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To: Members of the Executive Board

From: The Secretary

Subject: **Islamic Republic of Afghanistan—Request for a 42-Month Year Arrangement Under the Extended Credit Facility—Debt Sustainability Analysis**

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Prepared By:	The staffs of the Fund and the International Development Association
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Questions:	Mr. Sadikov, MCD (ext. 37984) Mr. Sumlinski, MCD (ext. 38611) Mr. Nandwa, MCD (ext. 38461)
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\*The authorities have indicated that they consent to the Fund's publication of this paper.





# ISLAMIC REPUBLIC OF AFGHANISTAN

## REQUEST FOR A 42-MONTH ARRANGEMENT UNDER THE EXTENDED CREDIT FACILITY—DEBT SUSTAINABILITY ANALYSIS

Approved By  
**Zeine Zeidane and Gavin  
Gray (IMF), and Marcello  
Estevão (IDA)**

International Monetary Fund  
International Development Association

Islamic Republic of Afghanistan Joint Bank-Fund Debt Sustainability Analysis	
Risk of external debt distress	High
Overall risk of debt distress	High
Granularity in the risk rating	Sustainable
Application of judgement	Yes: The projection period informing mechanical risk signals is extended to 20 years.

*This debt sustainability analysis (DSA) assesses Afghanistan's risk of external and overall debt distress as high.<sup>1</sup> Donor grants of about 40 percent of GDP currently finance Afghanistan's underlying fiscal and external deficits. Given this aid dependence and limits to official concessional financing, both external and public debt are expected to remain low for the next decade. Hence, mechanical signals in this period suggest moderate risk of debt distress. However, the financing mix is projected to shift away from grants towards debt financing in the long run, which warrants the use of the extended 20-year period. In this longer horizon, one of the indicators, the ratio of present value of debt to exports, repeatedly breaches the threshold under the baseline scenario, suggesting the high-risk rating. Downside risks come from political uncertainty, continued insecurity, faster-than-expected-drop in aid, and severe weather shocks. Mobilizing domestic revenue, enhancing the effectiveness of public spending, and strengthening the management of fiscal risks, including those stemming from state-owned corporations (SOCs) and public private partnerships (PPPs), should be priorities for the authorities. In addition, diversification of exports and strengthening debt management, including through local debt market development, will help Afghanistan improve its debt carrying capacity.*

<sup>1</sup> This DSA was jointly prepared by IMF and World Bank staff. The debt-carrying capacity is classified using the country-specific composite indicator (CI) composed of three macroeconomic indicators and the World Bank's Country Policy and Institutional Assessment (CPIA). Afghanistan's capacity is assessed as "weak" using the CI based on the October 2019 WEO and the 2019 CPIA.

## BACKGROUND

### A. Public Debt Coverage

**1. This DSA covers debt contracted by the central government and central bank debt owed to the IMF.**<sup>2</sup> Borrowing is done only by the central government as state and local governments cannot borrow by themselves (Public Finance and Expenditure Management Law, 2005). Majority of outstanding debt has been contracted through external loans to finance infrastructure projects. The central government has issued no guarantees for external borrowing by state/local governments or SOCs.<sup>3</sup> The government's debt to the central bank (DA Afghanistan Bank (DAB)) due to the Kabul Bank exposure was repaid in late-2019.<sup>4</sup> External and domestic debt are classified based on their currency denomination which matches the residency-based classification given the lack of a domestically issued debt.

**Text Table 1. Debt Coverage**

Subsectors of the public sector	Check box
1 Central government	X
2 State and local government	
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)	
7 Central bank (borrowed on behalf of the government)	X
8 Non-guaranteed SOE debt	

**2. The authorities are building capacity to systematically analyze risks arising from state-owned corporations (SOCs) and public-private partnerships (PPPs).** Key vulnerabilities stem from the lack of systematic financial reporting, analysis, and disclosure as well as the absence of consolidated fiscal risk oversight mandate by the Ministry of Finance. A recent IMF technical assistance mission laid out a reform agenda to strengthen the framework for analyzing and managing risks from SOCs and PPPs. The authorities are working to strengthen financial reporting at an individual SOC level, focusing on the largest SOCs, improve the SOC oversight framework, and form a more informed view about aggregate fiscal risks from the sector. A five-year plan for PPPs has been developed, and over a hundred projects are in the pipeline. While six projects are already under contract, neither the budget nor fiscal strategy paper quantifies contingent liabilities from such projects. Due to the lack of systematic data, this DSA uses default levels of State-Owned Enterprises (SOE) debt (2 percent of GDP) for the contingent liability stress test. Similarly, the financial market contingent liability levels are set at the default levels of 5 percent of GDP, leading to a total contingent liability shock of 7 percent of GDP.

<sup>2</sup> The separation allows for the accounting of the government's debt owed to the central bank.

<sup>3</sup> SOCs are governed by the SOC Law of 2018.

<sup>4</sup> A small residual payment remains to be paid after the impact of the COVID crisis abates.

**Text Table 2. Magnitude of Contingent Liability Shock**

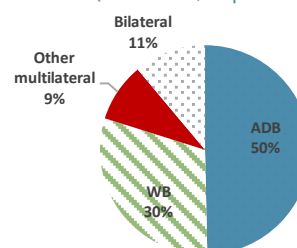
1 The country's coverage of public debt	The central government, central bank	
	Default	Used for the analysis
2 Other elements of the general government not captured in 1.	0 percent of GDP	0
3 SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	2
4 PPP	35 percent of PPP stock	0.00
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%.

## B. Background on Debt and Short-Term Developments

**3. Afghanistan has largely relied on grant financing and highly concessional external loans.** As of end-2019, Afghanistan's total public external debt stood at US\$1,147 million or 6.1 percent of GDP, due to past relief under the Enhanced HIPC Initiative and limited borrowing.<sup>5</sup> Multilateral and bilateral creditors have lent to Afghanistan on highly concessional terms. The largest multilateral lenders are the Asian Development Bank (ADB), the World Bank (WB), the International Monetary Fund (IMF), and the Islamic Development Bank (IsDB). Among bilateral creditors, the Saudi Fund is the main creditor (7 percent of total debt outstanding) followed by the Kuwait Fund (2 percent).

**External Public Debt by Creditor**  
(End-2019, in percent)



Sources: Afghan authorities

**4. The COVID-19 pandemic is leading to higher debt in 2020 than previously expected.** The overall deficit, excluding COVID-related grants, is projected to widen to 6 percent of GDP in 2020 due to the pandemic, compared to 0.8 percent of GDP projected before the shock. It is being financed through around 3 percent of GDP grants from the WB, ADB, and other bilateral donors and disbursements under Rapid Credit Facility (US\$223 million) and the proposed Extended Credit Facility (US\$115 million) from the IMF. As a result, public debt is projected to increase to 7.7 percent at end-2020.

