

INTERNATIONAL DEVELOPMENT ASSOCIATION
INTERNATIONAL MONETARY FUND

REPUBLIC OF UZBEKISTAN

Joint World Bank-IMF Debt Sustainability Analysis¹

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Prepared jointly by the staffs of the International Development Association (IDA)

And the International Monetary Fund (IMF)

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¹ This joint World Bank/IMF Debt Sustainability Analysis (DSA) has been prepared in the context of the 2020 request for emergency financing from the IMF. The macro framework underlying this DSA is the same as that included in the staff report of the 2020 RCF and RFI request which reflects recent global and domestic developments. The current macroeconomic framework reflects currently available information. However, updates with respect to the economic impact and policy response to the COVID-19 crisis are rapidly evolving and risks are tilted to the downside.

Uzbekistan: Joint Bank-Fund Debt Sustainability Analysis²	
Risk of External Debt Distress	Low ³
Overall Risk of Debt Distress	Low
Granularity in the Risk Rating	Not applicable
Application of Judgment	No
Macroeconomic projections	<p>The revisions present a deterioration in 2020 and a gradual recovery afterwards.</p> <p>i) In the near term, real GDP growth is projected to slowdown compared to the last DSA due to the COVID-19 outbreak (1.5 percent in 2020 compared to 6 percent in the 2019-DSA). Long-term growth was revised to 5 percent compared to 6 percent in the previous DSA.</p> <p>ii) The overall fiscal deficit is projected to increase in 2020 (5½ percent of GDP compared to 1¾ percent of GDP in the 2019-DSA) and over the medium term it is projected to converge to around 2 percent of GDP close to the values in the previous DSA.</p> <p>iii) The current account deficit is expected to reach 9½ percent of GDP (versus 4½ percent of GDP in the 2019-DSA) in 2020. Over the medium term, the current account deficit is expected to converge to 4¼ percent of GDP as in the previous DSA.</p>
Financial Strategy	In 2020, the additional fiscal needs will be financed with IFI funding. ⁴ Bilateral and multilateral funding will continue having a key role in the near and medium terms, but foreign and domestic commercial borrowing will gradually increase.
Stress test	<p>The DSA shows that debt ratios are robust to a wide range of adverse shocks. In the 2020-baseline most of the macro variables are already 1 standard deviation below the previous period, suggesting the stress test is performed over a “stress” baseline. This is a more rigorous stress test than in normal conditions.</p> <p>However risks are higher in the current DSA and they are reflected in a single short-lived (1 year) breach of PV of PPG external debt-to-exports in 2022 under the most extreme stress test (exports shock). The breach reaches 5 percentage points.</p>
Realism tools flagged	The tool flags the hike in public debt in 2019, which was attributed to large unanticipated issuance of SOE-guarantees. ⁵ This risk is mitigated as the authorities have set a cap on new commitments on PPG external debt.
Mechanical risk rating under the external DSA	Low
Mechanical risk rating under the public DSA	Low

² Debt coverage is the same as the 2019 DSA, which includes central government, state and local governments, extra-budgetary funds, social security, and SOEs’ guaranteed debt. Non-guaranteed debt of SOEs is not covered in the DSA due to data limitations. Non-guaranteed debt of SOEs accounts for about 7 percent of GDP. The authorities are working to improve statistics with technical support from the IMF.

³ Uzbekistan’s Composite Indicator score is 3.21 based on October 2109 WEO and CPIA 2018 and its debt carrying capacity is strong as in the 2019 DSA.

⁴ Including World Bank budget support. The World Bank is supporting the Government’s response to the COVID crisis through emergency project (\$95 million) and budget financing (up to \$700 million) to increase health and social spending, and through the reprioritization within existing approved projects to support the economic recovery once the virus has been contained.

⁵ This was driven by a large investment specific project and faster reforms that accelerated IFIs disbursements.

