HELLENIC REPUBLIC
Ministry of Finance

GREECE

Stability Programme 2023

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Preface

The Stability Programme of the Hellenic Republic for the period 2024-2026 is submitted to the Council and to the Commission in line with the requirements set out in Council Regulation (EC) 1466/1997, as amended and corresponds to the national medium-term fiscal plan of Article 4(1) of Regulation (EU) 473/2013 of the European Parliament and of the Council.

The format and content of the Stability Programme are in line with the updated "Code of Conduct of the Stability and Growth Pact" that has been agreed by the Economic and Financial Committee on 15 May 2017.

In addition to the activation of the general escape clause of the Stability and Growth Pact as a result of the pandemic, regarding any possible temporary violations of the Greek fiscal rules and the Greek budgetary framework in general, the "extraordinary circumstances" clauses of articles 37.3 and 38.2 of L.4270/2014 will be relied on. The macroeconomic forecasts included in the Stability Programme have been endorsed by the Hellenic Fiscal Council (HFC), as required under Article 4(4) of Regulation (EU) 473/2013.

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In 2022, the Greek economy showed significant resilience despite adverse global economic conditions, with real GDP growing by 5.9% y-o-y in 2022 (from 8.4% y-o-y in 2021), strongly outpacing the EU and Euro area average and pre-pandemic levels. The annual growth rate exceeded the State Budget 2023 estimate of 5.6%, as the second half of 2022 had a larger positive contribution to growth than previously anticipated, on the back of accelerating investment and private consumption benefited from continuing fiscal support, a resilient labour market, accumulated savings, RRP-related investment projects and falling energy inflation since the last quarter of the year.

From the expenditure side, the main driver behind the 5.9% expansion of real output in 2022 was domestic demand, with a contribution of 6.5 pps, through private consumption, gross fixed capital formation and net exports of services. Gross fixed capital formation increased by 11.7%, being the second determinant of growth for the previous year, with contribution of 1.5 pps.

The labour market continued to perform well despite the challenging environment, benefiting from enhanced domestic demand and government support measures to mitigate the impact of inflation following the energy crisis. Total employment (on a national accounts basis) rose significantly by 3.8% (2.7% in 2021), driven by employment growth in all industry sectors, except for financial and insurance activities. Moreover, the unemployment rate (LFS data) continued to de-escalate (12.4% from 14.7% in 2021), falling to its lowest rate since 2009.

Headline HICP inflation soared to 9.3% in 2022 from a marginally positive growth rate in 2021 (0.6%), reflecting the energy shock unleashed by the war in Ukraine, and the excess demand stemming from the post-pandemic expansion.

In 2023, according to the baseline macroeconomic scenario, real GDP is expected to grow by 2.3% (against State's Budget 2023 estimate of 1.8%), well above the Euro area average, but lower than in 2022. Final domestic demand is expected to remain the main driving force behind real GDP growth, with a smaller positive contribution of 2.6 pps, but mostly supported by investment activity.

Among components, gross fixed capital formation is estimated to contribute the most (1.8 pps and 13.2% y-o-y), mainly supported by investment in equipment and in non-residential construction. Investment as a share of GDP is estimated to increase to 15.3% in 2023 from 13.7% in 2022 and 10.7% in 2019.

Employment (on a national accounts basis) is estimated to continue growing in 2023, albeit at a slower pace of 0.9%, amid the anticipated slowdown in domestic demand, the gradual unwinding of government support measures and the tightening of financing conditions.

HICP inflation is estimated to moderate to 4.5%, on the back of declining energy prices and associated negative base effects.

The shift of the Greek economy's growth model towards a more investment- and exports-driven output composition is set to underpin a solid growth path over the period 2024-2026. In this context, real GDP growth is projected to expand by 3.0% in 2024 and 2025 and 2.1% in 2026, decisively supported by investment and exports growth.

Final domestic demand, primarily through investment and secondarily through private consumption, is projected to add 2.6 pps on average to real growth in the medium-term, driven by the vigorous implementation of the RRP and the resilience of the labour market.

Total employment is projected to increase by 1.0% in 2024 and by 0.9% in 2025, before remaining almost unchanged in 2026, on the back of stabilized financial conditions and job positions generated by the implementation of the RRP. In addition, unemployment is projected to steadily decline throughout the horizon period.

HICP inflation is expected to moderate significantly to 2.4% in 2024, under the assumption of reducing energy prices and the normalization of supply disruptions, and return to the medium-term target of 2% thereafter.

Regarding the fiscal position of the country, in 2022 Greece recorded a deficit in the headline balance of -2.3% of GDP, while the primary balance returned to positive ground, reaching +0.1% of GDP. The substantial improvement of the balance compared to October 2022 Draft Budgetary Plan (+1.8 pps of GDP in terms of primary balance) is mainly attributed to the higher yield of tax and social security contributions revenues driven by the -higher than expected- annual growth rate, the recording of the last instalment of ANFA/SMP profits in the last month of 2022 and the lower than anticipated spending in several expenditure categories.

For 2023, the headline budget balance and the primary balance are estimated at -1.8% and 1.1% of GDP, respectively. This positive fiscal development, compared to the previous year, is based on the expected strengthening of economic growth and on the prudent fiscal policy followed, noting that the policy measures taken to mitigate the consequences of the energy crisis are almost fiscally balanced.

It is noted that, as the country is currently under an election period, the above estimates are provided under the no policy change scenario.

Based on the solid growth path over the period 2024-2026, the fiscal stance is expected to be further improved from 2024 onwards with the achievement of sustainable and strong primary surpluses. The primary balance is projected at +2.1% of GDP in 2024, reaching +2.5% of GDP in 2026. It is noted that, the current government has announced additional pre-election measures of 0.1% of GDP for 2024, 0.3% of GDP for 2025 and respectively for 2026, that are not included in the abovementioned estimates.

The general government debt is estimated at €356.2 billion or 171.3% of GDP at the end of 2022, vs €353.4 billion or 194.6% of GDP in 2021. For the end of 2023, the general government debt is forecasted at €360.0 billion or 162.6% of GDP, i.e. reduced by 8.7 pps compared to 2022. Over the medium term, debt is forecasted to further reduce to 150.8% of GDP in 2024, 142.6% in 2025 and 135.2% in 2026.

1. Economic outlook

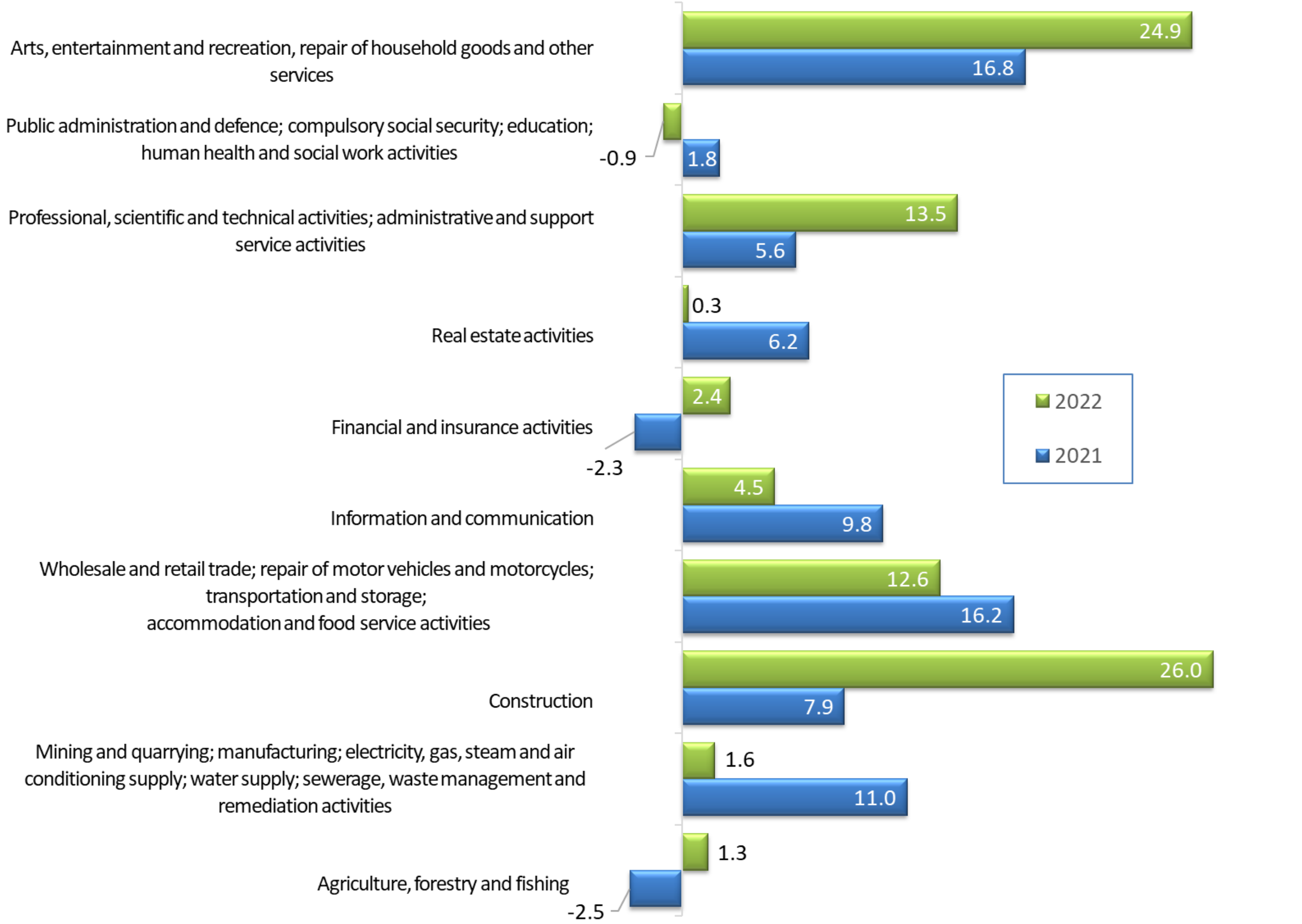
1.1 Macroeconomic developments in 2022

After the deep pandemic-induced recession in 2020 and the V-shaped economic recovery in 2021, thanks to the successful combination of expansionary fiscal policy and accommodative monetary policy, the European economy lost growth momentum in 2022 on account of the energy crisis related to the war in Ukraine, the ensuing large negative terms-of-trade shock and the tightening of monetary policy to temper the rise of inflation to historically high levels. Nevertheless, the slowdown proved milder than initially expected, as the refueling of domestic demand after the pandemic, fiscal policy measures to contain energy costs and the utilization of NGEU resources provided significant support to economic activity. In addition to these developments, energy prices started to decline at the end of the year, supported by reduced gas consumption and continued diversification of supply sources. Overall, EU and Euro area real GDP grew by 3.5% y-o-y in 2022 compared to 5.4% y-o-y in the previous year for the EU and 5.3% y-o-y for the Euro area.

The Greek economy showed significant resilience despite adverse global economic conditions, with real GDP growing by 5.9% y-o-y in 2022 (from 8.4% y-o-y in 2021), strongly outpacing the EU and Euro area average and pre-pandemic levels (+4.5% compared to 2019). The annual growth rate exceeded the State Budget 2023 estimate of 5.6%, as the second half of 2022 had a larger positive contribution to growth than previously anticipated, on the back of accelerating investment and private consumption benefited from continuing fiscal support, a resilient labour market, accumulated savings, RRP-related investment projects and falling energy inflation since the last quarter of the year.

GDP data from the production side showed a 5.6% increase in Gross Value Added (GVA) in volume terms (from 7.9% in 2021), mainly supported by the services (contact-intensive and others) and construction sectors, as shown in Figure 1. On the part of the services sector, arts/entertainment activities and professional/administrative activities pointed to the highest annual growth rates in 2022 (24.9% and 13.5% respectively), followed by wholesale/retail trade and tourism-related activities (12.6%). The construction sector also contributed significantly to the upturn in GVA, despite high cost-related pressures, logging 26.0% in annual terms, while the industrial sector presented a more moderate rise of 1.6%. Having said that, the industrial production index (seasonally adjusted data) slowed in 2022 compared to 2021 (2.2% from 9.9%), but remained in expansionary terrain thanks to the resilience of manufacturing output.

Figure 1 Gross Value Added (constant prices, non-seasonally adjusted data, annual rates of change %)



Source: Annual National Accounts (Hellenic Statistical Authority), calculated by the Ministry of Finance

From the expenditure side, the main driver behind the 5.9% expansion of real output in 2022 was final domestic demand, with a contribution of 6.5 pps, through private consumption and gross fixed capital formation, and net exports of services. In addition, inventories had also a significant contribution to annual GDP growth (1.9 pps), which could lead to higher growth in future GDP revisions.

Real private consumption rose strongly by 7.8%, making the largest positive contribution to growth (5.3 pps), on the back of government support measures to cushion households and businesses against inflation, the strengthening of the labour market and the release of pent-up demand after the removal of the remaining COVID-19 restrictions. Moreover, private sector savings provided additional support to aggregate spending, albeit decelerating amid the negative impact of high imported inflation (4.8% from 9.9% in 2021). At the same time, the increase in private consumption reflected increases in retail trade volume (3.2%), especially for durable goods, and in private passenger car registrations (6.8%).

Instead, real public consumption declined by 1.6% after three years of expansion, mainly reflecting the withdrawal of the majority of the pandemic-related support measures.

Gross fixed capital formation increased by 11.7%, being the second determinant of growth in 2022 with a contribution of 1.5 pps. All investment categories supported total investment, but, at a greater extent, investment in housing and other construction (25.7%), which surged to levels not accomplished since 2013. Public and private investment projects under the RRP underpinned investment activity, which was also facilitated by the robust corporate credit growth (at 12.3% from 4.5% in 2021). At the same time, foreign direct investment increased for the second consecutive year to record levels (€6.4 billion or 3.1% of nominal GDP), mainly being directed towards the manufacturing and services sectors, such as financial and real estate activities.

Despite strong exports dynamics in 2022, buoyant domestic demand after the pandemic coupled with adverse price developments in both energy and non-energy goods due to the intensified energy crisis following the war in Ukraine, led imports to grow faster than exports, resulting in a negative external sector contribution (-2.5 pps). Real exports of goods and services increased by 4.9%, outpacing the pre-pandemic levels (+2.2% compared to 2019), thanks to a strong recovery in tourism and the resilience of goods exports (notably fuels, industrial goods, food, pharmaceutical products and machinery/transport equipment) against slowing external demand. On the other hand, real imports of goods and services showed a stronger expansion of 10.2%, with goods imports (notably fuels, machinery/transport equipment, pharmaceutical products and industrial goods) accelerating, amid the domestically driven economic growth and the sustained export activity. On the prices side, the surge in import prices of fuels, raw materials, food and other goods as well as the costly transportation services led inevitably to the worsening of the trade balance. Consistent with this, the current account deficit (Bank of Greece data) widened in 2022 by almost 3 percentage points of nominal GDP relative to 2021 (-9.7% vs -6.8%), mainly due to the deterioration in the balance of goods, which was only partially offset by the increase in the services surplus (mainly the travel balance), while the income balance worsened.

