

# Ministry of Finance of Georgia

**Government Debt Sustainability Analysis**

**2022-2032**

### November 2022

**Government Debt Sustainability Analysis**

The government debt sustainability analysis aims to assess the government ability to service its liabilities in the medium- and long-term perspective. Debt sustainability analysis holds importance in terms of budget transparency and effective management of public finances. The analysis relies on the methodology of the International Monetary Fund (IMF) being modified in accordance with the country specifics[[1]](#footnote-1).

The government debt sustainability analysis includes the assessment of various possible risk factors and their impact on the government debt portfolio; it helps the government to identify possible consequences of negative factors in advance and develop an appropriate action plan.

The government debt sustainability analysis discusses baseline and alternative, i.e. negative scenarios and assumptions for these scenarios on various macroeconomic and fiscal variables - real GDP growth, inflation, exchange rate, interest rates, state budget deficit and other issues.

The baseline scenario, which is presented in the given analysis, is an expected variant of economic development, which is most likely to occur in the medium term. Accordingly, a draft state budget is drawn up based on this scenario.

Alternative scenarios provide stress testing based on macroeconomic and fiscal shocks of different magnitudes (real GDP growth shock[[2]](#footnote-2), real interest rate shock[[3]](#footnote-3), primary balance shock of the state budget[[4]](#footnote-4), nominal exchange rate shock[[5]](#footnote-5), combined shock[[6]](#footnote-6) and contingent liability shock[[7]](#footnote-7)) and evaluate their impact on the government debt sustainability.

**Values of variables applied for the baseline scenario**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **10-year average** | **Standard deviation** | **2023** | **2024** | **2025** | **2026** |
| Average real interest rate on the government debt (nominal rate minus the GDP deflator, %) | -1.5 | 3.1 | -0,7 | 0,8 | 0,8 | 0,9 |
| Real GDP growth (%) | 3.9 | 4.3 | 5,0 | 5,2 | 5,2 | 5,0 |
| Primary deficit (% in GDP) | 3.1 | 2.2 | 1,7 | 1,3 | 1,3 | 1,1 |
| Nominal consolidation of the GEL in percentages (USD per GEL) |  |  | 0.0 | 0.0 | 0.0 | 0.0 |

**Values of variables applied for the alternative scenarios**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **10-year average** | **Standard deviation** | **2023** | **2024** | **2025** | **2026** |
| Average real interest rate on the government debt (nominal rate minus the GDP deflator, %) | -1.5 | 3.1 | 0,9 | 2,3 | 2,4 | 2,4 |
| Real GDP growth (%) | 3.9 | 4.3 | 0,7 | 0,9 | 5,2 | 5,0 |
| Primary deficit (in % of GDP) | 3.1 | 2.2 | 2,8 | 2,4 | 2,4 | 2,2 |
| Nominal consolidation of the GEL in percentages (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 Figures), the government debt-to-GDP ratio increases; however, the debt starts to decrease as the assumed shock is neutralized. Significantly, the ratio of government debt to GDP reached its critical level by the end of 2020 as a result of the deteriorating economic situation caused by the global pandemic and correspondingly, increased financial needs[[8]](#footnote-8). However, at the end of 2021, the ratio of debt to GDP went down to 49.7%, and by the end of 2022, it is expected to drop to 39.6%. In the absence of additional shocks, the debt-to-GDP ratio will maintain a downward trend in the following years as well.

