Republic of Cyprus
Ministry of Finance
Public Debt Management Office

Annual Report

Public Debt Management

2022

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PUBLIC DEBT MANAGEMENT ANNUAL REPORT 2022

Republic of Cyprus
Ministry of Finance
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Mission Statement

The main mission of the Public Debt Management Office (PDMO) is the design and implementation of the appropriate and ideal government policy in the field of public debt management, depending on the domestic and international economic conditions and prospects.

The above mission is accomplished on the basis of two different but interrelated pillars: first, through the exercise of the applicable medium-term debt management strategy of the Government, and second, through the implementation of specific continuous actions under the guidelines of PDMO’s Action Plan.

The implementation of the above-mentioned actions constitutes a necessary condition for the achievement of the ultimate objective of debt management: i.e. to ensure the timely coverage of the financing needs of the Government, at the lowest possible medium-term cost, within an acceptable range of financial risks.

After the recession caused, globally, by the Covid-19 pandemic, Cyprus economy recovered relatively earlier than expected within 2021. In 2021 and in 2022 a positive growth rate was observed and created significant fiscal surpluses. Despite the uncertainty caused by geopolitical developments (Russia's invasion in Ukraine), restrictions on trade and commerce due to sanctions imposed on Russia, strong inflationary pressures due to rising energy prices and supply chain disruptions, the debt-to-GDP ratio dropped significantly, creating the conditions for credit upgrades from the rating agencies.

Although Cyprus is directly exposed to the Russia-Ukraine military conflict through trade in services, foreign direct investments and indirectly through energy sector, however the strong budget performance of the previous year and the strong cash position, as well as the positive drivers of growth, which will be supported by the disbursements from the EU Resilience and Recovery Facility, enforced by the related progress in structural economic and budgetary reforms, will further improve economic activity and mitigate the expected risk in the near future.

The PDMO is a small but fundamental part of the whole institutional mechanism of economic management of the country. In order to accomplish its mission, the PDMO is monitoring very closely the developments in the international capital markets and the financing needs of the country so that it can deliver the best possible result under the current volatile conditions.

Given the prevailing economic uncertainty internationally, the PDMO is constantly working on retaining the liquidity buffer of the State at a satisfactory level, as required by Articles 20 and 21 of the Public Debt Management Law. In this context, during the period of great uncertainty in 2020, the PDMO significantly increased cash reserves, while from 2021 the stock of cash reserves, in combination with the relaxation of the conditions of the Covid-19 pandemic, was maintained at very satisfactory levels. In addition, the better-than-expected performance of the economic growth rate led in 2022 the percentage of the outstanding amount of the general government debt to GDP to fall significantly from 101.0% σε 86.5%, of which approximately 9.6% was attributed to the stock of cash buffer.

The major part of the cash reserve funds is intended to cover exclusively the financing needs of the Government for the following 12 months, which are characterized by intense uncertainty in the global economy because of the geopolitical developments and the change of monetary policy by ECB, and as per the compliance with the above mentioned Public Debt Management Laws and as per the guidelines of the medium-term debt management strategy approved by the Council of Ministers (Articles 9-10 of the same laws mentioned above).

Today, the cash buffer is at a desire and satisfactory level since it covers the projected financing needs for the whole current year, whereas new extended borrowing is currently avoided meaning the containment of a further increase of the public debt.

The developments made on the public debt management policy for the financial year 2022, as per article 25 of the Public Debt Management Law, are presented in the following Report which has been drafted by the end of March 2023.

Public Debt Management Office
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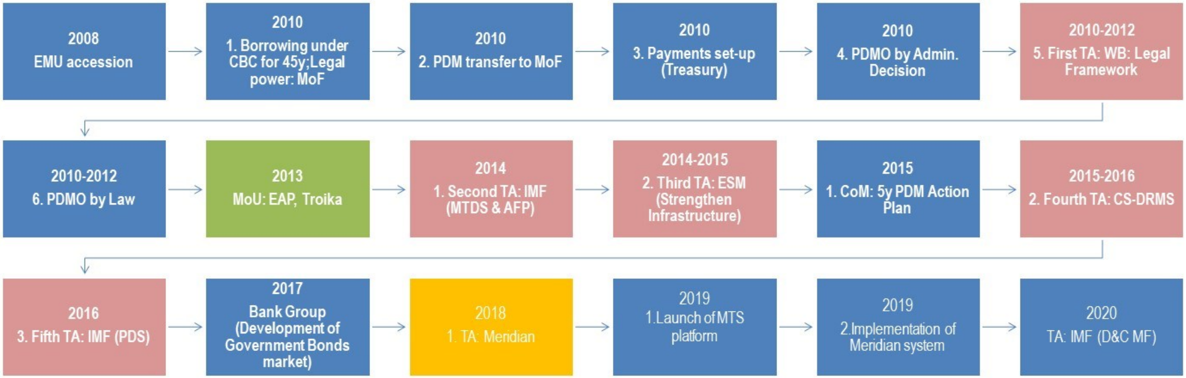
Cyprus
March 2023

The timeline of Public Debt Management in Cyprus (2008-2022)



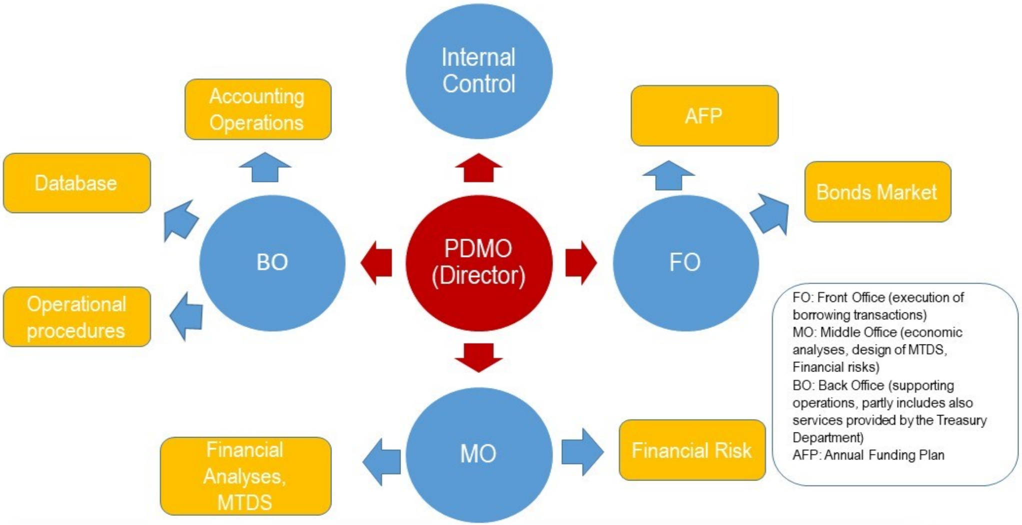
AFP: Annual Funding Plan
CBC: Central Bank of Cyprus
CoM: Council of Ministers
CS: CommonWealth Secretariat
DRMS: Debt recording management system
D&C MF: Debt&cash management framework

EMU: Economic and Monetary Union
ESM: European Stability Mechanism
EAP: Economic Adjustment Programme
IMF: International Monetary Fund
Meridian: New debt management system of CS
MoF: Ministry of Finance

MoU: Memorandum of Understanding
MTDS: Medium Term Debt Strategy
MTS: Electronic fixed income trading platform
PDM: Public Debt Management
PDS: Primary Dealer System

PDMO: Public Debt Management Office
TA: Technical assistance
WB: World Bank

Organisational Structure of the Public Debt Management Office



- The Minister of Finance has the exclusive power to borrow funds on behalf of the Republic of Cyprus
- The PDMO of the Ministry of Finance is the responsible office for the above borrowing
- PDMO is under the supervision of the Permanent Secretary of the Ministry of Finance.

List of abbreviations

AFP	Annual Financing Programme: “Annual Funding Plan’’
bn	Billion (one thousand million)
CBC	Central Bank of Cyprus
CCB	Cyprus Cooperative Bank
CEB	Council of Europe Development Bank
CRAs	Credit Rating Agencies
CS	Commonwealth Secretariat
CYPGB	Cyprus Euro Medium Term Note (EMTN)
EFC	Economic and Financial Committee of the EU
EFSF	European Financial Stability Facility
ECPs	Euro Commercial papers
EIB	European Investment Bank
EMTNs	Euro Medium Term Notes
ESDM	European Sovereign Debt Markets (EFC Sub-Committee)
ESM	European Stability Mechanism
EUR	Euro
GDP	Gross Domestic Product
GG	Government Guarantees
GGD	General Government Debt
IMF	International Monetary Fund
MFIs	Monetary Financial Institutions
MTDS	Medium Term Public Debt Management Strategy
mn	Million
NPEs	Non-performing exposures
PDML	Public Debt Management Law
PDMO	Public Debt Management Office
SDR	Special Drawing Rights
SSF	Social Security Fund
SURE	Support to mitigate unemployment risks in an emergency
TBs	Treasury Bills
WACD	Weighted Average Cost of Debt

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I. Introduction

After a significant contraction of the economic activity in Cyprus of about 4.4% of GDP in 2020 due to the Covid-19 pandemic, although at a slower pace than the euro area average, the Cypriot economy has recovered relatively quickly from the pandemic shock with the real GDP grew 6.6% in 2021, surpassing its pre-crisis levels, driven by improved economic activity in most sectors, except the tourism sector. The budget balance recorded a significant improvement of about 4.1 p.p compared to the previous year, however remained in deficit of about 1.7 percent of GDP. In 2022, the economic activity continued to grow dynamically, recording a positive growth rate of 5.6% of GDP despite the adverse external environment, including the impact of the Russia-Ukraine crisis on the Cypriot economy and financial sector. The budget balance recorded a further improvement of about 4.0 p.p compared to the previous year, reaching 2.3 percent of GDP. In general, Cyprus's diversified economy has proven resilient to recent external shocks and recorded better-than-expected performance with the medium-term prospects remaining favourable.

Regarding the bond market developments, the significant impact on markets and yield curves by geopolitical developments (e.g. Russia-Ukraine war) and changes in monetary policy (interest rate hikes by ECB) were among the highlights of 2022. During the first two months of the year 2022 the sovereign yield curves in euro area shifted upwards and steepened. In the period March to May 2022 the Euro area (EA) benchmark yield curve moved up and slightly steepened anticipating the termination of ECB's asset purchases programme. Thereafter, rapidly rising government bond yield spreads over the Bund in the euro area have been recorded due to the continuous increase of the base rate by ECB.

The main funding source for the Republic of Cyprus in 2022 was the international market supplemented by domestic market sources from both institutional and retail segments. The international market will continue to be strategically the main source of funding in the years to come, due to the capacity offered by the available large, diversified pool of investors. In 2022, the share of foreign bonds exhibited an increase, widening the gap between official loans and foreign bonds. The distribution of instrument composition is in line with our debt management strategy.

The public debt as a ratio of Gross Domestic Product (GDP) exhibited a material decrease in 2022, mainly due to the robust growth momentum, which was sustained for the whole year and the strong fiscal performance which led to the utilisation of a significant amount of cash reserves to cover a part of Government gross financing needs. The Central Government's liquid assets retained at strong level, similar to the 2021 level on absolute terms and slightly lower as a percent of the public debt in 2022 compared to the previous year.

The majority of the debt portfolio risk indicators were retained at similar levels as were in the previous year. The weighted average maturity of marketable debt recorded a minor increase, compared to the previous year, and performed very well compared to the euro area average surpassing the target set in the Medium-Term Debt Management Strategy (MTDS) 2022-2024. The average cost of servicing the public debt, exhibited a small increase due to the changes in the monetary policy by ECB and the geopolitical developments in the global economy.

The sovereign's creditworthiness was upgraded by two Credit Rating Agencies (CRAs), by one notch within the investment category, one

CRA confirmed the credit rating of the Republic of Cyprus at the investment category with no change in the stable outlook. The fourth CRA confirmed Cyprus's long term Issuer Default rating and changed the outlook from stable to positive. CRAs underlying, among others, that the key drivers for any upgrade of Cyprus' government bond in the near future, could result from the ability of the Government to: (a) sustain the expectations of positive growth rates, (b) maintain a sound fiscal policy, (c) reduce further the debt-to-GDP ratio, (d) reduce the stock of bank non-performing exposures and (e) continue deleveraging the private sector debt and (f) maintain increased economic resiliency to external shocks and (g) rise up the labour productivity levels.

Over the reference period, the Public Debt Management Office (PDMO) continued to monitor and upgrade a number of actions related to the internal organization and the IT infrastructure of the PDMO.

The PDMO participated inter alia in the Subcommittee of the EU Economic and Financial Committee on European Sovereign Debt Markets (ESDM), the International Monetary Fund (IMF) Spring meetings and the European Stability Mechanism (ESM) activities, specifically related to public debt management matters.

Following this introduction, the strategic objectives on public debt management set under the MTDS 2022-2024 as well as the revised MTDS 2023-2025, the Annual Funding Plan (AFP) 2022 and the progress to date are presented in Chapter 2. The main developments in the debt capital markets for bills and bonds are presented in Chapter 3.

Chapter 4 outlines the financing actions of the Central Government in 2022 as well as the debt redemptions (flow analysis), while Chapter 5 presents the main structural characteristics of public debt and their evolvement over time (stock analysis). The cost-risk profile is analysed in Chapter 6.

The operations on liquidity management are presented in Chapter 7, whereas sovereign rating developments are outlined in Chapter 8. The report concludes with Chapter 9 on the developments of the PDMO Action Plan for infrastructure and systems development in 2022.

II. Objectives and Evaluation

A. Mandate

On behalf of the Republic of Cyprus, the Minister of Finance, in his framework of competence, borrows funds by signing contracts of loans or issuing securities both in the domestic and foreign markets, in local or foreign currency. Pursuant to article 4 of the Public Debt Management Law (PDML), the PDMO is responsible among other functions for executing all borrowing transactions, the management of liquidity of the government and handling all other debt management operations, including the drafting of the MTDS and the designing of the AFP.

Government borrowings aim mainly at: (i) covering any fiscal deficit; (ii) maintaining the desired level of cash reserves; (iii) refinancing the outstanding public debt; and (iv) covering other government policy needs.

The ultimate objective of debt management strategy is to ensure that financing needs are always met in time and that the cost of borrowing is the lowest possible in the medium term[1], within the framework of an acceptable[2] level of risk[3].

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[1] Any decision-making based exclusively only on the minimization of the borrowing cost of a transaction (in raising a loan or a bond offering) i.e. using as a sole criterion the interest rate, constitutes a sub-optimal action that might undermine the ultimate objective of the public debt management strategy. This is why the minimisation of the borrowing cost is related to the medium term horizon.

[2] Borrowing has to be within reasonably acceptable and manageable levels of financial risks.

[3] In this context, the main financial risks are: (a) refinancing risk; (b) Interest rate risk; (c) Foreign exchange risk.

B. Legal Framework for public debt management

Pursuant to article 2 of the PDML, the debt management operations are concentrated on the preparation of the MTDS and of the AFP as well as on the execution of the necessary borrowing transactions in order to facilitate the implementation of the AFP and to meet the objectives of the MTDS.

The MTDS is a 3-5-year strategy which is revised at least once a year and is submitted for final approval to the Council of Ministers by the Minister of Finance, after informing the Budget and Finance Committee of the Parliament. According to the Law, the AFP is designed by the PDMO, and approved by the Minister of Finance. The execution of the necessary borrowing and other debt management transactions form the implementation of the financing plans in order to ultimately meet the guidelines of the Strategy. The previous Strategy, which was published at the end of October 2021, covers the period 2022-2024. The said strategy was updated through the MTDS 2023-2025.

The PDMO functions as an integral part of the Ministry of Finance, under the general supervision of the Permanent Secretary.

C. MTDS guidelines and targets

The guidelines of the MTDS and the actions / quantitative targets under each guideline related to the reference year 2022 are presented below.

1. **Smoothening of debt maturity profile and extension of the maturity of marketable debt**

   - *Maintain average remaining maturity of marketable debt not less than 7 years;*
   - *Maintain short term debt equal or less than 3 percent of total debt stock; and*

- *Maintain long term debt equal or more than 97 percent of total debt stock.*

2. Risk mitigation

- *Maintain total liquid funds to cover the financing needs of next 6 -9 months;*
- *Maintain annual gross financing needs up to 10 percent of the corresponding annual GDP;*
- *Maintain total debt foreign exchange exposure not to exceed 3 percent of total debt stock; and*
- *Maintain total debt floating interest rate exposure not to exceed 30 percent of total debt stock.*

3. Development of the government securities market

- *Improvement in the price discovery mechanism of the domestic market and increase accessibility to international investors;*
- *Introduce a suitable structure to enable a price discovery mechanism and liquidity/transparency provision in the foreign market; and*
- *Completion and extension of the long-term sovereign yield curve.*

4. Minimisation of marketable debt borrowing cost

- *Improvement of the investor relations and market intelligence;*
- *Expansion of the investor base in terms of geography, type and size.*

It is noted that in October 2022, the new MTDS 2023-2025 was approved by the Council of Ministers. The said strategy is a continuation of the existing debt management strategy 2022-2024. The main pillars of the new strategy remain the same, however some of the quantitative targets have been changed, such as the coverage target level of financing needs taking into consideration the new conditions created as a result of the geopolitical developments and changes in the monetary policy. More specific, on the 26th of January 2023 the Council of Ministers approved the proposal of the PDMO to amend the coverage target of financing needs in the General Government Account from 6-9 months to 9-12 months period and to be applied during the 1st quarter of 2023.

D. Annual Funding Programme 2022

Pursuant to article 10 of the PDML, the PDMO design and develop an AFP, which covers the projected accumulated borrowing needs of the Republic of Cyprus in one calendar year. The AFP is based on the MTDS and the annual cash flow forecast of the Republic of Cyprus. The AFP is approved by the Minister of Finance and is updated at least twice a year.

The objectives of the AFP 2022 were the following:

1. Maintain Cyprus' presence in the international capital markets in order to complete and extend the long-term sovereign yield curve;
2. Mitigate the refinancing risks by setting reserve on liquid funds to cover the financing needs of the next 6-9 months;
3. Maintain the average maturity of marketable debt not less than 7 years;
4. Containment of the annual refinancing needs up to 10 percent of the GDP;
5. Further development of the bonds market, and

6. Renewal of short-term debt and maintain the swift functioning of the Treasury Bills (TBs) market;

More details for the AFP 2022 are presented in chapter 4.

Taking into consideration the projected annual cash flows and the successful market access of Cyprus, the PDMO submitted an updated AFP to the Minister of Finance for the next year. The AFP 2023 was approved by the Minister of Finance at the end of November 2022.

E. Evaluation of MTDS guidelines and progress to date

The MTDS in 2022 was implemented under a number of challenges due to the geopolitical developments and changes in the monetary policy, including the Russia-Ukraine crisis, as well as the continuation of uncertainty surrounding the development of the Covid-19 pandemic. However, the recovery of the Cypriot economy was stronger than initially expected by the Ministry of Finance and GDP has already reached its pre-pandemic level since 2021, with the GDP growth rate recording an increase of 5.6 percent of GDP by the end of 2022. These developments affected either positive or negative the quantitative and qualitative objectives of the strategy. In general, and despite the negative impact, thanks to the geopolitical developments and changes in the monetary policy, the outcomes from the implementation of the strategy in 2022, presented in the current Annual Report (2022) could be characterised as satisfactory.

The assessment of the process of each guideline is presented below.

Smoothening of debt maturity profile and extension of the maturity of marketable debt

The share of outstanding short-term debt stood at around 1 percent of the total outstanding debt as at the end of 2022, which was in line with the target set (3 percent) in the strategy. It is noted that TBs issuances are necessary to maintain pricing points, enrich funding instruments and reach out to investors interested in this particular segment.

The share of outstanding long-term debt as at the end of 2022 stood at around 99 percent, below the target of 97 percent set in the strategy. The outstanding annual maturities profile are at satisfactory level and are extended up to the year 2051. The peak of the outstanding public debt is in year 2028 which is under control, based on the historically data as well as on the strong recovery of the Cypriot economy since 2021 and the expected positive prospects of the growth rate in the medium term. For the following years, the PDMO's intention is to issue at least one benchmark EMTN per year between EUR 1.0-1.5 bn in order to cover the financing needs of the Government. In order to smooth out further the debt maturity profile, the focus is drawn to longer-term debt issuances provided that the market conditions and new interest rate environment are favourable. The size of the issuance will depend on the performance of fiscal policy as well as of the progress of economic activity in the real economy.

The average remaining maturity of marketable debt exhibited a small increase reaching 7.9 years as at the end of 2022 compared to 7.7 years as at the end of 2021, which was mainly attributed to the 10-year government bond issuance in the international market. The value of the said indicator is above the relevant MTDS target i.e. to be not less than 7 years. The continuation of longer-term benchmark EMTN issuances is anticipated to maintain the maturity of marketable debt above 7 years.

Risk mitigation

The size of the liquid funds throughout the year of 2022 was in line with the relevant target set in the strategy, to cover the financing needs of the next 6–9-month period at any time. Throughout the year 2022, the total liquid funds maintained well above the said threshold, covering the financing needs of more than the next 9-month period and providing the flexibility to the Government to decide the appropriate timing to access the market as well as to cope with any unexpected events. The strong cash position is expected to support the Government to cope with the uncertainty caused by the Russia-Ukraine military conflict launched in early 2022 and the effects of sanctions on Russia to global economy.

Moreover, the target for the total foreign exchange exposure has been achieved up to date. The approach, generally followed, is to go for euro denominated debt issuances only. Since April 2020 the total foreign exchange exposure equals to zero.

The debt metrics comply with the target set for floating-fixed interest rate composition. Securities are generally issued in fixed interest rate form only. There is no outstanding marketable debt in floating or index type of interest. There is a sizeable share of outstanding debt in floating interest rates, mainly due to disbursements of ESM loan and to a lesser extent to a number of loans granted by European Investment Bank (EIB) and Council of Europe Development Bank (CEB). The total of the said debt with floating interest rates formed 30 percent of the outstanding public debt at the end of 2022, however the interest rate risk stemming from the floating rate debt is limited due to the low interest rate of loans granted by ESM. The variable rate debt is anticipated to decline from 2025 onwards with the gradual redemption of the instalments payable to ESM.

Developments of the government securities market

With regards to the efforts for improving the price discovery mechanism of the domestic market and increase accessibility to international investors, limited progress has been marked.

A significant improvement has been marked in the development of a suitable market structure to improve the price discovery mechanism and liquidity provision in the foreign market. An extended market group with eight international investment banks has continued to work towards this goal during the year 2022. The initial mandate of banks is to post indicative prices of the Cypriot international bonds on a voluntary basis in a platform jointly decided by the issuer and the banks. The MTS platform became operational since 2020 and it is expected that MTS will help the PDMO to increase the liquidity of Cypriot bonds and optimise the cost of funding in the long term.

The target of the completion and extension of a sovereign yield curve, has achieved at a very satisfactory level. One new point was added in the sovereign yield curve in 2022 through the new EMTN issuance. According to the existing debt maturity profile, the PDMO aims at centralizing the funding efforts of at least one international bond issuance per year for the following years to serve also as benchmark bonds.

Minimisation of marketable debt borrowing cost

The outcome for the said guideline is envisaged to materialize gradually through the successful implementation of the other guidelines and the realisation of their targets. The contact list of investors has been expanded considerably throughout the years. As the secondary yields of the Cypriot international bonds continue to follow a downward trend and the sovereign credit ratings tend to improve further, the composition of investors will continue to change over time. The improvement of investor base with more quality investors has continued in 2022 through the EMTN issuance despite the adverse external environment. The efforts are continuing to be in the analysis of investors in order to approach more investors with longer investment horizon profile. The marketing efforts are promoted to higher participation of this type of investors.

