Ministry of finance of Georgia

Government Debt Sustainability Analysis

for 2023-2033

November, 2023

Government Debt Sustainability Analysis

The primary goal of conducting the government debt sustainability analysis is to assess the government's ability to fulfill its responsibilities both in the short and long term. Debt sustainability analysis is important in terms of budget transparency and effective public finance management. The analysis is based on the methodology of the International Monetary Fund (IMF) and is modified depending on the specifics of the country.[1]

Government debt sustainability analysis, which encompasses the assessment of various possible risk factors and their impact on the government's debt portfolio, helps the government to identify possible consequences of negative factors in advance and develop an appropriate action plan.

In the government debt sustainability analysis, both baseline and alternative (negative) scenarios are used, and corresponding assumptions are made about various macroeconomic and fiscal variables. These include real GDP growth, inflation, exchange rate fluctuations, interest rates, government expenditures, fiscal deficit, and other factors.

In the given analysis, the baseline scenario represents the expected option of economic development, which has the highest probability of occurring in the medium term. Accordingly, the state budget is projected based on this scenario.

In alternative scenarios, stress tests are performed by considering various magnitudes of different economic and fiscal shocks (Real GDP growth shock[2], real interest rate shock[3], government budget primary balance shock[4], nominal exchange rate shock[5], combined shock[6] and contingent liabilities shock[7]) and the impact on the government debt sustainability is assessed.

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[1] The methodology is given at the following link: https://www.imf.org/external/np/pp/eng/2005/070105.pdf

[2] The baseline scenario minus 1 standard deviation of the past 10 years data. Shocks are applied for the years 2024-2025, and the baseline scenario is taken for the years 2026-2033. A permanent shock is not used in this scenario because under a permanent shock to real GDP growth, government debt, like the government debt of almost all other countries, is not stable. Also, in the long run, the economy grows with potential growth. As of today, there is no reason to reduce the rate of long-term potential economic growth of Georgia.

[3] ½ standard deviation of the past 10 years of data added to the baseline scenario. Shocks are used for 2024-2027.

[4] ½ standard deviation of the past 10 years of data added to the baseline scenario. Shocks are used for 2024-2027.

[5] One-time depreciation of the nominal exchange rate of the GEL against the US dollar by 30% in 2024.

[6] In 2024, the deviation of the primary balance of the government budget, the real GDP growth rate and the real interest rate from the baseline scenario by 1 standard deviation.

[7] Realization of 100% fiscal risk within the framework of the guaranteed Power Purchase Agreement (PPA) in the period of 2024-2027 (636 million GEL).

Values of variables used for the baseline scenario

Variables	Average of 10 years	Standard deviation	2024	2025	2026	2027
Average real interest rate on government debt (nominal rate minus GDP deflator, %)	-2.4	2.8	2.1	2.1	2.3	2.1
Real GDP growth (%)	4.3	4.8	5.2	5.0	5.0	5.0
Primary deficit (% of GDP)	3.2	2.1	1.1	0.8	0.6	0.7
Nominal appreciation of the GEL (USD per GEL)			0.0	0.0	0.0	0.0

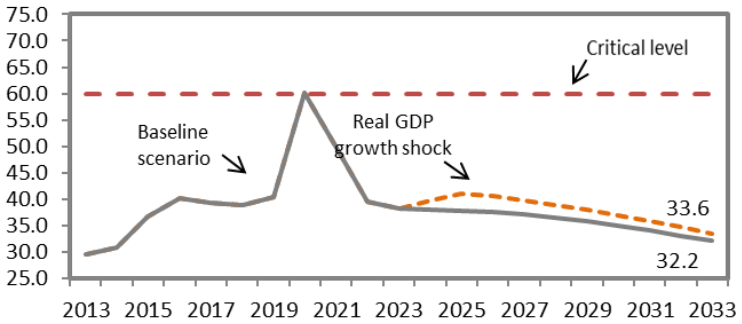
Values of variables used for alternative scenarios

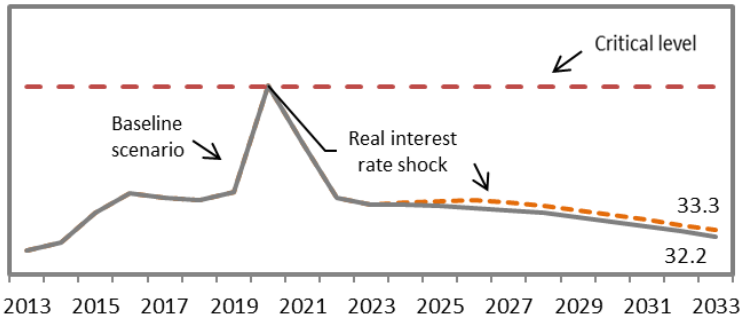
Variables	Average of 10 years	Standard deviation	2024	2025	2026	2027
Average real interest rate on government debt (nominal rate minus GDP deflator, %)	-2.4	2.8	3.5	3.5	3.7	3.5
Real GDP growth (%)	4.3	4.8	0.4	0.2	5.0	5.0
Primary deficit (% of GDP)	3.2	2.1	2.2	1.9	1.7	1.8
Nominal appreciation of the GEL (USD per GEL)			-30.0	0.0	0.0	0.0