**5. Afghanistan has been granted debt relief under the Catastrophe Containment and Relief Trust (CCRT) and requested debt service suspension under the Debt Service Suspension Initiative (DSSI).** These initiatives will lower its debt payments in 2020–22. The CCRT is expected to provide relief on debt payments to the IMF of about US\$14 million in 2020–22, lowering PV of debt payments.<sup>6</sup> The DSSI is a net-present-value (NPV) neutral exercise. Around US\$4 million of interest and principal payments falling due to bilateral creditors between May 1, 2020 and December 31, 2020 will instead be paid starting 2022.

<sup>5</sup> A debt reconciliation exercise uncovered overstatement of debt owed to the ADB by US\$77 million. After resolving this discrepancy, the revised debt stock for end-2019 is lower by that amount.

<sup>6</sup> The grant for the debt service falling due in the 12 months from April 14, 2021 is subject to the availability of resources under the CCRT.

**6. Afghanistan’s debt profile is characterized by currency risks, tempered by the long maturity and the debt holder profile.** A substantial depreciation of the Afghani—in the context of weak foreign exchange earning ability due to low exports—would increase the debt service burden. However, debt is very low and mostly of very long maturity, and debt holders are exclusively official entities. In addition, interest rates are low and fixed, resulting in low—below 1 percent of GDP—interest payments.

**7. To safeguard sustainability, the authorities remain committed to borrowing externally at concessional terms.** In line with the reform program supported by the new ECF arrangement, the authorities will contract external loans only with a grant element of 35 percent or higher. While the government borrowed US\$30 million in external loans in 2019, its borrowing is increasing to US\$338 million in 2020, all from the IMF, due to the pandemic. In 2021–25, the authorities are considering borrowing around US\$850 million (4 percent of 2021 GDP) for development projects.

**8. Debt management capacity needs strengthening, including development of the domestic debt market.** This will help with managing debt sustainability risks as Afghanistan is likely to gradually turn to domestic and foreign debt financing given the expected decline in grants. The ongoing efforts include support from the IMF and World Bank on debt management stock-taking and reform roadmap, along with specialized training on effective debt management. In addition, the ADB is assisting the authorities with formulation and implementation of a medium-term debt strategy and plans to provide training on debt recording and analysis tools by end-2020. The World Bank is also assisting with an assessment of SOCs’ financial position. As a prerequisite to issuing sukuk financing, a draft Sukuk law has been developed and is currently under review by development partners.

## UNDERLYING ASSUMPTIONS AND COUNTRY CLASSIFICATION

### A. Background on Macro Forecasts

**9. The updated long-term macroeconomic framework builds on the 2020 RCF DSA update (see Box 1).**

#### Box 1. Baseline Macroeconomic Assumptions

- Staff projects medium-term growth to be slightly lower than in the 2019 December DSA due to the COVID-19 pandemic. Long-term GDP growth remains unchanged compared to the RCF DSA at 4 percent.
- The projection balances potential tailwinds and headwinds to growth. Growth prospects could improve substantially if the recent political reconciliation improves reform implementation or the peace talks with the Taliban produce a path toward sustained political settlement. The latter could unlock growth prospects, including in the extractive sector with large growth and revenue generation potential which has not been included in the projections. On the other hand, worse-than-expected security conditions, slowdown in reforms, and faster-than-expected drop in aid would lower growth and revenue needed to finance development spending.

### Box 1. Baseline Macroeconomic Assumptions (concluded)

- In line with the RCF DSA, this DSA assumes a decline in grants as percent of GDP in the medium and long run. Donor aid beyond the short term remains subject to uncertainty although the 2020 November donor conference is expected to provide greater clarity on the next round of donor pledges covering 2021–24. While the baseline scenario envisions a slight fall in expenditures, primary deficits are projected to be similar to previous DSAs. Financing needs are assumed to be covered mainly by external loans.
- New external borrowing is assumed with a grant element of above 35 percent, as opposed to 60 percent in previous DSAs.<sup>1</sup> The DSA assumes that the authorities start issuing a three-year domestic sukuk in 2021. Annual net issuance in 2021–25 is assumed at about 0.3 percent of GDP with the interest rate of 7 percent.
- The authorities have prioritized diversification of exports and exports destinations as a critical goal, and the framework assumes a strong export growth in the long run.

<sup>1</sup> Typically, the 35 percent grant element is used by the IMF to define a loan as concessional.

Text Table 3. Macroeconomic Assumptions Comparison Table

	DSA December 2019		DSA RCF 2020		Current DSA	
	2019-24	2025-39	2020-25	2026-40	2020-25	2026-40
Real GDP (%)	3.7	4.5	3.0	4.0	2.7	4.0
Inflation (GDP, deflator, %)	4.8	5.0	5.4	4.8	4.3	4.3
Nominal GDP (Billions of Afghanis)	1877	5354	1985	5294	1827	4543
Revenue and grants (% of GDP)	28.7	24.4	26.4	21.7	27.9	24.6
Grants (% GDP)	13.7	6.7	12.4	4.2	13.3	6.4
Primary expenditure (% GDP)	28.6	26.1	27.5	23.6	29.3	26.4
Primary deficit (% GDP)	0.0	1.7	1.1	1.9	1.3	1.9
Exports of G&S (% change)	1.5	6.3	5.7	6.6	11.4	6.6
Noninterest current account deficit (% GDP)	1.0	10.6	-3.9	10.6	-7.9	9.1

Sources: Afghan authorities and IMF staff estimates and projections

## B. Realism Tools

### 10. The realism tools show that projections are in line with historical and peers' experiences.

- **Forecast errors.** Both external and public debt levels, and their forecast errors have been small in the past five years. In the recent past, positive current account balances have been offset by the errors and omissions (mostly driven by unrecorded imports, remittances, and FX conversions), and the trend is projected to continue. For public debt, primary deficits will be slightly larger going forward, leading to a modest increase in the debt-to-GDP ratio.
- **Fiscal adjustment.** The economy is expected to contract by 5 percent and the fiscal balance worsen substantially in 2020 due to the pandemic. Over time, supported by a recovery from the pandemic, gradual fiscal adjustment will reduce the deficit to 1.2 percent of GDP in 2022. The three-year primary balance adjustment (between 2019 and 2022) projection is -0.2 percent, solidly in the middle of the distribution of projections across peer countries.

