DECEMBER 2020

HELLENIC REPUBLIC

FUNDING STRATEGY FOR 2021

TABLE OF CONTENTS

I PUBLIC DEBT MANAGEMENT OF THE HELLENIC REPUBLIC: MAIN ACHIEVEMENTS IN 2020

LOOKING BACK AT THE 2020 DEBT MANAGEMENT EXECUTION: MAIN ACHIEVEMENTS

In 2020, the Hellenic Republic has successfully navigated through challenging macroeconomic conditions by accessing international debt capital markets at all times, and re-affirming its regular issuer status

✓ **Market access has been sustained despite turbulent market conditions**

- In 2020 Greece successfully performed 5 international debt market transactions**: 3 new bond series** (7Y, 10Y, 15Y new issues; 2 taps of resp. 10Y and 15Y) for a **total amount of €12bn** issued, **with an aggregated order book of c. €77bn**
- These successes confirmed market appetite in turbulent times (1 issuance was performed in April) and for maturities beyond 2032, the end of the grace period for ESM loans (15-Y bond issuance, issued in January and re-opened in October)
- This allowed to contain refinancing risks by **reducing the stock of T-Bills by €0.8bn** and **maintaining cash reserves at €31bn**

✓ **Cost of funding has remained historically low**

- Greece cost of funding reached an historical low at **1.152%** on the 15-year bond – the **lowest yield at issuance ever achieved on any Greek sovereign bond issuance**
- Besides, **monthly liquidity of Greece Government Bonds (GGBs) increased by +219%** year-on-year over April to November

✓ **The investor base has been rebalanced towards long-term investors** – it is characterized by a:

- **Strong presence of real money players investors** throughout the year, representing the bulk of the investor base
- **Increased presence of long-term investors** as compared to 2019
- **Reduced reliance on domestic investors** since June 2020

✓ **Strong credit rating fundamentals have translated into an upgrade at the end of the year, despite a challenging global macroeconomic environment**

- **Moody's upgraded Greece credit rating to Ba3** from B1 in November 2020, on the back of (i) achievement on structural reforms and (ii) improved long-term growth potential
- The rating **outlook has been confirmed at stable** by four agencies (Moody's, S&P, Fitch, DBRS) and at positive for Scope

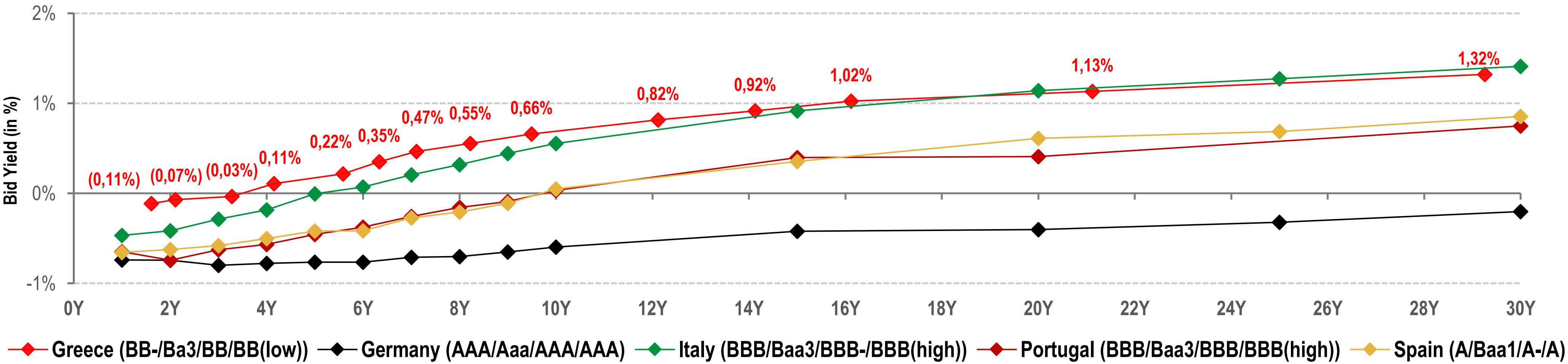
GREECE HAS SUCCESSFULLY AFFIRMED ITS MARKET ACCESS THROUGHOUT 2020

- **In 2020, five new bond issuances further developped Greek yield curve and improved the liquidity of Greece Government Bonds (GGBs)**
- **This strong performance has been achieved despite a context of global economic and sanitary crisis**
- **GGBs' market performance has been supported by their inclusion to the pool of marketable securities eligible to the ECB's Pandemic Emergency Purchase Programme (PEPP), and their eligibility as collateral to Eurosystem's repurchase operations**

Overview of 2020 Bond Issuances

ISINs	Issue/ Reopening Date	Maturity Date	Tenor	Demand Amount	Issued Amount	Subscr. Rate	Yield	Spread vs Bund
GR0128016731	21-Oct-20	04-Feb-35	15Y	€16.8bn	€2.0bn	8.4x	1.15%	155 bps
GR0124036709	02-Sep-20	18-Jun-30	10Y	€18.0bn	€2.5bn	7.2x	1.19%	160 bps
GR0124036709	09-Jun-20	18-Jun-30	10Y	€17.0bn	€3.0bn	5.7x	1.57%	188 bps
GR0118020685	15-Apr-20	22-Apr-27	7Y	€5.9bn	€2.0bn	3.0x	2.01%	263 bps
GR0128016731	28-Jan-20	04-Feb-35	15Y	€18.8bn	€2.5bn	7.5x	1.91%	213 bps
Key highlights of 2020 bond issuance performance			**Total:**	**€76.4bn**	**€12.0bn**			

Selected European Sovereign Yield Curves as of 22/12/2020



Source: Bloomberg as of 22-Dec-2020
Note: sovereign credit rating by (S&P/Moody's/Fitch/DBRS)

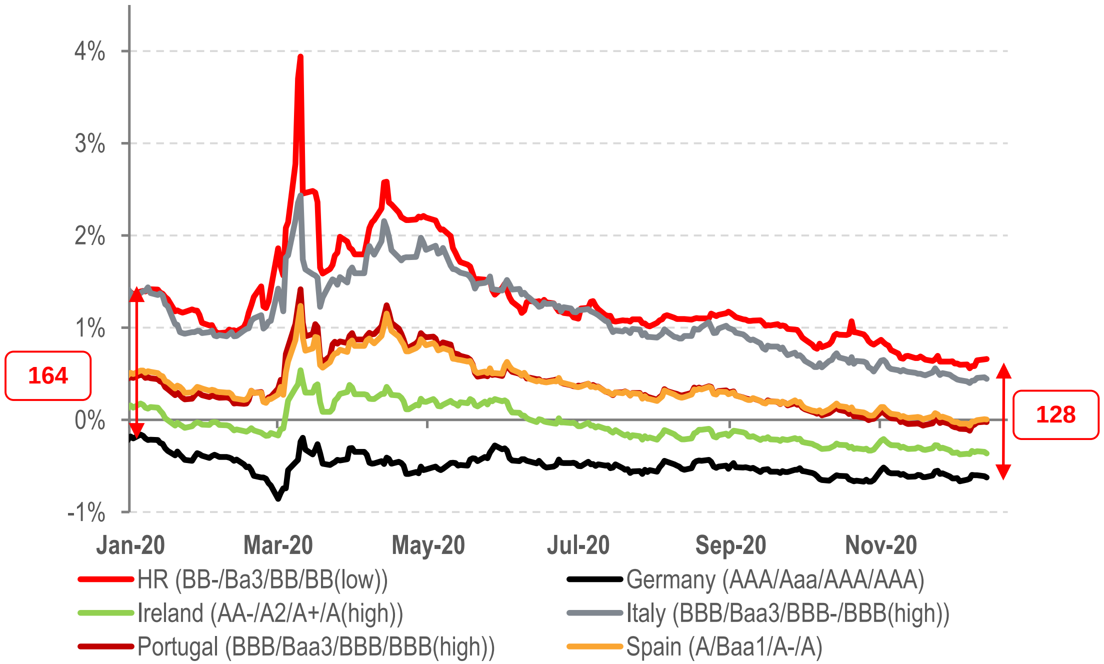
GREECE FUNDING COSTS HAVE REACHED RECORD LOWS IN 2020

Funding costs have substantially tightened in the course of 2020 (-81 bps on the 10Y benchmark)

