



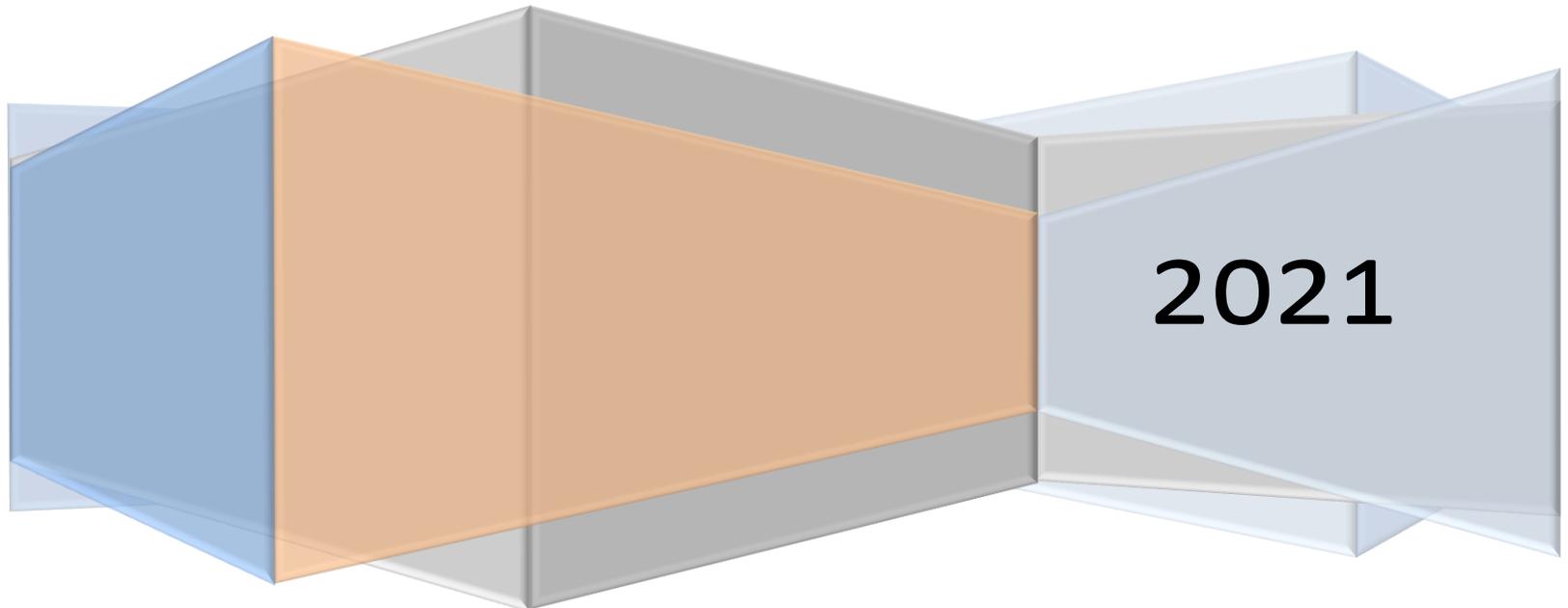
HELLENIC REPUBLIC
Ministry of Finance



HELLENIC REPUBLIC
Public Debt Management Agency

Sovereign Borrowing Outlook

Annual Report

A large, 3D geometric graphic consisting of several overlapping, semi-transparent rectangular blocks in shades of blue, orange, and grey. The year '2021' is prominently displayed in black text on the rightmost, light grey block.

2021





Ministry of Finance

Public Debt Management Agency Sovereign Borrowing Outlook 2021, Annual Report

The annual report is available at the following websites:

www.minfin.gr
www.pdma.gr

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BRIEF REVIEW OF THE GREEK ECONOMY

The growth rate of the economy increased during the second quarter of 2021, creating favorable conditions for the restart of the Greek economy with a rapid and strong recovery. Private consumption, investment and the external sector fueled economic activity. The recovery of a significant part of the losses at tourism sector and the maintenance of the upward pace in the processing industry helped to support the disposable income and employment.

Business expectations were maintained at a high level and strengthened throughout the year, while the development of key economic indicators in industry, construction and export activity remained particularly positive throughout the second half of the year. Inflation, from June onwards, recorded positive rates, as there was a significant increase in the prices of energy, raw materials and food internationally. At the same time, imported inflationary pressures have multiplied due to problems in global supply chains.

The pandemic footprint on key labor market figures remains mild so far, as measures to protect both employment and workers' incomes have proved effective, with clear signs of improving employment being recorded from the second quarter onwards.