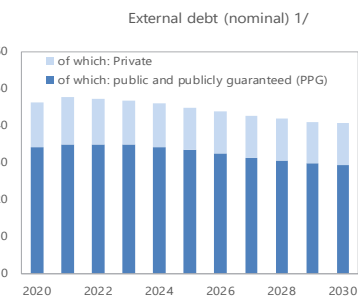
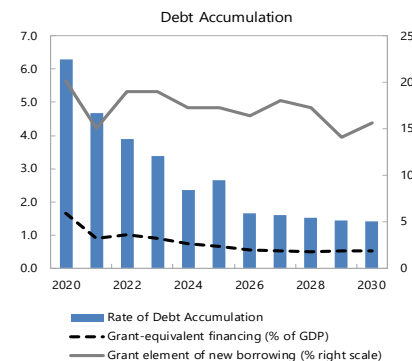
Based on the Joint Bank-Fund Low-Income Country Debt Sustainability Analysis (LIC-DSA), Uzbekistan has a low-risk of external and overall debt distress, which is unchanged from the previous DSA of May 2019, with debt burden indicators below relevant thresholds in the baseline and under most stress scenarios. The debt sustainability analysis suggests that the most significant risks could result from worse-than-expected external flows (mostly lower remittances) and significantly lower exports. The risks have increased relative to the 2019 DSA as result of the COVID-19 pandemic and the increase in government guarantees for state-owned enterprises (SOEs) in 2019. The COVID-19 outbreak exacerbates the risk of weaker exports and remittances, higher primary deficits, and also the risk of the government having to pay for SOEs' nonguaranteed debt service in case of a prolonged slowdown.

Over the medium term, the public debt-to-GDP ratio is expected to increase moderately, while the total external debt-to-GDP ratio is expected to decline moderately. In addition, foreign exchange reserve buffers and low rollover risk—due to the long-term maturity of debt—mitigate potential distress concerns. In the aftermath of the COVID-19 outbreak, the government should carefully manage external borrowing to maintain Uzbekistan's strong external position.

Table 1. Uzbekistan: External Debt Sustainability Framework, Baseline Scenario, 2020-40
(In percent of GDP, unless otherwise indicated)

