



HELLENIC REPUBLIC
Ministry of Finance



HELLENIC REPUBLIC
Public Debt Management Agency

Sovereign Borrowing Outlook

Annual Debt Bulletin



2022





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Sovereign Borrowing Outlook 2022, Annual Bulletin

The annual bulletin is available at the following websites:

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BRIEF REVIEW OF THE GREEK ECONOMY

The beginning of the war in Ukraine, combined with the rapid increase in global energy costs, created conditions of intense inflationary pressures with continuous turbulence and high volatility in international markets.

In this unfavorable economic environment, the dynamic recovery of the national economy continued. In particular, in the first half of 2022, the Greek economy performed better than expected. Specifically, in the first half of the year, Greece's growth rate reached 7.8%, compared to the same period of the previous year. It should be noted that the growth is largely due to the profitable tourist season, which returned to its historic high numbers as in 2019. According to European Commission data, annual GDP growth for 2022 is 6.0%.

Greek exports also increased, despite global challenges. In the first half of the year, goods exports amounted to €26 billion, compared to €18.6 billion in 2021. In addition, total exports in 2021 reached EUR 40 billion. Data presented by the Hellenic Statistical Authority showed that in June alone, exports increased by 60% and reached 5.4 billion euros.

The total value of exports in the period January-December 2022 amounted to 54,676.4 million euros (57,565.3 million dollars) compared to 39,997.0 million euros (47,382.5 million dollars) in the same period of 2021, showing an increase of 36.7% in euros. The corresponding value excluding petroleum products showed an increase of EUR 6,202.9 million, i.e. 21.4%, and the corresponding value excluding petroleum products and ships showed an increase of EUR 6,215.7 million, i.e. 21.6%, compared to the period January-December 2021. The trade deficit in the period January-December 2022 amounted to 38,371.9 million euros (39,840.4 million dollars) compared to 25,460.3 million euros (29,586.5 million dollars) in the same period of the year 2021, showing an increase, in euros, of 50.7%. The corresponding figure excluding oil products showed an increase of EUR 6,475.8 million, i.e. 32.5%, and the corresponding figure excluding oil products and ships showed an increase of EUR 6,190.8 million, i.e. 31.1%.

The total value of exports, in the month of December 2022 amounted to 4,527.1 million euros (4,807.9 million dollars) compared to 3,602.0 million euros (4,083.9 million dollars) in the same month of the year 2021, showing an increase, in euros, of 25.7%. The corresponding value excluding petroleum products in the month of December 2022 showed an increase of EUR 420.4 million which is 16.1%, and the corresponding value excluding oil products and ships in December 2022 increased by 419.8 million euros, i.e. 16.1%, compared to December 2021 and is expected to reach a new high level.

As already mentioned, in the first two months after the Russian invasion of Ukraine, inflation soared in both the EU and Greece. In June 2022 inflation reached 12%. However, since July 2022 inflation has gradually declined, but remained high at 11.6%. In October 2022 inflation in Greece slowed down to 9.3% and in November 2022 it fell further to 9%. According to EUROSTAT, inflation in Greece remained below the euro area average of 10.6% in October '22

and 10% in November. According to European Commission data, inflation in Greece in 2022 is set at 10%. Thus, it is obvious that the country suffered a rapid increase in inflation during the year. However, inflation rates have been trending downwards in the last few months of the year. However, the increased prices in energy and consumer goods remain high.

In addition, the unemployment rate has fallen even further. According to the Hellenic Statistics Labour Force Survey, in the third quarter of the year, unemployment stood at 11.6%. In the previous quarter of 2022, the same rate was 12.4%. In the second quarter of 2021, unemployment was 13%. According to the European Commission, the annual unemployment rate for 2022 is 12.6%, a slight decrease compared to 14.7% in 2021. Moreover, Greece's government debt, which is the highest in the Eurozone, declined further to 171.3% of GDP in 2022 from 194.5% of GDP in 2021, which remains the largest reduction compared to other EU Member States.

High cash reserves combined with limited financing needs of the Greek government also for 2022 created favorable conditions for the country's continued successful presence in capital markets. Continued issuance activity normalized the maturity profile of government debt and further enriched the benchmark yield curve of Greek government securities, both in terms of volume and liquidity. The trading performance of bonds in the secondary market was equally satisfactory.

