

# INTERNATIONAL MONETARY FUND

# ISLAMIC REPUBLIC OF AFGHANISTAN

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STAFF REPORT FOR THE 2019 ARTICLE IV CONSULTATION AND THE SIXTH REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT—DEBT SUSTAINABILITY ANALYSIS

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Joint Bank	Afghanistan c-Fund Debt Sustainability Analysis
Risk of external debt distress	High
Overall risk of debt distress	High
Granularity in the risk rating	n.a.
Application of judgment	Yes: The projection period informing mechanical risk signals are extended to 20

Afghanistan's external and overall risk of debt distress continues to be assessed as high.¹
Afghanistan's debt sustainability hinges on continued donor grants inflows (currently around 40 percent of GDP) which finance substantial fiscal and external gaps. A gradual replacement of grants by debt financing would lead to high risk of debt distress in the long-run extended 20-year period rather than the standard 10-year period. Significant downside risks include the political uncertainty, the fragile security situation, and regional risks. The authorities should continue their efforts to mobilize domestic revenue and implement structural reforms, while donors should continue to provide grants. Debt management capacity, including the quantification and monitoring of contingent liabilities arising from state-owned corporations (SOCs) and public-private partnerships (PPPs), should be strengthened before the authorities resort to debt-financed capital expenditures.

<sup>&</sup>lt;sup>1</sup> This DSA was jointly prepared by IMF and World Bank staff under the new debt sustainability framework (DSF) for low-income countries (LICs), implemented since July 2018.

# **BACKGROUND**

#### **Public Debt Coverage**

 This DSA considers as public debt the central government's debt and Da Afghanistan Bank's (DAB, the central bank) debt owed to the IMF. The central government has contracted external loans for

important infrastructure projects and has not issued guarantees for other public entities' external borrowing (e.g., state /local governments and state-owned corporations (SoCs)). State and local governments do not borrow on their own. In September 2019, the government cleared the debt owed to DAB in line with the 2016–19 ECF



structural benchmarks.<sup>2</sup> External and domestic debt is classified based on its currency denomination.

2. State-owned corporations and public-private partnerships (PPPs) are the largest potential sources of contingent liabilities. The potential government exposure to the state-owned entities has not been systematically quantified and the government is working on collecting the necessary data.<sup>3</sup> The magnitude of the shock used for the contingent liability stress test reflects the coverage of public debt and other vulnerabilities in the public sector. So far, the government approved four PPPs with total project cost of about US\$ 0.3 billion. The contingent liabilities arising out of approved projects are yet to be included in the budget.

The country's coverage of public debt	The central government, central bank								
		Used for the							
	Default	analysis	Reasons for deviations from the default setting						
Other elements of the general government not captured in 1.	0 percent of GDP	0.0							
SoE's debt (guaranteed and not guaranteed by the government) 1/	2 percent of GDP	2.0							
PPP	35 percent of PPP stock	0.0							
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-gincluded in the government debt (1.) and risks associated with SoE's debt not guarante	• • •								

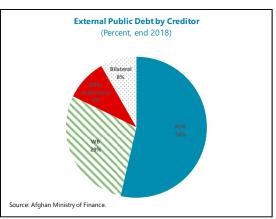
<sup>&</sup>lt;sup>2</sup> This debt is due to the lender-of-last-resort exposure incurred by DAB during the resolution of Kabul Bank.

<sup>&</sup>lt;sup>3</sup> There are 54 state-owned corporations (SOCs).

#### **Background on Debt**

**3.** Afghanistan's public debt is small and mainly owed to multilateral institutions on highly concessional terms. As of end-2018, Afghanistan's total public external debt stood at US\$1,213 million or

6.4 percent of GDP. There is no domestic public debt. The low level of debt reflects past debt relief under the Enhanced HIPC Initiative, and limited borrowing since then. The external loans provided by multilateral and bilateral lenders have highly concessional terms. In line with their lending policies, given Afghanistan's high risk of debt distress, the World Bank and the Asian Development Bank (ADB) provide only grants. Main multilateral creditors are the ADB, the International Development Agency (IDA), the International Monetary Fund (IMF), and the Islamic Development bank (ISDB).



Among bilateral creditors, the Saudi Fund was the main creditor (5 percent of total debt outstanding) followed by the Kuwait Fund (2 percent).

- **4.** Continued reliance on concessional financing and grants is critical for debt sustainability. Given Afghanistan's high level of dependence on grants and limited capacity to raise foreign exchange (outside grants) and domestic revenue, it is imperative to continue to rely on concessional debt and grants for external financing. Currently, the prospect for imminent default are low owing to the low level of public debt, its long average maturity (14 years), and the evenly spread redemptions. The annual interest payments are fixed and very low at 0.1 percent of GDP. Further, foreign reserves are high at US\$8.3 billion, fully covering external debt service coming due over the next decade.
- 5. Strengthening of debt management capacity is required before resorting to debt financing including domestic debt.<sup>4</sup> The authorities agree with staff that notwithstanding obvious investment needs, external borrowing should be preceded by strengthened debt management capacity and any investment plans should be considered only after a thorough assessment and prioritization of prospective projects in close consultation with donors.
- **6.** There are on-going efforts to strengthen debt management capacity. In this context, the development partners have assisted with the development of a Medium-Term Debt Strategy (MTDS)<sup>5</sup> and preparation of a debt sustainability analysis through TA and training courses. The World Bank is also assisting with an assessment of SOCs' financial position. Further, supported by the IMF's 2016–19 ECF's structural benchmarks, the authorities have prepared an internal guidance note on debt management and provided internal technical training courses to improve own capacity for debt management. The authorities

<sup>&</sup>lt;sup>4</sup> The latest IMF assessment of public debt recording and monitoring capacity, made in consultation with the World Bank (November 2016), pointed to the need to build up capacity in this area.