In the external sector, the competitiveness of the economy has improved, both in terms of prices and in terms of structure. Exports of goods continued to rise, but the balance of goods deficit widened, especially after the first quarter of the year, when imports accelerated due to the recovery in consumption and investment. In this direction, a special role is expected to play the effective utilization of the resources of the European recovery instrument NextGenerationEU to increase investments and the overall productivity of the economy, the implementation of the reforms included in the National Recovery and Sustainability Plan, but also the financing of the real economy.

Economic activity is estimated to have recorded a growth rate of 8.3% in 2021. For 2022 it is projected to reach 3.1%. Factors that may positively affect the recovery include the faster-than-expected increase in household consumption and the acceleration of the absorption of NextGenerationEU resources.

Basic figures of the Greek economy (% annual changes, constant prices)

	2020	2021
GDP	-9,0	8,3
Private Consumption	-8,0	7,8
Public Consumption	2,6	3,7
Gross fixed capital formation	-0,3	19,6
Exports of goods and services	-21,7	21,9
Imports of goods and services	-7,6	16,1
GDP Deflator	-0,8	2,1
Harmonized index CPI	-1,3	0,6
Unemployment rate	16,3	14,8

Source: Hellenic Statistical Authority (www.statistics.gr)

The high amount of cash reserves combined with the reduced financing needs of the Greek State for 2021 created favorable conditions for the continuation of the country's successful presence in the capital markets, which was based on the issuance of a ten-year bond in early February. This was followed by five successful syndicated bond issuances which had a high rate of overbook coverage and were sold mainly to final investors. The continuation of the issuance activity normalized the maturity profile of the public debt and further enriched the reference yield curve of Greek government bonds, both in volume and liquidity.

SOVEREIGN BORROWING 2021

During 2021, the utilization and the optimal management of the cash resources of the General Government entities continued, through the implementation of a program of cash management operations in the form of repo agreements, which were executed by Public Debt Management Agency.

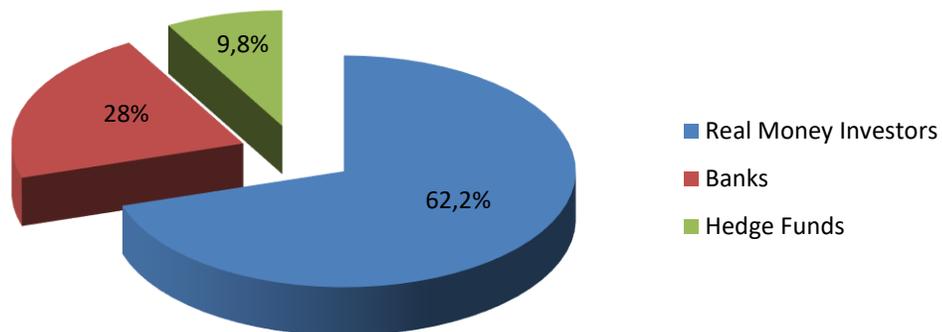
With this program, about 75% of the total cash of these institutions is utilized in a very efficient way, providing them with competitively high returns, to their advantage, while ensuring a corresponding benefit in terms of the budget result of General Government and the sustainability of public debt.

During 2021, PDMA successfully launched new syndications in the international capital markets (six times), raising a total of € 14 billion. More than 70% of the buyers were long-term investors, indicating that Greece is returning to its normal financing position.

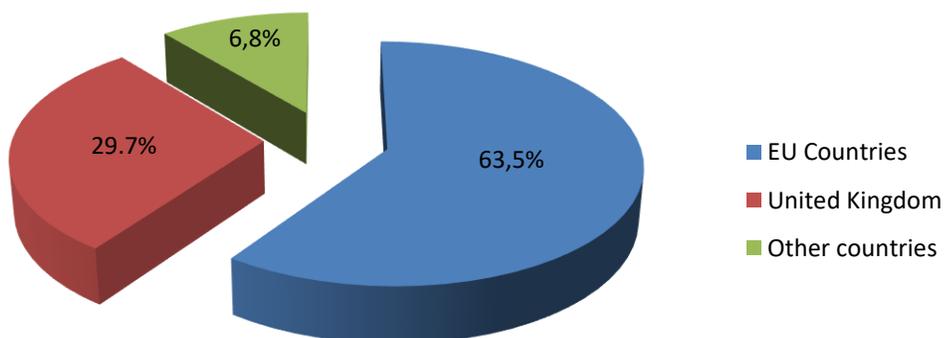
Issuance Date	Maturity Date	Duration	Initial Offers	Nominal Amount	Yield	Type of Issuance
5-2-2021	18-6-2031	10 years	31,0 bln	3,5 bln	0,807%	New issue
24-3-2021	24-1-2052	30 years	25,8 bln	2,5 bln	1,956%	New issue
12-5-2021	12-2-2026	5 years	20,7 bln	3,0 bln	0,17%	New issue
18-6-2021	18-6-2031	10 years	30,3 bln	2,5 bln	0,888%	Reopening
8-9-2021	12-2-2026	5 years	9,3 bln	1,5 bln	0,02%	Reopening
8-9-2021	24-1-2052	30 years	9.6 bln	1,0 bln	1,68%	Reopening
		Total	€126.7 bln	€14 bln		

In terms of investor distribution, only 9.8% of the issues were distributed to hedge funds, with the remaining 90.2% distributed mainly to long-term, good quality investors, 29.7% came from the United Kingdom, 63.5% from European Union countries and the remaining 6.8% from other countries.

