



# KYRGYZ REPUBLIC

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## REQUEST FOR PURCHASE UNDER THE RAPID FINANCING INSTRUMENT AND DISBURSEMENT UNDER THE RAPID CREDIT FACILITY—DEBT SUSTAINABILITY ANALYSIS

Approved By  
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| Kyrgyz Republic<br>Joint Bank-Fund Debt Sustainability Analysis |                   |
|---|-------------------|
| <b>Risk of external debt distress</b>                           | <i>Moderate</i>   |
| <b>Overall risk of debt distress</b>                            | <i>Moderate</i>   |
| <b>Granularity in the risk rating</b>                           | <i>Some space</i> |
| <b>Application of judgment</b>                                  | <i>No</i>         |

*The debt sustainability analysis (DSA) indicates that Kyrgyz Republic remains at moderate risk of debt distress, with some space, for both external debt and overall public debt, despite the expected spike of total public debt to 66 percent of GDP in 2020 in reaction to the outbreak of the COVID-19 pandemic and the depreciation of KGS vis-à-vis the US dollar.<sup>1</sup> This assessment is grounded on the projection that the authorities will strictly adhere to their fiscal rule of keeping the budget deficit at no more than 3 percent of GDP once the economy has fully recovered from the current crisis. The Kyrgyz Republic's current debt-carrying capacity is assessed as strong. However, the debt outlook remains vulnerable to shocks to real GDP growth and exports. Remaining cautious when contracting and guaranteeing new debt, including by avoiding non-concessional financing, and improving public investment management would help reducing these vulnerabilities.*

<sup>1</sup> This DSA analysis is based on the latest framework for DSA for low-income countries. See IMF, 2018, [Guidance Note on the Bank-Fund Debt Sustainability Framework for Low-Income Countries](#).

## PUBLIC DEBT COVERAGE

### 1. The debt coverage is limited to 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 issued by the central government. Local governments have no external debt and insignificant domestic debt. The social security fund has no debt. State-owned enterprises (SOEs) have no external debt and limited short-term domestic borrowing from the banking sector. Most of SOEs borrowing is from the government. In addition, the government has no outstanding guarantee of any debt as the budget code prevents the state from guaranteeing debt of 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. 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)<sup>2</sup> 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 |  | Sub-sectors covered |
|---------------------------------|--|---------------------|
| 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**

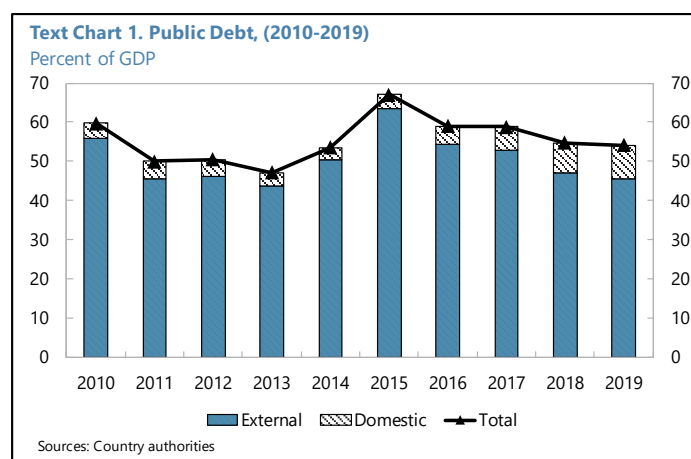
| 1 The country's coverage of public debt   | The central, state, and local governments, central bank, government-guaranteed debt |                       |  |
|---|---|-----------------------|--|
|   | Default   | Used for the analysis | Reasons for deviations from the default settings |
| 2 Other elements of the general government not captured in 1.                   | 0 percent of GDP  | 0.0                   |  |
| 3 SoE's debt (guaranteed and not guaranteed by the government) 1/               | 2 percent of GDP  | 2.0                   |  |
| 4 PPP   | 35 percent of PPP stock   | 0.0                   |  |
| 5 Financial market (the default value of 5 percent of GDP is the minimum value) | 5 percent of GDP  | 5.0                   |  |
| Total (2+3+4+5) (in percent of GDP)   |   | 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%.

<sup>2</sup> IMF Country Report No. 19/208, Kyrgyz Republic—Staff Report for 2019 Article IV Consultation, 134.

## BACKGROUND

2. **Overall public debt has been on a downward trajectory for the last four years due to the decline in external debt** (Text Chart 1). The substantial depreciation of KGS against the US\$ during 2014–15 caused public debt to increase to 67 percent of GDP in 2015. The appreciation of KGS against the US\$ since 2015, the write-off of Russian debt in 2018 (\$240 million in 2018, or 3 percent of GDP), and the low general government budget deficit in 2018 (0.6 percent of GDP) and 2019 (0.1 percent of GDP) resulted in a decline of total public debt to 54.1 percent of GDP in 2019. Domestic debt has increased from 3.6 percent in 2015 to 8.7 percent of GDP in 2019, accounting for about 16 percent of total debt. Domestic public debt is mostly held by commercial banks (50 percent) and the social security fund (30 percent).



## UNDERLYING ASSUMPTIONS

3. **The macroeconomic assumptions underlying this debt sustainability analysis (DSA) have deteriorated in the short term compared to the previous DSA owing to the outbreak of Coronavirus (COVID-19)** (Text Table 3):

|  | 2019 | 2020  | 2021  | 2022 | 2023 | 2024 | 2025 |
|--|------|-------|-------|------|------|------|------|
| Real GDP growth (percent)                |      |       |       |      |      |      |      |
| Current DSA                              | 4.5  | 0.4   | 6.0   | 4.3  | 4.0  | 4.1  | 4.1  |
| Previous DSA <sup>1</sup>                | 3.8  | 3.4   | 3.8   | 4.6  | 3.4  | 3.4  | 4.0  |
| Overall fiscal balance (percent of GDP)  |      |       |       |      |      |      |      |
| Current DSA <sup>2</sup>                 | -0.1 | -7.8  | -4.8  | -3.0 | -3.0 | -3.0 | -3.0 |
| Previous DSA <sup>1</sup>                | -3.3 | -3.0  | -3.0  | -3.0 | -3.0 | -3.0 | -3.0 |
| Current account balance (percent of GDP) |      |       |       |      |      |      |      |
| Current DSA                              | -9.2 | -14.5 | -10.0 | -7.5 | -7.3 | -7.1 | -7.0 |
| Previous DSA <sup>1</sup>                | -9.6 | -7.7  | -7.1  | -6.8 | -8.4 | -8.7 | -8.5 |
| PIP Disbursements (millions of US\$)     |      |       |       |      |      |      |      |
| Current DSA                              | 268  | 362   | 415   | 395  | 416  | 438  | 464  |
| Previous DSA <sup>1</sup>                | 414  | 351   | 409   | 439  | 463  | 487  | 515  |

Sources: Kyrgyz authorities and IMF staff estimates.  
1/ IMF Country Report No. 19/208, Kyrgyz Republic—2019 Article IV Consultation Staff Report--Debt Sustainability Analysis.  
2/ Including onlending to energy SOEs.

- **Growth and inflation.** Projections in 2020 have substantially worsened due to the expected economic disruption during the first semester of 2020 on the back of the outbreak of COVID-19, the closure of the border with China, and the 20 percent depreciation of KGS vis-à-vis the USD dollar since the beginning of the year. Economic growth is expected to rebound in 2021, and come back to potential, which is estimated at about 4 percent over the medium term. Inflation is projected to spike to about 11 percent in the short term, but then stay at the lower end of the authorities' target range (5 to 7 percent).
- **Fiscal policy.** The fiscal deficit is expected to widen to 7.8 percent of GDP in 2020 but then gradually decrease to 3 percent of GDP already in 2022, in line with the fiscal rule which is still pending approval of the parliament. The debt will spike to 66 percent of GDP in 2020 and then stabilize at about 60 percent of GDP in the medium-to long-term.
- **External sector.** The current account deficit is expected to widen to about 14.5 percent of GDP in 2020, owing to a weakening of tourism and remittances, and then to be reduced to 7 percent of GDP in the short and medium term owing to the depreciation of the KGS in 2020 that is supposed to be permanent. The current account is expected to be financed by foreign direct investment (FDI) and aid.
- **Financing assumptions.** The new external borrowing is assumed to remain on concessional terms as the country is expected to stay a low-income country over the projection horizon. The size of domestic debt on market terms is expected to double from 8 to 16 percent of GDP over the projection horizon in sync with the development of the domestic financial market.