<sup>&</sup>lt;sup>5</sup> The authorities are set to receive technical assistance on an MTDS from Asian Development Bank.

have been preparing for issuing sukuk to mobilize domestic resources, with technical assistance on legal infrastructure from the IsDB and the World Bank.

**7.** The authorities remain committed to contract only concessional loans. Under the ECF, concessional loans are those with a grant element of 60 percent or higher. In 2019, the government contracted external loans equivalent to US\$130 million, with a grant element of 61 percent in line with its borrowing plan shared with the IMF.<sup>6</sup>

# UNDERLYING ASSUMPTIONS AND COUNTRY CLASSIFICATION

#### **Background on Macro Forecasts**

8. The updated long-term macroeconomic framework assumes a lower long-term growth trajectory and somewhat worse current account balance than the December 2018 DSA given the lackluster growth performance since 2015 and persisting downside risks to growth (see Box 1). The baseline economic projections remain subject to downside security, political, and regional environment risks and to upside risks should there be a successful and lasting peace settlement.

	DSA Decemb	per 2018	Current DSA			
	2018–23	2024–38	2019–24	2025–39		
Real GDP (%)	3.7	6.0	3.7	4.5		
Inflation (GDP, deflator, %)	4.5	4.9	5.0	5.0		
Nominal GDP (Billions of Afghanis)	21.8	49.6	21.9	48.6		
Revenue and grants (% of GDP)	27.8	25.9	28.7	24.4		
Grants (% GDP)	14.9	9.0	13.7	6.7		
Primary expenditure (% GDP)	27.9	27.1	28.6	26.1		
Primary deficit (% GDP)	0.1	1.2	0.0	1.7		
Exports of G&S (% change)	8.6	6.9	1.7	6.3		
Noninterest current account deficit (% GDP)	0.3	9.5	1.2	10.8		

<sup>&</sup>lt;sup>6</sup> Those loans are interest free with maturity of around 30 years.

#### **Box 1. Baseline Macroeconomic Assumptions**

- Staff projects lower long-term growth relative to the 2018 DSA given the lackluster growth performance since 2015. The economy is projected to deliver 4.5 percent growth rate from 2025 onwards.
- The baseline assumes no significant deterioration in security, continued reforms, and sustained aid. While the extractive industry could deliver a positive impact on the economy, this is currently not incorporated in economic growth or export projections due to uncertainty over the timing and size of production coming onstream. If security conditions worsen, aid falls short of expectations, or reforms stall, growth would be lower with attendant effects on unemployment and poverty.
- Long-term export growth will pick up as the authorities continue their efforts to diversify export destinations and support export-oriented sectors. The authorities should complete the ongoing regional infrastructure/trade projects that may increase exports in the long run. Goods imports are projected to be a bit lower reflecting the 2018 outcomes and lower growth assumptions. A downward revision of grant inflows worsens the current account. The long-term agenda aimed at diversifying the economy as well as progress with regional integration should result in attracting FDI. Growing FDI and other capital inflows will partly substitute for declining grants.
- In line with the new DSF guidance on grants,<sup>1</sup> the baseline scenario assumes a gradual decline in donor aid beyond the period over which the international community has pledged its financial assistance.<sup>2</sup> The grants-to-GDP ratio is assumed to decline by around 1.5 ppt of GDP per year. The additional financing needs due to a decline in grants are assumed to be financed by private inflows (including FDI), external concessional loans, and domestic revenue mobilization. Off-budget grants are assumed to gradually migrate on-budget reflecting an increase in the authorities' capacity to properly implement projects.
- The new external borrowing is assumed to carry the standard concessionality with a grant element of 35 percent.<sup>3</sup> This DSA assumes that the authorities issue a three-year local currency-denominated sukuk from 2022 onwards with an interest rate of 7 percent. Given the still-underdeveloped domestic financial market, issuance during the first year is assumed to be only 0.1 percent of GDP with very modest increases afterwards.

<sup>&</sup>lt;sup>1</sup> See ¶37 of "Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries."

<sup>&</sup>lt;sup>2</sup> International development partners pledged US\$15.2 billion over 2017–20 at the Brussels Conference held in October 2016, while annual military assistance of US\$4 billion was pledged at the Warsaw NATO summit in July 2016.

<sup>&</sup>lt;sup>3</sup> Typically, the 35 percent grant element is used by the IMF to define a loan as concessional.

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

- **Forecast errors**. In the past, given low levels of public debt, changes in both PPG external debt and public debt were small with small negative forecast errors. At the same time, factors contributing to historical debt dynamics varied widely, with a current account surplus acting to contain an increase in external debt/GDP, and primary deficit driving total public debt. Going forward, both PPG external debt and public debt are expected to stay low in the medium term, and real GDP growth will continue to contribute as a debt reducing factor (Figure 3).
- **Fiscal adjustment**. The projected primary balance suggests some loosening compared with a better-than expected primary surplus recorded in 2018. Growth projections for 2019 are below than the growth path suggested by a fiscal multiplier of 0.4 (LICs' average) due to political uncertainty and security risks despite recovery from drought (Figure 4).
- **Investment-growth.** The contribution of public capital stock to growth is close to that shown in the previous DSA. Staff is of the view that the relatively high contribution of the public sector will gradually come down as infrastructure gaps are closed and private sector activities grow.

