IGCP
Agência de Gestão da Tesouraria
e da Dívida Pública

# Government Debt and Cash Management

## Annual Report 2021

## CONTENTS

# List of Charts

# List of Tables

# 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 | Certificados do Tesouro Poupança Crescimento |
| CTPM | Certificados do Tesouro Poupança Mais |
| 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 | Reference Financing Strategy |
| 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 | 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 the 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 Collections 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 gr | Year-on-year growth rate |

## Introduction

**The year 2021 continued to be marked by the effects of the health, economic and social crisis caused by the pandemic.**

After an unprecedented economic contraction in 2020, caused by a sudden and profound change in social behaviour and economic relations on a global scale as a result of the pandemic, 2021 already saw a remarkable rebound. The successful vaccination process, together with the adoption of containment measures adjusted to the different epidemiological moments, contributed to the return of some normality to economic activity.

**In the aftermath of the pandemic, which interrupted the economic growth trend and the correction of imbalances, in 2021 the Portuguese economy embarked on a recovery and resumption process.**

The profound structural adjustment experienced by the Portuguese economy in the past few years has proved to be instrumental to increase its robustness and capacity to tackle adverse shocks. Against this background, not only the 8.4% contraction of the Portuguese economy in 2020, caused by the pandemic and the containment measures adopted, has fell short of most of the widely more negative initial estimates, but also the 2021 recovery has exceeded most projections.

Hence, the Portuguese economy grew by 4.9% of GDP in 2021, maintained its favourable dynamics in the labour market, with an unemployment rate close to pre-pandemic levels, and improved its net borrowing capacity vis-à-vis the rest of the world, despite the deterioration in the goods account, benefiting from a slight improvement in the services account surplus and the increase in transfers from the European Union.

Without prejudice to the prompt and decisive political response, public finances benefited from the economic rebound and the lower financial effort required to tackle pandemic's containment measures, and, in 2021, the budget deficit stood at 2.8% of GDP, dropping 3 p.p. compared to 5.8% in 2020. Due to favourable budget results, it was possible, already in 2021, to put the government debt ratio (Maastricht perspective) back on a downward path. Thus, after reaching 135.2% of GDP by the end of 2020, this ratio fell by 7.8 p.p. to 127.4% of GDP in 2021.

**The ECB's stance underpinned favourable market access conditions, which made it easier for a flexible implementation of the financing strategy for 2021.**

The initial funding strategy for 2021 entailed funding sources of EUR 25.6 billion that included the use of deposits of EUR 6.7 billion and the issuance of EUR 15 billion of OTs, through the issuance of two new benchmarks (10 and 30 years) and the reopening of different OT lines through auctions. However, as a result of significant gains from cash pooling in State Central Treasury, a higher than initially estimated increase in the amount of funding from Official loans and the increase in net CA/CTPC issues, the BT programme could be cut by about EUR 4.8 billion and the OT programme by EUR 0.4 billion.

Taking advantage of broadly favourable market access conditions, and to maintain an active presence in the market despite the removal of some auctions, it was possible to conduct 4 exchange auctions, plus bilateral operations, which resulted in the repurchase of an aggregate nominal value of EUR 4.2 billion of OT to be redeemed in 2022, 2023 and 2024 against the issue of longer maturity OTs. Throughout the year there were also two public operations to repurchase bonds issued in 2014 in USD, for an overall amount of USD 1.4 billion.

Against this background, it was possible to increase the issued maturity with a marginal additional cost in issuances carried out in 2021 compared to 2020, as well as to increase the stock average maturity, maintaining a downward trend in the cost of funding, with the implicit interest rate of the debt set at 1.9%.

## Statutory Bodies of IGCP, E.P.E.[1]

**Board of Directors**

Cristina Maria Nunes da Veiga Casalinho (Chairwoman)[2]

António Abel Sancho Pontes Correia (Member)[3]

Maria Rita Gomes Granger (Member)[3]

**Advisory Board**

Cristina Maria Nunes da Veiga Casalinho (Chairwoman)

Alberto Manuel Sarmento Azevedo Soares[4]

Daniel Bessa Fernandes Coelho[5]

Hélder Manuel Sebastião Rosalino[6]

Sérgio Tavares Rebelo[5]

Vasco Manuel da Silva Pereira[4]

Vítor Augusto Brinquete Bento[4]

**Single Auditor[7]**

Sociedade JM Ribeiro da Cunha & Associados, SROC, Lda

[1] As at the date of the Report.

[2] Appointed Chairwoman of the Board of Directors of IGCP, E.P.E. by Resolution 24/2019 of 1 February.

[3] Appointed Executive Director of the Board of Directors of IGCP, E.P.E. by Resolution 24/2019 of 1 February.

[4] Member of the Advisory Board of IGCP, E.P.E. for having completed at least one mandate as Chairman of the Board of Directors of IGCP, E.P.E. (as provided for in Article 16 of the Bye-laws of IGCP, E.P.E.).

[5] Appointed to the Advisory Board by Order of the Secretary of State 7106/2015 of 18 June.

[6] Member of the Board of Directors of Banco de Portugal indicated by the bank.

[7] Appointed by the Assistant Secretary of State and Finance for the 2018-2020 mandate.

# Primary Market Participants in 2021[8]

### OT – Government bonds

| OEVT – Primary Dealers | OPM – 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 Europe AG | |
| Crédit Agricole CIB | |
| Deutsche Bank , AG | |
| Goldman Sachs Bank Europe SE | |
| HSBC Continental Europe | |
| Jefferies GmbH | |
| J.P. Morgan AG | |
| Morgan Stanley Europe SE | |
| Natwest Markets N.V. | |
| 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 |
| Citigroup Global Markets Europe AG |
| 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 |
| Natwest Markets N.V. |
| Nomura Financial Products Europe GmbH |
| Novo Banco, S.A. |
| Société Générale |

[8]As at 31 October 2021.

## Main Highlights

In 2021 State's net borrowing requirements will have reached EUR 13.8 billion, broken down by a budget deficit of about EUR 9.5 billion and other needs of EUR 4.3 billion. The decrease compared to 2020 was mainly due to a drop in the deficit (EUR 2.8 billion), reflecting the effect of the economic recovery and the lower impact of policies to tackle the health, economic and social crisis caused by the COVID-19.

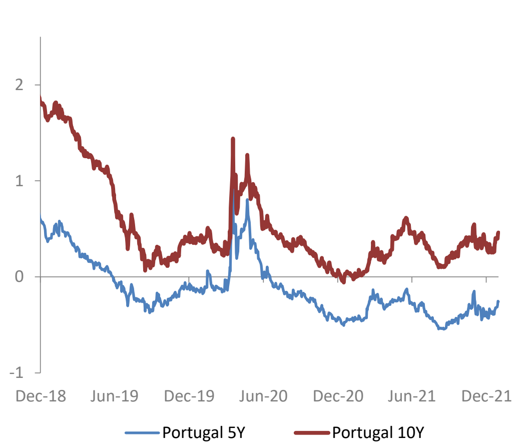
| BORROWING NEEDA AND SOURCES (EUR million) | |
|---|---|
| **GROSS BORROWING NEEDS** | **26,904** |
| Budget Deficit (State subsector) | 9,471 |
| Net acquisition of State's financial assets | 4,301 |
| OT redemptions (excl exchange operations) | 8,035 |
| Official loan redemptions (EFAP+SURE) | 0 |
| Other redemptions of medium- and long-term debt | 5,096 |
| **FINANCING SOURCES** | **26,904** |
| Use of deposits (excl cash collateral) | 8,281 |
| Official loans issuance (EFAP+SURE+RRP) | 3,593 |
| OT and MTN issuances (excl exchange operations) | 14,559 |
| OTRV issuances | 0 |
| Other MLT debt issuances | 0 |
| TBills net issuance (excl BT held by the FRDP) | -4,760 |
| CA/CT net issuance | 536 |
| Other movements in the Single Treasury Account | 4,695 |
| **Deposits balance at year-end (excl. margin accounts)** | **8,766** |
| Margin accounts balance at year end | 540 |
| **Total deposits balance at year end** | **9,306** |

In line with the usual strategy, the year's funding was mostly guaranteed by OT issues, amounting to EUR 14.6 billion (net of premiums and discounts). The extraordinarily high deposit balance at end-2020 (around EUR 17 billion) was also used to finance needs in 2021 (by around EUR 8.3 billion). In addition, Portugal received the second tranche of the EU loan under the SURE instrument, created in 2020 to assist Member States in financing employment support measures in the context of the pandemic, in the amount of EUR 2.4 billion, as well as received the pre-financing disbursement of funds under the EU Recovery and Resilience Mechanism, of which the loan component amounted to EUR 0.4 billion. As in previous years, also in 2021 the balance of Treasury Bills (BT) decreased (EUR 4.8 billion).

| Market financing operations in 2021 | Nominal value (EUR million) | Residual maturity (years) | Average allotment rate (%) |
|---|---|---|---|
| **OT SYNDICATED ISSUANCES** | | | |
| OT 1% apr 2052 | 3,000 | 32 | 1.02% |
| OT 0,3% oct 2031 | 4,000 | 11 | 0.34% |
| **OT AUCTIONS** | | | |
| OT 0,7% oct 2027 | 1,048 | 7 | -0.11% |
| OT 0,475% oct 2030 | 1,988 | 10 | 0.13% |
| OT 0,3% oct 2031 | 1,937 | 11 | 0.40% |
| OT 0,9% oct 2035 | 1,449 | 15 | 0.57% |
| OT 4,1% apr 2037 | 662 | 17 | 0.62% |
| **OT SWAPS** | | | |
| OT 2,125% oct 2028 | 1,975 | 8 | -0.12% |
| OT 0,3% oct 2031 | 681 | 11 | 0.39% |
| OT 2,25% apr 2034 | 547 | 14 | 0.54% |
| OT 4,1% apr 2037 | 336 | 17 | 0.48% |
| OT 1% apr 2052 | 266 | 32 | 1.23% |
| **TBills AUCTIONS (gross issuances, excl. FRDP)** | | | |
| 3 months | 1,575 | 0.25 | -0.57% |
| 6 months | 2,008 | 0.50 | -0.56% |
| 11 months | 2,175 | 0.92 | -0.55% |
| 12 months | 3,791 | 1.00 | -0.55% |

After the onset of the pandemic in 2020 had represented a shock of unprecedented proportions, causing a dramatic economic contraction and a widespread increase in volatility, the year 2021 was marked by a return of economic activity to some normality. The rapid and widespread political responses allowed the effects of the disruption to be contained and, at the financial level, the maintenance of an accommodative monetary policy by the main central banks throughout 2021 was key to maintaining generally favourable market access conditions, with rates remaining at historic lows.

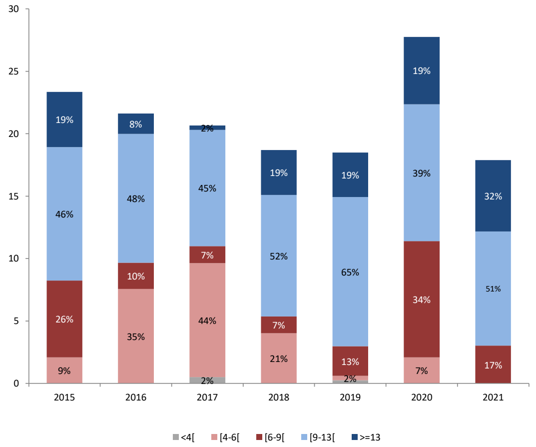
**Interest rates of OT in the secondary market** (%)



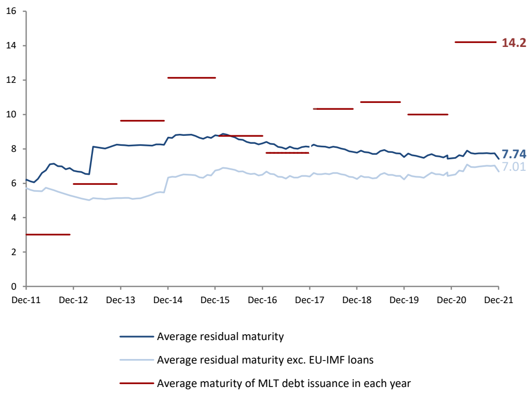
The particularly low interest rate environment, supported by the ECB's purchase programme, as well as the demand for longer maturities, allowed for an increase in longer maturity issuances, with issuances of more than 9 years accounting for 83% of the total issued, compared to a 59% share in 2020.

Due to this increase, the average maturity of the debt stock rose slightly to 7.7 years at the end of 2021.

**Issuances by maturity** (EUR billion)

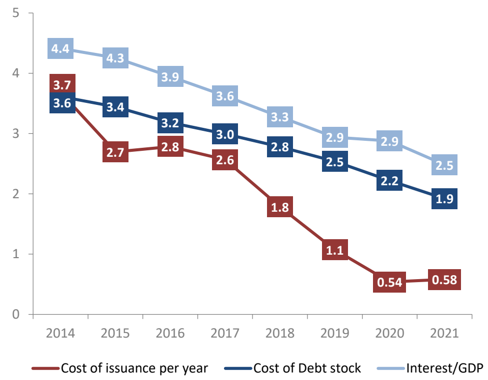



**Maturity of State direct debt** (years)



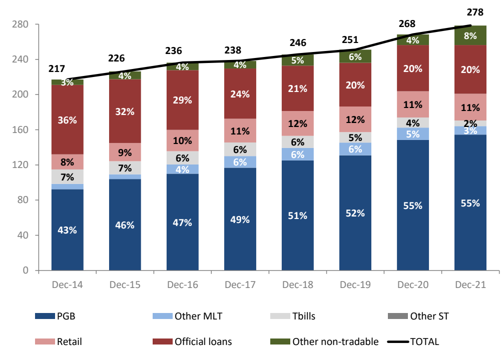

In this context, it was possible to increase the maturity issued with a reduced additional cost, since the marginal cost of financing weighted by amount and maturity increased only 4 basis points from 0.54% to 0.58% in 2021. Therefore, downward trend in the cost of funding could continue further,, with the interest rate on debt standing at 1.9%.

