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Annual Borrowing Plan

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National Treasury Secretariat

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SECRETARIA ESPECIAL DO TESOURO E ORÇAMENTO
MINISTÉRIO DA ECONOMIA
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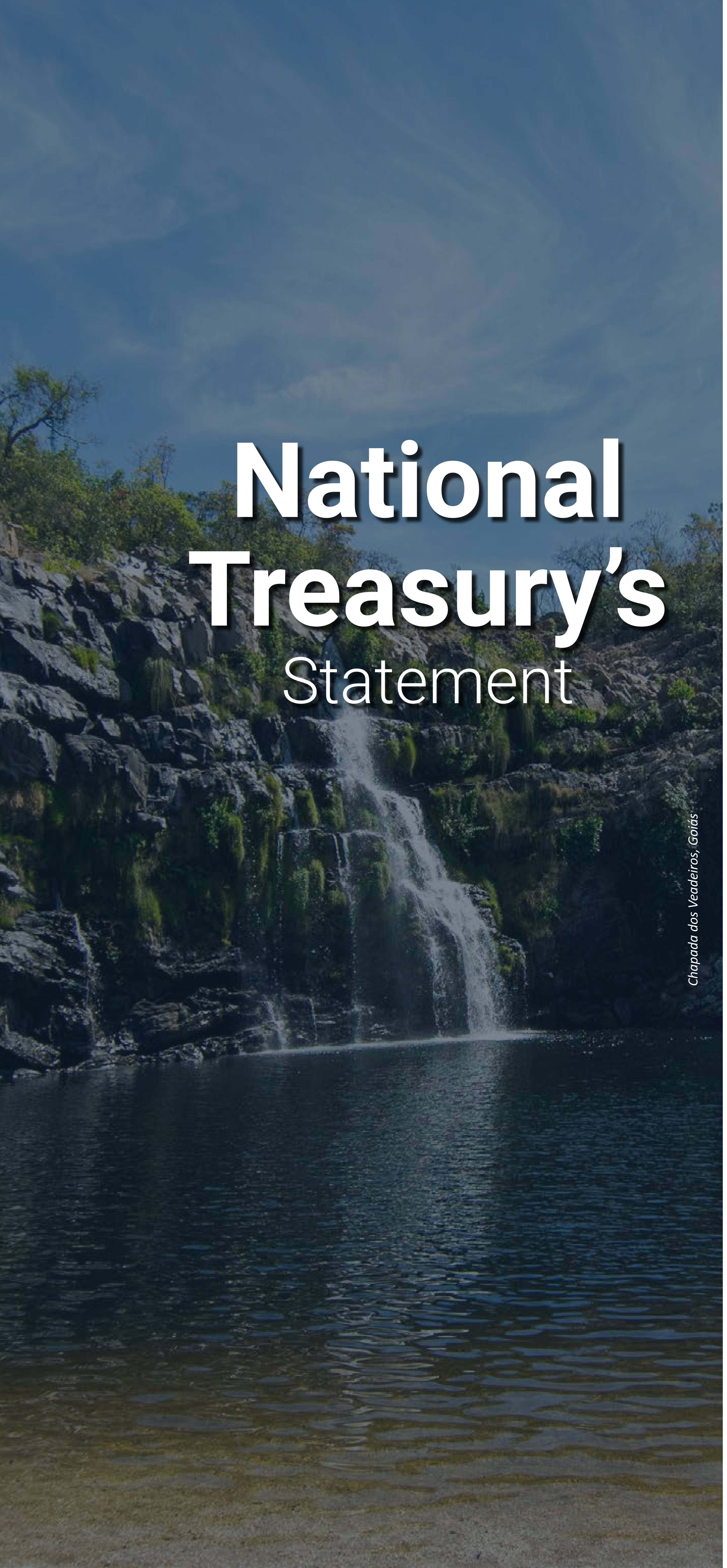

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National Treasury's Statement

The Annual Borrowing Plan (ABP) is a fundamental part of the Federal Public Debt (FPD) management. The document sets out the objective and the guidelines for the annual strategy for the issuance of domestic and external debt. The ABP's 22nd edition establishes the parameters to guide the public debt evolution during 2022, through reference limits for its main risk indicators.

Regarding public debt management and economic activity, 2021 was a year of recovery from the adverse and extraordinary effects of the COVID-19. The vaccination has appeased the negative effects of the pandemic for the Brazilian population. The impacts on economic activity were also less severe in 2021, and the need for extraordinary expenses was more punctual. Expectations remain optimistic for 2022 with greater control of the pandemic and a return to economic normality.

The relatively more favorable economic environment in 2021, especially in the first half of the year, helped to improve the public debt composition and the maturity profile. Another positive factor was the decline in the General Government debt-to-GDP ratio, expected to end the year close to 80%, after reaching 88.8% in 2020. Despite these advances, the public debt remains at a higher level than the pre-pandemic period, following a growth trajectory that has persisted for almost a decade. Therefore, efforts towards fiscal consolidation continue to be fundamental, so debt refinancing is sustainably carried out, with an adequate balance between costs and risks.

In this context, the 2022 ABP aims at meeting the Federal Government financing needs, which includes the debt rollover itself, prioritizing issuances that contributes to smooth the maturity profile of FPD. Furthermore, whenever market conditions allow, it seeks to promote the convergence of FPD indicators toward their long-term goals. Also, the Treasury seeks to preserve the liquidity reserve for debt payments at adequate level to mitigate refinancing risk.

Despite the challenges faced in recent years, the commitment to fiscal responsibility remains one of the pillars for sound public debt management and an ultimate condition for sustainable growth. The 2022 ABP reaffirms the National Treasury's determination to ensure fiscal sustainability and to promote the quality of public spending, which balance the cost-risk trade-off, respect the principles of sustainable finance and contribute to proper functioning of the Brazilian fixed-income market.

1 Introduction

The Annual Borrowing Plan presents the planning and expected results for the Federal Public Debt[1] in 2022. This document highlights the forecasts of the main risk indicators for the FPD, considering the financing strategy to be implemented throughout the year.

The objective of the FPD management is to efficiently supply the federal government borrowing needs at the lowest cost in the long term while maintaining prudent levels of risk and contributing to the proper functioning of the Brazilian bond market.

To achieve this objective, the qualitative guidelines for the development of FPD borrowing strategies are the following:

a. Gradually replacing the floating-rate bonds by fixed-rate and inflation-linked bonds;

b. Smoothing the maturity structure, with particular attention to short-term maturity;

c. Increasing the average maturity of the outstanding debt;

d. Developing the yield curve;

e. Increasing federal government bonds liquidity on the secondary market;

f. Broadening and diversifying the investors base;

g. Maintaining the liquidity reserve above its prudent level.

This document is organized into four sections, in addition to this introduction. The following section presents the macroeconomic scenario and the estimated borrowing requirements that guide the 2022 ABP. Section 3 discusses the borrowing strategy for 2022, highlights the main bonds to be issued throughout the year in the domestic market, the context of operation in the foreign market, and the evolution of the Environmental, Social, and Governance (ESG) issuance framework. Section 4 presents the results expected by the end of 2022 for the main FPD indicators, as well as indications of the composition and maturity structure of the public debt in the medium term. Section 5 presents the final remarks.

[1] The Federal Public Debt (FPD) corresponds to the sum of the Domestic Federal Public Debt (DFPD) – with the External Federal Public Debt (EFPD), the latter being subdivided into securities and contractual. The statistics presented throughout this document refer exclusively to debt held by the public, not considering the portion of held by the Central Bank. Information on this debt is available in the annexes to the FPD Monthly Reports at: www.gov.br/tesouronacional


Hercílio Luz Bridge, Florianópolis

2 Macroeconomic scenarios and **borrowing requirements**

2.1 Macroeconomic scenarios

Advances in vaccination have been essential to control the COVID-19 pandemic in Brazil and worldwide. New outbreaks have increasingly limited repercussions in terms of hospitalizations and deaths. In this context, the international baseline scenario assumes the return to normal levels of mobility and activity. This shift will allow the progressive overcoming of supply and logistics restrictions and will give greater vigor to global economic growth. The scenario also considers the US Federal Reserve tapering its bond purchases, but without significant impacts on the capital flow to emerging countries.

At the domestic level, the baseline scenario is close to market forecasts. The lessening of the pandemic impacts allows economic recovery and a reduction in the debt-to-GDP ratio. Inflation will decline compared to 2021 in response to the monetary policy tightening cycle. In its turn, the agenda of structural reforms evolve at a less intense pace than in previous years, as expected for an election year.

Alternative scenarios consider more persistent inflationary pressures on the international environment and the consequent anticipation of the tapering by the Fed, accelerating the withdrawal of stimuli and rising interest rates in the United States. In this case, there would be consequences to the capital flow to emerging countries, pushing up exchange rates and expected inflation. For Brazil, this adverse scenario would negatively affect the prices of financial assets and inflation, requiring an additional adjustment in interest rates compared to the baseline scenario estimates. This scenario could harm the recovery of the Brazilian economy and of public finances.

An optimistic scenario considers more benign political and economic conditions, including positive effects for fiscal policy. The improvement in the business environment and advances in the reform agenda would promote a more robust growth, accentuating the decline in the gross debt-to-GDP ratio observed in 2021.

Scenarios with severe shocks or extreme situations remain as a tail risk and have not been contemplated for the decision of the limits in this ABP.

