HELLENIC REPUBLIC
Ministry of Finance

Stability Programme 2021

Athens

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Preface

The Stability Programme of the Hellenic Republic for the period 2022-2024 is submitted to the Council and to the Commission in line with the requirements set out in Council Regulation (EC) 1466/1997 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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1. Economic outlook

1.1 Macroeconomic outturn 2020

The unprecedented global public health crisis due to the outbreak of the pandemic in early 2020 and its consequent deep imprint on economic activity, affected considerably the macroeconomic developments throughout the previous year for the global and the European economy. According to the latest World Economic Outlook of the IMF as of 6 April 2021, world and Euro area real GDP contracted by a historic 3.3% y-o-y and 6.6% y-o-y respectively.

In spite of positive growth dynamics at the beginning of 2020, the Greek economy shrank by 8.2% y-o-y in real terms in 2020, close to the recession estimate of the alternative macroeconomic scenario of the Stability Programme 2020 (-7.9%). The relatively milder negative economic impact of the second wave of containment measures in November-December, compared to the first nationwide lockdown in March-April, along with the extension and scaling up of economic response measures, led to a smaller recession, compared to that depicted in the 2021 Budget. In fact, recession rates followed a declining trajectory, starting from an abrupt drop of real GDP in the second quarter of 2020 (-13.8%), followed by a smaller GDP contraction in the third quarter (-10.5%) and an even smaller one in the fourth quarter (-7.9%).

The prolonged health crisis has caused heavy negative supply and demand side effects in the Greek economy. Production-side data showed that Gross Value Added (GVA) in volume terms contracted by 8.1% in 2020 on an annual basis (non-seasonally adjusted data), with the sectors that experienced the most restrictive measures, suffering the biggest drop in production, namely the sectors of arts and entertainment services (-25.4%), wholesale and retail trade, transportation, accommodation and food service activities (-22.8%), followed by professional and administrative activities (-10.7%) and financial and insurance activities (-7.6%). The sole sectors that recorded positive annual growth rates were construction (+10.4%), public administration (+2.5%) and information and communication (+0.1%). In terms of annual turnover for the total of enterprises in the Greek economy, the suspension of operation of 14.6% of the total number of enterprises and the under-operation of the majority of the rest enterprises due to pandemic-related restrictions on mobility and economic activity resulted to an overall decline of 13.5% y-o-y for 2020 as a whole, with the largest drop being recorded in the Accommodation and Food Service Activities (-53.4%).

Overall, the general industrial production index fell moderately by 1.9% y-o-y (seasonally adjusted data) in 2020, driven by declines in the manufacturing sector, electricity supply and mining and quarrying.

Accordingly, from the demand perspective, the drivers behind the 8.2% contraction of real GDP were, primarily, exports of services, given the high dependence of the Greek economy on the tourism sector and, secondarily, private consumption amid lack of spending opportunities.

Real exports of goods and services fell more than real imports (-21.7% and -6.8% respectively), resulting to a negative contribution of the external sector to the annual GDP of 5.6 pps. As expected, movement restrictions weighed heavily on tourism, a key sector for the Greek economy, as well as on transport, pushing real exports of services to a sharp dip (-43.0%). Instead, exports of goods proved resilient (+4.3%), reaching a record high in 2020 Q4 (+13.6%) amid a recovery of international trade. In the same vein, according to Bank of Greece data, the current account showed a deficit of 11.2 bn euros in 2020 or -6.7% of nominal GDP, higher by 8.4 bn euros compared to 2019, due to a significant deterioration in the services balance (mainly travel receipts), only partly offset by the improved balance of goods and primary income account.

Real private consumption experienced a 5.2% contraction, translating into a negative contribution of 3.6 pps to GDP. This contraction reflected a consumer confidence drop, income losses from business lockdowns or companies running at reduced production levels, postponements of consumer spending due to social-distancing measures and depressed sales. In this context, retail trade in volume terms declined by 4.0%, while the turnover for the total of enterprises classified in retail trade divisions saw an 8.6% drop compared to 2019. However, strong fiscal policy support measures restrained unemployment and limited the decline of nominal wages (-0.9%) as well as increasing familiarity with e-commerce prevented private spending from a larger contraction. Meanwhile, limited opportunities to consume and rising uncertainty linked to the evolution of the pandemic led to an accumulation of private sector savings, with households' and corporate bank deposits recording a cumulative annual increase of 20.6 bn euros or 14.4% (more than double compared to 2019).

Gross fixed capital formation fell marginally by 0.6% despite the unfavourable economic environment, mainly underpinned by the continued residential and non-residential construction activities (dwellings: +15.6% / other buildings and structures: +9.2%). In parallel, investment in machinery and technology equipment contributed positively to the total real investment. On the contrary, investment in transport equipment experienced a sharp contraction (-41.3%), amid low tourism activity and lockdown measures. Supportive financial conditions benefited from the ECB's accommodative monetary policy, the country's successful access to international capital markets and national policy interventions (e.g. loans via TEPIX II, Hellenic Development Bank guarantees, disbursements of repayable advances), that allowed acceleration in corporate credit growth and kept total investment relatively resilient. The annual growth rate of credit to the private sector averaged 1.2% in 2020 (-0.4% in 2019), with credit to non-financial corporations reaching on average 5.6%.

By contrast, real public consumption remained positive and grew by 2.7% amid increased government spending to address the negative economic impact of the pandemic.

Unlike the deep real GDP contraction, the impact of the pandemic on the labour market in 2020 was not as apparent as initially expected, as employment support measures, cushioned the hit (e.g. temporary labour contract suspension with special purpose compensation, short-time work scheme SYN-ERGASIA, suspension of tax and social security obligations, no firing clause in repayable advances). Total employment (on a national account basis) decreased by 1.3% (+1.2% in 2019), mainly due to lower hirings in the tourist sector, however employment flows in the private sector remained positive, albeit at lower levels than 2019. Likewise, the LFS unemployment rate continued its downward trajectory (16.3% from 17.3% in 2019).

Inflation turned negative after a four-year period of positive annual growth rates, on account of deflationary pressures on energy and services sector prices. As a result, the recession in terms of nominal GDP was higher than in volume, at 9.6%, with negative GDP deflator (-1.5%).

Overall, the recession would be considerably deeper without the adoption of the sizeable package of economic support measures (fiscal, tax deferrals and liquidity) deployed in 2020, amounting to more than 23 bn euros or 13.9% of GDP. In this context, the temporary suspension of the required primary surplus target of 3.5% of GDP, as well as the temporary departure from the medium-term budgetary objective, both owing to the activation of the SGP general escape clause in 2020, facilitated the adaptation of sizable, but targeted policy support measures.

1.2 Macroeconomic projections for 2021

Uncertainty around the evolution of the pandemic remained high at the global and European level in the first quarter of 2021, as the resurgence in infections and the new, more contagious variants aggravated the epidemiological situation, forced many countries to re-tighten or prolong containment measures, and, thus, weakened the near-term outlook. On the other hand, mass vaccination campaigns and the expected fiscal impulse from the "Next Generation EU" recovery fund to support a sustainable economic recovery, raised prospects of moving on from the worst of the pandemic.

The pace of the expected economic recovery from 2021 onwards is set to pass through the pandemic dynamics, the extent of the immunization of the population, the stringency and duration of containment measures, the effectiveness of policy responses to limit the effects of the health crisis, the adjustment capacity of the economy and the country-specific characteristics.

According to the latest World Economic Outlook of the IMF as of April 2021, global growth is projected at 6.0% in 2021, moderating to 4.4% in 2022, while Euro area growth is projected to be less pronounced, at 4.4% in 2021 and 3.8% in 2022. Meanwhile, the European Commission’s winter interim forecast (February 2021) points to an output growth rate of 3.7% in 2021 and 3.9% in 2022 for the EU as well as of 3.8% in both years for the Euro area.

The expected strong growth from mid-2021 at the European level will help advance the recovery to pre-pandemic levels, which, however is anticipated to be asymmetric across and within countries, as occurred with the asymmetric negative impact of the common pandemic shock in 2020. Among EU fiscal policy initiatives to address emerging divergences among Member States, the extraordinary €750 billion “Next Generation EU” recovery fund stands out. The activation of its centerpiece, the Recovery and Resilience Facility, within 2021, is expected to provide a strong boost to the EU economy by supporting Member States to recoup COVID-losses and to achieve resilient growth through bundles of ambitious investment projects and structural reforms oriented to the green and digital transitions.

In the case of Greece, the new tightening of mobility restrictions in Attica and other regions due to the worsening of the epidemiological situation in early 2021 is expected to weigh on the economic recovery for the current year as a whole, with the Greek economy continuing to experience recession in the first quarter of 2021. However, with the gradual easing of the containment measures from the second quarter onwards and the full reopening of the economy from the beginning of the third quarter of the year along with the planned acceleration of the vaccination program, the Greek economy is expected to return to a positive growth trajectory in 2021 as a whole.

A factor of significant importance behind the positive near-term outlook is the maintenance of the economic support measures, within the context of the extension of the flexibility of the SGP rules and through a balanced fiscal policy, until epidemiological and economic conditions allow their gradual phasing out. To date, the positive contribution of policy support to the real GDP of 2021 is estimated at 4%. In addition, the continuation of the accommodative monetary policy in 2021, contributes to keeping borrowing costs at low levels.

Furthermore, the timely and smooth absorption of NGEU funds on the basis of the implementation of the Greek National Recovery and Resilience Plan (NRRP) from the second half of 2021 onwards is expected to add 1.3 pps to real GDP in 2021, through an investment boost and second-round positive effects on the other GDP components. The NRRP is expected to pave the way for a solid economic growth with long lasting effects. In this context, an acceleration of structural reforms is anticipated, building on ongoing reforms in the context of the enhanced surveillance process, but also on a reform-oriented economic policy, beyond the agreed commitments.

