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WORLD BANK GROUP

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UGANDA

JOINT WORLD BANK-IMF DEBT SUSTAINABILITY ANALYSIS

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

UGANDA : JOINT BANK-FUND DEBT SUSTAINABILITY ANALYSIS	
Risk of external debt distress	Moderate[1]
Overall risk of debt distress	Moderate
Granularity in the risk rating	Limited space to absorb shocks
Application of judgment	No

The authorities have responded to the COVID-19 shock with fiscal support measures leading to a temporary widening of the fiscal deficit and an increase in public debt. Given the planned unwinding of crisis measures and implementation of fiscal consolidation, Uganda's public debt continues to be sustainable in the medium term. In line with the previous DSA prepared in June 2021, Uganda has a moderate risk of external and overall public debt distress, with limited space to absorb shocks. All external PPG debt and total public debt burden trajectories remain below their respective indicative thresholds and benchmarks over the medium term under the baseline scenario. Nevertheless, stress tests highlight breaches of external debt burden thresholds and the public debt benchmark, especially in relation to export shocks. Specifically, given that a median shock could lead to a breach for the external debt service indicators, Uganda has limited space to absorb shocks. Key risks include a slower recovery from Covid-19, environmental shocks, tighter global financial conditions, delayed reform implementation, further delays in oil exports, and a shift to non-concessional loans. Going forward, Uganda's fundamental development challenge is to replace a growth model based on debt-financed public spending that has emphasized infrastructure, with one where the private sector leads economic growth, supported by the state through investments in human capital and targeted regulations to promote green and inclusive growth that reduces inequality and ensures sustainability. The prospects for this shift are positive, but will rely on effective implementation of the ECF-

[1] Uganda's Composite Indicator, which is estimated at 2.99, signals a medium debt-carrying capacity based on the October 2021 WEO and CPIA 2020.

supported program to maintain macroeconomic stability, scaled-up investments in human capital, better support to the vulnerable, farmers and MSMEs, and more effective use of public resources to maximize returns on investments.

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). Uganda's Public Debt Management Framework (2018) gives the Ministry of Finance, Planning and Economic Development the mandate to prepare and publish quarterly Debt Statistical Bulletins. The published data covers PPG debt with information on domestic and external debt. In addition, the Bank of Uganda (BoU) provides data on locally issued government debt held by non-residents, which allows a residency-based analysis. However, 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), although SOEs issue debt only in the domestic market. Finally, the contingent liability stress test includes the disputed arrears to Tanzania (US$58 million or 0.1 percent of GDP),[2] estimates of non-guaranteed SOE debt (9.1 percent of GDP) based on a preliminary report by AFRITAC East, the default PPP shock (i.e., 35 percent of PPP stock, implying 1.7 percent of GDP), and the default financial market shock (5 percent of GDP).

Text Table 1. Uganda: Coverage of Public and Publicly Guaranteed Debt and Parameters for Contingent Liability Shock

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

Subsectors of the public sector	
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	0.1
SoE's debt (guaranteed and not guaranteed by the government)	2 percent of GDP	9.1
PPP	35 percent of PPP stock	1.7
Financial market (a minimum starting value of 5 percent of GDP)	5 percent of GDP	5
Total (in percent of GDP)		15.9

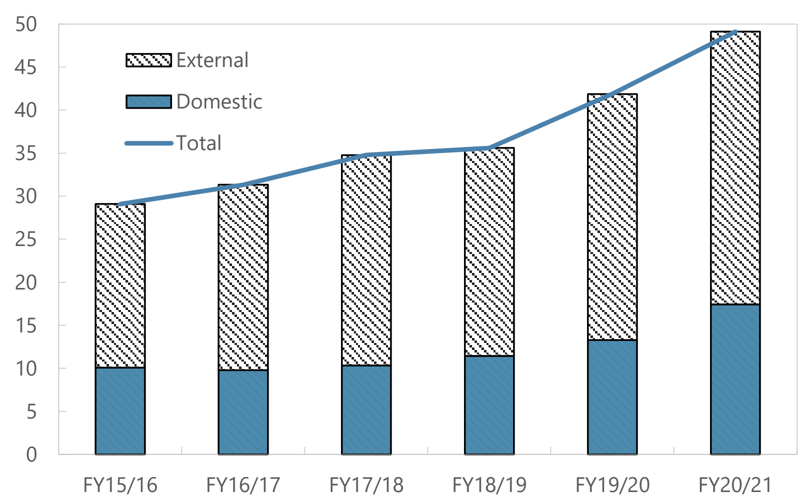
Source: Uganda authorities, IMF staff calculation.

[2] The arrears to Tanzania date back to the Uganda-Tanzania War in 1978-79, with an alleged lack of documentation of the debt, therefore the validity of these arrears is disputed and not included in officially reported total external debt. In contrast, arrears to Iraq (US$1,581) and Nigeria (US$19.3 million) are recorded in the official debt statistics. The Iraq and Nigeria arrears are pre-HIPC Initiative arrears to non-Paris Club creditors, which continue to be deemed away under the revised arrears policy for official creditors, as the underlying Paris Club agreement was adequately representative, and the authorities continue to make best efforts to resolve the arrears.

BACKGROUND AND RECENT DEVELOPMENTS

2. Public debt has been increasing, reaching 49.1 percent of GDP in nominal terms at the end of FY2020/21, below the expectation under the previous DSA (Text Figure 1 and Text Table 2). The positive surprise in the lower level of debt was due to the combination of a lower-than-expected fiscal deficit, and the appreciation of the exchange rate. The increase of almost fourteen percentage points in debt over the past two years was primarily driven by external borrowing, with two-thirds of outstanding public debt owed to external creditors (US$13.2 billion or 31.7 percent of GDP) on a residency basis (Text Figure 2). Domestic debt amounts to about US$7.2 billion (17.4 percent of GDP). In present value terms, total public sector debt amounted to 41.1 percent of GDP at the end of FY2020/21.

Text Figure 1. Uganda: Public and Publicly Guaranteed Debt
(Percent of GDP)



Source: Uganda authorities; and IMF staff calculation.

3. While most of the existing stock of external public debt is on concessional terms, the semi-concessional component has been on the rise in recent years. Highly concessional loans from the IMF, the International Development Association (IDA) and the African Development Fund (ADF) account for half of the external debt portfolio, which mainly drives the difference between the nominal value of public debt and its present value (Text Table 3). 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 Paris and non-Paris club creditors. The share of semi-concessional and non-concessional debt has been increasing in recent years. The increase in semi-concessional loans has been driven by official loans from the Export-Import Bank of China, reaching 20 percent of external public debt outstanding at the end of FY2020/21. In response to COVID-19, Uganda also resorted to commercial loans that constitute around 8 percent of external public debt, mostly owed to the Trade Development Bank (TDB), Standard Bank of South Africa (SBSA), and Standard Chartered. Finally, the stock of local-currency government securities held by offshore investors increased sharply in FY2020/21, doubling its share in external public debt to 6 percent.

Text Table 2. Uganda: Decomposition of Public Debt and Debt Service by Creditor, FY2020/21-FY2022/23[1/]

	Debt Stock (end of period)			Debt Service					
	FY2020/21			FY20/21	FY21/22	FY22/23	FY20/21	FY21/22	FY22/23
	(In millions of US$)	*(Percent total debt)*	*(Percent GDP)*	*(In millions of US$)*			*(Percent GDP)*		
Total	20,425.6	100.0	49.1	3214.0	4,053.0	2,532.9	7.7	9.3	5.3
External	13,178.4	64.5	31.7	667.3	1,049.4	980.1	1.6	2.4	2.1
Multilateral creditors[2,3]	7,745.4	37.9	18.6	160.1	246.9	224.8	0.4	0.6	0.5
IMF	772.6	3.8	1.9						
World Bank	4,381.6	21.5	10.5						
ADB/AfDB/IADB	573.7	2.8	1.4						
Other Multilaterals	2,017.5	9.9	4.8						
Bilateral Creditors[2]	3,539.9	17.3	8.5	309.5	346.6	371.1	0.7	0.8	0.8
Paris Club	851.2	4.2	2.0	45.3	65.7	65.3	0.1	0.2	0.1
Non-Paris Club	2,688.8	13.2	6.5	264.2	280.8	305.8	0.6	0.6	0.6
o/w: Eximbank of China	2,589.6	12.7	6.2						
Bonds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial creditors	1,102.9	5.4	2.7	47.2	123.4	241.8	0.1	0.3	0.5
Other international creditors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public guarantees	28.9	0.1	0.1						
Local currency debt held by non-residents, total	761.3	3.7	1.8	150.4	332.5	142.3	0.4	0.8	0.3
Domestic	7,247.2	35.5	17.4	2,546.7	3,003.7	1,552.9	6.1	6.9	3.3
T-Bills	1,514.4	7.4	3.6	n/a	n/a	n/a	n/a	n/a	n/a
Bonds	4,880.1	23.9	11.7	n/a	n/a	n/a	n/a	n/a	n/a
BoU advances	852.7	4.2	2.0	n/a	n/a	n/a	n/a	n/a	n/a
Memo items:									
Collateralized debt[4]	n/a		n/a						
o/w: Related	n/a		n/a						
o/w: Unrelated	n/a		n/a						
Contingent liabilities	n/a		n/a						
o/w: Public guarantees	n/a		n/a						
o/w: Other explicit contingent liabilities[5]	n/a		n/a						
Nominal GDP							40,636	44,030	47,858

