INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

KYRGYZ REPUBLIC

Joint World Bank-IMF Debt Sustainability Analysis

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Kyrgyz Republic: Joint Bank-Fund Debt Sustainability Analysis

Risk of external debt distress:	Moderate
Overall risk of debt distress	Moderate
Granularity in the risk rating	Some space
Application of judgment	No

This joint World Bank/IMF Debt Sustainability Analysis (DSA) has been prepared in the context of the 2019 Article IV Consultation, for the first time based on the revised framework for low-income countries.[1] Results indicate moderate risk of debt distress for both external and overall public debt. However, the debt outlook remains vulnerable, especially to a deceleration in real GDP and exports growth and the depreciation of the KGS. To address these vulnerabilities, the authorities need to remain cautious when contracting and guaranteeing new debt, maintain fiscal discipline, improve public investment management, and continue improving the business environment to maintain the export potential of the country after the main gold mine will close in 2026.

[1] See IMF, 2018, Guidance Note on the Bank-Fund Debt Sustainability Framework for Low-Income Countries.

PUBLIC DEBT COVERAGE

1. Public sector debt comprises state government debt (both central and local government), state guarantees, and the debt of the central bank towards the IMF (Text Table 1). Almost all the public sector debt is central government debt. Local governments have no external debt and negligible domestic debt vis-à-vis non-governmental entities. According to the 2019 budget, there is no outstanding state guarantee because the budget code has been preventing the state from guaranteeing debt of state-owned enterprises (SOEs) and other public entities since 2007, except for the cases stipulated by the obligations of the Kyrgyz Republic within its membership in international and inter-governmental organizations. SOEs have no external debt, while their domestic debt vis-à-vis non-governmental entities is limited to short term borrowing from commercial banks and is not significant, as most of their borrowing is from the State. The social security fund has no debt. Nevertheless, a contingent liability shock of 7 percent of GDP was applied, reflecting risks around the operation of SOEs (2 percent of GDP, which is about the structural cash shortfall of loss-making energy sector SOEs)[2] and the default value representing the average cost to the government during a financial crisis (5 percent of GDP, Text Table 2).

Text Table 1. Kyrgyz Republic: Public Debt Coverage

	Subsectors of the public sector	
1	Central government	X
2	State and local government	X
3	Other elements in the general government	
4	o/w: Social security fund	
5	o/w: Extra budgetary funds (EBFs)	
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	

Text Table 2. Kyrgyz Republic: Combined Contingent Liability Shock

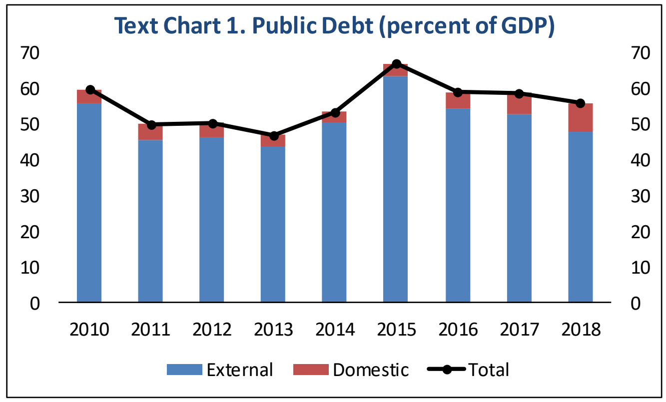
1	The country's coverage of public debt	The central, state, and local governments, central bank, government-guaranteed debt		
		Default	Used for the analysis	Reasons for deviations from the default settings
2	Other elements of the general government not captured in 1.	0 percent of GDP	0	
3	SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	2	
4	PPP	35 percent of PPP stock	0	
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)		7.0	

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.). If it is already included in the government debt (1.) and risks associated with SoE's debt not guaranteed by the government is assessed to be negligible, a country team may reduce this to 0%.

[2] Kyrgyz Republic—Staff Report for 2019 Article IV Consultation, ¶35 (forthcoming).

BACKGROUND

2. **Public debt decreased over the last three years, driven by external debt** (Text Chart 1). Following a sharp increase between 2013-15 mostly due to the significant depreciation of the KGS vis-à-vis the U.S. dollar, public debt decreased from 67.1 percent of GDP in 2015 to 56.0 percent of GDP in 2018. This was the result of the decline in external debt by 16 percent of GDP thanks to the appreciation of the KGZ as well as the debt relief received from Russia.[3] At the same time, domestic debt rose from 3.6 to 8.0 percent of GDP, thereby increasing its share from 5 to 14 percent in total debt. The domestic public debt is composed of treasury bills and bonds that are mostly held by commercial banks (50 percent) and the social security fund (30 percent).



UNDERLYING ASSUMPTIONS

3. **The current DSA is built on revised macroeconomic assumptions** (Text Table 3). Economic growth is projected to be slightly lower in the near term than in the last DSA. Following a substantial widening in 2018-19, the current account deficit is expected to narrow between 2020-22 on the back of a recovery of remittances and a slight increase in gold exports. Over the medium term, the current account deficit is projected to increase owing to the decline in gold production and exports starting in 2023. Over the long term, other exports are projected to materialize to partially replace the exports of the main gold mine that accounted for 37 percent of exports in 2018 and is projected to cease operations in 2026. The source of such exports could be new gold mines, other minerals, such as rare earths, or hydropower, for which only 10 percent of the potential has been exploited so far. A steady flow of foreign direct investment (FDI) prompted by sustained improvement in the business environment is projected to materialize to limit the gradual drop of the level of exports to about 5 percent of GDP over the projection horizon. After an unexpectedly tight fiscal stance in 2018, we project a moderate fiscal loosening in 2019 to close the output gap to be followed by strict adherence to the fiscal rule presently considered by parliament that caps debt at 70 percent of GDP and the budget deficit at 3 percent of GDP over the medium and long term. The budget deficit should be recorded in line with the IMF Government Finance Statistics Manual (GFSM), that is including on-lending to loss making state-owned enterprises as capital grants contributing to the deficit rather than as a financing item. The authorities have room to keep

[3] The initial agreement between Russia and the Kyrgyz Republic signed in 2014 to write-off of a $300 million debt (4.0 percent of GDP) in equal tranches over a 10-year period was revised to write off the outstanding $240 million in 2018.

