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REPUBLIC OF TAJIKISTAN

JOINT WORLD BANK-IMF DEBT SUSTAINABILITY ANALYSIS

Approved by:

Lalita M. Moorty and Marcello Estevão (IDA), and Subir Lall and Daria Zakharova (IMF)

Prepared by the staffs of the International Development Association (IDA)[1] and the International Monetary Fund (IMF).

REPUBLIC OF TAJIKISTAN JOINT BANK-FUND DEBT SUSTAINABILITY ANALYSIS	
Risk of external debt distress	High
Overall risk of debt distress	High
Granularity in the risk rating	Sustainable
Application of judgement	No

This joint World Bank/IMF Debt Sustainability Analysis (DSA) indicates that Tajikistan's debt is sustainable while the overall risk of debt distress remains high (unchanged from the May 2020 DSA)[2]. Public debt jumped to 50.1 percent of GDP in 2020 from 44 percent of GDP in 2019, reflecting the fallout from the COVID-19 shock on growth and revenues, notwithstanding emergency financing provided by the IMF and international donors. However, based on the authorities' adherence to fiscal discipline, the debt-to-GDP ratio declines to 39.8 percent in 2026 and is assessed as sustainable. Likewise, the DSA indicates that the present value of the public debt-to-GDP ratio declines over the same period to 30.3 percent.

Under the baseline, one debt indicator temporarily breaches its threshold, leading to a high external risk rating. In addition to the estimated fiscal adjustment of 1.8 percent of GDP from 2020-2022, the authorities' plan to limit fiscal deficits to -2.5 percent of GDP over the medium term, and the commitment to avoid non-concessional borrowing, the key debt indicators are projected to stabilize below their respective sustainability thresholds by 2031.

Tajikistan's public debt is vulnerable, especially to export shocks and contingent fiscal liabilities. A more severe or prolonged COVID-19 shock could heighten vulnerabilities. Maintaining fiscal discipline, avoiding non-concessional external borrowing, expanding and diversifying exports, and containing contingent liabilities from SOEs would help reduce vulnerabilities and stabilize debt.

1 This Debt Sustainability Analysis has been prepared jointly by the International Monetary Fund and the World Bank, in accordance with the revised Debt Sustainability Framework for low-income countries approved by the Executive Boards of the IMF and the International Development Association.

2 Tajikistan's debt carrying capacity has been upgraded to strong since the last DSA. The Composite Indicator (CI) for Tajikistan is estimated at 3.10, based on October 2021 IMF World Economic Outlook (WEO) and the 2020 World Bank's Country Policy and Institutional Assessment (CPIA).

COVERAGE AND BACKGROUND ON PUBLIC

BACKGROUND AND DEBT COVERAGE

1. In recent years, external and financial sector vulnerabilities have contributed to an increase in debt. Tajikistan's external public-and-publicly-guaranteed (PPG) debt rose from 24 percent of GDP in 2014 to 43.5 percent of GDP at end-2020 mainly as a consequence of a sizable depreciation of the somoni, large financing needs related to the construction of Roghun, and the fallout of the COVID-19 shock. This increase was driven by both commercial debt (the issuance of a $500 million sovereign bond in 2017)[3] and concessional debt (emergency borrowing from development partners during the COVID-19 shock). Domestic PPG debt also increased from 3½ percent of GDP at end-2014 to 6.7 percent of GDP at end-2020, partly reflecting a 6 percent of GDP recapitalization of banks in December 2016. As a result, the total PPG debt increased from 27.9 percent of GDP in 2014 to 50.1 percent of GDP in 2020. Tajikistan has participated in the 2020 DSSI but does not plan to join further phases.[4]

Tajikistan: Composition of External Public Debt, 2017-2020

	2017	2018	2019	2020
External Public Debt (US$ billion)	2.72	2.76	2.78	2.94
Bilateral	1.38	1.37	1.33	1.33
of which: China	1.20	1.21	1.16	1.12
Multilateral	0.84	0.90	0.95	1.11
Bonds	0.50	0.50	0.50	0.50

Source: Country authorities.

2. External debt made up the bulk of the total of PPG debt in 2020. External PPG debt accounted for about 87 percent of total PPG debt. Over 80 percent of external PPG debt was owed to multilateral and bilateral creditors. The single largest creditor was China, which held over 34 percent of the total PPG external debt.

3. The National Bank of Tajikistan (NBT) is the main creditor and holder of largely non-marketable domestic government debt. Most of the government securities held by the NBT were issued at significantly below-market terms, with some interest rates as low as 2 percent. Since 2016, the government has been accumulating interest and principal arrears to the NBT. In 2019, the arrears on domestic government securities issued for the NBT recapitalization were cleared after the NBT extended new credit to the government at a 2 percent interest rate with a one-year maturity. However, the government continues to run arrears against the NBT on bonds issued to recapitalize commercial banks during the 2015-16 shocks[5].

[3] The Eurobond of USD 500 million issued in September 2017, with a maturity of 10 years, carried an interest rate of 7.125 percent.

[4] USD 49.8 mn of 2020 external debt was temporarily suspended.

[5] These arrears do not trigger debt distress as they are technical due to weak debt management capacity. The corresponding instruments are domestic and non-marketable, reflecting internal operations between the Treasury and the Central Bank only.

4. This DSA covers the central government, central bank, and government-guaranteed external and domestic debt. Debt coverage includes duly consolidated overall external and domestic debt and guarantees of the Central Government (CG), including extrabudgetary funds, and the social security fund. As debt recording and monitoring capacity is weak, this DSA does not include in its baseline: i) non-guaranteed liabilities of state-owned enterprises (SOEs), including liabilities associated with the modernization of an aluminum plant and the construction of a gas pipeline,[6] (ii) contingent liabilities/fiscal costs associated with liquidation of two large and troubled financial institutions, and iii) demand or guarantees triggered from any existing PPP agreements.

	Subsectors of the public sector	Check box
1	Central government	X
2	State and local government	
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	

BACKGROUND ON MACRO FORECASTS

5. The assumptions in the baseline scenario are consistent with macroeconomic framework presented in the staff report.[7] The main assumptions are:

External. The current account surplus is expected to decline in 2021 and switch to a moderate deficit over the medium term, reflecting an increase in infrastructure investment. Remittances rebounded to pre-pandemic levels (32 percent of GDP) in 2021 but will most likely remain volatile. International reserves are supported by domestic purchases of monetary gold[8] despite some pressures from the balance of payments. The recent SDR allocation has also helped raise reserves above adequacy metrics threshold.

Interest rates. Effective average interest rates on external debt are projected to rise gradually over the medium term as concessional financing is likely to be constrained and the authorities gradually increase reliance on non-concessional external borrowing (after Roghun power purchase agreements are signed and debt remains sustainable). Interest rates on domestic public debt, some of which are highly negative in real terms at present, are expected to remain below market rates.