#### 4. **Realism tools suggest that the baseline projections are reasonable:**

- *Drivers of debt dynamics* (Figure 3). A comparison with the distribution of past forecast errors for low-income countries (LICs) shows that the unexpected changes to Kyrgyz Republic's external debt are below the interquartile range due to the large depreciation of KGS vis-à-vis the US\$ during 2014-16, while the unexpected changes to public debts are within the interquartile range for both public and publicly guaranteed (PPG) external debt for LICs.
- *Realism of planned fiscal adjustment* (Figure 4). The projected 3-year adjustment in the primary balance is near the median and well below the top quartile of the distribution of the past adjustments to primary fiscal deficit of the sample of LICs under an IMF program.
- *Consistency between fiscal adjustment and growth* (Figure 4). The growth projection for 2020 is below the growth path suggested by a fiscal multiplier of 0.2 due to the current economic shock caused by COVID-19 and the depreciation of KGS.
- *Consistency between public investment and growth* (Figure 4). The contribution of public investment to growth is slightly higher than the previous DSA, but still below historical contribution.

## COUNTRY CLASSIFICATION AND STRESS TESTS

5. **The Kyrgyz Republic's debt-carrying capacity is assessed as strong** (Text Table 4). The country's Composite Indicator (CI) index<sup>3</sup> is 3.19, above the threshold of 3.05 for strong debt-carrying capacity. The CI is calculated for the last two IMF World Economic Outlook (WEO) vintages (October 2019 and April 2019) and the World Bank's 2018 CPIA. This translates into the following external debt burden thresholds: 240 percent of the present value (PV) of external debt-to-exports ratio, 55 percent of the PV of external debt-to-GDP, 21 percent of the PV of external debt service-to-exports, and 23 percent of the PV of debt service-to-revenue. The total public debt burden threshold is 70 percent of the PV of total public debt-to-GDP ratio.

| <b>Text Table 4. Kyrgyz Republic: Debt-Carrying Capacity and Relevant Indicative Thresholds</b> |   |  |   |
|---|---|--|---|
| <b>Debt Carrying Capacity</b>   | <b>Strong</b>                           |  |   |
| Final   | Classification based on current vintage | Classification based on the previous vintage | Classification based on the two previous vintages |
| Strong  | Strong<br>3.19                          | Strong<br>3.19                               | Strong<br>3.19                                    |
| <b>EXTERNAL debt burden thresholds</b>  | <b>Strong</b>                           |  |   |
| <b>PV of debt in % of</b>   |   |  |   |
| <b>Exports</b>  | 240                                     |  |   |
| <b>GDP</b>  | 55                                      |  |   |
| <b>Debt service in % of</b>   |   |  |   |
| <b>Exports</b>  | 21                                      |  |   |
| <b>Revenue</b>  | 23                                      |  |   |
| <b>TOTAL public debt benchmark</b>  | <b>Strong</b>                           |  |   |
| <b>PV of total public debt in percent of GDP</b>  | 70                                      |  |   |

## EXTERNAL DSA

6. **The risk of external debt distress in Kyrgyz Republic is assessed to be moderate** (Figure 1, and Tables 1 and 3). Total external debt stood at about 76 percent of GDP in 2019, of which 46 percent of GDP is external Public and Publicly Guaranteed (PPG) debt and the balance of 31 percent of GDP is private external debt. It is projected to spike to about 88 percent of GDP in 2020, on the back of 20 percent depreciation of the KGS vis-à-vis the US dollar. However, it will be

<sup>3</sup> The CI is a function of the World Bank's Country Policy and Institutional Assessment (CPIA) score, 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](#).

on a downward trajectory to about 75 percent of GDP over the long term, driven by decline in PPG external debt owing to the moderate shift from external to domestic financing expected over the projection horizon (f13). Private external debt is expected to remain at about 30 percent of GDP. The PV of PPG external debt is projected to jump to 38 percent of GDP, and then declines to about 31 percent of GDP at the end of projection horizon, well below the sustainability threshold of 55 percent of GDP. The PV of debt to exports burden indicator breaches its threshold for three years (2022-24) under exports shock scenario, suggesting a moderate risk of debt distress. The debt services to revenue ratio is stable over the medium term, and well below its threshold with a shock to exports, the most extreme shock. The resilience of the external debt risk assessment to all the standardized stress tests, i.e. the downside scenarios on growth, primary balance, depreciation, and combined shocks (alternative scenarios B1 to B5 in Table 3), indicate that the sustainability of the external debt would remain resilient to a more severe impact of the COVID-19 crisis than assumed in this analysis.

## PUBLIC DSA

7. **The risk of total public debt distress is assessed to be moderate** (Figure 2 and Tables 2 and 4). The public debt outlook in 2020 has deteriorated since the last DSA, driven by the impact of COVID-19 on the economy and the KGS depreciation (Text Table 5). Higher primary deficit, depreciation of KGS and lower growth will increase public debt by 12 percent to 66 percent of GDP in 2020. Total public debt is expected to hover around 61 percent of GDP over the medium term. The PV of total public debt is projected to stay between 40 and 50 percent of GDP, well below the sustainability threshold of 70 percent of GDP. Total public debt remains vulnerable to shocks, especially to real GDP growth and exports. Under the shock scenario to real GDP growth, the PV of debt-to-GDP ratio breaches its sustainability threshold in 2026 and remains above the threshold until the end of the projection horizon. The resilience of public debt risk assessment to all the standardized stress test except the one of prolonged lower growth (alternative scenario B1 in Table 4) also indicate that the sustainability of the public debt would remain resilient to a more severe impact of the COVID-19 crisis than assumed in this analysis.

**Text Table 5. Kyrgyz Republic: Comparison of Debt Ratio**

(In percent of GDP)

|                                | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | Long Term<br>(2030) |
|--------------------------------|------|------|------|------|------|------|------|---------------------|
| PPG external debt-to-GDP ratio |      |      |      |      |      |      |      |                     |
| Current DSA                    | 45.5 | 56.5 | 53.5 | 51.8 | 50.5 | 48.9 | 47.6 | 42.0                |
| Previous DSA <sup>1</sup>      | 47.9 | 46.7 | 45.4 | 44.0 | 43.2 | 42.7 | 41.4 | 36.4                |
| Public debt-to-GDP ratio       |      |      |      |      |      |      |      |                     |
| Current DSA                    | 54.1 | 65.9 | 64.8 | 64.0 | 62.9 | 61.9 | 60.9 | 59.6                |
| Previous DSA <sup>1</sup>      | 56.1 | 55.5 | 55.3 | 54.5 | 54.4 | 54.4 | 54.3 | 54.0                |

Sources: Kyrgyz authorities and IMF staff estimates.

1/ IMF Country Report No. 19/208, Kyrgyz Republic—2019 Article IV Consultation Staff Report--Debt Sustainability Analysis.

## RISK RATING AND VULNERABILITIES

8. **The DSA indicates that overall public debt and external debt remain at a moderate risk of debt distress.** External debt is still sensitive to exports shock. Total public debt is vulnerable to a real GDP growth shock and breaches the PV of debt-to-GDP ratio threshold under such a shock.

9. **The Kyrgyz Republic is assessed to have some space to absorb shocks** (Figure 5). The external PPG debt outlook remains vulnerable to large external shocks, to a decline in exports and other flows (official and private transfers and foreign direct investment), a 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.

10. **The authorities need to maintain fiscal discipline, remain cautious when contracting or guaranteeing new debt and continue to improve the business climate.** To keep public debt sustainable, the authorities need to reduce the deficit to three percent of GDP once the economy recovers from the COVID-19 crisis and rigorously adhere to the fiscal rule being considered by Parliament thereafter. 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 both public debt management, while keeping new borrowing on concessional terms, and public investment management, to ensure that potential gains from externally financed public investment projects are fully realized. Moreover, the authorities should continue to improve the business environment to maintain and develop the country's export potential over the medium and 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.