	Actual	Projections								Average 8/	
	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
External debt (nominal) 1/	43.5	46.3	47.6	47.2	46.9	45.9	44.8	40.7	37.9	21.8	44.4
<i>of which: public and publicly guaranteed (PPG)</i>	<i>29.0</i>	<i>34.1</i>	<i>34.9</i>	<i>35.0</i>	<i>34.9</i>	<i>34.1</i>	<i>33.5</i>	<i>29.4</i>	<i>26.7</i>	<i>11.9</i>	<i>32.8</i>
Change in external debt	9.2	2.8	1.3	-0.4	-0.4	-0.9	-1.1	-0.4	-0.2		
Identified net debt-creating flows	-2.8	7.8	1.8	0.9	0.6	-0.2	-0.6	-0.3	-0.1	-3.1	0.7
Non-interest current account deficit	4.4	8.0	6.3	4.7	3.9	3.1	2.6	2.8	2.9	-1.4	3.8
Deficit in balance of goods and services	16.5	14.9	16.0	14.3	13.5	12.3	11.4	11.4	11.4	5.5	12.7
Exports	29.3	25.0	27.0	27.9	28.2	29.0	29.5	29.5	29.5		
Imports	45.9	39.9	43.0	42.1	41.7	41.2	41.0	41.0	41.0		
Net current transfers (negative = inflow)	-9.4	-5.6	-7.4	-7.2	-7.1	-6.8	-6.5	-6.5	-6.5	-4.1	-6.6
<i>of which: official</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>		
Other current account flows (negative = net inflow)	-2.7	-1.2	-2.3	-2.3	-2.4	-2.4	-2.2	-2.2	-2.1	-2.9	-2.2
Net FDI (negative = inflow)	-3.9	-1.2	-3.2	-3.0	-2.7	-2.6	-2.6	-2.6	-2.6	-2.0	-2.6
Endogenous debt dynamics 2/	-3.2	1.0	-1.3	-0.9	-0.7	-0.7	-0.7	-0.4	-0.4		
Contribution from nominal interest rate	1.2	1.6	1.6	1.7	1.7	1.7	1.6	1.5	1.4		
Contribution from real GDP growth	-1.7	-0.6	-2.9	-2.5	-2.3	-2.3	-2.3	-1.9	-1.8		
Contribution from price and exchange rate changes	-2.8	...	...	...	...	...	...	...	...
Residual 3/ 9/	12.0	-5.0	-0.4	-1.3	-0.9	-0.8	-0.5	-0.1	-0.1	6.2	-1.0
<i>of which: exceptional financing</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>		
Sustainability indicators											
PV of PPG external debt-to-GDP ratio	24.7	29.5	30.9	30.9	30.8	29.9	29.5	25.5	23.0		
PV of PPG external debt-to-exports ratio	84.1	117.8	114.4	110.7	109.3	103.3	100.0	86.4	78.0		
PPG debt service-to-exports ratio	4.5	6.8	8.0	7.9	7.8	9.7	7.4	9.0	8.3		
PPG debt service-to-revenue ratio	4.6	6.9	8.6	8.7	8.7	11.0	8.4	10.3	9.5		
Gross external financing need (Million of U.S. dollars)	3,642	8,551	6,009	5,839	5,991	6,447	5,958	9,926	19,289		
Key macroeconomic assumptions											
Real GDP growth (in percent)	5.6	1.5	7.0	6.0	5.5	5.5	5.5	5.1	5.0	6.6	5.2
GDP deflator in US dollar terms (change in percent)	8.9	3.5	3.3	6.3	5.3	5.0	4.6	2.4	1.9	-1.6	4.0
Effective interest rate (percent) 4/	4.2	3.8	3.8	3.9	3.9	3.9	3.9	4.0	3.9	2.6	3.9
Growth of exports of G&S (US dollar terms, in percent)	20.2	-10.4	19.3	16.3	12.3	14.0	12.4	7.6	7.0	4.2	9.8
Growth of imports of G&S (US dollar terms, in percent)	13.3	-8.6	19.2	10.4	9.8	9.6	9.6	7.6	7.0	9.7	8.5
Grant element of new public sector borrowing (in percent)	...	20.2	15.0	19.0	19.0	17.3	17.3	15.7	16.4	...	17.2
Government revenues (excluding grants, in percent of GDP)	28.2	24.9	25.2	25.2	25.4	25.5	25.7	25.7	25.7	28.1	25.5
Aid flows (in Million of US dollars) 5/	0.0	610.0	350.0	357.0	357.0	455.0	455.0	0.0	0.0		
Grant-equivalent financing (in percent of GDP) 6/	...	1.7	0.9	1.0	0.9	0.7	0.7	0.5	0.5	...	0.8
Grant-equivalent financing (in percent of external financing) 6/	...	20.2	15.0	19.0	19.0	17.3	17.3	15.7	16.4	...	17.2
Nominal GDP (Million of US dollars)	57,921	60,861	67,290	75,792	84,211	93,274	102,960	156,152	308,015		
Nominal dollar GDP growth	15.0	5.1	10.6	12.6	11.1	10.8	10.4	7.6	7.0	5.0	9.5
Memorandum items:											
PV of external debt 7/	39.1	41.6	43.6	43.1	42.8	41.7	40.8	36.8	34.3		
In percent of exports	133.4	166.5	161.6	154.6	151.8	144.0	138.2	124.6	116.2		
Total external debt service-to-exports ratio	20.0	29.0	21.6	21.4	20.8	22.1	19.4	21.0	20.3		
PV of PPG external debt (in Million of US dollars)	14,296	17,938	20,776	23,387	25,944	27,928	30,396	39,814	70,904		
(Pvt-Pvt-1)/GDPt-1 (in percent)	...	6.3	4.7	3.9	3.4	2.4	2.6	1.4	1.3		
Non-interest current account deficit that stabilizes debt ratio	-4.8	5.2	5.0	5.1	4.3	4.0	3.8	3.1	3.1		

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 $[r - g - p(1+g) + \alpha(1+r)] / (1+g+p+gp)$ times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, p = growth rate of GDP deflator in U.S. dollar terms.

α = 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.