**Government Debt Sustainability Analysis Figures (Government Debt in % of GDP)**

75,0



line

Baseline scenario

Real GDP growth shock

Critical level

35,8

34,6

70,0

65,0

60,0

55,0

50,0

45,0

40,0

35,0

30,0

25,0

75,0

70,0

65,0

60,0

55,0

50,0

45,0

40,0

35,0

30,0

25,0

75,0

70,0

65,0

60,0

55,0

50,0

45,0

40,0

35,0

30,0

25,0

75,0

70,0

65,0

60,0

55,0

50,0

45,0

40,0

35,0

30,0

25,0

2013 2015 2017 2019 2021 2023 2025 2027 2029 2031



2013 2015 2017 2019 2021 2023 2025 2027 2029 2031



Critical level

37,5

Baseline scenario

Combined shock

34,6

2013 2015 2017 2019 2021 2023 2025 2027 2029 2031



Critical level

34,9

Baseline scenario

Contingent liability shocks

34,6

2013 2015 2017 2019 2021 2023 2025 2027 2029 2031



Baseline shock

Real interest rate shock

Critical level

36,6

34,6

2013 2015 2017 2019 2021 2023 2025 2027 2029 2031



Critical level

38,2

Baseline scenario

Shocks to primary deficit

34,6

2013 2015 2017 2019 2021 2023 2025 2027 2029 2031



Baseline scenario

Probabilistic estimations



-95% -60%

-30% +30% +60%

+95% Baseline scenario

**Government Debt Sustainability Analysis, 2022-2032**

**(In 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

**Baseline scenario\***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Government debt** 28,8 | 29,5 | 31,0 | 36,7 | 40,3 | 39,4 | 38,9 | 40,4 | 60,2 | 49,7 | 39,6 | 38,3 | 37,8 | 37,2 | 36,4 | 36,0 | 35,6 | 35,2 | 34,9 | 34,6 | 34,3 |
| including the one denominated in foreign currency 24,3 | 24,8 | 24,9 | 30,3 | 33,3 | 32,4 | 31,6 | 32,0 | 47,6 | 39,9 | 29,8 | 27,7 | 26,4 | 25,0 | 23,5 | 22,5 | 21,6 | 20,6 | 19,7 | 18,9 | 18,1 |
| Changes in the government debt 0,5 | 0,7 | 1,5 | 5,7 | 3,6 | -0,9 | -0,5 | 1,5 | 19,8 | -10,5 | -10,1 | -1,3 | -0,5 | -0,7 | -0,8 | -0,4 | -0,4 | -0,4 | -0,3 | -0,3 | -0,3 |
| Identified components of debt growth (4+7+12) 0,4 | 0,8 | 2,6 | 6,5 | 4,1 | -2,6 | 0,1 | 1,1 | 17,4 | -8,7 | -8,5 | -1,3 | -0,5 | -0,7 | -0,8 | -0,4 | -0,4 | -0,4 | -0,3 | -0,3 | -0,3 |
| *Primary deficit* 1,8 | 1,6 | 2,2 | 2,5 | 2,7 | 2,5 | 1,4 | 2,2 | 8,2 | 5,8 | 2,7 | 1,7 | 1,3 | 1,3 | 1,1 | 1,2 | 1,2 | 1,2 | 1,2 | 1,1 | 1,1 |
| Total revenues and grants 27,8 | 26,0 | 26,1 | 26,4 | 27,0 | 26,8 | 26,5 | 26,2 | 25,2 | 25,2 | 26,6 | 26,1 | 25,6 | 25,4 | 25,4 | 25,4 | 25,4 | 25,4 | 25,4 | 25,4 | 25,4 |
| Total expenditures (excluding interest cost) 29,5 | 27,6 | 28,3 | 28,9 | 29,7 | 29,3 | 28,0 | 28,4 | 33,4 | 31,0 | 29,3 | 27,9 | 26,9 | 26,7 | 26,6 | 26,6 | 26,6 | 26,6 | 26,6 | 26,5 | 26,5 |
| *Automatic debt dynamics 1* -0,9 | 0,8 | 0,1 | 4,6 | 2,2 | -4,3 | -1,3 | -0,4 | 6,1 | -11,6 | -10,9 | -2,7 | -1,6 | -1,5 | -1,5 | -1,4 | -1,4 | -1,4 | -1,3 | -1,3 | -1,2 |
| Contribution from real interest rate/real GDP growth2 -0,7 | -0,4 | -1,6 | -1,6 | -0,8 | -3,7 | -2,2 | -2,5 | 1,5 | -9,4 | -7,3 | -2,1 | -1,6 | -1,5 | -1,5 | -1,5 | -1,4 | -1,4 | -1,3 | -1,3 | -1,2 |
| Contribution from real interest rate | 0,5 | -0,3 | -0,8 | 0,3 | -2,0 | -0,5 | -0,7 | -1,3 | -4,2 | -3,2 | -0,3 | 0,2 | 0,3 | 0,3 | 0,2 | 0,2 | 0,3 | 0,3 | 0,3 | 0,4 |
