2. State Financing

2.1. Financing Strategy

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

In 2018, the State's net borrowing needs amounted to EUR 7.3 billion, a decrease of approximately EUR 3 billion compared to 2017. This decrease is mainly explained by the amount used in CGD's capitalisation (in 2017), which amounted to EUR 2.5 billion. Excluding this amount, the State's net financing needs in 2018 would have been similar to the previous year (see Table 9 in Annex 1).

Compared to the initial forecast, net borrowing requirements were lower (EUR 3.6 billion), which allowed, in particular, for the conclusion of the early repayment of the IMF loan.

Table 1 – Summary of State borrowing needs and sources in 2018

(EUR million)	Fin Prog	Execution	Difference
GROSS BORROWING NEEDS	**18.527**	**20.604**	**2.078**
Net borrowing needs	**10.938**	**7.339**	**-3.599**
Budget deficit (State subsector)	5.532	3.666	-1.866
Net acquisition of State's financial assets	5.406	3.673	-1.733
One-off operations	0	0	0
Redepmtion of MLT debt	**7.589**	**13.266**	**5.677**
OT redemptions (reimbursed amount; excl exchange operations)	6.642	7.561	919
IMF redemptions	845	5.515	4.670
Other medium- and long-term debt redemptions	101	189	88
FINANCING SOURCES	**18.527**	**20.604**	**2.078**
Use of deposits (excl cash-collateral)	1.777	489	-1.288
Funding under the EFAP	0	12	12
OT issuance (disbursed amount; excl exchange operations)	15.000	16.431	1.431
OTRV issuance	750	1.000	250
Other medium- and long-term debt issuances	0	125	125
Net issuances of Tbills (excl Tbills held by *FRDP*)	0	-1.788	-1.788
Net issuances of *CA/CTPM*	1.000	1.315	315
Other moverments in the Single Treasury Account (excl cash-collateral)	0	3.021	3.021
Deposits at year-end (excl cash-collateral)	**8.042**	**9.330**	**1.288**
Cash-collateral at year-end	444	397	-47
Deposits at year-end	**8.486**	**9.726**	**1.241**

Note: Annex 1 presents a more detailed breakdown of the State borrowing needs and sources, as well as a comparison between the budget public accounting approach and the cash management approach presented here.

Source: IGCP

The strategy for 2018 included the issuance of a new 10-year benchmark and reopening different *OT* lines via auction to provide liquidity along the curve, anticipating a volume of gross *OT* issuance in the order of EUR 15 billion. Given the strong demand and improving market conditions, the actual volume of gross issuance amounted to EUR 16.4 billion. This amount includes the launch of a new 15-year *OT* in a second syndication, with demand of over EUR 16 billion and more than 300 accounts, and strong participation of real money investors. The increase in gross *OT* issuance was offset by the decrease in the *BT* programme, by around EUR 1.8 billion.

The funding programme also included the possible issuance of new *OTRV* series so as to continue boosting this market, a strategy that started in 2016. Domestic market demand for these securities was once again robust, leading to an issuance of EUR 1 billion, above the initial plan of EUR 750 million.

Finally, it should be noted that net CA/CT subscriptions exceeded expectations, surpassing the initial forecast (of EUR 1 billion) by more than EUR 300 million.

The successful execution of the funding programme is based on the regular and predictable issuance of government bonds throughout the year, with a focus on the euro market, so as to provide *OT* lines with liquidity, reduce volatility in the vicinity of trading windows, take advantage of increasing investor demand for Portuguese public debt and facilitate the implementation of the Eurosystem's asset purchase programme for Portugal. It also benefits from the promotion of Portuguese public debt among financial intermediaries and international investors: in 2018, IGCP continued to provide information frequently to the market, namely in meetings with final investors and rating agencies, as well as regular advice and contact with primary market participants (OEVT and EBT).

Interaction with investors throughout 2018 reflected overall confidence in Portuguese debt, particularly in view of the favourable and consistent behaviour of macroeconomic and fiscal data, and notwithstanding political tensions in Italy. Increased credibility translated into greater demand for Portuguese public debt, reinforced by Moody's upgrade to investment grade level, at Baa3 (in October). From that moment on, the Portuguese Republic was rated as investment grade by the main rating agencies: S&P, Fitch and Moody's (see Box 2.2).