SOVEREIGN BORROWING 2022

In 2022, the strategy of utilization and optimal cash management of the General Government entities continued through the implementation of the program of cash liquidity management operations in the form of repo agreements, which are concluded by the Public Debt Management Agency. With this program, approximately 75% of the total cash holdings of these entities are now utilized in a very efficient manner, providing them with high and competitive returns, to their benefit, while ensuring a corresponding benefit in terms of the fiscal outcome of the General Government and the sustainability of the public debt.

During the year, PDMA successfully accessed the capital markets, raising a total of €8.3 billion. The demand and quality of investors, most of whom were long-term investors, showed that the country has returned to a normal market funding era and is expected to regain investment grade status soon.

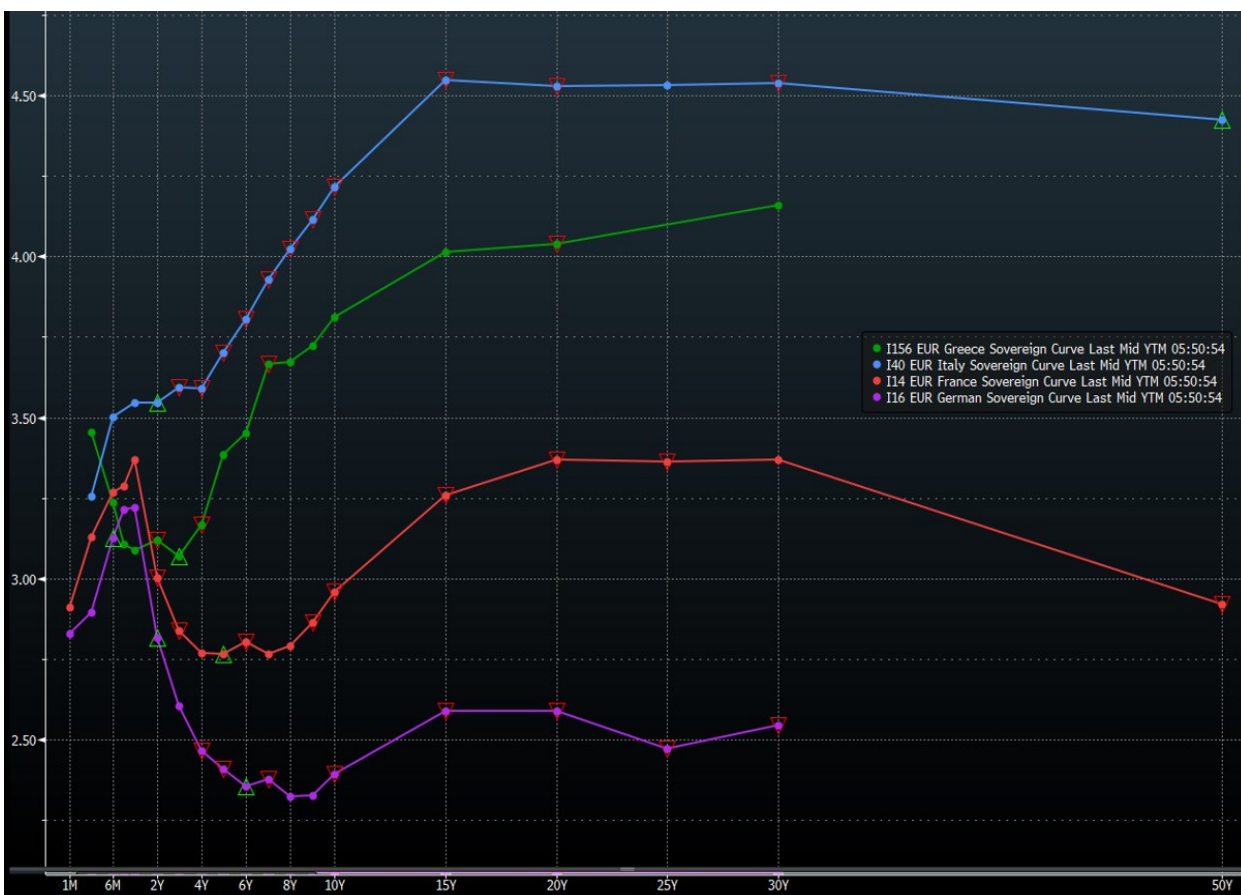
Issuance Date	Maturity Date	Duration	Initial Offers	Nominal Amount	Yield	Type of Issuance
26-1-2022	18-6-2032	10Y	15 bln	3,0 bln	1,836%	New issue
5-5-2022	22-4-2027	5Y	5,9 bln	1,5 bln	2,367%	Reopening
28-7-2022	15-12-2027	5Y	1 bln	1 bln	3M EURIBOR	New issue
30-5-2022	30-1-2033	11Y	1,6 bln	500 mln	3,611%	Reopening
6-6-2022	30-1-2037	15Y	920 mln	250 mln	3,512%	Reopening
6-6-2022	30-1-2042	20Y	675 mln	150 mln	3,555%	Reopening
18-7-2022	18-6-2032	10Y	1,9 bln	500 mln	3,667%	Reopening
2-11-2022	15-12-2027	5Y	1,9 bln	1,2 bln	3M EURIBOR	Reopening
21-11-2022	18-6-2032	10Y	1 bln	200 mln	4,444%	Reopening

