

2019

Federal Public Debt Annual Report



TESOURO NACIONAL

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We present the 17th edition of the Annual Debt Report (ADR), which provides accountability on the Federal Public Debt – FPD performance, based on the 2019 Annual Borrowing Plan. One of the objectives of the National Treasury with this publication is to improve the communication and the transparency related to the FPD.

Brazil took important measures towards fiscal consolidation in 2019, highlighting the pension reform approval, the transfer of rights surplus oil bidding round and the progress on the policy of reducing Federal Government's assets with public banks. The public debt as a share of Gross Domestic Product – GDP dynamics benefits from these events, coupled with an environment of interest rates historically low and reduced inflation risks.

The Brazilian economy, however, still has challenges to overcome. The fiscal agenda, particularly, depends on efforts for the approval of measures that contribute to control mandatory spending, which is highly rigid and presents little room for reduction in the absence of structural reforms. The ongoing economic activity recovery also contributes to the fiscal consolidation. Its sustainability over time will benefit from efforts to reduce allocative distortions and to increase factors' productivity.

In this context, public debt management has been successful in preserving a low foreign exchange exposure debt profile, reduced share of maturities in the short term, diversified investor base and safe the cash position to honor debt maturities. These factors mitigate risks in a scenario marked by consecutive primary deficits. Additionally, the cost of debt has fallen as a result of low interest rates.

However, the increase of the floating-rate bonds' share in the FPD composition, which at times of decreasing interest rates benefits debt cost indicators, also represents a risk in an occasional monetary policy cycle reversal. The continuity of the fiscal reform agenda is essential for FPD composition improvement, by promoting a favorable macroeconomic scenario to increase fixed-rate and inflation-linked bonds participation in FPD composition.

Aware of these challenges, we release the ADR 2019 and reaffirm the National Treasury's commitment to its mandate to ensure fiscal balance and public spending quality, pursuing an appropriate balance between public debt costs and risks and the adoption of good management practices of that debt

The National Treasury Team

National Treasury Statement



1

Domestic and external Economic Environment

in 2019

Toco toucan, ramphastos toco

International economy in 2019 was marked by trade tensions, especially between the United States and China, and, to a lesser extent, between the United Kingdom and the European Union (*Brexit*). These elements contributed to induce a global economic slowdown.

In response to this movement, the main central banks, not only in mature, but also in emerging economies, have adopted monetary easing policies. In particular, the Federal Reserve – FED has reversed the monetary policy cycle and reduced interest rates. Joint and timely reaction was fundamental to mitigate the ongoing economic slowdown.

Another international event that negatively affected the Brazilian economy was the crisis in Argentina. Facing severe fiscal and balance of payments problems, the crisis in this neighboring country was intensified after the results of primary elections in August, signaling a drastic change in the economic agenda. There were large capital outflows, public debt restructuring and economic recession, which directly impacted the Brazilian economy, given the commercial relationships between both countries.

In the domestic scenario, 2019 was marked by deepening of the structural reform agenda. Particularly, a robust social security reform was approved, giving some relief in the medium and long-term fiscal perspectives. Additionally, in the short term, fiscal risk was mitigated by the conclusion of the agreement between the Federal Government and Petrobras on the transfer of rights, enabling the surplus oil auction, which might generate a one-off net revenue of BRL 23.7 billion for the National Treasury. The primary deficit in 2019 stood considerably lower than the target of BRL 139 billion for the Central Government.

Regarding economic activity, 2019 GDP growth tends to be just over 1%. The relative underperformance to the initial forecasts of 2.5% is due to the turbulent external scenario and the uncertainties related to the structural reforms progress, especially during the first semester. One factor that contributed to mitigate the effects of the crisis in Argentina and the trade war between United States and China over the Brazilian economy was the releasing of FGTS (Guarantee Fund for Length of Service) and PIS/PASEP resources, in the amount of BRL 30 billion in 2019 (and of BRL 12 billion for 2020), which impacted the aggregate demand positively.

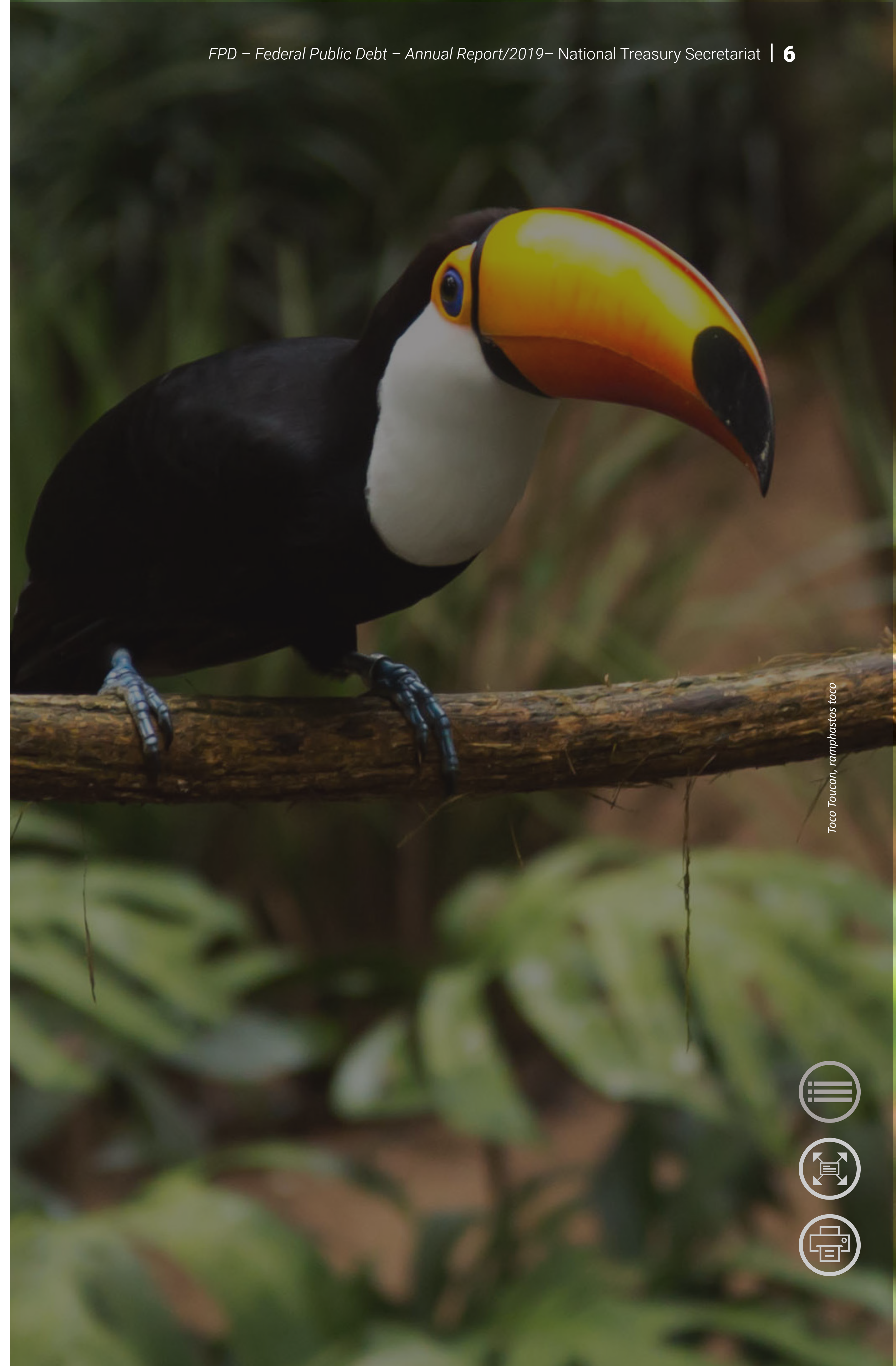


Presenting a moderate GDP growth rate, the Brazilian inflation remained below the center of the target for most of the year, allowing the Central Bank of Brazil - BCB to intensify the pace of monetary easing, which led the Selic rate to the lowest level in history. It is noteworthy that lower levels of international interest rates and, above all, the fiscal framework improvement contributed to the reduction not only of the Selic rate, but of the entire forward yield curve. Consequently, there was a significant reduction in the cost of public debt, contributing to its stabilization relative to the previous year.

Advances in the short-term fiscal framework were not limited, however, to primary fiscal accounts. Some one-off events contributed to reducing General Government Gross Debt - GGGD. In particular, there was the ongoing process of reducing Federal Government assets with public banks, including the pre-payment to the National Treasury by the BNDES (National Bank of Social and Economic Development) of loans in the amount of BRL 100 billion, in addition to the payment of Eligible Instruments to Principal Capital - EICP by Caixa Econômica Federal (BRL 11.3 billion) and by *Banco do Nordeste* (BRL 250 million).

The change in the BCB's procedure in the foreign exchange market also resulted in GGGD reduction. When BCB sells dollars on the spot market, it may reduce the excess of liquidity in the system, reflecting in a lower GGGD. Despite the reduction, international reserves remain at comfortable levels (US\$ 356.9 billion, in December/19). It reinforces the country's external accounts strength, which presents a balance of payments characterized by reduced current account deficits, fully financed by Foreign Direct Investments – FDI in the country, under a floating exchange rate regime.

The combination of lower interest rates, public banks prepayments to the Treasury and the BCB selling dollars on the spot market has improved expectations regarding GGGD/GDP ratio dynamic. For more details, see the Report of Public Debt Projections (available only in [Portuguese](#)).



Toco Toucan, ramphastos toco



2

Borrowing Strategy in 2019

Violet-headed hummingbird, colibri coruscans

This section discusses the funding strategy adopted, considering borrowing requirements.

2.1 Borrowing Requirements

Gross borrowing requirements considers FPD maturities, primary expenses to be paid with the government bonds issuances' proceeds and payments of non-performing guaranteed subnational governments debt. Net borrowing requirements, on the other hand, correspond to gross borrowing requirements minus the amount of budgetary resources allocated to pay debt that were not raised through government bonds issuances.

Figure 1 shows a comparison between the borrowing requirements estimated in the 2019 ABP and the effectively carried out value in that year. There is a subtle difference between these two views. The ABP, as an *ex-ante* view, focuses on the flows that occur during the year, allowing to interpret net borrowing requirements as the amount that the National Treasury must issue to pay debt, without changing the available cash position. The *ex-post* approach, on the other hand, includes the financial surplus (non-issuance revenues

collected in previous years)¹ actually used in the year, so that the net result indicates the amount of expenses paid with issuances resources, regardless of the variation in cash position².

However, both views are conservative. The risk implied in the *ex-ante* borrowing requirement is mitigated by the available cash position, including financial surplus from previous years, once the Treasury's strategy anticipates financial availability needed to cover for debt maturity. The *ex-post* indicator, in this turn, does not capture the effect of non-issuance revenues that were collected throughout the year and were not fully used and, therefore, increased cash position.

¹ One reason for not including a forecast for the use of the financial surplus in the *ex-ante* view is to prevent the same revenue from being considered in the estimates for more than a year, as it would be in case it is not fully used. This would distort the historical analysis.

² It does not mean that the exact amount attributed to net borrowing requirements was issued. The National Treasury single account maintains resources from issues made in previous years. Thus, part of the borrowing needs can be met by reducing these availabilities. Alternatively, the Treasury could issue more than net borrowing requirements to reinforce its cash position and, thus, contribute to reducing excess liquidity in the financial system. In any case, there would be no variation in GGGD, nor in Public Sector Net Debt – PSND, due to the variation in cash position, once any movement in the FPD would result in a movement, in the opposite direction, of the Central Bank's repo operations (open-market operations used to mop up liquidity).



Net borrowing requirements of BRL 896.8 billion in 2019 were BRL 117.1 billion higher than the value forecasted in the ABP. On the revenues side, the difference is mainly explained by the lower financial availability of budgetary free-allocation revenues (resources that are not earmarked to debtor any other specific expense), which were partially offset by a higher use of revenues earmarked to debt, such as revenues related to the pre-payment of BNDES' loans with the National Treasury (in BRL 30 billion).

On the expenditures side, FPD maturities were higher than the *ex-ante* view, mainly due to (i) the *Tesouro Direto* Program early redemptions, in the amount of BRL 21.3 billion; (ii) to bonds redemptions, in the amount of BRL 13.9 billion; and (iii) domestic debt issuances that generated maturities in the same year, in the amount of BRL 17.7 billion³.

Special report on the relationship between the National Treasury and the Central Bank



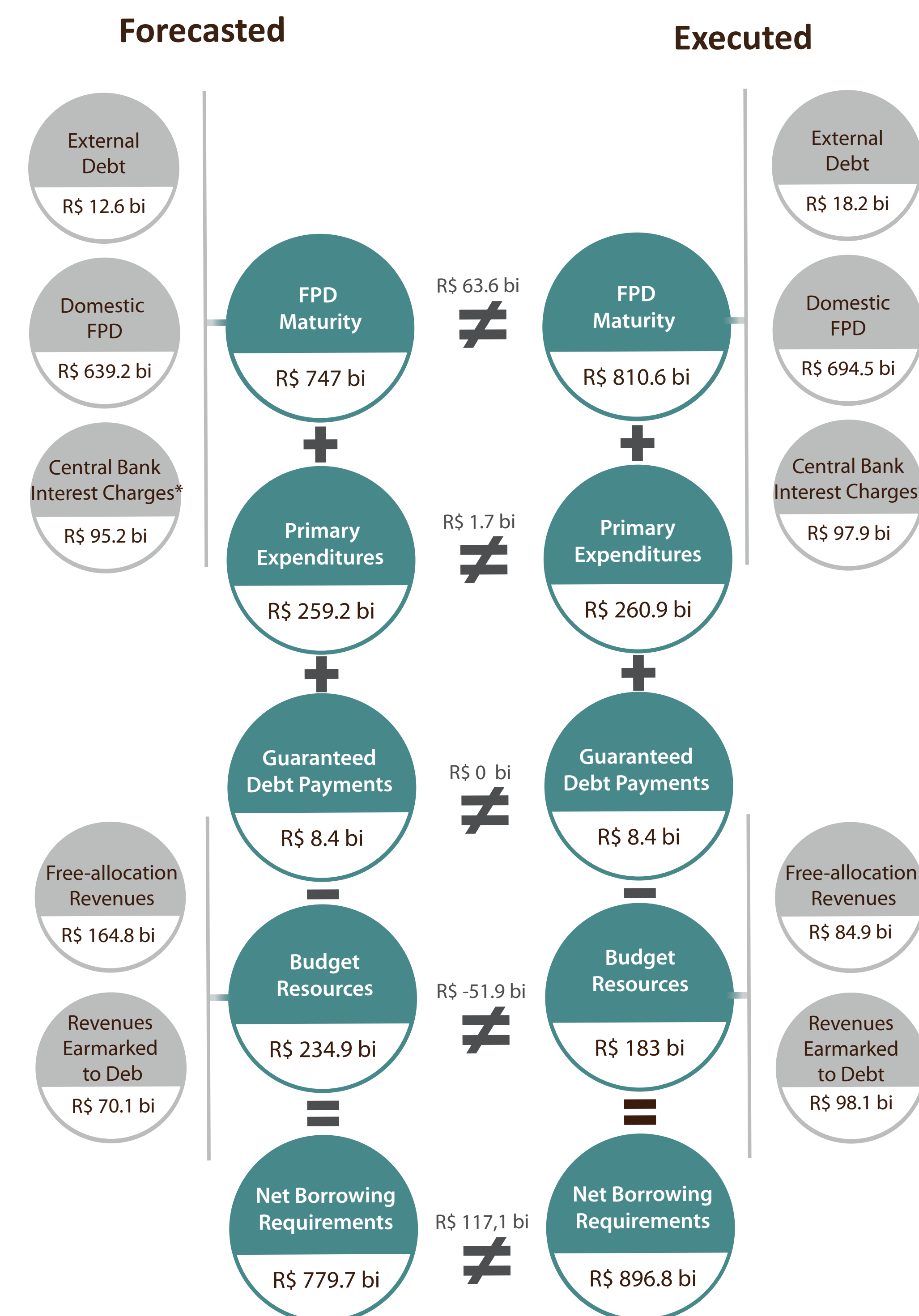
In May 2019, shortly after the publication of the Law No. 13,820/2019, which redesigned the financial relationship between the Federal Government and the BCB, a report was released containing time series for several statistics on the financial relationship between the National Treasury and the BCB (2001 -2018). The indicators are: international reserves; BCB balance result flows; roll-over and principal payments of the bonds in the BCB portfolio; BCB's government bonds portfolio composition; interest payments on the BCB portfolio; placements of bonds to reestablish BCB portfolio volume and to cover BCB's negative balance results; BCB's government portfolio developments, General Government Gross Debt and the government bonds in the BCB portfolio not compromised in repo operation as % of GDP; Treasury single account and its sub-accounts as % of GDP.

Benefits of the Law No. 13,820/2019:

- Improvement in transparency;
- Dissemination of knowledge;
- Data harmonization; and
- Simplification and clarity of the information available on the relationship between these two institutions.

³ By definition, the *ex-ante* borrowing requirements view does not include debt maturities arising from future issues and the effect of potential placements of very short-term securities (for example, LTN maturing in the same year). The *ex-ante* view, therefore, only considers projections of flows derived from debt already issued as of 12/31/2019. Issuances occurring after that date may increase maturities within the 2020 fiscal year itself, but also result in the inflow of funds to meet the borrowing requirement.

Figure 1 – **Borrowing Requirements of the National Treasury**



*According to the Article 39 of the Fiscal Responsibility Law (Law No. 101/2000), the real interest of the Central Bank's portfolio cannot be refinanced by STN payments in bonds directly to the Central Bank.
Source: National Treasury

Box 1 – National Bank of Social and Economic Development (BNDES) prepayments to the National Treasury

Since 2015, BNDES has been prepaying the loans granted by the National Treasury in previous years. Thus, between 2015 and 2019, about BRL 409 billion returned to the National Treasury. In 2019, specifically, the prepayment was of BRL 100 billion, divided in three installments, fully in cash. The first installment was paid on May 31st amounting to BRL 30 billion; the second, totaling BRL 40 billion, was due on September 19th; finally, the third, in the value of BRL 30 billion, occurred on December 11th.

Table 1 – Impact of BNDES payments on GGGD/GDP

Year	Additional payments (R\$ million)		Accumulated additional payments (% of GDP)		Accumulated accrual effect (% of GDP) (c)*	Accumulated total impact (% of GDP)	
	Prepayments	Contracts rescheduling	Prepayments (a)	Contracts rescheduling (b)		Only prepayments (a + c)	Prepayments + Contracts rescheduling (a+b+c)
2015	15,766	0	0.3	0.0	0.0	0.3	0.3
2016	113,221	0	2.1	0.0	0.0	2.1	2.1
2017	50,000	0	2.8	0.0	0.1	3.0	3.0
2018	130,000	0	4.7	0.0	0.3	5.0	5.0
2019	100,000	23,000	6.1	0.3	0.4	6.5	6.9

* The accumulated values are higher than the total of the annual impacts because past values are adjusted by the average cost of debt. The accrual effect referent to the flows' anticipation due to the contracts rescheduling in 2019 is not relevant yet.