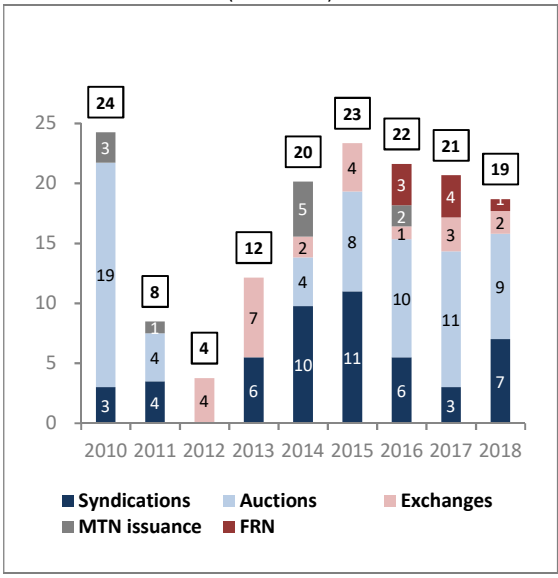
In 2018, medium- and long-term market financing amounted to approximately EUR 19 billion (nominal value), with EUR 7 billion (37%) being issued via syndicated *OT* operations, EUR 9 billion (47%) via *OT* auctions, EUR 1.9 billion (10%) via *OT* exchange operations and EUR 1 billion through *OTRV*. As a reference, in 2017 *OT* issuance through syndications and auctions amounted to EUR 3 billion and EUR 11 billion, respectively, and *OTRV* issuance amounted to EUR 3.5 billion.

As usual, the weight of the first quarter was higher than that of the others (41% of total issuance), mainly due to the opening of a new 10-year *OT* in the amount of EUR 4 billion. Compared to 2017, there was an increase in the relative weight of the second quarter (33% of the total amount issued) due to the opening of a 15-year *OT* amounting to EUR 3 billion. Thus, by the end of the first half of the year, 74% of the funding programme had been completed. In the remaining quarters, the amount issued was relatively constant at around EUR 2.3 billion.

In relation to the type of placement, there was an increase in the weight of financing through syndicated operations, offset by a reduction in the weight of auctions, as two new *OT* lines were opened, given the opportunity to issue a new long-term *OT* (15 years). In line with its strategy, IGCP maintained a regular and anticipated pattern of issuance in 2018, aiming at one auction per month (except in the months with less activity, in August and December), which could be replaced by a syndicated operation in the

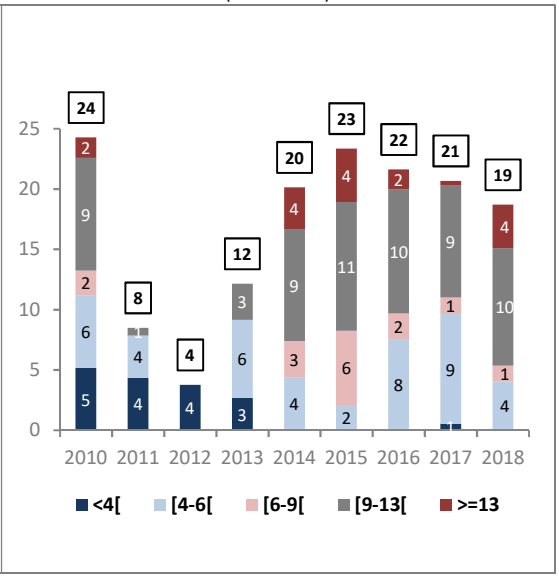
event of favourable market conditions, especially when the introduction of a new line is justified – as was the case in January and April with the issuance of 10- and 15-year *OT*.

Graph 9 – Issuance of medium- and long-term debt by type of placement
(EUR billion)



Source: IGCP

Graph 10 – Issuance of medium- and long-term debt by maturity
(EUR billion)