The Pandemic Emergency Purchase Program (PEPP) was completed in March 2022, but the ECB will reinvest the principal amounts from the redemption (at maturity) of securities acquired under the PEPP at least until the end of 2024, while the eligibility of Greek bonds has been extended for the same period of time so that they can be accepted as collateral for Eurosystem financing operations.

The total participation of Greek bonds in the ECB's extraordinary quantitative easing program is estimated at around EUR 39 billion, which makes it necessary for the HR to issue new securities as frequently as possible in order to ensure their adequacy for secondary market trading, while at the same time ensuring the achievement of debt level targets. Due to adverse global developments, yields on government securities of all euro area countries have risen sharply, particularly in the second quarter of 2022, and are now trading at positive yields for all bond issuance maturities.

The yield spread between 10-year Greek and the corresponding German benchmark bond moved upwards compared to the previous year and averaged 230 basis points during 2022. At the end of December, the yield differential was 205 basis points.

Yield Curves Chart (Greece – Italy – France – Germany)



(Source: Bloomberg, Retrieved on 30/05/2023)

Gross financing needs of the State Budget during the year 2022 (excluding the stock of short-term interest-bearing debt and repos) amounted to **€ 25,605** million and were covered by:

- Long-term borrowing amounting to **€ 11,085** million at face value with a settlement value (cash inflow) of **€ 10,947**
- Revenues from privatizations (sale of shares) amounted to **€ 530** million.
- Revenue from ANFAs -SMPs amounted to **€ 748** million.
- Revenues from financial transactions amounted to **€ 7** million.
- Short-term borrowing of **€ 12,968** million.
- Use of cash (SDR Holdings) for an IMF prepayment of **€1,881** million.

Cash reserves at the end of 2022 amounted to **€ 18,810** million, compared to **€ 17,334** million at the end of 2021, is increased by **€ 1,476** million.

Also, if we consider the deposits in SDR HOLDINGS which on 31-12-2022 was SDR 806 million (€ 1,010 million) the total cash reserves amounted to **€ 19,820** million.

Net new short-term borrowing amounted to €12,968 million. The balance of treasury bills remained stable at the end of 2022 at €11,800 million, while Repos increased by €12,968 million, bringing the stock of Repos at the end of 2022 to €49,925 million.

The weighted average duration of new borrowing for 2022 stood at 5,49 years while the weighted average cost of new borrowing - excluding REPOs - stood at **1,33%**.

PORTFOLIO MANAGEMENT

There were several portfolio management transactions through derivatives during 2022, involving four categories of transactions. These are:

1. Closure of existing Cross Currency Swaps related to loans made with the IMF and which, due to their early repayment, there were no positions to hedge.
2. Entering into Forward starting swaps 20Y20Y to cover the very distant part of the interest rate curve.
3. Execution of Offsetting/Mirror swaps on existing interest rate derivative positions to lock in positive values.
4. Time deposits under the ISDA legal framework with foreign banks.

In order to optimize the use of government cash reserves, new agreements were conducted such as: "Deposits under ISDA" or "Cash Reserves Management under ISDA". The aim was to increase the return for the benefit of the Hellenic Republic, for a small part of its cash holdings, totaling €178,9 million, by assuming a moderate risk, always within the framework of the risks already assumed by the Hellenic Republic.