Table 1. Kyrgyz Republic: External Debt Sustainability Framework, Baseline Scenario, 2017-2040

|  | (In percent of GDP, unless otherwise indicated) |             |             |              |              |              |              |              |             |             |             | Average 8/  |             |
|--|---|-------------|-------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|
|  | Actual  |             |             | Projections  |              |              |              |              |             |             |             | Historical  | Projections |
|  | 2017  | 2018        | 2019        | 2020         | 2021         | 2022         | 2023         | 2024         | 2025        | 2030        | 2040        |             |             |
| <b>External debt (nominal) 1/</b>                                | <b>81.1</b>                                     | <b>76.5</b> | <b>76.4</b> | <b>87.5</b>  | <b>84.5</b>  | <b>82.8</b>  | <b>81.5</b>  | <b>79.8</b>  | <b>78.6</b> | <b>73.0</b> | <b>74.7</b> | <b>81.3</b> | <b>79.1</b> |
| <i>of which: public and publicly guaranteed (PPG)</i>            | <i>53.0</i>                                     | <i>47.0</i> | <i>45.5</i> | <i>56.5</i>  | <i>53.5</i>  | <i>51.8</i>  | <i>50.5</i>  | <i>48.9</i>  | <i>47.6</i> | <i>42.0</i> | <i>43.8</i> | <i>50.5</i> | <i>48.1</i> |
| <b>Change in external debt</b>                                   | <b>-6.8</b>                                     | <b>-4.6</b> | <b>-0.1</b> | <b>11.1</b>  | <b>-3.0</b>  | <b>-1.7</b>  | <b>-1.3</b>  | <b>-1.6</b>  | <b>-1.2</b> | <b>-0.9</b> | <b>0.6</b>  |             |             |
| <b>Identified net debt-creating flows</b>                        | <b>-2.9</b>                                     | <b>4.8</b>  | <b>5.0</b>  | <b>11.3</b>  | <b>0.1</b>   | <b>-1.0</b>  | <b>-0.8</b>  | <b>-0.8</b>  | <b>-2.2</b> | <b>-1.4</b> | <b>-0.5</b> | <b>0.8</b>  | <b>0.0</b>  |
| <b>Non-interest current account deficit</b>                      | <b>5.5</b>                                      | <b>11.4</b> | <b>8.5</b>  | <b>13.8</b>  | <b>9.3</b>   | <b>6.8</b>   | <b>6.6</b>   | <b>6.5</b>   | <b>6.3</b>  | <b>6.4</b>  | <b>6.4</b>  | <b>11.0</b> | <b>7.5</b>  |
| Deficit in balance of goods and services                         | 32.1  | 38.3        | 35.8        | 34.0         | 30.4         | 27.3         | 26.7         | 26.2         | 25.8        | 26.2        | 28.9        | 35.8        | 27.4        |
| Exports  | 34.2  | 33.2        | 33.3        | 29.7         | 32.1         | 34.1         | 34.1         | 34.2         | 34.6        | 38.5        | 58.0        |             |             |
| Imports  | 66.4  | 71.5        | 69.1        | 63.8         | 62.4         | 61.4         | 60.9         | 60.4         | 60.4        | 64.8        | 86.9        |             |             |
| Net current transfers (negative = inflow)                        | -30.8   | -29.3       | -29.9       | -23.2        | -24.0        | -23.5        | -23.1        | -22.6        | -22.4       | -22.3       | -24.0       | -29.2       | -22.7       |
| of which: official   | -1.4  | -0.6        | -1.4        | 0.0          | -0.4         | -0.4         | -0.4         | -0.4         | -0.4        | 0.0         | 0.0         |             |             |
| Other current account flows (negative = net inflow)              | 4.2   | 2.4         | 2.7         | 3.0          | 2.9          | 3.1          | 3.0          | 2.9          | 2.9         | 2.5         | 1.5         | 4.4         | 2.8         |
| <b>Net FDI (negative = inflow)</b>                               | <b>1.0</b>                                      | <b>-1.7</b> | <b>-2.5</b> | <b>-2.9</b>  | <b>-5.0</b>  | <b>-5.1</b>  | <b>-4.9</b>  | <b>-4.8</b>  | <b>-6.1</b> | <b>-5.6</b> | <b>-4.8</b> | <b>-6.3</b> | <b>-5.2</b> |
| <b>Endogenous debt dynamics 2/</b>                               | <b>-9.5</b>                                     | <b>-4.9</b> | <b>-1.0</b> | <b>0.4</b>   | <b>-4.2</b>  | <b>-2.7</b>  | <b>-2.5</b>  | <b>-2.5</b>  | <b>-2.4</b> | <b>-2.2</b> | <b>-2.2</b> |             |             |
| Contribution from nominal interest rate                          | 0.7   | 0.6         | 0.7         | 0.7          | 0.7          | 0.7          | 0.7          | 0.7          | 0.7         | 0.6         | 0.7         |             |             |
| Contribution from real GDP growth                                | -3.7  | -2.6        | -3.3        | -0.3         | -5.0         | -3.4         | -3.2         | -3.2         | -3.1        | -2.8        | -2.9        |             |             |
| Contribution from price and exchange rate changes                | -6.5  | -3.0        | 1.7         | ...          | ...          | ...          | ...          | ...          | ...         | ...         | ...         |             |             |
| <b>Residual 3/</b>   | <b>-3.9</b>                                     | <b>-9.4</b> | <b>-5.1</b> | <b>-0.2</b>  | <b>-3.1</b>  | <b>-0.8</b>  | <b>-0.5</b>  | <b>-0.8</b>  | <b>1.0</b>  | <b>0.5</b>  | <b>1.1</b>  | <b>-2.0</b> | <b>-0.3</b> |
| <i>of which: exceptional financing</i>                           | <i>-0.5</i>                                     | <i>-2.9</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>  |             |             |
| <b>Sustainability indicators</b>                                 |   |             |             |              |              |              |              |              |             |             |             |             |             |
| <b>PV of PPG external debt-to-GDP ratio</b>                      | ...   | ...         | <b>32.4</b> | <b>38.1</b>  | <b>37.4</b>  | <b>36.7</b>  | <b>35.9</b>  | <b>34.8</b>  | <b>34.0</b> | <b>29.3</b> | <b>30.7</b> |             |             |
| <b>PV of PPG external debt-to-exports ratio</b>                  | ...   | ...         | <b>97.2</b> | <b>128.2</b> | <b>116.7</b> | <b>107.7</b> | <b>105.3</b> | <b>101.6</b> | <b>98.3</b> | <b>76.0</b> | <b>52.9</b> |             |             |
| <b>PPG debt service-to-exports ratio</b>                         | <b>6.1</b>                                      | <b>14.4</b> | <b>-0.4</b> | <b>9.6</b>   | <b>8.1</b>   | <b>8.5</b>   | <b>8.3</b>   | <b>9.2</b>   | <b>8.2</b>  | <b>8.4</b>  | <b>4.2</b>  |             |             |
| <b>PPG debt service-to-revenue ratio</b>                         | <b>6.8</b>                                      | <b>15.5</b> | <b>-0.4</b> | <b>10.4</b>  | <b>9.1</b>   | <b>9.8</b>   | <b>9.5</b>   | <b>10.5</b>  | <b>9.3</b>  | <b>10.7</b> | <b>8.1</b>  |             |             |
| Gross external financing need (Million of U.S. dollars)          | 1049.9  | 1530.2      | 795.4       | 1473.4       | 958.3        | 831.3        | 869.4        | 1046.7       | 962.7       | 1667.6      | 2426.9      |             |             |
| <b>Key macroeconomic assumptions</b>                             |   |             |             |              |              |              |              |              |             |             |             |             |             |
| Real GDP growth (in percent)                                     | 4.7   | 3.5         | 4.5         | 0.4          | 6.0          | 4.3          | 4.0          | 4.1          | 4.1         | 4.0         | 4.0         | <b>4.1</b>  | <b>3.9</b>  |
| GDP deflator in US dollar terms (change in percent)              | 7.9   | 3.8         | -2.1        | -5.2         | 0.1          | 1.3          | 1.9          | 1.9          | 1.9         | 1.0         | -0.5        | <b>2.3</b>  | <b>0.7</b>  |
| Effective interest rate (percent) 4/                             | 0.8   | 0.9         | 0.9         | 0.9          | 0.9          | 0.9          | 0.9          | 0.9          | 0.9         | 0.9         | 0.9         | <b>0.8</b>  | <b>0.9</b>  |
| Growth of exports of G&S (US dollar terms, in percent)           | 7.7   | 4.1         | 2.6         | -15.0        | 14.4         | 12.3         | 6.1          | 6.4          | 7.2         | 8.3         | 10.6        | <b>3.1</b>  | <b>6.3</b>  |
| Growth of imports of G&S (US dollar terms, in percent)           | 6.8   | 15.6        | -1.2        | -12.1        | 3.9          | 3.9          | 5.1          | 5.3          | 6.1         | 7.0         | 9.0         | <b>6.3</b>  | <b>4.1</b>  |
| Grant element of new public sector borrowing (in percent)        | ...   | ...         | ...         | 33.5         | 36.9         | 36.7         | 36.6         | 36.5         | 36.1        | 35.4        | 34.7        | ...         | <b>35.9</b> |
| Government revenues (excluding grants, in percent of GDP)        | 30.7  | 30.8        | 31.8        | 27.6         | 28.5         | 29.4         | 29.7         | 30.0         | 30.3        | 30.5        | 29.9        | <b>31.3</b> | <b>29.7</b> |
| Aid flows (in Million of US dollars) 5/                          | 195.6   | 137.4       | 190.1       | 347.4        | 290.3        | 248.0        | 258.3        | 267.1        | 275.9       | 282.4       | 405.8       |             |             |
| Grant-equivalent financing (in percent of GDP) 6/                | ...   | ...         | ...         | 3.7          | 2.9          | 2.3          | 2.3          | 2.2          | 2.2         | 1.8         | 1.8         | ...         | <b>2.2</b>  |
| Grant-equivalent financing (in percent of external financing) 6/ | ...   | ...         | ...         | 41.3         | 55.8         | 48.8         | 48.9         | 48.8         | 48.2        | 42.9        | 42.9        | ...         | <b>46.1</b> |
| Nominal GDP (Million of US dollars)                              | 7,703   | 8,271       | 8,455       | 8,052        | 8,546        | 9,026        | 9,568        | 10,149       | 10,768      | 13,872      | 22,113      |             |             |
| Nominal dollar GDP growth  | 13.1  | 7.4         | 2.2         | -4.8         | 6.1          | 5.6          | 6.0          | 6.1          | 6.1         | 5.0         | 3.5         | <b>6.5</b>  | <b>4.6</b>  |
| <b>Memorandum items:</b>   |   |             |             |              |              |              |              |              |             |             |             |             |             |
| PV of external debt 7/   | ...   | ...         | 63.4        | 69.1         | 68.4         | 67.7         | 66.9         | 65.8         | 64.9        | 60.3        | 61.7        |             |             |
| In percent of exports  | ...   | ...         | 190.2       | 232.3        | 213.2        | 198.6        | 196.0        | 192.1        | 187.9       | 156.4       | 106.3       |             |             |
| Total external debt service-to-exports ratio                     | 20.7  | 26.5        | 10.3        | 24.8         | 21.4         | 21.8         | 21.7         | 25.4         | 25.3        | 29.1        | 16.0        |             |             |
| PV of PPG external debt (in Million of US dollars)               | ...   | ...         | 2737.9      | 3070.7       | 3197.9       | 3313.9       | 3437.3       | 3529.0       | 3656.8      | 4063.5      | 6789.9      |             |             |
| (Pvt-Pvt-1)/GDPt-1 (in percent)                                  | ...   | ...         | ...         | 3.9          | 1.6          | 1.4          | 1.4          | 1.0          | 1.3         | 0.7         | 1.4         |             |             |
| Non-interest current account deficit that stabilizes debt ratio  | 12.4  | 16.0        | 8.6         | 2.7          | 12.3         | 8.6          | 7.9          | 8.1          | 7.6         | 7.3         | 5.8         |             |             |

