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REPUBLIC OF UZBEKISTAN

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).

REPUBLIC OF UZBEKISTAN : JOINT BANK-FUND DEBT SUSTAINABILITY ANALYSIS	
Risk of external debt distress	Low
Overall risk of debt distress	Low
Granularity in the risk rating	Not Applicable
Application of judgment	No

Staff assesses Uzbekistan's risk of external debt distress as low[1] and debt carrying capacity as strong.[2] Under the baseline scenario, public and publicly guaranteed (PPG) external debt and total external debt peak in 2022 at 37 and 62 percent of GDP, respectively, before declining over the medium term. These paths are modestly lower than in the previous DSA of April 2021, due to higher-than-expected GDP and lower-than-expected borrowing in 2021. Under stress scenarios, all indicators would remain well below relevant thresholds. The probability that these risks will be realized is higher than in the previous DSA, given the war in Ukraine.

Staff assesses that Uzbekistan's overall risk of debt distress also remains low. Under the baseline scenario, total PPG debt peaks at 38 percent of GDP in 2022 before falling. Like PPG external debt, this debt path is somewhat lower than projected in the previous DSA.

Strong buffers, a favorable composition of debt, and government policies should mitigate risks. Foreign exchange reserves are high (15 months of imports at end-2021), and rollover risk is low (as PPG external borrowing is mostly official borrowing at long maturities). The government is also implementing fiscal rules, including annual limits on the

[1] This DSA was prepared jointly by IMF and World Bank staff and is based on the Joint Bank-Fund Low-Income Country Debt Sustainability Analysis (LIC-DSA) methodology.
[2] Uzbekistan's Composite Indicator score is 3.19 based on data from the April 2022 World Economic Outlook and 2020 Country Policy and Institutional Assessment (see Text Table 4).

fiscal deficit (3 percent of GDP) and on new PPG external debt commitments (US$4.5 billion). In 2022, Uzbekistan is expected to enact a debt law limiting total PPG debt-to-GDP to 60 percent.

The authorities are encouraged to continue carefully managing public and external borrowing, improve public investment management and coordination, and develop additional fiscal rules to limit contingent liabilities arising from non-guaranteed debt of state-owned enterprises (SOEs) and the debt of public-private partnerships (PPPs).

BACKGROUND

PUBLIC DEBT COVERAGE

1. **Public debt coverage is broad** (text table 1). Public debt included in this analysis comprises public and publicly guaranteed debt (PPG) of the central, local, and state governments, extra-budgetary funds (including the pension fund), and state enterprises. At end-2021, total PPG debt amounted to 35.8 percent of GDP, of which public debt was 26.0 percent of GDP and publicly guaranteed debt was 9.6 percent of GDP. PPG debt does not include non-guaranteed debt of state enterprises and debt of PPPs. Non-guaranteed debt of state enterprises was estimated at 17.5 percent of GDP at the end of 2021, of which non-guaranteed debt of state banks was estimated at 9.5 percent of GDP, of non-financial public corporations (NFPCs) was estimated at 6.7 percent of GDP, and of joint ventures (JVs) was estimated at 1.3 percent of GDP. PPG debt also does not include public-private partnership (PPP) debt, which was estimated at 14.5 percent of GDP at end-2021. The government does not have outstanding debt to the central bank. External debt is based on residency.

Text Table 1. Debt Coverage

	Subsectors of the public sector	Sub-sectors covered
1	Central government	X
2	State and local government	X
3	Other elements in the general government	X
4	o/w: Social security fund	X
5	o/w: Extra budgetary funds (EBFs)	X
6	Guarantees (to other entities in the public and private sector, including to SOEs)	X
7	Central bank (borrowed on behalf of the government)	X
8	Non-guaranteed SOE debt	

2. **Contingency stress tests are based on standard parameters with the exception of non-guaranteed SOE debt** (text table 2). Standard shocks are used for PPPs (35 percent of the outstanding stock) and the financial market default (5 percent of GDP). As non-guaranteed SOE debt is substantial (17.5 percent of GDP), the shock is assumed to be 35 percent of the outstanding stock, or 6.1 percent of GDP, rather than the standard shock of 2 percent of GDP.

Text Table 2. Magnitude of Contingent Liability Shocks

1	The country's coverage of public debt	The general government, central bank, government-guaranteed debt			
		Default		Used for the analysis	Reasons for deviations from the default settings
2	Other elements of the general government not captured in 1.	0	percent of GDP	0.0	
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2	percent of GDP	6.1	Non-guaranteed SoE debt stock (17.5% of GDP) * shock (35%)
4	PPP	35	percent of PPP stock	5.1	PPP debt stock (14.5% of GDP) * shock (35%)
5	Financial market (the default value of 5 percent of GDP is the minimum value)	5	percent of GDP	5.0	
	Total (2+3+4+5) (in percent of GDP)			11.1	

1/ The default shock of 2% of GDP will be triggered for countries whose government-guaranteed debt is not fully captured under the country's public debt definition (1.).

BACKGROUND ON DEBT AND SHORT-TERM DEVELOPMENTS

3. Uzbekistan's public and external debt has risen rapidly over the last few years but leveled off in 2021 (see Table 2). At the end of 2021, total PPG debt was 35.8 percent of GDP (US$ 24.2 billion). Of this amount, PPG external debt was 35.0 percent of GDP (US$ 23.8 billion), down by one percentage point of GDP from a year earlier, while government domestic debt remained below 1 percent of GDP (only 2 percent of total PPG debt). Total external debt (the sum of PPG debt, non-guaranteed SOE debt, PPPs, and private external debt) was 57.8 percent of GDP (US$ 39.5 billion) at end-2021, up one-half percentage point from a year earlier.

- **In the three years preceding the COVID crisis, PPG external debt rose from 8 percent of GDP at end-2016 to 28 percent of GDP at end-2019**. There were three main causes. First, depreciation of the exchange rate, in particular the 48 percent depreciation of the exchange rate in 2017 as Uzbekistan unified its exchange rates and liberalized its foreign exchange regime. This added about 6 percent of GDP to the PPG external debt-to-GDP ratio. Second, the government primary deficit, which had been close to balance in previous years, rose from 0.4 percent of GDP in 2016 to 2.7 percent in 2019, adding about 6 percent of GDP to the PPG external debt-to-GDP ratio. Third, other debt creating flows significantly increased in 2018 and 2019, adding about 10 percent of GDP to the PPG external debt ratio. These flows reflected the authorities' efforts to liberalize the external and financial sectors and to reform the SOE sector by encouraging healthy SOEs to borrow so that bond holders could monitor SOEs and subject them to market discipline.

- **During the COVID crisis**, developments in 2020 and 2021 diverged.

  - In 2020, the PPG external debt-to-GDP ratio rose rapidly (by about 9 percent of GDP to 37 percent of GDP) due to a modestly higher primary deficit (of 3.3 percent of GDP) and significant additional SOE borrowing (6 percent of GDP).

  - In 2021, however, the higher primary deficit (6 percent of GDP) was completely offset by strong real growth, real exchange rate appreciation, and a net decline in SOE borrowing. As a result, the PPG external debt-to-GDP ratio declined to 35 percent of GDP at year-end.

4. Uzbekistan primarily borrows from official creditors at long maturities in foreign currencies (see Text Figure 1). The bulk of PPG debt is public and about a quarter was used for budget support and three-quarters for project financing.