- **Investment-growth.**<sup>7</sup> The contribution of public capital accumulation to GDP growth is as in the previous DSA. Contribution from government capital investment should decline from current high levels over the long term as the private sector becomes a more significant driver of the Afghan economy.

## C. Country Classification and Determination of Scenario Stress Tests

**11. Afghanistan is assessed to have a weak debt carrying capacity.** Based on the October 2019 WEO macroeconomic framework and World Bank's 2019 CPIA measures, Afghanistan's composite indicator score lies below the lower cut-off value of 2.69, hence placing Afghanistan among countries with the weak debt carrying capacity. This assessment affects the thresholds used to calculate the mechanical external debt risk ratings. Tailored stress tests (natural disasters, commodity prices, and market financing stress tests) are not applicable given Afghanistan's characteristics.

Calculation of the CI Index				
Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution of components
CPIA	0.385	2.6758	1.03	39%
Real growth rate (in percent)	2.719	3.0797	0.08	3%
Import coverage of reserves (in percent)	4.052	57.9628	2.35	90%
Import coverage of reserves^2 (in percent)	-3.990	33.5968	-1.34	-51%
Remittances (in percent)	2.022	0.5599	0.01	0%
World economic growth (in percent)	13.520	3.5586	0.48	18%
<b>CI Score</b>			<b>2.61</b>	<b>100%</b>
<b>CI rating</b>			<b>Weak</b>	

## EXTERNAL DSA

**12. Staff assesses Afghanistan's risk of external debt distress as high.** Given Afghanistan's unique circumstances, the DSA uses a 20-year projection period for the mechanical risk rating. A gradual replacement of grants by debt financing leads to higher debt accumulation and leads to large, persistent breaches in the baseline of the PV of external debt-to-exports ratio, which crosses the threshold after 2030 and remains above it for the rest of the projection period.<sup>8</sup> Among the liquidity indicators, the debt service to revenue ratio remains at low levels under the baseline, while the debt service to exports ratio reaches its threshold during the second decade of projections (Figure 1).

**13. External debt sustainability is most vulnerable to shocks to exports.** The most extreme shocks are the combination shocks for the ratio of PV of debt to GDP, and the exports shock for the ratio of PV of

<sup>7</sup> Due to lack of government capital stock data, staff estimated public capital stock by using the average share of government investment in total investment over the past five years (69 percent) and the total historical capital stock as estimated by the World Bank at 78 percent GDP as of end-2017.

<sup>8</sup> See ¶187 of "[Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries.](#)"



debt to exports and the ratio of debt service-to-exports (Table 3). Given these vulnerabilities, efforts to mobilize domestic revenue and boost exports will be critical for future debt sustainability, along with continued donor support.

## OVERALL RISK OF PUBLIC DEBT DISTRESS

**14. Total public debt is projected to remain low.** The PV of total public debt-to-GDP ratio is projected to stay well below the benchmark under the baseline scenario. However, this indicator is vulnerable to the growth shock and is expected to breach the threshold under the stress scenario starting 2033. Among the other indicators, the PV-to-revenue ratio and the debt service-to-revenue ratio are most sensitive to the growth shock as well (Figure 2).

**15. Afghanistan's overall risk of public debt distress is assessed as high.** Both external and public debt levels are projected to remain low over the first decade of projections, and the mechanical signals over that horizon suggest moderate risk of debt distress. However, it is more appropriate to use an extended period given the projected decline in grants. Given this, staff assesses the overall risk of debt distress as high, consistent with the mechanical signals over the 20-year horizon. Afghanistan's debt sustainability is dependent on sustainable transition from a grants-based financing to a concessional loan financing.

## CONCLUSIONS

**16. Afghanistan's high risk of public debt distress calls for continued sound macroeconomic policy, improved revenue mobilization, and strengthened debt management capacity.** As the COVID-19 crisis abates, the authorities should reverse the fiscal deterioration caused by the pandemic and mobilize domestic revenue to create space for development spending and reduce dependence on aid. They should also ensure that projects, including those financed through external concessional borrowing, have strong potential to support inclusive growth and continue to improve their debt management capacity and strengthen the management of fiscal risks, including from SOCs and PPPs.

## AUTHORITIES' VIEWS

**17. The authorities agreed with the conclusions of the DSA.** Authorities remain committed to fiscal prudence and relying on donor grants and concessional borrowing to ensure debt sustainability. Authorities also highlighted the need to increase revenue and investments for growth and job creation. Authorities are interested in targeted TA on debt management, including support for domestic debt market development through sukuk, as well as fiscal risk management for SOCs and PPPs.

**Table 1. Islamic Republic of Afghanistan: External Debt Sustainability Framework, Baseline Scenario, 2019–40**  
(In percent of GDP, unless otherwise indicated)