The labour market continued to perform well despite the challenging environment, benefiting from refueling domestic demand and government support measures to mitigate the impact of inflation. Total employment (on a national accounts basis) rose significantly by 3.8% (2.7% in 2021), driven by employment growth in all industry sectors, except for financial and insurance activities. Real estate activities and Art and entertainment activities presented the highest employment growth rates (14.1% and 7.5% respectively). Similarly, dependent employment flows in the private sector (ERGANI data) remained positive, though slowing compared to 2021 (72.8 thousand persons vs. 133.1 respectively). Moreover, the unemployment rate (LFS data) continued to de-escalate (12.4% from 14.7% in 2021), falling to its lowest rate since 2009.

Headline HICP inflation soared to 9.3% in 2022 from a marginally positive growth rate in 2021 (0.6%), reflecting the energy shock unleashed by the war in Ukraine, and the excess demand stemming from the post-pandemic expansion. The surge in HICP inflation came mainly from record high energy prices (41.0%) and significant increases in food prices (11.7%), gradually spilling over to core elements of the consumer basket (4.6%).

1.2 Macroeconomic projections for 2023

In the first quarter of 2023, economic activity in the EU marginally expanded on the back of more secure energy supplies, continued falling energy inflation and improving business and consumer confidence. That said, the energy component of HICP inflation declined by 6% q-o-q compared to the last quarter of 2022 and the composite PMI Output index moved into expansionary territory for both manufacturing and services for the third successive month in March, hitting a 10-month high of 53.7. The Economic Sentiment Indicator (ESI) averaged higher than in the last quarter of the previous year, though remaining slightly below its long-term average.

On the opposite, inflationary pressures continued to be broad-based at the start of the year, as reflected in accelerating food prices and persistent core inflation, weighing on real disposable income. Therefore, the ECB continued the normalization of monetary policy, exerting a drag on lending activity and thus on investment.

Meanwhile, additional factors are shaping the short-term outlook for the European economy; on the one hand, the high uncertainty amid the continuation of the war in Ukraine, the rising cost-of-living and the recent emergence of financial market tensions, and, on the other hand, the earlier-than-expected China's reopening after its "zero COVID-19" policy which is expected to boost external demand and reduce supply chain pressures.

In light of the above, Euro area economy is expected to remain into positive growth territory in 2023, but at a slower pace compared to 2022. Official estimates for real GDP growth range from 0.8% (IMF World Economic Outlook as of April 2023) to 1.0% (ECB staff macroeconomic projections as of March 2023), with the European Commission's forecast (Winter Economic Forecast as of February 2023) lying in between (0.9%).

Against this challenging environment described above, the Greek economy entered 2023 with higher growth momentum from last year. Moreover, high-frequency indicators showed improved economic sentiment and business conditions in the first quarter of this year. The ESI moved further above its long-term average (106.8 from 101.4 in the fourth quarter of 2022), exceeding EU and Euroarea readings. In addition, the manufacturing PMI expanded for the second consecutive month in March (52.8). Most of the hard indicators point to a similar picture. Industrial production and retail trade volume rebounded at the outset of the current year, the trade deficit continued to narrow in January-February, the labour market conditions remained supportive in the same period and HICP inflation kept easing amid falling energy prices.

In the second quarter of this year, economic activity is expected to remain resilient provided further easing of headline inflation and supply bottlenecks, and strengthen as of mid-2023, as foreign demand gathers pace, the implementation of the RRP speeds up and tourism receipts return to their pre-pandemic level.

Based on the above, according to the baseline macroeconomic scenario, in 2023 real GDP is expected to grow by 2.3% (against State's Budget 2023 estimate of 1.8%), well above the Euro area average, but lower than in 2022. Final domestic demand is expected to remain the main driving force behind real GDP growth, with a smaller positive contribution of 2.6 pps, but mostly supported by investment activity.

Among components, gross fixed capital formation is estimated to contribute the most (1.8 pps and 13.2% y-o-y), mainly supported by investment in equipment and in non-residential construction. Investment as a share of GDP is estimated to increase to 15.3% in 2023 from 13.7% in 2022 and 10.7% in 2019. The effective implementation of the RRP is expected to be the key factor behind the surge in investment, as investment outside the RRP is set to be negatively affected by the tightening of financing conditions. The RRP is estimated to add 1.9 pps to GDP growth mainly through high-quality private and public investment for the green and digital transition. The implementation of a growth-friendly tax policy and of reforms that upgrade business environment is set to facilitate investment activity.

Real private consumption is estimated to add 0.8 pps to real GDP growth and grow modestly by 1.2% after its rapid increase in 2022, amid the normalization of consumer demand and still high inflationary pressures on real disposable income. Nevertheless, continuing fiscal support against inflation, the resilience of the labour market and a higher wage bill due to a 9.4% rise in the minimum wage (effective as from April 2023) are set to sustain private spending at satisfactory rates. By contrast, real public consumption is estimated to decline marginally by 0.4%, amid an unwinding of government support measures in the course of the year.

The external sector is expected to have a significantly milder negative contribution to real output growth compared to 2022 (-0.3 pps), amid the slowdown in domestic demand and declining price levels in energy, raw materials and transportation services. Real exports of goods and services are set to continue to rise (2.3%), in response to the gradual increase of foreign demand and the easing of supply chain disruptions (amid China's reopening) as of the second half of the current year. At the same time, real imports are expected to grow slightly faster than exports (2.6%), despite the slowdown in domestic demand, amid the acceleration of the RRP execution. The consistent rise in goods exports and the full recovery of travel exports to their pre-pandemic level should drive an overall improvement of the current account deficit.

Employment (on a national accounts basis) is estimated to continue growing in 2023, albeit at a slower pace of 0.9%, amid the anticipated slowdown in domestic demand, the gradual unwinding of government support measures and the tightening of financing conditions. On the other hand, job creation through the implementation of the RRP and the labour supply-boosting effect of the minimum wage rise are set to provide support to employment, with employment gains mainly concerning self-employed and private sector employees. Similarly, the LFS unemployment rate is estimated to de-escalate further to 11.8%, albeit at a less dynamic pace compared to the recent years.

HICP inflation is estimated to moderate to 4.5%, on the back of declining energy prices and associated negative base effects. Lagged effects of past high energy prices on food, services and non-energy goods are set to sustain food and core inflation at high rates.

1.3 Medium-term growth prospects 2024-2026

In the medium-term, the Greek economy is expected to enhance its resilience, despite the challenging and volatile global environment, building on credible fiscal policy, reform orientation, productive investment and extroversion. The achievement of sustainable primary surpluses from 2024 onwards and the effective utilization of NGEU resources for the implementation of high-value added investments and structural reforms towards the green, digital and energy transitions, higher employment and social cohesion are set to ensure sustainable and inclusive economic growth and shield the economy against future crises. In this regard, the fulfillment of the 2023 primary surplus target would strengthen fiscal policy credibility, a key factor for the regain of the investment grade in the year.

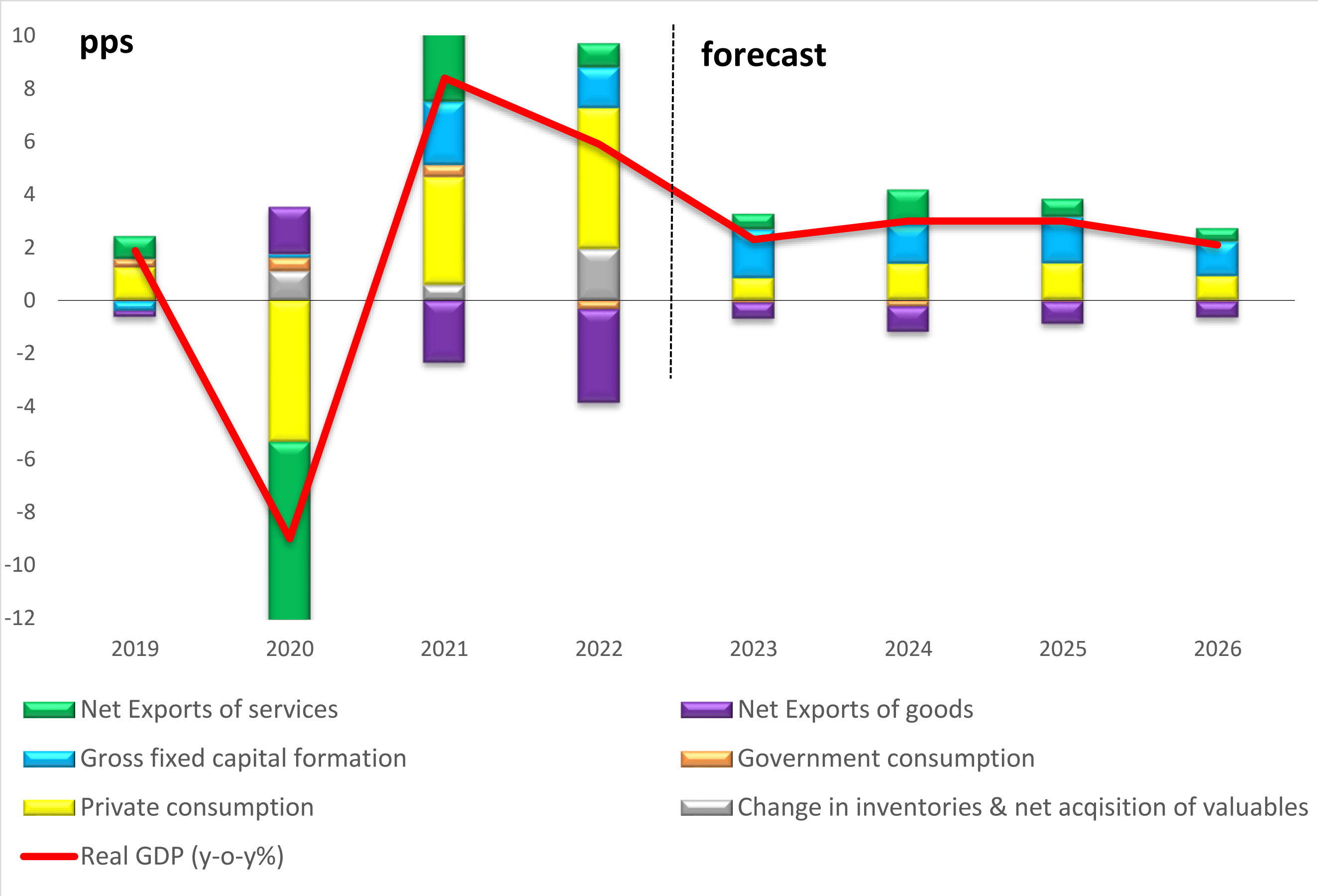
The shift of the Greek economy's growth model towards a more investment- and exports-driven output composition is set to underpin a solid growth path over the period 2024-2026. In this context, real GDP growth is projected to expand by 3.0% in 2024 and 2025 and 2.1% in 2026, decisively supported by investment and exports growth.

Final domestic demand, primarily through investment and secondarily through private consumption (Figure 2), is projected to add 2.6 pps on average to real growth in the medium-term, driven by the vigorous implementation of the RRP and the resilience of the labour market. The RRP is projected to have a 3.5 pps cumulative impact to real output growth throughout the entire period, with 0.3 pps stemming from grants, 0.7 pps from the loan part and 2.4 pps from productivity-enhancing reforms.

Gross fixed capital formation is projected to increase by an average 9.2% over the period 2024-2026, moving closer to the levels prior the financial crisis in 2026. The key factor behind the expected investment growth is expected to be the effective utilization of NGEU funds, with strong multiplier effects for the whole economy. The expected normalization of interest rates revisions from 2024 onwards should underpin investment activity outside the RRP.

Private consumption is projected to normalize at an average rate of 1.8% over the same period, in line with declining inflation, a further upturn in employment and an unwinding of fiscal support. On the contrary, public consumption is projected to stay almost stable, consistent with fiscal policy sustainability.

Figure 2 Real GDP growth and contributions



Source: Annual National Accounts (Hellenic Statistical Authority), calculated by the Ministry of Finance

On the external sector, exports of goods and services are projected to increase on average by 5.3% in the medium-term, benefiting from export capacity and competitiveness gains. On the other hand, robust growth of domestic demand, mainly investment, bolstered by the implementation of the RRP, should sustain imports at high levels (4.3% on average), resulting in a marginal contribution of net exports to real output growth.

Total employment is projected to increase by 1.0% in 2024 and by 0.9% in 2025, before remaining almost unchanged in 2026, on the back of stabilized financial conditions and job positions generated by the implementation of the RRP. In addition, unemployment is projected to steadily decline throughout the horizon period, by the end of which it is expected to de-escalate below pre-financial crisis levels (9.8% vs 12.7% in 2010).

HICP inflation is expected to moderate significantly to 2.4% in 2024, under the assumption of de-escalating energy prices and the normalization of supply disruptions, and return to the medium-term target of 2% thereafter.

Table 1 Key annual macroeconomic indicators and forecasts (% annual changes, constant prices)

	2021	2022	2023	2024	2025	2026
Real GDP	8.4	5.9	2.3	3.0	3.0	2.1
Private consumption	5.8	7.8	1.2	2.0	2.0	1.3
Government consumption	2.2	-1.6	-0.4	-1.2	-0.3	0.0
Gross fixed capital formation	20.0	11.7	13.2	9.7	10.7	7.2
Exports of goods and services	24.1	4.9	2.3	6.2	5.3	4.5
Imports of goods and services	17.7	10.2	2.6	4.4	4.8	3.8
GDP deflator	1.3	8.1	4.1	1.8	2.0	2.0
HICP	0.6	9.3	4.5	2.4	2.0	2.0
Total employment*	2.7	3.8	0.9	1.0	0.9	0.2
Unemployment rate*	12.4	10.6	10.1	9.3	8.5	8.4
Unemployment rate (LFS)	14.7	12.4	11.8	10.9	10.0	9.8

** On a national accounts basis*

Source: Annual National Accounts (Hellenic Statistical Authority), estimates/projections of the Ministry of Finance for the years 2023-2026

2. General Government balance and debt

2.1 Fiscal Developments

2.1.1 Fiscal outturn 2022

In 2022, Greece recorded a deficit in the headline balance of -2.3% of GDP, while the primary balance returned to positive ground, reaching +0.1% of GDP.

Compared to the previous year, both the headline and the primary balance were significantly improved by 4.8 p.p., driven by the accelerated economic recovery and the prudent fiscal policy. The adverse effects of the COVID outbreak were significantly reduced and this allowed the gradual return to normal activity. Targeted support gradually phased out within 2022, thus having lower negative fiscal impact on the general government balance than the previous years. On the other hand, the outbreak of the Ukrainian crisis led to the adoption of new supportive interventions in order to address the subsequent energy and inflation pressures to households and businesses. However, the temporary measures adopted were cautiously planned so as not to deviate from the fiscal targets set.

The substantial improvement of the balance compared to October 2022 Draft Budgetary Plan (+1.8 pps of GDP in terms of primary balance) is mainly attributed to the higher yield of tax and social security contributions revenues (+1.1% of GDP) driven by the -higher than expected- annual growth rate, the recording of the last instalment of ANFA/SMP profits in the last month of 2022 (+0.3% of GDP) and the lower than anticipated spending in several expenditure categories.

