# Creditreform ⊆ Rating

Rating Object	Rating Information	
HELLENIC REPUBLIC	Assigned Ratings/Outlook:  BB+ /stable	Type: Monitoring, Unsolicited with participation
Long-term sovereign rating Foreign currency senior unsecured long-term debt Local currency senior unsecured long-term debt	Initial Rating Publication Date: Rating Renewal: Rating Methodologies:	23-12-2016 02-12-2022 "Sovereign Ratings" "Rating Criteria and Definitions"

### **Rating Action**

Neuss, 02 December 2022

Creditreform Rating has raised its unsolicited long-term sovereign rating on the Hellenic Republic to "BB+" from "BB-". Creditreform Rating has also raised Greece's unsolicited ratings for foreign and local currency senior unsecured long-term debt to "BB+" from "BB-". The outlook is revised to stable from positive.

The rating revision on the Hellenic Republic reflects

#### 

- (i) the recent strong economic recovery, supported by rebounding tourism and flanked by further labor market improvement and implementation of measures to strengthen the business environment, which in light of reform progress enhances prospects of robust medium-term growth and increasing potential growth;
- (ii) a marked decline of the still high public debt ratio and growing confidence that, despite headwinds from the geopolitical situation, debt-to-GDP will remain on a downward path, amid what we view as robust mitigating factors to fiscal risks over the next few years and recent further advancement in terms of reducing non-performing loans (NPLs); and
- (iii) continued tangible progress regarding the improvement of the institutional framework, also underscored by demonstrated compliance with agreed milestones linked to the Recovery and Resilience Plan (RRP) in its early phase.

### **Key Rating Drivers**

- Stronger-than-expected economic recovery aided by rebounding tourism; while downside
  risks related to the Russian war against Ukraine are likely to constrain GDP growth in 2023,
  strong reform momentum and timely absorption of funds from the Recovery and Resilience Facility (RRF) reinforce our positive expectations for the medium-term growth outlook; significant challenges regarding Greece's labor market and its business environment
  remain in place
- 2. Strong indications that authorities remain determined to advance Greece's institutional set-up, which still offers scope for improvement; delivering on agreed milestones in the early stages of the RRP and a track record of steadfast commitment to maintaining reform momentum has led to graduation from the European Commission's (EC) enhanced surveil-lance mechanism; the sovereign is a strong beneficiary of being part of the EU and EMU;

# Creditreform ⊆ Rating

we assume that the Hellenic Republic continues on its path of predictable policymaking and decisively pursues agreed initiatives, and we do not expect the upcoming parliamentary election to fundamentally change envisaged implementation of major structural reforms

- 3. Despite considerable challenges posed by the corona crisis and adverse external and domestic economic reverberations due to Russia's military attack on Ukraine, we observed repeated outperformance in terms of budget execution, feeding expectations of a return to a primary surplus in 2023; signs of an improving payment record given early repayment of the outstanding IMF loan
- 4. Although remaining at a very high level, we expect debt-to-GDP to continue to fall over the medium term, aided by high nominal growth and subsiding Covid-19 measures despite fiscal measures to cushion the effects from high energy prices; a persistently large cash buffer and benign debt profile continue to represent key risk-mitigating factors; amid a gradually increasing resilience of the banking sector, we will continue to monitor the development of NPLs in light of tightening monetary policy and rising credit risks entailed by the geopolitical situation and its negative repercussions
- 5. Vulnerabilities associated with the highly negative net international investment position (NIIP) and recently increased current account deficit, which we assess as exacerbated by the succession of crises, continue to be mitigated to an extent by the high share of government debt held by the official sector

### Reasons for the Rating Decision and Latest Developments<sup>1</sup>

#### Macroeconomic Performance

A strong economic rebound following the pandemic, also backed by recovering tourism, and further improving labor market conditions is balanced by a still comparatively weak underlying macroeconomic profile. Challenges mainly relate to Greece's business environment and its labor market, whilst the Greek economy is still facing anemic labor productivity and laggard private investment activity. EU financing via the RRF and the commencing Multiannual Financing Framework 2021-27 (MFF 21-27) should continue to play a decisive role in enabling higher potential growth, if implemented timely and effectively, bolstering constructive expectations for income convergence with regard to which Greece has ample room to improve. Uncertainty over developments regarding the war in Ukraine and related economic downside risks via higher commodity prices as well as a more challenging external environment, could dampen otherwise brightening medium-term growth prospects.

Having nosedived by 9.0% in the first year of the pandemic, Greece's total economic output rebounded by 8.4% in 2021, exceeding its pre-pandemic level in Q4-21 on the back of a strong economic recovery, buttressed by wound-down containment measures, government support and rebounding tourism amid vaccination progress. Private consumption was thus the main contributor to last year's growth outcome, delivering 4.0 p.p., while investment added another 2.4 p.p., boosted in particular by massive increases in machinery and equipment as well as

<sup>&</sup>lt;sup>1</sup> This rating update takes into account information available until 25 November 2022.

# Creditreform C Rating

strong construction activity. Amid a substantial rebound in exports which exceeded the increase in imports, net trade also contributed positively, adding 0.9 p.p. to last year's overall GDP expansion.

With this, the Greek economy has begun to resume the convergence process towards EU levels in terms of GDP per capita, which had stalled in the few years prior to the Covid-19-induced setback in 2020. In 2021, GDP per capita increased by 13.3% to an estimated 32,230 USD (IMF data, PPP terms), corresponding to roughly 66% of the EU level, and continuing to lag behind other former program countries such as Cyprus or Portugal in this regard (2021: 92% and 75% of EU level, respectively).

In the first half of the current year, the Greek economy continued to show high growth momentum. In quarter-on-quarter terms, real GDP grew by 8.0% and 7.7%, respectively in Q1 and Q2-22, pushing total economic output 5.0% above its pre-pandemic level as of Q2-22, thus comparing rather favorably against the euro area (EA) as a whole (Q2-22 vs. Q4-19: 1.9%). While awaiting national account data for this year's third quarter, monthly data on industrial production and retail sales hint at ongoing GDP growth, although two consecutive declines in industrial production in August and September 2022 point towards a marked slowdown for this year's final quarter.

In the same vein, consumer sentiment as well as business sentiment in both the industry and the service sector have clouded markedly in October, pointing to a weaker near-term outlook. While Greece's direct trade exposure to Russia is limited, the relatively high energy intensity of its economy and comparatively high share of private household spending on energy presents vulnerabilities in the current geopolitical context.

Still on course to constitute a main pillar for GDP growth this year, private consumption growth should only see a moderate increase in 2023 as a whole as households' spending power will be hampered by soaring consumer prices. Having exhibited double-digit rates from May-22, Greek inflation (HICP) fell back to 9.5% in Oct-22 and is set to remain elevated next year. Government measures to soften the blow from higher energy prices for consumers, which included subsidies for electricity bills, amount to about 2.0% of GDP at this stage. Likewise, the minimum wage was increased twice this year, overall rising by 9.7% compared to its 2021 level, which should help to stabilize household expenditure.

Moreover, Greece's labor market has proved relatively resilient throughout the pandemic, bol-stered partly by stabilizing government measures. Drawing on its annual average, the unemployment rate has continued to fall during the Covid-19 crisis, reaching 14.8% in 2021 (EA: 7.7%), having come a long way since its peak in 2013 (27.8%). Throughout this year, the jobless rate has continued to trend downwards, posting at 11.8% in Sep-22. At this level, the unemployment rate remains the second highest in the euro area (EA, Sep-22: 6.6%). Employment growth was comparatively strong last year, lifting the employment level above its pre-crisis level, and has continued in 2022, albeit at a slowing rate.

