



HELLENIC REPUBLIC
PUBLIC DEBT MANAGEMENT AGENCY

INVESTOR PRESENTATION | FUNDING STRATEGY IMPLEMENTATION

July 2024

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I. Public Debt Management of the Hellenic Republic

Key Achievements

Debt management strategy: First semester of 2024

Flexible and proactive debt management strategy aims at further enhancing the debt's attractive properties and sustainability parameters and navigate a challenging international market environment

- Against a backdrop of heightened government bond yields worldwide, following a 2 year-period of rapid monetary policy tightening, Greece's PDMA continued to pursue a flexible debt management strategy in the first half of 2024, raising debt through syndications and auctions
- This strategy aims at seizing favorable market windows and capitalizing on the ongoing risk re-rating of Greek assets following the return of the Hellenic Republic to investment grade in 2H.23. This effort is assisted by stronger than planned fiscal performance in 2023, as well as in the first months of 2024, and a credible outperformance of Greece's GDP growth trajectory against the euro area average
- €8.5 bn have been raised in the first semester of 2024 through GGB issuance at competitive terms corresponding to 85% of annual funding plan target, which will be partly used to finance new initiatives improving further the debt structure and servicing costs
- The PDMA's proactive debt management strategy of previous years – which in 2023 involved, inter alia, an early repayment of €5.3 bn of GLF loans, on December 15 – is planned to continue in 2024 with new interventions expected during the course of the year, as well as in the coming years, to further reduce debt service costs and smoothen the redemption profile

Targeted issuances increased liquidity across the yield curve supporting a more balanced repricing of Greek bonds to investment grade status

- Market operations in 2024 have injected new GGBs across the yield curve with key maturity points in 2034 (10Y) and 2054 (30Y)
- The new issuance targeted, *inter alia*, the most competitively priced areas of the yield curve, supporting market liquidity
- All the relevant maturity points of the Greek yield curve now entail benchmark-size GGBs. This targeted issuance strategy has allowed to increase market activity along the curve, securing an even smoother redemption profile
- An impressive drop in the debt-to-GDP ratio of c. 45 pps was achieved between 2020 and 2023, on the back of solid macroeconomic performance and exceptional debt characteristics – signifying the resilience of Greece's debt trajectory during a period of heightened volatility in fixed income markets – against a backdrop of challenging monetary, fiscal and geopolitical conditions internationally
- The Greek curve was stabilized below the respective yield curve of Italy and re-priced closer to those of Spain and Portugal

The investor base for this year's syndicated bond issuances remains diversified and was characterized by:

- **A strong presence of real money investors**, still representing the bulk of the investor base
- **A sustained presence of long-term investors**, in line with 2023 for comparable maturities

The return to investment grade after 13 years has been the culmination of remarkable macroeconomic adjustment and innovative debt management strategy which set the stage for further future upgrades:

- **Fitch, S&P, DBRS, R&I and Scope upgraded the Hellenic Republic to Investment Grade status** in the second semester of 2023, whereas the rating by Moody's remained only one notch below Investment Grade following a two-notch upgrade in September 2023
- **The rating outlook has been confirmed at stable** by all major rating agencies with **S&P and Scope revising it to positive** on April 19 and July 12, 2024, respectively

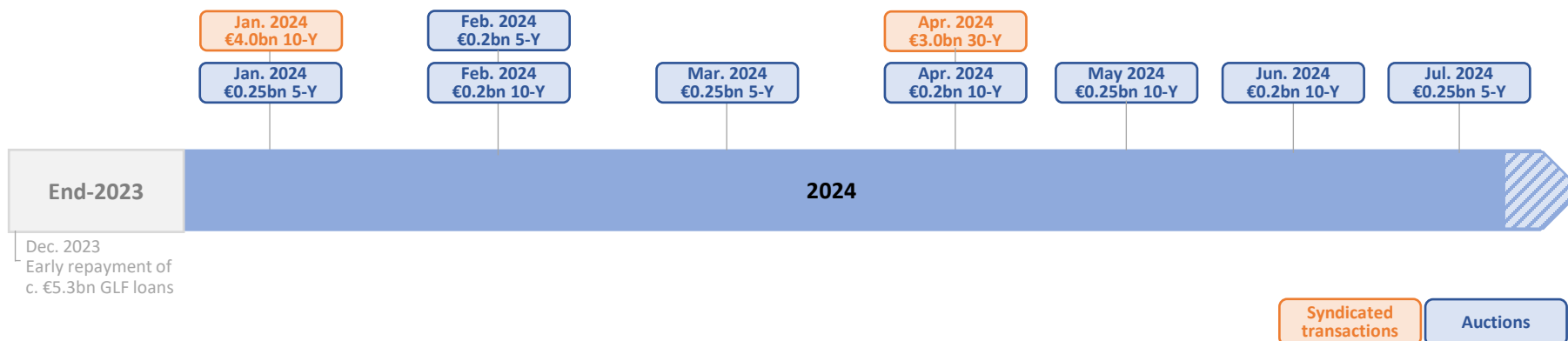
Efficient debt management against a backdrop of high market volatility, at the peak of monetary policy tightening, and of elevated geopolitical and fiscal risks worldwide

- Greece's PDMA continued to implement a flexible and preemptive debt management strategy in 7M.2024, raising €8.8 of debt through syndications and auctions, which corresponds to c. 90% of the original funding plan for the year
- The funding strategy aimed at seizing favorable market windows and capitalizing on positive market reaction related: i) to the return of the Hellenic Republic to investment grade in 2H.2023 and ii) solid macroeconomic and fiscal developments, confirmed by the latest fiscal and GDP data releases, published in 1H.2024, regarding FY.2023 and 1Q.2024 outcomes, respectively
- The new issuance was made at competitive terms, against a backdrop of increased government bond yields, as the financial markets remain cautious regarding the future pace of monetary policy normalization, following an aggressive tightening in 2022-23, while reassessing medium-term fiscal risks for major economies

Overview of Greek Government Bond Issues in 2024

ISINs	Issue/ Reopen. Date	Maturity Date	Tenor	Offered Amount	Issued Amount	Subscr. Rate	Yield	Spread vs Bund
Syndicated issuances								
GR0138018842	24/04/2024	15/06/2054	30Y	€33.0bn	€3.0bn	11.0x	4.24	151.8
GR0124040743	30/01/2024	15/06/2034	10Y	€35.0bn	€4.0bn	9.0x	3.48	119.3
Auctions								
GR0124035693	17/07/2024	12/03/2029	5Y	€906mn	€250mn	3.6x ⁽¹⁾	2.81	
GR0124040743	19/06/2024	15/06/2034	10Y	€727mn	€200mn	3.6x ⁽¹⁾	3.56	
GR0124040743	22/05/2024	15/06/2034	10Y	€835mn	€250mn	3.3x ⁽¹⁾	3.51	
GR0128016731	17/04/2024	04/02/2035	10Y	€714mn	€200mn	3.6x ⁽¹⁾	3.61	
GR0114033583	20/03/2024	15/06/2028	5Y	€929mn	€250mn	3.7x ⁽¹⁾	2.85	
GR0124039737	14/02/2024	15/06/2033	10Y	€711mn	€200mn	3.6x ⁽¹⁾	3.32	
GR0114033583	14/02/2024	15/06/2028	5Y	€623mn	€200mn	3.1x ⁽¹⁾	2.85	
GR0114033583	17/01/2024	15/06/2028	5Y	€1.09bn	€250mn	4.3x ⁽¹⁾	2.72	
Total:					€8.8bn			

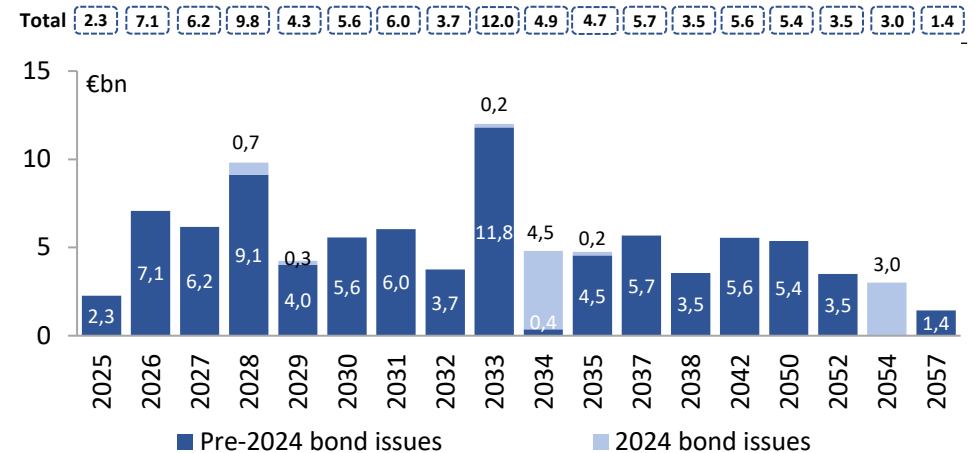
Overview of recent debt issuance and liability management operations