1/As reported by Country authorities according to their classification of creditors, including by official and commercial. Debt coverage is the same as the DSA.
2/Some public debt is not shown in the table due to data limitations.
3/Multilateral creditors" are simply institutions with more than one official shareholder and may not necessarily align with creditor classification under other IMF policies (e.g. Lending Into Arrears)
4/Debt is collateralized when the creditor has rights over an asset or revenue stream that would allow it, if the borrower defaults on its payment obligations, to rely on the asset or revenue stream to secure repayment of the debt. Collateralization entails a borrower granting liens over specific existing assets or future receivables to a lender as security against repayment of the loan. Collateral is "unrelated" when it has no relationship to a project financed by the loan. An example would be borrowing to finance the budget deficit, collateralized by oil revenue receipts. See the joint IMF-World Bank note for the G20 "Collateralized Transactions: Key Considerations for Public Lenders and Borrowers" for a discussion of issues raised by collateral.
5/Includes other-one off guarantees not included in publicly guaranteed debt (e.g. credit lines) and other explicit contingent liabilities not elsewhere classified (e.g. potential legal claims, payments resulting from PPP arrangements).

Source: Uganda authorities, IMF staff calculation.

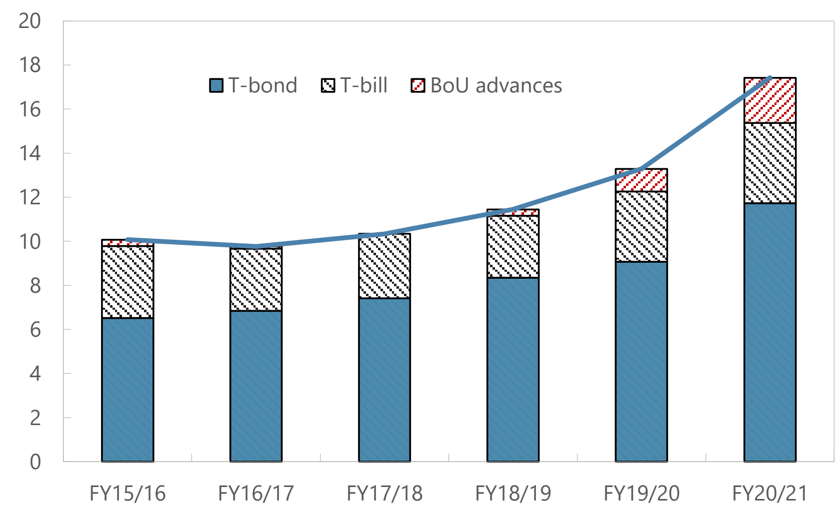
Text Table 3. Uganda: Decomposition of External Public and Publicly Guaranteed Debt, FY2020/21

Creditor	Amount	Share
Total	**13,178**	**100.0%**
Bilateral	3,540	26.9%
ABU DHABI FUND	10	0.1%
AFD	223	1.7%
EXIM BANK OF CHINA	2,590	19.7%
EXIM BANK S KOREA	26	0.2%
GOVT OF NIGERIA	12	0.1%
IRAQ FUND	0	0.0%
JBIC	77	0.6%
JICA	214	1.6%
KFW	4	0.0%
KUWAIT FUND	35	0.3%
MIN FOR AFF AUSTRIA	2	0.0%
SAUDI ARABIA FUND	38	0.3%
UKEF	309	2.3%
Commercial banks or other financial institutions	1,103	8.4%
AKA	11	0.1%
Bank Austria	3	0.0%
COMMERZBANK	11	0.1%
SBSA	358	2.7%
STANDARD CHARTERED	137	1.0%
TDB (PTA)	583	4.4%
Multilateral	7,745	58.8%
ADB	183	1.4%
ADF	1,448	11.0%
BADEA	66	0.5%
EIB	136	1.0%
IDA	4,382	33.2%
IDB	391	3.0%
IFAD	258	2.0%
IMF	773	5.9%
NDF	51	0.4%
OPEC FUND	58	0.4%
Publicly guaranteed external debt	29	0.2%
Local currency debt held by offshore investors	761	5.8%

Source: Uganda authorities, IMF staff calculation.

4. Public domestic debt (residency based) is dominated by medium-to long-term securities. T-bonds constituted around three-fourths of Treasury securities at the end of FY2020/21 (Text Figure 2). T-bonds are mostly held by non-banks (close to 70 percent), while T-bills were predominantly held by banks (more than 80 percent). Against the backdrop of strong demand by both domestic and foreign investors, Tbond yields declined by 100-200 basis points in FY2020/21. Outstanding advances to the Bank of Uganda contributed 2 percent of GDP to domestic debt at the end of FY20/21 (Text Figure 2).

Text Figure 2. Uganda: Public Domestic Debt
(Cost Value, Percent of GDP, as of End-FY2020/21)



Source: Uganda authorities; and IMF staff calculation.

MACROFORECASTS

5. The medium-and long-term macroeconomic framework underlying this DSA is consistent with the scenario presented in the Staff Report for the 2022 Article IV Consultation and First Review Under the Extended Credit Facility (Text Table 4). The baseline scenario assumes the following:

- *Real GDP growth.* The immediate growth outlook largely depends on the global recovery from the COVID-19 shock. In Uganda, the resurgence in Covid-19 cases triggered a new partial lockdown in June-July 2021, weighing on the recovery that was evident in FY2020/21. Notwithstanding the acceleration of the vaccine rollout, the lifting of the curfew, and the reopening of schools, growth forecast for FY2021/22 has been revised downward from 4.3 percent in the previous DSA to 3.8 percent.

- Over the medium-term, growth is projected to return to the annual 6-7 percent level before the COVID-19 crisis hit. This rebound will be driven by – some of these initiatives are directly supported by the ECF-supported program – a more productive composition of government spending, spending and tax collection efficiency gains, governance and product market reforms boosting agri-business/trade and private investments, a strong recovery in tourism, and the Final Investment Decision (FID) in the oil sector that will attract foreign and domestic private investment in related infrastructure ahead of the start of oil production in FY2024/25. The latter will be supported by the recent agreement on the oil pipeline between the French oil company Total, the Chinese oil company CNOOC, and the governments of Uganda and Tanzania, and the parliamentary approval of three bills regulating the oil sector (see below).

- In the long-term, growth is also supported by other factors. Specifically, infrastructure constraints are addressed (e.g., there are currently major investments to improve transport connectivity, expand access to power, and enhance digital connectivity), agricultural productivity improves, and agro-processing trade and industries are further developed. Finally, Uganda is entering a demographic transition, which has great potential for accelerating growth in per capita terms and reducing poverty. Although fertility rates and the dependency ratio are still high, Uganda's declining fertility rate and growing working-age population are gradually increasing the share of the working-age population and reducing the child dependency ratio.

- *Inflation.* Following projected headline inflation of 3.5 percent in FY2021/22, inflation is projected to be in line with the BoU's 5 percent target over the medium term.

- *Oil revenue projections.* Budget revenues from oil, net of oil-related expenditures, are expected to start in FY2024/25 and peak at around 2.7 percent of GDP in FY2027/28 before gradually declining over the long term. Delays in reaching the FID have allowed government more time to develop relevant legislation and put in place critical institutions to manage the oil resources. Legislation and institutions that have now been established included the Uganda Petroleum Fund, The Consolidated Fund, and the Petroleum Investment Fund to ensure fiscal sustainability over the longer run – these should help with managing the Dutch disease crowding out effects. The ECF-supported program also aims to help the authorities transition to a rules-based framework for oil revenue management, including through the adoption of the Income Tax Amendment Bill, the Public Finance Management Bill, and the East African Crude Oil Pipeline Bill.

