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FIRST REVIEW UNDER THE EXTENDED CREDIT FACILITY ARRANGEMENT AND REQUEST FOR MODIFICATION OF PERFORMANCE CRITERIA—DEBT SUSTAINABILITY ANALYSIS

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The conclusions of the last debt sustainability analysis for Afghanistan remain valid. The country continues to be assessed at high risk of external debt distress. Although public debt remains modest at slightly below 8½ percent of GDP, Afghanistan's debt sustainability will hinge critically on continued donor grant inflows (estimated at 39 percent of GDP in 2016, including both on and off-budget grants) under substantial fiscal and external deficits and downside risks to the economic outlook. The planned contracting of non-concessional loans from the Islamic Development Bank (US$72 million[2] does not noticeably impact the debt sustainability profile.

Changes in the structure of donor financing with a gradual shift to loan financing (a customized illustrative scenario) would quickly lead to an unsustainable debt burden. Other significant downside risks include the fragile security situation, political uncertainty, domestic revenue shortfalls and the potential for more rapid exchange rate depreciation.

Accordingly, the authorities should continue their efforts to mobilize revenue and press ahead with their reform efforts, while donors should continue to provide financing in the form of grants.

[1] This DSA was prepared by IMF and World Bank staff, using the standard debt sustainability framework for low-income countries (LIC-DSA); see "Staff Guidance Note on the Application of the Joint Bank-Fund Debt Sustainability Framework for Low-Income Countries." http://www.imf.org/external/np/pp/eng/2013/110513.pdf. The LIC-DSA compares the evolution over the projection period of debt-burden indicators against policy-dependent indicative thresholds, using the three-year average of the World Bank's Country Policy and Institutional Assessment (CPIA). With an average 2013-15 CPIA of 2.7, Afghanistan is classified as having "weak performance" under the LIC-DSF.

[2] The two loans of about US$4.5 million and US$67.5 million have grant elements of 49.6 and 55.6 percent respectively, below the 60 percent threshold required for Afghanistan per the Technical Memorandum of Understanding

BACKGROUND

1. **This joint International Monetary Fund (IMF) and World Bank (WB) DSA updates the DSA conducted in July 2016 for the request for a three-year Extended Credit Facility (ECF) arrangement**. The DSA is based on end-2016 data and the baseline scenario of the first review of the arrangement under the ECF. Public debt recording and monitoring needs to be strengthened: 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 stronger capacity in this area.

UNDERLYING DSA ASSUMPTIONS

The DSA's baseline macroeconomic scenario assumes some long-run improvements in security and political stability with implementation of reform and a decline in aid dependence. Compared with the July 2016 DSA, prospects for growth have weakened somewhat over the near- and medium term. This reflects continued uncertainties about security conditions which heavily influence economic confidence and the pace of reforms. In the medium- and long term, the baseline scenario assumes political stability with regular election cycles and economic reform with the government delivering on Afghanistan's development goals and priorities that improve the business environment and governance to support private-sector-led inclusive growth. As in the previous DSA, the scenario incorporates a gradual decline in donor aid disbursements with an increasing share being disbursed through the budget and provided to the civilian sector. Grants and exports are somewhat lower in the revised long-term scenario.

Macroeconomic Assumptions Comparison Table

	DSA July 2016		DSA update April 2017		Current vs. previous	
	2015-19	Long term 1/	2015-19	Long term 1/	2015-19	Long term
Real growth (%)	3.1	5.0	2.7	5.0	-0.5	0.0
Inflation (GDP, deflator, %)	5.3	5.1	4.9	4.7	-0.4	-0.4
Nominal GDP (Billions of Afghanis)	1446	4467	1423	4081	-23.1	-386
Revenue and grants (% GDP)	27.6	28.2	26.5	27.6	-1.1	-0.6
Grants (% GDP)	16.9	12.8	15.6	12.4	-1.3	-0.5
Primary expenditure (% GDP)	27.8	28.8	26.6	28.9	-1.1	0.1
Primary balance (% GDP)	-0.1	-0.6	0.1	1.3	0.2	1.9
Exports of G&S (% GDP)	11.7	16.9	6.5	9.6	-5.2	-7.2
Noninterest current account balance (%GDP)	1.4	-4.3	4.0	-2.6	2.6	1.7

1/ Last 15 years of the projection period.