2021: New Issued Bonds - Distribution by Type of Investor



2021: New Issued Bonds - Distribution by Country



Gross financing needs of the State Budget during the year 2021 (excluding the stock of short-term interest-bearing debt and repos) amounted to **€ 25,805** million and were covered by:

- Long-term borrowing amounting to **€ 20,720** million at face value with a settlement value (cash inflow) of **€ 21,293**
- Revenues from privatizations (sale of shares) amounting to **€ 654** million.
- Revenue from ANFAs -SMPs amounting to **€ 1,554** million.
- Revenues from financial transactions amounting to **€ 8** million.
- Short-term borrowing of **€ 1,599** million.
- Consumption of cash amounting to **€ 697** million.

Cash reserves at the end of 2021 amounted to **€ 17,334** million, compared to **€ 18,031** million at the end of 2020, is decreased by **€ 697** million.

Also, if we consider the deposits in SDR HOLDINGS which on 31-12-2021 was SDR 2,335.7 billion (€ 2,890.4 billion) the total cash is **€ 20,224** million.

In particular, new debt issues created a cash inflow of **€ 21,293** million, consisting of:

- The reissue and distribution to the National Bank of Greece and Piraeus Bank of a 30-year fixed interest rate bond of 3.25% with a total nominal value of € 1,400 million, maturing on 20-3-2050 with a settlement price of 144,800% and a cash inflow of € 2,027 million.
- Issuance of a new 10-year bond with a nominal value of € 3,500 million, fixed interest rate 0.75% maturing 18-6-2031 and a yield of 0.807% with an issue price of 99.436%, so a cash inflow of € 3,480 million.
- Issuance of a new 30-year bond with a nominal value of € 2,500 million at a fixed interest rate of 1.875%, maturing on 24-1-2052 and a yield of 1.956% with an issue price of 98.140%, thus a cash inflow of € 2.454 million.
- Issuance of a new 5-year bond with a nominal value of € 3,000 million, zero interest rate 0%, maturing 12-2-2026 and a yield of 0.17% with an issue price of 99.186%, so a cash inflow of € 2,976 million.
- Reissue of a 10-year bond with a fixed interest rate of 0.75%, maturing on 18-6-2031 with a nominal value of € 2,500 and a yield of 0.888% with an issue price of 98,685%, thus a cash inflow of € 2,467 million.
- Re-issuance of a 5-year bond with a nominal value of € 1,500 million, zero interest rate maturing 12-2-2026 and yield 0.02% with an issue price of 99.911%, so a cash inflow of € 1,499 million.
- Reissue of a 30-year bond with a nominal value of € 1,000 million, fixed interest rate 1.875%, maturing 24-1-2052 and yield 1.68% with an issue price of 104.730%, so a cash inflow of € 1.047 million.
- Loans from the European Investment Bank and Cohesion Fund € 401 million with an average interest rate of 0.65% and an average duration of 13.2 years.
- Loans through the SURE program (back-to-back funding) 12.8 years with an average duration of nominal value € 3,265 million, an average yield of 0.11% and an average price of 100.707% and a cash inflow of € 3,288 million.
- Loan through the 20-year Recovery Fund with a nominal value of € 1,655 million with an average interest rate of 0.13%.

The balance of treasury bills decreased by **€ 1** million, thus forming the new balance of treasury bills at the end of 2021 at **€ 11,801** million, while the short-term repurchase agreements (Repos) increased by **€ 11,800** million, forming the balance of Repos at the end of 2021 to **€ 35,356** million and therefore the total net short-term borrowing amounted to **€ 5,641** million, while Repos increased by € 1,600 million, forming the stock of Repos at the end of 2021 at € 36,957.

The weighted average duration of new borrowing for 2021 stood at 9.8 years while the weighted average cost of new borrowing - excluding REPOs - stood at **0.32%**.

PORTFOLIO MANAGEMENT

The strategy of portfolio management through selective derivative transactions continued during 2021, with the main goal of further reducing the cost of debt service.

Portfolio management operations during the year 2021 had to do mainly with transfers of existing derivative transactions from Foreign Banks to the Greek ones within the framework of GLF.

The reason is mainly the opening of country lines by foreign banks to continue the banking operations in Greece without any problems.