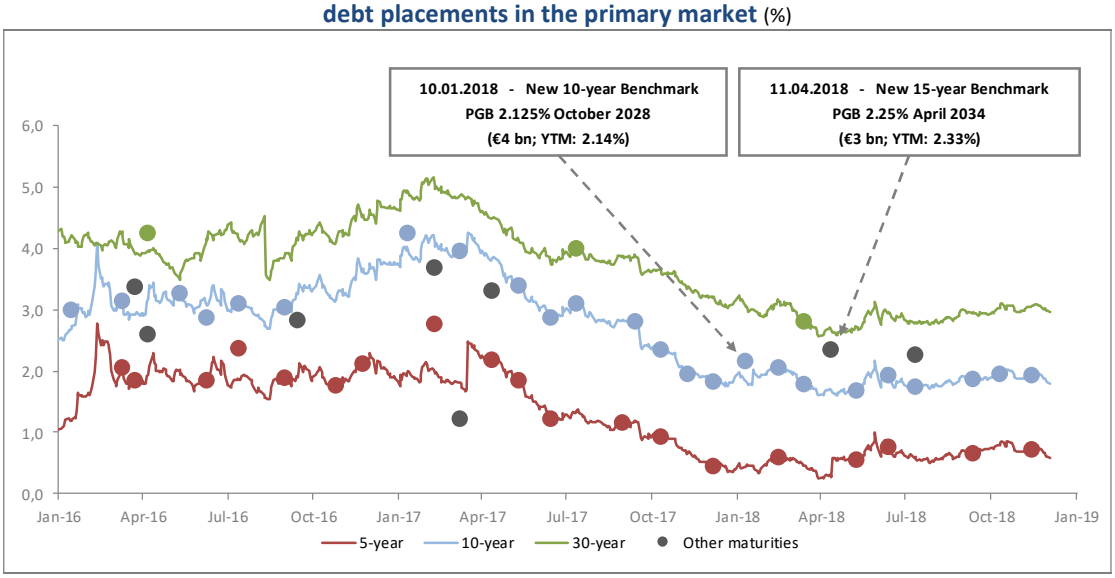


Source: IGCP

The upward trend in the Portuguese Republic's rating – notably the the classification as investment grade by S&P in September 2017, by Fitch in December 2017 and finally by Moody's in October 2018 – had a positive impact on the number of investors interested in *OT*, but especially in the quality of these investors, with the weight of real money investors, namely insurance/ pension funds and asset managers, on the upswing (see Box 2.2). The interest of these more traditional investors falls typically in the longer end of the curve, creating the said opportunity to issue the new 15-year *OT*. For the rest of the year, demand continued to be concentrated on the most liquid terms: 5 and in particular 10 years. Thus, the Republic chose to direct the implementation of the funding programme to the perceived preferences of investors, following recommendations issued by the *OEVT*.

In parallel, the relevance of ECB's asset purchase programme in the market decreased: between January and September 2018, monthly net purchases amounted to EUR 30 billion, falling to EUR 15 billion in the last quarter of the year; these figures contrast with an amount of EUR 60 billion between April and December 2017. This change ended up not having a negative impact on demand for Portuguese debt. In fact, the amount of net purchases of Portuguese debt under the PSPP declined only slightly between 2017 and 2018, from EUR 6.4 million to EUR 5.8 billion.

Graph 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 debt issued over 2018 was 10.3 years, up 2.5 years from 2017. Despite this increase, the average maturity of the debt stock declined slightly to 7.8 years (including official loans).

The active debt management strategy also benefited from maintaining a relatively high cash buffer, which not only reduces refinancing risk in periods of greater market volatility, but also enables the execution of debt repurchases in order to smooth the portfolio's repayment profile. In 2018, the debt buyback programme was carried out through bilateral operations and exchange auctions in an amount of around EUR 7.5 billion in total, of which around EUR 2.8 billion in *OT* buybacks and EUR 5.5 billion referring to the early repayment of the IMF loan, corresponding to the tranches due between 2021 and 2024 (see Box 2.1).

Box 2.1 | Payment in full of the IMF loan

The early repayment of the IMF loan was phased between March 2015 and December 2018, with the goal of optimising the cost of debt (by successively replacing tranches of this loan with less costly debt), as well as smoothing the refinancing profile in subsequent periods.

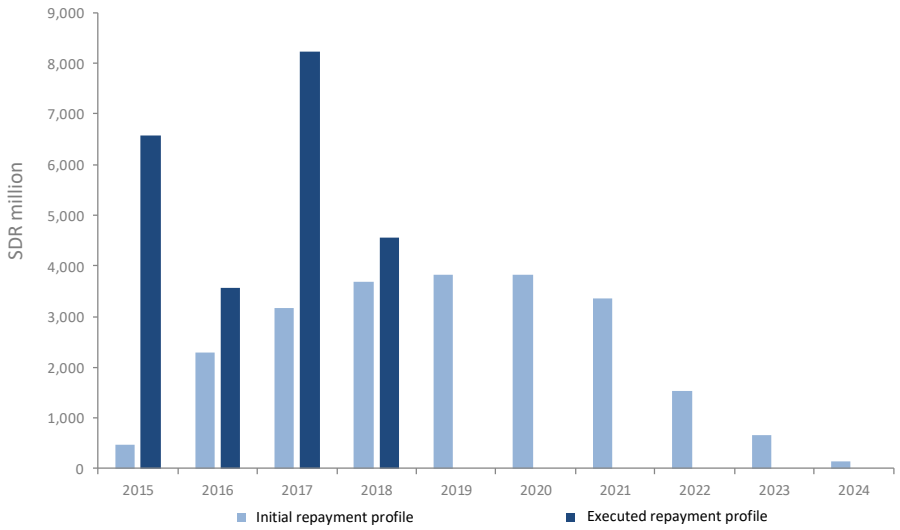
Between March 2015 and February 2017, Portugal repaid 50% of the loan's nominal value, i.e. approximately SDR 11,471 million, under the first main waiver granted by European creditors of the EFAP. In the second quarter of 2017, the second main waiver was granted, which enabled the Portuguese Republic to continue the early repayment programme through the reimbursement of about SDR 7,608.3 million between June 2017 and January 2018.