**State direct debt cost** (%)



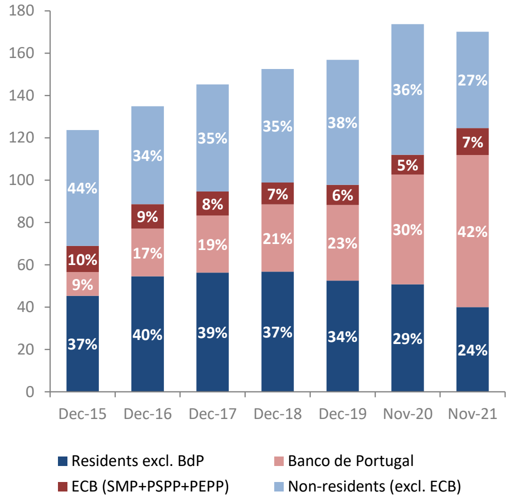

The State direct debt increased to EUR 278.5 billion at end-2020 (+3.8% year-on-year), decelerating growth compared to the 6.9% increase in 2020.

**State direct debt by instrument** (EUR billion)



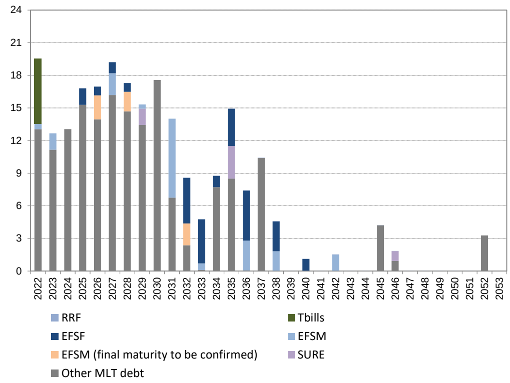

In the composition of the State direct debt securities holders, the increased weight of the Eurosystem reflects the reinforcement of asset purchase programmes to address the crisis. Of particular note is the significant volume of net purchases made under the programme set up to tackle the effects of the pandemic: the PEPP.

**State direct debt securities holders**
(EUR billion)




The smoothing of the repayment profile remains a guiding target in the Portuguese government debt management, given its contribution to reducing refinancing risk. In 2021, benefiting from broadly favourable market conditions, the ongoing monitoring of repurchase and/or debt exchange opportunities was pursued. In this plan, it was possible to present a more active profile than in 2020, having executed 4 exchange auctions in the year, plus bilateral operations, through which an aggregate nominal value of EUR 4.2 billion of OT with amortisation in 2022, 2023 and 2024 was repurchased against the issuance of longer-maturity OTs. Throughout the year there were also two public operations to repurchase bonds issued in 2014 in USD, for an overall amount of USD 1.4 billion.

**MLT debt redemption profile**
(EUR billion)



# 1. THE ECONOMY AND FINANCIAL MARKETS

## 1.1. International Macroeconomic Context

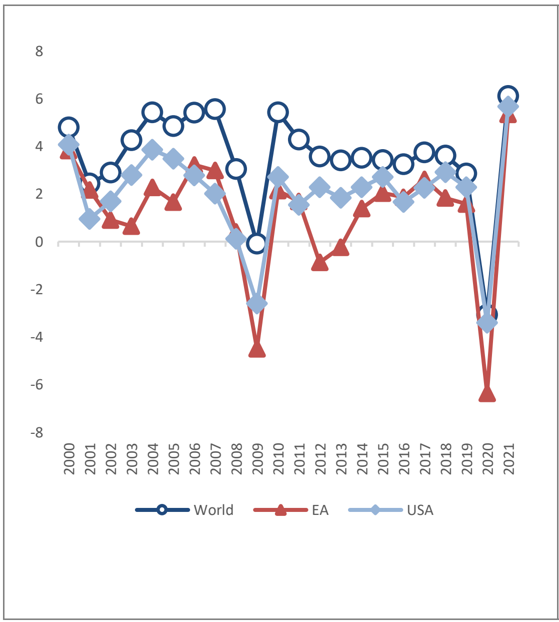
In 2021, the COVID-19 pandemic continued to be a key factor in global economic evolution. Nevertheless, positive developments in the vaccination process and the adoption of prevention measures adjusted to the need at each epidemiological moment allowed for the resumption of productive activity, contributing to a significant recovery from the dramatic fall in the previous year. According to the IMF's April 2022 estimates, the economic activity increased by 6.1% in real terms in 2021, following a -3.1% decrease in 2020. This reflects a significant increase in international trade (+10.1% in 2021, after -7.9% in 2020 and +0.9% in 2019) and an expansion of investment, relatively more intense in the US (+6.8%) than in the euro area (+5.2%).

The economic recovery was common to both the advanced and emerging economies: output increased by 5.7% in the US (-3.4% in 2020), GDP in the euro area recovered by 5.3% (-6.4% in 2020), and a similar trend was observed in other economies, such as the United Kingdom, India, Russia, China and Brazil.

The accommodative nature of monetary policy in the euro area and the US was maintained in 2021 aiming at curtailing the impacts of the pandemic, as well as enabling the recovery of the global economy. The pick-up in activity in 2021 was, however, uneven across major European peers: GDP increased 2.8% in Germany, 7.0% in France, 5.1% in Spain, 6.6% in Italy and 4.9% in Portugal. This gap is due to the different economic structure of each country and the economic containment and support measures adopted by different governments.

**Chart 1 – World economic growth**

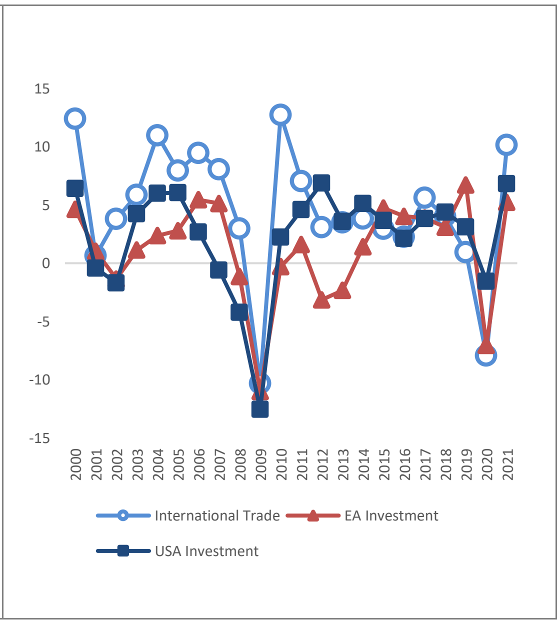
(yoy gr %)




Source: IMF (April 2022).

**Chart 2 – International trade and investment**

(yoy gr %)




Source: IMF (April 2022) and AMECO (November 2021).

Labour market conditions were also significantly enhanced after the initial impact of COVID-19. In the US, following an upswing to 8.1% in 2020, the unemployment rate recovered to 5.4% in 2021. In the euro area, the labour market also evolved favourably, although to a lesser extent than in the US market, where the more flexible labour law structure contributed to a more significant negative impact in 2020 and a sharper recovery in 2021. Thus, the unemployment rate in the euro area was 7.7% in 2021 – a year-on-year 0.3 p.p. decrease.

As regard consumer price developments, according to IMF data, inflation in 2021 in the US, measured by the Consumer Price Index (CPI), reached 4.7% (1.3% in 2020), the highest value since 2011 (5.1%). three main reasons explain this behaviour: the rapid reopening of the economy after the pandemic, the price increases in energy products and the base effect, as a result of the particularly low inflation rate in the previous year. Inflation in the euro area, in 2021, is expected to be 2.6% (0.3% in the previous year).

On the public finances side, the IMF forecasts similar developments in the euro area and the US. On average, single currency countries will have recorded a budget balance improvement (to a deficit of 5.5% in 2020, 1.7 p.p. less than in 2020), with public debt decreasing from the previous year (to 96.0% of GDP, 1.3 p.p. less than in the previous year). In the US, the improvement in post-pandemic economic conditions also resulted in a drop in the budget deficit (to 10.2% of GDP in 2021, 4.3 p.p. less than in 2020) which in turn resulted in a slight decrease in debt stock, to 132.6% of GDP (-1.6 p.p. in annual terms).

## 1.2. The Portuguese economy

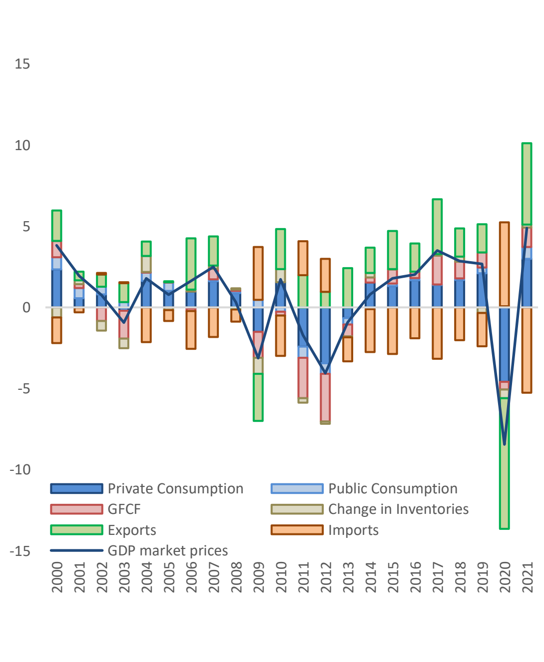
Signs of economic resumption were also evident in Portugal, with significant recovery in private consumption, exports and investment. In 2021, the Portuguese GDP posted a 4.9% recovery (compared to an 8.4% contraction in 2020). In the first quarter of the year, a year-on-year 5.3% decrease was still recorded, as a result of pandemic containment measures adopted, in particular a second lockdown, which affected a large part of the first quarter of the year. The gradual lifting of the restrictions imposed allowed for a pick-up in activity in the second quarter, with a 16.5% GDP growth year-on-year, driven solely by domestic demand, since external demand continued to make a negative contribution. In the second half of the year, the economic recovery continued, with a 4.4% growth in the third quarter and an acceleration to 5.8% in the last quarter of the year.

Domestic demand was the main contributor to annual GDP growth in 2021, with a positive contribution of 5.2 p.p. (-5.5 p.p. in 2020), since the contribution of external demand continued, as in 2020, to be negative, at -0.2 p.p. (still to a lesser extent than the -2.9 p.p. in 2020). Except for in inventories changes, all components recorded positive changes. Thus, private consumption increased by 4.5%, gross fixed capital formation (GFCF) increased by 6.4%, exports and imports increased by 13.1% and 12.9% respectively. In GFCF, it should be noted that construction maintained its positive evolution, advancing +4.0% in 2021 (+1.6% in 2020). A sharp recovery in exports resulted from both the services component, which recorded a 18.7% increase, mainly reflecting the recovery in tourism, and also from exports of commodities, which rose by 11.1%.

Against this background, also worth noting were labour market developments, which not only performed surprisingly well throughout the pandemic, but also enhanced the positive momentum in 2021, with a 0.4 p.p. decline in the unemployment rate, settling at 6.6% of the working population. Nevertheless, the annual average youth unemployment rate (16-24 years) reached 23.4%, increasing by 0.9 p.p. compared to the previous year. The working population increased by 7.6% between 2020 and 2021, also reflecting a pick in economic and productive activity, which allowed for the resumption of mobility and an increase in the working population compared to the pandemic year.

**Chart 3- Economic growth, Portugal**

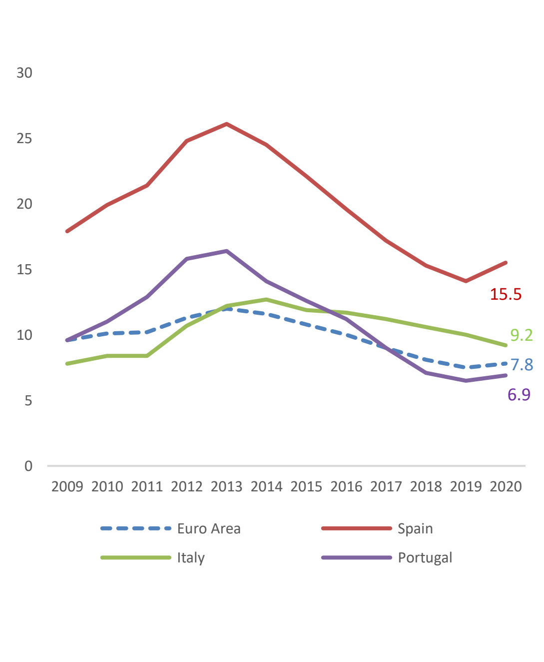
(Contributions of the yoy of GDP in real terms, p.p.)




Source: INE

**Chart 4- Unemployment rate, Portugal and European context**

(%)




Source: Eurostat

In 2021, the Portuguese budget balance was -2.8% of GDP. Although on negative territory, this represents an improvement compared to 2020, when the budget balance reached -5.8% of GDP, with a deterioration compared to the surplus of 0.1% in 2019, as a result of the exceptional circumstances of the COVID-19 pandemic. Whereas 2021 was marked by economic and health recovery, which led to an increase in revenue (+10.0%), expenditure arising from the fight against the contagion of the COVID-19, vaccination and social support, especially associated to sick and isolation pays, also resulted in an increase in expenditure (+3.0%). The revenue performance was strongly influenced by developments in indirect taxes (contribution of +3.6 p.p.), as a result of the economic activity recovery, and capital revenue (contribution of +2.0 p.p.). On the expenditure side, the increase in social benefits (contribution of +1.1 p.p.) is of note, reflecting the impact of sickness and confinement support measures. A further significant decline in interest payments (-10.8%) should also be noted, allowing the downward trend in the ratio to GDP to continue. In this context, the primary balance has again recorded a deficit, settling at -0.4% of GDP in 2021 (a 2.5 p.p. improvement against the previous year).

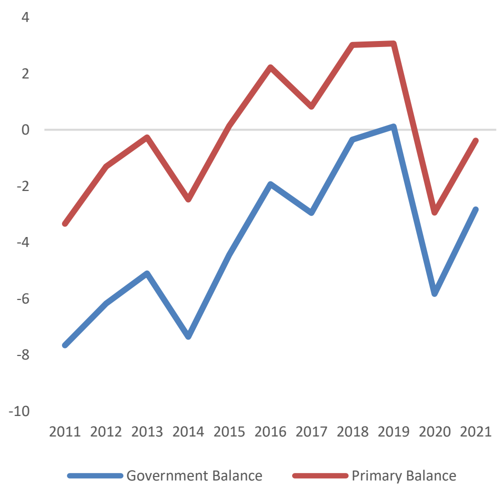
The downward trend of the public debt in the Maastricht perspective as a percentage of GDP, which had been observed since 2015 and interrupted in 2020, with the ratio standing at 135.2% of GDP at the end of the year, was resumed in 2021. Therefore, at the end of 2021, debt stood at 127.4% of GDP, with an annual 7.8 p.p. reduction of GDP.