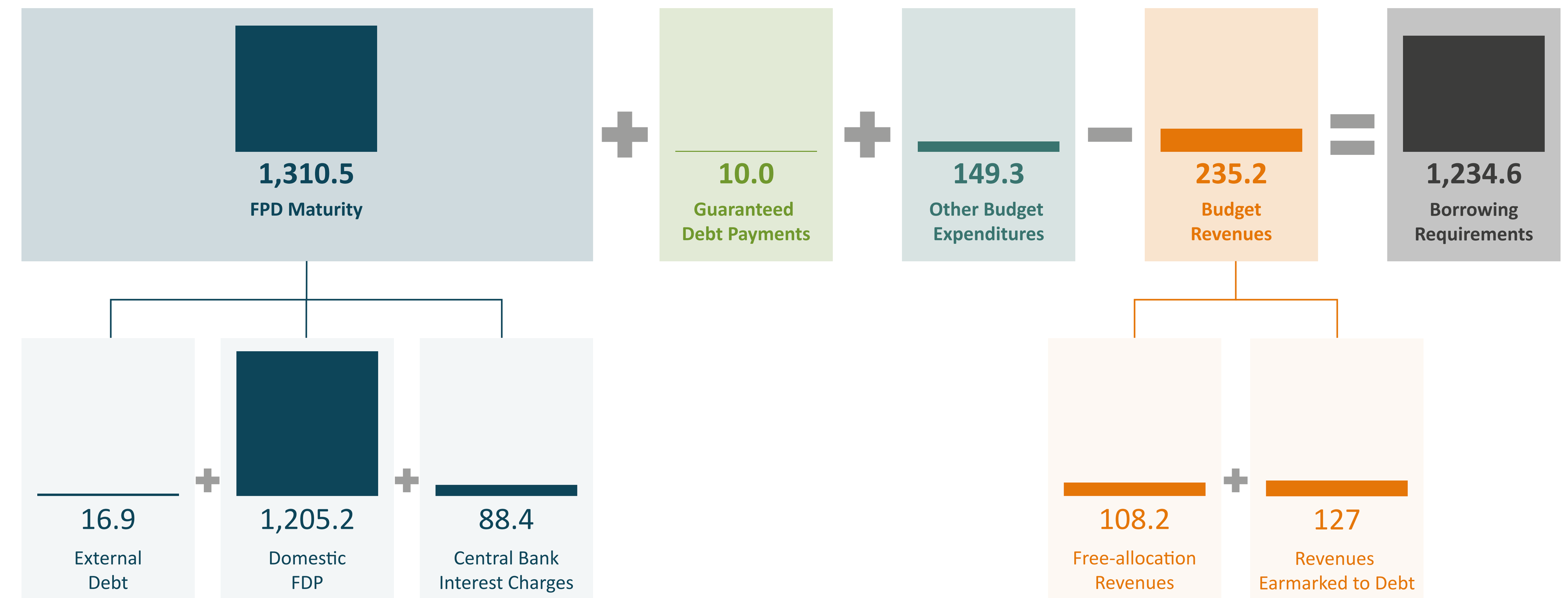
2.2. Necessidade de financiamento em 2022

The definition of borrowing requirements used in the ABP follows the budget view, and, therefore, considers only revenues to be collected during the current year. Thus, by design, revenues arising from the financial surplus obtained in past fiscal years are not included here and compound the debt cash balance management[2]. As the debt management has a liquidity reserve, also known as "debt cushion", the borrowing requirements indicator should not be interpreted as the volume of bond issuances for the year, but as the amount required to maintain a constant level of reserves.

The borrowing requirements equals the sum of the debt maturities, guarantees executions, and other budget expenditures[3] to be paid with revenues arising from government bonds issuances. Additionally, the borrowing requirements are reduced by budget resources not derived from bond issuance proceeds, which have been allocated to pay debt.

The estimate of federal government borrowing requirements for 2022 reaches BRL 1,234.6 billion [4], as shown in Figure 1.

*Figure 1 – **Borrowing Requirements for 2022 (BRL billion)****



**National Treasury projections, except for Other Budget Expenditures and Budget Revenues that were obtained from "Tesouro Gerencial" system in 01/25/2022.*

Fonte: Tesouro Nacional e SOF

The outstanding FPD maturing in 2022 amounts to BRL 1,310.5 billion, of which BRL 1,222.1 billion refers to debt[5] ematuring in the domestic and external market (detailed in Table 1), while BRL 88.4 billion represents interest payments of the bonds at the Central Bank portfolio, whose principal are legally[6], forbidden to be rollover.

*Table 1 – **Estimated FPD maturity in the market for 2022 - (BRL billion and % of the total)****

Type	FPD	
	BRL billion	% of the total
Fixed Rate	491.6	40.2%
Floating Rate	451.4	36.9%
Inflation Linked	263.5	21.6%
FX	15.6	1.3%
Total	**1,222.1**	**100.0%**

Source: *National Treasury*
As of 12/31/2021.

[2] One reason for not including a forecast of the use of the financial surplus in the ex-ante borrowing requirement concept is to prevent the same revenue from being considered in the estimate for more than one year. If the resource is not used in the same financial year as it was collected, it would distort borrowing requirements in time series analysis. The ex-post view, which is presented in the Annual Debt Reports, considers the financial surplus used in the year so that the net ex-post result indicates the amount of expenditure that has been paid out with resources of bond issuances, regardless of the variation in cash position.

[3] The largest share of other budget expenditures corresponds to budget primary expenditures.

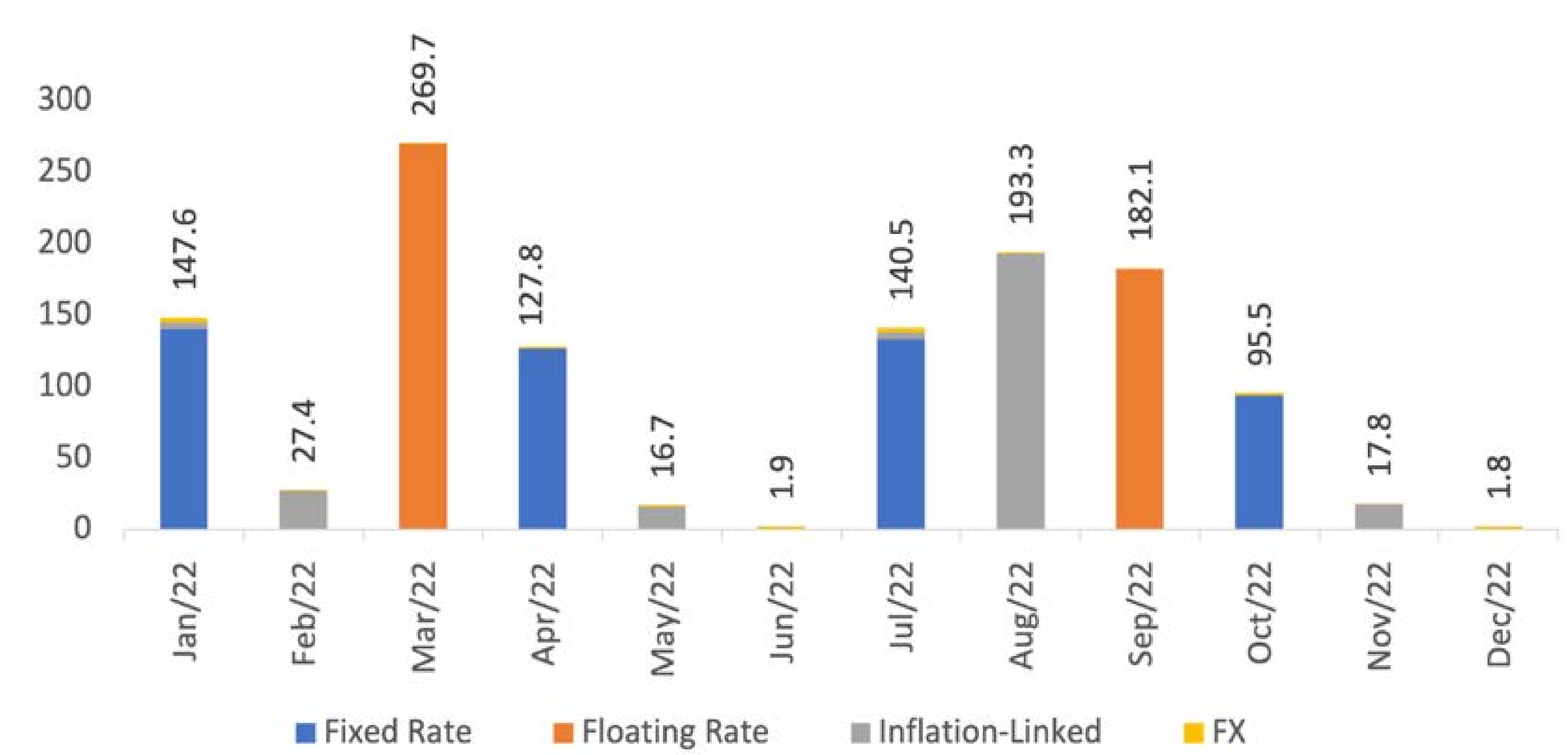
[4] As already mentioned, this amount should not necessarily be interpreted as the volume of bond issuances to be carried out over the year, as the Treasury can also rely on its liquidity reserve. The financial volume raised through issuances throughout the year may be greater or less than borrowing requirements depending on market conditions throughout the year.