Greece benefited from all the above-mentioned operations through:

- Further reduction and maintenance of historical low interest rate risk, especially useful in the current conditions of historically low interest rates,
- Maintenance of the foreign exchange risk at the lowest possible levels,
- Further utilization of the cash resources of the general government bodies in accordance with the existing institutional framework,
- The optimal utilization of government cash and the general rationalization in filling the gaps and the proper management of the short-term cash liquidity,
- Further provision of liquidity in the Greek yield curve, through the creation of benchmark issues with a sufficient volume, a fact that led to the reduction of bid / offer spreads, i.e. the reduction of transaction costs, the increase of GGBs demand and hence the increase of prices and the reduction of spreads vs bunds and thus the reduction of the new borrowing costs.
- The facilitation of the counterparty banks (Greek and foreign) that constitute the team of Key Market Negotiators, to increase their credit limits with the Greek government,
- The comparative improvement of the position and profitability of the General Government entities in general but also of the Common Capital in particular.

PSI Bond Exchange on 17-12-2021

On 6-12-2021 the Greek government proceeded to an invitation for a voluntary exchange of the 20 bonds issued in 2012 under the PSI, maturing from 2023 to 2042, with a total nominal value of 4 billion euros, through the reissue of 4 fixed rate bonds maturing in 2027, 2033, 2037 and 2042.

Especially for PSI bonds maturing in 2023, 2024, 2025 and 2042, they were given the opportunity to exchange them for cash so that both Bank of Greece as well as American investors (for the maturity bond 2042) could participate. The settlement date of the transaction was 17-12-2021.

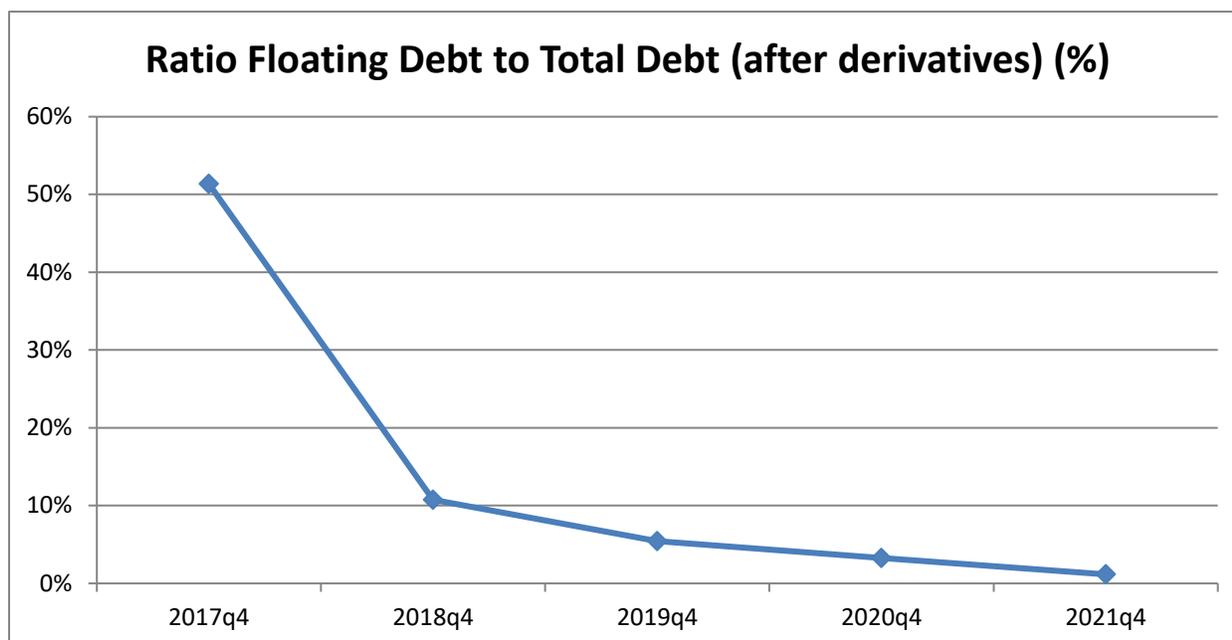
The whole project was successful as the initially set goals were achieved, as follows:

- The participation of investors in the exchange amounted to 72.16%.
- The so-called tradable debt was strengthened as the nominal value of bonds maturing in 2023, 2024, 2025 and 2042 increased accordingly, the lack of which had created distortions in their pricing as well as in the overall yield curve of Greek government securities.
- Most of the PSI bonds have been withdrawn, a fact that has a great symbolic value as, in fact, it marks the end of this era and contributes to the smooth flow of financing through financial markets.