(continued)

the deficit at such level while financing their development needs by reducing tax exemptions, better capturing imports, reducing transfers to energy sector SOEs and identifying other expenditure savings through progress in public investment and financial management.[4] Beyond firm commitments in the near term, a limited amount of grants (current grants around 0.4% of GDP and capital grants around 1% of GDP) is projected to continue over the medium term. These grants are highly likely and their inclusion does not change the risk rating.

Text Table 3. Kyrgyz Republic: Selected Indicators, 2016-24

	2016	2017	2018	2019	2020	2021	2022	2023	2024
Real GDP growth (percent)									
Current DSA	4.3	4.7	3.5	3.8	3.4	3.8	4.6	3.4	3.4
Previous DSA[1]	3.8	3.2	3.3	4.9	4.6	4.0	4.8	3.3	3.7
Overall fiscal balance (percent of GDP)									
Current DSA[2]	-6.4	-4.6	-1.3	-3.3	-3.0	-3.0	-3.0	-3.0	-3.0
Previous DSA[1,3]	-6.9	-5.9	-4.0	-5.3	-3.2	-2.6	-2.4	-2.5	-2.5
Current account balance (percent of GDP)									
Current DSA	-11.6	-6.2	-8.7	-9.6	-7.7	-7.1	-6.8	-8.4	-8.8
Previous DSA[1]	-12.1	-10.0	-13.1	-12.2	-11.6	-11.1	-10.6	-10.1	-10.0
PIP Disbursements (millions of US$)									
Current DSA	311	323	131	278	263	316	340	358	377
Previous DSA[1]	311	368	341	400	258	328	330	360	392

Sources: Kyrgyz authorities and IMF staff estimates.

1/ IMF Country Report No. 18/53, Kyrgyz Republic—4th and 5th Reviews under the Extended Credit Facility.
2/ Including onlending to energy SOEs.
3/ Including total onlending to SOEs.

4. **The realism tools suggest that the baseline scenario is credible.** There are small differences between the past and projected drivers of external and public debt dynamics; however, unexpected changes in debt are close to the upper end of the interquartile range (Figure 3). The lower projected contribution of the primary deficit to changes in public debt is due to the improvement in the fiscal balance. This, however, is in line with the historical distribution of adjustments under Fund-supported programs in LICs (Figure 4). Moreover, while the planned adjustment reflects the change in the fiscal balance between 2017-20, the bulk of the improvement already took place in 2018.

5. **The stable debt outlook reflects the broadly neutral fiscal stance in the medium term.** Total public debt is expected to hover around 55 percent of GDP over the medium term as the impact of positive growth/interest differential is offset by the fiscal deficit (Table 2). As the financing need is expected to be increasingly covered through domestic debt issuance, the composition of total public debt is projected to shift from external towards domestic debt. Domestic debt is expected to double from 8 percent of GDP in 2018 to 16 percent of GDP in the

[4] Kyrgyz Republic—Staff Report for 2019 Article IV Consultation, ¶¶28-30 (forthcoming).

long term and the increase is projected to be subscribed by commercial banks while leaving room for credit to the private sector, in sync with the gradual deepening of the financial sector.

COUNTRY CLASSIFICATION

6. **The Kyrgyz Republic's debt-carrying capacity is assessed to be strong.** The country's Composite Indicator (CI) index,[5] calculated based on the April 2019 WEO and the 2017 World Bank Country Policy and Institutional Assessment (CPIA) score, is 3.19, above the threshold of 3.05 for strong debt-carrying capacity (Text Table 4). This translates into the following external debt burden thresholds and public debt benchmark: 240 percent for the present value (PV) of external debt-to-exports ratio, 55 percent for the PV of external debt-to-GDP ratio, 21 percent for the external debt service-to-exports ratio, 23 percent for the external debt service-to-revenue ratio, and 70 percent for the PV of total public debt-to-GDP ratio.

Text Table 4. Kyrgyz Republic: Debt Carrying Capacity and Relevant Indicative Thresholds

Debt Carrying Capacity	Strong		
Final	**Classification based on April 2019 WEO**	**Classification based on October 2018 WEO**	**Classification based on the two previous vintages**
Strong	Strong 3.19	Strong 3.19	Strong 3.24

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

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

EXTERNAL DSA

7. **The debt outlook remains vulnerable to external and domestic shocks.** Because of the write-off of Russian debt, external public and publicly guaranteed (PPG) debt declined to 48.0 percent of GDP in 2018 from 53.0 percent in 2017. PPG external debt is projected to gradually

[5] The CI is a function of the CPIA, international reserves, remittances, country and global economic growth. The calculation is based on 10-year averages of the variables, across 5 years of historical data and 5 years of projection. For more details, see IMF, 2018, Guidance Note on the Bank-Fund Debt Sustainability Framework for Low-Income Countries.

(continued)

decrease further over the medium term. Total external debt decreased from 91.0 percent of GDP in 2017 to 85.0 percent in 2018 and will decline further towards 75 percent in the medium term.[6]

8. **External debt remains at moderate risk of distress.** Public and publicly guaranteed (PPG) external debt in PV terms is estimated to decline from 35 percent of GDP in 2018 to below 30 percent of GDP over the long term. While most external debt burden indicators remain below their indicative sustainability thresholds under shock scenarios and suggest limited rollover risks, the debt service-to-exports ratios breach its threshold in the medium term in the case of a shock to exports (Figure 1 and Table 3), indicating moderate risk of debt distress. Moreover, the PV of debt-to-exports also breaches its threshold, albeit for only a year. The assessment of moderate risk is also supported by the overvaluation of the exchange rate highlighted by the External Sector Assessment,[7] the need for continued fiscal discipline in strict adherence to the draft fiscal rule, the expectations of continuing external concessional financing, and the large dependence on remittances and gold exports.