[5] It is worth noting that BRL 3.1 billion, referring to the Global BRL, of the External FPD, are registered as fixed-rate debt. Meanwhile, BRL 1.9 billion of DFPD is registered as foreign exchange debt.

[6] Complementary Law No. 101/2000, article 29.

FPD maturity is concentrated in two periods: from January to April (47% of the year total) and from July to October (50%). As for the composition of the maturing debt, fixed-rate bond (40%) and floating-rate bond (37%) prevail. Domestic debt accounts for most of the payments expected for the year (BRL 1,205.2 billion).

*Figure 2 – **Estimated DFPD maturity in market for 2022 - (BRL billion)***



Four-Month Period	BRL billion	%
Jan - Apr	572.5	47%
May - Aug	352.4	29%
Sep - Dec	297.1	24%
Total	1,222.1	100%

FPD	BRL billion	%
Principal	1.073,7	88%
Interest	148,4	12%
Total	1.222,1	100%

Source: *National Treasury*
As of 12/31/2021.

The forecast of non-performing guaranteed debt amounts to BRL 10.0 billion in the borrowing requirements[7]. The largest part of this refers to payment of non-performing debt of subnational government that have already or may accede to the Fiscal Recovery Regime – FRR (Complementary Law No. 159, of 2017) and therefore cannot have their collateral executed. The budget forecast for guarantees executions also includes a margin to cover collaterals that cannot be executed due to legal injunctions. The following states were considered for the borrowing requirements: Rio de Janeiro, Minas Gerais, Goiás, Amapá, Rio Grande do Norte e Rio Grande do Sul.

In addition to debt maturities, the 2022 budget foresees the use of BRL 149.3 billion of government bonds issuances proceeds to pay for other budget expenditures. Of this amount, BRL 125.7 billion are expenses conditioned to the approval of additional credits by an absolute majority of the National Congress, in observation of the legislation known as the Golden Rule, defined in Section III of Article 167 of the Federal Constitution. For 2022, most of these credits refer to pension benefits expenditures[8].

As already mentioned, the 2022 budget forecasts the allocation of BRL 235.2 billion of fiscal resources, other than bonds issuances, to cover FPD maturities. This budget forecast includes two types of resources: i) revenues earmarked to FPD payments; and (ii) free-allocation revenues. A breakdown of these sources can be seen in Table 2.

[7] *This forecast includes estimates for non-performing guaranteed debt in 2022. The 2022 budget foresees additional resources to ensure payments due to new states joining the FRR and to legal injunctions.*

[8] *According to article 22 of the 2022 Budget Guidelines Law (Law 14.194/2021), in verbis:*

"Article 22. The 2022 Budget Draft and the respective Law may contain revenues from credit operations and programmed primary current expenditures, the execution of which is subject to the National Congress approval, by absolute majority, following the provisions of item III of the caput of article 167 of the Constitution, except for the case provided for in paragraph 3 of this article."

The amount of these conditioned expenditures and, therefore, the forecast borrowing requirements in this ABP, may be reduced throughout the year if there is a financial surplus or excess resource collection, as provided for in § 3 of article 22, in verbis:

"§ 3 The amounts referred to in § 1 may be reduced as a result of the replacement of the conditioned source by another source, subject to the provisions of sub-item "a" of item III of § 1 of art. 42, including the source related to the authorized credit operation, made available through a replacement of the previous Source."

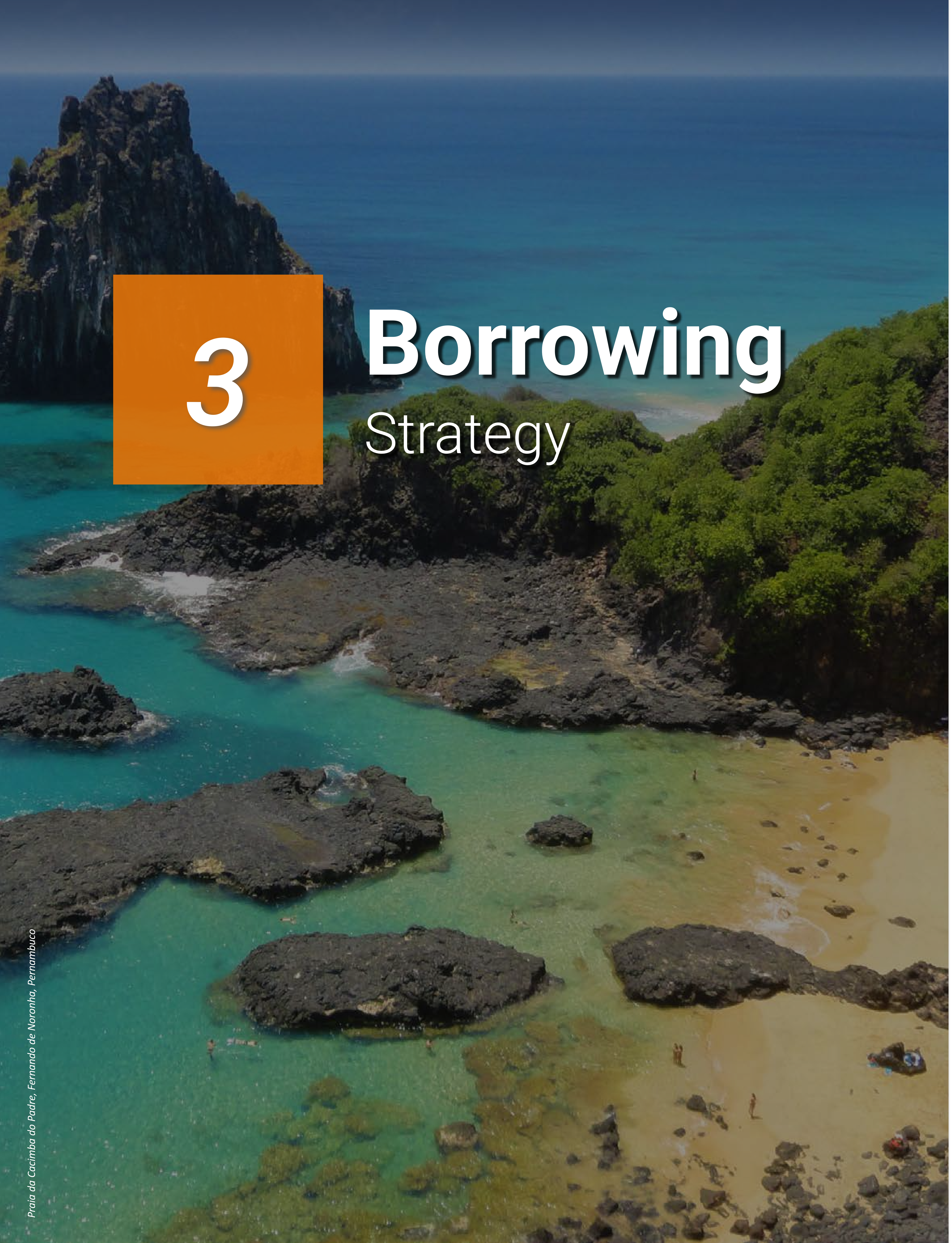
Table 2 – ***Budgetary revenues for debt payment (BRL billion)***

Budgetary Revenue (source)	
Source	**2021 Draft Budget Law**
(i) FPD earmarked revenues	127.0
159 - Return on Credit Operations - financial institutions	71.7
173 - Return of Credit Operations – states and municipalities	28.9
197 - Dividends	26.3
Others	0.1
(ii) Free-allocation revenues	108.2
100 - Ordinary Revenues*	58.9
188 - Single account remuneration	47.2
Others	2.1
Total	**235.2**

Produced by: *Tesouro Nacional*
Source: *SOF*
** Unmarked revenues, such as tax.*

Finally, it is important to highlight the current volume of the liquidity reserve[9] dedicated to debt management, which closed December 2021 at BRL 1,185.89 billion. This amount is enough to cover at least the next nine months of the Domestic Federal Public Debt (DFPD) maturing in the market, and interest payments relative to the Central Bank portfolio. In addition to the liquidity reserve in BRL, the National Treasury already has enough foreign currency resources to pay off all the external debt principal and interest maturities expected for 2022.

[8] The federal government cash availability is a part of the National Treasury Single Account (CTU), being the debt liquidity reserve a subset of the CTU. These resources are classified into budget sources, according to their origin. Two groups of sources integrate the liquidity reserve: (a) sources from government bonds issuance, which originates from resources raised on the market through government bonds; and (b) sources earmarked to pay the public debt, according to each source specific legislation (settlements of loans from federal financial institutions and regional governments, for example). The liquidity reserve balance has been published monthly in the Monthly Debt Report since its January/2021 edition.



Praia da Cacimba do Padre, Fernando de Noronha, Pernambuco

3 Borrowing Strategy

This section describes the National Treasury actions planned for the market bonds issuances to cover the borrowing needs throughout 2022.

The years 2020 and 2021 proved to be challenging to keep issuances within the previously established debt-management guidelines due to the Covid-19 pandemic crises. For 2022, a challenging environment remains, which demands flexibility and timing in conducting the issuances strategy to adapt to unforeseen changes in the scenario. In this sense, the 2022 ABP aims to keep prudent levels of resources to cover expenses, mitigate the public debt refinancing, and ensure the proper functioning of the government bond market.