The target of the provision of information to investors has been achieved by the PDMO through the production and dissemination directly to investors of two regular newsletter publications, namely Cyprus economy newsletter (bi-monthly) and public debt quarterly bulletin. Furthermore, an investor presentation is updated at intervals and published at the PDMO website informing investors about the main developments of the Cypriot economy.

With regards to market intelligence, the PDMO continues to monitor and analyse the financial markets observing the new debt issue premiums and new debt issue performance of peers compared to the Republic of Cyprus. It is expected that more information on flows, volumes and investor statistics will be gathered by the newly established Bank group.

For the expansion of the investor base in terms of geography, type and size, the PDMO has focused on marketing activities which are conducted well ahead of any intended bond placements. In 2022, a number of virtual meetings with investors were organised to provide update information about the Cypriot economy. The investor base has improved both in terms of geography and type in the 2022 EMTN issuance.

The results of the improvement of investor base both in terms of geography and type are evident through the investor distribution statistics by geography and type in the benchmark bond issuance in 2022 which are shown in Chapter 6.

III. Sovereign Debt Markets Developments

A. Eurozone sovereign debt market developments

According to the notes and the Annual report issued by the Directorate General for Financial Stability, Financial Services and Capital markets Union, the sovereign yield curves in euro area shifted upwards and steepened during the first two months of the year following ECB's decisions on 16 of December 2021, first to stop net asset purchases under the PEPP program and to reduce the PEPP portfolio with a roll-off pace starting from March 2022 and second a step-by-step reduce of monthly asset purchases, under the APP program, starting from EUR 40 bn in April down to EUR 20 bn in October 2022.

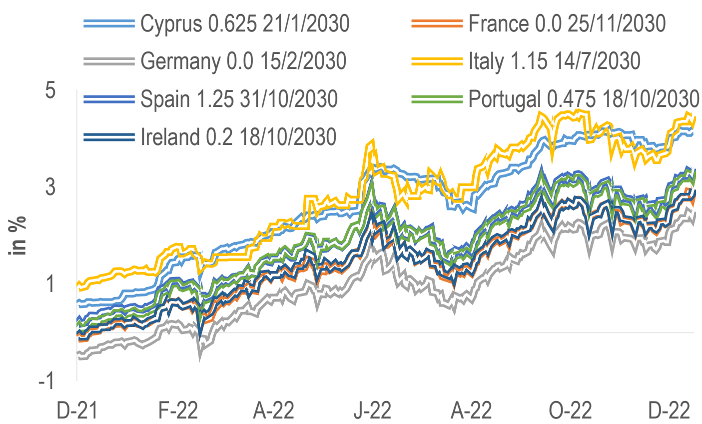
During the period March to May 2022, the Euro area (EA) benchmark yield curve moved up and slightly steepened anticipating the termination of ECB asset purchases programme. With regards to the total euro-denominated bond issuances for the period January-May 2022, a decline by 1.5 percent was recorded, compared to the corresponding period of 2021 whilst public bond issuances were still 21.7 percent higher than the pre-COVID levels of 2019.

In the period from June to November 2022, rapidly rising government bond yield spreads over the Bund in the euro area have been recorded. During this period, the surging energy prices due to the war in Ukraine, supply chains disruptions and China's slower growth related to its zero-Covid policy, continue to put upward pressure on inflation and reduce economic growth everywhere, particularly in Europe. Furthermore, the opening of rate hikes by ECB combined with the end of net asset purchases contributed to the upward path of the sovereign bond yield curves. With regards to the total euro-denominated bond issuance (EUR 1882 bn until the end of September 2022), a small decline was recorded in relation to the same period of 2021 whilst public issuances were recorded an increase compared to pre-pandemic levels.

Among the highlights in 2022, were the significant impact on markets and yield curves by geopolitical developments (Russia-Ukraine war) and changes in monetary policy. In terms of sovereign ratings, the EU Member States, the ESM and the EFSF were granted by 8 upgrades of credit ratings. According to the ESDM Annual Report 2022 (Directorate General for Financial Stability, Financial Services and Capital markets Union, 2022) the main challenges for EU sovereign debt markets that would need to be achieved in the upcoming years, will be related to the Russian war of aggression in Ukraine, expected further increase of interest rate by ECB, the consequences of the end of Quantitative Easing (QE), the management of cash balances accumulated by the Debt Management Offices and the potential market impacts, climate/green initiatives and the increased volumes of outstanding government debt.

The yield developments of 10-year bonds (where available) for selected Eurozone States throughout the year 2022 are illustrated in Figure 1. The 10-year Cyprus government bond yields followed an upward path during the year 2022 due to geopolitical developments (Russia-Ukraine crisis) and changes in monetary policy by ECB to bring inflation under control. The end of net asset purchases and the launch of rate hikes triggered a strong market reaction, with rapidly rising yields and spreads in the euro area. From the beginning of the year until to the 3rd week of June 2022, the Cyprus sovereign bond yields followed an upward path, then towards the end of August 2022 the said yields followed a downward path with minor volatility and then followed an upward path until the end of 2022. At the end of 2022, the 10-year Cyprus government bond yield increased by 352 basis points compared to the beginning of the year due to geopolitical developments and changes in monetary policy. Similar paths were recorded for the 10-year bonds of selected Eurozone states during the same period with the Portuguese bond yield curve and Italy bond yield curve recording an increase of about 302 basis points and 332 basis points compared to the corresponding values at the beginning of the year. Increases have also recorded, albeit at lower levels, for the German bond (increase of about 274 basis points), Irish bond (increase of about 284 basis points), French bond (increase of 280 basis points) and Spanish bond (increase of about 294 basis points).

Figure 1: Secondary market yield curve levels of Cyprus and selected Eurozone States (10-year government bonds) in 2022



(Source: Bloomberg)

Regarding the implementation of the AFP 2022, one new benchmark bond (EMTN) with a tenor of 10 year was issued early 2022, adding one further point in the sovereign yield curve of Cyprus.

The market behaviour indicated a disaggregation of the thirteen benchmark (EMTNs) bonds of the Republic of Cyprus into four main groups. The five longer-dated bonds maturing in 2030, 2034, 2040, 2049 and 2050 as well as the new bond issuance, due in 2032 moved in a similar pattern, recording an increase between 243 and 440 basis points by the end of the year 2022 since the corresponding values at the beginning of the year and its launch, respectively.

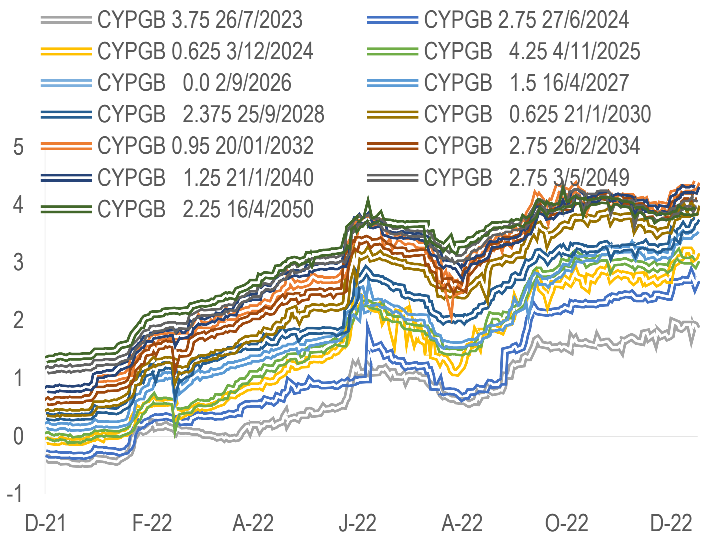
The second group of bonds maturing in 2026, 2027 and 2028 increased by the end of the year 2022 by 341 basis points, 343 basis points and 359 basis points since the beginning of the year, respectively.

The third group of bonds maturing in the short-term such as the bonds due in 2024 and 2025 moved in a similar pattern and towards the end of the year, they also moved in a positive territory increasing between 303 basis points and 327 basis points compared to the beginning of the year.

The fourth group of bonds include only the 7-year bond maturing in the year 2023 which recorded an increase by 233 basis points at the end of 2022 compared to the beginning of the year reaching 185 basis points.

Figure 2 below, illustrates the yield development of Cyprus' benchmark bonds in 2022, launched under the EMTN Programme which are under English law and listed on the London Stock Exchange.

Figure 2: Secondary yield levels for Cyprus EMTN in 2022

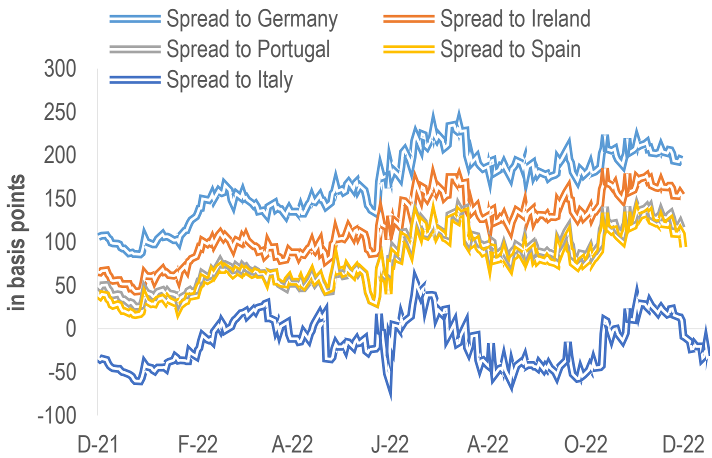


(Source: Bloomberg)

With regards to yield spreads developments, the Cyprus sovereign spreads of the 2030 bond over selected bonds of euro area countries have marked a significant increase since the beginning of the year due to geopolitical developments and changes in the monetary policy by ECB. The yields spreads continued to widen during the year, maximised in the period of July 2022 and then narrowed for a small period whilst towards the end of the year continued to widen and reached those levels at the beginning of July 2022, as presented in Figure 3 below.

The Cyprus sovereign yield spread of the 2030 bond (0.625 percent) over German Bund (0.0 percent) maturing on 15th of February 2030 marked an increase up to early March 2022 reaching 166 basis points, and then marked a small decrease by 35 basis points within the month and thereafter, followed an upward path. During the year, the lowest value of the spread reached 86 basis points whilst the highest value of the spread reached 235 basis points. By the end of the year, the yield spread reduced to 78 basis points compared to the beginning of the year. The spread to the Irish bond (0.2 percent) maturing on 18th of October 2030 moved in a similar pattern to the spread over German Bund, albeit at lower levels, with the lowest point and maximum point reaching 43 basis points and 185 basis points respectively whilst towards the end of year the spread narrowed to 68 basis points compared to the beginning of the year. Regarding the yield spread over Portuguese bond (0.475 percent) maturing on 18th of October 2030 and Spanish bond (1.25 percent) maturing on 31st of October 2030 moved in a similar pattern and were close throughout the year, however at lower spread levels, and towards the end of year had reduced by 51 basis points and 59 basis points respectively compared to the beginning of the year. The spread to the Italian bond (1.15 percent) maturing in 14th of July 2030 moved in a different pattern compared to the other bonds described above since the spread was in a negative territory or very closed to zero during the year 2022. The minimum spread was -13 basis points whilst the maximum spread was 23 basis points. By the end of the year, the spread to the Italian bond has been stabilised around -7 basis points as was in the beginning of the year 2022.

Figure 3: Cyprus sovereign yield spread to selected euro area countries in 2022 (bonds maturing 2030, where available)



(Source: Bloomberg)

The secondary market activity and the clearly upward trend of Cyprus sovereign yield spreads for the most of the period in 2022 have contributed to the creation of a new funding cost environment for the EMTN issuances in the primary markets in the foreseeable future. An overview of the financing of the Central Government in 2022 is presented in the following chapter.

B. Cyprus sovereign debt market developments

The activity of the domestic government bond market has continued throughout the year 2022 with regular monthly 13-week TBs auctions. TBs issuances are euro-denominated and are conducted at regular intervals, according to the indicative auction calendar. The auction schedule for 2022 and the indicative auction schedule for TBs for the first half of the year 2023 are presented in the Appendix. Although the annual outstanding amount of TBs is on a downward pattern since 2013 which is in line with the MTDS. In 2022 the TBs programme remains a significant short-term funding vehicle for Cyprus.

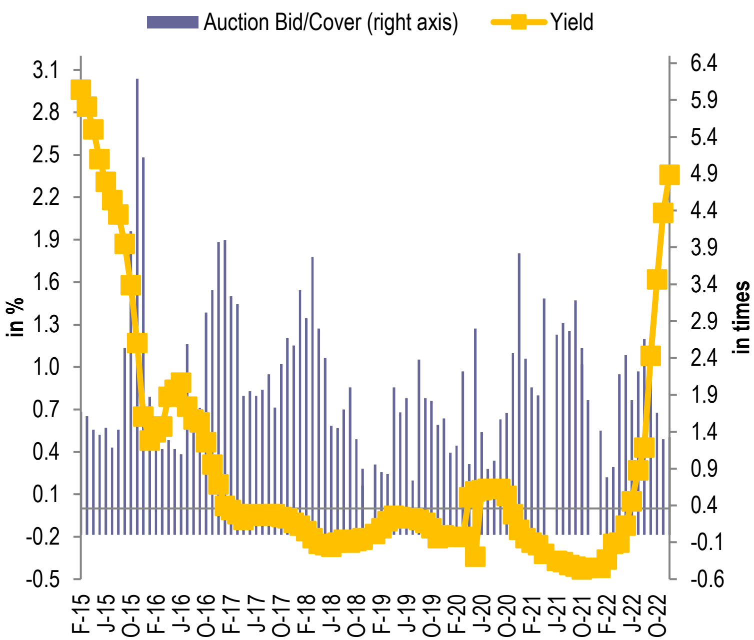
In 2022, the total cumulative amount of 13 weeks TBs auctions recorded a reduction reaching EUR 671 mn compared to EUR 1150 mn in 2021. The total net stock of TBs at the end of the year has marked a significant reduction of around EUR 163 mn reaching around EUR 137 mn or 0.6 percent of the total public debt compared to EUR 300 mn at the beginning of the year.

Figure 4 below, illustrates the historical evolution of TBs yields and auction bid to cover ratios[4] during the years 2015-2022. With regards to yields developments, the Cyprus TBs yields turned to positive territory since June 2022 following the ECB interest hikes in order to bring inflation under control. The weighted average yield in 2022 was 0.37 percent compared to -0.36 percent in the year 2021.

Regarding the bid to cover ratios, it seems that the auction participation followed a downward path since the increase of interest rates in general, provide alternative investment solutions (with higher return) for the Monetary Financial Institutions. The PDMO continues its efforts to attract higher participation of investors for TBs issuances. The annual average auction bid to cover ratio in 2022 was 1.78 times the auction amount compared to 2.54 times in 2021.

[4] The total value of bids received to the issuance amount announced.

Figure 4: Treasury Bills yields and auction bid/cover ratio in 2015-2022



(Source: PDMO)

IV. Financing of the Central Government in 2022 (AFP 2022)

A. Introduction

The financing of the Central Government in 2022 was achieved through a number of financing instruments. The financing of the Central Government was mainly done through the issuance of a new benchmark EMTN indicating the continuation of the successful presence of the Republic of Cyprus in the international market.

Following the introduction of this Report, the second sub-chapter illustrates the financing of borrowing needs in 2022 by source and by maturity based on the AFP 2022. The next sub-chapter focuses on debt redemptions and liability management transactions executed in 2022. The chapter concludes with a review of the year's financing profile.

B. Financing actions in 2022

The Central Government annual borrowing plan by financing instrument was revised two times during the year 2022, as you can see in Appendix, mainly due to strong performance of the Cypriot economy and the better-than-expected fiscal performance in year 2021 as well as the continuation of the improved fiscal performance in year 2022 which led to the reduction of the gross financing needs of the Government. Despite the fact that from early 2022 the war in Ukraine has raised uncertainty about the global economic prospects, the Cypriot economy has proven resilient to external shocks, including the Covid-19 pandemic during the year 2022 which was reflected in the reduction of the total annual borrowing in 2022. The upper borrowing limit of the 2nd update AFP 2022 was lower than the initial AFP 2022 approved in November 2021 by around EUR 0.8 bn. This was mainly attributed to the reduction of the borrowing amount under the EMTN programme by EUR 0.5 bn due to the reduction of the gross financing needs as a result of the better-than expected budget position of the Government. The final AFP 2022, after the two revisions executed during the year, is illustrated in Table 1 below. The total borrowed amount of the Republic of Cyprus in 2022 reached EUR 1.3 bn, excluding debt issued and redeemed within the year.

The main component of the annual financing was the issuance of one EMTN of the order of EUR 1 bn underpinned by strong and diversified participation of international, high quality investors, with the five biggest categories, originating from UK, Cyprus, France, Nordic countries and the country complex of Germany/Austria/Switzerland. In total, about 78 percent of the annual funds borrowed originated by foreign investors mainly consisting of foreign bond and bilateral loans granted by EIB. The remaining share of about 22 percent originated by domestic investors with both legal entities, mainly Monetary Financial Institutions (MFIs) by investing in foreign bond and TBs issuances as well as natural persons by investing in retail bonds. An amount of EUR 100 mn or about 8 percent of the total annual financing was formed by foreign loans granted by EIB throughout the year for ongoing infrastructure projects.

Table 1: Annual borrowing by financing instrument in 2022

		EUR mn		%	%
1	**Government Securities**		**1161**		**90**
	of which:				
	TBs (13 weeks)	137		11	
	Retail bonds	24		2	
	Foreign bond (EMTN)	1000		77	
2	**Loans**		**129**		**10**
	of which:				
	EIB – CEB loans	100		8	
	Other bilateral Loans[2/]	29		2	
	Total net annual borrowing[1/]		**1290**	**100**	**100**

1/= Debt issued and redeemed within the year 2022 is not included.
2/= Loans issued by European Commission under the SURE instrument
(Source: PDMO)

Table 2 below, shows the distribution of total net annual borrowing by maturity in 2022. The maturity of the annual borrowing in 2022 ranged between 0.25 years to 20 years with the majority of the debt ranging in the spectrum of over 10 years at 88 percent (an EMTN maturing in 2032 and bilateral loans maturing in 2032, 2037 and 2042). The debt ranged in the spectrum of 0.25-1 year was 11% and is composed by short-term TB issuances.

The weighted average maturity of new debt issued during 2022 recorded an increase by two times compared to the respective debt during 2021, reaching 9.7 years, mainly due to the 10-year EMTN issuance.

Table 2: Distribution of total annual borrowing by maturity in 2022

		EUR mn	%
1	0.25 – 1 year	137	10.6
2	1 – 5 years	0	0
3	6 -10 years	24	1.9
4	Over 10 years	1129	87.5
	Total net annual borrowing	**1290**	**100**

(Source: PDMO)

As presented in Table 3 below, in terms of the utilization of borrowed funds, about 90 percent of the annual funding was used by the Government to pay the scheduled debt redemptions. About 8 percent of the annual funding was used for the implementation of ongoing infrastructure projects whilst a small amount of EUR 29 mn or about 2 percent was mainly used within the framework of job and income protection.

Table 3: Summary of the use of the annual funding in cash terms in 2022

		EUR mn	%
1	Debt maturities[1/]	1161	90
2	Job and income protection (SURE)	29	2
3	Infrastructure projects	100	8
	Total net annual borrowing	**1290**	**100**

(Source: PDMO)
1/= The remaining amount of debt maturities in 2022 has been paid through the use of cash buffer.

The overview of financing actions implemented during 2022 is presented in more details below. The main financing of 2022 took place in January 2022 through the issuance of a 10-year foreign bond of the order of EUR 1000 mn.

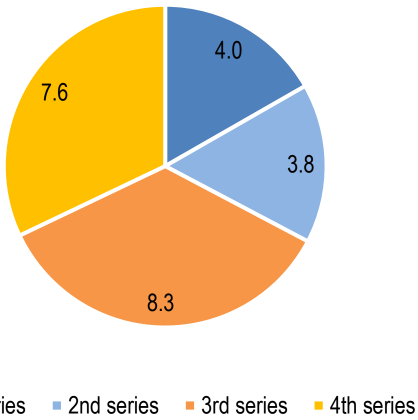
The 10-year benchmark bond was at a coupon rate of 0.95 percent and yield of 0.994 percent. The transaction was very successful attracting a high quality and diverse set of investors. The said bond was priced at spread of 65 basis points over the mid-swap rate. The orderbook was oversubscribed by 7.5 times. More details are presented in Box 1 below.

In May and June 2022, three loans of the total order of EUR 100 mn (two loans of the order of EUR 40 mn per each loan and the third loan of the order of EUR 20mn) were granted by EIB for the implementation of ongoing infrastructure projects. The first and the second loan issued in May 2022 maturing in 2032 and 2042 respectively whilst the third loan issued in June 2022 maturing in 2037.

In December 2022, an additional amount of EUR 29 mn was disbursed under the SURE instrument. The said loan maturing on 4th of December 2037 at a coupon rate of 2.75%. More details are presented in Box 2 below.

In addition, domestic retail bonds amounting to EUR 24 mn were issued throughout the year. The domestic retail bonds, designed to meet the characteristics of natural persons as investors, have a 6 years' maturity and can be redeemed by the holder pursuant to the specific terms of issuance. The interest rate follows a step-up structure and has a positive correlation with the time of holding, motivating the investors to hold the bond until to its maturity. Figure 5 below, illustrates the series of retail bond sales in 2022.

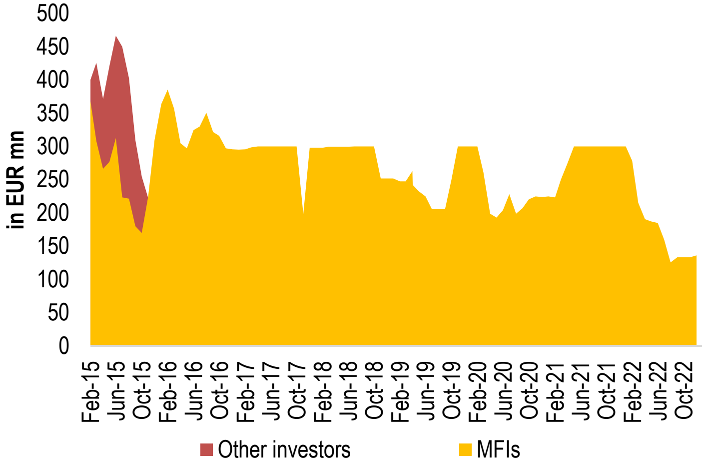
Figure 5: Series of Retail bond sales in 2022 (in EUR mn)



(Source: PDMO)

The annual funding in 2022 has been completed through monthly auctions of quarterly TBs with the total order to reach around EUR 168 mn on average for the whole year, on a roll-over basis. As presented in Figure 6 below, domestic MFIs dominated the Treasury Bill investor base. The participation of non-MFIs such as pension funds and state-owned enterprises in the monthly TBs auctions, has decreased since January 2016 due to the low (negative) yields offered compared to alternative investments particularly bank deposits. Nevertheless, a small participation by non-MFIs in TB auction was recorded in December 2022 indicating a sign for more possible demand in the near future.