During the fourth quarter of 2018, the third main waiver was granted, which allowed the early repayment of the remaining nominal value of the IMF loan – which corresponded to approximately SDR 3,862.7 million.

With the payment of 10 December 2018, the outstanding amount was paid in full. Accordingly, the last interest payment associated with this loan is dated 6 February 2019, considering the weighted average of the remaining nominal value during the interest calculation period.

Through the early repayment strategy, the average loan maturity was reduced from 7.25 years to 4.73 years, as can be seen from the comparison between the initial repayment profile and the executed profile:

Graph 12 – Repayment profile of the IMF loan (31.12.2018)



The table below summarises repayments per semester: the amount repaid, the original period in which that amount would be due and, as a result, the average number of months without redemptions due to the IMF.

	Amount (SDR M)	Initial redemption period	Months without redemption
S1-2015	6,579	Nov-15/ Apr-18	19
S2-2015	0		
S1-2016	1,583	Apr-18/ Sep-18	24
S2-2016	1,977	Sep-18/ Mar-19	23
S1-2017	2,142	Mar-19/ Oct-19	24
S2-2017	6,090	Oct-19/ May-21	31
S1-2018	708	May-21/ Jun-21	35
S2-2018	3,863	Jun-21/ Apr-24	47

As of 31 December 2018, the annualised cost of the IMF loan, in EUR, was approximately 4.77%, not including gains/losses on foreign-exchange and interest-rate hedging derivatives. By including the effect of exchange-rate and interest-rate hedging derivatives, the all-in cost of this loan in EUR was 3.49% per year. The difference between the final cost of 4.77% and the

cost of 3.70% estimated in December 2014 (i.e. at the end of the year of the last disbursement) is due to the unfavourable evolution of the SDR exchange rate against the EUR. It should be noted, however, that the use of derivatives made it possible to keep the final all-in cost at 3.49%.

From 2011 until the end of 2018, the aggregate gain from all hedging instruments (i.e. CCIRS, FX swaps, FX forwards and FX options) was approximately EUR 1.8 billion, with about 79% of this gain coming from CCIRS and 13% from FX forwards.

In order to estimate the interest savings with the IMF prepayments, a comparison is made, for each early repayment, between the interest rate of the IMF loan (converted to EUR) and the cost of financing of the Portuguese Republic for the equivalent term (*OT*). Summing up the differentials obtained in all executed payments, the estimated total savings amount to EUR 1.92 billion.

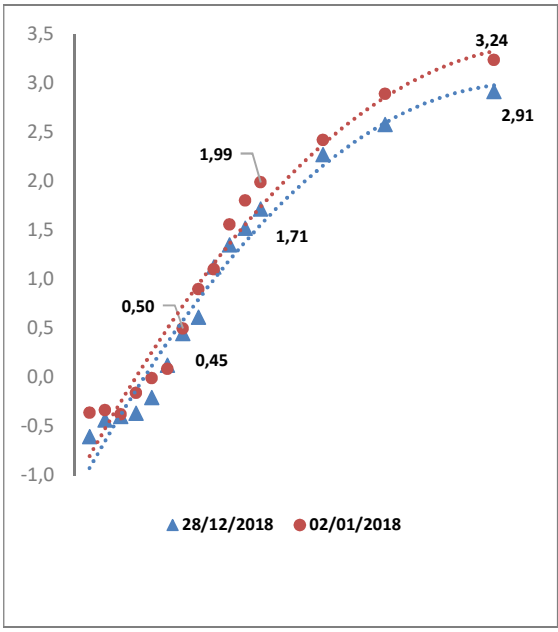
Month of early repayment	**Amount** (EUR bn)	**Average lifespan**(years)	**Interest rate (EUR)**	**Equivalent *OT* rate**	**Savings** (EUR bn)
Mar-2015	6.6	1.7	3.59%	0.26%	0.37
Jun-2015	1.8	2.6	3.83%	0.82%	0.14
Feb-2016	2	2.4	3.44%	0.49%	0.14
Nov-2016	2.1	2	3.54%	0.73%	0.12
Dec-2016	0.5	2.2	2.94%	0.66%	0.03
Feb-2017	1.7	2.2	3.27%	0.61%	0.1
Jul-2017	2.8	2.4	3.69%	0.21%	0.23
Oct-2017	1.8	2.6	3.64%	-0.14%	0.18
Nov-2017	2.8	3	3.41%	0.15%	0.27
Dec-2017	1	3.3	3.69%	0.07%	0.12
Jan-2018	0.8	3.3	4.11%	0.07%	0.11
Dec-2018	4.7	3.5	0.86%	0.20%	0.11
				TOTAL	**1.92**