Looking at more structural labor market characteristics, Greece continues to display one of the lowest labor participation rates. Recovering from the corona crisis, participation stood at 68.9% as of Q2-22 (EA: 74.7%). Long-term unemployment remains the highest in the euro area, with close to two thirds of the unemployed falling into this category (2021: 62.8%, 20-64y). The share has gradually declined from 2015 to 2020, but climbed last year, possibly hinting at some scar-

# Creditreform C Rating

ring effects from the pandemic. On the other hand, youth unemployment, while likewise remaining the highest in the EU, continued to decline in 2021, reaching the lowest level since 2010 at 35.5%.

Following five quarters of uninterrupted expansion, gross fixed capital formation has begun to weaken, declining on a q-o-q basis in Q2-22. Given tightening market financing conditions, as well as the burden from higher energy costs and the related uncertainty at the current stage, private investment decisions may be delayed. Generally, however, we see investment growth firmly underpinned by RRP-linked EU funds, amounting to EUR 17.8bn in grants and EUR 12.7bn in loans from 2021 to 2026. We gather that, domestically, investment projects to the tune of EUR 13.5bn have been approved, with EUR 1.7bn already disbursed.

Having received a first RRF payment in this year's April, a request for disbursement of EUR 3.56bn from was submitted by Greece in September 2022 and given a preliminary positive assessment by the EC. The tranche would bring total disbursements from the RRF to about EUR 11.08bn, suggesting timely absorption, similarly to what could be observed with regard to ESIF funds over the period 2014-2020. To be sure, private investment is still very low, standing at 9.7% of GDP (2021, AMECO data) as compared to 18.9% of GDP in the euro area as a whole.

Boosting the export performance this year, tourism has continued to recover forcefully. According to recent BoP data, arrivals of non-residents rose by 103.9% y-o-y over Jan-Sep-22, with travel receipts increasing by 78.3% y-o-y over the same period, lifting arrivals to 87.9% and respective receipts to 96.9% of the same period in 2019. In light of strong domestic demand and concomitant high import growth we expect net trade to make a negative contribution this year. Increasing service exports will cushion this development to some extent, displaying a rise by 43.3% y-o-y over the first nine months of 2022. For 2023, we expect net external trade to have a more or less neutral growth impact, with both import and export growth assumed to slow down markedly. The revitalized tourism sector could face headwinds if parts of the euro area experience a recession, as this may dampen travel activities to some degree.

Overall, we currently expect Greek real GDP growth of 6.5% this year, softening to about 1.2% in 2023, as domestic demand should slow significantly and net foreign trade is unlikely to generate any significant momentum. In our view, constructive medium-term growth prospects remain backed by support from RRF-financed projects and our expectation of some moderation in commodity prices, as well as an eventual full post-pandemic recovery of tourism.

Investment projects and reform measures coming on the back of the RRP should benefit underlying growth if implemented timely and effectively. Drawing on EC estimates, the national RRP could raise Greece's GDP by 2.1 to 3.3% in 2021-26. Potential growth is estimated to rise to 0.3% in 2022, 0.6% in 2023, and 1.0% in 2024, following years of negative growth rates (AMECO data). While still comparing unfavorably against the euro area as a whole, Greece would narrow the gap substantially.

We see potential constraints to the medium-term growth outlook with regard to Greece's business environment and its international competitiveness more generally, as suggested by a relatively weak 47th rank, out of 63 countries considered, in the recent IMD global competitiveness ranking (2022), with Greece having edged down by one rank compared to the preceding year. That said, it has to be stressed that, Greece has significantly improved in this respect vis-à-vis 2019 (2019: rank 58, 2017: 57), and remains committed to delivering further progress. We also

# Creditreform ⊆ Rating

highlight as positive further advancements made with regard to the new insolvency framework in force since last year.

In addition, significant challenges regarding digitalization are underscored by a weak performance on the EC's Digital Economy and Society Index (2022), with Greece occupying rank 25 out of the 27 EU members, mainly due to underperformance in terms of digital public services compared to fellow EU states. In this respect, the government firmly pursues its digitalization strategy to enhance its digital public services, including reforms and projects around data governance and upgrades of the digital infrastructure. Ultimately, this should also contribute to the improvement of overall (non-cost) competitiveness. Similarly, and drawing on the EC's Innovation Scoreboard 2022, Greece continues to be viewed as a moderate innovator, while it is noteworthy that the gap to the EU is also narrowing in that respect.

Focusing on Greece's cost competitiveness over recent years, we note that the sovereign's position compares as relatively favorable against the euro area as a whole and main European trade partners, although less so since the pandemic, acknowledging possible distortions due to the global health crisis. To be sure, Greece's global export market share recovered last year, following a marked decline in 2020 on the back of collapsing tourism, however without having fully recouped lost ground since 2019. As of 2021, its export market share stood at 0.32%, with the global share in goods exports even ticking up to 0.21% in 2021, its highest reading since 2008.

Going forward, wage developments may have to be monitored, although we do not expect cost competitiveness to be at risk at this stage, mainly due to considerable labor market slack. At the same time, real labor productivity remains sluggish. Despite last year's rise by 5.6%, Greece displays one of the lowest cumulative growth rates since 2016, coming in at -3.7% as compared to +2.0% in the EU-27.

Private sector debt decreased in 2021 and is far from being excessive, thus suggesting limited risks to the medium-term outlook. Drawing on quarterly (non-consolidated) private debt data, NFC debt has resumed its downward trend after a transitory, pandemic-induced spike, standing at 61.1% of GDP as of Q-22. Recent developments of outstanding loans to the private sector point to a somewhat increasing dynamic as regards lending to NFCs, whereas outstanding loans to households for house purchases continue to display negative growth rates. We note that household debt set against disposable income continued to trend down over recent years, including the acute Covid-19 phase, standing at 81.0% as of Q3-21 (ECB data).

### Institutional Structure

While the sovereign's institutional framework still has scope for improvement, Greece has continued to make tangible progress in implementing vital structural reforms, as also corroborated by the ongoing positive trend in the World Bank's Worldwide Governance Indicators (WGIs). We think that authorities have shown firm ownership of reform initiatives, as well as responsiveness to policy recommendations by relevant institutions over the last years, despite headwinds from the pandemic and adverse effects from the Russian invasion of Ukraine. Flanking this more constructive picture, Greece has exited the EC's enhanced surveillance framework and entered the post-surveillance period this year. While some structural weaknesses in the Greek justice system persist, numerous reforms are underway to enhance its quality and efficiency. Greece will benefit greatly from EU funding to facilitate the twin transition of its economy, adding to advantages such as access to deep and broad capital

# Creditreform ⊆ Rating

markets coming with EU/EMU membership. We will closely monitor policy implementation in connection with the upcoming parliamentary election, to be held by July 2023. Tensions with Turkiye over territorial claims in the Aegean Sea seem to have flared recently, and we will closely monitor related developments going forward.

Drawing on the latest update of the WGIs (Sep-22), Greece has continued the positive trend observed over the last few years with regard to the four factors we consider the most relevant for our credit assessment of the sovereign's institutional structure. Compared to the previous set of WGIs, Greece either improved or displayed stable performance, judging by the relative ranking concerning the base year 2021, illustrating that efforts to enhance the institutional structure are bearing fruit. However, we note that the sovereign exhibits notable gaps towards the respective euro area median rankings.

As regards the WGI 'voice and accountability', Greece maintained its relative rank of 45 out of 208 countries (median EA: 26). Small improvements were achieved concerning 'government effectiveness' (68 out of 209, up one place) and 'rule of law' (79 out of 209, up two places), however still posting well below the respective euro area median ranks of 36 and 32. When it comes to 'control of corruption', Greece saw a more marked improvement by six places in 2021, now ranking 81st out of 209 countries (EA median rank: 42).