Source: National Treasury

The BRL 100 billion prepayment represented 32.57% of the BRL 307 billion BNDES liability with the Treasury, in values of December 31st, 2018. Only BRL 30 billion out of the total were used in

the public debt's payments, in October 2019. The remaining BRL 70 billion were kept in the National Treasury single account and will be used exclusively for public debt payments.

Besides, in 2019 BNDES paid around BRL 23 billion in charges regarding the contracts' rescheduling occurred in 2018, which cut loans maturity relative to the original flows.

BNDES payments reduce GGGD immediately by an equivalent amount, regardless if they occur in bonds or in cash. When the payment is settled in bonds, their cancellation directly affects FPD. When the settlement is in cash, the impact occurs through system liquidity, and as a result, through the Central Bank repo operations volume. In both cases, GGGD reduces.

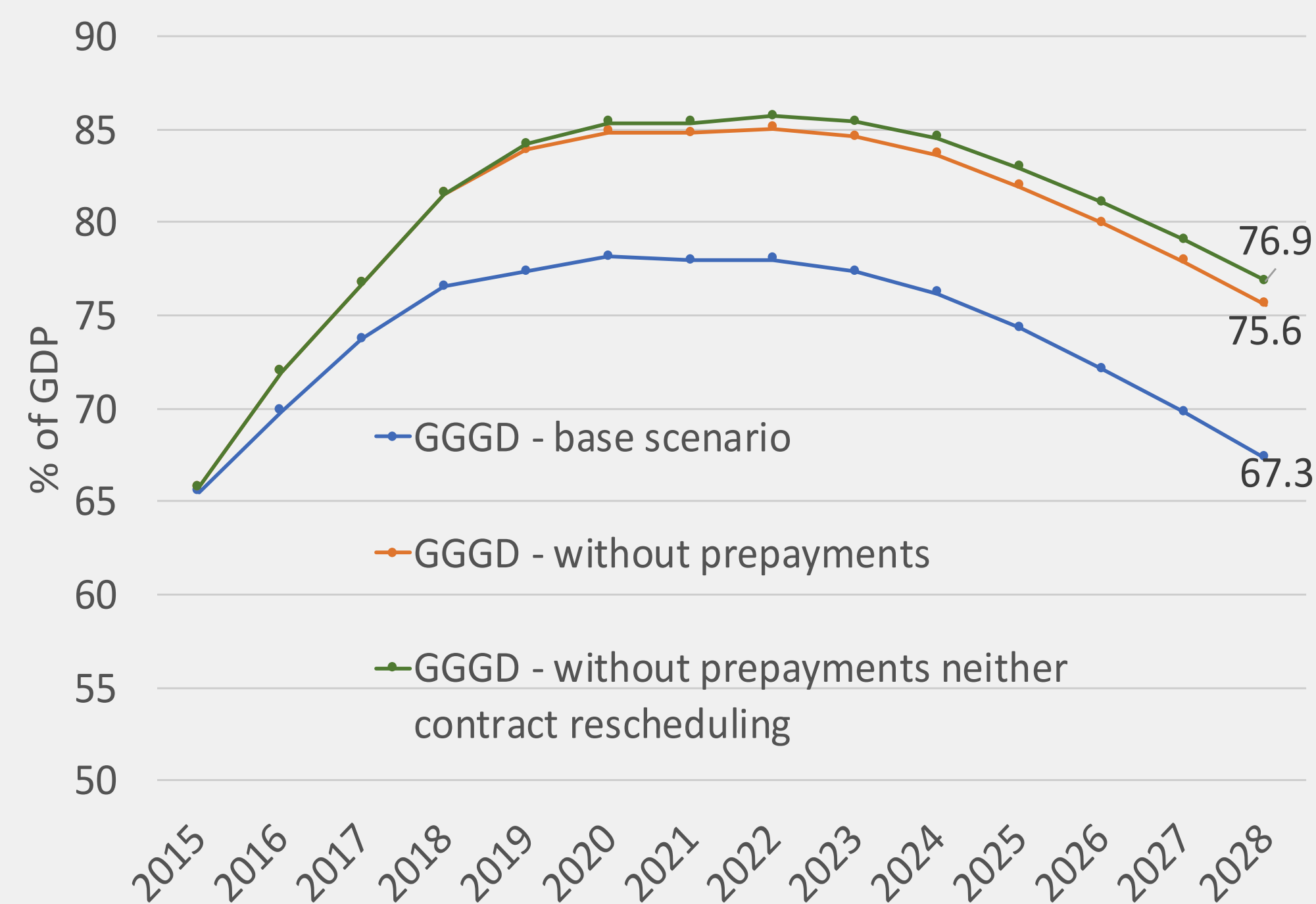
The accrual effects of the already occurred prepayments on the level of the GGGD persist in the upcoming years. The total impact is estimated to represent approximately 9.5% of GDP up to 2028. Figure 2 reflects the prepayments impacts in the GGGD/GDP ratio.

(To be continued) ►

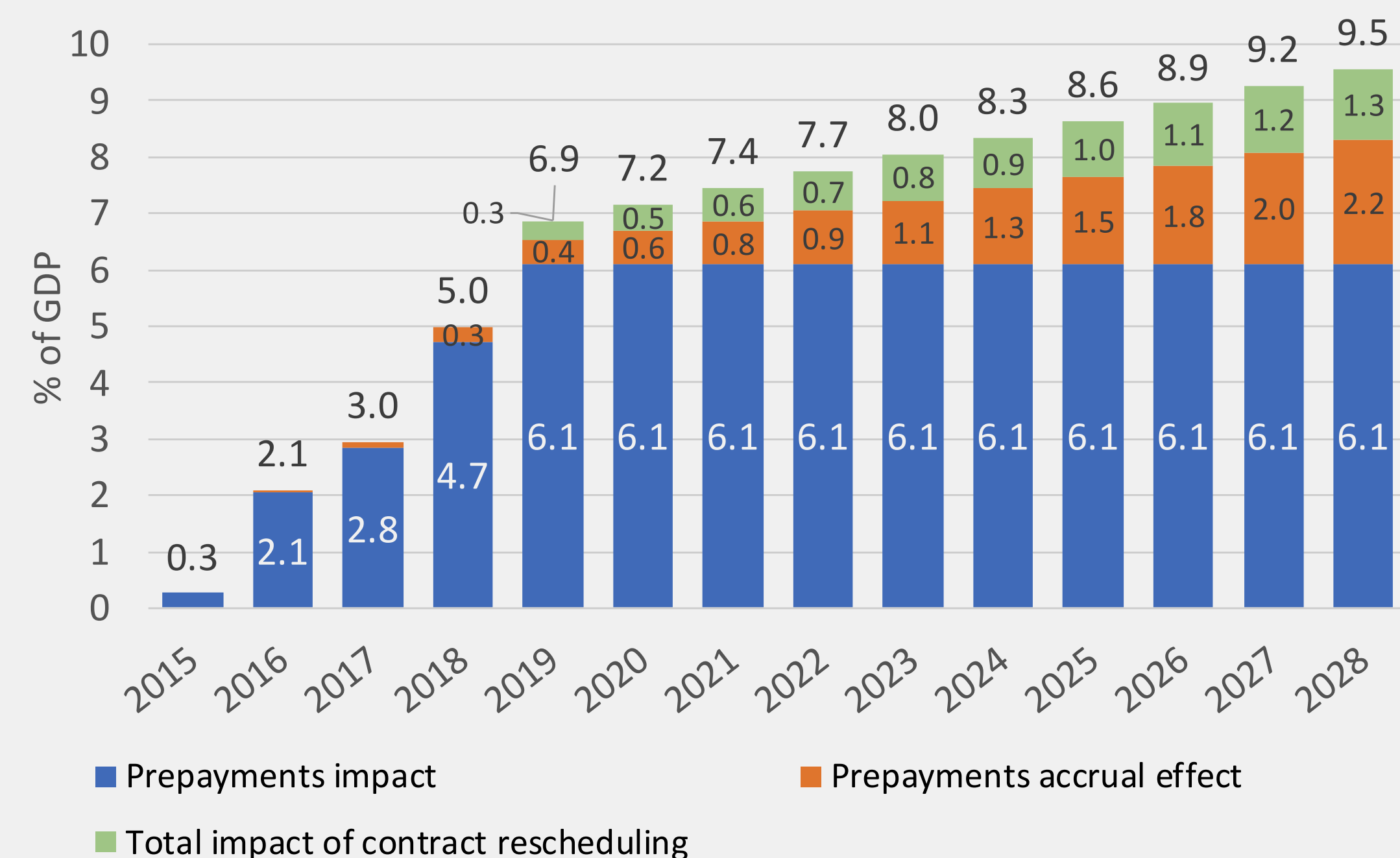


► **Box 1 – National Bank of Social and Economic Development (BNDES) prepayments to the National Treasury**

Figure 2 – Impact of BNDES payments on GGGD/GDP (medium-term)



Source: National Treasury



Source: National Treasury

2.2 Execution of the borrowing strategy

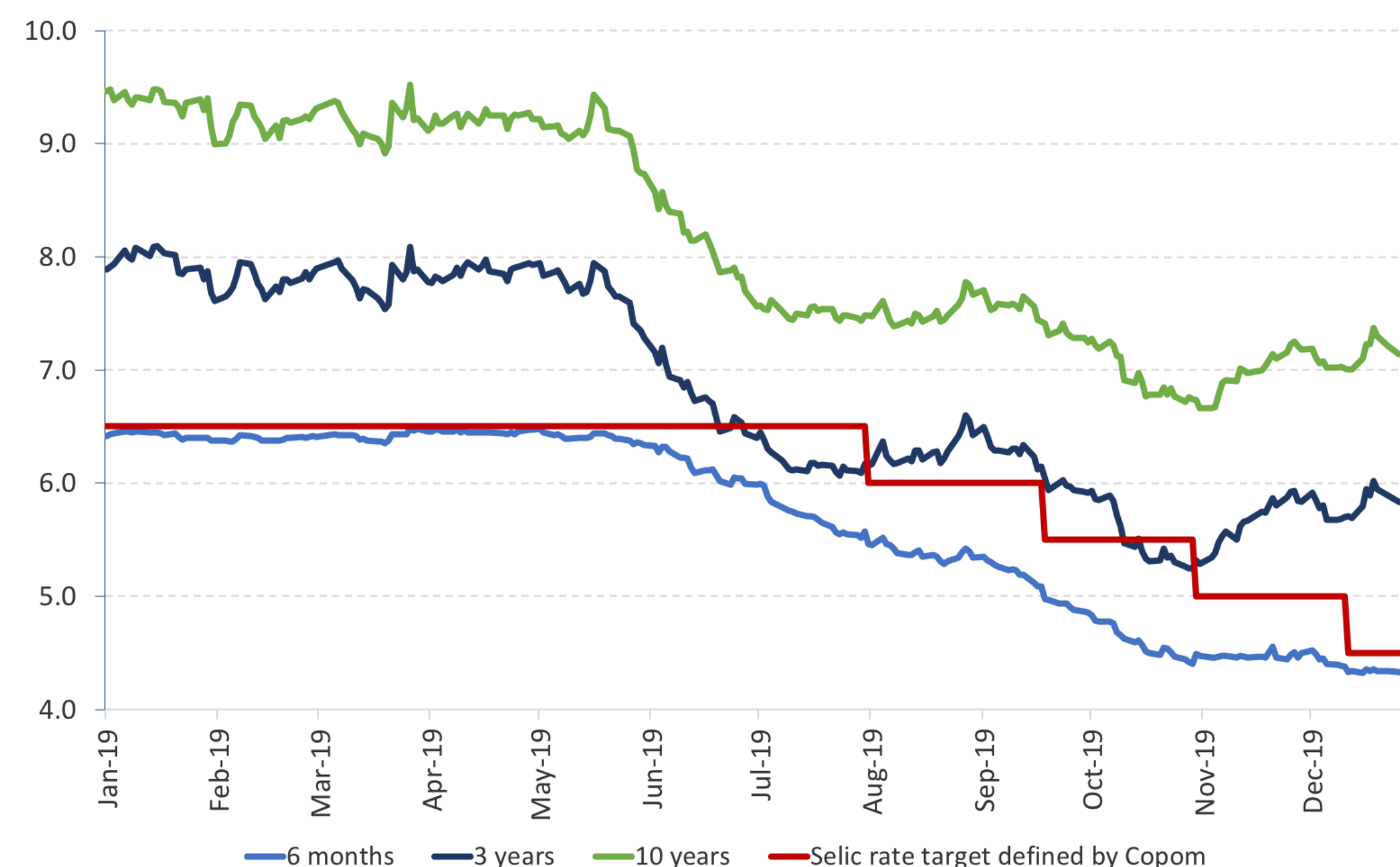
Debt management benefited from a macroeconomic context characterized by inflation under control, low interest rates (at the historical minimum) and relevant structural reforms – mainly the social security one.

Domestic Debt

The execution of the borrowing strategy in 2019 was favored by the monetary easing process. The scenario of structurally low interest rate levels reflected in a downward shift of the whole yield curve, as presented in Figure 3. Usually, during monetary expansion it's common to have higher demand for fixed-rate bonds. On the other hand, the first quarter of the year was characterized by uncertainties related to the social security reform approval, negatively affecting the demand for these bonds. It is important to point out that throughout 2019, the inflow of non-resident investment in government bonds was modest.



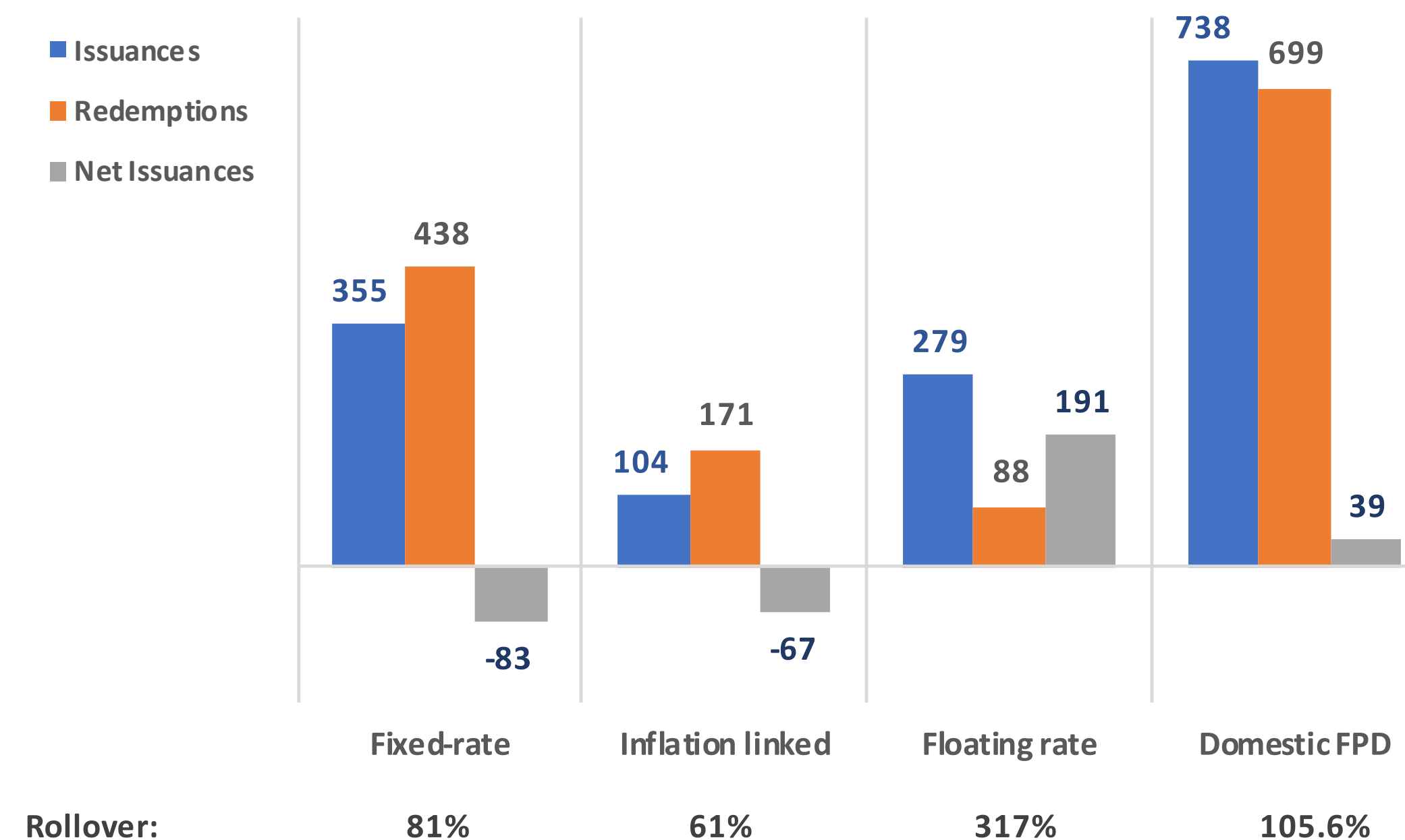
Figure 3 – Yield Curves (Y.o.Y %)



Source: National Treasury

In 2019, most issuances were composed of fixed-rate bonds, followed by floating-rate bonds. However, evaluating debt maturity profile only floating-rate bonds presented a rollover rate above 100% in 2019. This can be explained by the fact that LFT bonds maturities were relatively low in the year. Figure 4 presents the volumes of issuances and redemptions, as well as the rollover rate in 2019.

Figure 4 – DFPD issuances and redemptions in 2019 (BRL billion)



Source: National Treasury

Fixed-rate bonds were issued in four benchmarks for LTN (short-term: 6- and 12- month; medium-term: 24- and 48- month) and two benchmarks for NT-N-F (long-term: 7- and 10-year). The average rollover rate of fixed-rate bonds reached 81%, higher than 2018, when it reached 72%. This increase can be explained, to a certain extent, by interest rates downward trend along the yield curve. As shown in Figure 5, during the year of 2019, the National Treasury concentrated issuances on the 48-month benchmark. It should be highlighted that there was a strong restriction in the supply of 6- and 12-month benchmarks, so as to mitigate maturity concentration in the short-term.