RISK ASSEMENT & CONTROL FACTORS

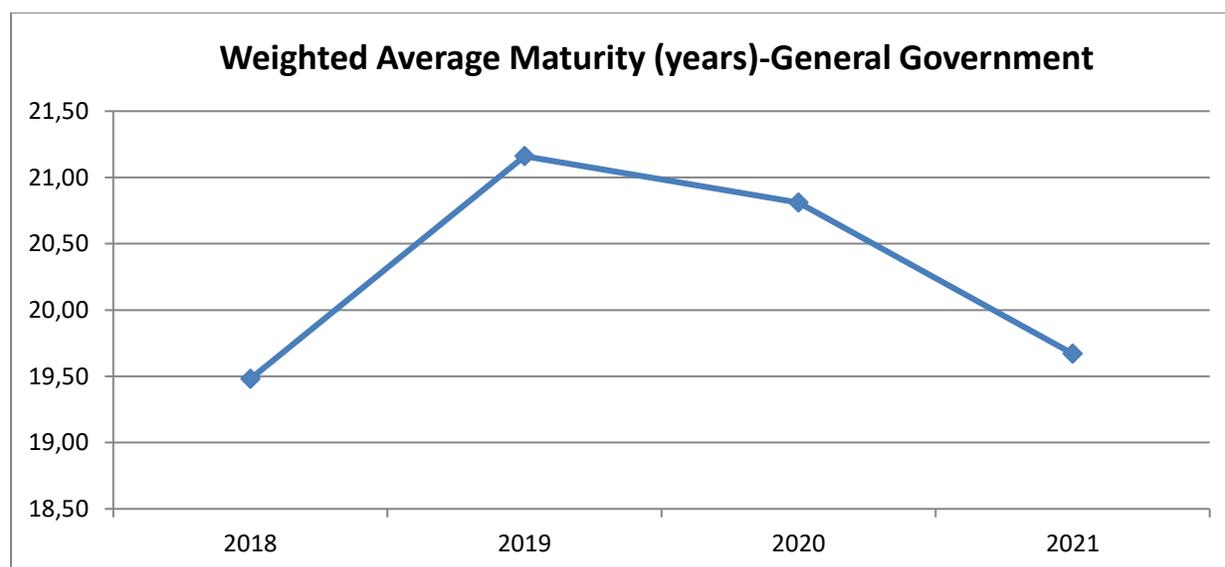
The debt portfolio had the following characteristics at the end of the year:

	31/12/2021
Refinancing Risk 1Y (%)	5,76%
Refinancing Risk 5Y (%)	17,72%
Refixing Risk 1Y (%)	13,02%
Refixing Risk 5Y (%)	23,68%
Ratio Foreign Debt to Total Debt (before derivatives) (%)	0,54%
Ratio Foreign Debt to Total Debt (after derivatives) (%)	0,33%
Ratio Floating Debt to Total Debt (before derivatives) (%)	17,32%
Ratio Floating Debt to Total Debt (after derivatives) (%)	1,16%
Average Time to next refixing	19,76 years
Average Life (years)	20,58 years



Interest rates are at historically low and negative levels and the expectation for their rise is an extremely important factor. The Greek portfolio is well shielded by future interest rate hikes resulting in the cost of servicing to be predictable and very low for the coming years. This fact is a great “breath” for the Greek Economy and its future growth. This is also proven by the continuous upgrades and positive evaluations, of the Government Bonds and Greek Banks, by the credit rating agencies.

The weighted average debt maturity index remains over 20 years, which gives Greece time to further improve its portfolio and most importantly to provide funding to the productive sectors of the economy, thus boosting GDP.