Sources: Afghan authorities; and IMF staff estimates and projections.

EXTERNAL DSA

2. **Assuming continued donor support in the form of grants, Afghanistan's debt outlook is benign.** Afghanistan's public debt remains modest. The country passed the HIPC completion point and received debt relief in 2006. External public and publicly guaranteed debt, mostly to multilateral creditors, amounted to 6½ percent of GDP in 2016.[3, 4] A limited amount of concessional borrowing and the planned contracting of non-concessional loans from the Islamic Development Bank (US$72 million), linked to large infrastructure projects with potentially high rates of economic and social returns, are embedded in the medium-term baseline scenario.

3. **Risks of a fall in grant financing put Afghanistan at a high risk of external debt distress.** A customized illustrative scenario assumes a change in the structure of financing with a shift of 15 percent of grants towards concessional lending from 2020 onward. Under such a scenario, one external debt burden indicator threshold is breached (the present value of debt to exports ratio), and it is noted that dynamics for all solvency and liquidity indicators deteriorate over the period.[5]

PUBLIC DSA

4. **The baseline scenario assumes that the government will start issuing domestic public debt in 2020.** The only domestic component of public debt (1.8 percent of GDP in 2016) is currently a promissory note issued by the Ministry of Finance in 2012 to underwrite DAB's lender-of-last-resort exposure to Kabul Bank; consistent with the conditionality of the ECF, it is expected to be fully repaid through capital transfers to DAB by end-2019. Starting in 2020, the country is assumed to start issuing domestic public debt (sukuk) which is assumed to become a significant source of finance by the end of the forecast period. Support for capacity building is being provided by the World Bank, to strengthen institutional arrangements for debt recording and management.

CONCLUSIONS

5. **Afghanistan's debt sustainability hinges on continued donor grant inflows**. The debt outlook under the baseline scenario is benign. However, a change in the structure of donor financing with a shift to loans (a customized illustrative scenario) would quickly lead to an unsustainable debt burden. Afghanistan remains at a high risk of external debt distress.

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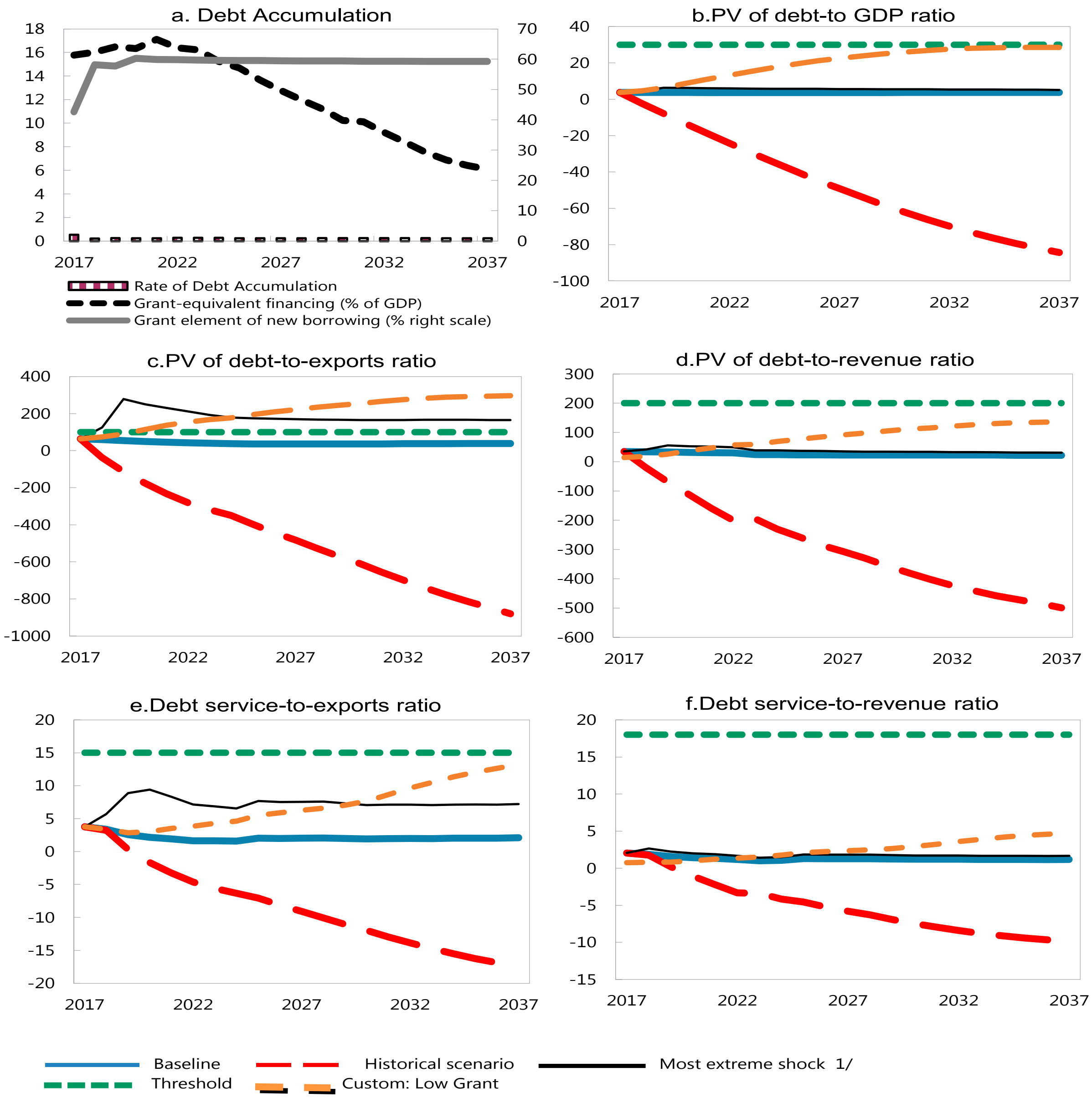
[3] This debt stock is after delivery of the already-pledged debt relief commitments. Afghanistan is still following up with one Paris Club creditor on its debt relief commitments, as well as with non-Paris Club creditors on debt relief on comparable terms. In terms of debt structure and composition, most of the external debt is owed to multilateral institutions, mainly regional and international financial institutions.