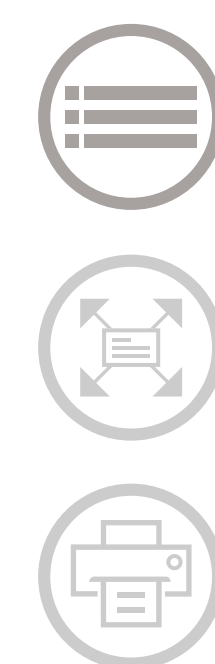
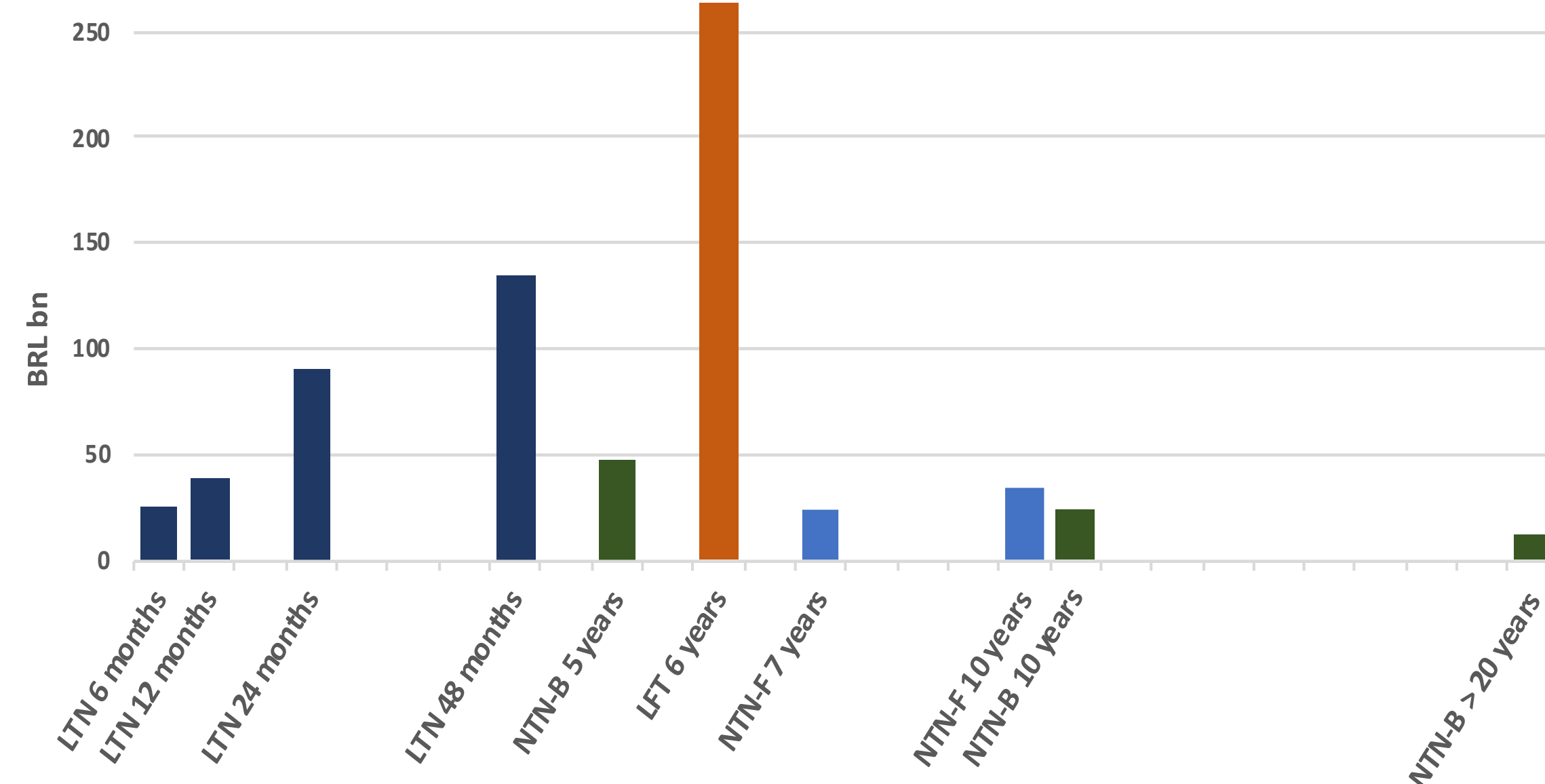


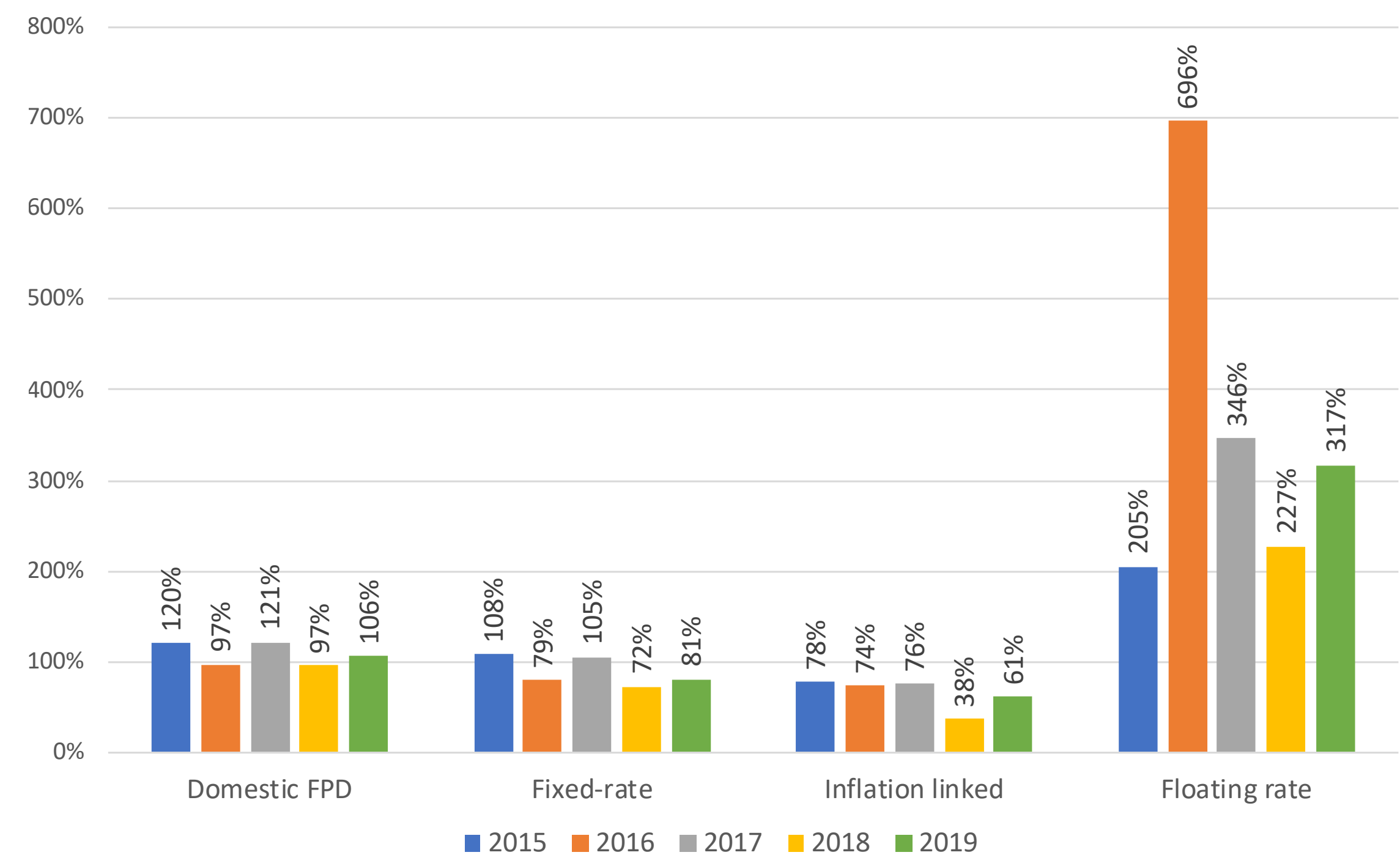
Figure 5 – **DFPD issuances in 2019** (BRL bn)

Source: National Treasury

Inflation-linked bonds (NTN-B), in its turn, were issued in two benchmark groups in 2019: Group I, composed by August 2024 and August 2028 benchmarks, and Group II, in which were issued May 2035 and May 2055 bonds. In general, demand for NTN-B bonds has been taking a declining trend, especially for Group II bonds.

Domestic debt rollover rate⁴ reached 106% in 2019, compared to 97% in the previous year. The volume of debt issued exceeded the full rollover of principal and interest payments flows in the year. This has contributed to maintain debt liquidity reserve (liquidity cushion) at prudent levels, as well as to increase the FPD share in the GGGD. Since 2015, the FPD strategy has maintained debt rollover rates close to or above 100%, in order to reinforce debt liquidity reserve (liquidity cushion) and deal with successive primary deficits. Figure 6 shows debt rollover rates for each type of bond as well as for total DFPD, from 2015 to 2019.

⁴ Rollover rate is the ratio between issuances and redemptions, including interest and principal payments.

Figure 6 – **Domestic Debt Rollover Rate**

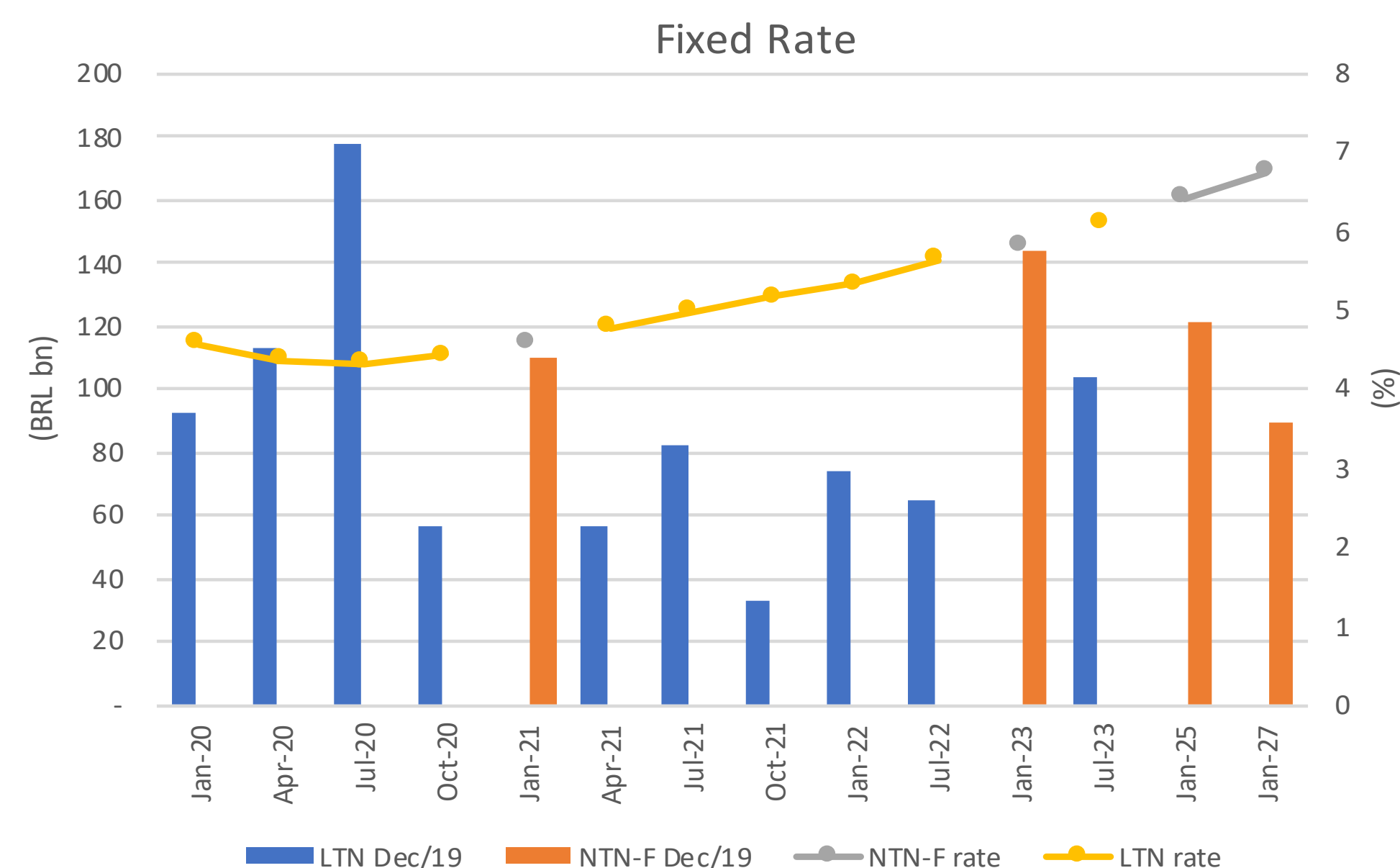
Source: National Treasury

It is useful to analyze debt rollover rates by type of bond, which indicate changes in debt composition over time. As shown in Figure 6, the floating bonds rollover rate was higher than that of other bonds, mainly due to the relatively low LFT maturity volume. This performance is in line with the observed trend since 2015. The increase in the share of LFT bonds in the FPD profile has helped reducing debt costs more sharply, especially in a context of historically low interest rates. Fiscal consolidation progress with structural reforms is fundamental to establish macroeconomic conditions that enable the National Treasury to achieve a FDP profile that simultaneously mitigates debt exposure to changes in the monetary policy and allows facing more smoothly increases in the cost of debt due to short-term interest rate (Selic) peaks.

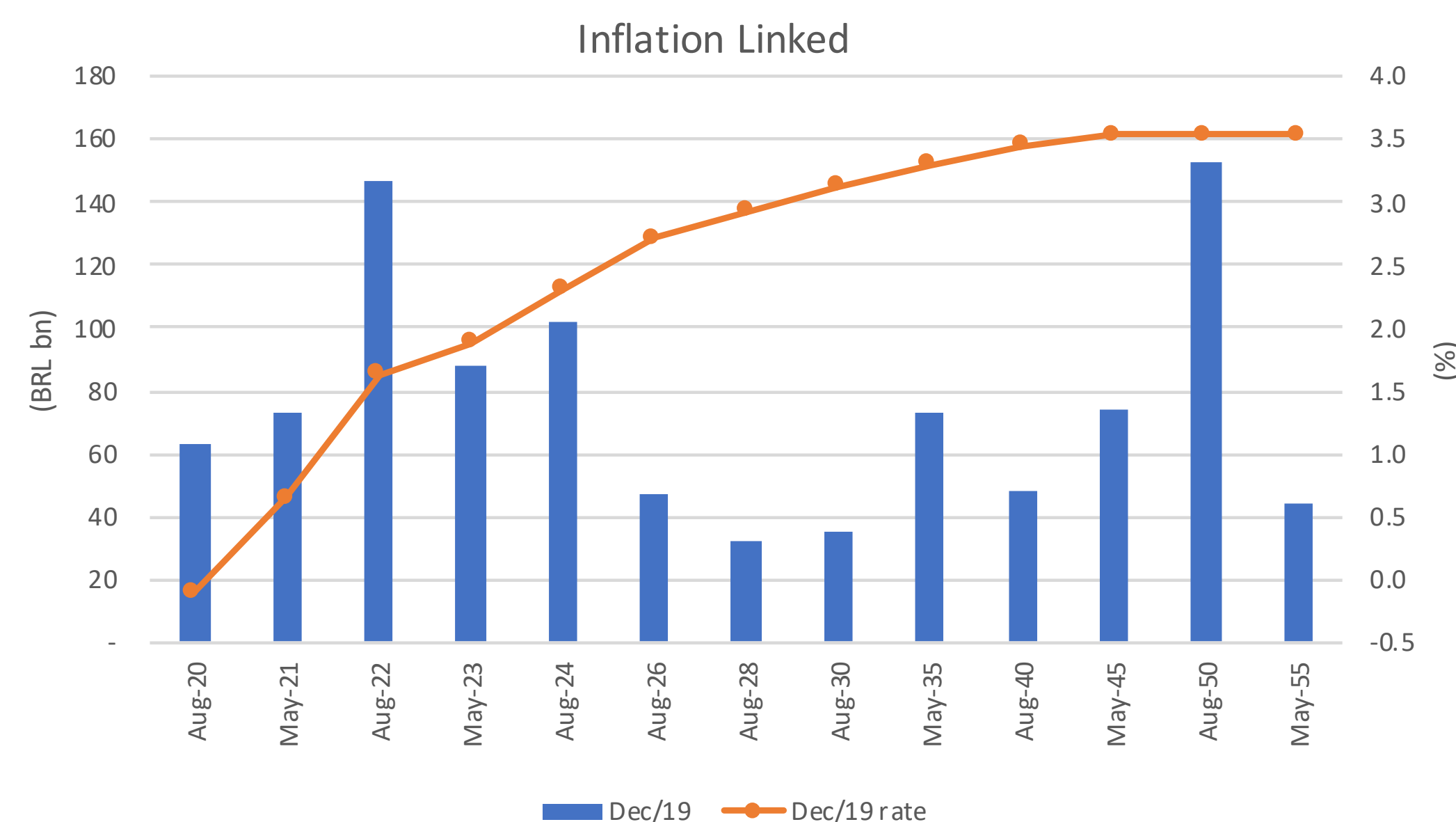


Public debt management strategy contemplates not only debt financing, but also fixed income market development. In this context, the outstanding volume of government bonds in the market, with stable issuance rules, favors liquidity and pricing. Figure 7 illustrates outstanding volumes, by maturity, of fixed-rate and inflation-linked bonds at the end of 2019, as well as their nominal and real yield curves at the end of the year.