9. **The Kyrgyz Republic is assessed to have some space to absorb shocks.** The external PPG debt outlook remains vulnerable to large external shocks, to a decline in exports and other flows, the depreciation of the KGS as well as combined external shocks. Given the gap between debt burden indicators and their respective thresholds, the Kyrgyz Republic has some space to absorb shocks without being downgraded to high risk of debt distress (Figure 5).

PUBLIC DSA

10. **The public debt outlook has remained broadly unchanged since the last DSA** (Text Table 5)**.** Public debt (external plus domestic) decreased from 58.8 percent of GDP in 2017 to 56.0 percent of GDP in 2018. Total public debt is expected to be manageable in the medium and long term but remains sensitive to shocks, especially to real GDP growth and the depreciation of the KGS. Specifically, the PV of debt-to-GDP ratio breaches its sustainability threshold in the case of shocks to real GDP growth over the medium and long term (Figure 2 and Table 4). Rollover risks associated with public debt are expected to remain modest in the years ahead, albeit increasing over the long term.

AUTHORITIES' VIEWS

11. **The authorities agreed with the overall assessment.** They noted that the fiscal rule being considered by Parliament will help keeping the overall public debt sustainable.

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[6] This implies that private external debt (for example, debt of commercial banks) would be in the range of 20-40 percent of GDP in the medium term.

[7] Kyrgyz Republic, Staff Report fort the 2019 Article IV Consultation, Annex 2. External Sector Assessment (forthcoming).

Text Table 5. Kyrgyz Republic: Comparison of Debt Ratio
(percent of GDP)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	Long Term (2028)
PPGE debt to GDP ratio										
Current DSA	54.4	53.0	48.0	47.9	46.7	45.4	44.0	43.2	42.7	37.8
Previous DSA[1]	56.6	54.5	55.8	56.1	54.1	53.1	51.5	50.1	48.7	42.0
Public debt to GDP ratio										
Current DSA	59.1	58.8	56.0	56.1	55.5	55.3	54.5	54.4	54.4	54.0
Previous DSA[1]	58.1	57.1	58.2	58.4	56.2	55.0	53.2	51.7	50.9	47.1

Sources: Kyrgyz authorities and IMF staff estimates.
1/ IMF Country Report No. 18/53, Kyrgyz Republic—4th and 5th Reviews under the Extended Credit Facility.

CONCLUSION

12. **Both external and overall public debt remains at moderate risk of distress.** Both the results of stress tests and country-specific circumstances point toward moderate risk of external debt distress. Given this assessment of external debt and that at least one indicator breaches the threshold under the public debt stress tests, overall public debt is also assessed to have moderate risk of debt distress.

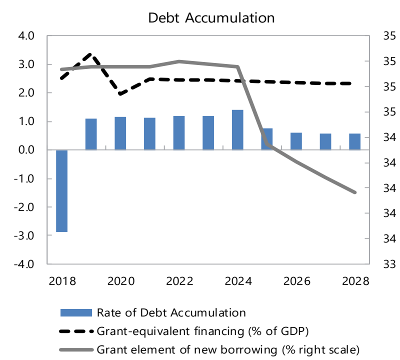
13. **The authorities need to maintain fiscal discipline, remain cautious when contracting or guaranteeing new debt and continue to improve the business climate**. To keep the public debt sustainable, the authorities will need to strictly adhere to the fiscal rule considered by Parliament. While necessary to fill the large infrastructure gap, externally-financed public investments, could undermine debt sustainability. In this context, further efforts are needed to strengthen public debt and public investment management, to ensure that potential gains from externally financed public investment projects are fully realized. Moreover, the authorities should keep improving the business environment to maintain the country's export beyond the closure of the main gold mine. An attractive business environment will be of paramount importance to generate new exports to replace those of the main gold mine that will close in 2026.

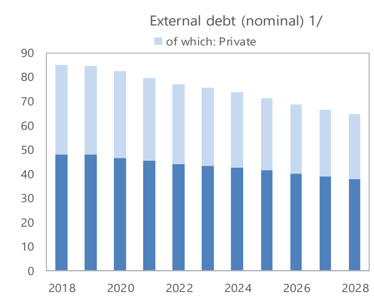
Table 1. Kyrgyz Republic: External Debt Sustainability Framework, Baseline Scenario, 2015–38

(In percent of GDP unless, otherwise indicated)