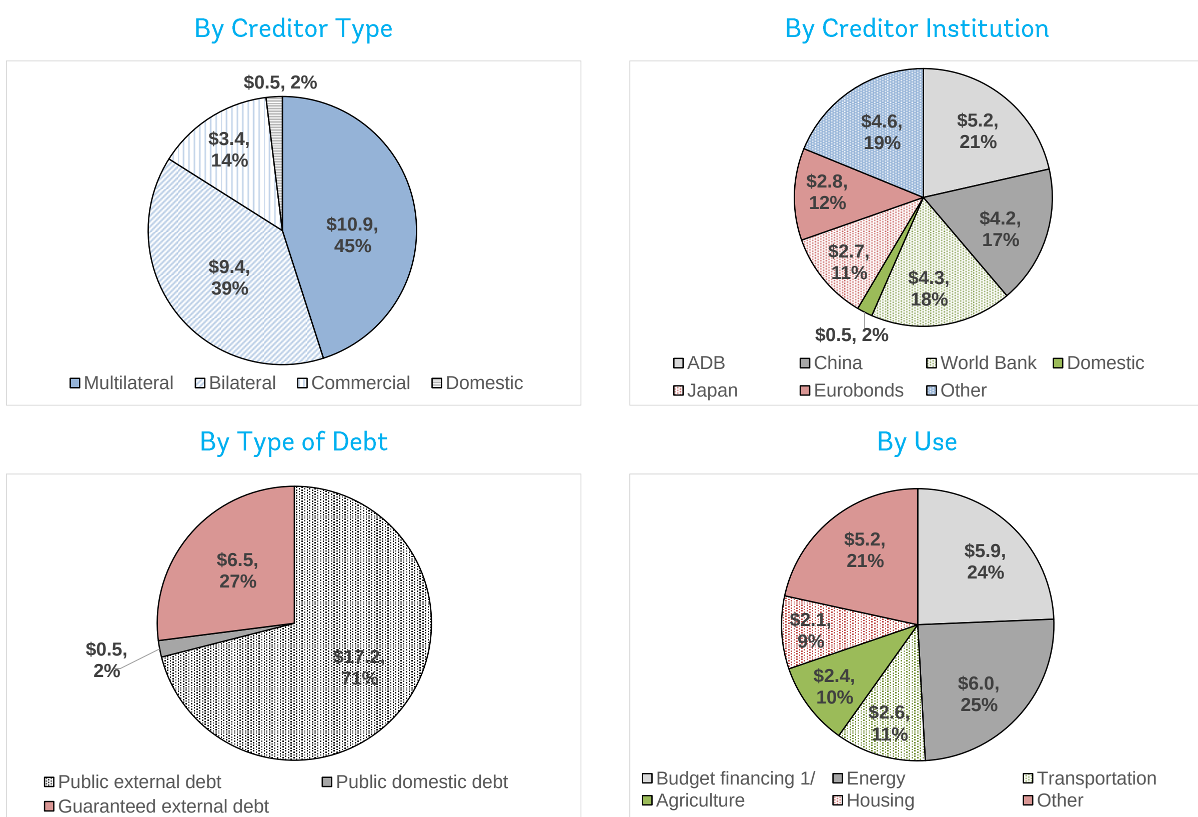
- **Type of Creditor**: As of end-2021, multilateral and bilateral creditors have provided 45 and 39 percent of Uzbekistan's total PPG debt financing, respectively. Among multilateral institutions, the Asian Development Bank and World Bank are the largest creditors. Among bilateral donors, China and Japan are the largest. Commercial borrowing provided 14 percent, of which 12 percent was sovereign bonds and 2 percent commercial borrowing.
- **Public and Guaranteed**: Of total PPG debt, 71 percent is public external debt, 27 percent is publicly guaranteed external debt, while only 2 percent is public domestic debt. Of public domestic debt, about 60 percent has a maturity of less than a year, while about 40 percent has a maturity of 1–5 years. Interest rates are generally close to the central bank policy rate.[3]
- **Use of Debt**: About 24 percent of PPG debt was used for budget financing. The remaining portion was used for project financing, which went primarily to the energy (25 percent), transportation (11 percent), agriculture (10 percent), and housing sectors (9 percent).

Text Figure 1. Composition of Public Debt, End-2021

Total = US$ 24.2 Billion (36% of GDP)

External = US$ 23.8 billion (35% of GDP)

Domestic = US$ 0.5 billion (1% of GDP)



1/ includes external donor support and domestic bills & bonds.

Source: Debt Management Office of the Ministry of Finance and IMF staff calculations.

[3] At end-2021, the central bank policy rate was 14 percent while consumer price inflation was 10 percent.

UNDERLYING ASSUMPTIONS AND COUNTRY CLASSIFICATION

ASSUMPTIONS FOR THE MACROECONOMIC FORECAST

5. Compared to the April 2021 DSA, macroeconomic conditions have improved, but the war in Ukraine has clouded the outlook. In particular:

- **Spillovers from the war**: The main economic links between Russia and Uzbekistan are through remittances and investment financing and to a lesser extent trade, import prices, and the exchange rate. Remittances were close to 10 percent of GDP in 2021, of which almost three-quarters originated from Russia. Similarly, sanctioned Russian banks have been a major source of financing for large projects in Uzbekistan's energy and mining sectors. Alternative financing sources can be found, but this may take time. Regarding trade, Russia accounts for over 20 percent of imports (mainly vegetable oil, sugar, and fuel) and 12 percent of exports (mainly fruits, vegetables, and textiles). Changes in exports and imports are expected to be broadly offsetting. The exchange rate depreciated 5 percent in March 2022 but appreciated afterwards. Global price increases and disruptions in food and fuel markets could also raise prices in 2022.

- **Growth**: In 2020, despite the pandemic, Uzbekistan's real growth remained positive and was revised upwards to 1.9 percent. Agriculture was relatively unaffected (growing about 3 percent). Manufacturing (up 8 percent) and construction (up 9½ percent) remained strong due to government stimulus spending, offsetting sharp declines in the mining (down 22 percent), hotels and food services (down 21 percent), and transportation sectors (down 6 percent).

  In 2021, real growth surged to 7.4 percent. Agriculture (up 4 percent) and manufacturing (up 8 percent) remained strong. Sectors hit by the pandemic rebounded strongly, including mining (up 10 percent), accommodation and food (up 18 percent), and transportation (up 16 percent).

  In the first quarter of 2022, growth measured 5.8 percent. Reported Covid cases had fallen to less than 5 per million per week and about 42 percent of the population had been fully vaccinated. For all of 2022, staff expects growth will slow to about 3–4 percent of GDP due to spillovers from the war in Ukraine.

  Over the medium-term, staff projects Uzbekistan real growth rate will average 5½ percent, about the same as projected in the previous DSA. The medium-term projection reflects a return to trend following temporary shocks (the pandemic, rebound, and spillovers from the war in Ukraine) and projected trend growth rates in agriculture (3–4 percent), manufacturing and retail trade (6–7½ percent), and services (5–6 percent).

- **Inflation**: In 2021, consumer price inflation fell from 11 to 10 percent, in line with the central bank's target. High real interest rates and a stable exchange rate contributed to the decline.

  In 2022, inflation is expected to remain high as food and commodity prices increase due to higher global inflation and spillovers from the war in Ukraine. A possible increase in utility tariffs during the year could further add to inflation.

  Over the medium-term, inflation is projected to gradually decline to 5 percent in line with the authorities' inflation target.

- **Fiscal outlook**: In 2021, Uzbekistan's primary deficit increased to 5.9 percent of GDP as the government continued to provide stimulus (amounting to 5 percent of GDP during 2020-2021) to offset the COVID shock. The largest part came from one-off increases in public investment. The government also increased spending on healthcare, social support, and assistance to enterprises (including via policy loans). Additional spending was partially offset by higher revenues, as gold prices and gold exports (8–9 percent of GDP) are countercyclical.

  In 2022, the government had planned to reduce the primary deficit to about 2.5 percent of GDP. However, with announced support for the economy, including an additional one percent of GDP for social assistance, the primary deficit is expected to be higher at about 3.2 percent of GDP.

  Over the medium-term, there will be some unwinding of support provided in response to the COVID pandemic and spillovers from the war in Ukraine. The primary deficit is projected to fall to 2.3 percent of GDP by 2027. Overall revenues are expected to fall in 2023 as the government implements a reduction in the value added tax, then rise gradually as a share of GDP as the government improves revenue administration and eliminates tax privileges. This will make resources available to boost spending on health, education, and infrastructure to meet the SDGs.

- **External outlook**: In 2021, the non-interest current account deficit rose from to 5.6 percent of GDP from 3.7 percent of GDP in 2020. But this was primarily due to the timing of gold exports.

  In 2022, remittances are expected to fall significantly as fewer Uzbeks are employed in Russia. As a result, the non-interest current account deficit is projected to rise to 6.8 percent of GDP, although the outlook is subject to unusually high uncertainties.

  Over the medium-term, staff expect the non-interest current account deficit to fall to around 3.5 percent of GDP, slightly higher than projected in the previous DSA.