Finally, it is recalled that the bulk of the HRs cash reserves is held in cash management accounts within the Central Bank and is now earning a return,

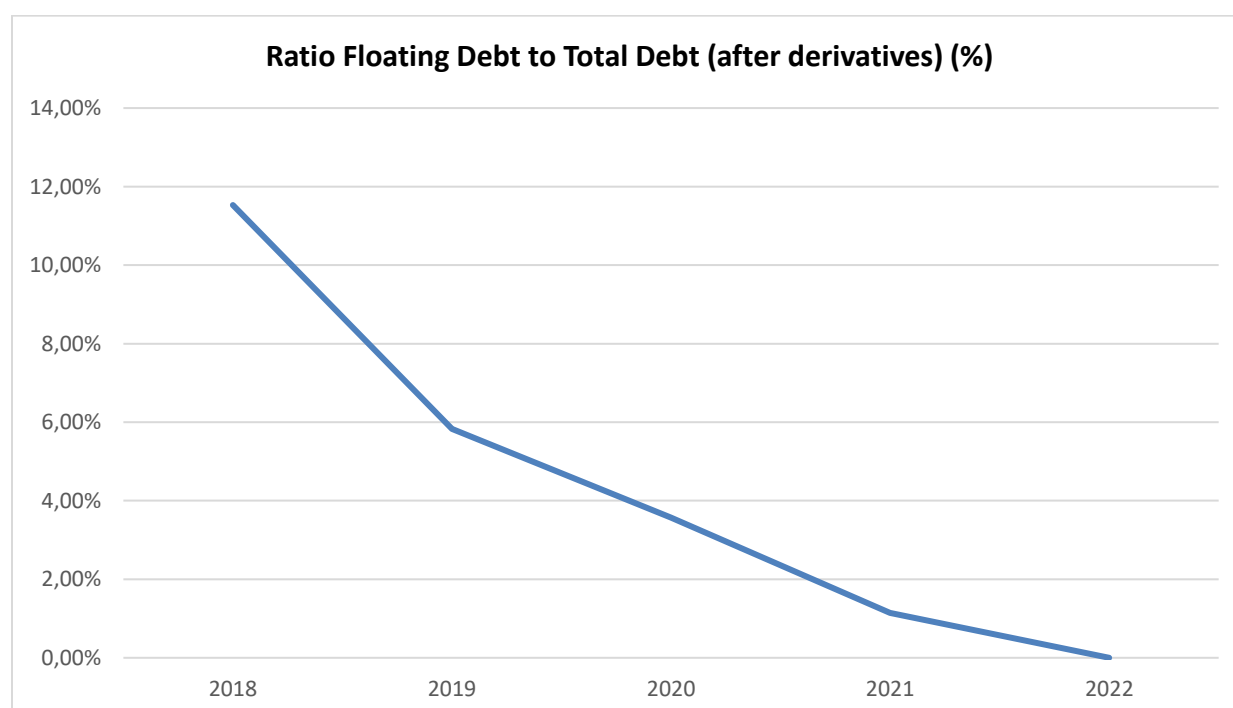
- i. equal to the ESTRON Rate minus a margin of 25 bps (€STR -0,25%), in the case of liquid assets; and
- ii. equal to the ESTRON Rate without margin (€STR + 0,0%) in the case of liquid assets related to a financial assistance program, as defined in the DALM Guideline.

(Indicatively: on 31/12/2022 €STR=1.90% & on 31/3/2023 €STR=2.90%)