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as  $[r - g - p(1+g) + \epsilon\alpha(1+r)] / (1+g+p+gp)$  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,  $\epsilon$  = nominal appreciation of the local currency, and  $\alpha$  = 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.

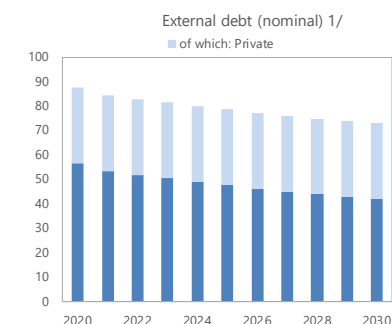
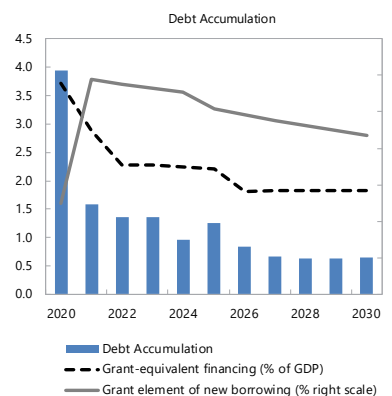
5/ Defined as grants, concessional loans, and debt relief.

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.

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





**Table 2. Kyrgyz Republic: Public Sector Debt Sustainability Framework, Baseline Scenario, 2017-2040**  
(In percent of GDP, unless otherwise indicated)

|  | Actual |      |       | Projections |       |       |       |       |       |       |       | Average 6/ |             |
|--|--------|------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|------------|-------------|
|  | 2017   | 2018 | 2019  | 2020        | 2021  | 2022  | 2023  | 2024  | 2025  | 2030  | 2040  | Historical | Projections |
| Public sector debt 1/<br>of which: external debt                       | 58.8   | 54.8 | 54.1  | 65.9        | 64.8  | 64.0  | 62.9  | 61.9  | 60.9  | 59.6  | 59.7  | 55.5       | 61.8        |
|  | 53.0   | 47.0 | 45.5  | 56.5        | 53.5  | 51.8  | 50.5  | 48.9  | 47.6  | 42.0  | 43.8  | 50.5       | 48.1        |
| Change in public sector debt   | -0.3   | -4.0 | -0.7  | 11.8        | -1.2  | -0.8  | -1.0  | -1.0  | -1.0  | -0.2  | 0.7   |            |             |
| Identified debt-creating flows   | -3.2   | -5.7 | -2.2  | 7.6         | 0.4   | -0.9  | -0.6  | -0.6  | -0.6  | -0.1  | -0.1  | -0.4       | 0.4         |
| Primary deficit  | 2.9    | -0.4 | -0.8  | 6.4         | 3.6   | 1.7   | 1.7   | 1.7   | 1.7   | 1.6   | 1.6   | 2.8        | 2.3         |
| Revenue and grants   | 33.3   | 32.5 | 34.0  | 28.6        | 30.1  | 30.3  | 30.6  | 30.9  | 31.1  | 30.9  | 30.5  | 33.7       | 30.5        |
| of which: grants   | 2.5    | 1.7  | 2.2   | 1.1         | 1.6   | 0.9   | 0.9   | 0.9   | 0.9   | 0.5   | 0.5   |            |             |
| Primary (noninterest) expenditure                                      | 36.2   | 32.0 | 33.3  | 35.1        | 33.6  | 32.0  | 32.3  | 32.6  | 32.8  | 32.5  | 32.0  | 36.5       | 32.8        |
| Automatic debt dynamics  | -5.7   | -2.6 | -1.4  | 1.1         | -3.1  | -2.6  | -2.3  | -2.3  | -2.2  | -1.7  | -1.6  |            |             |
| Contribution from interest rate/growth differential                    | -2.8   | -2.7 | -3.5  | 1.1         | -3.1  | -2.6  | -2.3  | -2.3  | -2.2  | -1.7  | -1.6  |            |             |
| of which: contribution from average real interest rate                 | -0.1   | -0.8 | -1.1  | 1.4         | 0.6   | 0.1   | 0.2   | 0.2   | 0.2   | 0.6   | 0.6   |            |             |
| of which: contribution from real GDP growth                            | -2.7   | -2.0 | -2.3  | -0.2        | -3.7  | -2.7  | -2.5  | -2.5  | -2.5  | -2.3  | -2.3  |            |             |
| Contribution from real exchange rate depreciation                      | -2.9   | 0.1  | 2.1   | ...         | ...   | ...   | ...   | ...   | ...   | ...   | ...   |            |             |
| Other identified debt-creating flows                                   | -0.4   | -2.7 | -0.1  | 0.0         | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | -0.3       | 0.0         |
| Privatization receipts (negative)                                      | 0.0    | 0.2  | -0.1  | 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   | 0.0   | 0.0   |            |             |
| Debt relief (HIPC and other)   | -0.4   | -2.9 | 0.0   | 0.0         | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |            |             |
| Other debt creating or reducing flow (please specify)                  | 0.0    | 0.0  | 0.0   | 0.0         | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |            |             |
| Residual   | 2.9    | 1.8  | 1.5   | 4.2         | -1.6  | 0.1   | -0.4  | -0.4  | -0.5  | -0.1  | 0.8   | 0.0        | 0.1         |
| <b>Sustainability indicators</b>                                       |        |      |       |             |       |       |       |       |       |       |       |            |             |
| PV of public debt-to-GDP ratio 2/                                      | ...    | ...  | 41.0  | 49.6        | 49.6  | 49.4  | 48.9  | 48.4  | 47.7  | 47.3  | 47.4  |            |             |
| PV of public debt-to-revenue and grants ratio                          | ...    | ...  | 120.5 | 173.3       | 164.9 | 163.1 | 159.7 | 156.4 | 153.3 | 153.0 | 155.5 |            |             |
| Debt service-to-revenue and grants ratio 3/                            | 6.3    | 14.7 | -0.4  | 40.0        | 38.8  | 46.6  | 49.3  | 50.7  | 51.3  | 66.1  | 60.7  |            |             |
| Gross financing need 4/  | 4.6    | 1.7  | -1.0  | 17.9        | 15.2  | 15.9  | 16.8  | 17.4  | 17.6  | 22.0  | 20.0  |            |             |
| <b>Key macroeconomic and fiscal assumptions</b>                        |        |      |       |             |       |       |       |       |       |       |       |            |             |
| Real GDP growth (in percent)   | 4.7    | 3.5  | 4.5   | 0.4         | 6.0   | 4.3   | 4.0   | 4.1   | 4.1   | 4.0   | 4.0   | 4.1        | 3.9         |
| Average nominal interest rate on external debt (in percent)            | 1.3    | 1.3  | 1.5   | 1.5         | 1.5   | 1.4   | 1.4   | 1.4   | 1.5   | 1.5   | 1.7   | 1.3        | 1.5         |
| Average real interest rate on domestic debt (in percent)               | -6.0   | -3.6 | 0.8   | -0.8        | 1.7   | 4.4   | 4.8   | 4.8   | 4.8   | 5.8   | 5.8   | -6.4       | 4.4         |
| Real exchange rate depreciation (in percent, + indicates depreciation) | -5.5   | 0.2  | 4.8   | ...         | ...   | ...   | ...   | ...   | ...   | ...   | ...   | -1.1       | ...         |
| Inflation rate (GDP deflator, in percent)                              | 6.3    | 3.7  | -0.8  | 9.6         | 8.1   | 5.3   | 5.0   | 5.0   | 5.0   | 4.0   | 4.0   | 7.2        | 5.3         |
| Growth of real primary spending (deflated by GDP deflator, in percent) | -0.4   | -8.3 | 8.5   | 5.9         | 1.6   | -0.6  | 4.9   | 5.0   | 4.8   | 4.0   | -0.1  | 4.0        | 3.7         |
| Primary deficit that stabilizes the debt-to-GDP ratio 5/               | 3.2    | 3.5  | -0.1  | -5.3        | 4.7   | 2.5   | 2.7   | 2.7   | 2.7   | 1.8   | 0.8   | 3.2        | 1.8         |
| 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   |            |             |