- **Financing Strategy**: Multilateral and bilateral budget financing was lower than projected in 2021, but this was mostly offset by higher bilateral project financing. Both budget and project financing are expected to increase in 2022 as some externally financed projects are shifted from 2021 to 2022 and the government seeks to use official financing to make up for lower sovereign bond issuances.

  External financing is expected to continue to provide most financing over the medium-term. However, the government has indicated that annual budgets will limit PPG external borrowing to US$ 4.5 billion per year (about 5 percent of GDP in 2022) and net issuance of domestic securities to UZS 6.0 trillion. As in the past, about half of future external debt disbursements are expected to be multilateral, about one third bilateral, and the remainder Eurobonds and commercial borrowing. In the near term, about one third of official disbursements are expected to be in the form of budget support, with project financing making up the remainder. The share of budget support is expected to decline over the medium term.

  The DSA assumes no issuance of sovereign bonds in 2022, as risk premia have risen due to the war in Ukraine and the increase in global interest rates. Sovereign bond issuances are expected to restart in 2023 and are projected at about one percent of GDP over the medium-term.

  In 2021, the Fund for Reconstruction and Development (FRD)—whose policy lending is included in the budget—financed its share of the budget (about 2.8 percent of GDP) by drawing down its foreign exchange assets at the central bank. But over the medium-term, FRD financing is projected to be close to zero.

Domestic financing will come from several sources, including the domestic bond market and privatization receipts (each expected to average about half a percent of GDP over the medium-term). Over the medium-term, the maturity of domestic securities is expected to rise while interest rates fall in line with inflation. The government has also begun to allow foreign investors to purchase domestic securities.

Following the successful sale of a Coca-Cola bottler in 2021, privatization of some state enterprises is expected to gradually increase over the medium-term with proceeds averaging about half a percent of GDP.

Text Table 3. Comparison of Key Macroeconomic Assumptions
(percent of GDP unless otherwise indicated)

DSA Vintage:	Actual	May 2020 RCF/RFI		May 2021 Art IV		Current	
Key macroeconomic variables (annual averages)	2016-21	2021-26	2027-41	2021-26	2027-41	2022-27	2028-42
				(percent change)			
Real GDP growth	5.1	5.2	5.1	5.4	5.1	5.0	5.1
GDP deflator (UZS)	2.6	8.4	5.5	7.6	3.1	8.8	5.6
Nominal GDP (UZS)	7.8	14.0	10.8	13.4	8.3	14.2	11.0
Exports of goods & services (USD)	6.5	10.6	7.6	14.9	7.7	14.1	7.7
Fiscal balance				(percent of GDP)			
Revenues & grants	25.8	25.3	25.7	25.3	25.7	27.9	28.7
Primary expenditure	28.4	28.2	27.5	28.2	27.5	31.1	31.0
Primary deficit	2.6	2.8	1.8	2.8	1.8	3.2	2.3
Interest expenditure	0.2	0.2	0.3	0.2	0.3	0.4	0.4
Overall fiscal deficit	2.8	3.1	2.1	3.1	2.1	3.6	2.7
External balance				(percent of GDP)			
Non-interest current account deficit	2.6	4.1	3.4	4.8	7.6	4.6	3.3
Current account deficit	3.6	5.0	4.2	6.4	4.3	6.2	5.0

Source: Authorities' data and IMF and World Bank staff estimates

REALISM TOOLS

6. The realism tools show that Uzbekistan's debt has increased more rapidly than for other low-income countries.

- **Forecast errors**. Over the last 5 years, the cumulative increases in Uzbekistan's PPG and external debt were 30 percent of GDP, in the top quartile for low-income countries (see Figure 3). For **PPG debt**, the largest, unexpected changes came from primary fiscal deficits and other debt creating flows (additional SOE borrowing, as explained in paragraph 3). For **external debt**, the largest, unexpected change came from the residual (additional SOE borrowing). The second largest factor was exchange rate depreciation, including the 48 percent depreciation in 2017.

  Both PPG and total external debt increases are projected to drop to close to zero over the next 5 years. For PPG debt this reflects higher primary deficits that are offset by real GDP growth, real exchange rate appreciation, and a reduction in government guarantees of SOEs. For external debt, current account deficits and higher interest rates are offset by real GDP growth and real exchange rate appreciation.

- **Fiscal adjustment**. The realism tools (Figure 4) suggest that the projected fiscal adjustment over the next three years is high (in the top quartile) relative to historical adjustments for low-income countries.

Staff believes this projection is reasonable given the government's strong commitment to reducing the fiscal deficit, improvements in budgeting, and conservative revenue assumptions.

- **Investment and growth**. In 2021, both investment and growth rebounded in the wake of the COVID crisis. Real investment increased 10.6 percent, while real GDP rose 7.4 percent.

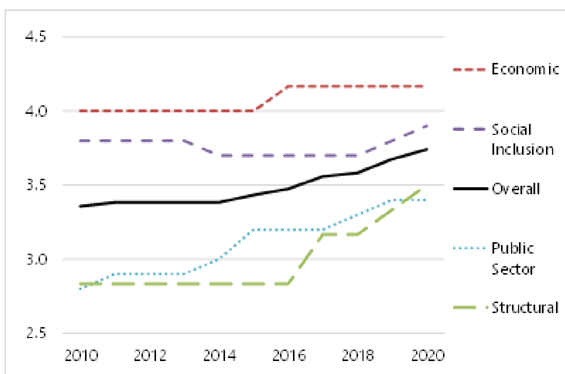
  In 2022–23, government fiscal consolidation and spillovers from the war in Ukraine are expected to significantly slow investment. Many large projects (particularly in the energy sector) receive substantial financing from Russia. Real GDP growth is projected to slow to around 3–4 percent, although there are large uncertainties.

  Over the medium-term, staff projects investment will return to trend and real growth to average about 5½ percent.

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

7. Uzbekistan's debt-carrying capacity is assessed as strong. The IMF-World Bank Composite Indicator (CI) score for Uzbekistan has continued to rise, reaching 3.19 in 2020 [4] up from 3.16 a year earlier. The strong CI score reflects high international reserves and a good Country Policy and Institutional Assessment (CPIA) rating. Uzbekistan's reserves are equivalent to 15 months of imports. Its overall CPIA score has risen 9 percent over the last 5 years, driven by improvements in the social, public sector, and structural components (see Text Figure 2).

Text Figure 2. Country Policy and Institutional Assessment, 2010-2020
(Score out of 6)



Source: World Bank.

[4] Based on the April 2022 World Economic Outlook and 2020 Country Policy and Institutional Assessment, indicating a strong debt carrying capacity.

Text Table 4. Calculation of the Composite Index of Debt Carrying Capacity

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.39	3.7	1.41	44%
Real growth rate (in percent)	2.72	4.9	0.13	4%
Import coverage of reserves (in percent)	4.05	58.0	2.35	74%
Import coverage of reserves^2 (in percent)	-3.99	33.6	-1.34	-42%
Remittances (in percent)	2.02	11.0	0.22	7%
World economic growth (in percent)	13.52	3.1	0.41	13%
CI Score			3.19	100%
CI rating			Strong	

CI scores are used to classify a country's debt carrying capacity. Countries with CI scores below the 25th percentile (2.69) are classified as weak. Countries with CI scores above the 75th percentile (3.05) are classified as strong. Countries with CI scores in between are classified as medium.

EXTERNAL DSA

8. **Staff assesses Uzbekistan's risk of external debt distress as low**. PPG external debt is projected to rise from 35 percent of GDP at end-2021 to 41 percent of GDP at end-2022. Including private external debt (primarily non-guaranteed debt of state enterprises), total external debt is projected to rise from 57 percent of GDP at end-2021 to 62 percent of GDP at end-2022, before declining over the medium-term (see Table 1). The increase in 2022 is primarily driven by expected depreciation relative to the US dollar as a result of the spillovers from the war in Ukraine, which lowers GDP measured in US dollars. The IMF's External Sector Assessment finds Uzbekistan's real exchange rate in line with fundamentals and assesses it will remain broadly stable in the near-term and appreciate 1-2 percent per year over the medium-term as relative price adjustments continue and productivity increases. Under the baseline scenario, sustainability indicators stay well below risk thresholds.