Figure 7 – **Outstanding Debt and Yields of Fixed-Rate and Inflation-Linked Bonds**



Source: National Treasury



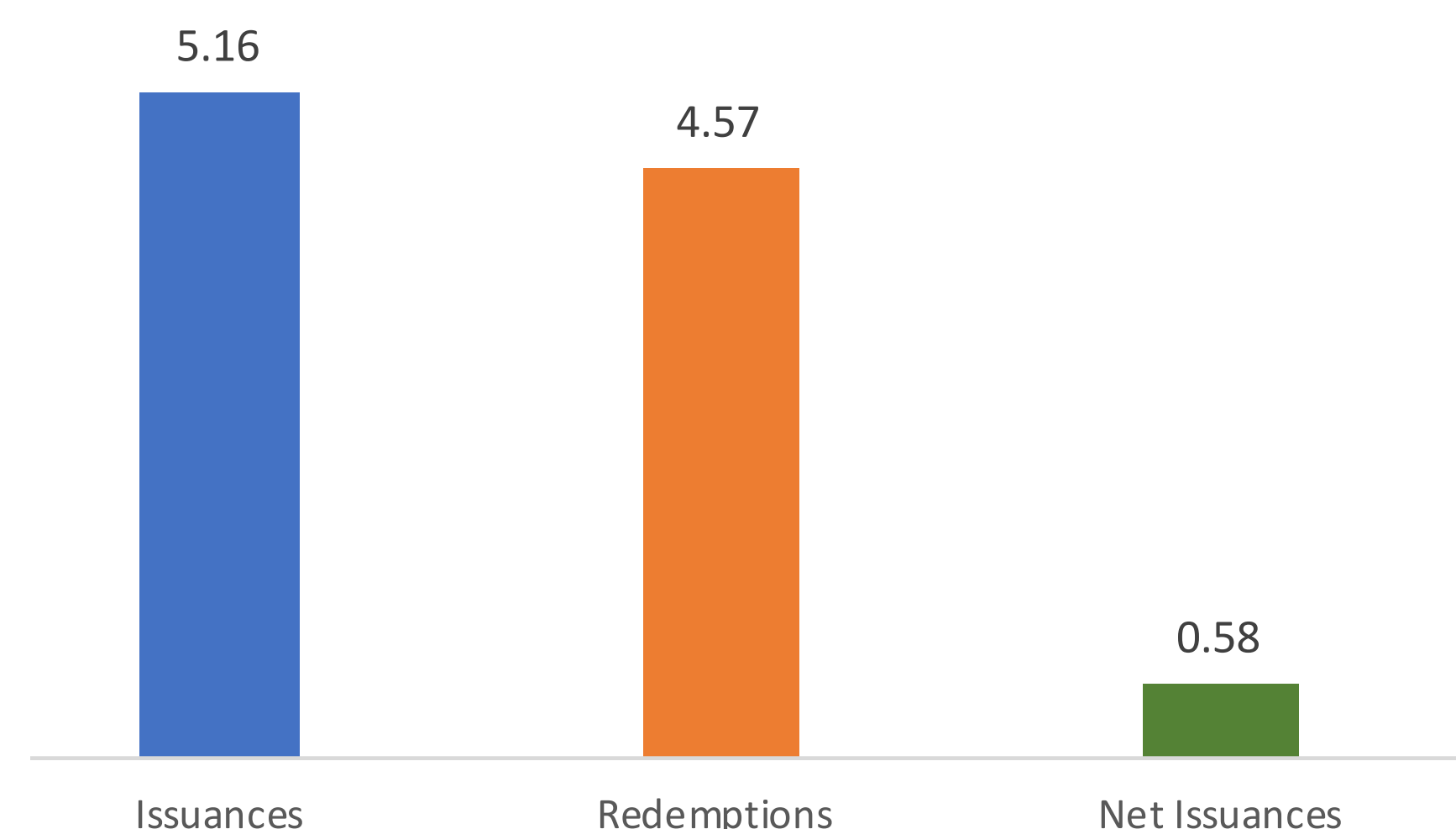
Source: National Treasury and Anbima

In addition to the traditional issuance operations, the National Treasury held quarterly NTN-B exchange auctions, in order to lengthen and favor debt maturity profile. There was little interest for these auctions, demonstrating reasonable depth of the secondary market for these securities

External Debt

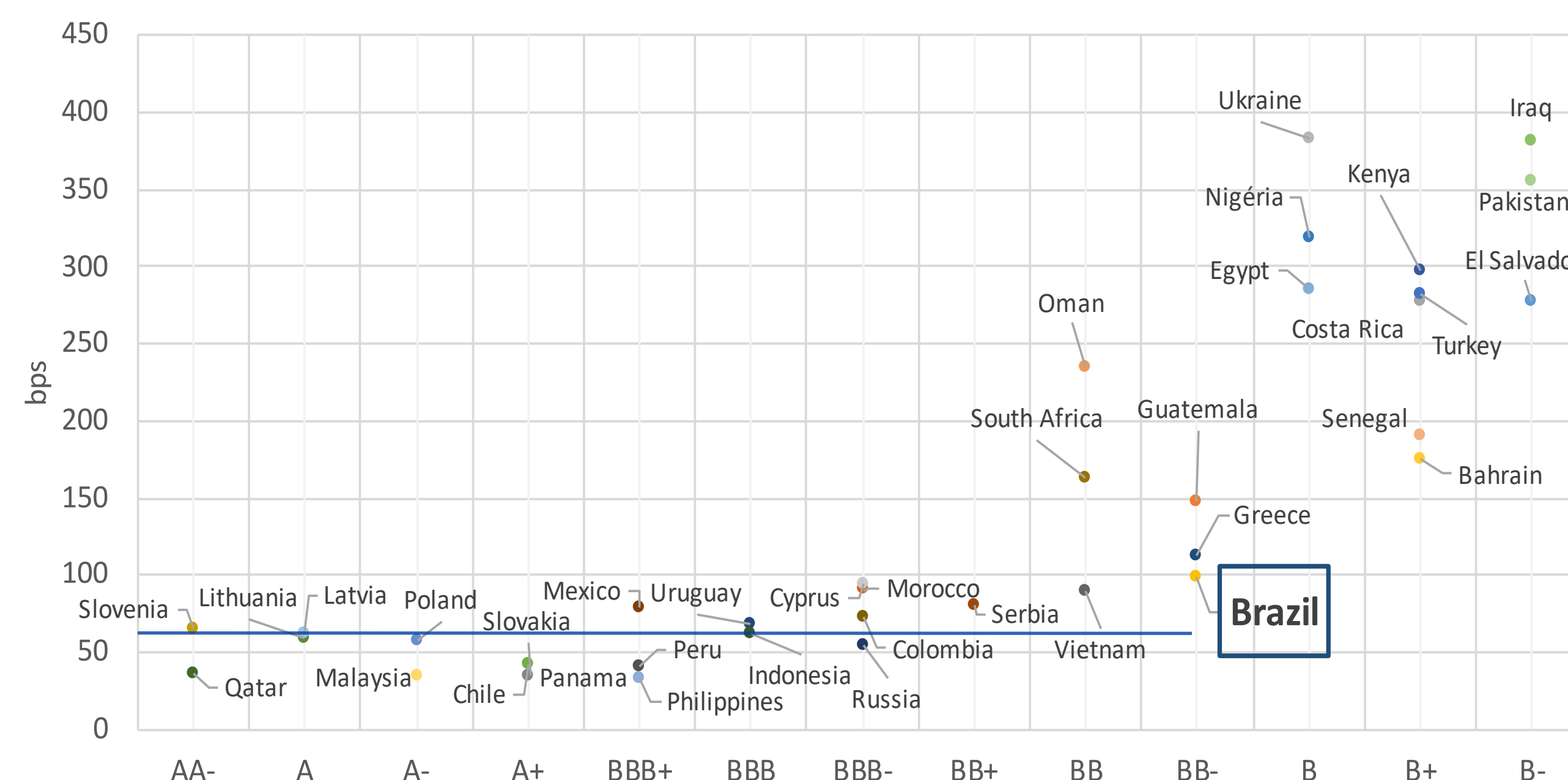
Despite the significant reduction in foreign debt over the past few years, the issuance of sovereign bonds in the international market represents an important instrument for investor base diversification, providing an appropriate price reference for corporate sector issuances and contributing to lengthening public debt maturity. In fact, the strategy adopted for more than a decade consists in setting benchmarks, seeking to improve the external yield curve, through a qualitative approach. In 2019, US\$ 5.16 billion were issued, while maturities and redemptions reached US\$ 4.57 billion (Figure 8), approximately.



Figure 8 – *Issuances and redemptions of EFPD (US\$ bn)*

Source: National Treasury

Given the high level of liquidity in international markets and the more optimistic investor feeling towards Brazil, the National Treasury took the opportunity to establish new 10- and 30-year sovereign benchmarks. Favorable conditions were reflected in the Credit Default Swap (CDS) trend observed throughout the year, which renewed its lows since investment grade loss in 2015 (Figure 9), allowing the Republic to carry out two operations in the international market.

Figure 9 – *5-year CDS rate versus Rating*

Source: Bloomberg

On March 21, 2019, a new 10-year benchmark was issued, the Global 2029, with a 4.700% per year yield and premium (spread) of 215.8 basis points over the U.S. Treasury bond. This operation raised an amount of US\$ 1.5 billion.

The second operation occurred on November 4, 2019. It was the first time the Brazilian National Treasury launched a dual tranche offering in the international market, issuing a new 30-year benchmark (Global 2050) and reopening Global 2029. The operation comprised simultaneously, a liability management exercise for some of the outstanding sovereign bonds.

Global 2050 issuance volume amounted US\$ 2.5 billion, with a 4.914% per year yield, which corresponds to a 265 basis points spread-over-treasury. The Global 2029 reopening in the amount of US\$ 500 million and 3.809% basis points yield, approximately 89 basis points lower than the first issuance in March, which reflects an improvement in financing conditions for Brazil throughout the year. The spread-over-treasury was of 203 basis points.



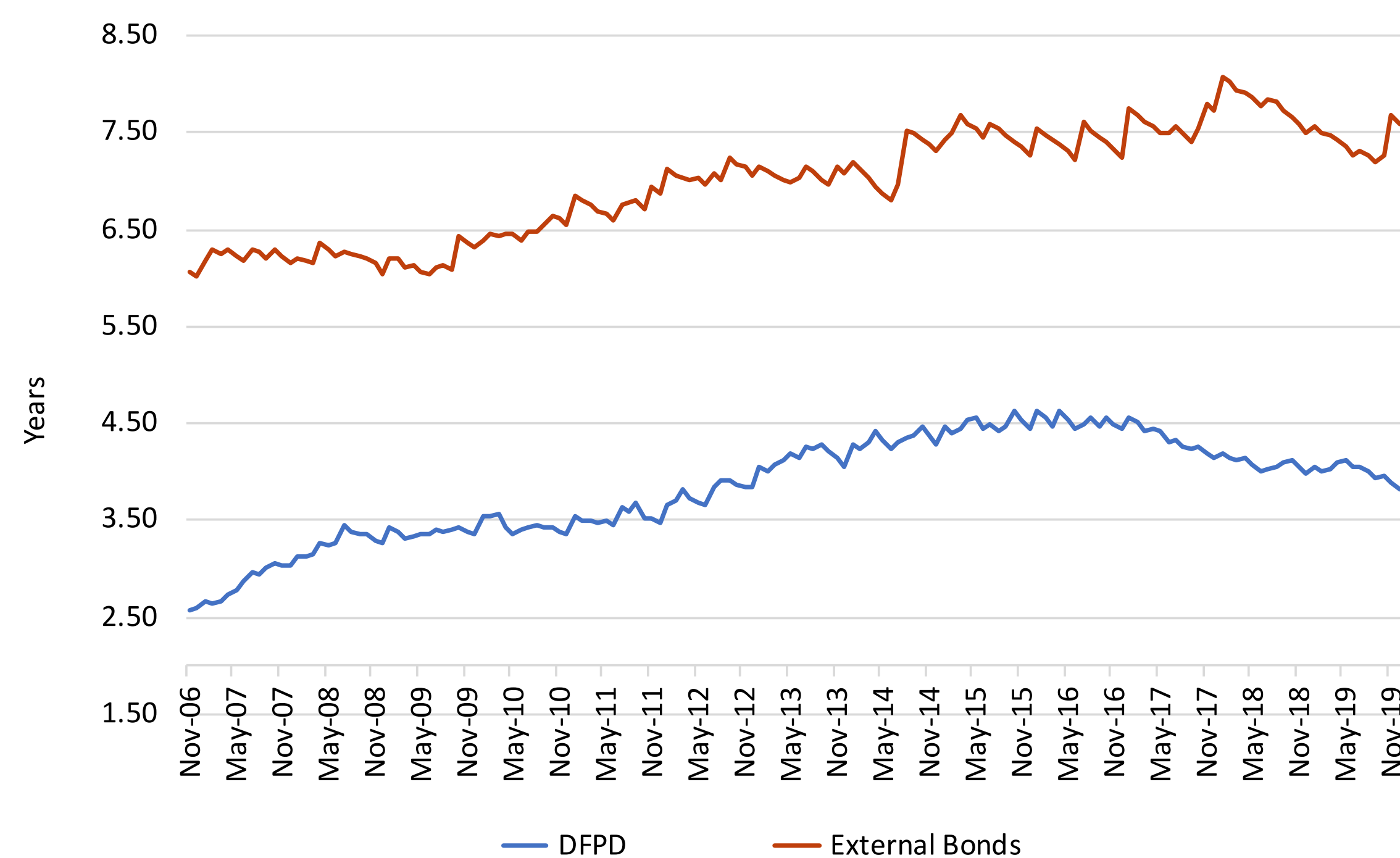
[Access the
Global 2029
Report](#)

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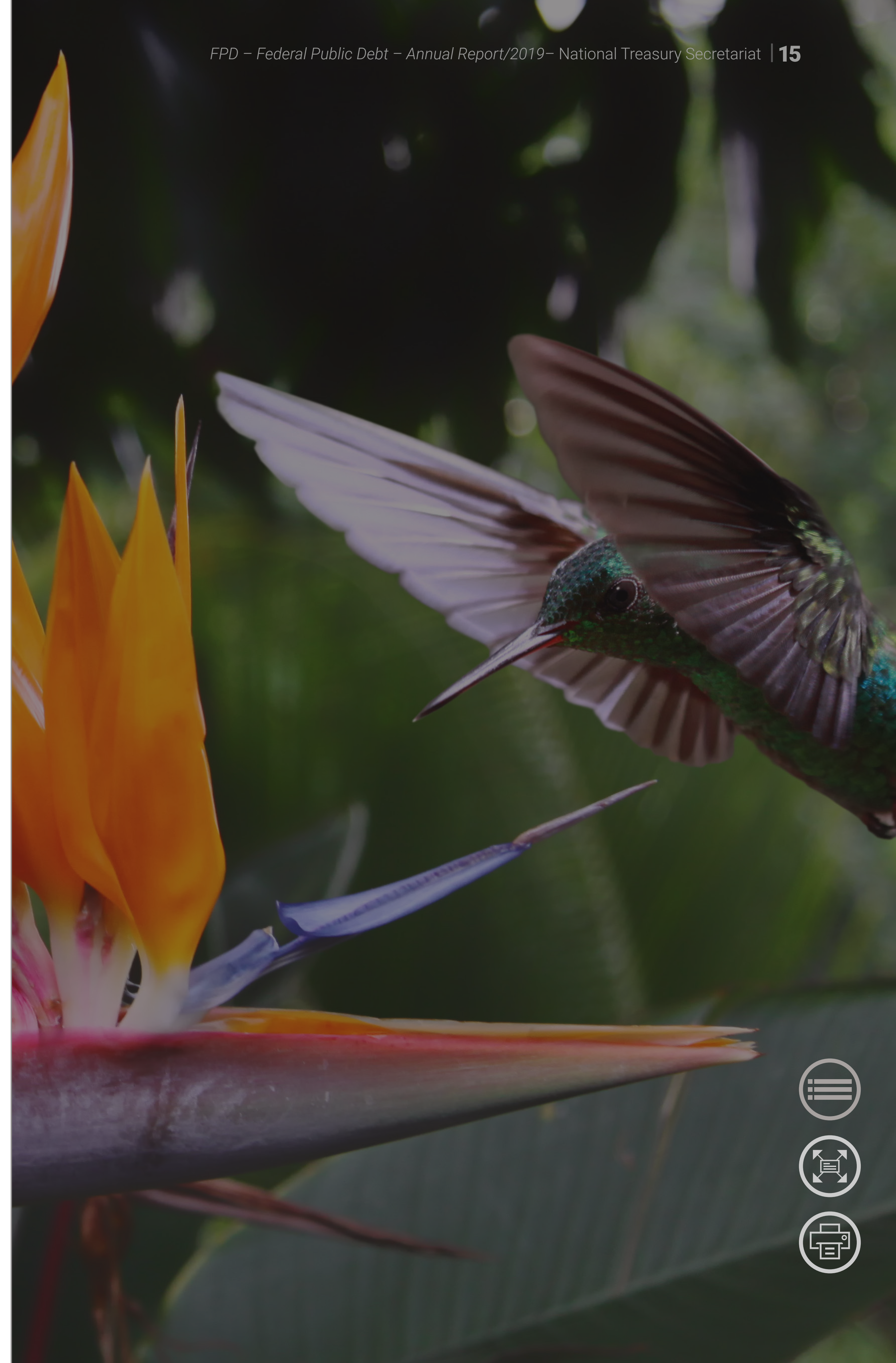


Out of the US\$ 2.5 billion in Global 2050 issuance proceeds, approximately US\$ 1.04 billion were used to buy back outstanding bonds, consisting in the liability management portion of the operation. Redeemed bonds yields were between 5.000% and 12.250%, in contrast to the Global 2050 4.750% coupon, a cost more in line with the current financing conditions. In addition to cost savings, the buyback contributed to lengthening External Federal Public Debt -- EFPD (Figure 10).

Figure 10 – **Average Maturity (years)**



Source: National Treasury



3

Results Achieved

Saíra-preciosa, tangara preciosa

In 2019, debt management results were adherent to the reference limits set out in the ABP 2019, highlighting the increase in the share of floating-rate bonds in FPD, mainly due to low LFT maturities and the execution of a strategy of rolling-over above 100% of principal and interest maturing in the year. Another highlight was the reduction in the average cost of debt, which accompanied the Selic rate performance and the downward shift of the domestic yield curve.

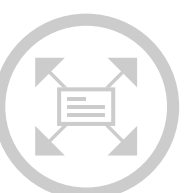
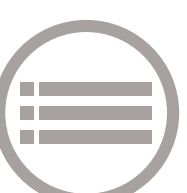
3.1. FPD statistics and risk management

Table 2 shows that the main FPD indicators referent to outstanding volume, FPD profile and maturity structure were within reference limits defined in the ABP 2019.

Table 2 – *Main results for the Federal Public Debt*

Indicators	Dec/18	Dec/19	Limits for 2019	
			Minimum	Maximum
Outstanding (BRL billion)				
FPD	3,877.1	4,248.9	4,100.0	4,300.0
Composição (%)				
Fixed rate	33.0	31.0	29.0	33.0
Inflation Linked	27.5	26.0	24.0	28.0
Floating Rate	35.5	38.9	38.0	42.0
Exchange rate	4.0	4.1	3.0	7.0
Maturity Profile				
% Maturing in 12 months	16.3	18.7	17.0	20.0
Average Maturity (years)	4.1	4.0	3.9	4.1

Source: National Treasury



Outstanding FPD

In 2019, the outstanding FPD volume increased by BRL 371.8 billion, that is, about 10% compared to the previous year. The variation was mainly derived from the interest accrual amounting BRL 330.7 billion, as shown in Table 3. Furthermore, net issuances in the period contributed to make outstanding volume growth rate higher than the average cost of that debt (which will be discussed later). In the case of EFPD, interest accrual includes the effect of exchange rate fluctuations over the outstanding volume.