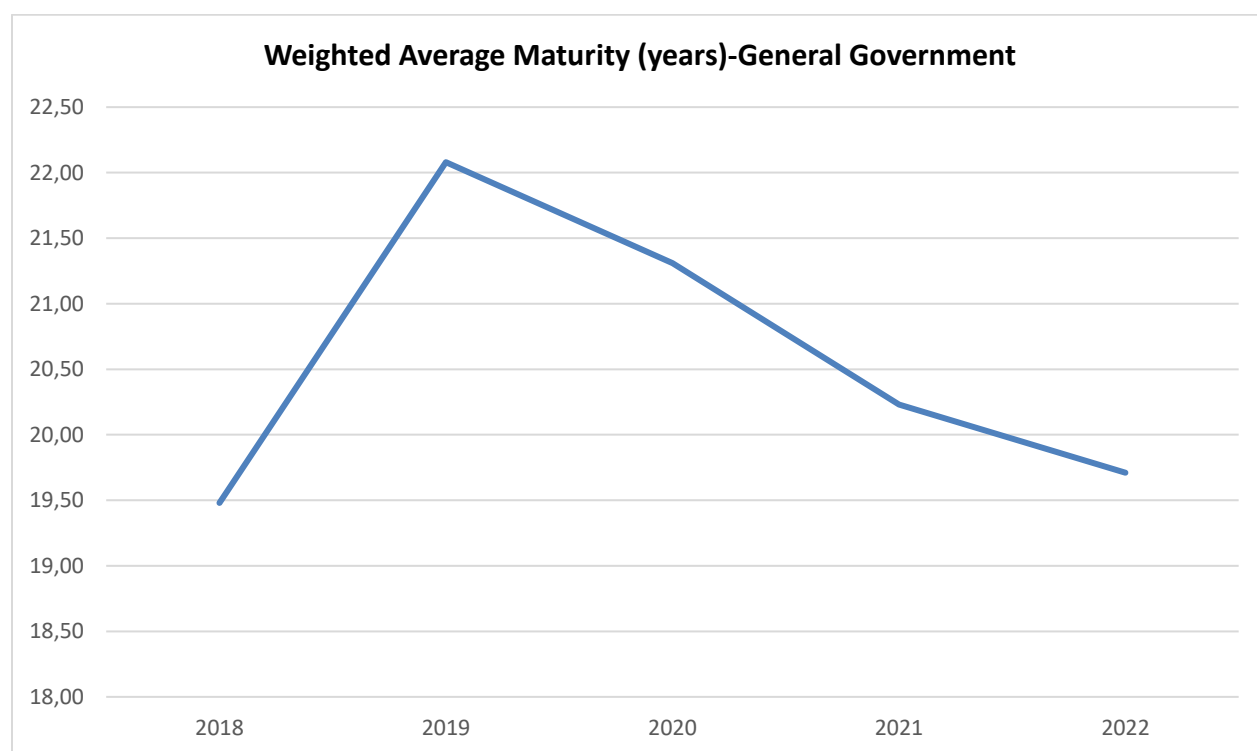
RISK ASSESSMENT & CONTROL FACTORS

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

	31/12/2022
Refinancing Risk 1Y (%)	6,98%
Refinancing Risk 5Y (%)	18,95%
Refixing Risk 1Y (%)	11,28%
Refixing Risk 5Y (%)	19,25%
Ratio Foreign Debt to Total Debt (before derivatives) (%)	0,01%
Ratio Foreign Debt to Total Debt (after derivatives) (%)	0,00%
Ratio Floating Debt to Total Debt (before derivatives) (%)	14,81%
Ratio Floating Debt to Total Debt (after derivatives) (%)	0,00%
Average Time to next refixing	18,60 years
Average Life (years)	19,71 years



HR portfolio is well shielded from future interest rate hikes, resulting in predictable and very low servicing costs for the coming years. This fact gives a big boost to the Greek economy and its growth. This, moreover, is demonstrated by the continuous upgrades and positive recommendations of Greece's credit rating by the rating agencies. The weighted average of the physical maturity of the debt is over 19 years, which gives Greece time to further improve its portfolio and, most importantly, to release resources to the productive sectors of the economy, thus strengthening the real economy and GDP.



CENTRAL (STATE) GOVERNMENT DEBT ANALYSIS

The table below illustrates the analysis of the change in central (state) government debt from 2021 to 2022.

