IGCP
Agência de Gestão da Tesouraria
e da Dívida Pública

Government Debt and Cash Management

Annual Report 2022

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Abbreviations

b.p.	basis points
BdP	Banco de Portugal
BT	Treasury Bills
CA	Saving certificates
CCIRS	Cross Currency Interest Rate Swap
CEDIC	Special Certificates of Government Debt
CEDIM	Special Certificates of Medium and Long-term Debt
CGE	State's General Account
CI	Credit institutions
CNY	Chinese Yuan
CSA	Credit Support Annex
CT	Treasury Certificates
CTPC	Treasury Certificates Savings Growth
CTPM	Treasury Certificates Savings Plus
CTT	Correios de Portugal
DUC	Single Billing Document
EA	Euro area
EBT	Treasury Bill Specialists
ECB	European Central Bank
EDP	Excessive Deficit Procedure
EFAP	Economic and Financial Assistance Programme
EFR	Financing Strategy of Reference
EFSF	European Financial Stability Facility
EFSM	European Financial Stabilisation Mechanism
EPR	State-owned companies within the General Government
EU	European Union
EUR	Euro
GBP	Great British Pound
GDP	Gross Domestic Product
GFCF	Gross fixed capital formation
HB	IGCP's Homebanking System
IB	IGCP's Internet Banking System
IGCP	Agência de Gestão da Tesouraria e da Dívida Pública – IGCP, E.P.E.
IMF	International Monetary Fund
INE (Statistics Portugal)	Instituto Nacional de Estatística (Statistics Portugal)
IRN	Institute of Registrars and Notaries
IRS	Interest rate swap
IS	Integrated Services
MLT	Medium and Long-Term
MTN	Medium Term Notes
OEVT	Primary Dealers
OMP	Other Auction Participants
ONSUTE	Entities not subject to Government's Treasury Unit
OT	Treasury Bonds
OTC	*Over-the-Counter*
OTRV	Floating Rate Treasury Bonds
p.p.	percentage points
PDSF	Public Debt Stabilisation Fund
PEPP	Pandemic Emergency Purchase Programme
POS	Point-of-sale terminal
PSPP	Public Sector Purchase Programme
RCE	State Collection Network
Repos	Repurchase Agreements
RTE	State Treasury Regime
SES	State Enterprise Sector
SFA	Autonomous Funds and Services
STCP	Sociedade de Transportes Coletivos do Porto S. A.
SURE	European instrument for temporary Support to mitigate Unemployment Risks in an Emergency
TLTRO-III	Targeted Longer-Term Refinancing Operations, series III
USA	United States of America
USD	United States Dollar
UTE	State Treasury Unit
yoy rc	Year-on-year rate of change

Introduction

2022 was marked by the beginning of the military conflict between Russia and Ukraine and the consequent surge in inflation.

Besides marking the return of global economic activity to normality, following the lifting of restrictions imposed by containment measures, 2022 was also marked by the invasion of Ukraine by Russia and the beginning of the military conflict between the two countries. As these countries are two major suppliers of commodities and energy goods, the conflict represented a major build-up of inflationary pressures already being felt as a result of a mismatch between demand and supply recovery. While demand adjusted quickly to the removal of pandemic-related restrictions, disruptions to global value chains reinforced by fears of an energy crisis and the maintenance of very restrictive measures by some economies, in particular China, have caused supply to adjust more slowly.

With inflation at record-high levels, in order to comply with their price stability mandates central banks in major developed economies have reversed their expansionary monetary policy stance of recent years, tightening it considerably with sharp rises in benchmark rates and by announcing the start of balance sheet reduction through quantitative tightening.

Despite a difficult environment the Portuguese economy grew steadily in 2022

Relatively less exposed to Russian and Ukrainian markets, the Portuguese economy has been less affected than most of its European peers, having mainly experienced the effects of price hikes. Simultaneously, Portugal has benefited from a robust recovery in tourism activities that had been strongly affected during the past two years. Thus, the Portuguese GDP grew by 6.7% in real terms, above the euro area average (3.5%), with positive contributions from both domestic demand (although lower than in 2021) and net external demand, which improved significantly compared with the previous year (from negative in 2021 to positive in 2022). Like in other European countries, inflation reached record levels and stood at 8.1 per cent.

Public accounts benefited from a sound economic recovery reflected in the across-the-board growth of tax revenue, allowing additional one-off measures to be adopted to address the effects of rising energy and general living costs, without jeopardising deficit reduction.

In this context, the budget deficit stood at 0.4% of GDP, a 2.5 p.p. decline compared with the previous year. Thus, it was also possible to accelerate the public debt reduction path (from a Maastricht perspective) which, after reaching 134.9% of GDP in 2020 and 125.4% in 2021, decreased by 11.5 p.p. in 2022, standing at 113.9% by the end of the year.

A favourable trend in savings product subscriptions has made a flexible implementation of the 2022 funding strategy easier

The funding strategy defined for 2022 envisaged funding sources of EUR 24.3 billion, which included the use of deposits of EUR 1.3 billion, BT (net) issuance of EUR 3 billion and OT issuances of EUR 17.7 billion through the issue of 2 new benchmarks and the reopening of different OT lines through at auctions, with the aim of providing liquidity throughout the curve. As a result of, among other factors, the sharp increase in net issue of CA/CTPCs, significant gains from cash pooling in State Central Treasury and the increased use of deposits, the BT programme had to be reduced by around EUR 1.8 billion and the OT programme by approximately EUR 5.7 billion.

Market access conditions were favourable in the first half of the year, except for the period following the Russia's invasion of Ukraine, and stable in the second half. Nevertheless, rises in benchmark interest rates increased sharply the interest rate on Portuguese debt. For example, in 10-year benchmark the interest rate rose from 0.46% at the beginning of 2022 to 3.58% by the end of the year. In this context, despite the increase in the cost of MLT debt issued in 2022 to 1.7%, the downward trend in funding costs continued, with the implicit interest rate on debt stock standing at 1.7%, without significantly reducing the average maturity of the debt.

Primary Market Participants in 2022

OT – Treasury Bonds

OEVT – Primary Dealers	OMP – Other Auction Participants
Banco Santander, S.A.	CaixaBank, S.A.
Bank of America Securities Europa SA	Millennium bcp
Barclays Bank Ireland PLC	
BBVA	
BNP Paribas	
Caixa Banco de Investimento, S.A.	
Citigroup Global Markets Limited	
Crédit Agricole CIB	
Deutsche Bank , AG	
Goldman Sachs Bank Europe SE	
HSBC Continental Europe	
Jefferies GmbH	
J.P. Morgan AG	
Morgan Stanley Europe SE	
Nomura Financial Products Europe GmbH	
Novo Banco, S.A.	
Société Générale	

BT – Treasury Bills

EBT – Treasury Bill Specialists
Banco Santander, S.A.
Bank of America Securities Europa SA
Barclays Bank Ireland PLC
BBVA
BNP Paribas
CaixaBank, S.A.
Caixa Geral de Depósitos, S.A.
Citigroup Global Markets Limited
Crédit Agricole CIB
Deutsche Bank , AG
Goldman Sachs Bank Europe SE
HSBC Continental Europe
Jefferies GmbH
J.P. Morgan AG
Millennium bcp
Morgan Stanley Europe SE
Nomura Financial Products Europe GmbH
Novo Banco, S.A.
Société Générale

Main Highlights

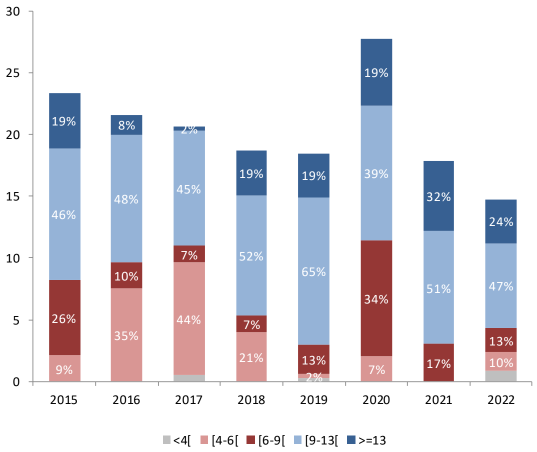
In 2022 State net borrowing requirements will have reached EUR 9.3 billion, broken down by a budget deficit of about EUR 5.8 billion and other needs of EUR 3.5 billion. Compared to 2021, the decrease was mainly due to a decline in the deficit (EUR -3.7 billion), reflecting the effect of the economic recovery on the revenue side and the lower impact of policies to tackle the health, economic and social crisis caused by COVID-19, but also to the EUR 0.8 billion decrease in net expenditure on the acquisition of financial assets.

BORROWING NEEDA AND SOURCES (EUR million)	
GROSS BORROWING NEEDS	**24 662**
Budget Deficit (State subsector)	5 781
Net acquisition of State's financial assets	3 469
OT redemptions (excl exchange operations)	10 729
Official loan redemptions (EFAP+SURE)	500
Other redemptions of medium- and long-term debt	4 182
FINANCING SOURCES	**24 662**
Use of deposits (excl cash collateral)	2 454
Official loans issuance (EFAP+SURE+RRP)	1 420
OT and MTN issuances (excl exchange operations)	11 994
OTRV issuances	0
Other MLT debt issuances	170
TBills net issuance (excl BT held by the FRDP)	1 260
CA/CT net issuance	4 551
Other movements in the Single Treasury Account	2 813
Deposits balance at year-end (excl. margin accounts)	**6 312**
Margin accounts balance at year end	668
Total deposits balance at year end	**6 980**

Financing for the year was mainly guaranteed by OT issues, with a cash inflow value of EUR 12.0 billion, as well as by the net issue of retail instruments of around EUR 4.6 billion. The balance of deposits as at the end of 2021 (around EUR 8.8 billion) was also used in part to finance needs in 2022 (by around EUR 2.5 billion). In addition, Portugal received EU loans totalling EUR 1.4 billion, of which EUR 0.8 billion under the SURE instrument, set up in 2020 to assist Member States in financing employment support measures in the context of the pandemic, and EUR 0.6 billion related to loans from the first tranche of funds under the EU Recovery and Resilience Facility. In 2022 the stock of Treasury Bills (BT) also contributed positively to the financing, with an increase of EUR 1.3 billion.

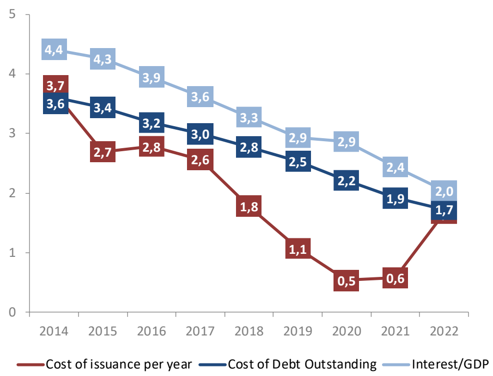
Market financing operations in 2022	Nominal value (EUR million)	Residual maturity (years)	Average allotment rate (%)
OT SYNDICATED ISSUANCES			
OT 1.15% Apr 2042	3 000	20	1.19%
OT 1.65% Jul 2032	3 000	10	1.69%
OT AUCTIONS			
OT 2.875% Oct 2025	385	3	2.09%
OT 2.875% Jul 2026	470	4	1.78%
OT 4.125% Apr 2027	501	5	0.22%
OT 2.125% Oct 2028	544	6	0.60%
OT 0.475% Oct 2030	891	8	1.77%
OT 0.3% Oct 2031	2 189	9	2.20%
OT 1.65% Jul 2032	780	10	2.75%
OT 2.25% Apr 2034	521	12	1.15%
OT SWAPS			
OT 2.125% Oct 2028	1 023	5	2.54%
OT 0.3% Oct 2031	531	6	1.64%
OT 2.25% Apr 2034	384	10	3.19%
OT 4.1% Apr 2037	232	13	2.50%
OT 1% Apr 2052	325	30	3.62%
TBills AUCTIONS (gross issuances, excl. FRDP)			
3 months	1 254	0.25	-0.50%
6 months	2 319	0.50	-0.08%
11 months	2 508	0.92	0.32%
12 months	4 296	1.00	0.14%

After economic activity resumed some normality in 2021 with the removal of the constraints imposed by containment measures, the year 2022, which represented a full recovery of the post-pandemic economy, ended up by being signalled by Russia's invasion of the Ukraine and the beginning of a military conflict between the two countries, which shows no signs of ending. As these two countries are major producers of commodities and energy products, the conflict has caused an overall rise in prices, which was already happening as a result of a faster recovery in demand than in supply, the latter still experiencing the constraints of global value chains. Soaring prices have dragged inflation to record highs in recent decades, pushing major central banks, in fulfilling their price stability mandates, to rapidly change the monetary policy stance, which has become considerably tighter.

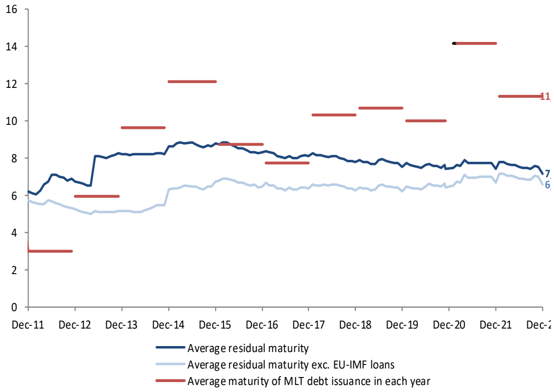


medium and long-term debt issued in 2022 stood at 11.3 years, lower than in 2021 (14.2 years). As a result of this decrease, the average maturity of debt stock fell slightly to 7.2 years in December 2022.

Cost of State direct debt (%)

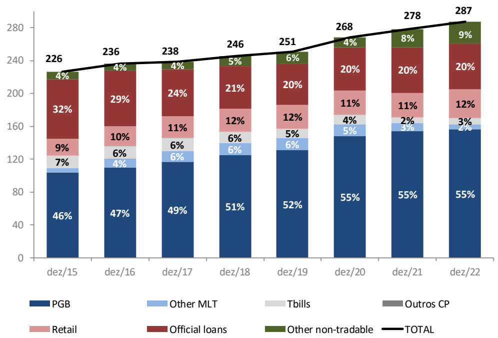


Maturity of State direct debt (years)



State direct debt increased by EUR 8.5 billion in 2022, reaching EUR 287 billion by the end of the year (a 3.1% increase compared to 2021), slowing down slightly from the 3.8% increase in 2021.

State direct debt by instrument (EUR billions)

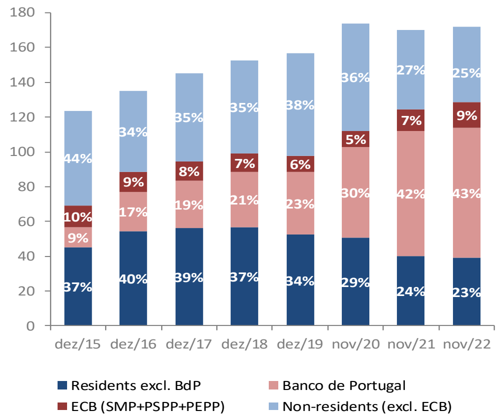


Market access conditions were favourable in the first half of the year, except for the period following the Russia's invasion of Ukraine, and stable in the second half. Nevertheless, rises in benchmark interest rates increased sharply the interest rate on Portuguese debt. For example, at 10-year benchmark the interest rate rose from 0.46% at the beginning of 2022 to 3.58% by the end of the year. In this context, despite the increase in the cost of MLT debt issued in 2022 to 1.7%, the downward trend in the cost of stock of debt continued, with the implicit interest rate standing at 1.7%, without significant reduction of the average maturity of the debt.