Table 3 – **FPD variation factors (BRL billion)**

Indicators	Outstanding		Change (a-b+c)	Change Drivers			Accrued Interest (c)
	2018	2019		Issuances (a)	Redemptions (b)	Net Issuances (a-b)	
FPD	3,877.1	4,248.9	371.8	759.2	718.1	41.1	330.7
DFPD	3,728.9	4,083.2	354.4	738.1	699.9*	38.2	316.2
EFPD	148.2	165.7	17.5	21.1	18.2	2.9	14.5

* Includes the portfolio transfer transaction between the market and the Central Bank in the amount of BRL 1,068 million, as explained in table 2.9 of the December 2019 Monthly Debt Report.

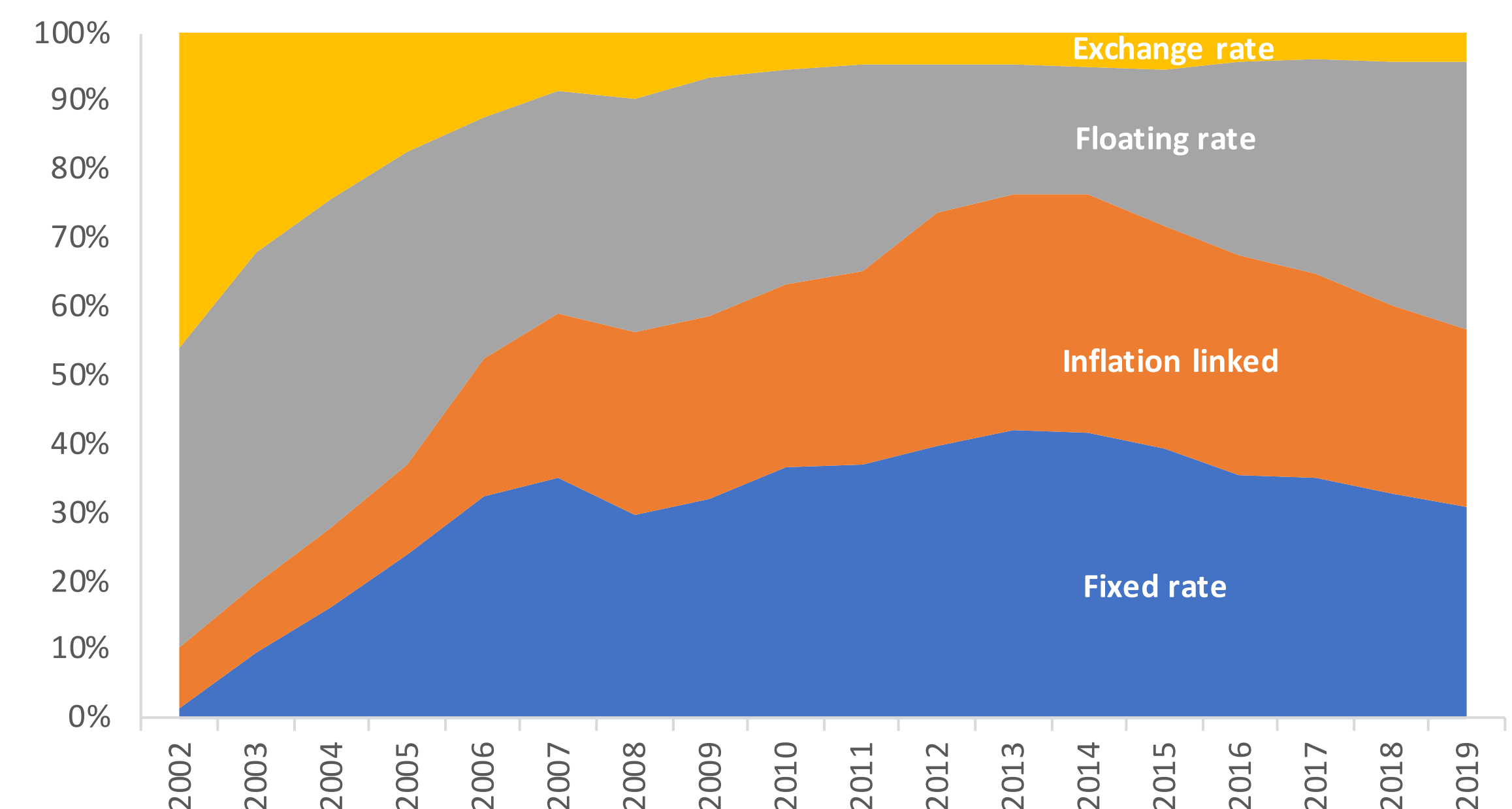
Source: National Treasury

FPD profile and market risk

The upward trend initiated in 2015 in the share of floating-rate bonds continued in 2019. These bonds participation in FPD increased by 3.4 percentage points relative to the end of 2018, from 35.5% to 38.9%. On the other hand, fixed-rate and inflation-linked bonds registered a drop in their shares - from 33% to 31%, and from 27.5% to 26%, respectively. The FPD profile over the time is shown in Figure 11. The changes in 2019 reflect net issuance of floating-rate bonds and net redemption of fixed-rate and inflation-linked bonds

As the share of floating-rate bonds increased in 2019, the FPD market risk was accentuated.

Figure 11 – **FPD composition according to the bond category**



Source: National Treasury

Over the past decade, there has been a significant increase in public indebtedness. Changes in FPD indicators, mainly regarding profile, reflect the new level of debt. LFT is the instrument that allows the National Treasury to increase funding without pressuring the yield curve and without concentrating maturities in the short term. One of the alternatives to this borrowing strategy would be to increase issuances of the 6- and 12-month LTN, which would tend to increase debt cost and short-term rollover risk.

Thus, the strategy adopted since 2015 has been advantageous, especially considering the cost reduction resulting from the new level of interest rates. However, it is worth considering that the growth in the proportion of LFT increases debt exposure to fluctuations in short-term interest rates term, which would have negative impacts in case of a severe tightening in monetary policy and in general financing conditions.

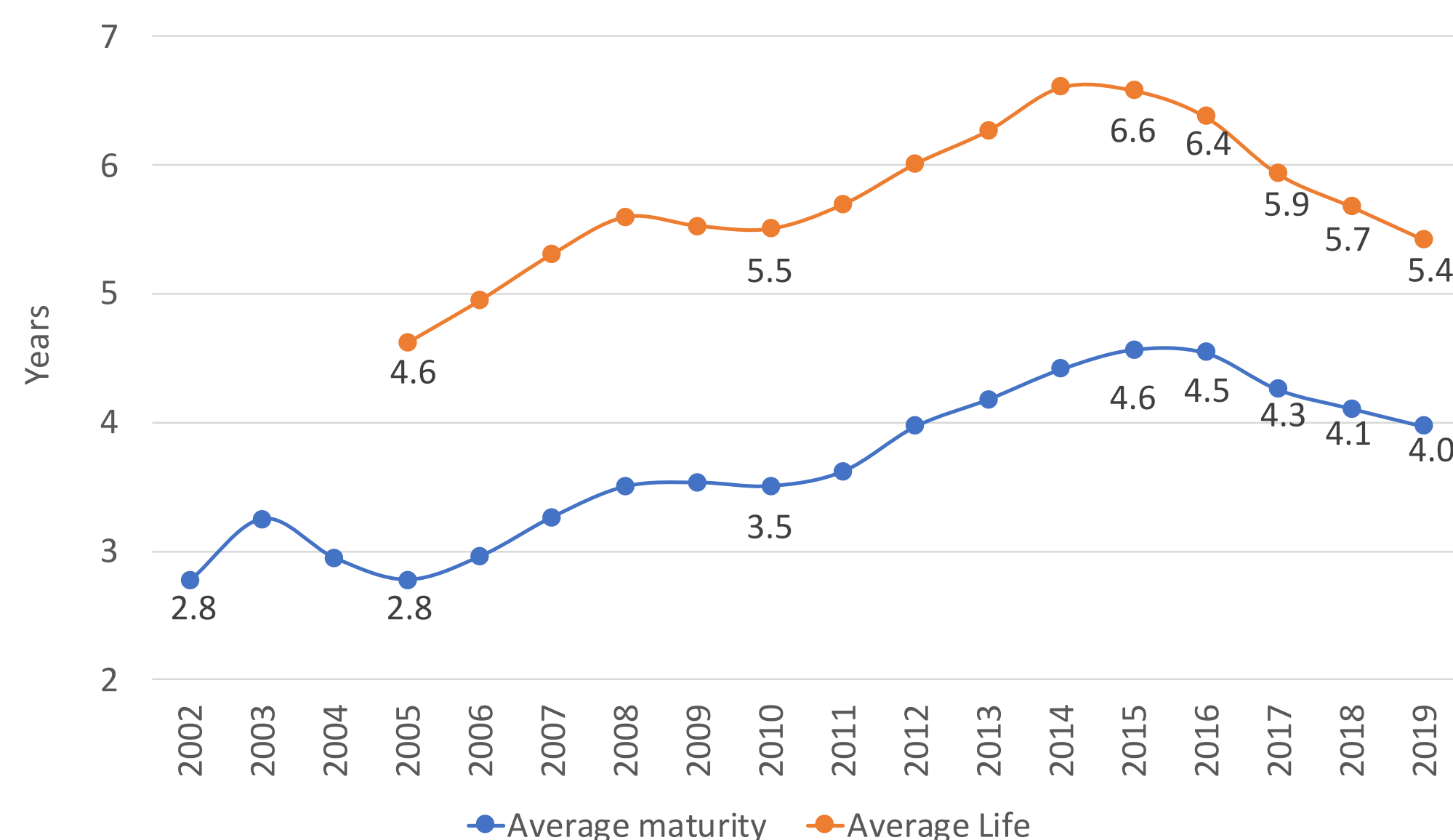


Despite changes in the FPD profile in recent years, the National Treasury maintains its long-term guideline of gradually replacing floating-rate bonds for fixed-rate or inflation-linked bonds. It must be recognized, however, that the pace for achieving the optimal profile is conditioned to the progress of the structural reforms agenda in order to complete the fiscal consolidation process and enable economic recovery.

Maturity structure and rollover risk

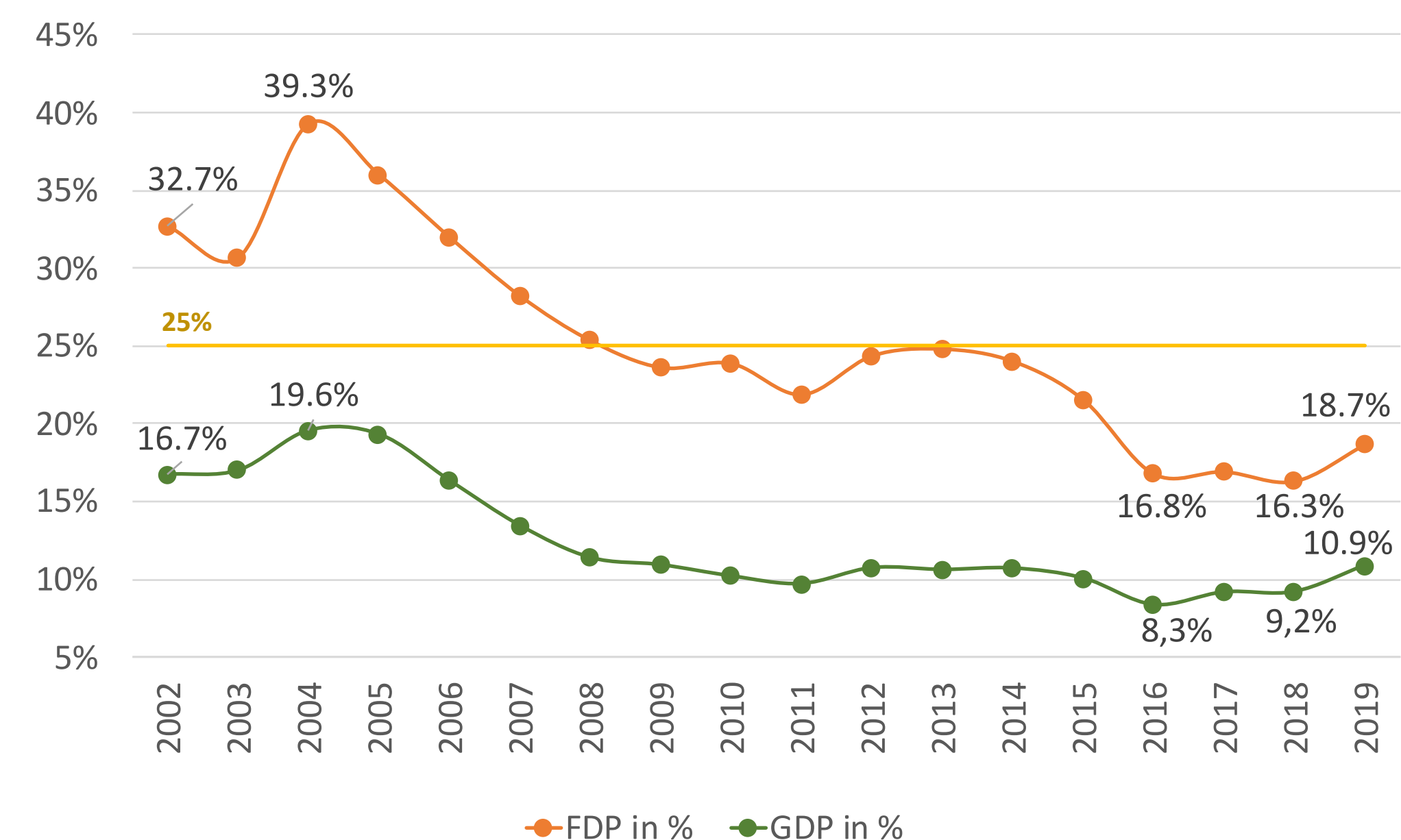
The FPD rollover risk is directly related to its maturity structure and its main indicators are the share of debt maturing in twelve months, which is a parameter for debt concentration in the short term, and the average maturity, which reflects the average time remaining for debt payments. As shown in Figures 12a and 12b, the share of debt maturing in 12 months increased from 16.3% in 2018 to 18.7% in 2019. The average maturity, in turn, was reduced from 4.1 to 4 years.

Figure 12a – *FPD Maturity Profile*



Source: National Treasury

Figure 12b – *FPD Maturity Profile*



Source: National Treasury

The borrowing strategy is defined in order to optimize bonds issuances, subject to market restrictions. The strategy adopted by the Treasury of reducing 6- and 12-month LTN issuances, for example, has contributed to maintain the share of debt maturing in twelve months at levels lower than 20% of FPD – a historically low level for Brazil. However, the increasing borrowing needs since 2014 has resulted in a higher maturities volume in 2020, which explains the increase in the share of debt maturing in 12 months.

The reduction in the average maturity, in turn, is mainly explained by demand restrictions. The main DFPD maturity lengthening instruments are the NTN-F, whose main holders are non-resident investors, and Group II NTN-B, whose main holders are pension funds. The demand for these instruments has remained stable over the past few years, despite the higher level of indebtedness. The reduction in average maturity stems from the lower relative share of long-term instruments in government bonds issuances.

It should be noted that, despite the recent behavior of maturity indicators, the refinancing risk remains fully mitigated by the maintenance of a liquidity reserve at historically high levels.





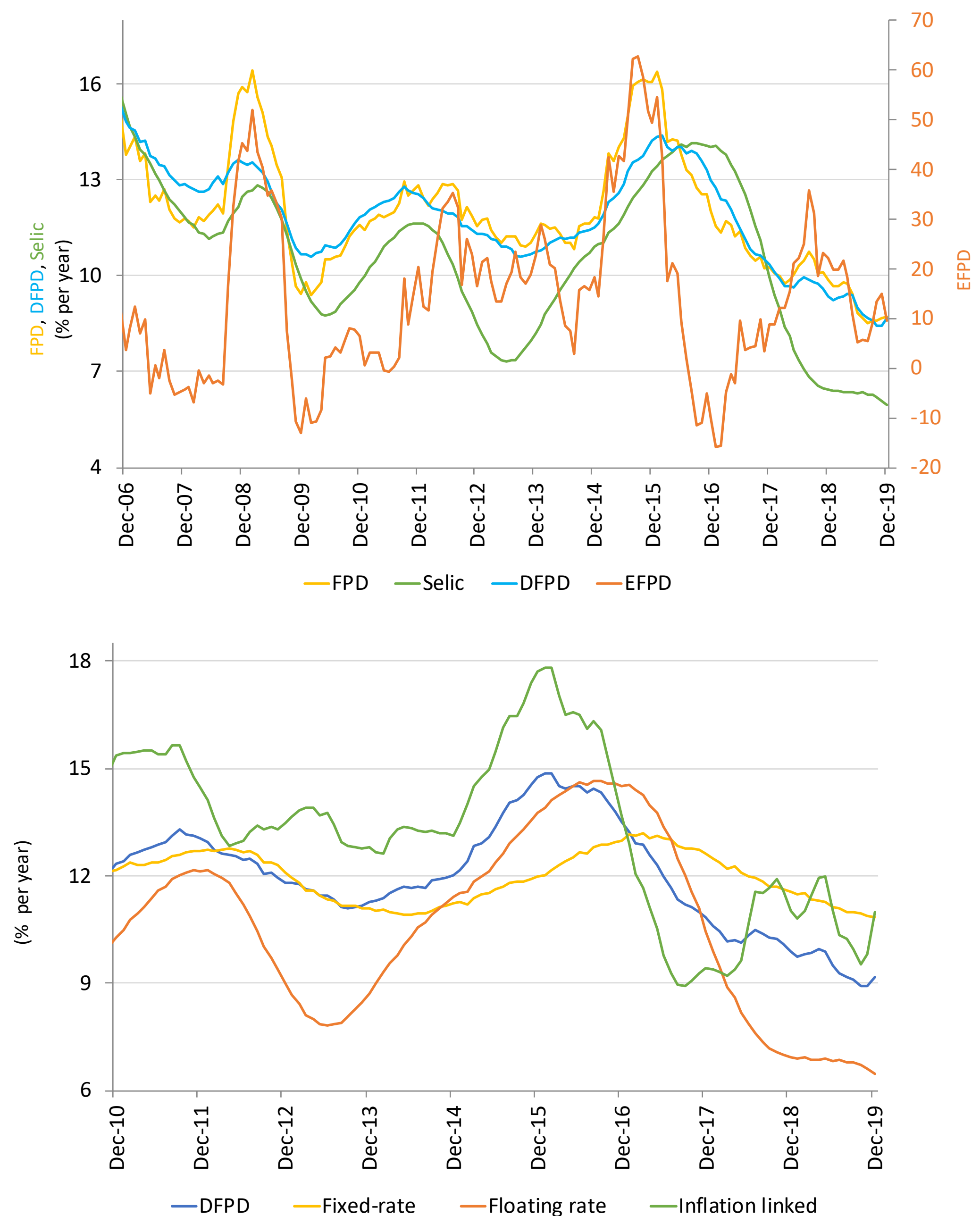
Key figures of
the Federal
Public Debt

In addition to the average maturity, the National Treasury regularly discloses the average life (ATM, average-time-to-maturity) of FPD, which is the indicator applied for international comparisons, since many countries use this metric to calculate the maturity of debts - instead of average maturity⁵. The information on FPD average life can be found in the link beside).