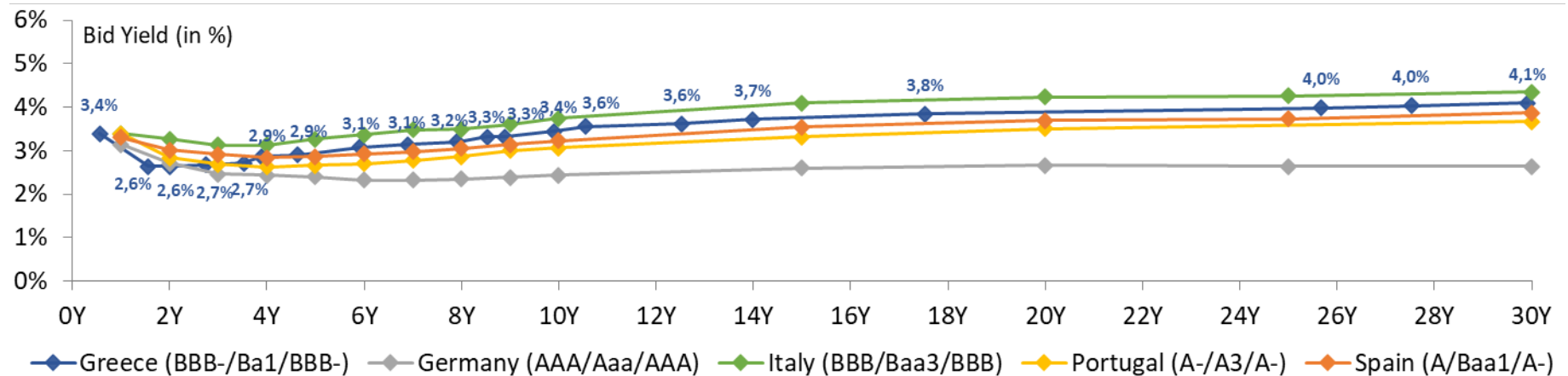
Targeted issuance increased liquidity across the yield curve speeding up the relative repricing of Greek government bonds to the investment grade status

- Market operations in 1H.2024 injected new GGBs, across the yield curve especially in key maturity points in 2028 (5Y), 2034 (10Y) & 2054 (30Y)
- New issuance focused on the most competitively priced areas of the yield curve increasing market liquidity and attracting new investors
- As a result of a consistent issuance strategy in previous years, as well as in 1H.2024, all key maturity points on the Greek yield curve are now linked to benchmark-size GGBs supporting liquidity and market activity, in conjunction with a smooth redemption profile
- The repricing of GGBs to investment grade status has stabilized the Greek curve below the respective yield curve of Italy and narrowed the distance from other, more competitively priced, sovereign curves such as those of Spain and Portugal. GGB yield compression was even larger for shorter maturities

Outstanding amount of GGBs per maturity (€bn)

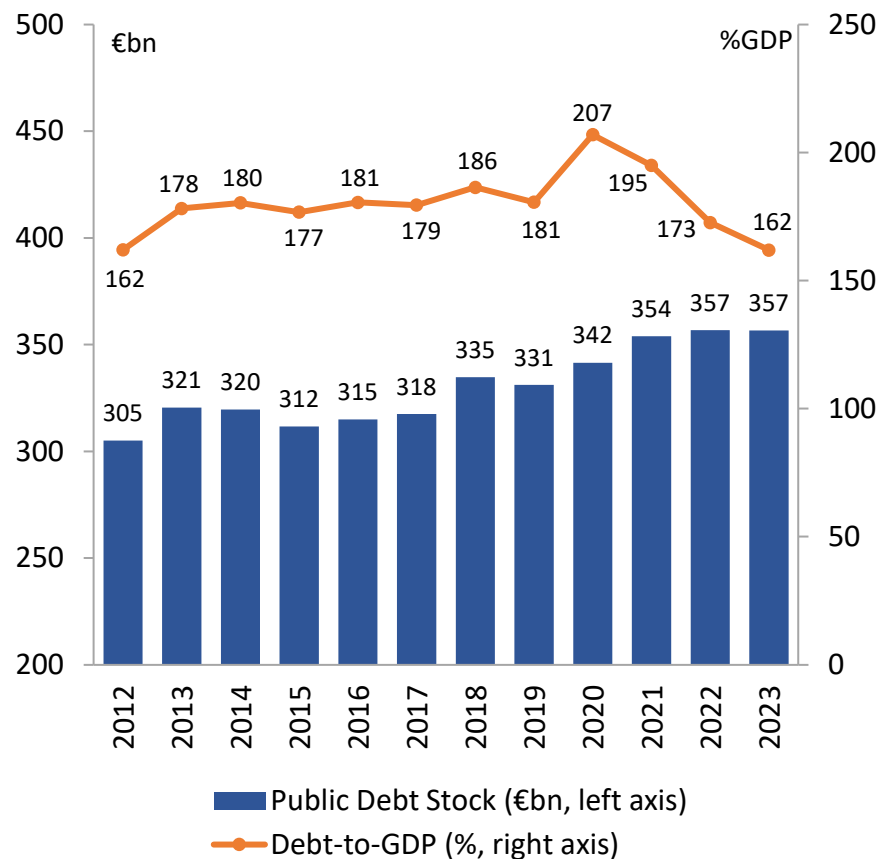


Selected European sovereign yield curves (as of 23 July 2024)

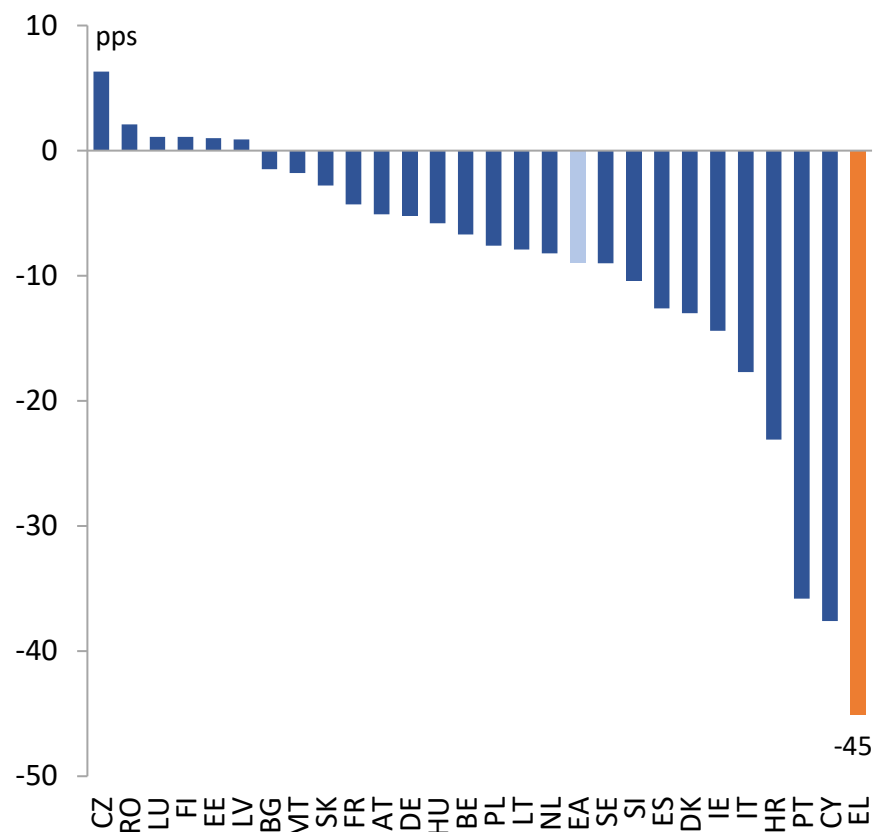


An impressive drop in the debt-to-GDP ratio of 45 pps between 2020 and 2023 on the back of robust macroeconomic performance and exceptional debt characteristics

Evolution of Greece's General Government Debt (€bn and %GDP)



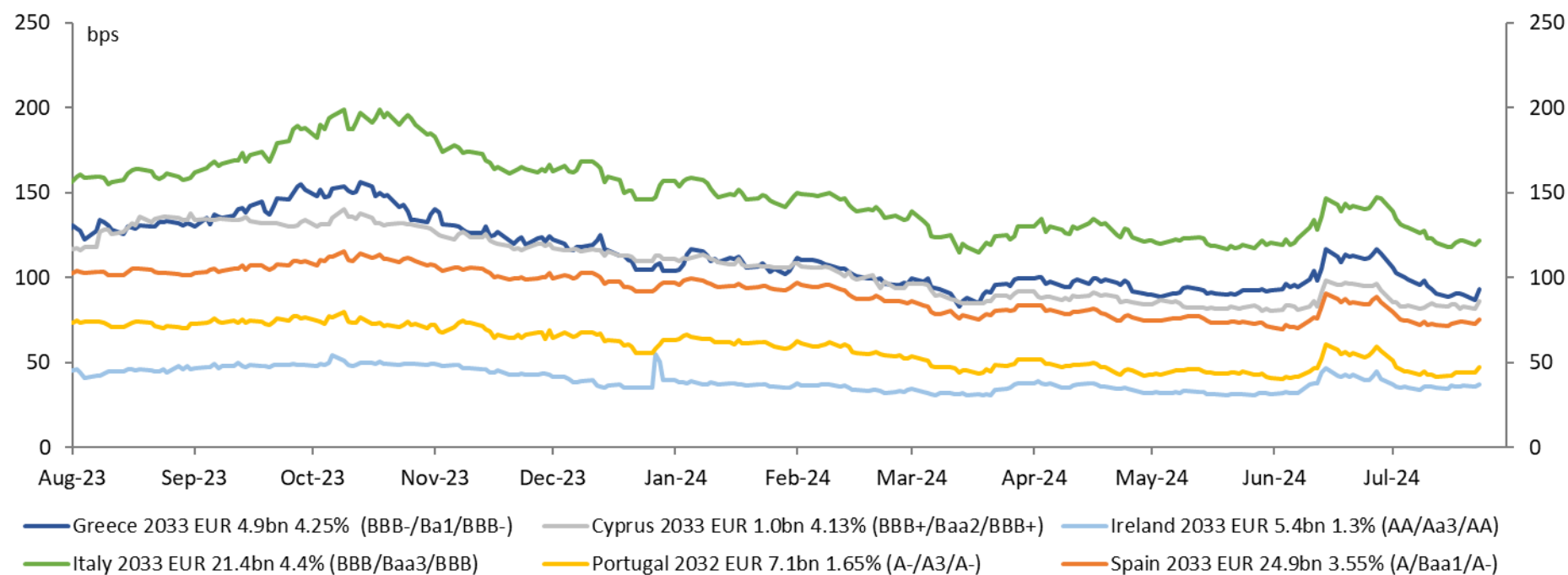
Cumulative change in Gen. Government Debt ratio (%GDP, 2020-2023)