With a slight decrease in the share of issues with a residual maturity of more than 9 years (71% of the total issued compared with 83% in 2021) and, therefore, an increase in the short end of the curve (issue of 16% in maturities of less than 6 years when in 2021 no issue had been carried out with this maturity), the average maturity of

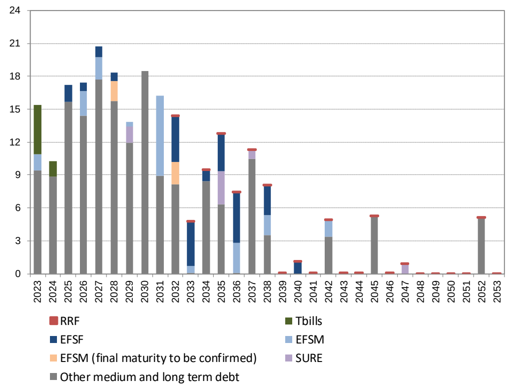
After significant net purchases in the previous two years, in 2022, with the reversal of monetary policy, the ECB decided to end net asset purchases under both the APP and the PEPP, leading to the stabilisation of the Eurosystem's weight across the holders of debt securities issued by the government, increasing its share by only 2 p.p. to 50%, (whereas in 2021 the Eurosystem's weight had increased by 14 p.p.).

State direct debt securities holders
(EUR billions)



The smoothing of the repayment profile is a guiding principle of Portuguese public debt management, given its contribution to reducing the refinancing risk. In order to reduce the Portuguese Republic's short-term refinancing risk and smooth the debt repayment profile, OT repurchase and exchange operations of OT with short maturities for longer maturities continued to be implemented in 2022. In particular, the Portuguese Republic carried out two repurchase auctions of OT with maturity in 2022, 2023 and 2024 by anticipating redemptions totalling EUR 1.8 billion, and two exchange auctions, having repurchased an aggregate nominal value of EUR 2.5 billion of OT maturing in 2023 and 2024 against the issue of OT with longer maturities.

Redemption profile of MLT debt
(EUR billions)



1. THE ECONOMY AND FINANCIAL MARKETS

1.1. International Macroeconomic Context

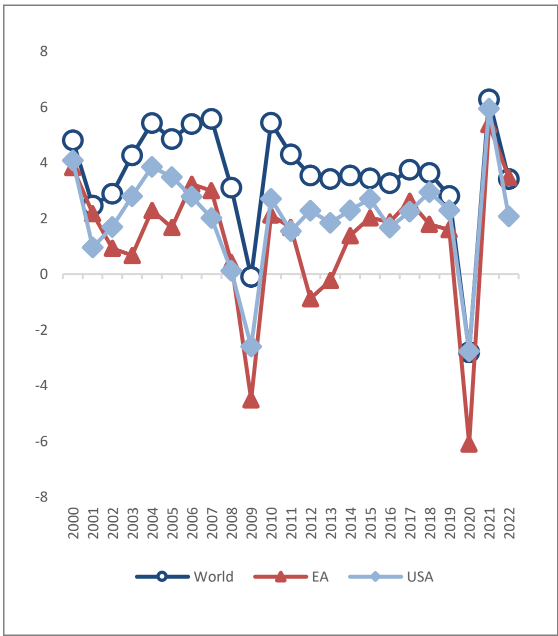
The outbreak of the Russia-Ukraine military conflict in February 2022 was a key driver of global economic developments, as it posed downside the risks to its growth. As these two countries are major suppliers of commodities, with particular emphasis on Russia's role in the supply of energy goods, the immediate consequence of the conflict was a widespread increase in prices, coupled with escalating uncertainty and a loss of confidence across economic agents. In the second half of the year, despite the easing of bottlenecks in global value chains (with some recovery in stocks) has slightly slowed down prices upward evolution, volatility and uncertainty remained, and investors' pessimism about an economic downturn has not faded. According to the IMF's April 2023 estimates, economic activity grew by 3.4% in real terms in 2022, following an increase of 6.3% in 2021. This reflects a significant slowdown in international trade (+5.1% in 2022, after +10.6% in 2021 and -7.8% in 2020) and a relatively stronger investment expansion in the Euro area (+2.8%) than in the US (-0.4%).

After In 2022, in the aftermath of the COVID-19 pandemic, global economy, , continue to face strong challenges, driven by the effect of three factors: Russia's invasion of Ukraine; a cost of living crisis with a loss of household purchasing power caused by persistent and rising inflation pressures; and the slowdown in China's economy, in result of its strict zero-COVID rules. The global economic rebound was thus constrained, reflected in a slowdown in both advanced and emerging economies: in the US output increased by 2.1% (5.9% in 2021): in the euro area the GDP grew by 3.5% (+5.4% in 2021), with a similar trend across other economies such as India, the United Kingdom, China and Brazil. The recovery in activity was quite uneven across major European peers, with countries being hardest affected by the effects of war: GDP rose by 1.8% in Germany, 2.6% in France, 5.5% in Spain, 3.7% in Italy and 6.7% in Portugal. Such a disparity is due to the different economy structure of each country and the economic containment and support measures adopted by each government.

Regarding monetary policy, despite the slowdown in economic activity and fears that some economies may face recession, central banks in most countries, and in particular in the Euro area and the US, have adopted tight policies in 2022, primarily with the aim of controlling inflation pressures. Thus, throughout 2022, the process of increasing key interest rates began, reversing the accommodative nature of monetary policy and the cycle of negative interest rates of recent years, as well as reducing assets on central banks' balance sheet.

Chart 1– World economic growth

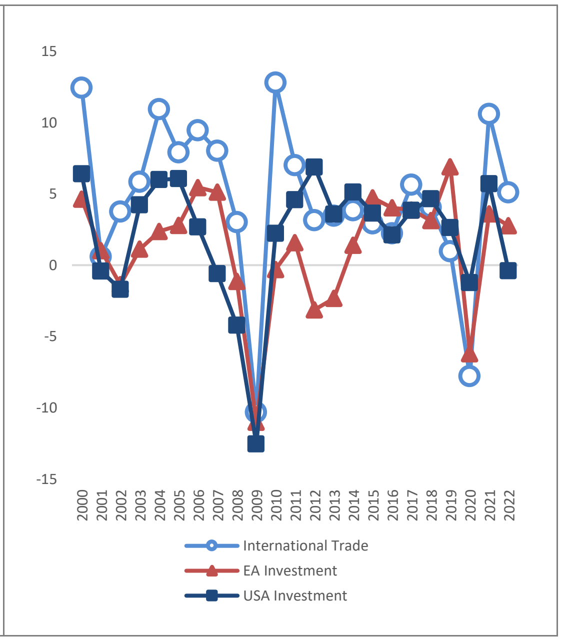
(yoy gr, %)



Source: IMF (April 2023).

Chart 1 – International trade and investment

(yoy gr %)



Source: IMF (April 2023) and AMECO (November 2022).

Despite the slowdown, economic activity proved to be resilient and the labour market also has remained tight, close to full employment and with historically low unemployment levels. In the US, the unemployment rate declined again, to 3.6% in 2022, from 5.4% in 2021 and 8.1% in 2020. In the euro area, the labour market also proved to be resilient, though to a lesser extent than in the US market, where a more flexible labour law structure contributed to a stronger negative impact in 2021 and a further recovery in 2022. Thus, the euro area unemployment rate stood at 6.8% in 2022 – a year-on-year decrease of 1.0 p.p.. Notwithstanding the tight labour market conditions, putting pressure on wages, and thus contributing to persistent inflation, these effects have been broadly contained and there appear to have been no signs of an upward wage-price spiral.

As regards consumer price developments, according to IMF data, global headline inflation, in 2022, reached 7.3%, the highest level in 30 years. This behaviour was largely driven by the following reasons: the rapid reopening of the economy after the pandemic, with demand adjusting faster than supply, which was still affected by several global shocks, the increase in energy and food prices, and the contagion effect reflected in strong upward pressure on core inflation (total index excluding energy and unprocessed food). According to IMF, in 2022, inflation in the US, as measured by the Consumer Price Index (CPI), will have stood at 8.0% (4.7% in 2021), and in the euro area, 8.4% (2.6% in the previous year).

On the public finance side, the IMF estimates that both the euro area and the US have presented similar developments in 2022, although more significant in the latter. On average, the single currency countries will have seen an improvement in budget balance (to a deficit of 3.8% in 2022, down by 1.6 p.p. from 2021), with public debt decreasing compared with the previous year (to 90.9% of GDP, down by 4.0 p.p. from 2021). In the US, the improved post-pandemic economic conditions also resulted in a lower budget deficit (to 5.5% of GDP in 2022, 6.1 p.p. less than in 2021), which in turn translated into a slight decline in debt stock to 121.7% of GDP (-4.7 p.p. year-on-year).

1.2. The Portuguese Economy

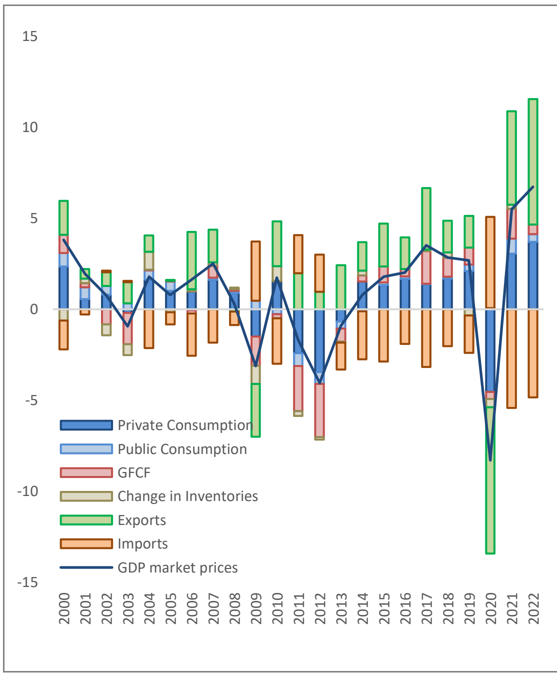
Portugal, despite having shown a slowdown trend throughout 2022, like other European countries, ended up benefiting from a set of factors that allowed it to grow above the previous year and the euro area average. Therefore, in 2022, the Portuguese GDP grew by 6.7% in volume, the highest level since 1987 (compared with a 5.5% growth in 2021, following an all-time decrease of 8.3% in 2020, as a result of adverse effects of the pandemic on economic activity). On the one hand, growth in the first quarters of the year reflected a significant pick-up in private consumption, compared with the same periods, in previous years, still largely influenced by pandemic containment restrictions. Against this background, the first quarter of the year showed a year-on-year growth of 11.9%, with an increase in the contribution of domestic demand, driven by an increase in private consumption, as well as the contribution of net external demand due to the slowdown, in real terms, of imports of goods and services and a slight acceleration of exports of goods and services, reflecting a rebound in tourism. In the second quarter of 2022, with a 6.9% growth compared with the same quarter of the previous year, GDP growth started to slow down mainly due to the decrease in the contribution of domestic demand, with exports of services continuing to drive external demand. In the second half of the year, in a context of heightened uncertainty, the economic slowdown has deepened, with a 4.8% growth in the third quarter and 3.2% in the last quarter of the year.

For the aggregate of the year 2022, domestic demand maintained a positive contribution of 4.8 p.p. (still below the 5.8 p.p. in 2021), while the contribution of external demand became positive, to 2.0 p.p. (compared with the negative contribution of -0.3 p.p., in 2021). Domestic demand benefited from positive changes in all its components, in particular private consumption, which with a real growth of 5.8%, represented a contribution of +3.8 p.p., but also public consumption, which grew by 1.7% (contribution of 0.3 p.p.) and gross fixed capital formation (GFCF), which contributed with +0.6 p.p. due to an expansion of 3.0% (less significant increase compared with the 8.7% in 2021). Imports and exports also increased by 16.7% and 11.1%, respectively. The strong recovery in exports resulted essentially from the significant acceleration in the services component, which increased by +37.7% (+19.6% in 2021) mainly reflecting a strong rebound in tourism (+80.9%).

Against this background, also worth noting were labour market developments, which not only has showed a surprisingly resilient behaviour throughout the pandemic, but also reinforced the positive dynamics in 2022, with a 0.6 p.p. decrease in the unemployment rate, compared to 2021, standing at 6.0% of the labour force. The annual average youth unemployment rate (16-24 years) reached 19.0%, decreasing by 4.4 p.p. from a year earlier. The labour force increased by 1.4%, between 2021 and 2022, also reflecting the recovery, although more subdued, of economic and productive activity, which allowed for the resumption of mobility and an increase in labour force, compared with the pandemic years.

Chart 2 – Economic growth, Portugal

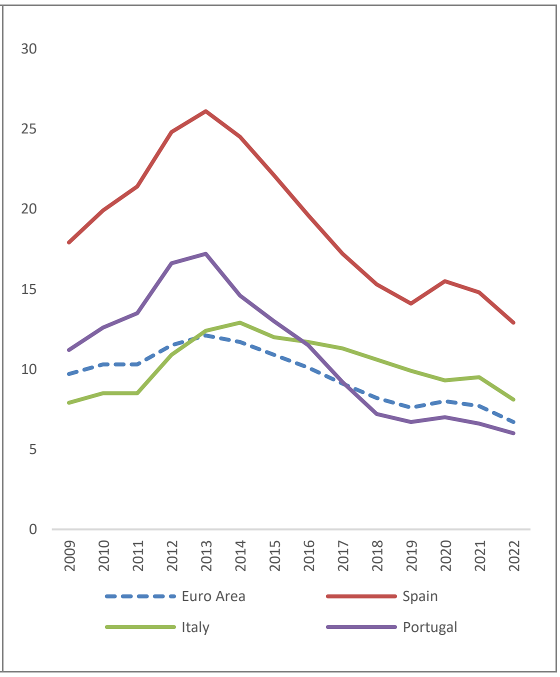
(Contributions to the yoy gr of GDP in real terms, p.p.)