3.1. Domestic Debt

The strategy for the federal government's domestic debt includes issuances of fixed-rate bonds (LTN and NTN-F), inflation-linked bonds (NTN-B), and floating-rate bonds (LFT). The LTN plays a relevant role in debt financing given its high liquidity in the secondary market and investors capability to easily hedge LTN's interest rate risk using derivatives. Both the NTN-F and the NTN-B support the goal of lengthening the debt maturity and diversifying the investors base. The LFT plays an important role in avoiding the concentration of short-term maturities and tends to offer a lower cost compared to fixed-rate bonds of equivalent maturity.

The fixed-rate bonds tenors at issuance are 6-, 12-, 24- and 48-month maturities for LTN, and NTN-F of 7- and 10- year maturities. The inflation-linked bond, NTN-B, now has 3-, 5-, 10-,15-, 25- and 35-year maturities at issuance. The 2021 tenors of 7 and 20 years are no longer offered and are replaced by the 15-and 25-year maturities. This change aims to increase the financial volume raised and to adapt the maturity profile to market demand. The LFT, the floating-rate bond, has 3- and, mainly, 6- year maturities. For all bonds, the auctions are held weekly.

Table 3 presents expected bonds issuances during the first quarter of 2022 for each benchmark tenor. The bid selection criteria are published before the auctions, which can be: i) by uniform price auction, in which there are accepted all bids equal or greater than the minimum accepted bid, which price is applied to all the bidders; or(ii) by multiple price auction, in which accepted bids pay the price submitted in their respective bid.

*Table 3 – **Benchmarks issuances in the 1st quarter of 2022***

Bond	Maturity	1st Quarter	Indexer	Coupon
LTN	6-month	Oct-2022	Fixed Rate	Zero-coupon
	12-month	Apr-2023		
	24-month	Apr-2024		
	48-month	Jul-2025		
NTN-F	7-year	Jan-2029	Fixed Rate	10% per year, payable semiannually
	10-year	Jan-2033		
LFT	3-year	Mar-2025	Floating Rate	Zero-coupon
	6-year	Mar-2028		
NTN-B	3-year	May-2025	Inflation-Linked Rate	6% per year, payable semiannually
	5-year	May-2027		
	10-year	Aug-2032		
	15-year	Aug-2035		
	25-year	Aug-2045		
	40-year	Aug-2060		

Source: *National Treasury*

As in 2021, the National Treasury will continue to publish the auction calendar on a quarterly basis in 2022. The quarterly publication, contrasted with the usual annual frequency, provides flexibility for the debt manager to adjust its strategy to the market scenario in a timely manner. The calendar will appear on its website[10] in Portuguese and English at least 15 days before the beginning of each quarter, ensuring transparency and predictability to the Treasury actions.

3.2. External Debt

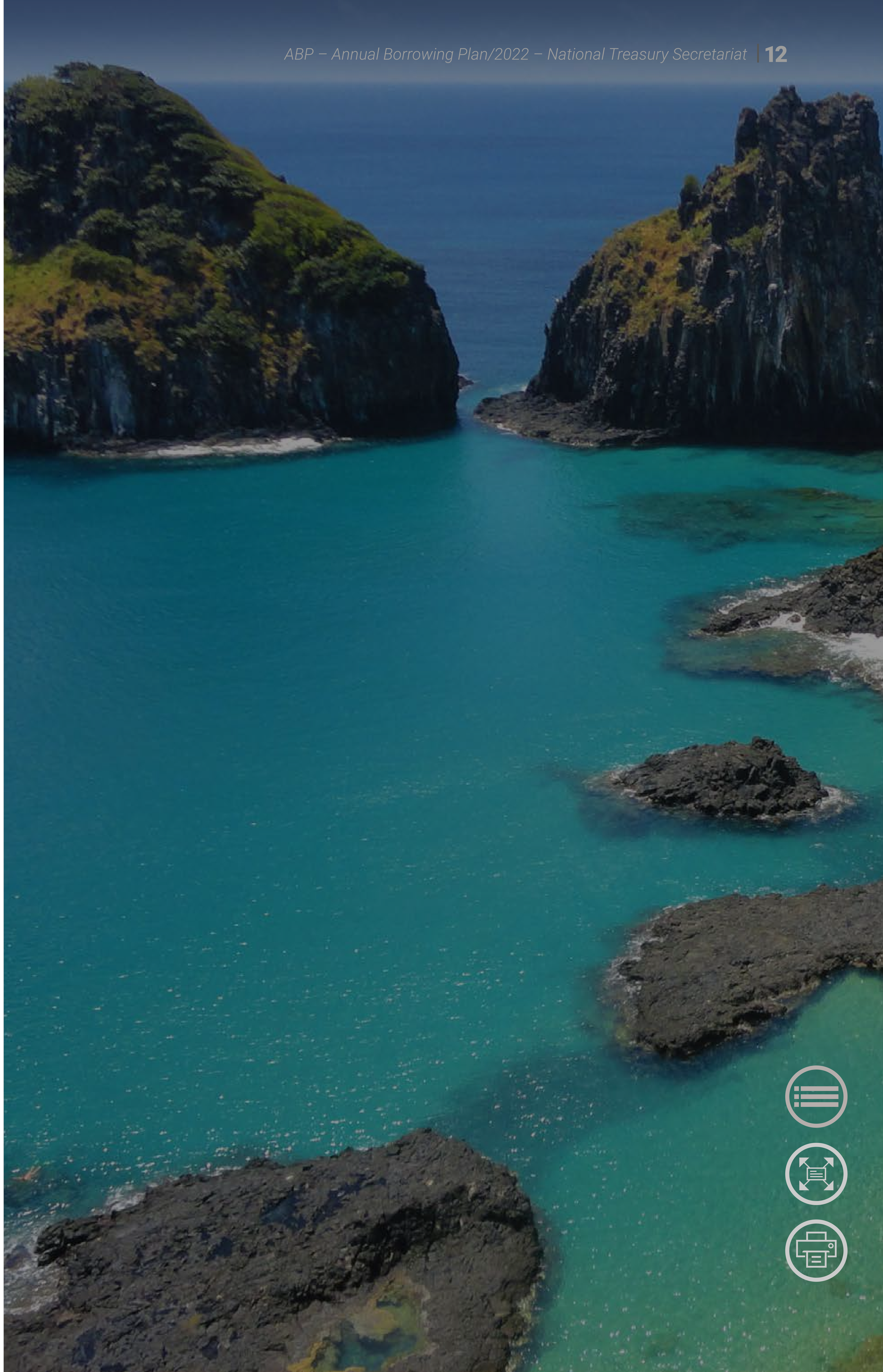
The federal government fulfills its borrowing needs mainly through bonds issuance at the domestic market. Thus, the external Federal Public Debt (EFPD) strategy serves more as qualitative guidelines. It helps to improve benchmarks in the yield curve, to diversify the investors base, and to extend the FPD maturity.

In this way, the qualitative approach towards sovereign external issuances seeks to consolidate liquid and efficient sovereign yield curves that can serve as a reference for the corporate sector issuances. More specifically, in 2022, the National Treasury will seek to issue benchmarks in the US dollar curve, which may be paired with external liability management operations.

The EFPD rollover risk in the short term has been mitigated, considering that all interest and principal maturities for 2022 have already been previously financed, either with proceeds from international issuances, maintained in dollar-denominated accounts, or through issuances and currency purchases in the local market.

Finally, the National Treasury remains attentive to the main changes and trends in the international fixed income market and can adapt its actions to always be aligned with the best debt management practices. It can also evaluate issuance opportunities in other currencies, such as euros (EUR) and reais (BRL).

[10] www.gov.br/tesouronacional



3.3. ESG Framework

In the 2021 ABP, the National Treasury announced its intention to develop an ESG Framework in the external market to meet the growing demand of international investors for these assets. This demand is of particular interest since it bears a preference for long-term fixed-rate bonds, thus minimizing the risks that are inherent to public debt management.

Throughout 2021, the Treasury fostered the necessary discussions for the development of the framework through the exchange of knowledge with sovereigns that have already accessed the thematic issuances market, such as Germany, Mexico, and Chile, among others, and multilaterals that actively participated in the construction process of building such sovereign frameworks, such as the World Bank and the Inter-American Development Bank.

In this context, new advances are expected in the process of building this sustainable framework throughout 2022, with the technical support of the aforementioned multilateral organizations, as well as with the participation of the various ministries that integrate the sustainable agenda. This participation will be fundamental in defining the public policies that have the greatest potential to be incorporated into the Brazilian sustainable emissions framework.

4 Expected Results

4.1. FPD in the short term (2022)

The borrowing requirements can be met through different issuance strategies, which are compatible with the different economic scenarios previously described. Table 4 presents the expected results for the main FPD indicators in the form of ranges, which grant transparency without compromising the flexibility needed for the debt management to adjust its performance to the prevailing conditions in the bond market.

*Table 4 – **Reference Limits for the FPD in 2022***

Statistics	2021	Reference limits for 2022	
		Minimum	Maximum
Outstanding debt (BRL billion)			
FPD	5,613.7	6,000.0	6,400.0
Composition (%)			
Fixed rate	28.9	24.0	28.0
Inflation linked	29.3	27.0	31.0
Floating rate	36.8	38.0	42.0
FX	5.0	3.0	7.0
Maturity structure			
% maturing in 12 months	21.0	19.0	23.0
Average maturity (years)	3.8	3.8	4.2

Source: *National Treasury*

The expected range for the outstanding FPD volume at the end of 2022 reflects both the expectation of interest accrual and the balance between planned issuances and redemptions throughout the year. The strategy aims at meeting the federal government borrowing needs and at maintaining a prudent level of cash balance.