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.

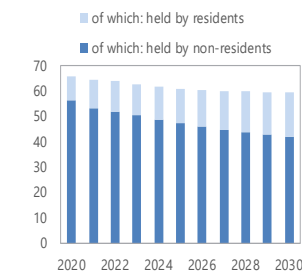
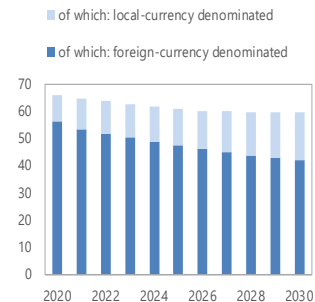
4/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period and other debt creating/reducing flows.

5/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio (-): a primary surplus, which would stabilize the debt ratio only in the year in question.

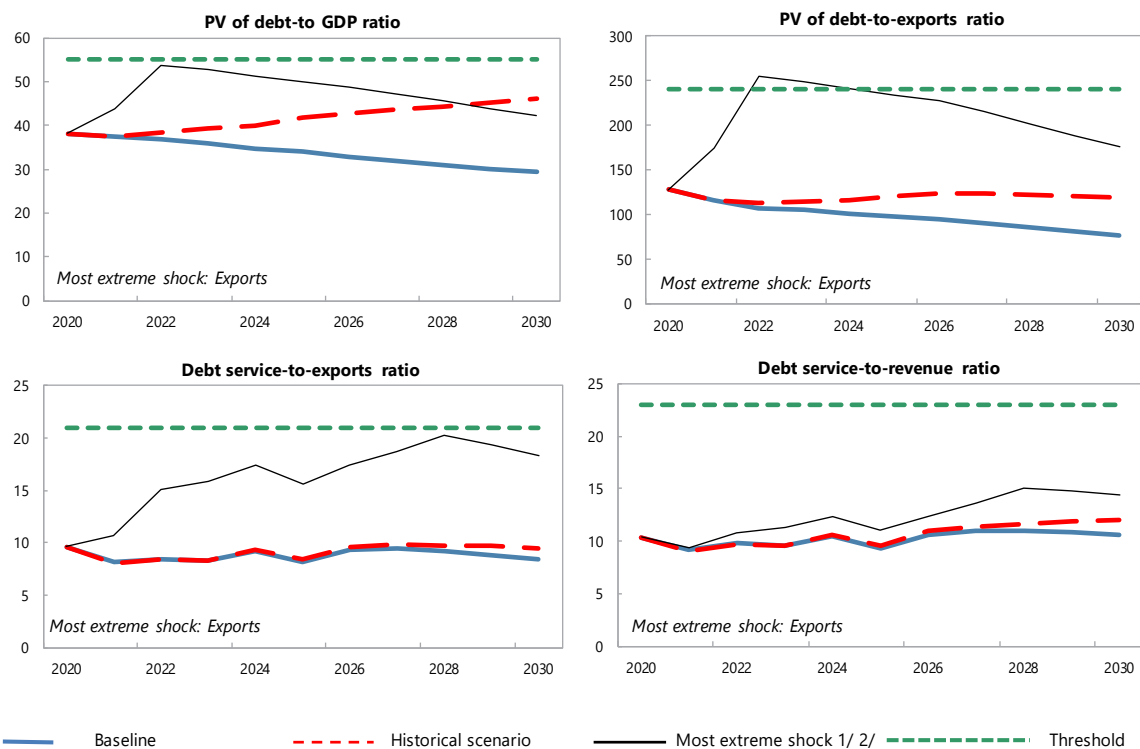
6/ Historical averages are generally derived over the past 10 years, subject to data availability, whereas projections averages are over the first year of projection and the next 10 years.

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

Public sector debt 1/



**Figure 1. Kyrgyz Republic: Indicators of Public and Publicly Guaranteed External Debt under Alternative Scenarios, 2020–2030**



| Customization of Default Settings |      |              |
|-----------------------------------|------|--------------|
|                                   | Size | Interactions |
| <b>Tailored Stress</b>            |      |              |
| Combined CL                       | No   |              |
| Natural disaster                  | n.a. | n.a.         |
| Commodity price                   | 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 on additional financing needs resulting from the stress tests* |         |              |
|--|---------|--------------|
|  | Default | User defined |
| <b>Shares of marginal debt</b>   |         |              |
| External PPG MLT debt  | 100%    |              |
| <b>Terms of marginal debt</b>  |         |              |
| Avg. nominal interest rate on new borrowing in USD                                   | 1.7%    | 1.7%         |
| USD Discount rate  | 5.0%    | 5.0%         |
| Avg. maturity (incl. grace period)   | 27      | 27           |
| Avg. grace period  | 5       | 5            |

