INTERNATIONAL DEVELOPMENT ASSOCIATION

INTERNATIONAL MONETARY FUND

DJIBOUTI

Joint World Bank-IMF Debt Sustainability Analysis[1]

May 2020

Prepared Jointly by the staffs of the International Development Association (IDA)

and the International Monetary Fund (IMF)

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Djibouti: Joint Fund-Bank Debt Sustainability Analysis	
Risk of external debt distress	High[2]
Overall risk of debt distress	High
Granularity in the risk rating	Sustainable
Application of judgment	No
Macroeconomic projections	Economic prospects for 2020 significantly weakened by COVID-19 pandemic (growth forecast at -1 percent; marked deterioration in fiscal and external positions). Shock expected to be temporary, followed by strong recovery and rapid reduction in imbalances.
Financing strategy	Similar to previous DSA, with a slowing path for new borrowing and similar terms. In addition, the crisis has created a financing need that is assumed to close with an IMF disbursement under the RCF and a grant under the CCRT, as well as donor support at favorable terms. As a result, the average grant element of new borrowing is projected to stabilize below 31 percent in the medium term.
Realism tools flagged	Large unexpected increase in public debt in last 5 years.
Mechanical risk rating under the external DSA	High
Mechanical risk rating under the public DSA	High

[1] The debt coverage has not changed since the last DSA (September 2019).

[2] As per the last DSA update, Djibouti's debt-carrying capacity is classified as medium. The October 2019 WEO and the 2018 CPIA result in a composite indicator of 2.21, which corresponds to a weak debt carrying capacity, while the previous debt-carrying capacity was medium. Since two consecutive weak signals are required to downgrade the debt carrying capacity, the current classification is medium.

This updated Debt Sustainability Analysis (DSA) concludes that Djibouti is at high risk of debt distress. This reflects the fact that the present value (PV) of the external debt-to-GDP ratio breaches its threshold during 2020–26 and the debt service-to-revenue ratio increases and largely stays above its threshold from 2022 onward. However, the authorities are expected to be able to service their debt under current terms. Debt is therefore assessed as sustainable.

Compared to the previous DSA (September 2019), it points to a deterioration in debt indicators, reflecting the impact of the COVID-19 pandemic on macroeconomic prospects. The baseline macroeconomic assumptions for this update are consistent with those underpinning the authorities' request for IMF support under the RCF and the CCRT:

- Djibouti is facing large negative demand and supply shocks that are projected to reduce 2020 real GDP growth to -1 percent. The shocks are expected to be temporary and followed by a strong recovery—10 percent growth in 2021, stabilizing around 6 percent by 2025.

- Additional health and other priority expenditures will be necessary this year to address the pandemic and its economic and social consequences, and the shocks are projected to reduce government revenue. As a result, the government fiscal deficit will increase to 4.5 percent of GDP this year before gradually declining to 1.3 percent over the medium term. Baseline projections assume a significant reduction in debt-financed infrastructure projects implemented by SOEs. For the purpose of the debt service-to-revenue ratio, the net income that SOEs can use for debt service is assumed to be equal to the total debt service due by SOEs (see footnote 1 in Figure 1).

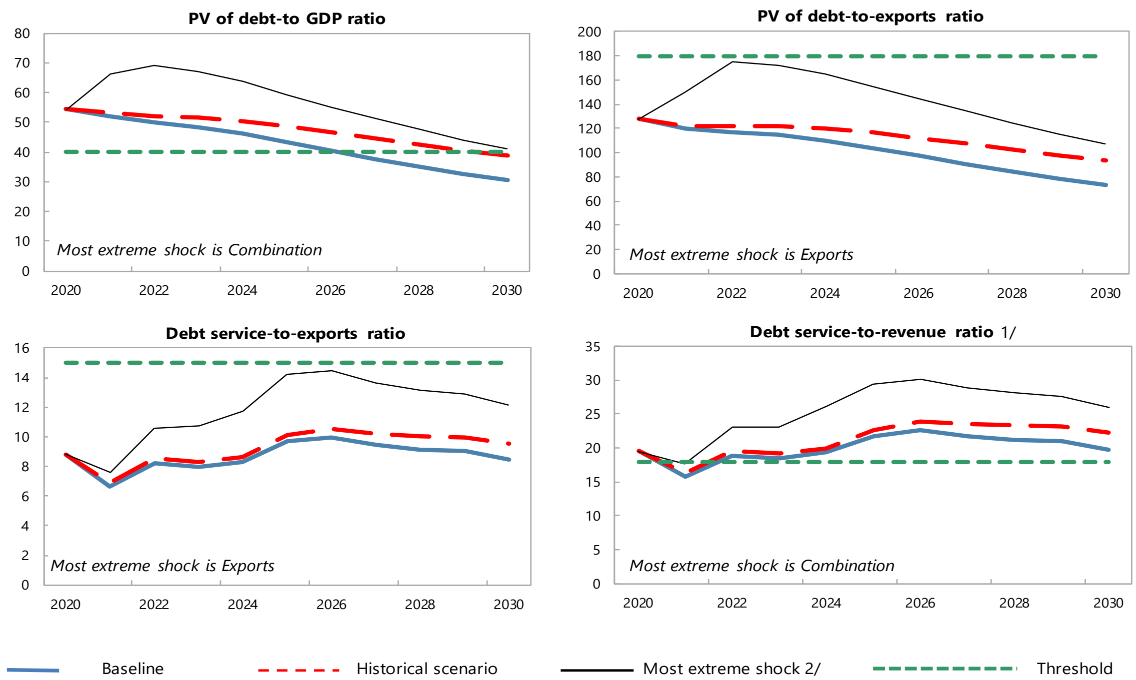
- Lower external demand is expected to temporarily widen the underlying current account balance (excluding re-exports) this year, to about 3.6 percent of GDP. Foreign direct investment (FDI) is also projected to drop by 40 percent. The resulting balance of payments financing need of about 4.8 percent of GDP is assumed to be financed through IMF support under the RCF and the CCRT, as well as donor support at favorable terms.