	Actual			Projections								Average 8/	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2028	2038	Historical	Projections
External debt (nominal) 1/	**109.4**	**99.7**	**91.0**	**85.0**	**84.7**	**82.3**	**79.7**	**77.1**	**75.4**	**64.6**	**56.6**	**88.3**	**75.4**
of which: public and publicly guaranteed (PPG)	**63.5**	**54.4**	**53.0**	**48.0**	**47.9**	**46.7**	**45.4**	**44.0**	**43.2**	**37.8**	**37.0**	**51.2**	**43.3**
Change in external debt	19.7	-9.7	-8.7	-5.9	-0.4	-2.3	-2.7	-2.6	-1.7	-2.0	-0.6		
Identified net debt-creating flows	**11.5**	**1.0**	**-4.3**	**5.1**	**1.8**	**0.4**	**-0.4**	**-1.4**	**1.7**	**-1.2**	**0.9**	**-5.0**	**0.8**
Non-interest current account deficit	**15.0**	**10.6**	**5.2**	**7.7**	**8.5**	**6.6**	**6.1**	**5.7**	**7.3**	**6.1**	**7.3**	**6.9**	**7.0**
Deficit in balance of goods and services	36.4	34.3	32.1	36.0	35.9	35.3	35.6	35.4	37.0	34.5	36.8	**31.5**	**35.9**
Exports	37.0	35.9	34.2	32.7	32.8	31.9	31.5	31.5	29.4	28.8	27.4		
Imports	73.4	70.3	66.4	68.7	68.7	67.2	67.1	66.8	66.5	63.3	64.2		
Net current transfers (negative = inflow)	-24.2	-27.9	-30.7	-29.9	-29.8	-30.9	-31.8	-32.1	-31.7	-30.5	-31.0	**-28.9**	**-30.9**
of which: official	-1.5	-1.2	-1.4	-0.6	-0.9	-0.1	-0.5	-0.5	-0.5	-0.4	-0.3		
Other current account flows (negative = net inflow)	2.9	4.2	3.8	1.6	2.3	2.2	2.3	2.4	1.9	2.1	1.5	**4.4**	**2.0**
Net FDI (negative = inflow)	**-15.1**	**-8.5**	**1.0**	**-0.6**	**-4.6**	**-4.5**	**-4.6**	**-4.7**	**-4.2**	**-5.5**	**-5.1**	**-7.1**	**-4.4**
Endogenous debt dynamics 2/	**11.6**	**-1.2**	**-10.5**	**-2.1**	**-2.0**	**-1.6**	**-1.9**	**-2.4**	**-1.4**	**-1.7**	**-1.3**		
Contribution from nominal interest rate	1.0	1.0	1.0	0.9	1.1	1.1	1.0	1.0	1.1	1.0	1.0		
Contribution from real GDP growth	-3.9	-4.7	-4.2	-3.0	-3.1	-2.7	-2.9	-3.4	-2.5	-2.8	-2.3		
Contribution from price and exchange rate changes	14.5	2.5	-7.3	...	...	...	...	...	...	...	...		
Residual 3/	**8.2**	**-10.7**	**-4.5**	**-11.0**	**-2.2**	**-2.7**	**-2.3**	**-1.2**	**-3.4**	**-0.8**	**-1.6**	**4.9**	**-3.2**
of which: exceptional financing	0.0	-0.4	-0.5	-3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	**...**	**...**	**40.1**	**35.5**	**35.5**	**34.8**	**34.0**	**33.0**	**32.5**	**28.0**	**27.1**		
PV of PPG external debt-to-exports ratio	**...**	**...**	**117.2**	**108.3**	**108.3**	**109.2**	**108.0**	**104.9**	**110.4**	**97.2**	**98.8**		
PPG debt service-to-exports ratio	**4.6**	**5.4**	**6.1**	**18.9**	**8.6**	**7.9**	**8.8**	**8.6**	**9.1**	**10.8**	**8.4**		
PPG debt service-to-revenue ratio	**5.1**	**6.2**	**6.7**	**19.9**	**8.7**	**8.0**	**8.9**	**8.7**	**8.6**	**10.3**	**7.5**		
Gross external financing need (Million of U.S. dollars)	680.4	783.8	1052.7	1320.4	853.3	720.3	760.1	766.7	1039.6	1123.3	2069.6		
Key macroeconomic assumptions													
Real GDP growth (in percent)	3.9	4.3	4.7	3.5	3.8	3.4	3.8	4.6	3.4	4.4	4.3	**4.4**	**3.9**
GDP deflator in US dollar terms (change in percent)	-13.9	-2.2	7.9	1.5	-0.7	1.9	1.9	1.9	1.9	1.0	1.0	**3.5**	**1.4**
Effective interest rate (percent) 4/	1.0	0.9	1.1	1.1	1.3	1.3	1.3	1.4	1.5	1.6	1.8	**1.0**	**1.4**
Growth of exports of G&S (US dollar terms, in percent)	-26.9	-0.9	7.7	0.4	3.2	2.5	4.4	6.5	-1.5	7.6	6.6	**4.5**	**3.8**
Growth of imports of G&S (US dollar terms, in percent)	-24.8	-2.3	6.8	8.8	2.9	3.0	5.6	6.1	4.7	5.0	5.9	**7.2**	**4.9**
Grant element of new public sector borrowing (in percent)	...	...	...	34.9	35.0	35.0	35.0	35.0	35.0	34.0	33.3	**...**	**34.7**
Government revenues (excluding grants, in percent of GDP)	33.5	31.0	31.1	31.2	32.3	31.6	31.3	31.2	31.0	30.2	30.6	**30.6**	**31.0**
Aid flows (in Million of US dollars) 5/	143.7	144.4	171.8	222.7	326.9	212.7	282.1	291.5	300.9	357.8	530.7		
Grant-equivalent financing (in percent of GDP) 6/	...	...	...	2.5	3.4	1.9	2.5	2.5	2.4	2.3	2.2	**...**	**2.5**
Grant-equivalent financing (in percent of external financing) 6/	...	...	...	60.7	61.0	49.9	53.0	52.4	52.2	50.5	48.8	**...**	**53.2**
Nominal GDP (Million of US dollars)	6,678	6,813	7,703	8,093	8,334	8,781	9,288	9,897	10,423	13,674	22,904		
Nominal dollar GDP growth	-10.6	2.0	13.1	5.1	3.0	5.4	5.8	6.6	5.3	5.4	5.3	**8.2**	**5.4**
Memorandum items:													
PV of external debt 7/	...	...	78.1	72.5	72.3	70.5	68.3	66.1	64.7	54.8	46.6		
In percent of exports	...	...	228.2	221.4	220.4	221.0	216.8	210.2	219.8	190.2	170.1		
Total external debt service-to-exports ratio	27.8	26.1	21.6	28.0	19.5	19.4	21.2	21.4	23.4	26.5	24.7		
PV of PPG external debt (in Million of US dollars)			3091.4	2869.6	2959.6	3057.1	3156.8	3267.0	3385.4	3826.0	6208.3		
(PVt-PVt-1)/GDPt-1 (in percent)				-2.9	1.1	1.2	1.1	1.2	1.2	0.6	1.4		
Non-interest current account deficit that stabilizes debt ratio	-4.6	20.4	14.0	13.7	8.8	8.9	8.7	8.3	9.0	8.1	7.9		

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.