Source: INE (Statistics Portugal)

Chart 3 – Unemployment rate, Portugal and European context

(%)



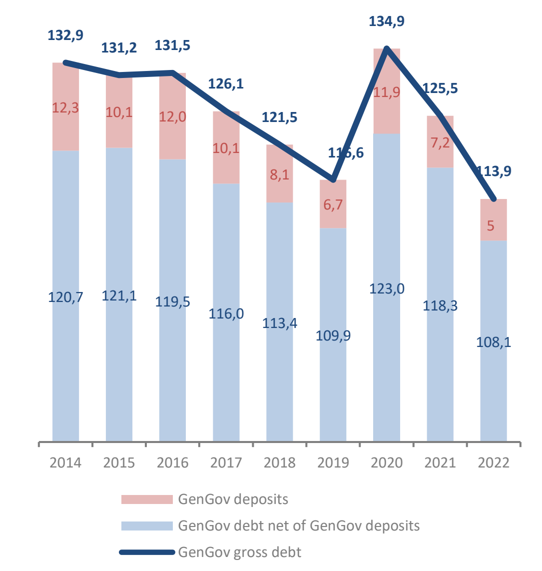
Source: Eurostat

In 2022, Portugal's budget balance was -0.4% of GDP. Although still in negative territory, this represents a significant improvement compared to 2021, when the budget balance reached -2.9% of GDP, and even more when compared with the deficit of -5.8%, in 2020, as a consequence of the extraordinary circumstances of the COVID-19 pandemic. During the year the economic and health recovery that began in 2021 has continued, leading to an increase in revenue (+10.2%), mainly due to positive developments in tax revenue (cross-cutting to most taxes), whereas the increase in expenditure (+4.4%) reflects the effects of public policy measures, some still in the context of the COVID-19 pandemic, even if at a significantly lower extent than in the previous two years and, mostly, new measures introduced to mitigate the effects of the geopolitical shock and rising inflation (especially in the prices of various goods and services and especially energy products). In more detail, revenue performance was strongly influenced both by developments in indirect taxes (contribution of +4.0 p.p.) and by the increase in direct taxes contribution (+5.2 p.p.), as a result of the upturn in economic activity and labour market. On the expenditure side, of note is the growth in social benefits (contribution of +3.0 p.p.), reflecting the exceptional supplements for pensioners and other extraordinary support to income and social benefit holders, to mitigate the negative effect of rising prices. Additionally, should also be noted the 15% growth in capital expenditure (essentially due to the increase in capital transfers related to TAP and EFACEC), as well as a significant decrease in interest (-9.4%), allowing to maintain the downward trend in the ratio to GDP. In this framework, unlike in 2021, the primary balance recorded a surplus in 2022, standing at 1.6% of GDP (an improvement of 2.1 p.p. compared with the -0.5% deficit in the previous year).

The downward trend of public debt (in Maastricht perspective) as a percentage of GDP, which had been observed since 2015, was interrupted in 2020 (134.9% of GDP), but resumed again in 2021, with the ratio standing at 125.4% of GDP that year. By the end of 2022, there was a 11.5 p.p. reduction compared with the previous year, with debt falling to 113.9% of GDP.

Chart4 – Maastricht debt, Portugal

(% GDP)



Source: Banco de Portugal, INE

Chart 5 – Budget balances, Portugal

(% GDP)

Note: 2014, 2015 and 2017 are marked by significant one-offs, associated with support for the banking sector.

Source: INE (Statistics Portugal)

The recent track record of strong economic growth and disciplined public finances, which led to a cumulative reduction of 16.3 p.p. of GDP in debt ratio between 2014 and 2019, has increased the robustness of Portuguese public finances. In this context, the particularly atypical environment in 2020 and 2021, due to the pandemic scenario and the response measures adopted, resulted in a smaller than initially anticipated one-off deterioration of public accounts in 2020. The downward trajectory of the public debt ratio resumed since 2021 contributed to 2022 being a particularly favourable year with a remarkable improvement of the credit rating of the Portuguese Republic, rated as investment grade by major agencies since the end of 2018. Thereafter, the main financial rating agencies have upgraded the rating and maintained stable outlook for the Portuguese Republic. In October 2022, Fitch upgraded Portugal's public debt rating by one notch, from BBB to BBB+, maintaining the stable outlook. This was the fourth upgrade of the Republic's rating in these two years, after Moody's upgraded Portugal, from Baa3 to Baa2, in 2021, with a stable outlook, and in August and September 2022, Standard & Poor's and DBRS Ratings, respectively, raised the rating, from BBB to BBB+, and from BBB (high) to A (low), maintaining the stable outlook. The rating agencies highlighted as positive factors Portugal's fiscal performance, which has consecutively outperformed that of similarly rated countries, as well as that of European peers, and the sustained trajectory of medium-term debt reduction.

1.3. Monetary Policy and Financial Markets

During 2022, the sharp rise in inflation and its global persistence prompted major central banks to begin the process of normalising their monetary policies. Therefore, in March, the US Federal Reserve started raising its key interest rate (Fed funds), which by the end of December, following several increases, was settled between a 4.25%-4.50% range. At a meeting held in May 2022, the Fed set out, and reiterated throughout the year, its plan to shrink its balance sheet by slowing down the pace of net asset purchases by a total of USD 47.5 billion per month (USD 17.5 billion in MBS and USD 30 billion in Treasuries) in the first three months and, as of September, by accelerating the pace to a reduction totalling USD 95 billion per month (USD 60 billion for Treasuries and USD 35 billion for MBS).

In July 2022, for the first time since 2011, the ECB Governing Council also started raising the key Eurosystem interest rates. After several increases and as at December, the marginal lending rate stood at 2.75%, the interest rate on main refinancing operations at 2.5% and the interest rate on the deposit facility at 2%. In terms of the pandemic emergency purchase programme (PEPP), the ECB announced, at its June meeting, and reaffirmed in December, its intention to continue reinvesting principal repayments of maturing securities purchased under the programme until, at least, the end of 2024. At the same time, ECB leaders reaffirmed, at their December meeting, that from March 2023 the portfolio of the asset purchase programme (APP) would be reduced at a moderate and predictable pace, and that they would stop reinvesting a portion of the principal repayments on maturing securities. This decrease would average EUR 15 billion per month, until the end of the second quarter of 2023, and its subsequent pace would be determined over time. The ECB was, however, flexible, and said that it would continue to monitor financing and financial stress conditions and take action whenever there are threats to monetary policy transmission that would jeopardise price stability.

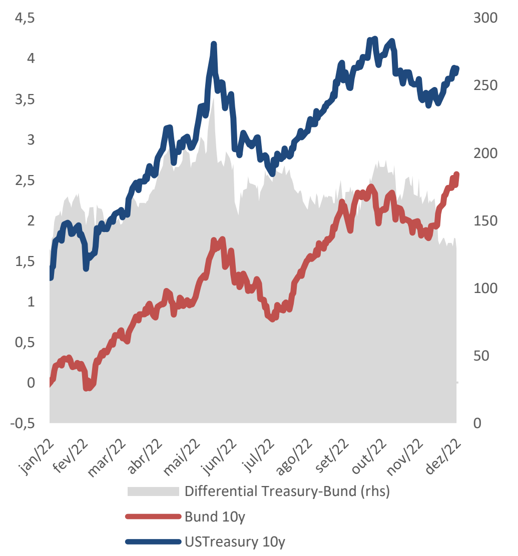
In this context, the 3-month USLibor showed an upward trend in the first quarter of the year, recording 0.317% in January 2022, to reach a high of 4.779% in November, and 4.769% in December. This move reflected the tighter monetary policy adopted by the Fed, based on its commitment to control inflation and bring it close to 2%. The 3-month Euribor also trended upwards over the course of the year, and on 14 July 2022, it returned to positive territory, for the first time since April 2015, and peaked at 2.202% in December. Euribor rates started a sharpest rise movement since 4 February, after the European Central Bank (ECB) have signalled that it would raise its key interest rates, in order to contain rising inflation in the euro area.

The trend in long-term interest rates was similar across these economies, with the spread between the US and Germany showing a rising path in the first half of the year, peaking at 241 bps in June 2022, but slowing down in the fourth quarter, with a 129 b.p. spread. Notwithstanding, rates in the US market remained above those in the euro area. In the first two quarters of the year, most euro area countries shown similar developments in their bonds, with particular emphasis (in annual terms) on the widening spreads of Portugal, Spain and Italy vis-à-vis Germany. In the second half of the year, Portugal, in particular, recorded a slight decrease compared with the first half, while only in the last quarter, Spain and Italy recorded similar reductions, -8.1 bp, -10.6 bp and -8.3 bp , respectively.

The foreign exchange market has been highly volatile since the beginning of the year, reflecting the instability, initially still related to COVID-19 spillovers and later on to the uncertain market conditions arising from the war in Ukraine. In this context, t is noteworthy the depreciation trend of the euro against dollar, with the euro, at the beginning of the year, recording a rate of USD 1.1368, and in July reaching parity, which has not happened for about two decades. In the third and fourth quarters, the euro continued to depreciate against the US dollar, trading just below parity until early November, before recovering and ending the year at 1.0702. Against the pound sterling, the euro also showed great volatility throughout 2022, with the euro appreciating from the beginning of December until the end of the year. As for the renminbi, despite softer changes in the foreign exchange market, the euro appreciated slightly during the last quarter of the year.

Chart 6 – Long-term interest rates

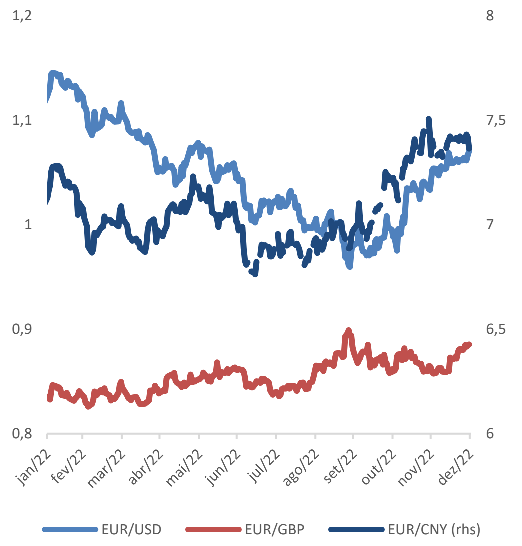
(%, left-hand scale) (bp, right-hand scale)



Source: Bloomberg

Chart 7 – Exchange rates

(currencies versus the euro)



Source: Bloomberg

2. State Financing

2.1. Financing Strategy

Public debt and financing management is subject to the principles set out in the Debt Framework Law (Law No. 7/98, of 3 February) and must ensure the financing required by budget execution, so as to minimise direct and indirect costs in a long-term perspective and to ensure their even distribution across annual budgets, avoiding excessive time concentration of redemptions and an exposure to excessive risks.

In 2022, the State’s net borrowing requirements amounted to EUR 9.3 billion, representing a EUR 4.5 billion decrease, compared to 2021. This change is mostly explained by the government budget deficit, which diminished by EUR 3.7 billion.

Compared with initial projections, gross borrowing requirements were EUR 0.4 billion higher, explained by (i) the higher than initially projected amount of OT redemptions, due to a OT buyback auction (in November) with a maturity beyond 2022 (amounting to approximately EUR 1.5 billion – see Box 1), (ii) the net effect of exchange transactions (amounting to approximately EUR 0.4 billion), (iii) the amortisation of other MLT debt (amounting to EUR 0.1 billion, STCP debt) and (iv) the fall in net borrowing (lower by around EUR 1.6 billion), explained by better budget execution, which resulted in a budget deficit lower than initially estimated. The increase in gross borrowing needs was financed by the use of deposits, bringing the total deposit balance at the end of the year down from the projected EUR 8.2 billion, to EUR 7.0 billion.

The funding strategy outlined for 2022 included the issuance of two new benchmarks (10-year and 20-year, see Annexes A2 and A4) and the reopening of different OT lines through auctions, with the aim of providing liquidity across the curve, anticipating a gross OT issuance volume of about EUR 17.7billion (exchanges excluded). A net increase of EUR 3.0 billion in the treasury bill programme was expected. However, due to the sharp increase in the net issuances of CA/CTPC (EUR 4.4 billion), significant gains from the pooling of funds in the Central Government Treasury (EUR 2.2 billion), the higher than estimated increase in the amount of funding from official loans (EUR 200 million), the issuance of another MLT debt (amounting to EUR 200 million, concerning an EIB loan) and the use of deposits, there was a need to (i) decrease the BT programme by around EUR 1.8 billion, cancelling July, August and November auctions and cutting the amount scheduled for May and June auctions (the October auction, though not initially scheduled, was carried out) and (ii) decrease the OT programme by approximately EUR 5.7 billion.

Official loans under the SURE and PRR programmes contributed with EUR 0.8 billion and EUR 0.6 billion, respectively, to State’s funding sources in 2022.

Table 1- Summary of State borrowing needs and sources in2022

(EUR millions)	Fin Prog OE2022	Execution (P)	Difference
GROSS BORROWING NEEDS	**24 281**	**24 915**	**633**
Net borrowing needs	**10 885**	**9 503**	**-1 382**
Budget deficit (State subsector)	8 725	6 034	-2 691
Net acquisition of State's financial assets	2 160	3 469	1 309
One-off operations	0	0	0
Redepmtion of MLT debt	**13 396**	**15 411**	**2 015**
OT redemptions (reimbursed amount; excl exchange operations)	8 832	10 729	1 897
Official loans redemptions (PAEF+SURE+PRR)	500	500	0
Other medium- and long-term debt redemptions	4 064	4 182	119
FINANCING SOURCES	**24 281**	**24 915**	**633**
Use of deposits (excl cash-collateral)	1 280	2 454	1 174
Funding under official loans (PAEF+SURE+PRR)	1 241	1 420	179
OT issuance (disbursed amount; excl exchange operations)	17 700	11 994	-5 706
OTRV issuance	0	0	0
Other medium- and long-term debt issuances	0	170	170
Net issuances of Tbills (excl Tbills held by FRDP)	3 047	1 260	-1 787
Net issuances of CA/CTPC	148	4 551	4 403
Other movements in the Single Treasury Account (excl cash-collateral)	865	3 066	2 200
Deposits at year-end (excl cash-collateral)	**7 657**	**6 312**	**-1 345**
Cash-collateral at year-end	538	668	130
Deposits at year-end	**8 195**	**6 980**	**-1 215**

Note: Annex 1 provides a more detailed breakdown of the State's borrowing needs and sources, as well as a comparison between the public accounting (budgetary) perspective and the cash perspective (presented above).

Source: IGCP

The funding programme was based on the regular issuance of Government Bonds (OT), throughout the year, in the euro market, to provide liquidity to OT lines, reduce volatility in the proximity of the issuance windows, and make it easier the implementation of Eurosystem's asset purchase programmes for Portugal (PSPP and PEPP). During 2022, the ECB's action was reflected in net asset purchases of approximately EUR 300 million per month.[1] For the year as a whole, the ECB's net purchases of Portuguese public debt totalled around EUR 3.4 billion, compared with EUR 22.6 billion in 2021. These ECB asset purchase programmes continued to have a positive impact, in particular on the OT market, helping to reduce volatility and maintain the buoyancy observed since the second half of 2020 in a market that had been hit by the pandemic crisis.

Market access conditions were favourable in the first half of the year, except for the period following the beginning of Russia's invasion of Ukraine, and stable in the second half. The demand for Portuguese public debt also benefited from promotional initiatives taken by the Agency with financial intermediaries and international investors. In 2022, the IGCP continued to provide regular information to the market, final investors and rating agencies, and maintained regular contact with primary market participants (Primary Dealers and Treasury Bill Specialists). In 2022, global social constraints in the context of the pandemic relaxed significantly, allowing for face-to-face meetings.

In 2022, gross medium- and long-term financing on the market amounted approximately to EUR 14.8 billion (nominal value), with EUR 6 billion (41%) issued through OT syndicated operations, EUR 6.3

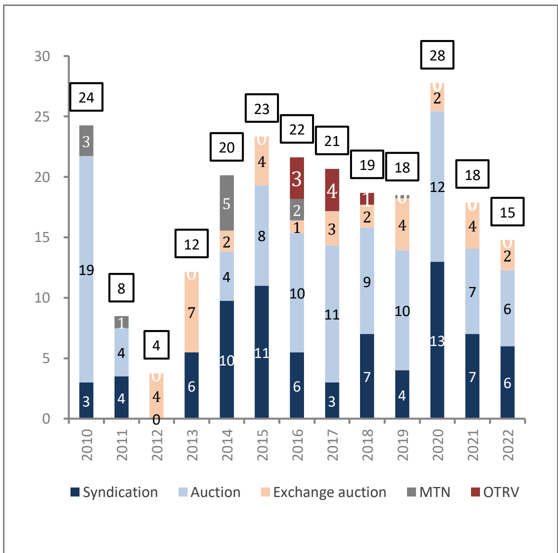
[1] As the breakdown of data on net purchases under the PEPP only occurs for a two-month period, it is assumed in this report that purchases of Portuguese government debt securities under the PEPP, in January 2022, corresponds to 50% of purchases in the period from December 2021 to January 2022 and, in December 2022, corresponds to 50% of purchases, in the period from December 2022 to January 2023.

billion (43%) through OT auctions and EUR 2.5 billion (17%) through OT exchange transactions. As a reference, the overall volume of OT issuances, in 2021, totalled EUR 17.9 billion (in nominal value) carried out through syndicated operations, regular auctions and exchange auctions in the amount of EUR 7 billion (39%), EUR 7.1 billion (39%) and EUR 3.8 billion (22%), respectively.

