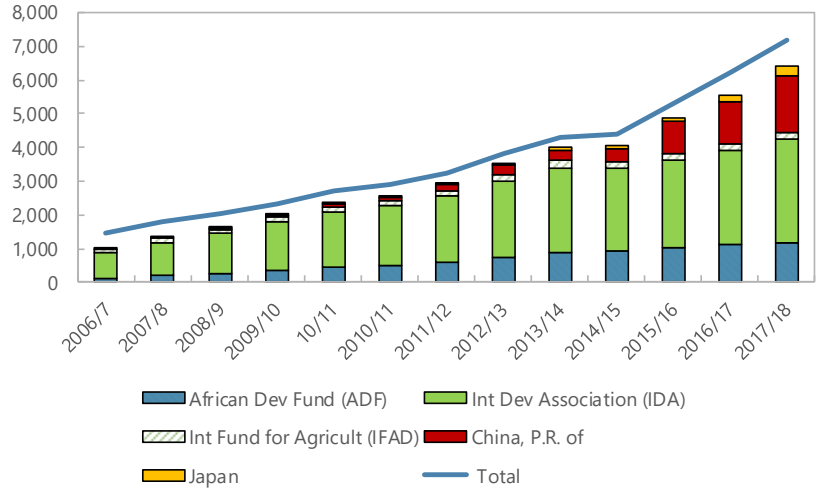
7. **Public debt has increased in recent years to reach 41.3 percent of GDP at the end of FY2017/18 (US$11.3 billion) (Text Figure 2).** In present value terms, total public sector debt amounts to 31.3 percent of GDP. Two-thirds of outstanding public debt is owed to external creditors (US$7.9 billion) on a residency basis, which finances largely energy and infrastructure projects (Text Figure 3). Domestic debt amounts to about US$3.5 billion, with roughly three-fourths in Treasury Bonds and the rest in short-term Treasury Bills (Text Figure 4).

8. **While most of the existing stock of external public debt is on concessional terms, the semi-concessional component has been on the rise reflecting sizable borrowing from China since** FY2015/16 (Text Figure 3). Highly concessional loans from the International Development Association (IDA) and the African Development Fund (ADF) account for 58.8 percent of the external loan portfolio, which drives the difference between the nominal value of public debt and its present value. Other concessional creditors include the International Fund for Agricultural

Development (IFAD), the Arab Bank for Economic Development in Africa (BADEA), the Organization of the Petroleum Exporting Countries (OPEC) fund, and some bilateral creditors (Text Figure 3 and Table 3). Semi-concessional loans were used largely to finance the building of the Karuma and Isimba dams as well as theKampala–Entebbe Expressway. These three investments financed by the Export-Import Bank of China (EXIM) account for three-fourths of all semi-concessional financing. The remaining one-third of semi-concessional loans are largely from the EIB for the East Africa transport corridor. Commercial loans are typically buyers' credits for electricity equipment provided by the China EXIM Bank and the Japan Bank for International Cooperation (JBIC). In sum, China EXIM Bank accounts for 23.4 percent of the external loan portfolio and is assumed to remain an important financing source going forward. Other commercial loans include European Export and Trade Bank (AKA Bank) and Commerzbank loans for the Inland Port at Bukasa, and Standard Chartered Bank provided loans for Kabaale International Airport and Closed-circuit television (CCTV) cameras (Text Table 3).

Figure 3: Main Creditors of Public and Publicly Guaranteed External Debt Stock

(Million U.S. dollars, main creditors, FY2006/07 –FY2017/18)



Sources: Uganda authorities and IMF and WB staff calculations.

Table 3: Composition of Public and Publicly Guaranteed External Debt Stock
(Million U.S. dollars, as of end-FY2017/18)

Creditor	Amount	Share
Total	**7,202**	**100.0%**
BILATERAL	**2,239**	**31.1%**
AFD	101	1.4%
EXIM BANK OF CHINA	1,688	23.4%
EXIM BANK S KOREA	27	0.4%
GOVT OF NIGERIA	12	0.2%
IRAQ FUND	0	0.0%
JBIC	120	1.7%
JICA	170	2.4%
KUWAIT FUND	33	0.5%
MIN FOR AFF AUSTRIA	5	0.1%
SAUDI ARABIA FUND	30	0.4%
UKEF	53	0.7%
COMMERCIAL BANKS OR OTHER FINANCIAL INSTITUTION	**49**	**0.7%**
AKA	7	0.1%
COMMERZBANK	1	0.0%
STANDARD CHARTERED	41	0.6%
MULTILATERAL	**4,914**	**68.2%**
ADB	30	0.4%
ADF	1,182	16.4%
IDB	100	1.4%
IFAD	222	3.1%
NDF	56	0.8%
OPEC FUND	42	0.6%
PTA	101	1.4%
IDA	3,055	42.4%
EIB	79	1.1%
BADEA	47	0.7%

Sources: Uganda authorities and IMF and WB staff calculations.

9. **Public domestic debt (residency based) stood at 12.6 percent of GDP at end of FY2017/18, which is expected to remain broadly unchanged in FY2018/19.** Total public domestic debt in local currency amounts to 13.5 percent of GDP. On average, nonresidents held about 9 percent of total treasury bills and treasury bonds over the period of FY2012/13 to FY17/18. As of June 2018, nonresidents held about 7 percent of total government securities as the investments became less attractive due to lower yields. That said, foreign investors did not completely move out of Uganda but have shifted into currency swaps. Using the residency-based methodology, government securities held by nonresidents are treated as external debt in the DSA (Text Figure 4, following).