- *Primary fiscal deficit.* The primary fiscal deficit is projected to narrow in FY2021/22 on the back of the implementation of the Domestic Revenue Mobilization Strategy (DRMS) (including the reform of tax expenditures and efficiency improvements in tax administration, including the management of tax arrears and the use of new technologies for audits)[3] and a decline in unproductive and poorly executed capital expenditures[4], as well as the non-recurrence of one-off items such as the recapitalization of the Bank of Uganda and on-lending to the Uganda Development Bank as part of the response to the COVID-19 crisis (both in fiscal years 2019/20 and 2020/21). The current deficit target of 7.5 percent of GDP in FY21/22, however, exceeds the target of 6.4 percent of GDP at the time of the approval of the ECF-supported program, due to revenue shortfalls against the backdrop of lower economic growth, certain payments that were postponed from FY2020/21, and additional spending in response to the second wave of the pandemic and recent security threats facing the country. After FY21/22, the cyclical improvement, implementation of the DRMS, and elimination of crisis response measures (e.g., spending related to Covid-19, including the enforcement of the curfew, and time-bound support to businesses and households) will lead to a further improvement in the primary balance, even despite oil infrastructure investments previously expected to be

[3] Implementation of the DRMS is projected to raise tax revenues by 0.5 percent of GDP per annum. The strategy outlines key tax policy reforms, including a rationalization of exemptions, and revenue administration modernization to improve compliance. For example, a Tax Expenditure Framework – to streamline and eventually scale down revenue leakages from tax expenditures – has now been finalized and approved by MoFPED. These leakages were estimated to have reached about 5.2 percent of GDP in FY20/21. Furthermore, several partners, including the IMF, World Bank, USAID and FCDO, are providing significant support to the Tax Policy Department (MoFPED) and Uganda Revenue Authority (URA) to ensure full implementation of the DRMS.

[4] Significant Public Investment Management reforms and institutional strengthening have taken place over the last five years, to improve the identification, selection and implementation of projects. This reform momentum is expected to pick up and be sustained over the medium term, with continued support from IFIs (including under the ECF-supported program and an ongoing World Bank program) and bilateral partners.

financed by the private sector. Moreover, spending rationalization and greater spending efficiency under the ECF-supported program are expected to allow for higher social spending and clearance of arrears during the program, without undue pressures on the primary balance.

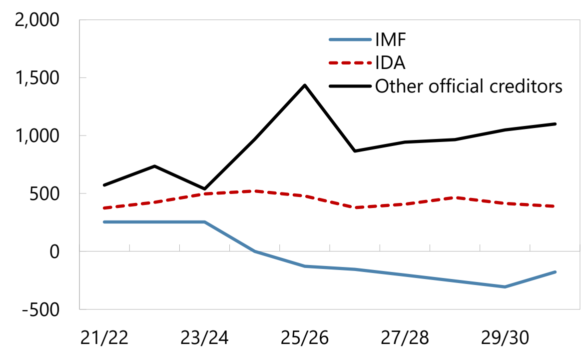
- *Current account deficit.* The current account deficit is expected to narrow slightly in FY2021/22, and – once oil-related investments are excluded - further improve over the medium term, helped by fiscal consolidation, further recovery in global demand and oil exports coming on-stream. Export growth will also be supported by better trade logistics, rural access to infrastructure and information, and credit availability, and the rollout of reforms envisaged under the African Continental Free Trade Agreement (AfCFTA).

- *FDI inflows* are expected to continue to increase, largely driven by investments in oil-related projects over the medium term, as well as the potential positive impact on FDI from the rollout of AfCFTA among all countries on the continent.

- *Gross official reserves*, excluding the impact of oil project financing and investment-related imports, are expected to gradually rise over the medium term, notwithstanding a temporary decline in FY2022/23, on the back of an increase in FDI, the recovery of tourism, and the start of oil production.

- *Financing mix.* Advances from the Bank of Uganda are assumed to be fully repaid by FY2023/24, thereby leading to a shift in the composition of debt from the central bank to other domestic debt. Given the recent decrease in local currency yields, costs of domestic borrowing are expected to be lower than under the previous DSA. Domestic debt financing is projected to maintain a constant share of T-bonds, covering two-thirds of domestic financing and T-bills. Under the ECF-supported program, the limit on the present value of new external and publicly guaranteed external debt aims to both limit the accumulation of debt and prevent a heavy reliance on non-concessional external financing. Over the long term, financing is assumed to shift gradually from domestic to external and less concessional debt (Text Figure 3).

Text Figure 3. Uganda: Official External Financing, Net
(US$, millions)



Source: Uganda authorities, IMF and World Bank estimates

- IDA financing is set to be largely delivered through project support over the medium term. The estimated average disbursement over the next five fiscal years is about US$ 750 million per year. About 80 percent of this will be delivered through project financing, with significant disbursements for projects that are supporting municipal infrastructure and road developments, water management and development, and digital acceleration. No budget support operations are planned, with the remainder of IDA financing going through Program for Results (P4Rs), including support to enhancing intergovernmental fiscal transfers for better service delivery.

Text Table 4. Uganda: Macroeconomic Assumptions

	Real GDP growth (percent)		Inflation (percent)		Primary balance (percent of GDP)		Current account (percent of GDP)		FDI inflows (percent of GDP)	
	ECF	Current	ECF	Current	ECF	Current	ECF	Current	ECF	Current
2019/20	3.0	2.9	3.0	2.3	-5.0	-5.0	-5.8	-6.7	2.6	2.6
2020/21	3.3	3.4	4.7	2.5	-7.1	-6.7	-9.2	-10.2	2.0	2.1
2021/22	4.3	3.8	5.0	3.5	-3.4	-4.4	-8.2	-8.0	2.3	2.5
2022/23	6.4	6.0	5.0	4.6	-0.9	-1.8	-8.6	-6.6	5.3	3.0
2023/24	7.0	6.5	5.0	5.0	-0.9	-0.7	-11.3	-5.1	7.8	3.0
2024/25	7.2	6.7	5.0	5.0	-1.3	-0.8	-13.2	-4.9	9.7	3.0
2025/26	7.0	7.1	5.0	5.0	-0.4	-0.3	-11.8	-5.3	9.2	2.9
Avg 2026/27-2040/41	6.0	6.0	5.0	5.0	-0.9	-0.1	-6.8	-4.7	3.9	2.6

Source: Uganda authorities, IMF staff projections.

6. The realism tool outputs compare the projections to cross-country experiences and to Uganda's own historical experience (Figures 3 and 4):

- There are small differences between past and projected debt creating flows, with the contributions of past debt creating flows remaining relatively the same for the projection period. Unexpected changes in external debt are above the median of the distribution across low-income countries, while they are outside the interquartile range in the case of public debt, reflecting the combination of the large recent increase in debt against the backdrop of the Covid-19 crisis and the projected decrease on the back of the fiscal consolidation.
- The improvement in the primary balance over the next 3-years is in the top quartile of the distribution, reflecting the cyclical improvement in tax revenues, the unwinding of temporary crisis measures, as well as the adjustment following the fiscal policy response to Covid-19, including the implementation of the DRMS. The fact that the first two factors are driven by the economic recovery from the Covid-19 shock explains the simultaneous acceleration in growth and the improvement in the fiscal balance. Moreover, the growth outlook is also supported by the recovery in international demand and private investments as well as improved spending efficiency, including through stronger public investment management on the back of reforms to be implemented under the IMF-supported program.
- Investment is expected to increase, with private investment broadly offsetting a temporary decline in public investment. Relative to the last DSA, private investment has been revised slightly downward.

COUNTRY CLASSIFICATION

7. Uganda's debt-carrying capacity is classified as medium, unchanged from the previous DSA. The classification of debt carrying capacity is guided by the composite indicator (CI) score, which is determined by the World Bank's CPIA and other variables, such as real GDP growth, import coverage of foreign exchange reserves, remittances, and growth of the world economy. The CI also incorporates forward-looking elements with the calculation based on the 10-year average (5 years of historical data and 5 years of projection). Uganda's latest CI is 2.99, which lies between the threshold values of 2.69 and 3.05 corresponding to medium and strong capacity, respectively, thereby categorizing the country as having “medium” debt-carrying capacity that determines the four external debt indicative thresholds and the total public debt benchmark (Text Table 5).

Text Table 5. Uganda: Composite Indicator, and Debt Thresholds and Benchmark

Debt Carrying Capacity	Medium	
Final	Classification based on Oct 2021 vintage	Classification based on Apr 2021 vintage
Medium	Medium 2.99	Medium 2.97

EXTERNAL debt burden thresholds	Weak	Medium	Strong
PV of debt in % of			
Exports	140	180	240
GDP	30	40	55
Debt service in % of			
Exports	10	15	21
Revenue	14	18	23

TOTAL public debt benchmark	Weak	Medium	Strong
PV of total public debt in percent of GDP	35	55	70

Source: IMF staff projections

EXTERNAL DEBT SUSTAINABILITY

8. The evolution of external government debt suggests a sustainable path under the baseline (Table 1). Both solvency and liquidity indicators remain below their indicative thresholds over the projection horizon (Figure 1 and Table 3). Specifically, the PV of PPG external debt-to-GDP ratio peaks at 25.1 percent (against the threshold of 40 percent), while the PV of debt-to-exports ratio reaches 152.9 percent before gradually declining towards 130 percent over the medium term (against the threshold of 180 percent). The liquidity indicators show a similar path. The debt service-to-revenue ratio peaks at 17.5 percent, below the threshold of 18 percent, before declining gradually over the medium term, while the debt service-to-exports ratio reaches 14.5 percent in FY21/22 against the indicative threshold of 15 percent.