[4] Afghanistan owes a small amount (US$10 million) of pre-HIPC Initiative arrears to a non-Paris Club creditor, which continues to be not included in PPG external debt under the revised arrears policy for official creditors, as the underlying Paris Club agreement was adequately representative and the authorities have made best efforts to resolve the arrears.

[5] The scenario is subject to high uncertainties regarding the sources and uses of grants and concessional borrowing.

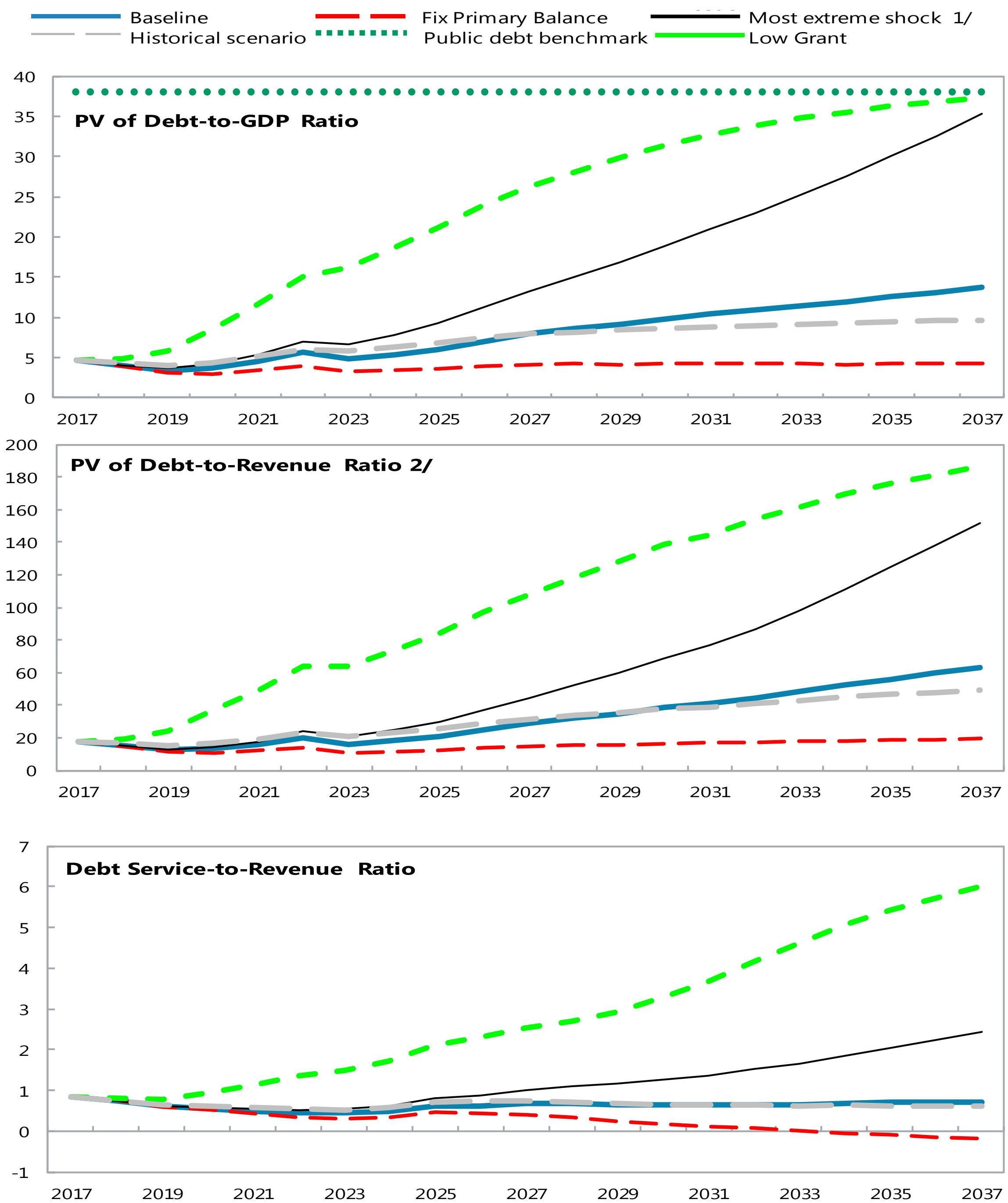
Figure 1. Islamic Republic of Afghanistan: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2017–37 1/



Sources: Afghan authorities; and IMF staff estimates and projections.

1/ The most extreme stress test (under the standardized stress tests) is the test that yields the highest ratio on or before 2026 among the six bound tests in Table 1b.

Figure 2. Islamic Republic of Afghanistan: Indicators of Public Debt Under Alternative Scenarios, 2017–37 1/



Sources: Afghan authorities; and IMF staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2026.
2/ Revenues are defined inclusive of grants.

Table 1a. Islamic Republic of Afghanistan: External Debt Sustainability Framework, Baseline Scenario, 2014–37 1/

(In percent of GDP, unless otherwise indicated)