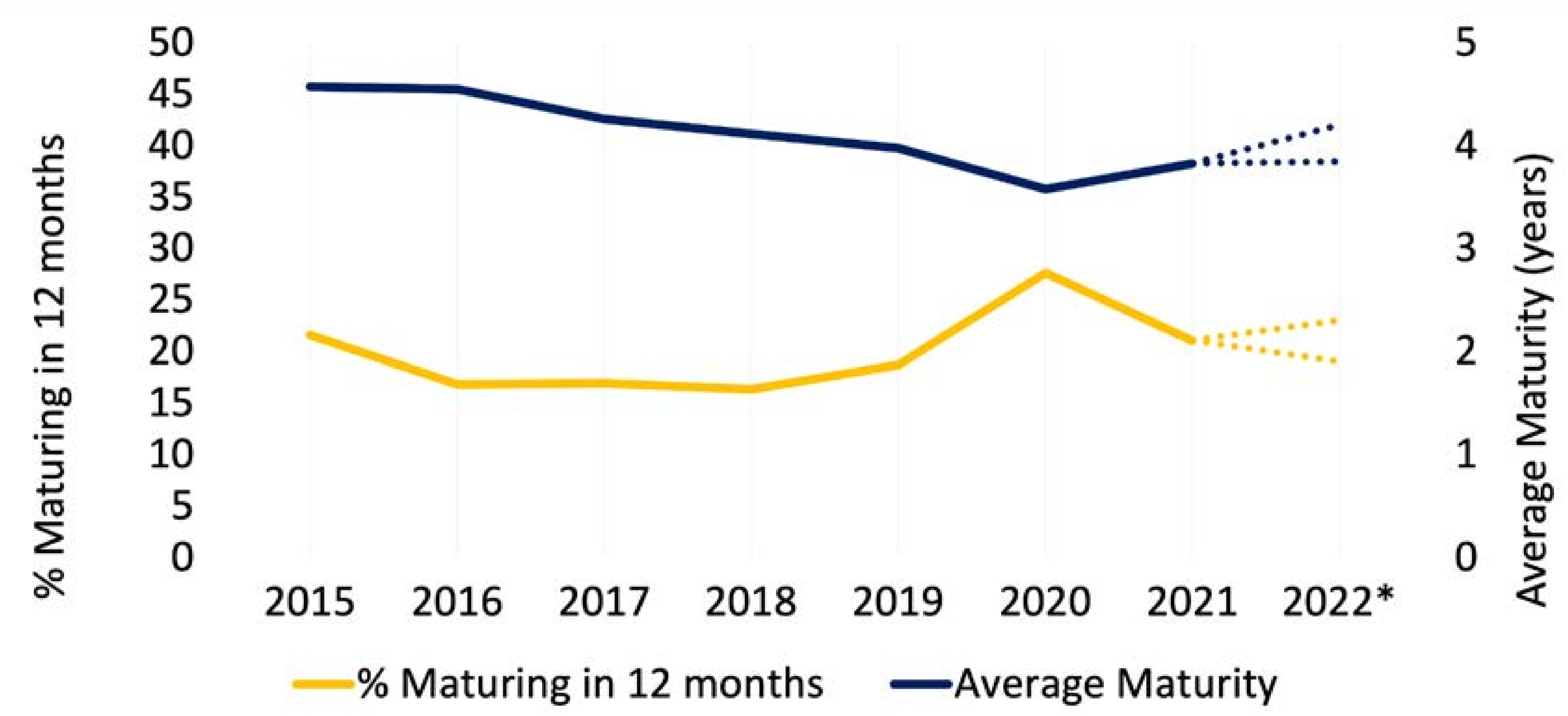
In 2022, the debt composition should see an increase in the share of floating-rate bonds (LFT) in contrast with a decrease in the share of fixed-rate debt. The LFT lengthens the public debt maturity. Therefore, they are a desirable alternative to short-term fixed-rate bonds (LTN). Despite the increase in LTN participation in 2020, due to instability of the economic-fiscal scenario and the consequences of the covid-19 pandemic, the LFT has recovered its predominance in 2021.

When analyzed separately, the increase in the LFT bonds and the decrease of fixed-rate debt appear to follow the qualitative guidelines of the FPD management. However, the FPD composition should not be analyzed independently from other risk indicators. This change in the composition increases the average maturity and decreases the share of debt maturing in 12 months[11], as shown in Figure 3. Especially in the context of higher outstanding debt and higher payments, as shown in Figure 4, it becomes

[11] Average maturity represents the average remaining time to maturity weighted by the present value of principal and interest. Debt maturing in 12 months indicates the concentration of payments on the short term.

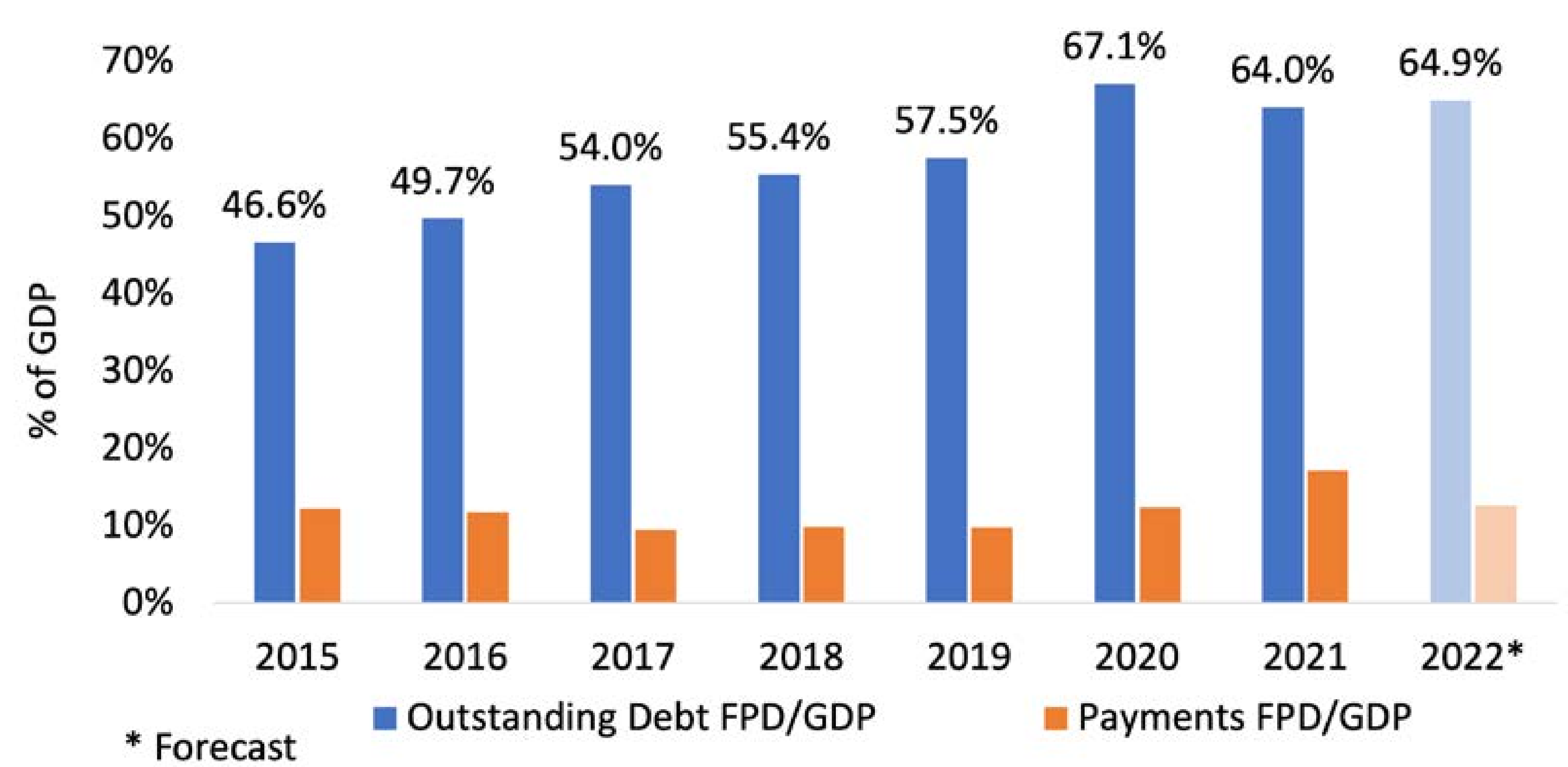
important to ensure that refinancing risks are at manageable levels, even if it implies temporary deviations from the qualitative guidelines for the debt composition.

*Figure 3 – **FPD average maturity and share maturing in 12 months***



Source: *National Treasury*

*Figure 4 – **FPD outstanding stock and maturity payment – on a GDP ratio***



Source: *National Treasury*

Still, another goal will be the consolidation of the share of inflation-linked bonds. Those bonds are important for lengthening the FPD maturity since they are issued with longer tenors. Besides they also guard a correlation with the GDP because their principal is corrected by the CPI. Hence, inflation-linked bonds help to smooth the trajectory of the debt-to-GDP ratio.

Foreign-exchange exposure of the FPD remains limited at around 5%. This low percentage is a positive aspect of the current debt management given the high volatility of the exchange rate compared to other bond indexers.