Cost of Public Debt

The current cycle of monetary policy easing has impacted the cost of the debt, which maintained a downward trajectory in 2019, as illustrated in Figure 13. The accumulated 12-month average cost of the outstanding DFPD was reduced from 9.37% p.a. in December 2018 to 8.66% p.a. in December 2019. This decrease was partially offset by the effect of exchange rate variations on the average cost of the of the EFPD, which presented higher value accumulated over in 12 months, of 9.65% p.a., than the DFPD.

Figure 13 – **Average FPD cost (12-month accrued)**



Source: National Treasury

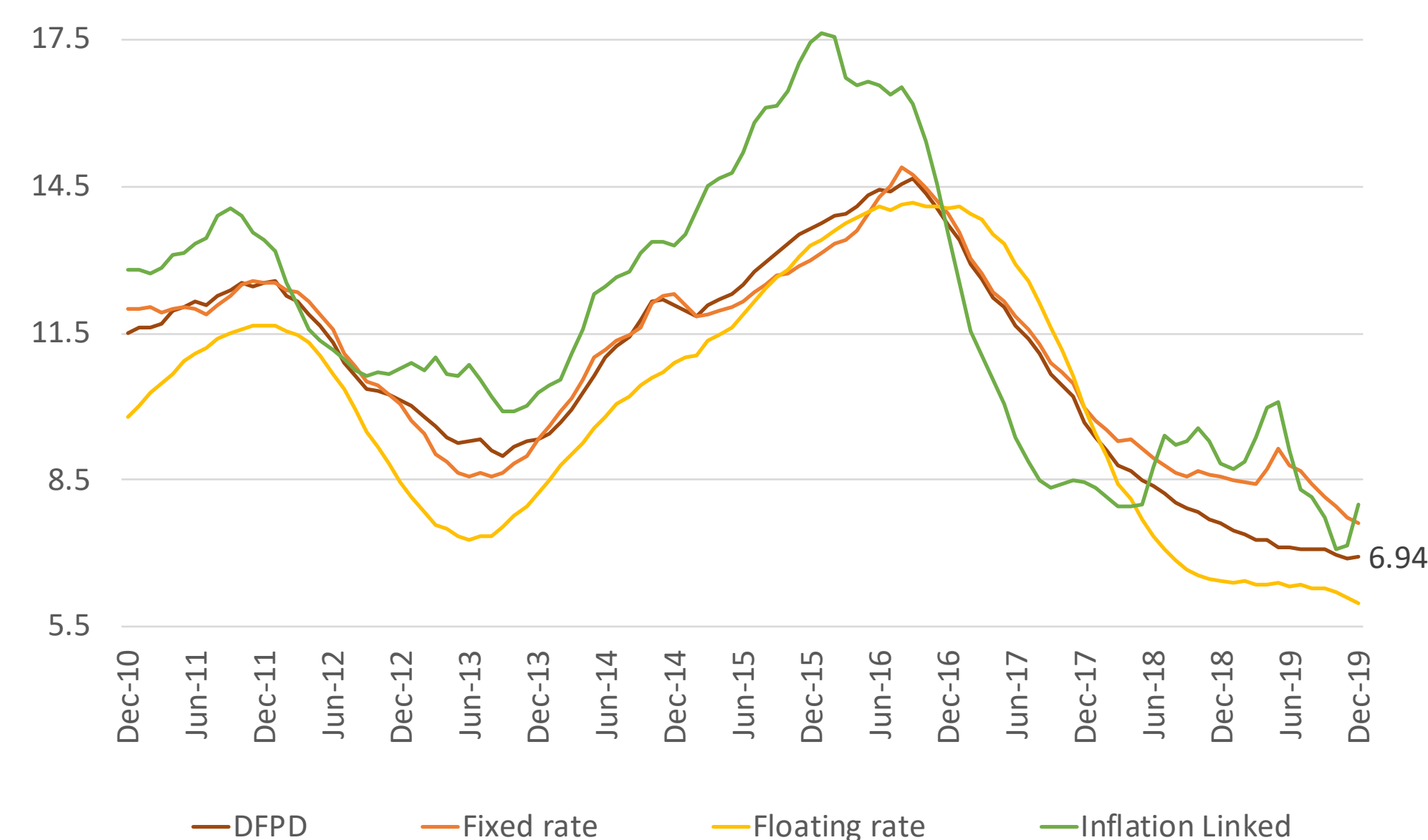
The average issuance cost for DFPD, which measures the conditions for tapping the market in the last twelve months, also showed a reduction throughout 2019. The indicator ended the year at 6.94% p.a., against 7.64% p.a. in December 2018. The analysis by type of index shows a drop in average

⁵ However, average life is an indicator less efficient than average maturity, since it does not consider coupon payments nor calculates payments by their present value. Such drawbacks, which are the reason the Treasury gives less emphasis to this indicator on FPD statistics, explain why average life values are usually well above average maturity. Despite these limitations, most countries adopt an indicator similar to the average life in their maturity profile statistics. Therefore, direct cross-country comparisons between the measures adopted to establish reference FPD ranges are inaccurate.



issuance cost for all the types of bonds. The average issuance cost reflects the bonds' yields in more recent issuances, which is why this indicator tends to follow the performance of the monetary policy interest rate. The average cost of the outstanding debt, on the other hand, tends to be more stable, taking longer to respond to short-term changes in interest rate parameters. This is because the cost of the outstanding debt is a reflection of all bond issuances, including those occurred in the past, that have not yet matured.

Figure 14 – **DFPD cost of issuance** (12-month accrued rate, % Y.o.Y.)



Source: National Treasury

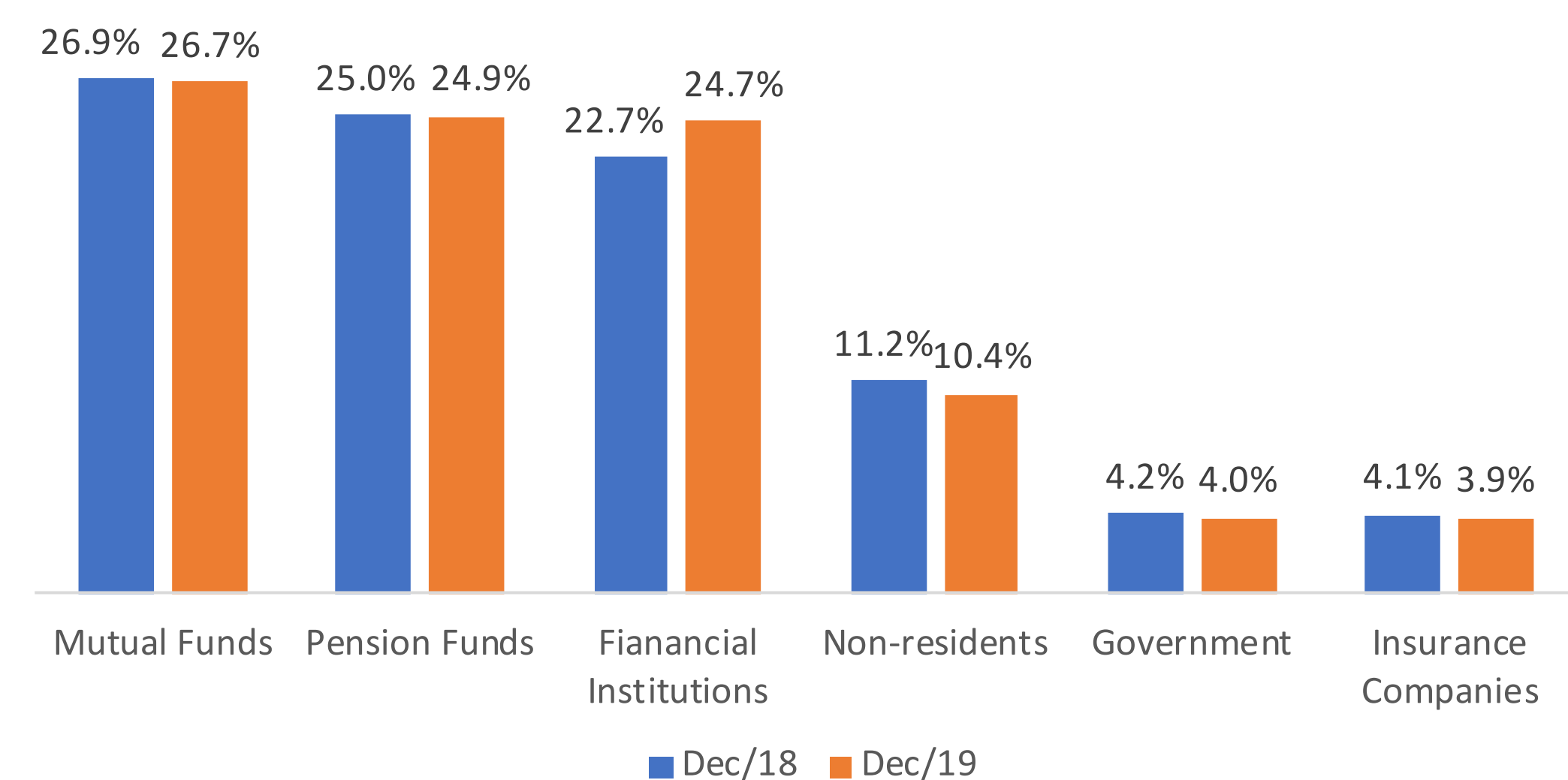
The current FPD profile, with approximately 40% of bonds linked to the Selic rate, quickly incorporates into the FPD cost indicators the fall in the interest rate given the current monetary policy easing cycle. Therefore, a reversal of this cycle, with an increase in the short-term interest rate (Selic), has the potential to impact cost indicators by the same magnitude and in the same timing. This demonstrates the urgent need for fiscal consolidation that creates favorable macroeconomic conditions for the implementation of the FPD guidelines, in order to increase the share of fixed-rate and inflation-linked bonds.

3.2 Investor Base

One of guidelines that orient the definition of FPD borrowing strategies and contribute to management efficiency is the expansion and diversification of the investor base. The presence of investors with different risk profiles and investment horizons minimizes the effects of the behavior of a specific group on government bond prices and mitigates debt risks as it contributes to increasing bonds' liquidity in the secondary market and to reduce their volatility.

In 2019, Investment Funds remained the main group of holders, ending the year with a 26.7% share, close to stability. Followed by pension funds, with a 25.0% share, a figure also similar to that of the previous year. As explained in Figure 15, the DFPD investor base remained diversified, with no significant changes, which supports its relevance for debt risk management.

Figure 15 – **DFPD investors base performance** (% of DFPD)

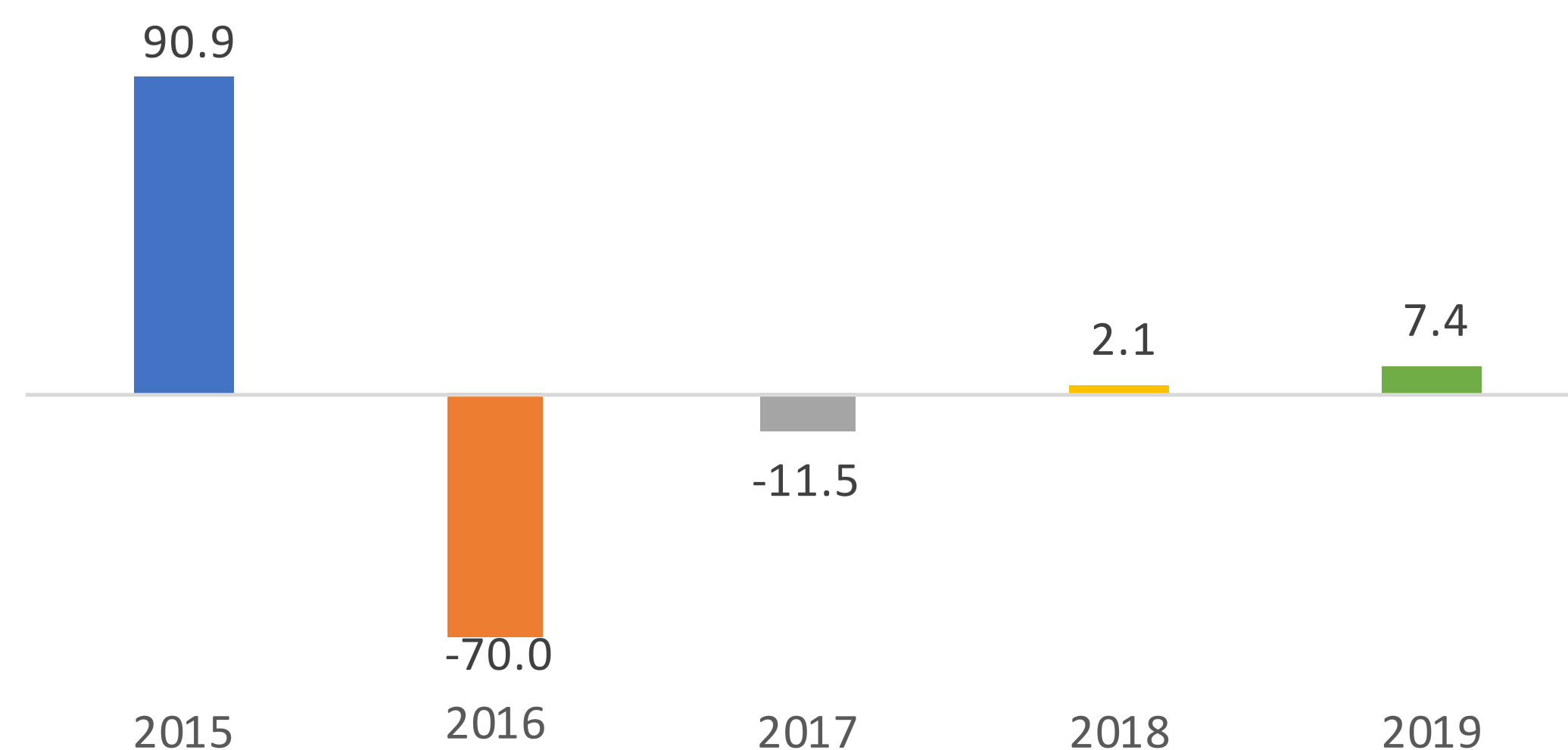


Source: National Treasury and Selic



The share of outstanding debt held by non-residents increased by BRL 7.4 billion in 2019 compared to the previous year, corresponding to a reduction in this group's participation from 11.2% to 10.4% (Figure 15). It is expected that, as stronger economic growth follows the progress on the implementation of structural reforms, the participation of this group will be even more relevant.

Figure 16 – **Variation in non-residents' government bonds portfolio (BRL bn)**

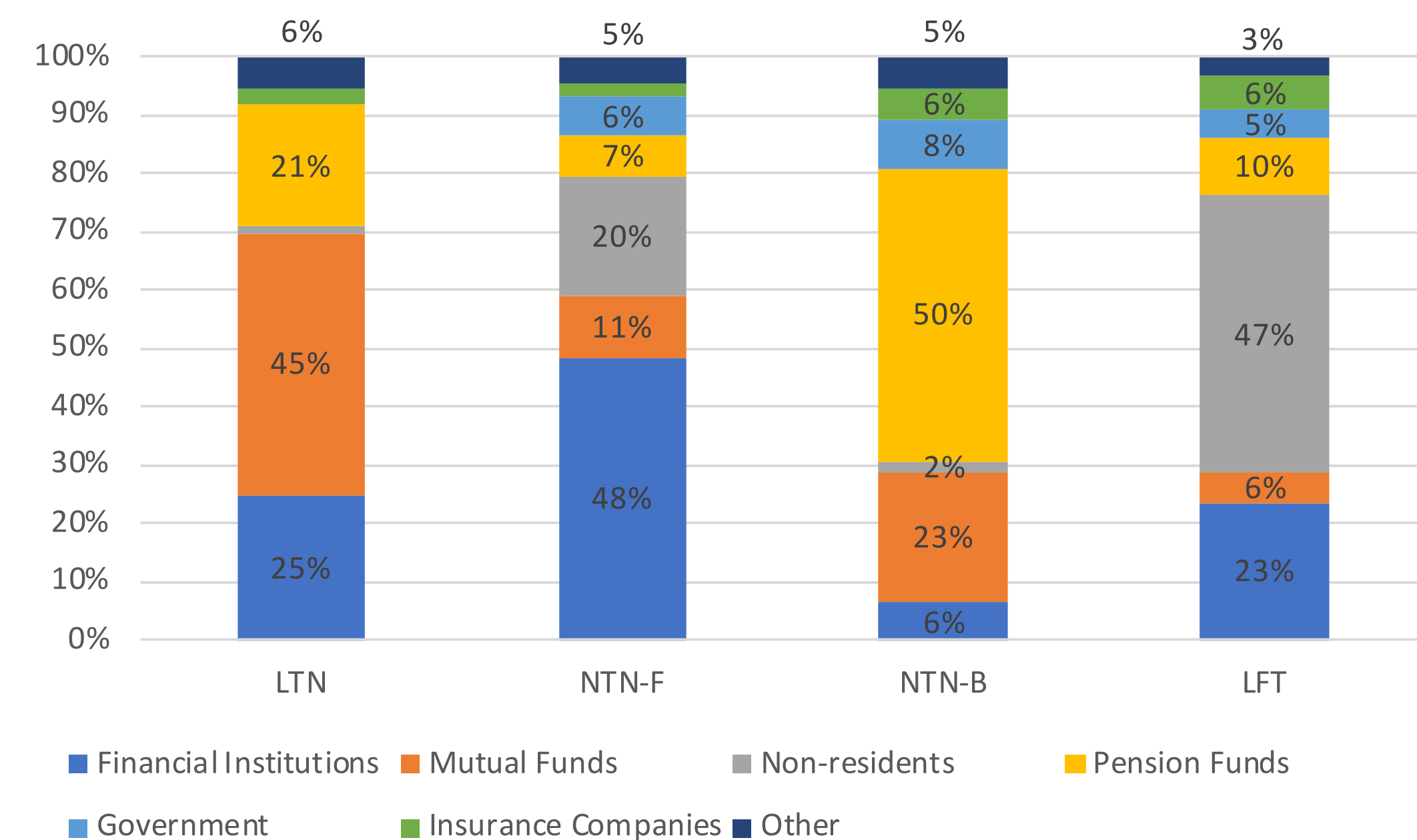


Source: National Treasury, BCB and CVM

Regardless of the percentage variation, all groups showed an increase in the volume of bonds held in 2019. The most significant figures correspond to Financial Institutions (BRL 160 billion), Pension Funds (BRL 85.3 billion) and Investment Funds (BRL 85.9 billion).