Figure 6: Evolution of stock of TBs by investor distribution in 2015-2022



(Source: PDMO)

Box 1: Republic of Cyprus EUR 1000 mn, 0.95% 10-year benchmark bond due 20 January 2032

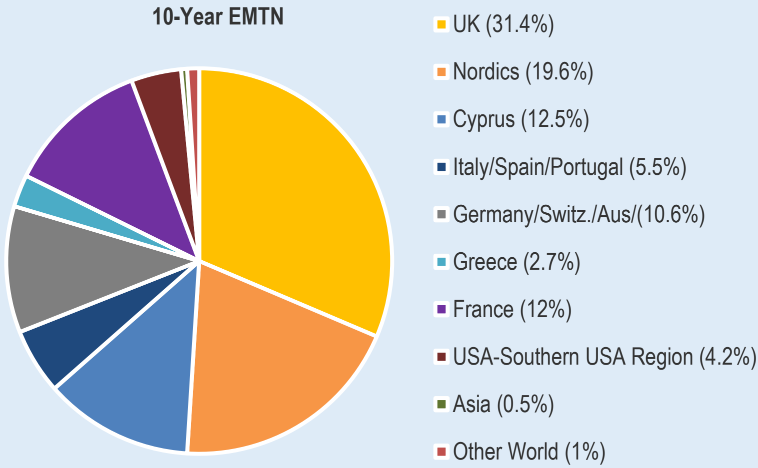
In January 2022, the Republic of Cyprus decided to issue a new 10-year European Medium-Term Bond (EMTN), in order to maintain its presence in international capital markets and meet its objectives set under the Medium-Term Debt Management Strategy.

The mandate to take on the role of bank contractor was given by PDMO office to Barclays, Citi, Deutsche Bank, Goldman Sachs and HSBC in a statement issued on 12th of January 2022. The mandate for the new 10-year benchmark bond was officially announced on the market at noon of Wednesday, on 12th of January 2022. On 13th of January 2022, at 8.22 LDN, the orderbook was officially opened and the initial pricing guideline was announced at the MS + 75 bps area. The transaction immediately attracted sizeable investor interest (with orders in excess of EUR 7.5 bn), allowing the issuer to limit the margin and set it at the area of MS +70 bp at 10:09 LDN. The orderbook continued to increase, exceeding EUR 7.8 bn whilst the quality of the orders allowed the final reoffer spread to be tightened further and set at MS + 65 bps and the issue amount to be set at EUR 1bn. The orderbook closed at 12:15 LDN with the final amount of offers in excess of EUR 7 bn. At 14:48 LDN, the new EUR 1 bn 10-year bond officially priced at MS+65 bps, equivalent to a reoffer yield of 0.994% and a spread of +107.5bps.

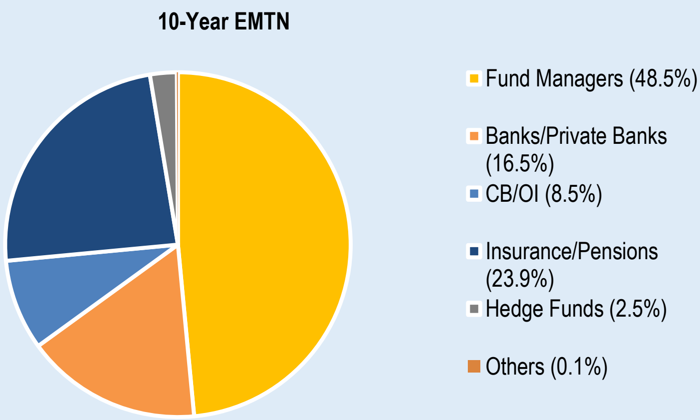
From geographical point of view, a wide distribution of investors was achieved, attracting a significant and diversified number of investors. The large number of offers came from investors from the Nordic countries and the United Kingdom. The increased participation from the group of countries Germany / Austria / Switzerland and France is also noted. The Cypriot participation in the issue reached 12.5%. The remaining investor participation came from various European countries, such as Greece, Italy, Spain and Portugal.

Regarding the type of investors, the largest group of investors was Fund Managers with a participation share of 48.5%, followed by the Insurance Organisations / Pension Funds with 23.9% and Banks / Private banks with a participation share of 16.5%. A significant percentage of 8.5% was allocated to Central Banks / Public institutions and organisations (More details on the distribution of investors by region and type are presented below).

Distribution by region



Distribution by type



Summary of terms and conditions

Issuer	Republic of Cyprus (through the PDMO)
Issuer Ratings	BBB-/Ba1/BBB-/BBBL (positive/stable/stable/positive) by S&P's, Moody's, Fitch and DBRS
Format	Reg S, Registered only, CACs
Settlement Date	20 January 2022
Maturity Date	20 January 2032
Size	1,000,000,000 EUR
Coupon Rate	0.95%, Annual/ACT/ACT
Re offer price/yield	99.583 / 0.994% p.a.
Spread	+65 bps
Denominations	EUR 1K + 1K
Listing / Law	London Stock Exchange / English Law
ISIN	XS2434393968
Lead Managers	Barclays, Citi, Deutsche Bank, Goldman Sachs, HSBC

Box 2: Participation of the Republic of Cyprus, to the SURE instrument of the EU

The coronavirus outbreak (COVID-19) has had a significant negative economic impact worldwide, affecting the production chain and the demand, with unavoidable effects on the labor market. As a result, a number of measures have been launched at European level, in order to support the European economies. In this context, a European instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE) and a Regulation laying down the conditions and procedures for the provision of this Union support to its Member States, have been put in place. The duration and scope of the new temporary support instrument are limited to tackling the effects of the coronavirus pandemic and are intended to protect jobs and employees affected. It will provide financial support in the form of loans granted by the European Commission ('the Commission') to its Member States totaling up to €100 bn, of which an amount of €98.4 bn has already been approved and €91.8 bn has already been disbursed to 19 Member States, as per 30 September 2022, to help them cover directly related costs by creating or extending national systems for part-time employees and similar measures they introduced for the self-employed to address the effects of the pandemic.

In order to finance its loans to Member States, the Commission has resorted to lending from the financial markets through the issuance of bonds. Member States benefit from the Commission's strong credit rating and its very low borrowing cost, as these loans are backed by a system of voluntary guarantees from the Member States, depending on each country's share of the Union's GDP, which amounted to € 38.1 mn in the case of Cyprus. These loans will be repaid upon maturity, and in the interim period only interest and related expenses will be paid. The total amount that Cyprus has received through the Loan Agreement is €632 mn or about 2.6% of GDP_{2021}.

In October 2020, EU proceeded to the first bond issuances. At the issuance of 12 November 2020, Cyprus received €250 mn. In 2021, it received an additional amount of €229 mn on the 2nd of February 2021 and €124 mn on the 25th of May 2021. More specifically, in 2020 Cyprus received a 5-year bond of €150mn and a 30-year amount of € 100mn with an annual nominal interest rate of 0.0% and 0.3% respectively. In February 2021 it received a 7-year bond of €157 mn and a 30-year bond of €72 mn with an annual nominal interest rate of 0.0% and 0.3% respectively and in May 2021 an 8-year bond of €77 mn and a 25-year bond of €47 with an annual nominal interest rate of 0.0% and 0.75% respectively. In addition, based on the latest issuance of the EU in December 2022, Cyprus received a 15-year bond of €29 mn with an annual nominal interest rate of 2.75%.

Box 3: Participation of the Republic of Cyprus, to the Recovery and Resilience Facility of the EU

In 2020, the European Commission proceeded to the creation of "Next Generation EU" fund in order to repair the immediate economic and social damage brought about by the coronavirus pandemic. At its core is the Recovery and Resilience Facility which aims to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, more resilient and better prepared for the challenges and opportunities of the green and digital transitions.

The Recovery and Resilience Plan (RRP) of the Republic of Cyprus which was approved by The European Commission was €1206 mn, which will be financed through grants of €1006 mn (at current prices) and additional funding of about €200 mn in the form of loans during the period 2021-2026. The key strategic goal of the RRP of Cyprus is to strength the economy's resilience and the country's potential for economically, socially and environmentally sustainable long-term growth and welfare. Through the implementation of the RRP measures, the aim is to promote Cyprus as:

- A country with high levels of resilience, productivity and competitiveness;
- A country where the education system and workforce development are aligned with the skills needed for the future;
- A country with high performance in green and digital transition;
- A country with a resilient health system;
- A welfare state with a strong protection network;
- A state of law, transparency and accountability with strong anti-corruption mechanisms.

The economic impact assessment of the RRP carried out by the Economic Research of the University of Cyprus, is expected to have significant macroeconomic impact in the short, medium and long term on economic growth, employment and productivity.

As per the payment profile, Cyprus has already received an amount of €157 mn on 9th of September 2021, being a 13% prepayment of the total grants and loan amounts as well as an amount of €85 mn in 2nd of December 2022. The payment in 2022 was the result of the achievement by Cyprus of the 14 milestones related to reforms and investments in the electricity markets, financial sector and public administration as well as in the areas of energy efficiency, circular economy, anti-corruption and transparency, digital skills and budget audit and control. The remaining amounts are expected to be disbursed in the period 2023-2026 subject to the fulfilment of the milestones and targets agreed within the framework of Cyprus RRP. More details are presented in Table 2c in the Appendix.

C. Liability management transactions and Debt redemptions in 2022

One of the main strategic objectives of the MTDS 2022-2024 was the minimisation of marketable debt borrowing cost. In 2022 the main attention was given to the reduction of the weighted average cost of public debt without affecting significantly the successful extension of the bond yield curve, achieved through longer-term EMTN issuances in the previous years. Through the bond issuance early in 2022, the PDMO achieved to retain the weighted average cost of public debt at more sustainable levels, enhance the liquidity buffer and improve the investor base in terms of geography, type and size.

Given the continuation of the uncertainty surrounding the development of the Covid-19 pandemic, as well as the uncertainty raised from the war in Ukraine, the main attention by the PDMO was given to the retainment of the cash buffer in order to cope with any changes regarding the financing requirements and the cash flow projections. However, Cyprus' diversified economy has proven resilient to external shocks, including the crisis in Ukraine and the economic consequences due to the Russian sanctions. As a result, the AFP 2022 was revised two times within the year. In May 2022 the maximum borrowing amount reduced by EUR 360 mn whilst in October 2022 the maximum borrowing amount reduced by another EUR 504 mn. Therefore, a significant part of the financing needs was covered through the utilisation of the cash buffer.

The details of debt redemptions in the domestic/foreign market and loan amortisations by creditor in 2022 are shown in the Appendix.

Table 4 below illustrates all long-term debt redemptions and early prepayment transactions in 2022. The scheduled long-term redemptions of the year, excluding early repayments of the order of EUR 5.8 mn, amounted to EUR 1915 mn and are mainly related to an EMTN and two domestic bonds.

With regards to short term debt, an amount which was rolled over throughout the year, reached EUR 137 mn as outstanding debt up to the year end of 2022.

Table 4: Long term debt redemptions and early debt repayments in nominal terms in 2022

		EUR mn	%
1	EMTN	1000	52.0
2	Domestic Bonds	663	34.5
3	Loans	97	5.1
4	Retail securities of which: early repayments (EUR 5.8 mn)	161	8.4
	Total	**1921**	**100**

(Source: PDMO)

D. Review of the annual financing plan 2022

This section illustrates how the annual financing plan changed the debt structure within the year 2022. The change of the debt structure was mainly attributed to the significant reduction of the domestic bonds of the order of EUR 663 mn and to a lesser extent to the reduction of the roll-over debt and retail bonds of the order of EUR 164 mn and EUR 138 mn respectively. It is noted that the reduction of the domestic bonds was attributed to the repayment of the last bond amounting EUR 610 mn issued in 2018 to facilitate the sale of the ex-CCB.

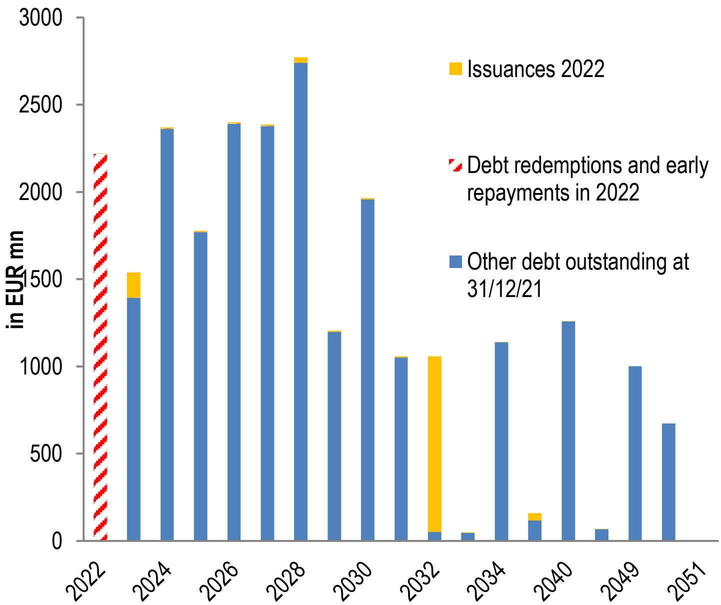
Table 5: Change in the public debt structure in 2022

		in EUR mn
1	Domestic Bonds	-663
2	EMTN	0
3	Treasury Bills	-164
4	Loans	32
5	Retail securities	-138
	Total	**-933**

(Source: PDMO)

Figure 7 below, shows how the public debt maturity profile changed due to funding and liability management transactions in 2022. A total amount of new issuances of around EUR 1.3 bn was added to the public debt maturity profile. An amount of EUR 1000 mn of the new debt issuances is related to a foreign bond fall in the year 2032. The second largest amount of debt of the order of EUR 137 mn (which was rolled over throughout the year) concerns TBs whilst a small amount of EUR 24 mn due in 2028 is related to retail bonds. The remaining amount spreads between 2022-2051 and refers loans granted by EIB for ongoing project financing.

Figure 7: Change of public debt maturity profile through 2022 actions



(Source: PDMO)

In general, the maturity profile at the end of 2022 remained within comfortable / manageable levels and within the targets set in the MTDS. The year 2028 which is the peak of the public debt is on a continuous monitoring, in order to avoid adding new debt on this year. However, taking into consideration the strong recovery of the economy and the significant improvement on the public finances, the Government will be in a position to refinance the said debt.

V. The size and Composition of Government Debt

A. Introduction

Statistical methodology and valuation for public debt is based on concepts defined in the European System of Accounts 2010. According to the consolidated version of the Treaty on the Functioning of the European Union (2012), the government debt is defined as "the total gross debt at nominal value outstanding at the end of the year and consolidated between and within the sectors of general government". In the case of Cyprus, the relevant subsectors are the Central Government, the local authorities and the Social Security Fund (SSF).

Following the introduction of this Report, the second sub-chapter which is organized in three sections, provides the statistical description of government debt. The first and second sections deal with the size, historical evolution and structure of the consolidated general government debt, whereas the third section deals separately with the unconsolidated general government debt.

B. Statistical description

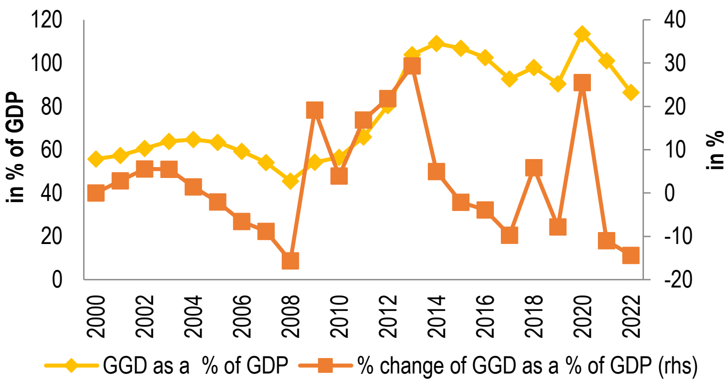
B.1 Size and evolution of General Government Debt

The General Government Debt (GGD) as a percent of GDP was on an upward path until the end of 2014 and thereafter, it marked an average reduction of around 5 percent for the next three consecutive years. In 2018 the outstanding amount of government debt increased by 5.8 percentage points (pp) reaching EUR 21.3 bn due to the government intervention of the order of EUR 3.5 bn to facilitate the sale of ex-CCB.

The debt to GDP ratio marked a significant decrease of 7.7 pp from around 98.1 percent in 2018 to 90.4 percent in 2019 whilst in 2020, the debt to GDP ratio marked a significant increase of 23.1 pp, due to the coronavirus pandemic which affected many countries all over the world including Cyprus, reaching EUR 24.8 bn or about 113.5 percent of GDP, as presented in Figure 8 below. In 2021 and 2022, the debt to GDP ratio recorded a significant reduction of 12.5 pp and 14.6 p.p respectively due to the strong nominal GDP growth and the improved fiscal position of the General Government translated to a sharp decline in the government debt to GDP ratio.

Figure 8 also shows that the percentage change of debt as a ratio of GDP was on a downward pattern since 2014, excluding years 2018 and 2020. The net debt to GDP ratio, in which the accumulation of cash reserves of the order of EUR 2596 mn is excluded, was estimated at around 77 percent as at the end of 2022.

Figure 8: Debt to GDP ratio evolution in 2000-2022

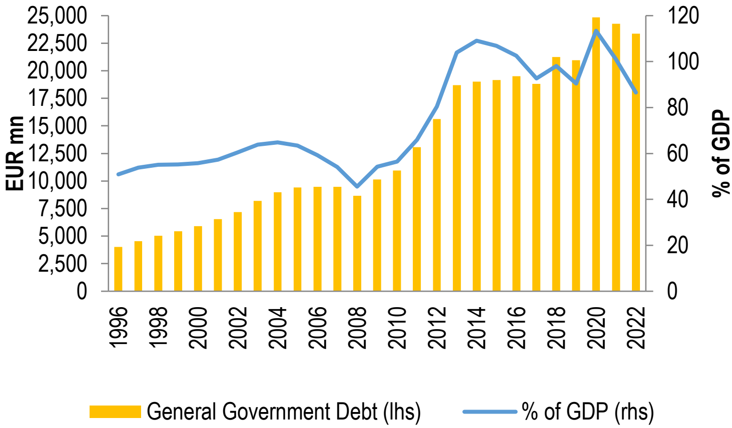


(Source: PDMO, Ministry of Finance and Eurostat)

The historical debt evolution over the years 1996 to 2022 is presented in Figure 9 below. During the period 1996-2004, the GGD followed an increasing path subsequently decreasing until 2008, when the debt to GDP ratio reached 46 percent, which was the lowest level, due to fiscal consolidation, and the use of available sinking funds. Since then, fiscal slippage, low to negative growth rates, capital injections into the banking sector and measures under the Memorandum of Understanding and other emergency loans, contributed to a considerable increase to the ratio. The state capital support to the domestic financial sector reached EUR 3.8 bn or about 20 percent of the gross public debt at end 2015.

Despite the sharp increase in the public debt, the strong fiscal outcome and the balanced budget for the period 2014-2016 combined with the strong real GDP growth of 3.4 percent in 2015 and 6.6 percent in 2016, allowed debt to stabilise earlier than expected and also at lower levels than originally anticipated. The years 2017 and 2018 were also years of strong fiscal outcome with positive real GDP growth of 5.7 percent and 5.6 percent respectively and in 2019 the growth rate exhibited an additional increase of 5.5 percent. In 2020, the public debt recorded an increase of 23.1 pp, reaching 113.5 percent of GDP whereas the real GDP exhibited a reduction of 4.4 percent due to the impact of the pandemic on economic activity. During the period 2021-2022, the strong nominal GDP growth improved the fiscal position of the Government translating to a sharp decline in the government debt to GDP ratio below 90 percent. The historical evolution of gross general government debt in values and as a percent of GDP for the period 1995-2022 is presented in table 4 in Appendix.

Figure 9: Trend in the consolidated general government debt in 1996-2022



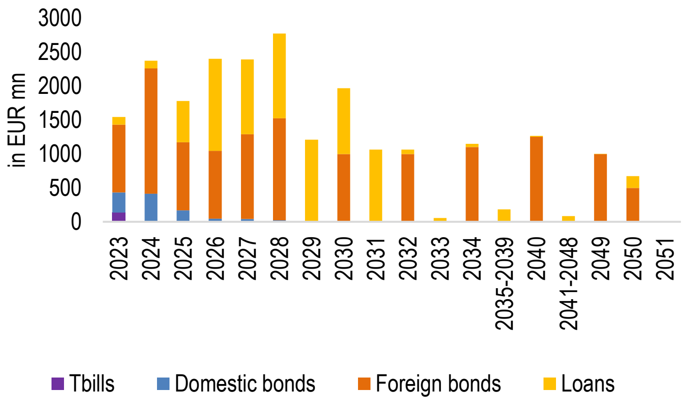
(Source: PDMO and Ministry of Finance)

B.2: Composition of the General Government Debt

This section presents the composition of the GGD at the end of 2022. The maturity structure of the GGD gives a clear picture of the distribution profile among different outstanding liabilities. Figure 10, illustrates the debt maturity profile, in other words the size of the debt sums maturing in each individual year given the outstanding GGD, excluding the outstanding amount of loans under the European Financial Stability Facility (EFSF) of the order of EUR 225 mn as at the end of 2022. In general, the debt maturity profile is smooth and the annual debt maturities are within comfortable levels.

During the period 2023-2027, an amount of EUR 6100 mn or about 59 percent of the total debt due in the said period concerns the repayments of the EMTNs and an amount of EUR 3290 mn or about 32 percent refers to the repayments of loans whilst the remaining amount concerns domestic bonds and retail bonds. The year 2028 shows the highest concentration of maturities of EUR 2775 mn of which an amount of EUR 1500 mn or about 54 percent is related to the repayment of an EMTN and EUR 1252 mn or about 45 percent to loans, mainly as an instalment of the ESM loan.

Figure 10: General government debt redemption profile as at the end of 2022



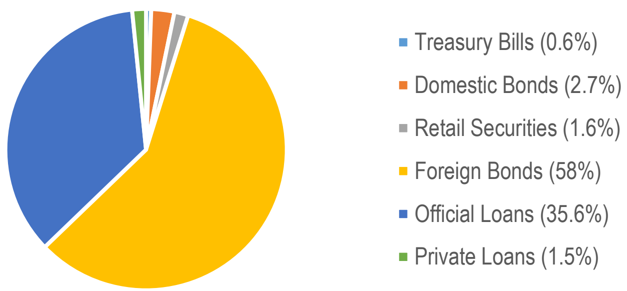
(Source: PDMO)

The share of the government debt by financing instrument, as at the end of December 2022, is illustrated in Figure 11 below. The two largest categories of the outstanding debt are the foreign bonds and the official loans. About 58 percent of the outstanding public debt in 2022 is related to EMTN issuances. About 36 percent of the loans' category comprised loans disbursed to the Republic of Cyprus of which the vast majority, about 76 percent of the official loans are related to loans disbursed by the ESM during the period 2013-2016 whilst the remaining was comprised by other bilateral loans, disbursed by EIB, CEB and EC.

The remaining share of the outstanding public debt (around 5 percent) is related to domestic securities issued in the domestic market which is expected to reduce the following years but it will continue to serve as a complimentary financing source. The outstanding Central

Government debt as at the end of 2022 is presented in Tables 5, 6 and 7 in Appendix.