Due to a State budget execution better than anticipated , the July auction was cancelled and replaced by an exchange auction to maintain a regular OT issuance pattern, aiming for one issue per month. Thus, the weight of financing carried out through syndicated operations and regular auctions increased, in contrast to a decrease in the share of exchange auctions, since two of the exchange auctions were held in 2022 and four in 2021.

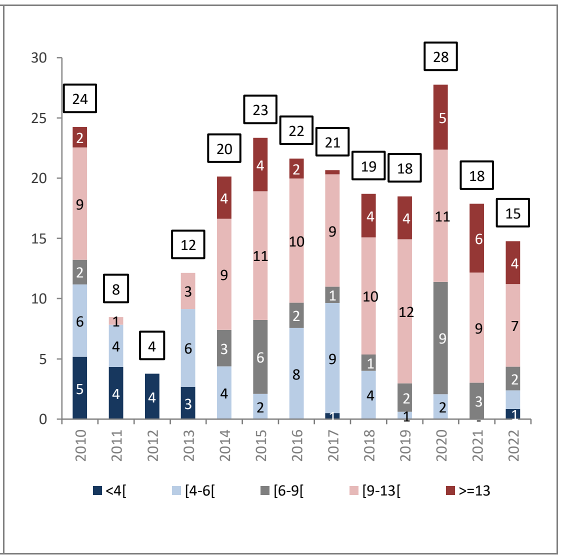
As usual, the first half of the year accounted for a larger share of annual funding raised, corresponding to 67% of the overall amount issued, including OT exchange offers (or 81%, excluding exchange offers), mainly due to the launch of two new 20-year and 10-year bonds, in January and April, respectively, through bank syndicate. In the third quarter, the amount issued totalled EUR 2 billion, including an exchange offer in July. In the fourth quarter, the amount issued totalled EUR 2.8 billion, including an exchange offer in October.

Chart 8 – Medium- and long-term debt issuance by type of placement
(EUR billions)



Source: IGCP

Chart 9 –Medium- and long-term debt issuance by maturity
(EUR billions)

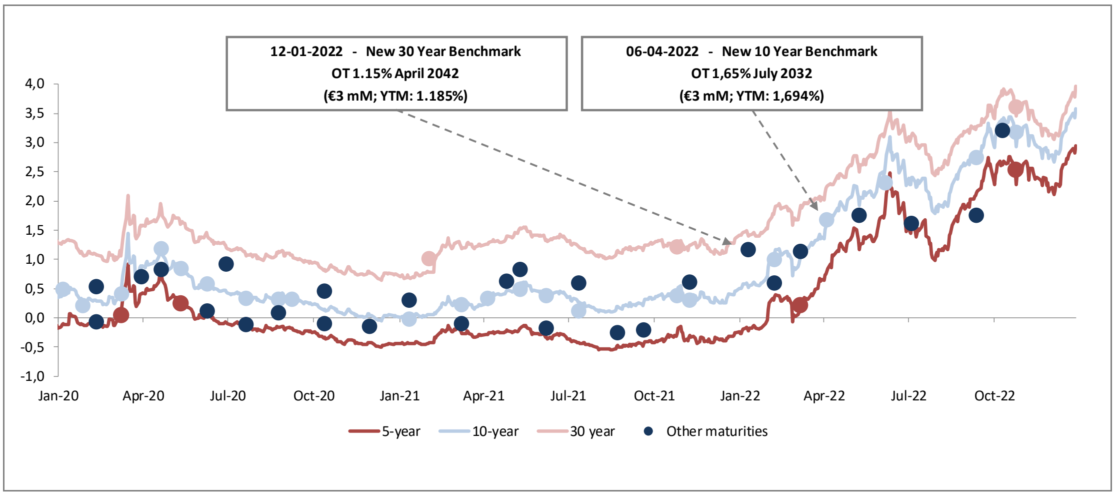


Source: IGCP

In 2022, real money investors continued to be interested in Portuguese Republic's syndicated issuances, namely insurance companies, pension funds, central banks (excluding the ECB and the Banco de Portugal, as they cannot finance States), other public entities, and fund managers, despite the reduction compared to 2021, due to the uncertainty caused by the outbreak of the military conflict in Ukraine and the market access conditions that took place in April 2022, at the time of the second syndicated issuance of the year. Geographically, worth referring is the triad of France, Italy and Spain (with an allocation of 26% and 31%, in January and April syndicates, respectively). These real money investors' interest was typically in the longer end of the curve, creating conditions for the opening and reopening of lines in the long end of the OT curve. The remaining demand continued to be focused on the most liquid maturities: 10-year, in particular.

Issuances with a residual maturity of more than 9 years represented 71% of the total issued, compared with a 83% share in 2021. Conversely, 16% of the total was issued in the short part of the curve (less than 6 years) (no issue was carried out at these maturities in 2021).

Chart 10 – Changes in interest rates in the secondary market and main medium- and long-term debt placements in the primary market (%)



Source: IGCP

The average maturity of medium and long-term debt issued during 2022 stood at 11.3 years, lower than in 2021 (14.2 years). This decrease led to a slight fall in the average maturity of the debt stock to 7.2 years, in December 2022 (including official loans).

The active debt management strategy also benefited from the maintenance of relatively high liquidity buffers, which not only mitigate the refinancing risk in periods of greater market volatility, but also enables the execution of debt repurchases aimed at smoothing the portfolio's repayment profile. In 2022, the strategy of smoothing the repayment profile proceeded, with a focus on the years 2022, 2023 and 2024, contributing to a lower refinancing risk. Throughout the year, debt repurchases were carried out, through buy-back auctions and OT exchange auctions, always in line with market conditions and demand, for an overall amount of around EUR 4.3 billion OT (nominal value).

Box 1 | Public debt repurchases and exchange operations

In 2022, repurchase operations and exchange offers of OT continued to be carried out with the purpose of: (i) mitigating the State's short-term refinancing risk, (ii) smoothing the debt redemption profile, and (iii) increasing the market liquidity of the debt securities.

Against this background, on March 29 and November 30, two repurchase operations were carried out, of treasury bonds with maturities in 2022, 2023 and 2024, which allowed to anticipate redemptions to be made in those years by around EUR 1.8 billion.

In addition, two exchange offers were carried out, on July 6 and October 26, enabling the deferment of around EUR 2.5 billion redemption due in 2023 and 2024, to 2027, 2028, 2032, 2035 and 2052. At the same time, these operations contributed to smooth the redemption profile and to provide liquidity to securities with longer maturities.

Table 2- Repurchase and Exchange operations 2022

Type of operation	Transaction date	Security	Nominal amount (EUR million)	YTM	Residual maturity (years)
Repurchase	29 March 2022	OT 2.2% Oct 2022	431	-0.56%	0.6
Repurchase	30 November 2022	OT 4.95% Oct 2023	250	2.03%	0.9
	30 November 2022	OT 5.65% FEB 2024	1,150	2.07%	1.2
Exchange - (debt purchased)	06 July 2022	OT 4.95% Oct 2023	538	0.69%	1.3
	06 July 2022	OT 5.65% FEB 2024	225	0.85%	1.6
Exchange - (debt sold)	06 July 2022	OT 2.125% Oct 2028	531	1.64%	6.3
	06 July 2022	OT 0.9% Oct 2035	232	2.50%	13.3
Exchange - (debt purchased)	26 October 2022	OT 4.95% Oct 2023	316	1.98%	1.0
	26 October 2022	OT 5.65% FEB 2024	1,416	2.04%	1.3
Exchange - (debt sold)	26 October 2022	OT 0.7% Oct 2027	1,023	2.54%	5.0
	26 October 2022	OT 1.65% JULY 2032	384	3.19%	9.7
	26 October 2022	OT 1% APR 2052	325	3.62%	29.5

2.2. Secondary Market

In the secondary sovereign market, interest rates on Portuguese debt presented an upward trend throughout the year, posting higher levels in the second and fourth quarters. The risk premium has also widened until the end of the second quarter, reversing this trend in the second half of the year until December, when it rose again. In 2022, liquidity conditions worsened compared to 2021. After the widening of bid-offer spreads between the end of 2021 and the end of the first quarter of 2022, in the second quarter of the year there was an upturn, which was reversed in the second half of the year. The interest rate on Portuguese 10-year benchmark government debt rose from 0.46%, at the beginning of 2022, to 3.58% at the end of the year. This was a sharply movement, which reflects the increase in key

ECB rates. The trend was common to the remaining points of the OT curve, but steeper in the short end, with a year-on-year decrease in the slope.

In relative terms, the spread cost of the Portuguese debt vis-à-vis Germany followed the trend of other euro area sovereign peers, peaking in mid-June, but partially reversing in the second half of the year. In the 10-year reference maturity, Portugal closed 2022 at a higher level (+101 b.p.) than at the beginning of the year (+64 b.p.). The spread vis-à-vis Italy, for the same maturity, widened by around 41 b.p. to -112 b.p., by the end of 2022. As regards Spain, the spread remained almost unchanged, between the end of 2021 (-10 b.p.) and the end of 2022 (-7 b.p.).

As regards secondary market liquidity, levels were much lower than in 2021, with a significant decrease in average daily OT trading volumes on inter-dealer platforms and over-the-counter market, compared to 2021, with high bid-offer spreads throughout the year. This reduction in liquidity was mainly driven by the climate of uncertainty, since the outbreak of the Ukraine-Russia conflict, and the following rise in prices, especially energy and food prices and, consequently, to the ECB's action initiated in 2022 to control them. In 2022, average daily OT trading volumes reached EUR 597 million, contrasting to EUR 1,025 million in 2021.

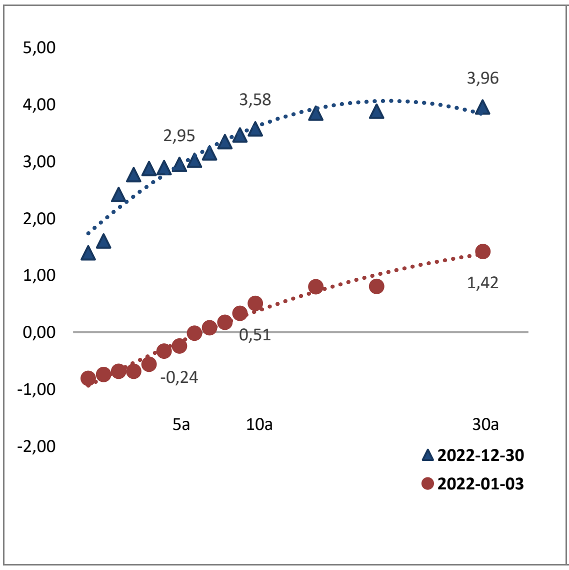
The secondary market flow maintained a significant concentration, as the five largest primary dealers (OEVTs) held a 49% market share in 2022. This represents a similar level to 2021 (48%), but denotes a reversal of the downward trend of previous years, with an increase compared to 2020 (43%). Considering a longer time horizon, the 2022 figure remains well below the 2012 level (when concentration reached 73%).

In terms of BT secondary market transactions, average daily transactions dropped from EUR 453 million in 2021 to EUR 218 million in 2022. By analysing transactions, only on inter-dealer platforms, the trend was also downwards, with the average daily volume decreasing from EUR 389 million in 2021 to EUR 134 million in 2022.

BT issuance rates followed a similar path to that of the OTs, with rates rising until the end of the year. The average annual BT issuance cost was 0.06% in 2022, higher than in 2021 and 2020 (-0.55% and -0.38%, respectively).

Regarding the BT issuance strategy, the issuance policy launched in 2015 was maintained in 2022, i.e. to concentrate issuance on only six lines and to open only one new line every two months, which allows to increase the outstanding balance per line. However, due to liquidity buffers growth over the year, the July, August and November auctions were cancelled, resulting in the BT programme ending the year with only four lines to be carried forward to 2023 (similarly to 2021).

Chart 11 – OT curve developments (%)

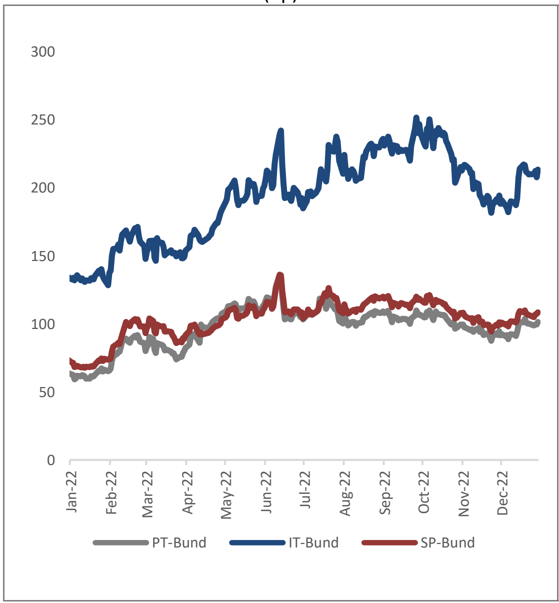


Source: Bloomberg

Chart 12 – 2, 5, 10 and 30-year OT rates (%)

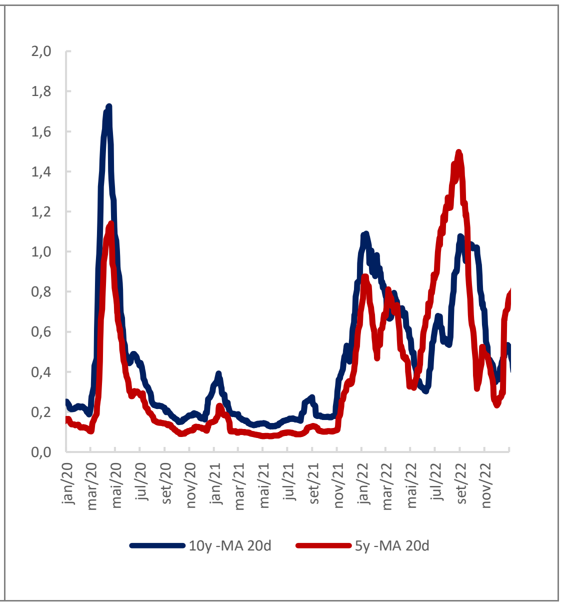
Source: Bloomberg

Chart 13 – Spreads vs. Germany (10 years)
(bp)