	Actual	Projections								Average 8/ Historical Projections	
	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
External debt (nominal) 1/	6.1	7.7	8.7	9.0	9.2	9.4	9.7	17.3	15.5	6.8	11.6
of which public and publicly guaranteed (PPG)	6.1	7.7	8.7	9.0	9.2	9.4	9.7	17.3	15.5	6.8	11.6
Change in external debt	-0.7	1.6	1.0	0.2	0.2	0.2	0.3	1.1	-1.0		
Identified net debt-creating flows	-11.9	-9.0	-8.8	-8.9	-8.6	-8.3	-8.0	5.4	9.3	-12.9	-4.6
Non-interest current account deficit	-11.7	-9.4	-8.1	-8.0	-7.7	-7.4	-7.0	7.6	13.3	-11.9	-3.4
Deficit in balance of goods and services	31.1	32.7	31.3	28.2	26.5	25.0	23.6	23.4	21.0	32.8	26.0
Exports	8.0	4.7	6.2	8.0	8.5	9.0	9.5	9.1	8.9		
Imports	39.0	37.4	37.4	36.2	35.0	33.9	33.2	32.5	29.8		
Net current transfers (negative = inflow)	-41.1	-40.9	-38.2	-35.1	-33.1	-31.3	-29.6	-15.2	-7.4	-44.0	-28.5
of which: official	-38.7	-39.9	-36.5	-33.2	-31.2	-29.3	-27.4	-12.5	-3.9	-0.7	-1.0
Other current account flows (negative = net inflow)	-1.7	-1.1	-1.2	-1.2	-1.1	-1.1	-1.1	-0.6	-0.3	-0.5	-0.9
Net FDI (negative = inflow)	0.0	0.0	-0.5	-0.5	-0.6	-0.6	-0.7	-1.8	-3.6		
Endogenous debt dynamics 2/	-0.1	0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4		
Contribution from nominal interest rate	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2		
Contribution from real GDP growth	-0.3	0.3	-0.3	-0.4	-0.4	-0.3	-0.4	-0.6	-0.6		
Contribution from price and exchange rate changes	0.1	—	—	—	—	—	—	—	—		
Residual 3/	11.1	10.6	9.9	9.1	8.8	8.6	8.3	-4.3	-10.3	11.9	5.6
of which: exceptional financing	0.0	-1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
CERT Debt Relief	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Sustainability indicators</b>											
PV of PPG external debt-to-GDP ratio	3.8	4.9	5.6	5.9	6.2	6.4	6.8	11.6	11.8		
PV of PPG external debt-to-exports ratio	47.0	104.9	91.5	74.5	73.1	72.0	71.1	128.3	132.9		
PPG debt service-to-exports ratio	2.5	5.0	3.6	2.6	2.7	2.9	2.9	7.4	9.8		
PPG debt service-to-revenue ratio	1.4	1.9	1.8	1.5	1.4	1.6	1.7	3.7	4.6		
Gross external financing need (Million of U.S. dollars)	-2176.1	-1739.5	-1669.3	-1745.3	-1782.4	-1812.9	-1819.2	2162.6	7247.9		
<b>Key macroeconomic assumptions</b>											
Real GDP growth (in percent)	3.9	-5.0	4.0	4.5	4.5	4.0	4.0	4.0	4.0	4.8	3.3
GDP deflator in U.S. dollar terms (change in percent)	-1.3	6.1	0.9	0.4	1.2	1.2	1.1	3.4	3.0	0.1	2.1
Effective interest rate (percent) 4/	0.5	0.7	0.6	0.5	0.6	0.6	0.7	1.2	1.3	0.3	0.8
Growth of exports of G&S (US dollar terms, in percent)	-6.2	-41.0	38.2	35.9	12.3	11.1	11.7	6.3	7.4	0.5	8.7
Growth of imports of G&S (US dollar terms, in percent)	-7.7	-3.6	5.2	1.5	2.2	2.0	2.8	6.6	6.2	7.5	3.7
Grant element of new public sector borrowing (in percent)	—	30.5	34.2	41.8	40.5	40.2	39.5	38.3	39.1	—	37.9
Government revenues (excluding grants, in percent of GDP)	14.1	12.1	12.0	14.2	16.3	16.4	16.6	18.1	19.1	11.3	15.9
Aid flows (in Million of U.S. dollars) 5/	2409.8	5456.2	2859.4	2152.1	2192.1	2871.0	2886.5	3072.0	3070.5		
Grant-equivalent financing (in percent of GDP) 6/	—	18.7	14.5	13.1	12.6	12.1	11.4	7.9	4.2	—	12.0
Grant-equivalent financing (in percent of external financing) 6/	—	93.8	93.9	96.2	96.0	95.9	94.9	82.5	90.6	—	90.4
Nominal GDP (Million of U.S. dollars)	18,876	19,028	19,972	20,951	22,150	23,304	24,514	33,493	68,744		
Nominal dollar GDP growth	2.6	0.8	5.0	4.9	5.7	5.2	5.2	7.6	7.2	5.1	5.4
<b>Memorandum items:</b>											
PV of external debt 7/	3.8	4.9	5.6	5.9	6.2	6.4	6.8	11.6	11.8		
In percent of exports	47.0	104.9	91.5	74.5	73.1	72.0	71.1	128.3	132.9		
Total external debt service-to-exports ratio	2.5	5.0	3.6	2.6	2.7	2.9	2.9	7.4	9.8		
PV of PPG external debt (in Million of U.S. dollars)	708.8	934.1	1125.9	1246.0	1373.1	1502.0	1658.8	3896.6	8112.2		
(PVt-PVt-1)/GDPt-1 (in percent)	1.2	1.0	0.6	0.6	0.6	0.6	0.7	1.6	0.2		
Non-interest current account deficit that stabilizes debt ratio	-11.0	-10.9	-9.1	-8.2	-7.9	-7.6	-7.3	6.5	14.4		

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

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

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.

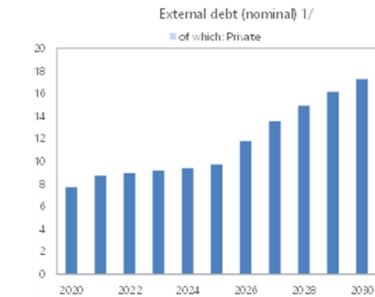
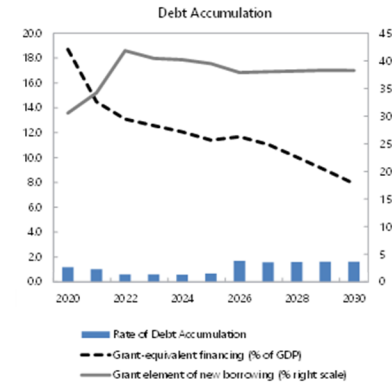
5/ Defined as grants, concessional loans, and debt relief.

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	Currency-based
Is there a material difference between the two criteria?	No



**Table 2. Islamic Republic of Afghanistan: Public Sector Debt Sustainability Framework, Baseline Scenario, 2019–40**  
(In percent of GDP, unless otherwise indicated)