Figure 11: Share of general government debt by financing instrument as at the end of 2022



(Source: PDMO)

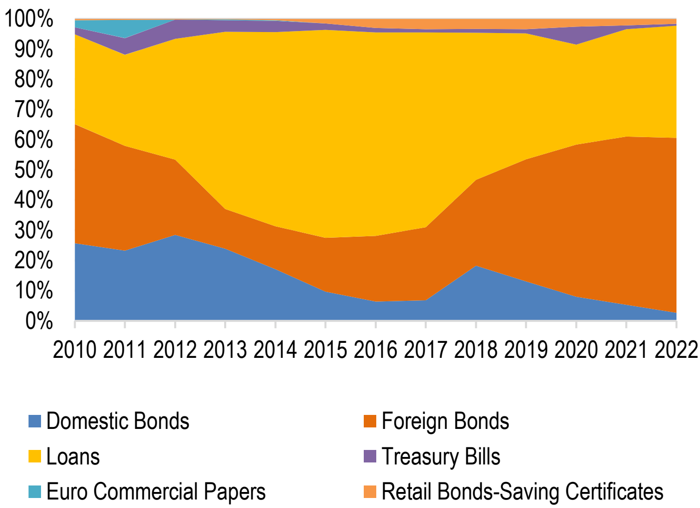
Figure 12 below, illustrates the historical breakdown of GGD by financing instrument during the years 2010-2022. During the said period, it is obvious that the vast majority of government debt concerned loans which increased abruptly in 2013 by 19 pp compared to 2012 and followed an upward trend until the end of 2015 reaching 69 percent mainly due to the official loans provided by ESM and IMF. In 2016 the level of loans stabilized at 67 percent of public debt and then followed a downward trend reaching 33 percent by the end of 2020 due to the early prepayments of the two bilateral loans, the first one which was granted by the Russian Federation in 2019 and the second one by the IMF in 2020. In 2022, the outstanding amount of loans marked an increase reaching around 37 percent, mainly due to the loans granted by the European Commission under the SURE instrument in order to mitigate unemployment risks as a result of the

Covid-19 pandemic and fund the social support measures taken by the Government.

While in the past, domestic bonds were one of the main financing instruments with an average contribution of around 25 percent in years 2010-2013, since 2014 the contribution of the said category to the GGD has marked a significant reduction reaching around 3 percent in 2022 compared to the highest point of 29 percent in 2012. It is noted that the significant increase in 2018 by 12 pp compared to the previous year was attributed to the domestic bond issuances of the order of EUR 3.19 bn to facilitate the sale of the ex-CCB. The said percentage is expected to reduce further in the following years because of the redemptions of all the issued domestic bonds and also by the fact that the main financing will be through the international capital markets. Nevertheless, domestic debt market is expected to continue to serve as an important complimentary financing source, due to its strategic importance.

On the other hand, EMTN securities have increased by 15 pp since 2013 reaching 28 percent as at the end of 2018 whilst one year later, in 2019, another increase of 12 pp has been recorded reflecting the intention of Cyprus to maintain its presence in international capital markets and build up a pertinent sovereign yield curve. By the end of 2020, the share of foreign bonds has exhibited a significant increase of about 10 pp reaching 50 percent in order to cope with the uncertainty surrounding the development of the Covid-19 pandemic whilst in 2022 the said share reached 58 percent of the outstanding public debt.

Figure 12: Historical breakdown of GGD by financing instrument in 2010-2022

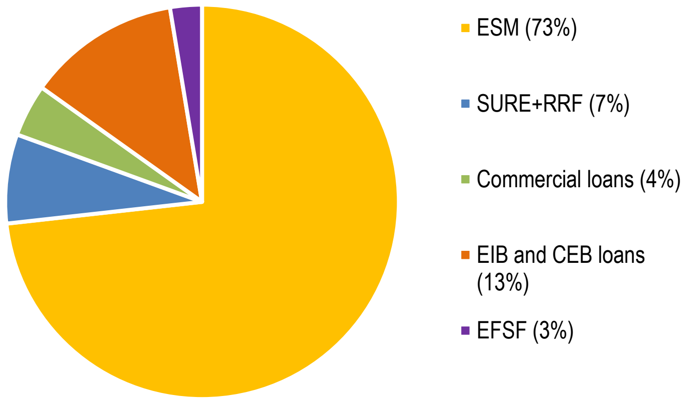


(Source: PDMO)

The distribution of outstanding loans by source as at the end of 2022 is presented in Figure 13 below. As mentioned above, the majority of the stock of outstanding loans as at the end of 2022 concerned the programme loans provided by ESM. Another important funding source was the loans disbursed by EIB and CEB for the implementation of new and ongoing infrastructure projects as well as by EC under SURE Instrument. These loans constitute 20 percent of the total outstanding loans as at the end of 2022 of which 13 percent are related to EIB and CEB loans. The total value of Cyprus' loans from domestic sources reached at 3 percent towards the end of the year 2022.

Finally, about 3 percent of the outstanding guaranteed loans granted via the EFSF to Greece, Ireland and Portugal, as attributed to the creditor countries of EU, including Cyprus, are included in the public debt statistics[5]. The government debt by instrument and lender as at the end of 2022 is presented in Table 7 in Appendix.

Figure 13: Distribution of loans by source as at the end of 2022



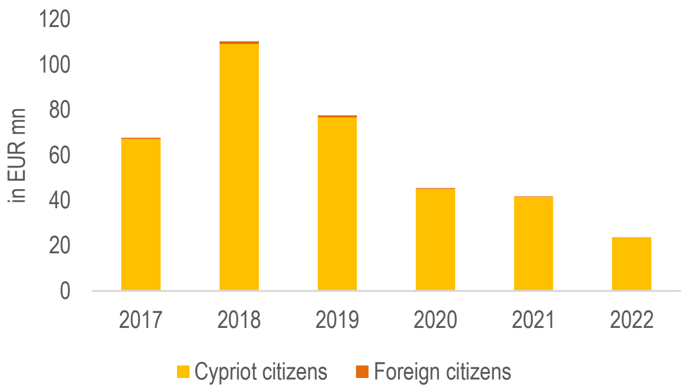
(Source: PDMO)

Figure 14 below, shows the outstanding amount of retail bond sales by citizenship during the years 2017-2022. The majority of the value of retail bonds during the said period was held by Cypriot investors. Considering data as at the end of 2022, about 99 percent of the total

[5]The creditor countries have an equal value of assets, as loans granted, in their balance sheet corresponding to the share of liabilities, i.e. the accumulated debt by the EFSF. However, any assets which may offset debt are not included in the general government debt, as this is reported on a gross basis.

outstanding amount of retail bonds were held by Cypriot citizens and about 1 percent by foreign citizens.

Figure 14: Distribution of retail bond sales by citizenship in 2017-2022



(Source: PDMO)

As mentioned earlier, in the case of the Republic of Cyprus, the three subsectors of the general government are the Central Government, the Local Authorities and the SSF. The Central Government includes all activities under the State Budget and one State-Owned Enterprise[6]. It is worth-noting, that the responsibilities of the PDMO in practice are currently limited to the debt management operations of the Central Government.

[6]The State-Owned Enterprise categorised within the Central Government and which has an outstanding debt balance is the Cyprus Sports Organisation.

According to the Eurostat definition, as described above, the public debt is reported in consolidated form and as a result, any obligations among the general government subsectors are not shown explicitly.

The highest percentage of the consolidated GGD, in gross terms, is made up of the Central Government debt. As at the end of 2022, the share of outstanding Central Government debt, excluding debt to SSF, accounted for around 99 percent of the general government debt on a consolidated basis. This share has historically remained constant.

Regarding the local authorities' loans, they were calculated to be around EUR 100 mn at the end of 2022. The majority of these loans is related to the borrowing of local authorities and concern infrastructure projects. Typically, the creditors are mainly local credit and ex-cooperative institutions[7]. This debt is thus in the form of long-term bank loans with a floating interest rate.

The third subsector of the general government, the SSF, does not have an outstanding debt balance. On the contrary, the Fund records an annual surplus which is invested within the Central Government, the total balance of which constitutes intra-governmental borrowing. This intra-governmental asset - liability relation is presented in section B.3 below.

[7] The said loans were transfered to state-owned Cyprus Asset Management Company (KEDIPES)

B.3: Investments of the SSF and Administered Funds

Due to its historical annual surpluses the SSF has a very large stock of investments with the Central Government. Investments of the SSF in the form of deposits within the general account of the government or by ownership of government securities, at year end of 2022, amounted to EUR 9609 mn according to the Social Insurance Services. The Funds, which are reported as a single account, in fact, comprise of five different accounts:

1. The Social Security Fund;
2. The Unemployment Benefits Account;
3. The Central Holiday Fund;
4. The Termination of Employment Fund; and
5. The Insolvency Fund.

Intra-governmental deposits

The majority of assets of the SSF are in the form of deposits within the Central Government. Annually, the surplus of the SSF is invested with the Government. By the end of 2022, the balance of the SSF in the form of deposits stood at EUR 9609 mn exhibiting an increase of around 4.8% in relation to the previous year balance of EUR 9197 mn.

Intra-governmental investments in government securities

In addition, the SSF in an effort to increase its revenue, has invested in Government EMTN bonds and Government domestic bonds. Since June 2021, the total outstanding amount of investments in government paper reduced to zero. It is noted that the SSF also maintains deposits with local credit institutions amounting to a total of EUR 105 mn as at the end of 2022.

Intra-governmental investments by Administered Funds

In addition to the SSF, intragovernmental investments (debt) are done through other five Administered Funds. There are five Administered Funds of the Central Government with an outstanding balance at year end 2022 of EUR 123 mn of which EUR 62 mn concerned investments of the Turkish Cypriot Properties Fund, EUR 57 mn of the Government Hourly Employees Provident Fund and EUR 4 mn of the Hunting Fund. The other two administered Funds are:

1. The Human Resources Development Authority Fund; and
2. The Agricultural Insurance Organisation Fund.

It is noted that the outstanding balance of the above two Funds since the year 2018 was equal to zero. The surpluses of these Funds are invested in Government Promissory Notes.

Finally, the only intragovernmental debt existing between the local authorities and the Central Government are two loans which were granted in 2011[8] by the Municipality of Nicosia to the Central Government at a variable interest rate extending to 2035 and 2026 respectively, with a 5-year grace period. The total outstanding balance of the said loans at the end of 2022 was EUR 5.2 mn.

It is worth noting that the intra-governmental relationship between government - SSF and other Administered Funds, as mentioned above, on a consolidated basis, is merely a statistical and accounting methodology.

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[8] That was before the enactment of the Public Debt Management Law (2012) and of the Fiscal Responsibility and Budgetary System Law (2014).

VI. Cost and risks

A. Introduction

The analysis of cost and risk was incorporated in the MTDS for the years 2022-2024. The cost-risk trade off was examined using the MTDS Analytical tool, which captures scenario analyses on various borrowing strategies.

This chapter is organized into two sub-chapters. The first one provides the cost of the public debt in terms of interest payments and the average interest rate. The second one discusses a number of risks which are related to the public debt.

B. Cost of the public debt

In this sub-chapter, the cost of the public debt is presented mainly on the basis of the interest payments to service the debt as well as by the weighted average cost of public debt.

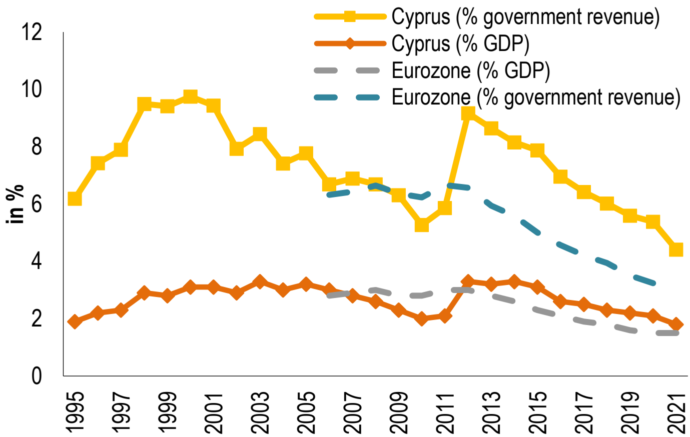
Historically, during the years 1995-2006 the average share of government revenue spent on the interest payments to service the public debt was 9 percent, with the highest share reaching 10 percent in 2000. The decrease of the public debt as a percent of GDP by around 8 pp in 2008 compared to 2007, contributed to the reduction in interest payments towards 7 percent of the government revenue and remained on average at 6 percent in 2009-2011.

Then, due to the sharp increase of public debt in the next years as well as the rise in the borrowing cost itself, the ratio of government revenue for interest payments followed an upward path reaching 9 percent at the end of 2013. It then followed a downward direction reaching around 5 percent at the end of 2020 and 4 percent at the end of 2021, as presented in Figure 15 below. It is noted that the increase of interest payable was partially offset by the low base rates.

Additionally, the interest payments as a percentage of GDP were close to 3 percent during the years 2000-2008 and then remained stable at around 2 percent until the end of 2011. Since 2012, the interest payments of Cyprus as a percentage of GDP exhibited an increase remaining above the corresponding values of the Eurozone average, as presented in Figure 15. It is important to highlight that, despite the sharp increase of public debt during 2011-2013, the amount of interest payments was restrained by the considerable improvement in the borrowing cost from official sources.

By the end of 2018, interest payments to GDP ratio were estimated at 2.3 percent compared to 2.5 percent of the previous year, despite the increase of the public debt in 2018.This is attributed to the lower amounts of interest payments due to lower borrowing cost because of low interest rates environment in the Eurozone and improvements in the sovereign credit ratings and the recovery of the Cypriot economy as well as higher GDP. In addition, the first interest repayments for the increased debt of 2018 fell due during the next year 2019. In 2019 and 2020, the interest payments to GDP ratio reduced to 2.2 percent and 2.1 percent respectively whilst in 2021 the said figure reduced below 2.0 percent reaching 1.8 percent of GDP. As presented in the following Figure, the gap of interest payments as a share of GDP between the Republic of Cyprus and the Eurozone marked a reduction of 0.23 pp reaching 0.36 percent in 2021 compared to 0.59 percent in 2020. The historical debt servicing in 2012-2021 is presented in Table 9 in Appendix.

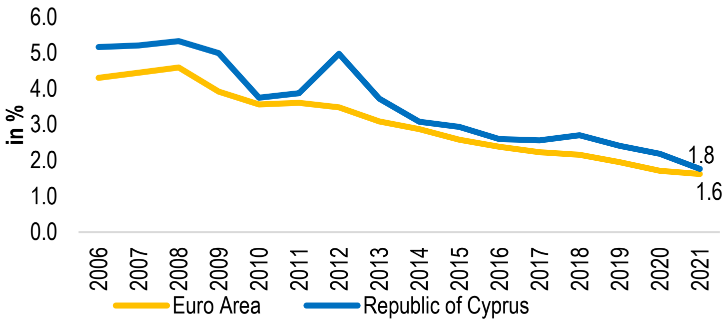
Figure 15: Distribution of interest payable on public debt during 1995-2021



Source: PDMO and Eurostat)
Note: The interest payable as a percent of GDP in 2022 was estimated at 1.5 percent.

Figure 16 illustrates the distribution of interest payable over debt for the Republic of Cyprus compared to Euro area countries in 2006-2021. Since 2013, interest payable to debt ratio is on a downward path exhibiting minor fluctuations. Regarding the gap between the Republic and Euro area countries, there is a convergence since the gap marked a significant reduction in 2021 reaching 0.1 percent compared to 0.5 percent in 2020 and 1.5 percent at the end of 2012.

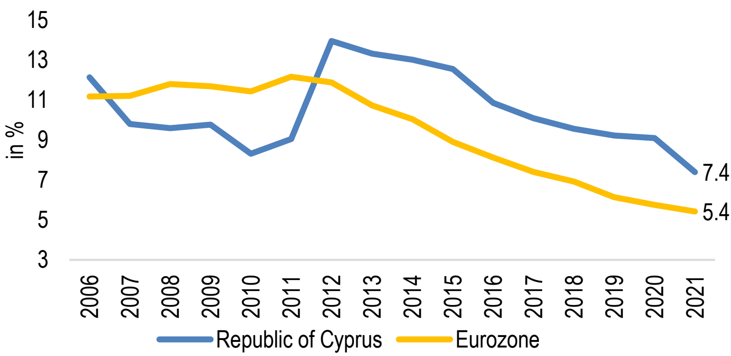
Figure 16: Distribution of Interest payable$_{(t)}$ to Debt $_{(t-1)}$ in 2006-2021



(Source: PDMO and Eurostat)
Note: The interest payable to Debt $_{(t-1)}$ was estimated at 1.6 percent in 2022

Figure 17 illustrates the distribution of interest payable to tax revenue for the Republic of Cyprus compared to Euro area countries in the period 2006-2021. During the period 2013-2019 the gap was around 2.9 percent whilst in 2021 the said figure marked a significant reduction reaching around 2.0 percent compared to around 3.3 percent in 2020.

Figure 17: Distribution of interest payable to tax revenue in 2006-2021



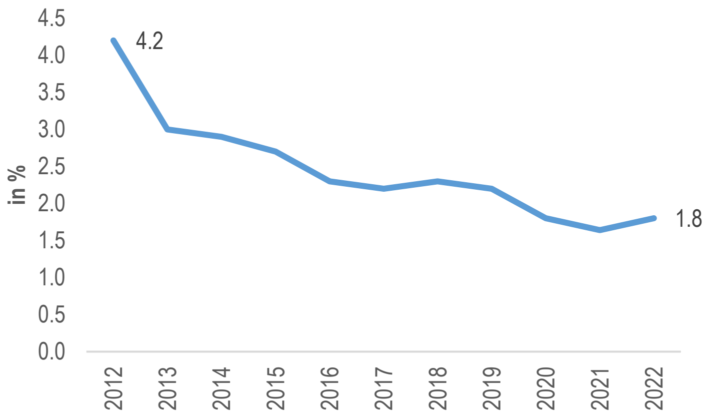
(Source: PDMO and Eurostat)

Another measure reflecting the overall rate being paid by the State on public debt financing is the weighted average cost of debt (WACD), although this alone does not indicate its burden on the economy as a whole. This indicator provides to investors information concerning the creditworthiness or the riskiness of the State implying that riskier States generally have a higher WACD. Within this framework, this indicator is very important for the sustainability of the public debt.

As presented in Figure 18 below, the peak of the WACD was in year 2012 when the said figure reached 4.2 percent. One year later the WACD marked a significant reduction by 1.2 pp mainly due to the official funding provided by ESM and IMF at low interest rates. During 2013-2020 the WACD followed a downward trend reaching 1.8 percent at year end of 2020 whilst in 2021 it reduced further to 1.6 percent. The downward path of the weighted average cost of debt curve was attributed to EMTN issuances at lower interest rates due to the low interest rates environment in the European capital markets, the positive impact from the low-cost ESM loans as well as from the liability management transactions implemented by the PDMO. In 2022 the WACD exhibited an increase of 0.2 pp reaching 1.8 percent, mainly due to the recent changes in the monetary policy to bring high inflation under control.

A necessary pre-condition to enhance the sustainability of public debt, is to achieve and maintain the WACD in the area below the level of the nominal growth rate of GDP.

Figure 18: Weighted average cost of debt in 2012-2022



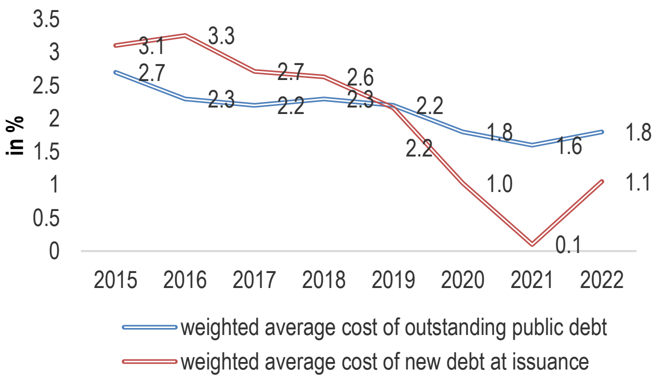
(Source: PDMO)

Figure 19 below, illustrates the historical evolution of the weighted average cost of the outstanding debt in comparison with the weighted average cost of new debt issued in each year for the period 2015-2022.

For the period 2015-2018, the weighted average cost of new debt moved above the weighted average cost of the outstanding public debt resulting in small changes in the second indicator. It is noted that the reduction of the weighted average cost of outstanding public debt during the reference period is attributed mainly to the implementation of the debt management strategy of the PDMO since the last program fund which was provided to the Republic of Cyprus was in 2015 by ESM and in 2016 (a small amount) by IMF. Excluding the cost of programme fund provided in 2015 and in 2016, the weighted average cost of new debt at issuance in 2015 and 2016 were 3.8 percent and 3.4 percent indicating that the weighted average cost of new debt at issuance followed a downward trajectory. The gradual reduction of the weighted average cost of new debt at issuance was attributed to a number of factors, intel alia, the liability management transactions executed throughout the reference period, the low interest rate environment in the European capital markets, the improved credit rating profile of Cyprus and it's return to the investment grade since September 2019 as well as successful exit from the Economic Adjustment Programme and finally it's presence in the international capital markets.

In 2019, the weighted average cost of new debt at issuance reached the level of the weighted average cost of the outstanding debt whilst in 2020 the reduction of the weighted average cost of new debt at issuance by 1.2 pp has contributed further to the decrease of the total cost. In 2021, the weighted average cost of public debt exhibited further reduction of 0.2 pp benefited also from the reduction of the weighted average cost of new debt issuance which was retained at historically low levels reaching around 0.1 percent. In 2022, the weighted average cost of public debt exhibited an increase of 0.2 pp as a result of the upward path of interest rates last year as well as the uncertainty in the global economy. The said increase was reflected to the increase of the weighted average cost of new debt by 1.0 pp.

Figure 19: Weighted average cost of outstanding and issued debt (2015-2022)



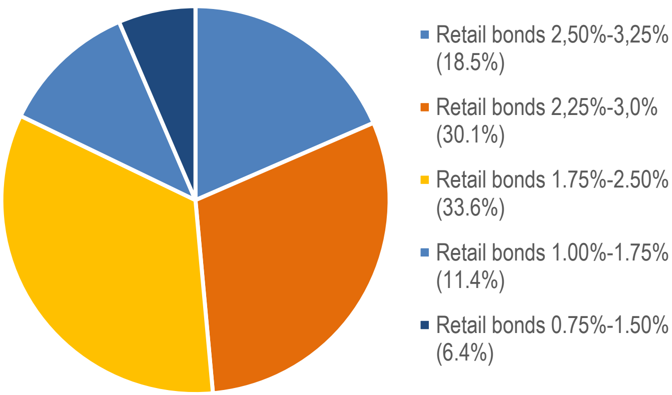
(Source: PDMO)

Furthermore, it is important to highlight that the refinancing of the short-term debt at negative interest rate was interrupted last year due to the changes in the monetary policy by ECB. Since June 2022, the refinancing of the short-term debt turned to positive rates, reaching 2.36 percent at the end of 2022 compared to 0.05 percent at the end of June 2022. The weighted average yield of short-term debt in 2022 was 0.37 percent compared to -0.36 percent the year before.

Regarding the interest rates of retail bonds, it is noted that after an announcement by the PDMO in September 2021, the interest rates under the terms of issuance on six-year government bonds for natural persons have been reduced as of the 1st of January 2022. The new step-up structure of interest rate starts from 0.75 percent in the first year and gradually increases to 1.50 percent if retained until the sixth year (see in Appendix).