- **Besides, the 10-year spread to Germany has further narrowed despite COVID-19 over the last nine months: from 164bps to 128bps**
- **T-bill yields are also on a downward trend with the latest 1-Y T-bills' issues priced at negative yield (-0.26%)**

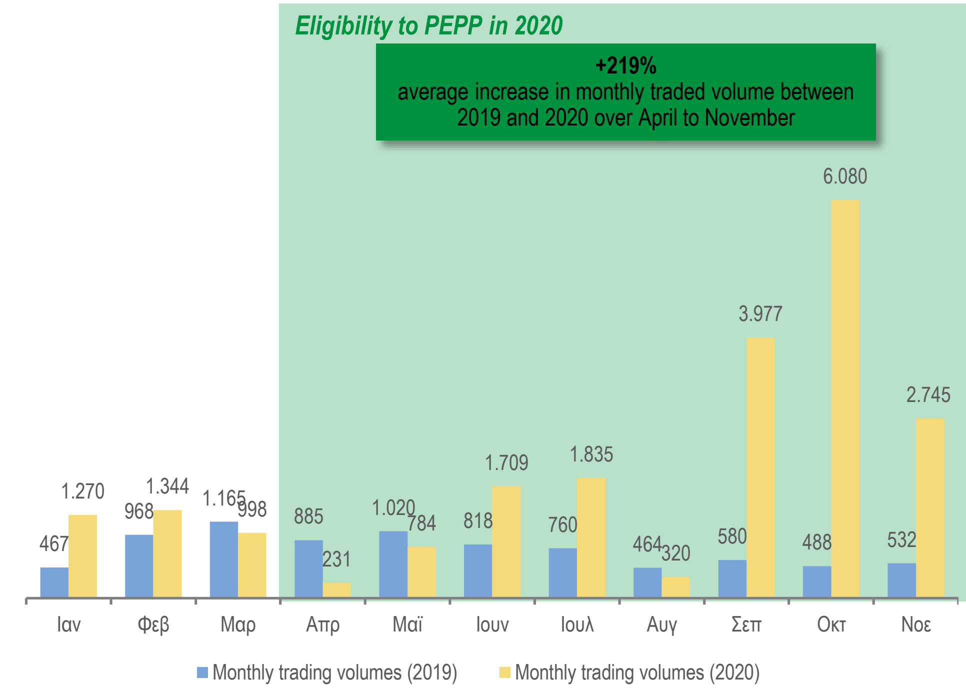
Traded volumes on GGBs increased by 219% year-on-year on average over April to November, owing to the introduction of the ECB's PEPP and the successive taps on the 10-Y and 15-Y benchmarks

Greece and selected peers' 10-Year bond bid YTM (%)



Source: Bloomberg as of 22-Dec-2020
Note: sovereign credit rating by (S&P/Moody's/Fitch/DBRS)

Greece GGB monthly traded volume *(€m)*



Source: Bank of Greece

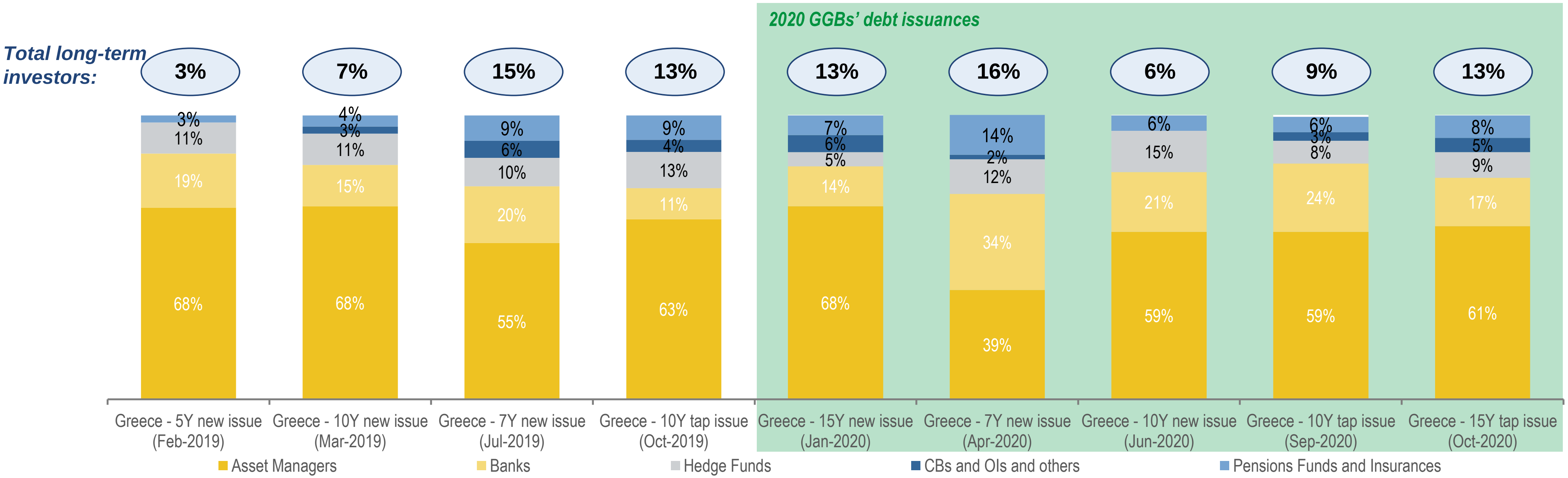
THE INVESTOR BASE IS BROADENING DESPITE THE PANDEMIC, WITH A SUSTAINED PRESENCE OF LONG-TERM HOLDERS

The share of long-term investors (notably insurances and pension funds) has been preserved despite the economic impact of the pandemic

Investor type breakdown of 2020 Greek government bond allocations

- **Central Banks, pensions funds, insurances have been increasingly represented in 2020, grasping an average of 11% of the total allocation of bonds issued in 2020 as compared to 9% in 2019**
- **Asset managers and banks still represent the bulk of the investor base, with an average of 79% of the total allocation of the 2020 GGBs' issuances, as compared to 80% last year**