Taking the above into account, as well as a more favourable carry over effect due to a smaller-than-initially expected recession in 2020, real GDP is expected to expand by 3.6% in 2021. Final domestic demand through all its components is projected to be the main driving force behind the real GDP growth, with a positive contribution of 3.0 pps. Among components, real private consumption is expected to contribute the most (1.9 pps), growing by 2.6%, benefitting from an upturn in employment, supportive economic policy and the materialization of pent-up consumer demand thanks to accumulated private savings during the lockdown period. Moreover, gross fixed capital formation is projected to rise by 7%, exceeding the levels of 2019, primarily supported by investment in non-residential construction and secondarily by investment in equipment. The key factor behind the expected investment growth, for the first time after a three-year period, is expected to be the beneficial effect of the absorption of NGEU funds. Lower uncertainty, growth-friendly fiscal policy and accommodative liquidity conditions should contribute to an attractive investment environment. Finally, public consumption is expected to continue to grow, albeit at a slower pace (1.5%).

On the external front, exports of goods and services are expected to regain some of the lost ground (10.4%), assuming improved foreign demand compared to 2020 in terms of world trade and GDP growth in the Euro area. Net exports of services are projected to contribute positively to GDP by 2.2 pps, with tourism, however, recovering only partially as uncertainty diminishes (tourism receipts are estimated to reach 45% of those in 2019). By contrast, net exports of goods are forecast to have a negative contribution to GDP, as the implementation of the NRRP pushes up imports of goods amid a pick-up in construction and equipment investment. Imports of goods and services are projected to rise (6.9%) in line with domestically driven recovery.

After the reversal of its dynamics in 2020, total employment is expected to turn positive in 2021 (0.7%), amid gradual normalization of economic activity. Unemployment, however, is projected to remain stable at 2020 levels (16.3%) due to an increase of labour force (0.8% from -2.2% in 2020). Enhancing effectiveness of active labour market policies and further strengthening the social safety net should be key factors to ensure inclusiveness in the coming years.

Inflation is expected to lie close to zero in 2021, before turning slightly positive in 2022, amid a recent increase in oil prices and a gradual improvement of domestic demand.

1.3 Medium-term growth prospects 2022-2024

The adoption of timely and targeted support measures in 2020 and early 2021 has been effective in containing permanent effects in Greece's production capacity, as a surge in unemployment and exit of viable firms from the market has been prevented. Going forward, the ambitious investment projects and productivity-enhancement reforms included in the Greek NRRP are expected to make a very significant contribution towards bridging the large investment gap observed during the financial crisis years, deteriorated further during the pandemic crisis. In this way, they will foster potential growth in the medium-term and, thereby, help address legacy stock macroeconomic imbalances (high public debt, negative net international investment position, high unemployment and high non-performing loans).

In addition to the multiple beneficial effects of the Greek NRRP, supportive fiscal policy in 2022, as per the European Commission's proposal for the extension of the SGP's general escape clause in the next year, the continuation of the ECB's Pandemic Emergency Purchase Programme (PEPP) until at least the end of March 2022 and the roll out of the vaccinations programme, are jointly expected to facilitate considerably an accelerated economic recovery.

On the basis of the above and assuming a gradual return to normality, real GDP is projected to climb to 6.2% in 2022, as there will be ample room for Greece's spare productive capacity to be mobilized and for aggregate demand to bounce back to cover the current large negative output gap. Domestic demand through investment (3.5 pps contribution or 30.3% growth rate) and private consumption (2.1 pps contribution or 2.9% growth rate) is projected to add 4.9 pps to GDP, whereas public consumption is expected to decline compared to 2021 due to base effects from the high government expenditure undertaken in 2021 to address the pandemic (-3.0%). High-quality investments in the context of the NRRP are expected to advance green and digital economy through the development and the modernization of infrastructure and networks. In this context, the pre-pandemic positive trend in labour market developments is expected to resume; total employment, supported by buoyant economic activity, is projected to gain strong momentum (2.3%), while unemployment is projected to return to its pre-pandemic declining path, decreasing by around 2 pps (14.4% from 16.3% in 2021). Additionally, the contribution of the external sector to GDP is expected to be higher compared to 2021 (1.3 pps from 0.7pps). By contrast, the negative contribution of net exports of goods to GDP is expected to increase compared to 2021, due to rise in imports of goods driven by construction and technological equipment investment picking up. Moreover, inflation is expected to tick up slightly in 2022 (0.7%), mainly due to the expected rise in domestic demand.

Regarding 2023 and subsequent years, the Greek economy is expected to continue along a solid growth path, although real GDP annual growth rates are projected to ease somehow compared to 2022 under the assumption that the economy has regained most of the losses sustained due to the pandemic. The permanent post-pandemic gains in terms of economic growth go hand in hand with the multiple benefits from the implementation of the Greek NRRP. Ambitious investments and structural reforms in the areas of green economy, digital transformation, growth-friendly business environment, export capacity, labour market and social cohesion are expected to facilitate a broad economic and institutional transformation of the Greek economy towards a more extrovert, competitive, green and digital economic model, and thus, to boost potential growth.

In this context, real GDP is projected to exceed 4.0% in both 2023 and 2024, mainly supported by domestic demand, with investment and private consumption contributing cumulatively equally to GDP at the end of the period 2023-2024 (3.4 pps). Likewise, favourable labour market developments are expected to continue, with total employment expected to record an annual growth rate of around 1.3% in both years and unemployment de-escalating below pre-financial crisis levels at the end of 2024 (11.9% versus 12.7% in 2010).

The external sector is expected to contribute 1 pp to economic growth on average over the period 2023-2024. This is expected to be mainly the result of the rebound of exports of services, as well as productivity and competitiveness gains underpinned by reforms and the implementation of the NRRP.

Figure 1: Real GDP growth and contributions.

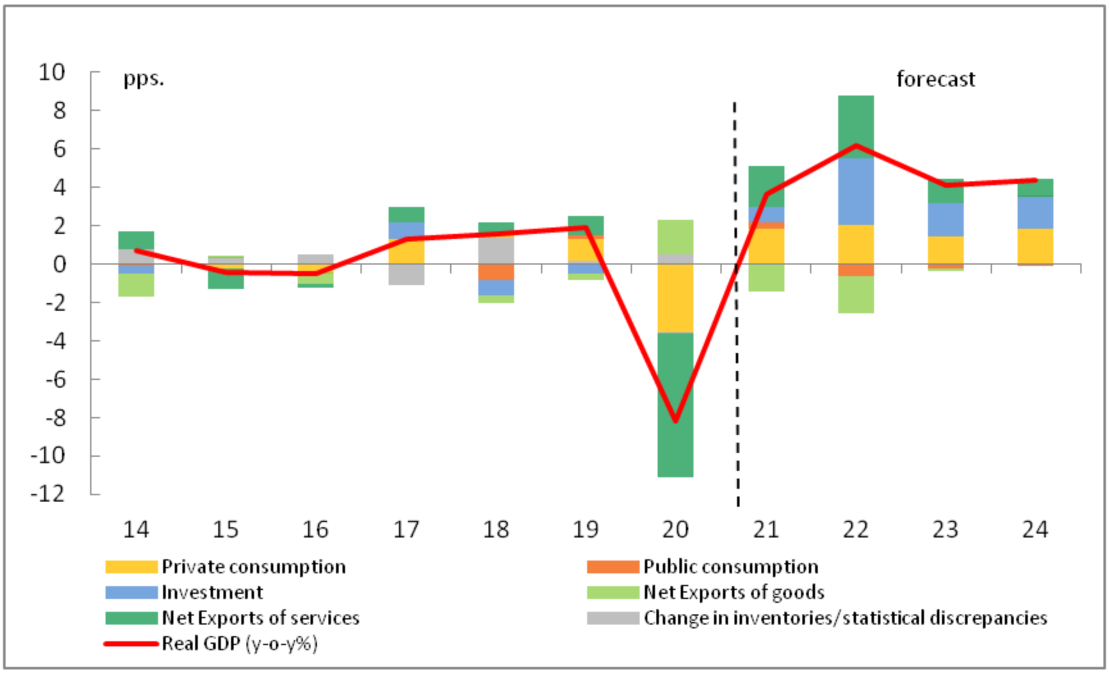


Table 1: Key annual macroeconomic indicators and forecasts (% annual changes, constant prices).

	2019	2020	2021	2022	2023	2024
Real GDP	1,9	-8,2	3,6	6,2	4,1	4,4
Private consumption	1,9	-5,2	2,6	2,9	2,1	2,8
Government consumption	1,2	2,7	1,5	-3,0	-1,0	-0,5
Gross fixed capital formation	-4,6	-0,6	7,0	30,3	12,3	10,8
Exports of goods and services	4,8	-21,7	10,4	13,8	7,5	6,2
Imports of goods and services	3,0	-6,8	6,9	8,5	4,0	3,4
GDP deflator	0,2	-1,5	0,2	1,0	1,2	1,6
HICP	0,5	-1,3	0,0	0,7	1,3	1,6
Total employment*	1,2	-1,3	0,7	2,3	1,3	1,3
Unemployment rate*	15,2	14,5	14,6	12,8	11,7	10,5
Unemployment rate (LFS)	17,3	16,3	16,3	14,4	13,2	11,9

(*) On a national accounts basis.

Source: Annual National Accounts (Hellenic Statistical Authority), estimates/ projections of the Ministry of Finance for the years 2021-2024.

2. General Government balance and debt

2.1 Fiscal developments

In 2020, Greece recorded a deficit in the headline budget balance of -9.7% of GDP, while the primary balance in ESA terms reached -6.7% of GDP. The heavy deterioration compared to the previous years is attributed to adverse macroeconomic developments related with the COVID outbreak, as well as the expansionary measures adopted to address it.

For 2021, the headline budget balance and the primary balance are estimated at -9.9% and -7.2% of GDP respectively. Compared with the estimations of the Draft Budgetary Plan submitted in October 2020, there is a significant downward revision of the headline budget balance by -6 p.p., due to the extended duration of the pandemic crisis and the related containment measures (which are partially still in place as of end April 2021), that delayed the expected rapid return to positive growth. Moreover, additional measures were adopted to mitigate the consequences of the pandemic and support households and businesses.