9. Stress tests and alternative scenarios indicate a moderate risk of debt distress rating. The PV of PPG debt-to-GDP ratio remains under the threshold even under the stress tests, with the combined shock being the most extreme shock. At the same time, the PV of debt-to-exports ratio, the debt service-to-revenue, and the debt service-to-exports ratio breach their respective thresholds under several stress tests (Figure 1 and Table 3). Specifically, for the PV of debt-to-exports ratio and debt service-to-exports ratio, the most extreme shock is a shock to exports, with long-lasting breaches of the thresholds.[5] Both indicators breach their thresholds under the combined shock, and the combined contingent liability shock, while the debt service-to-exports ratio also has two temporary breaches under the shock to other flows.

10. The total public debt-to-GDP trajectory under the baseline shows a declining path (Table 2). The PV of public debt-to-GDP ratio peaks at 44.1 percent in FY2021/22, before declining towards

[5] Moreover, export shocks might intensify due to volatile oil exports over the long term.

26 percent by FY2031/32 as oil export receipts ensue (Figure 2 and Table 4). This compares to an indicative benchmark of 55 percent for countries with medium debt-carrying capacity.[6] Notwithstanding the increase in the nominal level of public debt-to-GDP to above 50 percent of GDP over the next four years, the trajectory is expected to show a gradual decline over the medium-and long-run. The PV of debt-to-revenue ratio and the debt service-to-revenue ratio are expected to decline over the medium term, supported by the implementation of the DRMS and the oil-related revenue inflows from 2024/25 onward.

11. The stress tests confirm that adding domestic debt to the analysis does not elevate the risk of debt distress. For the PV of debt-to-GDP ratio, the most extreme stress test is the combined contingent liabilities shock (Figure 2), under which the PV of total public debt-to-GDP ratio rises above the benchmark of 55 percent and the ceiling of 50 percent of GDP in the Charter of Fiscal Responsibility. The debt burden indicator remains below the benchmark under all other shocks. The PV of total public debt-to-revenue ratio rises to around 390 percent under the most extreme scenario of the contingent liabilities shock. The most extreme shock to public debt service is also the combined contingent liability shock, under which the debt service-to-revenue peaks at 72 percent.

CONCLUSIONS

12. Uganda's risk of external and overall public debt distress is moderate, with limited space to absorb shocks. External debt burden indicators and total public debt remain below their respective thresholds and benchmark throughout the projection horizon under the ECF-supported program scenario. The stress tests, however, indicate breaches of the thresholds and the benchmark. Although the PV of debt-to-GDP ratio indicates substantial space to absorb shocks without being downgraded to a high risk of debt distress, the PV of debt-to-exports, the debt service-to-revenues ratio, and the debt service-to-exports ratios are close enough to their respective thresholds that a median shock would lead to a breach (Figure 5).

13. Risks to the debt outlook are tilted to the downside. Given the sensitivity of debt projections to growth, revenues and exports, a resurgence of domestic and external lockdown measures linked to another wave of Covid-19 constitutes a downside risk to the outlook. Risks around growth are further aggravated by the uncertainty around the external outlook, and increased frequency of natural disasters due to climate change. Domestic risks include the slower-than-expected implementation of reforms, any further delay in oil production, a shift in the composition of financing towards non-concessional loans, and the potentially limited capacity of commercial banks to increase their purchase of government securities in response to future shocks given the increasing weight of those securities in their balance sheets. On the upside, a faster than expected recovery from the pandemic and higher donor financing would help.

14. Mitigating debt risks requires sound macroeconomic management and strong/steadfast policy implementation. This includes:

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

- Implementing the DRMS. Given Uganda's relatively low revenue collection, the strategy outlines key tax policy reforms, including a rationalization of exemptions, and tax administration strengthening to improve compliance.
- Strengthening overall public financial management (PFM), including efforts to avoid arrears and the use of supplementary budgets. The published international audit of domestic arrears and the domestic arrears strategy should help the authorities in clearing arrears and preventing further accumulation. Following the progress on the extension of coverage of the Treasury Single Account to extra budgetary entities and externally funded projects, an improvement in the accuracy of monthly cash flow forecasting and preparation of an aggregate borrowing plan, considering the government's consolidated cash position, means further progress can be made through the operationalization of monthly and quarterly cash flow forecasting. Finally, in the Memorandum of Economic and Financial Policies in the first review of the ECF-supported program, the authorities made a commitment to aim to avoid supplementary budgets. In the exceptional case where a new one was to become necessary again, they will ensure that these are limited to unforeseeable unexpected shocks, with any such request costed, financing sources identified, and debt impact assessed.
- Improving spending efficiency, including the strengthening of public investment management. Priorities should include improving the use of medium-term fiscal envelope forecasts to achieve better project prioritization and capital expenditure budgeting. The recently published project selection criteria will be used to identify priority projects. Public investment management (PIM) shortcomings could be addressed by reducing overcommitment in multi-year projects, and reducing or eliminating the use of emergency procurement procedures, fostering open and competitive bidding while refraining from procuring through direct channels.
- Strengthening debt management. In line with its medium-term debt strategy, public debt management in Uganda should continue to 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 prudent risk-taking. Better communication and coordination across government agencies, including on new borrowing plans, would further enhance debt management.
- Improving debt transparency. Over the last decade, Uganda has enhanced debt transparency, both in terms of fiscal reporting and publication of explicit and implicit debt and debt management information. However, debt transparency could be further enhanced, including through the publication of a statement of fiscal risks in the budget framework paper that lists contingent liabilities and reports on risks arising to the budget, the extension of coverage to potential debt collateralization in the public sector, as well as better communication, thereby contributing to a better understanding and management of risks.
- Broadening the scope of potential creditors. The scope of potential creditors and financing sources could be broadened, including by finalizing the public investment financing strategy (which is already in advanced draft form) and expression of interest guidelines, and setting up a mobile money platform for retail investors to purchase Treasury securities.
- Closely monitoring 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. There has been important progress on the collection of data on the debt of state-owned enterprises. Efforts, however, should be stepped up to estimate, disclose, manage, contain, and shorten the lag in the publication of information on contingent liabilities, especially those in the financial sector, state-owned enterprises (including through their potential inclusion in government finance statistics), and PPPs. For example, disaggregated data on state-owned enterprise debt and contingent liabilities is planned to be published by June 2022.
- Implementing a set of particular reforms to improve fiscal and debt sustainability. Given the shift to moderate risk of debt distress, the government would need to implement a set of reforms – known as Performance and Policy Actions (PPAs) as per IDA's Sustainable Development Finance Policy (SDFP) – through actions in the areas of debt sustainability, debt management and fiscal

sustainability. The purpose of this is to ultimately incentivise government to reduce debt vulnerabilities. The first set of PPAs will be formulated in FY21/22 and applied in FY22/23.

- Enhancing governance frameworks. These are equally essential to safeguard the quality and effectiveness of public investment and other government spending. 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 avoidance of a premature reliance on uncertain future oil-related flows remain essential preconditions for debt sustainability.

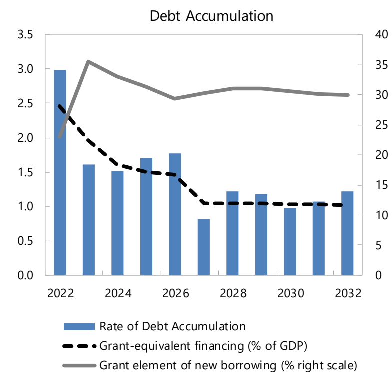
AUTHORITIES' VIEWS

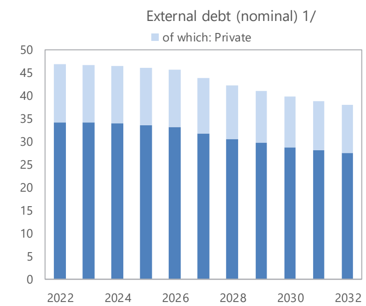
15. The authorities agreed with the assessment of the risk of debt distress. They also emphasized the importance of reducing public debt to below 50 percent of GDP (in nominal terms) over the medium term, through a combination of implementing the DRMS and unwinding the crisis measures introduced in response to Covid-19.