Table C.1: State: stock of gross debt, related transactions and other flows

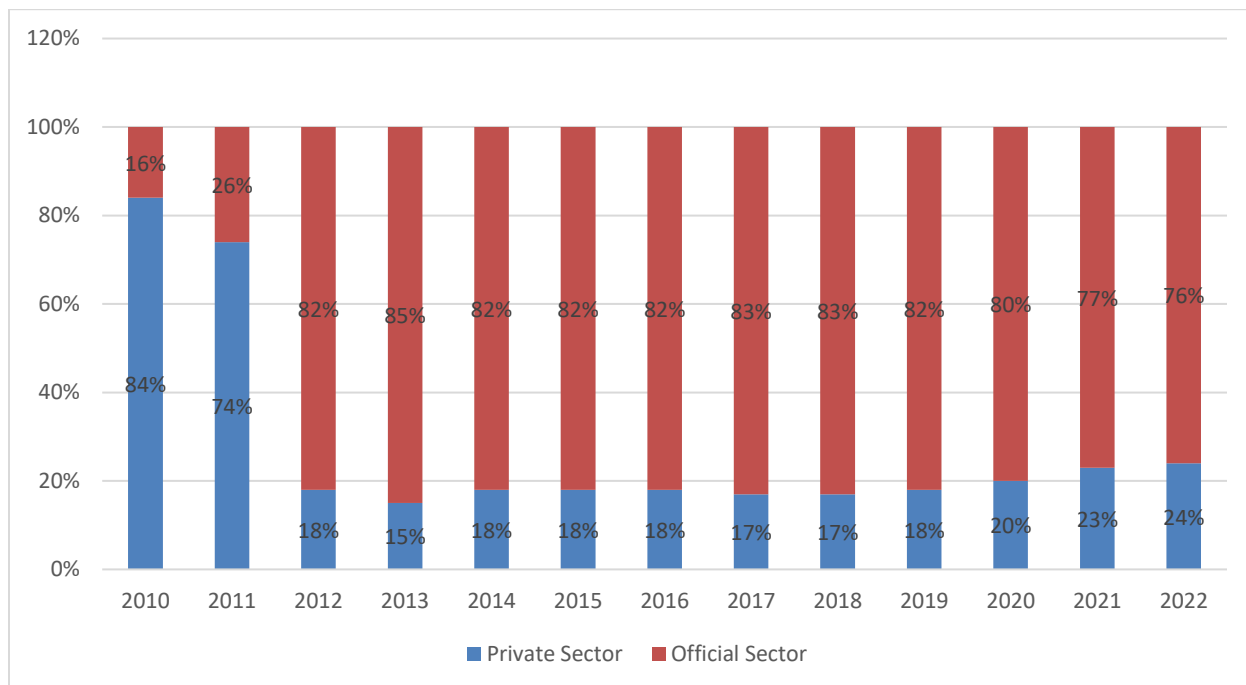
in millions of euros

Item	End- 2021	January-December 2022						End December 2022
	Stock	Change in stock (2)= (3)+(6) +(7)	Transactions			Revaluations		Stock (8)=(1)+(2)
			Issues minus redemptions *	Issues	Redemptions	Due to exchange rates changes	Due to other price changes	
			(3)= (4)-(5)	[4]	[5]	[6]	[7]	
[1]								
Debt by type of debt instrument, original maturity and creditor								
Gross debt	388.337	11.939	11.632	1.174.254	1.162.622	5	302	400.276
Debt securities	92.594	4.139	3.850	31.602	27.752	0	289	96.733
Short-term	11.800	0	0	23.400	23.400	0	0	11.800
T-Bills	11.800	0	0	23.400	23.400	0	0	11.800
Long-term	80.794	4.139	3.850	8.202	4.352	0	289	84.933
Issued domestically	79.035	4.005	3.850	8.202	4.352	0	155	83.040
Issued abroad	1.759	134	0	0	0	0	134	1.893
Loans	295.743	7.800	7.782	1.142.652	1.134.870	5	13	303.543
Short-term	36.957	12.967	12.967	1.139.908	1.126.941	0	0	49.924
Long-term	258.786	-5.167	-5.185	2.744	7.929	5	13	253.619
Vis-à-vis residents	1.152	-486	-487	0	487	1	0	666
Bank of Greece	967	-471	-472	0	472	1	0	496
Other residents	185	-15	-15	0	15	0	0	170
Vis-à-vis nonresidents	257.635	-4.681	-4.698	2.744	7.442	4	13	252.954
EFSF/ESM/IMF	242.620	-7.050	-7.064	0	7.064	3	11	235.570
Other nonresidents	15.015	2.369	2.366	2.744	378	1	2	17.384
Debt by currency denomination								
Gross debt	388.337	11.939	11.632	1.174.254	1.162.622	5	302	400.276
Domestic currency	387.260	13.025	12.734	1.174.254	1.161.520	0	291	400.285
Debt securities	92.594	4.139	3.850	31.602	27.752	0	289	96.733
Loans	294.666	8.886	8.884	1.142.652	1.133.768	0	2	303.552
Foreign currency	1.078	-1.086	-1.102	0	1.102	5	11	-8
Debt securities	0	0	0	0	0	0	0	0
Loans	1.078	-1.086	-1.102	0	1.102	5	11	-8