Figure 17 refers to the share of bondholders and explains a few circumstances: the Pension funds group holds 50% of the total NTN-B bonds in the market; non-residents correspond to 47% of the NTN-F; 48% of LTN constitute the portfolio of financial institutions; and 45% of LFT's outstanding volume are held by investment funds.

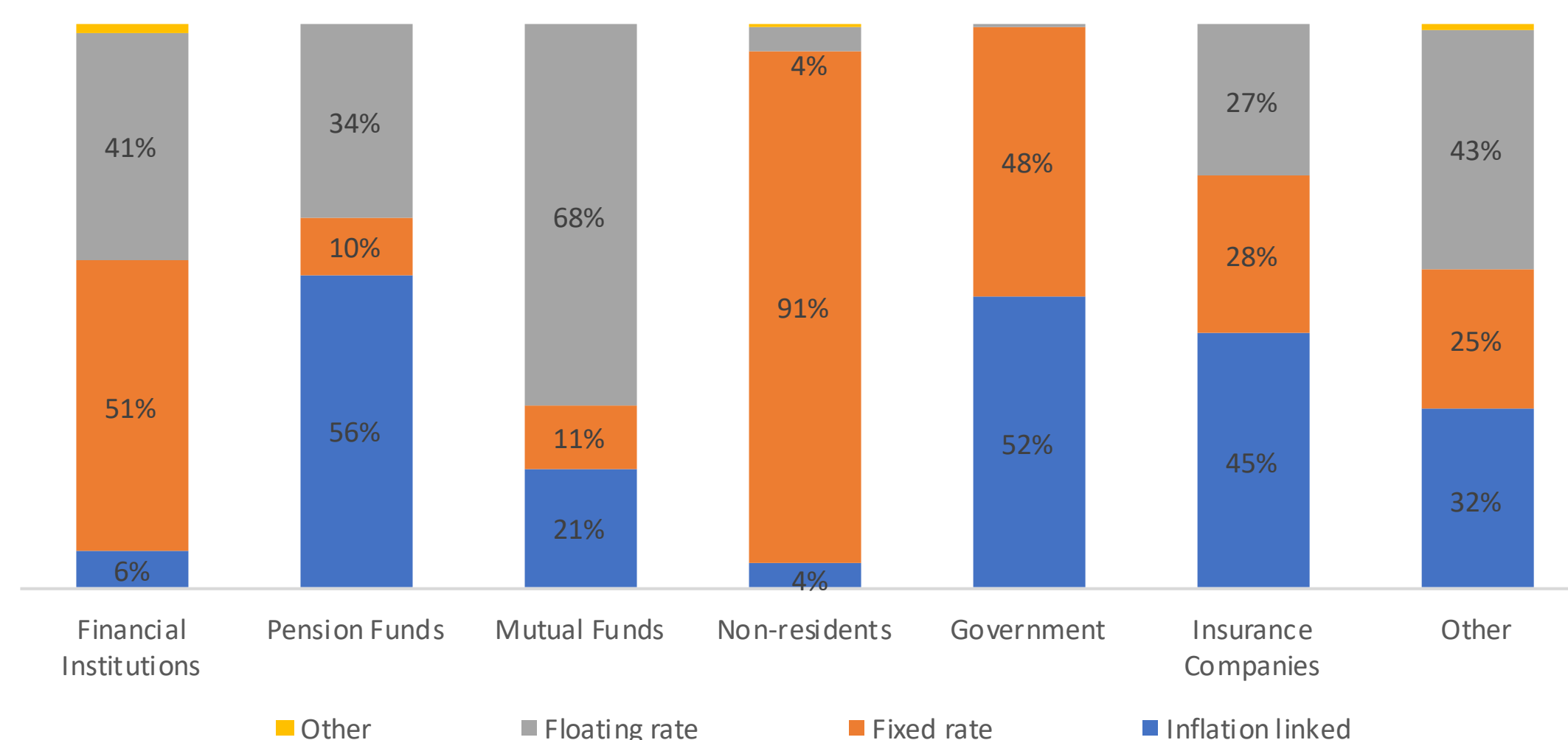
Figure 17 – **Participation of investors by type of bond**



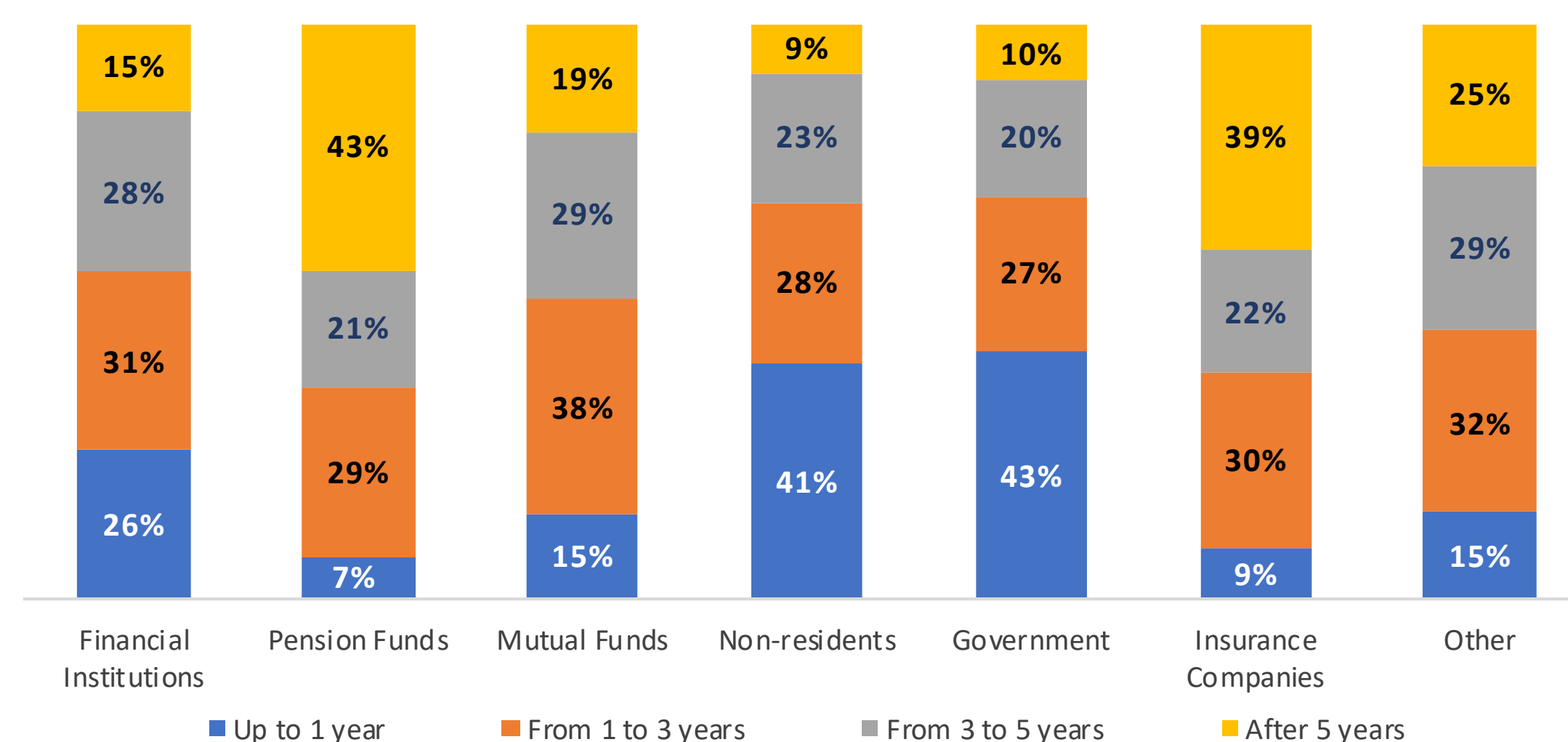
Source: National Treasury, BCB and CVM

The portfolio compositions of the main holders' groups and the corresponding maturity distributions are shown in Figures 18 and 19. It is worth noting that 91% of non-residents' investments in Brazilian Treasury bonds correspond to fixed-rate securities and 43% of the pension funds' are more than five years long maturity.



Figure 18 – **Composition by maturity**

Source: National Treasury, BCB and CVM

Figure 19 – **Composition by bond type**

Source: National Treasury, BCB and CVM

Box 2 – National Treasury supported ETF

Throughout its history, the National Treasury has been developing initiatives that contribute to the development of the Brazilian capital market, especially to the primary and secondary market for federal government bonds. A more efficient, liquid and transparent financial market has the potential to improve the country's financing conditions, with benefits for the entire society.

In May 2019, the National Treasury celebrated the conclusion of yet another initiative: the launch of the IT NOW ID ETF IMA-B (IMAB11) – a fixed-income Exchange-Traded Fund (ETF) referenced in the IMA-B index of Brazilian government bonds, conceived within the scope of the World Bank's ETF ID Project, which chose Brazil to implement it in a pioneering initiative.

Aware of the potential for ETF's positive externalities, the Treasury worked to build regulatory frameworks, tax frameworks and systems necessary for the development of the fixed income ETF industry. As a result, IMAB11 came to be the first government bond index referenced ETF in Brazil, and new ETF issuances followed its launch.

The number of ETF investors in Brazil has increased significantly in recent years. There are currently 20 ETFs listed on the Brazilian stock exchange, managing roughly BRL 22 billion in assets – BRL 18 billion in the equity segment and BRL 4 billion in the fixed income segment. The National Treasury believes in the enormous autonomous growth potential of this market, with diversity of portfolio managers and investors, aspects that should further strengthen the Brazilian capital market.

Detailed information on the ID ETF Project is available on [National Treasury's website \(only in Portuguese\)](#).



3.3. Tesouro Direto (Retail Program)

In 2019, the *Tesouro Direto* (TD) Program, which aims to amplify access to government bonds as an investment option and foster financial literacy in Brazilian society, reached yet another series of records.

There was an increase of 414,863 active investors, the highest growth in the time series. With this result, TD reached the mark of 1,201,181 investors with investments position in the program, 52.8% higher than the number at the end of 2018.

Launch of the new *Tesouro Direto* Program website

In September, the new TD website was released, with a friendlier layout and new features that facilitate investors' experience.

Benefits:

- *Faster access to the main information on the Program;*
- *New transactional area for investment and redemption operations;*
- *Updated version of the simulator, which facilitates comparisons with other fixed income products; and*
- *Historical data of prices and interest rates.*



Another indicator that corroborates the program's democratization is the number of investment operations up to BRL 1,000. In 2019, 65% of all investment operations in the Program involved amounts up to BRL 1,000. This result shows a tendency to increase the participation of small investors, especially when compared to the lowest share of this investment range in 2017 (51.3%)

and 2018 (60.2%). At *Tesouro Direto*, it is possible to invest with approximately BRL 30.00, which is an excellent investment opportunity for small investors looking for a safe, transparent and profitable option.

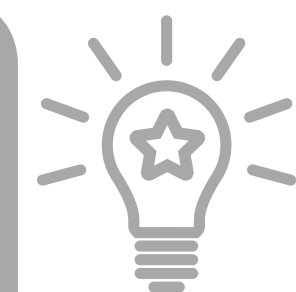
For further information, visit the [Program website](#).

Cut in the rate spread of the *Tesouro Selic*

*In April / 2019, there was a reduction in the rate spread of *Tesouro Selic* bonds, from 4 bps to 1 bps.*

Benefits:

- *Improved competitiveness of the *Tesouro Selic* bonds in a scenario of structurally lower interest rates;*
- *Higher profitability for the investor.*



3.4. Dealer system and secondary market for federal public securities

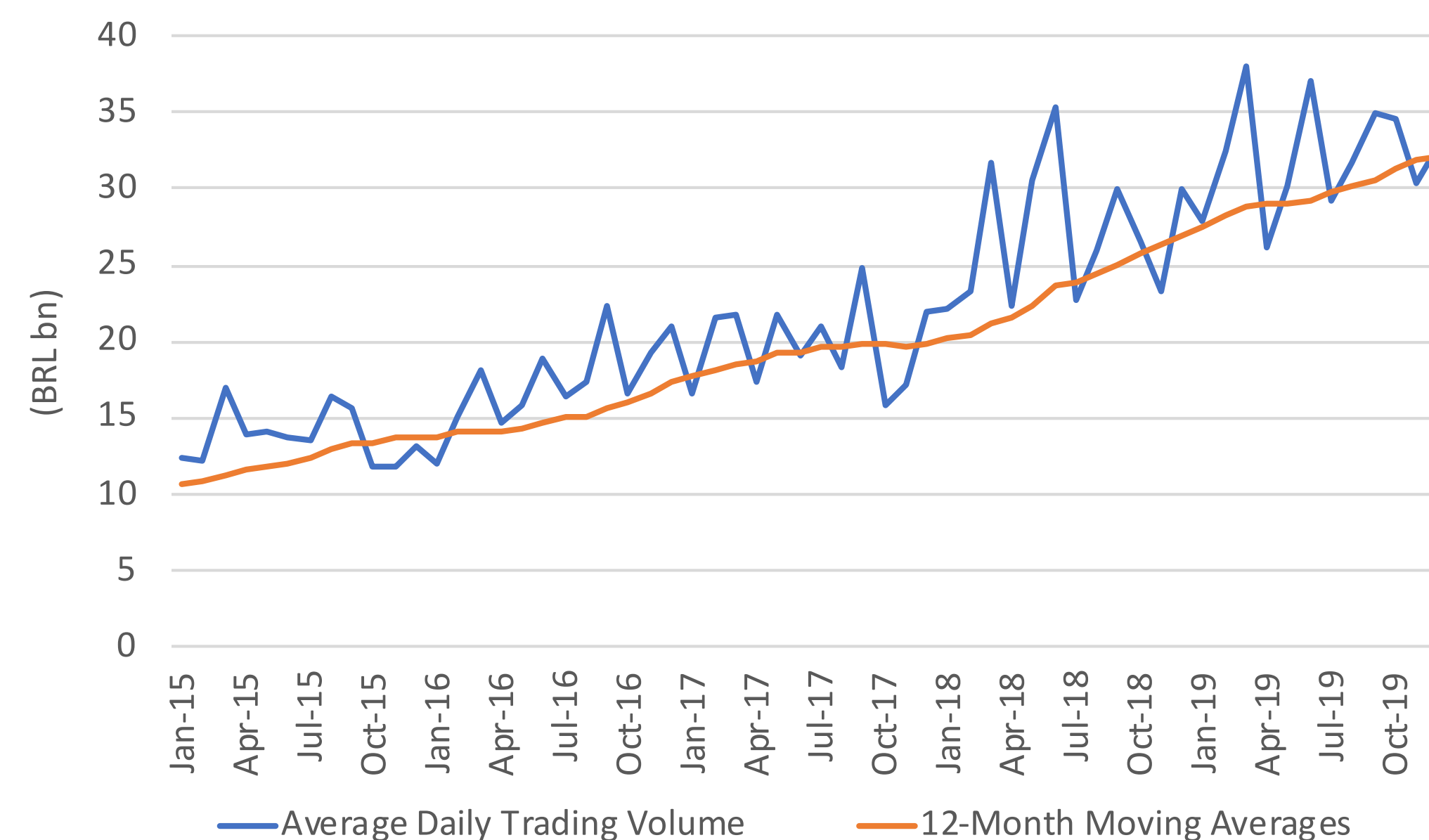
The National Treasury accredits financial institutions with the objective of promoting the development of primary and secondary government bonds markets. Known as dealers, these institutions operate both in primary issuances of federal public securities, in which the Treasury requires a minimum participation in public offerings, and in the secondary market through distribution and market formation, contributing to a more efficient monitoring of the secondary market and of the developments in the industry in which these institutions operate.



In order to improve the Dealer System, the National Treasury published the Ministry Decree STN No. 534, of August 9, 2019, which will take effect on February 10, 2020. The main innovation of the document was to review the weights attributed to the operations in the secondary market for federal public securities, in order to increase incentives for transactions involving longer-term bonds.

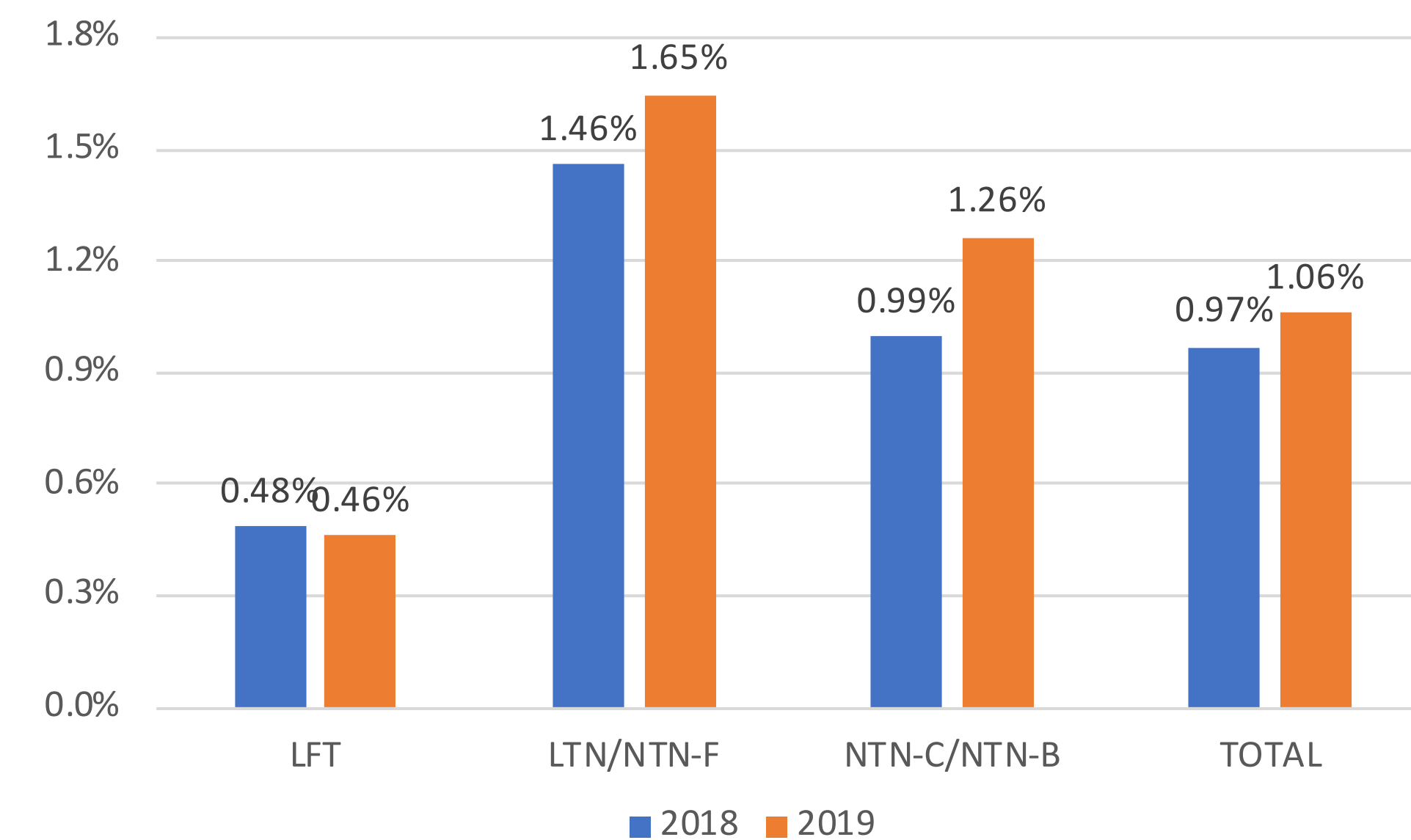
The data in Figure 20 illustrates the trend of growth in volume traded in the secondary market since the split of the Central Bank's and the National Treasury's Dealers Systems in 2015. The average daily volume, which was approximately BRL 12 billion in January 2015, reached BRL 32 billion in December 2019, considering the extra-group concept (negotiations between institutions from different financial conglomerates). Particularly in 2019, there was an escalation in the volume traded in relation to stock respective bonds, an important liquidity metric (Figure 21).