Source: Bloomberg

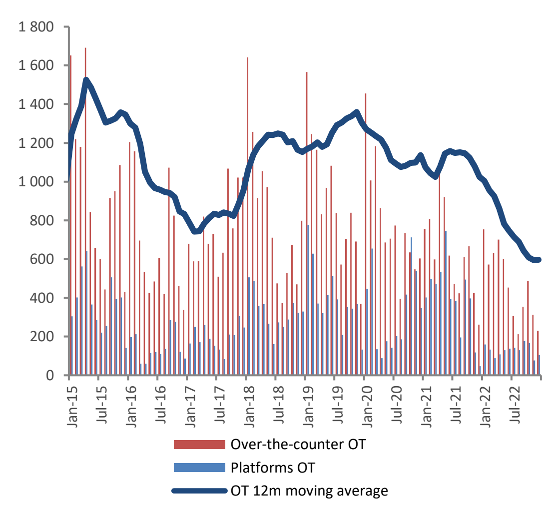
Chart 14 – Bid-offer spread



Source: IGCP

Chart 15 – OT trading on the secondary market

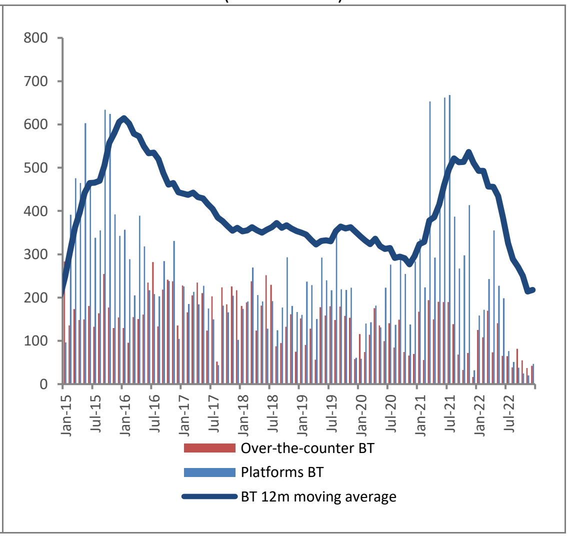
(EUR millions)



Source: Bloomberg

Chart 16 – BT Trading on the secondary market

(EUR millions)



Source: IGCP

3. State Assets and Liabilities

3.1. State Direct Debt and Costs

On 31 December 2022, the stock of State direct debt[2] valued at the end-of-period exchange rate, stood at EUR 287.0 billion (see Table 20 in Annex 5), which represents a EUR 8.5 billion increase compared to 2021 (3.1%). The annual change is mainly due to the increase in the stock of Savings Certificates, by EUR 7.2 billion (contribution of 2.6 p.p.), of CEDIC with an increase of EUR 3.3 billion (contribution of 1.2 p.p.), of OT with an increase of EUR 2 billion (contribution of 0.7 p.p.) and of BT with an increase of EUR 1.3 billion (contribution of 0.5 p.p.), partially offset by the decrease in the stock of OTRV by EUR 3.5 billion (-1.3 p.p.) and Treasury Certificates by EUR 2.6 billion (-0.9 p.p.).

In 2022, the medium and long-term debt issuance remained an important source of financing for the Portuguese Republic. Gross OT issuance, net of premiums and discounts, stood at EUR 14.2 billion, resulting in a positive net issuance of EUR 1.3 billion,with the outstanding amount of OT representing 54.5% of total debt stock by the end of 2022 (55.5%, at the end of 2021). Adding the stock of OTRVs, MTNs and other bonds in euro (with net issuances of EUR -3.5 billion, EUR -0.3 billion and EUR -0.1 billion, respectively), the relative share of medium and long-term tradable debt issued in euros stood at 55.5% (compared to 57.9% in 2021).

[2] The State direct debt is a concept that differs from the public debt compiled by the Banco de Portugal for the purposes of the Excessive Deficit Procedure (Maastricht debt, presented in Chart 5) in several aspects, among which we highlight: (i) differences in sector delimitation – the State direct debt includes only the debt issued by the State, while in Maastricht debt all entities classified, for statistical purposes, in the general government institutional sector are included; (ii) consolidation effects – the State direct debt reflects only the liabilities of this subsector, while the Maastricht debt is consolidated, i.e., excluding general government assets in liabilities issued by the general government itself.

The weight of retail instruments (CA and CT) increased significantly, from 10.9% to 12.1%, reflecting CA's positive performance, with subscriptions recording very high levels, particularly in the last quarter of the year.

In terms of short-term debt (in euro), the outstanding balance increased by around EUR 4.7 billion in 2022, mainly explained by developments in CEDIC and BT, which posted a net increase of EUR 3.3 billion and EUR 1.3 billion, respectively. This evolution, together with the slight increase in cash collateral received under derivative transactions to hedge interest rate and foreign exchange risk (around EUR 0.1 billion), was reflected in an increase in the relative weight of short-term debt instruments by 1.4 p.p., to 10.2% by the end of 2022.

The share of non-euro denominated debt (excluding official loans) fell slightly in 2022, from 1.1% to 1.0% of the total, mainly reflecting the redemption of CNY denominated MTN bonds (amounting to CNY 2.0 billion).

Official loans (including EFAP, SURE and RRP loans) decreased slightly in their relative weight in debt stock, from 19.9% in 2021 to 19.6% by the end of 2022. This decrease mainly reflects other debt instruments' behaviour, which increased in absolute value, thus reducing the percentage of official loans in the overall debt stock. In 2022, the SURE loan balance increased, with the disbursement of the last two tranches of the EC loan to Portugal in March (EUR 523 million) and December (EUR 300 million), together with the receipt of the first tranche of the RRP loan component in May for EUR 609 million. In April 2022, the EFSM loan was also partially redeemed in part by EUR 500 million.

Box 2 | Funding from official loans

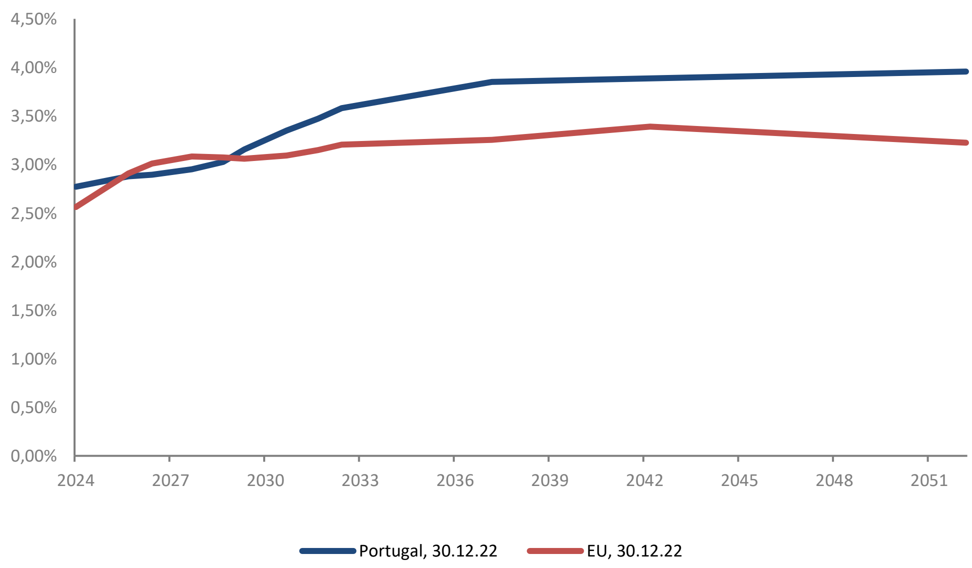
On 19 May 2022, the Portuguese Republic received the first disbursement of the Recovery and Resilience Plan (RRP) funds, composed by EUR 609 million in the form of a loan and EUR 553.4 million in the form of grants, following the European Commission's assessment of the milestones and targets agreed with the European Union. These funds supplement the pre-financing of 13% of the RRP funds received in August 2021, corresponding to EUR 350.9 million in the form of a loan and EUR 1,808 million in the form of grants.

The loan received in 2022, amounting to EUR 609 million, has a 30-year maturity, a 10-year grace period and an average life of 20 years. The interest rate on this loan is linked to the European Union's cost of financing.

The Portuguese Republic also received the final tranche under the SURE[3], on 29 March 2022, amounting to EUR 523 million, as well as an additional tranche of EUR 300 million on 14 December 2022, resulting in a total financing of EUR 6,234 million under the programme.

European Union's financing offers more favourable financial conditions than the Republic's market funding. The yield curves of Portugal and the EU are presented below, showing that there is a financial advantage, on medium and long term, in using RRP and SURE financing, compared with financing through government bonds.

Chart 17 – Portuguese and European Union yield curves



[3] SURE (Support to mitigate Unemployment Risks in an Emergency) is the European instrument for temporary support to mitigate the risks of unemployment in an emergency situation.

Box 3 | Evolution in financing through retail instruments – Savings Certificates (CA) and Treasury Certificates Savings Value (CTPV)

In 2022, the share of retail instruments – Savings Certificates ("CA") and Treasury Certificates ("CT") – in State direct debt increased by 1.3 p.p. compared with the previous year, with these instruments representing 12.1% of total State direct debt by the end of the year (10.9% at the end of 2021).

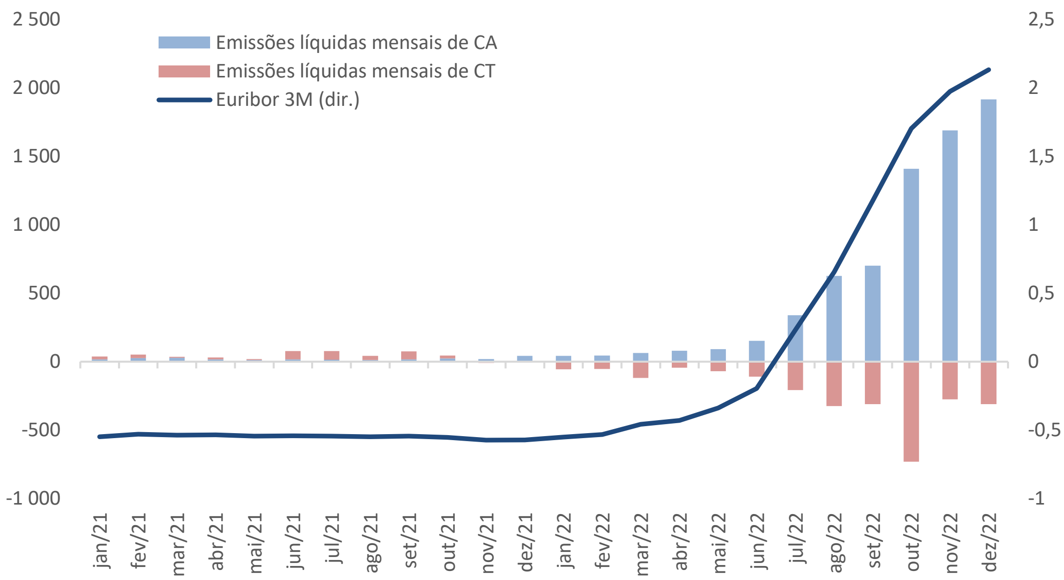
This trend, which occurred mainly in the second half of the year, was influenced firstly by the sharp rise in money market interest rates, which are the reference for CA remuneration, and secondly by the relative increase in CA remuneration, compared with interest rate on bank deposits.

The three-month Euribor rate, to which the CA series under subscription during 2022 (series E) is indexed, rose by around 270 b.p. throughout the year, from - 0.57% at the end of December 2021, to 2.13% at the end of 2022, having entered in positive territory in July.

In this context, net CA subscriptions increased significantly, from the second half of the year, peaking values in the last months of the year (their amount reached around EUR 1.9 billion in December 2022). For the year as a whole, net issuances of CA totalled EUR 7.2 billion.

Inversely, Treasury Certificates (CT) recorded negative net issue of EUR 2.6 billion. In particular, the series available for subscription during 2022, Treasury Certificates for Savings (CTPV), being fixed-rate instruments defined at their launch in September 2021, were losing competitiveness due to the widespread rise in interest rates throughout 2022.

Chart 18 – Evolution of monthly net issuances of savings products



The favourable exchange rate effect of derivatives hedging (net) increased slightly in 2022, totalling EUR 0.6 billion (compared with EUR 0.5 billion in 2021). After derivatives hedging, the outstanding amount of State's direct debt totalled EUR 286.4 billion, an increase of EUR 8.4 billion compared with 2021.

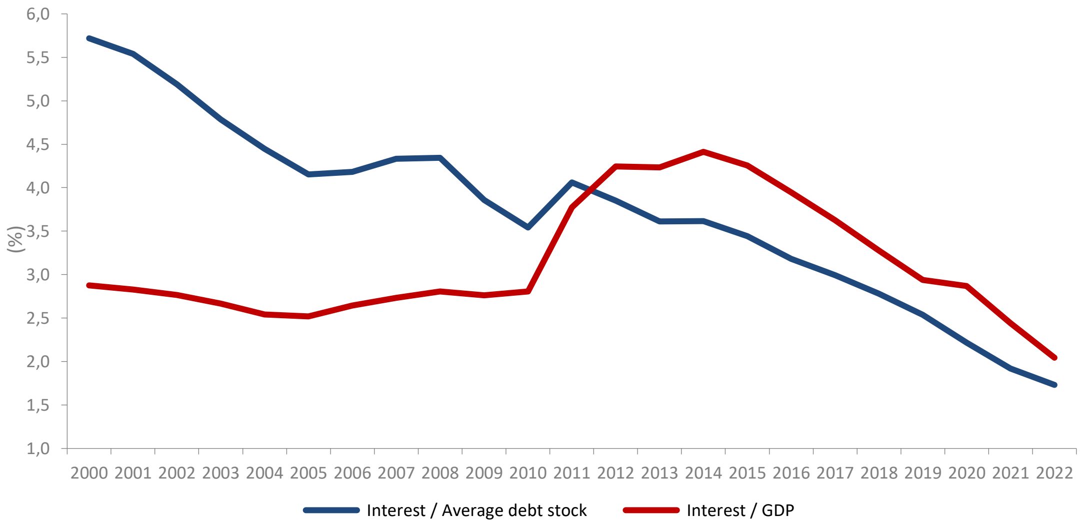
Current debt costs

In 2022, the State's current direct debt burden, on a public accounting basis, amounted to EUR 6.1 billion (net), a decrease of EUR 284 million compared with the previous year (Table 21, Annex 6).

Treasury bonds continued to be the instrument with the largest share in total debt interest, in the amount of EUR 4,382 million in 2022. This figure represents a decrease of EUR 260 million compared with the previous year, mainly due to the maturity of OT 3.85% April 2021 and the effect of exchange operations that had an impact on the reduction of the outstanding amount of OT lines with higher associated coupons. Other debt instruments decreased by EUR 114 million, largely explained by the decrease in interest associated with OTRV, as a result of the decrease in the outstanding balance, and MTN (Medium Term Notes) in USD, reflecting, in this case, the impact of buybacks carried out in 2021. Interest on official loans fell by EUR 46 million, compared with the previous year, mainly reflecting the effect of the extension of the EFSM loan in September 2021, which now has a zero coupon rate associated therewith. Interest on CA and CT increased by around EUR 163 million, reflecting the rise in interests associated with CTPC and CTPM, resulting from the impact of the premium related to GDP growth. On the other hand, interest received from BT totalled EUR 40 million, EUR 10 million lower than the previous year, as a result of the lower volume of issuances, in a context of negative interest rates.