**Chart 5 – Maastricht Debt, Portugal**

(% GDP)

**Chart 6- Budget Balances, Portugal**

(% GDP)




Source: Banco de Portugal, INE

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

Source: INE

The recent track record in terms of sound economic growth and discipline in public finances, which resulted in a cumulative decline in the government debt ratio of 16.3 p.p. of GDP between 2014 and 2019, has increased the robustness of Portuguese public finances. Against this background, the particularly atypical environment in 2020 and 2021, caused by the pandemic scenario and the response measures adopted, resulted in a one-off and smaller scale worsening than initially anticipated of the public finances in 2020 and a recovery of the trend as soon as 2021, which sustained a relatively positive year for Portugal's rating, rated at investment-grade by the main credit rating agencies since end-2018.

In a context of uncertainty, the main rating agencies maintained Portugal's rating and outlook. Standard&Poor's reaffirmed Portugal's BBB rating (since March 2019) and stable outlook, as did Fitch, which maintained its rating and outlook throughout the year, at BBB|Stable. DBRS has also maintained Portugal's rating and outlook (BBB(high), Stable), in its two annual reviews. Moody's upgraded its rating in September 2021, from Baa3 to Baa2, carrying a stable outlook. Portugal has thus ended 2021 with an upgrade of its rating by Moody's and maintaining a stable outlook assigned by the other credit rating agencies.

## 1.3. Monetary Policy and Financial Markets

Following a significant contraction of the economy due to the pandemic crisis in 2020, the first half of 2021 was driven by expectations of an accelerated economic recovery during the year. Despite growth forecasts on the rise and optimistic capital markets, as year-end drew near, the accumulation of negative inflation surprises and the deterioration of activity due to supply chain disruptions have started the debate on the possibility of normalising monetary policy by the end of 2021, or in 2022.

Throughout 2021, the US Federal Reserve kept the fed funds rate unchanged between 0.0% and 0.25% (a scenario that, in the meantime, has already changed with the increase in the reference rate in the March 2022 meeting). In November the Fed decided to reduce the monthly pace of USD 120 billion of net asset purchases by a total amount of USD 15 billion and announced the following month the acceleration of the cut in purchases to USD 30 billion and their end in March 2022, leaving clear signs that it should start, in the first quarter of 2022, to raise its reference interest rates.

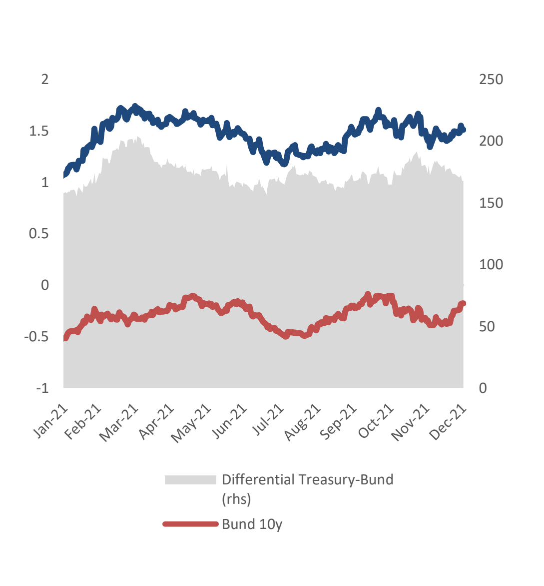
The Governing Council of the ECB decided to keep interest rates unchanged throughout 2021 and maintained the asset purchase programme due to the pandemic emergency (PEPP), even accelerating bond purchases over the second quarter of the year (however, these purchases slowed down over the last quarter of the year). At the December 2021 meeting, the ECB announced that this programme would be discontinued in March 2022, and reinvestment would be extended until the end of 2024. To mitigate the impact of the end of this programme, the ECB simultaneously announced a transitory rise in purchases under the asset purchase programme (APP) in the second and third quarters of 2022, returning to the normal trend in the last quarter of 2022.

Long-term interest rates started an upward trend in 2021, driven by rising inflation expectations and gradual reduction in stimuli to support economic activity. While long-term interest rates developments in the USA and the euro area have been in the same direction, the pace was faster on the other side of the Atlantic, with the spread between US and German 10-year sovereign bond interest rates reaching a maximum of 204 basis points as at 2 April 2021. Most countries in the euro area experienced a similar behaviour in the prices of their securities, with particular emphasis on – from an annual perspective – spread stability in Portugal, Spain and Greece compared to Germany and the slight widening of Italy's spread, particularly over the last quarter of the year.

In the foreign exchange market, noteworthy is the depreciation of the euro against the main currencies, due to the divergence in the pace of monetary stimuli cuts across different regions.

**Chart 7 – Long-term interest rates**

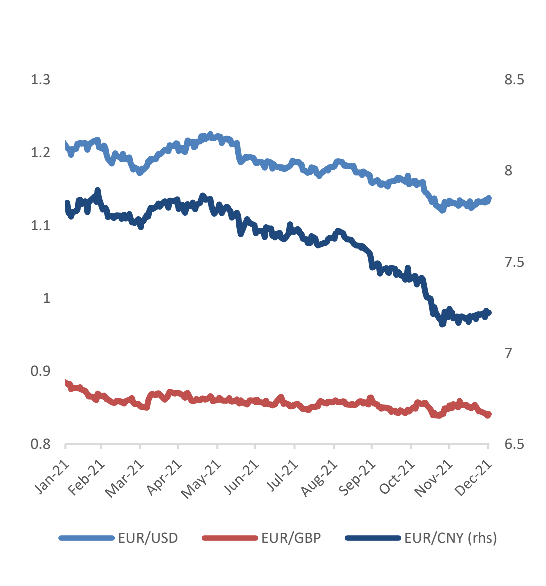
(%, left) (basis points, right)




Source: Bloomberg

**Chart 8- Exchange rates**

(currencies versus euro)




Source: Bloomberg

# 2. State's 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 mitigate direct and indirect costs in a long-term perspective and to ensure their even distribution across the various annual budgets, avoiding excessive time concentration in depreciation and an exposure to excessive risks.

In 2021, the State's net borrowing requirements totalled EUR 13.8 billion, representing a EUR 3.1 billion decrease compared to 2020. This is mostly explained by the impact of the pandemic caused by COVID-19 and the need to adjust the 2020 State Budget (SB 2020) by means of a Supplementary State Budget (SB2020).

Compared to the initial forecast, gross financing needs were EUR 1.3 billion higher, explained by the completion of two OT repurchase auctions in dollars, amounting to approximately EUR 1.5 billion (entered in Other MLP debt redemptions) - see Box 1. On the other hand, net borrowing requirements were EUR 227 million lower, essentially due to better budget implementation, which resulted in a deficit lower than initially estimated. The increase in gross borrowing requirements was financed by the use of deposits, by cutting the total deposit balance at the end of the year from EUR 10.8 billion to EUR 9.3 billion compared to expectations.

The 2021 funding strategy included the issuance of two new benchmarks (10 and 30 years, see Annexes A2 and A4) and the reopening of different OT lines through auction, with the aim of providing liquidity along the curve, anticipating a gross OT issuance volume of approximately EUR 15 billion (swaps excluded). However, due to significant gains from pooling funds at the State Treasury, amounting to EUR 3.8 billion, a higher than initially estimated increase in the amount of funding from Official loans, worth EUR 0.7 billion, and the increase in net CA/CTPC issuances, amounting to around EUR 0.5 billion, there was a need to decrease: (i) the BT programme by about EUR 4.8 billion, eliminating the August, September, October and November auctions and reducing the amount of the July auction (where only one line was issued instead of the two originally scheduled), and (ii) the OT programme by EUR 0.4 billion.

Official loans under the SURE and RRP programmes contributed with EUR 2.4 billion and EUR 0.4 billion respectively, to State's financing sources in 2021.

**Table 1 – Summary of State's borrowing requirements and sources 2021**

| (EUR millions) | Fin Prog OE2021 | Execution (P) | Difference |
|---|---|---|---|
| **GROSS BORROWING NEEDS** | **25,585** | **27,023** | **1,438** |
| **Net borrowing needs** | **14,000** | **13,892** | **-108** |
| Budget deficit (State subsector) | 10,000 | 9,591 | -409 |
| Net acquisition of State's financial assets | 4,000 | 4,301 | 301 |
| One-off operations | 0 | 0 | 0 |
| **Redepmtion of MLT debt** | **11,585** | **13,131** | **1,546** |
| OT redemptions (reimbursed amount; excl exchange operations) | 8,035 | 8,035 | 0 |
| Official loans redemptions (PAEF+SURE+PRR) | 0 | 0 | 0 |
| Other medium- and long-term debt redemptions | 3,550 | 5,096 | 1,546 |
| **FINANCING SOURCES** | **25,585** | **27,023** | **1,438** |
| Use of deposits (excl cash-collateral) | 6,658 | 8,281 | 1,623 |
| Funding under official loans (PAEF+SURE+PRR) | 2,934 | 3,593 | 659 |
| OT issuance (disbursed amount; excl exchange operations) | 15,000 | 14,559 | -441 |
| OTRV issuance | 0 | 0 | 0 |
| Other medium- and long-term debt issuances | 0 | 0 | 0 |
| Net issuances of Tbills (excl Tbills held by FRDP ) | 0 | -4,760 | -4,760 |
| Net issuances of CA/CTPC | -11 | 536 | 547 |
| Other moverments in the Single Treasury Account (excl cash-collateral) | 1,004 | 4,814 | 3,810 |
| **Deposits at year-end (excl cash-collateral)** | **10,389** | **8,766** | **-1,623** |
| Cash-collateral at year-end | 415 | 540 | 125 |
| **Deposits at year-end** | **10,804** | **9,306** | **-1,498** |

Note: Annex 1 provides a more detailed breakdown of the State's financing 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 and predictable issue of public debt securities throughout the year, with an emphasis on the euro market, so as to provide liquidity to the OT lines, reduce volatility in the proximity of the issue windows, and make it easier to implement the Eurosystem's asset purchase programmes for Portugal (PSPP and PEPP). During 2021, the ECB's initiatives were reflected in net asset purchases of approximately EUR 1.9 billion per month.[9] For the year as a whole, the number of net purchases of Portuguese public debt amounted to EUR 22.6 billion, which compares to EUR 20.7 billion in 2020. These ECB asset purchase programmes continued to have a positive impact, mainly on the OT market, helping to reduce volatility and maintain buoyancy from the end of 2020 in a market that had been affected by the pandemic crisis.

Market access conditions were generally favourable throughout the year, particularly compared to 2020. Demand for Portuguese government debt also benefited from marketing initiatives taken by the Agency with financial intermediaries and international investors. In 2021, the IGCP continued to provide frequent information to the market, final investors and rating agencies, and maintained regular contact with primary market participants (Primary Dealers and Treasury Bill Specialists). In the context of the pandemic, bearing in mind social constraints on a global scale, most contacts were virtual, resulting from a concerted effort of the financial community to adapt to digital media and the inseparable reinforcement of the underlying security parameters.

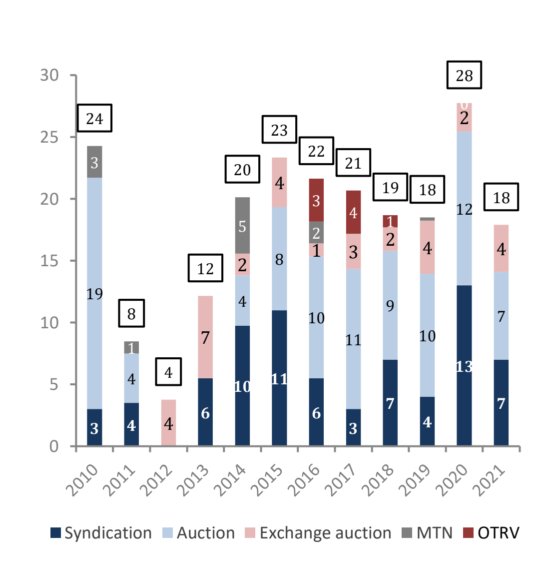
In 2021, medium- and long-term financing before tax on the market amounted roughly to EUR 18 billion (nominal value), with EUR 7 billion (39%) issued through OT syndicated operations, EUR 7 billion (39%) through OT auctions, EUR 4 billion (22%) through OT swaps. As a reference, OT issuances in 2020 (nominal value) through syndicated issues, regular auctions and exchange auctions amounted to EUR 13 billion (47%), EUR 12 billion (45%) and EUR 2 billion (8%), respectively.

By virtue of a better budget execution than anticipated in the State Budget, the September and October auctions were removed and replaced by exchange auctions, to maintain a regular issuance pattern, aiming at one issue per month. There was thus a decrease in the weight of financing through syndicated operations and regular auctions, as opposed to an increase in the weight of exchange auctions, as there were 4 exchange auctions in 2021 and only 2 in 2020.

As usual, the first half of the year had a higher weight in the annual funding raised, accounting for 73% of the total issued including OT exchange offers (or 85% excluding exchange offers), mainly due to the launch of two new 30 and 10 year bonds in February and April respectively, by means of a banking syndicate. In the third quarter, the amount issued was EUR 3 billion, including two exchange offers in August and September. In the fourth quarter the amount issued reached only EUR 2 billion, including an exchange offer in October.

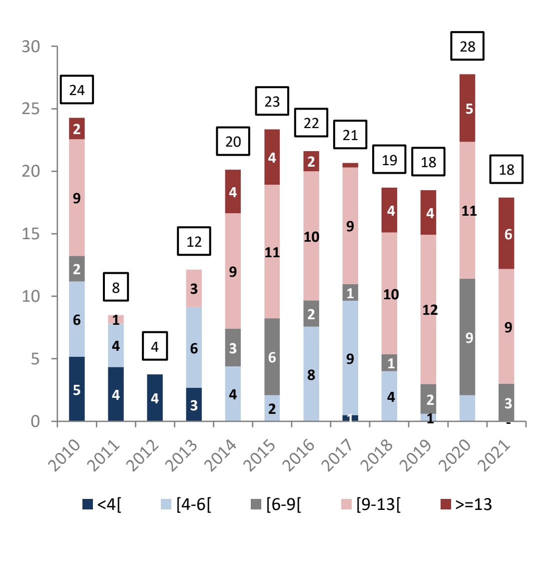
[9] As the breakdown of data on PEPP net purchases only occurs for a two-month period, it is assumed in this report that purchases of Portuguese government debt securities under the PEPP in December 2021 correspond to 50% of purchases in the period elapsed between December 2021 and January 2022.