Figure 20 below, shows the distribution of the outstanding amount of retail bonds by interest rate structure at the end of December 2022. About 34 percent of the outstanding amount of retail bonds ranged in the spectrum between 1.75 percent to 2.5 percent. The second largest category concerned retail bonds with interest rates between 2.25 percent to 3.0 percent, followed by the retail bonds ranged in the spectrum between 2.5 percent to 3.25 percent. It is important to note that the smaller category is the new category of interest class of retail bonds between 0.75 percent to 1.5 percent which was added in 2022 reached 6 percent at the end of December 2022.

Figure 20: Distribution of retail bonds by interest rate structure in 2022



(Source: PDMO)

As mentioned in chapter 2, in order to minimise the marketable debt borrowing cost, the PDMO continued its efforts to further expand the investor base for EMTN issuances since 2016. Marketing activities have been increased covering more financial centers in US and EU markets. The evolution of investor distributions by geography and type are presented in the Figure 21 and 22 respectively.

In the year 2019, there was a significant improvement in the quality of the order book in all EMO (EMTN) publications. This is mainly due to the improved credit rating profile, the positive outlook for the economy as well as the strong support of the Republic of Cyprus by the international investment community. In 2022 EMTN issuance, an increased participation was recorded by Fund Managers and Insurance/Pension Funds.

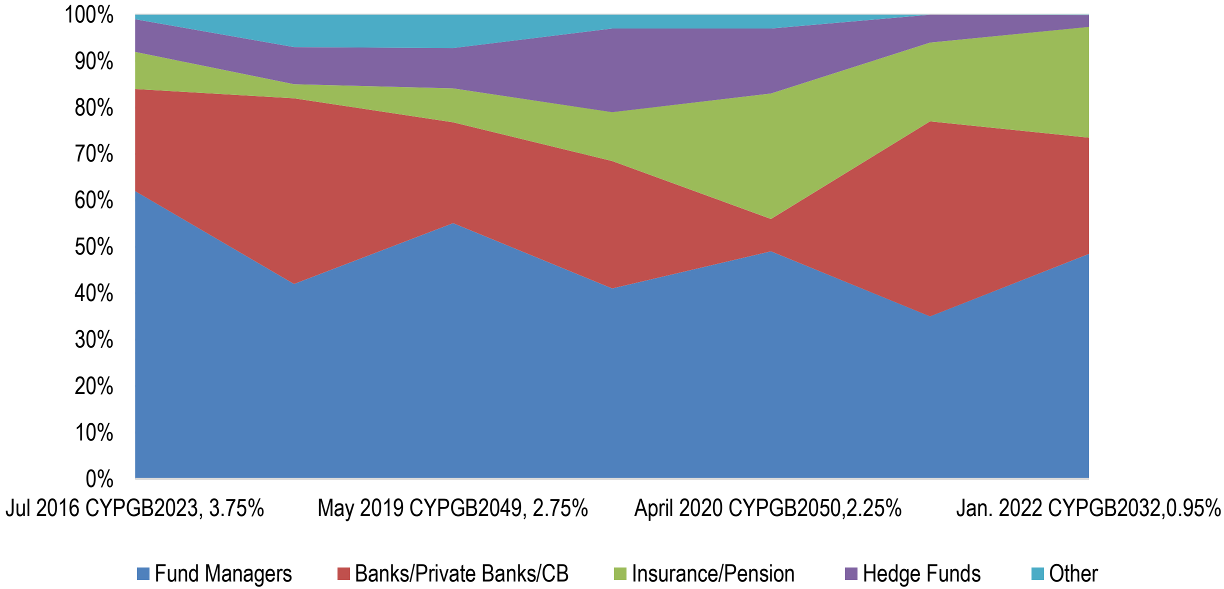
In all debt issuances included in the analysis presented in the Figure below, the largest category of investors was Fund Managers (at 48 percent on average) and then Banks/Central Banks (at 26 percent on average). The participation from Hedge Funds recorded a large decrease, approaching 9 percent on average. The participation from Insurance / Pension Funds was on average at 14 percent.

With regards to investor distribution for EMTNs by geography, it is worth-noting that since 2016, a more balanced distribution was achieved between UK investors and investors from other countries, however UK investors continue to maintain a significant share on our issuances. At the issuances executed in the period 2019-2021 presented below, the weighted average participation of investors from UK was 25 percent whilst investors from the German regions (Germany, Austria, Switzerland) was 20 percent. The corresponding figure for Cypriot investors was 9.5 percent on average.

It is also important to note that in 2022 EMTN issuance, there was a significant participation of investors from Nordic countries, France, Cyprus and USA-Southern USA Region whilst the participation from UK, German regions remained strong.

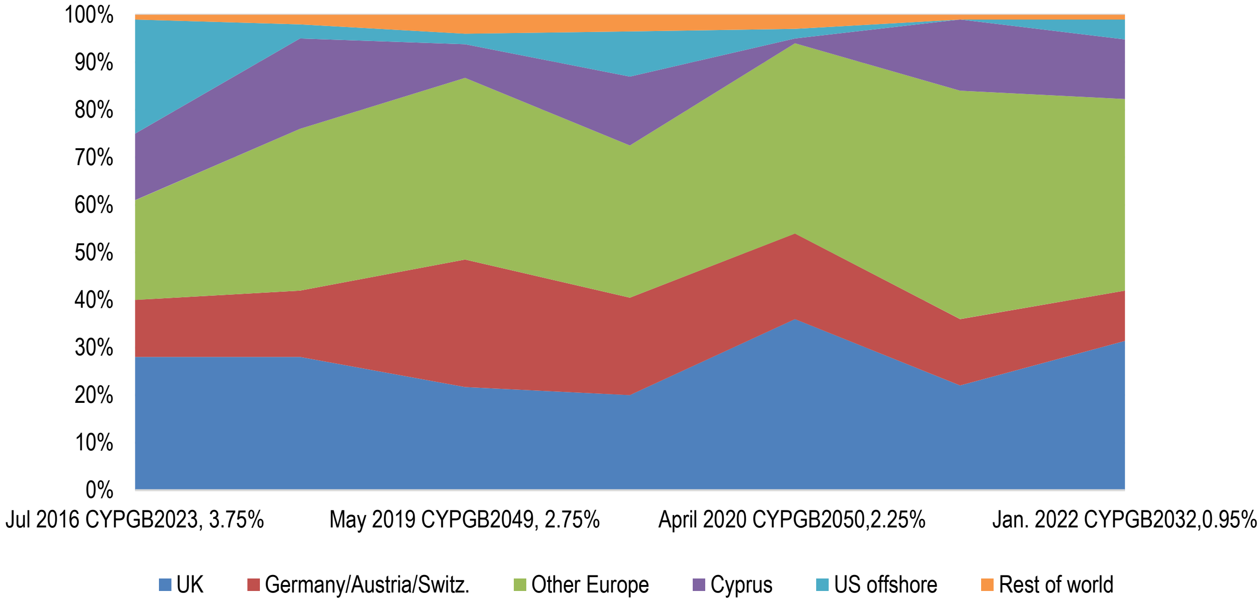
Taking into consideration all the selected bond issuances in the period 2016-2022, the average participation of investors from UK and German regions was closed to 27 percent and 17 percent respectively (at issuance). The remaining participation was from countries across Europe at 36 percent, about 12 percent from Cyprus and about 6 percent and 2 percent from US Offshore and rest of World.

Figure 21: Evolution of investor distribution for selected EMTNs by type during 2016-2022



(Source: PDMO)

Figure 22: Evolution of investor distribution for selected EMTNs by geography during 2016-2022



(Source: PDMO)

C. Risks

C.1: Introduction

Risk management has become an increasingly important tool for achieving strategic debt targets. Therefore, the risk management framework is an integral part of the MTDS for the years 2022-2024 in which a number of quantitative risk targets were set by the PDMO.

The process of establishing and executing a strategy for managing the public debt contains unavoidable both financial risks as well as non-financial risks such as operational risks. All of these risks are added to existing fiscal risks for the Government.

The most important categories of financial risks are the refinancing risk, the interest rate risk and the foreign exchange risk. In general, the developments of 2022 on the debt portfolio risks were similar to the corresponding outcomes of the year 2021. The weighted average maturity of marketable debt recorded a slight improvement and was retained at a very satisfactory level. The downward path of the weighted average cost of public debt was interrupted last year due to the geopolitical developments and changes in monetary policy, however the said figure was retained at low level. The share of debt due within one year exhibited a significant reduction by 2.6 pp whilst the share of debt due within five years recorded an increase of about 3.1 pp in 2022 compared to the year before. With regards to the foreign exchange risk, since February 2020 and after the repayment of the IMF loan, the said risk reduced to zero. On the floating rate debt and taking into consideration that the majority of the said debt concerns ESM loans with the first repayment to be executed in 2025, minor changes are expected to be recorded. It is noted that the risk from the floating rate debt is limited and based on the historically data no significant fluctuations have been recorded on the average cost of ESM loans as a result of the changes in the market base rates. With regards to the refinancing risk, the debt maturity profile has improved further in 2022 and the liquidity risk as well as the credit risk have been reduced substantially.

Following active debt management and liability management transactions executed in the previous years, the debt maturity profile has smoothened out at very satisfactory level.

It is important to highlight that risk management of public debt does not, in the ordinary application, cover the debt sustainability assessment since the latter is related mostly to fiscal and macroeconomic indicators, conventionally the GDP and the fiscal balance. Thus, the debt sustainability analysis focuses on macroeconomic factors and prospects and is not the primary subject of public debt management. However, the evolution of these parameters in conjunction with the WACD is closely monitored by the PDMO.

C.2: Financial and non-financial risks

This section has twofold objectives, of which the first one is to cover the analysis of the most important financial risks associated with the debt management operations whilst the second one is focusing on a discussion about the operational risks.

C.2.1: Financial risks

Refinancing risk

Refinancing risk is the probability (risk) for the Government to face a situation where a share of debt reaching maturity can only be replaced with the issuance of new loans at very high cost or, in the extreme case, cannot be refinanced at all.

In order to capture the refinancing risk of the Government, two indicators were used. The first one is the share of debt due within one year and the second one is the share of debt due within five years.

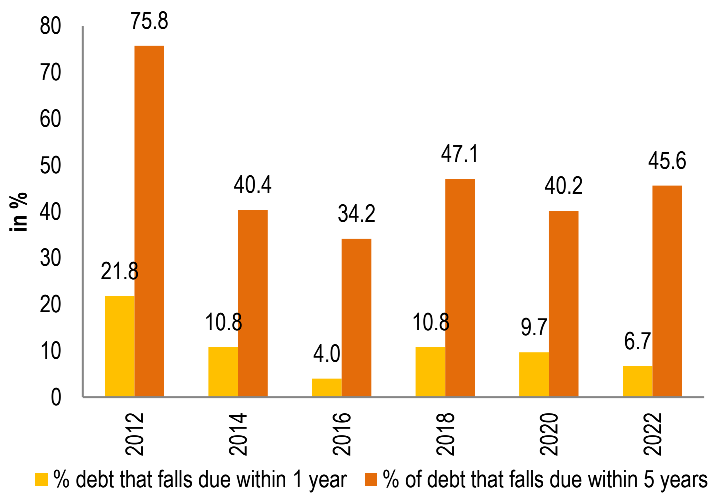
As presented in Figure 23 below, the share of debt due within one year followed a decreasing path since 2012. The large reduction of share of debt due within two years from 22 percent in 2012 to 11 percent in 2014 was attributed to the long-term official funding granted by ESM and IMF. In the following years, the said indicator has continued to improve underpinned mainly to the disbursements granted by ESM and IMF and the liability management transactions implemented during 2014-2017.

In 2018, the debt redemptions due within one year marked an increase reaching 11 percent compared to around 6 percent the year before reflecting the amount of EUR 750 mn of the bond issued to CCB due in December 2019. In 2020, the share of debt due within one year marked a minor decrease by 1.1 pp whilst in 2022 the said figure recorded a significant reduction by 3 p.p reaching 6.7%. In conclusion, the refinancing risks exposure is at an acceptable level of risk which is also supported by the strong current cash buffer.

Regarding the share of debt due within five years, after a significant reduction by more than 40 pp during the period 2012-2017, in 2018 it marked an increase reaching 47 percent compared to 35 percent a year before mainly due to the government bonds issued to ex-CCB which was paid in the period 2019-2022 as well as due to the EMTNs due in the said period. In 2020 the said indicator exhibited a reduction of 6.9 pp whilst in 2022 marked an increase reaching around 46 percent. It is noted that the said indicator is expected to retain at similar levels in the following years as reaching the years of ESM loan's repayments.

In order to mitigate the refinancing risk exposure and maintain the bond yield curve at a satisfactory level of completion, the PDMO is focusing on longer term issuances given the constraints due to the current interest rate environment.

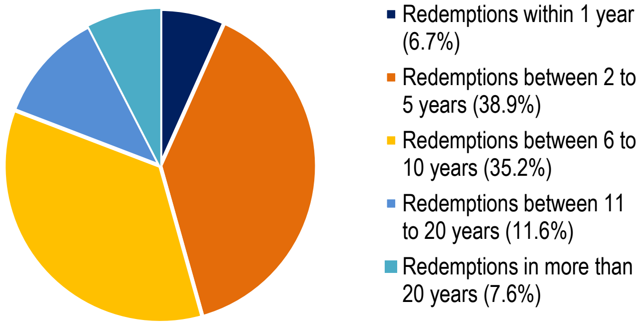
Figure 23: Share of debt refinancing due within 1 year and 5 years in 2012-2022



(Source: PDMO)

Figure 24 below, shows the debt refinancing distribution of the total debt of the Republic of Cyprus in five categories as at the end of 2022. The majority of the debt redemptions of the order of EUR 8.9 bn fall due in the segment between 2 to 5 years. The said amount is mainly attributed to the EMTNs due within the above period (about 57 percent) and loans provided by ESM (about 26 percent) and. The second largest category of redemptions of the order of EUR 8.1 bn fall in the segment between 6 to 10 years. About 49 percent of the debt due in the said segment is attributed to loans provided by ESM and about 43 percent to EMTNs redemptions.

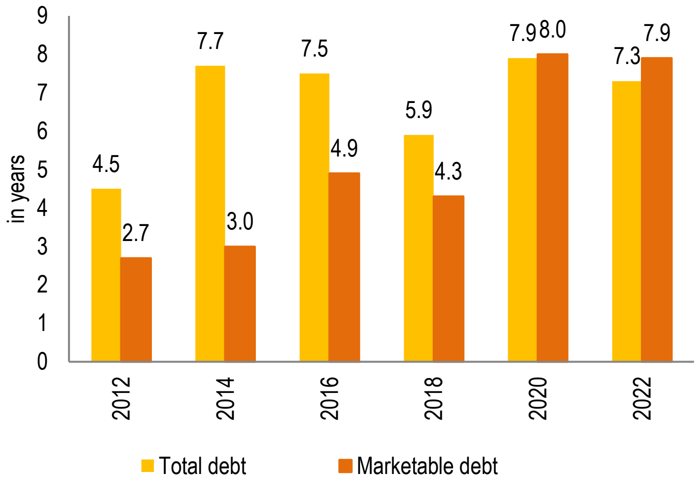
Figure 24: Total debt[1/] refinancing distribution as a percent of GGD at the end of 2022



(Source: PDMO)
1/ = Loans to EFSF are excluded

Another risk indicator which captures the refinancing risk is the weighted average maturity of debt. As presented in Figure 25 below, the outstanding average maturity exhibited a significant improvement in the period 2012-2016. This was attributed to the positive contribution of both long-term official loans by ESM and IMF and other bilateral loans such as by EIB, CEB and Russian loan as well as of liability management transactions implemented by the PDMO. At the end of 2022 the weighted average maturity stood at 7.3 years for the total debt and 7.9 years for the marketable debt and performs very well compared to the EU levels, thereby reducing the refinancing risk.

Figure 25: Weighted average maturity of debt (in years) in 2012-2022 as at the end of 2022



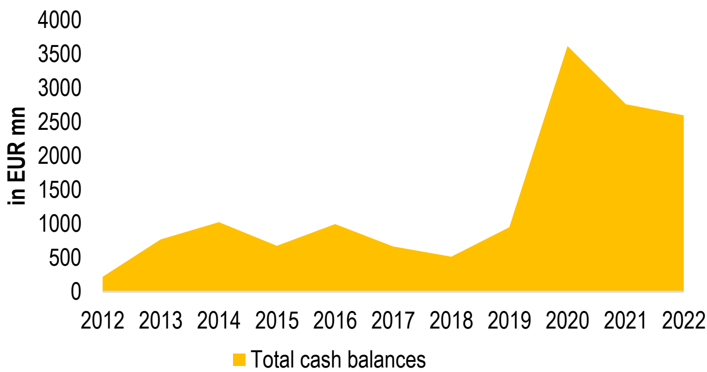
(Source: PDMO)

Liquidity risk

The annual cash balances in years 2012-2022 are presented in Figure 26 below. The liquidity levels of the Government were comfortable since 2013 due to the fiscal outcomes being better than expected as well as to the successful EMTN issuances, allowing the enhancement of the cash reserves. In 2020, the total cash balances have marked a significant increase mainly due to the uncertainty surrounding the development of the Covid-19 pandemic and its impact on the public finances and reached EUR 3616 mn at the end of 2020. In 2021 and 2022, the better-than-expected fiscal performance and the accumulation of cash reserves in the previous year maintained the strong cash position of the Government with the cash buffer reaching EUR 2762 mn and EUR 2596 mn, respectively.

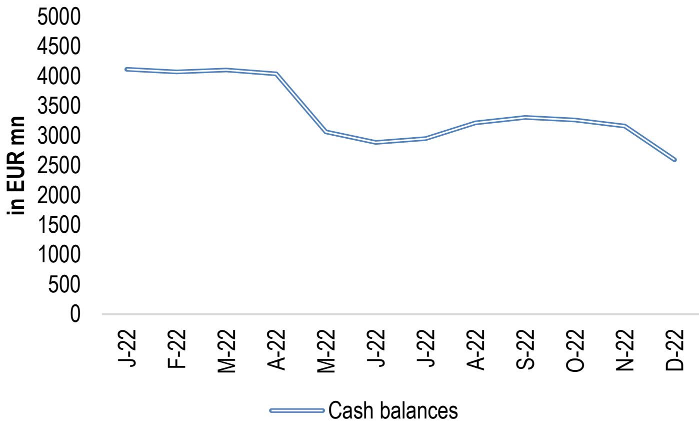
As presented in Figure 27 below, the total liquid funds increased by around EUR 1.3 bn in January 2022 compared to the cash buffer at the end of December 2021 which was mainly attributed to the EMTN issuance in January 2022 and to a lesser extent to fiscal surplus of December 2021. In May 2022, the cash buffer reduced significantly due to the repayment of a 7-year EMTN of the order of EUR 1.0 bn. Thereafter, the cash balance recorded minor fluctuations and moved on average around EUR 3.1 bn up to the end of November 2022. By the end of 2022 the cash buffer reached EUR 2.6 bn mainly due to the repayment of a domestic bond of the order of EUR 610 mn issued to ex-CCB. It is worth mentioning that this level of cash covers the financing needs of the year 2023 and a significant part of the financing needs of the year 2024. The financing needs cover ratio of 2022 is illustrated in Figure 33 under the Chapter "Cash management".

Figure 26: Cash liquidity levels in 2012-2022



(Source: CBC)

Figure 27: Cash liquidity levels on a monthly basis in 2022



(Source: CBC)

Interest rate risk

Interest rate risk for the Government refers to the risk it will have due either to the refixing of interest rates at the time of refinancing of outstanding debt or to the fluctuation of interest rates at the time of interest payments for debt carrying floating rates.

The interest rate distribution of debt has changed dramatically since 2013. Following the Memorandum of Understanding in March 2013 on Economic Adjustment Program, the interest rate distribution has changed significantly mainly due to the borrowing by the ESM and IMF[9] at floating interest rates. In fact, the loans from the ESM and IMF were

[9]The interest rate of IMF loan comprises of two components: Basic Lending rate plus 1 percent.

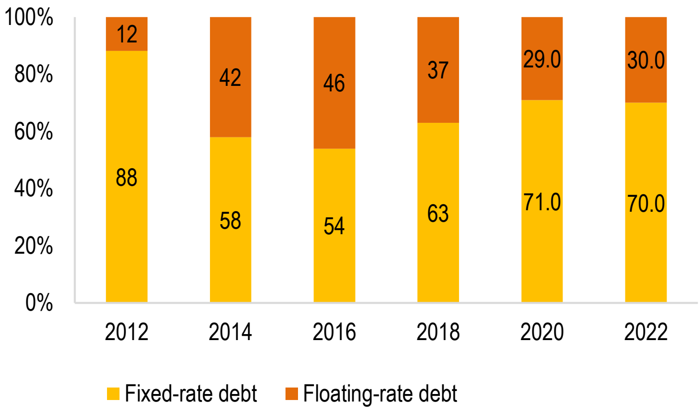
used to refinance the Cyprus debt which had fixed interest rate thereby reducing the share of the fixed rate debt. Another reason for the above change on the interest rate distribution was the borrowing by the EIB and CEB at floating interest rates with low margins over the Euribor. It should be noted that the extension of the weighted average maturity of marketable debt restricted the interest rate risk.

Therefore, the floating interest debt was increased by 24 pp reaching 36 percent at the end of 2013 compared to 12 percent at the end of 2012, prior to the loan agreement of Economic Adjustment Program.

As the loan disbursements by ESM and IMF were released, the proportion of debt at floating rate followed an upward path reaching 46 percent at the end of 2016 which was the last year of the financial assistance programme. In 2018, a large reduction of floating rate debt was marked because of the issuance of government bonds to CCB of the order of EUR 3.19 bn at fixed interest rates, therefore affecting the level of the debt of fixed rate. Then, the floating rate debt exhibited a reduction reaching 30 percent by the end of 2022.

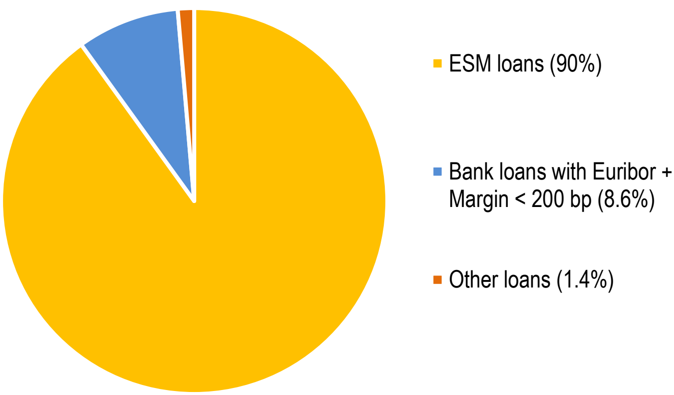
However, taking into consideration that the vast majority of floating rate debt is related to ESM loans which are indexed at low interest rates (about 90 percent or EUR 6.3 bn), as presented in Figure 29 below, and the fact that the interest rate of ESM loan recorded minor increases in 2022 indicating that changes in the market interest rates do not reflect the same change on ESM interest rates, the interest rate risk is expected to be limited. It is expected that the floating rate debt will stabilise at this level up to the year 2024 and thereafter will follow a downward trajectory due to the gradual repayment of the ESM financial assistance.