10. **The medium- and long-term macroeconomic framework underlying this DSA is consistent with the scenario presented in the staff report (Text Table 4). The baseline scenario assumes the following:**

- *Real GDP growth*. Growth is mainly driven by higher oil-related FDI and public infrastructure investment. Uganda's national development plan has identified five pillars to support long-term growth: (i) the modernization of the agriculture sector which accounts for about 2/3 of employment and more than half of today's exports; (ii) the development of the tourism sector, minerals and petroleumP (iii) the development and maintenance of strategic infrastructure and human capital

(iv) improvement of the business environment through better governance and fight against corruption. Medium term growth rate is projected between 6 to 7 percent.

- *GDP deflator*. Core inflation is projected to remain within a band of +/- 2 percentage points around the BoU's 5 percent target.

- *Oil revenue projections.* Oil production from the current projects is expected to start in FY2023/24 and last for 25 years. The government of Uganda expects to receive between ½ percent to 4 percent of GDP in oil related revenue per year during this period. Additional blocks are being allocated for exploration, and further commercially viable reserves may be discovered going forward.

- *Primary fiscal deficit*. The primary fiscal deficit is projected to remain high due to large capital spending on infrastructure projects.[1]

- *Public debt* is projected to decline starting from 2022/23, once the large infrastructure projects are completed and oil receipts raise government revenues.

- *External current account deficit.* The current account deficit is projected to widen to 9.6 percent of GDP over the next few years, due to rising import demand from both the government and the private sector for the planned development of the oil sector and public investment.

- *FDI inflows* are expected to continue to increase with investments on oil related projects before the oil exports start. Then we assume FDI outflows using the oil revenue in the long term.

- *Gross official reserves* are expected to gradually rise over the medium term, covering around 4.2 months of imports.

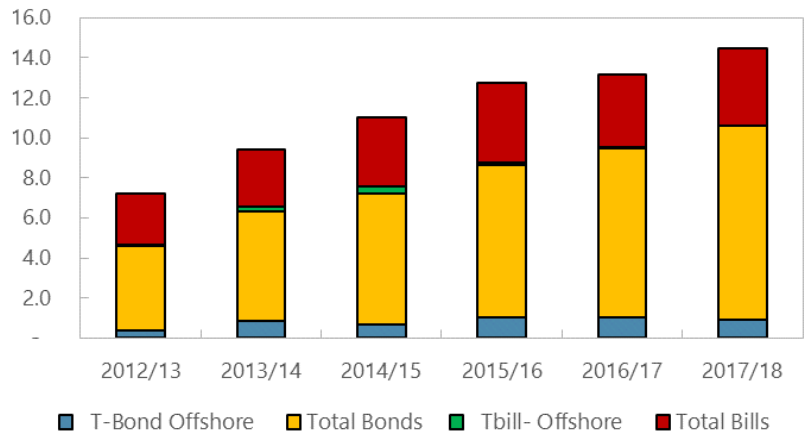
Table 4. Macroeconomic Forecast and Assumptions

	Real GDP growth (percent change)		Primary deficit (percent of GDP)		Change in public debt (percent)		Current account (percent of GDP)		FDI Inflows (percent of GDP)	
	Previous	Current	Previous	Current	Previous	Current	Previous	Current	Previous	Current
2015/16	4.7	4.8	3.8	2.9	2.8	3.4	-6.3	-5.6	2.2	2.8
2016/17	3.9	3.9	2.5	1.3	3.9	1.6	-4.8	-3.7	2.6	2.5
2017/18	5.0	6.1	1.6	2.5	2.9	3.5	-6.2	-6.1	3.3	2.7
2018/19	5.5	6.3	0.7	3.0	0.9	0.9	-8.0	-7.2	4.7	4.0
2019/20	6.0	6.3	0.6	4.7	1.5	3.5	-7.9	-8.9	5.6	5.4
2020/21	6.5	6.2	0.2	4.7	1.4	3.2	-9.0	-9.6	6.0	6.0
2021/22	6.5	6.1	-0.5	3.2	-1.5	1.7	-5.7	-8.9	6.1	6.9
2022/23	8.2	6.0	-2.4	1.3	-1.1	-0.2	-1.9	-7.0	-0.7	5.9
Avg 2023/24 -37/38	7.3	6.1	-0.2	-0.1	-0.8	-2.5	2.7	0.9	-2.3	-1.3

Sources: Uganda authorities and IMF staff calculations and projections.

[1] In recent years, actual project execution rates have been about 70 percent for externally-financed development spending, while the execution rate for the two hydro power projects was much lower in the early days of construction. The execution rate for domestically financed public investment has been 100 percent. Budget projections have become more realistic, but the baseline projections still assume an under execution of 70 percent.

Figure 4. Public Domestic Debt, by Instrument and Residency
(Face value, in millions of Uganda Shillings)



Sources: Uganda authorities; IMF and WB staff estimates.

11. **The realism tool outputs compared the projections to cross-country experiences and to Uganda's own historical experience:**

- There are small differences between past and projected debt creating flows. The contributions of past debt creating flows remain relatively the same for the projection period, and unexpected changes in public debt are near the median of the distribution across low-income countries. The smaller increase in average total public debt over the five-year projection horizon is accounted for by the start of oil exports in FY2023/24.
- Public investment rates are higher compared to the previous DSA. The higher investments reflect more infrastructure projects in the next few years, higher cost for some projects, and Uganda Air. Similarly, private investment rates have shifted upward.
- The country's planned fiscal adjustment for the next 3-years (until FY2021/22) is negative, implying that the investment cycle to prepare for oil exports is on-going. At the same time, the assumed fiscal multiplier stemming from the continued investment in oil infrastructure is minimal with the range of multipliers indicating a growth rate of up to 7.7 percent against the conservative assumption of about 6.1 percent in the analysis.