Greek Government Bonds continue to outperform the euro area average

- **The relative re-pricing of the Greek yield curve to the investment grade status continued** in the first months of 2024 in an environment of heightened volatility in fixed income markets
- **10-year GGB spread over the German bund stabilized slightly above 100 bps** in 1H.2024, with some widening in June – in parallel with similar developments for other sovereigns -- when political risks for major EU economies (especially France) intensified following the elections for the EU Parliament and the announcement of France’s snap legislative elections. A negative spread against the respective Italian bond is recorded on a sustained basis since May 2023

Evolution of 10-year bond spread to German bund (bps, as of 23 July 2024)



The investor base remained diversified in a period of increased volatility as investors aim at obtaining higher visibility on monetary policy and global fiscal risks

The share of long-term investors in internationally syndicated bond issues increased in 1H.2024

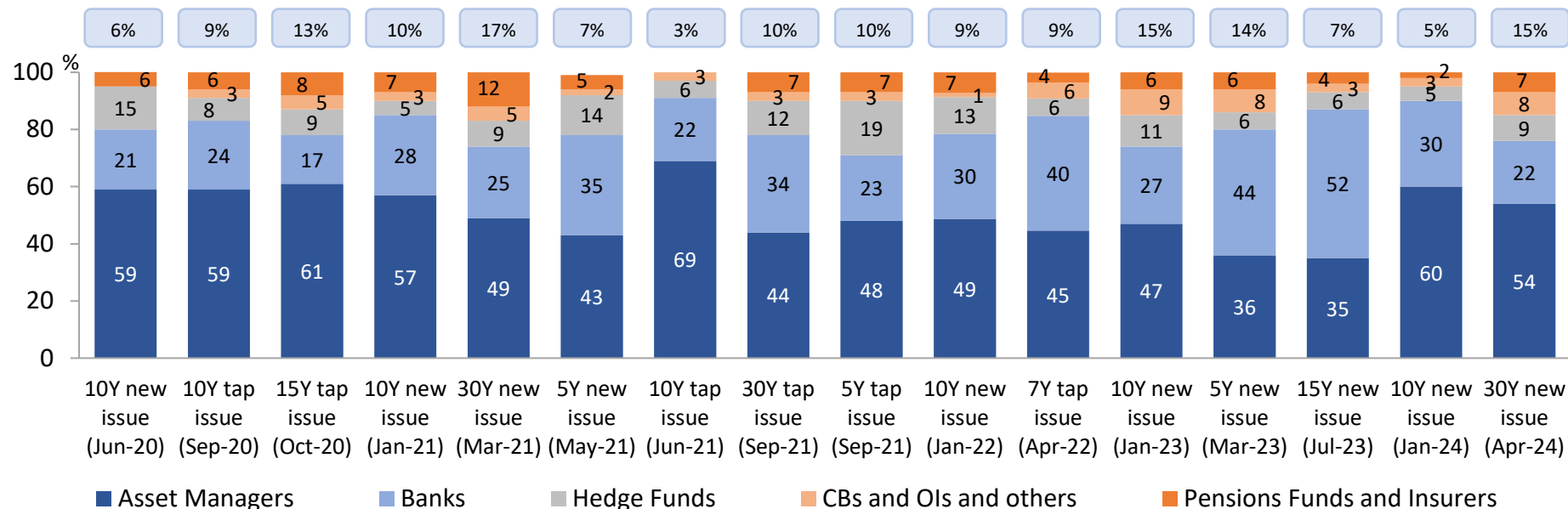
The participation of Central Banks, pension funds and insurance companies in the GGB market reached 10% in 1H.2024, from 12% in 2023 and 9% in 2022

The bulk of the investor base comprised asset managers and banks representing, on average, 83% of the total allocation of GGBs in 1H.2024, from 80% in 2023

Banks' share in new issuance fell to 26% in 1H.2024 compared with 41% in 2023, 35% in 2022 and 28% in 2021

Allocation of recent Greek government bond syndicated issuances by investor type

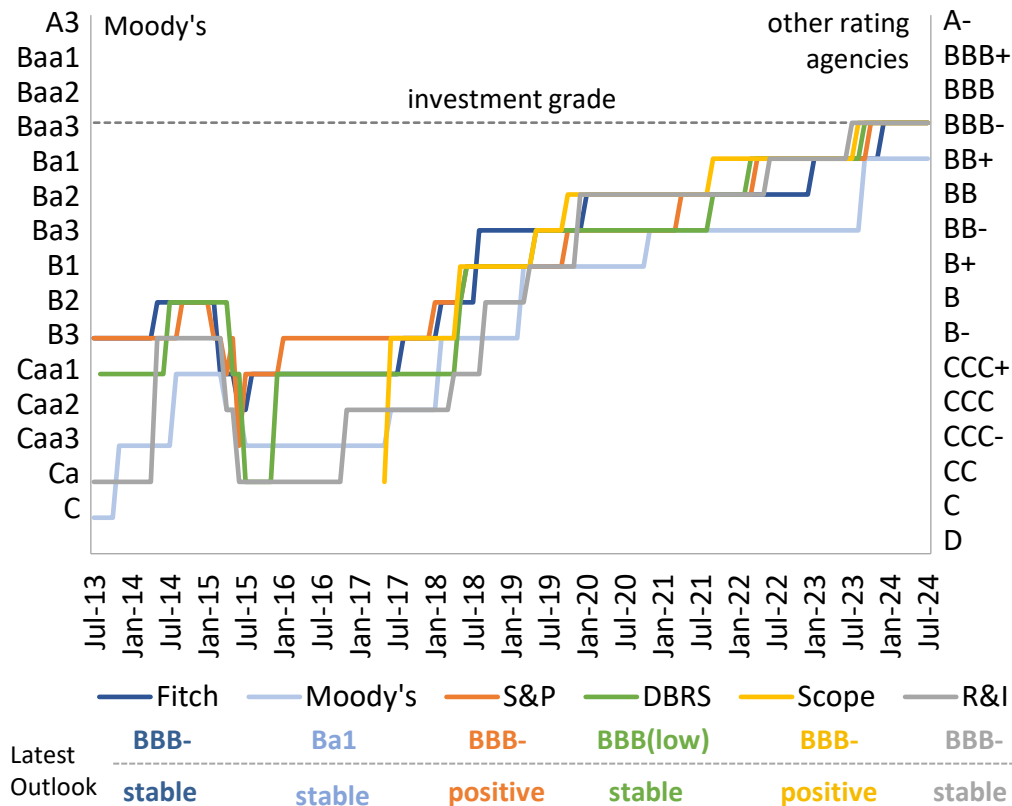
Total long-term investors:



The return to investment grade after 13 years has been the culmination of remarkable macroeconomic adjustment and innovative debt management strategy

Greece's credit rating was upgraded to investment grade by five rating agencies (R&I, Scope, DBRS, S&P and Fitch) in the second half of 2023, with rating by Moody's at one notch below investment grade. S&P & Scope revised Greece's sovereign rating outlook to positive on April 19 and July 12, 2024, respectively. Favourable debt structure, advantageous debt and servicing cost profile, sizeable cash buffers of the State, continued fiscal and macroeconomic outperformance of initial targets and EU peers, as well as further progress in structural reforms and strengthened banking system performance, are supporting Greece's current credit status according to the latest rating-agency reports and could entail further upgrades if sustained in the medium-term.