	Actual			Historical 6/ Average	Standard 6/ Deviation	Projections									
	2014	2015	2016			2017	2018	2019	2020	2021	2022	2017-2022 Average	2027	2037	2023-2037 Average
External debt (nominal) 1/	6.5	7.0	6.5			6.6	6.3	6.0	5.7	5.5	5.3		5.0	5.6	
of which: public and publicly guaranteed (PPG)	6.5	7.0	6.5			6.6	6.3	6.0	5.7	5.5	5.3		5.0	5.6	
Change in external debt	-0.5	0.5	-0.5			0.1	-0.3	-0.3	-0.3	-0.3	-0.2		0.0	0.0	
Identified net debt-creating flows	-6.1	-3.5	-7.2			-6.0	-3.4	-3.3	-2.6	-1.8	-0.8		2.4	2.4	
Non-interest current account deficit	-5.8	-2.9	-7.1	-17.7	17.9	-4.8	-2.7	-2.6	-1.9	-1.1	0.4		3.6	3.6	3.5
Deficit in balance of goods and services	31.5	36.5	33.6			32.6	31.6	30.0	28.5	27.2	26.4		20.3	10.4	
Exports	9.7	7.4	5.8			5.9	6.2	7.0	7.6	8.1	8.6		10.1	9.5	
Imports	41.3	43.9	39.4			38.5	37.8	37.0	36.1	35.3	35.0		30.4	19.9	
Net current transfers (negative = inflow)	-37.3	-38.5	-40.5	-50.1	13.0	-36.8	-33.7	-32.1	-29.9	-27.7	-25.6		-16.3	-6.6	-13.6
of which: official	-38.0	-38.2	-39.3			-35.6	-32.4	-30.7	-28.4	-26.3	-24.1		-14.5	-5.3	
Other current account flows (negative = net inflow)	0.0	-0.9	-0.3			-0.6	-0.6	-0.6	-0.5	-0.5	-0.5		-0.4	-0.2	
Net FDI (negative = inflow)	-0.2	-0.9	-0.4	-0.9	0.6	-1.1	-0.5	-0.5	-0.5	-0.5	-1.0		-1.0	-1.0	-1.0
Endogenous debt dynamics 2/	0.0	0.2	0.3			-0.1	-0.2	-0.2	-0.2	-0.2	-0.2		-0.2	-0.2	
Contribution from nominal interest rate	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Contribution from real GDP growth	-0.1	-0.1	-0.1			-0.2	-0.2	-0.2	-0.3	-0.3	-0.3		-0.2	-0.2	
Contribution from price and exchange rate changes	0.0	0.3	0.4			...	...	...	...	...	...		...	...	
Residual (3-4) 3/	5.6	4.0	6.7			6.2	3.1	3.1	2.3	1.5	0.7		-2.5	-2.4	
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	
PV of external debt 4/	...	...	3.4			3.6	3.5	3.4	3.2	3.1	3.0		2.8	2.9	
In percent of exports	...	...	58.7			60.9	55.8	48.0	42.4	38.4	35.1		27.8	30.1	
PV of PPG external debt	...	...	3.4			3.6	3.5	3.4	3.2	3.1	3.0		2.8	2.9	
In percent of exports	...	...	58.7			60.9	55.8	48.0	42.4	38.4	35.1		27.8	30.1	
In percent of government revenues	...	...	30.9			33.0	30.8	29.5	27.5	26.3	25.0		17.8	17.5	
Debt service-to-exports ratio (in percent)	4.0	3.1	3.9			3.7	3.3	2.4	2.0	1.8	1.5		1.8	1.7	
PPG debt service-to-exports ratio (in percent)	4.0	3.1	3.9			3.7	3.3	2.4	2.0	1.8	1.5		1.8	1.7	
PPG debt service-to-revenue ratio (in percent)	4.5	2.2	2.1			2.0	1.8	1.5	1.3	1.2	1.0		1.2	1.0	