In 2022, interest paid on State direct debt on a National Accounts basis stood at EUR 4.9 billion, thus maintaining the downward trend of the past seven years. The annual decrease, which amounted to EUR 353 million, reflected the favourable and particularly significant development in price effect (decrease in the implicit interest rate), which more than offset the increase in the outstanding debt (Table 23 in Annex 6). In fact, the implicit interest rate is on a consistent downward trend, having reached a new historical low of 1.7% in 2022. The ration of interest on GDP also registered a favourable evolution, decreasing from 2.4% in 2021, to 2.0% in 2022.

Chart 19 – Evolution of interest on State direct debt (National accounts basis) (%)



3.2. State Treasury

State Treasury assets

The breakdown of the State's cash holdings for the 2021-22 period is shown in Table 3.

Table 3- Cash Accounts

EUR millions	dez/21	dez/22
Accounts in BoP	9 306	6 980
Financial Applications	0	0
Foreign Exchange Accounts	3	4
Other Bank accounts	1	0
RCE Accounts (Banks, CTT, SIBS, IRN e National Treasury)	476	256
External Deposits	3	2
Checks	1	1
TOTAL	**9 790**	**7 243**

Source: IGCP

The analysis of the table above shows that the State's cash position at the end of 2022 were down by about EUR 2.5 billion, compared with the previous year, with a 25% decrease in amounts deposited at the Banco de Portugal (BdP).

By the end of 2022, the State's cash position amounted to EUR 7.0 billion (or EUR 6.3 billion, excluding cash collateral) compared with EUR 9.3 billion at the end of the previous year (or EUR 8.8 billion, excluding cash collateral). The decrease in the cash position in 2022, resulted mainly from the use of the cash balance to finance 2022 needs, allowing for a decrease in funding taken out during the year, while reflecting a lower coverage of estimated net financing needs for 2023 than in previous years, which were particularly demanding due to the impact of measures to tackle the effects of the pandemic crisis.

State Treasury Unit

The State Treasury Scheme (RTE), established by Decree-Law No 191/99 of 5 June and reinforced by the State Budget Law on an annual basis, has established the principle of the State Treasury Unit (UTE), according to which any activity in public funds must be centralised in bank accounts with the IGCP. The UTE is thus a key instrument for the optimisation of the State's liquidity management and financing.

The distribution of funds from public entities and services centralised in the State's cash management system is shown in table 4, taking as a reference the universe of public entities and services using the Internet Banking (IB), the application that acts as the privileged IT support for appropriate compliance with the UTE.

Table 4 - Cash holdings of Public Services and Entities

Type of Client	Funds (EUR millions)							
	Current Account		CEDIC		CEDIM		TOTAL	
	2021	2022	2021	2022	2021	2022	2021	2022
ONSUTE	4 406	5 093	6 362	6 917	0	0	10 768	12 011
SEE	1 301	1 312	2 195	2 352	21	21	3 518	3 685
SFA	3 779	3 883	8 914	9 906	559	765	13 252	14 554
SI	2 067	897	52	1 650	0	0	2 119	2 547
TOTAL	**11 553**	**11 185**	**17 524**	**20 826**	**580**	**786**	**29 657**	**32 797**

Source: IGCP

Considering the cash holdings of public services and entities in State treasury, there was an increase of EUR 3,140 million, between 2021 and 2022.

This change is mainly the result of the increase in the amounts invested in CEDIC by around EUR 3,302 million compared with the previous year, following compliance with Article 101 of Decree-Law No 53/2022, of 12 August 2022, and Order of the Minister of Finance No 14343/2022, of 15 December 2022.

Concurrently, the amounts held in current accounts decreased by about EUR 368 million, which shows that they were transferred to CEDIC subscriptions.

Initiatives to Promote the State Treasury Unit

Throughout 2022, several initiatives were carried out to promote the UTE (State Treasury Unit), which greatly contributed to achieving the level of pooled cash holdings in State's treasury, as shown in Table 4.

The UTE was disseminated to public services and entities at meetings, through the signing-up of service agreements, opinions issued on the UTE, as well as through persistent contacts with account managers.

In the course of these initiatives, the IGCP has always sought to advise public services and entities to use the tools that best fit their reality, within the range of banking services provided by the State's treasury.

Of the many meetings held with public departments and entities, eight stand out, held with potential clients using AMA (*Agência para a Modernização Administrativa, I.P.*)'s Public Administration Payment Platform (PPAP), for collecting revenue, by using the Single Billing Document (DUC).

Following the contacts initiated in 2021, AMA launched, in 2022, the option "Payments to the State" in the Public Administration Payment Platform, acting, in conjunction with the IGCP, as a technical facilitator with public departments and entities in generating their DUC references and in the exchange of issue and collection files.

This partnership with the AMA, is a first step towards the reformulation and revitalisation of the use of the State's Collection Network (RCE), aiming, at this stage, to technologically make the connection between public departments and entities, with the State network easier, but in the medium term is expected to :

a) drive the State's Collection Network modernisation, through DUCs real-time issue and collection;
b) foster reductions in collection costs incurred by the State;

c) improve management information for the IGCP and revenue management entities.

The initiatives undertaken by the IGCP to promote the UTE also resulted in the conclusion of around 30 agreements for the provision of banking services, 60% of which related to the provision of POS terminals (at the end of 2022, the IGCP had provided around 5,419 devices, which allowed for the inflow of public funds to the State‘s cash account of around EUR 342 million), and the remaining 40% related to collateral deposit agreements. Also in a finalising stage, for implementation as of 2023, was the draft tripartite agreement that will be used in all new applications of public services and entities for the State’s Collections Network, thus involving the AMA in its capacity as technological facilitator.

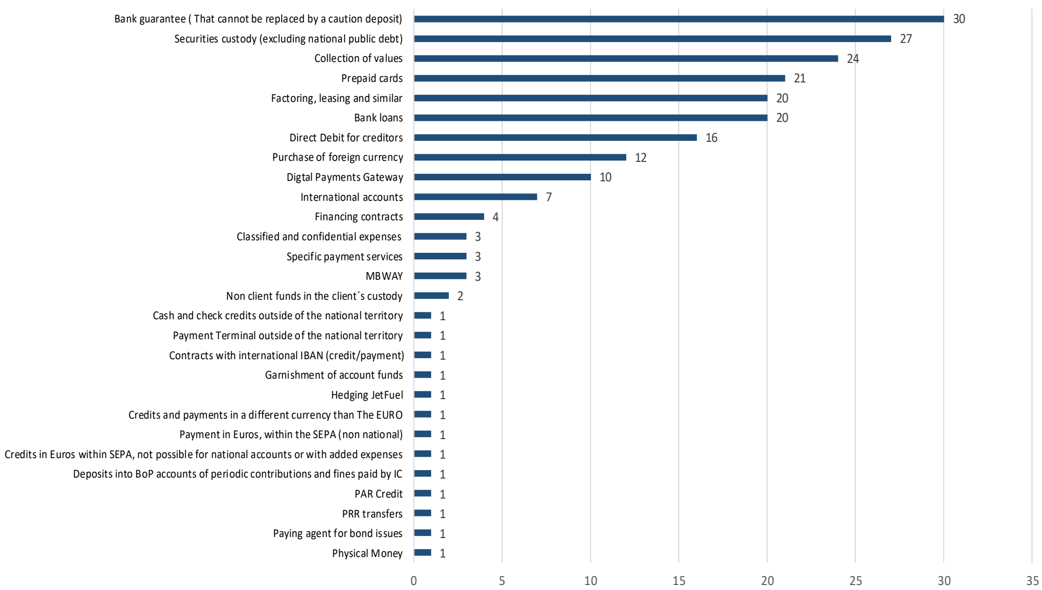
Under the terms of Article 136 (5) of Law No 12/2022, of 27 June 2022, public services and entities may be exempted from complying with the UTE. Cumulatively, according to Article 102(5) of Decree-Law 53/2022 of 12 August 2022, the IGCP may, in duly grounded exceptional situations, authorise the exemption from compliance with this principle, for a maximum period of two years.

In 2022, the IGCP issued 104 opinions on requests for exemption from UTE compliance requested by public services and entities, 24% of which were made by entities of the Ministry of Heath, 16% of the Ministry of the Environment and Climate Action and 12% of the Ministry of Finance.

Chart 21 illustrates the reasons given by public services and entities to justify the requests for exemption.

The 6 most common reasons given in requests for exemption from the UTE are: bank guarantees (which cannot be replaced by collateral deposits), custody of securities (excluding national public debt), collection of securities, prepaid cards, factoring, leasing and similar, and bank loans, which account for more than 60% of the reasons given for exemption.

Chart 20 – Reasons for requesting exemption from the UTE



Source: IGCP

As regard contacts established by the account managers, particularly noteworthy is that public services and entities, in a satisfaction survey carried out in 2022, assessed their degree of satisfaction with the performance of their managers at 91%.

4. Debt Portfolio Management and Risk Limits

4.1. Management of State's Derivatives Portfolio

The main purpose of derivative operations carried out in 2022 was to ensure the interest rate risk hedging of the portfolio, in a context of high inflation and an expected rise in market rates. Transactions executed were mainly related to pay fixed 10-year interest rate swaps as part of the strategy to hedge the cost of OT issuances made under the financing programme.

The derivatives portfolio posted a net profit of EUR 231.3 million over the year, mainly explained by the positive effect of the US dollar's appreciation against the euro in the market value of the currency hedging instruments, associated with a USD bond issuance. This outcome reflected, among other factors, the divergence in the pace and extent of monetary policy between the US and the euro area, with a difference in key rates, favouring the US dollar.

Moreover, the result of interest rate derivatives was also positive due to an increase in long-term rates, which reflected the ECB's withdrawal of monetary stimulus and the start of a cycle of interest rate hikes to ease inflation pressures in the euro area.

Table 5- Change in the financial derivatives portfolio

(EUR millions)	Market value		Cash-flow over the period (*)	Net income
	30 December 2022	*31 December 2021*		
	(1)	*(2)*	*(3)*	*(4) = (1) - (2) + (3)*
Interest rate	**17.0**	**-32.1**	**-11.8**	**37.4**
Exchange rate	**630.9**	**535.5**	**98.6**	**193.9**
Total	**647.9**	**503.4**	**86.8**	**231.3**
STCP derivative (**)	**0.0**	**-14.6**	**-14.6**	**0.0**

(*) Positive cash flows correspond to derivative receivables while negative cash flows correspond to payments made.

Source: IGCP

4.2. EPR Derivatives Portfolio

As part of its duties in managing the State direct debt, the IGCP is responsible for monitoring the derivatives portfolio of public enterprises that are financed through the State Budget (EPR – State-owned companies within General Government).

Considering that EPRs are hindered from obtaining financing on the market, no new hedging derivative financial instruments have been taken out. As at 31 December 2022, 8 derivative instruments remained outstanding in EPR portfoliosat a market value of EUR -12.7 million and a contractual value of EUR 322.5 million.

Table 6- EPR derivatives portfolio

(EUR millions)	Number of derivatives	Nominal amount	Market value		Cash-flow in the period (*)	Net income
			30 December 2022	*31 December 2021*		
		(1)	*(2)*	*(3)*	*(4)*	*(5)=(2)–(3)+(4)*
Metropolitano de Lisboa	4	260.0	-15.6	-122.0	-32.2	74.2
Metro do Porto	2	62.5	2.9	-110.4	-105.0	8.3
Total	**6**	**322.5**	**-12.7**	**-232.3**	**-137.2**	**82.5**

(*) Positive cash flows correspond to derivative receivables while negative cash flows correspond to payments made.

Source: Valuation made by the IGCP, except for the value of Metropolitano de Lisboa's derivative, which uses the counterparty's valuation.

The net result of this portfolio amounted to EUR 82.5 million over the year, which is mainly explained increase in euro interest rates, in particular at shorter maturities, as well as their volatility.

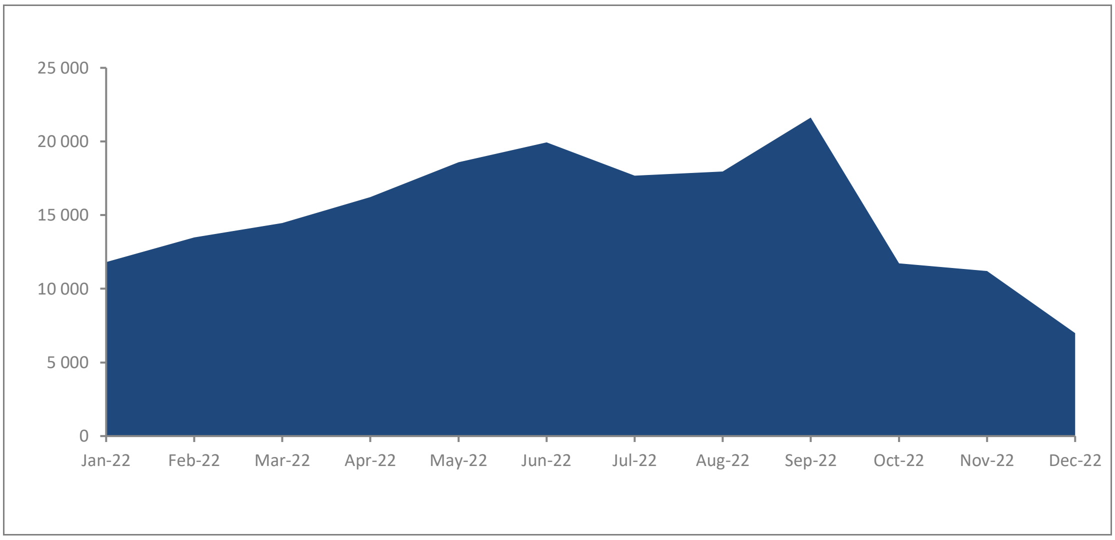
4.3. Cash Management

Throughout 2022, the objective pf ensuring maximum liquidity in the State's cash and cash equivalents holdings was maintained, therefore, of the universe of instruments available for liquidity management, deposits with the Banco de Portugal continued to be favoured.

By the end of 2022, the State' cash position was equivalent to EUR 7 billion, compared to EUR 9.3 billion at the end of 2021. The drop in cash balance throughout 2022 reflects a greater use of deposits to meet the State's financing needs.

Chart 21 – Deposits of the Single Treasury Account in Banco de Portugal

(EUR millions)



Source: IGCP

Despite the increase over recent years, the cost of holding the cash position, calculated on the basis of the average cost of BT and OT (or BT only), remained relatively low, reflecting that the increase in debt financing cost was relatively contained.

Table 7- Estimate of cash position costs

(EUR millions)

	Implicit rate total stock (1)			Average cost (BT+OT) (2)			Average cost (BT) (3)		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Average deposits balance	14 009	13 850	14 676	14 009	13 850	14 676	14 009	13 850	14 676
Financing cost/Financing (%)	2,2%	1,9%	1,7%	0,3%	0,2%	1,2%	-0,4%	-0,5%	0,1%
Average cost of funfing of the Treasury cash balance	311	266	254	38	26	182	-56	-76	9
Interest received from Treasury deposits	8	14	-13	8	14	-13	8	14	-13
Net cost of Treasury cash balance	**318**	**280**	**241**	**46**	**39**	**169**	**-49**	**-62**	**-3**
As % of average deposits balance	2,3%	2,0%	1,4%	0,3%	0,3%	1,2%	-0,3%	-0,4%	0,0%
As % of average State's direct debt stock	0,1%	0,1%	0,1%	0,0%	0,0%	0,1%	0,0%	0,0%	0,0%
As % of GDP	0,2%	0,1%	0,1%	0,0%	0,0%	0,1%	0,0%	0,0%	0,0%

Notes: (1) Implicit interest rate is computed as the ratio between interest paid on State direct debt paid on an accrual basis and the average debt stock in a given year. (2) The Funding cost of BT and OT corresponds to the average interest rate of new financing of BT (funded issues) and OT during the year. (3) Funding cost of BT corresponds to the average interest rate of new financing of BT (funded issues) over the year.