Representing an important milestone and following the advancement of far-reaching structural reforms as also echoed by the 14th enhanced surveillance report, Greece exited the EC's enhanced surveillance phase in August 2022 and eventually entered the post-program surveillance (PPS) period. In light of another positive conclusion drawn by the EC based on the first PPS report from November 2022, the eighth and final tranche of debt relief agreed back in 2018 may be released before the end of this year, due to be greenlighted by the Eurogoup.

At the same time, the EC in a preliminary conclusion suggested that the 28 milestones and targets linked to the disbursement of the second RRF tranche had been fulfilled, including initiatives to reorganize and modernize the railway sector, promote a greener bus fleet, and measures to foster the digital transformation of SMEs. As a consequence, the EC is thus likely to endorse Greece' request for disbursement by the end of the year.

On the legacy issue of dealing with government arrears, to which we continue to pay attention, authorities have made further headway, in particular as far as clearing of non-pension arrears is concerned, although the stock of arrears has remained above targets both with regard to pension and non-pension arrears (EC intelligence). The government remains committed to accelerating the clearance of these, as illustrated by several measures including e.g. provision for accelerating pension awards, aiming to have cleared non-pension and pension arrears by February 2023.

Equally, and reinforcing our view that Greece is advancing towards establishing a higher-quality institutional framework, a number of measures to enhance the justice system have been brought on their way. The Greek parliament inter alia passed a bill aimed at increasing the efficiency of court proceedings as well as of administrative matters and introducing criteria to assess the performance of judges more accurately, as also highlighted by the EC's recent Rule of law report. Nevertheless, we note that some challenges concerning the judicial system remain to be tackled, among others appointment procedures for the most senior positions of judges and prosecutors, as well as with respect to the digitalization of the judiciary, with the broader issue of filling digitalization gaps addressed by the RRP.

# Creditreform ⊆ Rating

A number of important structural reforms have seen further progress, among them the cadaster reform, with e.g. commitments as to the mapping and ratification of maps having been met and efforts to increase staffing of land registry offices being underway. The new IT tax collection system should facilitate the Independent Authority for Public Revenue's task and strengthen the respective audit framework. A new law on the governance of state-owned enterprises to enhance their efficiency has been adopted. Apart from that, the National Anti-Corruption Action Plan for 2022-2025 was approved as part of Greece's anti-corruption strategy.

Advancements were also made with regard to addressing the pressing issue of climate change. On 26-May-22, Greece created the legal foundations to accomplish the green transition, enacting the long-planned first climate law. Compared to 1990 levels, the law envisages reducing greenhouse gas (GHG) emissions by 55% by 2030 at the very minimum. By 2040, GHG emissions are to constitute only 20% of total emissions produced in 1990, and by 2050, the Greek economy is to become completely carbon-neutral. The climate law also foresees ending the use of fossil fuels in energy production by 2028.

Looking at relevant environmental metrics, at 7.1 tons per capita in 2020, Greece's GHG emissions stood slightly below the average level of the EU-27 (7.5 tons per capita). With regard to the EC's Eco-Innovation Index 2022, Greece slipped one rank compared to the preceding year, to 19th among the EU-27. When it comes to its overall share of renewable energy sources, the Hellenic Republic moves close to the EU average, recording 21.7% vs. 22.1% in the EU-27, having continuously risen since 2017 and comparing as more advanced in terms of use of renewables in heating/cooling while lagging somewhat behind as regards the use of renewable energy sources in transport. Given its geographical location, we gather that Greece harbors ambitions to become a strategic energy hub, increasingly focusing on becoming a green energy corridor between MENA countries and Western Europe, with the so-called GREGY interconnection intended to link Egypt and Europe via Greece representing a project in the planning.

With regard to the domestic political environment, we will follow developments around the upcoming parliamentary election, which will have to be held by July 2023, but reportedly may be scheduled somewhat earlier. Judging by recent polls, the governing New Democracy party remains in the lead, but has lost support since the election. While we generally expect major parties to adhere to implementing the RRP, coherent policymaking might become somewhat more challenging, depending on the actual political constellation.

### Fiscal Sustainability

The buoyant economic recovery and resulting shrinking headline deficit, as well as high inflation rates pushing up nominal GDP growth, have considerably improved Greece's fiscal metrics, although the public debt ratio remains the highest in the EU. Support measures to alleviate adverse effects from high energy costs on the private sector and adverse economic reverberations on important Greek trading partners from the Russian war against Ukraine could at least slow down further improvements of public finances, also given the upcoming election. We expect the debt-to-GDP ratio to shrink further over the medium-term, but it will ultimately remain high. The assumed downward movement should be aided by the early repayment of all outstanding credit from the IMF earlier this year and further debt relief as agreed with European partners, corroborating our view of an improving payment record. The sovereign's very favorable public debt profile, including its debt holder structure as well as a pronounced cash buffer remain risk-mitigating factors, shielding the Hellenic Republic against an

# Creditreform ⊆ Rating

abrupt worsening of financial market conditions, which have become less benign amid monetary policy tightening and will prospectively weigh somewhat on debt affordability. Underscoring the impression that the banking sector is becoming more resilient, the stock of NPLs has continued to decrease significantly, although mainly among the systemically important institutions and still comparing as relatively high. We reiterate our belief that the government's stated aim for the sovereign to be awarded investment grade status will incentivize fiscal discipline to be exerted over the medium term.

The pandemic has caused a setback to Greece's fiscal consolidation over recent years, prompting the general government balance to swing into a large deficit in 2020 (9.9% of GDP), which on the back of a strong economic recovery could be reduced to 7.5% in 2021, a stronger reduction than we had expected in our last review (Dec-21). Total expenditure still increased by 5.7% (2020: 13.3%) in the face of further rising subsidies in particular. That said, total revenues were boosted by rising tax revenue, ultimately mounting by 10.4% (2020: -7.3%).

Support measures to address high energy costs are estimated to come to about 2% of our estimated GDP in 2022. In light of the phasing-out of Covid-19 measures and the economic recovery, we expect the general government deficit to shrink to about 4.0% this year. Indeed, public finances seem to be on a more favorable course than estimated in the Budget 2022, suggesting that the headline deficit may be reduced to a larger extent than assumed. Net revenue from Jan-Oct-22 rose by 10.7% compared to the same period in 2021 (monthly state budget execution data), standing 12.1% above the target included in the Budget 2022, mainly driven by tax receipts. Total state budget expenditure meanwhile fell by 3.6% y-o-y, remaining 1.8% below target.

With regard to 2023, energy support measures are expected to be largely offset by the mechanism to tax the windfall profits of energy producers. On the other hand, more permanent tax cuts announced with the support package in Sep-22, including the elimination of the solidarity tax for pensioners and public sector employees could come to roughly 0.7% of our estimated 2023 GDP. Overall, we expect the headline deficit to be reduced to about 2.2% of GDP, acknowledging uncertainty over the assumed slowdown in economic growth and the persistence of high consumer prices.

The primary balance will likely remain in negative territory in 2022, whereas we think that the government's target of a positive primary balance will be met in 2023, notwithstanding the geopolitical and economic uncertainty. We recall that the Greek authorities, in the 2022 Stability Program, expected an almost balanced headline balance by 2025, which continues to seem feasible.

Concerning structural deficiencies weighing on the fiscal performance in the more recent past, we note that, according to latest estimates, Greece was able to lower its relatively high VAT gap in two consecutive years. Given the new IT collection system for the Independent Authority for Public Revenue (IAPR), which was expected to be fully operational by mid-Oct-22, we think that prospects to tackle this issue have improved.

Greece's debt-to-GDP ratio fell by 13.1 p.p. from its pandemic-induced increase in 2020 to 193.3% of GDP in 2021. Given the shrinking deficit, and ongoing, though transitorily slowing economic recovery, we anticipate Greece's public debt ratio to decline further to about 166.9% of GDP at the end of 2022. As of Q2-22, debt-to-GDP had dropped to 182.1% of GDP, still representing the highest in the euro area (EA Q2-22: 94.2% of GDP). For 2023, we currently expect the public debt ratio to decrease to 158.8% of GDP. A decision by Eurostat is pending on how to

# Creditreform C Rating

account for guarantees related to the Hellenic Asset Protection Scheme (HAPS). These may have to be added to the stock of general government debt, potentially adding about EUR 18.7bn or roughly 8.9 % of our estimated GDP in 2022.