Fiscal. The fiscal deficit is expected to narrow in 2021 owing to higher revenues and lower capital expenditures. Over the medium term, in line with authorities' plans for fiscal discipline, the fiscal deficit

[6] The Ministry of Finance does not record non-guaranteed debt of SOEs. In 2019, the Tajik Aluminum Company, a loss-making SOE, was allowed to borrow without a government guarantee. Subsequently, the company has signed a MOU to borrow USD 545 million from China to modernize its plant. The finalization of contract and associated disbursement are uncertain due to COVID crisis. Separately, Tajiktransgaz has borrowed USD 300 million from Chinese entities for the construction of the Tajikistan section of the Turkmenistan-China gas pipeline.
[7] The baseline includes SDR allocation of USD 238 million in August 2021.
[8] Monetary gold is a reserve asset that includes both gold held in specific allocated accounts as well as unallocated gold accounts with nonresidents. Monetary gold takes the form of coins, ingots, or bars with a purity of at least 995 parts per 1000.

is expected to hover around 2.5 percent of GDP. Spending on Roghun and other large infrastructure projects is expected to be accommodated by cuts to other non-priority spending.

Growth. Growth is expected to be around seven percent in 2021. Over the medium term, a weak global environment, and uneven structural reforms are expected to weigh on growth. Inflation is expected to remain moderate.[9]

6. **Macroeconomic assumptions under the current baseline scenario project a broadly similar fiscal deficit over the medium term as in the 2020 DSA.** Real GDP growth estimate for the current year is lower in the 2021 DSA, while medium-term growth rate projections are broadly similar. The projected fiscal deficit in 2021 is also lower relative to 2020 DSA reflecting lower capital expenditures. The projections also incorporate the government's commitment on fiscal discipline, which is to be incorporated in the government's budgets in 2022-23. The fiscal deficit is expected to be around 2 percent of GDP in 2021 and 2.7 percent of GDP in 2022. The external position is projected to weaken in the 2021 DSA before stabilizing with moderate deficits in the medium term. International reserves (in months of imports) are higher in the current DSA owing to domestic purchases of gold.

Tajikistan: Baseline DSA Assumptions, 2017-24
(In percent of GDP)

	2017	2018	2019	2020	2021	2022	2023	2024
Real GDP growth, percent								
2021 DSA	7.1	7.6	7.4	4.5	7.0	5.5	4.5	4.0
2020 DSA	7.1	7.3	7.5	-2.0	7.5	4.5	4.0	4.0
2019 DSA	7.1	7.3	5.5	4.8	4.5	4.5	4.0	4.0
Overall fiscal balance (incl. PIP)								
2021 DSA	-5.7	-2.7	-2.1	-4.3	-2.0	-2.7	-2.5	-2.5
2020 DSA	-6.0	-2.8	-2.1	-7.7	-4.4	-2.6	-2.5	-2.5
2019 DSA	-6.0	-2.8	-3.8	-4.3	-4.3	-4.3	-4.3	-4.3
Current account balance								
2021 DSA	2.1	-4.9	-2.2	4.1	2.6	-1.0	-1.6	-2.0
2020 DSA	2.2	-5.0	-2.3	-7.8	-4.7	-4.6	-4.4	-4.3
2019 DSA	2.2	-5.0	-4.5	-5.2	-5.3	-5.3	-5.4	-5.5

Sources: National authorities and IMF staff estimates

7. **The baseline scenario assumes that fiscal financing needs will be met from external concessional sources in the near term, and non-concessional financing will be avoided until Roghun power purchase agreements are signed.** During 2021-23, fiscal financing needs are expected to be met mostly from concessional loans and grants, provided by international finance institutions, export credit agencies, and traditional bilateral partners. There is uncertainty on the terms of future borrowing. For the purposes of this DSA, staff assume concessional borrowing after 2023 in line with the levels of recent years. Under 2020 RCF the authorities are committed to avoid non- concessional borrowing until the Roghun power-purchase agreements are finalized.[10] Therefore, residual financing needs could be met from non-concessional borrowing starting only after 2023. Staff projections assume no new domestic financing at market determined rates, in line with the recent experience (see paragraph 3) and authorities' financing plans.

8. **The realism tools largely suggest that staff forecasts are realistic.** Under the baseline, debt accumulation over the projection horizon is smaller than in recent years. The contribution of primary deficits to future debt accumulation is expected to be lower compared to the past few years due to

[9] There are weaknesses in national accounts statistics.
[10] In the RCF Letter of Intent (LOI), the authorities committed to avoiding any additional non-concessional borrowing until the Roghun power purchase agreements have been finalized and debt is on a sustainable path over the long term. Likewise, the total Roghun financing envelope over a three-year period should be around USD 1.1 billion (or on average approximately USD 375 million per year).

maintaining fiscal discipline in medium and long-term. Another important reason for the difference is that the contribution of exchange rate depreciation to external and public debt accumulation is lower than in recent years. This is appropriate as the COVID-19 shock is expected to be temporary and the exchange rate adjustment is expected to be smaller.

COUNTRY CLASSIFICATION AND DETERMINATION OF SCENARIO STRESS TESTS

9. Tajikistan's debt-carrying capacity was upgraded, and is currently assessed to be strong. Two consecutive signals are needed to change the debt-carrying capacity (DCC) assessment. The previous DSA vintage had already signaled an upgrade. Given the revised CI Index from the October 2021 WEO and the World Bank's 2020 CPIA rating, Tajikistan's DCC is currently assessed to be strong.

Debt Carrying Capacity	Strong

Final	Classification based on current vintage	Classification based on the previous vintage	Classification based on the two previous vintages
Strong	Strong 3.10	Strong 3.09	Medium 3.03

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

APPLICABLE	
TOTAL public debt benchmark	
PV of total public debt in percent of GDP	70

10. Stress tests for PPPs' agreements, potential size of a rescue of the financial sector, and a commodity price shock are set at default levels. Stress test for PPPs' demand and guarantees is set at a default 1.73 percent of GDP. Stress test for the banking sector is set at default 5 percent of GDP. Default tailored tests for commodity prices are also applied since non-fuel commodity exports constitute an important part of Tajikistan's exports.

11. A tailored contingent liability stress test is designed to incorporate contingent liabilities from potential non-guaranteed debt of SOEs. The debt coverage for Tajikistan excludes non-government guaranteed debt of non-financial public corporations (NFPC) under the baseline given uncertainties on the nature of the debt and lack of full financial information on SOEs. To illustrate the effects of contingent liabilities associated with large SOE debt that might have significant implications for debt sustainability, the size of shock is set at 10 percent of GDP. The shock reflects: (i) 5.5 percent of GDP based on available information on Barki Tojik arrears[11], which could be transferred onto the government's balance sheet; (ii) 3.5 percent of GDP based on the loan agreements of Tajiktransgaz, and (iii) 1 percent of GDP Roghun HPP's security placed in the Pension Fund. Planned borrowings related to the modernization of the TALCO aluminum plant could pose additional contingent liability risks (6½ percent of GDP). However, it is not clear at this stage if the contract to finance the aluminum plant will materialize and what the contract would look like, including whether it would be considered debt, so it is not included in this DSA.