Source: IGCP

4.4. Cost Indicators

On 31 December 2022 the market value of the overall State direct debt portfolio[4] was EUR 269,835 million, reflecting a discount of 6.7% over its nominal value. The average coupon of the portfolio

[4] The government direct debt considered is consistent with the portfolio considered for the purposes of the risk indicators reported quarterly to the ESDM - Economic and Financial Committee's Sub-Committee on EU Sovereign Debt Markets and with

decreased slightly to 1.9%, in 2022, while the average yield increased to 3%. The average debt redemption period dropped to 7.2 years.

Table 8 - Cost indicators at year-end (EUR millions)

	2020	2021	2022
Nominal value	267,955	277,976	286,411
Average coupon	2.4%	2.0%	1.9%
Average yield	0.4%	0.5%	3.0%
Average redemption period (years)	7.4	7.4	7.2
Market value	311,878	310,492	269,835
Premium (incl. accrued interest)	15.1%	10.7%	-6.7%

Source: IGCP

4.5. Risk Indicators

The Guidelines for the Management of Government Debt (Guidelines) identify the risk indicators considered most relevant for the debt portfolio and set limits to its exposure. The Guidelines set maximum limits to the interest rate risk (refixing profile and modified duration), refinancing risk, exchange rate risk and credit risk of the adjusted portfolio.

CaR – Cost at Risk

The estimated CaR for the debt portfolio measures the effect of changes in interest rates on the value of the costs associated with the debt portfolio, assessed on a cash-flow basis over the relevant future time horizon. Absolute CaR is the maximum amount that the cash-flow cost can reach with a 95% probability over the following year; relative CaR reflects the maximum deviation of this cost compared with its expected value.

Based on the financing needs outlined in the 2023 State Budget; the portfolio's position as at the end of 2022; a central scenario for 2023 financing and a set of simulated scenarios[5] for the dynamics of the interest rate curve (BT and OT):

– The expected value of the portfolio costs in 2023 (calculated on a National Accounts basis) is EUR 6,320 million;

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total government direct debt after derivative hedging, and therefore does not include cash investments and includes cash received on margin accounts associated with financial derivatives and securities issued for delivery as collateral.

[5]For scenario simulation for the interest rate term structure, a VAR (Vector Autoregressive) model with 3 factors obtained by Principal Component Analysis was used.

– There is only a 5% probability that this figure will exceed EUR 6,484 million (absolute CaR), due to changes in interest rates.

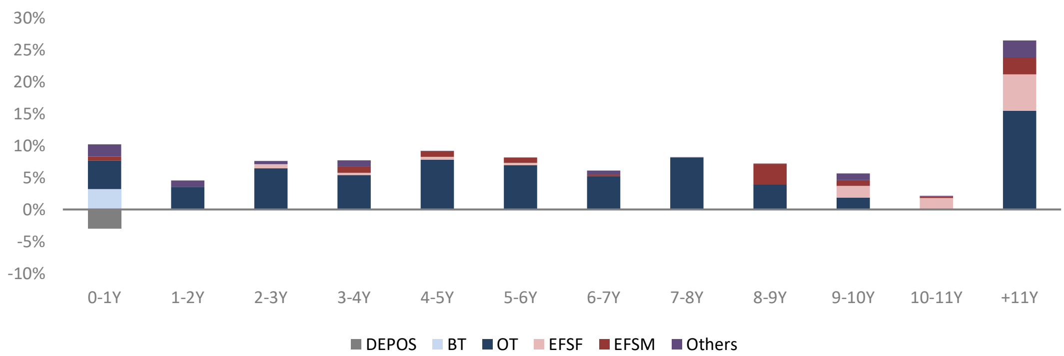
- The relative CaR, for the same significance level is EUR 164 million. Compared to GDP, the probability of the deficit-to-GDP ratio increasing by more than 0.07 p.p. in 2023, due to changes in interest rates, is less than 5 per cent.

Refinancing risk

In addition to market variables (e.g. tradability, liquidity, maintaining a benchmark yield curve for the Portuguese Republic), the management of the debt portfolio takes into account the control of the refinancing profile, to avoid an excessive concentration of redemptions that may lead to higher financing costs in the future.

The absolute limits set on the percentage of the portfolio maturing within 12, 24 and 36 months are 25%, 40% and 50%, respectively. At the end of 2022, the adjusted portfolio showed the following refinancing profile, in full compliance with these limits.

Chart 22 – Portfolio refinancing profile at end-2022



Source: IGCP

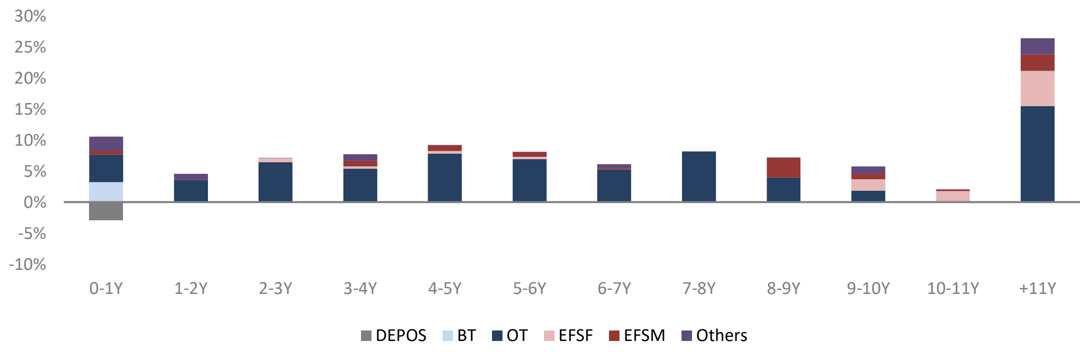
Interest rate risk

The modified duration[6] of the total and adjusted debt portfolio stood at 4.50 and 5.39, respectively, at the end of 2022. During 2022, the duration of the adjusted portfolio was always higher than the established lower limit of 4.0.

At the end of 2022, the portfolio had the refixing profile (i.e. percentage of the nominal value of the portfolio adjusted, to be refixed or maturing, by term), as shown in the figure below.

[6] Modified duration measures the elasticity of the portfolio's market value to changes in market interest rates.

Chart 23 – Refixing profile at end-2021



Source: IGCP

Exchange rate risk

At the end of 2022, primary currency exposure (i.e. excluding hedging operations) was 1.27% of the total adjusted debt portfolio, far below the 20% limit set by the Guidelines. This exposure is the result of bonds issued in foreign currency (USD).

At the end of the year, the net exchange rate exposure was 0% (i.e. after hedging swaps and forwards).

Credit risk

The assumption of credit risk by the Portuguese Republic results from operations involving derivatives, repos and money market applications. The Guidelines in force, approved by the Secretary of State in 2013, establish risk diversification and the allocation of exposure limits to each counterparty, depending on its credit quality.

The credit risk of each counterparty (i.e. of all its derivative agreements with the Portuguese Republic) is calculated using a methodology that includes two components: its current market value, which represents the transaction substitution value of each transaction, plus an add-on, designed to estimate the potential variation of that value in the future. The market value of the collateral received or delivered under the CSA should be deducted from the amount, resulting from the sum of these two components.

Throughout 2022, the credit risk exposure of the derivatives portfolio remained below the overall limit set at 3% of the adjusted portfolio. At the end of the year, the exposure corresponded to 0.03% of the adjusted portfolio value, i.e., that limit was occupied by 1.16%.

Table 9 -Risk indicators at year-end (EUR millions)

	2020	2021	2022
Primary Foreign Exchange Exposure (% adjusted portfolio)	1.86%	1.36%	1.27%
Net Foreign Exchange Exposure (% adjusted portfolio)	0.00%	0.00%	0.00%
Total Portfolio Duration (years)	5.71	5.65	4.50
Adjusted Portfolio Duration (years)	6.30	6.43	5.39

Source: IGCP

Annexes

A1. Borrowing Requirements and sources in 2022

Table 10 - State borrowing needs and sources on a public accounts basis

(EUR million)	2021	2022(P)
1. NET BORROWING REQUIREMENTS	**13 773**	**9 251**
Budget Deficit	9 471	5 781
Net acquisiton of financial assets (except privatisations)	4 301	3 469
FRDP reimbursement	0	0
Transfer of cash balances of *ADSE*	0	0
2. REDEMPTIONS AND CANCELLATIONS (Funded Debt)	**42 122**	**47 763**
Saving Certificates + Treasury Certificates	4 959	5 566
Short-term euro-denominated ebt	18 914	24 530
Medium- and long-term euro-denominated debt	16 662	17 409
Non-euro denominated debt	1 387	279
Swap capital flows (net)	200	-22
3. GROSS BORROWING REQUIREMENTS (1. + 2.)	**55 894**	**57 014**
4. SOURCES OF FINANCING	**56 070**	**57 775**
Balance of funding from previous budgets	1 501	198
Debt issuance of the year's budget	52 994	53 777
Debt issuance in complementary period	1 575	3 800
5. BALANCE OF FUNDING FOR FORTHCOMING BUDGETS (4. - 3.)	**198**	**522**
memo . Statistical discrepancies	23	-240
***memo* . DEBT ISSUANCE IN THE CIVIL YEAR (Funded Debt)**	**52 994**	**55 352**
Relative to the budget of the previous year (Complementary Period)	0	1 575
Relative to the year's budget	52 994	53 777

Note: The figures for 2022 execution are provisional until the CGE(State's General Accounts)/2022 are published.
Source: Ministry of Finance, IGCP.

Table 11 - State borrowing needs and sources on a cash management basis

Necessidades e fontes de financiamento 2021 e 2022 (EUR milhões)	2021	2022(P)
NECESSIDADES BRUTAS DE FINANCIAMENTO	**26.598**	**24.662**
Défice orçamental do Estado	9.471	5.781
Aquisição líquida de ativos financeiros do Estado (exceto privatizações)	4.301	3.469
Operações pontuais	0	0
Amortizações OT (inclui efeito líquido de operações de troca)	7.888	10.729
Amortizações empréstimos oficiais (PAEF+SURE+PRR)	0	500
Outras amortizações de dívida MLP	4.937	4.182
FONTES DE FINANCIAMENTO	**26.598**	**24.662**
Utilização de depósitos (excl contas margem)	8.281	2.454
Emissões empréstimos oficiais (PAEF+SURE+PRR)	3.593	1.420
Emissões OT e MTN	14.559	11.994
Emissões OTRV	0	0
Outras emissões de dívida MLP	0	170
Emissões líquidas BT (excl títulos detidos pelo FRDP)	-4.760	1.260
Emissões líquidas CA/CTPC	536	4.551
Outros movimentos na Tesouraria Central do Estado (excl contas-margem)	4.389	2.813
Saldo de depósitos no final do ano (excl contas-margem)	**8.766**	**6.312**
Saldo de contas-margem no final do ano	540	668
Saldo total de depósitos no final do ano	**9.306**	**6.980**

Note: The figures for the 2022 execution are provisional until the CGE (State's General Accounts)/2022 are published.
Source: Ministry of Finance, IGCP.

A2. Financing composition in 2022

Table 12 - Financing composition

(EUR million)	Issuance	Redemption	Net
EURO DEBT	**55 352**	**47 506**	**7 846**
CA - Saving Certificates	7 880	723	7 157
CT - Treasury certificates	2 238	4 843	-2 605
CEDIC	20 826	17 523	3 303
CEDIM	248	42	206
BT - Treasury Bills	7 727	6 467	1 260
OT - fixed rate government bonds	14 175	12 909	1 265
Floating rate Treasury Bonds (OTRV)	0	3 500	-3 500
EFSF	0	0	0
EFSM	-6	500	-506
SURE	817	0	817
RRF	609	0	609
Other short-term debt	668	540	128
Other medium- and long-term debt	170	458	-288
NON-EURO DEBT	**0**	**279**	**-279**
IMF	0	0	0
Other Debt	0	279	-279
SWAPS (NET)	**0**	**-22**	**22**
TOTAL	**55 352**	**47 763**	**7 589**

Note: The figures for the 2022 execution are provisional until the CGE/2022 is published.
Source: Ministry of Finance, IGCP.

Table 13 -OT issuance via syndication

Date	Issue	Nominal value (EUR millions)	Reoffer yield	*Spread vs benchmark*[1] *(bp)*	*Mid swap spread* (bp)
12 Jan 2022	OT 1.15% ABR 2042	3,000	1.185%	114	60
06 April 2022	OT 1.65% JUL 2032	3,000	1.694%	102	35

[1] Bund.

Source: IGCP

Table 14 -OT issuance via auction

Data	Security	Competitive auction nominal value (EUR millions)	Non-competitive auction nominal value (EUR millions)	Cut-off/allocated yield	*Mid swap spread* (bp)
09-Feb-2022	OT 2.125% OUT 2028	544	0	0.60%	-1.1
09-Feb-2022	OT 0.3% OUT 2031	706	0	1.01%	29.6
09-Mar-2022	OT 4.125% ABR 2027	500	1	0.22%	-31.1
09-Mar-2022	OT 2.25% ABR 2034	500	21	1.15%	19.6
11-May-2022	OT 0.475% OUT 2030	750	141	1.77%	4.3
08-Jun-2022	OT 0.3% OUT 2031	750	10	2.33%	31.5
14-Sept-2022	OT 2.875% JUL 2026	470	0	1.78%	-69.2
14-Sept-2022	OT 1.65% JUL 2032	780	0	2.75%	17.6
12-Oct-2022	OT 2.875% OCT 2025	349	36	2.09%	-93.8
12-Oct-2022	OT 0.3% OUT 2031	651	72	3.23%	-5.0

Source: IGCP

Table 15 - OT exchange offers

Date	Security	Side	*Exchange offer YTM*	Nominal value (EUR millions)
06 July 2022	OT 2.125 OUT 2028	Issue	1.64%	531
06 July 2022	OT 0.9 OUT 2035	Issue	2.50%	232
26 Oct 2022	OT 0.7 OUT 2027	Issue	2.54%	1,023
26 Oct 2022	OT 1.65 JUL 2032	Issue	3.19%	384
26 Oct 2022	OT 1.0 ABR 2052	Issue	3.62%	325
				2,495
06 July 2022	OT 4.95 OUT 2023	Purchase	0.69%	538
06 July 2022	OT 5.65 FEV 2024	Purchase	0.85%	225
26 Oct 2022	OT 4.95 OUT 2023	Purchase	1.98%	316
26 Oct 2022	OT 5.65 FEV 2024	Purchase	2.04%	1,416
				2,495

Source: IGCP

Table 16 -BT auctions

Date	Security	Competitive auction nominal value (EUR millions)	Non-competitive auction nominal value (EUR millions)	Average allocated yield	*Spread vs Euribor* (bp)
19 January 2022	BT 22 JUL 2022	495	15	-0.60%	-7.2
19 January 2022	BT 20 JAN 2023	1005	130	-0.57%	-10.6
16 February 2022	BT 20 MAY 2022	292	0	-0.61%	-8.7
16 February 2022	BT 20 JAN 2023	958	0	-0.56%	-24.1
16 March 2022	BT 23 SEPT 2022	500	130	-0.57%	-18.2
16 March 2022	BT 17 MAR 2023	1250	58	-0.47%	-23.4
20 April 2022	BT 22 JUL 2022	451	0	-0.66%	-18.0
20 April 2022	BT 17 MAR 2023	800	0	-0.31%	-23.7
18 May 2022	BT 18 NOV 2022	625	85	-0.18%	-4.8
18 May 2022	BT 19 MAY 2023	875	130	0.24%	-7.5
15 June 2022	BT 23 SEPT 2022	500	11	-0.30%	-14.8
21 September 2022	BT 17 MAR 2023	440	30	1.29%	-43.2
21 September 2022	BT 22 SEPT 2023	810	37	1.92%	-49.6

Note: Excludes issues in favour of the FRDP (Public Debt Settlement Fund)

Source: IGCP

Table 17 -CEDIC/CEDIM

	2021				2022			
	Nominal value (EUR millions)	Number of transactions	Average rate[1] (%)	Average redemption period (years)	Nominal value (EUR millions)	Number of transactions	Average rate[1] (%)	Average redemption period (years)
CEDIC								
Issues	21 376	331	0.07%	0.41	28 128	465	0.28%	0.28
Early repayments	188	23	0.06%	0.55	696	36	0.08%	0.39
Year-end balance	*17 523*				*20 826*			
CEDIM								
Issues	0	1	0.47%	10.35	248	12	2.01%	3.99
Early repayments	0	0	0.00%	0.00	16	2	1.99%	1.16
Year-end balance	*580*				*786*			

[1] Rate weighted by investment maturity

Source: IGCP.