Total gross financing need (Billions of U.S. dollars)	-1.1	-0.7	-1.4			-1.2	-0.7	-0.7	-0.6	-0.4	-0.1		1.2	2.2	
Non-interest current account deficit that stabilizes debt ratio	-5.4	-3.4	-6.6			-4.9	-2.4	-2.4	-1.6	-0.8	0.6		3.7	3.6	
Key macroeconomic assumptions															
Real GDP growth (in percent)	1.3	0.8	2.0	7.5	6.6	3.0	3.5	4.0	4.5	5.0	5.5	4.2	4.8	4.8	5.0
GDP deflator in US dollar terms (change in percent)	-0.4	-4.0	-6.0	3.4	8.7	5.6	2.3	2.9	2.9	2.8	2.8	3.2	1.4	1.8	1.6
Effective interest rate (percent) 5/	0.4	0.5	0.4	0.3	0.1	0.6	0.7	0.7	0.7	0.8	0.8	0.7	0.6	0.9	0.7
Growth of exports of G&S (US dollar terms, in percent)	42.7	-26.8	-24.3	-1.8	32.0	11.1	11.2	20.7	16.9	14.8	15.2	15.0	7.1	5.6	7.5
Growth of imports of G&S (US dollar terms, in percent)	-17.9	2.8	-13.8	8.6	25.7	6.4	3.9	4.8	5.0	5.5	7.6	5.5	3.6	0.0	2.8
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	31.0	52.5	52.6	57.8	57.5	57.8	51.5	58.4	58.7	58.5
Government revenues (excluding grants, in percent of GDP)	8.6	10.2	11.0			10.9	11.3	11.4	11.8	11.8	12.1		15.8	16.3	15.9
Aid flows (in Billions of US dollars) 7/	3.2	2.9	3.0			3.2	3.4	3.8	4.0	4.6	4.7		5.0	4.3	
of which: Grants	3.1	2.9	3.0			3.2	3.4	3.8	4.0	4.5	4.7		4.9	4.1	
of which: Concessional loans	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.1	0.2	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			15.6	15.8	16.3	16.1	16.9	16.2		12.3	5.6	10.2
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			97.4	99.3	99.2	99.4	99.3	99.2		98.4	96.4	97.8
Memorandum items:															
Nominal GDP (Billions of US dollars)	20.4	19.7	18.9			20.6	21.8	23.3	25.0	27.0	29.3		40.6	77.5	
Nominal dollar GDP growth	0.9	-3.3	-4.1			8.8	5.9	7.0	7.5	8.0	8.5	7.6	6.2	6.7	6.7
PV of PPG external debt (in Billions of US dollars)			0.7			0.7	0.7	0.8	0.8	0.8	0.9		1.1	2.2	
(PVt-PVt-1)/GDPt-1 (in percent)						0.4	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Gross workers' remittances (Billions of US dollars)	0.1	0.2	0.1			0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.2	
PV of PPG external debt (in percent of GDP + remittances)	...	...	3.4			3.6	3.5	3.4	3.2	3.1	3.0		2.8	2.9	
PV of PPG external debt (in percent of exports + remittances)	...	...	54.2			56.6	52.1	45.2	40.3	36.7	33.6		26.9	29.4	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	3.6			3.5	3.1	2.3	1.9	1.7	1.4		1.8	1.6	