Early repayment of all outstanding credit to the IMF (04 April 2022), two years ahead of schedule, in the amount of about EUR 1,1867mn, will be conducive to lowering Greece's public debt ratio over the medium term. The same applies to the release of the 7th tranche of policy-contingent debt relief by the Eurogroup earlier this year and the greenlighted release of the 8th and final tranche of such debt relief towards the end of the current year.

In addition, authorities foresee early repayment of part of the loans under the European Greek Loan Facility by the end of the year, thus underscoring ongoing sound debt management, which in our view remains an important risk-mitigating factor with regard to fiscal sustainability. At the end of Aug-22, the total sum of loans granted by the Support Mechanism came to about EUR 239.5bn (Ministry of Finance data). The effective weighted average interest rate (cash basis) has decreased to a low 1.53% considering the year to Sep-22 (PDMA).

Further elements alleviating fiscal risks continue to be the rather benign debt profile, with 76% of the debt held by the official sector and a weighted average maturity of central government debt of 18.0y as of 30 Sep-22 (PDMA). Adding to the mitigation of refinancing risks, the sovereign operates with a considerable cash buffer, amounting to roughly EUR 35bn as of the end of Oct-22 (EC intelligence, ~19.3% of 2021 GDP).

Risks from rising bond yields thus seem limited at this stage. Nevertheless, while interest payments have continued to fall last year, by 8.7% (2020: -18.6%) to 5.0% of total revenue (2020: 6.0%), these look set to increase further out in view of less favorable financial market conditions against the backdrop of monetary policy tightening, and given that the authorities continue a normalization process in terms of capital market funding. In the bond auction on 14-Nov-22, the yield was set at 4.44% as compared to 3.67% in the previous auction in Jul-22.

We highlight that the ECB still reinvests the principal payments of maturing government bond purchases made under the PEPP, in Greece's case amounting to about 9.9% of outstanding central government debt as of Sep-22 (PDMA data). Modalities concerning the ECB's balance sheet will be discussed at the December monetary policy meeting. Apart from that, we expect the ECB to lift its policy rates by a further 50 basis points on this occasion, and to continue with a somewhat slower pace in 2023.

Meanwhile, the banking sector has continued to make decisive progress in strengthening its resilience, judging by relevant metrics regarding asset quality and capitalization. In terms of size as measured by assets-to-GDP, the sector moves in the middle range among the EU countries, (168.8% of GDP as of Q2-22). According to EBA data, the NPL ratio has dropped to 5.2% as of Q2-22, representing a substantial fall vs. Q2-21 (-9.6 p.p.). Drawing on Bank of Greece data, the NPL ratio fell from 20.4% to 10.0% in the year to Q2-22, largely thanks to disposal of assets among the four systemically important banks, whereas the NPL ratio of less significant banks is still very high, standing at 49.7% as of Jun-22.

We gather that the total reduction of NPL stocks reached EUR 53.7bn among the systemically important banks since Dec-19, aided by the HAPS ('Hercules') which expired in Oct-22. Most of this reduction was through loan sales and - to a lesser extent - through write-offs. We stress that the Hellenic Financial Stability Fund (HFSF) has been extended until the end of 2025, accentuating its stabilizing function for the sector, as legacy assets will have to be disposed of. At the same

# Creditreform ⊆ Rating

time, we are cautious as regards possibly increasing arrears going forward, and will monitor the development of the banking sector's asset quality vigilantly.

While we consider risks to the banking sector from the tightening monetary policy cycle as manageable at this stage, outstanding loans to NFCs increased by 5.7% y-o-y in Sep-22 (see above), whilst interest rate conditions have deteriorated as seen from the borrower's point of view. Further to contingent liabilities, public guarantees remain elevated, but are expected to continue declining. From a level corresponding to 15.4% of GDP in 2021, they are estimated to fall to 12.4% of GDP in 2022 and further to 12.0% of GDP in 2023 (DBP23).

Given that Greece exhibits one of the highest old-age dependency ratios in the EU (2021: 35.6, EU: 32.5) and in light of projections for further notable increases (41.9 by 2030, EU: 39.1, EU Ageing Report 2021), we would continue to monitor developments around age-related costs. To be sure, we note that the 2021 EU Ageing Report projected age-related costs to decline over coming years. While a pension indexation mechanism to be applied from 2023 could potentially worsen prospects for age-related costs, pension reforms over recent years, including the overhauled auxiliary pension system in force since Jan-22, may ultimately rein in any longer-term fiscal pressure.

We will also continue to monitor developments around pending legal cases such as the litigation cases against the Public Real Estate Company (ETAD), while a recent ruling by the Council of State on retroactive compensation regarding supplementary pensions seems to point towards ultimately limited adverse fiscal effects via this channel.

#### Foreign Exposure

Despite the highly negative NIIP, we believe that Greece's external vulnerabilities are mitigated by the external debt composition, i.e. the high share of debt held by official creditors. Apart from further recovery in tourism, any improvement in the current account balance will be closely tied to moderating prices for energy commodities and related trade flows, as well as to economic activity of Greece's main trading partners.

After having dropped markedly in 2020, Greece's current account balance remained virtually unchanged in 2021 in GDP terms, amounting to -6.8% (2020: -6.6% of GDP). Driven by a recovery in the number of tourists, the service surplus widened, although it fell short of its pre-pandemic level. At the same time, more than offsetting the deficit-reducing effect of the recovering services account, the negative balance in goods trade weakened further, on the back of strengthening import demand and a deteriorating balance of fuels. Looking at more recent quarterly data, and drawing on the four-quarter moving sum, the current account deficit deepened considerably, coming to 8.2% of GDP in Q2-22, with the worsening fuels balance as the main driver.

While we expect the current account deficit to remain close to recent, more pronounced, levels going into 2023, the deficit should start to shrink over the course of 2023, assuming some decrease in energy prices and absence of an escalation of the Russian aggression against Ukraine as well as further recovering tourism.

Greece continues to feature the largest negative NIIP among the EU-27 countries, posting at -171.9% of GDP in 2021. Nevertheless, we view risks commonly associated with a large net external debtor position as being mitigated by the large proportion of (central) government debt in the hands of the official sector, rendering sudden capital outflows unlikely. Latest available

# Creditreform ⊆ Rating

data show that the NIIP improved to -155.4% of GDP in Q2-2022, leaving it roughly on par with its pre-pandemic reading (-155.7% in Q4-19).

### **Rating Outlook and Sensitivity**

Our rating outlook on the Hellenic Republic is stable. Downside risks relate to economic fallout, including high energy prices from the war in Ukraine, uncertainty over the extent and pace of the expected downward trend in the public debt ratio and – although more remote by now – remaining risks associated with the evolution of the coronavirus. We view these risks as more or less balanced by further progress in the implementation of measures to strengthen the institutional set-up and enhance underlying growth as well as by mitigating factors concerning fiscal risks as elaborated above.

We could consider a negative rating action if fiscal metrics fall short of our expectations, possibly on the back of more pronounced negative economic fallout from the war in Ukraine, also requiring extended fiscal support. A significant reversal of the improving trend in NPLs in the banking sector could add to such a scenario. We could also contemplate lowering the outlook and/or the rating if we observe back-tracking on structural reforms and/or authorities fail to implement measures to enhance underlying growth and the institutional framework. In such a scenario, we would expect detrimental effects on the medium-term growth outlook and potential growth, ultimately also bearing down on the fiscal outlook.