For 2022, the headline budget balance is expected to be significantly improved based on the accelerated economic recovery and is estimated at -2.9% of GDP. Greece expects the primary balance to return to positive ground in 2023 (+2% of GDP) and to achieve again a surplus regarding the headline balance in 2024 (+0.6% of GDP).

The table below summarizes the current fiscal estimations for the period 2021-2024, broken down by main components of revenues and expenditures. The estimations incorporate the effect of the urgent expansionary policies adopted by the Greek government to relief the adverse economic and social consequences of the COVID outbreak. All interventions have also been incorporated into the no policy change scenario, therefore there are no differences between the level of revenues and expenditures at unchanged policies.

Table 2: General government budgetary prospects.

	2020 (Levels)	2020 (% of GDP)	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)
Net lending (EDP B.9) by sub-sector						
1. General government	-16130	-9,7	-9,9	-2,9	-0,4	0,6
2. Central government	-16806	-10,1	-9,9	-3,3	-1,0	0,0
3. State government	0	0	0	0	0	0
4. Local government	77	0,0	-0,1	0,1	0,0	0,0
5. Social security funds	599	0,4	0,1	0,2	0,6	0,6
General government (S13)						
6. Total revenue	84077	50,7	49,4	48,9	48,8	47,5
7. Total expenditure	100207	60,4	59,4	51,9	49,2	46,9
8. Net lending/borrowing	-16130	-9,7	-9,9	-2,9	-0,4	0,6
9. Interest expenditure	4945	3,0	2,8	2,6	2,4	2,3
10. Primary balance	-11185	-6,7	-7,2	-0,3	2,0	2,9
11. One-off and other temporary measures						
Selected components of revenue						
12. Total taxes (12=12a+12b+12c)	42406	25,6	26	26,3	26,7	26,2
12a. Taxes on production and imports	27214	16,4	17,3	17,2	16,8	16,3
12b. Current taxes on income, wealth, etc	15022	9,1	8,6	9,0	9,8	9,8
12c. Capital taxes	170	0,1	0,1	0,1	0,1	0,1
13. Social contributions	25665	15,5	14,6	13,8	13,6	13,1
14. Property income	865	0,5	0,3	0,3	0,3	0,3
15. Other	15140	9,1	8,6	8,6	8,2	7,9
16=6. Total revenue	84077	50,7	49,4	48,9	48,8	47,5
p.m.: Tax burden (D.2+D.5+D.61+D.91-D.995)	68071	41,0	40,5	40,1	40,3	39,3
Selected components of expenditure						
17. Compensation of employees + intermediate consumption	30991	18,7	18,7	17,4	16,5	15,5
17a. Compensation of employees	22234	13,4	13,1	12,2	11,6	11,0
17b. Intermediate consumption	8757	5,3	5,6	5,2	4,9	4,5
18. Social payments (18=18a+18b)	39655	23,9	23,4	22,1	21,1	20,0
of which Unemployment benefits	1649	1,0	0,8	0,7	0,6	0,6
18a. Social transfers in kind supplied via market producers	4550	2,7	2,6	2,4	2,3	2,3
18b. Social transfers other than in kind	35106	21,2	20,8	19,7	18,8	17,7
19=9. Interest expenditure	4945	3,0	2,8	2,6	2,4	2,3
20. Subsidies	5917	3,6	4,9	1,1	1,0	1,0
21. Gross fixed capital formation	7404	4,5	4,8	6,1	5,6	5,7
22. Capital transfers	8437	5,1	2,4	0,7	0,6	0,6
23. Other	2859	1,7	2,5	2,0	1,9	1,8
24=7. Total expenditure	100207	60,4	59,4	51,9	49,2	46,9
p.m.: Government consumption (nominal)						

The table below depicts the evolution of the cyclically adjusted balance and the structural balance, which is expected to reach positive ground from 2023 onwards, following the significant improvement of the headline balance and despite the narrowing of the output gap.

Table 3: Cyclical developments.

	2020 (% of GDP)	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)
1. Real GDP Growth	-8,3	3,6	6,2	4,1	4,4
2. Net Lending of general government	-9,7	-9,9	-2,9	-0,4	0,6
3. Interest expenditure	3,0	2,8	2,6	2,4	2,3
4. One-off and other temporary measures	0,3	0,3	-0,3	0,0	0,0
4.a Of which one-offs on the revenue side: general government	1,3	0,3	-0,3	0,0	0,0
4.b Of which one-offs on the expenditure side: general government	1,0	0,0	0,0	0,0	0,0
5. Potential GDP growth (%)	-0,9	-0,4	0,2	0,5	0,6
contributions:					
- labour	-0,6	-0,4	-0,1	0,1	0,1
- capital	-0,6	-0,5	-0,5	-0,4	-0,4
- total factor productivity	0,5	0,5	0,8	0,8	0,8
6. Output gap	-12,3	-7,5	-4,4	-2,9	-1,5
7. Cyclical budgetary component	-6,4	-3,9	-2,3	-1,5	-0,8
8. Cyclically-adjusted balance (2 - 7)	-3,3	-6,0	-0,6	1,1	1,4
9. Cyclically-adjusted primary balance (8 + 3)	-0,3	-3,2	2,0	3,5	3,7
10. Structural balance (8 - 4)	-3,5	-6,3	-0,3	1,1	1,4

2.2 Debt developments

The general government debt is estimated at €341,023 million or 205.6% of GDP at the end of 2020, vs €331,073 million or 180.5% of GDP in 2019. For 2021, the general government debt is forecast at €352,500 million or 204.8% of GDP, i.e. reduced by 0.8 pp compared to 2020.

At the beginning of 2021, the Hellenic Republic concluded a series of liability management transactions with the four systemic banks, which initially started in December of the previous year. The bond swaps reduced the level of public debt and its refinancing risk, extended the duration of the debt portfolio and enhanced the liquidity.

The successful presence of the Hellenic Republic in the international capital markets continued in the first quarter of 2021, initially, with the launching of a new 10-year benchmark bond on February, 3.5 bn € nominal at 0.807% yield, while in March there was a milestone issue of a new 30-year benchmark bond, 2.5 bn € nominal at 1.956% yield, which was the first one since 2008. Both issues were oversubscribed during the book building procedure with their offers exceeding the 25 bn € each and were mainly acquired by end investors. Meanwhile, the maintenance of the high level of cash reserves, nearly 30 bn € at the end of March 2021, contributes substantially to achieving low funding costs and safeguards the meeting of medium term debt obligations.

The consistent issuance activity since 2018 has gradually rebuilt 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 the European Central Bank's Pandemic Emergency Purchase Programme - PEPP, which is expected to be continued by the end of Q1, 2021.

A very positive signal was given to the investors' community by the new early repayment of IMF loans for the amount of 3.3 bn €, concluded at mid-March 2021. The outstanding debt to the IMF, end of March 2021, was 1.8 bn €.

A considerable portion of the current year's financing needs is going to be covered by additional loans of the SURE programme. Last year, in the context of the SURE loan agreement, 2 bn € were initially disbursed, while there was a second disbursement of 728 million € in February 2021. The third disbursement is expected to take place by the end of the second quarter of 2021, for an extra amount of 2.5 bn €. SURE loans have a significant contribution to the retention of the weighted average maturity of the Greek public debt, close to twenty years, as well as to the preservation of the low and fixed servicing cost of the total debt portfolio.

Table 4: General Government debt development.

	2020 (% of GDP)	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)
1. Gross debt	205,6	204,8	189,5	176,7	166,1
2. Change in gross debt ratio	25,1	-0,8	-15,3	-12,9	-10,5
Contributions to changes in gross debt					
3. Primary balance	-6,7	-7,2	-0,3	2,0	2,9
4. Interest expenditure	-3,0	-2,8	-2,6	-2,4	-2,3
5. Stock-flow adjustment	-15,5	10,8	18,2	13,3	9,9
of which:					
- Differences between cash and accruals	0,0	0,0	0,0	0,0	0,0
- Net accumulation of financial assets	-15,5	10,8	18,2	13,3	9,9
- privatisation proceeds	0,0	-0,8	-0,8	0,0	-0,5
- Valuation effects and other	-15,5	11,6	19,0	13,3	10,4
p.m.: Implicit interest rate on debt	1,5	1,3	1,4	1,4	1,4
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	6,1	3,2	2,3	2,5	2,1
9. Percentage of debt denominated in foreign currency	2,5	0,9	0,7	0,1	0,0
10. Average maturity	19,4	20	20	20	20

2.3 Discretionary measures

Following the identification of the initial cases of COVID-19 on February 2020, the Greek government designed and employed a series of measures aimed at preventing the spread of the pandemic and supporting crisis-affected businesses and sectors, as well as their employees. As the second wave of the COVID-19 outbreak unfolded on autumn of 2020 and evolved throughout the first half of 2021, existing support measures were extended and new targeted support measures were established so as to support those financially affected by the pandemic.

These interventions, taking into account liquidity measures and corresponding leverage from the banking system, amount to a total value of 40.7 bn €, out of which 23.1 bn € (13.9% of GDP) correspond to support measures implemented during 2020, 15.6 bn € (9.1% of GDP) to measures under implementation during 2021 and 2 bn € (1.1% of GDP) correspond to measures extended to 2022 (Table 5).

The fiscal cost of these measures, without taking into account liquidity measures (which however bear a cost in cash terms), amounts to a total value of 27.9 bn €, out of which 11.6 bn € (7% of GDP) affect the fiscal balance of 2020, 14.3 bn € (8.3% of GDP) the balance of 2021 and 2 bn € (1.1% of GDP) the balance of 2022. From the 27.9 bn €, approximately 5.1 bn € (1.8 bn € for 2020 and 3.2 bn € for 2021) are funded by the Public Investment Budget (including co-funded ESPA and other programs, as well as REACT-EU). It is clear that as the crisis evolved, the Greek Government moved gradually from liquidity measures to equity interventions, so as to support the viability of those affected by the pandemic.