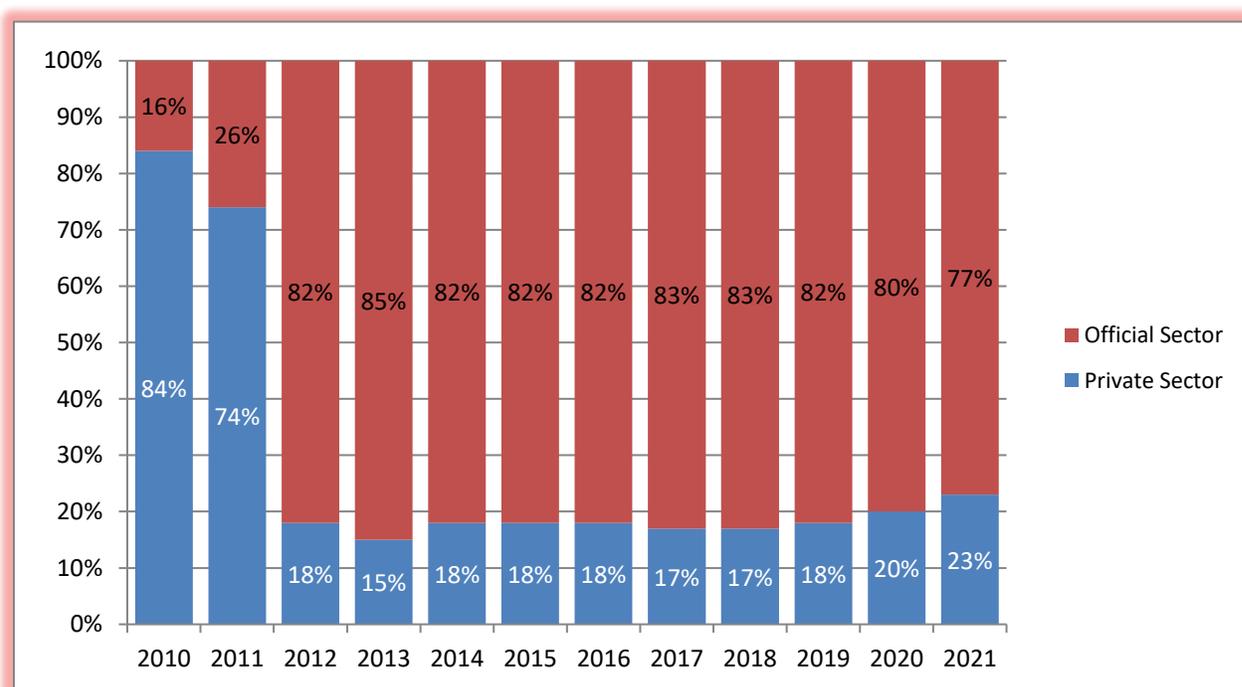
CENTRAL (STATE) GOVERNMENT DEBT ANALYSIS

The table below illustrates the analysis of the change in central (state) government debt from 2020 to 2021.

	31/12/2020	Net	New issues	Principal	Due to exch. rates changes	Other	31/12/2021
Total gross debt							
Breakdown by type of debt instrument, original maturity and creditor	374.005,73	14.720,22	1.132.954,44	1.118.234,22	56,24	-444,78	388.337,41
Debt Securities	78.680,78	14.334,91	48.224,32	33.889,41	0,00	-421,68	92.594,01
Short Term	11.801,28	-1,28	24.800,00	24.801,28	0,00	0,00	11.800,00
T-Bills	11.801,28	-1,28	24.800,00	24.801,28	0,00	0,00	11.800,00
Long Term	66.879,50	14.336,19	23.424,32	9.088,13	0,00	-421,68	80.794,01
issued domestically	65.169,06	14.336,19	23.424,32	9.088,13	0,00	-470,08	79.035,17
issued abroad	1.710,44	0,00	0,00	0,00	0,00	48,40	1.758,84
Loans	295.324,95	385,31	1.084.730,12	1.084.344,81	56,24	-23,10	295.743,40
Short Term	35.356,50	1.600,50	1.079.386,94	1.077.786,44	0,00	0,00	36.957,00
Long Term	259.968,45	-1.215,19	5.343,18	6.558,37	56,24	-23,10	258.786,40
Vis-a vis residents	1.634,53	-487,37	0,00	487,37	1,10	3,28	1.151,54
Bank of Greece	1.438,10	-472,27	0,00	472,27	1,10	0,00	966,93
Other residents	196,43	-15,10	0,00	15,10	0,00	3,28	184,61
Vis-a vis non residents	258.333,92	-727,82	5.343,18	6.071,00	55,14	-26,38	257.634,86
EFSF/ESM/IMF	248.260,29	-5.694,98	0,00	5.694,98	54,49	0,00	242.619,80
Other nonresidents	10.073,63	4.967,16	5.343,18	376,02	0,65	-26,38	15.015,06
Breakdown by currency of denomination	374.005,73	14.720,22	1.132.954,44	1.118.234,22	56,24	-444,78	388.337,41
Domestic currency denominated	369.839,37	17.865,21	1.132.954,44	1.115.089,23	0,00	-444,78	387.259,80
Debt securities	78.680,78	14.334,91	48.224,32	33.889,41	0,00	-421,68	92.594,01
Loans	291.158,59	3.530,30	1.084.730,12	1.081.199,82	0,00	-23,10	294.665,79
Foreign currency denominated	4.166,36	-3.144,99	0,00	3.144,99	56,24	0,00	1.077,61
Debt securities	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Loans	4.166,36	-3.144,99	0,00	3.144,99	56,24	0,00	1.077,61

The structure of the Public Debt by category of creditors as it was formed at the end of 2021 is shown in the following graph:

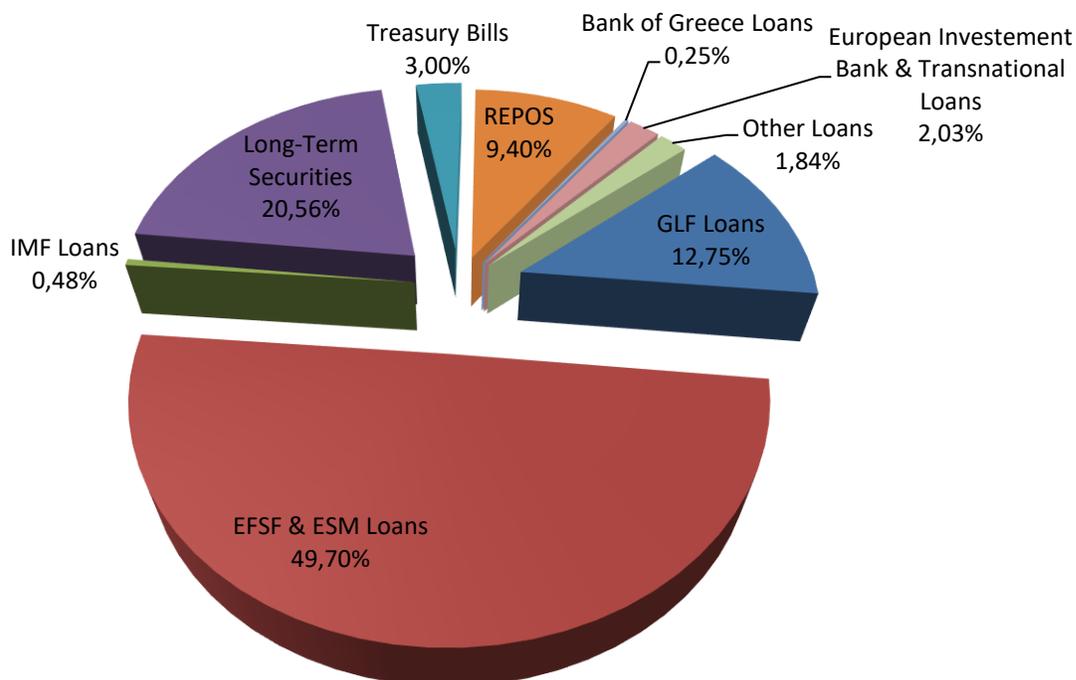
Central Government Debt by type of creditor



The picture of the debt structure from 2010 until today has changed almost completely, passing from the private to the official sector. This is mainly due to the PSI that took place in the year 2012.

At 31.12.2021 the stock of the central government debt by creditor showed the following breakdown:

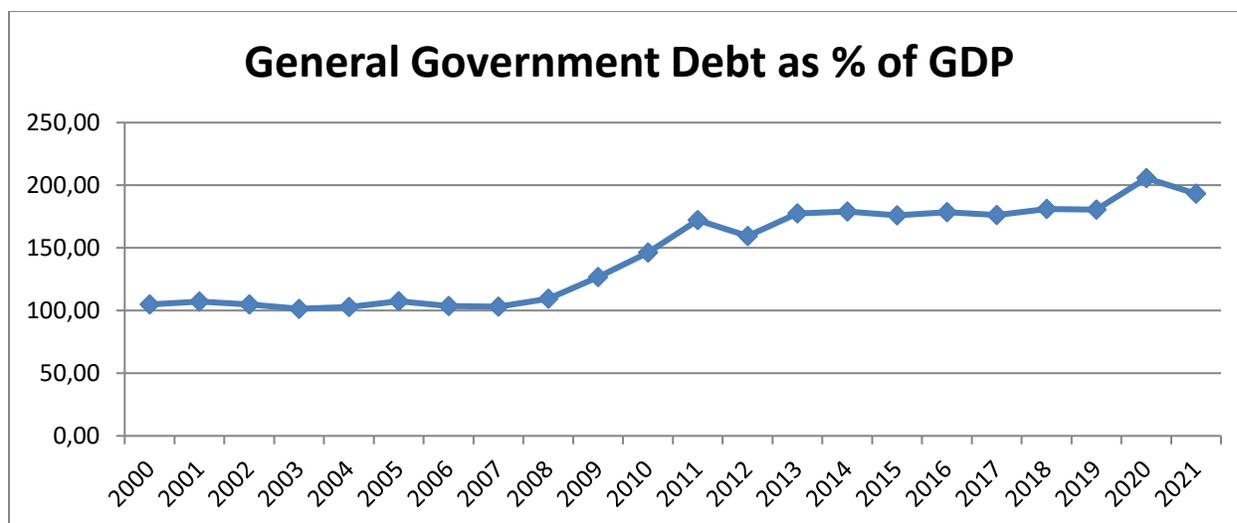
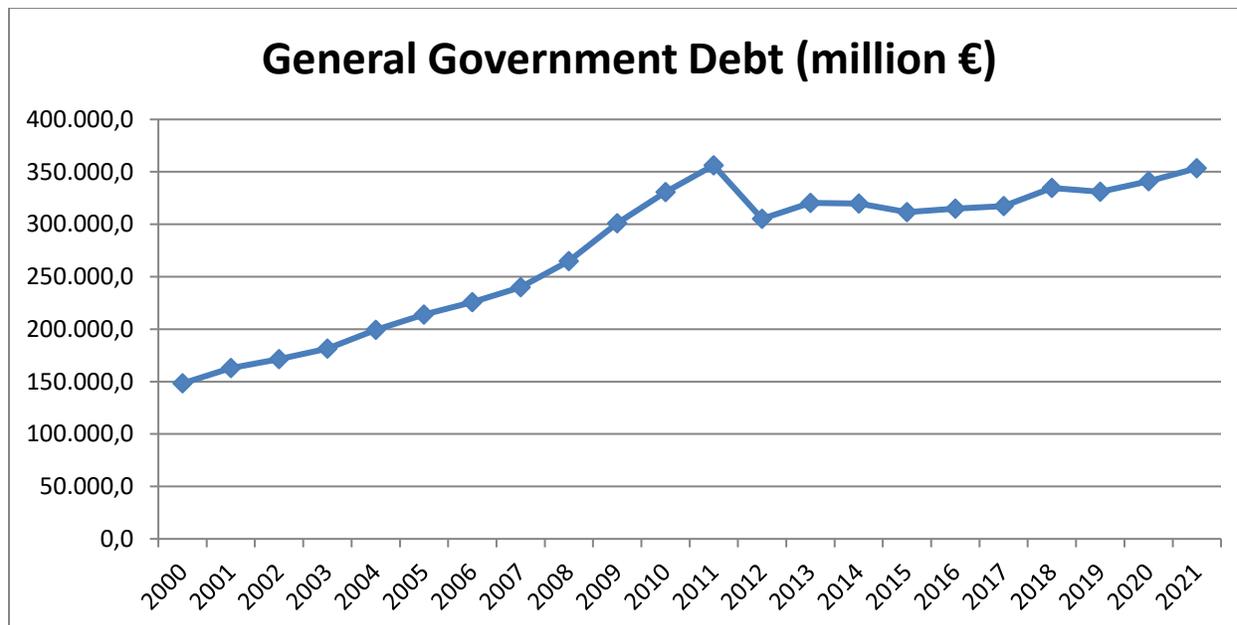
Central Government Debt Structure by Instrument at 31-12-21



The majority (49,7%) of Greek debt is held by the European Stability Mechanism and this ensures low interest rates and a long repayment period.

GENERAL GOVERNMENT DEBT ANALYSIS

The historical evolution of the general government debt is reflected in the following graphs:



Detailed information and data for all countries in the Eurozone are available at Eurostat's website and the Hellenic Statistical Authority (EL.ST.A) at the following links:

<http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsdde410&plugin=1%22>

<http://www.statistics.gr/el/european-statistics-tables>

The breakdown of general government debt for the year 2021 is shown in the table below. These figures are officially announced by the Hellenic and European statistical authorities in the last ten days of April each year.

Year 2021 (Amounts in million €)	State (S1311.1)	SOE(State Owned Enterprises) & EBFs (Extra Budgetary Funds) (S1311.2)	Consolidation of Central Government (S1311.1&2)	Central Government (S1311)	Local Government (S1313)	Social Security Funds (S1314)	Consolidation of General Government	General Government Debt(S13)
Currency & Deposits (AF2)	1.723	6.392	-356	7.759			-1.071	6.688
Bills & Short-Term Securities (AF331)	11.800		-669	11.131			-320	10.811
Long Term Securities (AF332)	80.783	105	-4.692	76.196			-6.071	70.125
Short Term Loans (AF41)	37.810	59	-22.692	15.177	9		-13.137	2.049
Long Term Loans (AF42)	260.917	2.659	-231	263.345	1.108	106	-843	263.716
Total	393.033	9.215	-28.640	373.608	1.117	106	-21.442	353.389
GG Debt (% GDP)								193,3%

Table Glossary:

Column 1 (State): The Central government debt with the adjustments made in the context of compliance with the European System of Accounts 2010 (ESA10).

Column 2 (DEKOs & EBFs): Debt of Public Utility Public Enterprise and Public Legal Entities (Other central government bodies).

Column 3 (Consolidation of Central Government): Government securities and loans held by central government entities.

Column 4 (Central Government): Central government debt as defined by the European System of Accounts 2010.

Column 5 (Local Government): The debt of local governments.

Column 6 (Social Security Funds): The debt of Social Security Funds.

Column 7 (Consolidation of General Government): Government securities and loans held by general government entities.

Column 8 (General Government Debt): General government debt as defined by the European System of Accounts 2010.