1	The country's coverage of public debt	The central government plus social security and extra budgetary funds, 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	
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	10	Great uncertainty about the true size of liabilities and weak financial position and performance of SOEs
4	PPP	35 percent of PPP stock	1.73	
5	Financial market (the default value of 5 percent of GDP is the minimum value)	5 percent of GDP	5	
	Total (2+3+4+5) (in percent of GDP)		16.7	

DEBT SUSTAINABILITY

EXTERNAL DEBT SUSTAINABILITY ANALYSIS

12. Under the baseline scenario, external debt indicators improve in comparison to the 2020 DSA. External debt stabilizes in the medium term.

13. One external debt indicator breaches its threshold in the earlier years of the projections and then falls below the threshold over the longer term (Figure 1). More specifically, the baseline of debt-service-to-exports ratio breaches its respective threshold during 2025-27. After a jump in 2025, the flow/liquidity indicator remains elevated throughout 2027 and then falls below the threshold after 2028. The three-year pick up starting in 2025 is due to the Eurobond and the RCF principal repayments.[12] The other flow indicator, debt service-to-revenue ratio, remains below the threshold under the baseline. Both solvency indicators are stable throughout the projection horizon.

14. Under the stress scenarios, two external debt indicators breach their respective thresholds.

[11] Barki-Tojik is a state-owned energy company in Tajikistan.
[12] Eurobond principal will be repaid in three equal instalments from September 2025 to September 2027. The IMF's RCF will be repaid from June 2025 to June 2030. These are the main reason for breaching the debt service-to-export threshold.

Breaches in the debt-to-exports and debt-service-to exports ratios are significant and point to debt vulnerabilities. Shocks to exports are the most extreme and impactful. Under a shock to exports, the PV of the debt-to-exports ratio reaches 378.5 percent (versus 250 percent threshold), while the PV of debt service-to-exports ratio reaches 43.8 percent (versus 21 percent threshold). The contingent liability shock also causes a deterioration in external debt sustainability. This suggests the need for the government to improve debt recording and management practices (especially for SOEs) and rebuild fiscal buffers to address the rising contingent liabilities.

15. The market-financing risk indicator tool is moderate. Recent tightening of global financial conditions due to the COVID19 pandemic has pushed the spread on Tajikistan's sovereign bond (921bps) further beyond the benchmark (570bps) under the market module. The authorities' commitment to avoid non-concessional borrowing and commitment to fiscal discipline should allow the market financing risk to be moderate or low in the medium term.

PUBLIC SECTOR DEBT SUSTAINIBILITY ANALYSIS

16. Under the baseline, the public debt-to-GDP ratio does not breach its threshold and points to lower risk in comparison to the 2020 DSA. However, public debt is assessed to be at high risk of distress due to baseline breaches on the external debt indicators. The public debt burden indicator (PV total debt-to-GDP) ratio stabilizes andremains below the 55 percent benchmark throughout the projection horizon.

17. The standardized sensitivity analysis shows lower risks in comparison to the 2020 DSA. Shocks to combined contingent liabilities in the most extreme and historical scenarios adversely affect all public debt indicators. The shock in the most extreme scenario causes a 9.8 percent deterioration in comparison to baseline debt ratio by 2031. This highlights the need for strengthened SOE oversight and streamlined borrowing policies at a time when the government is already financing a large infrastructure project.

RISK RATING AND VILNERABILITIES

18. The debt sustainability analysis under the new LIC DSF framework suggests that Tajikistan's risk of external and overall public debt distress is high. These results are similar to the 2020 DSA findings, butdebt stabilizes under the baseline.

19. Tajikistan's risk of external debt distress remains high. One external debt-burden (debt service-to-exports ratio) indicator breaches its threshold under the baseline for three years (2025-27). The indicator stabilizes after the Eurobond repayment is completed and falls below the threshold by 2028. The PV of debt-to-exports ratio is stable under the baseline and stays slightly below the threshold by the end of the horizon. All other debt burden ratios are stabilized during the projection horizon. External debt is most vulnerable to exports shocks and contingent liabilities. The baseline scenario and standardized stress tests indicate the importance of containing contingent liabilities and broadening the export base.

20. The overall risk of public debt distress is high under the baseline due to a breach of an external debt indicator. A contingent liability shock has the largest impact on public debt sustainability.

21. Under the baseline, Tajikistan's public debt is sustainable. The external debt indicator that breaches its threshold under the baseline falls below the threshold in 2028. All stock and flow indicators are on a stable trajectory during the projection horizon. It is also worth noting that while external debt risks are high, total public debt levels do not breach thresholds in both the baseline and stress tests. Debt is assessed to be sustainable based on the authorities' commitments to fiscal discipline and to avoiding non-concessional borrowing. The authorities plan to adopt a new Tax Code which envisages reduction of some tax rates. This may lead to lower tax revenues in the medium term. If tax revenues do not recover quickly, more aggressive expenditure measures should be implemented to follow the agreed fiscal consolidation path. In case fiscal adjustment falls short or the authorities resort to non-concessional borrowing, the debt path may deteriorate, putting debt sustainability under pressure. A more severe or prolonged COVID-19 shock could heighten debt vulnerabilities. On the other hand, greater-than-expected progress with economic diversification or higher energy and non-energy exports would improve debt sustainability over the longer term.

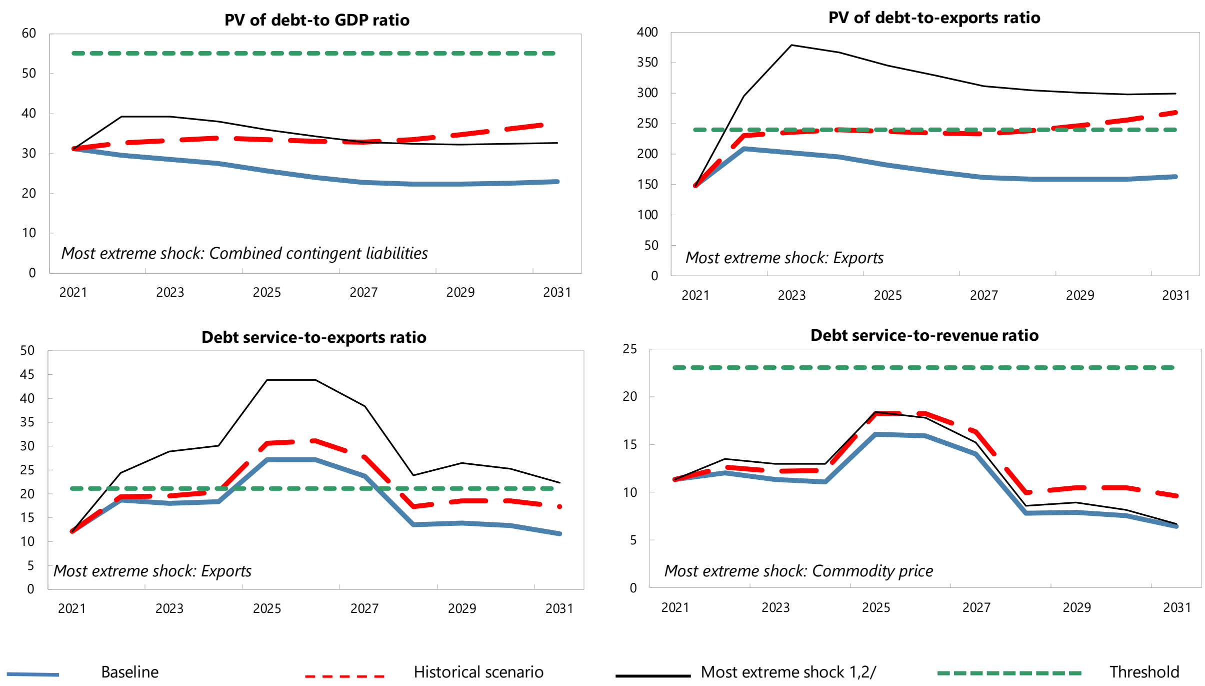
22. Other measures should also be taken to reduce debt vulnerabilities. Diversifying exports and containing contingent liabilities will reduce the vulnerabilities of public debt to shocks. Improving debt management practices, including by smoothing the repayment profile could help address large medium-term breaches in the debt service-to-exports ratio. Further upgrading the debt recording and reporting practices and enhancing the linkages between the medium-term debt management strategy and the government's borrowing plans would further help to contain debt vulnerabilities.