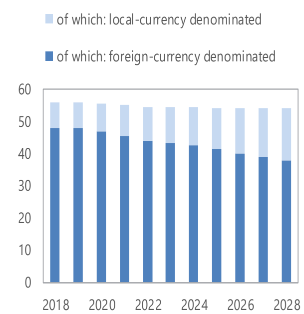
Table 2. Kyrgyz Republic: Public Sector Debt Sustainability Framework, 2015-38

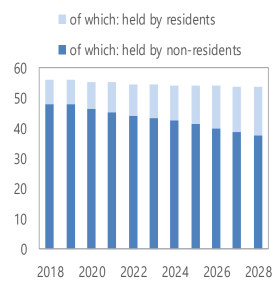
(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2028	2038	Historical	Projections
Public sector debt 1/	67.1	59.1	58.8	56.0	56.1	55.5	55.3	54.5	54.4	54.0	54.0	55.3	54.8
of which: external debt	63.5	54.4	53.0	48.0	47.9	46.7	45.4	44.0	43.2	37.8	37.0	51.2	43.3
Change in public sector debt	13.5	-8.0	-0.3	-2.8	0.1	-0.6	-0.2	-0.7	-0.1	0.0	0.0		
Identified debt-creating flows	12.4	-5.9	-2.6	-3.9	1.5	-0.1	-0.3	-0.7	-0.1	-0.2	-0.1	-0.4	-0.4
Primary deficit	1.8	5.4	3.5	0.0	1.9	1.6	1.6	1.5	1.4	1.0	0.9	2.9	1.3
Revenue and grants	35.6	33.1	33.4	32.8	34.5	32.5	32.6	32.5	32.3	31.4	31.6	33.3	32.3
of which: grants	2.2	2.1	2.2	1.6	2.2	0.9	1.3	1.3	1.2	1.1	1.0		
Primary (noninterest) expenditure	37.4	38.5	36.8	32.8	36.4	34.0	34.2	34.0	33.7	32.4	32.5	36.2	33.6
Automatic debt dynamics	10.6	-10.8	-5.7	-0.9	-0.3	-1.6	-1.8	-2.1	-1.4	-1.2	-1.0		
Contribution from interest rate/growth differential	-2.3	-3.3	-3.2	-1.9	-1.5	-1.6	-1.8	-2.1	-1.4	-1.5	-1.3		
of which: contribution from average real interest rate	-0.3	-0.5	-0.5	0.1	0.5	0.2	0.2	0.3	0.3	0.8	0.9		
of which: contribution from real GDP growth	-2.0	-2.8	-2.7	-2.0	-2.0	-1.8	-2.0	-2.4	-1.8	-2.3	-2.2		
Contribution from real exchange rate depreciation	12.9	-7.5	-2.4	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	0.0	-0.4	-0.4	-3.0	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	-0.1	-0.3
Privatization receipts (negative)	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	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	0.0	0.0		
Debt relief (HIPC and other)	0.0	-0.4	-0.4	-3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	1.0	-2.2	2.3	2.1	-0.2	-0.5	0.1	-0.1	0.0	0.5	0.5	0.5	0.3
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	46.0	44.0	44.2	44.2	44.4	44.0	44.2	44.6	44.5		
PV of public debt-to-revenue and grants ratio	...	...	137.8	134.1	128.1	136.1	136.0	135.5	136.9	142.2	140.8		
Debt service-to-revenue and grants ratio 3/	4.8	5.8	6.3	37.2	32.4	33.4	35.9	38.8	41.4	58.9	61.5		
Gross financing need 4/	2.9	6.6	5.6	9.3	13.0	12.4	13.2	14.0	14.7	19.5	20.3		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	3.9	4.3	4.7	3.5	3.8	3.4	3.8	4.6	3.4	4.4	4.3	4.4	3.9
Average nominal interest rate on external debt (in percent)	1.3	1.3	1.3	1.3	1.6	1.6	1.5	1.5	1.6	1.7	1.8	1.2	1.6
Average real interest rate on domestic debt (in percent)	-3.3	-5.7	-6.0	6.7	8.5	4.9	4.8	4.8	4.8	5.8	5.8	-8.4	5.6
Real exchange rate depreciation (in percent, + indicates depreciation)	26.6	-12.3	-4.7	...	...	...	...	...	...	...	...	0.6	...
Inflation rate (GDP deflator, in percent)	3.4	6.1	6.3	1.5	2.2	4.9	5.0	5.0	5.0	4.0	4.0	9.6	4.1
Growth of real primary spending (deflated by GDP deflator, in percent)	2.3	7.3	0.3	-7.8	14.9	-3.3	4.2	4.0	2.4	3.6	4.4	7.0	2.8
Primary deficit that stabilizes the debt-to-GDP ratio 5/	-11.7	13.4	3.8	2.8	1.8	2.2	1.8	2.2	1.5	1.1	0.9	1.8	1.7
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	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, state, and local governments, 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.

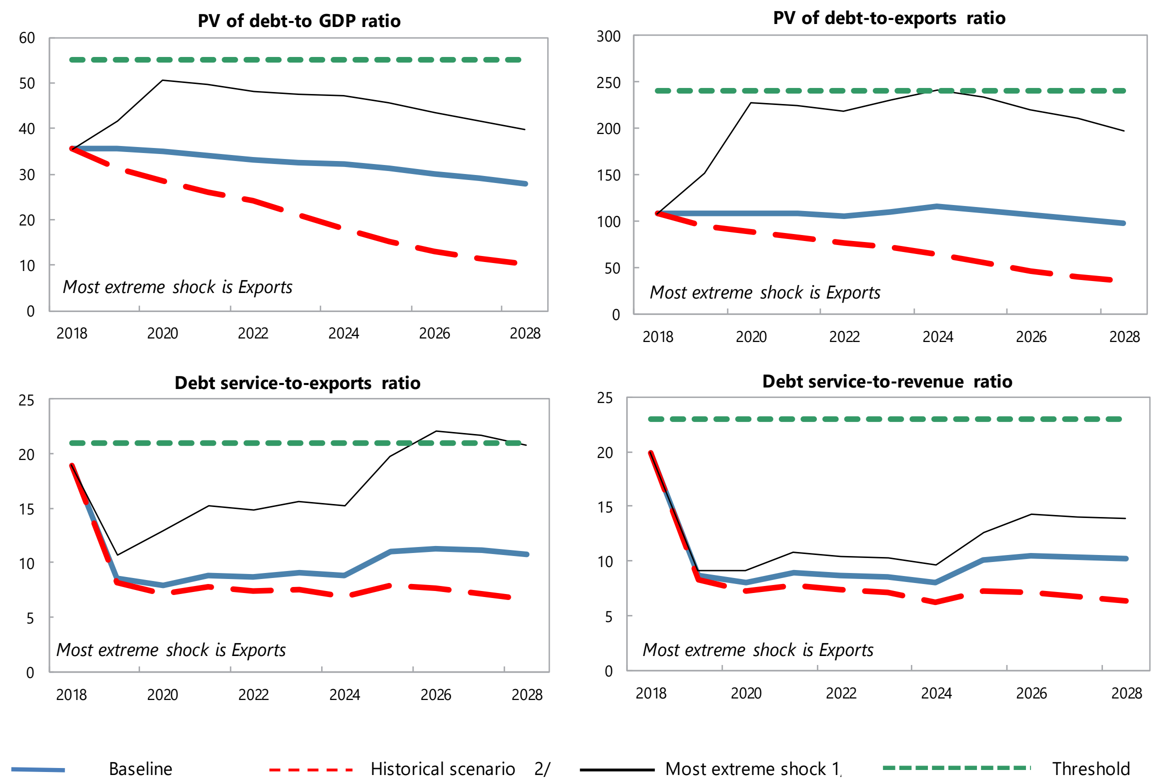
3/ Debt service is defined as the sum of interest and amortization of medium and long-term, and short-term debt.