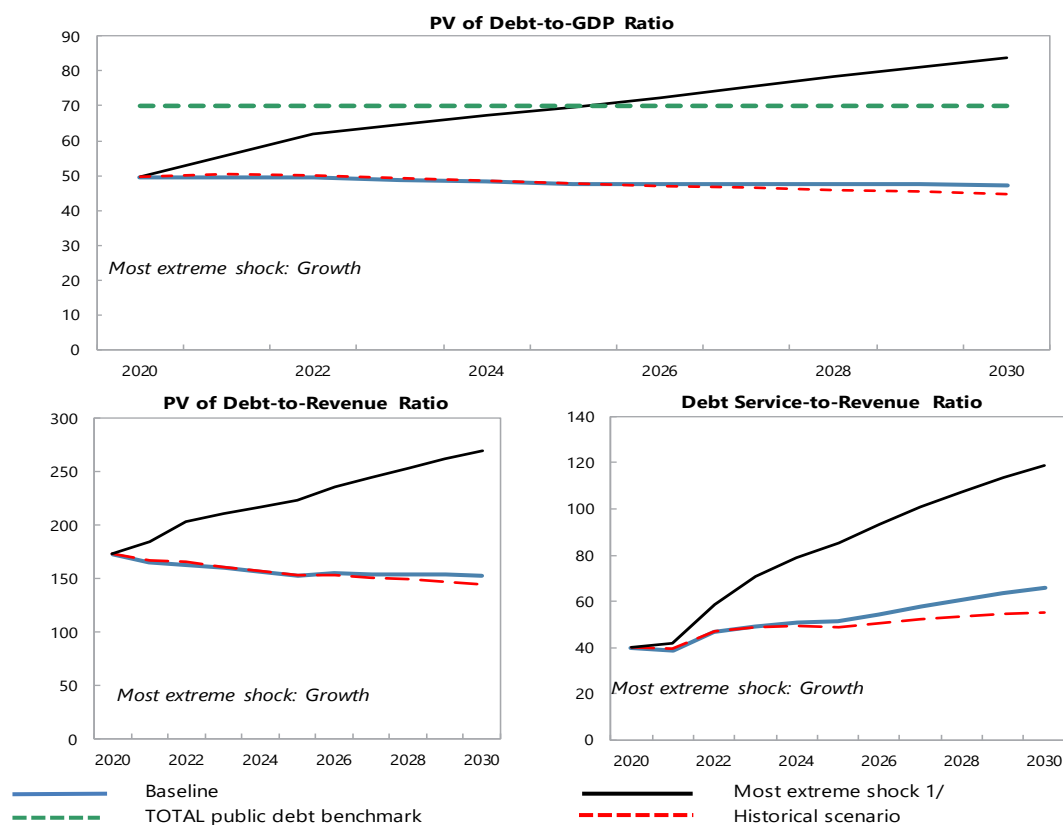
\* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 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.

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. Kyrgyz Republic: Indicators of Public Debt Under Alternative Scenarios, 2020-2030



| Borrowing assumptions on additional financing needs resulting from the stress tests* | Default | User defined |
|--|---------|--------------|
| <b>Shares of marginal debt</b>   |         |              |
| External PPG medium and long-term  | 23%     | 23%          |
| Domestic medium and long-term  | 0%      | 0%           |
| Domestic short-term  | 77%     | 77%          |
| <b>Terms of marginal debt</b>  |         |              |
| <b>External MLT debt</b>   |         |              |
| Avg. nominal interest rate on new borrowing in USD                                   | 1.7%    | 1.7%         |
| Avg. maturity (incl. grace period)   | 27      | 27           |
| Avg. grace period  | 5       | 5            |
| <b>Domestic MLT debt</b>   |         |              |
| Avg. real interest rate on new borrowing   | 0.0%    | 0.0%         |
| Avg. maturity (incl. grace period)   | 1       | 1            |
| Avg. grace period  | 0       | 0            |
| <b>Domestic short-term debt</b>  |         |              |
| Avg. real interest rate  | 4.7%    | 4.7%         |

\* 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. Kyrgyz Republic: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2020–2030**  
(in percent)

|  | Projections 1/ |      |            |            |            |      |      |      |      |      |      |
|--|----------------|------|------------|------------|------------|------|------|------|------|------|------|
|  | 2020           | 2021 | 2022       | 2023       | 2024       | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
| <b>PV of debt-to GDP ratio</b>                                 |                |      |            |            |            |      |      |      |      |      |      |
| <b>Baseline</b>  | 38             | 37   | 37         | 36         | 35         | 34   | 33   | 32   | 31   | 30   | 29   |
| <b>A. Alternative Scenarios</b>                                |                |      |            |            |            |      |      |      |      |      |      |
| A1. Key variables at their historical averages in 2020-2030 2/ | 38             | 37   | 38         | 39         | 40         | 42   | 43   | 44   | 44   | 45   | 46   |
| <b>B. Bound Tests</b>  |                |      |            |            |            |      |      |      |      |      |      |
| B1. Real GDP growth  | 38             | 41   | 42         | 41         | 40         | 39   | 38   | 36   | 35   | 34   | 33   |
| B2. Primary balance  | 38             | 38   | 38         | 37         | 36         | 36   | 35   | 34   | 33   | 32   | 31   |
| B3. Exports  | 38             | 44   | 54         | 53         | 51         | 50   | 49   | 47   | 45   | 44   | 42   |
| B4. Other flows 3/   | 38             | 42   | 46         | 45         | 43         | 42   | 41   | 40   | 39   | 37   | 36   |
| B5. Depreciation   | 38             | 47   | 41         | 40         | 38         | 37   | 36   | 35   | 34   | 33   | 33   |
| B6. Combination of B1-B5                                       | 38             | 48   | 50         | 49         | 48         | 47   | 45   | 44   | 42   | 41   | 39   |
| <b>C. Tailored Tests</b>                                       |                |      |            |            |            |      |      |      |      |      |      |
| C1. Combined contingent liabilities                            | 38             | 38   | 39         | 38         | 38         | 37   | 36   | 35   | 35   | 34   | 33   |
| C2. Natural disaster   | n.a.           | n.a. | n.a.       | n.a.       | n.a.       | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| C3. Commodity price  | n.a.           | n.a. | n.a.       | n.a.       | n.a.       | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| C4. Market Financing   | n.a.           | n.a. | n.a.       | n.a.       | n.a.       | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| <b>Threshold</b>   | 55             | 55   | 55         | 55         | 55         | 55   | 55   | 55   | 55   | 55   | 55   |
| <b>PV of debt-to-exports ratio</b>                             |                |      |            |            |            |      |      |      |      |      |      |
| <b>Baseline</b>  | 128            | 117  | 108        | 105        | 102        | 98   | 95   | 90   | 85   | 81   | 76   |
| <b>A. Alternative Scenarios</b>                                |                |      |            |            |            |      |      |      |      |      |      |
| A1. Key variables at their historical averages in 2020-2030 2/ | 128            | 117  | 112        | 115        | 117        | 121  | 124  | 123  | 122  | 121  | 119  |
| <b>B. Bound Tests</b>  |                |      |            |            |            |      |      |      |      |      |      |
| B1. Real GDP growth  | 128            | 117  | 108        | 105        | 102        | 98   | 95   | 90   | 85   | 81   | 76   |
| B2. Primary balance  | 128            | 118  | 110        | 109        | 106        | 104  | 101  | 96   | 91   | 87   | 82   |
| B3. Exports  | 128            | 175  | <b>254</b> | <b>249</b> | <b>241</b> | 234  | 228  | 216  | 202  | 189  | 176  |
| B4. Other flows 3/   | 128            | 131  | 134        | 131        | 127        | 123  | 120  | 113  | 106  | 99   | 93   |
| B5. Depreciation   | 128            | 117  | 94         | 92         | 89         | 86   | 83   | 78   | 74   | 71   | 67   |
| B6. Combination of B1-B5                                       | 128            | 167  | 133        | 186        | 180        | 174  | 169  | 160  | 150  | 140  | 131  |
| <b>C. Tailored Tests</b>                                       |                |      |            |            |            |      |      |      |      |      |      |
| C1. Combined contingent liabilities                            | 128            | 120  | 113        | 112        | 110        | 107  | 105  | 100  | 95   | 91   | 86   |
| 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. |
| <b>Threshold</b>   | 240            | 240  | 240        | 240        | 240        | 240  | 240  | 240  | 240  | 240  | 240  |
| <b>Debt service-to-exports ratio</b>                           |                |      |            |            |            |      |      |      |      |      |      |
| <b>Baseline</b>  | 10             | 8    | 8          | 8          | 9          | 8    | 9    | 9    | 9    | 9    | 8    |
| <b>A. Alternative Scenarios</b>                                |                |      |            |            |            |      |      |      |      |      |      |
| A1. Key variables at their historical averages in 2020-2030 2/ | 10             | 8    | 8          | 8          | 9          | 8    | 10   | 10   | 10   | 10   | 9    |
| <b>B. Bound Tests</b>  |                |      |            |            |            |      |      |      |      |      |      |
| B1. Real GDP growth  | 10             | 8    | 8          | 8          | 9          | 8    | 9    | 9    | 9    | 9    | 8    |
| B2. Primary balance  | 10             | 8    | 8          | 8          | 9          | 8    | 9    | 10   | 9    | 9    | 9    |
| B3. Exports  | 10             | 11   | 15         | 16         | 17         | 16   | 17   | 19   | 20   | 19   | 18   |
| B4. Other flows 3/   | 10             | 8    | 9          | 9          | 10         | 9    | 10   | 11   | 11   | 10   | 10   |
| B5. Depreciation   | 10             | 8    | 8          | 8          | 9          | 8    | 9    | 9    | 8    | 8    | 8    |
| B6. Combination of B1-B5                                       | 10             | 10   | 13         | 13         | 14         | 12   | 14   | 16   | 15   | 15   | 14   |
| <b>C. Tailored Tests</b>                                       |                |      |            |            |            |      |      |      |      |      |      |
| C1. Combined contingent liabilities                            | 10             | 8    | 9          | 8          | 9          | 8    | 10   | 10   | 9    | 9    | 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. |
| <b>Threshold</b>   | 21             | 21   | 21         | 21         | 21         | 21   | 21   | 21   | 21   | 21   | 21   |
| <b>Debt service-to-revenue ratio</b>                           |                |      |            |            |            |      |      |      |      |      |      |
| <b>Baseline</b>  | 10             | 9    | 10         | 10         | 11         | 9    | 11   | 11   | 11   | 11   | 11   |
| <b>A. Alternative Scenarios</b>                                |                |      |            |            |            |      |      |      |      |      |      |
| A1. Key variables at their historical averages in 2020-2030 2/ | 10             | 9    | 10         | 10         | 11         | 10   | 11   | 11   | 12   | 12   | 12   |
| <b>B. Bound Tests</b>  |                |      |            |            |            |      |      |      |      |      |      |
| B1. Real GDP growth  | 10             | 10   | 11         | 11         | 12         | 11   | 12   | 13   | 13   | 12   | 12   |
| B2. Primary balance  | 10             | 9    | 10         | 10         | 11         | 9    | 11   | 11   | 11   | 11   | 11   |
| B3. Exports  | 10             | 9    | 11         | 11         | 12         | 11   | 12   | 14   | 15   | 15   | 14   |
| B4. Other flows 3/   | 10             | 9    | 10         | 10         | 11         | 10   | 11   | 12   | 13   | 13   | 13   |
| B5. Depreciation   | 10             | 12   | 12         | 12         | 13         | 11   | 13   | 14   | 13   | 12   | 12   |
| B6. Combination of B1-B5                                       | 10             | 10   | 12         | 11         | 12         | 11   | 12   | 14   | 14   | 14   | 14   |
| <b>C. Tailored Tests</b>                                       |                |      |            |            |            |      |      |      |      |      |      |
| C1. Combined contingent liabilities                            | 10             | 9    | 10         | 10         | 11         | 10   | 11   | 11   | 11   | 11   | 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   | n.a.           | n.a. | n.a.       | n.a.       | n.a.       | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| <b>Threshold</b>   | 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. Kyrgyz Republic: Sensitivity Analysis for Key Indicators of Public Debt, 2020–2030**