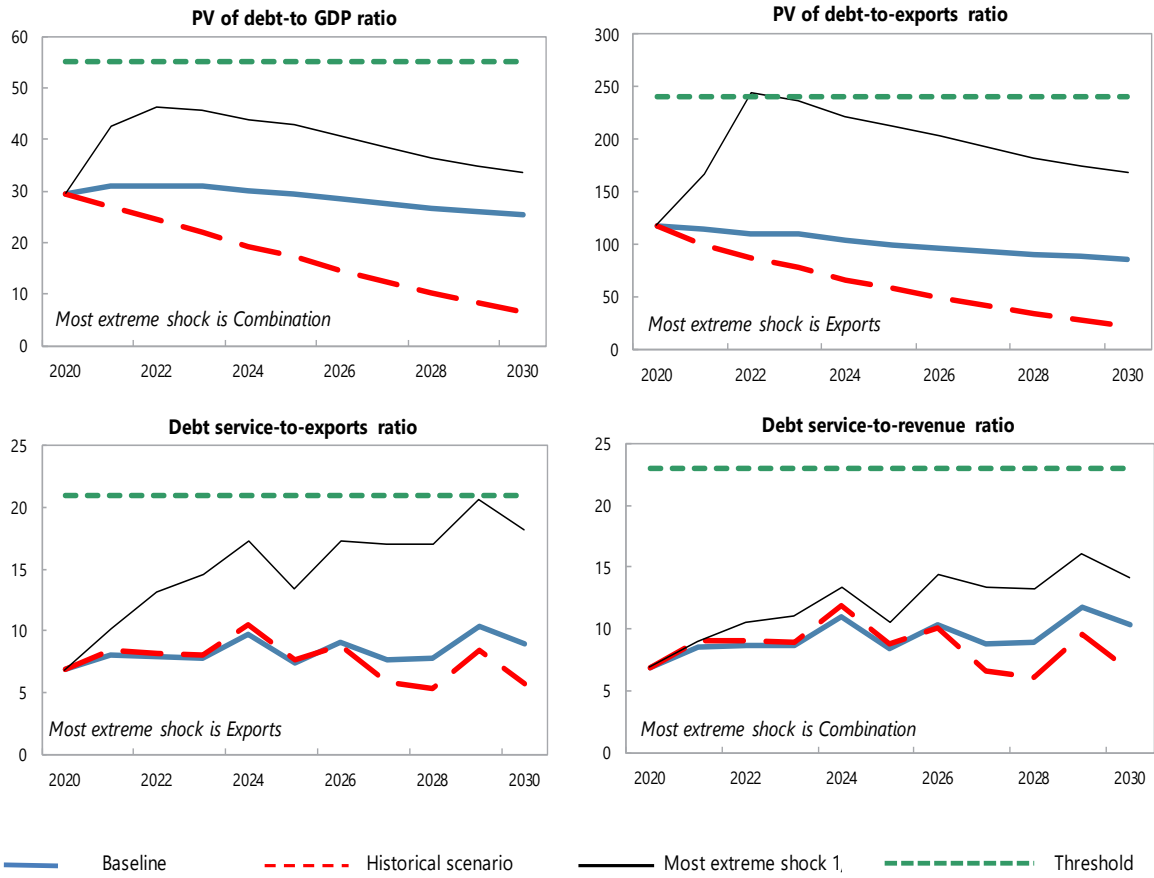
6/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).

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.

9/ Residual in 2019 is a result of large errors and omissions, reserve accumulation, and other outflows (mostly households' FX accumulation), while the residual in 2020 is attributed to the use of reserves finance external financing needs.

Figure 1. Uzbekistan: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2020-30 (In percent)



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	3.1%	3.1%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	18	18
Avg. grace period	4	4

* 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.

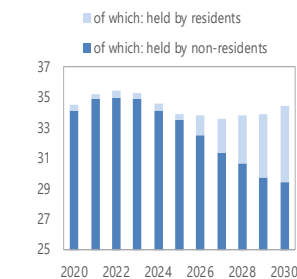
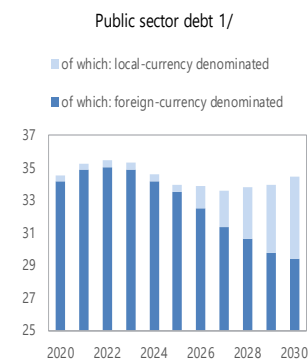
1/ The most extreme stress test is the test that yields the highest ratio in or before 2030. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock 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, 2020–40
(In percent of GDP, unless otherwise indicated)