Table 1. Uganda: External Debt Sustainability Framework, Baseline Scenario, FY2018/19-2031/32 (In percent of GDP, unless otherwise indicated)

	Actual			Projections							Average 8/	
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2031/32	Historical	Projections
External debt (nominal) 1/	**37.1**	**41.5**	**44.8**	**46.9**	**46.6**	**46.5**	**46.1**	**45.7**	**43.8**	**37.9**	**34.5**	**43.2**
of which: public and publicly guaranteed (PPG)	**24.2**	**28.6**	**31.7**	**34.1**	**34.1**	**34.0**	**33.5**	**33.2**	**31.6**	**27.5**	**21.0**	**31.7**
Change in external debt	1.2	4.4	3.3	2.1	-0.3	-0.1	-0.4	-0.4	-1.9	-0.9		
Identified net debt-creating flows	**1.1**	**1.8**	**5.0**	**3.9**	**1.2**	**-0.4**	**-0.4**	**-0.4**	**-0.3**	**-0.4**	**0.1**	**-0.3**
Non-interest current account deficit	**6.3**	**5.9**	**9.2**	**6.9**	**7.7**	**9.0**	**11.0**	**10.9**	**9.6**	**7.8**	**6.4**	**8.4**
Deficit in balance of goods and services	1.2	2.0	4.2	2.9	4.1	4.9	6.4	4.6	2.0	0.5	**1.1**	**2.3**
Exports	18.2	14.6	16.3	16.4	16.6	16.6	16.5	17.3	18.5	15.3		
Imports	19.3	16.5	20.5	19.4	20.7	21.5	22.8	21.9	20.4	15.8		
Net current transfers (negative = inflow)	-5.0	-4.8	-4.2	-4.3	-3.9	-3.9	-3.9	-3.7	-3.6	0.0	**-5.3**	**-3.4**
of which: official	-0.4	-0.4	-0.5	-0.5	-0.3	-0.2	-0.2	-0.2	-0.2	0.0		
Other current account flows (negative = net inflow)	10.1	8.8	9.2	8.3	7.5	7.9	8.5	10.1	11.3	7.3	**10.5**	**9.4**
Net FDI (negative = inflow)	**-3.4**	**-2.6**	**-2.1**	**-2.5**	**-5.0**	**-7.6**	**-9.5**	**-9.3**	**-8.0**	**-6.8**	**-3.4**	**-7.1**
Endogenous debt dynamics 2/	**-1.7**	**-1.6**	**-2.1**	**-0.4**	**-1.6**	**-1.8**	**-1.8**	**-1.9**	**-2.0**	**-1.4**		
Contribution from nominal interest rate	0.7	0.7	0.9	1.2	1.0	1.0	1.0	1.0	1.0	0.7		
Contribution from real GDP growth	-2.2	-1.0	-1.3	-1.6	-2.6	-2.8	-2.9	-3.0	-2.9	-2.1		
Contribution from price and exchange rate changes	-0.3	-1.2	-1.8	...	...	...	...	...	...	...		
Residual 3/	**0.1**	**2.6**	**-1.7**	**-1.8**	**-1.5**	**0.3**	**-0.1**	**0.0**	**-1.5**	**-0.5**	**0.6**	**-0.3**
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	**...**	**...**	**24.2**	**25.1**	**24.6**	**23.9**	**23.6**	**23.2**	**22.0**	**19.9**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**148.2**	**152.9**	**147.8**	**144.0**	**143.1**	**134.1**	**119.3**	**129.8**		
PPG debt service-to-exports ratio	**16.6**	**23.7**	**9.5**	**14.5**	**13.4**	**13.5**	**13.1**	**14.4**	**13.0**	**11.7**		
PPG debt service-to-revenue ratio	**23.9**	**27.9**	**11.6**	**17.5**	**15.7**	**15.2**	**14.0**	**14.4**	**12.7**	**10.0**		
Gross external financing need (Million of U.S. dollars)	2,619	3,121	5,196	4,927	4,131	3,794	3,791	4,437	4,663	4,527		
Key macroeconomic assumptions												
Real GDP growth (in percent)	6.4	2.9	3.4	3.8	6.0	6.5	6.7	7.1	7.0	5.7	**3.6**	**6.2**
GDP deflator in US dollar terms (change in percent)	0.7	3.5	4.5	4.4	2.5	2.5	1.7	2.1	1.8	1.5	**9.6**	**2.5**
Effective interest rate (percent) 4/	2.2	2.0	2.4	2.8	2.4	2.3	2.4	2.5	2.4	1.8	**2.0**	**2.5**
Growth of exports of G&S (US dollar terms, in percent)	15.6	-14.7	21.1	9.0	10.1	9.0	7.8	14.7	16.4	2.4	**6.3**	**11.2**
Growth of imports of G&S (US dollar terms, in percent)	21.6	-9.0	34.2	2.1	16.5	13.3	15.2	4.6	1.9	3.5	**6.8**	**8.9**
Grant element of new public sector borrowing (in percent)	...	...	...	23.1	35.4	33.0	31.3	29.4	30.2	30.0	**...**	**30.4**
Government revenues (excluding grants, in percent of GDP)	12.6	12.4	13.4	13.6	14.1	14.8	15.4	17.2	19.0	18.0	**12.6**	**15.7**
Aid flows (in Million of US dollars) 5/	-1,576	-1,570	-2,007	1,335	1,354	1,049	872	748	678	944		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.5	2.0	1.6	1.5	1.5	1.0	1.0	**...**	**1.7**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	35.8	42.1	38.8	36.6	33.3	34.4	34.4	**...**	**36.8**
Nominal GDP (Million of US dollars)	35,290	37,596	40,636	44,030	47,858	52,220	56,681	61,972	67,500	97,288		
Nominal dollar GDP growth	7.2	6.5	8.1	8.4	8.7	9.1	8.5	9.3	8.9	7.3	**13.5**	**8.8**
Memorandum items:												
PV of external debt 7/	...	...	37.3	37.9	37.1	36.4	36.1	35.7	34.2	30.2		
In percent of exports	...	...	228.4	230.7	223.4	219.2	219.3	206.3	185.0	197.2		
Total external debt service-to-exports ratio	25.2	33.8	34.6	40.5	35.4	35.3	31.7	32.3	28.6	23.9		
PV of PPG external debt (in Million of US dollars)			9,830	11,045	11,756	12,480	13,366	14,371	14,877	19,337		
(PVt-PVt-1)/GDPt-1 (in percent)				3.0	1.6	1.5	1.7	1.8	0.8	1.2		
Non-interest current account deficit that stabilizes debt ratio	5.1	1.5	6.0	4.7	8.0	9.1	11.4	11.3	11.5	8.8		

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) + Ɛα (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, Ɛ=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.

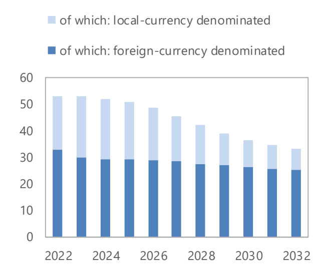
8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

Table 2. Uganda: Public Sector Debt Sustainability Framework, Baseline Scenario, FY2018/19-2031/32 (In percent of GDP, unless otherwise indicated)