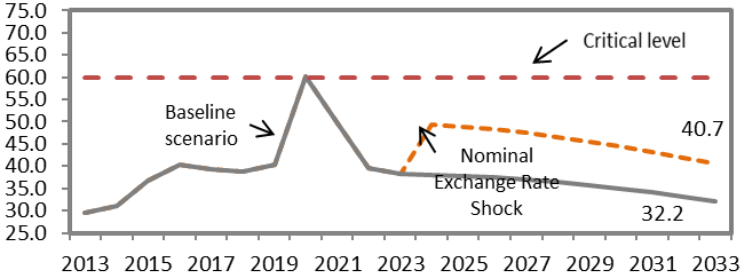
According to all the scenarios considered in the assessment of the government debt sustainability analysis (see diagrams), the government debt to GDP ratio increases, but starts to decrease as the assumed shock is neutralized. It should be noted that as a result of the worsened economic situation due to the global pandemic and the corresponding increased financial needs, the government debt to GDP ratio breached a critical level[8] as of the end of 2020, but at the end of 2022 the ratio of debt to GDP decreased to 39.5%, and by the end of 2023 it is expected to decrease further to 38.2 percent. Without additional shocks, the debt-to-GDP ratio will maintain a downward trend in the following years.

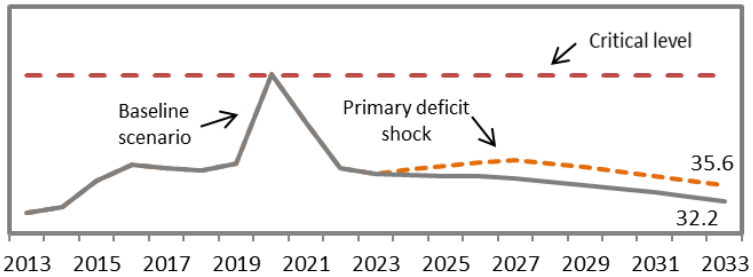
[8] Rate determined by the Economic Freedom Act (60% of GDP). It should be noted that as of December 31, 2022, the present value of the commitments undertaken within the framework of projects corresponding to the criteria of Public-Private Partnership is 70.2 million GEL, which is 0.1% of the expected GDP of 2023.

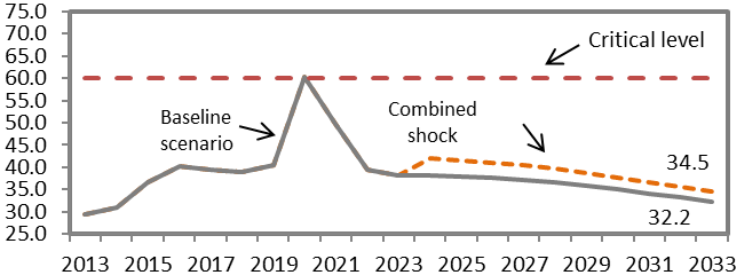
Government Debt Sustainability Analysis Charts (Government Debt as % of GDP)