Sources: Afghan authorities; and IMF staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and ρ = 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; errors and omissions; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

4/ Assumes that PV of private sector debt is equivalent to its face value.

5/ Current-year interest payments divided by previous period debt stock.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

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

8/ 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).

Table 1b. Islamic Republic of Afghanistan: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2017–37

(In percent)

	Projections							
	2017	2018	2019	2020	2021	2022	2027	2037
PV of debt-to GDP ratio								
Baseline	4	4	4	4	4	4	4	4
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	4	-2	-8	-13	-19	-24	-49	-84
A2. New public sector loans on less favorable terms in 2017-2037 2/	4	4	4	4	4	4	5	7
Customized 1: Lower Grants	4	5	6	9	11	13	23	28
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	4	4	4	4	4	4	4	4
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	4	5	6	6	6	6	6	5
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	4	4	4	4	4	4	4	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	4	3	1	1	1	1	1	2
B5. Combination of B1-B4 using one-half standard deviation shocks	4	1	-1	-1	-1	-1	0	1
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	4	5	5	5	5	5	5	5
PV of debt-to-exports ratio								
Baseline	64	60	54	49	45	42	36	39
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	64	-36	-112	-175	-232	-281	-483	-881
A2. New public sector loans on less favorable terms in 2017-2037 2/	64	62	58	55	53	51	52	70
Customized 1: Lower Grants	64	74	89	113	136	154	221	297
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	64	60	53	48	45	42	36	38
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	64	125	279	250	230	211	170	166
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	64	60	53	48	45	42	36	38
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	64	41	12	12	12	12	14	21
B5. Combination of B1-B4 using one-half standard deviation shocks	64	22	-26	-21	-16	-11	3	21
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	64	60	53	48	45	42	36	38
PV of debt-to-revenue ratio								
Baseline	35	33	33	32	31	30	23	22
A. Alternative Scenarios								
A1. Key variables at their historical averages in 2017-2037 1/	35	-20	-69	-114	-159	-201	-307	-499
A2. New public sector loans on less favorable terms in 2017-2037 2/	35	35	35	36	36	36	33	39
Customized 1: Lower Grants	14	18	26	38	47	57	91	136
B. Bound Tests								
B1. Real GDP growth at historical average minus one standard deviation in 2018-2019	35	34	34	33	32	31	24	23
B2. Export value growth at historical average minus one standard deviation in 2018-2019 3/	35	41	56	53	51	49	35	31
B3. US dollar GDP deflator at historical average minus one standard deviation in 2018-2019	35	36	38	37	36	35	27	25
B4. Net non-debt creating flows at historical average minus one standard deviation in 2018-2019 4/	35	23	7	8	8	9	9	12
B5. Combination of B1-B4 using one-half standard deviation shocks	35	9	-9	-7	-6	-4	1	6
B6. One-time 30 percent nominal depreciation relative to the baseline in 2018 5/	35	47	46	44	43	42	32	31