AUTHORITIES' VIEWS

23. The authorities concurred with staff that debt vulnerabilities need to be prudently managed. They agreed with staff that non-concessional borrowing would weaken debt sustainability and would continue to explore options to attract concessional financing or grants. Staff emphasized the need to adhere to fiscal discipline to ensure debt sustainability.

24. There was broad agreement that better SOE oversight is needed to contain contingent liabilities. However, the authorities maintained that debt contracted by SOEs—including TALCO, Tajiktransgaz, and Roghun OJSC—do not pose immediate fiscal risks, as these companies are considered as financially viable.

Figure 1. Tajikistan: Indicators of Public and Publicly Guaranteed external Debt under Alternative Scenarios, 2021-2031



Customization of Default Settings		
	Size	Interactions
Tailored Stress		
Combined CL	Yes	
Natural disaster	n.a.	n.a.
Commodity price	No	No
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 on additional financing needs resulting from the 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	1.6%	1.6%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	24	24
Avg. grace period	5	5

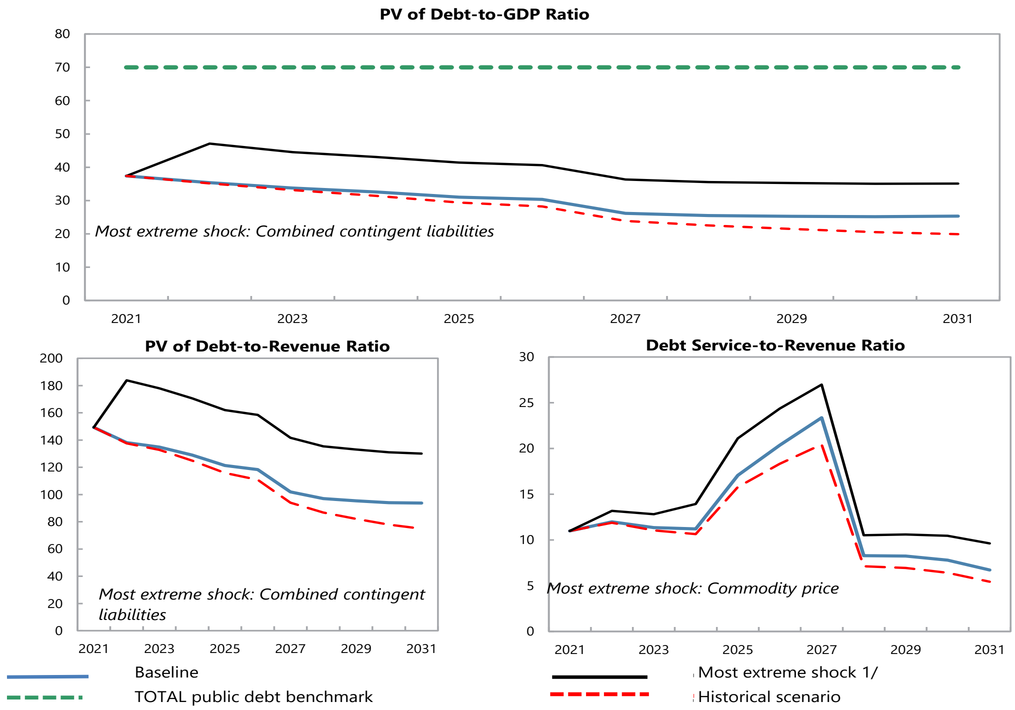
* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 2031. 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.

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. Tajikistan: Indicators of Public Debt Under Alternative Scenarios, 2021-2031



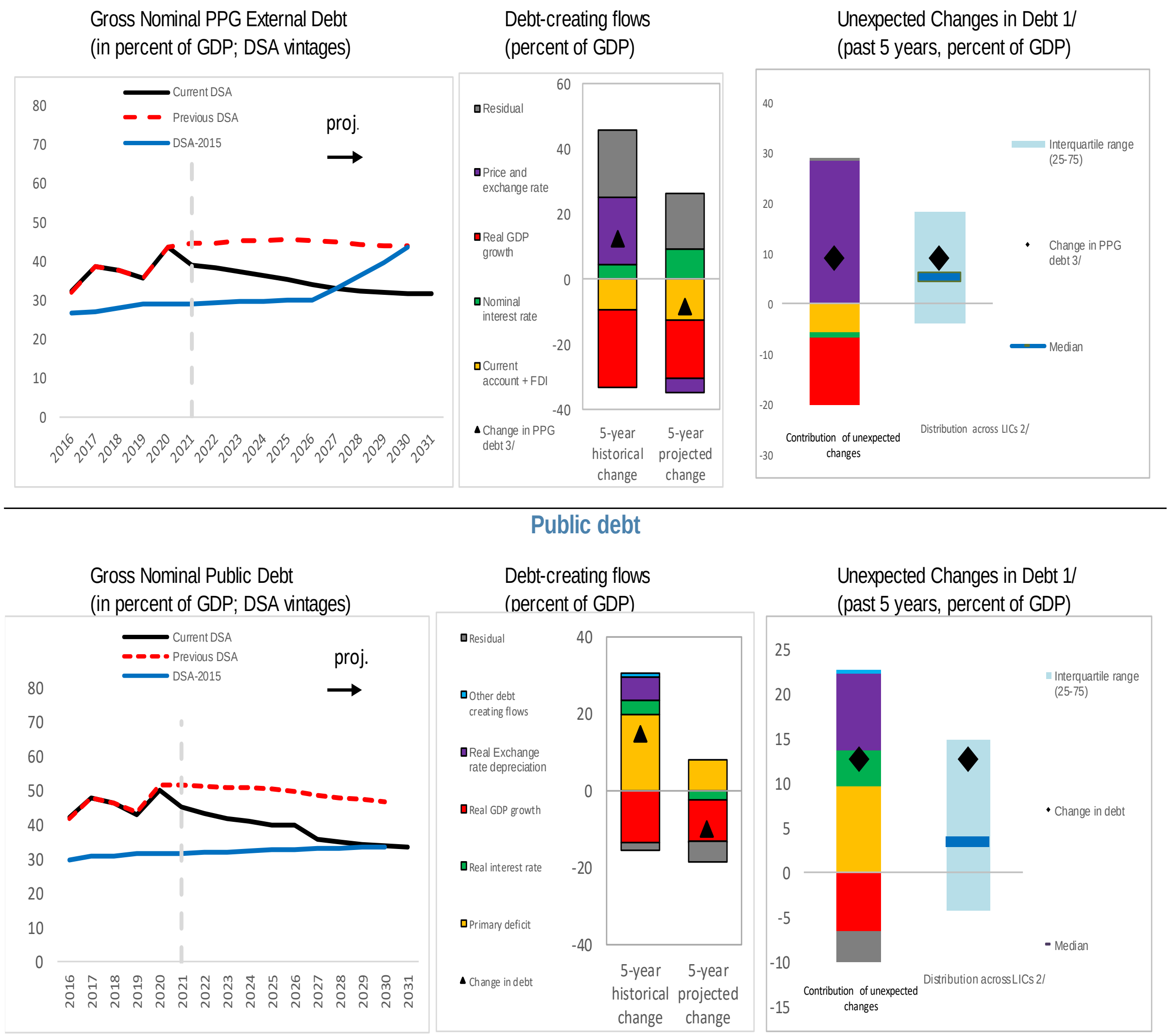
Borrowing assumptions on additional financing needs resulting from the stress tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	86%	86%
Domestic medium and long-term	0%	0%
Domestic short-term	14%	14%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.6%	1.6%
Avg. maturity (incl. grace period)	24	24
Avg. grace period	5	5
Domestic MLT debt		
Avg. real interest rate on new borrowing	0.0%	0.0%
Avg. maturity (incl. grace period)	1	1
Avg. grace period	0	0
Domestic short-term debt		
Avg. real interest rate	1.8%	1.8%