* The figures presented include amounts attributable to Swap contracts

The structure of the Public Debt by category of creditors as it was formed at the end of 2022 is shown in the following graph:

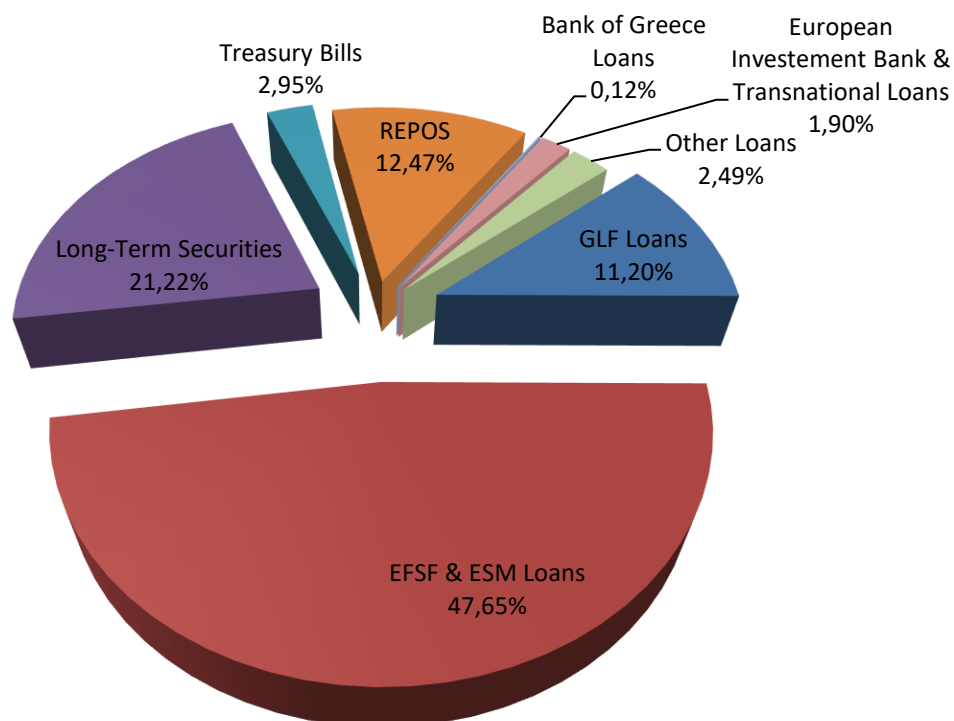
Central Government Debt by type of creditor



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 31.12.2022 the stock of the central government debt by creditor showed the following breakdown:

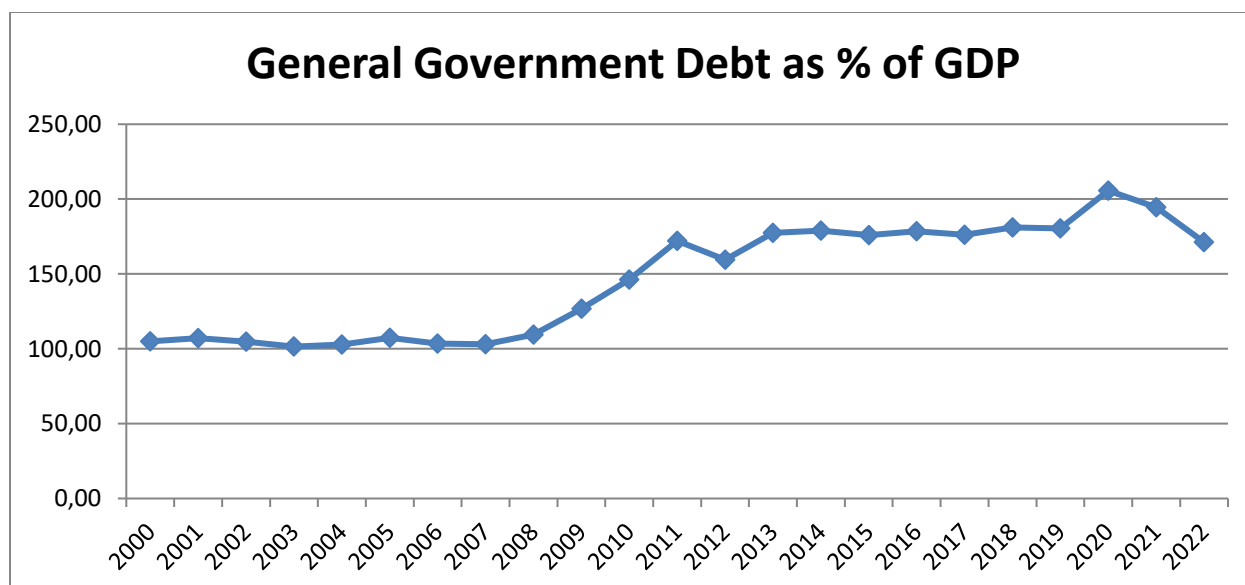
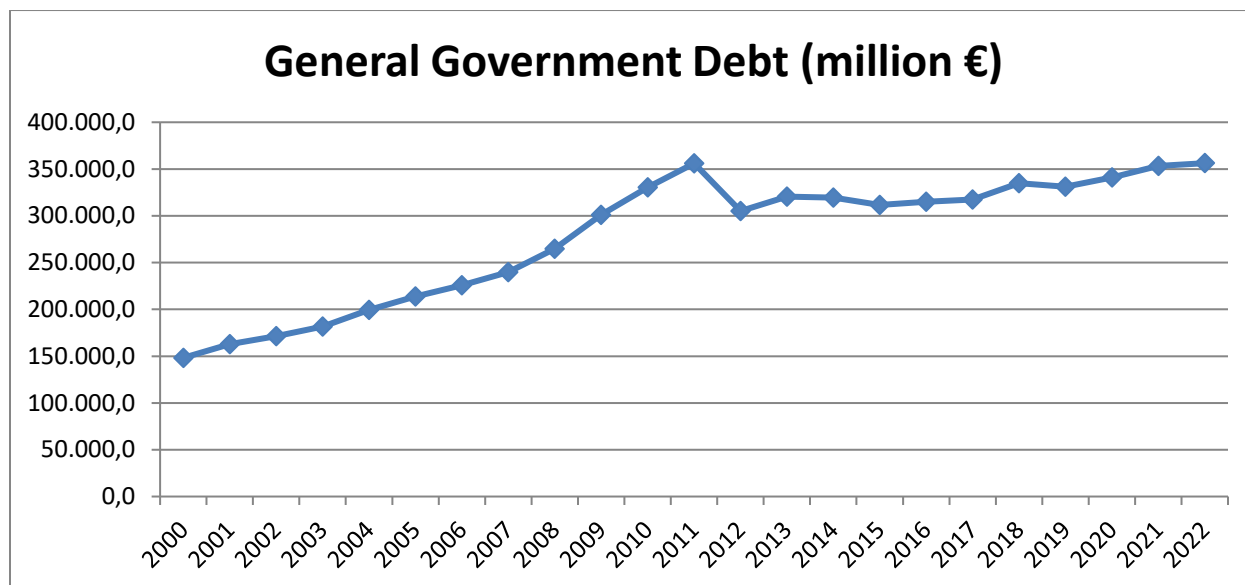
Central Government Debt Structure by Instrument at 31-12-22



The majority (47,65%) of Greek debt is held by the European Stability Mechanism (ESM & EFSF) 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 2022 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 2022 (Amounts in million €)	PDMA	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)		1.963	6.701	-313	8.351			-1.161	7.190
Bills & Short-Term Securities (AF331)	11.800	11.800		-435	11.365			-276	11.089
Long Term Securities (AF332)	84.933	84.922	74	-4.868	80.128			-6.083	74.045
Short Term Loans (AF41)	49.925	50.994	108	-28.231	22.871	10		-17.490	5.391
Long Term Loans (AF42)	253.618	255.868	2.758	-419	258.207	1.120	98	-884	258.541
Total	400.276	405.547	9.641	-34.266	380.922	1.130	98	-25.894	356.256
GG Debt (% GDP)									171,3%

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.