9. **PPG external debt is most vulnerable to a shock to exports** (see Figure 1 and Table 3). Under a one-standard-deviation shock to exports, the debt service-to-exports ratio would approach, but remain below, the indicative threshold of 21 percent of GDP in 2024, due to the scheduled repayment of a 2019 US$ 500 million Eurobond. The debt service-to-exports ratio is projected to fall thereafter. The most significant other stress scenario is a combination of shocks. Under the market financing scenario, debt indicators would rise slightly above the baseline but remain well below indicative thresholds (see Tables 3 and 4). The projected decline in remittances is expected to cause Uzbekistan's gross financing needs to breach the benchmark of 14 percent of GDP in 2022 before falling back below the threshold in 2023. Despite an increase in the spread on Uzbekistan's 2021 Eurobond, from 265 basis points at the end of 2021 to 380 basis points on May 13, 2022, the spread remains below the DSA benchmark of 570 bps (see Figure 5).

10. Private external debt is expected to be subject to similar risks. Most of this debt arises from non-guaranteed external borrowing of SOEs. A shock to exports would likely also worsen indicators for SOEs (e.g., debt service-to-exports). However, SOEs that borrow without guarantees are generally in better shape than other SOEs and have access to foreign exchange (for example, banks and mining companies). In addition, the government has begun categorizing SOEs according to risk, with SOEs in higher risk categories requiring permission to borrow. The government is also planning to limit government guarantees to state enterprises and to develop a framework to limit risks from contingent liabilities from SOEs and PPPs.

OVERALL RISK OF PUBLIC DEBT DISTRESS

11. Staff assesses Uzbekistan's overall risk of public debt distress as low. Total PPG debt is projected to rise from 36 percent of GDP at end-2021 to 38 percent of GDP in 2022, before gradually declining to 32 percent of GDP by 2027. PPG debt is projected to remain stable round 35 percent of GDP thereafter (see Table 2). While the PPG external debt ratio would fall modestly, PPG domestic debt would increase as the government plans to further develop the domestic market for government securities. Multilateral and official bilateral creditors may accelerate financing in the near-term as commercial financing is reduced by spillovers from the war in Ukraine. They will also likely continue to provide the majority of financing over the medium term.

12. Stress tests suggest Uzbekistan's PPG debt ratios are robust to a wide range of shocks (see Figure 2 and Table 4). Even under the most extreme scenario (a shock to exports), the PV of debt-to-GDP ratio peaks at 33 percent of GDP, well below the benchmark of 70 percent of GDP. As external debt comprises 98 percent of total PPG debt, greater use of domestic debt could reduce the risk from exchange rate and external financing disruptions. The realization of contingent liabilities (described in text table 2) is the most extreme shock for the public debt service-to-revenue ratio but remains relatively modest, peaking at 20 percent.

13. The government is implementing fiscal rules to mitigate risks. Annual budget laws contain limits on the expenditures which are expected to keep fiscal deficits at or below 3 percent of GDP over the medium term. They also limit PPG external borrowing to US$4.5 billion per year and net issuance of domestic securities to UZS6.0 trillion per year. In addition, a public debt law has been passed by both houses of parliament and is expected to be enacted in 2022. It limits overall PPG debt to 60 percent of GDP and requires the government to make proposals to reduce debt if PPG debt reaches 50 percent of GDP. The government is also considering fiscal rules to limit contingent liabilities arising from non-guaranteed debt of SOEs, state-owned banks, and PPPs. It will be important for the government to carefully monitor debt of these entities to reduce these risks.

RISK RATING AND VULNERABILITIES

14. Uzbekistan is at low risk of external and public debt distress. Uzbekistan's economy is transforming and requires significant investment to finance structural changes and modernize the economy. It also wants to achieve its development goals, which include raising growth, creating high quality jobs, upgrading infrastructure, and improving social support systems. Over the last 5 years, as investment and foreign financing have increased, Uzbekistan has seen a significant increase in public debt levels. Nonetheless, Uzbekistan's current level of PPG external debt (35 percent of GDP) is moderate. PPG debt ratios are projected to peak in 2022 and decline thereafter. High international reserves and low rollover risk, due to the long-term maturity of debt, mitigate the risk of debt distress.

15. Risks could arise from unexpected external shocks or excessive borrowing by state enterprises, and Uzbekistan is implementing fiscal rules. The DSA suggests the most significant risk could arise from a shock to exports. But even under this scenario debt indicators remain below DSA thresholds. The government has already included limits on the fiscal deficit and on PPG borrowing in the annual budget law. The new debt law limiting PPG debt to 60 percent of GDP is expected to be enacted in 2022. Plans for additional rules to cover non-guaranteed debt of SOEs and PPPs are also welcome. To maintain its strong external position, the government should continue to carefully manage public and external borrowing, improve public investment management and coordination, reduce guarantees of SOE debt, and continue to strengthen the implementation of fiscal rules.

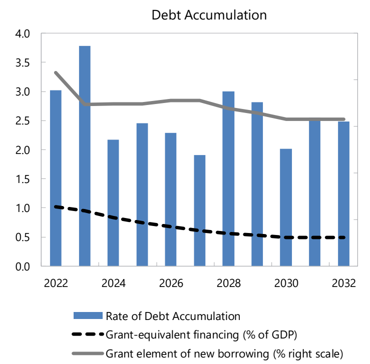
AUTHORITIES' VIEWS

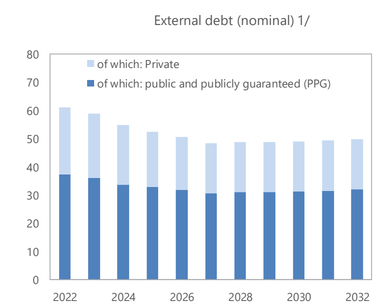
16. The authorities broadly agreed with staffs' assessment. They emphasized their commitment to ensuring debt sustainability. They noted the 60 percent limit on public debt in the debt law would anchor their medium-term debt. Operational targets—including a limit on the fiscal deficit of 3 percent of GDP and a US$4.5 billion limit on commitments of new PPG external debt—are calibrated to lower debt levels and provide sufficient space to adjust to economic shocks. They noted they plan to phase out debt guarantees to state enterprises over the medium-term as these enterprises are reformed or privatized. At the same time, they have put in place a system that categorizes the operations of state enterprises as low, medium, or high risk, so that appropriate risk mitigation measures can be taken. They noted concerns about risks arising from PPPs and emphasized they are working to implement a framework to appropriately address these risks, with assistance from development partners, including the World Bank, ADB and the IMF.

Table 1. Uzbekistan: External Debt Sustainability Framework, Baseline Scenario, 2021–2042
(In percent of GDP, unless otherwise indicated)