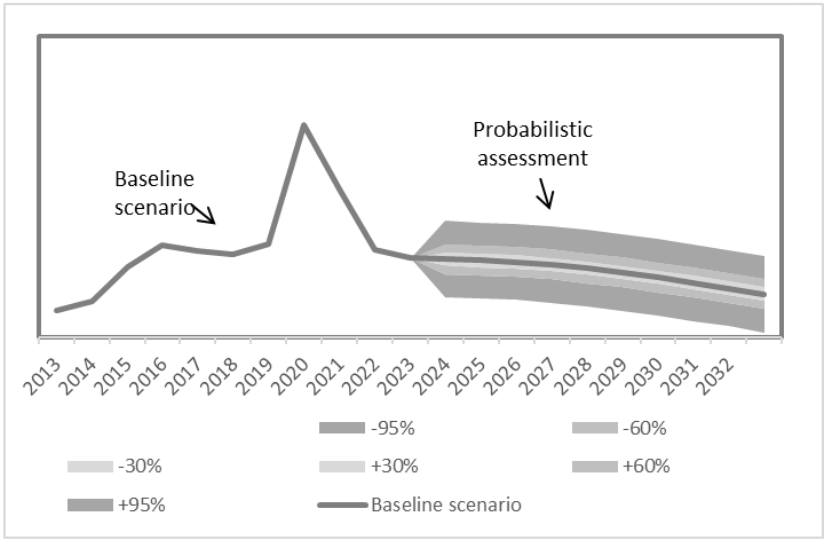


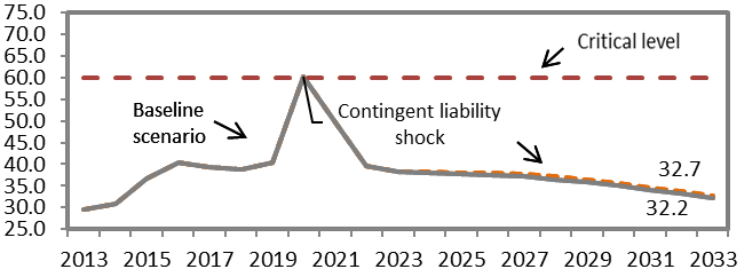












Government Debt Sustainability Analysis, 2023-2033

(as a percentage of GDP, unless otherwise stated)