Table 2 General Government budget balances

	2022 (%)	2023 (%)	2024 (%)	2025 (%)	2026 (%)
Headline budget balance	-2.3	-1.8	-0.8	-0.5	-0.1
Primary balance	0.1	1.1	2.1	2.3	2.5
Structural balance	-2.1	-1.7	-1.7	-2.4	-2.6

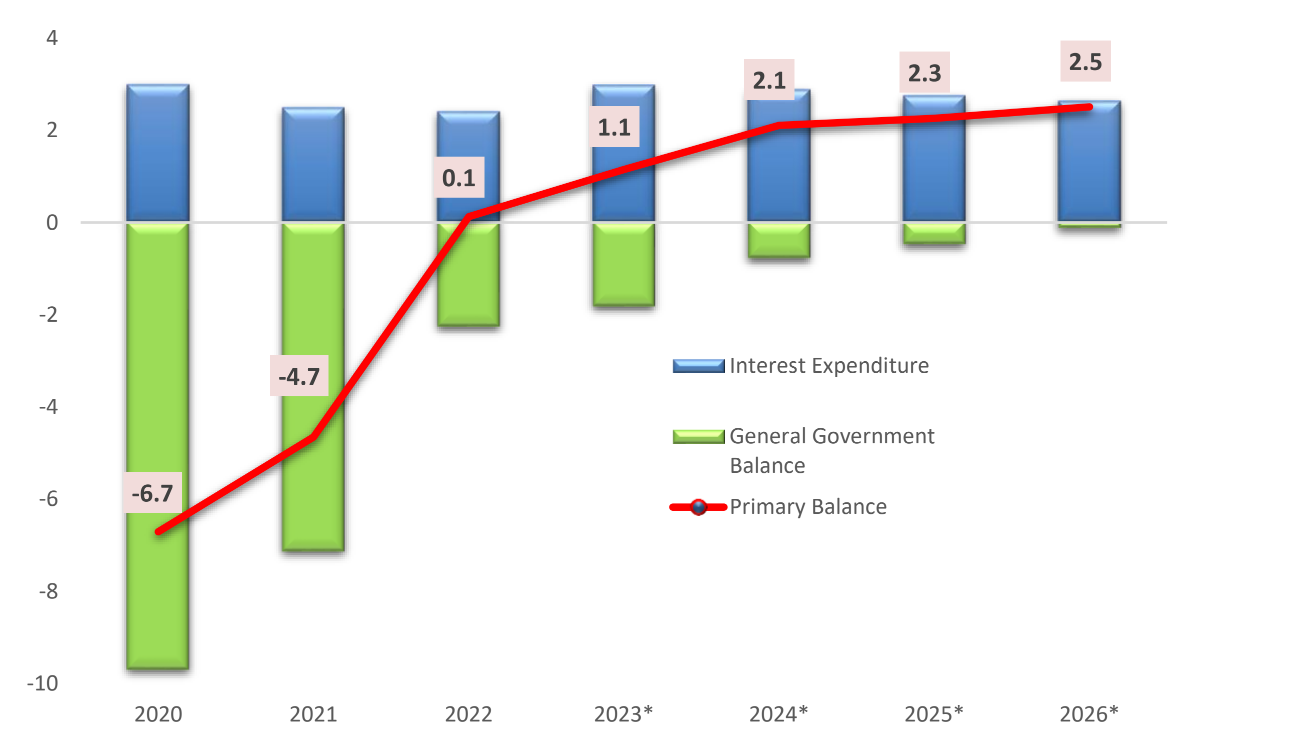
2.1.2 Fiscal outlook 2023

For 2023, the headline budget balance and the primary balance are estimated at -1.8% and 1.1% of GDP, respectively. This positive fiscal development, compared to the previous year, is based on the expected strengthening of economic growth and on the prudent fiscal policy followed, noting that the policy measures taken to mitigate the consequences of the energy crisis are almost fiscally balanced.

Compared to the 2023 Draft Budgetary Plan, the headline balance is estimated to be further improved by 0.3 pps of GDP and the primary balance by 0.4 pps of GDP, mainly because of the strong positive carry over effect on tax and social security contribution revenues and the favorable macroeconomic projections.

It is noted that, as the country is currently under an election period, the above estimates are provided under the no policy change scenario. For 2023, the primary surplus target set in the budget was 0.7% of GDP, which remains the fiscal target. Therefore, the above estimates do not take into account other unforeseen expenses or post-election measures that may occur during the course of the year.

Figure 3 General Government Primary Balance (% of GDP)



* *Projections.*

2.1.3 Fiscal outlook 2024-2026

Based on the solid growth path over the period 2024-2026, the budget position is expected to be further improved from 2024 onwards with the achievement of sustainable and strong primary surpluses. The primary balance is projected at + 2.1% of GDP in 2024, reaching +2.5% of GDP in 2026, while the headline deficit is projected to show a continuous decline and the general government budget will be almost balanced by the end of the projection period.

The above estimates, apart from all the interventions already adopted and described below (included also in the unchanged policies scenario), include additionally the fiscal impact of the significant reform of the public sector unified wage grid, estimated at 0.3% of GDP from 2024 onwards.

It is noted that, the current government has announced additional pre-election measures of 0.1% of GDP for 2024, 0.3% of GDP for 2025 and respectively for 2026, that are not taken into account in the estimates presented above.

The Table 3 below summarizes the current fiscal estimations for the period 2023-2026, broken down by main components of revenues and expenditures. The cyclical developments are presented in Table 7 of the Annex I.

Table 3 General government budgetary prospects

	2022 (Levels)*	2022	2023	2024	2025	2026
		(% of GDP)				
Net lending (EDP B.9) by sub-sector						
1. General government	-4,727	-2.3	-1.8	-0.8	-0.5	-0.1
2. Central government	-7,222	-3.5	-2.2	-1.0	-0.5	0.0
3. State government	-	-	-	-	-	-
4. Local government	-321	-0.2	-0.1	-0.1	-0.1	0.0
5. Social security funds	2,816	1.4	0.5	0.3	0.1	-0.1
General government (S13)						
6. Total revenue	104,410	50.2	47.1	46.5	45.9	45.1
7. Total expenditure	109,137	52.5	48.9	47.3	46.4	45.3
8. Net lending/borrowing	-4,727	-2.3	-1.8	-0.8	-0.5	-0.1
9. Interest expenditure	5,000	2.4	3.0	2.9	2.8	2.6
10. Primary balance	273	0.1	1.1	2.1	2.3	2.5
11. One-off and other temporary measures	1,356	0.7	0.0	0.0	0.0	0.0
Selected components of revenue						
12. Total taxes (12=12a+12b+12c)	59,528	28.6	26.6	26.0	25.8	25.7
12a. Taxes on production and imports	39,765	19.1	16.9	16.4	16.1	15.8
12b. Current taxes on income, wealth, etc.	19,501	9.4	9.6	9.5	9.6	9.8
12c. Capital taxes	262	0.1	0.1	0.1	0.1	0.1
13. Social contributions	29,037	14.0	12.6	12.3	12.0	11.8
14. Property income	930	0.4	0.5	0.5	0.4	0.3
15. Other	14,915	7.2	7.4	7.8	7.7	7.3
16=6. Total revenue	104,410	50.2	47.1	46.5	45.9	45.1
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)	88,565	42.6	39.2	38.3	37.8	37.5
Selected components of expenditure						
17. Compensation of employees + intermediate consumption	34,396	16.5	15.9	15.2	14.6	14.2
17a. Compensation of employees	22,712	10.9	10.5	10.3	9.9	9.6
17b. Intermediate consumption	11,684	5.6	5.4	4.9	4.7	4.6
18. Social payments (18=18a+18b)	43,290	20.8	20.0	19.3	18.9	18.6
of which Unemployment benefits	1,364	0.7	0.6	0.6	0.5	0.5
18a. Social transfers in kind supplied via market producers	6,135	2.9	2.2	2.2	2.2	2.1
18b. Social transfers other than in kind	37,155	17.9	17.8	17.1	16.7	16.5
19=9. Interest expenditure	5,000	2.4	3.0	2.9	2.8	2.6
20. Subsidies	11,276	5.4	2.0	1.4	1.4	1.3
21. Gross fixed capital formation	7,297	3.5	4.8	5.4	5.7	5.5
22. Capital transfers	4,633	2.2	1.3	1.3	1.2	1.3
23. Other	3,245	1.6	1.9	1.8	1.8	1.8
24=7. Total expenditure	109,137	52.5	48.9	47.3	46.4	45.3
p.m.: Government consumption (nominal)						

** In million euros (€).*

2.1.4 Fiscal interventions to address the consequences of the energy crisis

Against the backdrop of soaring energy and commodity prices in the aftermath of the war in Ukraine, in 2022, a package of measures has been adopted aiming at cushioning the impact of sharply increasing energy and inflation costs on households and businesses. The total cost of the aforementioned interventions amounted in 2022 to approximately €10 billion or 4.8 % of GDP, from which the bulk of the expenditure (€7.8 billion or 3.8% of GDP) was related to the electricity and natural gas consumption subsidy scheme for households and enterprises. The scheme covers a significant part of the energy increases of households and enterprises and is closely monitored and recalibrated regularly. It is mainly financed by the revenues of the Green Transition Fund deriving from the renewable sources (prompted by the increase in electricity prices), from the -established in July 2022- price cap mechanism on wholesale energy market[1] and from the emissions trading system allowances that totally amount to €5.3 billion or 2.5% of GDP for 2022.

Additional interventions to alleviate the impact of increased inflation were adopted in 2022, targeted mainly on vulnerable households, as described in Table 4.[2]

In the context of the rising inflation, albeit at a decelerating rate, several existing energy measures, as the electricity subsidy scheme, were extended to 2023, although their cost is considerably reduced compared to the previous year, following the evolution of electricity prices. In particular, the cost related to the electricity subsidy scheme funded by the revenues of the Green Transition Fund, is expected to total a significantly lower level (€1.7 billion or 0.8% of GDP) than foreshadowed in the Draft Budgetary Plan 2023.

In addition, with a view to safeguarding the purchasing power of low-income households through alleviating increasing food cost, an income subsidy (market pass) was launched in February 2023. The measure, with an estimated cost of approximately €0.5 billion, is funded by the temporary solidarity contribution of companies in the fossil fuel sector.

[1] With article 122 of Law 4951/2022, as amended, the Temporary Mechanism for Returning Part of the Revenues of the Day Ahead Market (DAM) and Intraday Market (IDM) was established. By means of this mechanism, energy producers for each class of power generation units (RES, Natural Gas, Lignite and Hydroelectric Plants) are compensated at a price that cannot exceed the regulatory cap and thus shall return any excess revenue to the GTF.

[2] With regards to budgetary costs related to persons fleeing from Ukraine, these are considered small (i.e. much lower than 0.1% of GDP) and are not depicted in the Table.

Table 4 Discretionary measures to address the consequences of energy crisis

List of interventions	2022	2023
	(% of GDP)	
Subsidies for electricity consumption for households and enterprises	-3.6	-0.8
Subsidies for natural gas consumption for households and enterprises	-0.2	0.0
Subsidies & tax reliefs to farmers and breeders for energy and inflation pressures	-0.1	-0.1
Increased allowances to vulnerable citizens	-0.4	0.0
Income subsidy to households for covering the increased cost of food products	0.0	-0.2
Subsidy on heating oil price and increase of the heating benefit allowance	-0.1	-0.2
Subsidize diesel fuels	-0.1	0.0
Prepaid card for fuels to households	-0.1	0.0
Return of 60% of increased electricity cost for first residence for households with income up to 45,000€	-0.1	0.0
Other	0.0	0.0
Total cost of interventions	**-4.8**	**-1.2**
Price cap mechanism & levy on electricity producers windfall profits	1.6	0.4
Other revenues of the Green Transition Fund	1.2	0.6
Temporary solidarity contribution on refineries	0.0	0.3
Direct (net) Budget impact of the energy interventions	**-2.1**	**0.0**

2.1.5 Other fiscal interventions

From 2023 onwards, several fiscal measures were adopted to strengthen the economy growth, to reduce the tax burden and to support income. The growth friendly interventions include the permanent reduction of social security contributions by 3 pps, amounting to €871 million, the permanent abolition of the solidarity tax in the private sector, amounting to €765 million as well as the abolition for the employees of the public sector and the pensioners, amounting to €476 million, the prolongation of reduced VAT on several goods and services.

Furthermore, the fiscal projections from 2023 onwards, include -inter alia- the increase of disability pensions and disability benefits (€145 million full year cost), the abolition of the 1% special levy in favor of Public Employees' Welfare Fund (TPDY), amounting to €80 million, the reform of doctors' special wage regime (€65 million), increased compensation to the Armed Forces personnel (€59 million), the reform of the hazardous allowances of the public sector (€75 million), the increase of the student allowance (€26 million), the extension of the maternity allowance in the private sector from six to nine months (€64 million), the suspension of VAT for new buildings until end of 2024 (€18 million). For 2023, a targeted one-off benefit was granted to pensioners who did not receive an increase in their pensions in 2023 because of the personal difference, amounting to €280 million.

In addition, an installment scheme was launched targeting the consistent taxpayers and an overall framework was established in order to support housing needs of the vulnerable citizens which is focused on younger people (low-interest housing loans, co-financing of house restoration costs, energy saving programs). Also, it is worth mentioning that the minimum wage of the private sector was further increased since April 2023, supporting the disposable income of the employees against inflation and also leading to increased unemployment benefits.

From 2024 onwards, the fiscal projections include the impact of the reform of the wage grid of the public sector with an emphasis on the low paid and on those positions with managerial responsibilities, estimated at 0.3% of GDP.

2.2 Debt developments

The general government debt is estimated at €356.2 billion or 171.3% of GDP at the end of 2022, vs €353.4 billion or 194.6% of GDP in 2021. For the end of 2023, the general government debt is forecasted at €360.0 billion or 162.6% of GDP, i.e. reduced by 8.7 pps compared to 2022.

At the beginning of 2023, the Hellenic Republic engaged its successful presence in the international capital markets by launching a new syndicated 10-year benchmark bond in January, nominal €3.5 billion, at 4.287% yield. The issue was oversubscribed during the book building procedure with its offers exceeding €21 billion and was mainly acquired by end investors. This was followed by the issuance of a new syndicated 5-year benchmark bond in April, nominal €2.5 billion, at 3.919% yield. This issue was also oversubscribed during the book building procedure with its offers exceeding €19 billion and, by large percentage, was acquired by end investors.

The maintenance of the high level of cash reserves, nearly €33 billion at the end of March 2023, contributes substantially to achieving low funding costs and safeguards the meeting of medium-term debt obligations. Within the upcoming years, cash reserves will be reduced gradually targeting to the repayment of the outstanding amount of public debt, following the efforts of the Hellenic Republic being back to normality, having continuous access to the capital markets by achieving, at the same time, the investment grade status.

It is notable that, despite the unfavorable international environment, Hellenic Republic's creditworthiness was upgraded again by three rating agencies during 2022, most of which rate the Greek economy just one notch before the investment grade (BBB-).