#### **Country Classification and Determination of Scenario Stress Tests**

**10.** Afghanistan is assessed to have a weak debt carrying capacity. Based on the October 2018 and April 2019 WEO macroeconomic framework, and update to the World Bank's CPIA measures through 2018, Afghanistan's composite indicator score<sup>8</sup> lies below the lower cut-off value of 2.69 and

Components	Coefficients (A)	10-year average values (B)	CI Score components (A*B) = (C)	Contribution o 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
CI Score			2.613	100%
CI rating			Weak	

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

<sup>&</sup>lt;sup>8</sup> 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).

confirms the weak debt carrying capacity as past DSAs (see Table). The thresholds for a weak performer are used to derive mechanical risk signals. Given Afghanistan's economic characteristics, tailored stress tests (natural disasters, commodity prices, and market financing stress tests) are not applicable.

### **EXTERNAL DSA**

- 11. The risk of external debt distress for Afghanistan remains high. Given the very high concessionality of existing external debt (with a long grace period) and the persistence of Afghanistan's economic and social challenges, a 20-year projection period is used for mechanical risk rating (rather than the standard 10-year projection period). The external debt-to-GDP is projected to remain low in the medium term, but as grants are gradually replaced by loans, one of the debt sustainability indicators—the ratio of present value (PV) of debt to exports—breaches the threshold under the baseline and stays above the threshold over the projection period. Nevertheless, liquidity indicators remain strictly below the thresholds under the baseline provided the concessional loans continue in the long-run (Figure 1).
- **12. External debt sustainability is vulnerable to shocks to non-debt flows and exports**. The most extreme impacts are due to the exports shock for the ratio of PV of debt to exports and the ratio of debt service-to-exports, and the non-debt flow shock (FDI and transfers) for the ratio of PV of debt to GDP (Table 3) reflecting large dependence on grants inflows. These results illustrate the importance of sustained donor support, and continued efforts to boost exports and mobilize domestic revenue.

# **OVERALL RISK OF PUBLIC DEBT DISTRESS**

- **13. Total public debt remains low**. Given the financing mix of large grants and highly concessional external loans, the PV of total public debt-to-GDP ratio is projected to stay below the benchmark with a wide margin under the baseline. The public DSA suggests that all three relevant debt sustainability indicators: PV-to-GDP ratio, PV-to-revenue ratio, and debt service-to-revenue ratio—are most vulnerable to the growth shock (Figure 2). Going forward, it is important to maintain primary surpluses and strengthen the capacity to manage debt and liquidity and to assure prudent issuance of domestic sukuk.
- **14. Afghanistan's overall risk of public debt distress is assessed to be high**. Though both PPG external debt and total public debt are projected to remain low and mechanical signals over the first 10-year period suggest moderate risk of debt distress, staff is of the view that Afghanistan's overall risk of debt distress should be "high" consistent with 20-year mechanical signals because its debt sustainability largely hinges on significant and continued donor support which is uncertain in the long term and significant social, economic, regional, and other related risks persist into the longer term.

<sup>&</sup>lt;sup>9</sup> See ¶87 of "Guidance Note on the Bank-Fund Debt Sustainability Framework for Low Income Countries."

# CONCLUSIONS

- 15. Afghanistan remains at a high risk of external/overall debt distress as debt sustainability hinges upon continued donor grant inflows. Sound macroeconomic management, including proper use of public resources, would be key to keeping donors on board. While the authorities should continue efforts to gradually reduce reliance on grants, a sharp or rapid decline in grant inflows will deteriorate Afghanistan's debt sustainability. Externally, they should increase resilience by boosting exports, substituting imports by domestic production where viable, and maintaining sufficient foreign reserves buffers to effectively manage external shocks. Domestic revenue collection should continue to increase by continued broadening of the tax base and strengthening of tax compliance. Debt management capacity, including the monitoring of contingent liabilities emanating from state-owned entities and PPPs, needs to be strengthened before tapping less concessional debt financing. The authorities should strictly prioritize projects to be financed by external borrowing—through consultation with development partners and enhanced internal due diligence process—and seek as concessional terms as possible. Domestic borrowing through sukuk should be implemented cautiously after an adequate institutional framework and capacity is in place. Staff welcomed the authorities' recent efforts to strengthen the technical capacity of the debt management office in line with the ECF's structural benchmark.
- **16.** The authorities concurred with the conclusions of the DSA. While noting that they need to find a way to finance country's large developmental needs given that grant inflows are expected to gradually decline, they agreed that, for the time being, to ensure debt sustainability they should rely on grants and as concessional borrowing as possible. They recognized the need to enhance debt management and institutional capacity before using less concessional external loans and domestic sukuks. They agreed that such capacity enhancement should be accompanied by strengthening public financial management and resilience to external vulnerabilities. They would welcome targeted and continued TA in these areas.