	Actual	Projections								Average 8/	
	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
External debt (nominal) 1/	57.8	61.2	59.0	54.7	52.4	50.7	48.4	49.8	48.3	29.7	52.0
of which: public and publicly guaranteed (PPG)	35.0	37.4	36.1	33.7	32.9	31.9	30.7	32.0	30.6	17.3	32.7
Change in external debt	0.3	3.4	-2.2	-4.2	-2.4	-1.7	-2.2	0.5	-0.3		
Identified net debt-creating flows	-3.7	5.1	2.5	0.9	-0.5	-0.9	-1.0	-0.8	-0.8	-0.9	0.2
Non-interest current account deficit	5.6	6.8	5.5	4.4	3.4	3.7	3.6	3.4	3.3	0.8	4.0
Deficit in balance of goods and services	16.4	12.7	12.1	11.3	10.5	10.5	10.5	10.5	10.5	9.3	10.9
Exports	23.7	26.8	27.5	27.1	27.7	27.6	27.6	27.6	27.6		
Imports	40.1	39.5	39.5	38.4	38.2	38.1	38.1	38.1	38.1		
Net current transfers (negative = inflow)	-9.2	-5.7	-6.2	-5.9	-5.9	-5.8	-5.7	-5.7	-5.7	-6.6	-5.8
of which: official	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other current account flows (negative = net inflow)	-1.7	-0.2	-0.4	-1.0	-1.2	-1.0	-1.2	-1.4	-1.5	-2.0	-1.1
Net FDI (negative = inflow)	-3.0	-1.3	-2.0	-3.0	-3.2	-3.5	-3.5	-3.5	-3.5	-2.0	-3.1
Endogenous debt dynamics 2/	-6.4	-0.4	-1.0	-0.5	-0.6	-1.1	-1.1	-0.7	-0.6		
Contribution from nominal interest rate	1.4	1.5	1.7	2.0	2.0	1.4	1.4	1.6	1.7		
Contribution from real GDP growth	-3.7	-1.9	-2.7	-2.6	-2.7	-2.6	-2.5	-2.3	-2.3		
Contribution from price and exchange rate changes	-4.0	...	...	...	...	...	...	...	...		
Residual 3/	4.0	-1.7	-4.7	-5.1	-1.9	-0.8	-1.2	1.3	0.5	5.4	-0.9
of which: exceptional financing	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	14.5	16.6	18.2	17.8	18.0	18.2	18.0	21.6	23.5		
PV of PPG external debt-to-exports ratio	61.1	61.9	66.2	65.5	65.1	65.9	65.4	78.5	85.2		
PPG debt service-to-exports ratio	8.4	6.3	6.9	10.6	7.7	6.9	7.0	4.8	8.3		
PPG debt service-to-revenue ratio	7.6	5.8	7.1	10.6	7.8	6.8	6.7	4.6	8.0		
Gross external financing need (Million of U.S. dollars)	8,668	11,391	10,858	11,152	10,133	10,039	10,069	13,953	31,114		
Key macroeconomic assumptions											
Real GDP growth (in percent)	7.4	3.4	5.0	5.0	5.5	5.5	5.5	5.1	5.0	5.9	5.1
GDP deflator in US dollar terms (change in percent)	7.6	2.1	6.7	9.1	6.6	5.8	5.6	2.5	1.9	-3.4	4.9
Effective interest rate (percent) 4/	2.8	2.7	3.0	4.0	4.2	3.1	3.1	3.5	3.7	2.7	3.5
Growth of exports of G&S (US dollar terms, in percent)	12.9	19.4	14.8	13.0	14.7	11.3	11.3	7.7	7.0	2.2	11.9
Growth of imports of G&S (US dollar terms, in percent)	23.1	4.0	12.1	11.3	11.6	11.4	11.4	7.7	7.0	7.1	9.8
Grant element of new public sector borrowing (in percent)	...	20.8	17.4	17.4	17.4	17.8	17.8	15.8	15.8	...	17.2
Government revenues (excluding grants, in percent of GDP)	26.0	29.0	26.9	27.0	27.5	28.1	28.7	28.7	28.7	26.3	28.3
Aid flows (in Million of US dollars) 5/	0.0	610.0	600.0	607.0	607.0	705.0	705.0	394.3	793.3		
Grant-equivalent financing (in percent of GDP) 6/	...	1.0	1.0	0.8	0.7	0.7	0.6	0.5	0.5	...	0.7
Grant-equivalent financing (in percent of external financing) 6/	...	20.8	17.4	17.4	17.4	17.8	17.8	15.8	15.8	...	17.2
Nominal GDP (Million of US dollars)	69,202	73,073	81,850	93,708	105,309	117,508	130,893	203,010	400,363		
Nominal dollar GDP growth	15.5	5.6	12.0	14.5	12.4	11.6	11.4	7.7	7.0	2.4	10.3
Memorandum items:											
PV of external debt 7/	37.3	40.4	41.0	38.8	37.5	37.0	35.8	39.4	41.2		
In percent of exports	157.3	150.7	149.2	143.1	135.5	134.0	129.8	142.9	149.6		
Total external debt service-to-exports ratio	41.8	37.6	35.6	38.6	34.2	30.1	27.7	25.3	28.9		
PV of PPG external debt (in Million of US dollars)	10,025	12,116	14,881	16,656	18,958	21,365	23,611	43,941	94,047		
(PVt-PVt-1)/GDPt-1 (in percent)		3.0	3.8	2.2	2.5	2.3	1.9	2.5	1.6		
Non-interest current account deficit that stabilizes debt ratio	5.3	3.4	7.7	8.6	5.7	5.4	5.8	2.9	3.6		

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





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g) + 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.

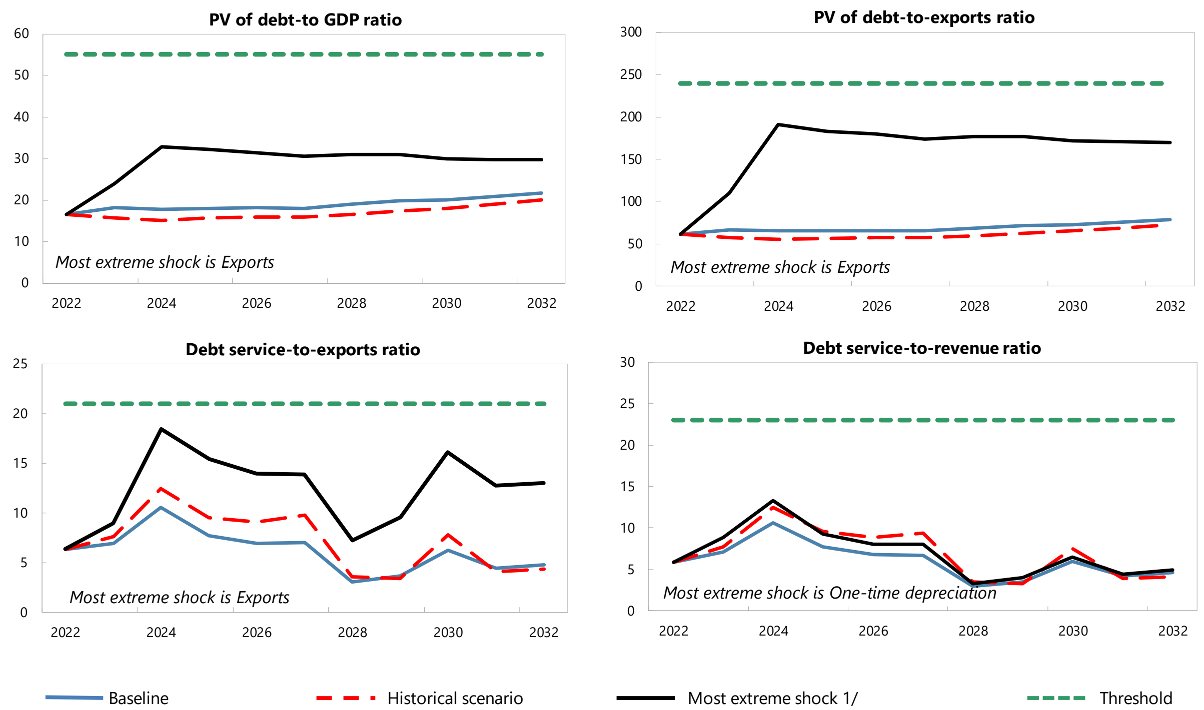
5/ Defined as grants, concessional loans, and debt relief.

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.

Figure 1. Uzbekistan: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2022–2032



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	No	No

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	3.2%	3.2%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	18	18
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.

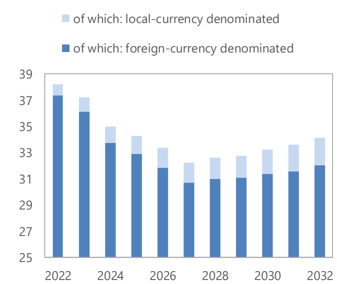
2/ The magnitude of shocks used for the commodity price shock stress test are based on the commodity prices outlook prepared by the IMF research department.