Allocation of recent Greece government bond issues by investor types

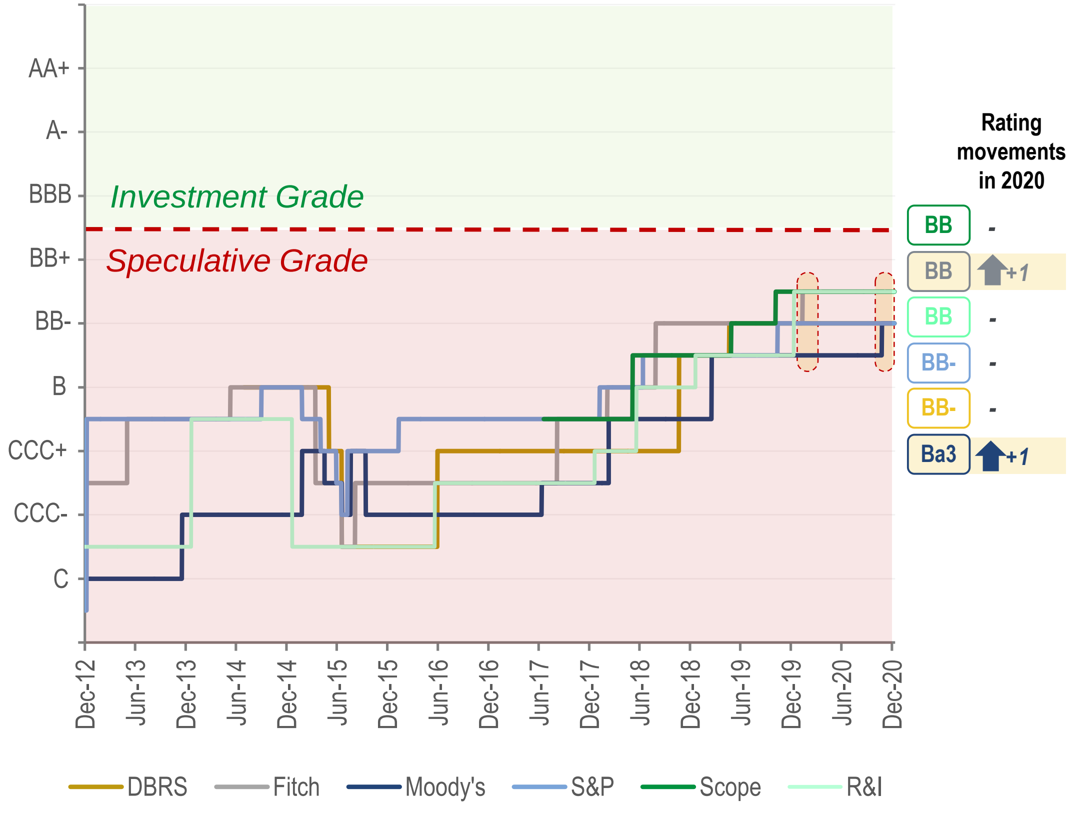


Source: PDMA

GREECE HAS MAINTAINED ITS UPWARD CREDIT RATING TRAJECTORY THROUGHOUT 2020

Greece's sovereign creditworthiness has been confirmed in 2020, as agencies outlined the Republic's improved institutional strength and economic outlook. Two credit rating agencies upgraded Greece: Fitch (+1 notch to BB, on January 24th, 2020), and Moody's, post-COVID-19 (+1 notch to Ba3, on November 6th, 2020). The other agencies confirmed Greece's credit rating with an outlook stable or positive (for Scope)

Evolution of Greece Credit Rating since 2012



Sources: DBRS, Fitch, Moody's, S&P, Scope

Note: DBRS and Scope credit ratings are available since 2014 and 2017 respectively

Selected Comments of the Rating Agencies

On 6 November 2020, **we upgraded Greece's […] ratings to Ba3 from B1** and maintained the stable outlook.

This reflects ongoing reforms that are bringing a **sustainable improvement in institutional strength**; and our view that European funds and an **improving investment climate** will bolster Greece's investment outlook and medium-term growth prospects SOURCE MOODY'S / 11 NOVEMBER 2020

Greece's liquid asset buffer is substantial (around 20% of forecast GDP), and could accommodate unexpected increases in spending […] The amortization schedule is moderate, and the average maturity of Greek debt (20.3 years) is amongst the longest across all Fitch-rated sovereigns, reducing the risk from interest rate rises

SOURCE FITCH / 24 JULY 2020

We believe that the sovereign's funding position has been significantly reinforced during 2020 due to (i) the European Central Bank's announcement of a waiver to include Greek government bonds in its Pandemic Emergency Purchase Program […] and (ii) the July "Next Generation EU" agreement

SOURCE: S&P / 23 OCTOBER 2020

Greece's ratings are underpinned by […]: i) an improved medium-term debt sustainability, backed by: a track record of sustained fiscal discipline […]; a substantial cash buffer […]; a more robust debt profile […]; and favourable financing rates […]; and ii) Greece's strengthened political

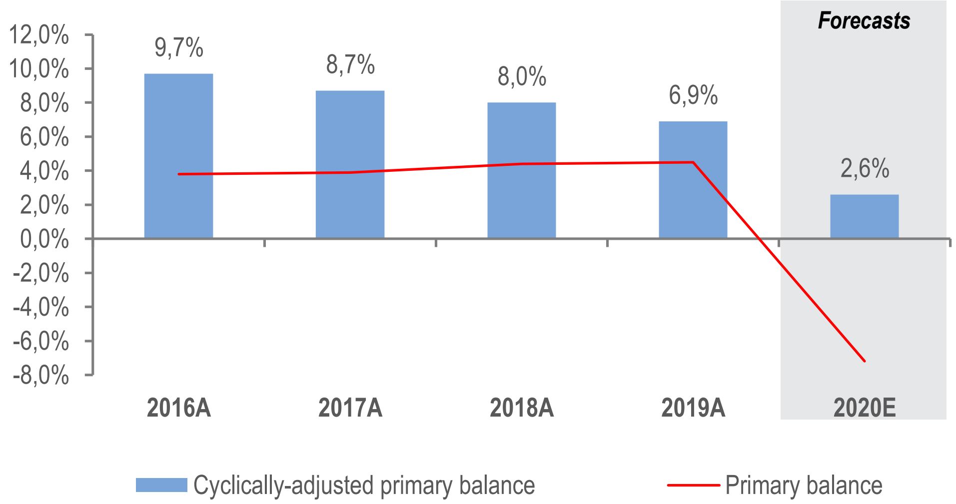
SOURCE SCOPE / 4 DECEMBER 2020

II 2021 BUDGET: KEY HIGHLIGHTS

GREECE FISCAL PERFORMANCE HAS BEEN INSTRUMENTAL TO ADDRESS THE COVID-19 SHOCK

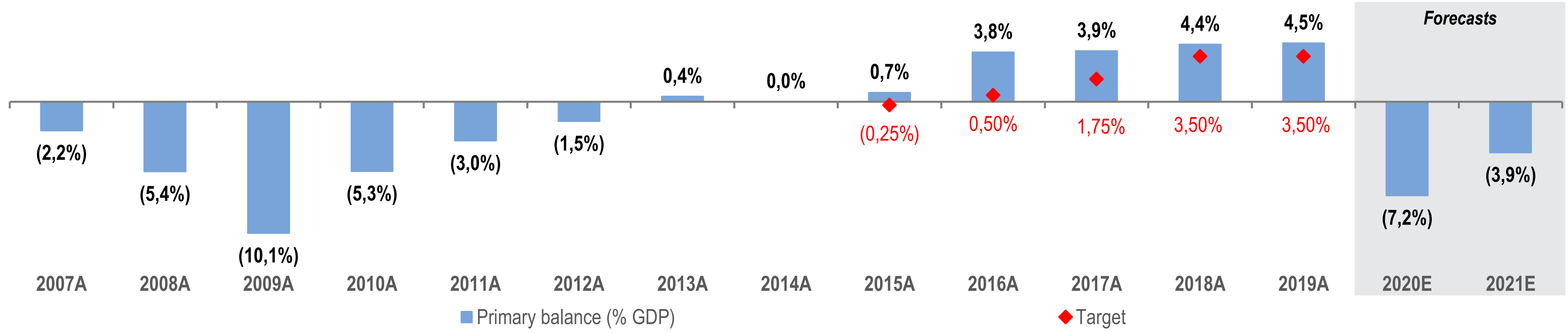
- **Greece entered into the COVID-19 crisis with substantial fiscal buffers**
  - Since 2015, Greece had repeatedly overperformed its fiscal targets and ran significant fiscal primary surpluses
  - In 2019, it reached 4.5% of GDP, in excess of the 3.5% target
- **This strong performance allowed for a timely and sizeable fiscal response to the pandemic in 2020, in support of the Greek population and its economy**
  - This policy response has been supported by the activation of the SGP's General Escape Clause, which was extended for 2021
- **Greece remains committed to fiscal discipline, and targets a reduction in the fiscal primary balance to –3.9% of GDP in 2021 from –7.2% of GDP estimated in 2020**