					(In	percent o			rise indicat	ed)			
		ctual	<del></del>					ections				Ave Historical	rage 8/ Projection
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	riojection
External debt (nominal) 1/	6.1	6.4	6.4	7.3	7.9	8.2	8.5	8.6	8.9	16.2	18.3	7.7	10.5
of which: public and publicly guaranteed (PPG)	6.1	6.4	6.4	7.3	7.9	8.2	8.5	8.6	8.9	16.2	18.3	7.7	10.5
Change in external debt	-0.8	0.4	-0.1	0.9	0.6	0.3	0.3	0.2	0.2	1.4	0.1		
dentified net debt-creating flows	-8.6	-6.3	-9.9	-2.7	-2.1	-1.4	1.8	2.7	3.3	7.2	6.2	-15.8	2.7
Non-interest current account deficit	-8.4	-5.9	-9.6	-2.1	-1.5	-0.6	2.5	3.4	4.0	9.4	12.4	-14.4	3.7
Deficit in balance of goods and services	31.8	34.2	30.5	35.3	35.3	33.7	34.2	32.6	30.8	26.7	15.8	30.6	31.2
Exports	5.9	5.8	10.0	8.0	8.3	8.4	8.3	7.9	8.0	7.6	6.2		
Imports	37.7	40.0	40.5	43.3	43.6	42.1	42.6	40.5	38.8	34.4	22.0		
Net current transfers (negative = inflow)	-39.3	-38.8	-39.0	-36.4	-35.8	-33.5	-30.9	-28.4	-26.1	-16.9	-3.2	-44.5	-26.8
of which: official	-38.3	-36.2	-37.0	-34.3	-33.6	-31.3	-28.7	-26.3	-24.0	-14.4	-0.9		
Other current account flows (negative = net inflow)	-1.0	-1.3	-1.1	-0.9	-0.9	-0.9	-0.8	-0.8	-0.7	-0.5	-0.2	-0.5	-0.7
Net FDI (negative = inflow)	-0.4	-0.2	-0.4	-0.5	-0.5	-0.5	-0.5	-0.4	-0.4	-1.7	-5.7	-0.6	-0.8
Endogenous debt dynamics 2/	0.2	-0.1	0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.5	-0.6		
Contribution from nominal interest rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2		
Contribution from real GDP growth	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.6	-0.8		
Contribution from price and exchange rate changes	0.4	0.0	0.3										
Residual 3/	7.8	6.6	9.8	3.6	2.7	1.7	-1.5	-2.5	-3.1	-5.9	-6.1	14.5	-1.8
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
ustainability indicators													
V of PPG external debt-to-GDP ratio			3.7	4.1	4.3	4.3	4.3	4.3	4.2	8.2	10.1		
V of PPG external debt-to-exports ratio			37.3	50.9	51.8	51.3	52.0	54.1	53.0	107.9	162.5		
PPG debt service-to-exports ratio	3.9	4.4	2.2	3.0	2.8	2.5	2.3	2.9	3.0	3.5	7.7		
PPG debt service-to-revenue ratio	2.1	2.1	1.7	1.7	1.8	1.5	1.3	1.4	1.4	1.5	2.7		
iross external financing need (Million of U.S. dollars)	-1666.3	-1174.1	-1922.8	-442.1	-332.8	-188.9	497.3	764.3	997.6	2851.6	6004.6		
Key macroeconomic assumptions													
teal GDP growth (in percent)	2.2	2.9	2.7	3.0	3.5	4.0	4.0	4.0	4.0	4.5	4.5	6.7	4.1
GDP deflator in US dollar terms (change in percent)	-5.2	-0.4	-3.7	-5.5	-2.2	2.0	3.4	3.7	4.2	2.0	4.1	0.4	1.4
ffective interest rate (percent) 4/	0.4	0.4	0.4	0.6	0.6	0.6	0.5	0.5	0.5	8.0	1.0	0.3	0.6
rowth of exports of G&S (US dollar terms, in percent)	-20.3	1.4	70.7	-22.6	4.9	8.0	6.5	2.9	9.3	5.7	7.1	6.3	3.4
Growth of imports of G&S (US dollar terms, in percent)	-13.5	8.6	0.3	3.9	1.9	2.6	8.6	2.7	3.7	4.1	4.1	10.4	4.0
Grant element of new public sector borrowing (in percent)				67.0	72.5	69.6	68.6	67.5	67.2	51.1	54.3		60.7
Government revenues (excluding grants, in percent of GDP)	10.7	12.4	13.3	13.9	12.9	14.0	15.3	16.6	16.9	17.8	17.7	10.5	16.2
Aid flows (in Million of US dollars) 5/	3043.8	2670.2	2997.8	2599.6	2797.3	2943.0	3196.8	3476.2	3768.4	3809.1	1512.6		
Grant-equivalent financing (in percent of GDP) 6/				13.6	14.4	14.4	14.6	14.7	14.8	10.2	1.7		13.4
Grant-equivalent financing (in percent of external financing) 6/				98.2	98.0	98.0	97.9	97.9	97.8	89.7	72.4	•••	94.9
Nominal GDP (Million of US dollars)	19,428	19,917	19,696	19,171	19,408	20,593	22,132	23,877	25,886	35,657	83,012		
Iominal dollar GDP growth	-3.1	2.5	-1.1	-2.7	1.2	6.1	7.5	7.9	8.4	6.6	8.7	7.2	5.6
Memorandum items:													
V of external debt 7/			3.7	4.1	4.3	4.3	4.3	4.3	4.2	8.2	10.1		
In percent of exports			37.3	50.9	51.8	51.3	52.0	54.1	53.0	107.9	162.5		
otal external debt service-to-exports ratio	3.9	4.4	2.2	3.0	2.8	2.5	2.3	2.9	3.0	3.5	7.7		
V of PPG external debt (in Million of US dollars)			737.0	776.8	829.7	888.0	958.1	1025.6	1100.0	2938.8	8391.2		
PVt-PVt-1)/GDPt-1 (in percent)				0.2	0.3	0.3	0.3	0.3	0.3	1.3	0.7		
Ion-interest current account deficit that stabilizes debt ratio	-7.6	-6.3	-9.5	-3.0	-2.0	-1.0	2.2	3.2	3.8	8.0	12.3		

Definition of external/domestic debt Currency-based Is there a material difference between the No two criteria? Debt Accumulation 16.0 14.0 70 12.0 60 10.0 50 8.0 40 6.0 30 4.0 2.0 2019 2021 2023 2025 2027 Rate of Debt Accumulation - - • Grant-equivalent financing (% of GDP) Grant element of new borrowing (% right scale) External debt (nominal) 1/ of which: Private

1/ Includes both public and private sector external debt.