* 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 2031. 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. Tajikistan: Drivers of Debt Dynamics – Baseline Scenario



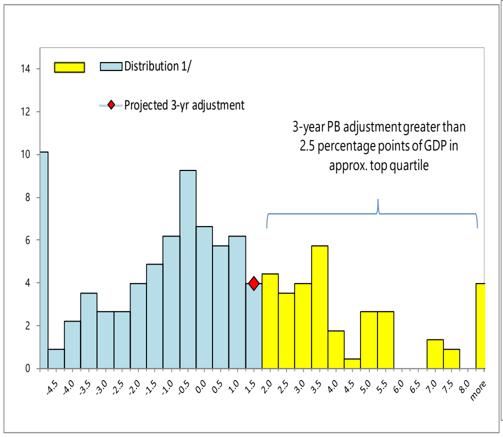
1/ Difference between anticipated and actual contributions on debt ratios.

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.

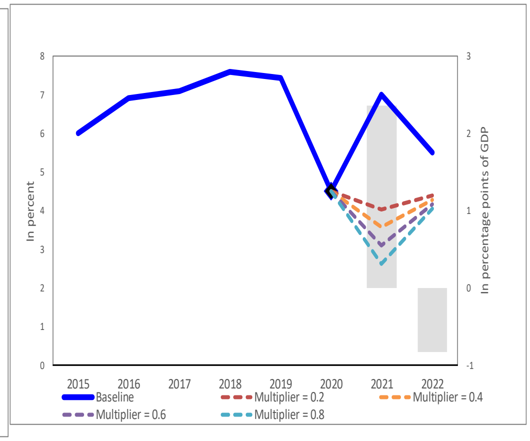
Figure 4. Tajikistan: Realism Tools

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



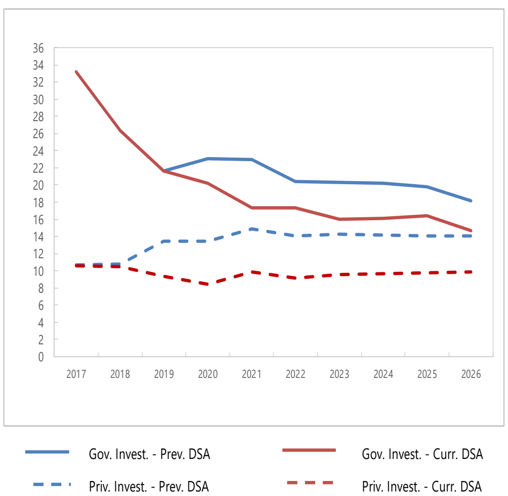
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

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)

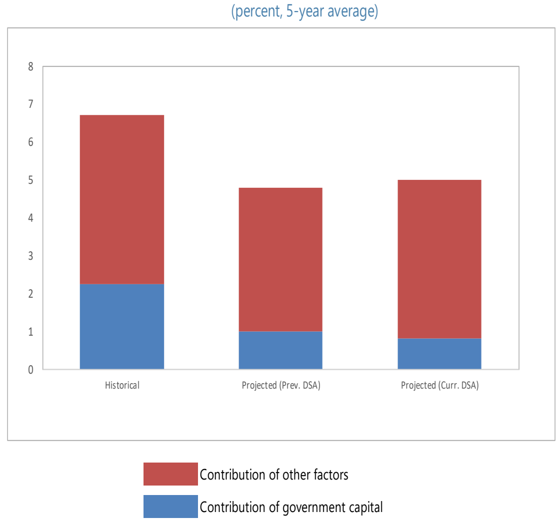
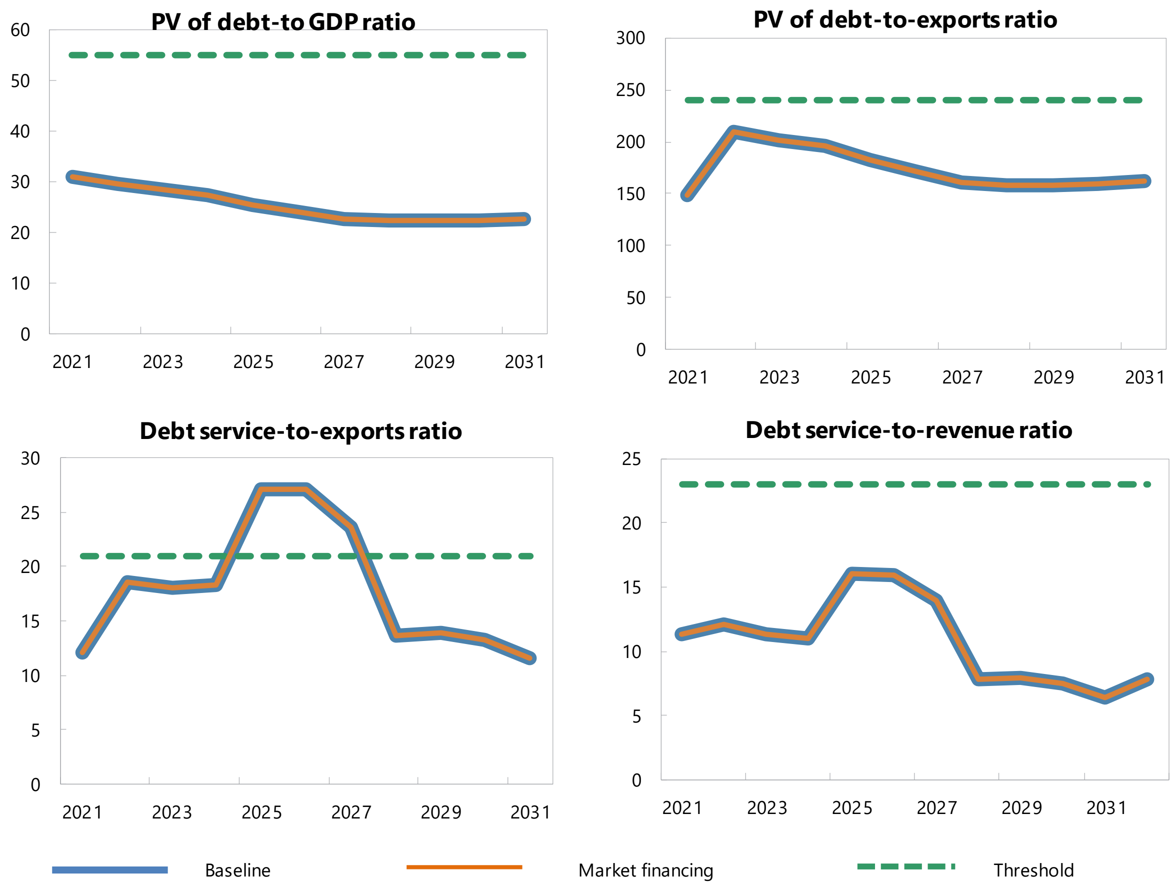