By contrast, we could raise the outlook and/or rating in the event of a substantial acceleration of the implementation of sustainable growth-enhancing measures and clear indications of significantly higher growth rates, possibly on the back of strong improvements on the labor market and regarding the business environment. Upward pressure on our rating could also arise if the debt level embarks on a significantly stronger downward trajectory than currently assumed, flanked by a substantial broad-based improvement of NPL ratios and an unwavering commitment to pursue a credible fiscal consolidation path over the medium term, and possibly enhanced by markedly improving prospects with regard to age-related costs.

### **Analysts**

Primary Analyst
Fabienne Riefer
Sovereign Credit Analyst
f.riefer@creditreform-rating.de
+49 2131 109 1462

Chairperson
Dr Benjamin Mohr
Head of Sovereign Ratings
b.mohr@creditreform-rating.de
+49 2131 109 5172

# Creditreform ⊆ Rating

### Ratings\*

Long-term sovereign rating BB+ /stable

Foreign currency senior unsecured long-term debt BB+ /stable

Local currency senior unsecured long-term debt BB+ /stable

#### **ESG Factors**

Creditreform Rating has signed the ESG in credit risk and ratings statement formulated within the framework of the UN Principles for Responsible Investment (UN PRI). The rating agency is thus committed to taking environmental and social factors as well as aspects of corporate governance into account in a targeted manner when assessing creditworthiness.

While there is no universal and commonly agreed typology or definition of environment, social, and governance (ESG) criteria, Creditreform Rating views ESG factors as an essential yardstick for assessing the sustainability of a state. Creditreform Rating thus takes account of ESG factors in its decision-making process before arriving at a sovereign credit rating. In the following, we explain how and to what degree any of the key drivers behind the credit rating or the related outlook is associated with what we understand to be an ESG factor, and outline why these ESG factors were material to the credit rating or rating outlook.

For further information on the conceptual approach pertaining to ESG factors in public finance and the relevance of ESG factors to sovereign credit ratings and to Creditreform Rating credit ratings more generally, we refer to the basic documentation, which lays down key principles of the impact of ESG factors on credit ratings.

### **ESG Factor Box**



<sup>\*)</sup> Unsolicited

# Creditreform ⊆ Rating

The governance dimension plays a pivotal role in forming our opinion on the creditworthiness of the sovereign. As the World Bank's Worldwide Governance Indicators Rule of Law, Government Effectiveness, Voice and Accountability, and Control of corruption have a material impact on Creditreform Rating's assessment of the sovereign's institutional set-up, which we regard as a key rating driver, we consider the ESG factors 'Judicial System and Property Rights', 'Quality of Public Services and Policies', 'Civil Liberties and Political Participation', and 'Integrity of Public Officials' as highly significant to the credit rating.

Since indicators relating to the assessment of a economy's competitive stance by e.g. the World Bank, the World Economic Forum, the European Commission, and IMD Business School add further input to our rating or adjustments thereof, we judge the ESG factor 'Business Environment' as significant.

The social dimension plays an important role in forming our opinion on the creditworthiness of the sovereign. Labor market metrics constitute crucial goalposts in Creditreform Rating's considerations on macroeconomic performance of the sovereign, and we regard the ESG factor 'Labor' as significant to the credit rating or adjustments thereof. Indicators or projections providing insight into likely demographic developments and related cost represent a social component affecting our rating or adjustments thereof. Hence, we regard the ESG factor 'Demographics' as less significant in our ESG framework.

While Covid-19 may have significant adverse effects on several components in our ESG factor framework in the medium to long term, it has not been visible in the relevant metrics we consider in the context of ESG factors – though it has a significant bearing concerning economic prospects and public finances. To be sure, we will follow ESG dynamics closely in this regard.