Table 5 General Government debt development

	2022	2023	2024	2025	2026
			(% of GDP)		
1. Gross debt	171.3	162.6	150.8	142.6	135.2
2. Change in gross debt ratio	-23.3	-8.7	-11.8	-8.1	-7.4
Contributions to changes in gross debt					
3. Primary balance	0.1	1.1	2.1	2.3	2.5
4. Interest expenditure	-2.4	-3.0	-2.9	-2.8	-2.6
5. Stock-flow adjustment	25.6	10.5	12.6	8.6	7.6
of which:					
- Differences between cash and accruals	-0.3	-0.2	-0.1	0.5	0.8
- Net accumulation of financial assets	-0.1	0.8	4.3	2.1	2.0
- privatisation proceeds	0.2	0.1	1.7	0.0	0.0
- Valuation effects and other	26.0	9.8	8.3	6.1	4.8
p.m.: Implicit interest rate on debt	1.4	1.8	1.9	1.9	1.8
Other relevant variables					
6. Liquid financial assets					
7. Net financial debt (7=1-6)					
8. Debt amortization (existing bonds) since the end of the previous year	2.1	2.0	1.7	1.3	3.2
9. Percentage of debt denominated in foreign currency	0.9	0.0	0.0	0.0	0.0
10. Average maturity	19.8	19.2	18.5	18.0	17.5

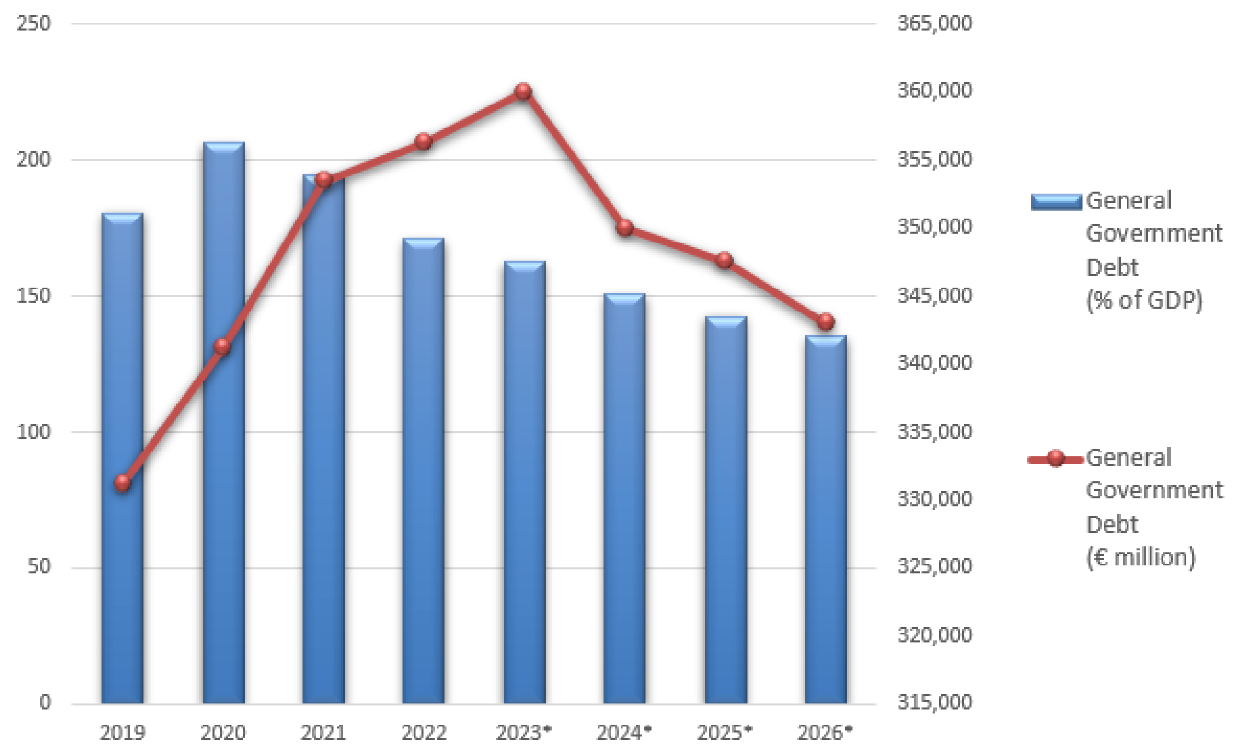
The consistent issuance activity since 2018 continues to rebuild the Hellenic Republic's yield curve by filling the gaps at the most significant maturities, while providing volume and liquidity within the whole spectrum of the Greek government bonds.

The favorable performance of Greek government bonds in the secondary market since March 2020 was further encouraged by European Central Bank's Pandemic Emergency Purchase Programme –PEPP, which was concluded at the end of March of 2022. The maturing principal payments from securities purchased under the PEPP will be reinvested until, at least, the end of 2024. Furthermore, ECB has announced the extension of the waiver for the Greek bonds also until, at least, the end of 2024.

Very positive signal to the investors' community had the full repayment of IMF loans for the amount of €1.9 billion, which was concluded at the beginning of April 2022, followed by the early repayment of €2.6 billion of GLF loans that were maturing in 2023 and took take place in mid-December of 2022.

In addition to the previous years' financing, a considerable portion of the current year's financing needs is going to be covered by loans of NGEU programme, of which an amount of €1.8 billion has already been disbursed in January 2023. NGEU loans have significant contribution to the retention of the weighted average maturity of the Greek public debt, close to twenty years, as well to the preservation of the low and fixed servicing cost of the total debt portfolio.

Figure 4 General Government Debt



* *Projections.*

2.3 National Recovery and Resilience Plan

The Greek National Recovery and Resilience Plan (NRRP), "Greece 2.0" aspires to change the existing economic model and institutional framework via a numerous reforms and investments, steering the Greek economy towards a more extrovert, competitive, green and digital growth model, with a more resilient social safety network.

The resources included in "Greece 2.0" for the period 2021-2026 amount to €30.1 billion, of which grants are estimated at €17.4 billion and loans up to €12.7 billion to support investments and reforms.

The Greek plan comprises of four main pillars: Green Transition, Digital Transition, Employment – Skills - Social Cohesion (Health, Education, Social Protection) and Private investment and transformation of the economy.

In 2022, €2.8 billion were transferred for approved RRF projects to entities inside and outside the general government. By the end of March 2023, 617 projects and subprojects, with a total budget of €17.86 billion including VAT, have already been approved and included in the RRF grants programme.

The approved projects include, inter alia: the energy renovation of residential buildings, the upgrading of energy efficiency of the public sector buildings, island electrical interconnections, energy storage investments, motorways construction, micro-satellite network development, implementation of the national public health secondary prevention programme, implementation of the strategy for excellence in universities and innovation and many others.

In April 2022, Greece received the first payment for 2022 from the Recovery and Resilience Fund amounting to €3.6 billion, after the fulfillment of the 15 milestones and in January 2023, Greece received the second payment request from the RRF amounting to €3.6 billion, after the fulfillment of 28 milestones.

Table 6 RRF impact on programme's projections - GRANTS

	2020	2021	2022	2023	2024	2025	2026
	(% of GDP)						
Revenue from RRF grants							
1. RRF GRANTS as included in the revenue projections	-	0.2	0.4	1.3	1.7	1.9	1.8
2. Cash disbursements of RRF GRANTS from EU	-	1.3	0.8	1.6	1.5	1.4	1.3
Public Investment Expenditure to entities by RRF GRANTS	**-**	**0.2**	**1.4**	**1.7**	**1.9**	**1.8**	**1.7**
Expenditure financed by RRF GRANTS		**0.2**	**0.5**	**1.5**	**2.0**	**2.2**	**2.1**
3.TOTAL CURRENT EXPENDITURE	-	0.1	0.0	0.5	0.2	0.2	0.1
of which:							
- Compensation of employees	-	0.0	0.0	0.0	0.0	0.0	0.0
- Intermediate consumption	-	0.0	0.0	0.1	0.1	0.0	0.0
- Social Payments	-	0.1	0.0	0.1	0.1	0.1	0.1
- Interest expenditure	-	-	-	-	-	-	-
- Subsidies, payable	-	0.0	0.0	0.3	0.1	0.1	0.0
- Current transfers	-	-	-	-	-	-	-
4. TOTAL CAPITAL EXPENDITURE	-	0.1	0.4	1.0	1.7	2.0	2.0
of which:							
- Gross fixed capital formation	-	0.1	0.3	0.8	1.3	1.5	1.4
- Capital transfers	-	0.1	0.1	0.3	0.4	0.5	0.6
Other costs financed by RRF grants							
5. Reduction in tax revenue	-	-	-	-	-	-	-
6. Other costs with impact on revenue	-	-	-	-	-	-	-
7. Financial transactions	-	-	-	-	-	-	-

Note: Public investment expenditure to entities by RRF grants, refers to transfers for approved RRF projects to entities inside and outside the general government. Expenditure financed by RRF Grants refers to expenditure outside the general government. Expenditure figures include VAT.

The Greek Plan includes the use of RRF loans that amount up to €12.7 billion and is expected to mobilize a total of €32 billion of investment resources, co-financing projects falling under the following five pillars: green transition, digital transition, exports, innovation-research and development, economies of scale through partnerships, joint ventures, acquisitions, mergers.

The financing of private investments from the RRF loans envelope will be implemented through three distinctive funding channels: (a) International Financial Institutions, including the EIB and the EBRD, (b) commercial banks, Greek but also international ones and (c) an equity platform instrument operated by the Hellenic Development Bank (HDB).

In the loan facility, which mainly concerns the granting of loans for the implementation of investment projects by private businesses through the commercial banks and International Financial Institutions, the status between projects submitted and loans signed –by the end of March 2023– was as follows:

381 investment projects have been submitted with a total budget of €12.1 billion (out of which: €5.0 billion RRF loans, €4.0 billion bank loans and €3.1 billion investors' own contribution).

106 loan agreements have already been signed, with a total budget of €5.2 billion (out of which: €2.1 billion RRF loans, €1.8 billion bank loans and €1.3 billion investors’ own contribution).

Table 7 RRF impact on programme’s projections - LOANS

	2020	2021	2022	2023	2024	2025	2026
	(% of GDP)						
Cash flow from RRF loans projected in the programme							
1. Disbursements of RRF LOANS from EU	-	0.9	0.9	0.8	0.8	1.5	0.7
2. Repayments of RRF LOANS to EU	-	-	-	-	-	-	-
Expenditure financed by RRF loans							
3.TOTAL CURRENT EXPENDITURE	-	-	-	-	-	-	-
of which:							
- Compensation of employees	-	-	-	-	-	-	-
- Intermediate consumption	-	-	-	-	-	-	-
- Social Payments	-	-	-	-	-	-	-
- Interest expenditure	-	-	-	-	-	-	-
- Subsidies, payable	-	-	-	-	-	-	-
- Current transfers	-	-	-	-	-	-	-
4. TOTAL CAPITAL EXPENDITURE	-	-	-	-	-	-	-
of which:							
- Gross fixed capital formation	-	-	-	-	-	-	-
- Capital transfers	-	-	-	-	-	-	-
Other costs financed by RRF loans							
5. Reduction in tax revenue	-	-	-	-	-	-	-
6. Other costs with impact on revenue	-	-	-	-	-	-	-
7. Financial transactions	-	-	0.1	0.6	1.1	1.4	1.1

3. Sensitivity analysis

The baseline scenario forecasts a slowdown in real GDP growth from 5.9% in 2022 to 2.3% in 2023, followed by stronger growth of 3% in 2024-2025, driven mainly by the growth in gross fixed capital formation and facilitated by the implementation of the Recovery and Resilience Plan, as analyzed in the first chapter. The HICP is projected to deescalate from 9.3% in 2022 to 4.5% in 2023 and to 2.4% in 2024, before converging to the ECB target from 2025 onwards. Although growth is therefore projected to remain robust throughout the medium-term, risks to the outlook do exist, particularly in the form of a possible new surge in international energy prices, as well as in the form of a stronger than anticipated tightening in financing conditions.

In this respect, the sensitivity analysis examines the impact on economic activity and on public finances from adverse developments in inflation and in interest rates. Specifically, the analysis examines the impact of the following alternative scenarios:

1. A price hike in oil, gas and commodities within 2023, that results in higher headline inflation by 0.5% for the current year (Scenario A).

2. A monetary shock raising interest rates by 50 basis points in 2023 relative to the baseline scenario (Scenario B).

The transmission channels of the higher inflationary pressures include dampening effects on the income and spending of households, as well as increased production costs that limit the operating surplus of non-energy corporations and slow down labour market growth. Moreover, higher uncertainty leads to a potential postponement of investment decisions and a reassessment of saving decisions for precautionary reasons. Finally, international trade and tourism are negatively affected, through higher transport costs and weaker disposable income.

Higher interest rates also imply a dampening effect on private consumption, although their main impact on activity operates through gross investment. At the same time, they also imply a more straightforward impact on public finances, as they increase interest expenditure and public debt.

Table 8 presents the results of the sensitivity analysis for the main macroeconomic variables, showing the deviation of the annual growth rates under each alternative scenario with regard to the baseline scenario of the Stability Programme. Relative to the baseline forecast, an inflationary shock would dampen real economic growth in 2023 by 0.25 percentage points. The impact would be transmitted primarily through the disposable income of households and consumer spending, followed by losses of real exports due to a loss of competitiveness and investment growth hampered by higher operational costs and uncertainty. Furthermore, the unemployment rate would increase by 0.1% during 2023, while nominal compensation of employees would bear losses by 0.1% within the current year.

Table 8 Sensitivity analysis results - macroeconomic variables (change in growth rates vs the baseline)

Scenario A: Higher inflation by 0.5% in the current year				
	2023	**2024**	**2025**	**2026**
Real GDP	-0.25	0.00	0.00	0.00
Private consumption	-0.40	0.00	0.00	0.00
Investment	-0.60	-0.20	0.00	0.00
Exports of goods and services	-0.30	0.00	0.00	0.00
Imports of goods and services	-0.60	-0.20	0.00	0.00
Employment	-0.10	0.00	0.00	0.00
Unemployment rate	0.10	0.00	0.00	0.00
Compensation of employees	-0.10	0.00	0.00	0.00
GDP deflator	*0.50*	*0.00*	*0.00*	*0.00*
HICP	*0.50*	*0.10*	*0.00*	*0.00*

Scenario B: Higher nominal interest rates by 50 basis points in the current year				
	2023	**2024**	**2025**	**2026**
Real GDP	-0.10	0.00	0.00	0.00
Private consumption	-0.10	0.00	0.00	0.00
Investment	-0.30	0.00	0.00	0.00
Exports of goods and services	-0.10	0.00	0.00	0.00
Imports of goods and services	-0.20	0.00	0.00	0.00
Employment	-0.04	0.00	0.00	0.00
Unemployment rate	0.04	0.00	0.00	0.00
Compensation of employees	-0.04	0.00	0.00	0.00
GDP deflator	*-0.10*	*0.00*	*0.00*	*0.00*
HICP	*-0.10*	*0.00*	*0.00*	*0.00*

Scenario B assumes that a monetary shock in the baseline scenario takes place in 2023, leading to an increase of the interest rate by 50 basis points. This has a negative impact on the growth rate of output both through gross investment, due to the increase in the cost of borrowing, and through private consumption, due to an increase in consumers' savings. In turn, the slowdown in domestic demand will have a negative impact on employment, and will result in a marginal fall in prices in 2023. On the other hand, a relatively larger decline in imports offset the fall in exports, reflecting developments in gross investment. Overall, the higher interest rates compared to those in the baseline scenario may lead to a negative growth rate of gross fixed capital formation by 0.3% and to a lower growth of private consumption by 0.1%, leading to lower real GDP growth by -0.1% in 2023 compared to the baseline scenario.

The fiscal implications of the alternative scenarios are presented in Table 9. The sensitivity of the headline balance was calculated by employing elasticities used in the context of the European fiscal surveillance framework. Specifically, the value of the budget balance semi-elasticity has been used, in line with the calculations presented in the 2018 Report on Public Finances in EMU. For Greece, this semi-elasticity has been calculated at 0.524 implying a rise (decline) in the budget balance by 0.5% of GDP as a result of an increase (decrease) of GDP by 1%.