The debt sustainability assessment takes into consideration the understanding reached with Exim Bank of China in 2019 to restructure the railway loan and accumulated arrears, which is expected to be finalized soon. It also hinges upon the implementation of a range of fiscal and debt management reforms. This includes efforts to address and prevent recurrence of external arrears and to rapidly ramp up operations of several key projects to generate the revenues necessary for debt service. A combination of policies to reduce the pace of borrowing and prioritizing concessional financing and FDI, as well as reforms to strengthen the fiscal framework, public investment management, SOEs oversight, and debt management capacity are also necessary.

The authorities are committed to promptly resolve their outstanding external arrears, which are assessed to be below the de minimis threshold of 1 percent of GDP. As of end-March 2020, Djibouti had an outstanding stock of arrears to bilateral creditors in the order of 3.3 percent of

GDP. The authorities have indicated that arrears reflect delays in finalizing conversions and cancellation agreements and arrears of a technical nature (due to weak debt management capacity and not indicative of a fundamental payment incapacity) or reflecting diplomatic disagreements. They have expressed a commitment to engage with their creditors to address these expeditiously. On this basis, and in accordance with paragraph 90 of the LIC DSF guidance note, external debt arrears excluding arrears related to technical or diplomatic issues stand at 0.97 percent of GDP and are therefore assessed to be below the de minimis threshold of 1 percent of GDP.

Figure 1. Djibouti: Indicators of Public and Publicly Guaranteed External Debt Under Alternatives Scenarios, 2020–2030



Customization of Default Settings		
	Size	Interactions
Tailored Tests		
Combined CLs	No	
Natural Disasters	n.a.	n.a.
Commodity Prices [3/]	n.a.	n.a.
Market Financing	n.a.	n.a.

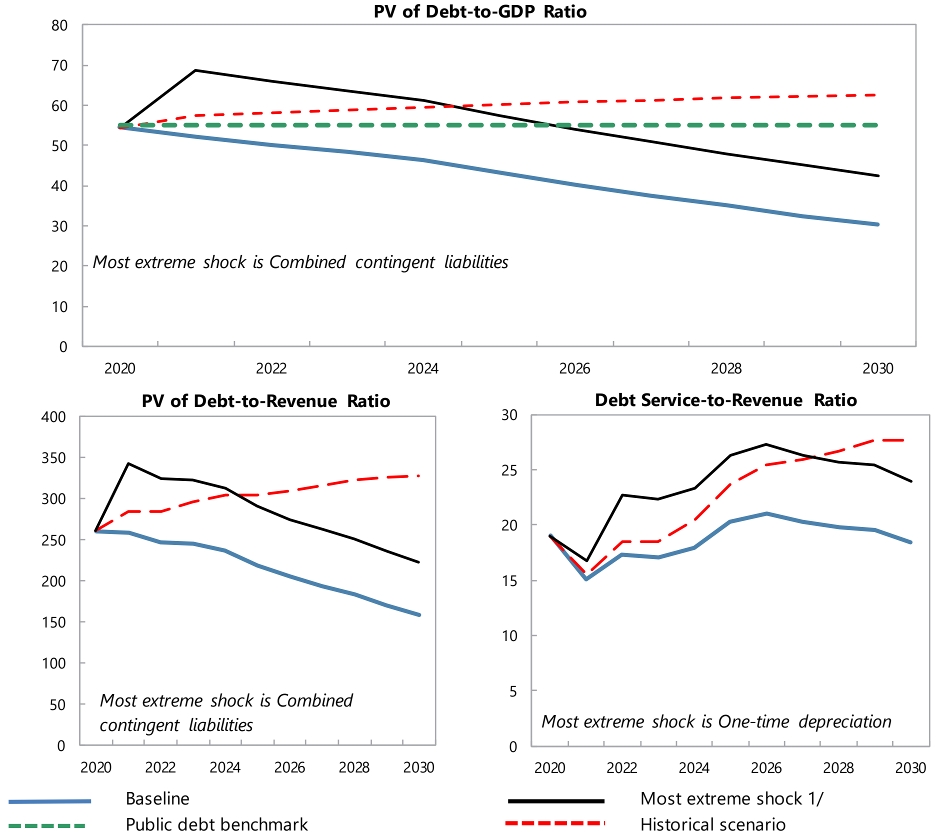
Note: "Yes" indicates any change to the size or interactions of the default settings for the stress tests. "n.a." indicates that the stress test does not apply.