Evolution of Greece's credit rating since 2013



“ Risks to public debt sustainability are mitigated by several factors. First, Greece's debt structure is very favourable with 100% of debt at fixed rates after swaps. Moreover, the weighted average maturity is very high, slightly below 20 years as of end-2023, and more than 70% of the debt is held by the official sector, which makes the debt less susceptible to market volatility. Secondly, the Greek PDMA has been able to temporarily over-hedge its debt portfolio, mitigating the impact of the rise in interest costs. In 2024, the average effective interest rate on medium to long term debt is expected to stand at 1.3%
SOURCE: DBRS / 8 MARCH 2024 ”

“ Greek authorities are undertaking a broad ranging structural reform agenda and tackling long-standing bottlenecks [...] Greece is likely to hit its fiscal primary surplus target this year (2024) [...] We estimate gross general government debt will fall to about 131% of GDP by 2027 [...] The PDMA's extensive swaps program is likely to reduce Greece's debt financing needs by about €1 billion in each of the coming years [...] The positive outlook reflects our expectation that the tight fiscal regime will continue to spur a reduction in the government debt ratio, while growth should continue to outperform that of Greece's eurozone peers
SOURCE: S&P / 19 APRIL 2024 ”

“ The revision of the Outlooks to Positive for Greece's long-term credit ratings reflects Scope's expectation of a continued reduction in Greece's general government debt ratio over the coming years. Greece's anticipated public-debt decline, which was one of the drivers of Scope's announcement of the upgrade of Greece to investment grade last August, is driven by favourable debt dynamics and a further decline of the headline budget deficit, including stronger primary surpluses than previously foreseen
SOURCE: SCOPE / 12 JULY 2024 ”



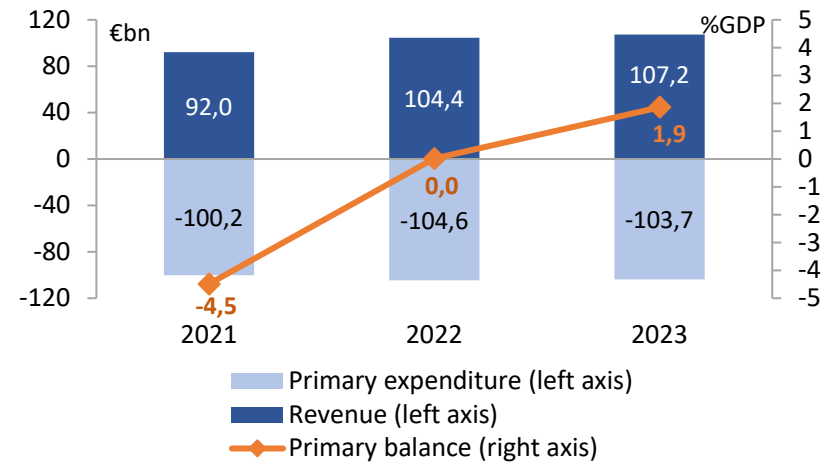
II. Fiscal & Macroeconomic Developments

1H.2024 & Prospects

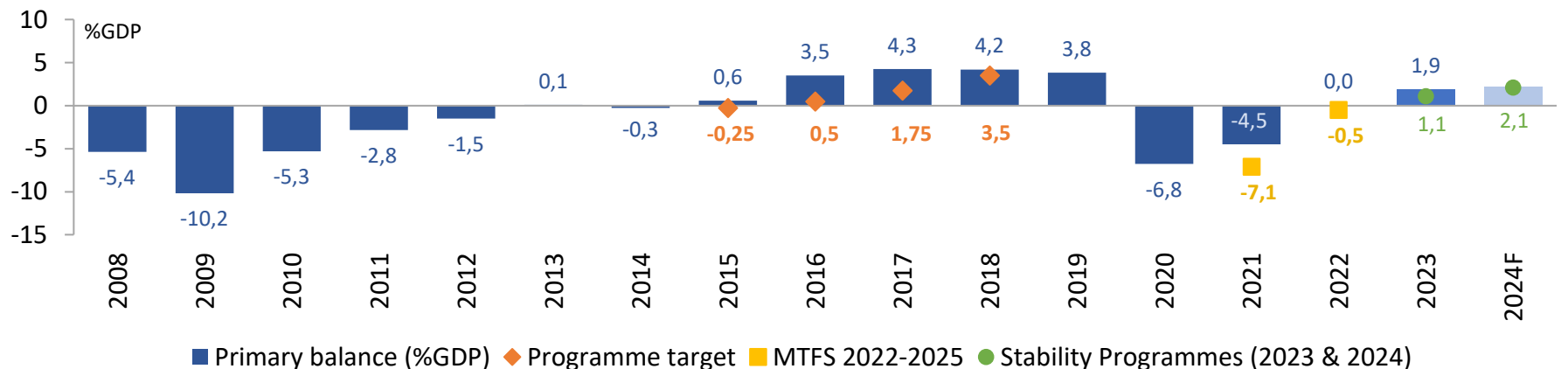
Fiscal credibility remains high on the back of strong efficiency gains and cyclical tailwinds which helped to overcome the impact of significant shocks in recent years

- Greece outperformed its fiscal targets for a 3rd consecutive year achieving in 2023 a primary fiscal surplus of 1.9% of GDP, among the largest in the EU, compared with a target of 1.1%.
- Fiscal trends remain favorable in the first months of 2024 on the back of accelerating economic activity (GDP growth picked up to 2.1% y-o-y in 1Q.2024 following a temporary slowing to 1.3% y-o-y in 4Q:2023). Nominal GDP growth is estimated at 4.5%, on average in 2024-25 according to the latest National Stability Program, supporting tax revenue while primary expenditure returned to a steady downward trend, as per cent of GDP, after the withdrawal of temporary support measures against the energy/inflation crisis
- Sustained efficiency gains through tax reforms and rapidly rising cashless payments, strong consumption and corporate profitability, rising inflows of EU funding (NGEU and European Structural and Investment Funds) and credible expenditure control, bode well for the achievement of a primary surplus of 2.1% of GDP, or higher, in 2024-25 according to the latest National Stability Program

Revenue, primary expenditure & primary balance ⁽¹⁾



General Government primary balance: actual outcome vs target (%GDP) ⁽²⁾

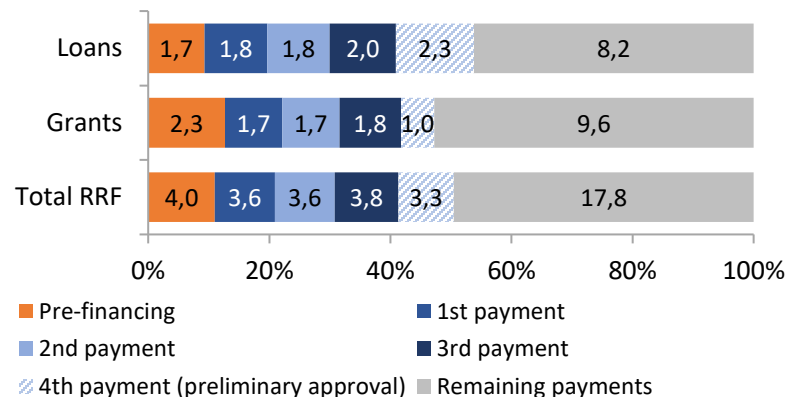


NGEU is expected to boost further growth and structural competitiveness in the coming years, when the major part of related capital expenditure will occur

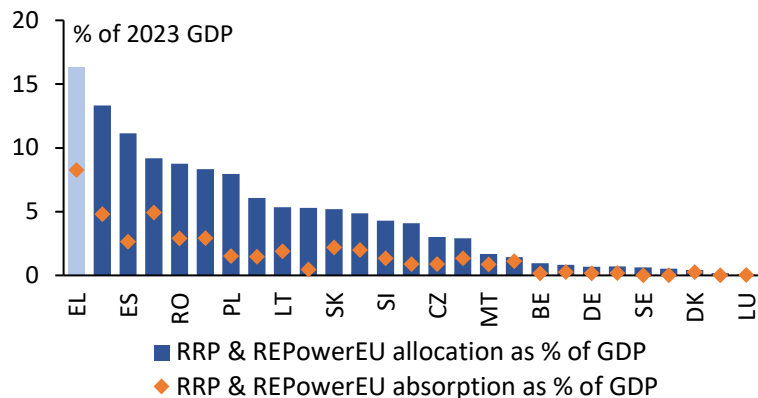
- Greece is the top recipient of RRF funds among euro area countries, amounting to €36 bn in the period 2021-26, including loans and grants from REPowerEU (16.3% of 2023 GDP compared with 4.6% for the EU average).
- The absorption of RRF funding stood at 51% of total allocated funds to Greece until mid-2024 (including the preliminary approval by the European Commission of Greece's 4th payment request for €2.3 bn in RRF loans in June 2024), corresponding, in total, to €8.6 bn of grants and €9.6 bn of loans; following the accomplishment of related milestones and targets.
- Fixed capital investment financed through the RRF is expected to gain traction in 2024-2026 with public gross fixed capital formation increasing to all-time highs.
- NGEU funding minimizes fiscal costs related to the frontloading of Greece's climate and digital transition and contributes to the narrowing of the economy's investment gap.
- Lower effective financing costs through RRF loans and the leverage with bank loans, lead to more supportive liquidity conditions for Greek corporates against a backdrop of increasing lending costs in the EU