Table 5: Cost of COVID-19 measures by type of intervention (% of GDP of the respective year).

	Type of intervention	(% of GDP - Cumulative)		
		2020	**2021**	**2022**
1	**Revenue interventions**	-1,8	-2,0	-0,9
2	**Expenditure interventions**	-5,2	-6,3	-0,2
2.1	State funded expenditure	-4,1	-4,4	-0,2
2.2	PIB funded expenditure	-1,1	-1,9	0,0
3	**Liquidity interventions**	-3,5	-0,6	0,0
3.1	State funded liquidity measures	-2,0	-0,5	0,0
3.2	PIB funded liquidity measures	-1,5	-0,1	0,0
4	**Leverage of liquidity interventions**	-3,4	-0,1	0,0
	Total Fiscal Cost of Measures (1+2)	-7,0	-8,3	-1,1
	Total Cost of Measures (1+2+3)	-10,5	-8,9	-1,1
	Total Value of Measures (1+2+3+4)	-13,9	-9,1	-1,1

The interventions are mainly targeted for supporting:

- businesses with decreased revenues due to the pandemic,
- employees of crisis-affected sectors, including seasonal employees,
- self-employed and freelancers,
- unemployed people,
- farmers,
- property owners
- borrowers,
- the national Healthcare system,
- sectors of tourism, food service, culture, athletics and transports with special sectoral policies.

It is estimated that until April 2021 approximately 1.5 million employees and 700.000 companies and self-employed have been directly benefited from the support measures.

In Table 6 is presented a concise list of the interventions. The percentage change of the budgetary impact from the previous year in terms of GDP is depicted, following the instructions of the Programme; thus in order to calculate the fiscal effect of each intervention one has to take also into account the fiscal effect of the previous year.

Table 6: Discretionary measures adopted/announced according to the Programme[1].

	Measures	Month / year of adoption	Budgetary impact (% of GDP - change from previous year)				
			2020	2021	2022	2023	2024
	Temporary measures[2]						
A	**Interventions on Revenue**						
	Covid Interventions on Revenue						
1	Deferral of VAT payments	March 2020	-0,11	0,10	0,00	0,00	0,00
2	Deferral of tax obligation payments	March 2020	-0,14	0,03	0,10	0,00	0,00
3	Extension of the deadline for the payment of scheduled SSCs instalments	March 2020	-0,18	0,10	0,07	0,00	0,00
4	Deferral of SSCs payments	April 2020	-0,05	0,05	0,00	0,00	0,00
5	Reduction of advanced CIT and PIT payment for enterprises and self-employed	Aug 2020, May 2021	-0,93	0,37	0,12	0,35	0,00
6	Reduction by 3 p.p. of the SSCs of wage earners in the private sector	Jan 2021	0,00	-0,45	0,03	0,40	-0,03
7	Suspension of solidarity tax in the private sector	Jan 2021	0,00	-0,45	0,00	0,39	0,00
8	New compensation scheme for fixed expenses on basis of the new temporary framework; coverage of taxes	May 2021	0,00	-0,15	0,14	0,00	0,00
9	Reduction of VAT to transports, coffee and beverages, cinema tickets and tourism package and suspension on cable tv fee	June 2020, Oct 2020	-0,11	-0,03	0,13	0,00	0,00
10	25% of the VAT paid on time discounted from future tax obligations and 25% discount on tax and SSCs installment schemes paid on time	March 2020, June 2020	-0,17	0,16	0,00	0,00	0,00
11	Measures targeted to employees/ enterprises / property owners inflicted by the pandemic (including abolishment of LG levy's for enterprises affected by the COVID shutdown, reduction in primary and student residence rent and return of taxes for property owners that receive reduced rent)	April 2020, Aug 2020	-0,13	0,03	0,03	0,05	0,00
	Total Covid measures on the revenue side		**-1,82**	**-0,23**	**0,62**	**1,20**	**-0,03**
1	Reduction of advance payment for CIT tax by 5% for 2019	2019	0,09	0,00	0,00	0,00	0,00
2	Hellenic Financial Stability Fund 2019 COCOs coupon receipt		-0,10	0,00	0,00	0,00	0,00
3	2020-2021 ANFAs & SMPs revenue		-0,02	-0,86	-0,09	0,00	0,00
4	Non-financial privatizations 2021 - 2024		0,00	0,19	-0,08	-0,06	0,00
	Total temporary measures on the revenue side		**-1,85**	**-0,90**	**0,45**	**1,14**	**-0,03**
B	**Interventions on Expenditure**						
1	Extension of the regular unemployment benefit	March 2020	-0,21	0,11	0,08	0,00	0,00
2	Other benefits to natural persons (long-term unemployed, compensation to scientists)	April 2020, March 2021	-0,06	0,04	0,02	0,00	0,00
3	COVID Healthcare expenditures (including ICU equipment, consumables, temporary healthcare personnel, vaccination costs, rapid tests etc.)	March 2020	-0,28	-0,11	0,20	0,14	0,00
4	COVID expenditures of other ministries	March 2020	-0,19	0,07	0,08	0,01	0,00

	Measures	Month / year of adoption	Budgetary impact (% of GDP - change from previous year)				
			2020	2021	2022	2023	2024
	Temporary measures[2]						
5	Special allowance for employees of firms affected by the coronavirus crisis, whose labour contract has been suspended	April 2020	-0,89	-0,05	0,85	0,00	0,00
6	Coverage of the SSCs of employees of firms affected by the coronavirus crisis, whose labour contracts have been suspended	April 2020	-0,48	-0,14	0,56	0,00	0,00
7	Special allowance for self employed, freelancers, individual businesses and enterprises with up to 20 employees & six scientific sectors due to the coronavirus crisis	April 2020	-0,36	0,23	0,11	0,00	0,00
8	Interest payment on performing loans of SMEs affected by the coronavirus crisis paid by the state	April 2020	-0,15	0,05	0,08	0,00	0,00
9	Business financing in the form of a repayable advance payment (non-repayable part)	May 2020	-1,75	0,57	1,04	0,00	0,00
10	Special allowance and unemployment benefit to seasonal workers of tourism	July 2020	-0,13	0,09	0,04	0,00	0,00
11	SSCs coverage for employees of seasonal	Aug 2020	-0,14	0,14	0,00	0,00	0,00
12	New hirings subsidy program (subsidize SSCs on 100.000 new hirings for 6 months)	Oct 2020	-0,02	-0,17	0,17	0,00	0,00
13	Compensation to property owners that receive reduced rent	Nov 2020	0,00	-0,29	0,27	0,00	0,00
14	Expenditure related to christmas & easter bonus, for employees on labour contract suspension	Dec 2020	-0,27	0,03	0,21	0,00	0,00
15	First residence subsidy cost for borrowers hit by COVID (GEFYRA)	Dec 2020	-0,01	-0,17	0,17	0,00	0,00
16	Non-refundable grant to small & micro enterprises via Local Governments	March 2021	0,00	-0,51	0,48	0,00	0,00
17	Subsidies to the transport sector	April 2020, March 2021, April 2021	-0,03	-0,15	0,16	0,01	0,00
18	Non-repayment of a percentage of refundable advance 1, 2, 3, on basis of turnover reduction	May 2021	0,00	-0,33	0,31	0,00	0,00
19	Working capital grant program for restaurants and other sectors	May 2021	0,00	-0,41	0,38	0,00	0,00
20	New program for SMEs borrowers hit by COVID (GEFYRA 2)	May 2021	0,00	-0,17	0,16	0,00	0,00
21	New Compensation scheme for fixed expenses on basis of the new temporary framework; coverage of SSCs	May 2021	0,00	-0,15	0,14	0,00	0,00
22	Other subsidies aiming at supporting the primary sector of the economy, the culture sector and at promoting employment	April, July, Dec 2020, Jan 2021, Apr 2021	-0,14	-0,01	0,13	0,00	0,00
23	Measures aiming at promoting tourism (including Social Tourism programs, EOT advertising expenditure)	April 2020, June 2020, Aug 2020, Nov 2020	-0,06	0,00	0,05	0,00	0,00
	Total temporary measures on the expenditure side		**-5,18**	**-1,30**	**5,68**	**0,16**	**0,00**
	Subtotal / temporary measures		**-7,02**	**-2,20**	**6,13**	**1,29**	**-0,03**

Measures		Month / year of adoption	Budgetary impact (% of GDP - change from previous year)				
			2020	2021	2022	2023	2024
	Non-temporary measures[2]						
1	Reduction of VAT on restaurants, food products, electricity and natural gas	2019	-0,13	0,00	0,00	0,00	0,00
2	New tax arrears installment scheme	May 2019	-0,01	0,17	-0,03	0,00	0,00
3	Reduction of CIT tax rate from 29% to 24% in 2020	December 2019	-0,41	0,17	0,00	0,00	0,00
4	Tax evasion fight through expansion of electronic transactions	December 2019	0,28	0,07	0,00	0,00	0,00
5	PIT reduction for low incomes from 22% to 9%	December 2019	-0,17	-0,19	0,07	0,00	0,00
6	Other tax reform measures (including reduction in dividend tax, CIT, short-term leases taxation, interventions encouraging environmental transition such as PIT deduction due to eco-friendly building renovations, suspension of VAT on new buildings)		-0,06	0,02	-0,08	-0,07	0,00
7	Other measures on social contributions		-0,09	-0,07	-0,06	-0,03	0,00
	Subtotal / non-temporary measures		**-0,59**	**0,18**	**-0,10**	**-0,11**	**0,00**
Total			**-7,61**	**-2,02**	**6,02**	**1,19**	**-0,03**

[1] Excluding those measures that are planned to be financed by grants under the RRF.