**Chart 9 – Medium- and long-term debt issuance by type of placement**
(EUR billion)




Source: IGCP

**Chart 10 – Medium and long-term debt issuance by maturity**
(EUR billion)

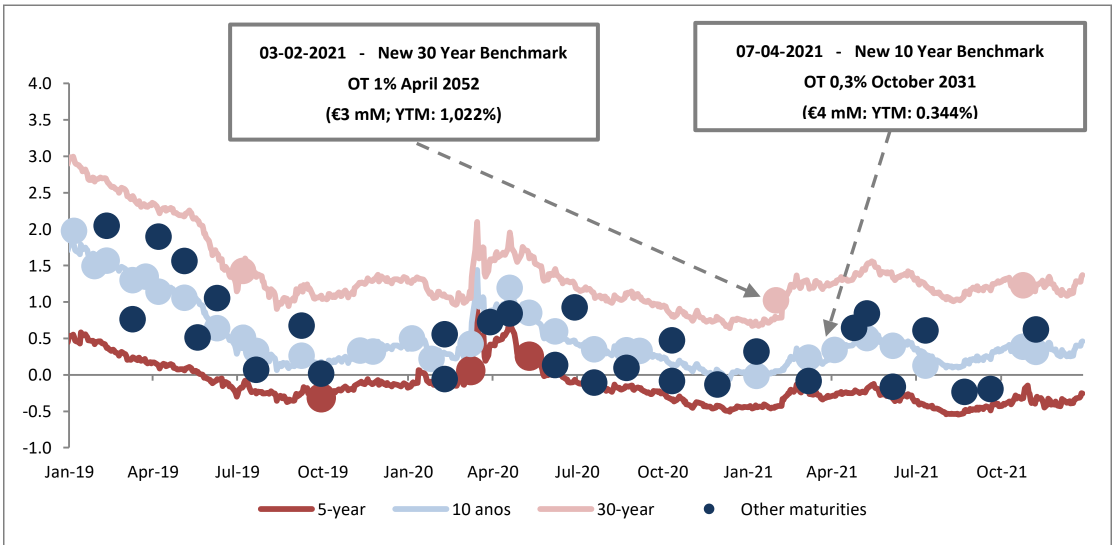



Source: IGCP

In 2021, the interest of real money investors, notably insurers, pension funds, central banks (excluding the ECB and the Banco de Portugal) and other public entities remained unchanged, compared to 2020. Geographically, investors from Italy and Spain are also worth mentioning. These investors' interests were typically in the longer end of the curve, creating conditions for the opening of a new 30-year line in February, an opportunity to be exploited since 2015. Demand continued to be focused on the most liquid maturities: 10 years, in particular.

Issuances over 9 years accounted for 83% of total issued, compared to a 59% share in 2020. Conversely, in the middle part of the curve (between 6 years and 9 years) 17% of the total was issued, compared to 34% in 2020 issuances.

**Chart 11 – 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 in 2021 stood at 14.2 years, higher than in 2020 (10.0 years). This increase led to a slight rise in the average maturity of debt stock to 7.7 years in December 2021 (including Official loans).

The active debt management strategy also benefited from the maintenance of relatively high liquidity buffers, which not only drops 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 2021, the strategy of smoothing the repayment profile continued, focusing on subsequent years 2022, 2023 2024, contributing to a lower refinancing risk. Throughout the year, debt repurchases were carried out through OT exchange auctions, repurchase auctions for the security in dollars (PORTUG 5.125% Oct/2024), and bilateral operations were executed when deemed appropriate in view of market conditions and demand, for an overall amount of around EUR 4.1 billion OTs (nominal value) and around USD 1.4 billion (nominal value).

## Box 1 Public repurchase operations of bonds issued in USD

In 2021, two repurchase operations of USD bonds issued by the Portuguese Republic in 2014 ("PORTUG 5.125% Oct/2024") were carried out, with a nominal amount of USD 4.5 billion, to mitigate the refinancing risk and to allow an efficient cash surpluses investment.

The repurchase of PORTUG 5.125% Oct/2024 increases the average lifetime of the debt portfolio and has an impact on the decrease in redemptions in 2024. Between 2023 and 2025 the repayment profile is particularly demanding, especially between October 2023 and October 2024, when OT 4.95 Oct/2023, OT 5.65 Feb/2024 and PORTUG 5.125% Oct/2024, will be redeemed.

The repurchase was carried out through a competitive reverse auction, in a process similar to that for OT repurchases. This option allowed for the price dynamics to be competitive and save commissions costs that would be applicable in the event of a syndicated transaction.

The fact that the PORTUG 5.125% Oct/2024 is not eligible for ECB asset purchase programmes, in conjunction with its lower liquidity, has contributed to a spread differential between these securities and OT of similar maturity. This spread confers a financial advantage to the repurchase of the OT 5.125% Oct/2024, as opposed to the repurchase of OT of an equivalent maturity.

The operations were announced to the market on 12 July and 19 October and were executed on the following day through an auction using the single price method. These repurchases enabled the IGCP to anticipate the repayment of around USD 1.4 billion, initially programmed for 2024 (bond maturity year).

The bonds were repurchased at 0.74% and 0.87% interest rates respectively, which resulted in rates in euro of -0.37% and -0.39% after the use of financial instruments taken out by the IGCP to hedge market risk. These rates compare to a market funding cost of the Portuguese Republic at around -0.57%, obtained from linear interpolation of the Treasury Bond yield curve.

**Table 2 – Repurchase auctions PORTUG 5.125% Oct/2024**

| Date of operation | Nominal amount (million USD) | Total demand (million USD) | Repurchase yield | Yield converted into euro | OT interpolated rate |
|---|---|---|---|---|---|
| 13 July 2021 | 1,124.0 | 1,580.0 | 0.74% | -0.37% | -0.57% |
| 20 October 2021 | 268.0 | 425.0 | 0.87% | -0.39% | -0.57% |
| **Total** | **1,392.0** | **2,005.0** | | | |

## 2.2. Secondary Market

In the secondary sovereign market, interest rates on Portuguese debt fluctuated throughout the year, showing higher levels in the second[10] and fourth quarters (in particular in 10- and 30-year maturities), periods during which the curve slope was also steeper. The risk premium remained flat throughout the year (in the 10-year benchmark maturity), having narrowed slightly in benchmarks for shorter maturities. Bid-offer spreads improved after the pandemic crisis and remained historically low until the beginning of the fourth quarter, after which bid-offer spreads widened and liquidity conditions deteriorated slightly. The interest rate on Portuguese government debt at 10-year benchmark maturity rose from 0.03% at the end of 2020 to 0.46% at the end of 2021, a reference above the annual average but in line with pre-pandemic levels, despite the volatility. The trend was common to the remaining points of the curve, but steeper in the long-end, with an increase in the slope over the same period a year earlier.

In relative terms, the spread cost of the Portuguese public debt against the German cost has always remained in line with EU comparable, very close to the lowest levels in 2019. In the 10-year benchmark maturity, it ended 2021 (+64 basis points) at a level in line with that at the end of 2020 (+62 basis points). The spread over Italy for the same maturity widened by around 20 basis points to -71 basis points by the end of 2021 (i.e. the difference between the two sovereigns widened throughout the year, with the Portuguese curve at a level considerably lower than the Italian). In respect of Spain, the spread widened slightly between the end of 2020 (-2 basis points) and the end of 2021 (-10 basis points).

As regards secondary market liquidity, there was a slight deterioration in the second half of the year, with a decrease in average daily OT trading volumes between platforms and over-the-counter market and an increase in bid-offer spreads over the last two months of the year. This decrease was mainly caused by heightened uncertainty about the maintenance of an accommodative monetary policy by the ECB in 2022. In 2021, average daily volumes reached EUR 1,024 million, which contrasts with EUR 1,136 million posted in 2020.

10 It was also in this period that the 10-year interest rate reached its highest level of the year (+0.61% in May).

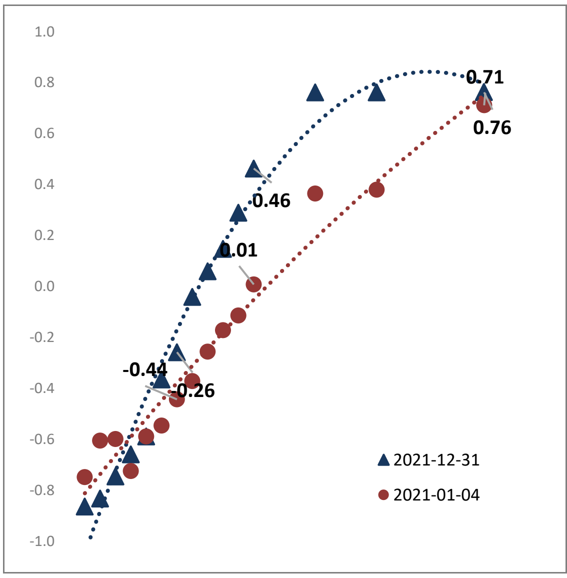
The concentration of flow in the secondary market is still significant, as the five largest OEVTs held a 48% market share in 2021. This represents a reversal of the downward trend in recent years, with a significant increase compared to 2020 (43%). However, the 2021 figure remains well below that seen in 2012 (when concentration reached 73%) and remains below pre-pandemic levels (around 50%).

As regards BT transactions on the secondary market, average daily transactions increased from EUR 296 million in 2020 to EUR 511 million in 2021. In terms of transactions on the platforms, the trend was also upwards, with the average daily volume rising from EUR 187 million in 2020 to EUR 389 million in 2021.

The trend of BT issuance rates was similar to that of OTs, with high volatility between March and April and a downward trend until the end of the year. The average annual BT issuance cost was -0.55% in 2021, lower than both the homologous reference and that observed in 2019 (-0.39% and -0.41% respectively).

As regards the BT issuance strategy, the issuance policy launched in 2015 was maintained in 2019 i.e. concentrating issuances on only six lines and opening only one new line every two months, which allows for an increase in the outstanding balance per line. Due to the rise in Treasury liquidity reserves in the second half of the year, the August, September and November auctions were cancelled, resulting in the BT programme having only four lines carried over to 2022 (one less than in 2020).

**Chart 12 –OT curve developments (%)**

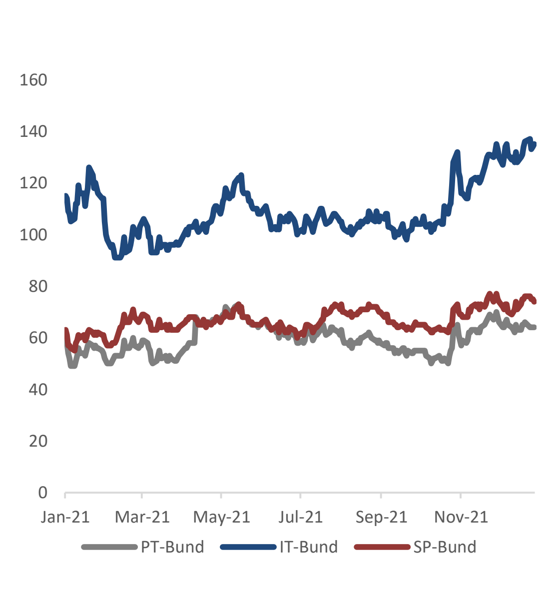



Source: Bloomberg

**Chart 13 – 2, 5, 10 and 30-year OT rates (%)**

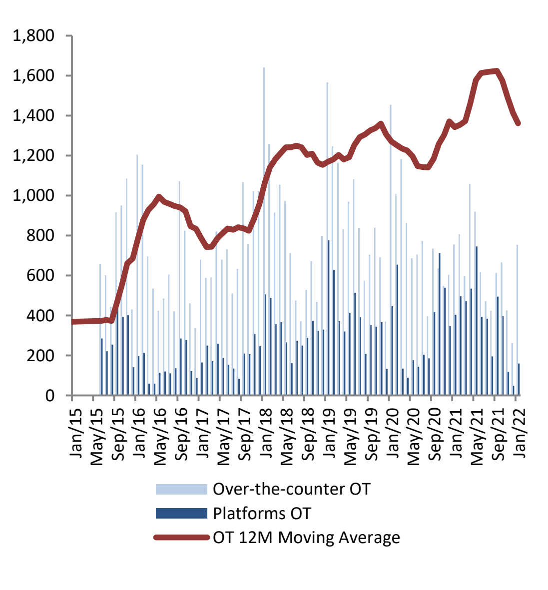

Source: Bloomberg

**Chart 14 – Spreads vs Germany (10-year) (b.p.)**




Source: Bloomberg

**Chart 15 –OT trading on the secondary market (EUR million)**




Source: IGCP

# 3. State's Assets and Liabilities

## 3.1. State Direct Debt and Costs

On 31 December 2021, the stock of State direct debt,[11] valued at the end-of-period exchange rate, stood at EUR 278.5 billion (see Table 20 in Annex 5), which represents a EUR 10.2 billion increase compared to 2020 (3.8%). The annual change essentially stems from the increase in CEDIC balance (3.9 p.p. contribution) and OT (apportionment of 2.3 p.p.), partially offset by the decrease in BT stock (-1.9 p.p.) and the OTRV outstanding amount (-1.3 p.p.).

In 2021, the medium and long-term debt issuance remained an important source of net financing for Portugal. Gross OT issuance, net of premiums and discounts, stood at EUR 19.4 billion, resulting in a positive net issuance of EUR 6.8 billion and in an increase in the relative weight of OTs in debt stock (nominal value) from 55.3% in 2020 to 55.5% at the end of 2021. Adding the balance of OTRVs and bonds issued in foreign currency, converted into euro (with net issuances of EUR -3.5 billion and EUR -0.2 billion respectively), the relative weight of medium and long-term tradable debt issued in euros stood at 57.8% (compared to 59.1% in 2020).

[11] Direct State 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:: (i) differences in sector delimitation - direct public debt includes the debt issued by the State only, while in the Maastricht debt all entities classified, for statistical purposes, in the general government institutional sector are included; (ii) consolidation effects - the direct public 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) fell slightly from 11.1% to 10.9%, primarily reflecting the performance of other debt instruments, which increased in absolute value, thus reducing the weight of retail instruments.

As regards short-term debt (in euros), its outstanding amount increased to around EUR 5.6 billion in 2021, mainly explained by CEDIC developments (repayments exceeded issuances by EUR 10.5 billion). This evolution, together with the slight increase in cash collateral received as part of derivative operations to cover interest rate and exchange rate risk (around EUR 0.1 billion), more than offset the decrease in the BT stock (around EUR 5.0 billion). The relative weight of short-term debt instruments increased by only 1.8 p.p., to 8.8% by the end of 2021.

The weight of non-euro denominated debt (excluding EFAP loans) decreased in 2021, from 1.5% to 1.1% of the total, mainly reflecting the early repurchase operation of the USD denominated bond (in the amount of USD 1.4 billion).