Table 2a. Islamic Republic of Afghanistan: Public Sector Debt Sustainability Framework, Baseline Scenario, 2014–37

(In percent of GDP, unless otherwise indicated)

	Actual					Estimate	Projections								
	2014	2015	2016	Average 5/	Standard Deviation 5/	2017	2018	2019	2020	2021	2022	2017-22 Average	2027	2037	2023-37 Average
Public sector debt 1/	6.5	9.3	8.3			7.9	7.4	7.0	6.9	6.9	8.0		11.2	21.6	
of which: foreign-currency denominated	6.5	7.0	6.5			6.9	6.9	7.0	6.9	6.8	6.8		7.0	7.5	
Change in public sector debt	-0.5	2.8	-1.0			-0.3	-0.5	-0.5	-0.1	0.0	1.1		1.3	1.1	
Identified debt-creating flows	1.4	2.3	-1.0			-0.9	-0.7	-0.5	0.0	0.2	0.7		1.1	1.1	
Primary deficit	1.7	1.4	-0.1	1.1	1.4	-0.5	-0.2	-0.1	0.4	0.6	1.2	0.2	1.7	2.6	1.6
Revenue and grants	24.0	25.0	26.9			26.3	26.9	27.6	27.8	28.6	28.1		28.4	22.6	26.6
of which: grants	15.4	14.9	15.9			15.4	15.7	16.1	16.0	16.8	16.1		12.4	5.7	10.3
Primary (noninterest) expenditure	25.7	26.4	26.7			25.8	26.7	27.5	28.2	29.3	29.4		30.1	25.2	
Automatic debt dynamics	-0.1	0.9	-0.6			-0.4	-0.5	-0.4	-0.4	-0.5	-0.5		-0.7	-1.5	
Contribution from interest rate/growth differential	-0.2	0.0	-0.4			-0.4	-0.4	-0.4	-0.4	-0.4	-0.4		-0.6	-1.5	
of which: contribution from average real interest rate	-0.1	0.0	-0.2			-0.2	-0.1	-0.1	-0.1	-0.1	-0.1		-0.2	-0.6	
of which: contribution from real GDP growth	-0.1	0.0	-0.2			-0.2	-0.3	-0.3	-0.3	-0.3	-0.4		-0.4	-0.9	
Contribution from real exchange rate depreciation	0.1	0.9	-0.3			0.0	-0.1	-0.1	-0.1	-0.1	-0.1		...	...	
Other identified debt-creating flows	-0.2	0.0	-0.2			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	0.0	0.0	-0.2			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recognition of implicit or contingent liabilities	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)	-0.2	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, 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	
Residual, including asset changes	-1.8	0.6	-0.1			0.6	0.1	0.0	-0.1	-0.2	0.4		0.3	0.0	
Other Sustainability Indicators															
PV of public sector debt	...	...	5.2			4.8	4.2	3.8	3.7	3.8	4.9		7.8	17.8	
of which: foreign-currency denominated	...	...	3.5			3.8	3.8	3.8	3.7	3.7	3.6		3.7	3.7	
of which: external	...	...	3.5			3.8	3.8	3.8	3.7	3.7	3.6		3.7	3.7	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 2/	2.1	1.6	0.1			-0.3	0.0	0.1	0.6	0.8	1.3		1.9	2.8	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	19.5			18.2	15.8	13.7	13.4	13.2	17.3		27.6	78.6	
PV of public sector debt-to-revenue ratio (in percent)	...	...	47.6			43.7	37.7	33.0	31.7	31.9	40.4		49.0	105.2	
of which: external 3/	...	...	31.4			34.7	33.5	33.0	31.7	31.1	30.2		22.9	21.9	
Debt service-to-revenue and grants ratio (in percent) 4/	1.6	0.9	0.8			0.8	0.8	0.7	0.6	0.5	0.5		0.7	0.9	
Debt service-to-revenue ratio (in percent) 4/	4.5	2.2	2.1			2.0	1.9	1.6	1.4	1.3	1.2		1.3	1.2	
Primary deficit that stabilizes the debt-to-GDP ratio	2.2	-1.5	0.9			-0.2	0.3	0.4	0.5	0.6	0.1		0.4	1.5	
Key macroeconomic and fiscal assumptions															
Real GDP growth (in percent)	1.3	0.8	2.0	7.5	6.6	3.0	3.5	4.0	4.5	5.0	5.5	4.2	4.8	4.8	5.0
Average nominal interest rate on forex debt (in percent)	0.4	0.5	0.4	0.3	0.1	0.6	0.8	0.8	0.8	0.9	0.9	0.8	0.7	0.9	0.8
Average real interest rate on domestic debt (in percent)	...	...	...	...	...	...	...	...		...	...	...	...	...	...
Real exchange rate depreciation (in percent, + indicates depreciation	0.9	14.7	-3.8	-1.0	7.6	0.1	...	...	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	3.3	2.3	4.4	6.4	5.3	6.0	6.0	6.0	6.0	6.0	5.9	6.0	4.5	4.0	4.7
Growth of real primary spending (deflated by GDP deflator, in percer	4.3	3.5	3.2	1.2	1.7	-0.6	7.4	6.9	7.0	9.1	5.8	5.9	3.4	4.0	3.9
Grant element of new external borrowing (in percent)	...	...	...	...	...	42.6	58.2	57.7	60.3	59.9	59.8	56.4	59.5	59.2	...