Greece Cyclically-Adjusted Primary Balance *(% of GDP)*



Sources: European Commission (Autumn 2020 forecasts); Ministry of Finance for 2020E Primary balance

Greek Primary Balance: Historical Figures and Targets *(% of GDP)*



Sources: IMF for historical figures (2007-2016); European Commission for data for 2016-2019 (Autumn 2020 forecasts); Ministry of Finance for 2020-2021E

GREECE GROWTH STRATEGY WILL BE SUPPORTED BY THE DEPLOYMENT OF EU FUNDS OVER THE COMING YEARS

Greece growth strategy will take advantage of the available liquidity and will support Greece longer-term economic outlook

- **The government has outlined the strategic directions for its National Recovery and Resilience Plan (NRRP). It provides a comprehensive roadmap of reforms and projects to be funded by €32bn Next Generation EU (NGEU) funds available for Greece**
- **The plan aims at fostering a green and digitalized transformation, supporting employment and stimulating private investment**
- **The funds will be disbursed over 2021-26 and will leverage the strong absorption capacity of the Greek economy over the past years**

Key objectives of the NRRP

- Promoting economic, social and territorial cohesion and convergence
- Strengthening economic and social resilience
- Mitigating the economic and social impact of the crisis
- Supporting the green and digital transition

Funding sources of the NRRP - NGEU funds *(€bn)*

RRF Grants – *allocated as follows:*	**16.4**
Green	*6.2*
Digital	*2.1*
Employment, skills and social cohesion	*4.1*
Private investment and economic & institutional transformation	*4.0*
RRF Loans	**12.6**
Other Grants[1]	**3.0**
Sum of Grants and Loans	**32.0**

Greece and EU peers' fund absorption capacity[2] *(% of GDP)*

Sources: Hellenic Republic – National Recovery and Resilience Plan; European Commission

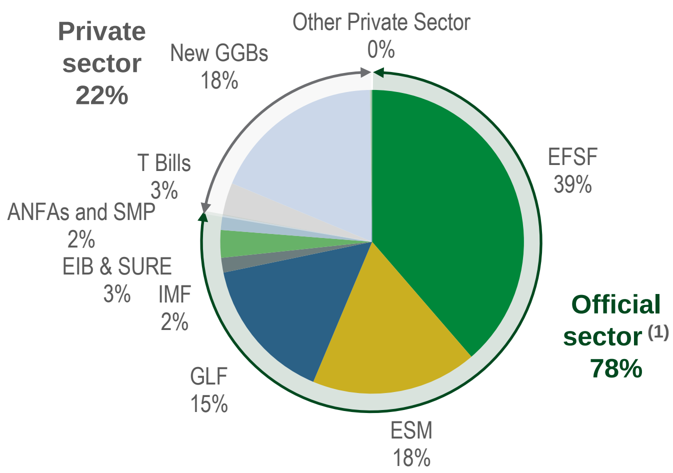
Notes: 1) REACT-EU, Just Transition Fund, European Agricultural Fund for Rural Development; 2) European Regional Development Fund over 2014-2020 (as of 11/12/2020)

III OVERVIEW OF GREEK PUBLIC DEBT SUSTAINABILITY

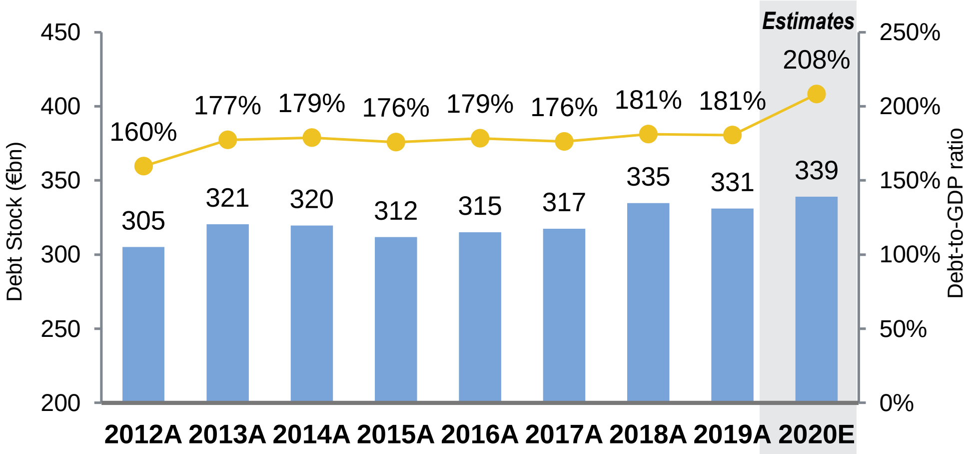
GREECE BENEFITS FROM A FAVOURABLE DEBT STRUCTURE

- **Due the COVID-19 impact, the Greek debt-to-GDP ratio has increased this year**
  - The total debt stock is expected to increase from 181% of GDP (€331bn) in 2019 to 208% of GDP (€339bn) in 2020
  - This represents a debt increase in nominal terms limited to €8bn
- **Greece benefits from a favourable debt structure**
  - Over 78% of the debt stock is held by official sector creditors(1), allowing for **long term maturity profile** and **low interest rates**
  - **97% of debt is fixed rate**(2), limiting risks related to the raise of interest rates in the debt capital markets

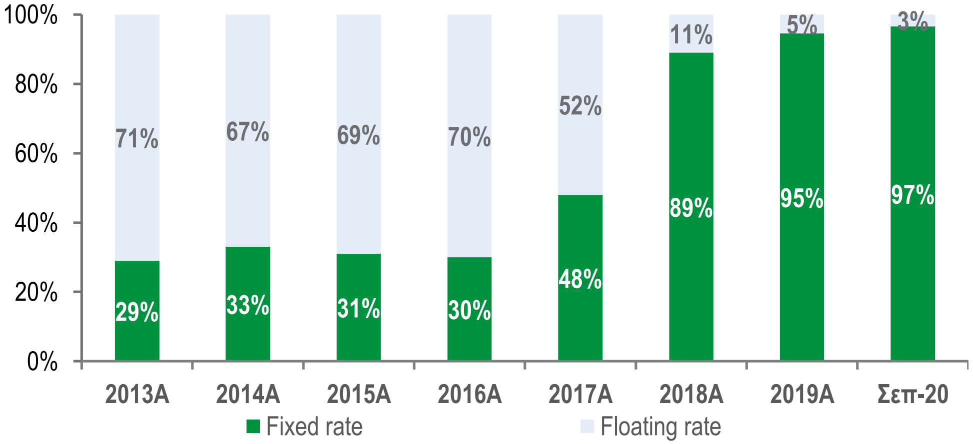
Debt Breakdown by Type of Instruments, as of YE 2020E



Evolution of Greek Public Debt



Debt Breakdown by Coupon Rate Type(2)