RRF disbursements to Greece

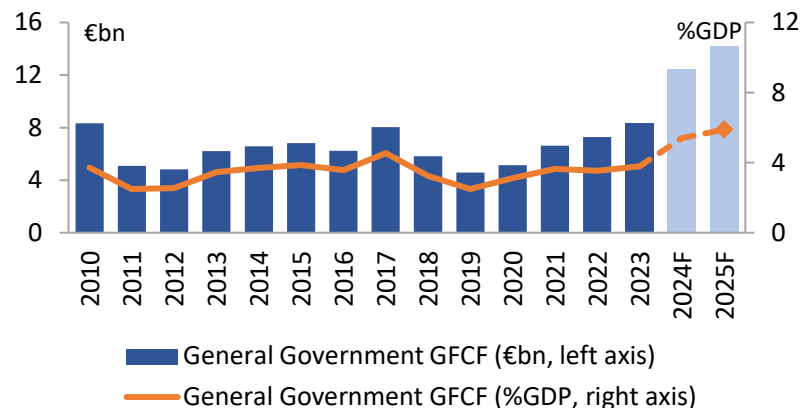
(in €bn, as of 30 June 2024)



Cross-country RRF funds allocation & absorption ⁽¹⁾



Gross Fixed Capital Formation of Gen. Government

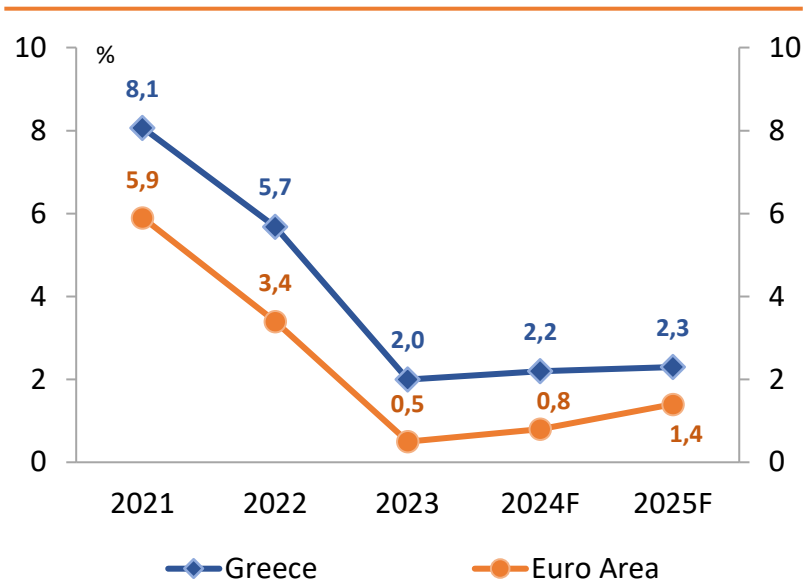


Greece's macroeconomic performance is expected to remain solid in 2024, as well as in the medium-term, creating supportive tailwinds for further fiscal rebalancing

Greece's economic recovery showed resilience to a sequence of economic shocks in previous years, on the back of a broad-based strengthening in key GDP components which was combined with reviving tourism, stronger export growth and supportive wealth effects from rising financial and real asset valuations

Steadily improving labor market conditions, increased corporate efficiency and profitability and sizeable official support through the RRF and the EU's multiannual fiscal framework in conjunction with an ongoing risk re-rating of the economy bode well, for higher trend GDP growth and continued outperformance against the euro area economy.

Real GDP growth: Greece vs EA



Key indicators of economic activity (EC forecasts)

Economic Indicators					
Greece	2020	2021	2022	2023	2024F
Real GDP growth (%)	-9,0	8,1	5,7	2,0	2,2
HICP (% YoY)	-1,3	0,6	9,3	4,2	2,8
Unemployment rate (%)	17,6	14,7	12,5	11,1	10,3
Gen. Gov. Debt (% GDP)	207,0	195,0	172,7	161,9	153,9
Gen. Gov. Primary balance (% GDP)	-6,8	-4,5	0,0	1,9	2,3
Euro area	2020	2021	2022	2023	2024F
Real GDP growth (%)	-6,1	5,9	3,4	0,4	0,8
HICP (% YoY)	0,3	2,6	8,4	5,4	2,5
Unemployment rate (%)	8,0	7,8	6,8	6,6	6,6
Gen. Gov. Debt (% GDP)	99,2	96,6	92,4	90,0	90,0
Gen. Gov. Primary balance (% GDP)	-5,5	-3,8	-2,0	-1,9	-1,1

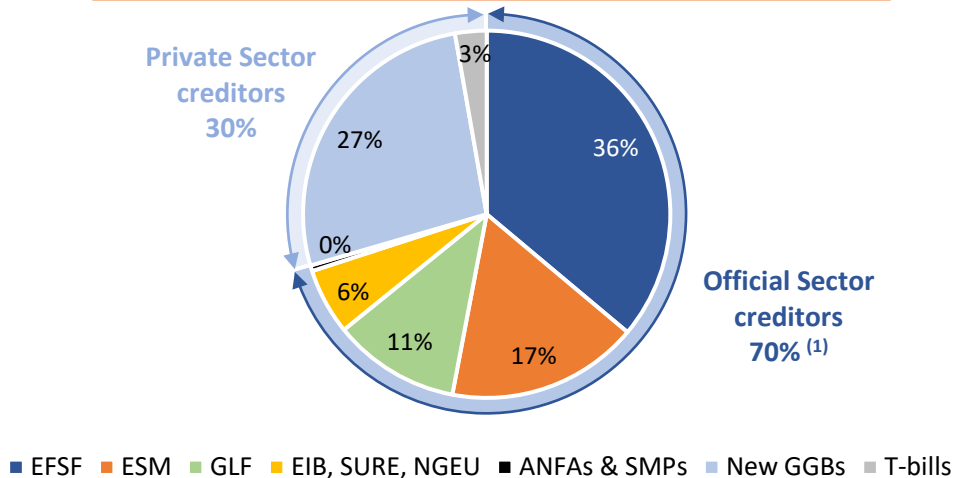


III. Overview of Greek Public Debt Sustainability

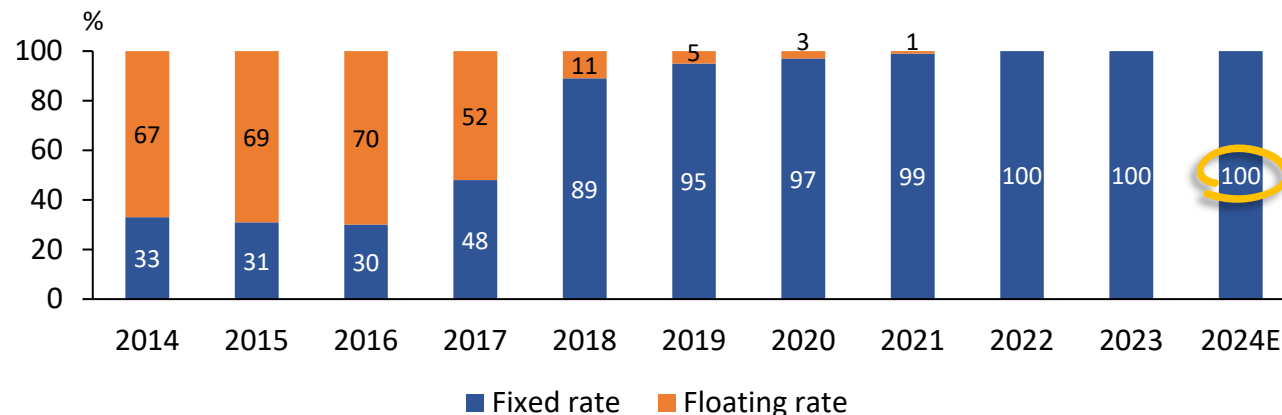
Greece benefits from a unique debt structure

- Greece benefits from a favorable debt structure which limits financing needs and supports the implementation of a pre-emptive and well-targeted funding strategy
- 70% of the debt stock is held by official sector creditors⁽¹⁾. The debt exhibits long-term maturity profile and low interest rates
- 100% of debt is at fixed rate⁽²⁾, diminishing interest rate risks
- Furthermore, PDMA's active debt management has allowed Greece's debt portfolio to be temporarily over-hedged against interest rate risk, which will contribute to further contain funding costs going forward

Debt breakdown by type of instrument (as of June 2024)