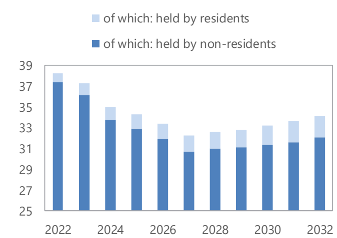
Table 2. Uzbekistan: Public Sector Debt Sustainability Framework, Baseline Scenario, 2021–2042
(In percent of GDP, unless otherwise indicated)

	Actual	Projections								Average 6/	
	2021	2022	2023	2024	2025	2026	2027	2032	2042	Historical	Projections
Public and publicly guaranteed debt 1/	35.8	38.2	37.2	35.0	34.3	33.4	32.2	34.1	36.6	**17.5**	**34.2**
of which: PPG external debt	35.0	37.4	36.1	33.7	32.9	31.9	30.7	32.0	30.6	**17.3**	**32.7**
Change in public sector debt	-1.9	2.4	-1.0	-2.3	-0.7	-0.9	-1.1	0.5	0.2		
Identified debt-creating flows	-2.2	1.4	-2.4	-2.8	-1.1	-1.5	-1.5	-0.2	0.3	**2.4**	**-1.0**
Primary deficit	5.9	3.2	4.8	3.1	3.3	2.6	2.3	2.3	2.3	**1.0**	**2.8**
Revenue and grants	26.0	29.0	26.9	27.0	27.5	28.1	28.7	28.7	28.7	**26.3**	**28.3**
of which: grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Primary (noninterest) expenditure	31.9	32.1	31.7	30.1	30.9	30.8	31.0	31.0	31.0	**27.2**	**31.1**
Automatic debt dynamics	-5.1	-1.0	-4.9	-4.4	-3.0	-3.0	-2.7	-1.4	-1.4		
Contribution from interest rate/growth differential	-3.3	-3.2	-2.7	-1.8	-1.6	-1.9	-1.7	-1.4	-1.4		
of which: contribution from average real interest rate	-0.7	-2.0	-0.9	-0.1	0.2	-0.1	0.0	0.2	0.3		
of which: contribution from real GDP growth	-2.6	-1.2	-1.8	-1.8	-1.8	-1.8	-1.7	-1.6	-1.7		
Contribution from real exchange rate depreciation	-1.8	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	-3.1	-0.8	-2.3	-1.5	-1.4	-1.2	-1.1	-1.1	-0.6	**1.7**	**-1.3**
Privatization receipts (negative)	-0.5	-0.2	-0.8	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (SOEs' Guarantees)	-2.6	-0.6	-1.5	-1.1	-1.0	-0.9	-0.8	-0.8	-0.3		
Residual	0.4	1.1	1.5	0.5	0.3	0.6	0.4	0.8	-0.1	**0.6**	**0.8**
Sustainability indicators											
PV of public debt-to-GDP ratio 2/	15.5	18.2	19.5	19.0	19.4	19.7	19.6	24.1	29.9		
PV of public debt-to-revenue and grants ratio	59.8	62.7	72.6	70.6	70.3	69.9	68.2	83.9	104.0		
Debt service-to-revenue and grants ratio 3/	9.4	8.0	9.0	13.3	10.8	10.1	10.2	10.0	25.5		
Gross financing need 4/	5.2	4.7	4.9	5.2	4.9	4.3	4.1	4.1	9.0		
Key macroeconomic and fiscal assumptions											
Real GDP growth (in percent)	7.4	3.4	5.0	5.0	5.5	5.5	5.5	5.1	5.0	**5.9**	**5.1**
Average nominal interest rate on external debt (in percent)	2.1	0.2	0.4	2.1	2.6	1.5	1.9	2.5	2.9	**2.1**	**2.1**
Average real interest rate on domestic debt (in percent)	-0.6	2.0	1.5	1.4	2.8	2.4	1.7	1.5	1.4	**-0.6**	**1.8**
Real exchange rate depreciation (in percent, + indicates depreciation)	-5.3	...	...	...	...	...	...	...	...	**10.0**	**...**
Inflation rate (GDP deflator, in percent)	13.6	11.6	13.1	10.6	6.3	5.6	5.6	5.6	5.6	**15.0**	**7.3**
Growth of real primary spending (deflated by GDP deflator, in percent)	15.3	4.3	3.4	-0.2	8.1	5.2	6.4	5.1	5.0	**8.5**	**4.9**
Primary deficit that stabilizes the debt-to-GDP ratio 5/	7.8	0.7	5.7	5.4	4.0	3.5	3.4	1.8	2.1	**-1.3**	**2.9**
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

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

Public and publicly guaranteed debt 1/





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The general government, and 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.

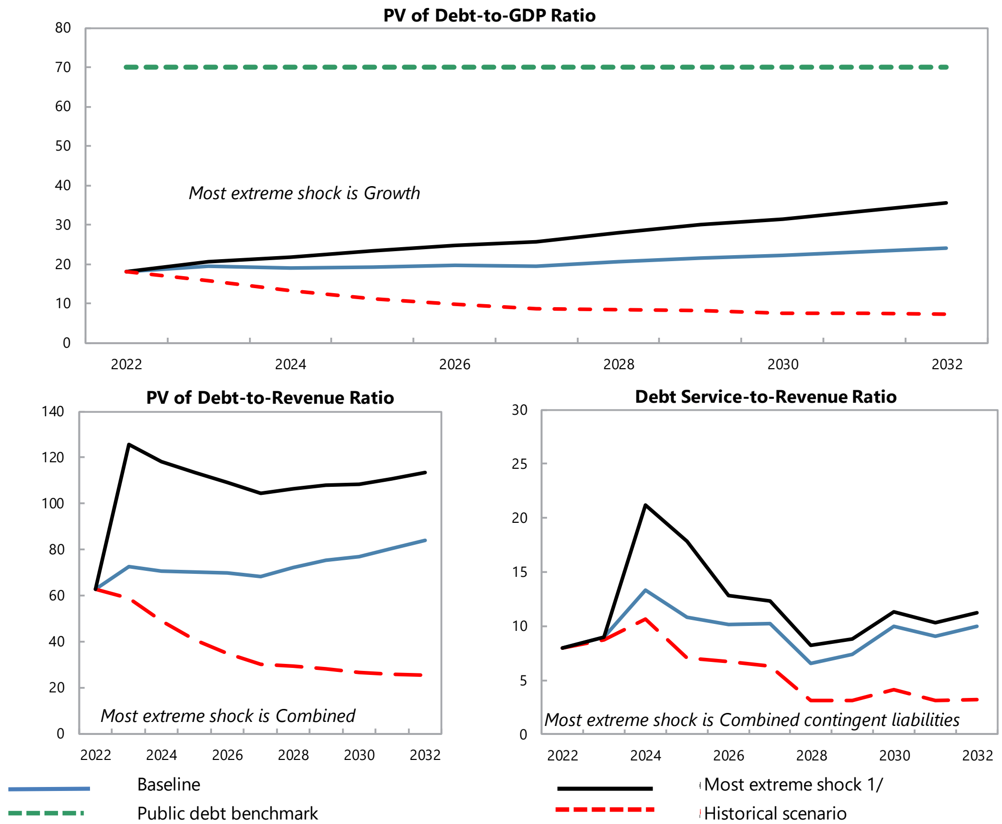
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

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.

Figure 2. Uzbekistan: Indicators of Public Debt Under Alternative Scenarios, 2022–2032



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	80%	80%
Domestic medium and long-term	10%	10%
Domestic short-term	16%	10%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	3.2%	3.2%
Avg. maturity (incl. grace period)	18	18
Avg. grace period	5	5
Domestic MLT debt		
Avg. real interest rate on new borrowing	1.3%	1.3%
Avg. maturity (incl. grace period)	2	2
Avg. grace period	1	1
Domestic short-term debt		
Avg. real interest rate	-1.0%	5.0%

* 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.