Sources: Afghan authorities; and IMF staff estimates and projections.

1/ Indicate coverage of public sector, e.g., general government or nonfinancial public sector. Also whether net or gross debt is used.

2/ 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.

3/ Revenues excluding grants.

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

5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

Table 2b. Islamic Republic of Afghanistan: Sensitivity Analysis for Key Indicators of Public Debt 2017–37

	Projections							
	2017	2018	2019	2020	2021	2022	2027	2037
PV of Debt-to-GDP Ratio								
Baseline	5	4	4	4	4	5	8	18
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	5	5	4	4	5	5	8	11
A2. Primary balance is unchanged from 2017	5	4	3	3	3	3	4	7
A3. Permanently lower GDP growth 1/	5	4	4	4	5	6	13	40
A4. Alternative Scenario : Low Grant	5	5	6	9	11	14	26	42
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-20	5	4	4	5	5	6	11	24
B2. Primary balance is at historical average minus one standard deviations in 2018-201	5	5	6	6	6	7	9	19
B3. Combination of B1-B2 using one half standard deviation shocks	5	5	5	5	5	6	9	18
B4. One-time 30 percent real depreciation in 2018	5	6	5	5	5	6	8	17
B5. 10 percent of GDP increase in other debt-creating flows in 2018	5	8	7	7	7	8	11	20
PV of Debt-to-Revenue Ratio 2/								
Baseline	18	16	14	13	13	17	28	79
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	18	17	17	17	17	21	30	54
A2. Primary balance is unchanged from 2017	18	15	13	11	10	12	15	30
A3. Permanently lower GDP growth 1/	18	16	14	15	15	21	43	166
A4. Alternative Scenario : Low Grant	18	20	25	37	47	61	106	202
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-20	18	16	15	16	16	21	37	103
B2. Primary balance is at historical average minus one standard deviations in 2018-201	18	19	21	20	19	23	33	83
B3. Combination of B1-B2 using one half standard deviation shocks	18	18	19	18	17	21	30	79
B4. One-time 30 percent real depreciation in 2018	18	21	18	17	16	20	28	76
B5. 10 percent of GDP increase in other debt-creating flows in 2018	18	29	26	26	24	28	37	88
Debt Service-to-Revenue Ratio 2/								
Baseline	1	1	1	1	1	1	1	1
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	1	1	1	1	1	1	1	1
A2. Primary balance is unchanged from 2017	1	1	1	1	0	0	0	0
A3. Permanently lower GDP growth 1/	1	1	1	1	1	1	1	3
A4. Alternative Scenario : Low Grant	1	1	1	1	1	1	3	6
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2018-20	1	1	1	1	1	1	1	1
B2. Primary balance is at historical average minus one standard deviations in 2018-201	1	1	1	1	1	1	1	1
B3. Combination of B1-B2 using one half standard deviation shocks	1	1	1	1	1	1	1	1
B4. One-time 30 percent real depreciation in 2018	1	1	1	1	1	1	1	1
B5. 10 percent of GDP increase in other debt-creating flows in 2018	1	1	1	1	1	1	1	1

Sources: Afghan authorities; and IMF staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.