	Actual		Projections								Average 6/	
	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections	
Public sector debt 1/ of which: external debt	6.1	7.7	9.0	9.6	10.1	10.5	11.0	20.8	22.2	7.7	13.2	
	6.1	7.7	8.7	9.0	9.2	9.4	9.7	17.3	15.5	6.8	11.6	
Change in public sector debt	-1.3	1.6	1.3	0.5	0.5	0.4	0.5	1.3	-0.6			
Identified debt-creating flows	0.9	3.0	1.6	0.4	0.0	0.2	0.4	0.5	1.4	-0.9	0.7	
Primary deficit	1.0	3.0	2.2	1.2	0.4	0.6	0.8	1.5	2.4	0.3	1.3	
Revenue and grants	26.9	30.3	26.0	26.9	28.5	28.1	27.6	24.9	23.0	25.4	27.2	
of which: grants	12.9	18.2	14.0	12.7	12.2	11.7	11.0	6.9	3.9			
Primary (noninterest) expenditure	28.0	33.3	28.2	28.1	28.9	28.7	28.4	26.4	25.4	25.6	28.5	
Automatic debt dynamics	-0.1	0.0	-0.2	-0.5	-0.4	-0.4	-0.4	-1.0	-1.0			
Contribution from interest rate/growth differential	-0.4	0.2	-0.4	-0.5	-0.5	-0.5	-0.5	-0.8	-0.8			
of which: contribution from average real interest rate	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.1			
of which: contribution from real GDP growth	-0.3	0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.7	-0.9			
Contribution from real exchange rate depreciation	0.3	—	—	—	—	—	—	—	—			
Other identified debt-creating flows	0.0	0.0	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0	-0.8	-0.1	
Privatization receipts (negative)	0.0	0.0	-0.3	-0.3	0.0	0.0	0.0	0.0	0.0			
Recognition of contingent liabilities (e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Residual	-2.2	-1.7	-0.2	0.1	0.6	0.3	0.2	0.6	-2.2	-0.1	0.6	
<b>Sustainability indicators</b>												
PV of public debt-to-GDP ratio 2/	3.8	5.0	6.1	6.6	7.2	7.6	8.2	15.2	18.6			
PV of public debt-to-revenue and grants ratio	14.1	16.5	23.4	24.6	25.2	27.2	29.6	61.1	80.7			
Debt service-to-revenue and grants ratio 3/	2.5	0.8	0.9	0.8	1.0	2.0	2.2	6.6	12.5			
Gross financing need 4/	1.7	3.2	2.1	1.1	0.7	1.1	1.4	3.2	5.3			
<b>Key macroeconomic and fiscal assumptions</b>												
Real GDP growth (in percent)	3.9	-5.0	4.0	4.5	4.5	4.0	4.0	4.0	4.0	4.8	3.3	
Average nominal interest rate on external debt (in percent)	0.5	0.7	0.6	0.6	0.6	0.6	0.7	1.2	1.3	0.3	0.8	
Average real interest rate on domestic debt (in percent)	-0.2	-4.8	2.1	2.6	2.9	2.9	2.9	2.5	2.9	-3.0	1.9	
Real exchange rate depreciation (in percent, + indicates depreciation)	4.2	—	—	—	—	—	—	—	—	2.7	—	
Inflation rate (GDP deflator, in percent)	2.4	5.0	4.8	4.3	4.0	4.0	4.0	4.4	4.0	4.1	4.3	
Growth of real primary spending (deflated by GDP deflator, in percent)	4.7	13.1	-12.0	4.2	7.7	3.0	3.0	1.1	4.1	8.3	2.9	
Primary deficit that stabilizes the debt-to-GDP ratio 5/	2.3	1.4	0.8	0.6	-0.1	0.1	0.3	0.2	3.0	0.7	-0.1	
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			

Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central government, central bank. Definition of external debt is Currency-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.

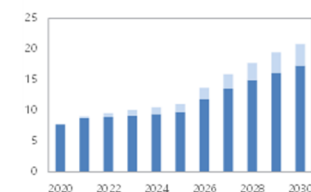
5/ Defined as a primary deficit minus a change in the public debt-to-GDP ratio (i.e., a primary surplus), which would stabilize the debt ratio only in the year in question.

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.

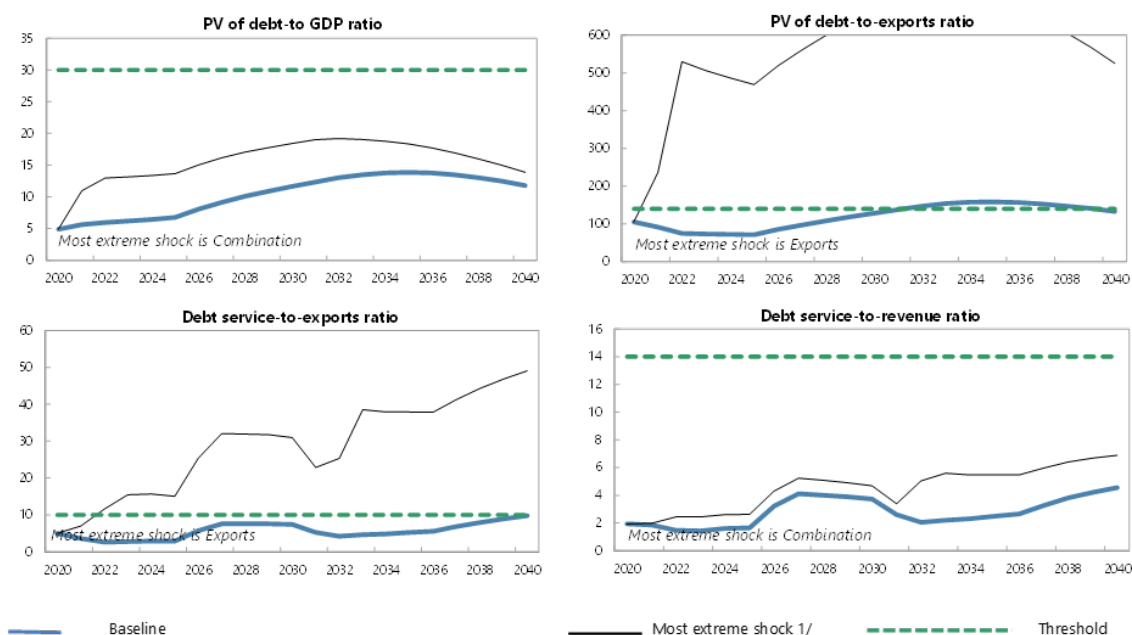
Definition of external/domestic debt	Currency-based
Is there a material difference between the two criteria?	No

Public sector debt 1/

■ of which: local-currency denominated  
■ of which: foreign-currency denominated



**Figure 1. Islamic Republic of Afghanistan: Indicators of Public and Publicly Guaranteed External Debt Under Alternatives Scenarios, 2020–40**



Customization of Default Settings		
	Size	Interactions
Tailored Tests		
Combined CLs	No	
Natural Disasters	n.a.	n.a.
Commodity Prices <sup>2/</sup>	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	1.2%	1.5%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	19	20
Avg. grace period	9	10