<sup>2/</sup> Derived as [r - g - p(1+g)]/(1+g+p+gp) 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.

<sup>3/</sup> 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.

<sup>4/</sup> Current-year interest payments divided by previous period debt stock.

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

<sup>6/</sup> 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).

<sup>7/</sup> Assumes that PV of private sector debt is equivalent to its face value.

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

Table 2. Afghanistan: Public S	ector Deht Sustainahility	Framework Raseline	Scenario 2016-2039
rable 2. Alghanistan, Public 3	ector Debt Sustamability	rraniework, baseinie	3Cellario, 2010-2039

(In percent of GDP, unless otherwise indicated)

_	A	ctual					Projec	tions				Ave	erage 6/		
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2029	2039	Historical	Projections		
Public sector debt 1/	7.8	7.6	6.9	7.3	7.9	8.2	8.5	8.8	9.2	19.1	22.4	8.5	11.5	Definition of external/domestic	Currency-
of which: external debt	6.1	6.4	6.4	7.3	7.9	8.2	8.5	8.6	8.9	16.2	18.3	7.7	10.5	debt	based
Change in public sector debt	-1.3	-0.3	-0.7	0.4	0.6	0.3	0.3	0.3	0.4	1.7	0.2			Is there a material difference	
Identified debt-creating flows	-1.1	0.3	-1.4	0.2	-0.1	-0.5	-0.6	-0.7	-0.7	1.1	0.9	-1.3	0.1	between the two criteria?	No
Primary deficit	-0.2	0.6	-1.6	-0.2	0.2	-0.1	-0.1	-0.1	-0.1	2.0	1.9	0.4	0.6	between the two criteria?	
Revenue and grants	26.1	25.7	28.5	27.0	26.5	27.7	29.2	30.7	31.0	26.8	18.7	24.0	28.7	•	
of which: grants	15.4	13.2	15.1	13.1	13.6	13.7	13.9	14.1	14.1	9.0	0.9			Public sector debt 1	/
Primary (noninterest) expenditure	25.9	26.2	26.9	26.9	26.8	27.7	29.1	30.6	30.9	28.7	20.5	24.4	29.2		
Automatic debt dynamics	-0.7	-0.1	0.2	0.3	-0.3	-0.4	-0.5	-0.6	-0.6	-0.9	-1.0			of which: local-currency deno	minated
Contribution from interest rate/growth differential	-0.4	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.5	-0.9	-1.1				
of which: contribution from average real interest rate	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1			of which: foreign-currency der	nominated
of which: contribution from real GDP growth	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.7	-1.0			25	
Contribution from real exchange rate depreciation	-0.3	0.3	0.5											20	
Other identified debt-creating flows	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.8	0.0		
Privatization receipts (negative)	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			15	
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			10	
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			5	
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	-0.3	-0.6	0.7	0.9	0.7	0.8	0.8	0.8	1.0	0.6	-0.6	0.1	1.1	_5 2019 2021 2023 2025	2027 202
Sustainability indicators														J	
PV of public debt-to-GDP ratio 2/	•••		4.4	4.3	4.3	4.4	4.5	4.6	4.7	11.3	14.5				
PV of public debt-to-revenue and grants ratio			15.4	15.8	16.4	15.8	15.2	14.8	15.3	42.1	77.6				
Debt service-to-revenue and grants ratio 3/	8.4	3.2	2.9	2.7	0.9	0.8	0.7	0.8	0.8	4.5	9.9				
Gross financing need 4/	2.0	1.4	-0.7	0.6	0.5	0.2	0.1	0.1	0.1	3.2	3.7				
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	2.2	2.9	2.7	3.0	3.5	4.0	4.0	4.0	4.0	4.5	4.5	6.7	4.1		
Average nominal interest rate on external debt (in percent)	0.4	0.4	0.4	0.7	0.6	0.6	0.6	0.5	0.5	0.9	1.0	0.3	0.6		
Average real interest rate on domestic debt (in percent)	-5.0	-1.2	-0.4	0.0	3.0	2.3	1.4	1.0	0.5	1.9	1.9	-3.2	1.6		
Real exchange rate depreciation (in percent, + indicates depreciation)	-4.8	4.8	7.5									1.5			
Inflation rate (GDP deflator, in percent)	5.2	1.2	2.4	2.1	3.9	4.6	5.5	6.0	6.5	5.0	5.0	4.1	4.9		
Growth of real primary spending (deflated by GDP deflator, in percent)	2.3	2.8	5.3	2.9	3.1	7.5	9.5	9.2	4.9	1.2	0.8	9.4	4.8		
Primary deficit that stabilizes the debt-to-GDP ratio 5/	1.1	0.8	-0.9	-0.6	-0.3	-0.4	-0.4	-0.4	-0.5	0.3	1.6	0.4	-0.5		
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.