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	2.3%	2.3%
USD Discount rate	5.0%	5.0%
Avg. maturity (incl. grace period)	25	25
Avg. grace period	2	2

* 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/ Consistent with paragraph 22 of the Guidance Note on the Bank-Fund LIC DSA framework, the debt-service-to-revenue liquidity ratio is calculated as the ratio of total public sector interests and amortizations to central government revenues augmented by the net income that SOEs can use for debt service. Given that data limitations do not allow for a detailed cash flow analysis of SOEs, the net income that SOEs can use for debt service is assumed to be equal to the total debt service due by SOEs. This assumption may entail an under-estimation of SOEs' capacity to service debt, to the extent that they generate higher cash flows that could be used for debt service. However, while data on gross operating balances (a concept somewhat equivalent to the EBITDA) are available for most large SOEs, using those to estimate net income that SOEs can use for debt service would lead to a considerable over-estimation of SOEs' capacity to service debt. This is because these data do not account for the cash flows used by SOEs to self-finance large investment programs. In addition, aggregating these surpluses would entail considering that revenue from SOEs are fungible—i.e. that these are resources that can be used to service any debt—which is not the case.
2/ 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.
3/ 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. Djibouti: Indicators of Public Debt Under Alternative Scenarios, 2020–2030



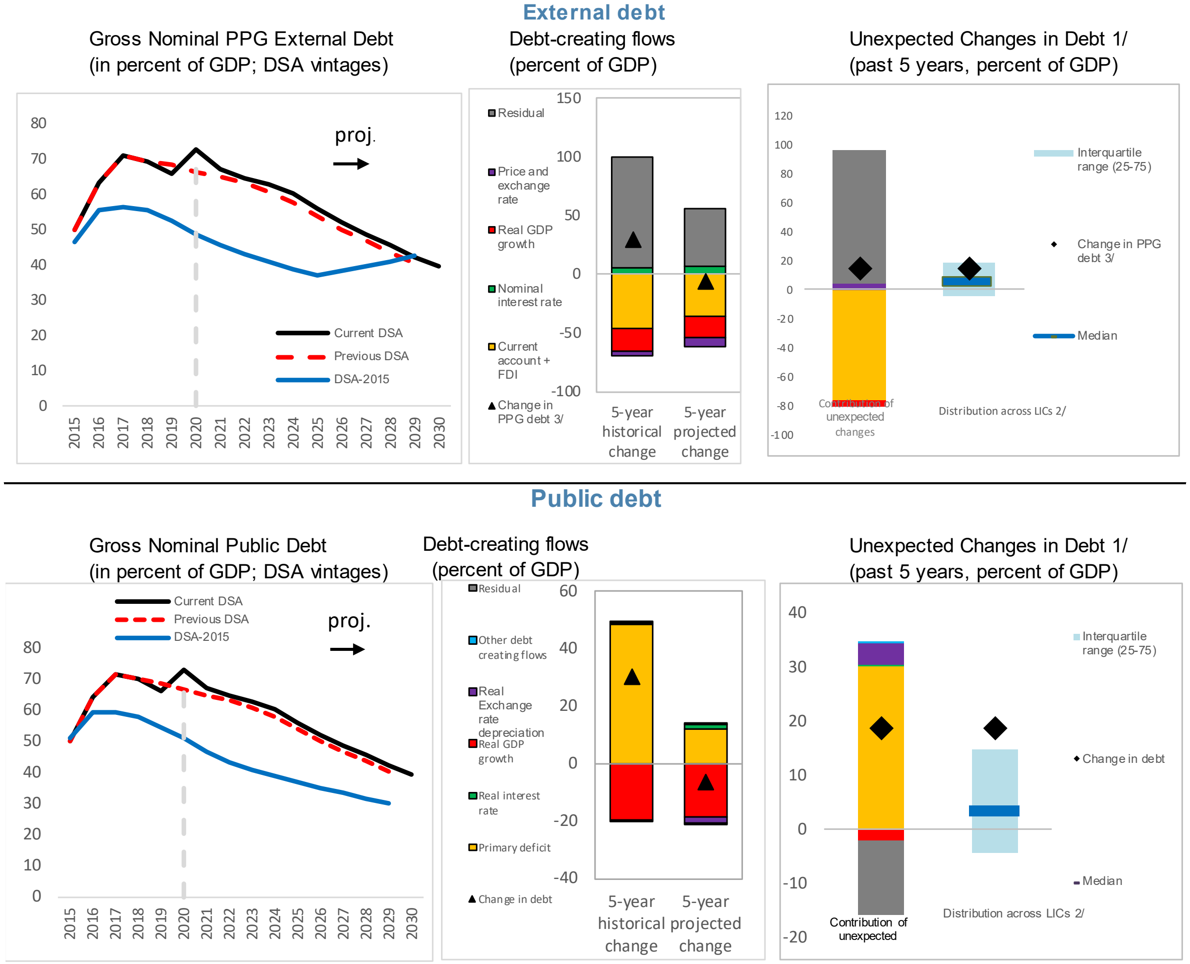
Borrowing Assumptions for Stress Tests*	Default	User defined
Shares of marginal debt		
External PPG medium and long-term	100%	100%
Domestic medium and long-term	0%	0%
Domestic short-term	0%	0%
Terms of marginal debt		
External MLT debt		
Avg. nominal interest rate on new borrowing in USD	2.3%	2.3%
Avg. maturity (incl. grace period)	25	25
Avg. grace period	2	2
Domestic MLT debt		
Avg. real interest rate on new borrowing	0.0%	0.0%
Avg. maturity (incl. grace period)	1	1
Avg. grace period	0	0
Domestic short-term debt		
Avg. real interest rate	0%	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 exterme shock even after disregarding the one-off breach, only that stress test (with a one-off breach) would be presented.