2.2. Secondary Market

PGB yields in the secondary market improved throughout 2018. Earlier in the year, *OT* interest rates continued the downward trend of 2017, benefiting from the release of benign macroeconomic and budgetary data: the Portuguese economy grew by 2.8% in 2017, the budget deficit amounted to 0.9% of GDP (excluding the impact of the recapitalisation of *Caixa Geral de Depósitos*) and the debt ratio decreased by 4.5 pp year-on-year. In mid-May, the outcome of the Italian elections and discussions between the Italian government and the European Union about the deficit target led to the reduction of positions in Italian assets, bringing about some uncertainty in euro area debt markets and raising interest rates to the year's highs. However, Portuguese public debt was resilient (in line with the Spanish market) and recovered from the end of June, as Portuguese macroeconomic data exceeded investor expectations and fears of contagion from the Italian crisis began to dissipate. In December, rates were close to the 2018 lows, also benefiting from Moody's upgrade to investment grade, with Portugal receiving this rating from the three biggest rating agencies (see Box 2.2).

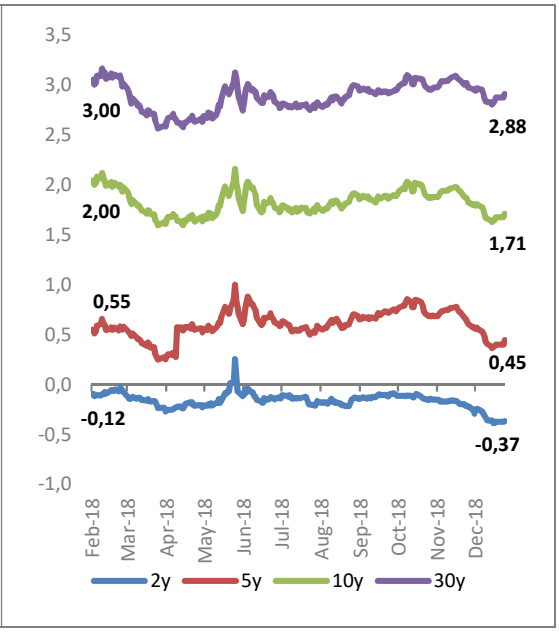
In relative terms, Portuguese public debt maintained a stable differential to euro area peers throughout the year and consolidated the negative spread against Italy, dispelling suspicions of a contagion effect. The 10-year benchmark interest rate declined from 2% at the end of 2017 to 1.7% at the end of 2018. The trend was common to other points of the curve but was more pronounced in the long end, where it became slightly less steep.

Graph 13 – Developments in the *OT* curve (%)



Source: Bloomberg

Graph 14 – 2, 5, 10 and 30-year *OT* rates (%)

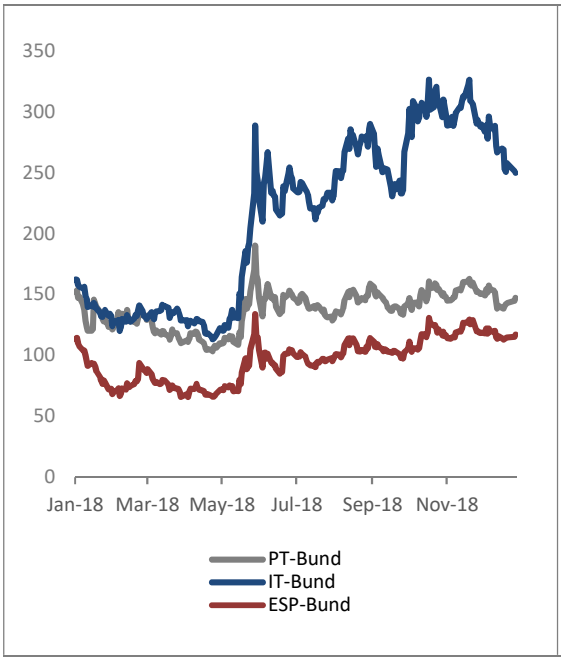


Source: Bloomberg

The spread against Germany in the 10-year reference tenor stood around 148 bp by end-2018, at the same level as at the end of 2017 (149 bp), providing further evidence of the resilience of Portuguese public debt. The spread against Spain and Italy in the same maturity narrowed compared to the end of 2017. Compared to Italy, 10-year *OT* narrowed by around 93 bp, settling at -103 bp at the end of 2018 (i.e. the 10-year Portuguese rate was lower than the Italian rate for the same maturity). The narrowing in relation to Spain was about 5 bp, with the spread standing at 30 bp at the end of the year.