Under the first alternative scenario, the further rise in inflation in the current year will have a recessionary impact on the economy, through the channels mentioned above, while a faster normalisation will allow for larger GDP growth tailwinds, on the back of the lower burden on the budgets of households and corporations and the relatively lower level of uncertainty. At the same time, the fiscal implications of Scenario A move to the opposite direction, following rather the course of nominal GDP, as the increase in the GDP deflator is stronger than the reduction in real GDP due to the higher inflation. As a result, the impact of the higher inflation in 2023 on the fiscal balance is positive as the higher price level shores up nominal GDP and revenues, overcoming the negative impact on real consumption and investment spending.

Table 9 Sensitivity analysis - fiscal implications of alternative scenarios

Scenario A: Higher inflation by 0.5% in the current year				
	2023	**2024**	**2025**	**2026**
Headline budget balance	-1.71%	-0.66%	-0.36%	-0.01%
Difference to stability programme scenario	*0.12%*	*0.12%*	*0.12%*	*0.12%*
Primary balance	1.27%	2.23%	2.39%	2.63%
Difference to stability programme scenario	*0.12%*	*0.12%*	*0.12%*	*0.12%*

Scenario B: Higher nominal interest rates by 50 basis points in the current year				
	2023	**2024**	**2025**	**2026**
Headline budget balance	-1.99%	-1.00%	-0.72%	-0.38%
Difference to stability programme scenario	*-0.16%*	*-0.22%*	*-0.23%*	*-0.25%*
Primary balance	1.05%	2.01%	2.17%	2.41%
Difference to stability programme scenario	*-0.10%*	*-0.10%*	*-0.10%*	*-0.10%*
Debt to GDP ratio	162.9%	151.1%	143.0%	135.7%
Difference to stability programme scenario	*0.32%*	*0.34%*	*0.38%*	*0.44%*

Under the second alternative scenario, the impact on the fiscal balance is negative, as the monetary shock not only leads to smaller real growth compared to the baseline, but also implies a decline in the GDP deflator, hence further reducing nominal output. Moreover, Scenario B also leads to an increase in interest expenditure, which strengthens the negative impact on the headline balance. As a result, the headline balance reaches -0.4% of GDP at the end of the Stability Programme horizon, approximately 0.25% lower compared to the baseline, while the ensuing difference is much smaller for the primary balance, which reaches a value of 2.4% in 2026, from 2.5% under the baseline. The higher interest rates also affect the path of the debt to GDP ratio, leading to gross public debt to be higher by €470 million compared to the baseline by the end of the programme's horizon. This implies only a minimal impact on the path of the debt ratio, mainly due to the favourable profile of Greek public debt. Specifically, the increase in nominal interest rates under Scenario B will lead to an end value for the debt ratio at 135.7% of GDP in 2026, just 0.45 pps higher compared to the baseline projection for the same year.

4. Long-term sustainability of public finances

4.1 Main assumptions and background

The present chapter analyses the impact of ageing on public finances over a long-term horizon (2019-2070) based on the projection results for the evolution of expenditure of ageing related items (pensions, health care, long-term care and education) of the 2021 Ageing Report (AR) (published in May 2021).

Specifically, the results on the cost of ageing for the period 2019–2070 are based on:

- the current pension legislation (cut-off date July 2020),
- the most recent EUROSTAT's demographic projections (EUROPO2019) and
- the macroeconomic assumptions endorsed by the Ageing Working Group (AWG) of EU's Economic Policy Committee (EPC) for the 2021 AR,
- the long-term projections on age-related expenditure in the areas of health care, long-term care and education that have been prepared by the EPC's AWG in the context of the 2021 AR.

4.1.1 Key elements of the pension system

As far as pension expenditure is concerned, the projections include the main and auxiliary pension provision of the public pension system, as well as means-tested benefits (uninsured elderly and social solidarity grant provision which totally phased out in 2020).

Key elements of recent pension reforms introduced by Laws 4387/2016, 4670/2020 and 4826/2021:

- All social insurance main pension funds are integrated into one single social insurance pension fund (e-EFKA) with common governance, administration and accounting framework.
- Auxiliary pension fund (former ETEAEP) is also integrated into e-EFKA as an independent financial sector. Since January 2022, a new auxiliary pension fund (TEKA), along with a Funded Defined Contribution (FDC) Scheme has been introduced for the newcomers to the labour market and those aged below 35.
- Harmonized contribution rates and pension benefit rules.
- Already accrued rights of both pensioners (except farmers) and insured (for farmers, a 15-year transition period is provided) are affected by applying the unified pension benefit rules on those as well.

The key elements of the main pension system (as it has been formed by the provisions of laws 4336/2015, 4387/2016, and 4670/2020) are the following:

1. The full contributory period is set at 40 years.
2. Unified statutory retirement ages are set for all at 67 years. The minimum age for retirement is set initially at 62, informed by life expectancy dynamics.

3. The main pension amount consists of two components, namely the national pension and the contributory pension. The national pension is a flat-rate pension which is granted only if at least 15 years of contributions are accrued (for old age pensions). It is initially set at €384 per month for at least 20 years of contributions (payable 12 times a year). The national pension is reduced: by 2% for each year of contributions below 20 years, between 19 and 15 years (reduces to €345.60 for 15 years). The cost of national pension is financed by the State.

4. The contributory pension is the amount of pension which is in proportion to the amount of insurance contributions pertaining to the years of insurance. The contributory pension amount aims at rewarding insured people who choose to prolong their working lives. Law 4387/2016 introduced marginally applied accrual rates for the contributory part of the pension that depend only on the length of the career (for all pension categories), with the same profile for all workers. Law 4670/2020 introduced new scale of accrual rates for main pensions, effective from 1.10.2019 onwards, actually increasing the accrual rates over 30 years of contributions. The new scale is applied to the new pensions, as well as the existing ones for the calculation of personal differences with effect from 1.10.2020 onwards. This amendment was adopted due to Council of State ruling.

5. For calculating the contributory component of the pension, the pensionable earnings are derived taking into account the average monthly earnings of the insured for the whole of his insurance life (starting from 2002 onwards). The maximum and minimum pensionable earnings for salaried insured with full employment are €6,500 and €650 respectively.

6. For the period up to 2024, pensionable earnings are valorized by the change in the average annual general consumer price index (CPI) published by the Hellenic Statistical Authority (ELSTAT) while from 2025 onwards pensionable earnings are valorized by annual change in wages.

7. Under law 4387/2016, all social insurance contribution rates were gradually harmonized with those of IKA-ETAM (20%). Yet, law 4670/2020 introduced insurance classes for self-employed and farmers, effective from 2020 onwards due to Council of State ruling. For all self-employed contributions range from 155 to 500€. For farmers (ex. OGA) contributions range from 87-280€ in 2020. The insured can freely choose the class to be insured every year. Insurance classes' amounts are adjusted in 2023 and 2024 by CPI and from 2025 onwards by the annual change in wages.

8. There is a 15-years transition period for new retirees of OGA, during which a pro-rata pension is granted.

9. Pension indexation is fully linked to a uniform adjustment index which cannot exceed CPI. In particular, the index is equal to the minimum of CPI and the average of CPI and GDP growth [min (50% GDP growth +50% CPI, CPI)]. Indexation is not applied up to 2022.

10. A monthly maximum pension amount of €4,608 (12 times the monthly national pension amount) was introduced by law 4623/2019.

11. For those with less than 15 years of contributions (elderly uninsured), and thus not eligible for pension, a flat rate means-tested benefit (360€) is provided which constitutes an important social safety net.

12. All main pensions granted up to the entry into force of the law 4387/2016 were recalibrated according to the new system's rules. Each pension consists of the following components: a) National pension, b) Contributory pension according to the new rules and c) Personal difference, as the difference between the total pension amount according to the old and new rules. Personal differences that correspond to pensions with lower pension amount according to the new rules are offset with future pension indexation starting from 2023 onwards. Personal differences that correspond to pensions with higher pension amount according to the new rules are granted in 5 installments starting from 2019 onwards.

Since January 2022, the auxiliary pension system consists of two separate schemes: the old **Notional Defined Contributions (NDC) Scheme** and a new **Funded Defined Contribution (FDC) Scheme**.

A. The key elements of the NDC Scheme are the following:

1. The auxiliary pension provision works in parallel to the main pension provision and is mandatory for most people. Auxiliary pension is financed separately from the main pension from both employer and employee, without any state contribution. It is awarded under the prerequisite of receiving a main pension.
2. By law 4052/2012, a pay-as-you-go (PAYG) notional defined contribution system (NDC) was introduced, replacing the old defined benefit system, with the following elements:
    (i) The notional rate of return, which is the annual growth in pensionable earnings (contributory earnings) of all insured with the Fund, applied for the accumulation of contributions.
    (ii) The life expectancy at retirement, applied for the calculation of the amount of pension.
    (iii) A balancing mechanism applied to guarantee the system's financial stability (no pension indexation in case of deficit).
3. The amount of pension paid is entirely linked to the pensioner's age. In order to calculate the amount of old-age pension, a whole life annuity is used, taking into account the transfer of pension rights to assignees (survivors). Disability pensions are calculated using the proper age annuity for each case. Whole life annuities are recalculated every three years to take into account changes in life expectancy.
4. For those insured before 1.1.2014, the new system is implemented pro rata starting on 1.1.2015 and they are awarded a pension which consists of two components:
    (i) The first component is using the arrangements of the defined benefit system (accrual rate 0.45% and pensionable earnings calculated according to the method of the main pension) for as many years as the insured worked before 1.1.2015.

(ii) The second component is using the NDC arrangements for as many years as the insured worked after 1.1.2015.

5. All auxiliary pensions granted up to 31.12.2014 are recalibrated according to the new system's rules. Each pension consists of the following components:

   (i) Contributory pension according to the new rules.

   (ii) Personal difference, as the difference between the pension amount according to the old and new rules, only for the cases the new pension amount is lower than the old one. Initially, when the new legislation was applied, personal differences were completely eliminated starting from the 2nd half of 2016 in case the sum of pension amounts (main and auxiliary) was higher than €1,300. Law 4670/2020 restored the eliminated personal difference (for those with sum of pension amounts higher than €1,300) with effect from 1.10.2019. This amendment was adopted due to the Council of State ruling. This provision affects only a closed group of pensioners who had applied for a supplementary pension up to 31.12.2014.

6. The formula for auxiliary pensions benefit indexation, which can also take negative values, is:

$$\gamma_t = \min\left([1 + g_{t-2} - r] - 1, \mathrm{CPI}_{t\text{-}1}\right)$$

where

g_{t-2} : notional rate of return,

r : discount rate=1.3% (used in annuities calculation)

$\mathrm{CPI}_{t\text{-}1}$: Consumer Price Indexation

7. According to article 59 of law 4826/2021, the State covers from the State Budget the impairment of the resources of the old auxiliary NDC from insurance contributions, due to the introduction of the FDC Scheme. In order to maintain the pensions of the insured and the pensioners of the old system at the levels of NDC system, the parameters of the system such as the notional rate of return are calibrated with values as if the NDC system remained open to newcomers.

B. The key elements of the new auxiliary Funded Defined Contribution (FDC) Scheme are the following:

1. Participation is mandatory for new wage and salary earners, as well as self-employed, for whom the current auxiliary pension system is mandatory. Participation is optional for: i) wage and salary earners, up to a specific age (below 35), who wish to be transferred from the existing to the new auxiliary pension system, ii) self-employed, up to 35, for whom the existing auxiliary pension system is mandatory and wish to be transferred from the existing to the new auxiliary pension system, iii) self-employed, up to 35, for whom the existing auxiliary pension system is not mandatory. Contributions will remain at the same level with the ones of the existing auxiliary pension plan, namely 6% of reference earnings for wage and salary earners (3% by employees and 3% by employers) and fixed amount (existing classes) for self-employed.

2. The auxiliary pension to be provided on a lifelong annuity monthly basis will be actuarily neutral, based on the financial value of lifetime contributions and the returns of the investments credited to

the individual account of the participant. Survivors' and disability pensions (up to a specific level in case of insufficient contributions) are also provided.

3. The new auxiliary FDC pension plan offers to its participants the ability to allocate their accumulated capital in different risk levels and investment profiles.

4. The State guarantees a minimum amount of the monthly auxiliary pension, which corresponds to the actuarial equivalent of the sum of the contributions paid by the insured individual in real terms.

4.1.2 Main demographic, labour force and macroeconomic assumptions

The main demographic, labour force and macroeconomic assumptions are the ones used in the context of the 2021 Ageing Report and are reproduced in Table 10. The demographic assumptions are based on EUROSTAT's population projections (EUROP2019). The labour force projections are based on a Cohort Simulation Model (CSM) developed by DG-ECFIN that calculates entry and exit rates in the labour market by gender and cohort. Finally, the Output Gap Working Group (OGWG) methodology is used for projecting potential growth and its components over the medium term, namely up to 2029, while the long-run projection is based on the central assumption of convergence towards the same value of labour productivity by the end of the projection horizon. The long-term projections, and T+10 are based on the Commission spring 2020 forecast.

The evolution of main demographic variables is given in the first partition of Table 10. Eurostat's demographic projections point to a slow rise in the fertility rate, which reaches a value of 1.5 in 2070 from 1.3 in 2021. However, the fact that the fertility rate remains below the level required for maintaining a non-decreasing total population (2.1 for the developed countries), along with the marginal projected effect of net migration, leads to a declining population that is projected to fall below ten million by 2040 and decline further to 8.6 million by the end of the projection horizon.

Furthermore, the old-age dependency ratio increases from 39.2 in 2021 up to 68.2 in 2050 and then decreases to 65.2 in 2070. Life expectancy at birth increases from 79.3 in 2021 to 86.4 in 2070 for men and from 84.5 in 2021 to 90.3 in 2070 for women. Life expectancy at 65 rises from 19.0 in 2021 to 23.9 at the end of the projection period for men and from 22.0 to 26.7 for women.

Overall, labor force participation is projected to increase as illustrated in the second partition of table 10 for workers aged 20-64 (from 74.5% in 2021 to 82.2% in 2070) as well as for workers aged 20-74 (from 63.8% in 2021 to 71.4% at the end of the projection). The employment rate also increases for workers aged 20-64 (from 62.1% in 2021 to 76.5% in 2070, but it also increases significantly from the first decade) and for workers aged 20-74 (from 53.3 in 2021 to 66.5 in 2070), which affects the projection results.

In the third partition of Table 10, the basic macroeconomic assumptions point to a slowly increasing growth rate of potential GDP that will reach a peak of 1.7% in 2040 and then drop gradually to 1.3% by 2070, while labour productivity growth is projected to follow an increasing path until 2040, reaching a peak of 2.2% and then gradually drop to 1.5% in 2070. Its underlying determinants, namely labour augmenting total factor productivity and capital stock per worker (also referred to as capital deepening) follow a similar path.

Finally, it should be stated that the projections are made under a "no policy change" assumption. They are not forecasts and they are subject to considerable uncertainty. They aim to illustrate what the future could hold if current policies remain unchanged.