Figure 3. Djibouti: Drivers of Debt Dynamics – Baseline Scenarios



Sources: Country authorities; and staff estimates and projections.

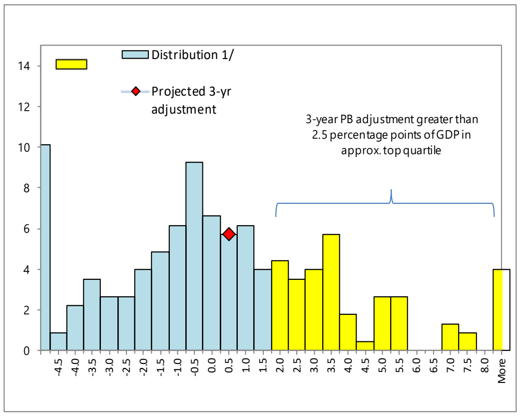
1/ Difference between anticipated and actual contributions on debt ratios.

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.

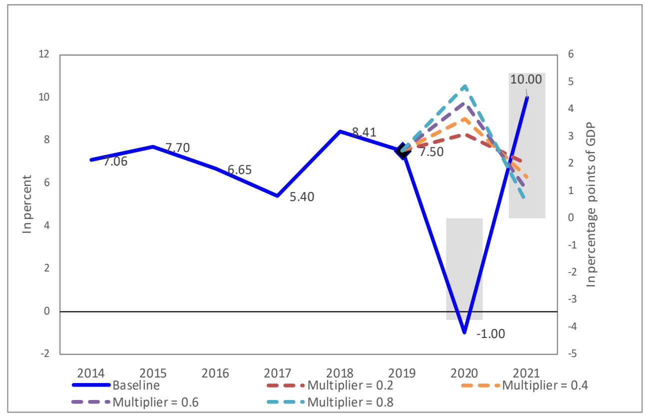
Figure 4. Djibouti: Realism Tools

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



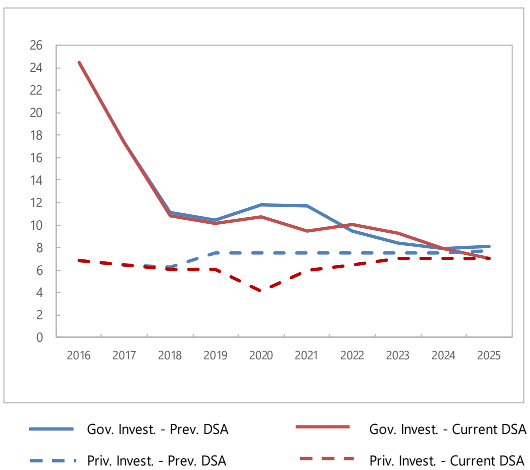
1/ Data cover Fund-supported programs for LICs (excluding emergency financing) approved since 1990. The size of 3-year adjustment from program inception is found on the horizontal axis; the percent of sample is found on the vertical axis.

Fiscal Adjustment and Possible Growth Paths 1/

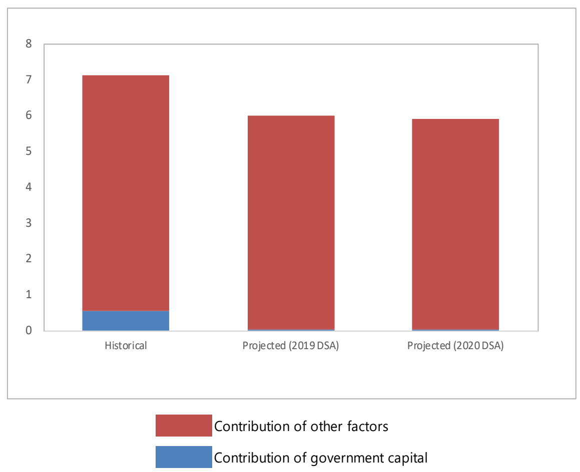


1/ Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

Public and Private Investment Rates
(% of GDP)



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



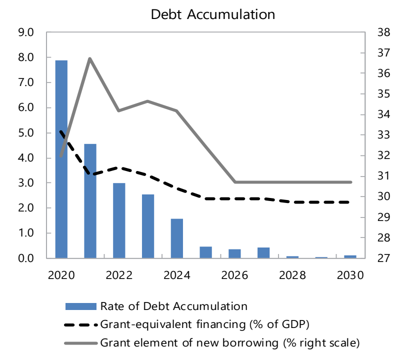
Sources: Country authorities; and staff estimates and projections.