EXTERNAL DEBT SUSTAINABILITY

12. **The evolution of external government debt burden indicators points to a sustainable path under the baseline.** Both solvency and liquidity indicators remain well below their indicative thresholds over the projection horizon (Figure 1). Specifically, the PV of PPG external debt-to-GDP ratio peaks at 25.9 percent (against the threshold of 55 percent), while the PV of debt-to-exports ratio reaches 134.7 percent (against the threshold of 240 percent). The liquidity indicators show a similar path. The debt service-to-revenue ratio rises to 11.3 percent in FY2022/23, about half of the level at which the threshold is set. The denominator for this debt burden indicator is low compared to other

Sub-Saharan countries, and is assumed to rise gradually from 15.3 percent in FY2017/18 to 17.9 percent of GDP in FY2022/23, on the back of a medium-term revenue strategy being developed by the government and supported by the IMF and the World Bank. The debt service-to-exports ratio peaks at 10.3 percent, well below the indicative threshold of countries with strong debt-carrying capacity.

13. **Stress tests and alternative scenarios confirm a continued low risk of debt distress rating.** All extreme stress tests remain below the respective indicative thresholds (Figure 1). The most extreme shock is the combined contingent liability shock for the PV of debt-to-GDP ratio and the depreciation shock for debt service-to-revenue ratio. For the PV of debt-to-exports ratio and debt service-to-exports ratio, the most extreme shock is a shock to exports. The historical scenario, meanwhile, depicts a deterioration over time across all debt burden indicators. This scenario does not take account of the structural break in the major macroeconomic indicators as a result from the commencement of oil production. For the debt sustainability assessment, the scenario is therefore disregarded. The contingent liability shock assumes the realization of the SOE's debt of 9.1 percent of GDP and a PPP stock of 2.8 percent of GDP.

14. **Risks stem from the uncertainty around oil production. The scaling-up of investment spending and corresponding increases in semi-concessional and commercial borrowing lead to pronounced vulnerabilities.** These vulnerabilities stem from several factors. First, oil export receipts could be realized much later than expected postponing large inflows of foreign exchange, which would adversely affect denominators of the solvency and liquidity debt burden indicators (PV of debt-to-exports and debt service-to-exports). Second, a delay in oil exports would also leave the budget without planned revenues thus leaving a larger gross financing need, and adversely impacting the denominator of the debt service-to-revenues indicator. Under such circumstances, the historical scenario may to some extent be illustrative of the inherent risks as debt levels continue to increase over the period. Finally, risks could also stem from uncertainty regarding oil prices. There could be oil price shocks under which oil prices are lower than under the baseline. However, the effects of oil price shock on total exports are relatively small, as projected oil exports account for 10 to 20 percent of total exports. As a result, debt indicators would remain below the thresholds under an oil price shock scenario.

15. **Debt vulnerabilities nevertheless remain significant.** Other risks could include large investments financed with semi- or non-concessional loans not taken into account within this framework such as nationalizing the electricity transmission system when the concession expires in 2025, and thus engaging in new government borrowing for maintaining and expanding the gridline.

PUBLIC DEBT SUSTAINABILITY

16. **Total public debt-to-GDP trajectories under the baseline remain below the indicative threshold.** The PV of public debt-to-GDP ratio reaches around 39.3 percent in FY2023/24, and declines to 29.9 percent by FY2028/29 as oil export receipts ensue (Figure 2). This compares to an

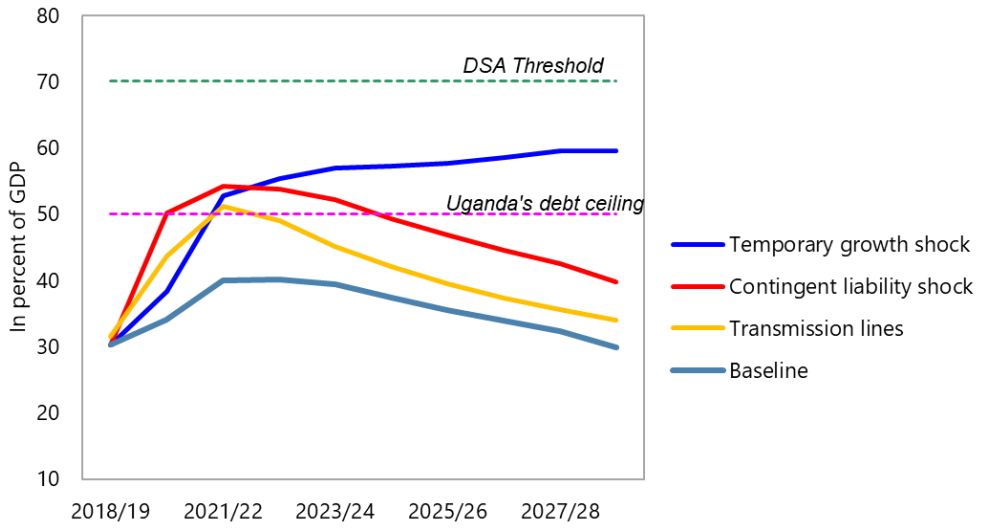
indicative benchmark of 70 percent for countries with strong debt-carrying capacity.[2] However, the nominal level of public debt-to-GDP is projected to reach 50.7 percent mark in FY2021/22. The debt service-to-revenue ratio slowly declines to 37.6 percent after five years. The liquidity indicator is driven by several factors: (i) the relatively short average term to maturity (ATM) of domestic debt amounting to 3.7 years; (ii) high average nominal interest rate on domestic debt of over 15 percent; and (iii) the low budget revenue base, even in the SSA context. These factors imply high rollover risks and pronounced interest rate risks. To mitigate such risks, policy actions are required such as stronger revenue mobilization and extension of average domestic debt maturities over the medium term. These are areas in which the IMF and the World Bank provide technical assistance.