Another dimension monitored in 2022 is the maturity profile of the FPD, through the indicators of the share of debt maturing in 12 months and average debt maturity. While the former consists of a measure of short-term maturity concentration, the latter reflects the average remaining time for debt payments weighted by the present values of principal and interest flows. The debt refinancing risk, measured by these indicators, will be greater the higher the former and the lower the latter.

The share of FPD maturing in 12 months decreased substantially in 2021 compared with 2020. The expectation for 2022 is to keep this indicator at current levels and, if possible, to reduce it even more. On the other hand, the FPD average maturity should keep the same positive trajectory as in the previous year. The performance of these indicators follows the expected reduction in the share of the short-term fixed-rate bonds and greater issuance of bonds of longer maturity.

In addition to the average maturity, which guides the ABP, the Treasury also regularly publishes in its monthly bulletin an alternative indicator: the average time to maturity[12]. This additional indicator is useful for international comparisons, once many countries prefer it to calculate their outstanding debt maturities rather than the average maturity, a concept closer to the duration.

[12] Average life to maturity (ATM) is an indicator less efficient than the average maturity (duration) since it ignores coupon payments and does not calculate the principal payment flows by their present value. Such drawbacks cause the indicator to show values well above the FPD average maturity which is the reason the Treasury gives less emphasis to this indicator on its debt statistics. Despite these limitations, most countries adopt an indicator similar to the average life in their maturity profile statistics, therefore direct comparisons with the indicator adopted in this ABP are misleading.

4.2. FPD optimal long-term composition

The FPD optimal long-term composition, known as benchmark portfolio, is one of the main debt planning tools. It is obtained through a quantitative model that intends to answer which debt composition optimizes the balance between cost and risk in the long run for a given set of presumed demand constraints for each bond type. The purpose is to provide quantitative guidelines for debt strategic planning in line with the objective of public debt and its qualitative guidelines.

Table 5 presents the indicative ranges of the FPD benchmark portfolio.

*Table 5 – **Optimal FPD long-term composition***

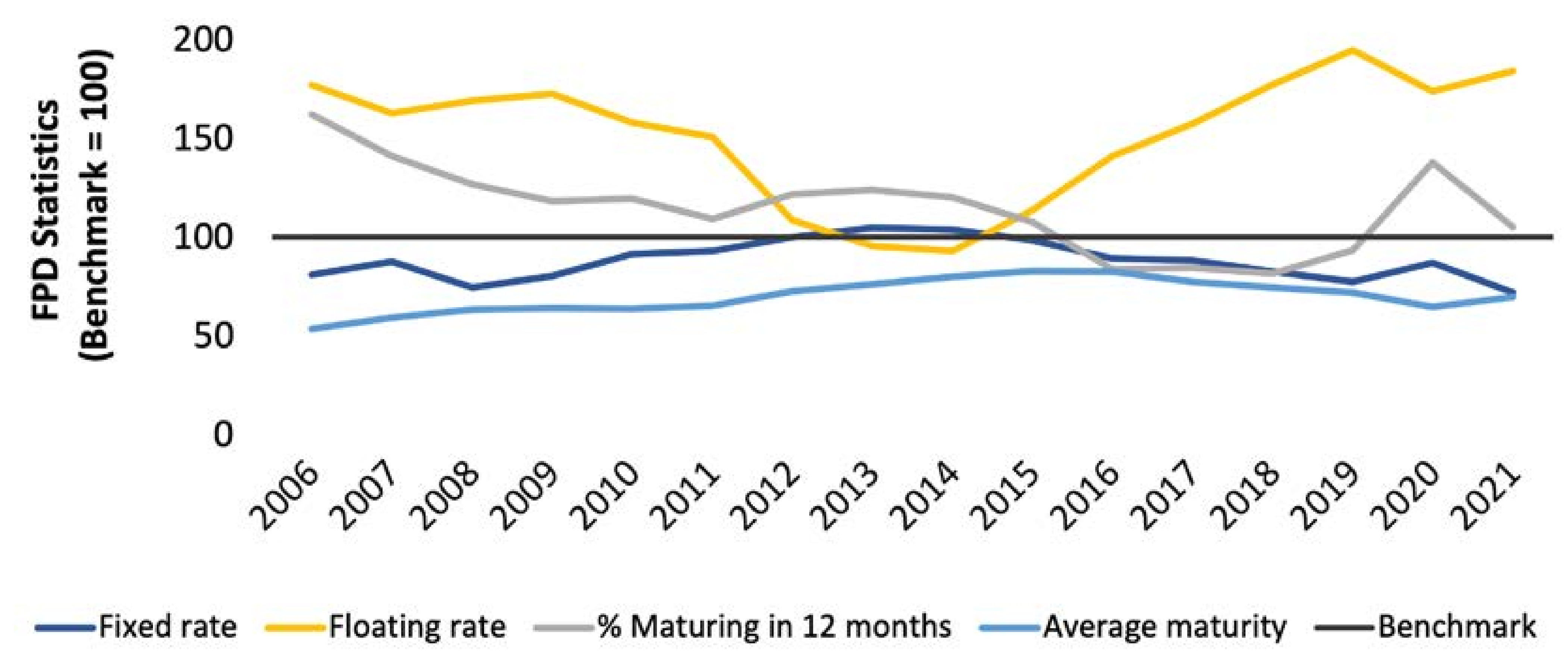
Statistics	Long-term limits	
	Reference	Range
Composition - %		
Fixed-rate	40.0	+/- 2.0
Inflation-linked	35.0	+/- 2.0
Floating-rate	20.0	+/- 2.0
FX	5.0	+/- 2.0
Maturity structure		
% maturing in 12 months	20.0	+/- 2.0
Average maturity (years)	5.5	+/- 0.5

Source: *National Treasury*

As a long-term reference, deviations from the benchmark may be acceptable in the short term, as the National Treasury adjusts the strategies to the prevailing macroeconomic and financial conditions to avoid pressures that result in excessive cost or risk.

Figure 5 illustrates a dilemma observed in recent years. Although an increase in fixed-rate debt is recommended, the average maturity of these securities is still short in comparison with other financing instruments. Thus, the strategy has been prioritizing the issuance of floating-rate bonds (LFT), which have a longer term, as a way of minimizing the concentration of debt on the short horizon. In addition, LFT have a more favorable balance between cost and risk than short-term fixed-rate bonds, which would be the viable alternative to cope with the borrowing needs.

*Figure 5 – **Debt composition and share of debt maturing in 12 months - comparison with the benchmark***



Source: *National Treasury*

Regarding the benchmark, this option leads to a deviation in the proportion of floating-rate bonds from the optimal profile but brings, as benefits, the maintenance of the share of debt maturing in 12 months at values close to the optimal levels and an improvement in the average maturity. The convergence of the maturity profile to the desired levels, such as the share of debt maturing in 12 months and the average maturity, is fundamental for maintaining refinancing risk at sustainable levels. For this reason, these indicators may even be prioritized in the short term over those related to debt composition.

A greater share of floating-rate bonds in the outstanding FPD became more pronounced since 2015, in a period of recurrent primary deficits in the central government and, consequently, the increase in the National Treasury borrowing requirements. In general, periods with greater participation of fixed-rate bonds have been accompanied by an increase in the indicator of short-term maturing debt, as observed between 2012 and 2014 and in 2020, the latter year being marked by stark issuances in the context of the COVID-19 pandemic.