Table 3. Uzbekistan: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2022–32

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
	PV of debt-to GDP ratio										
Baseline	17	18	18	18	18	18	19	20	20	21	22
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	17	16	15	16	16	16	16	17	18	19	20
B. Bound Tests											
B1. Real GDP growth	17	19	19	19	19	19	20	21	21	22	23
B2. Primary balance	17	20	23	24	24	23	24	24	24	25	26
B3. Exports	17	24	33	32	31	30	31	31	30	30	30
B4. Other flows 3/	17	21	23	23	23	22	23	24	23	24	24
B5. Depreciation	17	23	19	19	20	20	21	22	23	24	25
B6. Combination of B1-B5	17	25	25	25	25	24	25	25	25	26	26
C. Tailored Tests											
C1. Combined contingent liabilities	17	29	29	29	29	28	29	29	29	29	30
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	17	20	20	20	21	20	21	22	22	23	24
Threshold	55	55	55	55	55	55	55	55	55	55	55
	PV of debt-to-exports ratio										
Baseline	62	66	66	65	66	65	69	72	73	76	78
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	62	57	55	57	57	58	60	63	65	69	72
B. Bound Tests											
B1. Real GDP growth	62	66	66	65	66	65	69	72	73	76	78
B2. Primary balance	62	73	86	85	85	84	86	88	88	90	93
B3. Exports	62	110	191	183	179	174	176	177	171	170	170
B4. Other flows 3/	62	76	85	83	83	81	84	86	85	86	88
B5. Depreciation	62	66	55	55	57	57	61	64	66	70	73
B6. Combination of B1-B5	62	104	88	122	121	119	123	125	123	125	127
C. Tailored Tests											
C1. Combined contingent liabilities	62	107	107	106	105	103	104	106	105	107	109
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	62	67	66	66	67	67	70	73	73	75	78
Threshold	240	240	240	240	240	240	240	240	240	240	240
	Debt service-to-exports ratio										
Baseline	6	7	11	8	7	7	3	4	6	4	5
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	6	8	12	10	9	10	4	3	8	4	4
B. Bound Tests											
B1. Real GDP growth	6	7	11	8	7	7	3	4	6	4	5
B2. Primary balance	6	7	11	9	8	8	4	5	8	6	6
B3. Exports	6	9	18	15	14	14	7	10	16	13	13
B4. Other flows 3/	6	7	11	8	8	8	4	5	8	6	6
B5. Depreciation	6	7	11	7	7	7	3	3	5	4	4
B6. Combination of B1-B5	6	8	16	12	11	11	5	7	11	8	9
C. Tailored Tests											
C1. Combined contingent liabilities	6	7	12	9	8	8	4	5	7	5	6
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	6	7	11	8	7	7	6	6	8	4	5
Threshold	21	21	21	21	21	21	21	21	21	21	21
	Debt service-to-revenue ratio										
Baseline	6	7	11	8	7	7	3	3	6	4	5
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	6	8	12	10	9	9	3	3	8	4	4
B. Bound Tests											
B1. Real GDP growth	6	7	11	8	7	7	3	4	6	4	5
B2. Primary balance	6	7	11	9	8	8	4	5	7	6	6
B3. Exports	6	7	12	10	9	8	4	6	10	8	8
B4. Other flows 3/	6	7	11	8	7	7	3	4	7	5	6
B5. Depreciation	6	9	13	9	8	8	3	4	7	4	5
B6. Combination of B1-B5	6	7	12	9	8	8	4	5	8	6	6
C. Tailored Tests											
C1. Combined contingent liabilities	6	7	12	9	8	8	4	5	7	5	6
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	6	7	11	8	7	7	6	6	8	4	5
Threshold	23	23	23	23	23	23	23	23	23	23	23

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

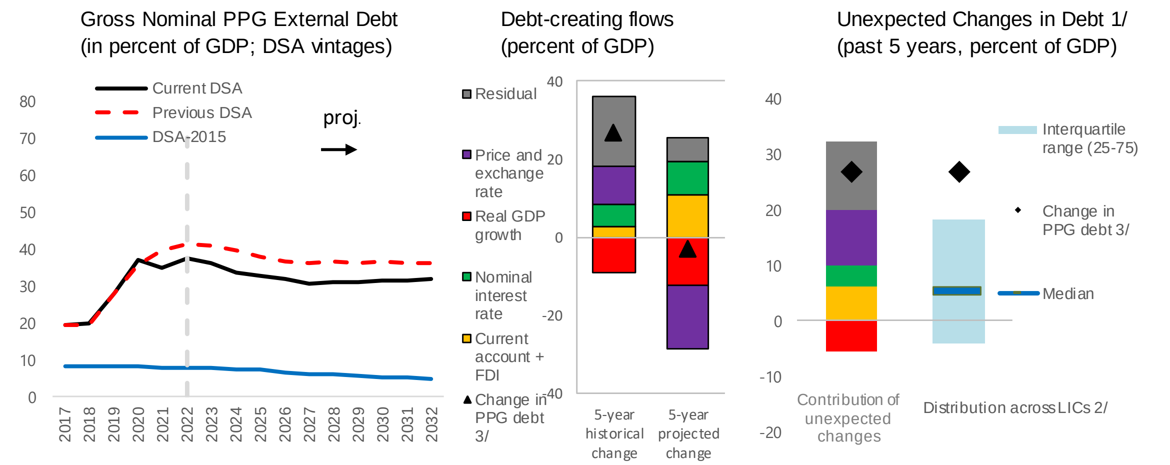
Table 4. Uzbekistan: Sensitivity Analysis for Key Indicators of Public Debt, 2022–32
(In percent)

	Projections 1/										
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
PV of Debt-to-GDP Ratio											
Baseline	18	20	19	19	20	20	21	22	22	23	24
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	18	16	13	11	10	9	8	8	8	7	7
B. Bound Tests											
B1. Real GDP growth	18	21	22	23	25	26	28	30	32	34	36
B2. Primary balance	18	22	26	25	25	25	26	26	27	27	28
B3. Exports	18	25	33	32	32	31	31	31	31	31	31
B4. Other flows 3/	18	22	24	24	24	24	25	25	26	26	27
B5. Depreciation	18	22	19	17	16	14	14	13	12	12	11
B6. Combination of B1-B5	18	20	21	21	21	20	21	22	22	22	23
C. Tailored Tests											
C1. Combined contingent liabilities	18	34	32	31	31	30	31	31	31	32	33
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	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	18	20	19	20	20	20	21	22	22	23	24
Public debt benchmark	70	70	70	70	70	70	70	70	70	70	70
PV of Debt-to-Revenue Ratio											
Baseline	63	73	71	70	70	68	72	75	77	81	84
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	63	59	49	41	35	30	29	28	27	26	25
B. Bound Tests											
B1. Real GDP growth	63	77	81	85	88	90	98	104	110	117	124
B2. Primary balance	63	82	95	92	90	86	89	92	92	95	98
B3. Exports	63	92	121	117	112	107	109	110	108	108	108
B4. Other flows 3/	63	83	90	88	86	83	87	89	89	91	93
B5. Depreciation	63	81	70	63	56	49	47	45	42	41	40
B6. Combination of B1-B5	63	75	79	77	74	71	73	75	75	77	79
C. Tailored Tests											
C1. Combined contingent liabilities	63	126	118	113	109	104	107	108	109	111	113
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	63	73	71	72	71	70	73	76	77	80	84
Debt Service-to-Revenue Ratio											
Baseline	8	9	13	11	10	10	7	7	10	9	10
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2022-2032 2/	8	9	11	7	7	6	3	3	4	3	3
B. Bound Tests											
B1. Real GDP growth	8	9	14	12	12	12	9	10	13	12	14
B2. Primary balance	8	9	15	14	12	12	8	9	12	11	12
B3. Exports	8	9	14	13	12	12	8	9	13	12	13
B4. Other flows 3/	8	9	14	11	11	11	7	8	11	10	11
B5. Depreciation	8	10	16	12	11	11	6	7	10	8	8
B6. Combination of B1-B5	8	9	14	12	11	11	7	8	10	9	10
C. Tailored Tests											
C1. Combined contingent liabilities	8	9	21	18	13	12	8	9	11	10	11
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	8	9	13	11	11	11	9	10	12	9	10

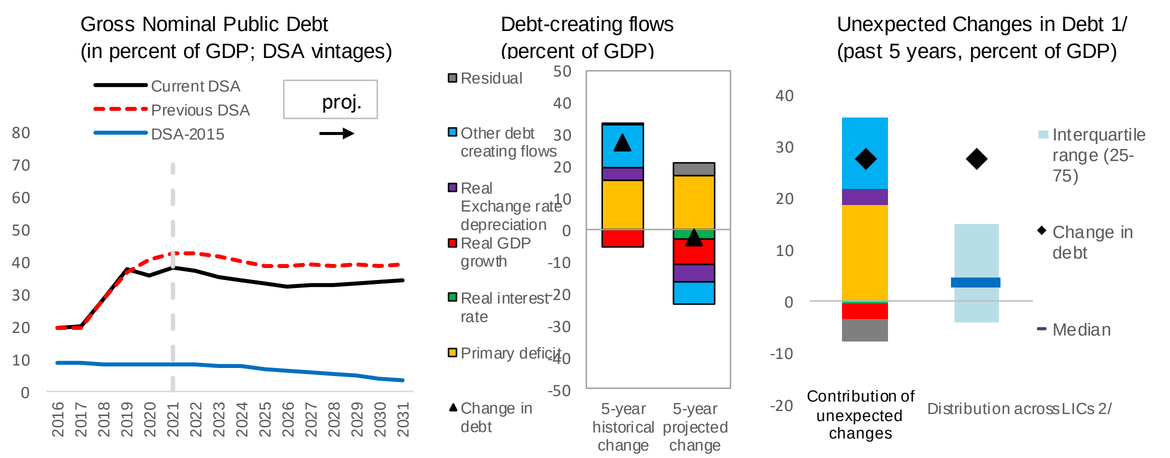
Sources: Country authorities; and staff estimates and projections.
1/ A bold value indicates a breach of the benchmark.
2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.
3/ Includes official and private transfers and FDI.