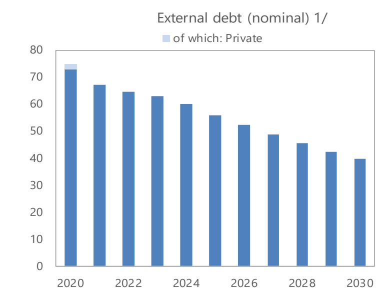
Table 1. Djibouti: External Debt Sustainability Framework, Baseline Scenario, 2017–2040

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 9/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
External debt (nominal) 1/	76.2	74.0	70.3	75.0	67.1	64.7	62.8	60.1	56.1	39.6	20.8	51.5	55.9
of which: public and publicly guaranteed (PPG)	70.9	69.2	66.0	72.9	67.1	64.7	62.8	60.1	56.1	39.6	20.8	50.1	57.3
Change in external debt	12.9	-2.2	-3.6	4.7	-7.9	-2.4	-1.9	-2.7	-4.1	-2.8	-1.2		
Identified net debt-creating flows	-8.0	-14.9	-16.0	0.5	-11.9	-11.6	-11.8	-12.0	-12.1	-10.9	-9.7	-10.9	-10.5
Non-interest current account deficit	0.1	-3.7	-3.9	2.1	-1.1	-2.2	-2.9	-3.5	-3.3	-3.0	-2.4	-2.7	-2.3
Deficit in balance of goods and services	2.4	2.9	0.7	5.3	1.3	0.1	-0.8	-1.6	-1.9	-1.9	-1.9	0.2	-0.5
Exports	51.1	48.7	50.5	42.4	43.6	42.7	42.2	42.0	41.4	41.4	41.4		
Imports	53.4	51.6	51.2	47.8	44.9	42.9	41.4	40.4	39.5	39.5	39.5		
Net current transfers (negative = inflow)	-5.6	-6.5	-5.9	-4.5	-4.3	-4.0	-3.7	-3.5	-3.3	-3.3	-3.3	-4.4	-3.7
of which: official	-0.2	-0.9	-2.0	-0.5	-0.7	-0.7	-0.6	-0.6	-0.5	-0.5	-0.5		
Other current account flows (negative = net inflow)	3.3	-0.1	1.3	1.3	1.9	1.6	1.6	1.7	1.9	2.3	2.9	1.5	1.9
Net FDI (negative = inflow)	-6.0	-5.6	-5.6	-3.8	-5.5	-6.0	-6.5	-6.5	-6.5	-6.5	-6.5	-5.0	-6.1
Endogenous debt dynamics 2/	-2.1	-5.5	-6.5	2.2	-5.2	-3.4	-2.4	-2.0	-2.2	-1.4	-0.9		
Contribution from nominal interest rate	1.3	1.1	0.9	1.5	1.4	1.5	1.5	1.5	1.1	0.8	0.2		
Contribution from real GDP growth	-3.2	-5.8	-5.0	0.7	-6.6	-4.9	-3.9	-3.5	-3.3	-2.2	-1.0		
Contribution from price and exchange rate changes	-0.2	-0.8	-2.4	...	...	...	...	...	...	...	...		
Residual 3/ 4/ 10/	20.9	12.7	12.4	4.2	4.0	9.2	9.9	9.3	8.0	8.1	8.5	13.7	7.7
of which: exceptional financing	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0		
Sustainability indicators													
PV of PPG external debt-to-GDP ratio	...	...	47.4	54.3	52.1	50.0	48.4	46.2	43.2	30.4	17.0		
PV of PPG external debt-to-exports ratio	...	...	94.0	127.9	119.4	117.0	114.6	110.0	104.2	73.3	41.1		
PPG debt service-to-exports ratio	4.6	4.5	4.0	8.8	6.6	8.2	8.0	8.3	9.7	8.5	3.5		
PPG debt service-to-revenue ratio	10.1	10.4	10.3	19.5	15.7	18.8	18.4	19.3	21.7	19.8	8.1		
Gross external financing need (Million of U.S. dollars) 4/	-96.8	-216.3	-251.0	70.4	-144.0	-199.2	-279.5	-323.2	-314.0	-467.7	-1160.3		
Key macroeconomic assumptions													
Real GDP growth (in percent)	5.4	8.4	7.5	-1.0	10.0	8.0	6.5	6.0	6.0	5.5	5.0	6.4	5.9
GDP deflator in US dollar terms (change in percent)	0.3	1.0	3.3	2.9	2.8	2.0	2.0	2.0	2.0	2.0	2.0	2.4	2.3
Effective interest rate (percent) 5/	2.1	1.6	1.3	2.2	2.1	2.4	2.5	2.5	2.0	1.9	0.8	1.7	2.3
Growth of exports of G&S (US dollar terms, in percent)	12.9	4.3	15.3	-14.4	16.1	8.0	7.3	7.6	6.6	7.6	7.1	5.8	5.2
Growth of imports of G&S (US dollar terms, in percent)	22.7	5.7	10.2	-5.0	6.3	5.2	4.9	5.4	5.7	7.6	7.1	7.3	3.8
Grant element of new public sector borrowing (in percent)	...	...	...	32.0	36.7	34.2	34.7	34.2	32.4	30.7	30.7	...	34.0
Government revenues (excluding grants, in percent of GDP)	23.4	21.3	19.6	19.2	18.3	18.6	18.2	18.1	18.4	17.8	17.8	21.4	18.5
Aid flows (in Million of US dollars) 6/	77.7	147.1	189.3	135.8	156.8	155.5	153.9	137.5	106.6	102.2	202.6		
Grant-equivalent financing (in percent of GDP) 7/	...	...	...	5.0	3.3	3.6	3.3	2.8	2.4	2.2	1.8	...	3.4
Grant-equivalent financing (in percent of external financing) 7/	...	...	...	41.7	56.1	48.8	49.6	51.1	51.4	51.6	62.9	...	49.8
Nominal GDP (Million of US dollars)	2,751	3,013	3,346	3,409	3,853	4,244	4,611	4,985	5,390	7,852	15,590		
Nominal dollar GDP growth	5.7	9.5	11.1	1.9	13.0	10.2	8.6	8.1	8.1	7.6	7.1	8.9	8.3
Memorandum items:													
PV of external debt 8/	...	...	51.7	56.4	52.1	50.0	48.4	46.2	43.2	30.4	17.0		
In percent of exports	...	...	102.5	132.9	119.4	117.0	114.6	110.0	104.2	73.3	41.1		
Total external debt service-to-exports ratio	4.6	4.5	4.0	8.8	6.6	8.2	8.0	8.3	9.7	8.5	3.5		
PV of PPG external debt (in Million of US dollars)			1587.5	1851.3	2006.1	2121.8	2230.3	2303.3	2326.1	2383.3	2655.7		
(PVt-PVt-1)/GDPt-1 (in percent)				7.9	4.5	3.0	2.6	1.6	0.5	0.1	0.5		
Non-interest current account deficit that stabilizes debt ratio	-12.8	-1.6	-0.3	-2.6	6.8	0.2	-1.0	-0.8	0.8	-0.2	-1.1		