|  | Projections 1/ |      |      |      |      |      |           |           |           |           |           |
|--|----------------|------|------|------|------|------|-----------|-----------|-----------|-----------|-----------|
|  | 2020           | 2021 | 2022 | 2023 | 2024 | 2025 | 2026      | 2027      | 2028      | 2029      | 2030      |
| <b>PV of Debt-to-GDP Ratio</b>                                 |                |      |      |      |      |      |           |           |           |           |           |
| <b>Baseline</b>  | 50             | 50   | 49   | 49   | 48   | 48   | 48        | 47        | 48        | 47        | 47        |
| <b>A. Alternative Scenarios</b>                                |                |      |      |      |      |      |           |           |           |           |           |
| A1. Key variables at their historical averages in 2020-2030 2/ | 50             | 50   | 50   | 49   | 48   | 48   | 47        | 46        | 46        | 45        | 45        |
| <b>B. Bound Tests</b>  |                |      |      |      |      |      |           |           |           |           |           |
| B1. Real GDP growth  | 50             | 56   | 62   | 65   | 67   | 70   | <b>72</b> | <b>75</b> | <b>78</b> | <b>81</b> | <b>84</b> |
| B2. Primary balance  | 50             | 52   | 53   | 52   | 52   | 51   | 51        | 51        | 50        | 50        | 50        |
| B3. Exports  | 50             | 55   | 64   | 63   | 62   | 61   | 61        | 61        | 60        | 59        | 58        |
| B4. Other flows 3/   | 50             | 54   | 59   | 58   | 57   | 56   | 56        | 56        | 55        | 55        | 54        |
| B5. Depreciation   | 50             | 57   | 54   | 52   | 49   | 47   | 45        | 43        | 41        | 39        | 38        |
| B6. Combination of B1-B5                                       | 50             | 50   | 51   | 50   | 49   | 49   | 48        | 48        | 49        | 49        | 49        |
| <b>C. Tailored Tests</b>                                       |                |      |      |      |      |      |           |           |           |           |           |
| C1. Combined contingent liabilities                            | 50             | 56   | 55   | 55   | 54   | 53   | 52        | 52        | 52        | 52        | 52        |
| 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.      |
| <b>TOTAL public debt benchmark</b>                             | 70             | 70   | 70   | 70   | 70   | 70   | 70        | 70        | 70        | 70        | 70        |
| <b>PV of Debt-to-Revenue Ratio</b>                             |                |      |      |      |      |      |           |           |           |           |           |
| <b>Baseline</b>  | 173            | 165  | 163  | 160  | 156  | 153  | 155       | 154       | 154       | 154       | 153       |
| <b>A. Alternative Scenarios</b>                                |                |      |      |      |      |      |           |           |           |           |           |
| A1. Key variables at their historical averages in 2020-2030 2/ | 173            | 167  | 165  | 161  | 157  | 153  | 153       | 151       | 149       | 147       | 145       |
| <b>B. Bound Tests</b>  |                |      |      |      |      |      |           |           |           |           |           |
| B1. Real GDP growth  | 173            | 184  | 204  | 211  | 217  | 223  | 236       | 245       | 254       | 262       | 270       |
| B2. Primary balance  | 173            | 172  | 176  | 172  | 167  | 164  | 165       | 164       | 164       | 163       | 162       |
| B3. Exports  | 173            | 182  | 211  | 206  | 201  | 197  | 198       | 197       | 194       | 191       | 187       |
| B4. Other flows 3/   | 173            | 180  | 193  | 189  | 185  | 181  | 182       | 181       | 179       | 177       | 175       |
| B5. Depreciation   | 173            | 190  | 179  | 170  | 160  | 151  | 146       | 140       | 134       | 128       | 122       |
| B6. Combination of B1-B5                                       | 173            | 167  | 168  | 162  | 159  | 156  | 158       | 158       | 158       | 158       | 157       |
| <b>C. Tailored Tests</b>                                       |                |      |      |      |      |      |           |           |           |           |           |
| C1. Combined contingent liabilities                            | 173            | 186  | 183  | 178  | 174  | 170  | 171       | 170       | 169       | 169       | 168       |
| 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.      |
| <b>Debt Service-to-Revenue Ratio</b>                           |                |      |      |      |      |      |           |           |           |           |           |
| <b>Baseline</b>  | 40             | 39   | 47   | 49   | 51   | 51   | 54        | 57        | 61        | 64        | 66        |
| <b>A. Alternative Scenarios</b>                                |                |      |      |      |      |      |           |           |           |           |           |
| A1. Key variables at their historical averages in 2020-2030 2/ | 40             | 40   | 47   | 49   | 49   | 49   | 50        | 52        | 53        | 54        | 55        |
| <b>B. Bound Tests</b>  |                |      |      |      |      |      |           |           |           |           |           |
| B1. Real GDP growth  | 40             | 42   | 59   | 71   | 79   | 85   | 93        | 101       | 107       | 114       | 119       |
| B2. Primary balance  | 40             | 39   | 52   | 59   | 58   | 57   | 59        | 61        | 64        | 66        | 69        |
| B3. Exports  | 40             | 39   | 47   | 50   | 52   | 52   | 55        | 59        | 64        | 67        | 69        |
| B4. Other flows 3/   | 40             | 39   | 47   | 50   | 51   | 52   | 55        | 59        | 63        | 65        | 68        |
| B5. Depreciation   | 40             | 37   | 46   | 45   | 50   | 50   | 53        | 56        | 59        | 61        | 63        |
| B6. Combination of B1-B5                                       | 40             | 38   | 47   | 50   | 51   | 52   | 55        | 59        | 63        | 66        | 69        |
| <b>C. Tailored Tests</b>                                       |                |      |      |      |      |      |           |           |           |           |           |
| C1. Combined contingent liabilities                            | 40             | 39   | 64   | 63   | 61   | 60   | 61        | 63        | 65        | 67        | 69        |
| 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.      |