Figure 3. Uzbekistan: Drivers of Debt Dynamics—Baseline Scenario

External debt



Public debt



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

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

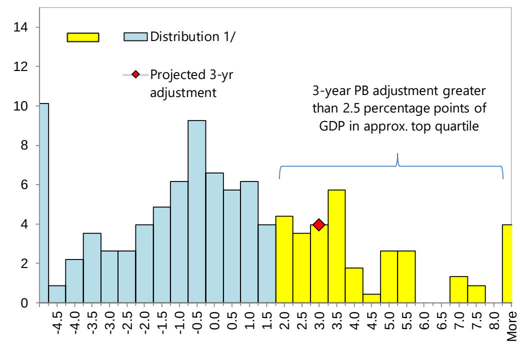
3/ Given the relatively low private external debt for average low-income countries, a ppt change in PPG external debt should be largely explained by the drivers of the external debt dynamics equation.

Source: IMF staff estimates.

Figure 4. Uzbekistan: Realism Tools

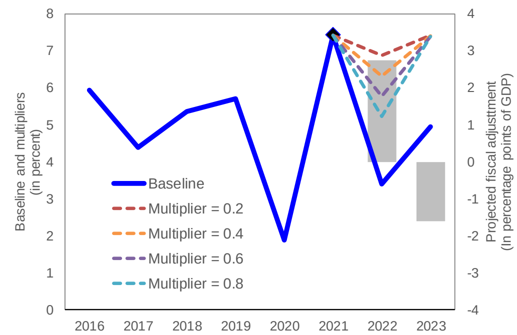
3-Year Adjustment in Primary Balance

(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.

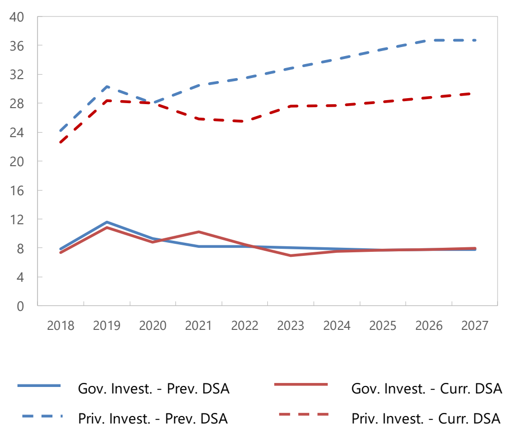
Fiscal Adjustment and Possible Growth Paths 1/



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

(percent of GDP)



Contribution to Real GDP growth

(percent, 5-year average)

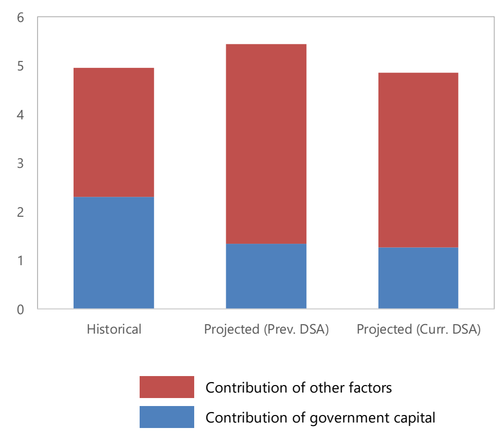
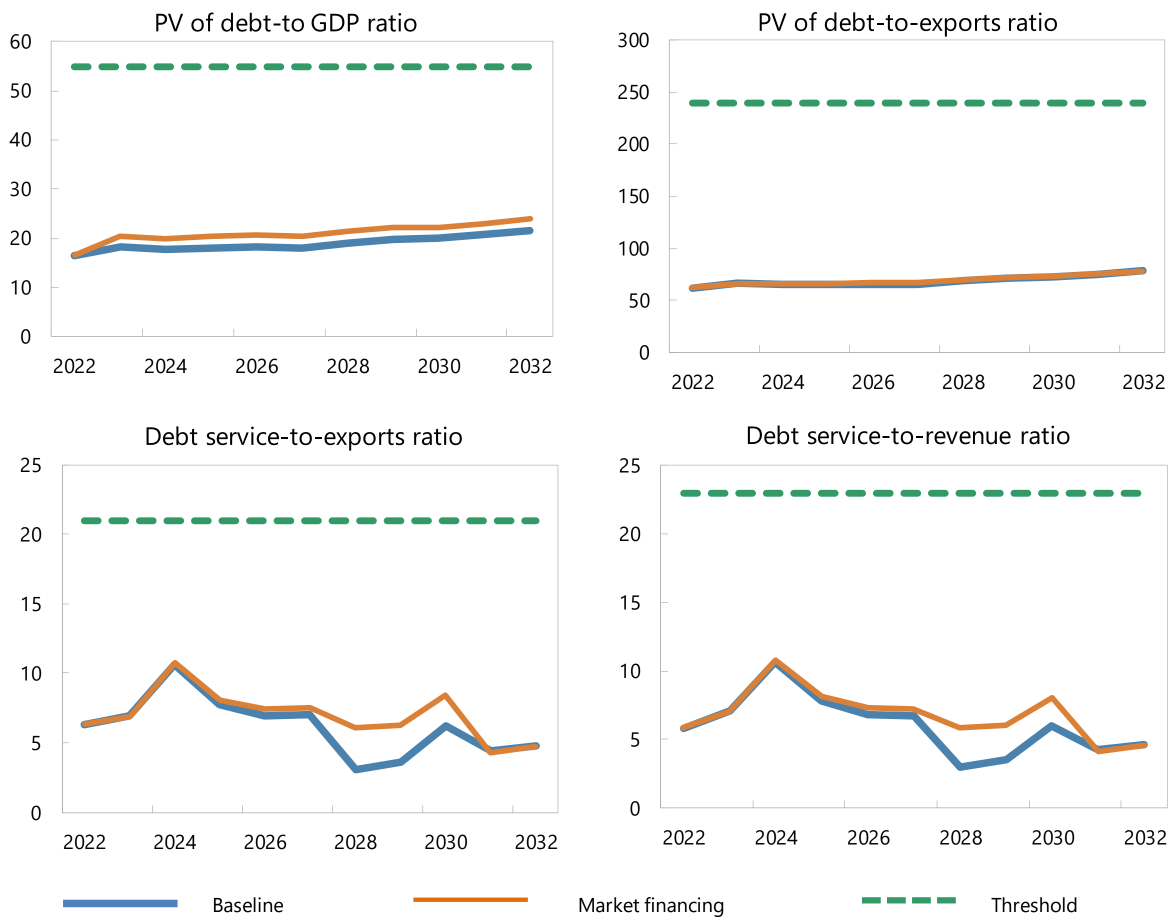


Figure 5. Uzbekistan: Market-Financing Risk Indicators

	GFN 1/	EMBI 2/	
Benchmarks	14	570	
Values	14.1	360	As of May 27, 2022
Breach of benchmark	**Yes**	**No**	
Potential heightened liquidity needs	Moderate		

1/ Maximum gross financing needs (GFN) over 3-year baseline projection horizon.

2/ Uzbeksitan is not included in EMBI. Spread from Uzbekistan's 2021 sovereign bond issuance.



Sources: Country authorities; and staff estimates and projections.