	Actual			Projections							Average 6/	
	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2031/32	Historical	Projections
Public sector debt 1/	**35.6**	**41.9**	**49.1**	**52.9**	**53.1**	**52.1**	**50.8**	**48.8**	**45.6**	**33.1**	**31.0**	**45.5**
of which: external debt	**24.2**	**28.6**	**31.7**	**34.1**	**34.1**	**34.0**	**33.5**	**33.2**	**31.6**	**27.5**	**21.0**	**31.7**
Change in public sector debt	0.8	6.3	7.2	3.8	0.1	-0.9	-1.4	-1.9	-3.2	-1.4		
Identified debt-creating flows	**0.9**	**5.0**	**5.0**	**4.4**	**0.3**	**-0.7**	**-1.1**	**-1.5**	**-2.8**	**-1.3**	**1.4**	**-1.1**
Primary deficit	**3.0**	**5.0**	**6.7**	**4.4**	**1.8**	**0.7**	**0.8**	**0.3**	**-1.0**	**0.0**	**3.0**	**0.3**
Revenue and grants	13.6	13.2	14.4	14.8	14.6	15.1	15.7	17.5	19.1	18.2	**13.8**	**17.2**
of which: grants	0.9	0.8	0.9	1.1	0.5	0.4	0.3	0.2	0.2	0.2		
Primary (noninterest) expenditure	16.5	18.2	21.1	19.1	16.4	15.8	16.5	17.8	18.1	18.2	**16.8**	**17.5**
Automatic debt dynamics	**-2.1**	**0.0**	**-1.7**	**0.8**	**-1.5**	**-1.4**	**-1.9**	**-1.8**	**-1.8**	**-1.3**		
Contribution from interest rate/growth differential	-0.8	0.1	-0.4	-0.2	-1.7	-1.8	-1.8	-1.9	-1.9	-1.4		
of which: contribution from average real interest rate	1.3	1.2	1.0	1.6	1.3	1.5	1.5	1.5	1.3	0.4		
of which: contribution from real GDP growth	-2.1	-1.0	-1.4	-1.8	-3.0	-3.2	-3.3	-3.3	-3.2	-1.9		
Contribution from real exchange rate depreciation	-1.3	-0.2	-1.3	...	...	...	...	...	...	...		
Other identified debt-creating flows	**0.1**	**0.0**	**0.0**	**-0.7**	**0.0**	**0.0**	**0.0**	**0.0**	**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	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.1	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		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	-0.7	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	**-0.1**	**1.2**	**2.2**	**-0.6**	**-0.1**	**-0.2**	**-0.3**	**-0.4**	**-0.4**	**-0.1**	**0.7**	**-0.3**
Sustainability indicators												
PV of public debt-to-GDP ratio 2/	**...**	**...**	**41.1**	**44.1**	**43.7**	**42.5**	**41.1**	**39.2**	**36.3**	**25.7**		
PV of public debt-to-revenue and grants ratio	**...**	**...**	**286.0**	**298.8**	**299.4**	**280.9**	**261.6**	**224.5**	**189.8**	**141.4**		
Debt service-to-revenue and grants ratio 3/	**52.5**	**45.5**	**42.9**	**62.4**	**56.7**	**54.0**	**42.7**	**37.2**	**33.6**	**21.9**		
Gross financing need 4/	8.2	9.3	12.8	12.9	10.0	8.9	7.5	6.8	5.4	4.0		
Key macroeconomic and fiscal assumptions												
Real GDP growth (in percent)	6.4	2.9	3.4	3.8	6.0	6.5	6.7	7.1	7.0	5.7	**3.6**	**6.1**
Average nominal interest rate on external debt (in percent)	1.9	1.7	2.1	3.2	2.5	2.5	2.6	2.7	2.5	1.6	**1.6**	**2.3**
Average real interest rate on domestic debt (in percent)	12.7	9.4	8.2	10.2	8.3	6.4	6.5	6.5	6.5	6.4	**1.5**	**7.3**
Real exchange rate depreciation (in percent, + indicates depreciation)	-5.3	-0.7	-4.5	...	...	...	...	...	...	...	**-5.3**	**...**
Inflation rate (GDP deflator, in percent)	2.6	3.1	2.5	2.8	4.0	5.3	5.2	5.1	5.0	4.6	**14.1**	**4.6**
Growth of real primary spending (deflated by GDP deflator, in percent)	18.1	13.6	19.4	-5.8	-9.2	3.0	11.3	15.3	9.2	6.2	**2.9**	**4.8**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	2.1	-1.2	-0.5	0.5	1.6	1.6	2.2	2.2	2.2	1.4	**0.1**	**1.7**
PV of contingent liabilities (not included in public sector debt)	0.0	0.2	0.5	0.0	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.

Table 3. Uganda: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, FY2021/22-2031/32 (In percent)

	Projections										
	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
PV of debt-to GDP ratio											
Baseline	**25.1**	**24.6**	**23.9**	**23.6**	**23.2**	**22.0**	**21.4**	**21.0**	**20.5**	**20.1**	**19.9**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 1/	25.1	23.7	23.5	23.4	23.3	22.4	23.6	24.5	24.7	24.4	24.2
B. Bound Tests											
B1. Real GDP growth	25.1	26.7	28.5	28.1	27.6	26.3	25.6	25.1	24.4	24.0	23.7
B2. Primary balance	25.1	25.8	27.0	26.9	26.5	25.3	24.8	24.7	24.1	23.6	23.2
B3. Exports	25.1	26.5	29.1	28.6	27.9	26.6	25.8	25.2	24.3	23.5	22.9
B4. Other flows 2/	25.1	28.2	32.9	32.2	31.4	29.9	29.0	28.1	26.9	25.9	25.0
B6. One-time 30 percent nominal depreciation	25.1	30.6	26.7	26.5	26.1	24.8	24.2	23.8	23.4	23.1	23.0
B6. Combination of B1-B5	25.1	31.4	36.4	35.7	34.9	33.2	32.2	31.3	30.0	29.0	28.1
C. Tailored Tests											
C1. Combined contingent liabilities	25.1	31.4	31.5	31.2	30.7	29.4	29.8	29.5	28.9	28.4	28.1
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	**40**	**40**	**40**	**40**	**40**	**40**	**40**	**40**	**40**	**40**	**40**
PV of debt-to-exports ratio											
Baseline	**152.9**	**147.8**	**144.0**	**143.1**	**134.1**	**119.3**	**120.2**	**121.4**	**122.4**	**125.2**	**129.8**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 1/	152.9	142.8	141.3	141.8	134.9	121.1	132.3	141.5	147.3	152.0	157.9
B. Bound Tests											
B1. Real GDP growth	152.9	147.8	144.0	143.1	134.1	119.3	120.2	121.4	122.4	125.2	129.8
B2. Primary balance	152.9	155.3	162.5	163.0	153.0	136.7	139.2	142.5	143.8	146.8	151.5
B3. Exports	152.9	**184.6**	**232.8**	**230.3**	**214.8**	**191.2**	**192.3**	**193.2**	**192.5**	**194.6**	**199.1**
B4. Other flows 2/	152.9	169.7	**198.1**	**195.4**	**181.7**	161.8	162.5	162.6	160.7	161.2	163.5
B6. One-time 30 percent nominal depreciation	152.9	146.5	128.1	127.8	120.2	106.8	107.8	109.1	110.9	114.4	119.7
B6. Combination of B1-B5	152.9	**187.0**	**185.1**	**217.9**	**202.9**	**180.7**	**181.6**	**181.6**	**180.2**	**181.4**	**184.8**
C. Tailored Tests											
C1. Combined contingent liabilities	152.9	**189.0**	**189.6**	**189.2**	177.4	159.1	167.0	170.6	172.8	177.1	**183.3**
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	**180**	**180**	**180**	**180**	**180**	**180**	**180**	**180**	**180**	**180**	**180**
Debt service-to-exports ratio											
Baseline	**14.5**	**13.4**	**13.5**	**13.1**	**14.4**	**13.0**	**11.0**	**11.5**	**12.6**	**12.4**	**11.7**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 1/	14.5	12.8	12.5	11.7	12.5	11.0	9.1	9.5	10.4	10.4	10.0
B. Bound Tests											
B1. Real GDP growth	14.5	13.4	13.5	13.1	14.4	13.0	11.0	11.5	12.6	12.4	11.7
B2. Primary balance	14.5	13.4	13.7	13.6	14.9	13.5	11.4	12.4	14.2	14.0	13.5
B3. Exports	14.5	**15.6**	**18.6**	**18.6**	**20.3**	**18.3**	**15.5**	**17.0**	**19.8**	**19.5**	**18.6**
B4. Other flows 2/	14.5	13.4	14.1	14.5	**15.6**	14.1	12.1	13.8	**16.6**	**16.3**	**15.6**
B6. One-time 30 percent nominal depreciation	14.5	13.4	13.5	12.7	14.0	12.7	10.6	11.1	11.4	11.2	10.6
B6. Combination of B1-B5	14.5	14.6	**16.9**	**16.9**	**18.3**	**16.5**	14.0	**16.1**	**18.6**	**18.3**	**17.5**
C. Tailored Tests											
C1. Combined contingent liabilities	14.5	13.4	14.6	14.3	**15.5**	14.0	12.0	12.7	13.8	13.6	13.0
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
Debt service-to-revenue ratio											
Baseline	**17.5**	**15.7**	**15.2**	**14.0**	**14.4**	**12.7**	**10.3**	**10.6**	**11.3**	**10.8**	**10.0**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 1/	17.5	15.0	14.0	12.5	12.6	10.8	8.5	8.7	9.4	9.1	8.5
B. Bound Tests											
B1. Real GDP growth	17.5	17.1	**18.1**	16.7	17.2	15.1	12.2	12.6	13.5	12.9	11.9
B2. Primary balance	17.5	15.7	15.4	14.5	14.9	13.1	10.7	11.4	12.7	12.3	11.5
B3. Exports	17.5	15.8	15.7	15.0	15.3	13.4	11.0	11.7	13.4	12.8	11.9
B4. Other flows 2/	17.5	15.7	15.9	15.5	15.7	13.8	11.3	12.6	14.9	14.3	13.3
B6. One-time 30 percent nominal depreciation	17.5	**19.8**	**19.1**	17.0	17.7	15.5	12.5	12.8	12.9	12.4	11.4
B6. Combination of B1-B5	17.5	17.4	**18.8**	18.0	**18.3**	16.0	13.1	14.7	16.6	15.9	14.8
C. Tailored Tests											
C1. Combined contingent liabilities	17.5	15.7	16.4	15.3	15.6	13.7	11.2	11.7	12.4	11.9	11.1
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.

2/ Includes official and private transfers and FDI.