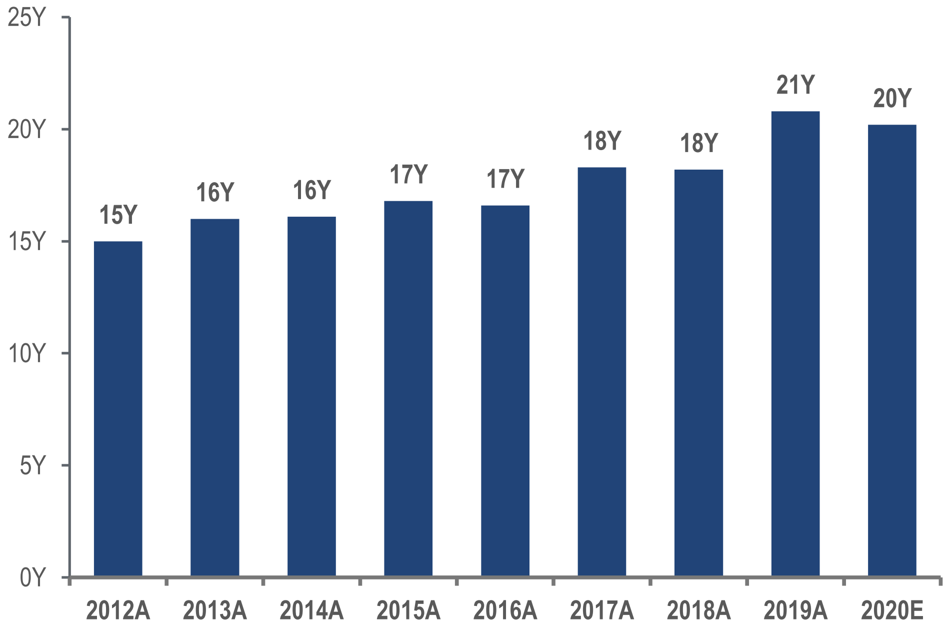


(1) Excludes Eurosystem holding of GGBs, purchased on the secondary markets through the PEPP; (2) Fixed/floating ratio is calculated taking into account: i) interest rate swap transactions, ii) the use of funding instruments by ESM regarding the loans that have been granted to the Hellenic Republic and iii) the incorporation of the risk metrics of EFSF's liability portfolio into the Greek debt portfolio

GREEK PUBLIC DEBT HAS AN EXCEPTIONALLY LONG MATURITY

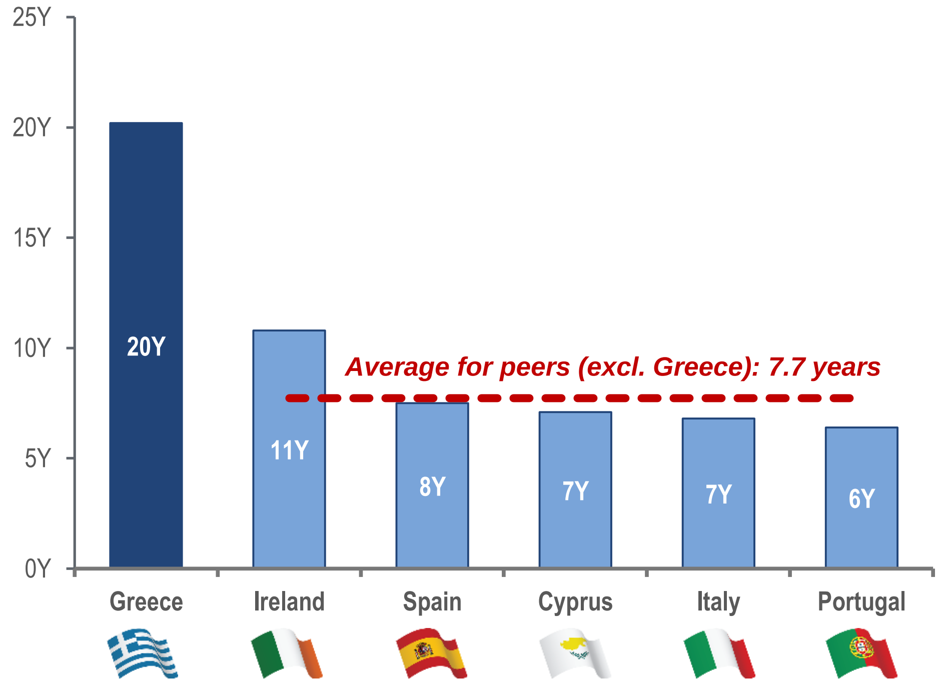
- **The weighted average maturity of the Greek public debt stock has significantly increased since 2012 and now stands at 20Y**
  - Greek public debt weighted average maturity stands largely above the similar indicator for Eurozone peers (20Y vs 8Y on average for a selected group of peers)
- **Such long weighted average maturity limits refinancing risks**

Evolution of Weighted Average Maturity of Greek Public Debt



Source: PDMA

Greece and EZ Peers' Debt Weighted Average Maturity *(2020E)*

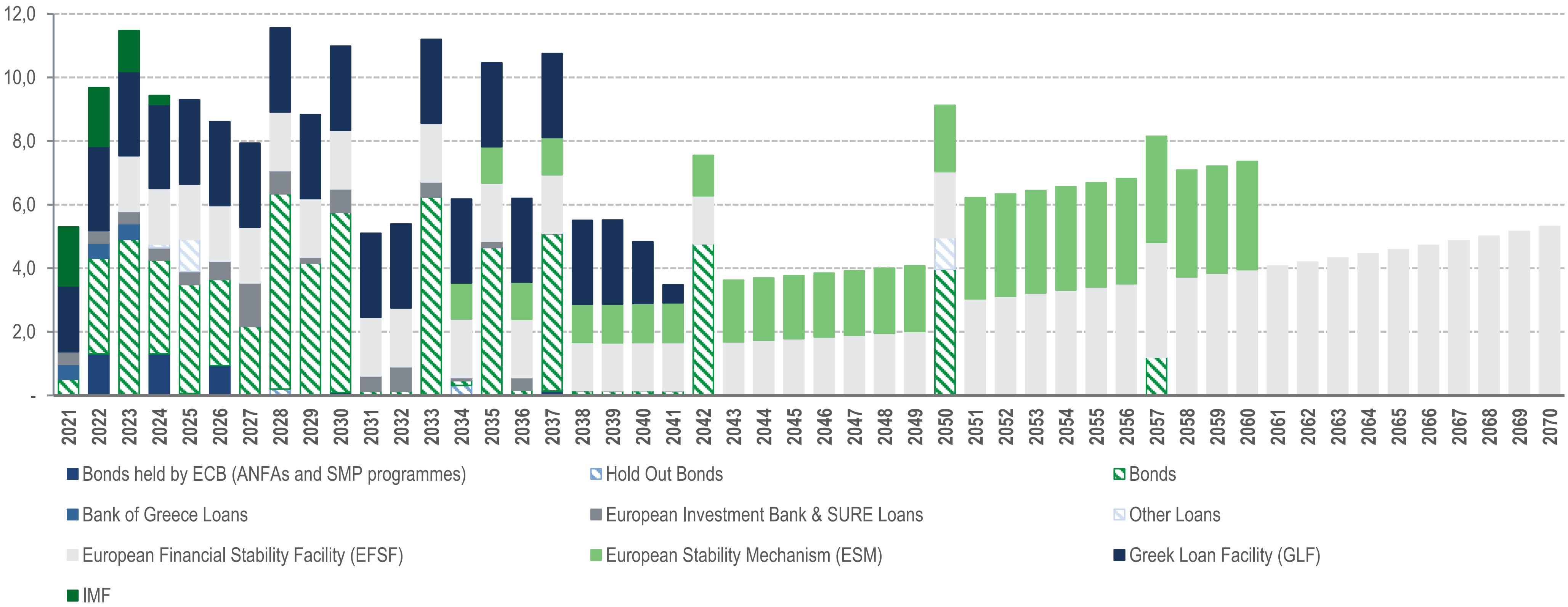


Sources: PDMA, IMF Fiscal Monitor October 2020

A MATURITY PROFILE WELL INSIDE RECENT DEMAND DYNAMIC

- **Public debt repayment profile will remain below €12bn each year, which compares favorably to the demand (€77bn of demand in 2020, for €12bn raised) even leaving aside the large cash buffer**
- **Such favourable amortization profile limits public debt refinancing risks in short, medium and long terms**