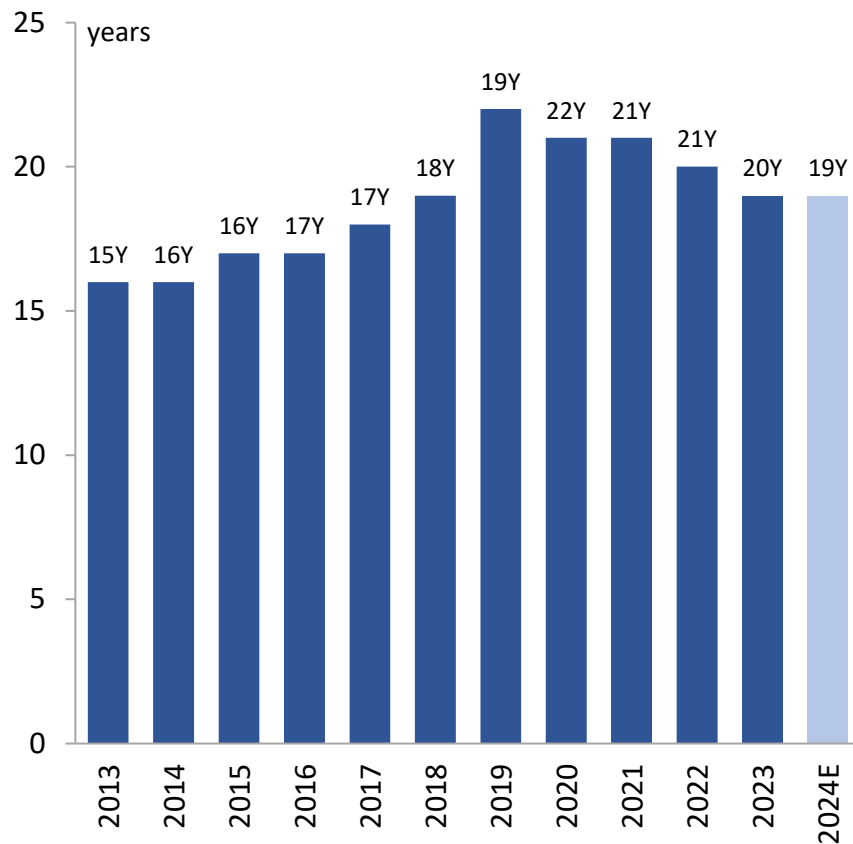
Debt breakdown by coupon rate⁽²⁾



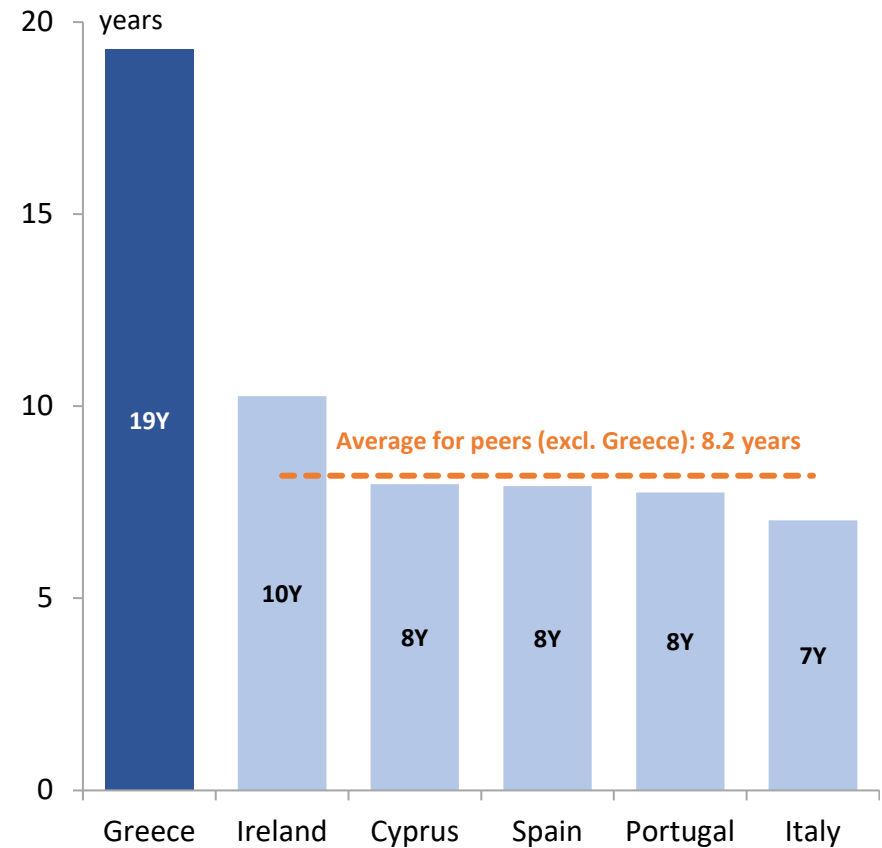
- ✓ Greece's public debt portfolio is in fact temporarily over-hedged against interest rate risk (c. 104% hedged)
- ✓ The corresponding (locked-in) fixed interest rates are expected to remain well below market rates, which will reduce Greece's net funding costs for the coming years

Exceptionally long, average debt maturity with very favorable refinancing terms locked in on the basis of an innovative and forward-looking debt management strategy

Weighted average maturity of Gen. Government debt



Greece & EA peers' debt weighted average maturity (2024E)



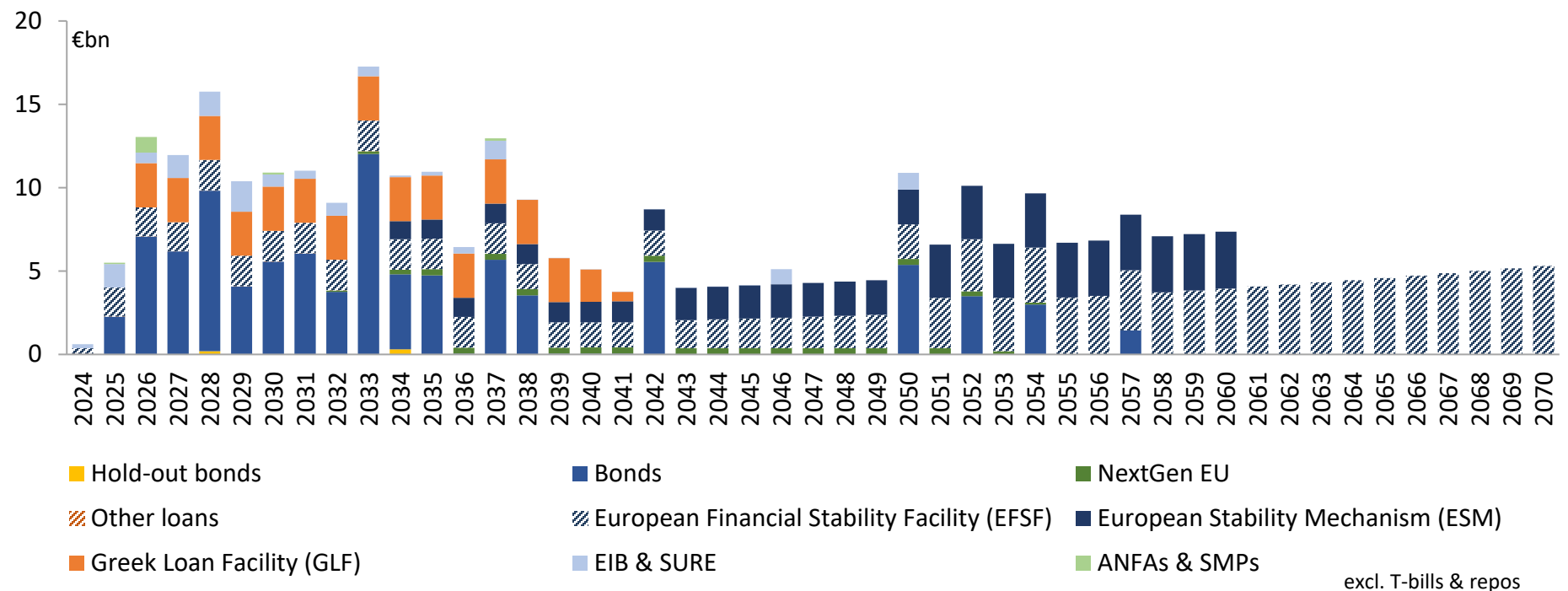
A differentiated and well-targeted issuance strategy aims at securing competitive financing costs and stable financing needs

Greece's favourable debt repayment profile diminishes public debt refinancing risks even under very conservative scenarios

Debt amortization is evenly distributed over the medium-term with average annual redemptions at below €10 bn

At c. €34 bn in mid-2024, the General Government cash reserves is also a strong mitigant against potential refinancing risks, implying that the public debt is c.15% of GDP lower than its current gross ratio over GDP

Maturity profile of Greece public debt (as of June 2024, €bn)



excl. T-bills & repos

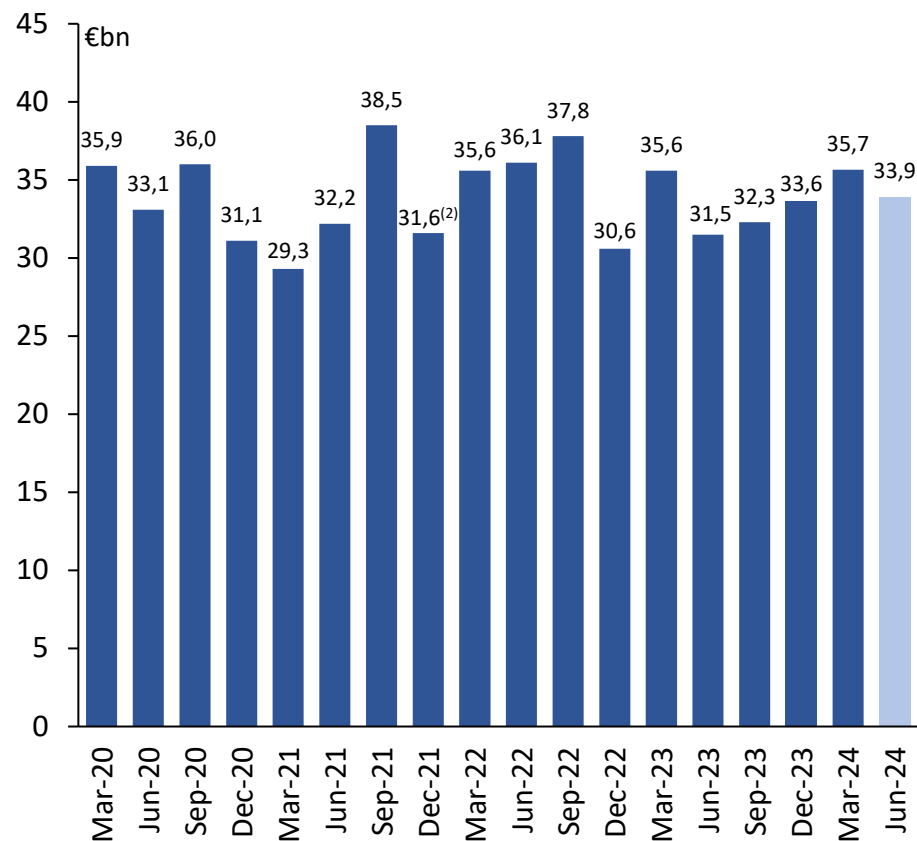
The substantial cash reserves are another credible backstop against refinancing risk