	Actual		Projections							Average 6/	
	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
Public sector debt 1/	29.3	34.5	35.3	35.4	35.3	34.6	33.9	34.5	38.6	12.0	34.4
of which: external debt	29.0	34.1	34.9	35.0	34.9	34.1	33.5	29.4	26.7	11.9	32.8
Change in public sector debt	8.8	5.3	0.7	0.2	-0.1	-0.7	-0.7	0.5	0.4		
Identified debt-creating flows	8.9	5.3	0.9	0.2	-0.1	-0.7	-0.7	0.5	0.4	1.5	0.5
Primary deficit	3.7	5.5	3.3	2.5	2.2	1.9	1.8	1.8	1.8	-1.2	2.4
Revenue and grants	28.2	24.9	25.2	25.2	25.4	25.5	25.7	25.7	25.7	28.2	25.5
of which: grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Primary (noninterest) expenditure	32.0	30.4	28.5	27.8	27.6	27.4	27.5	27.5	27.5	27.0	27.9
Automatic debt dynamics	-1.3	-1.6	-3.1	-3.0	-2.7	-2.3	-2.3	-1.1	-1.3		
Contribution from interest rate/growth differential	-0.8	0.2	-1.8	-1.6	-1.4	-1.4	-1.4	-1.2	-1.4		
of which: contribution from average real interest rate	0.3	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4		
of which: contribution from real GDP growth	-1.1	-0.4	-2.3	-2.0	-1.8	-1.8	-1.8	-1.6	-1.8		
Contribution from real exchange rate depreciation	-0.5	...	...	...	...	...	...	...	...
Other identified debt-creating flows	6.5	1.4	0.7	0.7	0.4	-0.3	-0.1	-0.1	-0.1	2.7	0.2
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
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)	6.5	1.4	0.7	0.7	0.4	-0.3	-0.1	-0.1	0.0		
Residual	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
Sustainability indicators											
PV of public debt-to-GDP ratio 2/	26.8	31.0	31.6	31.6	31.3	30.6	30.0	31.0	35.4		
PV of public debt-to-revenue and grants ratio	95.0	124.6	125.2	125.0	123.3	119.8	116.6	120.5	137.5		
Debt service-to-revenue and grants ratio 3/	5.2	7.9	9.8	9.8	10.0	12.3	9.9	20.4	37.9		
Gross financing need 4/	11.6	8.8	6.4	5.7	5.1	4.7	4.2	6.9	11.5		
Key macroeconomic and fiscal assumptions											
Real GDP growth (in percent)	5.6	1.5	7.0	6.0	5.5	5.5	5.5	5.1	5.0	6.6	5.2
Average nominal interest rate on external debt (in percent)	3.1	3.1	3.2	3.3	3.3	3.3	3.2	3.2	3.1	2.0	3.2
Average real interest rate on domestic debt (in percent)	-2.7	0.2	6.0	3.3	2.3	1.9	1.3	1.3	1.3	-2.7	1.9
Real exchange rate depreciation (in percent, + indicates depreciation)	-2.6	...	...	...	...	...	...	...	...	8.8	...
Inflation rate (GDP deflator, in percent)	19.2	15.8	8.5	8.5	6.5	5.9	5.5	5.5	5.5	16.7	7.1
Growth of real primary spending (deflated by GDP deflator, in percent)	13.2	-3.6	0.5	3.2	4.7	4.8	6.0	5.1	5.0	9.3	3.8
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-5.1	0.2	2.6	2.3	2.3	2.6	2.4	1.3	1.4	-4.4	1.9
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



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.

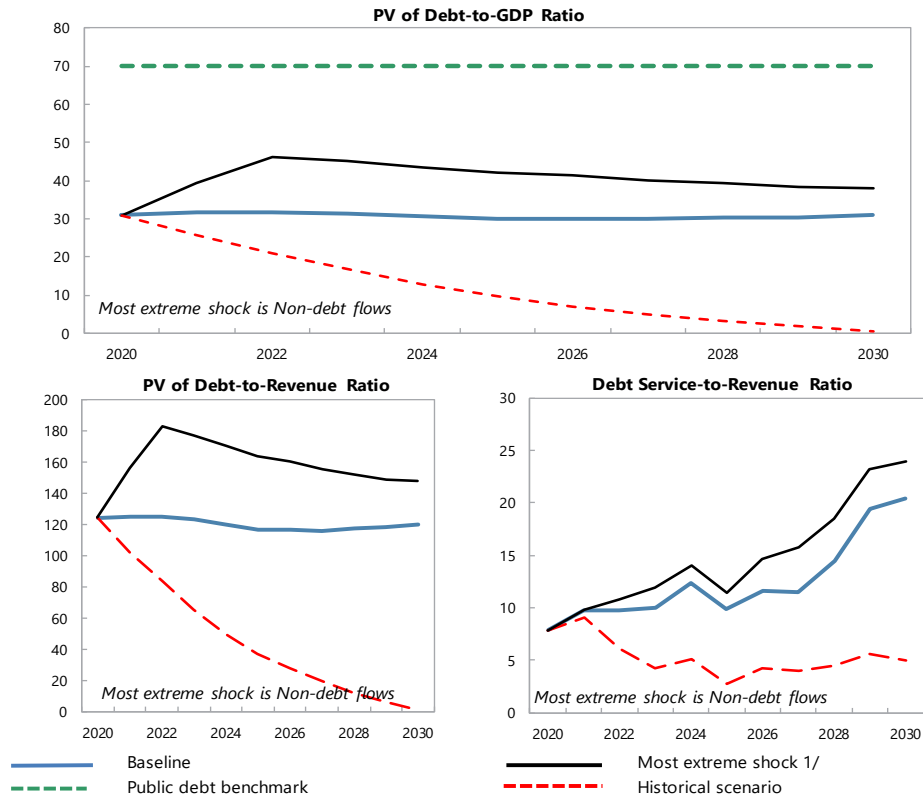
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