Figure 5. Tajikistan: Market-Financing Risk Indicators

	GFN 1/	EMBI 2/
Benchmarks	14	570
Values	5	921
Breach of benchmark	No	Yes
Potential heightened liquidity needs	Moderate	

1/ Maximum gross financing needs (GFN) over 3-year baseline projection horizon.
2/ EMBI spreads correspond to the latest available data.



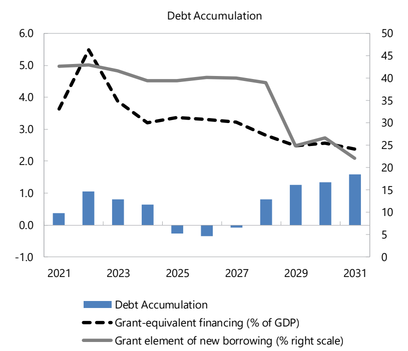
Sources: Country authorities; and staff estimates and projections.

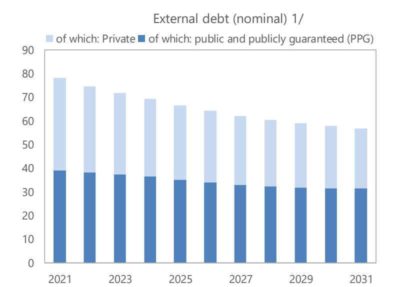
Table 1. Tajikistan: External Debt Sustainability Framework, Baseline Scenario, 2020-41

(In percent of GDP, unless otherwise indicated)

	Actual	Projections								Average 8/	
	2020	2021	2022	2023	2024	2025	2026	2031	2041	Historical	Projections
External debt (nominal) 1/	**83.9**	**78.3**	**74.6**	**71.8**	**69.3**	**66.4**	**64.2**	**56.7**	**48.5**	**66.3**	**65.5**
of which: public and publicly guaranteed (PPG)	**43.5**	**39.1**	**38.2**	**37.2**	**36.4**	**35.1**	**33.9**	**31.4**	**28.5**	**33.0**	**34.5**
Change in external debt	4.8	-5.6	-3.7	-2.8	-2.5	-2.9	-2.2	-1.0	0.4		
Identified net debt-creating flows	**-3.5**	**-9.6**	**-4.4**	**-2.9**	**-2.1**	**-2.0**	**-1.9**	**-2.2**	**-4.4**	**-0.5**	**-3.1**
Non-interest current account deficit	**-5.2**	**-4.5**	**-0.9**	**-0.2**	**0.1**	**0.1**	**0.1**	**0.0**	**-2.3**	**3.0**	**-0.4**
Deficit in balance of goods and services	20.9	24.5	28.8	29.4	29.9	29.8	30.0	29.5	26.3	**33.9**	**29.2**
Exports	17.2	21.0	14.1	14.1	14.0	14.0	14.0	14.0	15.2		
Imports	38.1	45.5	42.9	43.6	44.0	43.9	44.0	43.5	41.5		
Net current transfers (negative = inflow)	-8.4	-10.3	-10.1	-10.0	-9.9	-9.9	-9.9	-9.7	-9.4	**-8.8**	**-9.9**
of which: official	-1.1	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	0.0		
Other current account flows (negative = net inflow)	-17.8	-18.7	-19.6	-19.6	-19.9	-19.9	-19.9	-19.7	-19.2	**-22.1**	**-19.7**
Net FDI (negative = inflow)	**-0.4**	**-1.4**	**-1.4**	**-1.4**	**-1.4**	**-1.4**	**-1.4**	**-1.7**	**-2.2**	**-2.8**	**-1.5**
Endogenous debt dynamics 2/	**2.2**	**-3.8**	**-2.1**	**-1.3**	**-0.8**	**-0.7**	**-0.6**	**-0.6**	**0.1**		
Contribution from nominal interest rate	1.1	1.9	1.9	1.9	1.9	1.9	1.9	1.6	1.9		
Contribution from real GDP growth	-3.6	-5.7	-4.0	-3.2	-2.7	-2.6	-2.5	-2.2	-1.8		
Contribution from price and exchange rate changes	4.6	...	...	...	...	...	...	...	...		
Residual 3/	**8.3**	**4.0**	**0.7**	**0.1**	**-0.4**	**-0.9**	**-0.3**	**1.2**	**4.8**	**5.4**	**0.6**
of which: exceptional financing	-0.6	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	**32.0**	**31.1**	**29.6**	**28.5**	**27.4**	**25.6**	**24.0**	**22.8**	**23.7**		
PV of PPG external debt-to-exports ratio	**185.9**	**148.4**	**209.4**	**202.0**	**195.5**	**181.9**	**171.6**	**162.5**	**156.1**		
PPG debt service-to-exports ratio	**13.1**	**12.1**	**18.6**	**18.0**	**18.3**	**27.1**	**27.1**	**11.6**	**17.0**		
PPG debt service-to-revenue ratio	**10.0**	**11.3**	**12.1**	**11.3**	**11.0**	**16.1**	**15.9**	**6.4**	**10.2**		
Gross external financing need (Million of U.S. dollars)	1731.2	1397.8	2044.0	2344.5	2373.9	2371.1	2472.5	2511.2	2982.0		
Key macroeconomic assumptions											
Real GDP growth (in percent)	4.5	7.0	5.5	4.5	4.0	4.0	4.0	4.0	4.0	**6.9**	**4.5**
GDP deflator in US dollar terms (change in percent)	-5.5	-2.9	3.2	1.9	2.2	2.3	0.9	1.4	1.4	**-2.4**	**1.3**
Effective interest rate (percent) 4/	1.4	2.3	2.6	2.6	2.9	2.9	3.0	2.9	4.1	**1.8**	**2.7**
Growth of exports of G&S (US dollar terms, in percent)	13.3	26.7	-26.7	6.5	5.7	6.4	4.6	5.0	7.0	**6.7**	**4.6**
Growth of imports of G&S (US dollar terms, in percent)	-8.3	24.0	2.6	8.1	7.3	6.1	5.2	5.1	3.8	**0.6**	**7.2**
Grant element of new public sector borrowing (in percent)	...	42.7	42.9	41.6	39.4	39.4	40.1	22.1	16.2	**...**	**36.3**
Government revenues (excluding grants, in percent of GDP)	22.5	22.4	21.7	22.5	23.2	23.6	23.8	25.2	25.2	**25.0**	**23.7**
Aid flows (in Million of US dollars) 5/	176.0	378.4	612.4	453.5	377.3	427.4	447.5	407.9	578.5		
Grant-equivalent financing (in percent of GDP) 6/	...	3.6	5.5	3.9	3.2	3.4	3.3	2.4	2.3	**...**	**3.3**
Grant-equivalent financing (in percent of external financing) 6/	...	73.0	71.7	66.8	63.6	59.9	59.6	53.6	48.5	**...**	**62.0**
Nominal GDP (Million of US dollars)	8,194	8,512	9,265	9,867	10,487	11,153	11,706	15,247	25,864		
Nominal dollar GDP growth	-1.3	3.9	8.8	6.5	6.3	6.4	5.0	5.4	5.4	**4.3**	**5.8**
Memorandum items:											
PV of external debt 7/	72.4	70.3	66.0	63.1	60.4	56.9	54.2	48.1	43.7		
In percent of exports	420.9	335.4	467.3	446.8	429.8	405.1	387.6	342.7	287.9		
Total external debt service-to-exports ratio	155.9	106.3	172.3	179.7	170.7	160.8	160.2	128.9	105.2		
PV of PPG external debt (in Million of US dollars)	2619.4	2649.3	2739.3	2814.5	2878.4	2850.1	2810.2	3476.9	6130.2		
(PVt-PVt-1)/GDPt-1 (in percent)		0.4	1.1	0.8	0.6	-0.3	-0.4	1.6	1.1		
Non-interest current account deficit that stabilizes debt ratio	-10.0	1.2	2.8	2.6	2.6	3.0	2.4	1.1	-2.7		