Maturity Profile of the Greek Public Debt as of YE 2020E *(€bn)*

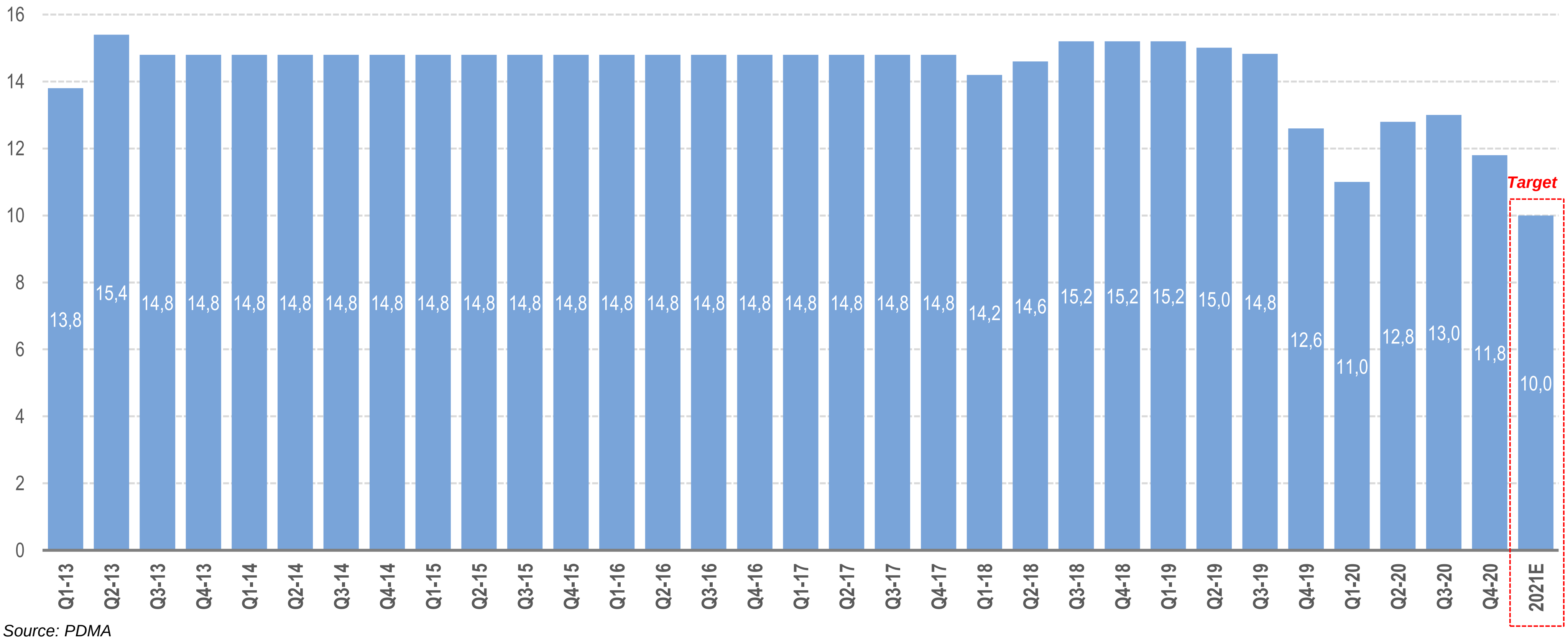


Source: PDMA
Note: Maturity profile excludes T-bills and REPOs.

THE STOCK OF GREEK T-BILLS IS TO DECLINE

- **The current stock of T-bills of the Hellenic Republic is estimated at €11.8bn at the end of 2020**
- **The further planned reduction in the stock of T-bills by c. €1.8bn in the course of 2021 would allow the government to reduce further short-term refinancing risks and provide space for additional GGBs' issuances**

Evolution of the Stock of Greek T-bills by Quarter *(End of Period, €bn)*



Source: PDMA
Note: The T-bills' stock is calculated at the end of each quarter

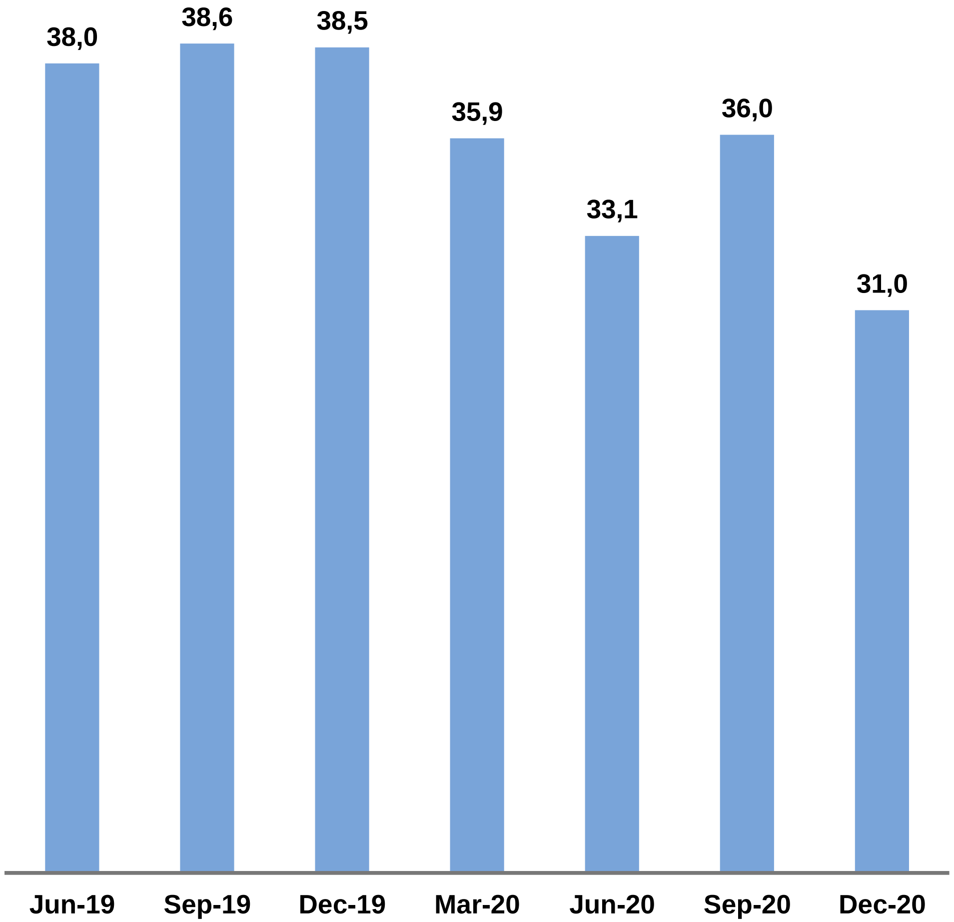
THE SUBSTANTIAL CASH RESERVES IS ANOTHER BACKSTOP AGAINST REFINANCING RISK

Greece's cash reserves now exceeds €31bn [(1)], i.e. over 2 years of debt maturities

Key Considerations

- **Greece benefits from important cash reserves, which it has progressively accumulated over the past years thanks to:**
  - New GGBs' issuances over 2017-20
  - Final loan disbursement of the ESM under its financial assistance programme of €15bn in August 2018, out of which €5.5bn were dedicated to the segregated account and €9.5bn to the cash buffer account
  - Primary budget surpluses
- **Despite the increase in funding needs throughout 2020, the active debt management has allowed to maintain cash reserves of €31bn at end of December**
- **Greece sizeable cash reserves will allow to contain refinancing and interest rate risks** related to Greek public debt stock over the medium-term

Greece's Cash Reserves *(€bn)*[(1)]