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 stabilize 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, 2020-40
(In percent)



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	78%	78%
Domestic medium and long-term	10%	10%
Domestic short-term	12%	12%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	3.1%	3.1%
Avg. maturity (incl. grace period)	18	18
Avg. grace period	4	4
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	0.9%	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 2030. 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 extreme 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 PPG External Debt, 2020-40
(In percent)

	Projections 1/										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of debt-to GDP ratio											
Baseline	29	31	31	31	30	30	28	27	27	26	25
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	29	27	24	22	19	17	15	12	10	8	6
B. Bound Tests											
B1. Real GDP growth	29	32	32	32	31	30	29	28	28	27	26
B2. Primary balance	29	33	38	38	37	36	35	33	32	31	31
B3. Exports	29	36	45	44	42	41	39	37	35	34	32
B4. Other flows 3/	29	39	45	44	43	42	40	37	36	34	33
B5. Depreciation	29	39	34	34	33	33	32	31	31	30	30
B6. Combination of B1-B5	29	42	46	46	44	43	41	38	36	35	33
C. Tailored Tests											
C1. Combined contingent liabilities	29	39	39	39	38	37	36	35	34	33	32
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	29	34	34	34	33	33	32	31	30	29	28
Threshold	55	55	55	55	55	55	55	55	55	55	55
PV of debt-to-exports ratio											
Baseline	118	114	111	109	103	100	96	93	90	88	86
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	118	99	88	78	66	59	50	42	34	28	22
B. Bound Tests											
B1. Real GDP growth	118	114	111	109	103	100	96	93	90	88	86
B2. Primary balance	118	123	135	134	127	122	117	113	109	106	103
B3. Exports	118	167	245	237	222	213	203	192	183	175	168
B4. Other flows 3/	118	143	163	158	148	141	134	127	120	115	110
B5. Depreciation	118	114	97	97	92	89	86	84	82	81	80
B6. Combination of B1-B5	118	181	159	218	204	195	185	175	166	159	153
C. Tailored Tests											
C1. Combined contingent liabilities	118	144	140	140	132	127	122	117	114	111	108
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	118	114	111	110	104	100	96	93	90	88	86
Threshold	240	240	240	240	240	240	240	240	240	240	240
Debt service-to-exports ratio											
Baseline	7	8	8	8	10	7	9	8	8	10	9
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	7	8	8	8	10	8	9	6	5	8	6
B. Bound Tests											
B1. Real GDP growth	7	8	8	8	10	7	9	8	8	10	9
B2. Primary balance	7	8	9	9	11	9	11	9	10	12	11
B3. Exports	7	10	13	15	17	13	17	17	17	21	18
B4. Other flows 3/	7	8	9	10	11	9	12	11	11	14	12
B5. Depreciation	7	8	8	7	9	7	9	7	7	9	8
B6. Combination of B1-B5	7	10	13	13	16	12	17	16	16	19	17
C. Tailored Tests											
C1. Combined contingent liabilities	7	8	9	9	11	8	10	8	9	11	10
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	7	8	8	8	12	8	9	8	8	10	9
Threshold	21	21	21	21	21	21	21	21	21	21	21
Debt service-to-revenue ratio											
Baseline	7	9	9	9	11	8	10	9	9	12	10
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	7	9	9	9	12	9	10	7	6	10	7
B. Bound Tests											
B1. Real GDP growth	7	9	9	9	11	9	11	9	9	12	11
B2. Primary balance	7	9	9	10	12	10	12	11	11	14	12
B3. Exports	7	9	10	11	13	10	13	13	13	15	14
B4. Other flows 3/	7	9	10	11	13	10	13	13	13	16	14
B5. Depreciation	7	11	11	10	13	10	13	10	10	14	12
B6. Combination of B1-B5	7	9	11	11	13	11	14	13	13	16	14
C. Tailored Tests											
C1. Combined contingent liabilities	7	9	10	10	12	9	11	10	10	13	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	7	9	9	9	14	9	11	9	9	12	10
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, 2020–40
(In percent)