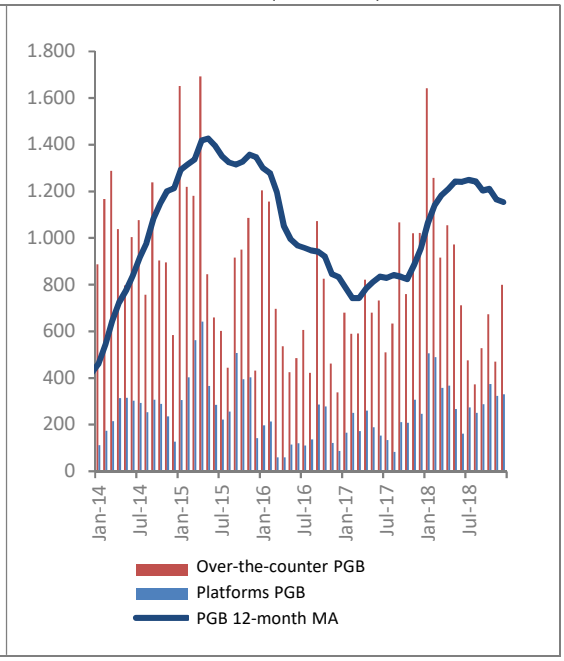
With regard to secondary market liquidity, after a decrease in 2016, there was an increase in the average daily traded volumes of *OT* between platforms and the over-the-counter market in 2017 (EUR 956 million) and 2018 (EUR 1,153 million). This phenomenon was particularly evident in the second part of 2017 and early 2018, with the decrease in the risk premium assigned to Portugal and the entry of new investors, as a result of Portugal's investment grade rating by S&P and Fitch and the subsequent entry of Portuguese *OT* into some of the major European government bond indices. In the second half of 2018, there was a slight decrease in liquidity, partly due to the large flow at the beginning of the year, as well as the uncertainty resulting from the Italian crisis.

Graph 15 – Spreads vs Germany (10 years) (bp)



Source: Bloomberg

Graph 16 – Trading of OT in the secondary market (EUR million)



Source: IGCP

The concentration of the flow in the secondary market is still significant, given that the five biggest *OEVT* had a 52% market share in 2018, maintaining the trend compared to 2017. However, this figure is much lower than in 2012 when the concentration reached 73%; it is now close to pre-crisis levels, around 50%.

With regard to *BT* transactions in the secondary market, average daily transactions decreased from EUR 360 million in 2017 to EUR 350 million in 2018. Looking at platform transactions, the average daily volume went up from EUR 171 million in 2017 to EUR 191 million in 2018.

Despite a slight decrease in the trading volume, *BT* issuance rates continued the downward trend of 2017. The average annual issuance cost was -0.33% in 2018, which contrasts with -0.23% in 2017.

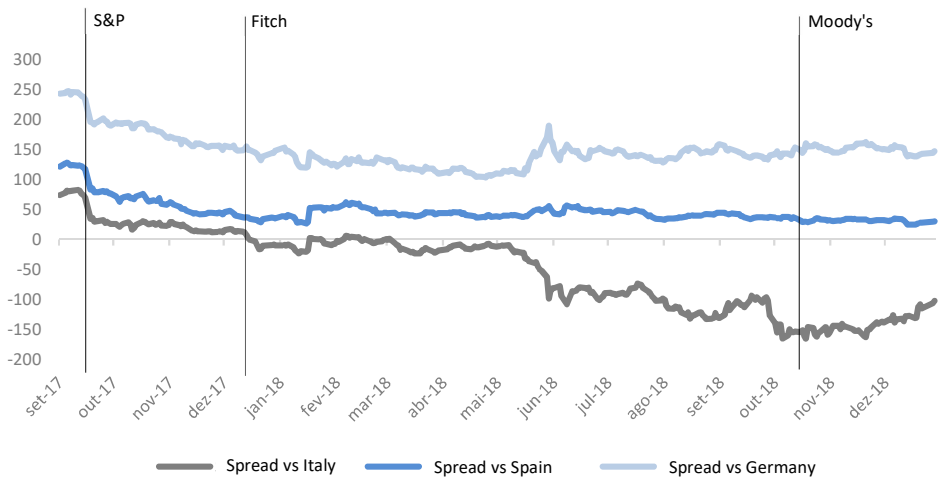
With regard to the *BT* issuance strategy, the issuance policy initiated in 2015 was maintained in 2018, i.e. concentrating issuance in only six lines and opening only one new line every two months, which allows an increase in the outstanding per line.