Figure 20 – **Average Daily Trading Volume**



Source: National Treasury

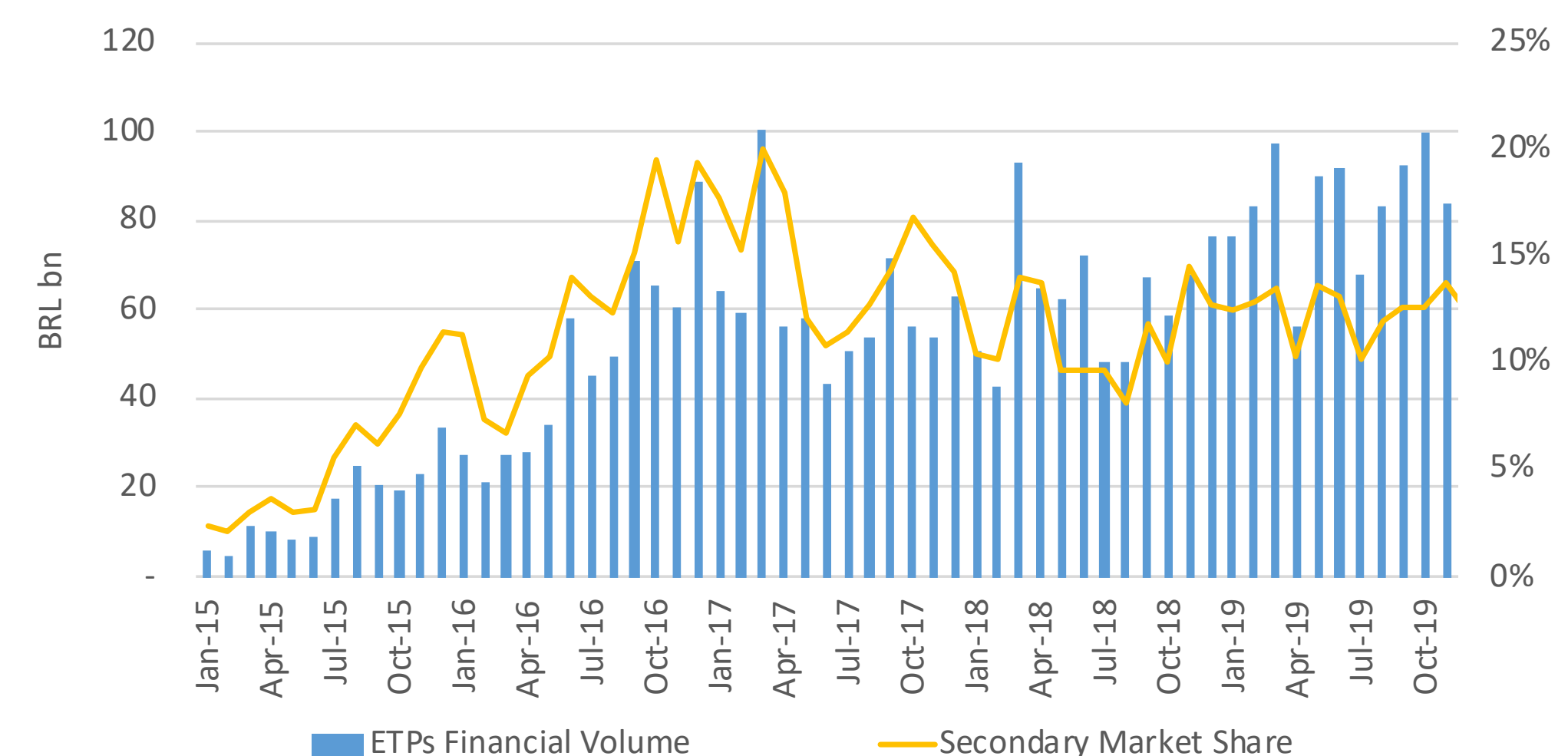
Figure 21 – **Average Daily Trading Volume versus Outstanding Amount**



Source: National Treasury

Another segment that the National Treasury seeks to improve through its dealer system, in order to increase liquidity and price transparency, is the electronic government bonds trading platforms (ETPs). Progress on this front has been significant in recent years, from around BRL 6 billion in volume traded on electronic platforms in January 2015 to around BRL 85 billion in December 2019.

Figure 22 – **ETPs Monthly Volume and Secondary Market Shares**



Source: National Treasury

4

Guaranteed Debt



Chapada Diamantina, Bahia, Brasil

The federal government grants guarantees to credit loans to subnational governments (states and municipalities), federal banks, state-owned enterprises and government related entities in order to reduce the credit risk of borrowers, by making it possible to obtain funding at lower costs than in the absence of these guarantees.

Guaranteed debt constitutes a contingent liability of the federal government so that monitoring its outstanding as well as executing guarantees is relevant for public debt management. Guaranteed debt has gained importance in the current scenario of the fiscal crisis of subnational governments in a way that the forecast of guarantees honors has started to incorporate the federal government borrowing requirements. As Table 4 shows, at the end of 2019 the outstanding of guaranteed debt operations granted under the responsibility of the National Treasury amounted BRL 255.9 billion. Domestic guaranteed debt reached BRL 109.3 billion while external guaranteed debt totaled BRL 146.6 billion.

Table 4 – **Total outstanding guaranteed credit operations and honored payments** (BRL billion)

	2012	2013	2014	2015	2016	2017	2018	2019
Domestic Guarantees	22.6	52.7	80.6	112.3	111.1	115.5	114.3	109.3
States	13.2	39.9	61.9	81.8	81.3	84.7	91.4	90.9
Others	9.4	12.8	18.7	30.5	29.8	26.8	22.9	18.4
External Guarantees	48.6	56.1	70.2	110.6	103.8	121.8	143.9	146.6
States	29.2	35.7	47.7	77.8	75.5	91.2	107.7	109.6
Others	19.4	20.4	22.5	32.8	28.3	30.6	36.3	37.0
Total Guarantees	71.2	108.8	150.8	222.9	214.9	233.3	258.2	255.9
Executed Guarantees	0	0	0	0	2.4	4.1	4.8	8.3

Source: National Treasury

The amount of executed guarantees reached BRL 8.3 billion in 2019, which represented an increase in 73% compared to 2018 (BRL 4.8 billion). In 2019, the payments of guaranteed debt refers to the states of Rio de Janeiro (BRL 4.0 billion), Minas Gerais (BRL 3.3 billion), Goiás (BRL 770 million), Rio Grande do Norte (BLR 139 million) and Amapá (BRL 90 million), and also the municipalities of Belford Roxo/RJ and Cachoeirinha/RS (BRL 3.4 million).

The federal government is impeded from executing the collaterals related to the executed guarantees of the state of Rio de Janeiro, under the Fiscal Recovery Regime (FRR) instituted by



Complementary Law No. 159/2017. The execution of collaterals of the states of Goiás, Minas Gerais, Rio Grande do Norte and Amapá is also suspended, since these subnational governments have obtained legal injunctions in the Supreme Court in 2019 that prevent the federal government from executing the referred collaterals.

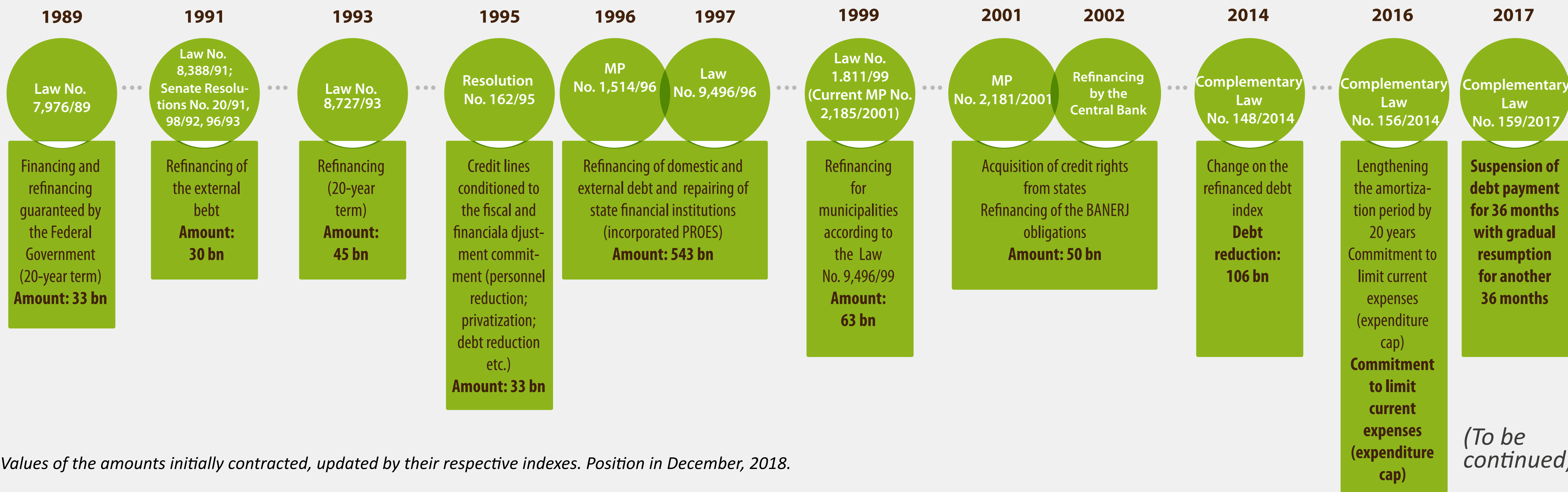
The increase in honors of guarantees without the corresponding recovery of collaterals has the final effect of raising Federal Public Debt, since these expenses are paid with government bonds issuances. Thus, the default of some entities has the effect of increasing the federal government's financial expenses, burdening society.

The Treasury publishes every four months the [Guaranteed Debt Report](#), which contains details of the guaranteed debt situation of all states, as well as an overview of the federal government's contingent liability with a series of indicators.

Box 3 – Assumption and restructuring of subnational governments' debts

The assumption and restructuring of subnational governments' debts by the federal government directly impacts federal borrowing requirements. Generally, payments realized by subnational governments to the federal government are lower than the amounts assumed by the federal government, which means granting subsidies. This also occurs when there is debt restructuring with an index change on more favorable terms and costs, which causes loss of revenues for the federal government to face the debts assumed. Figure 23 describes the history of renegotiations in the past 30 years.

Figure 23 – History of restructuring and assumption of subnational governments' debts by the federal government (in BRL)



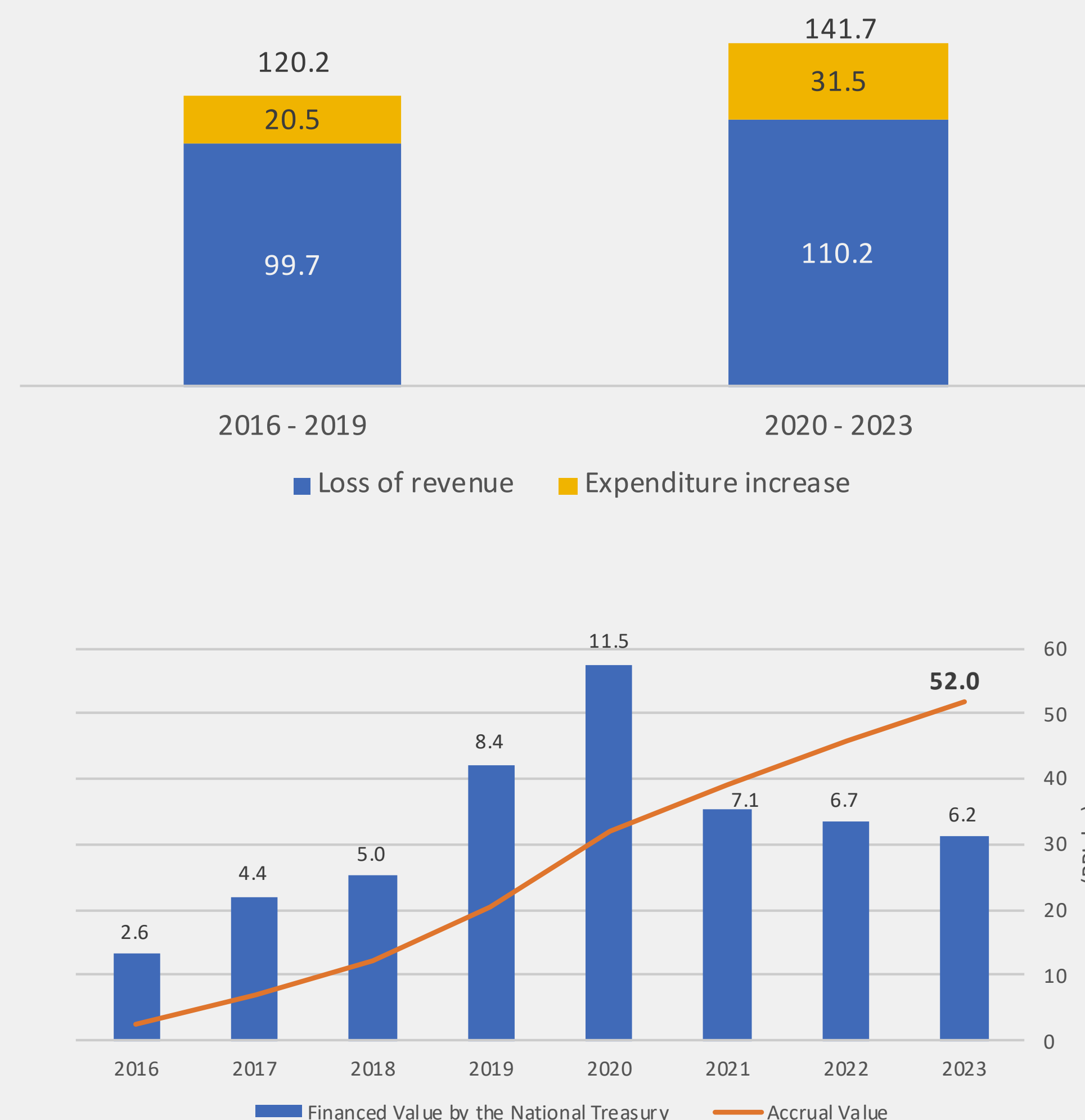
► In 1997, the Federal Government carried out one of the most important subnational governments' debt restructuring. Through Law No. 9,496/1997, the National Treasury took over, consolidated and rescheduled states' bond debt, which undertook liabilities directly with the Federal Government, but under more favorable conditions of cost and length. States' liabilities were consolidated at the nominal rate equivalent to the general price index-internal availability (IGP-DI) plus interest of 6% p.a., which in 1995 amounted to 21.67%, while the Federal Government's borrowing cost was 53.09% in the same year.

With the approval of the complementary laws No 148/2014 (indexers' change) and No 156/2016 (lengthening), states' payment flows were reduced in relation to the original contracts resulting from Law No. 9,496/1997. In addition, the Federal Government's revenues have been falling due to the impacts related to the FRR and the judicial injunctions that make it possible for some debtor subnational governments to suspend the payment of their debts. In addition to this loss of revenue, the FRR and Supreme Court decisions increase the Federal Government's expenses due to the obligation to honor guarantees related to subnational debts with several creditors, without the possibility to access their counter guarantees.

Figures 24 and 25 show the total loss due to restructuring operations occurring after 2014, including loss of revenue and increased expenditure on guarantees. The amount paid by the National Treasury in guarantees under the FRR and court injunctions since 2016, including projections up to 2023, is noteworthy.

The total impact in 2019 was BRL 34.91 billion, of which BRL 26.47 billion corresponds to revenue losses and BRL 8.44 billion to expenditures on guarantee honors (values updated in 12/31/19). This impact represents an equal increase in last year's Federal Government's borrowing requirement.

Figures 24 and 25 – **Total impact of restructuring operations and guarantees (BRL bn)**



Source: National Treasury. IPCA-corrected values, position in 12/31/2019

In short, the assumption and restructuring of subnational governments' debts by the Treasury transfer the cost of some entities' fiscal imbalance to the whole of Brazilian society, since the Federal Government needs to issue new bonds in the market to finance this debt.

For more information on the guarantees granted by the Federal Government to subnational credit operations, please refer to the [Guaranteed Debt Report](#) published every four months by the National Treasury.



5 Conclusion

In this 17th edition of the ADR, we sought to present the main results related to FPD management, in the light of the ABP prepared for the respective year and the 2019 macroeconomic scenario.

The current environment for implementing fiscal consolidation in the country brought elements that helped FPD management in 2019. Fiscal measures such as the approval of the pensions reform, the search for the reduction in the State's role as an inducer of economic growth through state-owned banks, the commitment to complying with fiscal rules, among others, created the necessary conditions for the reduction in interest rate levels, which resulted in the drop in FPD cost indicators to the lowest levels in the historical series.

Despite the significant gains from this reform scenario, it is important to highlight the relevance of continuing to approve fiscal reforms, not only those that have already been sent to the National Congress, but also those that will still be sent throughout 2020, for the consolidation of a favorable environment and the ensuing reversal of the deterioration of FPD composition. In recent years, the small maturity of floating rate linked securities and the need for positive net issues to finance the recurrent primary deficits of the Central Government have increased the share of these securities in the composition of the FPD. If, on the one hand, this composition was favorable to the fall in FPD cost indicators in the face of the reduction in the Selic rate, on the other hand, it has brought significant risks to the management of FPD in monetary tightening cycles.

In this context, the National Treasury will continue having its role in the discussion of the impacts that fiscal measures bring to FPD indicators, and, consequently, to debt management. By promoting this discussion, the Treasury aims to increase transparency in this issue for Brazilian society, assisting public policy makers in the decision-making process.