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.

Figure 1. Kyrgyz Republic: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2018-28 1/



Customization of Default Settings		
	Size	Interactions
Tailored Tests		
Combined CLs	No	
Natural Disasters	n.a.	n.a.
Commodity Prices 2/	n.a.	n.a.
Market Financing	n.a.	n.a.

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

Borrowing Assumptions for Stress Tests*		
	Default	User defined
Shares of marginal debt		
External PPG MLT debt	100%	
Terms of marginal debt		
Avg. nominal interest rate on new borrowing in USD	1.9%	1.9%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	27	27
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.

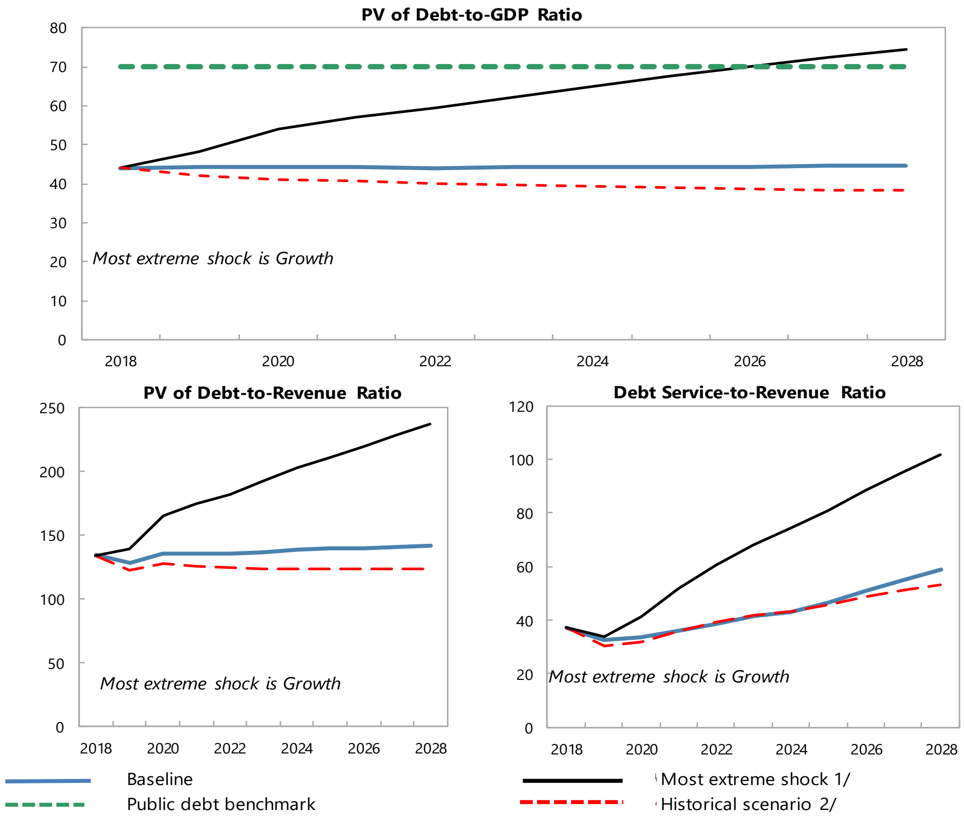
Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2028. 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 historical scenario leads to much more favorable debt dynamics than the baseline mainly because the average annual FDI inflow was much higher than projected in the base line (see Table 1).

Note: debt service was very high in 2018 because debt relief by Russia ($240 million) was recorded as debt amortization financed by debt relief in the balance of payments.

Figure 2. Kyrgyz Republic: Indicators of Public Debt Under Alternative Scenarios, 2018-28



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	23%	23%
Domestic medium and long-term	0%	0%
Domestic short-term	77%	77%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.9%	1.9%
Avg. maturity (incl. grace period)	27	27
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	5%	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 2028. 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 historical scenario leads to more favorable debt dynamics than the baseline in spite of higher primary deficits mostly because of the countervailing impact of the higher GDP deflator and the lower interest rate than in the baseline (see Table 2).