Greece's cash reserves amount to €34 bn⁽¹⁾, i.e. 3 years of financing needs

Key considerations

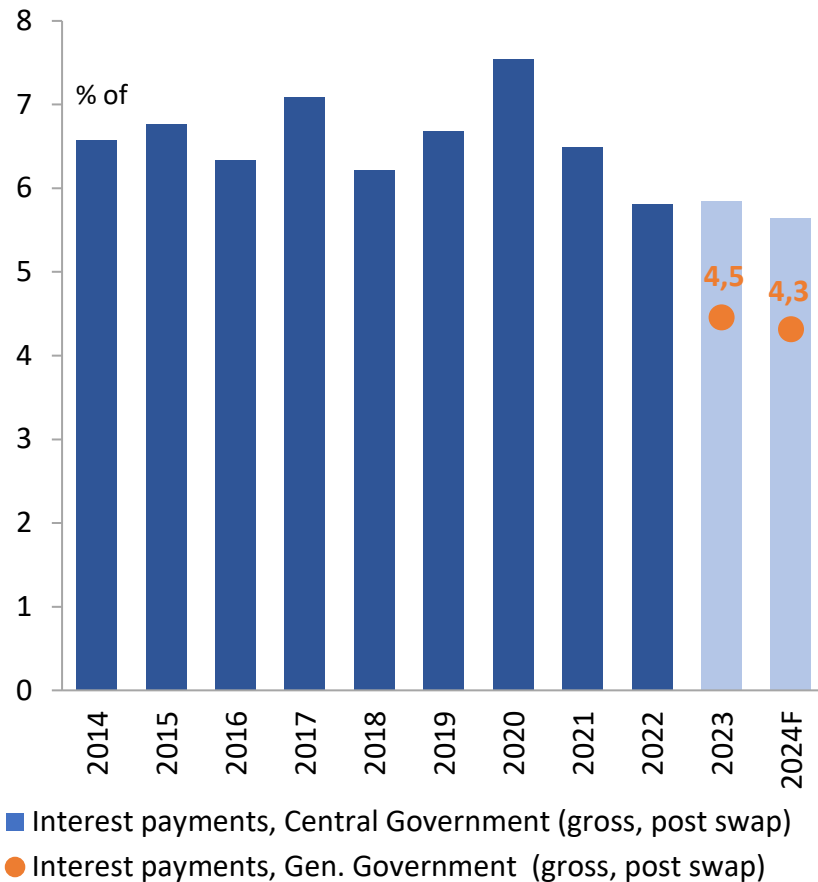
- **Greece benefits from important cash reserves, which have been progressively accumulated over the past years thanks to:**
 - New GGB issuances over 2017-1H.2024
 - Fiscal surpluses accumulated prior to the pandemic , as well as in 2023 and 1H.2024
 - A very favourable debt amortization profile
- **Revenue collection overperformance and the withdrawal of temporary support measures in conjunction with proactive debt management allowed to maintain cash reserves of c. €34bn as of the end of 1H.2024 despite the volatile global financial environment**
- **These sizeable cash reserves cover around 3 years of gross financing needs of the Hellenic Republic and continue to provide a significant buffer against any refinancing and interest rate risks over the medium-term**

Greece's Gen. Government cash reserves (€bn) ⁽¹⁾

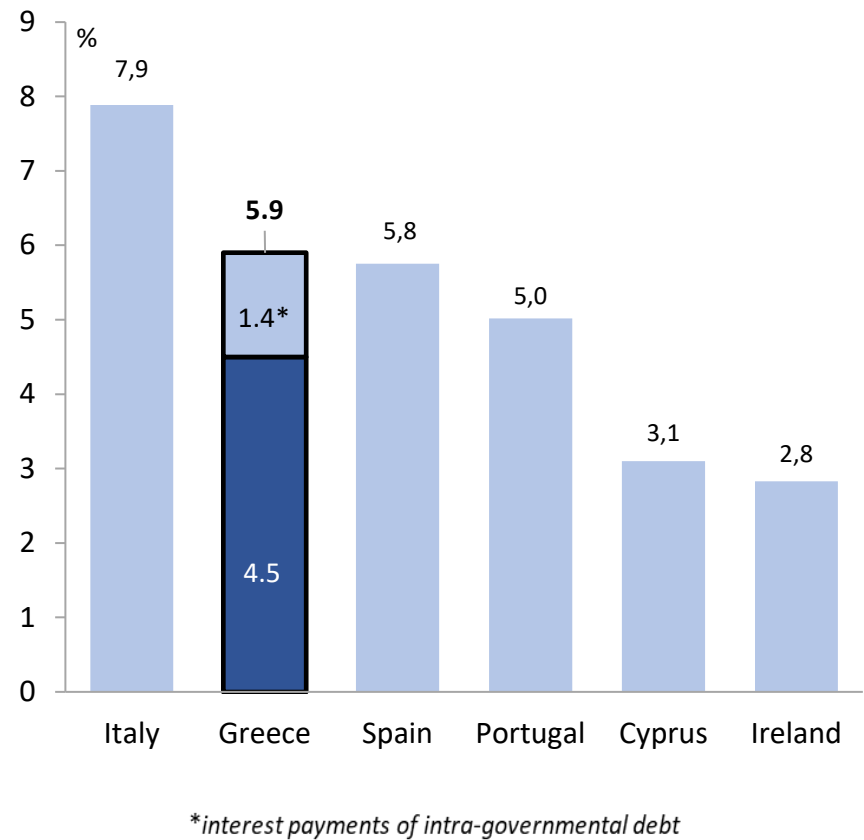


Interest payments and comparison vs EA peers: Remarkable stability on the back of a successful and proactive funding and portfolio-management strategy

Greece: Evolution of interest payments as % of Government revenues



Greece & EA peers' interest payments as % of General Government revenues (2023)