[2] For the purpose of this table, temporary measures refer to those discretionary measures that have no budgetary impact beyond 2022, which corresponds to the end of the Commission spring 2021 forecast horizon. By contrast, those measures adopted or announced for 2020, 2021 or 2022 that continue to have a fiscal effect of 0.1% of GDP or greater until at least 2023 are considered as 'non-temporary'..

2.4 The National Recovery and Resilience Plan

The Greek National Recovery and Resilience Plan (NRRP), Greece 2.0, aspires to facilitate a paradigm shift in the Greek economy and institutions. It includes a plethora of ambitious reforms and investments, steering the Greek economy towards a more extrovert, competitive and green economic model, with a more efficient, less bureaucratic digitalised state, a much reduced "grey sector", a more growth friendly tax system and a more resilient social safety network.

Greece 2.0 is not just a programme of economic transition: It is a programme of fundamental economic and social transformation, affecting economic activity, but also technologies, attitudes and institutions. A transition that combines economic efficiency with social inclusion and justice.

The total amount of resources included in Greece 2.0 amount to EUR 30.5 bn € up to 2026, out of which grants are estimated at EUR 17.8 bn € and loans up to 12.7 bn €. Note that investments and reforms of 18.4 bn € have been budgeted so as to ensure the absorption of grants. Given the amounts involved, the NRRP is a major opportunity for accelerating Greece's economic recovery and increasing long-term growth. Greece 2.0 envisages that the total amount of investment recourses mobilised will be approximately EUR 60 bn €, i.e. double the size of the total RRF envelope.

The Greek NRRP comprises of four main pillars, involving the following budgets:

- Green Transition: EUR 6.17 bn (expected to mobilise a total of 11.58 bn €)
- Digital Transformation: EUR 2.2 bn (expected to mobilise a total of 2.36 bn €)
- Employment, Skills, Social Cohesion (Health, Education, Social Protection): EUR 5.18 bn (expected to mobilise a total of 5.27 bn €)
- Private investment and transformation of the economy: EUR 4.84 billion (expected to mobilise a total of 8.78 bn €).

The investments and reforms included in Greece 2.0 meet the green and digital tagging requirements (currently 38% and 25% respectively).

The expenditure of Recovery and Resilience Facility (RRF) grants up to 2024 is estimated at 5.9% of GDP with equivalent budget revenues. Out of the 5.9% of GDP expenditures, 3.3% are expected to be directed to public investments (Gross fixed capital formation), 1.4% to capital transfers, 0.6% to subsidies, 0.5% to social payments and 0.1% to intermediate consumption (Table 7).

Table 7: Revenues and expenditures of RRF grants.

	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)	2025 (% of GDP)	2026 (% of GDP)
Revenue from RRF grants						
1. RRF GRANTS as included in the revenue projections	0,9	1,7	1,6	1,6	1,5	1,5
2. Cash disbursements of RRF GRANTS from EU	2,2	1,5	1,4	1,3	1,3	1,3
Expenditure financed by RRF grants						
3.TOTAL CURRENT EXPENDITURE	0,2	0,3	0,4	0,2	0,3	0,3
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	0,0	0,0	0,0
- Social Payments	0,1	0,2	0,2	0,1	0,1	0,1
- Interest expenditure	0,0	0,0	0,0	0,0	0,0	0,0
- Subsidies, payable	0,1	0,1	0,1	0,1	0,1	0,1
- Current transfers	0,0	0,0	0,0	0,0	0,0	0,0
4. TOTAL CAPITAL EXPENDITURE	0,7	1,4	1,3	1,3	1,2	1,3
of which:						
- Gross fixed capital formation	0,4	1,0	0,9	1,0	0,8	0,8
- Capital transfers	0,4	0,4	0,3	0,4	0,5	0,5
Other costs financed by RRF grants						
5. Reduction in tax revenue	0,0	0,0	0,0	0,0	0,0	0,0
6. Other costs with impact on revenue	0,0	0,0	0,0	0,0	0,0	0,0
7. Financial transactions	0,0	0,0	0,0	0,0	0,0	0,0

The RRF loans amount to approximately 12.73 billion euro up to 2026, expected to mobilize a total of 31.82 of investment resources. An amount of approximately 5% of GDP is expected to be directed to financial liquidity measures for the private sector until 2024 (Table 8).

The Greek Plan envisages using RRF loans to be directed to finance projects falling under the following categories:

- Green transition.
- Digital transition.
- Openness (exports orientation).
- Innovation.
- Economies of scale through firms’ scale-up.

There are three distribution channels through which funds from the RRF loans envelope will finance private investments: (a) International Financial Institutions, including the EIB and the EBRD, (b) commercial banks, Greek but also international and (c) an equity platform instrument operated by the Hellenic Development Bank.

Table 8: Cash flows from RRF loans.

	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)	2025 (% of GDP)	2026 (% of GDP)
Cash flow from RRF loans projected in the programme						
1. Disbursements of RRF LOANS from EU	1,4	1,4	1,1	1,1	1,0	0,5
2. Repayments of RRF LOANS to EU*						
Expenditure financed by RRF loans						
3.TOTAL CURRENT EXPENDITURE	0	0	0	0	0	0
of which:						
- Compensation of employees						
- Intermediate consumption						
- Social Payments						
- Interest expenditure						
- Subsidies, payable						
- Current transfers						
4. TOTAL CAPITAL EXPENDITURE	0	0	0	0	0	0
of which:						
- Gross fixed capital formation	0	0	0	0	0	0
- Capital transfers	0	0	0	0	0	0
Other costs financed by RRF loans						
5. Reduction in tax revenue	0	0	0	0	0	0
6. Other costs with impact on revenue	0	0	0	0	0	0
7. Financial transactions	0,5	1,6	1,3	1,2	1,2	0,6

*On the basis of RRF loans terms.

3. Sensitivity analysis

The baseline macroeconomic scenario forecasts a partial recovery in 2021 with real GDP growing by 3.6%, followed by an acceleration of economic activity in 2022 that is projected to cover the losses of the crisis and bring real GDP to levels slightly higher than the pre-crisis ones. Real growth is expected to remain strong in 2023-2024, to a large extent due to the impact of the implementation of the National Recovery and Resilience Plan. However, uncertainty over the evolution of the pandemic is still high and the outlook contains both positive and negative risks, especially for the current year.

The recovery in 2021 is currently estimated to take place at a slower pace compared to the projections of the 2021 Budget, since the resurgence of the pandemic has led to a tightening of containment measures during the first quarter of the year. A gradual lift of containment measures is expected to take place during the second quarter, as the rollout of the vaccination programme accelerates. Given that both processes are subject to risks, uncertainty over the macroeconomic outlook seems to be particularly strong for the current year, since the emergence of new strains of the virus or a faster rollout of vaccinations could have adverse or positive impacts respectively on the course of economic activity over the following months.

The sensitivity analysis attempts to investigate the possible impact of such factors by examining the implications from the materialization of both positive and negative risks. Specifically, it examines two scenarios that include a divergence from the macroeconomic projections of the Stability Programme with respect to the real growth rate in 2021. In the first scenario, growth is assumed to be lower by 1 percentage point in the current year compared to the baseline projection. In the second scenario, positive risks to the outlook are expected to prevail, leading to a stronger than anticipated recovery in 2021 and to a real growth rate higher by 1 percentage point compared to the baseline projection. In both cases, the shock to economic activity is assumed to be short-lived and affect only the growth rate of the current year, while the economy is assumed to return to the baseline growth path from 2022 onwards.

In addition to shocks to the growth rate, the present chapter also presents the results of a sensitivity analysis of a rise in interest rates. Unlike the case of alternative growth scenarios, the assumed rise in interest rates is not treated as a one-off shock affecting only one year, while its impact is assumed to materialize in the medium-term rather than in 2021. What is assumed is a gradual increase in interest rates over a period of three years, leading to a cumulative increase by 100 basis points. Specifically, interest rates are assumed for the purposes of this analysis to increase by 50 basis points in 2022, by a further 30 basis points in 2023 and by a further 20 basis points in 2022.

The analysis of the above three scenarios is conducted through the NiGEM model, developed by the National Institute of Economic and Social Research. NiGEM is a large-scale structural macro-econometric model of the world economy. It is essentially New-Keynesian in its approach, in that agents are presumed to be forward looking, at least in some markets, but nominal rigidities slow the process of adjustment to external events. It has complete demand and supply sides, as well as an extensive monetary and financial sector. Rational or model-consistent expectations are used throughout the model. Linkages between countries take place through trade, interacting financial markets and international stocks of assets. NiGEM is a “closed” global model, in that all income, asset and trade inflows into one country are matched by outflows from another country, i.e. aggregation at the “world” level is internally consistent (world net assets and trade balance are approximately zero).

Table 9: Results of sensitivity analysis (% deviations from baseline).

	2020	2021	2022	2023	2024
Scenario 1: negative shock in the 2021 real growth rate					
Budget balance	0,00	-0,51	-0,51	-0,51	-0,51
Primary balance	0,00	-0,63	-0,51	-0,50	-0,49
Cyclically adjusted balance	0,00	-0,51	-0,51	-0,51	-0,51
Structural balance	0,00	-0,51	-0,51	-0,51	-0,51
Debt to GDP ratio	0,00	2,10	2,04	1,99	1,92
Scenario 2: positive shock in the 2021 real growth rate					
Budget balance	0,00	0,51	0,51	0,51	0,51
Primary balance	0,00	0,31	0,42	0,43	0,45
Cyclically adjusted balance	0,00	0,51	0,51	0,51	0,51
Structural balance	0,00	0,51	0,51	0,51	0,51
Debt to GDP ratio	0,00	-2,06	-2,00	-1,95	-1,88
Scenario 3: negative monetary shock					
Real GDP	0,00	0,00	-0,08	-0,12	-0,15
Budget balance	0,00	0,00	-0,10	-0,20	-0,27
Primary balance	0,00	0,00	-0,08	-0,09	-0,10
Cyclically adjusted balance	0,00	0,00	-0,10	-0,20	-0,27
Structural balance	0,00	0,00	-0,10	-0,20	-0,27
Debt to GDP ratio	0,00	0,00	0,06	0,13	0,19

The results of the analysis concerning the fiscal implications of the different scenarios are presented in Table 9, where all values are expressed as percentage deviations from the baseline. The first scenario includes a negative shock of 1% to real GDP growth in 2021, but unchanged growth rates for the following years. Despite the shock, the economy's output still marginally surpasses the 2019 GDP level by the end of 2022, while it reaches EUR 199.5 billion by 2024 compared to EUR 201.4 under the baseline. The scenario implies a constantly lower level of real output compared to the baseline, leading to smaller general government balances by approximately 0.5% of GDP, while it also implies an initial increase in the debt ratio by 2.1% of GDP which dissipates in the following years. In this scenario, the headline deficit remains above 3% of GDP in 2022 and an almost balanced budget is achieved by the end of the programme's horizon, but the structural balance still moves into positive territory by 2023.