# Creditreform ⊆ Rating

### **Economic Data**

Macroeconomic Performance         Real GDP growth         1.1         1.7         1.9         -9.0         8.4         6.5         1.2           GDP per capita (PPP, USD)         28,518         29,761         30,888         28,457         32,23         36,466         38,608           Credit to the private sector/GDP         103.8         94.6         83,9         85,5         60.1         n/a         n/a           Unemployment rate         21.8         19.7         17.9         17.6         14.7         n/a         n/a           Real unit labor costs (index 2015=100)         100.3         99.4         99.2         107.4         102.7         95.5         93.4           World Competitiveness Ranking (rank)         57         57         58         49         46         47         n/a           Inference Control of Corruption (scare)         81.4         81.9         81.4         80.3         n/a         n/a           WGI Voice and Accountability (score)         0.1         0.1         0.2         0.3         0.3         n/a         n/a           WGI Government Effectiveness (score)         0.3         0.3         0.3         0.4         0.4         n/a         n/a           HICP inflation rate, y-o-y chan	[in %, otherwise noted]	2017	2018	2019	2020	2021	2022e	2023e	
GDP per capita (PPP, USD)         28,518         29,761         30,888         28,457         32,23         36,466         38,608           Credit to the private sector/GDP         103.8         94.6         83.9         85.5         60.1         n/a         n/a           Unemployment rate         21.8         19.7         17.9         17.6         14.7         n/a         n/a           Real unit labor costs (index 2015=100)         100.3         99.4         99.2         107.4         102.7         95.5         93.4           World Competitiveness Ranking (rank)         57         57         58         49         46         47         n/a           Life expectancy at birth (years)         81.4         81.9         81.7         81.4         80.3         n/a         n/a           Life expectancy at birth (years)         81.4         81.9         81.7         81.4         80.3         n/a         n/a           MGI Covertancy         0.1         0.1         0.2         0.3         0.3         n/a         n/a           WGI Government Effectiveness (score)         0.7         0.7         0.8         1.0         1.0         n/a         n/a           GHG emissions (tons of CO2 equivalent p.c.) <td< td=""><td>Macroeconomic Performance</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Macroeconomic Performance								
Credit to the private sector/GDP         133.8         94.6         83.9         85.5         60.1         n/a         n/a           Unemployment rate         21.8         19.7         17.9         17.6         14.7         n/a         n/a           Real unit labor costs (index 2015=100)         100.3         99.4         99.2         107.4         102.7         95.5         93.4           World Competitiveness Ranking (rank)         57         57         58         49         46         47         n/a           Life expectancy at birth (years)         81.4         81.9         81.7         81.4         80.3         n/a         n/a           Life expectancy at birth (years)         81.4         81.9         81.7         81.4         80.3         n/a         n/a           Life expectancy at birth (years)         81.4         81.9         81.7         81.4         80.3         n/a         n/a           Life expectancy at birth (years)         81.4         81.9         81.7         81.4         80.3         n/a         n/a           Life expectancy at birth (years)         81.4         81.9         10.0         0.0         0.1         0.2         n/a         n/a           Will Rule of Law (score)<	Real GDP growth	1.1	1.7	1.9	-9.0	8.4	6.5	1.2	
Unemployment rate         21.8         19.7         17.9         17.6         14.7         n/a         n/a           Real unit labor costs (index 2015=100)         100.3         99.4         99.2         107.4         102.7         95.5         93.4           World Competitiveness Ranking (rank)         57         57         58         49         46         47         n/a           Life expectancy at birth (years)         81.4         81.9         81.7         81.4         80.3         n/a         n/a           Istitutional Structure         WGI Score)         0.1         0.1         0.2         0.3         0.3         n/a         n/a           WGI Voice and Accountability (score)         0.1         0.0         0.0         0.1         0.2         n/a         n/a         n/a           WGI Voice and Accountability (score)         0.7         0.7         0.8         1.0         1.0         n/a         n/a           WGI Voice and Accountability (score)         0.7         0.7         0.8         1.0         1.0         n/a         n/a           WGI Voice and Accountability (score)         0.7         0.7         0.8         1.0         1.0         n/a         n/a           HIC	GDP per capita (PPP, USD)	28,518	29,761	30,888	28,457	32,23	36,466	38,608	
Real unit labor costs (index 2015=100)         100.3         99.4         99.2         107.4         102.7         95.5         93.4           World Competitiveness Ranking (rank)         57         57         58         49         46         47         n/a           Life expectancy at birth (years)         81.4         81.9         81.7         81.4         80.3         n/a         n/a           Institutional Structure         WGI Role of Law (score)         0.1         0.1         0.2         0.3         0.3         n/a         n/a           WGI Control of Corruption (score)         0.1         0.0         0.0         0.1         0.2         n/a         n/a         n/a           WGI Voice and Accountability (score)         0.7         0.7         0.8         1.0         1.0         n/a         n/a           WGI Government Effectiveness (score)         0.3         0.3         0.3         0.4         0.4         n/a         n/a           HICP inflation rate, y-0-y change         1.1         0.8         0.5         -1.3         0.6         9.5         4.5           GHG emissions (tons of CO2 equivalent p.c.)         9.2         9.0         8.4         7.1         n/a         n/a         n/a	Credit to the private sector/GDP	103.8	94.6	83.9	85.5	60.1	n/a	n/a	
World Competitiveness Ranking (rank)         57         57         58         49         46         47         n/a           Life expectancy at birth (years)         81.4         81.9         81.7         81.4         80.3         n/a         n/a           Institutional Structure         WGI Rule of Law (score)         0.1         0.1         0.2         0.3         0.3         n/a         n/a           WGI Control of Corruption (score)         0.1         0.0         0.0         0.1         0.2         n/a         n/a         n/a           WGI Voice and Accountability (score)         0.7         0.7         0.8         1.0         1.0         n/a         n/a           WGI Government Effectiveness (score)         0.3         0.3         0.3         0.4         0.4         n/a         n/a           HICP inflation rate, y-o-y change         1.1         0.8         0.5         -1.3         0.6         9.5         4.5           GHG emissions (tons of CO2 equivalent p.c.)         9.2         9.0         8.4         7.1         n/a         n/a         n/a           Ibefault history (years since default)         5         6         7         8         9         10         11	Unemployment rate	21.8	19.7	17.9	17.6	14.7	n/a	n/a	
Life expectancy at birth (years) 81.4 81.9 81.7 81.4 80.3 n/a n/a  Institutional Structure  WGI Rule of Law (score) 0.1 0.1 0.1 0.2 0.3 0.3 n/a n/a  WGI Control of Corruption (score) 0.7 0.7 0.8 1.0 1.0 0.2 n/a n/a  WGI Government Effectiveness (score) 0.3 0.3 0.3 0.4 0.4 n/a n/a  HICP inflation rate, y-o-y change 1.1 0.8 0.5 -1.3 0.6 9.5 4.5  GHG emissions (tons of CO2 equivalent p.c.) 9.2 9.0 8.4 7.1 n/a n/a n/a n/a  Default history (years since default) 5 6 7 8 9 10 11  Fiscal Sustainability  Fiscal Balance/GDP 0.6 0.9 1.1 -9.9 -7.5 -4.0 -2.2  General government gross debt/GDP 179.5 186.4 180.6 206.3 193.3 166.9 158.8  Interest/revenue 6.4 6.8 6.1 6.0 5.0 n/a n/a  Debt/revenue 365.4 376.9 368.8 414.5 389.1 n/a n/a  Total residual maturity of debt securities (years) 8.2 8.0 7.7 9.2 9.5 n/a n/a  Foreign exposure  Current account balance/GDP -1.9 -2.9 -1.5 -6.6 -6.8 n/a n/a  International reserves/imports 0.1 0.1 0.1 0.2 0.2 n/a n/a	Real unit labor costs (index 2015=100)	100.3	99.4	99.2	107.4	102.7	95.5	93.4	
WGI Rule of Law (score)   0.1   0.1   0.2   0.3   0.3   0.4   0.4   0.5   0.	World Competitiveness Ranking (rank)	57	57	58	49	46	47	n/a	
WGI Rule of Law (score)         0.1         0.1         0.2         0.3         0.3         n/a         n/a           WGI Control of Corruption (score)         -0.1         0.0         0.0         0.1         0.2         n/a         n/a           WGI Voice and Accountability (score)         0.7         0.7         0.8         1.0         1.0         n/a         n/a           WGI Government Effectiveness (score)         0.3         0.3         0.3         0.4         0.4         n/a         n/a           HICP inflation rate, y-o-y change         1.1         0.8         0.5         -1.3         0.6         9.5         4.5           GHG emissions (tons of CO2 equivalent p.c.)         9.2         9.0         8.4         7.1         n/a         n/a         n/a           Default history (years since default)         5         6         7         8         9         10         11           Fiscal Sustainability           Fiscal Sustainability         179.5         186.4         180.6         206.3         193.3         166.9         158.8           Interest/revenue         6.4         6.8         6.1         6.0         5.0         n/a         n/a           Total residual	Life expectancy at birth (years)	81.4	81.9	81.7	81.4	80.3	n/a	n/a	
WGI Control of Corruption (score)         -0.1         0.0         0.0         0.1         0.2         n/a         n/a           WGI Voice and Accountability (score)         0.7         0.7         0.8         1.0         1.0         n/a         n/a           WGI Government Effectiveness (score)         0.3         0.3         0.3         0.4         0.4         n/a         n/a           HICP inflation rate, y-o-y change         1.1         0.8         0.5         -1.3         0.6         9.5         4.5           GHG emissions (tons of CO2 equivalent p.c.)         9.2         9.0         8.4         7.1         n/a         n/a         n/a           Default history (years since default)         5         6         7         8         9         10         11           Fiscal Sustainability           Fiscal Sustainability           Fiscal Balance/GDP         0.6         0.9         1.1         -9.9         -7.5         -4.0         -2.2           General government gross debt/GDP         179.5         186.4         180.6         206.3         193.3         166.9         158.8           Interest/revenue         6.4         6.8         6.1         6.0         5.0<	Institutional Structure								