Table 10 Demographic projections and macroeconomic assumptions

	2021	2030	2040	2050	2060	2070
Demographic projections						
Total population (million)	10.6	10.3	9.9	9.5	9.0	8.6
Fertility rate	1.3	1.4	1.4	1.5	1.5	1.5
Net migration as % of population	0.1	0.1	0.2	0.2	0.3	0.3
Old age dependency ratio (65+/20-64)	39.2	46.1	57.8	68.2	67.3	65.2
Life expectancy at birth (males)	79.3	80.8	82.4	83.8	85.2	86.4
Life expectancy at birth (females)	84.5	85.7	86.9	88.1	89.3	90.3
Life expectancy at 65 years old (males)	19.0	20.0	21.1	22.1	23.0	23.9
Life expectancy at 65 years old (females)	22.0	22.9	23.9	24.9	25.8	26.7
Population aged 65+ over total population	22.8	26.0	30.6	33.8	33.5	32.8
Labour force participation						
Participation rate (20-64)	74.5	77.4	79.5	81.8	82.1	82.2
Participation rate (20-74)	63.8	65.1	65.8	67.5	70.6	71.4
Participation rate (20-64) - males	82.6	83.1	83.6	85.3	85.3	85.5
Participation rate (20-64) - females	66.6	71.6	75.2	78.1	78.5	78.7
Employment rate (20-64)	62.1	68.0	71.9	76.0	76.4	76.5
Employment rate (20-74)	53.3	57.3	59.6	62.9	65.9	66.5
Unemployment rate (20-64)	16.6	12.1	9.6	7.1	6.9	6.9
Unemployment rate (20-74)	16.5	12.0	9.4	6.9	6.8	6.7
Macroeconomic assumptions						
Real GDP growth rate	7.9	0.7	1.7	1.6	1.5	1.3
Potential real GDP growth	-0.2	0.7	1.7	1.6	1.5	1.3
Growth rate of labour productivity	0.0	0.9	2.2	2.0	1.8	1.5
Total Factor Productivity	0.3	0.7	1.4	1.3	1.2	1.0
Capital deepening	-0.3	0.2	0.8	0.7	0.6	0.5

Source: 2021 Ageing Report

Notes:
For more information related to the key elements of the pension system as well as the macroeconomic assumptions, please see "National Actuarial Authority (2021), *Greek Pension System Fiche,* prepared for the 2021 Ageing Report, Ageing Working Group, Economic Policy Committee, European Commission.

https://ec.europa.eu/info/sites/default/files/economy-finance/el_-_ar_2021_final_pension_fiche_0.pdf

For more information on underlying assumptions and projection methodologies used in AR 2021 for all the ageing related items projected see: https://ec.europa.eu/info/publications/2021-ageing-report-underlying-assumptions-and-projection-methodologies_en

For more information on the population projections see: https://ec.europa.eu/eurostat/web/population-demography-migration-projections/population-projections-data

Since the GDP projection of the 2021 AR are used in this section, as prepared by the European Commission and endorsed by the Ageing Working Group, some figures (e.g. total revenues/expenditure as % of GDP) vary compared to other sections of the Stability Programme that use updated national estimates. Due to the high rates of nominal growth in the last two years, the difference has increased compared to the previous Stability Programmes.

It should be noted that the long-term macroeconomic projections used in this section do not take into account the growth benefits that will occur through the savings and investment of the new auxiliary FDC scheme. For an analysis of the potential growth benefits of the new scheme under different scenarios please see: https://teka.gov.gr/meleti-makrooikonomikon-epiptoseon-iobe.

4.2 Projections for pension expenditure and other expenditure related to ageing

4.2.1 Projection results

The main results of the analysis are presented in Table 11 and show a decline of 4.3 percentage points of GDP in age-related expenditure between 2021 and 2070, stemming from the declining path of pension expenditure which declines early in the projection period. In more detail, total age-related expenditure amounts to 23.8% of GDP in 2021 of which 15.9% is pension expenditure. The pension expenditure drops already in the first decade from 15.9% in 2021 to 13.8% in 2030 and amounts to 11.6% of GDP at the end of the projection horizon. A small amount of this decline (0.3% in 2070)[3] is due to the fact that a part of the auxiliary pensions' expenditure is diverted at the new FDC auxiliary pension scheme, which is classified outside the General Government. The results of the analysis show that the reforms that have taken place over the previous years in the pension system can ensure long-term sustainability even in a context of unfavourable demographic developments as described in the previous section.

With respect to non-pension age-related expenditure, the 2021 Ageing Report projections show a relative stable expenditure over GDP starting at 8.0%, then ranging from 7.8% to 8.1% and stabilizing again at 8.0% at the end of the projection period. In Table 10 in the Annex I, the items are displayed in detail. In particular, the expenditure on health care increases from 4.6% to 5.2% of GDP at the end of the projection period, while the long-term care expenditure remains stable at 0.2%. The declining trend is the result of educational costs, which decline from 3.2% in 2021 to 2.6% in 2070 depicting the decrease of population in younger cohorts.

[3] For more information on the auxiliary FDC Scheme please see the report of the Hellenic Actuarial Authority: https://www.eaa.gr/images/attachments/analogistiki-meleti-eaa-total-5-4-2021.pdf.

Pension contributions (the sum of employers' and employees' contributions) as a share to GDP decline from 8.3% in 2021 to 6.8% in 2070. This decline is mostly explained by the share of contributions diverted to the new FDC Scheme, amounting to 1.4% of GDP at the end of the projection period.

Finally, as far as the projections for total revenue and expenditure over GDP are concerned, they are mechanistically projected under the assumption that changes in these ratios after the horizon of the Stability Programme are due only to the projected changes in age-related expenditure and revenues from pensions contributions, therefore they should not be understood as forecasts.

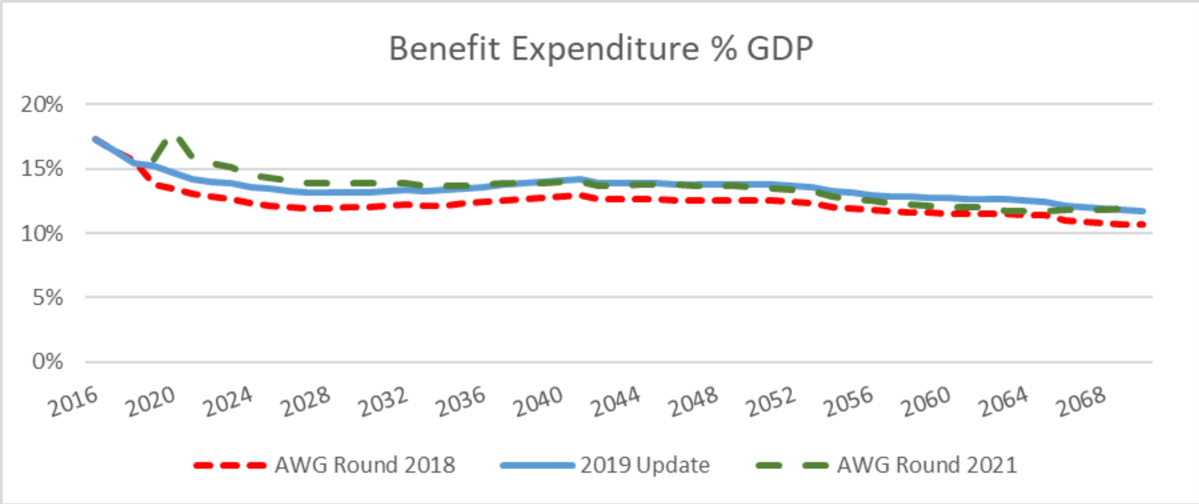
Table 11 Results of long-term sustainability analysis

	2021	2030	2040	2050	2060	2070
Total expenditure	**59.5%**	**52.9%**	**53.0%**	**52.9%**	**51.3%**	**50.8%**
of which age-related expenditure	23.8%	21.6%	21.8%	21.7%	20.1%	19.6%
of which pension expenditure	15.9%	13.8%	14.0%	13.6%	12.0%	11.6%
of which other age-related items	8.0%	7.8%	7.8%	8.1%	8.1%	8.0%
Total revenues	**56.9%**	**54.4%**	**54.1%**	**53.7%**	**53.4%**	**53.2%**
of which pensions contributions	8.3%	8.0%	7.7%	7.3%	7.0%	6.8%

4.2.2 Comparing with previous long-term projections (AR2018 and updated 2019 projections)

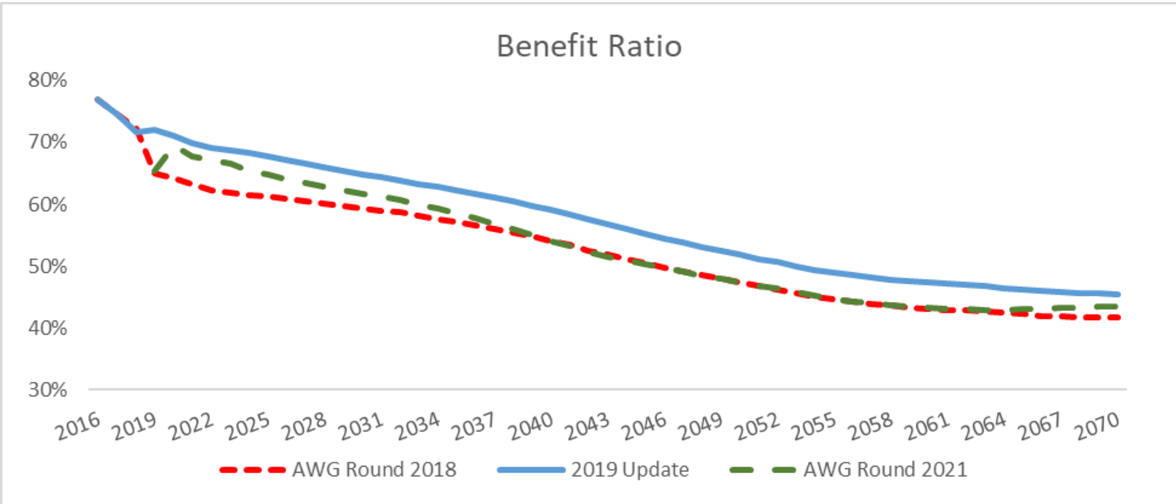
Figure 5 shows the evolution of benefit expenditure as a share of GDP between AR2018, updated projections of 2019 and AR2021. In relation to the AR2018 projections, the update 2019 projection as well as the 2021 results lead to marginally higher pension expenditure that dissipates in the long-run. In particular, the difference between 2018 round and the updated pension projections (2019 update) is due to the new legislation amendments, while the difference between 2019 update and the new pension projections (round 2021) is due to the change in macro-assumptions as well as the new legislation amendments. The macroeconomic assumptions for the second half of the projection period (after 2040) have an opposite effect since they are more favorable compared to the AR2018 projections, thus, the expenditure as % GDP in this period reaches a lower level compared to the updated 2019 projections. Figure 6 illustrates the evolution of the ratio of average pension to average wage over time (benefit ratio).

Figure 5 Evolution of pension expenditure in the 2021 Ageing Report projections compared to previous projections



Source: National Actuarial Authority

Figure 6 Evolution of benefit ratio in the 2021 Ageing Report projections compared to previous projections



Source: National Actuarial Authority

Notes:

For more results and comparisons across the different rounds of the Ageing Report, please see "National Actuarial Authority (2021), Greek Pension System Fiche, prepared for the 2021 Ageing Report, Ageing Working Group, Economic Policy Committee, European Commission.

https://ec.europa.eu/info/sites/default/files/economy-finance/el_-_ar_2021_final_pension_fiche_0.pdf

The introduction of the new FDC Scheme has not been incorporated into the results of the Ageing Report (2021), as the scheme was voted in August 2021 after the publication of the report in May 2021.

5. Quality of public finances

5.1.1 Arrears clearance

The Government of Greece has committed to minimize the existing stock of (net) arrears and avoid the accumulation of new arrears. An updated action plan was adopted in April 2021 to address the delays in implementation that occurred due to the COVID-19 pandemic. According to the latest available data, total net arrears of the General Government amounted to €0.8 billion in February 2023, compared to €0.6 billion in February 2022, €1.0 billion in February 2021 and €1.35 billion in February 2020.

Several actions that had been initiated in previous periods to reduce non-pension arrears were completed in the course of 2022, while implementation of the clearance plan for pending pension claims has continued. At the same time, General Accounting Office in cooperation with competent authorities continues the constant monitoring of arrears. It is worth noting that pension arrears have been reduced drastically, by approximately 55% compared to February 2022 and 79% compared to February 2021, currently standing at €98 million at a gross basis, at the end of February 2023.

5.1.2 Spending Reviews

For the Greek authorities, Spending Reviews is a major budget tool towards achieving a more efficient use of the available resources by line Ministries and other General Government entities and the creation of fiscal space, mainly by prioritizing interventions that support development, with returns that reflect future increased public revenues or decreased expenditure. Taking into account the new environment created by the international energy crisis, Greece places special emphasis on 'green' reviews which focus on taking measures to reduce energy consumption and costs, as well as on promoting interventions that have a positive environmental footprint.

5.1.3 Performance Budgeting

As of 2022 budget, Greece has completed the presentation of the budget with the structure/ classification of programs and supported by performance data (presentational performance budgeting approach). The Greek budget is now accompanied with performance information for the evaluation of each program (strategic goals, objectives, KPIs etc.).

During 2023, general government entities will monitor the progress towards achieving the goals/ targets set in the framework of the 2023 Performance Budget, through the indicators agreed for each Annual Program Plan. In addition, during 2023, Greece further strengthens the preparation for the gradual transition to a performance informed system. A key success factor in this direction is the development of the new financial management information system (Gov-erp) which will support all the respective reforms that are underway.

5.1.4 Functional Classification

The Functional Classification supports the information needs for international reporting and is developed based on the alignment of the program classification with the CoFoG (Classification of Functions of Government). General Accounting Office has been working on presenting the functional classification for both the ordinary and the public investment budget. Following the development of the first level of the functional classification for the 2022 budget, for the 2023 budget the functional classification was presented in the second degree of the CoFoG standard at the general government level. The bridging of the classification by Program with the functional classification was carried out with the cooperation of the competent Services of the General Accounting Office, the Hellenic Statistical Authority and the Ministry of Development and Investments. The full development of the new performance budgeting system, which is dynamic, as well as the new financial management information system are expected to further improve the information provided.

5.1.5 Green Budgeting

Greece proceeds with the integration of the green dimension of the budget. Green budgeting consists of the presentation and the assessment of the environmental footprint of public policies in the context of national and international priorities for tackling the effects of climate change. In the 2023 budget, the tagging of the Programs of the Ministries of Environment & Energy and Agricultural Development & Food was presented, taking into account the environmental dimension of the Programs. The actions included in each Program are evaluated in terms of their positive, negative or neutral contribution to each of the six sustainable development objectives defined by the European classification. During 2023, the Greek Ministry of Finance expands tagging to more performance budgeting programs and works on further developing the green budgeting methodology.

5.1.6 Management and clearance of called state guarantees

General Accounting Office has created an action plan for the management of called state guarantees, in collaboration with commercial banks since 2020, with the purpose to clear the remaining stock of state guarantees claims by 2023.

All main actions aiming to accelerate the pace of clearance have been concluded; these include the operation of the e-file repository, the recruitment of thirty (30) fixed-term employees for a period of three years and hiring of thirty-five (35) permanent employees.