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 $[r - g - \rho(1+g) + \varepsilon\alpha (1+r)]/(1+g+\rho+g\rho)$ 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.

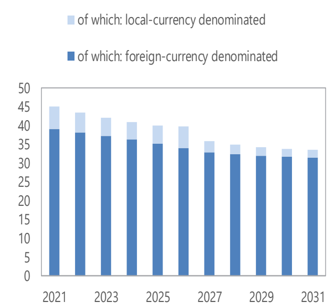
8/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

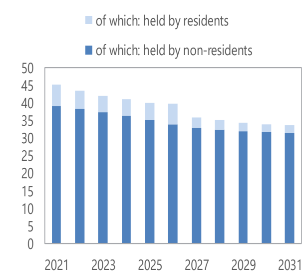
Table 2. Tajikistan: Public Sector Debt Sustainability Framework, Baseline

	Actual	Projections								Average 6/	
	2020	2021	2022	2023	2024	2025	2026	2031	2041	Historical	Projections
Public sector debt 1/	50.1	45.1	43.5	42.0	41.0	39.9	39.8	33.5	29.3	39.0	38.5
of which: external debt	43.5	39.1	38.2	37.2	36.4	35.1	33.9	31.4	28.5	33.0	34.5
Change in public sector debt	7.0	-5.0	-1.6	-1.5	-1.0	-1.1	-0.1	-0.3	-0.5		
Identified debt-creating flows	5.2	-2.5	-1.1	-0.8	-0.3	-0.3	-0.1	1.2	2.8	0.9	-0.1
Primary deficit	3.4	1.0	1.9	1.7	1.8	1.8	1.9	3.0	4.1	2.1	2.2
Revenue and grants	24.6	25.0	25.6	25.0	25.3	25.5	25.6	27.0	27.0	27.3	25.8
of which: grants	2.1	2.6	3.9	2.5	2.0	1.9	1.8	1.8	1.8		
Primary (noninterest) expenditure	28.0	26.1	27.5	26.7	27.1	27.3	27.5	30.0	31.1	29.4	28.0
Automatic debt dynamics	3.3	-3.5	-3.0	-2.5	-2.1	-2.1	-2.0	-1.9	-1.3		
Contribution from interest rate/growth differential	-0.9	-3.5	-3.0	-2.5	-2.1	-2.1	-2.0	-1.9	-1.3		
of which: contribution from average real interest rate	0.9	-0.2	-0.6	-0.6	-0.5	-0.5	-0.5	-0.6	-0.1		
of which: contribution from real GDP growth	-1.9	-3.3	-2.4	-1.9	-1.6	-1.6	-1.5	-1.3	-1.1		
Contribution from real exchange rate depreciation	4.2	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	-1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
Privatization receipts (negative)	-0.7	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 (please specify)	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	1.8	-2.5	-0.5	-0.7	-0.7	-0.8	0.0	-1.5	-3.3	0.4	-1.4
Sustainability indicators											
PV of public debt-to-GDP ratio 2/	41.6	37.4	35.4	33.8	32.6	31.0	30.3	25.3	25.0		
PV of public debt-to-revenue and grants ratio	168.7	149.3	138.1	134.9	128.9	121.4	118.3	93.8	92.6		
Debt service-to-revenue and grants ratio 3/	9.9	11.0	12.0	11.4	11.2	17.1	20.4	6.7	9.9		
Gross financing need 4/	4.3	3.8	4.9	4.6	4.6	6.1	7.1	4.8	6.8		
Key macroeconomic and fiscal assumptions											
Real GDP growth (in percent)	4.5	7.0	5.5	4.5	4.0	4.0	4.0	4.0	4.0	6.9	4.5
Average nominal interest rate on external debt (in percent)	1.3	1.9	2.0	1.9	2.2	2.2	2.2	1.5	2.6	0.2	1.7
Average real interest rate on domestic debt (in percent)	-1.4	-4.4	-5.7	-5.5	-5.4	-5.4	-4.7	-5.0	-5.0	-0.7	-5.1
Real exchange rate depreciation (in percent, + indicates depreciation)	12.0	...	...	...	...	...	...	...	...	4.2	...
Inflation rate (GDP deflator, in percent)	2.3	6.5	6.2	5.9	5.9	5.9	5.5	5.5	5.5	5.9	5.8
Growth of real primary spending (deflated by GDP deflator, in percent)	4.7	-0.5	11.2	1.7	5.2	5.0	4.8	4.9	4.0	8.4	5.1
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-3.6	6.0	3.5	3.2	2.8	2.9	2.0	3.4	4.6	1.3	3.7
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 sector debt 1/





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government plus social security and extra budgetary funds, 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.