17. **Stress tests confirm that adding domestic debt to the analysis does not elevate the risk of debt distress.** The most extreme stress test is the combined contingent liability shock, which simulates a contingent liability shock on the order of 17 percent of GDP with liabilities from SOE's debt, PPP, and financial market liabilities (Figure 2). Under this shock scenario, PV of total public debt-to-GDP ratio rises to a maximum of 54 percent in FY2020/21 to FY2022/23, which would be higher than the government's publicly stated ceiling of 50 percent of GDP. Another significant stress test is the growth shock scenario, which assumes lower real output growth than under the baseline, the PV of total public debt-to-GDP ratio rises to a maximum of 50 percent in FY2023/24. The PV of total public debt-to-revenue ratio rises close to 300 percent under the most extreme contingent liabilities shock scenario. The most extreme shock to public debt service is the combined contingent liability shock, and the debt service-to-revenue rises to 65 percent. The realism tools suggest conservative growth assumptions. However, there is uncertainty around the long-term growth dividend of public investment if there are significant delays in public investment execution.

18. **Deviations from fiscal plans are the main risks to debt sustainability.** Although the debt risk rating remains "low", the PV of public debt levels breaches the debt target of 50 percent of GDP that the authorities aim to maintain in the Charter for Fiscal Responsibility under the contingent liability shock scenario and the customized scenarios of temporary growth shock and transmission lines (Text Figure 5), which suggest vulnerabilities in the debt path. Uganda has lost its fiscal anchor. The budget process does not provide sufficient top-down guidance for resource allocation, as budget execution has systematically deviated from the approved budgets, altering expenditure composition. This also highlights the importance of domestic revenue mobilization, enhanced public investment management, reined-in current spending, overall fiscal consolidation once major large investment projects are completed, and realizing the envisaged growth dividend. These risks amplify the risk stemming from uncertainties surrounding oil production.

[2] The government's Charter of Fiscal Responsibility requires public debt to stay below 50 percent of GDP in net present value terms which is also one of the convergence criteria for monetary union in the East African Community.

Figure 5. PV of Public Debt to GDP under alternative scenarios



Sources: Uganda Authorities; IMF staff estimates.
Notes: In this chart, the temporary growth shock assumes growth rates are 1.5 standard deviation lower than forecast; Transmission lines scenario assumes full amount of financing needed.

CONCLUSION

19. **Despite increased debt vulnerability, Uganda's risk of external debt distress remains low.** The increase in borrowing is intended to finance growth-enhancing scaled-up public investment. As a result, external debt and public debt have risen rapidly compared to the previous DSA. Domestic risks include problems in public investment management, political pressures for higher current spending, new ad-hoc tax exemptions that put downward pressure on tax revenues in conjunction with existing exemptions, and weak implementation of new tax-enhancing measures and reforms. Further delays in oil exports beyond FY2023/24 could result in liquidity pressures, given the current heavy borrowing for oil sector-related infrastructure that is relying on enhanced repayment capacity from oil exports— especially if more non-concessional borrowing materializes. Significant delays in public investment execution, weather-related shocks and pest infestations may constrain real GDP growth and the future growth dividend. Debt risks could stem from external risks such as negative demand shock to real GDP growth outlook, declines in oil prices which may affect investment plans including phasing of extraction, worsened terms of trade, and exchange rate risks with normalization of US interest rate.

20. **Mitigating debt risks requires sound macroeconomic management and strong/steadfast policy implementation.**

- *Adopt fiscal anchor and make budget binding*. To prevent public debt from rising above the sustainable path and provide a buffer against shocks, the authorities could set an operational debt ceiling of 50 percent of GDP in nominal terms. This debt ceiling would then determine the annual budget deficit and define a binding expenditure envelope. Strong fiscal discipline requires clear quantitative targets of budget, and these targets need to gain a binding character during budget implementation, by committing to using budget for top-down resource allocation.

- *Strengthen public investment management.* To avoid overborrowing, close attention and prudence should be applied to project identification and the financing terms of any proposed investment. The government should focus on projects with high returns that are closely aligned to development priorities and rely more on concessional loans to contain borrowing costs. Reducing volatility in domestic borrowing, which currently occurs at high interest rates, would also serve this purpose and avoid crowding out private sector credit expansion.

- *Adopt and Implement Domestic Resource Mobilization (DRM) strategy.* Given Uganda's relatively low revenue collection, this requires further efforts to increase revenue mobilization and maximize the impact of limited domestic resources. The strategy is expected to include tax policy reforms, including a rationalization of exemptions, and tax administration reforms to improve compliance.

- *Strengthen debt management (interest cost, exchange rate risk, maturities).* Public debt management should ensure that the government's financing needs and its payment obligations are met at the lowest possible cost over the medium to long run, consistent with a prudent degree of risk. Debt management needs to consider interest rate risk, exchange rate risk, refinancing risk, liquidity risk, credit risk, and operational risk. Debt management should try to minimize expected debt servicing costs and the cost of holding liquid assets, subject to an acceptable level of risk. With limited access to foreign capital markets, debt management should give higher priority to refinancing risk and try to promote the development of the domestic debt market.

- *Strengthen overall public financial management (PFM), including efforts to avoid arrears*. Efforts should be taken to strengthen public procurement and PFM compliance. The approved Uganda PFM Reform Strategy (FY18/19–FY22/23) would help to ensure commitments accurately reflected in annual budgets and rein in excessive current spending. Implementing the proposed arrears management strategy, which includes recognition, ageing, liquidation and reporting of arrears, would be important.