The improvement in the clearance pace is evident, noting that about 250 thousand claims were cleared during 2022 and additional 70 thousand in the first quarter of 2023, compared to 55 thousand in the whole year 2021 and 20 thousand during 2020. The target is to clear the remaining stock of about 280 thousand claims by the end of 2023.

Annex I: Stability Programme tables

Table 1: Macroeconomic prospects

	2022 (Levels)	2022	2023	2024	2025	2026
		(rate of range)				
1. Real GDP	192,067	5.9	2.3	3.0	3.0	2.1
2. Nominal GDP	208,030	14.5	6.5	4.8	5.0	4.1
Components of real GDP						
3. Private consumption expenditure	133,822	7.8	1.2	2.0	2.0	1.3
4. Government consumption expenditure	36,593	-1.6	-0.4	-1.3	-0.3	0.0
5. Gross fixed capital formation	26,715	11.7	13.2	9.7	10.7	7.2
6. Changes in inventories and net acquisition of valuables (% of GDP)	9,134	4.8	4.6	4.5	4.4	4.3
7. Exports of goods and services	71,586	4.9	2.3	6.2	5.3	4.5
8. Imports of goods and services	85,782	10.2	2.6	4.4	4.8	3.8
Contribution to real GDP growth						
9. Final domestic demand	11,848	6.5	2.6	2.6	3.1	2.2
10. Changes in inventories and net acquisition of valuables	3,495	1.9	0.0	0.0	0.0	0.0
11. External balance of goods and services	-4,619	-2.6	-0.3	0.3	-0.2	0.0

Table 2: Price developments

	2022 (Levels)	2022	2023	2024	2025	2026
		(rate of range)				
1. GDP deflator	108	8.1	4.1	1.8	2.0	2.0
2. Private consumption deflator	107	7.5	4.5	2.4	2.0	2.0
3. HICP	111	9.3	4.5	2.4	2.0	2.0
4. Public consumption deflator	110	3.9	3.0	2.0	1.7	1.7
5. Investment deflator	107	5.9	5.1	2.5	2.0	2.0
6. Export price deflator (goods and services)	142	30.2	-4.3	-4.2	1.8	2.0
7. Import price deflator (goods and services)	141	24.4	-3.6	-2.0	1.8	2.0

Table 3: Labour market developments

	2022	2022	2023	2024	2025	2026
	(Levels)	(rate of range)				
1. Employment, persons (thousands)	4,975	3.8	0.9	1.0	0.9	0.2
2. Employment, hours worked (thousands)	10,277,428	3.0	1.1	1.1	1.4	0.2
3. Unemployment rate (%)	12,4	-15.5	-5.4	-7.2	-8.0	-2.8
4. Labour productivity, persons	38,604.3	2.0	1.3	2.0	2.1	1.9
5. Labour productivity, hours worked	18,7	2.9	1.2	1.9	1.6	1.9
6. Compensation of employees	73,146	5.4	3.9	4.6	3.8	3.0
7. Compensation per employee (in €)	19,848	0.3	3.2	3.4	2.8	2.8

Table 4: Sectoral balances

	2022	2023	2024	2025	2026
	(rate of range)				
1. Net lending/borrowing vis-a-vis the rest of the world	-8.3	-7.3	-6.4	-5.3	-5.0
of which					
- Balance on goods and services	-9.4	-9.3	-9.3	-9.2	-9.1
- Balance of primary incomes and transfers	-0.5	0.3	1.0	1.1	1.6
- Capital account	1.6	1.7	1.9	2.8	2.5
2. Net lending/borrowing of the private sector	-3.6	-5.5	-5.6	-4.8	-4.9
3. Net lending/borrowing of general government	-2.3	-1.8	-0.8	-0.5	-0.1
4. Statistical discrepancy	-2.4	0.0	0.0	0.0	0.0

Table 5: Total government revenue and expenditure at unchanged policies

	2022	2022	2023	2024	2025	2026
	(Levels)	(% of GDP)				
1. Total revenue at unchanged policies	104,410	50.2	47.1	46.5	45.9	45.1
2. Total expenditure at unchanged policies	109,137	52.5	48.9	47.0	46.1	45.0

Table 6: Expenditure to be excluded from the expenditure benchmark

	2022 (Levels)	2022	2023	2024	2025	2026
		(% of GDP)				
1. Expenditure on EU programmes fully matched by EU funds revenue	4,268	2.1	3.1	3.7	3.7	3.3
1.a Of which investment expenditure fully matched by EU funds revenue	2,851	1.4	2.1	2.8	2.8	2.5
2. Cyclical unemployment benefit expenditure	396	0.2	0.2	0.1	0.1	0.0
3. Effect of discretionary revenue measures	2,881	1.4	-2.0	-0.6	0.0	0.0
4. Revenues increased mandated by law	-	-	-	-	-	-

Table 7: Cyclical developments

	2022	2023	2024	2025	2026
	(% of GDP)				
1. Real GDP Growth	5.9	2.3	3.0	3.0	2.1
2. Net Lending of general government	-2.3	-1.8	-0.8	-0.5	-0.1
3. Interest expenditure	2.4	3.0	2.9	2.8	2.6
4. One-off and other temporary measures	0.7	0.0	0.0	0.0	0.0
4.a Of which one-offs on the revenue side: general government	0.7	0.0	0.0	0.0	0.0
4.b Of which one-offs on the expenditure side: general government	0.0	0.0	0.0	0.0	0.0
5. Potential GDP growth (%)	0.3	0.6	1.1	1.0	1.0
contributions:					
- labour	-0.2	0.0	0.2	0.0	0.0
- capital	0.0	0.1	0.2	0.2	0.2
- total factor productivity	0.5	0.5	0.8	0.8	0.8
6. Output gap	-1.8	-0.2	1.7	3.7	4.8
7. Cyclical budgetary component	-0.9	-0.1	0.9	1.9	2.5
8. Cyclically-adjusted balance (2 - 7)	-1.4	-1.7	-1.7	-2.4	-2.6
9. Cyclically-adjusted primary balance (8 + 3)	1.0	1.3	1.2	0.4	0.0
10. Structural balance (8 - 4)	-2.1	-1.7	-1.7	-2.4	-2.6

Table 8: Divergence from previous update

	2022	2023	2024	2025	2026
Real GDP growth (%)					
Previous update (SP - April 2022)	3.1	4.8	3.5	3.3	-
Current update	5.9	2.3	3.0	3.0	2.1
Difference	2.8	-2.6	-0.5	-0.4	-
General government net lending (% of GDP)					
Previous update (SP - April 2022)	-4.4	-1.4	-0.4	-0.1	-
Current update	-2.3	-1.8	-0.8	-0.5	-0.1
Difference	2.1	-0.4	-0.4	-0.4	-
General government gross debt (% of GDP)					
Previous update (SP - April 2022)	180.2	168.6	155.2	146.5	-
Current update	171.3	162.6	150.8	142.6	135.2
Difference	-8.9	-6.0	-4.5	-3.8	-

Table 9: Contingent liabilities

	2022	2023
	(% of GDP)	
Public guarantees	12.2	11.6
Of which: linked to the financial sector	8.6	7.9

Table 10: Long-term sustainability of public finances

	2007	2010	2020	2030	2040	2050	2060
	(% of GDP)						
Total expenditure	**47.1**	**52.5**	**59.3**	**52.9**	**53.0**	**52.9**	**51.3**
Of which: age-related expenditures	22.8	27.6	26.4	21.6	21.8	21.7	20.1
Pension expenditure	13.0	16.0	18.0	13.8	14.0	13.6	12.0
Social security pension	13.0	16.0	18.0	13.8	14.0	13.6	12.0
Old-age and early pensions	9.7	12.0	12.7	10.2	10.5	10.5	9.1
Other pensions (disability, survivors)	3.3	4.0	5.3	3.6	3.4	3.1	2.8
Occupational pensions (if in general government)			0.0				
Health care	5.8	6.8	5.0	4.7	5.0	5.2	5.3
Long-term care (this was earlier included in the health care)	0.0	0.0	0.2	0.2	0.2	0.2	0.2
Education expenditure	3.6	4.1	3.2	2.9	2.6	2.7	2.7
Other age-related expenditures	0.4	0.7					
Interest expenditure							
Total revenue	**40.4**	**41.3**	**49.8**	**54.4**	**54.1**	**53.7**	**53.4**
Of which: property income							
Of which: from pensions contributions (or social contributions if appropriate)	8.5	6.3	8.4	8.0	7.7	7.3	7.0
Pension reserve fund assets							
Of which: consolidated public pension fund assets (assets other than government liabilities)							
Systemic pension reforms							
Social contributions diverted to mandatory private scheme				0.2	0.5	0.9	1.2
Pension expenditure paid by mandatory private scheme				0.0	0.0	0.0	0.1
Assumptions							
Labour productivity growth			0.2	0.9	2.2	2.0	1.8
Real GDP growth			-9.7	0.7	1.7	1.6	1.5
Participation rate males (aged 20-64)			82.5	83.1	83.6	85.3	85.3
Participation rates females (aged 20-64)			65.4	71.6	75.2	78.1	78.5
Total participation rates (aged 20-64)			73.8	77.4	79.5	81.8	82.1
Unemployment rate			17.5	12.1	9.6	7.1	6.9
Population aged 65+ over total population			22.2	26.0	30.6	33.8	33.5

Notes: In order to guarantee the full (100%) coverage in the projections, there has been a loading on the amount of total benefits for some funds which are not explicitly modeled. The loading covers dividend schemes (public sector/MTPY, army, navy, and air force) and concerns the whole projection period. This is also added in the category "other pensions". A small amount of loadings is added also in pension contributions.

Table 11: Basic assumptions

	2022	2023	2024	2025	2026
Short-term interest rate (annual average)	0.3	3.3	3.3	2.8	2.7
Long-term interest rate (annual average)	1.8	3.1	3.1	3.2	3.3
USD/EUR exchange rate (annual average)	1.0	1.1	1.1	1.1	1.1
Nominal effective exchange rate	-4.0	3.3	0.0	0.0	0.0
World excluding EU, GDP growth	3.1	3.0	3.3	3.3	3.1
EU GDP growth	3.5	0.8	1.6	1.6	1.5
Growth of relevant foreign markets	6.3	2.1	3.1	3.3	3.1
World import volumes, excluding EU	4.4	2.4	3.6	3.5	3.4
Oil prices (Brent, USD/barrel)	100.7	84.8	79.9	80.0	80.0

HELLENIC FISCAL COUNCIL

Athens, April 28th, 2023

Opinion on the Macroeconomic Forecasts of the Stability Programme 2024-2026

The Hellenic Fiscal Council (HFISC), entrusted with the role of an independent fiscal institution, submits its opinion on the Stability Programme's 2024-2026 (SP 2024-2026) macroeconomic forecasts as stipulated in Regulation No 473/2013 of the European Parliament and of the Council of the European Union (EU).[1]

This assessment takes into account the European Commission's fiscal policy guidance for the year 2024.[2] Accordingly, the new Stability Programmes should include their medium-term budgetary and structural plans as required by the new economic governance framework as of 2024, after the deactivation of the general escape clause. At the same time, the current Stability and Growth Pact (SGP) should be in line with the SGP's reference value of 3% of GDP deficit and ensure a plausible and continuously declining rate of public debt to sustainable levels throughout the reference period.[3]

The current assessment takes also into account the following:

(a) The SP 2024-2026 macroeconomic forecasts have been forwarded to the HFISC by the Ministry of Finance on 21.3.2023. The scenario extends up to 2027, so as the Medium-Term Fiscal Strategy Framework for the Greek economy to be constructed.

(b) The latest published data on the Greek GDP and its expenditure components by the Hellenic Statistical Authority (ELSTAT), covering the entire year 2022.[4]

(c) The forecasts of the State Budget (SB) for the year 2023, as well as those of the SP 2023-2025.[5,6]

(d) European Commission's 2022 winter forecasts, as well as those by other international and domestic institutions regarding the key macroeconomic variables of the Greek economy, such as real GDP and the Harmonised Index of Consumer Prices (HICP).[7]

(e) HFISC's internal projections for GDP based on in-house econometric models.

1. A comprehensive analysis of the macroeconomic developments of the Greek economy along with a substantiated argumentation on the specific views presented in this opinion will be included in the forthcoming HFISC's bi-annual report.
2. https://economy-finance.ec.europa.eu/system/files/2023-03/COM_2023_141_1_EN_ACT_part1_v4. pdf
3. https://economy-finance.ec.europa.eu/system/files/2022-11/com_2022_583_1_en. pdf
4. Hellenic Statistical Authority 7.3.2023: Στατιστικές - ELSTAT (statistics.gr)
5. State Budget Plan Budget - Ministry of Finance (minfin.gr)
6. Stability Programme (europa.eu)
7. Economic forecast for Greece (europa.eu)

2023 Macroeconomic forecasts

The forecast for the 2023 GDP growth rate from the Ministry of Finance is within the HFISC's range (2.2% - 3.0%) and in line with the recent estimates by the International Monetary Fund (IMF) (2.6%), as well as those of the Bank of Greece (2.2%) (see Charts 1 and 2). The European Commission and the OECD appear less optimistic, since their calculations have been mainly made before the announcement of the significant upward revision of Q3 2022 (4.4% from 2.1%, year-on-year), as well as the strong growth of Q4 quarter 2022 (5.2% year-on-year) from the ELSTAT in early March 2023.

Chart 1: Real GDP forecasts for 2023 & 2024.

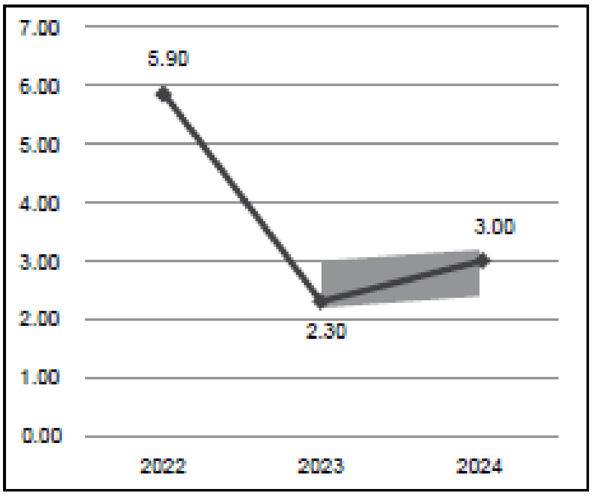
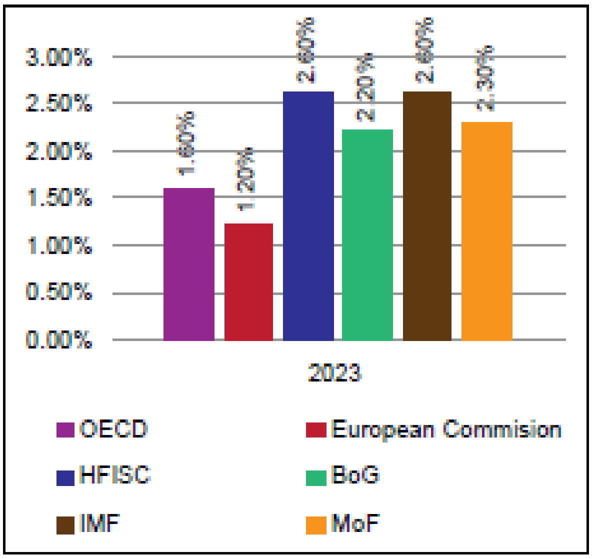


Chart 2: Comparison of GDP forecasts in 2023 (year-on-year rate of change).