| Contribution from real GDP growth -1,7 | -0,9 | -1,3 | -0,9 | -1,0 | -1,7 | -1,7 | -1,8 | 2,7 | -5,2 | -4,1 | -1,8 | -1,8 | -1,8 | -1,7 | -1,7 | -1,7 | -1,6 | -1,6 | -1,6 | -1,6 |
| Contribution from exchange rate depreciation3 -0,2 | 1,1 | 1,7 | 6,2 | 2,9 | -0,6 | 1,0 | 2,1 | 4,6 | -2,2 | -3,6 | 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 |
| *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 | -0,3 | -0,2 | -0,4 | -0,4 | -0,2 | -0,2 | -0,2 | -0,2 | -0,2 | -0,2 |
| Privatization (with a minus sign) and the 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 | -0,3 | -0,2 | -0,4 | -0,4 | -0,2 | -0,2 | -0,2 | -0,2 | -0,2 | -0,2 |
| 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 |
| 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 |
| Difference (2-3) 0,1 | -0,1 | -1,2 | -0,8 | -0,5 | 1,7 | -0,6 | 0,4 | 2,4 | -1,8 | -1,6 | 0,0 | 0,0 | 0,0 | 0,0 | 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 | 39,6 | 38,9 | 38,9 | 38,8 | 38,5 | 38,0 | 37,5 | 37,0 | 36,6 | 36,3 | 35,9 |
| **Scenario 2. Real GDP growth shock** | 29,5 | 31,0 | 41,4 | 40,3 | 39,4 | 38,9 | 40,4 | 60,2 | 49,7 | 39,6 | 39,8 | 40,8 | 39,9 | 38,8 | 38,2 | 37,5 | 36,9 | 36,4 | 35,9 | 35,5 |
| **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 | 39,6 | 39,4 | 40,0 | 40,3 | 40,5 | 39,9 | 39,3 | 38,8 | 38,3 | 37,9 | 37,5 |
| **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 | 39,6 | 50,8 | 49,8 | 48,6 | 47,4 | 46,5 | 45,7 | 44,9 | 44,2 | 43,6 | 43,0 |
| **Scenario 5. Combined shock** 28,8 | 29,5 | 31,0 | 41,4 | 40,3 | 39,4 | 38,9 | 40,4 | 60,2 | 49,7 | 39,6 | 43,2 | 42,5 | 41,6 | 40,5 | 39,9 | 39,2 | 38,7 | 38,1 | 37,7 | 37,2 |
| **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 | 39,6 | 38,4 | 38,0 | 37,5 | 36,8 | 36,4 | 36,0 | 35,6 | 35,2 | 34,9 | 34,6 |
| **Basic 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 | 10,0 | 5,0 | 5,2 | 5,2 | 5,0 | 5,0 | 5,0 | 5,0 | 5,0 | 5,0 | 5,0 |
| Average nominal interest rate on the 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 | 4,3 | 3,8 | 3,9 | 3,9 | 3,7 | 3,9 | 4,0 | 4,1 | 4,2 | 4,4 |
| Average nominal interest rate on the public external debt (%) 4/ | 1,9 | 1,8 | 1,8 | 1,7 | 2,0 | 2,0 | 2,1 | 1,9 | 1,3 | 1,1 | 2,5 | 2,1 | 2,0 | 1,8 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 | 1,5 |
| Average real interest rate on the government debt (average nominal interest rate minus GDP deflator, in %) 3,7 | 2,0 | -1,0 | -2,3 | 0,8 | -4,7 | -1,1 | -1,7 | -3,4 | -6,8 | -6,2 | -0,7 | 0,8 | 0,9 | 0,9 | 0,7 | 0,8 | 0,9 | 1,1 | 1,2 | 1,3 |
| Exchange rate (GEL per USD) 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 |
| Nominal depreciation of the GEL (GEL per USD) -0,8 | 4,8 | 7,3 | 28,5 | 10,5 | -2,1 | 3,3 | 7,1 | 14,3 | -5,5 | -12,6 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Exchange rate (USD per 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 |
| Nominal consolidation of the GEL (USD per GEL) 0,8 | -4,6 | -6,8 | -22,2 | -9,5 | 2,1 | -3,2 | -6,7 | -12,5 | 5,8 | 14,4 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Inflation (GDP deflator, in %) 0,4 | 1,4 | 4,2 | 5,8 | 2,6 | 8,5 | 4,4 | 5,2 | 7,3 | 10,3 | 9,5 | 5,0 | 3,0 | 3,0 | 3,0 | 3,0 | 3,0 | 3,0 | 3,0 | 3,0 | 3,0 |