Source: PDMA

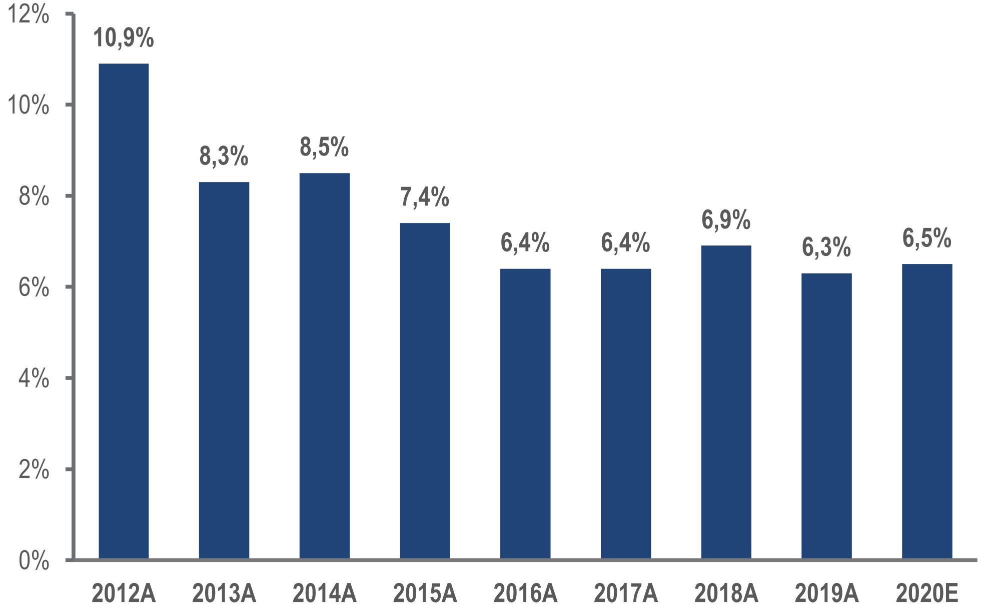
Note: (1) Including general government entities' deposits in commercial banks

THE AFFORDABILITY OF GREEK PUBLIC DEBT IS IMPROVING

Greek debt affordability is improving, as interest debt service as % of government revenues is decreasing, on the back of falling financing costs for Greece

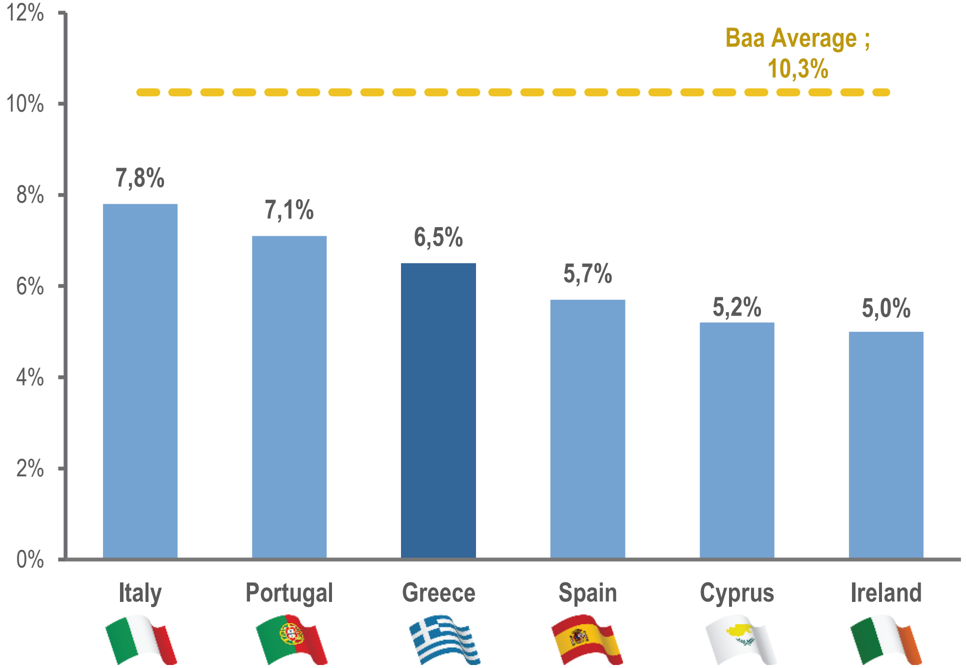
- **Interest debt service as a share of total Greek government revenues has considerably decreased over the past years, from 10.9% in 2012 to 6.3% in 2019 and 6.5% in 2020 – despite a conjunctural contraction in revenues. Compared to 2019, the combined effect of (i) lower revenue and (ii) lower average interest rate on debt leads to stability of interests-to-revenue ratio**
- **Although Greece has the highest public debt-to-GDP ratio in the Eurozone, and despite the COVID-19 shock, Greece debt service remains in line with its peers' and significantly below the average of Baa3-rated sovereigns', providing further evidence of the affordability of Greek public debt**

Evolution of Greek Interest Debt Service to Revenues



Source: Ministry of Finance

Greece & EZ peers' Interest Debt Service to Revenues *(2020E)*

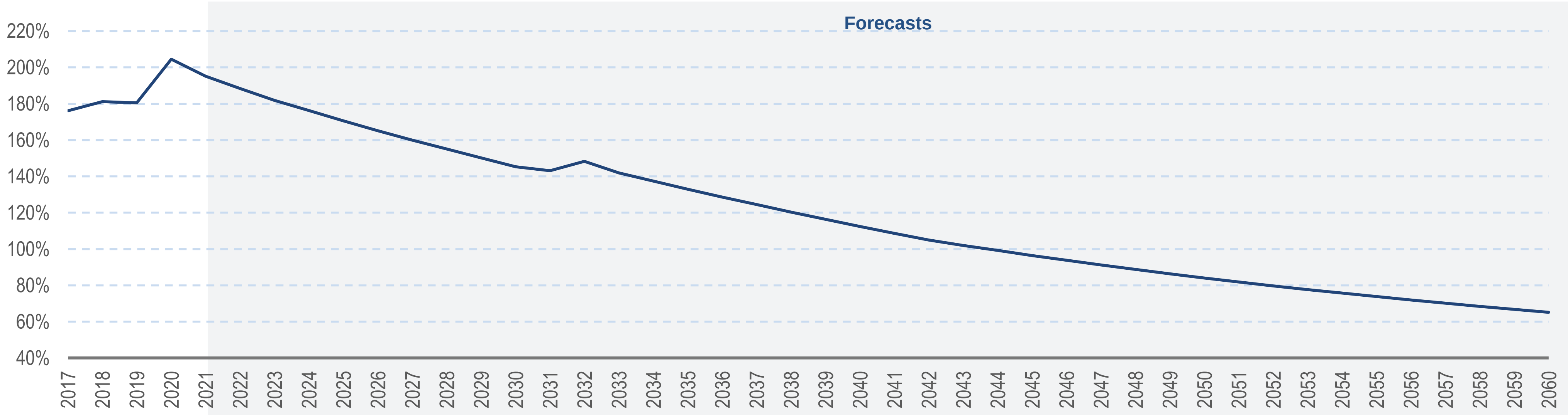


Sources: Ministry of Finance; Moody's

GREEK PUBLIC DEBT-TO-GDP RATIO IS EXPECTED TO RESUME ITS SUSTAINED DOWNWARD TREND

Despite a short-term deterioration due to the COVID-19 impact, the Greek debt-to-GDP ratio is expected to decrease over the coming years, supported by strong economic recovery, sustained fiscal discipline and a proactive debt management strategy

Public Debt to GDP Forecast *(% of GDP)*



	2021	2022	2023	2024	2025 onwards
Real GDP growth rate	4.8%	3.5%	2.2%	1.9%	1.7% to 0.7%(1)
Inflation (GDP deflator)	0.6%	1.0%	1.2%	1.1%	1.2% to 2.1%(2)
Average effective interest rate *(medium- & long-term debt)*	1.4%	1.4%	1.4%	1.3%	2.1%(3)
Primary surplus	(3.9%)	(0.8%)	2.2%	2.2%	2.2%