Figure 28: Evolution of interest rate distribution of debt in 2012-2022



(Source: PDMO)

Figure 29: Composition of floating-rate debt as at the end of 2022



(Source: PDMO)

Foreign exchange risk

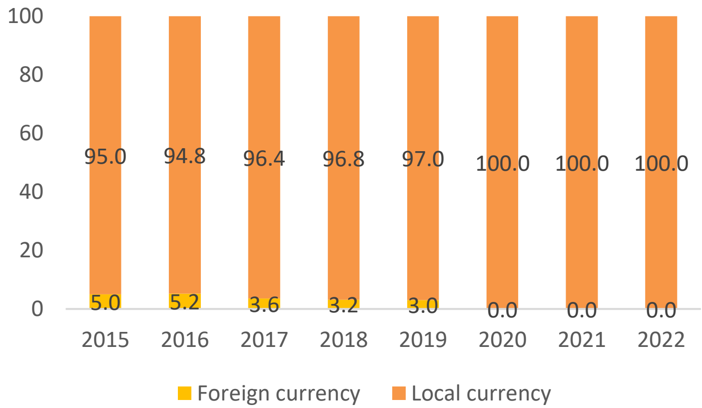
Although foreign currency debt has many benefits such as access to a large investor base and the geographical independence with possible interest rates benefits, foreign currency financing has substantial risks. Some of the risks are the increase of the country's external vulnerability to exchange rates in case of large-scale foreign issuance (new borrowing) which may lead to the increase of outstanding debt servicing and debt burden in case of a significant depreciation of the domestic currency. In case of hedging of the foreign exchange risk, additional debt management costs arise.

Figure 30 shows the historical currency composition of debt during the period 2015-2022. Through the said period, the majority of the public debt is denominated in domestic currency whilst only a small amount of the outstanding GGD is denominated in foreign currency. This amount was related to the loan from the IMF which, was denominated in SDR[10].

Since February 2020 and after the early prepayment of the IMF loan reducing the outstanding amount of debt denominated in foreign currency to zero, the foreign exchange risk is zero.

[10]The SDR is an international reserve asset, created by the IMF in 1969 and it was defined as a basket of currencies. The SDR basket consists of the U.S dollar, the euro, the Chinese yuan (Renmimbi), the Japanese yen, and the British pound sterling (Source: IMF).

Figure 30: Currency composition of debt during the period 2015-2022



(Source: PDMO)

Credit risk

Credit risk or counterparty risk for the government is the risk relating to the government's credit exposure to individual counterparties through financing transactions or bond swap transactions and the investment of liquid assets.

During 2022, there were no outstanding derivative exposures for the Republic of Cyprus. Regarding the deposit levels in the money market, there were no deposits in the MFIs. More information is presented in Chapter 7.

In conclusion, the credit risk for the government in the reference period could be ignored.

C.2.2: Non Financial risks

Operational risks

Operational risk may arise mainly from the potential difficulties of implementing effective internal procedures, the lack of human resources, the internal control systems and the possible lack of appropriate software and computer systems. In order to enhance the above infrastructure, at the request of Cyprus, technical assistance was received by the ESM. The technical assistance provided by the ESM covered both an evaluation of internal organisation and IT infrastructure of the PDMO as well as proposals for the creation of a pool of information and knowledge about capital markets and further enhance relationships with investors. Appropriate technical assistance was also provided by the IMF for issues concerning MTDS as well as by the Commonwealth Secretariat (CS) for the appropriate software.

The five-year action plan for the internal organisation and the IT infrastructure of the PDMO as well as the establishment of a market intelligence function, which was approved by the Council of Ministers of the Republic of Cyprus in September 2015, have already been completed successfully. However, a number of actions have to be monitored and updated on a continuous basis. More information is presented under the final chapter, namely “PDMO action plan”.

The implementation of the roadmap for actions will enable the PDMO to further reduce the operational risks while undertaking public debt management operations and strengthen its capacity for effective market access, executing economic analysis, monitoring developments and designing an effective strategy.

C.3: Contingent liabilities

C.3.1: Introduction

Overall, contingent liabilities can be distinguished into (a) Direct (explicit) such as e.g. government guarantees and (b) Indirect, such as e.g. various risks arising from unforeseen developments, legal disputes, etc. A relevant report on contingent liabilities is submitted each year from the Treasury Department to the Minister of Finance.

Granting government guarantees (GG) to financial institutions is a common feature of government policy all over the world. In some cases, the cost for certain borrowers is too high due to asymmetry of information and therefore, the provision of GG may help to overcome the said issue. GG enhance the scope of financial intermediation within the financial system.

On the other hand, GG legally and explicitly bind the government to make loan repayments on behalf of a borrower that defaults. Therefore, they constitute a contingent liability that might impose fiscal costs on the government, which adversely affect the public finances and the public debt sustainability.

C.3.2: Government guarantees framework

Pursuant to a decision of the Council of Ministers in June 2015, the responsibility of management and coordination of procedures relating to guarantees was assigned to the Treasury of the Republic of Cyprus. For this purpose, an amendment of the PDML was enacted, in a way that the monitoring of the GG was removed from the PDMO's competencies.

C.3.3: Statistical description of Government Guarantees

Taking into consideration the above amendment of the PDML, this section describes only the main developments[11] regarding GG.

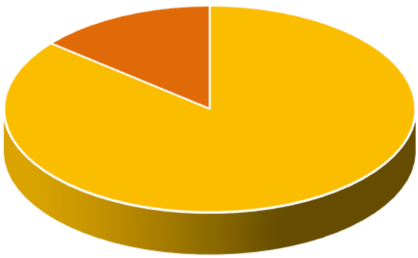
The Republic of Cyprus had outstanding GG[12] for loans as at the end of 2022 of EUR 1.53 bn or about 5.7 percent of GDP, which is lower than the relevant stock of EUR 1.64 bn as at the end of 2021. Excluding the GG granted to entities of the general government (since the outstanding amount of these guarantees is also included in the general government debt), the net value of outstanding GG was EUR 1.32 bn or about 4.9 percent of GDP as at the end of 2022. It is noted that the GG portfolio is denominated fully in euro. Analysis of the outstanding stock of government guarantees as at the end of 2022 is presented in table 10 in Appendix.

Figure 31 shows that an amount of EUR 208 mn or about 13.6 percent of the total value of outstanding guarantees is also included in the public debt as at end of 2022.

[11] Detailed analysis of explicit contingent liabilities is presented in the website of the Treasury of the Republic.

[12] Called guarantees and guaranteed loans which have been given by the Cyprus Cooperative Bank to refugee cooperative companies for settle the deposits of the refugees and guarantees given to Hellenic Bank under the Asset Protection Scheme are excluded.

Figure 31: Outstanding GGs in percent as at the end of 2022



(Source: Treasury)

Regarding the called guarantees, an amount of EUR 44 mn or about 2.9 percent of the outstanding amount of government guarantees at the end of 2022 was called. The majority of the called guarantees concerned guaranteed loans granted to natural persons. More information is presented in the website of the Treasury of the Republic of Cyprus.

VII.Cash Management

Governments need to ensure an effective implementation of a cash management framework in order to meet with a high degree of certainty their financial obligations of debt servicing payments in a timely manner as well as to avoid the accumulation of idle cash balances which can increase the cost of holding cash. Furthermore, liquid financial assets can provide a high degree of flexibility in debt and cash management operations and enable governments to absorb shocks when occurred and reduce cost of borrowing when access in capital markets is costly. An efficient cash management framework enables debt managers to manage the trade-offs between expected cost and risk in the public debt portfolio.

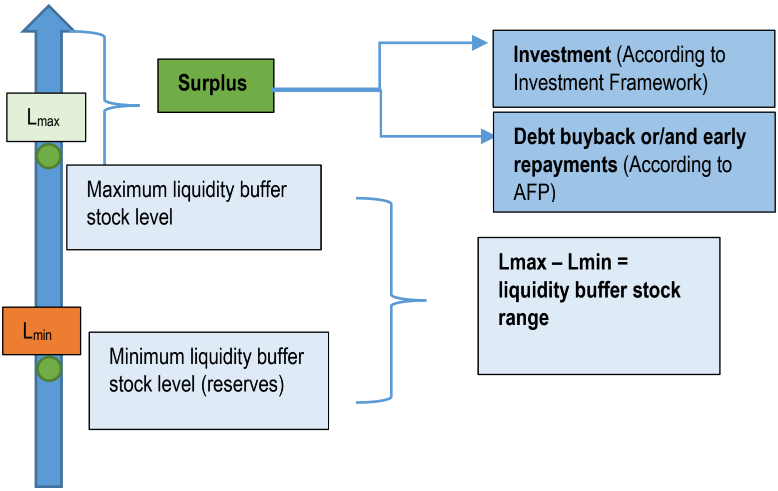
Pursuant to article 21 of the PDML, the PDMO has the responsibility to retain the liquidity buffer stock range by borrowing the necessary funds in time. The PDML authorizes the PDMO to operate an active cash management framework as was approved by the Minister of Finance in order to ensure a satisfactory return on the liquid funds maintaining refinancing risk to a minimum level.

The institutional structure of the government cash management pursuant to articles 20 and 21 of the PDML, that has been set, via a decision of the Council of Ministers {ΠΧ (restricted circulation) 84.568, 28/3/2018)} is presented in Figure 32. A maximum and a minimum liquidity buffer stock level are determined by the PDMO within the General Government Account considering, among others, the variability of the markets and the current credit facilities of the Republic of Cyprus.

When the cash amount exceeds the maximum buffer stock level, the said surplus can be invested by the PDMO according to the Investment

Policy Framework for cash management or it can be used either to buyback outstanding securities of the Republic or for the early repayment of loans according to the AFP.

Figure 32: Institutional structure of the government cash management



(Source: PDMO)

As a result of the better-than-expected fiscal performance in 2022 and taking into consideration the forward-looking upward interest rate expectations in the foreseeable future which will have a negative impact on servicing the public debt, the PDMO used a significant amount of cash buffer to cover the financing needs for the year 2022 leading the public debt as a percent of GDP to lower levels. Table 11 in Appendix, shows the historical distribution of total cash balances held by the CBC and cash deposited to MFIs.

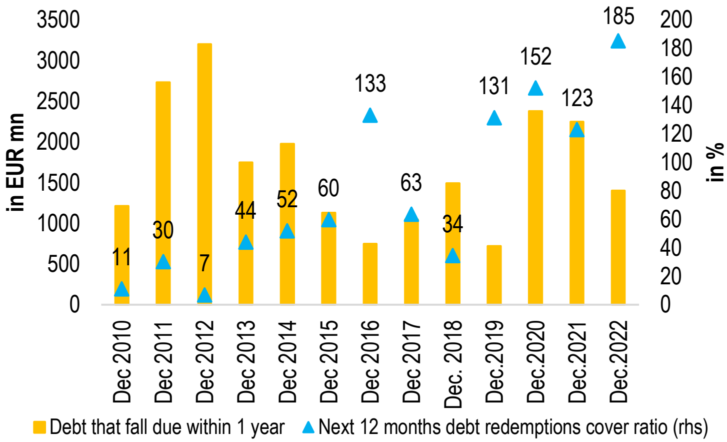
Figure 33 below, shows a comparative analysis between the historical distribution of total cash balances and the amount of debt that falls due within next year based on the statistical information as at the end of the current year. The debt redemptions of the next 12 months have peaked at the end of 2012, with the debt redemptions cover ratio reaching only at 7 percent. Taking into consideration the implementation of an active cash management on the one hand and the liability management transactions on the other hand in conjunction with the long-term loans issued by the ESM-IMF, the PDMO has achieved since 2012 to reduce the short-term refinancing needs and improved significantly the share of debt that falls due within the next year covered by cash balances.

The enhancement of the liquidity position of the Republic of Cyprus at the end of 2016 has reduced significantly the refinancing risk. On the other hand, in order to minimize the cost of idle cash balances and taking into account the low interest rate environment to invest cash balances in combination with the fact that the ability of the sovereign to access capital markets on increasingly favourable terms has improved, the Council of Ministers decided to amend the target of total liquid funds to cover the financing needs for the next 9-month period instead of 12-month period within the MTDS 2016-2020.

Although the uncertainty surrounding the development of the pandemic continued in 2021, towards the end of September the conditions about the pandemic begun to normalize leading to the amendment of the target set about total liquid funds to 6-9 months instead of 9-12 months for the year 2022. Despite the high uncertainty in the global economy and the external shocks such as Russia-Ukraine war and Covid-19 pandemic and the utilization of a significant amount of cash buffer to cover a part of the gross financing needs in 2022, the cash position of the Government remained very strong. By the end of the year 2022 the said buffer stood at 197% of the next 9-months funding needs. In addition, the said buffer stood about 185% of the next 12-months funding needs, as presented in the Figure 33 below.

Despite the strong cash position of the Government as a result of the better-than-expected fiscal performance in 2022 and the fact that medium-term economic prospects remain solid in the medium-term, on the 26th of January 2023, the Council of Ministers approved the proposal of the PDMO to amend the coverage target of financing needs in the General Government Account from 6-9 months to 9-12 months period for the 1st quarter of 2023.

Figure 33: Distribution of cash balances and amount of debt that falls due within one year in 2010-2022



(Source: PDMO and CBC)

Notes:

(1) The debt redemptions in December 2018 and December 2019 concern the 9-month period of the next year and not 12 month-period as were on the other years.

(2) In periods of budget surpluses or balanced budgets, the cash available should cover only the net needs of refinancing, i.e. debt arrears minus the surplus. On the contrary, in periods of budget deficits, the cash available must cover all gross financial needs, i.e. both the cash deficit and the need for refinancing (debt maturities).

VIII. Sovereign Credit Ratings of the Republic of Cyprus

Credit Rating Agencies (CRAs) play an important role into financial markets by helping to reduce any information asymmetry between lenders and investors on the one hand, and different sovereign issuers on the other hand, regarding the creditworthiness and the prospects of individual economies.

Pursuant to article 26 of the PDML 2012-2016, the PDMO is the liaison with the international CRAs and it can enter into contracts on behalf of the Republic of Cyprus with the CRAs. The Republic of Cyprus as a sovereign issuer, maintains a contractual (solicited) relationship with four CRAs, namely DBRS, Fitch, Moody's and Standard and Poor's.

In 2022, Cyprus's economic growth recorded, a positive sign of 5.6% compared to 5.1% in 2021 due to the strong recovery of the economy in a number of sectors such as "Hotels and Restaurants", "Manufacturing", "Transport, Storage and Communication", "Wholesale and Retail Trade, Repair of Motor Vehicles", "Arts, Entertainment and Recreation" and "Other Service Activities".

Specifically, during the first quarter of 2022 the economic growth rate in real terms exhibited an increase of 6.7 percent compared to the corresponding quarter of 2021 and in the second quarter of 2022 the economic growth rate in real terms marked also a significant increase of 5.9 percent compared to the corresponding quarter of 2021. A positive growth rate of about 5.5% in real terms was also recorded in the third quarter of 2022 compared to the corresponding period of 2021. It is noted that a significant recovery was recorded in tourist arrivals and revenue compared to the year 2019 contributing to the growth of the economy. The fourth quarter of 2022 recorded a positive growth rate of about 4.5% compared to the corresponding period of the year 2021.

The stock of NPEs has continued to decline in 2022, albeit at a slower pace. The acquisition of a large part of the NPLs from the Credit Acquiring Companies resulted to the significant reduction of the NPLs in the banking sector. The fiscal balance of the General Government recorded positive sign in 2022 reaching 2.3% compared to a deficit of 1.7% the year before reflecting the continued strong economic growth in 2022. Regarding the public debt developments, the general government gross debt to GDP ratio recorded a significant decrease of about 14.5pp reaching 86.5% at the end of 2022. The said reduction is attributed to the substantial decrease of outstanding debt maturing within the year through the utilization of cash accumulated in the previous years (numerator effect) which was used to cover a part of the refinancing needs as well as of the increase of the GDP (denominator effect). The prudent debt management strategy has also resulted in a favourable debt profile reducing refinancing risks and improving the cost-risk indicators of the debt portfolio.

In 2022, two of the sovereign CRAs upgraded the credit rating of the Republic of Cyprus by one notch within the investment category, one CRA changed the outlook from stable to positive and the fourth CRA confirmed the creditworthiness of the Republic of Cyprus within the investment category. Despite the fact that the global economies are expected to face many challenges in year 2023, such as geopolitical tension, stubbornly high inflation, climbing interest rates, uncertainty around the world-pandemic recovery process, the continued disruptions in the supply chain, the prospects for Cyprus's economy remain strong. Fiscal performance due to a targeted prudent fiscal policy by Cyprus Authorities as well as the fiscal support by the EU under the National Recovery and Resilience Plan, either through loans or grants, pave the way for positive growth rates and for a new round of upgrades in the near future. The better-than-expected fiscal performance in 2022 in conjunction with the strong cash position of the Government by the end of the said year, provides a high flexibility in terms of selecting the time which is more appropriate to access the market.

In February 2022, Moody's issued a credit opinion confirming Cyprus' long-term Issuer Default Rating at "Ba1" and maintaining the outlook stable. In August 2022, Moody's affirmed the Cyprus' long-term Issuer Default Rating and changed the outlook from stable to positive indicating a likelihood of an upgrade within the next 12 months if specific conditions are met.

Standard & Poor's affirmed its "BBB-" long-term foreign currency sovereign credit rating on Cyprus in March 2022 and in September 2022 upgraded the credit rating by one notch to "BBB" from "BBB-" and changed the outlook from positive to stable.

In March and September 2022, Fitch affirmed Cyprus' long-term Issuer Default Rating (IDR) at 'BBB-' maintaining the outlook stable.

In April 2022 DBRS upgraded Cyprus' long-term Issuer Default Rating by one notch to "BBB" from "BBBL" and changed the outlook to stable from positive. In October 2022, the said CRA affirmed the Cyprus' long-term Issuer Default Rating to 'BBB' and maintained the outlook stable.

Table 6 below, illustrates where the Republic of Cyprus stood at the end of 2022 in terms of credit ratings. In 2022, the credit rating profile upgraded by two CRAs whilst one CRA changed the outlook from stable to positive.

Table 6: Solicited sovereign credit ratings developments in 2022[13]

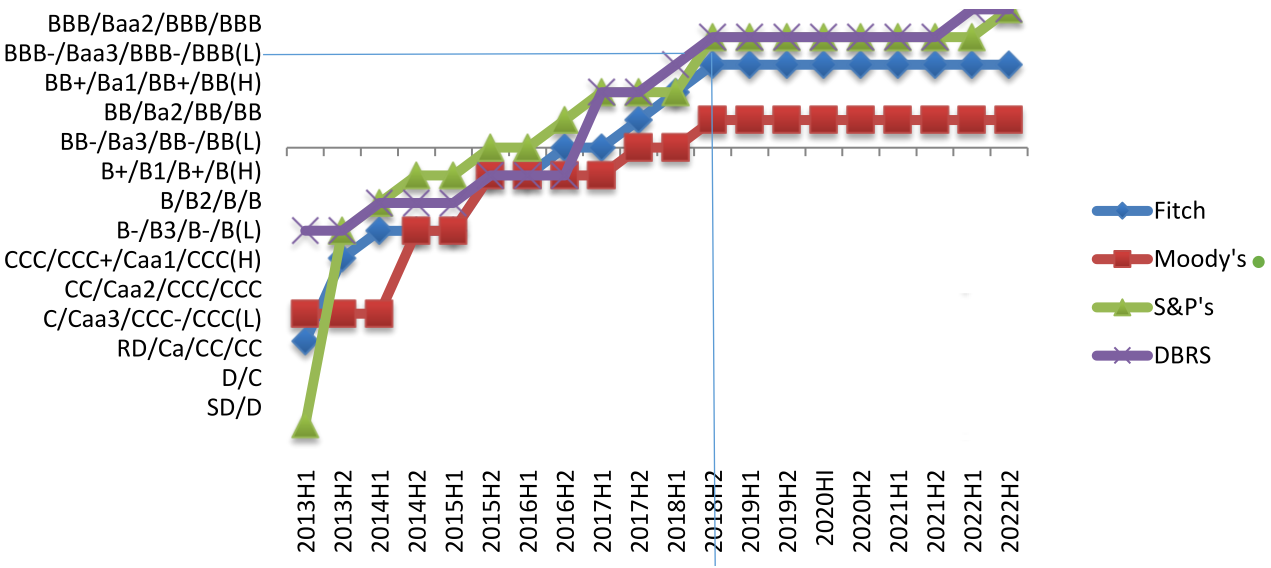
	Long-term debt					
	Latest rating			**Previous rating**		
CRAs	**Rating**	**Outlook**	**Notches to investment grade**	Rating	Outlook	Notches to investment grade
DBRS	**BBB (Oct. 2022)**	**Stable**	**+2**	BBB (April 2022)	Stable	+2
Fitch	**BBB- (Sept. 2022)**	**Stable**	**+1**	BBB- (March 2022)	Stable	+1
Moody's[1/]	**Ba1 (August 2022)**	**Positive**	**-1**	Ba1 (Feb. 2022)	Stable	-1
Standard & Poor's	**BBB (Sept. 2022)**	**Stable**	**+2**	BBB- (March 2022)	Positive	+1

Source: PDMO
IG = Investment grade
1/ = Moody's issued credit opinions for the Republic of Cyprus in February 2022.

The historical credit ratings of the long-term issuer rating of the Republic of Cyprus during the years 2013-2022 are illustrated in Figure 34 below. The Republic of Cyprus is on an upgrading path since 2013 which reflects the economy's turnaround whilst since 2018 the restoration of investment grade status was achieved. As mentioned above, in 2022, DBRS and S&P's upgraded the long-term sovereign credit rating of Cyprus by one notch from "BBBL" and "BBB-" to "BBB", Fitch and Moody's affirmed the credit rating whilst the last CRA changed the outlook from stable to positive.

[13] More recent developments on the sovereign credit rating of the Republic of Cyprus are available at the website of the PDMO.

Figure 34: Historical evolution of credit ratings of the Republic of Cyprus in 2013-2022



(Source: PDMO)

Note: Rating sequence on the graph is as following: Fitch/S&P/Moody's/DBRS. The green circles next to the names of the CRAs indicate the positive outlook. The horizontal and vertical blue line indicate the first upgrade by S&P's to investment category.

Regarding the rationale of the rating developments about the Cypriot economy in 2022, the rating of the Republic of Cyprus by Standard & Poor's[14], based on the CRA, was supported by the medium-term prospects of the Cypriot economy which remain strong and solid despite the Russian-Ukraine crisis and the sanctions against Russia, as well as by the fact that solid economic activity is expected to be supported by the disbursements of the European Recovery and Resilience Fund. The upgrade of the long-term sovereign rating of Cyprus to "BBB" from "BBB-" rating level and the change of the outlook from positive to stable in September 2022, based on the CRA, was attributed to diversified Cypriot economy which has proven resilient to external shocks and the relatively strong performance over the past decade as well as CRA's expectation that growth rate would continue despite any effects from the war in Ukraine.

In the case of Fitch's rating[15], the long-term sovereign credit rating of the Republic of Cyprus in 2022, based on the CRA, reflects the fact that Cyprus has adequately responded to the challenges posed by the uncertainty in its broader economic environment. In March 2022, CRA pointed out that the medium-term growth prospects remain overall positive despite the current external shock of Russia-Ukraine conflict, strengthened by the framework of the government's Recovery and Resilience plan. In September 2022, the CRA affirmed the sovereign rating of Cyprus with the outlook to be remained stable. The stable outlook reflects the fact that although the Cypriot economy has had a strong post-pandemic recovery and government finances have proved resilient, the worsening outlook for eurozone growth and uncertainties related to Cyprus' high exposure to Russia through its investment and tourism linkages, pose significant risks. In addition, the CRA refers to the significant

[14] Standard & Poor's Rating Action Report on 2nd of March and on 2nd of September 2022.
[15] Fitch Report on 30th of March and Rating Action Commentary on 9th of September 2022.

banking sector weaknesses, including the high, but declining NPLs that could pose contingent liability risks to the sovereign and lead to macro-stability risks.