The second scenario includes a positive shock of 1% to real GDP growth in 2021 without affecting growth rates of the following years. As a result of the shock, GDP in the outer year of the forecast reaches EUR 203.4 billion, higher by 0.96% compared to the baseline projection. The results mirror the negative shock scenario and lead the structural balance to positive values already in 2022 and to a value of approximately 2% of GDP by 2024.

The third scenario includes a rise in interest rates, which is assumed to materialize gradually and at a decelerating pace, leading to a 100 basis points increase over three years (2022-2024). This has a negative but relatively mild effect on output growth, real GDP in 2024 being only 0.15% lower compared to the baseline value. The impact on the budget balance starts at 0.1% of GDP in 2022 and approaches 0.3% by the end of the programme’s horizon, but the impact on the primary balance is very small and does not surpass 0.1% of GDP. The negative effect on public debt is also shown to be small, with the debt ratio reaching a value only 0.2% above the baseline projection by the end of the programme.

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) (*forthcoming 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 phases out in 2020).

Key elements of recent pension reforms introduced by laws 4387/2016 and 4670/2020:

- 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.
- 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 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 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)].

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.

13. Related to the main pensions, the projected amounts for 2020 include the return of main pension cuts applied due to laws 4051/2012 and 4093/2012 from 11.6.2015 until the entry into force of law 4387/2016. This provision was adopted due to the Council of State ruling.

14. In order to further control expenditure in the forthcoming years benefits indexation is kept stable up to 2022.

The key elements of the **auxiliary pension system (NDC)** 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). Any deficits are covered by fund's assets.

3. The amount of pension paid is entirely linked to the pensioner's age. All insured after 1.1.2014 are fully encompassed in the new system. 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:

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

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

The assumptions of the auxiliary pensions system are based on the current legislative framework and do not take into account potential reforms.

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 2020. 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 37.9 in 2019 up to 68.2 in 2050 and then decreases to 65.2 in 2070. Life expectancy at birth increases from 79.0 in 2019 to 86.4 in 2070 for men and from 84.3 in 2019 to 90.3 in 2070 for women. Life expectancy at 65 rises from 18.8 in the base year to 23.9 at the end of the projection period for men and from 21.8 to 26.7 for women.

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. It should be noted that for 2020 due to the COVID-19 crisis, the real GDP growth rate that had been assumed in the AWG projections was -9.7%. This large drop strongly affects the comparisons across different years that are presented in the next section, since the expenditure and revenue amounts are expressed as a share of GDP and thus, there is a large denominator effect.

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.

	2020*	2030	2040	2050	2060	2070
Demographic projections						
Total population (million)	10.7	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)	37.9	46.1	57.8	68.2	67.3	65.2
Life expectancy at birth (males)	79.0	80.8	82.4	83.8	85.2	86.4
Life expectancy at birth (females)	84.3	85.7	86.9	88.1	89.3	90.3
Life expectancy at 65 years old (males)	18.8	20.0	21.1	22.1	23.0	23.9
Life expectancy at 65 years old (females)	21.8	22.9	23.9	24.9	25.8	26.7
Labour force participation						
Participation rate (20-64)	74.2	77.4	79.5	81.8	82.1	82.2
Participation rate (20-74)	63.6	65.1	65.8	67.5	70.6	71.4
Employment rate (20-64)	59.5	68.0	71.9	76.0	76.4	76.5
Employment rate (20-74)	51.1	57.3	59.6	62.9	65.9	66.5
Macroeconomic assumptions						
Real GDP growth rate	-9.7	0.7	1.7	1.6	1.5	1.3
Potential real GDP growth	-0.8	0.7	1.7	1.6	1.5	1.3
Growth rate of labour productivity	-0.2	0.9	2.2	2.0	1.8	1.5
Total Factor Productivity	0.2	0.7	1.4	1.3	1.2	1.0
Capital deepening	-0.4	0.2	0.8	0.7	0.6	0.5

Source: 2021 Ageing Report.

Notes:

* The values of demographic assumptions for 2020, refer to 2019 which is the baseline year of projections.

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 (*forthcoming May 2021*)".

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/expenses as % of GDP) may slightly vary compared to other sections of the stability program that use national estimates prepared from the Ministry of Finance.

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 large decline of 6.4 percentage points of GDP in age-related expenditure between 2020 and 2070, stemming mainly from the declining path of pension expenditure (6.1 p.p) which declines early in the projection period. In more detail, total age-related expenditure amounts to 26.4% of GDP in 2020 of which 18.0% is pension expenditure. The pension expenditure drops already in the first decade from 18.0% to 13.8% and amounts to 11.9% of GDP at the end of the projection horizon. The declining path in the first decade is present even if we remove the large denominator effect of 2020 and we compare results for the forthcoming decades with the figure of 2019 (baseline year of AR2021), which amounts to 15.7% of GDP. 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 moderate decline from 8.4% to 8.1% of GDP between 2020-2070. In Table 9 in the Annex, the items are displayed in detail. In particular, the expenditure on health care increases from 5.0% to 5.4% 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 2020 to 2.6% in 2070 depicting the decrease of population in younger cohorts.

Pension contributions (the sum of employers' and employees' contributions) as a share to GDP slightly decline from 8.4% in 2020 to 7.9% in 2070.

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 Program 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.

	2020	2030	2040	2050	2060	2070
Total expenditure	**59.3%**	**46.4%**	**46.6%**	**46.5%**	**45.0%**	**44.8%**
of which age-related expenditure	26.4%	21.7%	21.8%	21.7%	20.2%	20.0%
of which pension expenditure	18.0%	13.8%	14.0%	13.6%	12.0%	11.9%
of which other age-related items	8.4%	7.8%	7.9%	8.1%	8.2%	8.1%
Total revenues	**49.8%**	**47.8%**	**47.7%**	**47.7%**	**47.7%**	**47.7%**
of which pensions contributions	8.4%	8.0%	7.9%	7.9%	7.9%	7.9%

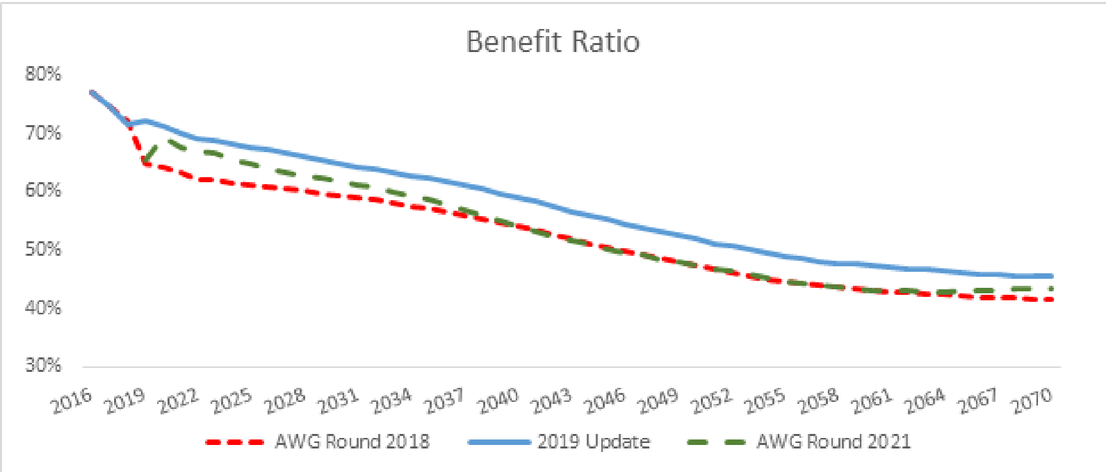
Source: National Actuarial Authority, Ministry of Finance.

Note: In 2020, the projection results include also the one-off payment regarding the return to beneficiaries of pension cuts applied (due to laws 4051/2012 & 4093/2012) from 11.6.2015 until the entry into force of law 4387/2016 as well as retroactive amounts regarding up to the base year outstanding claims.

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

Figure 2 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 effect of the new macroeconomic assumptions for AR2021, which in the first part of the projection period are less favorable compared to the AR2018 projections, lead to a higher level of pension expenditure as % of GDP compared to the updated 2019 projections. 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 2: Evolution of pension expenditure in the 2021 Ageing Report projections compared to previous projections.



Source: National Actuarial Authority.

5. Quality of public finances

Arrears clearance

In the context of the Enhanced Surveillance, the Government has committed to clear the existing stock of (net) arrears and avoid the accumulation of new arrears[1]. Over the past 5 years, intensive efforts of the Greek authorities coupled with payment programs have achieved to reduce net arrears of the General Government from approximately €8.7 billion in December 2015 to €968 million in December 2020. Conducive to this reduction has been the adoption in October 2019, of a broad action plan that includes horizontal actions and specific actions per subsector as well as quantitative targets per subsector and/or entity.

Based on our projections, we estimate that net arrears can be reduced to €681 million by June 2021. A lower threshold of about 0.2% of GDP (approximately €283 million) is expected to be reached by December 2021, which shall then be retained in the following years with the exception of seasonal increases. The overall target is to maintain arrears to at most 0.2% of GDP (observed at the end of each year), with a tight range of up to 0.1% of GDP within the year related to seasonality observed in some sectors.