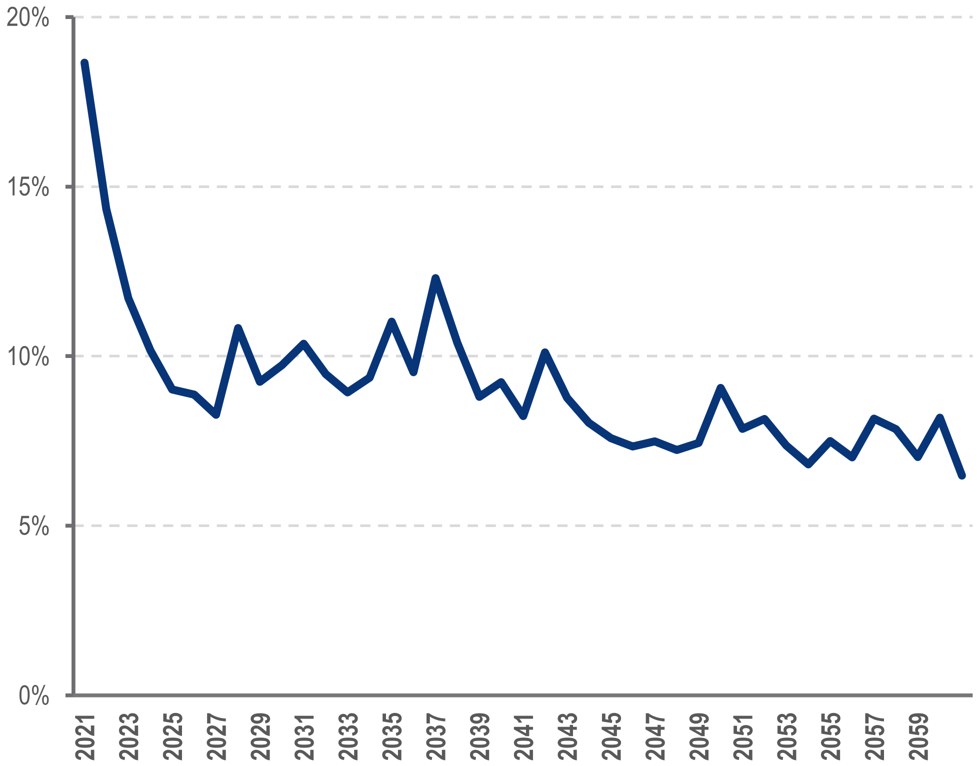
Sources: PDMA, Ministry of Finance, European Commission

Note: The present analysis is mainly based on the baseline assumptions of the European Institutions; 1) Real GDP growth decreasing steadily from 1.7% in 2025 to 0.7% in 2030, and then remaining constant at 0.7% from 2030 onwards; 2) GDP deflator increasing steadily from 1.2% in 2025 to 2.1% in 2030, and then remaining constant at 2.1% from 2030 onwards:; 3) Average effective interest rate for the period 2025-2060

GREECE GROSS FINANCING NEEDS ARE AMONG THE LOWEST OF THE EUROZONE

Greece Gross Financing Needs will not exceed 20% of GDP over the coming years, significantly below the average of Eurozone peers

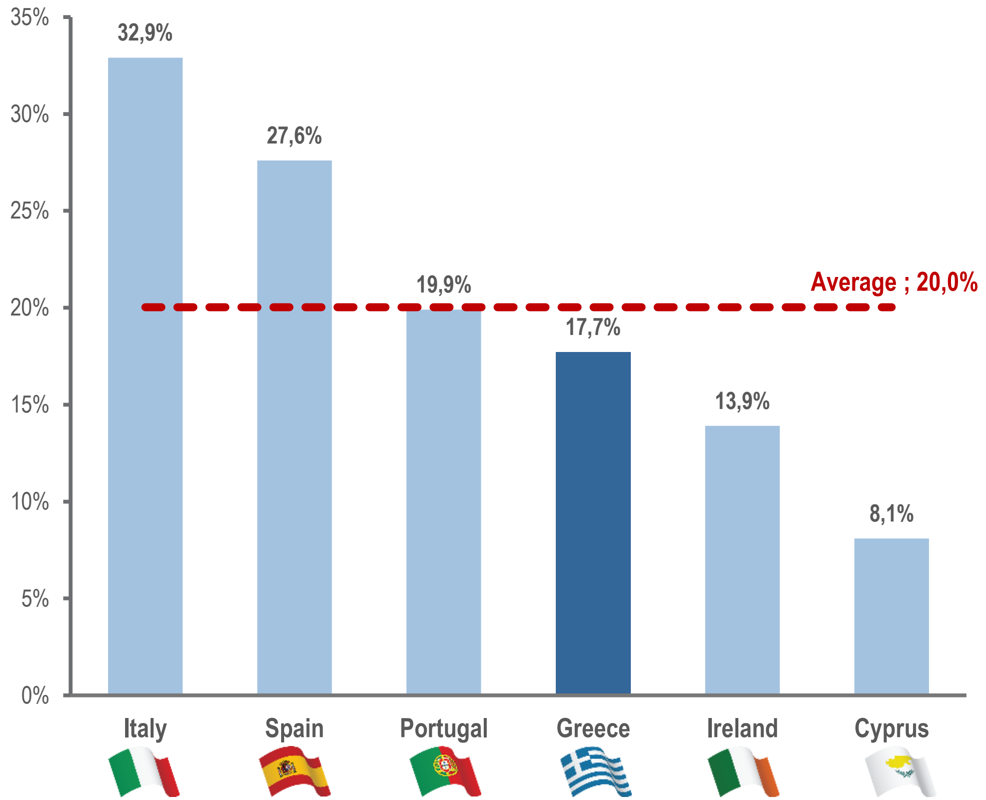
Evolution of Gross Financing Needs[1] *(% of GDP)*



Source: PDMA

Note: 1) Including T-bills and excluding Repos

Greece & EZ peers' Gross Financing Needs *(2020E, % of GDP)*



Sources: IMF Article IV for Greece (November 2020), IMF Fiscal Monitor October 2020

IV FOCUS ON FINANCING NEEDS FOR 2021

OVERVIEW OF PDMA DEBT & 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. **Lower 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 the General Government Entities)**

FOCUS ON GREECE’S FINANCING NEEDS AND SOURCES

PDMA funding strategy for year 2021 will focus on the continuous presence in the international debt markets, accompanied by the reduction in debt-to-GDP ratio and the preservation of a large cash buffer

- **PDMA considers 2 main financing scenarios for 2021 depending on the amount of early repayments: (1) Scenario 1 focuses on the reduction in T-bills’ stock through issuance of additional GGBs, while (2) Scenario 2 takes into account additional possible early prepayments of official and private sector debt. The final amount of early prepayments will depend on market conditions in 2021**

Overview of Greece’s 2021 Financing Needs and Sources *(€bn)*

	Scenario 1	Scenario 2
2021 Financing Needs		
Medium- and long- term debt amortization	5.4	5.4
Interests on medium- and long- term debt (incl. interest rate swaps)	5.2	5.2
Primary deficit / (surplus) to finance	8.1	8.1
Early repayments (T-bill stock reduction, official sector debt, etc.)	1.8	3.8
Other cash requirements	1.6	1.6
Total	**22.0**	**24.0**
2021 Financing Sources		
Medium- and long- term debt issuance (new money transactions)	8.0	12.0
Other financing sources (SURE, RRF, EIB, CEB, etc.)	2.5	3.0
Return of SMP / ANFA profits	1.3	1.3
Privatization receipts	1.5	1.5
Change in cash reserves, decrease / (increase)	8.7	6.2
Total	**22.0**	**24.0**
Change in public debt, increase / (decrease)	**3.3**	**5.8**