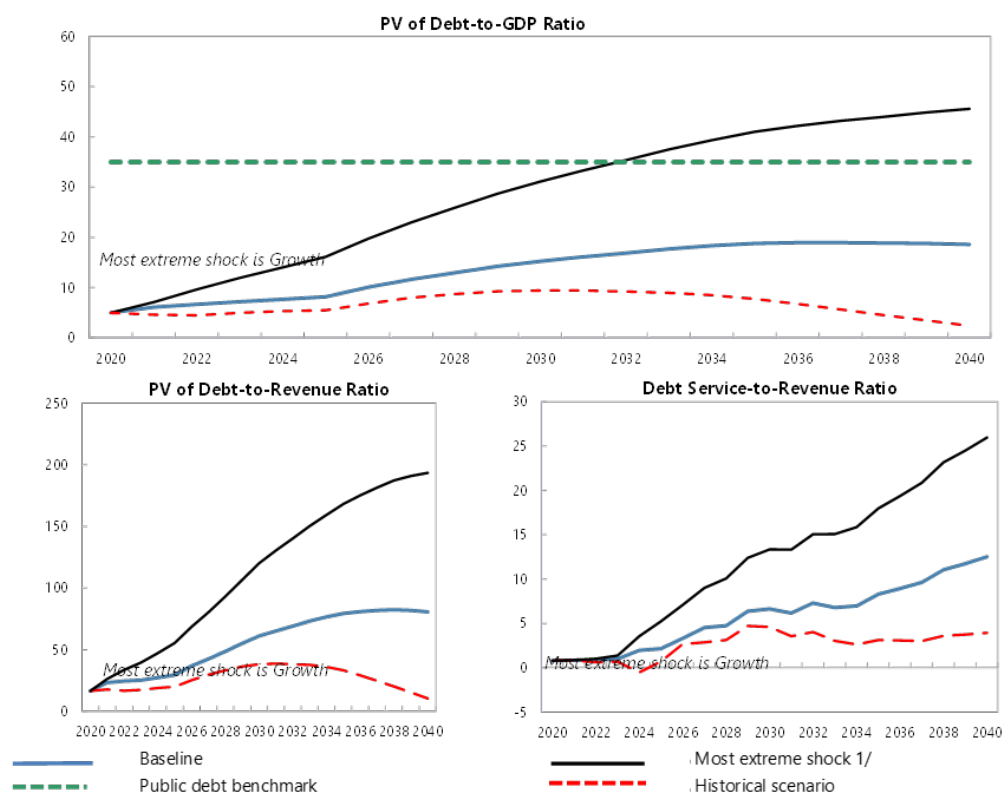
\* Note: All the additional financing needs generated by the shocks under the stress tests are assumed to be covered by PPG external MLT debt in the external DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2030. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

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

**Figure 2. Islamic Republic of Afghanistan: Indicators of Public Debt Under Alternative Scenarios, 2020–40**



Borrowing Assumptions for Stress Tests*	Default	User defined
<b>Shares of marginal debt</b>		
External PPG medium and long-term	59%	59%
Domestic medium and long-term	41%	41%
Domestic short-term	0%	0%
<b>Terms of marginal debt</b>		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	1.2%	1.5%
Avg. maturity (incl. grace period)	19	20
Avg. grace period	9	10
Domestic MLT debt		
Avg. real interest rate on new borrowing	2.7%	2.7%
Avg. maturity (incl. grace period)	3	3
Avg. grace period	2	2
Domestic short-term debt		
Avg. real interest rate	0%	0%

\* Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio in or before 2030. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most extreme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

**Table 3. Islamic Republic of Afghanistan: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2020–30**  
(In percent)

	Projections									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
<b>PV of debt-to-GDP ratio</b>										
<b>Baseline</b>	4.9	5.6	5.9	6.2	6.4	6.8	8.1	9.1	10.1	10.9
<b>A. Alternative Scenarios</b>										
A1. Key variables at their historical averages in 2020–2040 1/	4.9	3.2	1.0	-1.3	-3.7	-6.3	-10.0	-15.3	-22.5	-31.1
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>B. Bound Tests</b>										
B1. Real GDP growth	4.9	6.0	6.8	7.0	7.3	7.7	9.2	10.4	11.5	12.4
B2. Primary balance	4.9	6.0	6.7	7.0	7.4	7.8	9.1	10.2	11.2	12.0
B3. Exports	4.9	7.6	11.7	11.9	12.1	12.3	13.6	14.6	15.5	16.1
B4. Other flows 2/	4.9	9.0	12.7	12.8	13.0	13.3	14.5	15.5	16.3	16.9
B6. One-time 30 percent nominal depreciation	4.9	7.1	1.3	1.7	2.0	2.5	4.2	5.6	7.0	8.1
B6. Combination of B1–B5	4.9	11.0	13.0	13.2	13.4	13.7	15.0	16.2	17.1	17.8
<b>C. Tailored Tests</b>										
C1. Combined contingent liabilities	4.9	8.2	8.6	8.8	9.9	10.3	11.6	12.9	13.8	14.5
C2. Natural disaster	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.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	30	30	30	30	30	30	30	30	30	30
<b>PV of debt-to-exports ratio</b>										
<b>Baseline</b>	104.9	91.5	74.5	73.1	72.0	71.1	85.1	96.9	108.1	118.6
<b>A. Alternative Scenarios</b>										
A1. Key variables at their historical averages in 2020–2040 1/	104.9	51.8	13.1	-14.8	-41.6	-66.5	-105.2	-162.6	-241.1	-338.5
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>B. Bound Tests</b>										
B1. Real GDP growth	104.9	91.5	74.5	73.1	72.0	71.1	85.1	96.9	108.1	118.6
B2. Primary balance	104.9	97.7	84.2	82.3	82.2	82.1	96.1	108.4	120.0	130.4
B3. Exports	104.9	236.2	530.2	506.3	487.4	469.2	519.8	561.7	600.7	636.4
B4. Other flows 2/	104.9	146.5	159.1	151.5	145.5	139.7	153.4	164.6	175.1	184.6
B6. One-time 30 percent nominal depreciation	104.9	91.5	12.5	15.6	18.1	20.9	35.0	47.2	59.0	70.2
B6. Combination of B1–B5	104.9	267.8	147.5	358.0	344.4	331.4	366.3	395.2	422.0	446.6
<b>C. Tailored Tests</b>										
C1. Combined contingent liabilities	104.9	133.6	107.4	104.2	111.0	107.9	122.1	136.8	147.8	157.9
C2. Natural disaster	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.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	140	140	140	140	140	140	140	140	140	140
<b>Debt service-to-exports ratio</b>										
<b>Baseline</b>	5.0	3.6	2.6	2.7	2.9	2.9	5.7	7.6	7.6	7.4
<b>A. Alternative Scenarios</b>										
A1. Key variables at their historical averages in 2020–2040 1/	5.0	3.6	1.9	1.5	1.1	0.6	2.8	3.6	2.2	0.4
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>B. Bound Tests</b>										
B1. Real GDP growth	5.0	3.6	2.6	2.7	2.9	2.9	5.7	7.6	7.6	7.4
B2. Primary balance	5.0	3.6	2.7	3.0	3.1	3.1	5.9	7.8	7.8	7.6
B3. Exports	5.0	7.0	11.6	15.5	15.7	15.1	25.4	32.1	31.9	31.8
B4. Other flows 2/	5.0	3.6	3.6	4.5	4.5	4.3	7.1	8.9	8.9	8.8
B6. One-time 30 percent nominal depreciation	5.0	3.6	2.6	1.4	1.7	1.8	4.7	6.5	6.6	6.5
B6. Combination of B1–B5	5.0	5.8	10.0	10.8	11.0	10.5	17.6	22.2	22.1	21.5
<b>C. Tailored Tests</b>										
C1. Combined contingent liabilities	5.0	3.6	3.4	3.4	3.6	3.7	6.5	8.3	8.4	8.2
C2. Natural disaster	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.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	10	10	10	10	10	10	10	10	10	10
<b>Debt service-to-revenue ratio</b>										
<b>Baseline</b>	1.9	1.8	1.5	1.4	1.6	1.7	3.2	4.1	4.0	3.9
<b>A. Alternative Scenarios</b>										
A1. Key variables at their historical averages in 2020–2040 1/	1.9	1.8	1.1	0.8	0.6	0.3	1.6	1.9	1.2	0.2
	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>B. Bound Tests</b>										
B1. Real GDP growth	1.9	2.0	1.7	1.6	1.8	1.9	3.6	4.7	4.5	4.4
B2. Primary balance	1.9	1.8	1.5	1.5	1.7	1.8	3.3	4.2	4.1	4.0
B3. Exports	1.9	1.9	1.8	2.2	2.4	2.4	3.9	4.8	4.7	4.5
B4. Other flows 2/	1.9	1.8	2.0	2.3	2.5	2.5	4.0	4.9	4.7	4.5
B6. One-time 30 percent nominal depreciation	1.9	2.3	1.9	0.9	1.2	1.3	3.3	4.5	4.4	4.3
B6. Combination of B1–B5	1.9	2.0	2.4	2.4	2.6	2.6	4.3	5.2	5.1	4.9
<b>C. Tailored Tests</b>										
C1. Combined contingent liabilities	1.9	1.8	1.9	1.8	1.9	2.1	3.6	4.5	4.4	4.3
C2. Natural disaster	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.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<b>Threshold</b>	14	14	14	14	14	14	14	14	14	14