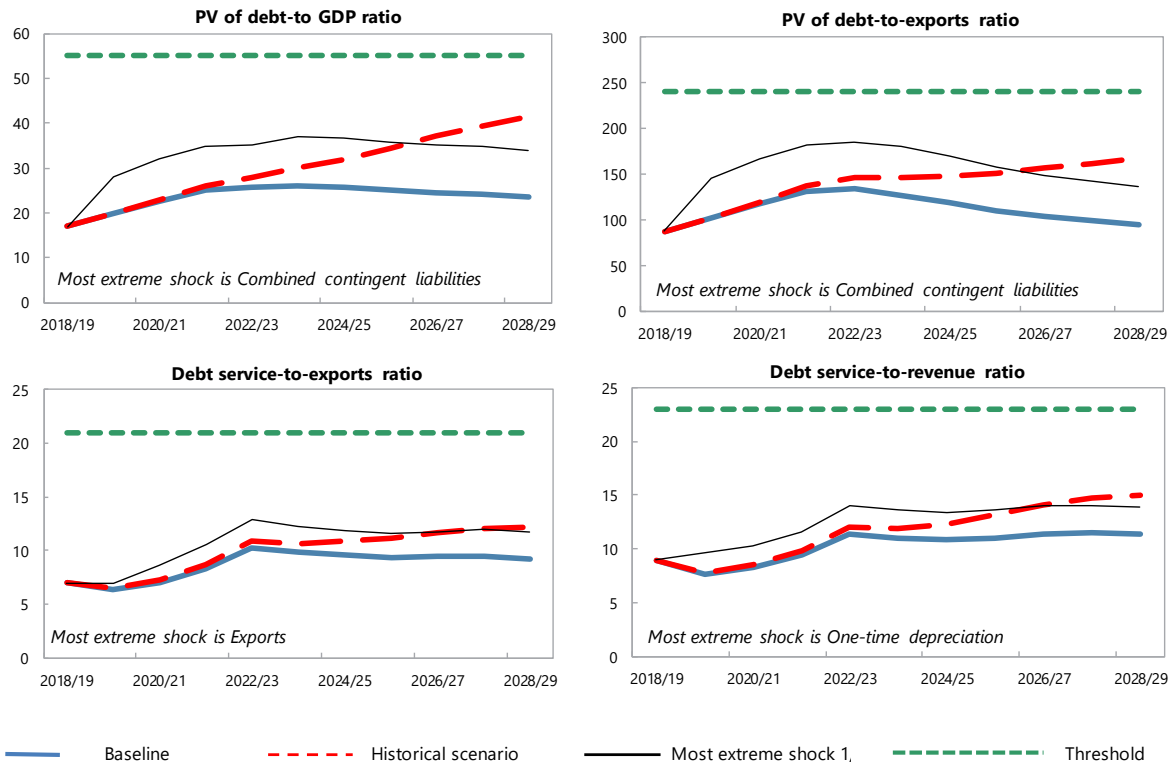
- *Closely monitor contingent liabilities.* Contingent liabilities have in general been one of the largest sources of fiscal risk across countries, since the materialization of contingent liabilities can contribute to unexpected increases in the debt-to-GDP ratio, crowding out private credit and jeopardizing debt sustainability. Efforts should be stepped up to estimate, disclose, manage, and contain contingent liabilities, especially those in the financial sector, state-owned enterprises, and PPPs.

- *Enhance governance frameworks*. These are equally essential to safeguard the quality and effectiveness of public investment and other government spending. A better infrastructure and the impact of parallel reforms, e.g., improvements in the business climate, are expected to strengthen Uganda's competitiveness. Sound asset-liability management and avoiding a premature reliance on uncertain future oil flows remain essential preconditions for debt sustainability.

AUTHORITIES' VIEWS

21. **The authorities broadly agree with the results of this DSA and the overall conclusion of a low risk of external debt distress.** The authorities regularly carry out their own debt sustainability analyses and pay very close attention to maintaining a low risk of debt distress. They remain committed to ensuring debt sustainability through long-term prudent debt management, as outlined in their Medium Term Debt Management Framework. They are committed to carefully prioritizing infrastructure projects and financing of the projects preserves debt sustainability. The authorities acknowledged the significant vulnerabilities from growing public debt and contingent liabilities risks, and intend to closely monitor developments, and stand ready to adjust policies as needed to safeguard debt sustainability. They also commit to continue to engage with IDA/IMF staff on debt management issues and to address debt vulnerabilities by building policy credibility and deepening the markets.

Figure 1. Uganda: Indicators of Public and Publicly Guaranteed External Debt under Alternatives Scenarios, 2018/29-2028/29



Customization of Default Settings	Size	Interactions
Tailored Tests		
Combined CLs	Yes	
Natural Disasters	n.a.	n.a.
Commodity Prices 2/	n.a.	n.a.
Market Financing	n.a.	n.a.

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

Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	4.1%	1.5%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	21	38
Avg. grace period	4	6

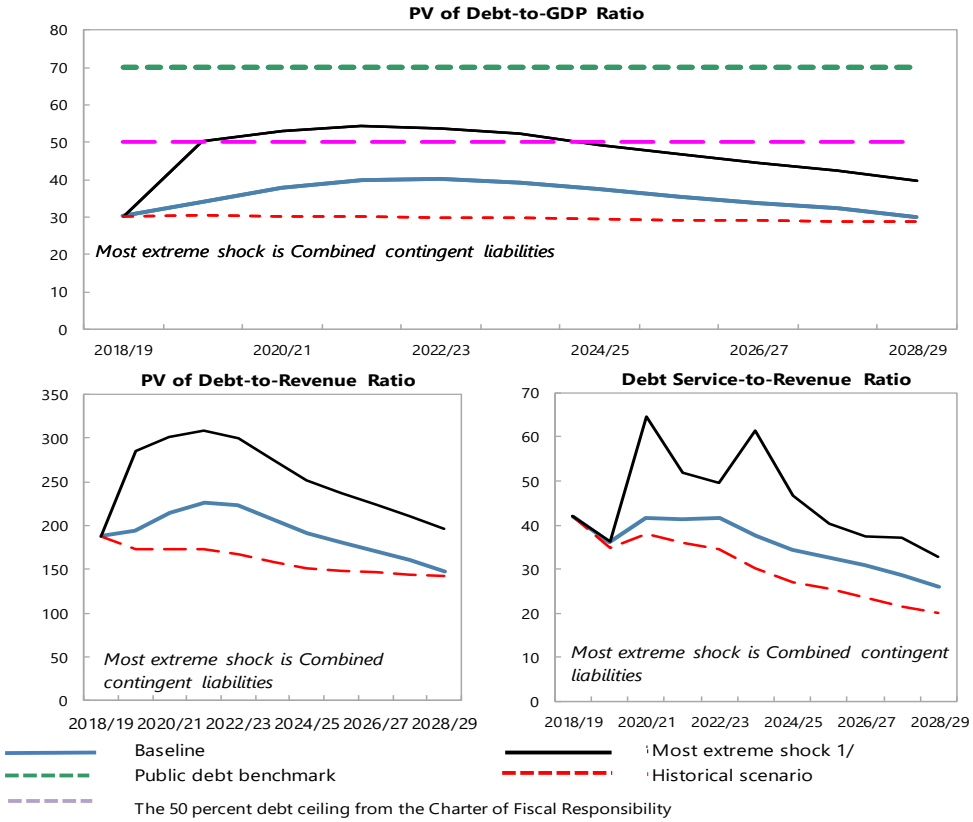
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2029. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