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

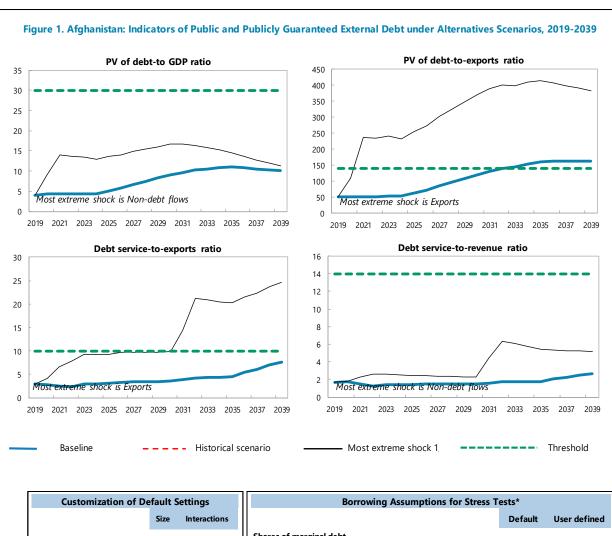
<sup>2/</sup> The underlying PV of external debt-to-GDP ratio under the public DSA differs from the external DSA with the size of differences depending on exchange rates projections.

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

<sup>4/</sup> 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.

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

<sup>6/</sup> 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.



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

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

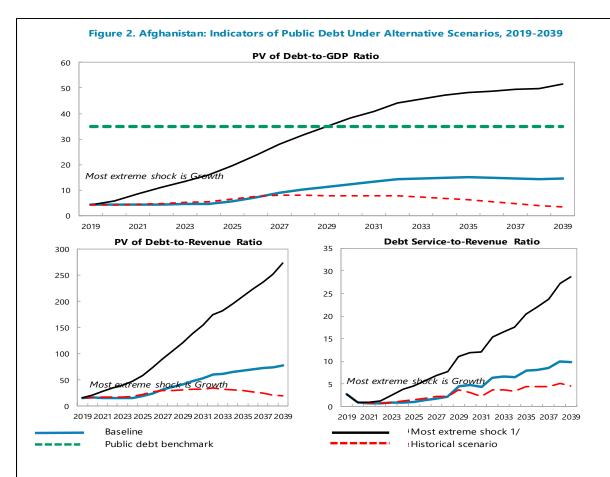
cternal PPG MLT debt 100%											
	Default	User defined									
Shares of marginal debt											
External PPG MLT debt	100%										
Terms of marginal debt											
Avg. nominal interest rate on new borrowing in USD	0.8%	1.5%									
USD Discount rate	5.0%	5.0%									
Avg. maturity (incl. grace period)	39	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 2029. Stress tests with one-off breaches are also presented (if any), while these one-off breaches are deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

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



Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	71%	71%
Domestic medium and long-term	29%	29%
Domestic short-term	0%	0%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	0.8%	1.5%
Avg. maturity (incl. grace period)	39	20
Avg. grace period	9	10
Domestic MLT debt		
Avg. real interest rate on new borrowing	2.1%	2.1%
Avg. maturity (incl. grace period)	3	3
Avg. grace period	2	2
Domestic short-term debt		
Avg. real interest rate	0%	0%

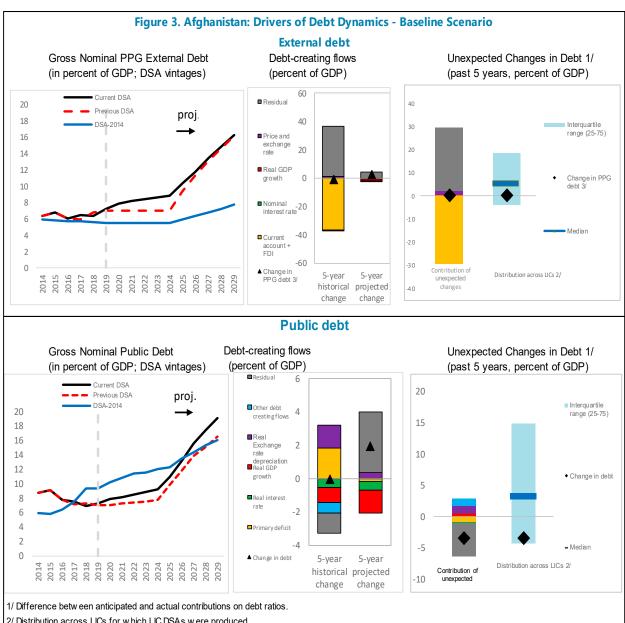
<sup>\*</sup> Note: The public DSA allows for domestic financing to cover the additional financing needs generated by the shocks under the stress tests in the public DSA. Default terms of marginal debt are based on baseline 10-year projections.