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1/ Derived as [(r - p(1+g) - g + ae(1+r)]/(1+g+p+gp)) the ratio of previous period debt with nominal GDP, where r = real interest rate; p = GDP deflator growth rate; g = real GDP growth rate; a = share of government debt denominated in foreign currency in total government debt; and e = nominal exchange rate depreciation (measured by increase in the GEL value of USD).

2/ The real interest rate contribution is derived from footnote 2 as r - π (1+g) and the real growth contribution as -g.

3/ The exchange rate contribution is also derived from footnote 2 – as ae(1+r).

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

\* The baseline scenario applied in the government debt sustainability analysis is in line with the one applied in the macroeconomic risk analysis of the fiscal sector.

## Factors influencing changes in government debt (% in GDP), baseline scenario

Percentage changes in the government debt

Privatization (with a minus sign) and the use of other resources

Contribution of exchange rate depreciation

Contribution of real GDP growth

Contribution of real interest rate

Primary deficit

25,0

Changes in the government debt

20,0

15,0

10,0

5,0

0,0

2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

-5,0

-10,0

-15,0

-20,0

1. The methodology is available through the following link: <https://www.imf.org/external/np/pp/eng/2005/070105.pdf> [↑](#footnote-ref-1)
2. Baseline scenario minus 1 standard deviation of the data for the past 10 years. Shocks are applied for the period of 2023-2024 and a baseline scenario is taken for the period of 2025-2032. The given scenario does not apply a permanent shock because under the real GDP growth permanent shock, the government debt, similarly to the government debt of almost all other countries, is volatile. Furthermore, in the long-term perspective, the economy develops with potential growth. As of today, there is no reason to reduce the rate of long-term potential economic growth of Georgia. [↑](#footnote-ref-2)
3. Baseline scenario plus 1⁄2 standard deviation of the data for the past 10 years. Shocks are applied for the period of 2023-2026. [↑](#footnote-ref-3)
4. Baseline scenario plus 1⁄2 standard deviation of the data for the past 10 years. Shocks are applied for the period of 2023-2026. [↑](#footnote-ref-4)
5. A one-time depreciation of the nominal exchange rate of GEL against the USD by 30% in 2023. [↑](#footnote-ref-5)
6. Deviation of the primary balance of the state budget, real GDP growth rate and real interest rate from the baseline scenario with 1 standard deviation in 2023. [↑](#footnote-ref-6)
7. Realization of 30% fiscal risk within the framework of the guaranteed power purchase agreement (PPA) in the period of 2023-2026 (GEL 420 million). [↑](#footnote-ref-7)
8. Rate determined by the Economic Freedom Act (60% of GDP). As of 1 January 2022, the current value of the obligations undertaken within the framework of projects complying with the criteria of public and private cooperation is GEL384.6 million, which accounts for 0.64% of the GDP of 2021. [↑](#footnote-ref-8)