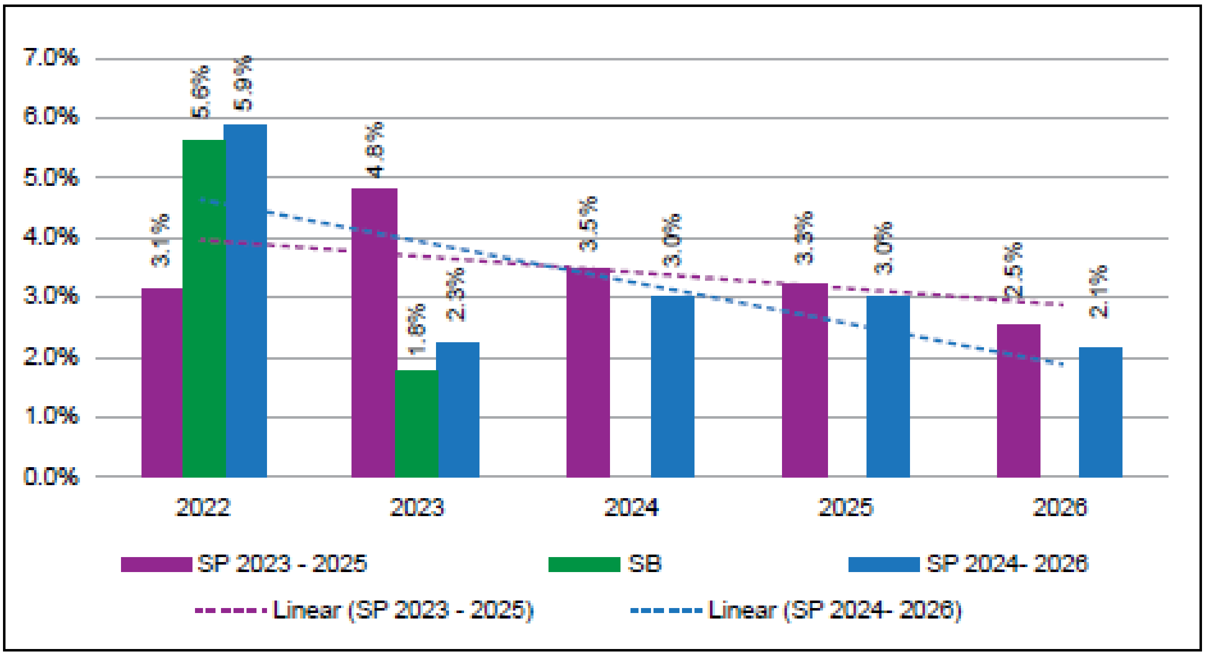


Note: In the above chart we note that the Ministry of Finance (Stability Programme 2024-2026) forecasts are within the range of the HFISC forecasts. This is derived from 6 different groups of econometric models (Dynamic Factor Model, VECMs, MIDAS, AR, ARIMA & ARFIMA). The grey area indicates the range of the forecasts (2.2% to 3.0% for 2023 & 2.4% to 3.2% for 2024).

Sources:
1) OECD Economic Outlook, Volume 2022 Issue 2, No 112, November 2022.
2) European Commission, European Economic Forecast, February 2023.
3) HFISC, March 2023.
4) Bank of Greece, Governor's Annual Report, April 2023.
5) IMF, World Economic Outlook, April 2023.
6) Stability Programme 2024-2026, Ministry of Finance, April 2023.

The SP 2024-2026 macroeconomic scenario for 2023 revises upwards the expected GDP growth rate compared to the State Budget 2023 (November 2022), to 2.3% from 1.8% (see Chart 3). This optimistic revision is partly justified by the large statistical carry-over effect of the 2022 growth rate, estimated at 1.5%. Regarding the SP 2023-2025, there is a downward revision (to 2.3% from 4.8%) that could be attributed to the nearly double growth rate achieved by the Greek economy in 2022, compared to what was projected (5.9% from 3.1%).

Chart 3: Ministry of Finance, economic growth rates (2022 – 2026).



Sources: Ministry of Finance: 1) Stability Programme 2023-2025 (April 2022), 2) State Budget 2023 (November 2022), 3) Stability Programme 2024-2026 (April 2023) and HFISC workings.

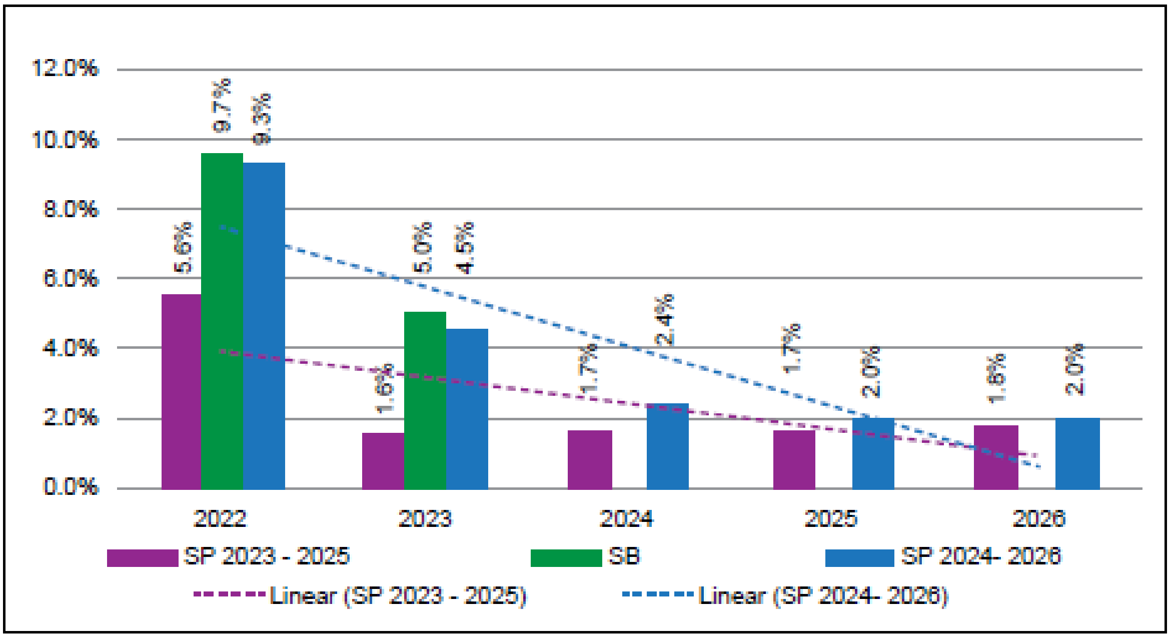
The inflation forecasts (HICP) of the Ministry of Finance for the current year are in line with recent forecasts by IMF and the European Commission (see Table 1). This forecast has been revised to 4.5% from 5% estimated in the SB 2023 (see Chart 4). The downward revision is in line with the deceleration of inflation observed in the last six months (4.6% according to the latest data from ELSTAT in March 2023). However, it remains above the relevant forecast of the SP 2023-2025 (1.8%), and this is mainly due to the persistence of structural inflation at high levels (6.7%, March 2023).

Table 1: Inflation (HICP) 2022-2026, Ministry of Finance and international Organisations.

	Publication date	2022	2023	2024	2025	2026
OECD[1]	November 2022	10.9%	3.6%	2.6%	-	-
European Commission[2]	February 2023	9.3%	4.5%	2.4%	-	-
IMF[3]	April 2023	9.3%	4.0%	2.9%	2.3%	2.0%
MoF[4]	April 2023	9.3%	4.5%	2.4%	2.0%	2.0%

Sources:
1) OECD Economic Outlook, Volume 2022 Issue 2, No 112, November 2022.
2) European Commission, European Economic Forecast, February 2023.
3) IMF, World Economic Outlook, April 2023.
4) Stability Programme 2024-2026, Ministry of Finance, April 2023.

Chart 4: Inflation (HICP), Ministry of Finance (2022 – 2026).



Sources: Ministry of Finance: 1) Stability Programme 2023-2025 (April 2022), 2) State Budget 2023 (November 2022), 3) Stability Programme 2024-2026 (April 2023) and HFISC workings.

For 2023, private consumption is projected to slightly improve from 1% in SB 2023 to 1.2%, but investment is expected to slowdown from 15.5% to 13.2% (see Table 2). Labor market conditions are expected to continue improving in 2023, with employment (on national accounts basis) estimated to increase by 0.9% and accordingly, the LFS unemployment rate to further de-escalate to 11.8%. Possible adverse contingencies within this year would be the continuation of international uncertainty and geopolitical tensions, the energy crisis and high inflation throughout the year, as well as more aggressive tightening of monetary policy, resulting in difficulties for maintaining private consumption and investment at the levels estimated by the SP 2024-2026. Moreover, a possible recession in European Union countries, main trading partners of Greece, would negatively affect exports of goods and services (tourism receipts and goods excluding petroleum products), that are expected to increase by 2.3% in 2023 from 4.9% in 2022. Possible difficulties and delays in the formation of government could be further added to the adverse contingencies. On the other hand, an effective utilization of the Recovery and Resilience Facility (RRF) resources is expected to maintain investment momentum with gross fixed capital formation projected to increase by 13.2% in 2023 from 11.7% in 2022. In addition, the expected upgrade of the country's credit rating to investment grade, within the medium term, will have a beneficial impact on investment as well as keeping the borrowing costs at normal levels.

Table 2: Forecasts of key macroeconomic variables, at constant prices 2015 (year-on-year percentage changes, unless otherwise stated).

	SP 2023 -2025			SB 2023	SP 2024 -2026				
	2023	2024	2025	2023	2022	2023	2024	2025	2026
GDP	4.8%	3.5%	3.3%	1.8%	5.9%	2.3%	3.0%	3.0%	2.1%
Private Consumption	2.9%	2.3%	2.0%	1.0%	7.8%	1.2%	2.0%	2.0%	1.3%
Public Consumption	-0.8%	0.3%	0.7%	-1.5%	-1.6%	-0.4%	-1.2%	-0.3%	0.0%
Gross fixed capital formation	21.5%	9.2%	8.6%	15.5%	11.7%	13.2%	9.7%	10.7%	7.2%
Public investment	-3.1%	7.8%	-3.6%	10.3%	59.3%	-9.9%	9.7%	-0.3%	-1.1%
Exports of goods & services	6.2%	5.6%	4.9%	1.0%	4.9%	2.3%	6.2%	5.3%	4.5%
Imports of goods & services	5.3%	4.0%	3.7%	2.6%	10.2%	2.6%	4.4%	4.8%	3.8%
External balance of goods & services (% GDP)	-4.0%	-3.4%	-2.9%	-6.3%	-7.4%	-7.6%	-7.0%	-7.0%	-6.8%
Inflation (HICP)	12.2%	11.2%	10.2%	5.0%	9.3%	4.5%	2.4%	2.0%	2.0%
Employment (national accounts basis)	1.8%	1.0%	1.0%	0.2%	3.8%	0.9%	1.0%	0.9%	0.2%
Unemployment rate*	10.4%	9.5%	8.6%	12.6%	12.4%	11.8%	10.9%	10.0%	9.8%

Sources: Ministry of Finance: 1) Stability Programme 2023-2025 (April 2022), 2) State Budget 2023 (November 2022), 3) Stability Programme 2024-2026 (April 2023) and HFISC.
*Note: As a percentage of the Labour Force, Labour Force Survey (LFS).

Medium-term growth prospects 2024-2026

Regarding 2024, the expected GDP growth rate from the HFISC estimations (2.8%), is in line with the macroeconomic scenario of the current SP (3.0%) (see, Table 3) taking into account a significant carry-over effect from 2022. Thus, the GDP growth rate is expected to be at 3% compared to 3.5% forecast in the SP 2023-2025. The European Commission's and other international and domestic organisations' forecasts are within a more conservative range, compared with those of the current SP.

Table 3: Real GDP forecasts 2023-2026, Ministry of Finance, Domestic and international organizations.

	Publication date	2022	2023	2024	2025	2026
OECD[1]	November 2022	6.7%	1.6%	1.6%	-	-
European Commission[2]	February 2023	5.5%	1.2%	2.2%	-	-
HFISC[3]	March 2023	5.9%	2.6%	2.8%	-	-
BoG[4]	April 2023	5.9%	2.2%	-	-	-
IMF[5]	April 2023	5.9%	2.6%	1.5%	1.4%	1.4%
MoF[6]	April 2023	5.9%	2.3%	3.0%	3.0%	2.1%

Sources:

1) OECD Economic Outlook, Volume 2022 Issue 2, No 112, November 2022.
2) European Commission, European Economic Forecast, February 2023.
3) HFISC, March 2023.
4) Bank of Greece, Governor's Annual Report, April 2023.
5) IMF, World Economic Outlook, April 2023.
6) Stability Programme 2024-2026, Ministry of Finance, April 2023.

The basic assumptions of the SP 2024-2026 projections for 2024, are the de-escalation of inflation to levels below 2.4%, the positive impact of RRF funds on investment expenditure (9.7%), the carry-on in the dynamic path of consumption (2%), as well as the significant increase in exports by 6.2% (see Table 2). Exports grow at a faster rate than imports, resulting at a slight improvement in the balance of goods and services from -7.6% in 2023 to -7.0% in 2024.

For the entire 2022-26 period, the current SP foresees a convergence in the average GDP growth rate with that of the SP 2023-25 (3.4% to 3.3%) (see Chart 3). The above convergence is justified on the basis that the recent adverse international developments would be temporary and thus could not damage the dynamic path of recovery in the Greek economy. In addition, at a European level, the downward trajectory of inflation would limit interest rate hikes with even further positive macroeconomic effects. In any case, the level of investment will play a crucial role in achieving the new scenario, with particular emphasis on those projects financed by the RRF. Indicatively, according to the SP 2024-2026 the cumulative GDP change in the period 2022-2026 without the RRF effect would be limited to 5.1% vis a vis 10.7% with the RRF effect. Timely and effective implementation of the Recovery and Resilience Plan is essential. It should be noted that the Greek economy had received so far (24.4.2023), €11.1 billion out of the €30.1 billion for financing the Greek economy with the remaining €19 billion in loans and grants until 2026. Finally, public consumption in the current SP is lower than the one in SP 2023-2025 (see Table 2), for the whole medium-term period, highlighting the expected adjustment of the Greek economy to the new fiscal framework following the deactivation of the general escape clause from 2024 onwards.

Summary - Conclusions

The SP 2024-2026 macroeconomic scenario is consistent with the one of the SP 2023-2025 as well as, the one presented in the SB 2023. The main driver for both, the expected 2023 and the 2024-2026 GDP growth, is the increase in gross fixed capital formation with a significant contribution from the RRF funds. In addition, the possible de-escalation of the energy crisis, the expected Greece's sovereign rating upgrade by foreign rating agencies, the completion of the consolidation of the banking system and the use of the high stock deposits, yield positive prospects for the success of the presented macroeconomic scenario.

On the other hand, uncertainties related to the persistence of inflationary pressures, the possibility of a prolonged election period, any exogenous shocks on the domestic financial system, and the recently introduced European fiscal governance framework may challenge the implementation of the SP 2024-2026 macroeconomic scenario. In the context of the above analysis, the Hellenic Fiscal Council endorses the macroeconomic forecasts of the Greek Stability Programme 2024-2026.

For the Hellenic Fiscal Council

The Chairperson

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