To reach the target of the minimum steady stock of arrears (either 0.2% of GDP or 0.1% of GDP depending on the adjustments above) based on the projections, arrears (excluding pensions) of approximately €220 million have to be cleared until the end of the first semester of 2021 and €461 million related to pension claims have to be cleared until the end of 2021. Several new actions have been recently launched to achieve this reduction target. The main new actions include a program for the payment of LGs' arrears, a grant to facilitate transport-related EBFs facing liquidity

[1] Net arrears are the remaining arrears after excluding the payment claims that cannot be cleared due to legal or technical reasons that are beyond the authorities' control, the amounts that are offset with health care clawbacks and rebates, and the amounts that fall into the categories of the agreed adjustments.

problems due to COVID-19, an advance payment of pension amounts for recent applicants and pending applications.

To oversee the implementation of the clearance plan as well as to coordinate and implement additional measures to further streamline payment processes, a governance structure in the form of a Steering Committee was established in December 2019. The Steering Committee was recently expanded to include participants from the Ministry of Defense, the Ministry of Infrastructure and Transport and the Ministry of Civil Protection to enable focusing on their respective arrears and to cover a large number of the remaining HCA recommendations in this area.

Management and clearance of called state guarantees

GAO has created an action plan for the management of called state guarantees, in collaboration with commercial banks in October 2019. The plan was revised in February 2020 and another update took place in July 2020 with the purpose to accelerate payments as much as possible and ensure clearance of the remaining stock within the targets set.

The electronic files repository has become fully operational according to the timeline foreseen in the clearance plan.

The implementation of the interoperability between the FMIS and the IT system (TAXIS) of the tax administration has been completed. This implementation has enabled full automation of the process related to the assessment of the State's claims against borrowers and other guarantors.

Furthermore, GAO proceeded with the implementation of its plan to enhance its human resources capacity dealing with called state guarantees. More specifically, thirty (30) employees have been recruited for a period of three years through a procedure administered by the Supreme Council for Civil Personnel Selection (ASEP). In addition, GAO is proceeding to hire thirty (30) additional permanent employees to reinforce the two departments of the State Guarantees and Capital Movement Directorate dealing with natural persons' and private companies' called loans.

Accounting reform

The Ministry of Finance and the General Accounting Office is working to complete within the current year (to be presented in the 2022 budget) the first level of the functional (CoFoG) classification for General Government, whereas the second level of CoFoG classification is to be presented by mid 2022.

Furthermore, the Ministry of Finance in cooperation with the Ministry of Digital Governance is taking all the necessary steps for implementing an ambitious Accounting Reform programme in the context of the RRF, with the design and implementation of the Government Enterprise Resource Planning (GOV ERP) IT system as its core element.

Spending reviews

Greece has rendered spending reviews as a regular process as of 2018 and established a permanent mechanism for organizing, conducting and monitoring their implementation. This is achieved through interministerial Committees between the Ministry of Finance (MoF) and the Line Ministries, with MoF having the coordinating role. There has been significant progress in integrating spending reviews in the budget calendar and spending review results systematically inform the budget process.

The new environment under the Covid-19 pandemic contributed to shifting spending review focus to areas related to structural changes in the operation of the State that can generate fiscal space, while at the same time they improve cost-effectiveness and quality of the service delivered. They refer to both horizontal- for all line ministries- and sectoral actions. The first include real estate management, state vehicles' fleet, energy consumption and cleaning-security services. Main sectoral spending review areas include enhancing the socio-economic effectiveness of the welfare benefits and healthcare, modernizing the system related to fines about traffic code violations, promoting e-governance related actions and other.

Performance Budgeting

Greece is working towards the completion of the first phase of the performance budgeting reform. For 2022 budget, the presentational performance budgeting approach will be in place. The central administration budget will be presented classified by Policy Sector (1st level) and Program (2nd level). Programs will be supported by a series of performance information including human resources per Program, goals, main actions comprised, main output(s) and expected outcome(s), relative indicators as well as contribution of General Government entities.

Greece is receiving technical assistance from the OECD to prepare during the next years transition to performance-informed budgeting.

Green Budgeting

Greece is moving towards the integration of the Green Dimension in the framework of the Performance Budgeting reform. MoF is receiving technical assistance from the OECD and following the European Commission developments in the area. Next steps include elaboration on the respective tagging and methodology, in close cooperation with the Ministry of Environment.

Annex I: Stability Programme tables

Table 1: Macroeconomic prospects.

	2020 (Levels)	2020 (rate of change)	2021 (rate of change)	2022 (rate of change)	2023 (rate of change)	2024 (rate of change)
1. Real GDP	168463	-8,3	3,6	6,2	4,1	4,4
2. Nominal GDP	165830	-9,6	3,8	7,3	5,4	6,0
Components of real GDP						
3. Private consumption expenditure	120818	-5,2	2,6	2,9	2,1	2,8
4. Government consumption expenditure	35747	2,7	1,5	-3,0	-1,1	-0,6
5. Gross fixed capital formation	18591	-0,6	7,0	30,3	12,3	10,8
6. Changes in inventories and net acquisition of valuables (% of GDP)	4882	2,9	2,8	2,6	2,5	2,4
7. Exports of goods and services	54865	-21,7	10,4	13,8	7,5	6,2
8. Imports of goods and services	66439	-6,8	6,9	8,5	4,0	3,4
Contribution to real GDP growth						
9. Final domestic demand	-5735	-3,1	3,0	4,9	3,0	3,4
10. Changes in inventories and net acquisition of valu	916	0,5	0,0	0,0	0,0	0,0
11. External balance of goods and services	-10323	-5,6	0,7	1,3	1,1	1,0

Table 2: Price developments.

	2020 (Levels)	2020 (rate of change)	2021 (rate of change)	2022 (rate of change)	2023 (rate of change)	2024 (rate of change)
1. GDP deflator	98,44	-1,5	0,2	1,0	1,2	1,6
2. Private consumption deflator	98,44	-1,3	0,0	0,7	1,3	1,6
3. HICP	101,17	-1,3	0,0	0,7	1,3	1,6
4. Public consumption deflator	103,82	-0,1	1,3	1,3	1,5	1,8
5. Investment deflator	99,15	-0,2	0,4	0,6	1,1	1,5
6. Export price deflator (goods and services)	96,38	-8,2	3,8	-0,2	0,5	1,7
7. Import price deflator (goods and services)	98,44	-8,3	3,8	-1,0	0,8	1,8

Table 3: Labour market developments.

	2020 (Levels)	2020 (rate of change)	2021 (rate of change)	2022 (rate of change)	2023 (rate of change)	2024 (rate of change)
1. Employment, persons	4505	-1,3	0,7	2,3	1,3	1,3
2. Employment, hours worked	8.165.755	-11,4	5,4	8,8	1,3	1,3
3. Unemployment rate (%)	16,3	-4,3	0,0	-11,6	-8,3	-10,1
4. Labour productivity, persons	37,4	-7,0	2,9	3,8	2,8	3,0
5. Labour productivity, hours worked	0,021	3,5	-1,7	-2,4	2,8	3,0
6. Compensation of employees	67530,5	-0,9	0,8	3,3	3,2	3,8
7. Compensation per employee	20842,5	0,0	0,0	1,1	2,1	2,4

Table 4: Sectoral balances.

	2020 (% of GDP)	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)
1. Net lending/borrowing vis-a-vis the rest of the world	-4,6	-4,2	-0,7	0,1	1,1
of which					
- Balance on goods and services	-7,6	-6,9	-4,9	-3,8	-2,8
- Balance of primary incomes and transfers	-0,3	0,9	2,2	2,1	1,8
- Capital account	3,2	1,9	2,1	1,8	2,1
2. Net lending/borrowing of the private sector	5,2	5,7	2,2	0,5	0,5
3. Net lending/borrowing of general government	-9,7	-9,9	-2,9	-0,4	0,6
4. Statistical discrepancy	0,1	0,0	0,0	0,0	0,0

Table 5: Total revenue and expenditure at unchanged policies.

	2020 (Levels)	2020 (% of GDP)	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)
1. Total revenue at unchanged policies	84077	50,7	49,4	48,9	48,8	47,5
2. Total expenditure at unchanged policies	100207	60,4	59,4	51,9	49,2	46,9

Table 6: Expenditure to be excluded from the expenditure benchmark.

	2020 (Levels)	2020 (% of GDP)	2021 (% of GDP)	2022 (% of GDP)	2023 (% of GDP)	2024 (% of GDP)
1. Expenditure on EU programmes fully matched by EU funds revenue	5.567	3,4	3,6	3,9	3,8	3,6
1.a Of which investment expenditure fully matched by EU funds revenue	5.567	3,4	3,6	3,9	3,8	3,6
2. Cyclical unemployment benefit expenditure	205	0,1	0,1	0,0	0,0	-0,1
3. Effect of discretionary revenue measures	-4.044	-2,4	-0,7	0,3	1,0	0,0
4. Revenues increased mandated by law	0	0	0	0	0	0

Table 7: Divergence from previous update.

	2020	2021	2022	2023	2024
Real GDP growth (%)					
Previous update	-4,7	5,1	0	0	0
Current update	-8,3	3,6	6,2	4,1	4,4
Difference	-3,6	-1,5	6,2	4,1	4,4
General government net lending (% of GDP)					
Previous update	-4,7	-0,2	0	0	0
Current update	-9,7	-9,9	-2,9	-0,4	0,6
Difference	-5	-9,7	-2,9	-0,4	0,6
General government gross debt (% of GDP)					
Previous update	188,8	176,8	0	0	0
Current update	205,6	204,8	189,5	176,7	166,1
Difference	16,8	28,0	189,5	176,7	166,1

Table 8: Contingent liabilities.