	Projections 1/										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of Debt-to-GDP Ratio											
Baseline	31	32	32	31	31	30	30	30	30	30	31
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	31	26	21	17	13	10	7	5	3	2	0
B. Bound Tests											
B1. Real GDP growth	31	33	34	34	34	34	34	35	36	36	38
B2. Primary balance	31	35	40	39	38	37	36	36	36	36	36
B3. Exports	31	36	45	43	42	41	40	39	38	38	37
B4. Other flows 3/	31	39	46	45	44	42	41	40	39	38	38
B5. Depreciation	31	38	35	33	30	28	26	24	23	22	21
B6. Combination of B1-B5	31	32	34	33	32	31	31	30	30	30	30
C. Tailored Tests											
C1. Combined contingent liabilities	31	42	41	40	39	38	38	37	37	37	38
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	31	32	32	31	31	30	30	30	30	30	31
Public debt benchmark	70	70	70	70	70	70	70	70	70	70	70
PV of Debt-to-Revenue Ratio											
Baseline	125	125	125	123	120	117	117	116	118	118	120
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	125	102	84	66	50	37	28	19	13	7	2
B. Bound Tests											
B1. Real GDP growth	125	130	133	134	133	132	134	135	139	141	146
B2. Primary balance	125	138	157	153	147	142	141	140	140	140	141
B3. Exports	125	144	176	171	165	159	156	151	149	146	145
B4. Other flows 3/	125	156	183	177	171	164	161	155	153	149	148
B5. Depreciation	125	150	139	129	118	108	101	95	91	86	83
B6. Combination of B1-B5	125	128	135	131	126	121	120	117	117	116	116
C. Tailored Tests											
C1. Combined contingent liabilities	125	167	163	159	153	148	146	145	145	145	146
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	125	125	125	124	120	117	117	116	117	118	120
Debt Service-to-Revenue Ratio											
Baseline	8	10	10	10	12	10	12	12	14	19	20
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2030 2/	8	9	6	4	5	3	4	4	5	6	5
B. Bound Tests											
B1. Real GDP growth	8	10	10	11	14	11	13	13	17	22	23
B2. Primary balance	8	10	12	15	16	12	14	14	17	22	23
B3. Exports	8	10	10	12	14	11	14	15	18	23	24
B4. Other flows 3/	8	10	11	12	14	11	15	16	18	23	24
B5. Depreciation	8	11	12	11	14	12	13	12	15	20	20
B6. Combination of B1-B5	8	10	11	12	14	12	13	13	15	20	21
C. Tailored Tests											
C1. Combined contingent liabilities	8	10	17	16	15	12	13	13	16	21	22
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	10	10	10	15	10	12	12	14	19	20

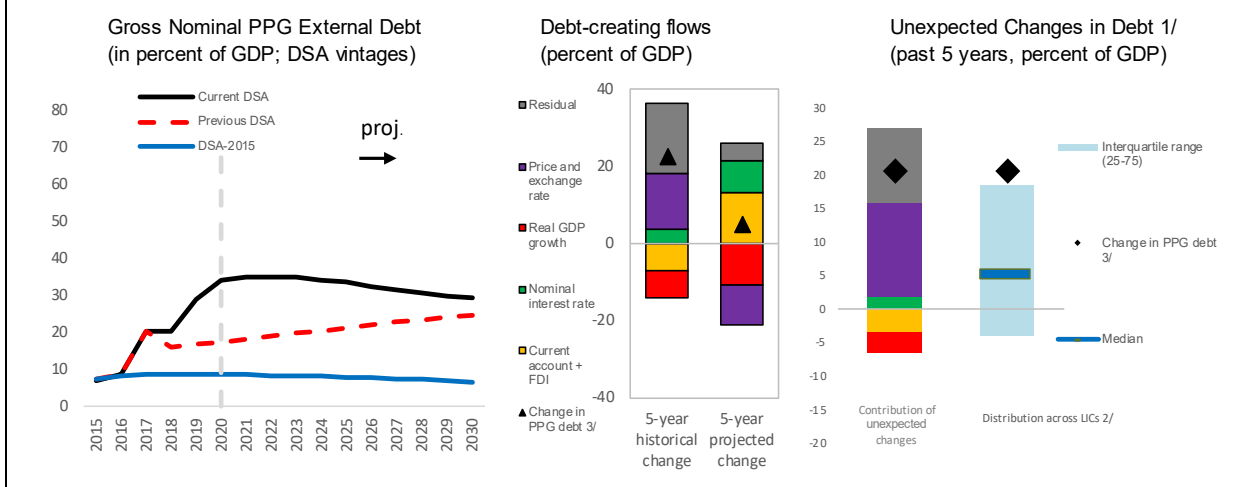
Sources: Country authorities; and staff estimates and projections.