In February 2022, Moody's[16] issued a credit opinion reaffirming the long-term sovereign credit rating of the Republic of Cyprus to "Ba1" rating level with a stable outlook which reflects that credit strengths and challenges are balanced. In addition, CRA expects that the public debt will not be burdened further compared to the pre-pandemic level since debt affordability metrics are expected to be favourable and fiscal deficits will continue to narrow in 2023. On Moody's rating action in August 2022, the long-term sovereign credit rating was reaffirmed and the outlook was changed from stable to positive reflecting the sharp reduction in Cyprus's public debt-to-GDP ratio which is estimated to be continued in the coming years. In addition, the positive outlook reflects the economy's stronger-than-expected resilience to the external shocks including the spillover effects from the military conflict between Russia and Ukraine. The key rating challenges of the Republic by Moody's are the small and relatively undiversified economy of Cyprus, the high level of government, non-financial and household debt as well as the high level of non-performing exposures of the financial sector.

The long-term sovereign credit rating of Cyprus was upgraded by DBRS[17] in April 2022, from "BBB (low)" to "BBB" rating level. The outlook was changed from positive to stable. The rationale for the upgrade reflects Cyprus' stronger-than-expected performance in the economy and public finances during 2021 and CRA's expectation that medium-term conditions will remain favourable for debt reduction efforts, despite the risks posed by Russia's invasion in Ukraine and the pandemic. In October 2022, the CRA confirmed the long-term sovereign rating of Cyprus at "BBB" rating level underlining that the stable outlook balances recent favourable fiscal dynamics against important

[16] Moody's credit opinion on 22nd of February 2022 and a Rating Action Report on 15th of September 2022.
[17] DBRS Morningstar Press Release on 8th of April 2022 and on 7th of October 2022.

downside risks for the fiscal and economic outlooks. However, the rating agency underlined the most important downside risks for the Cyprus economy such as a further escalation of the conflict in Ukraine and high-for-longer energy prices, possible fiscal pressures due to the National Health System and the planned expansion of the public asset management company (KEDIPES). In addition, the rating agency noted that risks for debt dynamic, might emanate from a potential materialisation of contingent liabilities related to the still high legacy stock of non-performing loans in the banking system.

The key drivers for the upgrade of Cyprus' government bond in the near future, based on CRAs latest rating reviews in 2022, could result from the ability of the Government to: (a) sustain the expectations of positive growth rates, (b) maintain a sound fiscal policy, (c) reduce further the debt-to-GDP ratio, (d) reduce the stock of bank non-performing exposures and (e) continue deleveraging the private sector debt and (f) maintain increased economic resiliency to external shocks and (g) rising labour productivity levels.

The historical credit ratings of the Republic of Cyprus during the period 2008-2022 are presented in Table 12 while the sovereign rating review calendar by CRAs for 2023 is presented in Figure 2 in the Appendix.

Table 7 below, illustrates where Cyprus stood in the long-term rating scale compared to selected Eurozone States at the end of 2022. The horizontal blue line illustrates the investment grade line while the vertical column under each CRA shows the ratings of the long-term debt.

It is worth-noting that during 2022 only four number of countries (Cyprus, Greece, Ireland and Portugal) were upgraded by CRAs and only three Eurozone States (Cyprus, Greece and Ireland) were on a positive outlook. The fact that Cyprus is included in the said group of countries, indicates that economic prospects have improved significantly and they are expected to be improved in the upcoming years.

Table 7: Government Bond rating in long-term local currency of Eurozone States[18] as at the end of 2022

Fitch		Moody's		S&P		DBRS	
AAA	DE, LU, NL	Aaa	DE, LU, NL	AAA	DE, LU, NL	AAA	DE, LU, NL, AT
AA+	AT, FI	Aa1	AT, FI	AA+	AT, FI	AA high	FI, FR
AA	FR	Aa2	FR	AA	BE, FR	AA	BE
AA-	BE, EE, IE	Aa3	BE	AA-	IE, EE, SI	AA low	EE, IE
A+	MT	A1	EE, IE	A+	SK, LV, LT	A high	MT, SK, SI, LT
A	SI, SK, LT	A2	MT, SK, LT	A	ES	A	ES, LV
A-	ES, LV	A3	LV, SI	A-	MT,	A low	PT
BBB+	PT	Baa1	ES	BBB+	PT	BBB high	IT
BBB	IT	Baa2	PT	BBB	IT, CY	BBB	CY
BBB-	CY	Baa3	IT	BBB-		BBB low	
BB+		Ba1	**CY**	BB+	EL	BB high	EL
BB	**EL**	Ba2		BB		BB	
BB-		Ba3	EL	BB-		BB low	
B+		B1		B+		B high	
B		B2		B		B	
B-		B3		B-		B low	
CCC		Caa1		CCC+		CCC high	
CC		Caa2		CCC		CCC	
C		Caa3		CCC-		CCC low	
RD		Ca		CC		CC	
D		C		SD/D		C	
						D	

(Source: Bloomberg)

[18] The abbreviations in the Table are interpreted as following: CY=Cyprus, ES=Spain, EL=Greece, IE=Ireland, IT=Italy, MT=Malta, PT=Portugal and SI=Slovenia, DE=Germany, LU=Luxembourg, NL=Netherland, AT=Austria, FI=Finland, FR=France, BE=Belgium, EE=Estonia, SK=Slovakia,LV=Latvia, LT=Lithuania. Green/black/red color for countries abbreviations indicates Positive/Stable/Negative outlook.

IX. Public Debt Management Office Action Plan

In September of 2015 a five-year action plan for the period from 2015 to 2019 was approved by the Council of Ministers. This action plan covers areas related to the internal organization and the IT infrastructure of the PDMO as well as the establishment of a market intelligence function. The main actions of the said plan have already been completed successfully. However, a number of actions, which are recurring, have to be monitored and updated on a continuous basis and therefore, the PDMO will continue to implement or update them and present the outcomes once a year on the Annual Report of the Public Debt Management.

The main actions implemented or updated during 2022 are the following:

i. Debt Management Committee: The aforementioned Committee convened during 2022, amidst the ongoing pandemic in accordance with the Decrees and the Health Protocols issued by the Health Ministry, in both under a broad and narrow structure. The main issues discussed involved the impact of the pandemic to the Cyprus economy, the cash management policy framework, fiscal and financial developments and prospects, debt sustainability analysis and the implementation of the debt management strategy. The meetings held under the broad structure focused on the exchange of information among the Directorates within the Ministry of Finance, in order to ensure the efficient and effective communication on debt related issues.

ii. Cash Management Framework: Having in place an effective and efficient Cash Management Framework, is of paramount importance since this ensures that, inter alia, the cost of carry is maintained to a minimum. The PDMO is in the process of improving its existing framework after having received related technical assistance from the IMF in the past, taking also into consideration the recent changes in the monetary policy to bring inflation under control and the repercussions to the capital market. This procedure, will assist the PDMO to achieve a more rational and congruous approach in efficiently and effectively managing the cash framework.

iii. Maintaining a suitable & control working environment: The PDMO aims to ensure that any transactions and any other operations taking place within the working environment adhere to strict procedures set, on a continuous basis. These procedures are improved and updated on a regular basis and when deemed necessary are either updated, enhanced or revised in order to better reflect conditions that exist at the time within the PDMO. During 2022, the internal procedures manual has been enriched and updated whilst the audit checklists have been further enhanced. A report prepared by the Audit Office of the Republic of Cyprus about the efficiency of the management of the public debt was concluded in January 2022 and the PDMO is currently in the process of evaluating related recommendations.

iv. Risk management – operational risk: The PDMO continues to update the database of operational risk incidents. Any incidents that have taken place in 2022 have been recorded and evaluated accordingly aiming towards minimizing any associated risks involved. This process is ongoing and it is reviewed and updated on a regular basis.

v. Contacts with the international investment bank market group: The creation of the group is providing a significant contribution to the ability of the Republic to maintain its access to the international capital markets even under difficult circumstances similar to those experienced in 2020-2021. Furthermore, beyond the primary market, the Bank Group has contributed to the better functioning of the secondary market by providing a steady stream of data to the PDMO regarding the activity of the banks in the secondary market. The electronic platform for dealer-to-dealer transactions, MTS Cyprus, was established in 2020 and is operating ever since. The PDMO in collaboration with the Bank Group intends to investigate ways to help increase the liquidity of the Eurobonds of the Republic in order to optimize the cost of funding in the long term. In 2022, a number of teleconferences were made between the PDMO and the international bank market group, discussing market developments and the main challenges of the following years.

vi. Investor' Relations Function: Despite the many problems created in this area by the pandemic in 2021, as well as, by the high uncertainty due to the Russia - Ukraine crisis, in 2022, the PDMO continued its communication with investors in order to make sure they had the best possible information about developments in Cyprus. This information took the form of dissemination of material electronically and through teleconferences with investors throughout the year.

vii. IT Strategy: The new software system of the Commonwealth Secretariat 'Meridian' was formally adopted by the PDMO since its official launch in July 2019. The PDMO participated in the piloting of 'Meridian' prior to its general release, thus contributing in the designing and implementation of a new public debt management system which incorporates advanced and improved functionalities in order to better address emerging public debt management requirements. During 2022, a series of teleconferences took place with the participation of the PDMO and CS addressing issues that aimed towards the enhancement of Meridian.

viii. Sustainability bond launch: In 2022, the PDMO received political approval to include the issuance of a green/sustainability bond in the financing actions of the PDMO. As a result, the PDMO proceeded with all the necessary actions in order to be ready for a possible/sustainability bond issuance in 2023. With the assistance of the structuring agents, the PDMO started the planning for the issuance, through meetings and teleconferences in a regular time base. In parallel, an internal circular was issued informing all the departments and ministries of the State about the subject and instructing them to make a list of all on going or planned projects that might be incorporated to the issuance. Based on the international practice, and after an internal assessment of the international banks on green bonds based on the Request for Proposal procedure, the PDMO appointed two banks to act as structuring agents. All the planned and ongoing projects proposed were evaluated by the PDMO and based on the Asset Register that was created in order to decide which projects would be selected to be a part of the funding outcome of the issued bond, it became clear that the best option was the issuance of a sustainability bond. The final stage was the preparation of the Cyprus Framework for sustainable financing which is one of the main part of documentations for the issuance of a sustainability bond, which is expected to be approved by independent and recognized assessor soon. The Framework includes, among others, the main strategy of the Cyprus on issues related to environmental and social policy, the pillars of the strategy, the grouping of the projects, the monitoring procedures for the projects and the Government obligations to investors.

Further to the above actions, it is important to underline that during 2022 officers of the PDMO participated in a number of virtual meetings (seminars, conferences, meetings) in the Economic and Financial Committee Sub-Committee on EU sovereign debt markets (ESDM) and other Working Groups regarding the management of public debt. Table 13 in Appendix illustrates the said participations in more detail.

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Appendix

List of Tables, Figures and Announcements

Table 1a: Auction schedule for Treasury Bills in 2022

No	Auction day	Auction date	Value date	Tenor of TB	Maturity date
1	Monday	24/01/2022	28/01/2022	13 weeks	29/04/2022
2	Friday	18/02/2022	25/02/2022	13 weeks	27/05/2022
3	Friday	18/03/2022	24/03/2022	13 weeks	24/06/2022
4	Wednesday	20/04/2022	29/04/2022	13 weeks	29/07/2022
5	Monday	23/05/2022	27/05/2022	13 weeks	26/08/2022
6	Monday	20/06/2022	24/06/2022	13 weeks	23/09/2022
7	Monday	25/07/2022	29/07/2022	13 weeks	27/10/2022
8	Monday	22/08/2022	26/08/2022	13 weeks	25/11/2022
9	Monday	19/09/2022	23/09/2022	13 weeks	23/12/2022
10	Friday	21/10/2022	27/10/2022	13 weeks	27/01/2023
11	Monday	21/11/2022	25/11/2022	13 weeks	24/02/2023
12	Monday	19/12/2022	23/12/2022	13 weeks	24/03/2023

(Source: PDMO)

Table 1b: Indicative auction schedule for Treasury Bills in January – June 2023

No	Auction day	Auction date	Value date	Tenor of TB	Maturity date
1	Monday	23/01/2023	27/01/2023	13 weeks	28/04/2023
2	Monday	20/02/2023	24/02/2023	13 weeks	26/05/2023
3	Monday	20/03/2023	24/03/2023	13 weeks	26/06/2023
4	Monday	24/04/2023	28/04/2023	13 weeks	28/07/2023
5	Monday	22/05/2023	26/05/2023	13 weeks	25/08/2023
6	Monday	19/06/2023	23/06/2023	13 weeks	22/09/2023

(Source: PDMO)

Table 2a: Revised Annual Financing Plan 2022 during the year

Financial Instrument	AFP 2022 (November 2021) Upper borrowing limit (a)	1st update AFP 2022 (May 2022) Upper borrowing limit (b)	2nd update AFP 2022 (October 2022) Upper borrowing limit (c)	Change (c) – (b)
Domestic 3-month Treasury Bills	€300 mn	€300 mn	€300 mn	€0 mn
European Medium-Term Notes (EMTN)	€1500 mn	€1000 mn	€1000 mn	€0 mn
Domestic Retail Bonds for individuals	€40 mn	€40 mn	€40 mn	€0 mn
Loans by supranational organisations (EIB, CEB, EBRD)	€124 mn	€124 mn	€124 mn	€0 mn
Loans under SURE Instrument	€ 0 mn	€ 0 mn	€29.2 mn	€29.2 mn
Use of cash buffer	€497 mn	€637 mn	€104 mn	(€533 mn)
Total approved maximum borrowing amounts in Jan. - Dec. 2022	**€2461 mn**	**€2101 mn**	**€1597 mn**	**(€504 mn)**

(Source: PDMO)

Table 2b: Liability management transactions: Early repayments of loans and securities details in 2022

Creditor	Interest rate	Maturity year	Principal payment amount	Remaining amount	Interest payments
	in %		in EUR mn	in EUR mn	in EUR mn

(Source: PDMO)

No execution of liability management transactions within the year 2022

Table 2c: Indicative Cyprus Recovery and Resilience Plan payment profile

Details of payment request	# M&Ts (Grants)	Grant amount in €mln	# M&Ts (Loans)	Loans amount in €mln	Total amount in €mln	Year of payment
13% pre-financing	0	130,772,986	0	26,041,600	156,814,586	2021
1st dose	14	85,000,000	0	0	85,000,000	2022
2nd to 3rd dose	48	200,000,000	1	0	200,000,000	2023
4th to 5th dose	54	230,000,000	4	50,000,000	280,000,000	2024
6th to 7th dose	47	195,000,000	3	85,000,000	280,000,000	2025
8th to 9th dose	56	120,000,000	3	0	144,451,461	2026
10th dose	37	45,173,061	4	39,278,400	225,000,000	2027
Total	**256**	**1,005,946,047**	**15**	**200,320,000**	**1,206,266,047**	

This amount corresponds to the financial allocation after deduction of Cyprus' proportional share of the expenses of Article 6(2) of Regulation (EU) 2021/241, calculated in accordance with the methodology of Article 11 of that Regulation and corresponds to 0.02% of the allocation.

Table 3a: Matured securities (1/1/2022 to 31/12/2022)

I. Domestic market

A. Treasury Bills

Issue date	Maturity (in weeks)	Weighted average yield (in %)	Maturity date	ISIN	Nominal amount in EUR
22/10/2021	13	-0.42	28/01/2022	CY0149730810	100,0
22/11/2021	13	-0.43	25/02/2022	CY0149770816	100,0
17/12/2021	13	-0.43	24/03/2022	CY0149820819	100,0
24/01/2022	13	-0.42	29/04/2022	CY0149920817	100,0
18/02/2022	13	-0.36	27/05/2022	CY0149960813	78,4
18/03/2022	13	-0.25	24/06/2022	CY0240020814	37,0
20/04/2022	13	-0.24	29/07/2022	CY0240050811	75,0
23/05/2022	13	-0.12	26/08/2022	CY0240110813	75,0
20/06/2022	13	0.05	23/09/2022	CY0240140810	35,0
25/07/2022	13	0.27	27/10/2022	CY0240190815	50,0
22/08/2022	13	0.43	25/11/2022	CY0240230819	40,5
19/09/2022	13	1.08	23/12/2022	CY0240240818	43,0
					833,9

B. Domestic Bonds

Issue date	Maturity (in years)	Coupon rate (in %)	Maturity date	ISIN code	Nominal amount in EUR mn
01/07/2013	9	5.25	01/07/2022	CY0143800817	52,7
13/07/2018	4,4	3.5	15/12/2022	CY0148010818	610,0
					662,7

C. Repayments of Saving Certificates/Retail Bonds

	Nominal amount in EUR mn
Saving certificates	0,1
Retail bonds	161,2
	161,3

II. Foreign market

A. Euro Commercial Papers

Nominal amount in EUR mn
0

B. Euro Medium Term Notes

Issue date	Maturity (in years)	Coupon rate (in %)	Maturity date	ISIN CODE	Nominal amount in EUR mn
06/05/2015	7	3.875	06/05/2022	XS1227247191	1000,00
					1000,0

Table 3b: Loan amortisations by creditor (1/1/2022 to 31/12/2022)

	Remaining amount in EUR mn	Principal payments in EUR mn
European Investment Bank	928,9	72,1
Council of Europe Development Bank	149,9	25,4
		97,5

Table 4: Historical evolution of gross general government debt[1/] in 1995-2022

Year	Consolidated gross general government debt (in EUR mn)	Consolidated gross general government debt (% of GDP)
1995	3765,7	46.8
1996	4012,6	50.9
1997	4531,8	53.9
1998	5043,6	55.1
1999	5428,9	55.2
2000	5905,2	55.7
2001	6544,4	57.3
2002	7187,9	60.5
2003	8200,1	63.8
2004	8974,3	64.8
2005	9402,8	63.4
2006	9481,7	59.3
2007	9461,8	54.0
2008	8658,6	45.6
2009	10139,0	54.3
2010	10953,7	56.4
2011	13057,9	65.9
2012	15618,4	80.1
2013	18706,4	103.7
2014	19013,8	108.8
2015	19164,0	106.8
2016	19509,2	102.6
2017	18814,1	92.6
2018	21256,3	98.1
2019	20958,9	90.4
2020	24828,7	113.5
2021	24271,0	101.0
2022	23363.8	86.5

1/ = Since 2010 figures include also liabilities due to the issuance of euro coins

Box 1: Historical evolution of the public debt of Cyprus

During the period 1996-2004, the GGD followed an increasing path from 51 percent of GDP in 1996 to 65 percent of GDP in 2004. Following years of fiscal consolidation, and due to the use of available sinking funds, the debt-to-GDP ratio reached a minimum point of 46 percent of GDP in 2008. Since then, fiscal slippage and low to negative growth rates as well as repetitive capital injection into the banking sector in combination with measures under the Memorandum of Understanding and other emergency loans, contributed to a considerable increase in the debt to GDP ratio.

During 2009-2011 the resulting fiscal deterioration was the main contributor to the increase in the public debt. During 2012-2013, the fiscal deficit as well as the negative growth rate contributed to the debt deterioration. In addition, the state capital support of the Cyprus Popular Bank (ex Laiki Bank) in 2012 (EUR 1.9 bn) and of the cooperative sector in 2013 (EUR 1.5 bn) increased the public debt by a total amount of EUR 3.4 bn, excluding interest payments.

The banking crisis resulted in state support to the domestic financial sector of EUR 3.6 bn or about 20 percent of the gross public debt by end 2014, excluding interest payments. These funds were related to the state recapitalisation of Cyprus Popular Bank and the cooperative sector via debt securities. In late 2015, the Government provided an additional injection of EUR 175 mn or about 1 percent of GDP into the cooperative sector.

It is important to highlight that despite the sharp increase of the public debt over the past few years, the strong fiscal outcome and the fact that the budget outcome was close to balance in 2014-2015 and positive in 2016, as well as, the strong real GDP growth of 3,2 percent and 6,4 percent in 2015 and 2016 respectively, indicate that debt is stabilising earlier and at lower levels than originally anticipated. The years 2017 and 2018 were years of strong fiscal outcome with positive real GDP growth of 5.2 percent in each year whilst in 2019 the growth rate has slowed down towards 3.1 percent, albeit at above Eurozone levels. In 2020, the public debt recorded a material increase of 24pp reaching 115 percent of GDP whereas the real GDP exhibited a reduction of 5.1 percent due to the impact of the pandemic on economic activity affecting both revenue and expenditure of the Government. In 2021, the public debt recorded a significant reduction of about 11 pp, dropping to 103.9 percent of GDP as a result of the increase of real GDP of about 5.5 percent and the utilisation of a significant amount of cash buffer to cover the gross financing needs of the Government without any need for further borrowing. In 2022 the public debt to GDP ratio recorded a further reduction of about 14.5pp reaching 86.5 percent of GDP as a result of the significant increase of GDP by 5.6% and the reduction by 0.9 bn of the nominal value of the cumulative public debt.