In turn, Official loans (including EFAP, SURE and loans under the Recovery and Resilience Mechanism - RRM) increased slightly in the relative weight in debt stock, rising from 19.6% in 2020 to 19.9% at the end of 2021. This development reflects the increase in the SURE loan balance, with the disbursement of the second tranche of the EC loan to Portugal in May 2021, along with the disbursement of the loan component of the RRM pre-financing) received in August 2021.

## Box 2 | Financing through RRM

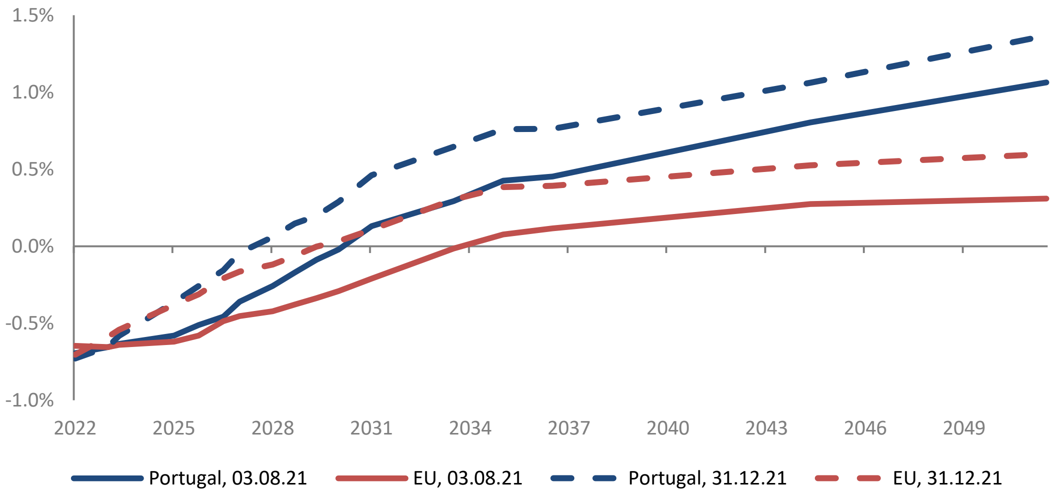
The European Commission created the temporary recovery instrument Next Generation EU (NGEU) as a response to the COVID-19 crisis, amounting to EUR 750 billion, aiming to support economic recovery through financial contributions and loans to Member States.

The Portuguese Recovery and Resilience Plan (RRP), developed under the Recovery and Resilience Mechanism (RRM) and approved by the European Union on 13 July 2021, contains an investment plan based on 3 structuring dimensions: resilience, climate transition and digital transition. The funding granted by the European Union to Portugal in the period 2021-26 under the RRM amounts to EUR 16.6 billion: EUR 13.9 billion in the form of financial contributions and EUR 2.7 billion in the form of loans.

Following the approval of the RRP, the Portuguese Republic received an amount of EUR 2.2 billion on 3 August 2022, equivalent to 13% of the funds to which it is entitled in the form of pre-financing: EUR 1.8 billion in the form of a grant and EUR 350.9 million in the form of a loan.

The loan was granted for a 30-year period, with a 10-year grace period and an average life of 20 years. The interest rate of this loan is not fixed and is linked to the European Union's cost of financing. As an illustration, the yield curves for Portugal and the EU are presented below, showing that there is a financial advantage in using RRP financing compared with OT financing, especially for longer maturities.

**Chart 16 – Portuguese and European yield curves**




The favourable foreign exchange effect of derivative hedging (net) was higher in 2021, totalling EUR 0.5 billion (compared to EUR 0.3 billion in 2020). After derivatives hedging, the balance of direct government debt stood at EUR 278.0 billion, thus recording a EUR 10.0 billion increase compared to 2020.

## Box 3 | The new *Certificados do Tesouro Poupança Valor* (CTPV)

In September 2021, a new public debt instrument was launched, the *Certificado do Tesouro Poupança Valor* (CTPV), aimed at promoting medium-term household savings. The launch of this new product aimed at curtailing the existing misalignment between the remuneration offered by *Certificados do Tesouro Poupança Crescimento* (CTPC) and alternative market financing for similar maturities.

This new savings product maintained the final 7-year maturity and also the application of a premium indexed to real GDP growth. However, this premium is now 20% of the average real GDP growth and applies to all the years from the third year, that is, one year later than for CTPCs. These changes made it possible to cut the rates in shorter maturities, while still maintaining a final remuneration that is competitive and less misaligned with the OT funding cost, which in September 2021 was negative for the reference maturities of up to 7 years (relevant in this comparison).

CTPCs are issued with a 7-year maturity and a guaranteed fixed rate on the subscription date. The gross remuneration rates set for subscriptions made on or after 13 October 2021, and guaranteed until their amortisation, are as follows:

| Years | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| CTPV base interest rates | 0.70 | 0.70 | 0.80 | 0.90 | 1.00 | 1.30 | 1.60 |

rom the third year, a premium corresponding to 20% of the average GDP real growth, if positive, will be added to this rate. Similarly to CTPC, but contrarily to CAs, CTPVs earn interest annually, with no capitalisation of interest, and may only be redeemed one year after their subscription date. On the redemption date, the total amount of capital invested is guaranteed.

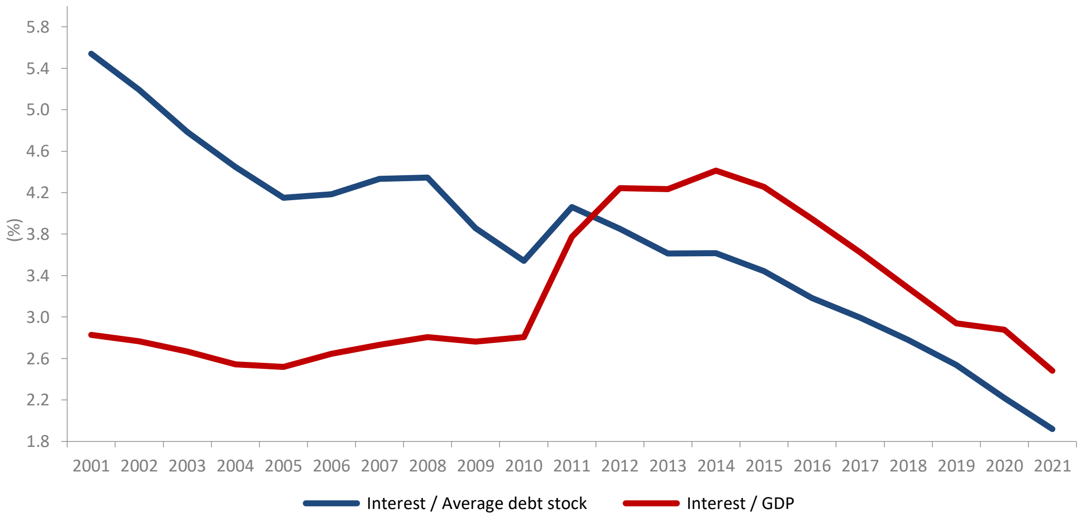
**Current debt costs**

In 2021, the government's current direct debt burden on a public accounting basis was EUR 6.4 billion (net), a reduction of EUR 547 million from the previous year (see Table 21 in Annex 6).

Treasury bonds continued to be the instrument with the greatest representation in total debt interest, amounting to EUR 4,642 million in 2021. This amount represents a EUR 74 million decrease from the previous year, mainly due to the maturity of the OT 4.8% June 2020. Interest from Official loans fell by EUR 318 million compared to the previous year, reflecting the reimbursement, in July, of EUR 286.7 million by the EFSF to the Portugal relating to interest associated with the repayment of the prepaid margin. Interest from CA and CT fell by approximately EUR 139 million, as a result of a decrease in interest associated to CTPM, due to the impact of the lower premium related to GDP growth and reduction in the outstanding stock of this product. Interest from BT pursued a favourable evolution, with the instrument continuing to benefit from negative issuing interest rates, with interest received standing at EUR 51 million.

In 2021, interest paid on the State direct debt on a National Accounts basis stood at EUR 5.2 billion, with a significant drop for the sixth year in a row. The annual decrease, which amounted to EUR 511 million, reflected the favourable and particularly significant development in price effect (decrease in implicit interest rate), which more than offsets the increase in the outstanding debt (see Table 23 in Annex 6). In fact, the implicit interest rate continues a consistent downward trend, reaching a new historic low of 1.9% in 2021. The weight of interest on GDP also registered a favourable evolution, decreasing from 2.9% in 2020 to 2.5% in 2021.

## Chart 17 – Evolution of interest on State direct debt (National accounts basis) (%)




## 3.2. State's Treasury

**State Treasury Cash Holdings**

The breakdown of the State's cash holdings for the 2020-2021 biennium is shown in Table 3.

**Table 3 – Cash accounts**

| EUR million | Dec-20 | Dec-21 |
|---|---|---|
| Accounts with BdP | 17,162 | 9,306 |
| Financial invesments with CI | 300 | 0 |
| Foreign currency accounts | 1 | 3 |
| Other bank accounts | 1 | 1 |
| RCE accounts (Banks, CTT, SIBS, IRN and Caixas do Tesouro) | 439 | 476 |
| External accounts with CI | 8 | 3 |
| Cheques in course of collection | 1 | 1 |
| **TOTAL** | **17,912** | **9,790** |

Source: IGCP

The table above illustrates that the cash position of the State at the end of 2021 showed a decrease of about EUR 8 billion compared to the previous year, as a result of a 46% decrease in amounts deposited at the Banco de Portugal (BdP).

By the end of 2021, the State's cash position was EUR 9.3 billion (or EUR 8.8 billion excluding cash collateral), compared to EUR 17.5 billion (or EUR 17.0 billion excluding cash collateral) at the end of the previous year.[12] The extraordinarily high cash position in December 2020 exceeded projections, as the budget execution proved more favourable than initially estimated (especially from summer, with the economic activity recovery) and the effort to pool the State's cash continued progressing, as well as reflecting the need to carry out the pre-financing of the OT to be amortised in April 2021 (in contrast to more recent years when the maturity occurred in June or October). Thus, the reduction during 2021 resulted mainly from the use of the balance to finance 2021 needs, allowing a financing decrease in 2021, while reflecting lower estimated net financing needs for 2022 than in previous years, which was particularly demanding in terms of the impact of measures to tackle the effects of the pandemic crisis.

**State Treasury Unit**

The State Treasury Regime (RTE), established by Decree-Law no. 191/99 of 5 June and reinforced annually by the State Budget Law, has defined the principle of the State Treasury Unit (UTE), according to which any activity in public funds must be centralised in bank accounts at the IGCP. The UTE is thus a key instrument to optimise State's liquidity management and financing.

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

**Table 4 – Cash Holdings of Public Services and Entities**

| Type of Customer | Disponibilidades (EUR milhões) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Demand deposits | | CEDIC | | CEDIM | | TOTAL | |
| | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 |
| ONSUTE | 6,298 | 4,406 | 2,995 | 6,362 | 0 | 0 | 9,293 | 10,768 |
| SEE | 2,149 | 1,301 | 887 | 2,195 | 25 | 21 | 3,061 | 3,518 |
| SFA | 6,548 | 3,779 | 3,163 | 8,914 | 909 | 559 | 10,620 | 13,252 |
| SI | 1,784 | 2,067 | 0 | 52 | 0 | 0 | 1,784 | 2,119 |
| **TOTAL** | **16,779** | **11,553** | **7,046** | **17,524** | **934** | **580** | **24,759** | **29,657** |

Source: IGCP

Considering the cash holdings of public services and entities in State Treasury, there was an increase of EUR 4,898 million between 2020 and 2021.

This variation essentially results from the increase in the amounts invested in CEDIC, which rose to about EUR 10.5 million compared to the previous year.

Concurrently, the amounts held in current accounts decreased by about EUR 5.2 million, which shows that they were transferred to CEDIC subscriptions.

[12] The treasury position is understood as the balance of deposits with the BdP and CIs, excluding cash collateral (see Table 11).

**Initiatives to Promote the State Treasury Unit**

During 2021, several initiatives were carried out to promote the UTE (State Treasury Unit), which greatly contributed to reaching the level of pooled cash holdings in the State Treasury indicated in Table 4 of this report.

The promotion of the UTE across public services and entities was carried out through dissemination and awareness-raising initiatives with public services and entities, the signing-up of service agreements, opinions issued on the UTE, as well as through the implementation of the new online banking services platform, the Internet Banking.

In the course of these initiatives, the IGCP has always sought to advise public services and entities on the use of tools that best fit their reality, within the range of banking services made available by the State Treasury.

In 2021, major steps were taken with the AMA (*Agência para a Modernização Administrativa, I.P.*) for the latter to work together with the IGCP as a technical facilitator for public services and entities in generating Single Billing Document (DUC) references and in the exchange of issue and collection files inherent to the use of the State Collections Network (RCE).

This partnership between the IGCP and AMA, which will enable the payment collection service for payments to the State to be made available on the new Public Administration Payment Platform, aims at:

a) Boosting the integration of low-technology entities into the RCE;
b) Improving management information for entities managing DUCs.