Box 2.2 | Return to investment grade

The year 2018 ended with Moody's placing the rating back at investment grade level, marking the return of Portugal to this level by the three biggest rating agencies, something that had not happened since 2011. This is a clear sign that improvements in macroeconomic performance, fiscal consolidation and public debt dynamics are recognised internationally.

Moody's upgraded the Portuguese Republic's rating to Baa3, the first level of investment grade, on 12 October. The robustness of the Portuguese public debt market was confirmed by the significant demand in the auction in November, as well as in the exchange in early December, which, together with the sound budget execution, made it possible to prepay the outstanding credit to the IMF. As Moody's decision was long awaited by the market, its impact was not as significant as that felt with the upgrade of the two other agencies, in particular the first one, undertaken by S&P.

Graph 17 – Spread of Portugal vs Spain, Italy and Germany in 10-year *OT*



Source: Bloomberg

Throughout 2018, spreads against Spain and Germany remained stable. Notwithstanding a widening of the spread versus Germany shortly after the Italian elections (in May and June), it narrowed during the summer, with the value remaining practically unchanged until the end of the year. The absence of a contagion effect (from the events in Italy to the Iberian markets) confirmed the robustness of Portuguese public debt, highlighting the contrast with the evolution of financing conditions after the global financial crisis.

The current rating is reflected in the base of investors seeking Portuguese debt, which is now broader in terms of geography and entities. The improved rating not only increased the number of Portuguese debt investors but also their quality. The vast majority of investors who were limited in their purchases of Portuguese public debt before the rating upgrade were insurers, pension funds and asset managers, institutions that are now returning to the Portuguese market. More speculative investors, such as hedge funds, are starting to give way

to more conservative investors, which is the normal course, to be expected following the country's return to investment grade status.

2.3. State Direct Debt and Costs

On 31 December 2018, Portuguese State direct debt[12] evaluated at the end-of-period exchange rate stood at EUR 245.6 billion (see Table 20 in Annex 5), which represents an increase of EUR 7.3 billion compared to 2017 (3.1%). The annual change is mainly due to the increase in the *OT* balance (contribution of 3.5pp), *CEDIC* (1.5pp) and *CT* (0.6pp), partially offset by the decrease in EFAP loans (-2.3 pp) and the *BT* balance (-0.8pp).

In 2018, and as observed since 2015, the Republic's main source of net financing was the issuance of medium- and long-term debt. Gross issuance of *OT,* net of premiums and discounts, was EUR 18.7 billion, translating into a positive net issuance of EUR 9.1 billion and resulting in an increase in the relative weight of *OT* in the debt stock (nominal value), from 49.0% in 2017 to 50.9% at the end of 2018. Adding the balance of *OTRV* and MTN in euros, the overall weight of medium- and long-term tradable debt issued in euros was 55.1% (compared to 52.9% in 2017).

The weight of retail instruments (*CA* and *CT*) increased slightly from 11.3% to 11.5%, mainly reflecting the positive performance of *CTPC*, whose subscriptions remained high in 2018.

Short-term debt (in euros) increased by around EUR 1.7 billion in 2018, mainly due to the evolution of *CEDIC* (net issuance of EUR 3.6 billion), which more than offset the reduction in the stocks of *BT* (of approximately EUR 1.8 billion) and of accounts payable of cash-collateral related with financial derivatives to hedge interest rate and exchange rate risk (around EUR 0.1 billion). In this regard, the relative weight of short-term debt instruments increased from 8.4% to 8.8% at the end of 2018.

The weight of non-euro denominated debt (excluding EFAP loans) remained relatively stable in 2018 (around 1.6%).

In turn, EFAP loans decreased their relative weight in the debt stock, from 23.9% in 2017 to 21.0% at the end of 2018, due to the early repayment of the IMF loan outstanding. The amount paid in 2018 was SDR[13] 4.6 billion, equivalent to EUR 5.5 billion, of which EUR 0.8 billion was paid in January and EUR 4.7 billion in December.

The favourable exchange rate effect of hedging derivatives (net) decreased slightly to EUR 0.6 billion, compared with EUR 0.7 billion in the previous year. Debt after cross-currency hedges stood at EUR 245.0 billion, an increase of EUR 7.4 billion compared to 2017.

---

[12] State direct debt is a concept that differs from debt compiled by Banco de Portugal for the purposes of the Excessive Deficit Procedure (Maastricht debt, presented in Graph 5) in various aspects, among which: (i) sector delimitation differences – the State direct debt includes only the debt issued by the State, while the Maastricht debt includes all rated entities, for statistical purposes, in the institutional sector of the general government; (ii) consolidation effects – the State direct debt reflects only the liabilities of this sub-sector, while the Maastricht debt is consolidated, i.e. it excludes the assets of public administration in liabilities issued by their own government; (iii) capitalisation of savings certificates – the State direct debt includes the accumulated capitalisation of savings certificates, which is excluded from the Maastricht definition.