Table 5: Outstanding Central Government[1/] debt as at the end of 2022

A. TREASURY BILLS

Issue date	Maturity (in weeks)	Weighted average yield (in %)	Maturity date	ISIN code	Nominal value in EUR mn
21/10/2022	13	1.62	27/01/2023	CY0240280814	50.0
21/11/2022	13	2.09	24/02/2023	CY0240330817	41.0
19/12/2022	13	2.36	24/03/2023	CY0240370813	45.8
					136,8

B. DOMESTIC BONDS

Issue date	Maturity (in years)	Yield (in %)	Maturity date	ISIN code	Nominal value in EUR mn
18/01/2016	7	3.25	18/01/2023	CY0146250812	221.9
01/07/2013	10	6.00	01/07/2023	CY0143810816	3.2
24/01/2017	7	3.25	24/01/2024	CY0147060814	300.0
18/12/2015	10	4.00	18/12/2025	CY0146120817	92.0
					617,1

C. RETAIL/SPECIAL RETAIL BONDS-SAVING CERTIFICATES

	Coupon rate (in %)	Maturity year	Nominal value in EUR mn
Retail bonds	2.50-3.25	2023	67.7
Retail bonds	2.50-3.00	2023	110.3
Special retail bonds	0.75	2024	0.8
Retail bonds	1.75-2.50	2025	77.6
Special retail bonds	0.75	2025	1.0
Retail bonds	1.75-2.50	2026	45.5
Retail bonds	1.00-1.75	2027	41.8
Retail bonds	0.75-1.50	2028	23.6
Saving certificates	0.00	perpetual	2.5
			370,88

TOTAL DOMESTIC SECURITIES AS AT 31/12/2022 [EUR MN] **1124,7**

D. EURO COMMERCIAL PAPERS

Issue date	Maturity (in months)	Yield (in %)	Maturity date	ISIN code	Discount value in EUR mn
					0,0
					0,0

E EURO MEDIUM TERM NOTES (EMTN)

Issue date	Maturity (in years)	Yield (in %)	Maturity date	ISIN code	Nominal value in EUR mn
26/07/2016	7	3.750	26/07/2023	XS1457553367	1000.0
03/05/2019	5	0.625	03/12/2024	XS1989405425	1000.0
27/06/2017	7	2.750	27/06/2024	XS1637276848	850.0
04/11/2015	10	4.250	04/11/2025	XS1314321941	1000.0
09/02/2021	5	0.000	09/02/2026	XS2297209293	1000.0
16/04/2020	7	1.500	16/04/2027	XS2157184255	1250.0
25/09/2018	10	2.375	25/09/2028	XS1883942648	1500.0
21/01/2020	10	0.625	21/01/2030	XS2105095777	1000.0
13/01/2022	10	0.950	20/01/2032	XS2434393968	1000.0
26/02/2019	15	2.750	26/02/2034	XS1956050923	1100.0
21/01/2020	20	1.250	21/01/2040	XS2105097393	1250.0
03/05/2019	30	2.750	03/05/2049	XS1989383788	1000.0
16/04/2020	30	2.250	16/04/2050	XS2157183950	500.0
					13450,0

TOTAL FOREIGN SECURITIES AS AT 31/12/2022 [EUR MN] **13450,0**

F. DOMESTIC LOANS

Issue year	Interest rate (in %) /2	Maturity year	Remaining maturity (in years)	Balance (in EUR mn)
2019	0.98	2026	4.1	250,0
				250,0

G. FOREIGN LOANS

Creditor (3)	Issue year (7)	Interest rate (in %)	Maturity year	Remaining maturity (in years)	Balance (in EUR mn)
CEB	2004	6mE+0.30	2023	1.0	1.5
CEB	2003	6mE+0.30	2023	1.0	3.3
EIB	2004	1	2025	2.5	0.4
EC	2020	0	2025	2.8	150.0
CEB	2010	3mE+0.60	2025	2.9	14.3
EIB	2004	1	2026	3.6	0.2
EIB	2006	3mE+0.704	2026	3.8	8.9
CEB	2014	6mE+0.15	2026	4.0	22.9
CEB	2007	6mE+0.09	2027	4.5	5.5
EIB	2003	4.43	2027	5.0	8.2
EIB	2018	6mE+0.181	2028	5.2	6.8
EC	2021	0	2028	5.5	157.0
CEB	2018	1.06	2028	5.9	14.5
CEB	2008	3.7	2028	6.0	17.6
EIB	2003	VSFR	2028	6.0	18.0
EIB	2004	VSFR	2028	6.0	7.5
EIB	2004	4.47	2029	6.5	10.2
EIB	2019	0.438	2029	6.5	28.0
EC	2021	0	2029	6.6	77.0
EIB	2017	6mE+0.217	2029	6.6	12.4
EIB	2019	0.269	2029	6.9	14.0
EIB	2019	6mE+0.413	2029	7.0	11.1
CEB	2009	3mE+0.48	2029	7.0	7.1
CEB	2009	3mE+0.48	2029	7.0	4.4
CEB	2014	1.46	2029	7.0	17.5
CEB	2010	3mE+0.55	2030	7.6	2.9
EIB	2003	VSFR	2030	8.0	24.6
EIB	2005	VSFR	2030	8.0	12.6
EIB	2004	VSFR	2030	8.0	10.3
ESM	2013	BLR+0.10	2031	8.8	6300.0
EIB	2022	1.296	2032	9.4	40.0

CEB	2017	1.08	2032	9.5	10.7
EIB	2005	VSFR	2032	10.0	10.5
EIB	2007	6mE+0.018	2032	10.0	36.8
EIB	2003	VSFR	2033	11.0	45.1
CEB	2013	6mE+0.81	2033	11.0	5.9
EIB	2021	0.106	2033	11.0	32.1
EIB	2011	12mE+0.27	2034	12.0	26.0
CEB	2020	0.48	2035	12.0	6.0
CEB	2020	0.42	2035	12.3	10.0
CEB	2020	0.28	2035	12.5	6.0
EIB	2011	6mE+0.314	2035	13.0	21.7
EIB	2011	6mE+0.25	2035	13.0	10.0
EIB	2011	6mE+0.314	2035	13.0	14.4
EIB	2011	12mE+0.305	2036	13.6	28.0
EIB	2017	1.514	2037	14.5	30.0
EIB	2017	1.634	2037	14.6	22.5
EIB	2012	12mE+1.517	2037	14.6	98.7
EIB	2017	12mE+1.137	2037	15.0	59.2
EIB	2012	1.563	2037	14.7	10.5
EIB	2022	1.95	2037	14.5	19.3
EC	2022	2.75	2037	15.0	29.0
EIB	2010	6mE+0.28	2038	15.5	42.7
EIB	2011	12mE+0.829	2038	16.0	13.6
EIB	2014	12mE+0.998	2039	16.9	13.4
EIB	2011	1.766	2040	18.0	36.0
EIB	2011	1.782	2040	18.0	19.9
EIB	2021	0.806	2041	18.9	38.0
EIB	2022	1.933	2042	19.4	39.0
EIB	2018	1.828	2043	20.5	30.0
EIB	2020	0.409	2045	22.1	18.4
EC	2021	0.75	2047	24.6	47.0
EC	2020	0.3	2050	27.9	100.0

EC	2021	0.3	2050	27.9	72.0	
EC	2021	0	2051	28.8	26.0	
EFSF (4)	2011				224.8	
					8261.7	
TOTAL LOANS AS AT 31/12/2022 [EUR MN]						***8511.7***
TOTAL DEBT OF CENTRAL GOVERNMENT AS AT 31/12/2022 [EUR MN]						***23086.4***

Notes:
(1) Definition: Debt of the budgetary Central Government (BCG) excluding debt of Social Security Investments, state-owned enterprises categorised within the Central Government

and the debt of local authorities. BCG is around 99% of the general government debt

(as at 31/12/2022)
(2) E= Euribor rate; BLR=Basic Lending Rate; VSFR = other variable interest rate; m=months

(3) EIB=European Investment Bank, CEB= Council of Europe Development Bank, EFSF=European Financial Stability Facility, ESM=European Stability Mechanism, EC = European Commission

(4) Debt issued by the EFSF for Greece, Ireland and Portugal

(5) It refers to the first year of the disbursement

(6) Excluding liabilities due to the issuance of Euro

(7) Currency issue: in Euro

(8) Loans under EC due in years 2025,2028, 2029,2037,2047 and 2050 disbursed under SURE Instrument whilst the loan due in year 2051 disbursed under RRF
(9) There may be slight discrepancies between the totals shown and the sum of constituent items because of rounding

Table 6a: Outstanding Central Government debt as at the end of 2022

Year	Foreign law securities	Domestic law securities	ESM loans	Other loans	Total
2023	1000	431	0	111	1542
2024	1850	412	0	111	2373
2025	1000	171	350	261	1782
2026	1000	46	1000	357	2403
2027	1250	42	1000	100	2391
2028	1500	24	1000	252	2775
2029	0	0	1050	159	1209
2030	1000	0	900	69	1969
2031	0	0	1000	62	1062
2032	1000	0	0	64	1064
2033	0	0	0	54	54
2034	1100	0	0	46	1146
2035-2039	0	0	0	183	183
2040	1250	0	0	15	1265
2041-2048	0	0	0	85	85
2049	1000	0	0	1	1001
2050	500	0	0	173	673
2051	0	0	0	1	1
Total	**13450**	**1124**	**6300**	**2106**	**22980**

Notes
1/ = Preliminary data
2/ = Excluding debt for EFSF Loans
3/ = Excluding liabilities due to the issuance of Euro coins
4/ = A flat redemption profile is assumed for loans granted to local authorities and State-Owed Enterprises.
5/ = There may be slight discrepancies between the totals shown and the sum of constituent items because of rounding.

Table 6b: Disbursements of ESM financial assistance to Cyprus

<table>
<tr><th>Date of disbursement</th><th>Amount disbursed</th><th>Final maturity</th><th>Cumulative amount disbursed</th></tr>
<tr><td rowspan="2">13/05/2013</td><td>€1 bn</td><td>13/05/2026</td><td rowspan="2">€2 bn</td></tr>
<tr><td>€1 bn</td><td>13/05/2027</td></tr>
<tr><td>26/06/2013</td><td>€1 bn</td><td>26/06/2028</td><td>€3 bn</td></tr>
<tr><td rowspan="2">27/09/2013</td><td>€750 mn</td><td>27/09/2029</td><td rowspan="2">€4.5 bn</td></tr>
<tr><td>€750 mn</td><td>27/09/2030</td></tr>
<tr><td>19/12/2013</td><td>€100 mn</td><td>19/12/2029</td><td>€4.6 bn</td></tr>
<tr><td>04/04/2014</td><td>€150 mn</td><td>04/04/2030</td><td>€4.75 bn</td></tr>
<tr><td>09/07/2014</td><td>€600 mn</td><td>09/07/2031</td><td>€5.35 bn</td></tr>
<tr><td>15/12/2014</td><td>€350 mn</td><td>15/12/2025</td><td>€5.7 bn</td></tr>
<tr><td>15/07/2015</td><td>€100 mn</td><td>15/07/2031</td><td>€5.8 bn</td></tr>
<tr><td rowspan="2">08/10/2015</td><td>€200 mn</td><td>08/10/2029</td><td rowspan="2">€6.3 bn</td></tr>
<tr><td>€300 mn</td><td>08/10/2031</td></tr>
</table>

Table 7: Government debt[1/] by instrument and lender at the end of 2022 (in EUR mn)

A. Domestic Debt			**1645,6**
I. Long-term debt		**1509,5**	
1. Domestic bonds	**617,1**		
- Monetary Financial Institutions	522,6		
- Private Sector	94,5		
2. Retail securities	**370,9**		
3. Loans	**363,0**		
- Other	250,0		
- Local Authorities	100,2		
- Semi-government organisations	12,8		
4. Liabilities to issuance of euro coins	**158,5**		
II. Short-term debt		**136,1**	
1. Treasury Bills	**136,1**		
- Monetary Financial Institutions	136,1		
- Private Sector	0,0		
B. Foreign debt			**21718,2**
I. Long-term debt		**21718,2**	
1. Long term loans	**8043,4**		
-ESM[2/]	6300,0		
-EIB and CEB	1078,9		
-SURE + RRF	658,0		
-Local Authorities	6,5		
2. Euro Medium Term Notes	**13450,0**		
3. EFSF loans	**224,8**		
II. Short-term debt		**0,0**	
Euro Commercial Papers	0,0		
C. Gross General Government Debt			**23336,8**

Note:

1/ = Preliminary data

2/ = Debt is reported in consolidated form and therefore any obligations among subsectors of the general government are omitted.

Table 8: Investments[1/] of the Social Security Fund with the Central Government as at the end of 2022

	Amount in EUR mn
Social Insurance Fund	8472.6
Unemployment Benefits Account	85.8
Termination of Employment Fund	683.9
Central Holiday Fund	80.7
Insolvency Fund	286.2
Deposits with the Central Government	**9609,2**

Note

1/ = Investments in the form of deposits in financial institutions of EUR 105 mn are not included.

Table 9: Historical debt servicing in 2012-2021

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
					in EUR mn					
Interest payments (IP)	649	581	576	558	497	500	509	511	458	438
General Government Debt (GGD)	15618	18706	19014	19164	19509	18814	21256	20958	24852	24271
Tax revenue (TR)	4656	4363	4431	4452	4581	4959	5322	5538	5035	5931
Total government revenue (TGR)	7085	6722	7073	7093	7138	7780	8451	9128	8501	9938
Interest payments to GDP	3.3	3.2	3.3	3.1	2.6	2.5	2.3	2.2	2.1	1.8
Interest payments to GGD	4.2	3.1	3.0	2.9	2.5	2.7	2.4	2.4	1.8	1.8
Interest payments to TR	13.9	13.3	13.0	12.5	10.8	10.1	9.6	9.2	9.1	7.4
Interest payments to TGR	9.2	8.6	8.1	7.9	7.0	6.4	6.0	5.6	5.4	4.4

Note:

1/ =Interest payments exclude intragovernmental interest payments to the Social Security Fund.

Announcement 1

REPUBLIC OF CYPRUS

MINISTRY OF FINANCE

PUBLIC DEBT MANAGEMENT OFFICE

ANNOUNCEMENT

SIX-YEAR REGISTERED GOVERNMENT BONDS FOR NATURAL PERSONS

INTEREST RATE REDUCTION FOR THE SERIES TO BE ISSUED

AS FROM 2022 ONWARDS

The Public Debt Management Office announces the reduction of interest rates on six-year registered government bonds for natural persons (hereinafter "bonds"), with effect as from the 1st issue of 2022.

In particular, the bonds that will be issued from 1st of February 2022 onwards, will yield a reduced interest rate as shown in the table below:

Holding period of the government bond	Annual Coupon per holding period (with effect as from the 1st of February 2022)
For the first 24 months	0.75%
For the period after the first 24 months and up to 48 months	1.00 %
For the period after the first 48 months and up to 60 months	1.25%
For the period after the first 60 months and up to 72 months	1.50%

It is clarified that the above reduction of interest rates will not affect the next issue of bonds (November 2021), for which the applications submission period will be from 4 to 20 October 2021. This specific series of bonds will be the last series of issues for 2021 and will have the same interest rates as the previous 2021 issue series.

Finally, it is noted that bond issues in 2022 will be done on a quarterly basis, as they are done this year. Specifically, the bond issues in 2022 will take place in February, May, August and November, for which the application submission periods will be during January, April, July and October, respectively, according to the respective Specific Terms of Issuance

.

For more information please contact:

Cyprus Stock Exchange

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PUBLIC DEBT MANAGEMENT OFFICE

MINISTRY OF FINANCE

6 September 2021

Disclaimer:

This document does not constitute or form part of, and should not be construed as, an offer to sell or issue or the solicitation of an offer to buy or acquire securities of the Republic of Cyprus (Issuer) in any jurisdiction or an inducement to enter into investment activity in any jurisdiction. Neither this document nor any part thereof, nor the fact of its publication, shall form the basis of, or be relied on in connection with, any contract or commitment or investment decision whatsoever. Interested investors are encouraged to perform an independent review of the financial situation of the Issuer and the main characteristics/risks of the government bonds. For this purpose, advice may be sought from a registered/ licensed expert (eg. Investment Firms) as to whether this investment is suitable for them before taking any final decision as regards the government bonds.

Table 10: Stock of outstanding government guarantees[1/] as at the end of 2022

No	Principal debtors	Loan contracts	Stock of outstanding guarantees
		in number	EUR mn
1	**Corporate**	**101**	**433,721,601**
	Other Companies	5	4,753,502
	SMEs	40	9,337,175
	Banks and Other Credit Institutions	56	419,630,924
2	**Entities with Public Interest**	**69**	**737,195,028**
	Other Entities with Public Interest	6	130,237,880
	Public Organizations[2/]	7	166,513,001
	Sewerage Boards	56	440,444,147
3	**Local Authorities[3/]**	**98**	**208,260,301**
	Municipalities	79	205,248,397
	Community Boards	19	3,011,904
4	**Individuals / Retail**	**2693**	**75,649,397**
	Agricultural	1	45,215
	Small Business	883	20,512,124
	Housing	1789	54,034,550
	Individuals / retail	20	1,057,508
5	**Total outstanding GG for loans excluding the issue of debt instruments (1+2+3+4)**	**2961**	**1,454,826,327**
6	**Issues of debt instruments**	**3**	**74,289,577**
	SURE loan	1	38.114.750
	EE-Support to Ukraine	1	5,502,098
	European Financial Stability Facility (EFSF)	1	57.438.651
7	**Grand Total outstanding GG (5+6)**	**2964**	**1,529,115,904**

Source: Treasury (PDMO calculations)

1/ = The guaranteed amount under the Asset Protection Scheme to Hellenic Bank is not included.

2/ = An amount of EUR 6.5 mn concerns loans granted to Cyprus Sport Organisation which is included in the public debt

3/ = These entities are included in the General Government sector and therefore their loans are part of the General Government Debt

Table 11: Central Government liquid assets and cash/debt ratios in 2012-2022 (in EUR mn)

Date	Cash at the CBC	Cash at MFIs[1/]	Total	Debt that falls due within 1 year[2]	Cash/debt[3]
31.12.2012	148,8	69,5	218,3	3.202,0	6.8
31.12.2013	760,9	6,5	767,4	1.748,0	43.9
31.12.2014	1.015,9	6,5	1.022,4	1.978,0	51.7
31.12.2015	666,8	6,5	673,3	1.131,0	59.5
31.12.2016	564,2	430,0	994,2	748,0	132.9
31.12.2017	284,0	380,0	664,0	1.048,0	63.4
31.12.2018	513,22	0,0	513,22	1.491,0	34.4
31.12.2019	947,24	0,0	947,24	721,7	131.2
31.12.2020	3.615,96	0,0	3.615,96	2.378,0	152.1
31.12.2021	2.761,62	0,0	2.761,62	1.257,6	219.59
31.12.2022	2.595,55	0,0	2.595,55	1.542.0	168.32

1/ = An amount of EUR 2.813 mn placed to CCB is not included in the above table since CCB now is not considered as MFI. The said deposit was transferred to the Cyprus Asset Management Company.
2/= The amount of debt that falls due within next year based on the statistical information at the end of the reference year. The amount of debt at the end of 2018, 2019 and 2021 refer to the total amount of debt redemptions within the next 9-month period.
3/= % of cash over debt that falls due within one year. The ratio at the end of 2018, 2019 and 2021 refer to the % of cash over debt that falls due within 9-month period due to the amendment of the target set in the MTDS 2016-2020 and MTDS 2022-2024.

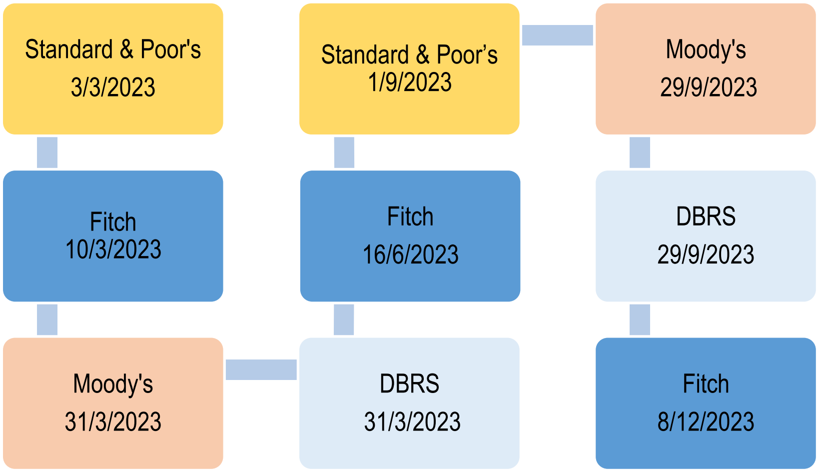
Table 12: Historical credit ratings[1/] 2008 – 2022 (Long term-short term rating)

Long term Issuer Credit rating (ICR)							
DBRS		**Fitch**		**Moody's**		**S&P's**	
Date	ICR	Date	ICR	Date	ICR	Date	ICR
07/10/2022	BBB	16/09/2022	BBB-	19/08/2022	Bα1	02/09/2022	BBB
08/04/2022	BBB	18/03/2022	BBB-	23/07/2021	Bα1	04/03/2022	BBB-
22/10/2021	BBB (L)	24/09/2021	BBB-	------------	----	03/09/2021	BBB-
13/11/2020	BBB (L)	02/10/2020	BBB-	------------	----	04/09/2020	BBB-
15/05/2020	BBB (L)	03/04/2020	BBB-	20/09/2019	Ba2	06/03/2020	BBB-
15/11/2019	BBB (L)	11/10/2019	BBB-	27/07/2018	Ba2	06/09/2019	BBB-
17/05/2019	BBB (L)	12/04/2019	BBB-	28/07/2017	Ba3	08/03/2019	BBB-
23/11/2018	BBB (L)	19/10/2018	BBB-	11/11/2016	B1	14/09/2018	BBB-
25/05/2018	BB	20/04/2018	BB+	13/11/2015	B1	16/03/2018	BB+
01/12/2017	BB(L)	20/10/2017	BB	14/11/2014	B3	17/03/2017	BB+
02/06/2017	BB(L)	24/04/2017	BB-	10/01/2013	Caa3	16/09/2016	BB
02/12/2016	B	21/10/2016	BB-	08/10/2012	B3	25/09/2015	BB-
04/12/2015	B	23/10/2015	B+	13/06/2012	Ba3	24/10/2014	B+
27/06/2014	BL	25/04/2014	B-	12/03/2012	Ba1	25/04/2014	B
12/07/2013	CCC	05/07/2013	CCC	04/11/2011	Ba3	29/11/2013	B-
		28/06/2013	RD	27/07/2011	Baa1	03/07/2013	CCC+
		03/06/2013	CCC	24/02/2011	A2	28/06/2013	SD
		25/01/2013	B	03/01/2008	Aa3	21/03/2013	CCC
		21/11/2012	BB-			20/12/2012	CCC+
		25/06/2012	BB+			17/10/2012	B
		27/01/2012	BBB-			01/08/2012	BB
		10/08/2011	BBB			13/01/2012	BB+
		31/05/2011	A-			27/10/2011	BBB
						29/07/2011	BBB+
						30/03/2011	A-
						16/11/2010	A
						24/04/2008	A+

1/ = A credit upgrade/downgrade/affirmation is indicated in green/red/black color respectively.

Short term Issuer Credit Rating (ICR)							
DBRS		Fitch		Moody's		S&P	
Date	ICR	Date	ICR	Date	ICR	Date	ICR
07/10/2022	R-2(H)	16/09/2022	F3	19/08/2022	NP	02/09/2022	A-3
08/04/2022	R-2(H)	18/03/2022	F3			04/03/2022	A-3
22/10/2021	R-2M	24/09/2021	F3	23/07/2021	NP	03/09/2021	A-3
14/05/2021	R-2M	26/03/2021	F3	----------	---	05/03/2021	A-3
13/11/2020	R-2M	02/10/2020	F3	----------	---	040/9/2020	A-3
15/05/2020	R-2M	03/04/2020	F3	----------	---	06/03/2020	A-3
15/11/2019	R-2M	11/10/2019	F3	20/09/2019	NP	06/09/2019	A-3
17/05/2019	R-2M	12/04/2019	F3	27/07/2018	NP	08/03/2019	A-3
23/11/2018	R-2M	19/10/2018	F3	12/03/2012	NP	14/09/2018	A-3
25/05/2018	R-4	25/04/2018	B	04/11/2011	P-3	14/09/2017	B
12/04/2015	R-4	26/03/2013	B	27/07/2011	P-2	29/11/2013	B
07/12/2013	R-5	03/06/2013	B			03/07/2013	C
		10/08/2011	F3			28/06/2013	SD
		31/05/2011	F1			20/12/2012	C
						13/01/2012	B
						27/10/2011	A-3
						30/03/2011	A-2

Figure 2: Sovereign Rating Review Calendar for the Republic of Cyprus in 2023



Note

1/= CRAs are able to announce other evaluation dates outside the above official planned evaluations if required by economic conditions. They have not the obligation to issue a credit assessment decision at all of the above evaluation dates.

Table 13: Participation of PDMO officers to seminars, EU committees and other events during the year 2022

January - March	April - June	July - September	October - December
EFS Sub-Committee on EU sovereign debt markets	EFS Sub-Committee on EU sovereign debt markets	Green Bond – Sub-committee ESDM	Investors roadshows (teleconferences)
	IMF-World Bank meetings	Green Bond Cyprus working group	EFS Sub-Committee on EU sovereign debt markets
	Seminars about Meridian - Commonwealth software of public debt management		Green Bond – Sub-committee ESDM
			NGEU - Sub-committee ESDM
			IMF-World Bank meetings
			ESM meeting conference

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