Table 4. Uganda: Sensitivity Analysis for Key Indicators of Public Debt, FY2021/22-2031/32

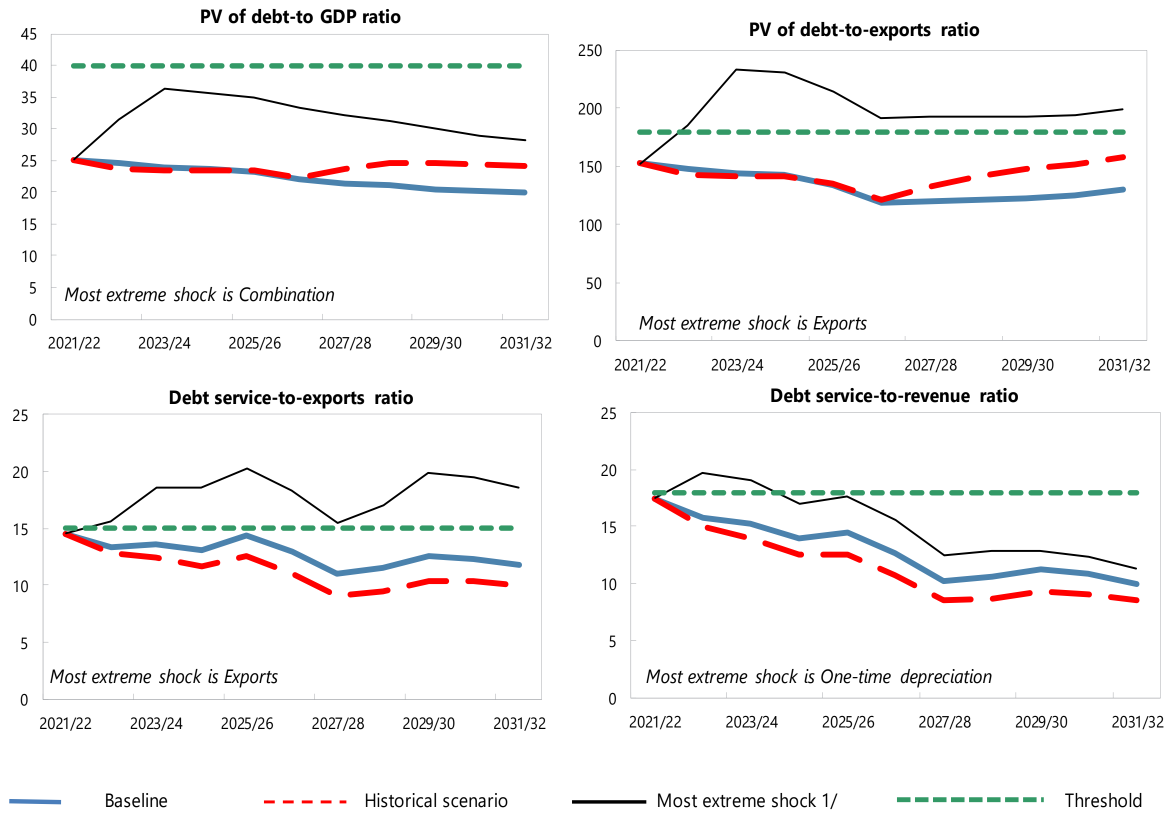
	Projections										
	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32
PV of Debt-to-GDP Ratio											
Baseline	**44.1**	**43.7**	**42.5**	**41.1**	**39.2**	**36.3**	**33.4**	**30.9**	**28.4**	**26.8**	**25.7**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 1/	44	42	40	39	37	36	35	34	33	32	31
B. Bound Tests											
B1. Real GDP growth	44	48	54	54	54	53	52	52	51	52	52
B2. Primary balance	44	46	48	46	44	41	37	34	32	30	29
B3. Exports	44	45	47	46	44	41	38	35	32	30	29
B4. Other flows 2/	44	47	52	50	48	44	41	38	35	33	31
B6. One-time 30 percent nominal depreciation	44	48	45	42	38	34	30	27	23	21	19
B6. Combination of B1-B5	44	45	47	43	41	38	35	32	30	28	27
C. Tailored Tests											
C1. Combined contingent liabilities	44	**57**	**55**	53	50	47	43	40	37	36	34
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public debt benchmark	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**
PV of Debt-to-Revenue Ratio											
Baseline	**298.8**	**299.4**	**280.9**	**261.6**	**224.5**	**189.8**	**173.9**	**161.7**	**150.6**	**145.1**	**141.4**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 1/	299	287	267	247	214	189	182	177	175	174	173
B. Bound Tests											
B1. Real GDP growth	299	331	353	342	309	277	271	270	271	278	288
B2. Primary balance	299	315	316	293	251	212	194	180	168	162	158
B3. Exports	299	311	313	291	250	212	195	182	169	162	157
B4. Other flows 2/	299	324	342	317	272	232	214	200	185	177	170
B6. One-time 30 percent nominal depreciation	299	330	298	267	221	180	158	141	124	113	104
B6. Combination of B1-B5	299	311	310	271	233	198	182	170	159	153	150
C. Tailored Tests											
C1. Combined contingent liabilities	299	391	364	337	289	246	225	211	199	192	188
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Debt Service-to-Revenue Ratio											
Baseline	**62.4**	**56.7**	**54.0**	**42.7**	**37.2**	**33.6**	**26.9**	**28.9**	**29.4**	**26.7**	**21.9**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 1/	62	53	49	39	33	29	26	26	27	26	24
B. Bound Tests											
B1. Real GDP growth	62	61	65	54	49	45	39	44	47	46	42
B2. Primary balance	62	57	57	48	40	36	31	35	33	29	25
B3. Exports	62	57	54	44	38	34	27	30	31	28	24
B4. Other flows 2/	62	57	55	44	38	35	28	31	33	30	25
B6. One-time 30 percent nominal depreciation	62	55	55	44	39	35	28	30	31	28	23
B6. Combination of B1-B5	62	56	56	44	39	36	29	31	32	30	25
C. Tailored Tests											
C1. Combined contingent liabilities	62	57	72	50	42	38	44	36	33	30	25
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

2/ Includes official and private transfers and FDI.

Figure 1. Uganda: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, FY2021/22-2031/32[1]



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.

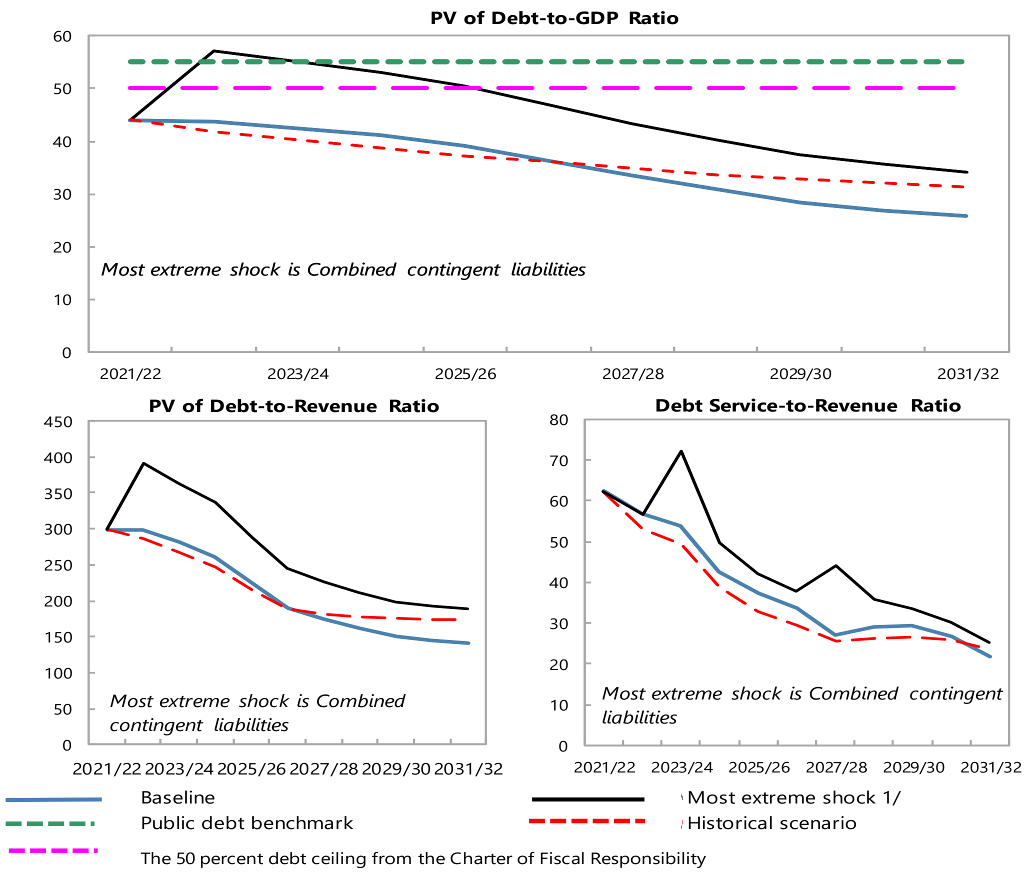
Borrowing Assumptions for Stress Tests*		
	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	2.1%	2.1%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	20	20
Avg. grace period	5	5