2/ The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.

Figure 2. Uganda: Indicators of Public Debt under Alternative Scenarios, 2018/19-2028/29



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	53%	53%
Domestic medium and long-term	29%	29%
Domestic short-term	17%	18%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	4.1%	4.1%
Avg. maturity (incl. grace period)	21	21
Avg. grace period	4	4
Domestic MLT debt		
Avg. real interest rate on new borrowing	9.3%	9.3%
Avg. maturity (incl. grace period)	4	4
Avg. grace period	3	3
Domestic short-term debt		
Avg. real interest rate	7%	7.0%

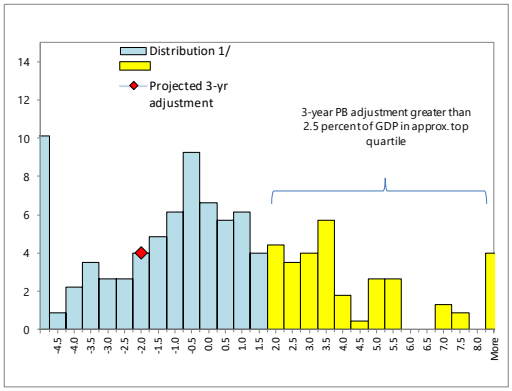
* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2029. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

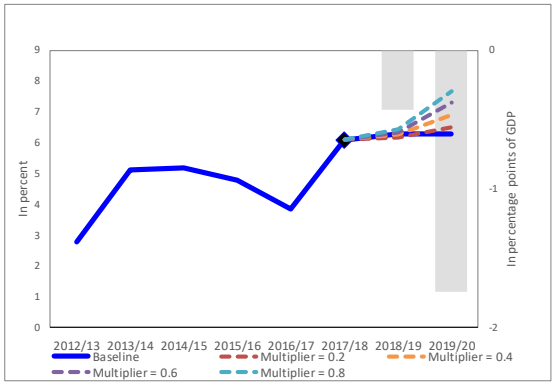
Figure 4. Uganda: Realism Tools

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



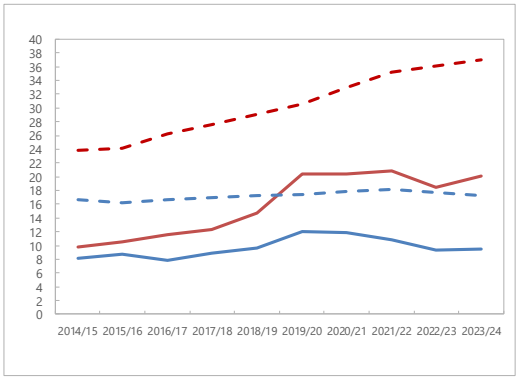
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



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

Public and Private Investment Rates
(% of GDP)



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

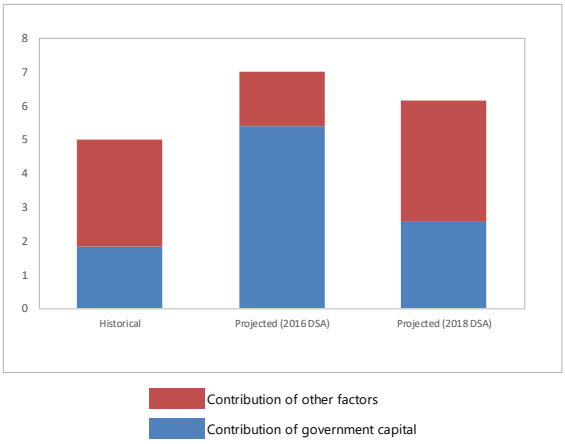
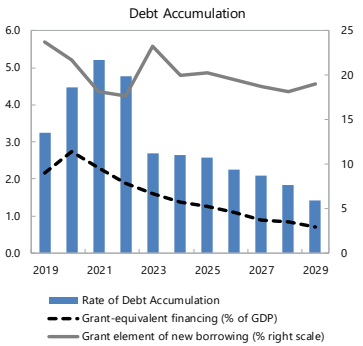


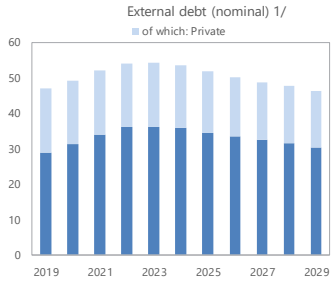
Table 1. Uganda: External Debt Sustainability Framework, Baseline Scenario, 2015/16-2028/29

(In percent of GDP,unless otherwise indicated)