Table 3. Kyrgyz Republic: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2018-28

(In percent)

		Projections									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PV of debt-to GDP ratio											
Baseline	**35.5**	**35.5**	**34.8**	**34.0**	**33.0**	**32.5**	**32.2**	**31.1**	**30.0**	**28.9**	**28.0**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 1/	35.5	31.2	28.4	26.0	24.2	21.1	17.8	15.3	13.1	11.3	10.2
B. Bound Tests											
B1. Real GDP growth	35.5	37.5	38.7	37.8	36.7	36.1	35.8	34.6	33.3	32.2	31.1
B2. Primary balance	35.5	36.0	36.3	36.2	35.8	35.7	35.7	34.8	33.7	32.7	31.7
B3. Exports	35.5	41.6	50.7	49.6	48.2	47.5	47.0	45.5	43.4	41.5	39.8
B4. Other flows 2/	35.5	40.7	45.8	44.8	43.6	43.0	42.5	41.1	39.2	37.5	36.0
B5. One-time 30 percent nominal depreciation	35.5	45.0	35.9	35.0	34.0	33.4	33.1	31.9	30.9	30.1	29.3
B6. Combination of B1-B5	35.5	44.5	47.4	46.4	45.1	44.4	44.0	42.4	40.5	38.8	37.3
C. Tailored Tests											
C1. Combined contingent liabilities	35.5	36.6	36.7	36.5	35.9	35.7	35.6	34.8	33.7	32.8	31.9
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**	**55**
PV of debt-to-exports ratio											
Baseline	**108.3**	**108.3**	**109.2**	**108.0**	**104.9**	**110.4**	**115.8**	**111.7**	**106.6**	**102.6**	**97.2**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 1/	108.3	95.2	89.0	82.7	76.9	71.7	64.2	54.9	46.6	40.1	35.5
B. Bound Tests											
B1. Real GDP growth	108.3	108.3	109.2	108.0	104.9	110.4	115.8	111.7	106.6	102.6	97.2
B2. Primary balance	108.3	109.9	113.9	115.1	113.7	121.2	128.3	124.9	119.9	116.0	110.3
B3. Exports	108.3	151.2	227.1	225.1	219.1	230.7	241.9	233.4	220.7	210.5	197.7
B4. Other flows 2/	108.3	124.0	143.7	142.4	138.6	146.0	153.0	147.4	139.5	133.1	125.0
B5. One-time 30 percent nominal depreciation	108.3	108.3	88.9	87.7	85.2	89.5	93.9	90.2	86.7	84.1	80.3
B6. Combination of B1-B5	108.3	141.2	135.9	165.7	161.3	169.8	178.0	171.1	162.1	154.9	145.8
C. Tailored Tests											
C1. Combined contingent liabilities	108.3	111.5	115.0	115.8	114.1	121.3	128.3	124.8	119.9	116.1	110.7
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	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	**240**	**240**	**240**	**240**	**240**	**240**	**240**	**240**	**240**	**240**	**240**
Debt service-to-exports ratio											
Baseline	**18.9**	**8.6**	**7.9**	**8.8**	**8.6**	**9.1**	**8.8**	**11.0**	**11.3**	**11.1**	**10.8**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 1/	18.9	8.2	7.1	7.7	7.4	7.5	6.9	7.9	7.7	7.2	6.6
B. Bound Tests											
B1. Real GDP growth	18.9	8.6	7.9	8.8	8.6	9.1	8.8	11.0	11.3	11.1	10.8
B2. Primary balance	18.9	8.6	8.0	9.0	8.8	9.3	9.1	11.4	11.9	11.8	11.6
B3. Exports	18.9	10.7	12.9	15.3	14.9	15.6	15.2	19.8	22.1	21.6	20.8
B4. Other flows 2/	18.9	8.6	8.3	9.8	9.5	10.0	9.7	12.8	14.0	13.7	13.2
B5. One-time 30 percent nominal depreciation	18.9	8.6	7.9	8.3	8.1	8.5	8.3	10.5	9.7	9.6	9.3
B6. Combination of B1-B5	18.9	9.5	10.4	11.8	11.5	12.0	11.7	15.8	16.5	16.1	15.6
C. Tailored Tests											
C1. Combined contingent liabilities	18.9	8.6	8.0	9.0	8.8	9.3	9.1	11.3	11.6	11.5	11.1
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**
Debt service-to-revenue ratio											
Baseline	**19.9**	**8.7**	**8.0**	**8.9**	**8.7**	**8.6**	**8.0**	**10.0**	**10.4**	**10.3**	**10.3**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 1/	19.9	8.3	7.2	7.8	7.4	7.1	6.2	7.2	7.1	6.7	6.3
B. Bound Tests											
B1. Real GDP growth	19.9	9.2	8.9	9.9	9.7	9.6	8.9	11.2	11.6	11.5	11.4
B2. Primary balance	19.9	8.7	8.0	9.0	8.9	8.8	8.2	10.4	10.9	11.0	11.0
B3. Exports	19.9	9.1	9.1	10.7	10.5	10.3	9.6	12.6	14.2	14.1	13.9
B4. Other flows 2/	19.9	8.7	8.4	9.8	9.6	9.4	8.8	11.7	12.9	12.7	12.6
B5. One-time 30 percent nominal depreciation	19.9	11.0	10.2	10.6	10.4	10.3	9.5	12.1	11.3	11.3	11.3
B6. Combination of B1-B5	19.9	9.3	9.3	10.5	10.3	10.1	9.4	12.8	13.5	13.3	13.2
C. Tailored Tests											
C1. Combined contingent liabilities	19.9	8.7	8.1	9.1	8.9	8.8	8.2	10.3	10.7	10.6	10.6
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	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**

Sources: Country authorities; and staff estimates and projections.

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

2/ Includes official and private transfers and FDI.

Table 4. Kyrgyz Republic: Sensitivity Analysis for Key Indicators of Public Debt, 2018-28