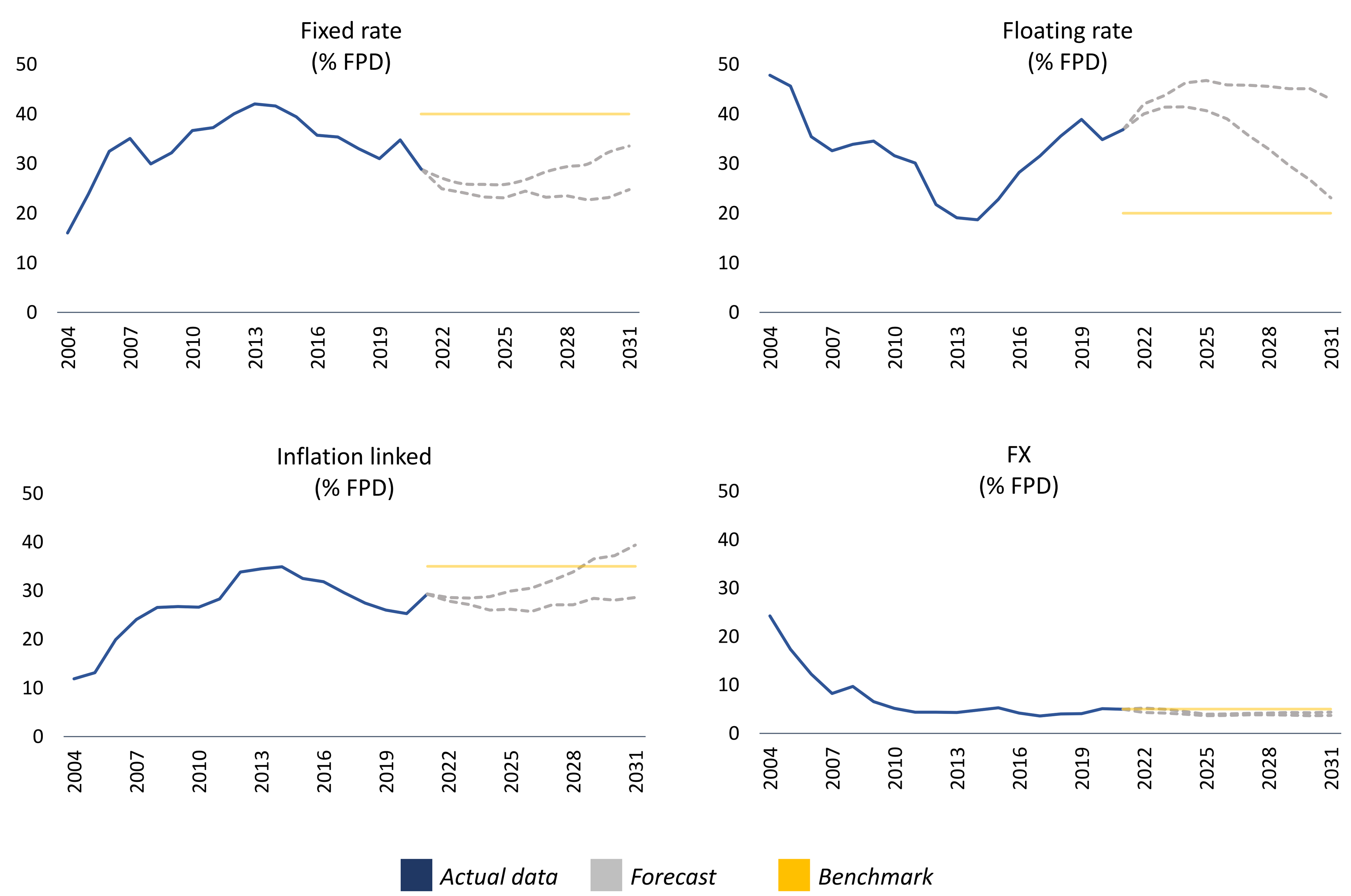
Overcoming the above dilemma requires a positive economic scenario over the medium term, particularly for the fiscal outlook. This would be a condition for convergence of the FPD profile towards the benchmark in its various dimensions, following what happened between 2006 and 2011, when it was possible to combine advances in FPD composition and maturity structure. This was a period marked by primary surpluses in public accounts and a downward trend in the debt-to-GDP ratio in addition to the positive evolution of other macroeconomic variables. This context brought about less risk aversion, with a reduction in premiums and improvement in the country's risk classification favoring the demand for longer-term bonds, particularly fixed-rate bonds.

4.3. The medium-term outline for the FPD

Medium-term projections suggest that simultaneous convergence of FPD indicators to the benchmark portfolio is more likely to take place from the middle of the current decade onwards. The dashed lines in figures 6 and 7 represents the upper and lower limits for projections resulting from the forecast economic scenarios and different issuance strategies. The horizontal continuous line represents the benchmark goal.

As for the medium-term composition of the FPD (Figure 6), there is an increasing trend in the share floating rate bonds at the beginning of the projection period compensated with a drop in the share of fixed-rate and inflation-linked bonds. Looking at the maturity profile (Figure 7), the first years of the trajectory are distinguished by relative stability in the percentage of FPD maturing in 12 months and a gradual increase in the average maturity.

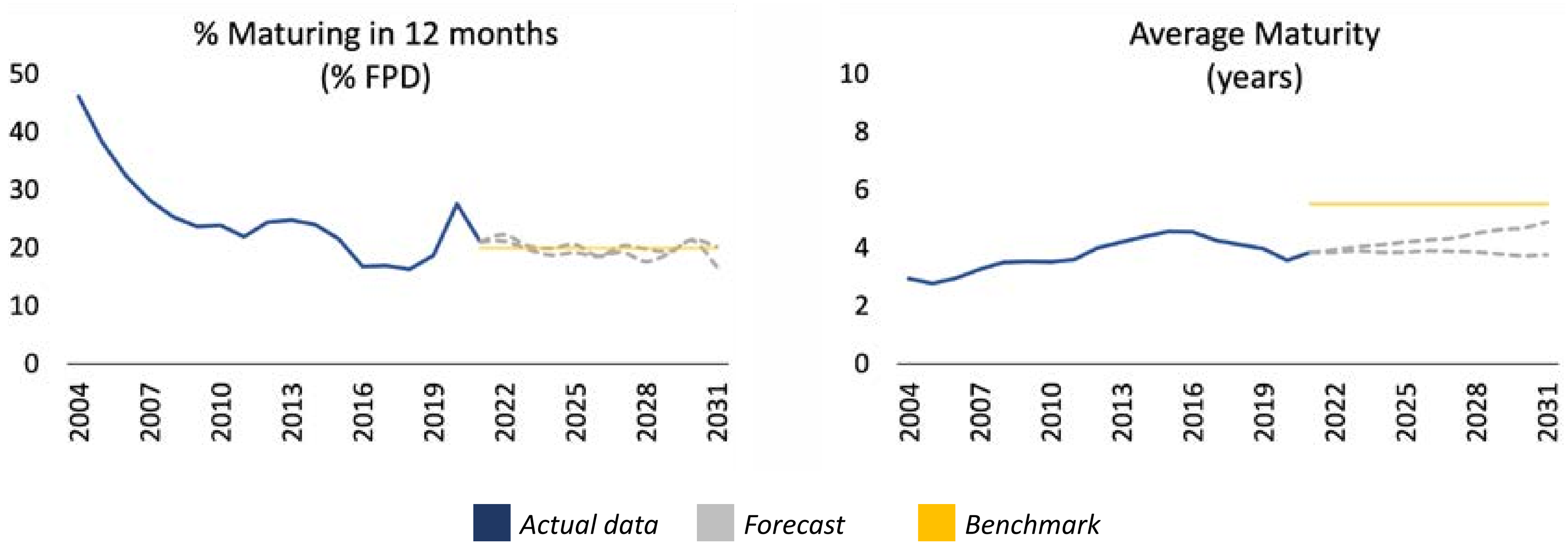
*Figure 6 – **FPD composition – medium-term projection***



***Source:** National Treasury*

Despite the prognosis of a more benign and stable scenario, it is not yet possible to ensure that all indicators will converge to the benchmark within the forecast horizon, especially for the fixed-rate and floating-rate bonds (Figure 6) and the average maturity indicator (Figure 7). Even if they do not reach the benchmark before 2031, the three indicators still follow a gradual adjustment trajectory. This highlights the importance that all indicators converge to the desired limits and that the effects on the refinancing risk must be considered whenever there is a greater commitment to fixed-rate bonds at the expense of floating-rate ones.

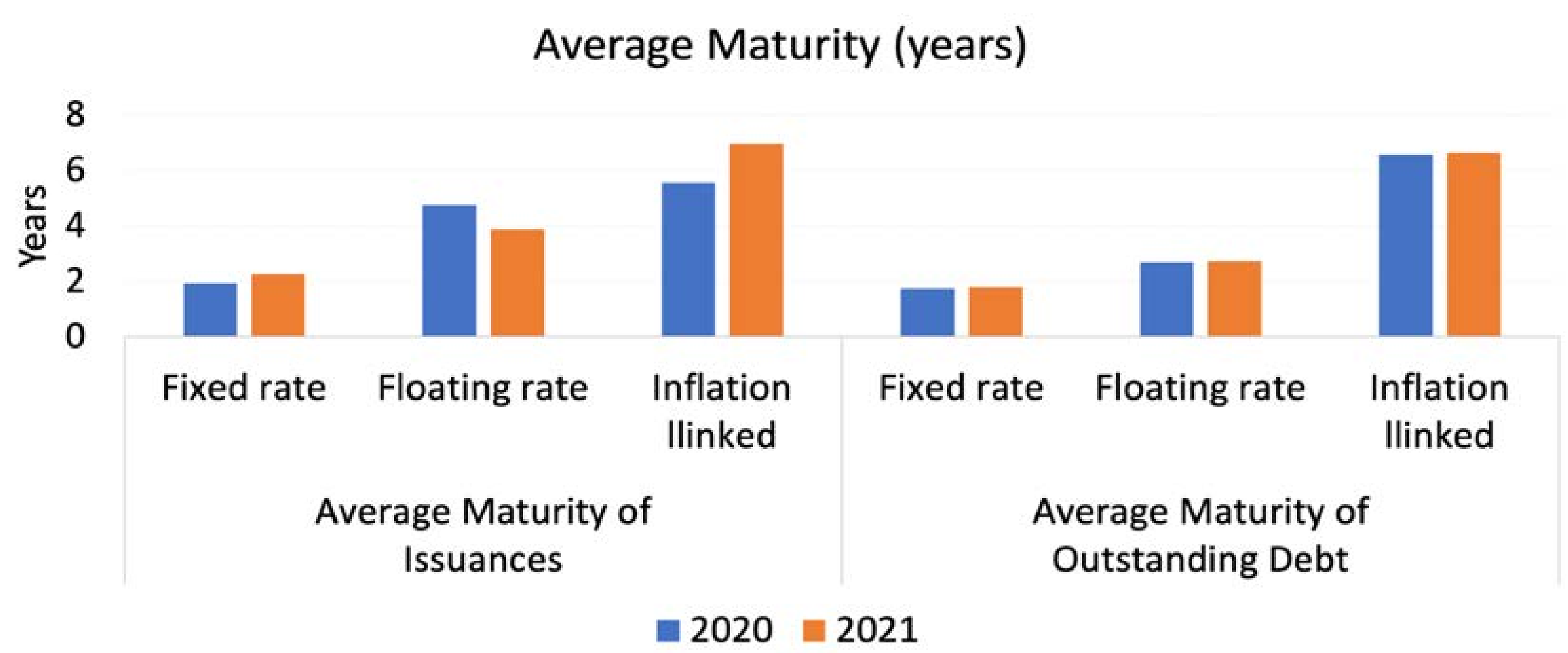
*Figure 7 – **FPD maturity structure - medium-term projection***



***Fonte:** National Treasury*

This trend for the coming years is consistent with the prescription of the benchmark portfolio. Although it is desirable to increase the share of fixed-rate bonds, this recommendation entails the extension of these bonds' maturity. Without this, LFT are preferable to short-term LTN (sometimes up to 12 months). Figure 8 shows that the fixed-rate bonds' issuances and outstanding average maturity are still low compared to other instruments. Convergence towards the benchmark depends on the lengthening of fixed-rate bonds' maturity, as well as an increase in the participation of inflation-linked ones, typically with longer maturities. Therefore, it is important to advance composition and maturity simultaneously.