		Actual									Projections											
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
		Baseline Scenario*																					
1	**Government debt 1/**	28.8	29.5	31.0	36.7	40.3	39.4	38.9	40.4	60.2	49.7	39.5	38.2	38.0	37.8	37.6	37.1	36.5	35.8	35.0	34.1	33.2	32.2
	o/w foreign-currency denominated	24.3	24.8	24.9	30.3	33.3	32.4	31.6	32.0	47.6	39.9	29.6	27.5	26.5	25.4	24.5	23.4	22.3	21.1	19.8	18.6	17.4	16.1
2	Change in Government debt	0.5	0.7	1.5	5.7	3.6	-0.9	-0.5	1.5	19.8	-10.5	-10.2	-1.3	-0.1	-0.2	-0.2	-0.5	-0.6	-0.7	-0.8	-0.9	-0.9	-1.0
3	Identified debt-creating flows (4+7+12)	0.4	0.8	2.6	6.5	4.1	-2.6	0.1	1.1	17.4	-8.7	-8.9	-0.8	-0.8	-0.5	-0.7	-0.7	-0.6	-0.7	-0.8	-0.9	-0.9	-1.0
4	*Primary deficit*	1.8	1.6	2.2	2.5	2.7	2.5	1.4	2.2	8.2	5.8	2.5	1.7	1.1	0.8	0.6	0.7	0.6	0.6	0.5	0.4	0.3	0.2
5	Revenue and grants	27.8	26.0	26.1	26.4	27.0	26.8	26.5	26.2	25.2	25.2	26.8	27.3	28.4	28.1	27.6	27.5	27.5	27.5	27.5	27.5	27.5	27.5
6	Primary (noninterest) expenditure	29.5	27.6	28.3	28.9	29.7	29.3	28.0	28.4	33.4	31.0	29.3	29.0	29.4	28.9	28.3	28.2	28.1	28.0	27.9	27.9	27.8	27.7
7	*Automatic debt dynamics 1/*	-0.9	0.8	0.1	4.6	2.2	-4.3	-1.3	-0.4	6.1	-11.6	-11.6	-1.9	-1.1	-1.0	-1.0	-1.0	-1.1	-1.1	-1.2	-1.2	-1.2	-1.2
8	Contribution from real interest rate/real GDP growth 2/	-0.7	-0.4	-1.6	-1.6	-0.8	-3.7	-2.2	-2.5	1.5	-9.4	-7.3	-2.0	-1.1	-1.0	-1.0	-1.0	-1.1	-1.1	-1.2	-1.2	-1.2	-1.2
9	Contribution from real interest rate	1.0	0.5	-0.3	-0.8	0.3	-2.0	-0.5	-0.7	-1.3	-4.2	-3.0	0.3	0.7	0.7	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.4
10	Contribution from real growth	-1.7	-0.9	-1.3	-0.9	-1.0	-1.7	-1.7	-1.8	2.7	-5.2	-4.3	-2.3	-1.8	-1.8	-1.7	-1.7	-1.7	-1.7	-1.7	-1.6	-1.6	-1.5
11	Contribution from exchange rate depreciation 3/	-0.2	1.1	1.7	6.2	2.9	-0.6	1.0	2.1	4.6	-2.2	-4.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Denominator = 1+g+p+gp	1.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
12	*Other identified debt-creating flows*	-0.5	-1.6	0.3	-0.6	-0.8	-0.8	-0.1	-0.6	3.1	-2.9	0.2	-0.6	-0.8	-0.3	-0.3	-0.3	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
13	Privatization receipts (negative) and use of other resources	-0.5	-1.6	0.3	-0.6	-0.8	-0.8	-0.1	-0.6	3.1	-2.9	0.2	-0.6	-0.8	-0.3	-0.3	-0.3	-0.1	-0.1	-0.1	-0.1	-0.1	0.0
14	Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Residual (2-3)	0.1	-0.1	-1.2	-0.8	-0.5	1.7	-0.6	0.4	2.4	-1.8	-1.3	-0.5	0.7	0.3	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0
	Scenario 1. Real interest rate shock	28.8	29.5	31.0	36.7	40.3	39.4	38.9	40.4	60.2	49.7	39.5	38.2	38.5	38.7	39.0	38.5	37.8	37.1	36.2	35.3	34.3	33.3
	Scenario 2. Real GDP growth shock	28.8	29.5	31.0	41.4	40.3	39.4	38.9	40.4	60.2	49.7	39.5	38.2	39.7	41.1	40.6	39.9	39.0	38.0	37.0	35.9	34.8	33.6
	Scenario 3. Primary deficit shock	28.8	29.5	31.0	41.4	40.3	39.4	38.9	40.4	60.2	49.7	39.5	38.2	39.1	39.9	40.7	41.2	40.5	39.6	38.7	37.7	36.7	35.6
	Scenario 4. Nominal exchange rate shock	28.8	29.5	31.0	41.4	40.3	39.4	38.9	40.4	60.2	49.7	39.5	38.2	49.3	48.7	48.2	47.5	46.6	45.5	44.4	43.2	42.0	40.7
	Scenario 5. Combined shock	28.8	29.5	31.0	41.4	40.3	39.4	38.9	40.4	60.2	49.7	39.5	38.2	41.9	41.5	41.1	40.4	39.6	38.7	37.8	36.7	35.6	34.5
	Scenario 6. Contingent liability shock	28.8	29.5	31.0	41.4	40.3	39.4	38.9	40.4	60.2	49.7	39.5	38.2	38.2	38.1	38.1	37.7	37.1	36.4	35.6	34.7	33.7	32.7
	Key macroeconomic and fiscal assumptions																						
	Real GDP growth (%)	6.4	3.3	4.6	3.0	2.9	4.8	4.8	5.0	-6.8	10.5	10.4	6.5	5.2	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Average nominal interest rate on Government debt (%) 4/	4.1	3.4	3.2	3.4	3.4	3.4	3.2	3.4	3.6	2.8	2.7	4.2	5.2	5.2	5.3	5.1	5.0	4.8	4.7	4.5	4.4	4.3
	Average nominal interest rate on government external debt (%) 4/	2.2	1.9	1.8	1.8	1.7	2.0	2.0	2.1	1.9	1.3	1.1	2.5	3.4	3.5	3.6	3.7	3.7	3.6	3.6	3.6	3.7	3.7
	Average real interest rate on government debt (average nominal interest rate minus GDP deflator, %)	3.7	2.0	-1.0	-2.3	0.8	-4.7	-1.1	-1.7	-3.4	-6.8	-5.9	1.1	2.1	2.1	2.3	2.1	1.9	1.7	1.6	1.5	1.4	1.3
	Exchange rate (GEL per US dollar)	1.7	1.7	1.9	2.4	2.6	2.6	2.7	2.9	3.3	3.1	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	Nominal depreciation of local currency (GEL per US dollar)	-0.8	4.8	7.3	28.5	10.5	-2.1	3.3	7.1	14.3	-5.5	-12.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Exchange rate (USD to one GEL)	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	Nominal appreciation of local currency (increase in US dollar value of local currency)	0.8	-4.6	-6.8	-22.2	-9.5	2.1	-3.2	-6.7	-12.5	5.8	14.6	-0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Inflation (GDP deflator, %)	0.4	1.4	4.2	5.8	2.6	8.5	4.4	5.2	7.3	10.3	9.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0

1/ Derived as $[(r - \pi(1+g) - g + \alpha\varepsilon(1+r)]/(1+g+\pi+g\pi))$ multiplied by the previous period debt to GDP ratio,

with r = interest rate; p = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt;

and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

2/ The real interest rate contribution is derived from the denominator in footnote 2/ as $r - \pi (1+g)$ and the real GDP growth contribution as -g.

3/ The exchange rate contribution is derived from the denominator in footnote 2/ as $\alpha\varepsilon(1+r)$.

4/ Derived as nominal interest expenditure divided by previous period debt stock.

*The baseline scenario used in the government debt sustainability analysis is consistent with the baseline scenario used in the development of the macroeconomic risk analysis of the fiscal sector.

Factors affecting changes in government debt (as % of GDP), baseline scenario