1/ A bold value indicates a breach of the benchmark.

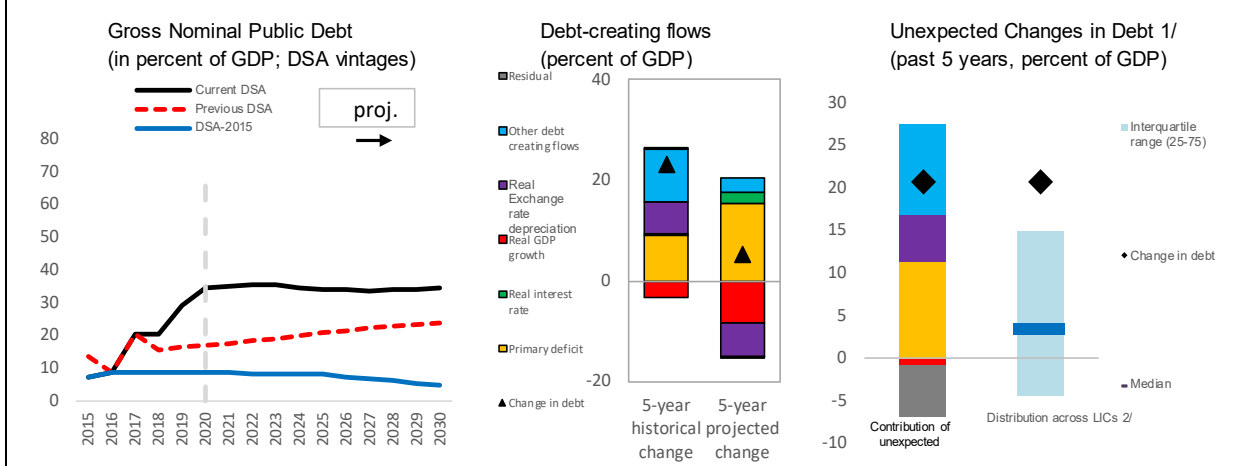
2/ Variables include real GDP growth, GDP deflator and primary deficit in percent of GDP.

3/ Includes official and private transfers and FDI.

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



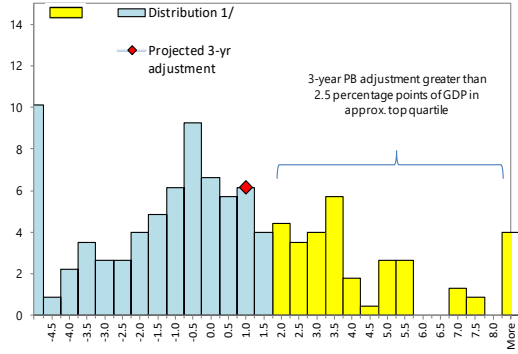
Public debt



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.

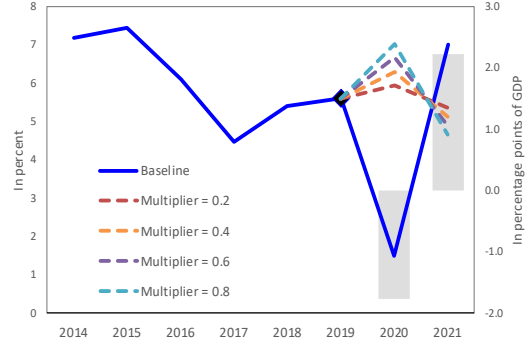
Figure 4. Uzbekistan: Realism Tools

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



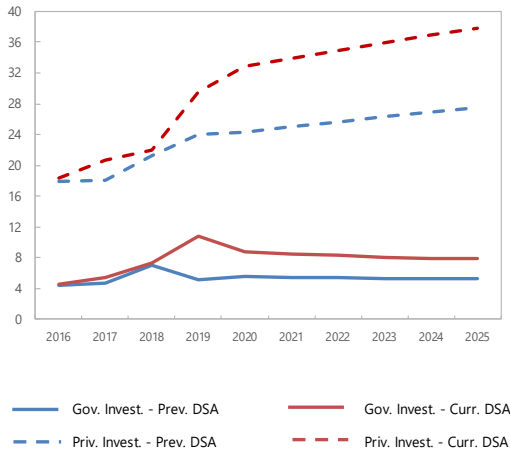
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

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)**



Source: IMF staff estimates.

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