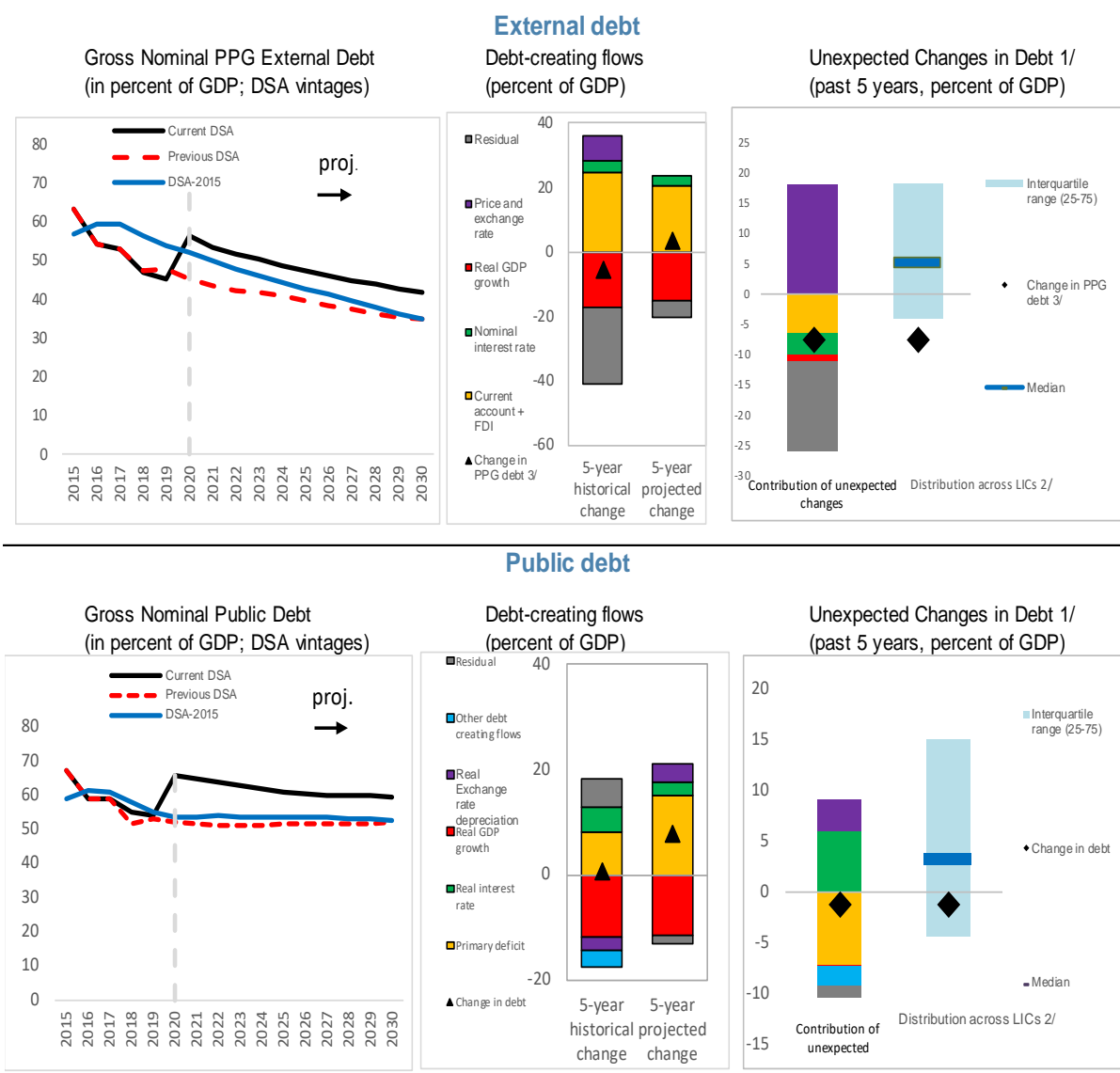
Sources: Country authorities; and staff estimates and projections.

1/ 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.

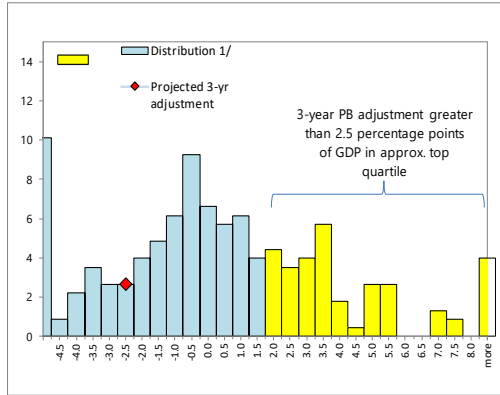
**Figure 3. Kyrgyz Republic: Drivers of Debt Dynamics—Baseline Scenario**



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.

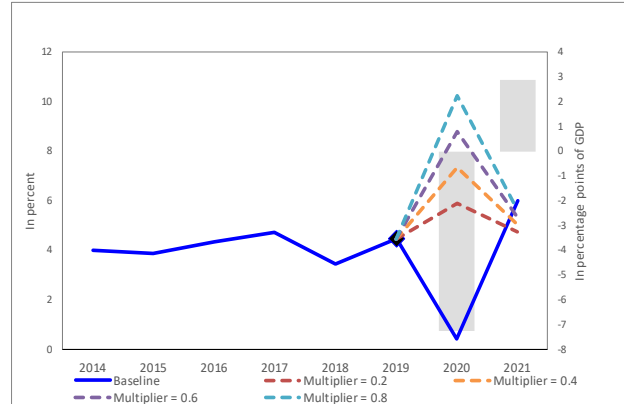
Figure 4. Kyrgyz Republic: Realism Tools

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



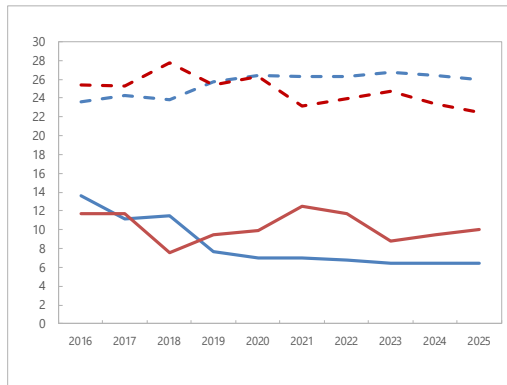
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/



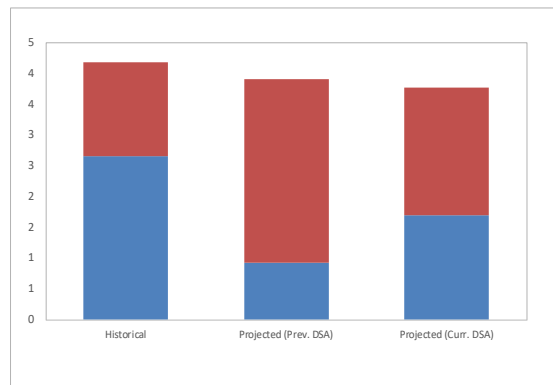
1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

Public and Private Investment Rates  
(percent of GDP)



— Gov. Invest - Prev. DSA      — Gov. Invest - Curr. DSA  
- - Priv. Invest - Prev. DSA      - - Priv. Invest - Curr. DSA

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



■ Contribution of other factors  
■ Contribution of government capital

**Figure 5. Kyrgyz Republic: Qualification of the Moderate Category, 2020–2030 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.