	Actual			Projections							Average 8/	
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2028/29	Historical	Projections
External debt (nominal) 1/	**41.1**	**42.9**	**45.3**	**46.9**	**49.3**	**52.0**	**54.1**	**54.3**	**53.6**	**46.2**	**33.2**	**50.4**
of which: public and publicly guaranteed (PPG)	**23.6**	**25.8**	**28.7**	**28.8**	**31.3**	**34.1**	**36.2**	**36.2**	**35.8**	**30.3**	**19.2**	**33.4**
Change in external debt	4.6	1.7	2.5	1.6	2.3	2.7	2.1	0.2	-0.7	-1.5		
Identified net debt-creating flows	**7.1**	**-1.8**	**1.1**	**0.6**	**1.3**	**1.4**	**0.1**	**-0.9**	**-2.4**	**-1.9**	**1.5**	**-1.1**
Non-interest current account deficit	**4.1**	**1.9**	**4.2**	**5.7**	**7.0**	**7.8**	**6.9**	**4.8**	**2.6**	**-6.2**	**5.4**	**2.1**
Deficit in balance of goods and services	0.1	-0.6	0.9	1.6	2.4	2.5	1.8	0.2	-2.0	-11.4	**1.7**	**-2.7**
Exports	19.3	19.0	19.5	19.3	19.1	19.1	19.0	19.0	20.5	24.7		
Imports	19.4	18.3	20.5	20.9	21.6	21.6	20.8	19.3	18.5	13.3		
Net current transfers (negative = inflow)	-5.9	-5.6	-5.7	-5.9	-5.6	-5.2	-4.8	-4.6	-4.4	-3.2	**-6.1**	**-4.5**
of which: official	-1.0	-0.7	-0.5	-0.8	-0.8	-0.6	-0.5	-0.4	-0.3	-0.1		
Other current account flows (negative = net inflow)	9.8	8.1	9.0	10.0	10.2	10.4	9.9	9.1	9.0	8.4	**9.7**	**9.3**
Net FDI (negative = inflow)	**-2.8**	**-2.5**	**-2.7**	**-4.0**	**-4.9**	**-5.5**	**-5.9**	**-4.9**	**-3.7**	**3.0**	**-3.6**	**-2.4**
Endogenous debt dynamics 2/	**5.8**	**-1.1**	**-0.4**	**-1.1**	**-0.9**	**-0.9**	**-0.9**	**-0.8**	**-1.2**	**1.3**		
Contribution from nominal interest rate	1.6	1.8	1.9	1.6	1.8	1.9	2.0	2.2	2.1	4.0		
Contribution from real GDP growth	-2.0	-1.5	-2.5	-2.7	-2.7	-2.8	-2.9	-3.0	-3.3	-2.7		
Contribution from price and exchange rate changes	6.2	-1.5	0.1	...	...	...	...	...	...	...		
Residual 3/	**-2.4**	**3.5**	**1.4**	**1.0**	**1.0**	**1.3**	**2.0**	**1.1**	**1.6**	**0.4**	**0.9**	**1.3**
of which: exceptional financing	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	**...**	**...**	**14.8**	**16.9**	**19.7**	**22.5**	**25.1**	**25.6**	**25.9**	**23.4**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**75.6**	**87.8**	**102.6**	**117.9**	**131.8**	**134.7**	**126.0**	**94.7**		
PPG debt service-to-exports ratio	**13.5**	**14.4**	**8.5**	**7.0**	**6.4**	**7.0**	**8.3**	**10.3**	**9.8**	**9.2**		
PPG debt service-to-revenue ratio	**18.9**	**19.3**	**11.4**	**9.0**	**7.7**	**8.2**	**9.5**	**11.3**	**11.0**	**11.3**		
Gross external financing need (Million of U.S. dollars)	1727.2	1345.9	1941.5	2155.8 14381.3	2591.4	3111.6	3259.3	3263.1	3457.2	6326.5		
Key macroeconomic assumptions												
Real GDP growth (in percent)	4.8	3.9	6.1	6.3	6.3	6.2	6.1	6.0	6.6	6.1	**6.4**	**6.2**
GDP deflator in US dollar terms (change in percent)	-14.9	3.7	-0.3	0.2	2.4	4.0	2.6	2.3	2.4	3.0	**1.2**	**2.3**
Effective interest rate (percent) 4/	3.8	4.7	4.8	3.7	4.3	4.2	4.2	4.5	4.2	9.1	**5.5**	**4.2**
Growth of exports of G&S (US dollar terms, in percent)	-5.0	5.6	9.0	5.0	8.2	10.1	8.5	8.3	17.9	10.6	**7.2**	**9.7**
Growth of imports of G&S (US dollar terms, in percent)	-5.9	1.6	17.9	8.6	12.5	10.6	4.9	0.2	4.8	7.1	**5.1**	**6.9**
Grant element of new public sector borrowing (in percent)	...	...	...	23.7	21.7	18.2	17.7	23.2	20.0	19.0	**...**	**20.7**
Government revenues (excluding grants, in percent of GDP)	13.8	14.1	14.5	15.0	16.0	16.3	16.7	17.2	18.3	20.1	**12.7**	**16.6**
Aid flows (in Million of US dollars) 5/	583.5	519.8	246.2	882.4	1176.8	1093.0	1007.1	969.3	902.3	834.7		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.1	2.7	2.3	1.9	1.6	1.4	0.7	**...**	**2.0**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	38.6	39.0	31.9	28.9	34.9	31.5	23.2	**...**	**34.1**
Nominal GDP (Million of US dollars)	24,134	25,985	27,474	29,246	31,839	35,148	38,250	41,480	45,282	73,866		
Nominal dollar GDP growth	-10.8	7.7	5.7	6.5	8.9	10.4	8.8	8.4	9.2	9.3	**7.6**	**8.7**
Memorandum items:												
PV of external debt 7/	...	...	31.4	35.1	37.6	40.4	43.0	43.7	43.7	39.3		
In percent of exports	...	...	160.6	182.2	196.5	211.6	226.0	230.0	212.7	158.9		
Total external debt service-to-exports ratio	25.9	28.3	27.1	29.4	30.7	34.0	38.7	41.7	42.3	47.5		
PV of PPG external debt (in Million of US dollars)			4057.0	4949.9	6257.7	7916.0	9595.7	10622.3	11719.5	17281.5		
(PVt-PVt-1)/GDPt-1 (in percent)				3.3	4.5	5.2	4.8	2.7	2.6	1.4		
Non-interest current account deficit that stabilizes debt ratio	-0.6	0.2	1.7	4.1	4.7	5.0	4.8	4.6	3.3	-4.8		