WGI Voice and Accountability (score)         0.7         0.7         0.8         1.0         1.0         n/a         n/a           WGI Government Effectiveness (score)         0.3         0.3         0.3         0.4         0.4         n/a         n/a           HICP inflation rate, y-o-y change         1.1         0.8         0.5         -1.3         0.6         9.5         4.5           GHG emissions (tons of CO2 equivalent p.c.)         9.2         9.0         8.4         7.1         n/a         n/a         n/a           Default history (years since default)         5         6         7         8         9         10         11           Fiscal Sustainability           Fiscal Sustainability         8         9         10         11           Fiscal balance/GDP         0.6         0.9         1.1         -9.9         -7.5         -4.0         -2.2           General government gross debt/GDP         179.5         186.4         180.6         206.3         193.3         166.9         158.8           Interest/revenue         6.4         6.8         6.1         6.0         5.0         n/a         n/a           Total residual maturity of debt securities (years)         8.2 <td>WGI Rule of Law (score)</td> <td>0.1</td> <td>0.1</td> <td>0.2</td> <td>0.3</td> <td>0.3</td> <td>n/a</td> <td>n/a</td>	WGI Rule of Law (score)	0.1	0.1	0.2	0.3	0.3	n/a	n/a	
WGI Government Effectiveness (score)         0.3         0.3         0.3         0.4         0.4         n/a         n/a           HICP inflation rate, y-o-y change         1.1         0.8         0.5         -1.3         0.6         9.5         4.5           GHG emissions (tons of CO2 equivalent p.c.)         9.2         9.0         8.4         7.1         n/a         n/a         n/a           Default history (years since default)         5         6         7         8         9         10         11           Fiscal Sustainability           Fiscal Balance/GDP         0.6         0.9         1.1         -9.9         -7.5         -4.0         -2.2           General government gross debt/GDP         179.5         186.4         180.6         206.3         193.3         166.9         158.8           Interest/revenue         6.4         6.8         6.1         6.0         5.0         n/a         n/a           Debt/revenue         365.4         376.9         368.8         414.5         389.1         n/a         n/a           Total residual maturity of debt securities (years)         8.2         8.0         7.7         9.2         9.5         n/a         n/a <td co<="" td=""><td>WGI Control of Corruption (score)</td><td>-0.1</td><td>0.0</td><td>0.0</td><td>0.1</td><td>0.2</td><td>n/a</td><td>n/a</td></td>	<td>WGI Control of Corruption (score)</td> <td>-0.1</td> <td>0.0</td> <td>0.0</td> <td>0.1</td> <td>0.2</td> <td>n/a</td> <td>n/a</td>	WGI Control of Corruption (score)	-0.1	0.0	0.0	0.1	0.2	n/a	n/a
HICP inflation rate, y-o-y change 1.1 0.8 0.5 -1.3 0.6 9.5 4.5 GHG emissions (tons of CO2 equivalent p.c.) 9.2 9.0 8.4 7.1 n/a n/a n/a n/a Default history (years since default) 5 6 7 8 9 10 11 Fiscal Sustainability  Fiscal balance/GDP 0.6 0.9 1.1 -9.9 -7.5 -4.0 -2.2 General government gross debt/GDP 179.5 186.4 180.6 206.3 193.3 166.9 158.8 Interest/revenue 6.4 6.8 6.1 6.0 5.0 n/a n/a Debt/revenue 365.4 376.9 368.8 414.5 389.1 n/a n/a Total residual maturity of debt securities (years) 8.2 8.0 7.7 9.2 9.5 n/a n/a Foreign exposure  Current account balance/GDP -1.9 -2.9 -1.5 -6.6 -6.8 n/a n/a International reserves/imports 0.1 0.1 0.1 0.2 0.2 n/a n/a N/a NIIP/GDP -143.4 -148.6 -154.1 -173.8 -171.9 n/a n/a	WGI Voice and Accountability (score)	0.7	0.7	0.8	1.0	1.0	n/a	n/a	
GHG emissions (tons of CO2 equivalent p.c.) 9.2 9.0 8.4 7.1 n/a n/a n/a n/a n/a pefault history (years since default) 5 6 7 8 9 10 11  Fiscal Sustainability Fiscal balance/GDP 0.6 0.9 1.1 9.9 7.5 4.0 -2.2 General government gross debt/GDP 179.5 186.4 180.6 206.3 193.3 166.9 158.8 Interest/revenue 6.4 6.8 6.1 6.0 5.0 n/a n/a Debt/revenue 365.4 376.9 368.8 414.5 389.1 n/a n/a Total residual maturity of debt securities (years) 8.2 8.0 7.7 9.2 9.5 n/a n/a Foreign exposure Current account balance/GDP -1.9 -2.9 -1.5 -6.6 -6.8 n/a n/a International reserves/imports 0.1 0.1 0.1 0.1 0.2 0.2 n/a n/a	WGI Government Effectiveness (score)	0.3	0.3	0.3	0.4	0.4	n/a	n/a	
Default history (years since default)         5         6         7         8         9         10         11           Fiscal Sustainability           Fiscal balance/GDP         0.6         0.9         1.1         -9.9         -7.5         -4.0         -2.2           General government gross debt/GDP         179.5         186.4         180.6         206.3         193.3         166.9         158.8           Interest/revenue         6.4         6.8         6.1         6.0         5.0         n/a         n/a           Debt/revenue         365.4         376.9         368.8         414.5         389.1         n/a         n/a           Total residual maturity of debt securities (years)         8.2         8.0         7.7         9.2         9.5         n/a         n/a           Foreign exposure           Current account balance/GDP         -1.9         -2.9         -1.5         -6.6         -6.8         n/a         n/a           International reserves/imports         0.1         0.1         0.1         0.2         0.2         n/a         n/a           NIIP/GDP         -143.4         -148.6         -154.1         -173.8         -171.9         n/a         n/a <td>HICP inflation rate, y-o-y change</td> <td>1.1</td> <td>0.8</td> <td>0.5</td> <td>-1.3</td> <td>0.6</td> <td>9.5</td> <td>4.5</td>	HICP inflation rate, y-o-y change	1.1	0.8	0.5	-1.3	0.6	9.5	4.5	
Fiscal Sustainability           Fiscal balance/GDP         0.6         0.9         1.1         -9.9         -7.5         -4.0         -2.2           General government gross debt/GDP         179.5         186.4         180.6         206.3         193.3         166.9         158.8           Interest/revenue         6.4         6.8         6.1         6.0         5.0         n/a         n/a           Debt/revenue         365.4         376.9         368.8         414.5         389.1         n/a         n/a           Total residual maturity of debt securities (years)         8.2         8.0         7.7         9.2         9.5         n/a         n/a           Foreign exposure           Current account balance/GDP         -1.9         -2.9         -1.5         -6.6         -6.8         n/a         n/a           International reserves/imports         0.1         0.1         0.1         0.2         0.2         n/a         n/a           NIIP/GDP         -143.4         -148.6         -154.1         -173.8         -171.9         n/a         n/a	GHG emissions (tons of CO2 equivalent p.c.)	9.2	9.0	8.4	7.1	n/a	n/a	n/a	
Fiscal balance/GDP         0.6         0.9         1.1         -9.9         -7.5         -4.0         -2.2           General government gross debt/GDP         179.5         186.4         180.6         206.3         193.3         166.9         158.8           Interest/revenue         6.4         6.8         6.1         6.0         5.0         n/a         n/a           Debt/revenue         365.4         376.9         368.8         414.5         389.1         n/a         n/a           Total residual maturity of debt securities (years)         8.2         8.0         7.7         9.2         9.5         n/a         n/a           Foreign exposure           Current account balance/GDP         -1.9         -2.9         -1.5         -6.6         -6.8         n/a         n/a           International reserves/imports         0.1         0.1         0.1         0.2         0.2         n/a         n/a           NIIP/GDP         -143.4         -148.6         -154.1         -173.8         -171.9         n/a         n/a	Default history (years since default)	5	6	7	8	9	10	11	
General government gross debt/GDP         179.5         186.4         180.6         206.3         193.3         166.9         158.8           Interest/revenue         6.4         6.8         6.1         6.0         5.0         n/a         n/a           Debt/revenue         365.4         376.9         368.8         414.5         389.1         n/a         n/a           Total residual maturity of debt securities (years)         8.2         8.0         7.7         9.2         9.5         n/a         n/a           Foreign exposure           Current account balance/GDP         -1.9         -2.9         -1.5         -6.6         -6.8         n/a         n/a           International reserves/imports         0.1         0.1         0.1         0.2         0.2         n/a         n/a           NIIP/GDP         -143.4         -148.6         -154.1         -173.8         -171.9         n/a         n/a	Fiscal Sustainability								
Interest/revenue	Fiscal balance/GDP	0.6	0.9	1.1	-9.9	-7.5	-4.0	-2.2	
Debt/revenue         365.4         376.9         368.8         414.5         389.1         n/a         n/a           Total residual maturity of debt securities (years)         8.2         8.0         7.7         9.2         9.5         n/a         n/a           Foreign exposure           Current account balance/GDP         -1.9         -2.9         -1.5         -6.6         -6.8         n/a         n/a           International reserves/imports         0.1         0.1         0.1         0.2         0.2         n/a         n/a           NIIP/GDP         -143.4         -148.6         -154.1         -173.8         -171.9         n/a         n/a	General government gross debt/GDP	179.5	186.4	180.6	206.3	193.3	166.9	158.8	
Total residual maturity of debt securities (years) 8.2 8.0 7.7 9.2 9.5 n/a n/a  Foreign exposure  Current account balance/GDP -1.9 -2.9 -1.5 -6.6 -6.8 n/a n/a  International reserves/imports 0.1 0.1 0.1 0.2 0.2 n/a n/a  NIIP/GDP -143.4 -148.6 -154.1 -173.8 -171.9 n/a n/a	Interest/revenue	6.4	6.8	6.1	6.0	5.0	n/a	n/a	
Foreign exposure         -1.9         -2.9         -1.5         -6.6         -6.8         n/a         n/a           Current account balance/GDP         -1.9         -2.9         -1.5         -6.6         -6.8         n/a         n/a           International reserves/imports         0.1         0.1         0.1         0.2         0.2         n/a         n/a           NIIP/GDP         -143.4         -148.6         -154.1         -173.8         -171.9         n/a         n/a	Debt/revenue	365.4	376.9	368.8	414.5	389.1	n/a	n/a	
Current account balance/GDP         -1.9         -2.9         -1.5         -6.6         -6.8         n/a         n/a           International reserves/imports         0.1         0.1         0.1         0.2         0.2         n/a         n/a           NIIP/GDP         -143.4         -148.6         -154.1         -173.8         -171.9         n/a         n/a	Total residual maturity of debt securities (years)	8.2	8.0	7.7	9.2	9.5	n/a	n/a	
International reserves/imports         0.1         0.1         0.1         0.2         0.2         n/a         n/a           NIIP/GDP         -143.4         -148.6         -154.1         -173.8         -171.9         n/a         n/a	Foreign exposure								
NIIP/GDP -143.4 -148.6 -154.1 -173.8 -171.9 n/a n/a	Current account balance/GDP	-1.9	-2.9	-1.5	-6.6	-6.8	n/a	n/a	
	International reserves/imports	0.1	0.1	0.1	0.2	0.2	n/a	n/a	
External debt/GDP 229.1 232.0 244.6 298.7 305.3 n/a n/a	NIIP/GDP	-143.4	-148.6	-154.1	-173.8	-171.9	n/a	n/a	
	External debt/GDP	229.1	232.0	244.6	298.7	305.3	n/a	n/a	