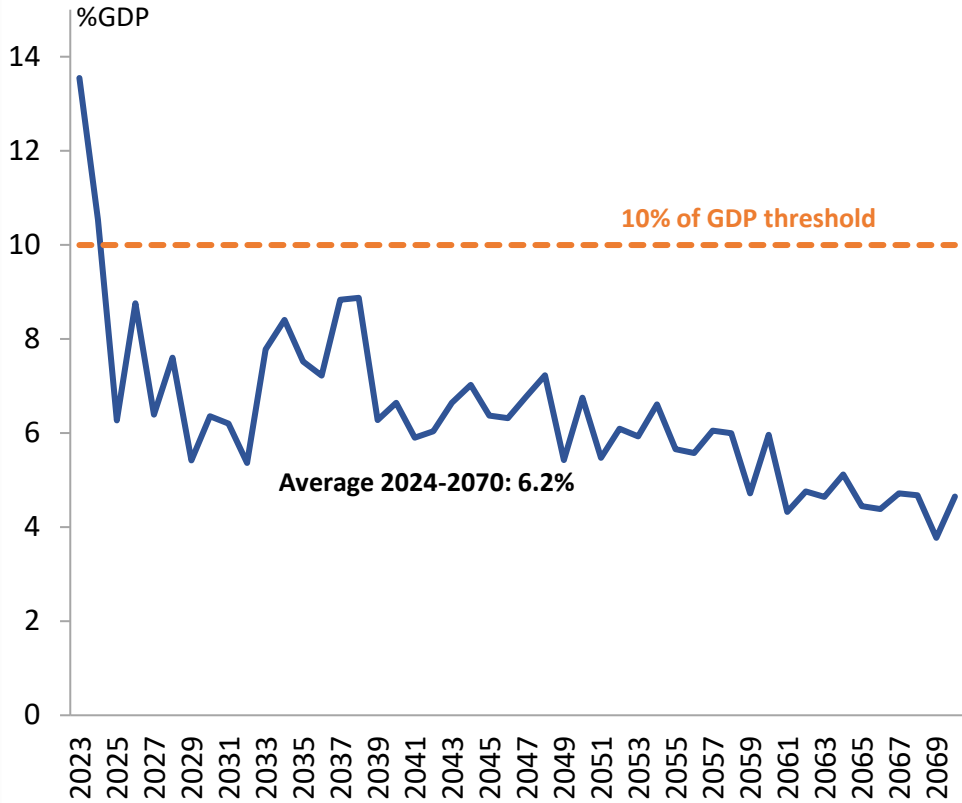




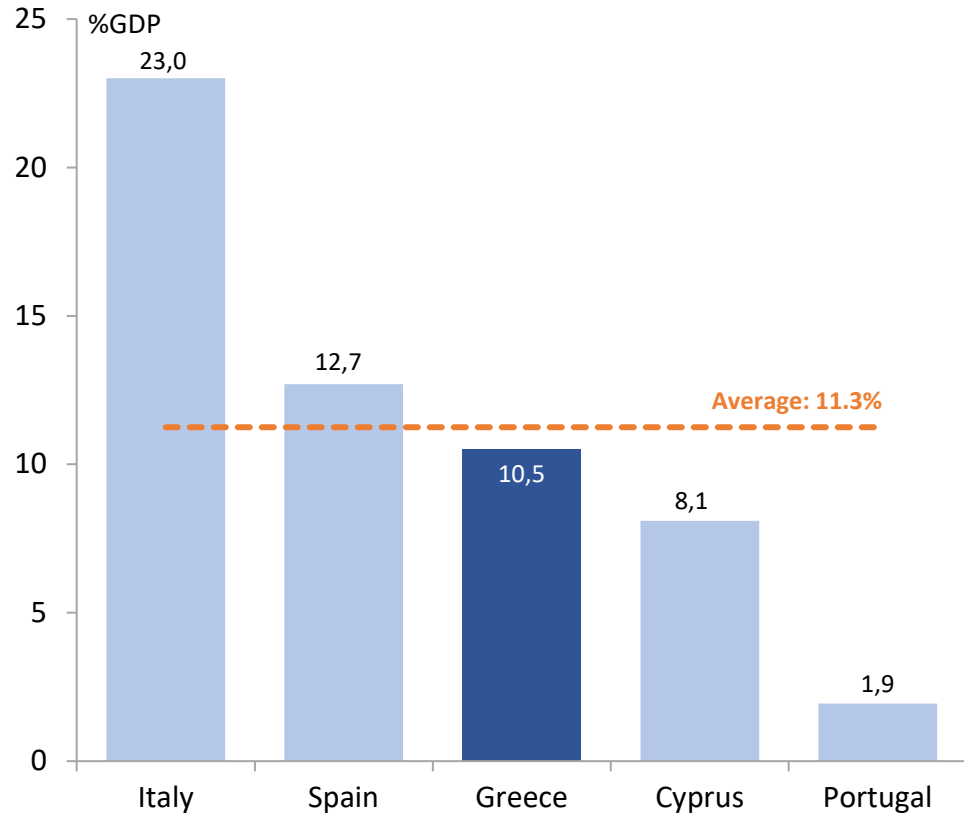
IV. Financing Needs & Sources for 2024

Gross financing needs clearly below the 10% of GDP threshold, over the forecasting horizon, even under very conservative assumptions

Evolution of Greece's gross financing needs (% GDP) ⁽¹⁾



Greece and EA peers' gross financing needs (2024E, % GDP) ⁽¹⁾



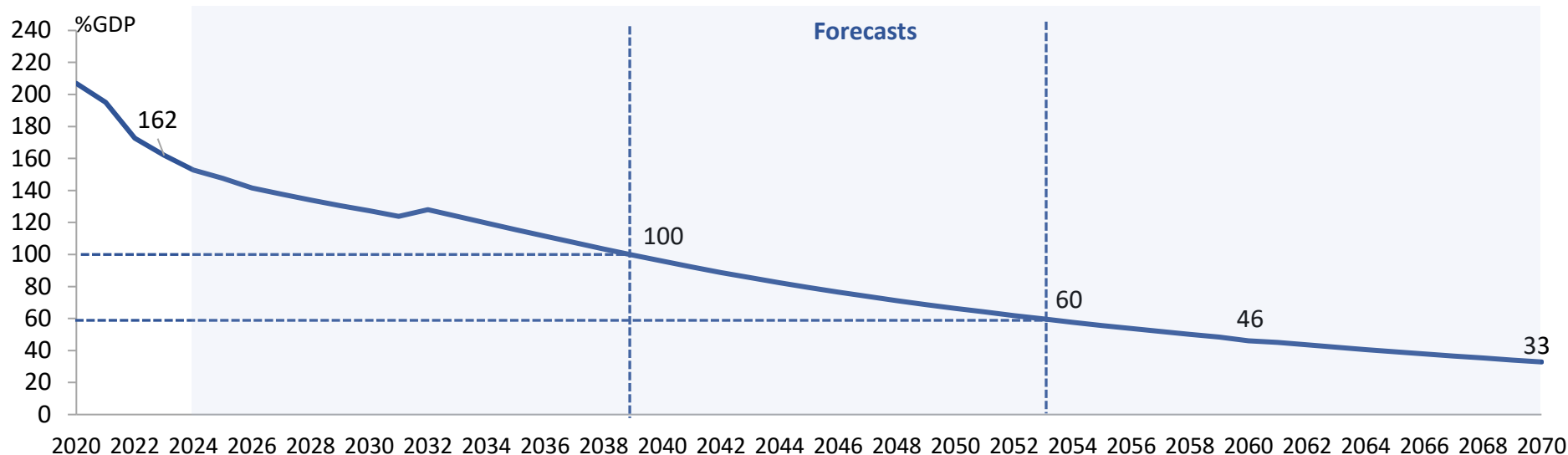
Greek public debt-to-GDP is set to remain on a firm downward trajectory even under a “very conservative” scenario

- Strong nominal growth, sustained primary surpluses and low debt-servicing costs are projected to lead to a steady decline in the government debt-to-GDP ratio
- The real implicit cost of debt is expected to remain negative in the medium-term. As a result, the interest rate - GDP growth differential (“snowball” effect) will be debt-reducing over the forecasting horizon

	2023	2024	2025	2026	2027 onwards
Real GDP (y-o-y, %)	2.0	2.5	2.6	2.1	1,1 to 1,5 ⁽¹⁾
GDP deflator (y-o-y, %)	4.8	2.3	1.6	2.0	2,4 to 2,1 ⁽²⁾
Average effective interest rate (medium & long-term debt, %)	1.2	1.3	1.3	1.4	2,9 on average ⁽³⁾
Primary surplus ⁽⁴⁾ (%GDP)	1.9	2.1	2.1	2.5	2,1 on average

Notes: The present analysis is mainly based on the baseline assumptions of the European Institutions, a €15 bn use of cash reserves for debt reduction and also includes conservative assumptions with respect to contingent liabilities (assumed crystallization of c. 44% of the total stock of contingent liabilities over 2024-2031, on average); (1) Real GDP growth decreasing from 1.1% in 2027 to 0.7% in 2030, then increasing to 1.7% in 2040 and finally converging to 1.5% in 2070; (2) GDP deflator decreasing from 2.4% in 2027 to 2.0% in 2050, and then remaining broadly constant from 2050 onwards; (3) Average effective interest rate for the period 2027-2070 assuming borrowing from the market at an average maturity of 10 years and an average nominal interest rate of 4.1 percent (spread vs 10-y bund of 200 bps over the projection period); (4) From 2024 onwards, each year’s primary surplus is calibrated so as to compensate the current year’s interest bill, i.e. achieving overall fiscal balance and (5) Recovery and Resilience Facility (RRF) loans are included in the DSA only as liabilities whereas, their asset counterpart is, conservatively, not taken into consideration

Public debt-to-GDP forecast (% GDP)



Overview of PDMA debt and funding strategy

PDMA current debt and funding strategy is focused on reaching the following main objectives:

- 1 Enhance market access**
 - Improve a tradable and liquid yield curve
 - Enhance the investor base towards more real money players
 - Maintain regular market operations
- 2 Contain funding costs**
 - Bring the credit spread of the GGB curve in line with peers
- 3 Contain debt-associated risks**
 - Limit interest rate and FX risks
 - Limit refinancing risks
- 4 Manage liquidity (cash reserves of both the Greek State and General Government Entities)**

Focus on Greece's 2024 Financing Needs and Sources

- ✓ Funding strategy for 2024 focuses on the continuous presence in the international debt markets, accompanied by the reduction in the level of public debt, proactive management of the debt portfolio and the preservation of a significant cash buffer
- ✓ The funding strategy aims at further improving GGB secondary market operation and further reducing rollover risk
- ✓ A limited and targeted use of cash reserves is mainly driven by respective increase of assets (RRF loans, capital inc., etc.)

2024 Financing Needs* (in €mn)

2024 Financing Needs	FY 2024e	Actualizations 1st semester	Remaining 2nd semester
Medium- and long- term debt amortization	5,463	4,841	0,622
Interests on debt (incl. interest rate swaps)	4,850	3,281	1,569
Primary deficit / (surplus) to finance	-6,903	-3,950	-3,553
Early repayments (T-bill stock reduction, official sector debt, etc.)	12,000	4,065	7,935
Other cash requirements	3,589	1,443	2,146
Total	18,999	9,680	8,719
2024 Financing Sources			
Medium and long-term debt issuance (new money transactions)	10,000	8,465	1,535
Other financing sources (RRF, EIB, CEB, etc.)	4,195	0,000	4,195
Proceeds from equity and investment fund shares	1,161	0,935	0,226
Change in cash reserves, decrease / (increase)	3,643	0,280	2,763
Total	18,999	9,680	8,719
Change in public debt, increase / (decrease)	-3,268	-0,441	-2,827

Note: Regarding Primary surplus, it is expected an overall 0.3% of GDP better outcome, compared to the 2024 State budget initial assumptions

*on a cash basis

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