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





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) + Εα (1+r)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, ρ = growth rate of GDP deflator in U.S. dollar terms, Ε=nominal appreciation of the local currency, and α= share of local currency-denominated external debt in total external debt.

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.

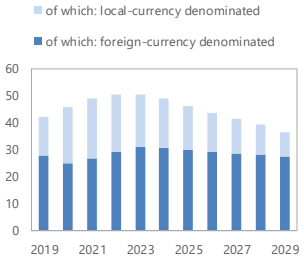
Table 2. Uganda: Public Sector Debt Sustainabilty Framework, Baseline Scenarios, 2015/16-2028/29

(In percent of GDP, unless otherwise indicated)

	Actual	Projections							Average 6/	
	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2028/29	Historical	Projections
Public sector debt 1/	**41.3**	**42.2**	**45.7**	**49.0**	**50.7**	**50.4**	**48.9**	**36.6**	**29.4**	**45.8**
of which: external debt	**28.7**	**28.8**	**31.3**	**34.1**	**36.2**	**36.2**	**35.8**	**30.3**	**19.2**	**33.4**
Change in public sector debt	3.5	0.9	3.5	3.2	1.7	-0.2	-1.5	-2.9		
Identified debt-creating flows	**3.6**	**0.3**	**3.8**	**3.8**	**2.3**	**0.5**	**-0.9**	**-2.7**	**1.9**	**0.2**
Primary deficit	**2.5**	**3.0**	**4.7**	**4.7**	**3.2**	**1.3**	**0.6**	**-1.1**	**2.3**	**1.8**
Revenue and grants	15.3	16.1	17.6	17.5	17.6	17.9	19.0	20.2	**14.3**	**18.5**
of which: grants	0.8	1.1	1.6	1.2	0.9	0.7	0.6	0.2		
Primary (noninterest) expenditure	17.8	19.1	22.3	22.2	20.8	19.2	19.5	19.1	**16.6**	**20.2**
Automatic debt dynamics	**1.1**	**-2.7**	**-1.3**	**-1.0**	**-0.9**	**-0.9**	**-1.4**	**-1.6**		
Contribution from interest rate/growth differential	-0.4	-1.6	-1.3	-0.9	-0.9	-0.9	-1.4	-1.4		
of which: contribution from average real interest rate	1.7	0.8	1.2	1.8	1.9	2.0	1.8	0.9		
of which: contribution from real GDP growth	-2.2	-2.4	-2.5	-2.7	-2.8	-2.9	-3.1	-2.3		
Contribution from real exchange rate depreciation	1.6	...	...	...	...	...	...	...		
Other identified debt-creating flows	**0.0**	**0.0**	**0.4**	**0.1**	**0.1**	**0.1**	**0.0**	**0.0**	**0.1**	**0.1**
Privatization receipts (negative)	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	0.4	0.1	0.1	0.1	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		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	**-0.1**	**-0.5**	**-0.3**	**-0.7**	**-0.7**	**-0.7**	**-0.7**	**-0.4**	**-0.3**	**-0.6**
Sustainability indicators										
PV of public debt-to-GDP ratio 2/	**28.2**	**30.3**	**34.1**	**37.7**	**39.9**	**40.2**	**39.3**	**29.9**		
PV of public debt-to-revenue and grants ratio	**184.6**	**188.3**	**194.0**	**215.2**	**226.6**	**223.8**	**207.5**	**147.9**		
Debt service-to-revenue and grants ratio 3/	**44.5**	**42.0**	**36.2**	**41.6**	**41.4**	**41.6**	**37.6**	**26.0**		
Gross financing need 4/	9.6	9.7	11.5	12.1	10.5	8.8	7.7	4.2		
Key macroeconomic and fiscal assumptions										
Real GDP growth (in percent)	6.1	6.3	6.3	6.2	6.1	6.0	6.6	6.1	**6.4**	**6.5**
Average nominal interest rate on external debt (in percent)	2.0	0.5	1.7	2.0	2.3	2.5	2.5	2.7	**1.6**	**2.2**
Average real interest rate on domestic debt (in percent)	-0.1	-1.5	-0.2	-0.2	-0.1	0.1	0.3	0.5	**0.0**	**0.0**
Real exchange rate depreciation (in percent, + indicates depreciation)	6.7	...	...	...	...	...	...	...	**2.3**	**...**
Inflation rate (GDP deflator, in percent)	3.3	3.0	4.2	5.2	5.2	4.9	4.9	5.4	**9.2**	**4.9**
Growth of real primary spending (deflated by GDP deflator, in percent)	15.1	13.6	24.3	6.0	-0.8	-2.1	8.4	1.5	**7.2**	**8.0**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-1.0	2.1	1.2	1.5	1.5	1.5	2.1	1.8	**-0.6**	**1.9**
PV of contingent liabilities (not included in public sector debt)	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0		

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

Public sector debt 1/



Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central, state, and local governments plus social security, central bank, government-guaranteed debt. Definition of external debt is Residency-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.