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.



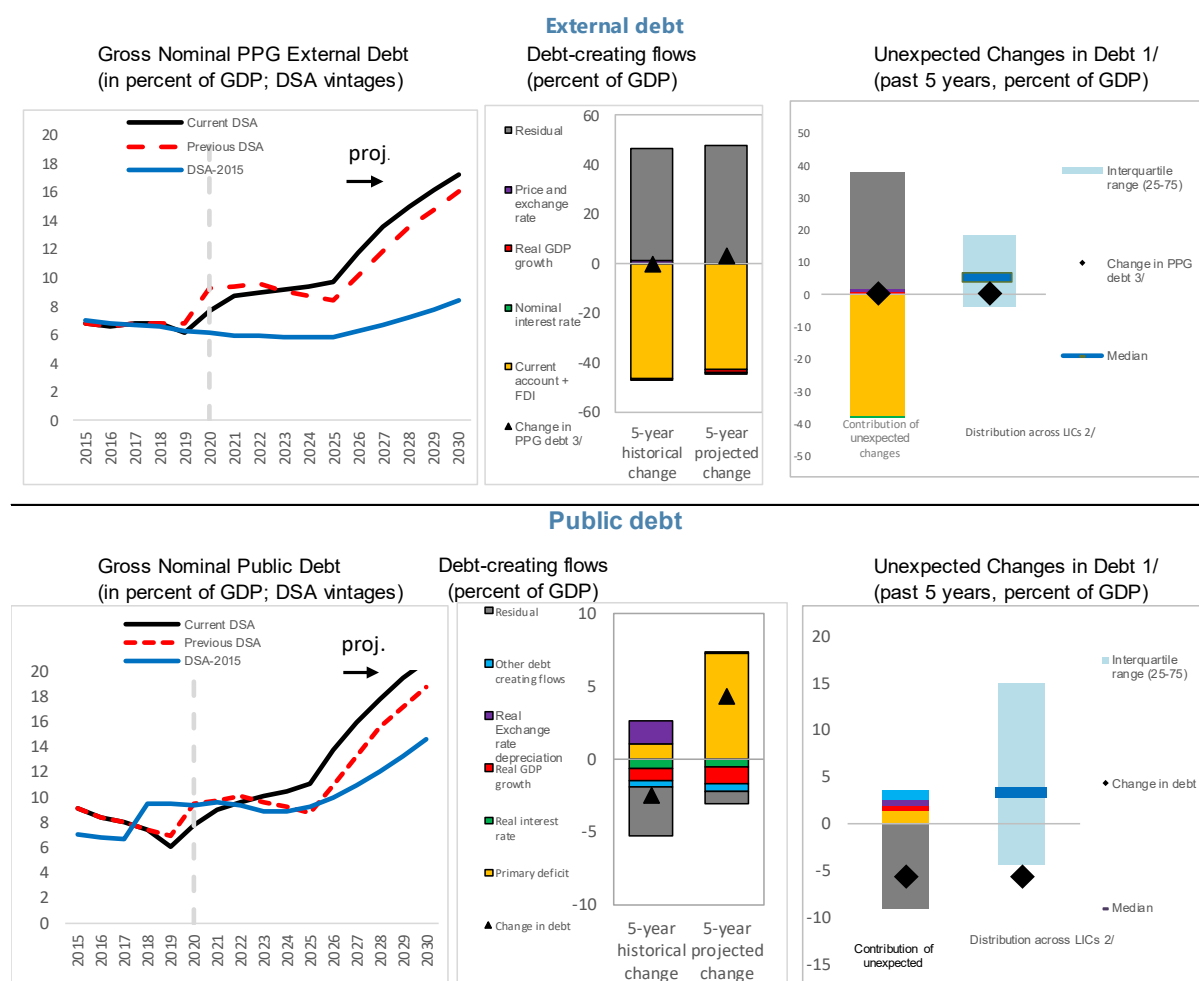
**Table 4. Islamic Republic of Afghanistan: Sensitivity Analysis for Key Indicators of Public Debt, 2020–30**