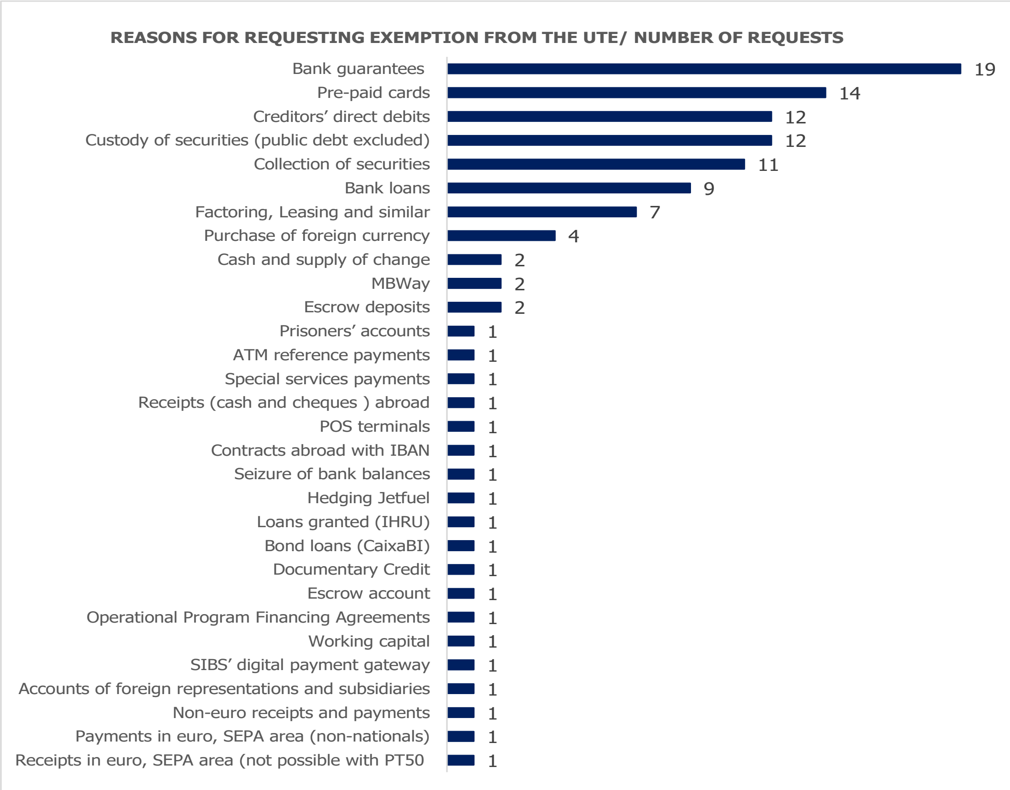
The initiatives undertaken by the IGCP to promote the UTE also resulted in the conclusion of around 30 agreements for the provision of banking services, 76% of which related to the provision of POS terminals (at the end of 2021, the IGCP had made around 5,400 equipment available, which enabled the inflow of public funds to the State's cash account of around EUR 277 million), and the remaining 24% split between agreements for the deposit of collateral and validation of the IBAN/NIF pair.

Under the terms of Article 172(5) of Law No 75-B/2020 of 31 December, public services and entities may be exempt from complying with the UTE. Cumulatively, under Article 115 (5) of Decree-Law No 84/2019 of 28 July, the IGCP may, in duly grounded exceptional situations, authorise the exemption of compliance with this principle, for a maximum period of two years. In 2021, the IGCP issued 54 opinions on requests for exemption from UTE compliance requested by public services and entities, 57% of which were submitted by SES entities.

Chart 18 illustrates the reasons given by services and public entities to justify requests for exemption.

The four most common reasons given for requests for exemption from the UTE are: bank guarantees, prepaid cards, the credit side of direct debits and custody of securities (excluding public debt), which represent 50% of the reasons for exemption.

Chart 18 – Reasons for requesting exemption from the UTE




Source: IGCP

During 2021, the implementation of *Internet Banking* (IB) was completed, the new online platform for the provision of banking services, replacing the *Homebanking* (HB).

This new platform integrates the best practices in terms of security, usability and efficiency, approaching similar applications provided by commercial banking.

In 2021, the satisfaction of services and public entities was measured, namely at the level of banking services provided through IB, which, under the satisfaction survey conducted in the reporting year, rose from 73% in 2017 to 93% in 2021.

# 4. Portfolio and Risk Limits Management

## 4.1. Management of State's Derivatives Portfolio

The main purpose of derivative operations executed in 2021 was to ensure the foreign exchange hedging of the portfolio. Transactions were mainly related to the unwinding of existing exchange rate positions, following repurchase transactions of USD bonds in July and October.

The derivatives portfolio obtained a net profit of EUR 762.6 million throughout the year, which is mainly explained by the positive effect of the appreciation of the dollar against the euro in the market value of currency hedging instruments (cross-currency swaps and FX swaps) associated to debt issues in USD and CNY. The result of interest rate derivatives was also positive due to the increase of long-term rates, compared to 2020 (in 2021, swaptions contracted by the IGCP in 2009 to hedge 30-year interest rates reached maturity).

With the publication of Decree-Law No 151/2019 of 11 October, as amended by Decree-Law No 175/2019 of 27 December, the intermunicipalisation of Sociedade de Transportes Coletivos do Porto S. A. (STCP) was established through the transfer of all the shares representing its share capital from the State to the municipalities of Gondomar, Maia, Matosinhos, Porto, Valongo and Vila Nova de Gaia. According to the provisions of Article 7(1)(d) of that Decree-Law, the State assumed the responsibilities that may be ascertained as a result of financial derivative contracted by STCP until 31 December 2019. At the end of 2021, only one derivative signed by the company was outstanding, maturing in June 2022 and with a market value of EUR -16.6 million.

**Table 5 – Change in derivative financial instruments portfolio**

| (EUR million) | Market value | | Cash-flow over the period(*) | Net income |
|---|---|---|---|---|
| | *31 December 2021* | *31 December 2020* | | |
| | *(1)* | *(2)* | *(3)* | *(4) = (1) - (2) + (3)* |
| **Interest rate** | **-32.1** | **-430.5** | **-313.7** | **84.7** |
| *IRS* | -32.1 | -3.0 | 30.1 | 1.0 |
| *Swaptions* | 0.0 | -427.6 | -343.9 | 83.7 |
| **Exchange rate** | **535.5** | **393.4** | **535.8** | **677.9** |
| *CCIRS* | 535.5 | 425.3 | 454.1 | 564.4 |
| *FX swaps* | 0.0 | -31.8 | 81.8 | 113.6 |
| **Total** | **503.4** | **-37.1** | **222.1** | **762.6** |
| **STCP derivative** | **-16.6** | **-41.6** | **-13.8** | **13.2** |

(*) Positive cash flows correspond to receipts in derivatives while negative cash flows correspond to payments made.

Source: IGCP

## 4.2. EPR's 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 in the market, no new hedging derivative financial instruments have been taken out. In 31 December 2021,  12 derivative instruments remained in the EPR portfolios at a market value of EUR -232.3 million and a contractual value of EUR 524.2 million.

**Table 6 – EPR derivatives portfolio**

| (EUR million) | Number of derivatives | Contractual amount | Market value 31 December 2021 | Market value 31 December 2020 | Cash-flow over the period(*) | Net income |
|---|---|---|---|---|---|---|
| | | *(1)* | *(2)* | *(3)* | *(4)* | *(5) = (2) – (3) + (4)* |
| Metropolitano de Lisboa | 8 | 348.5 | -122.0 | -272.4 | -94.4 | 56.0 |
| Metro do Porto | 4 | 168.1 | -110.4 | -213.7 | -100.6 | 2.7 |
| **Total** | **12** | **516.6** | **-232.3** | **-486.0** | **-195.0** | **58.7** |

(*) Positive cash flows correspond to receipts in derivatives while negative cash flows correspond to payments made.

Source: Valuation made by the IGCP, with the exception of the value of a derivative of the Lisbon Metro in which the counterparty's valuation is used.

The net result of this portfolio amounted to EUR 58.7 million throughout the year, which is mainly explained by the increase in euro swap rates, particularly in longer maturities, as well as their volatility.

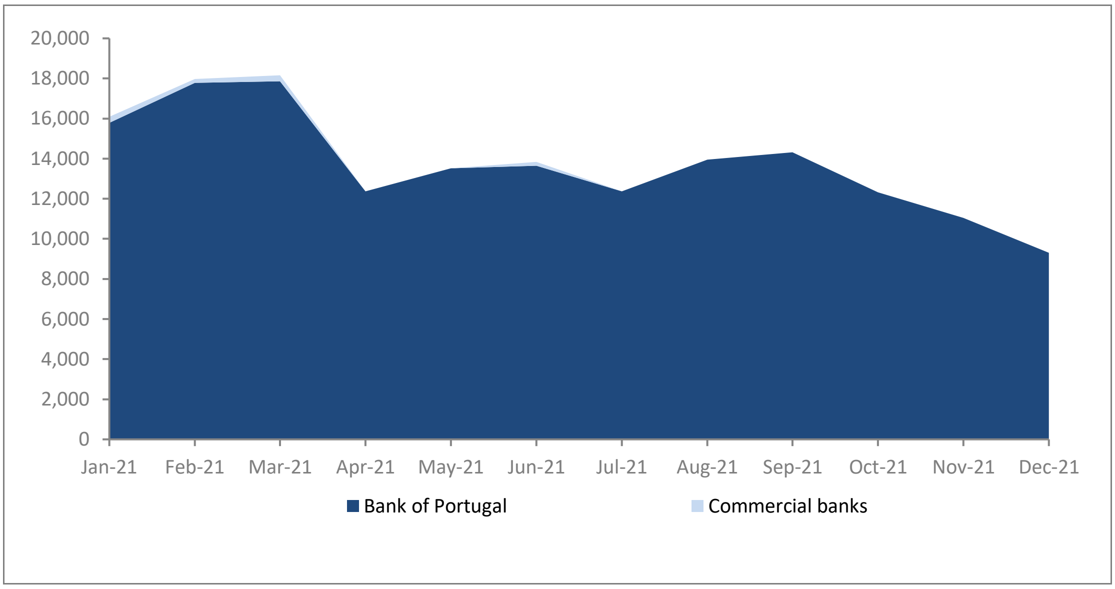
## 4.3. Cash Management

During 2021, the objective of ensuring maximum liquidity in the State's cash and cash equivalents was maintained, therefore, of the universe of instruments available for liquidity management, preference continued to be given to deposits with the Banco de Portugal.

By the end of 2021, the State' cash position was equivalent to EUR 8.8 billion, compared to EUR 17.0 billion at the end of the previous year. The drop in the cash balance throughout 2021 reflects a greater use of deposits to meet the State's financing needs, as mentioned above.

**Chart 19 – Developments in deposits of Single Treasury Account**

(EUR million)




Source: IGCP

The cost of holding the cash position calculated on the basis of the average cost of BT and OT (or BT only) renewed its minimum levels, benefiting simultaneously from the drop in the cost of debt financing (regardless of the calculation methodology considered) and the gradual reduction in the average cash position over time.

**Table 7 – Estimate of the cost of the cash position**

(EUR million)

| | Implicit rate total stock (1) | | | Average cost (BT+OT) (2) | | | Average cost (BT) (3) | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 | 2019 | 2020 | 2021 |
| Average deposits balance | 11,606 | 14,009 | 13,850 | 11,606 | 14,009 | 13,850 | 11,606 | 14,009 | 13,850 |
| Financing cost/Financing (%) | 2.5% | 2.2% | 1.9% | 0.6% | 0.3% | 0.2% | -0.4% | -0.4% | -0.5% |
| Average cost of funfing of the Treasury cash balance | 294 | 311 | 266 | 65 | 38 | 26 | -48 | -56 | -76 |
| Interest received from Treasury deposits | -2 | 8 | 14 | -2 | 8 | 14 | -2 | 8 | 14 |
| **Net cost of Treasury cash balance** | **293** | **318** | **280** | **63** | **46** | **39** | **-49** | **-49** | **-62** |
| As % of average deposits balance | 2.5% | 2.3% | 2.0% | 0.5% | 0.3% | 0.3% | -0.4% | -0.3% | -0.4% |
| As % of average State's direct debt stock | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| As % of GDP | 0.1% | 0.2% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

Notes: (1) Implicit interest rate is computed as the ratio between interest paid on State direct debt on an accrual basis and the average debt stock in a given year. (2) 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) during the year.

Source: IGCP

## 4.4. Cost indicators

On 31 December 2021, the market value of the State direct debt[13] was EUR 310,492 million, reflecting a premium of 10.7% over its nominal value. The average coupon of the portfolio decreased slightly in 2021 to 2.0%, while the average yield increased to 0.5%. The average debt repayment term has remained 7.4 years.

**Table 8 – Cost indicators[14] at year-end(EUR million)**

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Nominal value | 250,309 | 267,955 | 277,976 |
| Average coupon | 2.7% | 2.4% | 2.0% |
| Average yield | 0.7% | 0.4% | 0.5% |
| Average redemption period (years) | 7.5 | 7.4 | 7.4 |

[13]The direct government debt considered is consistent with the portfolio considered for the purposes of risk indicators reported quarterly to the ESDM - Economic and Financial Committee's Sub-Committee on EU Sovereign Debt Markets) and with the total debt stock after exchange rate hedging reported in IGCP's Monthly Bulletin and, as such, does not include treasury investments and includes cash received in the cash collateral associated with financial derivatives and securities issued for delivery as collateral.

[14]The average coupon is calculated by annualising the accrued interest between the last two working days of the year divided by the outstanding for the last business day. The premium indicator is obtained by subtracting the unit at market value without accrued interest divided by the outstanding balance. The average yield corresponds to considering an OT with maturity equal to the average redemption period, which pays the average coupon annually and has a price equal to market value, without accrued interest divided by the outstanding.

| | | | |
|---|---|---|---|
| Market value | 289,688 | 311,878 | 310,492 |
| Premium (incl. Accrued interest) | 14.3% | 15.1% | 10.7% |

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

Considering the funding needs outlined the proposal State Budget for 2022, the portfolio's position at the end of 2021, the assumption of constant financing spreads and the various scenarios simulated[15] for OT and BT curve dynamic:

- The expected value of the portfolio costs for 2022 (calculated on a National Accounts basis) is EUR 5,213 million;

- There is only a 5% probability that this value may exceed EUR 5,370 million (absolute CaR), due to interest rate changes.

- The relative CaR, for the same significance level, is EUR 157 million. Compared to GDP, the probability that, as a result of interest rate changes, the budget deficit-to-GDP ratio increases by more than 0.08 p.p. in 2022 is less than 5%.

**Refinancing risk**

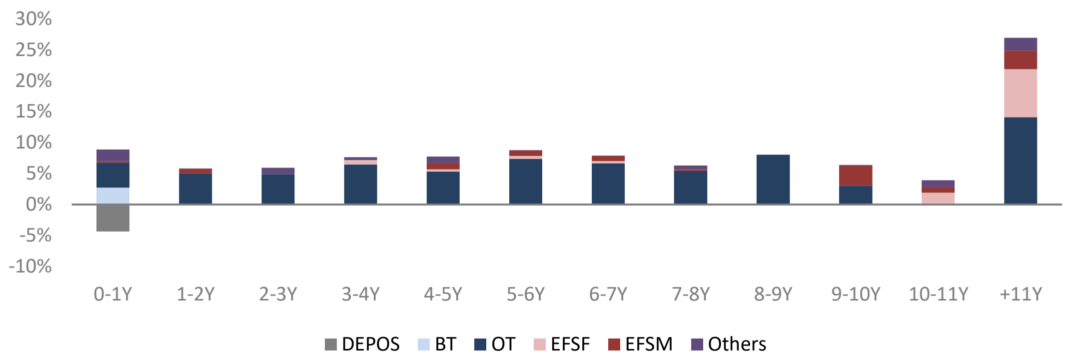
In addition to market variables (e.g. negotiability, liquidity, maintenance of a benchmark curve for the Republic), the management of the debt portfolio takes into account the control of the refinancing profile, so as to avoid an excessive concentration of redemptions that may lead to higher financing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

The absolute limits set on the percentage of the portfolio due to mature within 12, 24 and 36 months are 25%, 40% and 50%, respectively. At the end of 2021, the adjusted portfolio presented the

[15] To simulate the scenarios for the term structure of the interest rate, a VAR (Vector Autoregressive) model with 3 factors obtained through Principal Component Analysis was used.

refinancing profile shown in the following figure, fully complying with these limits. At the end of 2021, the adjusted portfolio had the following refinancing profile, fully complying with these limits.