A3. Performance evaluation of participants in the Portuguese government debt market

In the Portuguese public debt market, OEVTs and EBTs play a strategic role as a distribution channel, providing reference prices and liquidity in the secondary market, and advising the Portuguese Republic on the definition and implementation of its financing strategy. They also play a key role in promoting Portuguese public debt to end-investors. At the end of 2022, the OEVT group was composed of 17 banks and the EBT group of 19 banks.

In 2022, of note is the performance of the following OT and BT market participants, respectively:

Table 18 - Best-performing OEVTs in 2022

1	JP Morgan
2	BNP Paribas
3	Morgan Stanley
4	Barclays Bank
5	Deutsche Bank

Source: IGCP

Table 19 - Best-performing EBTs in 2022

1	Millennium BCP
2	JPMorgan
3	Crédit Agricole
4	Bank of America
5	Goldman Sachs

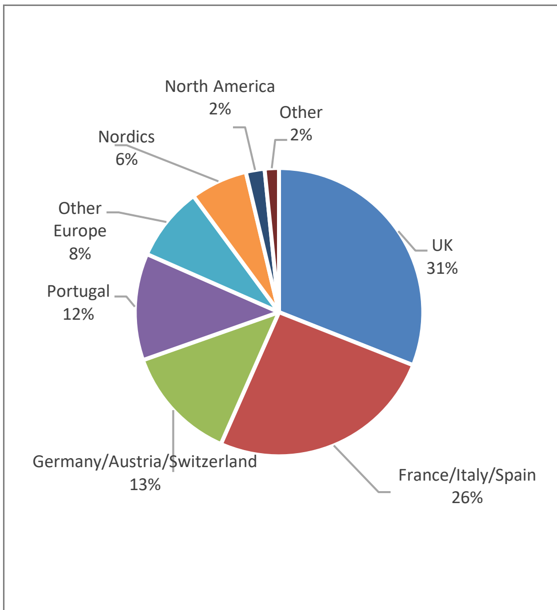
Source: IGCP

A4. Distribution of OT syndicated issues

In January 2022, the Portuguese Republic placed EUR 3 billion OT through a 20-year syndicated transaction. In this transaction, about 88% of the final amount was placed with non-resident investors, with particular emphasis on investors from the United Kingdom (with about 31% of the distribution), but also the relevant presence of investors from France, Italy and Spain (26%), and Germany, Austria and Switzerland (13%). Also of note is the strong participation of real money investors, in particular Fund Managers , Insurance Companies and Pension Funds, which usually offer greater price stability on the secondary market.

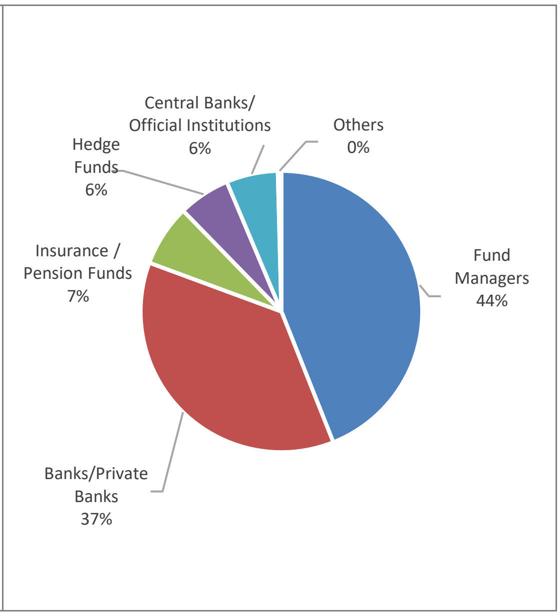
Chart 24 – OT syndicated issue in January 2022: New 20-year Benchmark

By investor geography



Source: IGCP

By investor profile

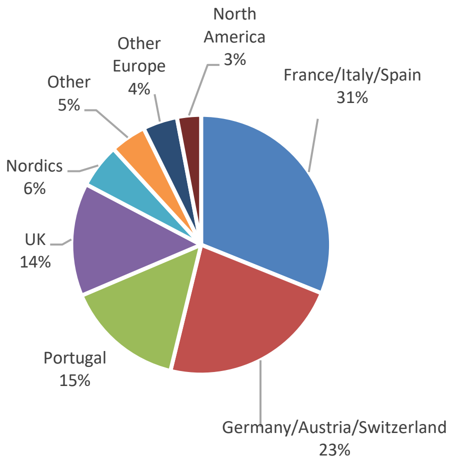


Source: IGCP

In April 2022, the Portuguese Republic placed more EUR 3 billion on the market, through a syndicated operation for a new 10-year OT. In this transaction, around 85% of the final amount was placed with non-resident investors, with particular emphasis on investors from France, Italy and Spain (with about 31% of the distribution), Germany, Austria and Switzerland (23%), and the United Kingdom (14%). Investment Funds and Banks were the main participants in this transaction with around 31% and 49% respectively.

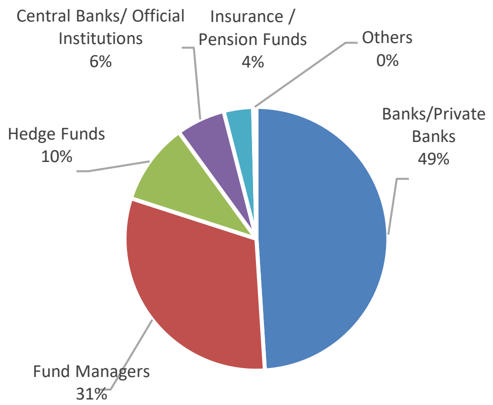
Chart 25 – OT syndicated issue in January 2022: New 10-year Benchmark

By investor geography



Source: IGCP

By investor profile



Source: IGCP

A5. Table of State direct debt turnover

Table 20- State direct debt (Public accounts basis)

	Outstanding on		January - December 2022			Outstanding on	
	31/dez/21	Structure	Issues	Redemptions	Others	31/dez/22	Structure
1. Euro-denominated debt (excluding official loans)	**220 116**	**79,0%**	**65 007**	**58 081**	**783**	**227 824**	**79,4%**
Tradable	167 587	60,2%	25 011	26 389	783	166 992	58,2%
ECP (discounted value)	0	0,0%	0	0	0	0	0,0%
BT (discounted value)	6 467	2,3%	10 836	9 576	0	7 727	2,7%
Fixed rate Treasury Bonds (OT)	154 443	55,5%	14 175	12 909	783	156 492	54,5%
Floating rate note (FRN)	4 500	1,6%	0	3 500	0	1 000	0,3%
Other bonds	100	0,0%	0	100	0	0	0,0%
MTN	2 070	0,7%	0	304	0	1 766	0,6%
Retail-Bonds	7	0,0%	0	0	0	7	0,0%
Non-tradable	52 529	18,9%	39 996	31 692	0	60 832	21,2%
Saving Certificates	12 469	4,5%	7 880	723	0	19 626	6,8%
Subscription value	8 190	2,9%	7 712	579	0	15 323	5,3%
Accrued interest	4 279	1,5%	168	144	0	4 303	1,5%
Treasury Certificates	17 849	6,4%	2 238	4 844	0	15 243	5,3%
CEDIC	17 523	6,3%	28 150	24 847	0	20 826	7,3%
CEDIM	580	0,2%	248	42	0	786	0,3%
Cash-collateral	540	0,2%	1 034	906	0	668	0,2%
Ohers	**3 568**	**1,3%**	**446**	**330**	**0**	**3 683**	**1,3%**
2. Non-Euro-denominated debt (excluding official loans)	2 984	1,1%	0	279	169	2 873	1,0%
Tradable	2 984	1,1%	0	279	169	2 873	1,0%
ECP (discounted value)	0	0,0%	0	0	0	0	0,0%
Other bonds	0	0,0%	0	0	0	0	0,0%
MTN	2 984	1,1%	0	279	169	2 873	1,0%
Non-tradable	0	0,0%	0	0	0	0	0,0%
3. Official loans	**55 390**	**19,9%**	**1 420**	**500**	**12**	**56 322**	**19,6%**
SURE	5 411	1,9%	817	0	6	6 234	2,2%
RRF	351	0,1%	609	0	0	960	0,3%
EFAP	49 628	17,8%	-6	500	6	49 128	17,1%
EFSF	25 328	9,1%	0	0	0	25 328	8,8%
EFSM	24 300	8,7%	-6	500	6	23 800	8,3%
IMF	0	0,0%	0	0	0	0	0,0%
4. Total Debt (1.+ 2.+3.)	**278 489**	**100,0%**	**66 427**	**58 860**	**964**	**287 019**	**100,0%**
5. Exchange rate effect of hedging with derivatives (net)	-478	0,0%	0	0	0	-627	0,0
6. Total debt after derivatives (4.+ 5.)	**278 011**	**0,0%**	**0**	**0**	**0**	**286 392**	**0,0**

Note: Outstanding amounts are at nominal value (except for instruments issued at a discount, which are at a discount), valued as at the end-of-period exchange rate, while issues and redemptions are at cost value. The Other column includes changes in exchange rate, capital gains or losses on issues and redemptions and change in value of perpetuities and consolidated annuities.

Source: IGCP

A6. Cost of State direct debt

Table 21 - Interest costs and other charges on State direct debt (Public accounts basis)

(EUR million)

	2015	2016	2017	2018	2019	2020	2021	2022
Government debt interest	**7 038**	**7 282**	**7 034**	**7 063**	**7 108**	**6 837**	**6 287**	**6 041**
Treasury bills	99	9	2	-35	-45	-49	-51	-40
Government bonds	4 087	4 544	4 599	4 842	4 858	4 716	4 642	4 382
EFAP loans	2 119	1 846	1 567	1 178	1 058	990	673	627
Savings and Treasury certificates	562	791	669	731	780	715	576	739
Others	171	92	197	347	457	464	447	334
Other charges (*)	**67**	**101**	**93**	**82**	**61**	**80**	**77**	**65**
EFAP loans	2	16	11	28	15	14	28	9
Others	65	85	82	54	47	65	49	56
Total charges paid	**7 105**	**7 383**	**7 127**	**7 145**	**7 169**	**6 917**	**6 364**	**6 106**
Interest received from deposits and loans granted	-13	-4	-4	1	-2	8	14	-13
Net interest and other charges	**7 092**	**7 379**	**7 123**	**7 146**	**7 168**	**6 925**	**6 378**	**6 094**

Notes: (*) Other charges include costs associated with the placement of debt in the market (issue, distribution, redemption and custody of securities), as well as IGCP's management fee and other expenses related to the rating of the Portuguese Republic's credit risk.

Source: IGCP

Table 22 - Interest costs of State direct debt (National accounts basis)

(EUR million)

	2015	2016	2017	2018	2019	2020	2021	2022
Government debt interest								
Treasury bills	35	5	-14	-46	-47	-49	-49	-23
Government bonds	4 361	4 315	4 384	4 220	3 930	3 616	3 327	3 223
EFAP loans	2 215	1 942	1 574	1 245	1 115	1 063	862	589
Savings and Treasury certificates	687	734	707	790	750	582	623	717
Others	352	365	454	516	549	543	486	390
Total charges paid	**7 650**	**7 362**	**7 106**	**6 725**	**6 297**	**5 755**	**5 248**	**4 895**
Interest received from deposits and loans granted	-13	-3	-4	1	-1	8	13	-14
Net interest and other charges	**7 637**	**7 358**	**7 103**	**6 726**	**6 296**	**5 763**	**5 261**	**4 882**

Notes: (1) Unlike Public Accounting, which adopts a cash basis, the National Accounts perspective considers interest on an accrual basis. (2) The specificity of the methodology for calculating interest on Treasury Certificates in National accounts may result in minor retroactive revisions to the series.

Source: IGCP

Table 23 -Annual change in interest on State direct debt (National accounts basis)

(EUR million)

Year	Average debt stock*	Interest** (national accounts)	Implicit interest rate	Annual change in interest	Contributions to interest change		
					Stock effect	Price effect	Cross effect
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2000	64 566	3 692	5,7%	0	0	0	0
2001	69 313	3 840	5,5%	147	271	-116	-9
2002	75 962	3 943	5,2%	103	368	-242	-23
2003	81 426	3 895	4,8%	-48	284	-309	-22
2004	87 058	3 871	4,4%	-24	269	-275	-19
2005	96 249	3 995	4,2%	124	409	-257	-27
2006	105 158	4 400	4,2%	404	370	31	3
2007	110 681	4 797	4,3%	397	231	158	8
2008	115 633	5 024	4,3%	227	215	12	1
2009	125 605	4 846	3,9%	-178	433	-562	-49
2010	142 261	5 038	3,5%	192	643	-398	-53
2011	163 657	6 646	4,1%	1 608	758	739	111
2012	185 431	7 141	3,9%	494	884	-344	-46
2013	199 837	7 218	3,6%	77	555	-443	-34
2014	211 201	7 636	3,6%	419	410	8	0
2015	222 207	7 650	3,4%	14	398	-365	-19
2016	231 323	7 362	3,2%	-289	314	-579	-24
2017	237 273	7 106	3,0%	-255	189	-434	-11
2018	241 911	6 725	2,8%	-381	139	-510	-10
2019	248 285	6 297	2,5%	-428	177	-589	-16
2020	259 664	5 755	2,2%	-542	289	-794	-36
2021	273 403	5 248	1,9%	-508	305	-771	-41
2022	282 754	4 895	1,7%	-353	180	-515	-18

Notes:

* The calculation of the average debt stock takes into account total debt including margin accounts.

** Excludes interest received on deposits and other loans.

(2) = S_t - average stock at the end of t and t-1

(4) = $i_t = (3)_t / (2)_t$

(5) = $\Delta(S_t . i_t) = i_{t-1}.\Delta S_t + S_{t-1}.\Delta i_t + \Delta S_t.\Delta i_t$

(6) = $i_{t-1}.\Delta S_t$

(7) = $S_{t-1}.\Delta i_t$

(8) = $\Delta S_t . \Delta i_t$

Source: IGCP