[13] Basket made up of USD, EUR, GBP, JPY and CNY.

Current debt costs

In 2018, the current debt costs of State direct debt on a public accounts basis amounted to EUR 7.1 billion (net), a slight increase of EUR 22 million year-on-year (see Table 21 in Annex 6).

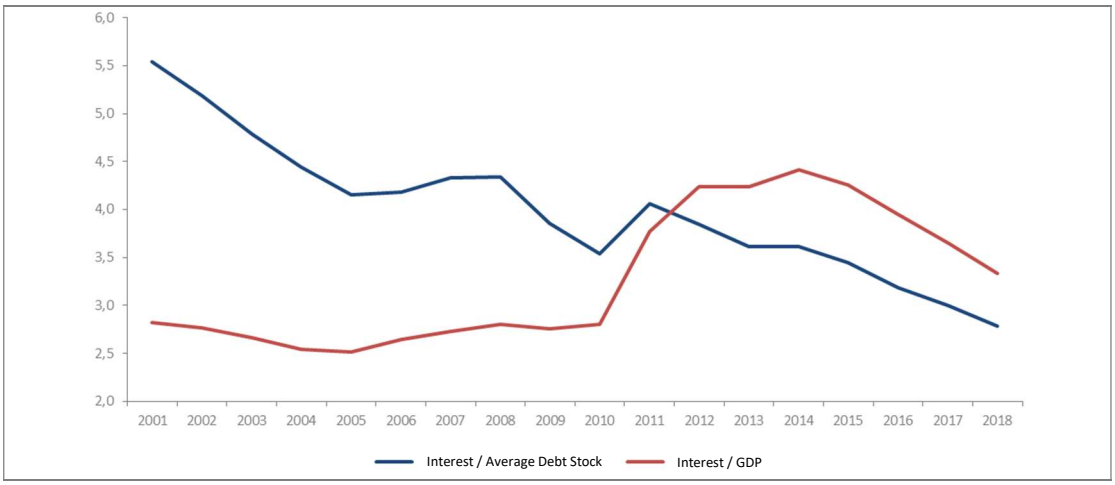
OT continued to be the instrument with the largest share of total interest: EUR 4,842 million, an increase of EUR 244 million year-on-year, explained by the increase in the stock over recent years. Interest on Other Instruments increased by EUR 149 million compared to 2017, standing at EUR 347 million in 2018. This evolution is mainly due to the increase in interest paid by *OTRV*, as a result of the increase in the outstanding amount with the launch of new lines in 2017 (*OTRV* April 2022, *OTRV* August 2022 and *OTRV* December 2022), and the first interest payment associated with the loan taken out with Banco Santander Totta (BST)[14]. Also noteworthy was the increase in *CA* and *CT* interest (around EUR 62 million), essentially attributed to *CT*, both in terms of stock (increase in the balance outstanding) and price (in addition to rising interest rates with maturity, the payment of the GDP premium of a significant volume of *CTPM* began in the final quarter of 2017, which had a significant impact in 2018, as this was the first full year including such effect[15]). In contrast, there was a substantial reduction in the interest of EFAP loans (EUR 389 million) due to the early partial repayments of the IMF loan carried out between 2015 and 2018. It should be noted that *BT* interest also evolved favourably, reflecting the fact that this instrument has benefitted from negative issuance interest rates over the last two years.

In 2018, interest paid on State direct debt on a National Accounts basis stood at EUR 6.7 billion, a significant decrease for the third consecutive year (see Table 22 in Annex 6). The annual reduction, which amounted to EUR 379 million, reflected the favourable evolution of the price effect (decrease in the implicit interest rate), which more than offset the increase in the outstanding debt. The stock effect has been decreasing in significance and, in 2018, reached the lowest value of the historical series started in 2001 (see Table 23 in Annex 6). Nonetheless, the most relevant contribution remains the consistent fall in the implicit interest rate, which recorded a new historical low of 2.8% in 2018. The weight of interest in GDP also evolved favourably, from 3.7% in 2017 to 3.3% in 2018.

[14] Fifteen-year loan in the amount of EUR 2.3 billion, taken out in 2017. The instrument is linked to the agreement between the State and BST on a set of derivative operations contracted between BST and a number of public companies.

[15] In the 4th and 5th year, a premium is added to the value of the fixed interest rate. This premium corresponds to 80% of the average growth of real GDP at market prices (year-on-year growth rate rounded to one decimal place) in the last four quarters known in the month preceding the interest payment date.

Graph 18 – Evolution of interest of the State direct debt (National accounts basis) (%)



Source: IGCP