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 2029. The stress test with a one-off breach is also presented (if any), while the one-off breach is deemed away for mechanical signals. When a stress test with a one-off breach happens to be the most exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

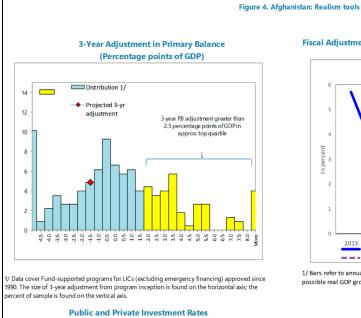
					D.	oiocti-					
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2
	PV of debt-to	GDP rat	tio								
aseline	4.1	4.3	4.3	4.3	4.3	4.2	5.0	5.7	6.7	7.5	
. <b>Alternative Scenarios</b> 1. Key variables at their historical averages in 2019-2039 1/	4.1	-4.2	-12.7	-22.9	-33.5	-44.2	-54.2	-64.4	-74.9	-85.6	-1
. Bound Tests											
1. Real GDP growth 2. Primary balance	4.1 4.1	4.7 4.8	5.3 5.5	5.3 5.5	5.2 5.6	5.2 5.7	6.2 6.4	7.0 7.1	8.1 8.1	9.1 8.8	
3. Exports	4.1	6.1	9.2	9.1	8.9	8.7	9.4	10.0	10.9	11.6	
4. Other flows 2/	4.1	9.2	14.0	13.7	13.4	13.0	13.5	14.0	14.8	15.4	
6. One-time 30 percent nominal depreciation 6. Combination of B1-B5	4.1 4.1	5.4 9.9	-2.0 11.8	-1.7 11.6	-1.5 11.4	-1.3 11.1	-0.2 11.8	0.8 12.4	2.2 13.4	3.3 14.2	
. Tailored Tests	7.1	5.5	11.0	11.0	11.4		11.0	12.7	13.4	14.2	
Combined contingent liabilities	4.1	7.4	7.4	7.4	8.0	7.8	8.6	9.3	10.2	10.9	
2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
hreshold	30	30	30	30	30	30	30	30	30	30	
	PV of debt-to-e	xports r	atio								
aseline	50.9	51.8	51.3	52.0	54.1	53.0	63.5	72.5	85.8	96.7	1
<ul> <li>Alternative Scenarios</li> <li>Key variables at their historical averages in 2019-2039 1/</li> </ul>	50.9	-50.6	-150.8	-275.1	-421.3	-551.3	-683.8	-818.0	-963.2	-1111.5	-12
. Bound Tests											
1. Real GDP growth	50.9	51.8	51.3	52.0	54.1	53.0	63.5	72.5	85.8	96.7	
2. Primary balance	50.9	58.4	65.8	66.4	70.4	70.7	81.0	90.2	103.8	114.5	
3. Exports	50.9	109.4	236.5	235.2	241.2	233.3	255.0	273.2	301.8	324.5	3
4. Other flows 2/ 6. One-time 30 percent nominal depreciation	50.9 50.9	111.0 51.8	<b>166.5</b> -18.6	<b>164.6</b> -16.4	<b>168.0</b> -15.1	<b>161.6</b> -12.9	<b>170.7</b> -1.6	<b>178.0</b> 8.5	<b>190.4</b> 22.3	<b>199.9</b> 34.1	2
6. Combination of B1-B5	50.9	133.0	123.9	176.2	180.4	174.1	187.8	199.2	217.4	231.8	2
. Tailored Tests											
Combined contingent liabilities	50.9	89.9	88.6	89.0	100.8	97.9	108.1	118.5	131.5	141.9	
2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
hreshold	140	140	140	140	140	140	140	140	140	140	
	Debt service-to-	exports	ratio								
aseline	3.0	2.8	2.5	2.3	2.9	3.0	3.1	3.4	3.4	3.4	
<ol> <li>Alternative Scenarios</li> <li>Key variables at their historical averages in 2019-2039 1/</li> </ol>	3.0	2.6	0.2	-2.2	-4.6	-7.1	-10.0	-12.5	-15.5	-18.4	
. Bound Tests											
1. Real GDP growth	3.0	2.8	2.5	2.3	2.9	3.0	3.1	3.4	3.4	3.4	
2. Primary balance 3. Exports	3.0 3.0	2.8 4.1	2.7 6.6	2.6 7.9	3.3 9.2	3.4 9.2	3.4 9.2	3.7 9.7	3.7 9.7	3.8 9.8	
4. Other flows 2/	3.0	2.8	3.8	4.9	5.4	5.3	5.3	5.5	5.4	5.4	
6. One-time 30 percent nominal depreciation	3.0	2.8	2.5	8.0	1.4	1.6	1.7	2.0	2.1	2.2	
6. Combination of B1-B5	3.0	3.3	5.5	5.6	6.4	6.4	6.4	6.7	6.7	6.7	
. Tailored Tests											
Combined contingent liabilities     Network discrete.	3.0	2.8	3.4	3.1	3.7	4.0	4.0	4.3	4.3	4.3	
Natural disaster     Commodity price	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	
4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
hreshold	10	10	10	10	10	10	10	10	10	10	
	Debt service-to-r										
aseline	1.7	1.8	1.5	1.3	1.4	1.4	1.4	1.5	1.5	1.5	
. <b>Alternative Scenarios</b> 1. Key variables at their historical averages in 2019-2039 1/	1.7	1.7	0.1	-1.2	-2.2	-3.4	-4.6	-5.6	-6.8	-7.9	
. Bound Tests 1. Real GDP growth	1.7	1.9	1.9	1.5	1.7	1.8	1.7	1.8	1.8	1.8	
2. Primary balance	1.7	1.8	1.6	1.4	1.6	1.6	1.6	1.7	1.6	1.6	
3. Exports	1.7	1.8	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
4. Other flows 2/	1.7	1.8	2.3	2.6	2.6	2.5	2.4	2.5	2.4	2.3	
6. One-time 30 percent nominal depreciation 6. Combination of B1-B5	1.7 1.7	2.2 1.9	1.9 2.6	0.5 2.4	0.9 2.4	1.0 2.4	1.0 2.3	1.2 2.4	1.2 2.3	1.2 2.3	
. Tailored Tests	,										
Combined contingent liabilities	1.7	1.8	2.0	1.7	1.8	1.9	1.8	1.9	1.9	1.9	
2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
3. Commodity price		n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
3. Commodity price 4. Market Financing hreshold	n.a. <b>14</b>	14	14	14	14	14	14	14	14	14	