Sources: IMF, World Bank, Eurostat, AMECO, ECB, ELSTAT, own estimates

### **Appendix**

### **Rating History**

Event	Publication Date	Rating /Outlook
Initial Rating	23.12.2016	B- /stable
Monitoring	22.12.2017	B- /positive
Monitoring	21.12.2018	B+ /stable
Monitoring	20.12.2019	B+ /positive
Monitoring	19.06.2020	B+ /stable
Monitoring	18.12.2020	B+ /positive
Monitoring	10.12.2021	BB- /positive
Monitoring	02.12.2022	BB+ /stable

### **Regulatory Requirements**

In 2011 Creditreform Rating AG (CRAG) was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration Creditreform Rating AG is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation. The rating was not endorsed by Creditreform Rating AG from a third country as defined in Article 4 (3) of the CRA-Regulation.

# Creditreform ⊆ Rating

This sovereign rating is an unsolicited credit rating. The Public Debt Management Agency participated in the credit rating process as it reviewed a draft version of the report. Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

Unsolicited Credit Rating	
With Rated Entity or Related Third Party Participation	YES
With Access to Internal Documents	NO
With Access to Management	NO

The rating was conducted on the basis of CRAG's "Sovereign Ratings" methodology (v1.2, July 2016) in conjunction with its basic document "Rating Criteria and Definitions" (v1.3, January 2018). CRAG ensures that methodologies, models and key rating assumptions for determining sovereign credit ratings are properly maintained, up-to-date, and subject to a comprehensive review on a periodic basis. A complete description of CRAG's rating methodologies and basic document "Rating Criteria and Definitions" is published on our website.

To prepare this credit rating, CRAG has used the following substantially material sources: International Monetary Fund, World Bank, Organization for Economic Co-operation and Development, Eurostat, European Commission, European Banking Authority, European Central Bank, World Economic Forum, IMD Business School, European Center for Disease Prevention and Control (ECDC), Blavatnik School of Government, European Investment Bank, Bank of Greece, Ministry of Finance, Public Debt Management Agency (PDMA), ELSTAT, Parliamentary Budget Office (PBO).

A Rating Committee was called consisting of highly qualified analysts of CRAG. The quality and extent of information available on the rated entity was considered satisfactory. The analysts and committee members declared that the rules of the Code of Conduct were complied with. No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or approving credit ratings and rating outlooks. The analysts presented the results of the quantitative and qualitative analyses and provided the Committee with a recommendation for the rating decision. After the discussion of the relevant quantitative and qualitative risk factors, the Rating Committee arrived at a unanimous rating decision. The weighting of all risk factors is described in CRAG´s "Sovereign Ratings" methodology. The main arguments that were raised in the discussion are summarized in the "Reasons for the Rating Decision".

As regards the rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within the credit rating report. There are no other attributes and limitations of the credit rating or rating outlook other than displayed on the CRAG website. In case of providing ancillary services to the rated entity, CRAG will disclose all ancillary services in the credit rating report.

# Creditreform ⊆ Rating

The date at which the credit rating was released for distribution for the first time and when it was last updated including any rating outlooks is indicated clearly and prominently in the rating report; the first release is indicated as "initial rating"; other updates are indicated as an "update", "upgrade or downgrade", "not rated", "affirmed", "selective default" or "default".

In accordance with Article 11 (2) EU-Regulation (EC) No 1060/2009 registered or certified credit rating agency shall make available in a central repository established by ESMA information on its historical performance data, including the ratings transition frequency, and information about credit ratings issued in the past and on their changes. Requested data are available on the ESMA website: <a href="https://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml">https://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml</a>.

An explanatory statement of the meaning of each rating category and the definition of default are available in the credit rating methodologies disclosed on the website.

#### Disclaimer

Any rating issued by Creditreform Rating AG is subject to the Creditreform Rating AG Code of Conduct which has been published on the web pages of Creditreform Rating AG. In this Code of Conduct, Creditreform Rating AG commits itself – systematically and with due diligence – to establish its independent and objective opinion as to the sustainability, risks and opportunities concerning the entity or the issue under review.

When assessing the creditworthiness of sovereign issuers, Creditreform Rating AG relies on publicly available data and information from international data sources, governments and national statistics. Creditreform Rating AG assumes no responsibility for the true and fair representation of the original information.

Future events are uncertain, and forecasts are necessarily based on assessments and assumptions. Hence, this rating is no statement of fact but an opinion. Neither should these ratings be construed as recommendations for investors, buyers or sellers. They should only be used by market participants (entrepreneurs, bankers, investors etc.) as one factor among others when arriving at investment decisions. Ratings are not meant to be used as substitutes for one's own research, inquiries and assessments. Thus, no express or implied warranty as to the accuracy, timeliness or completeness for any purpose of any such rating, opinion or information is given by Creditreform Rating AG in any form or manner whatsoever. Furthermore, Creditreform Rating AG cannot be held liable for the consequences of decisions made on the basis of any of their ratings.

This report is protected by copyright. Any commercial use is prohibited without prior written permission from Creditreform Rating AG. Only the full report may be published in order to prevent distortion of the report's overall assessment. Excerpts may only be used with the express consent of Creditreform Rating AG. Publication of the report without the consent of Creditreform Rating AG is prohibited. Only ratings published on the Creditreform Rating AG web pages remain valid.

Creditreform Rating AG

# Creditreform ⊆ Rating

### **Creditreform Rating AG**

Europadamm 2-6 D - 41460 Neuss

Phone +49 (0) 2131 / 109-626 Fax +49 (0) 2131 / 109-627 E-Mail info@creditreform-rating.de Internet www.creditreform-rating.de

CEO: Dr. Michael Munsch Chairman of the Board: Michael Bruns HRB 10522, Amtsgericht Neuss