	Projections										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
<b>PV of Debt-to-GDP Ratio</b>											
<b>Baseline</b>	5.0	6.1	6.6	7.2	7.6	8.2	10.1	11.6	12.9	14.2	15.2
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2040 1/	5	5	4	5	5	5	7	8	9	9	9
<b>B. Bound Tests</b>											
B1. Real GDP growth	5	7	10	12	14	16	20	23	26	29	31
B2. Primary balance	5	7	8	9	9	10	11	13	14	15	16
B3. Exports	5	8	12	13	13	14	15	17	18	19	20
B4. Other flows 2/	5	10	13	14	14	15	17	18	19	20	21
B6. One-time 30 percent nominal depreciation	5	7	6	6	6	5	6	6	7	7	7
B6. Combination of B1-B5	5	7	7	7	8	8	10	12	13	14	15
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	5	12	12	12	12	13	15	16	17	18	19
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>Public debt benchmark</b>	35	35	35	35	35	35	35	35	35	35	35
<b>PV of Debt-to-Revenue Ratio</b>											
<b>Baseline</b>	16.5	23.4	24.6	25.2	27.2	29.6	36.8	42.5	48.7	55.2	61.1
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2040 1/	16.5	17.7	16.6	17.4	19.0	20.0	25.2	29.7	33.2	36.3	38.3
<b>B. Bound Tests</b>											
B1. Real GDP growth	16.5	26.3	33.6	39.5	47.3	55.4	68.6	80.3	93.1	106.6	120.2
B2. Primary balance	16.5	26.5	30.6	30.7	32.5	34.6	41.7	47.3	53.4	59.9	65.7
B3. Exports	16.5	30.8	45.5	44.6	46.7	49.2	56.4	62.0	68.1	74.5	80.5
B4. Other flows 2/	16.5	36.8	50.1	48.8	51.0	53.5	60.7	66.3	72.3	78.7	84.7
B6. One-time 30 percent nominal depreciation	16.5	26.6	23.9	21.6	20.7	20.5	23.1	24.4	25.9	27.7	28.8
B6. Combination of B1-B5	16.5	25.4	26.5	24.9	26.9	29.3	36.4	42.2	48.3	54.8	60.7
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	16.5	44.4	44.4	43.5	43.7	46.1	53.2	58.2	64.3	70.7	76.5
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>	0.8	0.9	0.8	1.0	2.0	2.2	3.3	4.5	4.7	6.4	6.6
<b>A. Alternative Scenarios</b>											
A1. Key variables at their historical averages in 2020-2040 1/	0.8	0.9	0.6	0.7	(0.5)	0.7	2.7	2.9	3.1	4.7	4.6
<b>B. Bound Tests</b>											
B1. Real GDP growth	0.8	0.9	1.0	1.4	3.6	5.2	7.1	9.0	10.1	12.4	13.4
B2. Primary balance	0.8	0.9	1.0	1.2	3.4	3.6	3.6	5.2	5.4	6.6	7.0
B3. Exports	0.8	0.9	1.0	1.4	2.4	2.6	3.7	4.9	5.1	6.7	7.0
B4. Other flows 2/	0.8	0.9	1.1	1.5	2.5	2.7	3.8	5.0	5.2	6.8	7.1
B6. One-time 30 percent nominal depreciation	0.8	1.0	1.0	1.0	1.9	0.7	3.4	4.7	4.9	6.3	6.5
B6. Combination of B1-B5	0.8	0.8	0.8	1.0	2.0	2.1	3.3	4.5	4.7	6.4	6.6
<b>C. Tailored Tests</b>											
C1. Combined contingent liabilities	0.8	0.9	1.8	1.8	10.8	3.0	4.1	8.0	5.4	7.0	8.3
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.

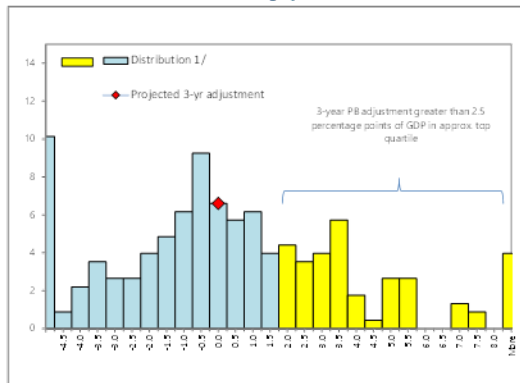
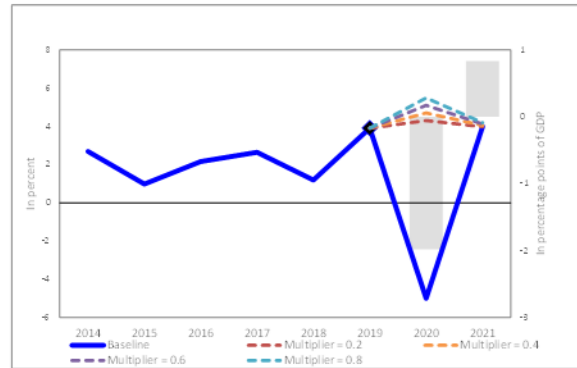
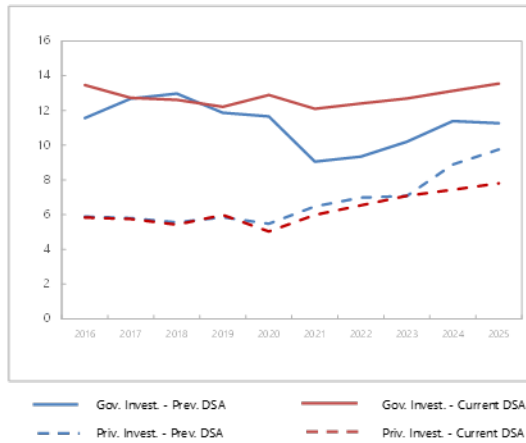
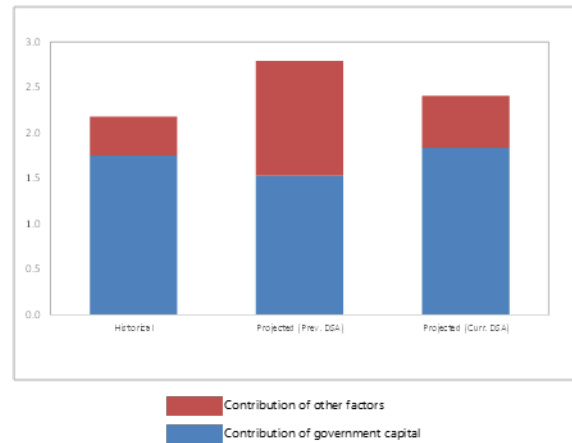
**Figure 3. Islamic Republic of Afghanistan: Drivers of Debt Dynamics—Baseline Scenario**

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. Islamic Republic of Afghanistan: Realism Tools****3-Year Adjustment in Primary Balance  
(Percentage points of GDP)****Fiscal Adjustment and Possible Growth Paths 1/****Public and Private Investment Rates 1/  
(% of GDP)****Contribution to Real GDP growth  
(percent, 5-year average)**

Contribution of other factors  
Contribution of government capital