	Projections										
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
	PV of Debt-to-GDP Ratio										
Baseline	**44.0**	**44.2**	**44.2**	**44.4**	**44.0**	**44.2**	**44.3**	**44.4**	**44.4**	**44.5**	**44.6**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 1/	44	42	41	41	40	40	39	39	39	38	38
B. Bound Tests											
B1. Real GDP growth	44	48	54	57	59	62	65	68	70	72	75
B2. Primary balance	44	47	51	51	50	50	50	50	50	50	49
B3. Exports	44	49	56	56	56	56	56	55	55	54	53
B4. Other flows 2/	44	49	55	55	55	55	55	55	54	53	53
B5. One-time 30 percent nominal depreciation	44	52	49	48	45	43	41	39	37	36	34
B6. Combination of B1-B5	44	45	46	44	43	43	44	44	44	44	44
C. Tailored Tests											
C1. Combined contingent liabilities	44	51	50	50	50	50	50	49	49	49	49
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public debt benchmark	**70**	**70**	**70**	**70**	**70**	**70**	**70**	**70**	**70**	**70**	**70**
	PV of Debt-to-Revenue Ratio										
Baseline	**134.1**	**128.1**	**136.1**	**136.0**	**135.5**	**136.9**	**138.7**	**139.6**	**140.3**	**141.2**	**142.2**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 1/	134	123	127	126	125	124	124	124	124	124	124
B. Bound Tests											
B1. Real GDP growth	134	139	166	174	182	192	203	212	220	228	237
B2. Primary balance	134	137	156	155	154	154	156	156	157	157	158
B3. Exports	134	141	173	172	171	172	174	174	172	171	170
B4. Other flows 2/	134	143	171	170	169	170	172	171	170	169	168
B5. One-time 30 percent nominal depreciation	134	151	151	146	139	134	130	124	119	114	109
B6. Combination of B1-B5	134	132	143	134	133	134	136	137	138	139	140
C. Tailored Tests											
C1. Combined contingent liabilities	134	147	155	154	152	153	155	155	156	156	157
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Debt Service-to-Revenue Ratio										
Baseline	**37.2**	**32.4**	**33.4**	**35.9**	**38.8**	**41.4**	**43.3**	**46.6**	**50.9**	**55.0**	**58.9**
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2018-2038 1/	37	30	32	36	39	42	43	46	49	51	53
B. Bound Tests											
B1. Real GDP growth	37	34	41	52	60	68	74	81	88	95	102
B2. Primary balance	37	32	42	52	51	51	51	53	57	60	64
B3. Exports	37	32	34	37	40	42	44	48	54	58	61
B4. Other flows 2/	37	32	34	37	40	42	44	48	53	57	61
B5. One-time 30 percent nominal depreciation	37	31	33	32	38	41	42	45	49	53	56
B6. Combination of B1-B5	37	32	33	36	38	41	43	46	50	54	58
C. Tailored Tests											
C1. Combined contingent liabilities	37	32	50	49	49	50	50	52	56	59	62
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Sources: Country authorities; and staff estimates and projections.

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

2/ Includes official and private transfers and FDI.

Figure 3. Kyrgyz Republic: Drivers of Debt Dynamics—Baseline Scenario

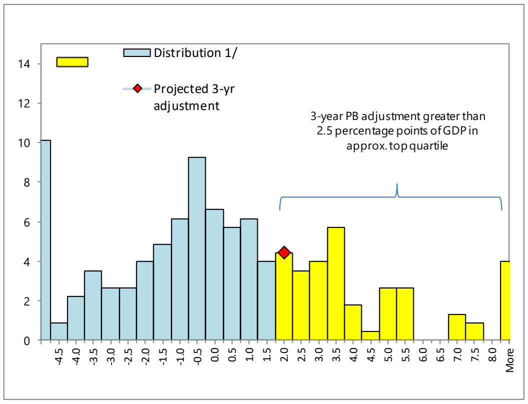
1/ Difference between anticipated and actual contributions on debt ratios.

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.

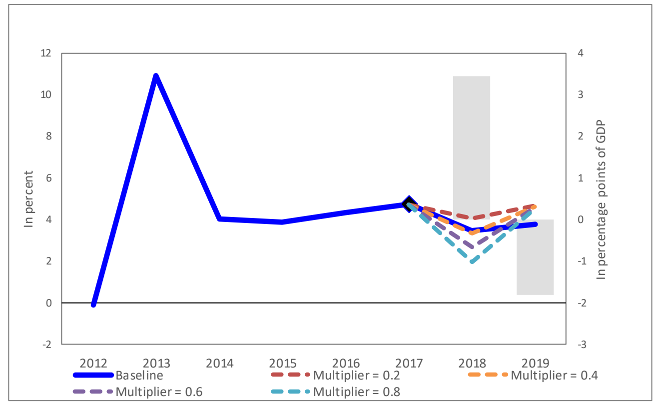
Figure 4. Kyrgyz Republic: Realism Tools

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



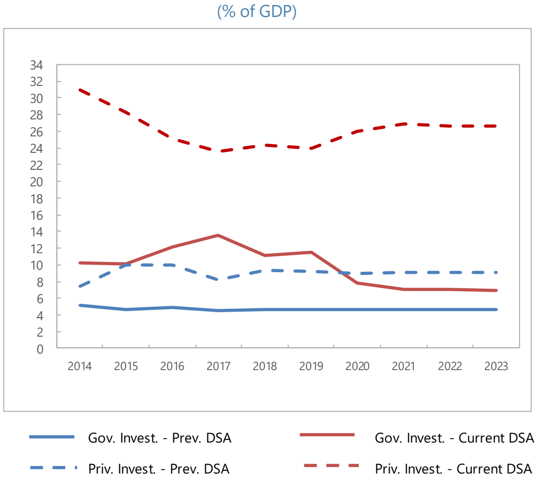
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



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

Public and Private Investment Rates
(% of GDP)



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

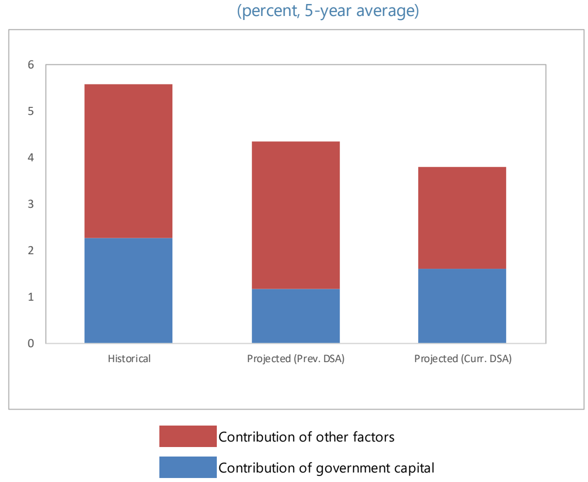


Figure 5. Kyrgyz Republic: Qualification of the Moderate Category, 2018-2028 1/

Sources: Country authorities; and staff estimates and projections.

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