**Chart 20 – Portfolio refinancing profile at end-2021**



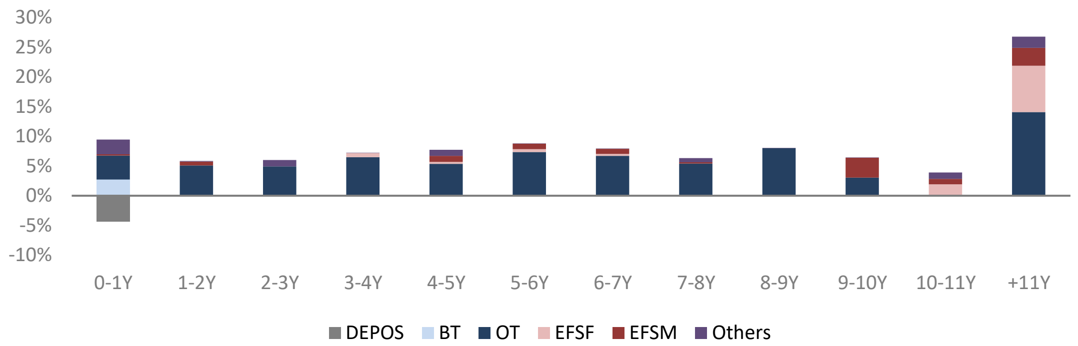

Source: IGCP

**Interest rate risk**

The modified duration of the total and adjusted debt portfolio stood at 5.65 and 6.43, respectively, at the end of 2021. During 2021, the duration of the adjusted portfolio was always higher than the established 4.0 minimum threshold.

By the end of 2021, the portfolio had the refixing profile (i.e. percentage of the nominal value of the portfolio adjusted to be refixed or matured, by maturity) shown in the figure below.

**Chart 21 – Refixing profile at end-2021**




Source: IGCP

**Exchange rate risk**

At the end of 2021, primary currency exposure (i.e. excluding hedging operations) was 1.36% of the total adjusted debt portfolio, far below the 20% threshold set by the Guidelines. This exposure is the result of bonds issued in foreign currency (USD and CNY).

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

**Credit risk**

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

The credit risk of each counterparty (i.e. of all its derivative contracts with the Portuguese Republic) is calculated using a methodology which includes two components: its current market value, which represents the substitution value of the 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 subtracted from the amount resulting from the sum of these two components.

Throughout 2021, the credit risk exposure of the derivatives portfolio remained below the overall limit set at 3% of the adjusted portfolio. By the end of the year, the exposure corresponded to 0.04% of the value of the adjusted portfolio, that is, that limit was occupied by 1.24%.

**Table 9 – Risk indicators at year-end** (EUR million)

| | 2019 | 2020 | 2021 |
|---|---|---|---|
| Primary Foreign Exchange Exposure (% adjusted portfolio) | 2.12% | 1.86% | 1.36% |
| Net Foreign Exchange Exposure (% adjusted portfolio) | 0.00% | 0.00% | 0.00% |
| Total Portfolio Duration (years) | 5.42 | 5.71 | 5.65 |
| Adjusted Portfolio Duration (years) | 6.07 | 6.30 | 6.43 |

Source: IGCP

# Annexes

## A1. Borrowing requirements and sources in 2021

### Table 10 – State borrowing requirements and sources on a public accounts basis

| (EUR million) | 2020 | 2021(P) |
|---|---|---|
| **1. NET BORROWING REQUIREMENTS** | **16,790** | **13,892** |
| Budget Deficit | 12,204 | 9,591 |
| Net acquisiton of financial assets (except privatisations) | 4,585 | 4,301 |
| FRDP reimbursement | 0 | 0 |
| Transfer of cash balances of *ADSE* | 0 | 0 |
| **2. REDEMPTIONS AND CANCELLATIONS (Funded Debt)** | **36,841** | **42,122** |
| Saving Certificates + Treasury Certificates | 3,987 | 4,959 |
| Short-term euro-denominated ebt | 22,327 | 18,914 |
| Medium- and long-term euro-denominated debt | 10,530 | 16,662 |
| Non-euro denominated debt | 0 | 1,387 |
| Swap capital flows (net) | -3 | 200 |
| **3. GROSS BORROWING REQUIREMENTS (1. + 2.)** | **53,631** | **56,014** |
| **4. SOURCES OF FINANCING** | **55,117** | **56,014** |
| Balance of funding from previous budgets | 108 | 1,501 |
| Debt issuance of the year's budget | 55,009 | 52,994 |
| Debt issuance in complementary period | 0 | 1,519 |
| **5. BALANCE OF FUNDING FOR FORTHCOMING BUDGETS (4. - 3.)** | **1,501** | **0** |
| *memo* . Statistical discrepancies | 15 | 0 |
| ***memo* . DEBT ISSUANCE IN THE CIVIL YEAR (Funded Debt)** | **56,562** | **52,994** |
| Relative to the budget of the previous year (Complementary Period) | 1,553 | 0 |
| Relative to the year's budget | 55,009 | 52,994 |

Note: The figures for the 2021 execution are provisional until the CGE/2021 is published
Source: Ministry of Finance, IGCP.

### Table 11 – State borrowing requirements and sources on a cash management basis

| **Needs and Sources 2020 e 2021** (EUR million) | **2020** | **2021**[(P)] |
|---|---|---|
| **GROSS BORROWING REQUIREMENTS** | **24,862** | **27,023** |
| Budget Deficit | 12,204 | 9,591 |
| Net acquisition of State financial assets (except privatisations) | 4,585 | 4,301 |
| One-off operatoions | 0 | 0 |
| *OT* redemptions (excl exchange operations) | 8,019 | 8,035 |
| Official loans redemptions (EFAP+SURE+RRF) | 0 | 0 |
| Other redemptions of medium- and long-term debt | 53 | 5,096 |
| **SOURCES OF FINANCING** | **24,862** | **27,023** |
| Use of deposits (excl cash-collateral) | -10,225 | 8,281 |
| Official loans issuance (EFAP+SURE+RRF) | 0 | 3,593 |
| *OT issuance* (excl exchange operations) | 27,157 | 14,559 |
| Floating Rate Treasury Bonds (*OTRV*) issuance | 0 | 0 |
| Other issuance of medium- and long-term debt | 16 | 0 |
| *BT* net issuance (excl *BT* held by the FRDP) | -530 | -4,760 |
| CA/CTPM net issuance | 711 | 536 |
| Other movements in the Single Treasury Account (excl cash-collateral) | 7,733 | 4,814 |
| **Outstanding amount of deposits (excl cash-collateral)** | **17,047** | **8,766** |
| cash.collateral outstanding at year-end | 415 | 540 |
| **Total outstanding amount of deposits at year-end** | **17,462** | **9,306** |

Note: The figures for the 2021 execution are provisional until the CGE/2021 is published
Source: Ministry of Finance, IGCP.

## A2. Financing composition in 2021

### Table 12 – Financing composition

| (EUR million) | Issuance | Redemption | Net |
|---|---|---|---|
| **EURO DEBT** | **52,994** | **40,535** | **12,459** |
| CA - Saving Certificates | 873 | 624 | 249 |
| CT - Treasury certificates | 4,622 | 4,335 | 287 |
| CEDIC | 17,523 | 7,046 | 10,477 |
| CEDIM | 0 | 354 | -354 |
| BT - Treasury Bills | 6,467 | 11,453 | -4,986 |
| OT - fixed rate government bonds | 19,375 | 12,599 | 6,776 |
| Floating rate Treasury Bonds (OTRV) | 0 | 3,450 | -3,450 |
| EFSF | 828 | 0 | 828 |
| EFSM | 8 | 0 | 8 |
| SURE | 2,407 | 0 | 2,407 |
| RRF | 351 | 0 | 351 |
| Other short-term debt | 540 | 415 | 126 |
| Other medium- and long-term debt | 0 | 259 | -259 |
| **NON-EURO DEBT** | **0** | **1,387** | **-1,387** |
| IMF | 0 | 0 | 0 |
| Other Debt | 0 | 1,387 | -1,387 |
| **SWAPS (NET)** | **0** | **200** | **-200** |
| **TOTAL** | **52,994** | **42,122** | **10,872** |

Note: The figures for the 2021 execution are provisional until the CGE/2021 is published.
Source: Ministry of Finance, IGCP.

### Table 13 – OT issuance via syndication

| Date | Security | Nominal value (EUR million) | Issue rate | *Spread vs benchmark*[1] *(pb)* | *Mid swap spread*(b p) |
|---|---|---|---|---|---|
| 03 Feb 2021 | OT 1% APR 2052 | 3,000 | 1.022% | 103 | 85 |
| 07 Apr 2021 | OT 0.3% Oct 2031 | 4,000 | 0.344% | 67 | 28 |

[1] Bund.
Source: IGCP

### Table 14 – OT issuance via auction

| Date | Security | Competitive auction nominal value (EUR million) | Non-competitive auction nominal value (EUR million) | Cut-off/allocation rate | *Mid swap spread*(b p) |
|---|---|---|---|---|---|
| 13 Jan 2021 | OT 0.475% Oct. 2030 | 500 | 0 | -0.01% | 22.2 |
| 13 Jan 2021 | OT 0.9% Oct 2035 | 750 | 0 | 0.32% | 35.7 |
| 10 Mar 2021 | OT 0.7% Oct. 2027 | 625 | 123 | -0.09% | 12.1 |
| 10 Mar 2021 | OT 0.475 Oct. 2030 | 625 | 123 | 0.24% | 23.9 |
| 12 May 2021 | OT 0.3% Oct 2031 | 551 | 0 | 0.51% | 34.1 |
| 12 May 2021 | OT 0.9% Oct 2035 | 699 | 0 | 0.84% | 46.6 |
| 09 Jun 2021 | OT 0.7% Oct. 2027 | 300 | 0 | -0.16% | 2.3 |
| 09 Jun 2021 | OT 0.3% Oct 2031 | 700 | 0 | 0.40% | 29.0 |
| 14 Jul 2021 | OT 0.475% Oct. 2030 | 622 | 118 | 0.13% | 14.0 |
| 14 Jul 2021 | OT 4.10% APR 2037 | 292 | 56 | 0.61% | 30.1 |
| 10 Nov 2021 | OT 0.3% Oct 2031 | 686 | 0 | 0.31% | 19.9 |
| 10 Nov 2021 | OT 4.10% APR 2037 | 314 | 0 | 0.62% | 34.2 |

Source: IGCP

### Table 15 – OT exchange offers

| Date | Title | Position | *Exchange offer YTM* | Nominal value (EUR million) |
|---|---|---|---|---|
| 28 Apr 2021 | OT 2.25% APR 2034 | Issuance | 0.65% | 312 |
| 28 Apr 2021 | OT 2.125% Oct 2028 | Issuance | 0.09% | 671 |
| 25 Aug 2021 | OT 2.125% Oct 2028 | Issuance | -0.23% | 1,025 |
| 25 Aug 2021 | OT 4.10% APR 2037 | Issuance | 0.48% | 336 |
| 22 Sep 2021 | OT 2.125% Oct 2028 | Issuance | -0.19% | 279 |
| 22 Sep 2021 | OT 2.25% APR 2034 | Issuance | 0.39% | 235 |
| 27 Oct 2021 | OT 0.3% Oct 2031 | Issuance | 0.39% | 681 |
| 27 Oct 2021 | OT 1% APR 2052 | Issuance | 1.23% | 266 |
| | | | | **3,805** |
| 28 Apr 2021 | OT 2.20% Oct 2022 | Purchase | -0.59% | 501 |
| 28 Apr 2021 | OT 5.65% FEB 2024 | Purchase | -0.49% | 482 |
| 25 Aug 2021 | OT 4.95% Oct 2023 | Purchase | -0.69% | 1,080 |
| 25 Aug 2021 | OT 5.65% FEB 2024 | Purchase | -0.68% | 281 |
| 22 Sep 2021 | OT 2.20% Oct 2022 | Purchase | -0.69% | 330 |
| 22 Sep 2021 | OT 5.65% FEB 2024 | Purchase | -0.70% | 184 |
| 27 Oct 2021 | OT 4.95% Oct 2023 | Purchase | -0.71% | 205 |
| 27 Oct 2021 | OT 5.65% FEB 2024 | Purchase | -0.66% | 742 |
| | | | | **3,805** |

Source: IGCP

## Table 16 – BT auctions

| Date | Security | Competitive auction nominal value (EUR million) | Non-competitive auction nominal value (EUR million) | Average allocated yield | *Spread vs Euribor* (b p) |
|---|---|---|---|---|---|
| 20 Jan 2021 | BT 16 JUL 2021 | 750 | 8 | -0.55% | -2.1 |
| 20 Jan 2021 | BT 21 JAN 2022 | 750 | 8 | -0.52% | -1.6 |
| 17 Feb 2021 | BT 21 MAI 2021 | 625 | 0 | -0.54% | 0.1 |
| 17 Feb 2021 | BT 21 JAN 2022 | 625 | 0 | -0.52% | -2.2 |
| 17 Mar 2021 | BT 17 SEP 2021 | 500 | 0 | -0.55% | -3.2 |
| 17 Mar 2021 | BT 18 MAR 2022 | 1000 | 0 | -0.53% | -4.2 |
| 21 Apr 2021 | BT 16 JUL 2021 | 450 | 0 | -0.60% | -6.2 |
| 21 Apr 2021 | BT 18 MAR 2022 | 800 | 0 | -0.56% | -7.5 |
| 19 May 2021 | BT 19 NOV 2021 | 750 | 0 | -0.57% | -5.5 |
| 19 May 2021 | BT 20 MAI 2022 | 1000 | 0 | -0.54% | -5.7 |
| 16 Jun 2021 | BT 17 SEP 2021 | 500 | 0 | -0.59% | -4.5 |
| 16 Jun 2021 | BT 20 MAI 2022 | 750 | 0 | -0.55% | -6.0 |
| 21 Jul 2021 | BT 22 JUL 2022 | 1000 | 33 | -0.59% | -11.0 |

Note: Excluding issues to the FRDP

Source: IGCP

## Table 17 – CEDIC/CEDIM

| | 2020 | | | | 2021 | | | |
|---|---|---|---|---|---|---|---|---|
| | Nominal value (EUR million) | Number of operations | Average rate[1] (%) | Average redemption period (years) | Nominal value (EUR million) | Number of operations | Average rate[1] (%) | Average redemption period (years) |
| **CEDIC** | | | | | | | | |
| Issues | 9,253 | 260 | 0.08% | 0.50 | 21,376 | 331 | 0.07% | 0.41 |
| Early repayments | 902 | 19 | 0.09% | 0.52 | 188 | 23 | 0.06% | 0.55 |
| *Year-end balance* | *7,046* | | | | *17,523* | | | |
| **CEDIM** | | | | | | | | |
| Issues | 13 | 2 | 0.01% | 2.35 | 0 | 1 | 0.47% | 10.35 |
| Early repayments | 0 | 0 | 0.00% | 0.00 | 0 | 0 | 0.00% | 0.00 |
| *Year-end balance* | *934* | | | | *580* | | | |

[1] Rate weighted by the maturity of the investments

Source: IGCP.