Definition of external/domestic debt	Residency-based
Is there a material difference between the two criteria?	Yes





Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

2/ Derived as [r - g - ρ(1+g) + Ɛα (1+r)]/(1+g+ρ+gρ) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, ρ = growth rate of GDP deflator in U.S. dollar terms, Ɛ=nominal appreciation of the local currency, and α= share of local currency-denominated external debt in total external debt.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections it also includes contribution from price and exchange rate changes.

4/ Residual debt-creating flows and large negative gross external financing need arise because of the large and systematically negative errors and omissions in the historical data of the balance of payment. Both the residual and gross external financing need remain substantial in projections reflecting the "Other investment" item of the balance of payment. The latter helps address the issue of error and omissions in the projection period, but is not accounted for in this table.

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

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

7/ 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).

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

9/ 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.

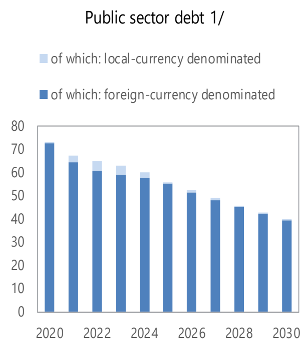
10/ Exceptional financing includes debt relief for the first 6-month tranche and the next 18 months. The next 18 months of debt service relief is expected subject to availability of CCRT resources.

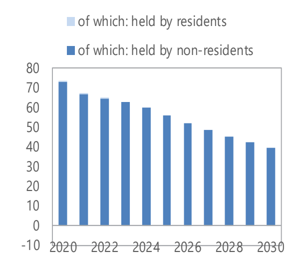
Table 2. Djibouti: Public Sector Debt Sustainability Framework, Baseline Scenario, 2017–2040

(In percent of GDP, unless otherwise indicated)