	2020 (% of GDP)	2021 (% of GDP)
Public guarantees	6,4	6,4
Of which: linked to the financial sector	0,2	0,2

Table 9: Long-term sustainability of public finances.

	2007 (% of GDP)	2010 (% of GDP)	2020 (% of GDP)	2030 (% of GDP)	2040 (% of GDP)	2050 (% of GDP)	2060 (% of GDP)
Total expenditure	47,1%	52,5%	59,3%	46,4%	46,6%	46,5%	45,0%
Of which: age-related expenditures	22,8%	27,6%	26,4%	21,7%	21,8%	21,7%	20,2%
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%	9,2%
Other pensions (disability, survivors)	3,3%	4,0%	5,3%	3,6%	3,4%	3,1%	2,9%
Occupational pensions (if in general government)							
Health care	5,8%	6,8%	5,0%	4,8%	5,1%	5,3%	5,4%
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%	47,8%	47,8%	47,7%	47,7%
Of which: property income							
Of which: from pensions contributions (or social contributions if appropriate)	8,5%	6,3%	8,4%	8,0%	7,9%	7,9%	7,9%
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							
Pension expenditure paid by mandatory private scheme							
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%

Note: A different set of macro forecasts has been used in this Table, compared to the rest of the SP.

Table 10: Basic assumptions.

	2020	2021	2022	2023	2024
Short-term interest rate (annual average)	-0,4	-0,5	-0,5	-0,4	-0,4
Long-term interest rate (annual average)	0,0	0,0	0,1	0,3	0.5
USD/EUR exchange rate (annual average)	1,14	1,21	1,21	1,21	1,21
Nominal effective exchange rate	3,9	2,3	0,0	0,0	0,0
(for countries not in euro area or ERM II) exchange rate vis-à-vis the € (annual average)	0	0	0	0	0
World excluding EU, GDP growth	-3,4	5,2	3,8	3,0	2,8
EU GDP growth	-6,3	3,7	3,9	2,3	1,9
Growth of relevant foreign markets	-10,8	8,3	4,4	3,2	3,1
World import volumes, excluding EU	-9,4	7,5	4,9	2,7	2,3
Oil prices (Brent, USD/barrel)	43,4	54,7	52,4	52,2	52,0

Table 11: Stock of guarantees adopted/announced at Feb-2021 according to the Programme.

	Measures	Date of adoption	Maximum amount of contingent liabilities (% of GDP)	Estimated take-up (% of GDP)
In response to COVID-19	Sure programme	2020	0,20%	0,20%
	Paneuropean Guarantees' Fund	2020	0,21%	0,21%
	Covid-19 Fund	May 2020	0,95%	1,16%
	Subtotal		1,36%	1,57%
Others	State Guarantees to non General Government Entities		2,26%	
	Enterpreneurship loans (EIB loans to greek banks)		0,92%	
	Bank Support Scheme Guarantees		0,19%	
	Hercules (NPLs)		1,40%	
	ETEAN & Enterpreneurship Fund		0,04%	
	Subtotal		4,81%	
Total			**6,17%**	

Annex II: Opinion of the Hellenic Fiscal Council

HELLENIC
FISCAL
COUNCIL

Athens, 29th of April 2021

Opinion on the Macroeconomic Forecasts of the Stability Program 2022-2024.

According to the EU regulation 473/2013 Article 4(4), national medium-term budgetary plans should be based on independent macroeconomic forecasts, that is forecasts endorsed by national independent fiscal institutions. Acting as such, the Hellenic Fiscal Council (hereafter HFC) assesses the baseline macroeconomic scenario of the Stability Programme for the period 2022-2024.

This assessment follows the recent guidelines set out by the European Commission (3.3.2021) with preliminary considerations in favor of the continued activation of the general escape clause of the Growth and Stability Pact for the year 2022 and its deactivation from the year 2023 onwards. This indicates European Commission's strong position to support national fiscal policies that help overcome the global pandemic socioeconomic consequences.

The macroeconomic scenario of the Ministry of Finance incorporates the expected positive effects of the National Recovery and Resilience Plan (released in 31.3.2021) based on the European Recovery and Resilience Mechanism. The Plan foresees over €30 billion inflows to the Greek economy in the form of loans and grants during a period up to 2026. Given the magnitude of the Plan, macroeconomic forecasts strongly depend on the Plan's implementation as well as on its multiplicative effects on the Greek economy. In addition, macroeconomic forecasts are also sensitive to the unfolding of the pandemic both in Greece and abroad.

Through the lens of the expected positive effect of the National Resilience and Recovery Plan as well as the uncertainty due to the pandemic, **HFC endorses the National Stability Plan's macroeconomic scenario.**

Table 1: Macroeconomic indicators forecasts endorsed by the HFC (at constant 2015 prices)

GDP and its components (%, annual change)	2021	2022	2023	2024
Gross Domestic Product	**3.6%**	**6.2%**	**4.1%**	**4.4%**
Private consumption	2.6%	2.9%	2.1%	2.8%
Public consumption	1.5%	-3.0%	-1.0%	-0.5%
Gross fixed capital formation	7.0%	30.3%	12.3%	10.8%

Exports of goods & services	10.4%	13.8%	7.5%	6.2%
Imports of goods & services	6.9%	8.5%	4.0%	3.4%

Source: Ministry of Finance, Stability Programme, April 2021.

The 2021 Stability Programme baseline scenario (*Table 1*) revises downwards the GDP growth rate (3.6%) in comparison with the State Budget 2021 report (4.8%), presenting a more conservative outlook, which is justified by the extension of lockdown for the first four months of 2021 due to the pandemic.

As far as the period 2021-2024 is concerned, according to the aforementioned scenario, 2022 will be the year when the largest annual percentage growth of GDP will occur. This shift, is in line with the corresponding revision of the European Commission's Autumn forecasts (2021: 5%, 2022: 3.5%) by the Winter forecasts (2021: 3.5%, 2022: 5%). In the same year (2022) GDP is expected to exceed the pre-pandemic levels of GDP. The growth rate for 2022 **is relatively more optimistic (6.2%) than that of the European Commission**, with the positive deviation incorporating two main elements:

(a) the positive effects of the Recovery and Resilience Plan (hereafter: RRP), where part of the current year's disbursements are carried forward to the year 2022. This transfer is expected to have a particularly strong impact on **gross fixed capital formation (+30,3%)**, given the investment orientation of RRP, and

(b) the assumption that in the year 2022 the pandemic will be fully controlled thus the economic activity will have been fully recovered. This scenario is reflected to the strong **recovery, to their pre-pandemic levels, of both private consumption (2019) and exports of goods and services**.

Facts that strongly supports the aforementioned forecasts are: (a) the progress of the national vaccination program, which may reduce the likelihood of a fourth pandemic wave; (b) the upcoming lifting of coronavirus containment measures and the "reopening" of tourism services and facilities; (c) the increase of private savings, which may finance new investment projects; and (d) the resilience shown by specific sectors of the economy, such as construction, despite the containment measures on economic and social activity, which may further support the economic recovery.

For the period 2022-2024, the average annual GDP growth is estimated at approximately 3.83%, supported by private consumption, investment and exports. It is underlined that in the aforementioned period the public consumption is estimated to be reduced, despite RRF’s grants, which is in line with the possible deactivation of the “general escape clause” in the coming years.

Furthermore, the MoF macroeconomic forecasts are largely in line with the forecasts provided by the European Commission and other international and domestic institutions (IMF, OECD, BoG) for 2021 and 2022 (*see table 2*). Compared to the IMF forecasts, there is a significant deviation in GDP growth in the medium term (2023-2024). However, this deviation may arise because the beneficial effect of the RRF on the Greek economy has not been taken into account.

Table 2: Forecasts of Greek GDP growth produced by domestic and international institutions.

	2021	2022	2023	2024
Real GDP (annual change, %)				
MoF (April 2021)[1]	3.6	6.2	4.1	4.4
BoG (April 2021)[2]	4.2	n/a	n/a	n/a
IMF (April 2021)[3]	3.8	5.0	2.4	1.5
EC (February 2021)[4]	3.5	5.0	n/a	n/a
OECD (December 2020)[5]	0.9	6.6	n/a	n/a

Sources: **1)** MoF: Stability Programme, April 2021. **2)** Bank of Greece (BoG): Report of the Governor, April 2021. **3)** International Monetary Fund (IMF): World Economic Outlook Database, 6 April 2021. **4)** European Commission (EC): Winter forecasts, 2021 – Greece, 11 February 2021. **5)** OECD: Economic Outlook, No 108, December 2020.

Regarding the fulfillment of the macroeconomic scenario produced by the Ministry of Finance, HFC identifies the following risks:

(a) The evolution of the current pandemic wave is a key point for the current macroeconomic forecast estimations. Any further delay in lifting the restrictive measures (lockdowns) due to health crisis, will negatively affect important sectors of the Greek economy (retail sales, tourism, etc.). A possible fourth pandemic wave could also jeopardize the return of Greek economy to "normality" in 2022, putting further constraints in its fiscal and macroeconomic position.

(b) A possible delay of the Plan's implementation related to the agreed milestones and targets, may lead to a loss of funds which will negatively affect GDP growth. The European Semester of economic policy coordination will be used as a framework of managing the Funds under the Facility and its implementation will be monitored through progress reports submitted to the Commission. Regulation (EU) 2021/241, establishing the recovery and resilience facility, gives the Council the power to suspend, on a proposal from the Commission, partially or fully the disbursements under the Facility, if significant deviations from the SGP rules will be occurred.

(c) The banking sector is expected to play a key role in securing the undisrupted flow of funds into the economy. To this end it is important that financial institutions will continue to consolidate their balance sheets.

(d) The private sector's contribution is also vital for the recovery and in particular in relation to the required productive investments in innovative sectors in order to raise the potential output in the medium term.

A more detailed analysis of the macroeconomic developments of the Greek economy will be included in the HFC's biannual report which will be published by the end of May 2021

The Chairman of the Hellenic Fiscal Council,

Prof. Panagiotis Korliras