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

It is important to maintain an analysis of the performance of primary dealers ( OEVT), as a distribution channel for the primary market and as suppliers of reference prices and liquidity in the secondary market, as they are a crucial to the proper functioning of the financial markets.

In 2021, of note is the performance of the following OT and BT market participants, respectively:

**Table 18 – Best-performing Primary Dealers (OEVT)in 2021**

| | |
|---|---|
| 1 | Crédit Agricole |
| 2 | Nomura |
| 3 | Morgan Stanley |
| 4 | JP Morgan |
| 5 | BNP Paribas |

Source: IGCP

**Table 19 – Best-performing Treasury Bill Specialists (EBT) in 2021**

| | |
|---|---|
| 1 | Millennium bcp |
| 2 | JP Morgan |
| 3 | Crédit Agricole |
| 4 | Barclays |
| 5 | HSBC |

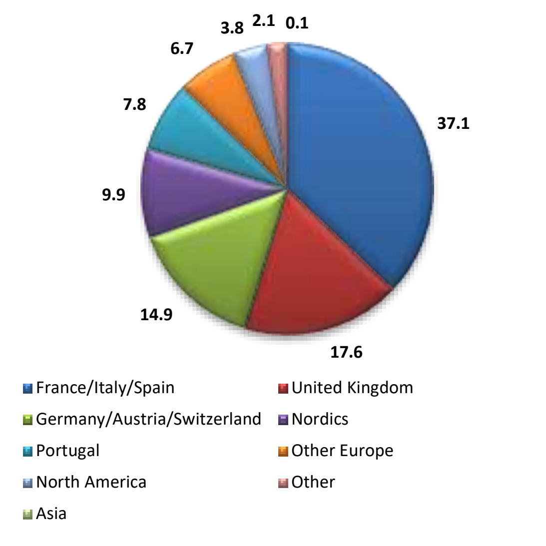
Source: IGCP

## A4. Distribution of OT syndicated issues

In February 2021, the Portuguese Republic placed EUR 3 billion OT through a 30-year syndicated transaction. In this transaction, about 92% final amount was placed with non-resident investors, with particular emphasis on investors from the France, Italy and Spain (37%), , but also the relevant presence of investors of the from United Kingdom (about 18.6%), and Germany, Austria and Switzerland(15%). Also of note Investment strong participation of real money investors, in particular investment funds, Insurance Companies and Pension Funds, which usually offer greater price stability on the secondary market.

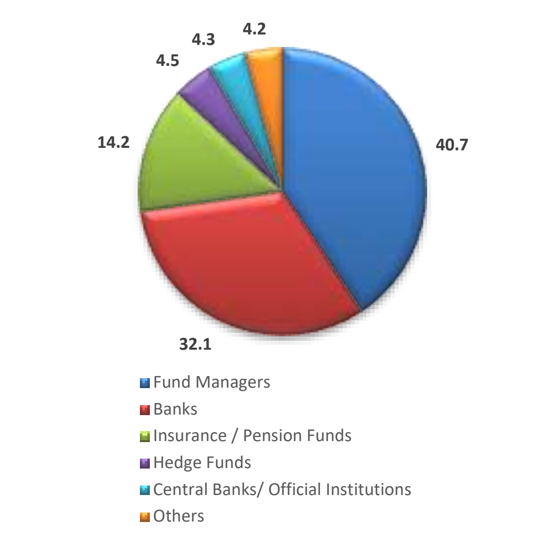
**Chart 22 – OT syndicated issue as at February 2021: New 30-year *Benchmark***

By investor geography




Source: IGCP

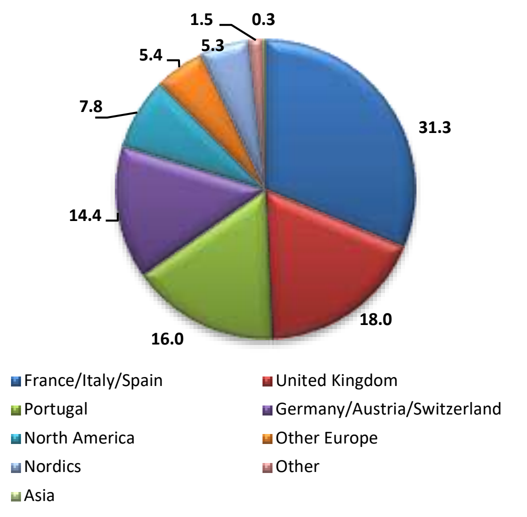
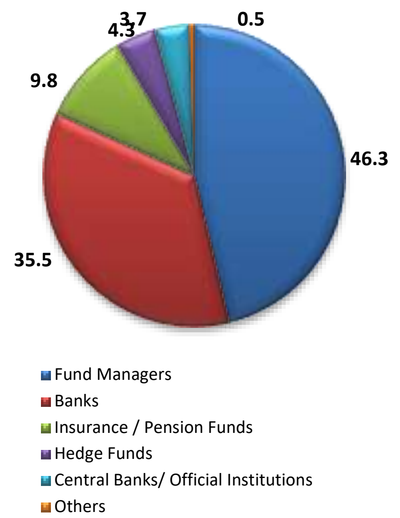
By investor profile




Source: IGCP

In April 2021, the Portuguese Republic placed EUR 4 billion OT through a 10-year syndicated transaction. In this operation, about 84% of the final amount was placed in non-resident investors, namely from France, Italy and Spain (with about 31% of the distribution), United Kingdom (18%), and Portugal (with 16% of the allocation). Investment Funds (with 46% of the distribution) and Banks (about 36%).

**Chart 23 – OT syndicated issue as at April 2021: New 10-year *Benchmark***

| By investor geography | By investor profile |
|---|---|
|  |  |





Source: IGCP

Source: IGCP

# A5. Table of movements in State's direct debt

## Table 20 – State's direct debt (Public accounts basis)

| | **Outstanding on** | | January - December 2021 | | | **Outstanding on** | |
|---|---|---|---|---|---|---|---|
| | **31/dez/20** | Structure | Issues | Redemptions | Others | **31/dez/21** | Structure |
| **1. Euro-denominated debt (excluding official loans)** | **211,771** | **78.9%** | **57,133** | **48,266** | **-522** | **220,116** | **79.0%** |
| Tradable | 169,974 | 63.3% | 29,433 | 31,298 | -522 | 167,587 | 60.2% |
| *ECP* (discounted value) | 0 | 0.0% | 0 | 0 | 0 | 0 | 0.0% |
| BT (discounted value) | 11,453 | 4.3% | 10,057 | 15,044 | 0 | 6,467 | 2.3% |
| Fixed rate Treasury Bonds (OT) | 148,294 | 55.3% | 19,375 | 12,599 | -627 | 154,443 | 55.5% |
| Floating rate note (FRN) | 7,950 | 3.0% | 0 | 3,450 | 0 | 4,500 | 1.6% |
| Other bonds | 0 | 0.0% | 0 | 0 | 100 | 100 | 0.0% |
| *MTN* | 2,270 | 0.8% | 0 | 205 | 5 | 2,070 | 0.7% |
| Retail-Bonds | 7 | 0.0% | 0 | 0 | 0 | 7 | 0.0% |
| Non-tradable | 41,797 | 15.6% | 27,700 | 16,969 | 0 | 52,529 | 18.9% |
| Saving Certificates | 12,220 | 4.6% | 873 | 624 | 0 | 12,469 | 4.5% |
| Subscription value | 7,949 | 3.0% | 724 | 483 | 0 | 8,190 | 2.9% |
| Accrued interest | 4,271 | 1.6% | 148 | 141 | 0 | 4,279 | 1.5% |
| Treasury Certificates | 17,562 | 6.5% | 4,622 | 4,335 | 0 | 17,849 | 6.4% |
| CEDIC | 7,046 | 2.6% | 21,377 | 10,900 | 0 | 17,523 | 6.3% |
| CEDIM | 934 | 0.3% | 0 | 354 | 0 | 580 | 0.2% |
| Cash-collateral | 415 | 0.2% | 770 | 644 | 0 | 540 | 0.2% |
| Ohers | **3,621** | **1.3%** | **58** | **112** | **0** | **3,568** | **1.3%** |
| **2. Non-Euro-denominated debt (excluding official loans)** | 3,916 | 1.5% | 0 | 1,387 | 455 | 2,984 | 1.1% |
| Tradable | 3,916 | 1.5% | 0 | 1,387 | 455 | 2,984 | 1.1% |
| *ECP* (discounted value) | 0 | 0.0% | 0 | 0 | 0 | 0 | 0.0% |
| Other bonds | 0 | 0.0% | 0 | 0 | 0 | 0 | 0.0% |
| *MTN* | 3,916 | 1.5% | 0 | 1,387 | 455 | 2,984 | 1.1% |
| Non-tradable | 0 | 0.0% | 0 | 0 | 0 | 0 | 0.0% |
| **3. Official loans** | **52,628** | **19.6%** | **3,593** | **0** | **-831** | **55,390** | **19.9%** |
| SURE | 3,000 | 1.1% | 2,407 | 0 | 4 | 5,411 | 1.9% |
| RRF | 0 | 0.0% | 351 | 0 | 0 | 351 | 0.1% |
| EFAP | 49,628 | 18.5% | 835 | 0 | -835 | 49,628 | 17.8% |
| EFSF | 25,328 | 9.4% | 828 | 0 | -828 | 25,328 | 9.1% |
| EFSM | 24,300 | 9.1% | 8 | 0 | -8 | 24,300 | 8.7% |
| IMF | 0 | 0.0% | 0 | 0 | 0 | 0 | 0.0% |
| **4. Total Debt (1.+ 2.+3.)** | **268,316** | **100.0%** | **60,726** | **49,654** | **-899** | **278,489** | **100.0%** |
| 5. Exchange rate effect of hedging with derivatives (net) | -288 | | | | | -478 | |
| **6. Total debt after derivatives (4.+ 5.)** | **268,028** | | | | | **278,011** | |

Note: Outstanding amounts are at nominal value (except for instruments issued at a discount, which are at a discount), valued 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. State's direct debt costs

### Table 21 – Current expenditure on State's direct debt (Public accounts basis)

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|---|
| **Government debt interest** | **7,017** | **7,038** | **7,282** | **7,034** | **7,063** | **7,108** | **6,837** | **6,287** |
| Treasury bills | 381 | 99 | 9 | 2 | -35 | -45 | -49 | -51 |
| Government bonds | 3,964 | 4,087 | 4,544 | 4,599 | 4,842 | 4,858 | 4,716 | 4,642 |
| EFAP loans | 2,009 | 2,119 | 1,846 | 1,567 | 1,178 | 1,058 | 990 | 673 |
| Savings and Treasury certificates | 379 | 562 | 791 | 669 | 731 | 780 | 715 | 576 |
| Others | 284 | 171 | 92 | 197 | 347 | 457 | 464 | 447 |
| **Other charges (*)** | **81** | **67** | **101** | **93** | **82** | **61** | **80** | **77** |
| EFAP loans | 19 | 2 | 16 | 11 | 28 | 15 | 14 | 28 |
| Others | 63 | 65 | 85 | 82 | 54 | 47 | 65 | 49 |
| **Total charges paid** | **7,098** | **7,105** | **7,383** | **7,127** | **7,145** | **7,169** | **6,917** | **6,364** |
| Interest received from deposits and loans granted | -126 | -13 | -4 | -4 | 1 | -2 | 8 | 14 |
| **Net interest and other charges** | **6,972** | **7,092** | **7,379** | **7,123** | **7,146** | **7,168** | **6,925** | **6,378** |

Notes: (*) Other charges include costs associated with the placement of debt in the market (issuance, 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. (**) In 2011 a portion of EUR 64 million of charges with Official loans was reclassified as interest from a National accounts perspective and accrued over the lifetime of the loan. The 2012 figures include the guarantee commission fee of EFSF bills, totalling EUR 1.2 million, which was reclassified as interest in National Accounts.

Source: IGCP.

### Table 22 – Interest on State's direct debt (National accounts basis)

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|---|
| **Government debt interest** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| Treasury bills | 214 | 35 | 5 | -14 | -46 | -47 | -49 | -49 |
| Government bonds | 4,362 | 4,361 | 4,315 | 4,384 | 4,220 | 3,930 | 3,616 | 3,327 |
| EFAP loans | 2,262 | 2,215 | 1,942 | 1,574 | 1,245 | 1,115 | 1,063 | 862 |
| Savings and Treasury certificates | 517 | 687 | 734 | 707 | 791 | 752 | 586 | 623 |
| Others | 281 | 352 | 365 | 454 | 516 | 549 | 543 | 486 |
| **Total charges paid** | **7,636** | **7,650** | **7,362** | **7,106** | **6,725** | **6,299** | **5,760** | **5,249** |
| Interest received from deposits and loans granted | -125 | -13 | -3 | -4 | 1 | -1 | 8 | 13 |
| **Net interest and other charges** | **7,511** | **7,637** | **7,358** | **7,103** | **6,726** | **6,297** | **5,768** | **5,262** |

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 | 6,299 | 2.5% | -427 | 177 | -588 | -16 |
| 2020 | 259,664 | 5,760 | 2.2% | -539 | 289 | -791 | -36 |
| 2021 | 273,403 | 5,249 | 1.9% | -511 | 305 | -775 | -41 |

Notes:

* The calculation of the average debt stock takes into account the total debt including cash collateral.

** 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.