	Actual			Projections								Average 6/	
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2030	2040	Historical	Projections
Public sector debt 1/	71.6	69.9	66.5	73.1	67.1	64.7	62.8	60.1	56.1	39.6	20.8	50.3	57.3
of which: external debt	70.9	69.2	66.0	72.9	67.1	64.7	62.8	60.1	56.1	39.6	20.8	50.1	57.3
Change in public sector debt	7.4	-1.7	-3.5	6.7	-6.0	-2.4	-1.9	-2.7	-4.1	-2.8	-1.2		
Identified debt-creating flows	7.4	-1.7	-3.5	6.6	-6.1	-2.5	-2.0	-2.8	-4.1	-2.8	-1.2	1.5	-2.5
Primary deficit	9.5	3.4	2.6	6.4	1.1	2.3	1.8	0.6	-0.7	-0.5	0.1	5.6	0.9
Revenue and grants	25.2	24.6	22.9	20.9	20.1	20.3	19.8	19.5	19.7	19.1	19.1	25.1	19.8
of which: grants	1.8	3.3	3.3	1.7	1.8	1.7	1.5	1.4	1.3	1.3	1.3		
Primary (noninterest) expenditure	34.7	28.0	25.5	27.3	21.2	22.6	21.5	20.1	19.1	18.6	19.2	30.7	20.6
Automatic debt dynamics	-2.1	-5.1	-6.1	0.3	-7.0	-4.8	-3.8	-3.3	-3.4	-2.2	-1.3		
Contribution from interest rate/growth differential	-3.1	-6.0	-5.1	1.7	-6.4	-4.8	-3.8	-3.3	-3.0	-1.9	-1.1		
of which: contribution from average real interest rate	0.2	-0.5	-0.2	1.0	0.2	0.2	0.2	0.2	0.4	0.3	-0.1		
of which: contribution from real GDP growth	-3.3	-5.6	-4.9	0.7	-6.6	-5.0	-4.0	-3.6	-3.4	-2.2	-1.0		
Contribution from real exchange rate depreciation	1.0	0.9	-1.0	...	...	...	...	...	...	...	...		
Other identified debt-creating flows	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	0.0
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other) 7/	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	0.0	0.0	0.0	-1.3	-0.5	0.1	0.1	0.1	-0.4	-0.3	-0.2	0.9	-0.4
Sustainability indicators													
PV of public debt-to-GDP ratio 2/	...	...	47.9	54.5	52.1	50.0	48.4	46.2	43.2	30.4	17.0		
PV of public debt-to-revenue and grants ratio	...	...	209.5	260.6	258.9	246.3	244.9	236.7	218.7	159.0	89.2		
Debt service-to-revenue and grants ratio 3/	10.5	10.0	9.9	19.0	15.1	17.3	17.0	17.9	20.3	18.4	7.5		
Gross financing need 4/	10.9	4.8	4.9	10.3	4.0	5.8	5.1	4.1	3.3	3.0	1.5		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	5.4	8.4	7.5	-1.0	10.0	8.0	6.5	6.0	6.0	5.5	5.0	6.4	5.8
Average nominal interest rate on external debt (in percent)	2.1	1.7	1.4	2.3	2.2	2.4	2.5	2.5	2.0	1.9	0.8	1.7	2.2
Average real interest rate on domestic debt (in percent)	3.9	2.9	-1.4	-1.3	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-0.2	-1.9
Real exchange rate depreciation (in percent, + indicates depreciation)	1.6	1.4	-1.5	...	...	...	...	...	...	...	...	-0.7	...
Inflation rate (GDP deflator, in percent)	0.3	1.0	3.3	2.9	2.8	2.0	2.0	2.0	2.0	2.0	2.0	2.4	2.2
Growth of real primary spending (deflated by GDP deflator, in percent)	-13.4	-12.6	-2.1	6.0	-14.6	15.1	1.6	-1.1	0.5	6.7	5.2	4.8	2.7
Primary deficit that stabilizes the debt-to-GDP ratio 5/	2.2	5.1	6.1	-0.3	7.0	4.7	3.7	3.3	3.4	2.2	1.3	4.5	3.3
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Definition of external/domestic debt	**Residency-based**
Is there a material difference between the two criteria?	**Yes**





Sources: Country authorities; and staff estimates and projections.

1/ Coverage of debt: The central, state, and local governments, government-guaranteed debt. Definition of external debt is Residency-based.

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

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

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

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

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

7/ Debt relief considered under CCRT recorded in the table.

Table 3. Djibouti: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2020–2030 (In percent)