Scenario, 2020-41

Table 3. Tajikistan: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2021-2031

	Projections 1/										
	2021	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**
PV of debt-to GDP ratio											
Baseline	31	30	29	27	26	24	23	22	22	22	23
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	31	33	33	34	33	33	33	33	35	36	38
B. Bound Tests											
B1. Real GDP growth	31	30	29	28	26	25	23	23	23	23	23
B2. Primary balance	31	31	35	34	32	30	29	28	28	28	28
B3. Exports	31	34	37	36	34	32	30	30	29	29	29
B4. Other flows 3/	31	33	35	33	31	30	29	28	28	27	27
B5. Depreciation	31	30	29	27	26	24	23	22	22	22	23
B6. Combination of B1-B5	31	36	35	34	32	30	29	28	28	28	28
C. Tailored Tests											
C1. Combined contingent liabilities	31	39	39	38	36	34	33	32	32	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	31	32	33	31	28	26	23	21	20	19	18
C4. Market Financing	31	30	29	27	26	24	23	22	22	22	23
Threshold	55	55	55	55	55	55	55	55	55	55	55
PV of debt-to-exports ratio											
Baseline	148	209	202	195	182	172	161	158	159	159	162
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	148	230	236	**240**	237	235	233	238	**246**	**256**	**268**
B. Bound Tests											
B1. Real GDP growth	148	209	202	195	182	172	161	158	159	159	162
B2. Primary balance	148	222	**246**	240	225	214	203	199	198	197	199
B3. Exports	148	**295**	**378**	**367**	**345**	**328**	**312**	**305**	**301**	**298**	**299**
B4. Other flows 3/	148	232	**246**	239	224	214	203	198	195	193	194
B5. Depreciation	148	209	202	195	182	172	161	158	159	159	162
B6. Combination of B1-B5	148	**267**	226	**270**	**253**	**240**	227	221	220	219	221
C. Tailored Tests											
C1. Combined contingent liabilities	148	**277**	**277**	**270**	**255**	**245**	234	230	229	229	232
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	148	**272**	**271**	**251**	221	195	169	156	145	136	130
C4. Market Financing	148	209	202	195	182	172	161	158	159	159	162
Threshold	240	240	240	240	240	240	240	240	240	240	240
Debt service-to-exports ratio											
Baseline	12	19	18	18	27	27	24	14	14	13	12
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	12	19	20	20	31	31	28	17	18	19	17
B. Bound Tests											
B1. Real GDP growth	12	19	18	18	27	27	24	14	14	13	12
B2. Primary balance	12	19	19	20	29	29	26	16	17	16	15
B3. Exports	12	24	29	30	44	44	38	24	26	25	22
B4. Other flows 3/	12	19	19	19	28	28	25	16	17	16	15
B5. Depreciation	12	19	18	18	27	27	24	14	14	13	12
B6. Combination of B1-B5	12	21	23	23	34	34	30	19	19	18	16
C. Tailored Tests											
C1. Combined contingent liabilities	12	19	20	20	29	29	25	15	15	15	13
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	12	23	22	22	32	31	26	15	16	15	12
C4. Market Financing	12	19	18	18	27	27	24	14	14	13	12
Threshold	21	21	21	21	21	21	21	21	21	21	21
Debt service-to-revenue ratio											
Baseline	11	12	11	11	16	16	14	8	8	8	6
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	11	13	12	12	18	18	16	10	11	10	10
B. Bound Tests											
B1. Real GDP growth	11	12	12	11	17	16	14	8	8	8	7
B2. Primary balance	11	12	12	12	17	17	15	9	10	9	8
B3. Exports	11	13	13	13	18	18	16	10	10	10	9
B4. Other flows 3/	11	12	12	12	17	16	14	9	10	9	8
B5. Depreciation	11	12	11	11	16	16	14	8	8	8	6
B6. Combination of B1-B5	11	13	13	13	18	18	16	10	10	9	8
C. Tailored Tests											
C1. Combined contingent liabilities	11	12	12	12	17	17	15	9	9	8	7
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	11	13	13	13	18	18	15	9	9	8	7
C4. Market Financing	11	12	11	11	16	16	14	8	8	8	6
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. Tajikistan: Sensitivity Analysis for Key Indicators of Public Debt, 2021-2031

	Projections 1/										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	PV of Debt-to-GDP Ratio										
Baseline	37	35	34	33	31	30	26	25	25	25	25
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	37	35	33	31	29	28	24	23	21	21	20
B. Bound Tests											
B1. Real GDP growth	37	36	35	35	33	33	29	29	29	30	30
B2. Primary balance	37	38	40	39	37	36	32	31	31	31	31
B3. Exports	37	38	39	38	36	36	31	31	30	30	29
B4. Other flows 3/	37	39	40	39	37	36	32	31	31	30	30
B5. Depreciation	37	42	38	35	32	29	24	22	21	19	19
B6. Combination of B1-B5	37	35	35	34	32	31	26	25	24	24	24
C. Tailored Tests											
C1. Combined contingent liabilities	37	47	45	43	41	41	36	36	35	35	35
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	37	37	38	39	39	40	36	35	35	36	36
C4. Market Financing	37										
TOTAL public debt benchmark	70	70	70	70	70	70	70	70	70	70	70
	PV of Debt-to-Revenue Ratio										
Baseline	149	138	135	129	121	118	102	97	95	94	94
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	149	138	133	125	116	111	94	87	82	78	75
B. Bound Tests											
B1. Real GDP growth	149	141	141	137	131	129	114	111	111	111	112
B2. Primary balance	149	147	161	154	146	142	125	119	117	114	113
B3. Exports	149	147	157	151	143	139	123	117	113	111	109
B4. Other flows 3/	149	151	160	153	145	142	125	119	115	112	110
B5. Depreciation	149	164	154	141	126	115	93	84	78	73	69
B6. Combination of B1-B5	149	138	141	133	124	120	102	96	93	90	88
C. Tailored Tests											
C1. Combined contingent liabilities	149	184	178	171	162	158	142	135	133	131	130
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	149	158	165	168	162	160	142	134	133	132	132
C4. Market Financing	149										
	Debt Service-to-Revenue Ratio										
Baseline	11	12	11	11	17	20	23	8	8	8	7
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	11	12	11	11	16	18	20	7	7	6	5
B. Bound Tests											
B1. Real GDP growth	11	12	12	12	18	21	25	9	9	9	8
B2. Primary balance	11	12	14	14	19	22	25	10	10	10	9
B3. Exports	11	12	12	12	18	21	24	9	10	9	8
B4. Other flows 3/	11	12	12	12	18	21	24	9	10	9	8
B5. Depreciation	11	13	14	14	21	24	26	10	9	9	7
B6. Combination of B1-B5	11	12	12	13	17	21	23	9	9	8	7
C. Tailored Tests											
C1. Combined contingent liabilities	11	12	21	13	18	21	24	9	9	9	8
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	11	13	13	14	21	24	27	11	11	10	10
C4. Market Financing											

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.