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

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2032. 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, FY2021/22-2031/32



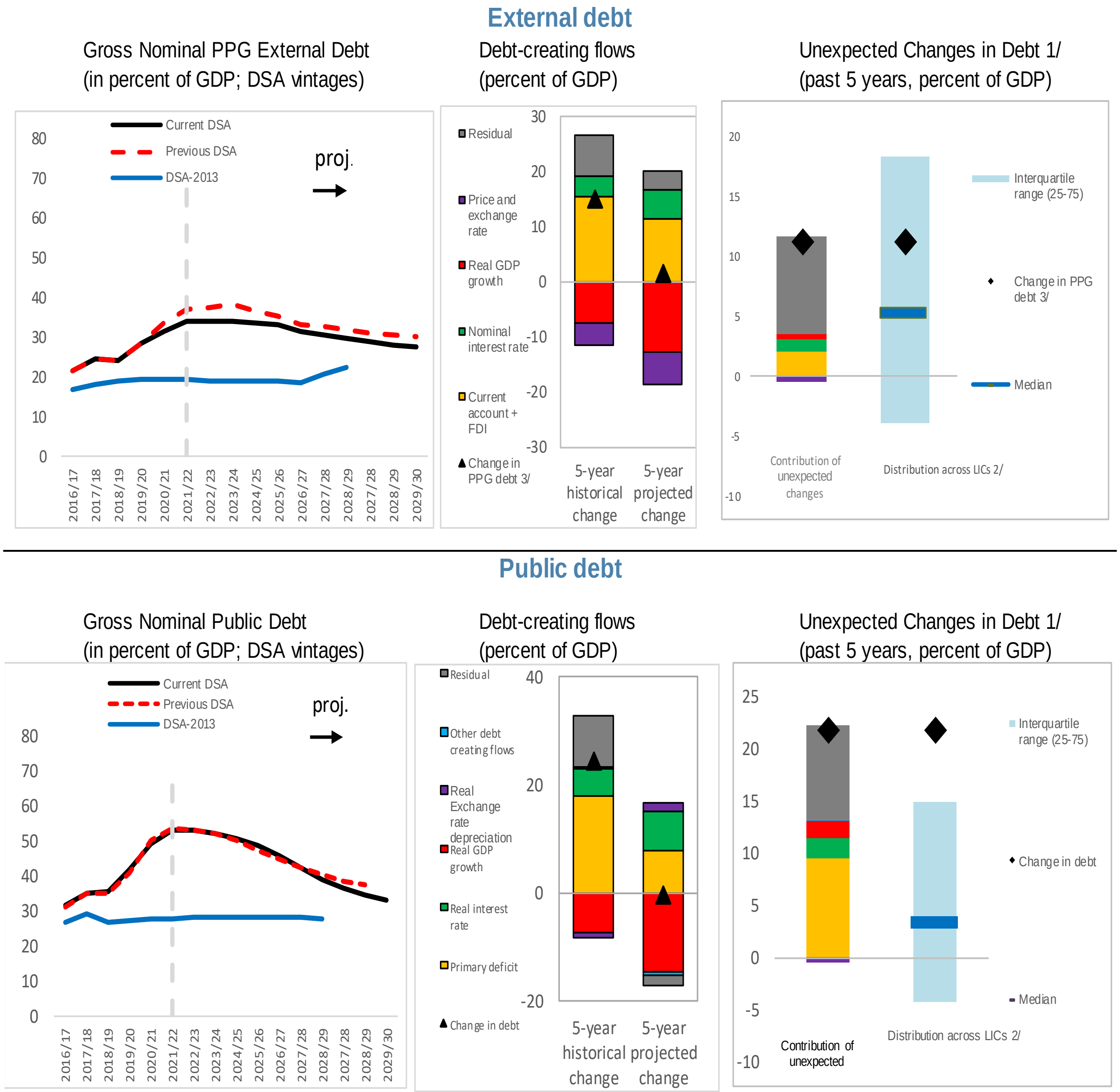
Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	58%	58%
Domestic medium and long-term	29%	29%
Domestic short-term	13%	13%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	2.1%	2.1%
Avg. maturity (incl. grace period)	20	20
Avg. grace period	5	5
Domestic MLT debt		
Avg. real interest rate on new borrowing	7.7%	7.7%
Avg. maturity (incl. grace period)	5	5
Avg. grace period	4	4
Domestic short-term debt		
Avg. real interest rate	3.0%	3.0%

* 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 2032. 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 3. Uganda: Drivers of Debt Dynamics – Baseline Scenario



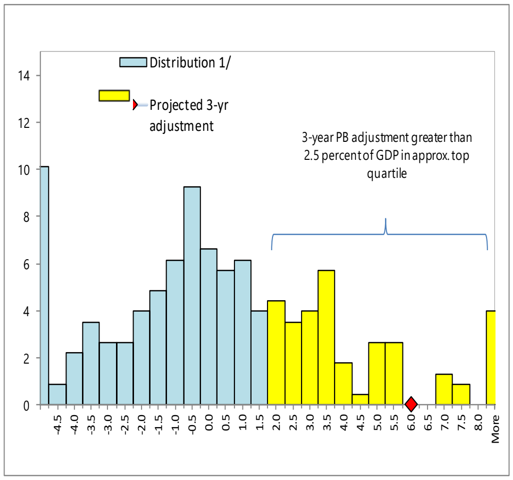
1/ Difference between anticipated and actual contributions on debt ratios.

2/ Distribution across LICs for which LIC DSAs were produced.

3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

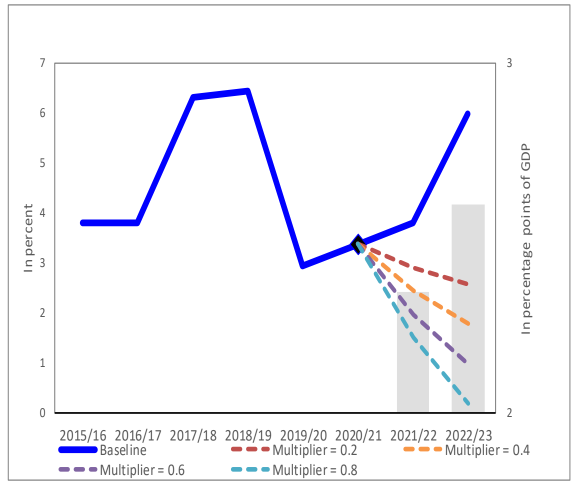
Figure 4. Uganda: Realism Tools

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



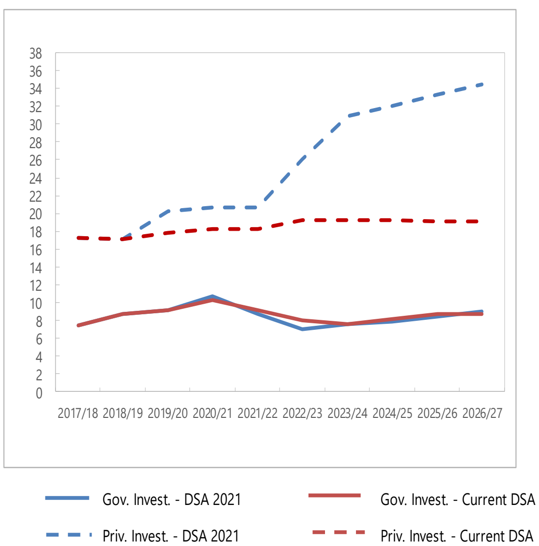
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

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)

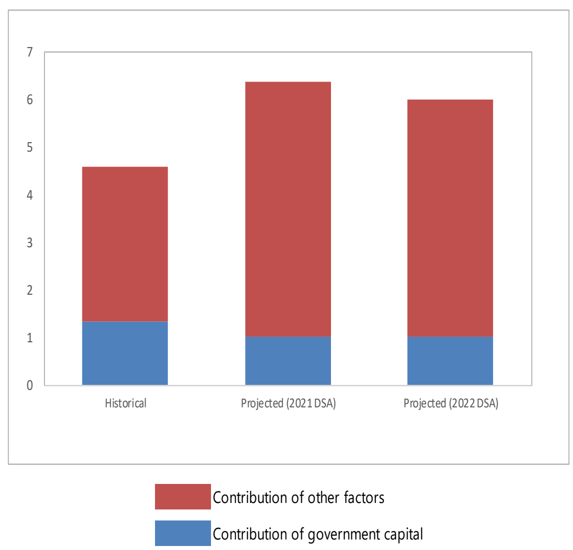


Figure 5. Uganda: Qualification of the Moderate Category, 2021-2031 1/

Sources: Country authorities; and staff estimates and projections.

1/ For the PV debt/GDP and PV debt/exports thresholds, x is 20 percent and y is 40 percent. For debt service/Exports and debt service/revenue thresholds, x is 12 percent and y is 35 percent.