	Projections										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of debt-to GDP ratio											
Baseline	54	52	50	48	46	43	40	38	35	33	30
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2040 1/	54	53	52	51	50	48	47	45	43	41	39
B. Bound Tests											
B1. Real GDP growth	54	56	57	55	52	49	46	43	40	37	34
B2. Primary balance	54	60	65	63	60	56	53	49	46	43	41
B3. Exports	54	56	60	58	55	52	48	45	41	38	36
B4. Other flows 2/	54	58	62	60	57	53	49	46	42	39	36
B6. One-time 30 percent nominal depreciation	54	65	61	59	56	52	49	46	43	40	37
B6. Combination of B1-B5	54	66	69	67	64	59	55	51	48	44	41
C. Tailored Tests											
C1. Combined contingent liabilities	54	69	66	64	61	57	54	51	48	45	42
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	40	40	40	40	40	40	40	40	40	40	40
PV of debt-to-exports ratio											
Baseline	128	119	117	115	110	104	97	91	85	79	73
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2040 1/	128	122	122	122	120	117	112	108	103	98	93
B. Bound Tests											
B1. Real GDP growth	128	119	117	115	110	104	97	91	85	79	73
B2. Primary balance	128	138	152	148	142	135	127	119	112	104	98
B3. Exports	128	150	176	172	165	155	144	134	125	115	107
B4. Other flows 2/	128	133	145	142	136	128	119	110	103	95	88
B6. One-time 30 percent nominal depreciation	128	119	113	111	106	101	94	88	82	76	71
B6. Combination of B1-B5	128	153	140	161	154	145	135	126	117	108	100
C. Tailored Tests											
C1. Combined contingent liabilities	128	158	154	151	145	138	130	123	115	108	102
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	180	180	180	180	180	180	180	180	180	180	180
Debt service-to-exports ratio											
Baseline	9	7	8	8	8	10	10	9	9	9	8
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2040 1/	9	7	9	8	9	10	11	10	10	10	10
B. Bound Tests											
B1. Real GDP growth	9	7	8	8	8	10	10	9	9	9	8
B2. Primary balance	9	7	9	9	10	12	12	12	11	11	11
B3. Exports	9	8	11	11	12	14	14	14	13	13	12
B4. Other flows 2/	9	7	9	9	10	12	12	11	11	11	10
B6. One-time 30 percent nominal depreciation	9	7	8	8	8	9	10	9	9	9	8
B6. Combination of B1-B5	9	7	10	10	11	13	14	13	12	12	11
C. Tailored Tests											
C1. Combined contingent liabilities	9	7	9	9	9	11	11	10	10	10	9
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	15	15	15	15	15	15	15	15	15	15	15
Debt service-to-revenue ratio											
Baseline	20	16	19	18	19	22	23	22	21	21	20
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2040 1/	20	16	20	19	20	23	24	23	23	23	22
B. Bound Tests											
B1. Real GDP growth	20	17	21	21	22	25	25	25	24	24	22
B2. Primary balance	20	16	20	21	23	27	28	27	26	26	25
B3. Exports	20	16	19	20	22	26	26	25	24	24	23
B4. Other flows 2/	20	16	20	20	23	26	27	26	25	25	23
B6. One-time 30 percent nominal depreciation	20	20	24	23	24	26	28	27	26	26	24
B6. Combination of B1-B5	20	18	23	23	26	29	30	29	28	28	26
C. Tailored Tests											
C1. Combined contingent liabilities	20	16	21	21	22	24	25	24	23	23	21
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Threshold	18	18	18	18	18	18	18	18	18	18	18

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. Djibouti: Sensitivity Analysis for Key Indicators of Public Debt, 2020–2030

(In percent)

		Projections									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
PV of Debt-to-GDP Ratio											
Baseline	55	52	50	48	46	43	40	38	35	33	30
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2040 1/	55	**57**	**58**	**59**	**60**	**60**	**61**	**61**	**62**	**62**	**63**
B. Bound Tests											
B1. Real GDP growth	55	**57**	**60**	**59**	**59**	**57**	55	53	52	50	49
B2. Primary balance	55	**60**	**65**	**63**	**60**	**56**	53	50	46	43	41
B3. Exports	55	**56**	**60**	**58**	**56**	52	48	45	42	38	36
B4. Other flows 2/	55	**58**	**62**	**60**	**57**	53	49	46	42	39	36
B6. One-time 30 percent nominal depreciation	55	**67**	**62**	**58**	54	49	45	41	37	33	30
B6. Combination of B1-B5	55	**60**	**57**	50	48	45	42	39	36	34	31
C. Tailored Tests											
C1. Combined contingent liabilities	55	**69**	**66**	**64**	**61**	**58**	54	51	48	45	43
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Public debt benchmark	55	55	55	55	55	55	55	55	55	55	55
PV of Debt-to-Revenue Ratio											
Baseline	261	259	246	245	237	219	205	194	184	171	159
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2040 1/	261	284	285	297	304	305	309	316	323	326	328
B. Bound Tests											
B1. Real GDP growth	261	283	290	298	298	285	277	273	269	261	254
B2. Primary balance	261	299	320	318	308	286	269	256	243	228	214
B3. Exports	261	281	297	295	285	262	245	231	218	202	187
B4. Other flows 2/	261	288	305	303	292	268	250	236	222	206	191
B6. One-time 30 percent nominal depreciation	261	336	309	297	279	252	230	211	194	174	156
B6. Combination of B1-B5	261	296	282	252	244	226	211	201	190	176	165
C. Tailored Tests											
C1. Combined contingent liabilities	261	342	325	323	313	291	275	263	251	236	223
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Debt Service-to-Revenue Ratio											
Baseline	19	15	17	17	18	20	21	20	20	20	18
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2020-2040 1/	19	16	19	19	20	24	25	26	27	28	28
B. Bound Tests											
B1. Real GDP growth	19	16	20	19	21	24	26	25	26	26	25
B2. Primary balance	19	15	18	19	22	26	26	25	25	24	23
B3. Exports	19	15	18	19	20	24	24	24	23	22	21
B4. Other flows 2/	19	15	18	19	21	24	25	24	23	23	22
B6. One-time 30 percent nominal depreciation	19	17	23	22	23	26	27	26	26	25	24
B6. Combination of B1-B5	19	15	18	17	18	21	21	21	20	20	19
C. Tailored Tests											
C1. Combined contingent liabilities	19	15	20	19	20	22	23	22	22	21	20
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.