						ojections					
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	20
		of Debt-									
Baseline	4.3	4.3	4.4	4.5	4.6	4.7	5.7	7.3	9.0	10.2	1
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2019-2039 1/	4	4	5	5	5	6	7	8	8	8	
B. Bound Tests											
B1. Real GDP growth	4	6	9	11	14	16	19	24	28	31	
B2. Primary balance	4	5	6	6	6	6	7	9	10	12	
B3. Exports	4 4	6 9	9 14	9 14	9 14	9 14	10	11	13	14	
B4. Other flows 2/	4	5	4	3	2	2	14 2	16 2	17 2	18 3	
B6. One-time 30 percent nominal depreciation B6. Combination of B1-B5	4	5	5	5	5	5	6	8	10	11	
		3	3	3	3	3	Ü	Ü	10		
C. Tailored Tests	4	9	9	9	9	9	10	11	12	1.4	
C1. Combined contingent liabilities	4						10	11	13	14	
C2. Natural disaster 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. 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.	
-											
Public debt benchmark	35	35	35	35	35	35	35	35	35	35	
3aseline	PV c	of Debt-to 16.4		Ratio 15.2	14.8	15.3	18.8	24.5	31.4	36.7	4
	13.0	10.4	15.8	13.2	14.0	15.5	10.0	24.5	31.4	30.7	4
A. Alternative Scenarios	45.0	46.5	160	47.4	47.5	10.0	22.6	26.6	20.4	20.4	,
A1. Key variables at their historical averages in 2019-2039 1/	15.8	16.5	16.8	17.1	17.5	18.8	22.6	26.6	29.4	30.1	3
3. Bound Tests											
B1. Real GDP growth	15.8	20.7	28.1	34.3	40.1	47.0	58.7	73.1	89.8	105.4	12
32. Primary balance	15.8	19.8	22.9	21.8	20.6	20.5	24.1	29.7	36.5	41.9	4
B3. Exports	15.8	23.1	32.7	30.8	29.1	29.0	32.5	38.2	45.2	50.7	5
B4. Other flows 2/	15.8	35.1	51.2	47.8	44.7	43.9	47.5	53.2	60.3	66.0	7
B6. One-time 30 percent nominal depreciation B6. Combination of B1-B5	15.8 15.8	18.7 18.8	14.3 19.3	10.8 16.3	7.6 16.2	5.6 16.9	5.1 20.8	6.7 26.7	8.8 33.8	9.4 39.3	1 4
	13.0	10.0	13.5	10.5	10.2	10.5	20.0	20.7	33.0	39.3	4
C. Tailored Tests	45.0										_
C1. Combined contingent liabilities	15.8	35.8	33.9	31.9	28.8	28.6	32.1	37.5	44.5	50.0	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 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. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	n.a. n.a.	
.4. Ivial Ret Financing	II.a.	II.a.	II.a.	II.a.	II.a.	II.a.	II.a.	II.d.	II.d.	II.d.	
Baseline		Service-to			0.0	0.0	1.0	1.4	1.0	2.2	
A. Alternative Scenarios	2.7	0.9	0.8	0.7	0.8	0.8	1.0	1.4	1.8	2.2	
A1. Key variables at their historical averages in 2019-2039 1/	2.7	0.8	0.8	0.7	0.9	1.2	1.4	1.8	2.2	2.3	
3. Bound Tests											
B1. Real GDP growth	2.7	0.9	1.0	1.1	2.5	3.8	4.5	5.6	6.8	7.8	1
B2. Primary balance	2.7	0.9	0.9	0.9	1.9	2.1	1.2	1.8	2.2	2.3	
33. Exports	2.7	0.9	0.9	1.0	1.1	1.1	1.3	1.6	2.0	2.4	
84. Other flows 2/	2.7	0.9	1.2	1.4	1.4	1.4	1.6	1.9	2.3	2.7	
36. One-time 30 percent nominal depreciation	2.7	1.0	1.0	0.7	8.0	0.0	0.9	1.2	1.5	1.8	
36. Combination of B1-B5	2.7	0.9	8.0	0.7	8.0	0.9	1.3	1.7	2.1	2.6	
C. Tailored Tests											
C1. Combined contingent liabilities	2.7	0.9	1.5	1.4	6.4	1.4	1.5	3.0	2.2	2.6	
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.	
24. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	

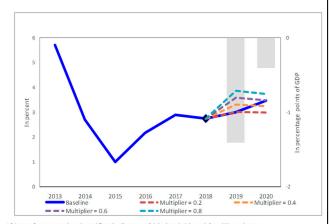


2/ Distribution across LICs for which LIC DSAs were produced.

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.

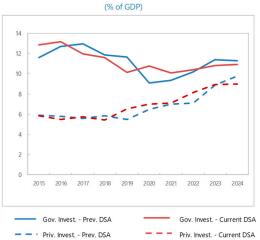


#### Fiscal Adjustment and Possible Growth Paths 1/



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).





- Priv. Invest. - Prev. DSA

#### Contribution to Real GDP growth