*Figure 8 – **Average maturity for emissions and outstanding stock***



***Source:** National Treasury*

In summary, the medium-term exercise point to a positive trajectory of the FPD composition and maturity, as the fiscal consolidation advances in an economic environment of stability and growth. This would be a favorable background for the desired changes to the debt profile, allowing the reduction of risks in its many dimensions.

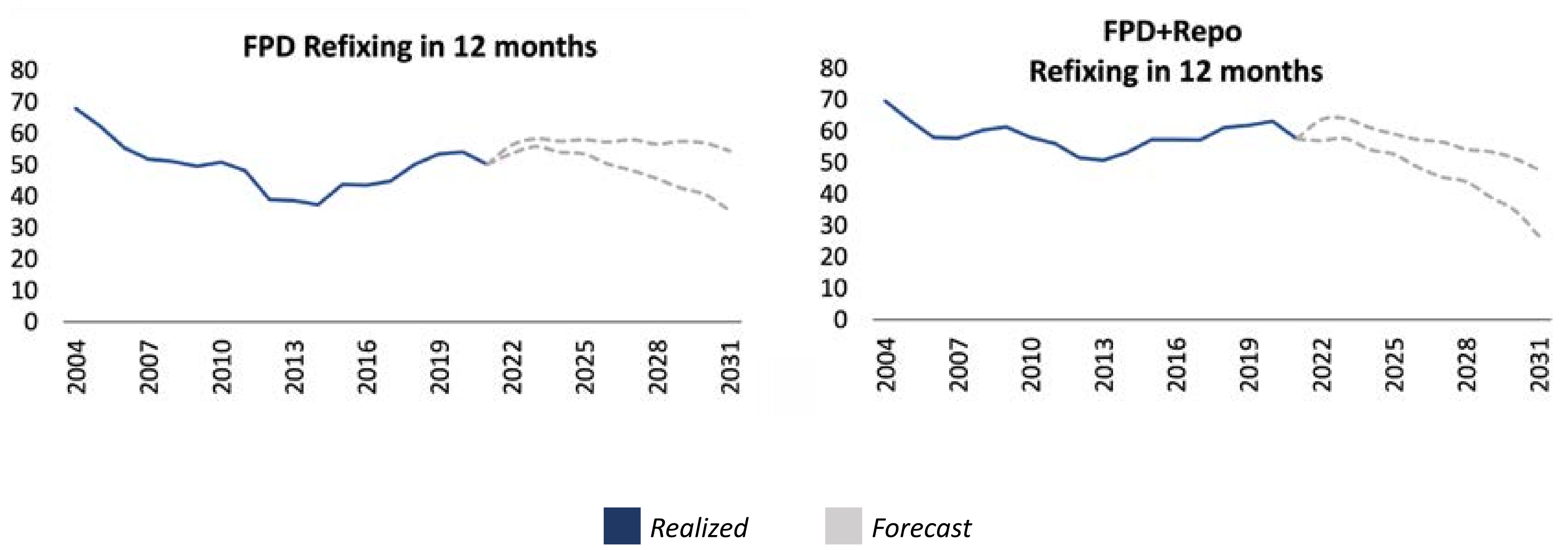
4.4. Market risk: a broader analysis of debt composition

The LFT share in the outstanding debt is an indicator of debt exposure to the interest rate risk, given that fluctuations in its benchmark rate (the Selic) cause changes in the average cost proportionally to the share of these bonds in the outstanding FPD. Likewise, the public debt that matures in the short term needs to be rolled over and, therefore, is also exposed to interest rate risks.

The share of the FPD sensitive to changes in short-term interest rates comprises two components: a) the share of FPD maturing in 12 months which, therefore, will have its cost redefined in the short term, and (b) the share of floating-rate bonds with maturities higher than 12 months. The sum of these two shares corresponds to the FPD share that will have its interest rate refixed in the next 12 months, an indicator of the debt interest rate risk (Figure 9). It is an indicator that combines the effects of changes in the composition (share of floating rate) and in the maturity structure (short-term debt).

A broader perspective of the public debt could include both the FPD and the stock of repo operations, whose costs are linked to the Selic benchmark rate and is part of the general government gross debt (GGGD). In this scope, an increase in the share of floating-rate bonds (LFT) in FPD that is compensated by a proportional reduction in the amount of repo operations would be neutral for the refixing indicator, presented in Figure 9.

Figure 9 – ***Share of debt with interest rate refixing in 12 months (% of FPD)***

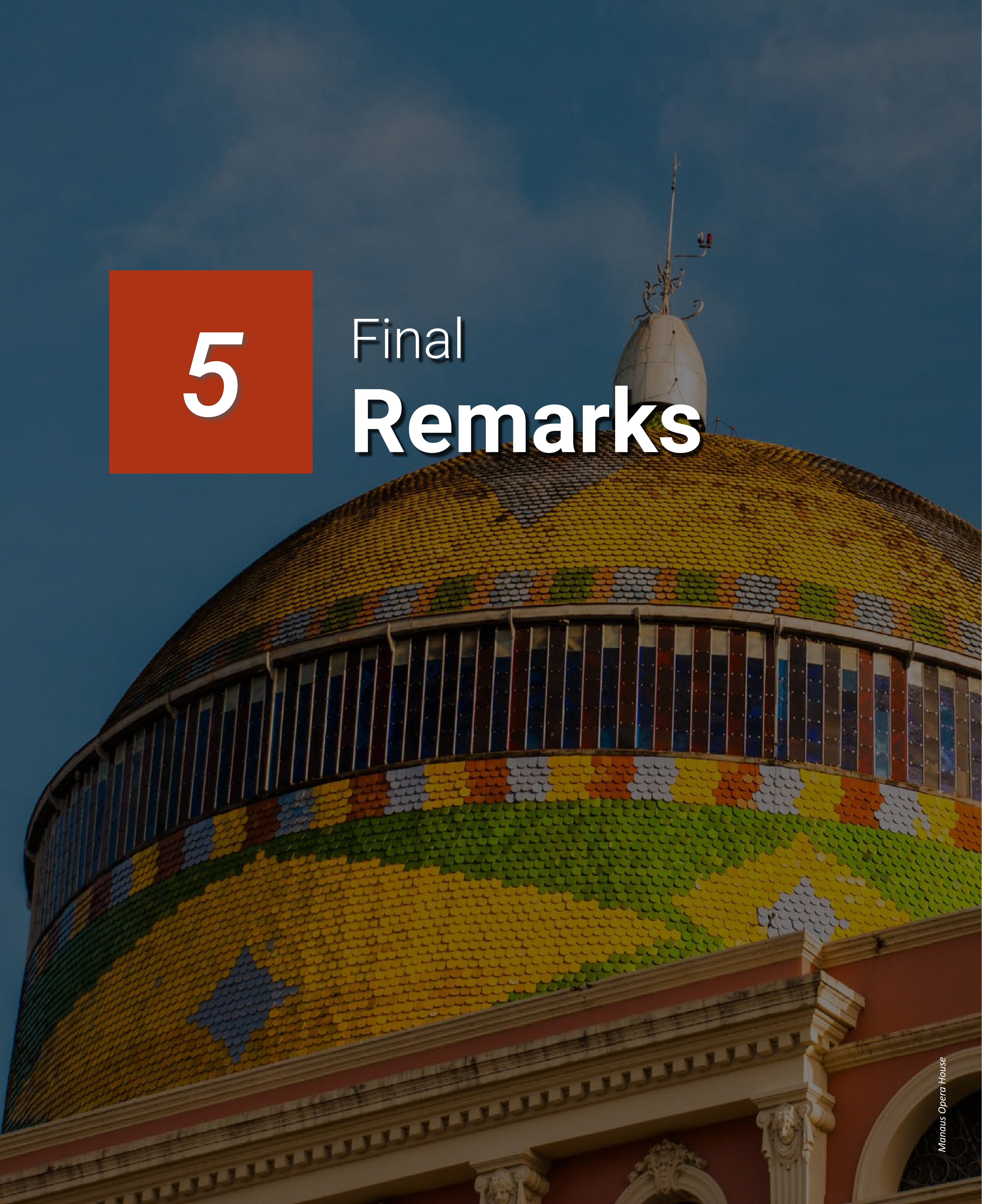


Source: *National Treasury*

The share of debt re-fixing in 12 months has shown a growing trend between 2013 and 2020, whether the FPD is considered alone or with repo operations. In 2021, there was a reduction in this indicator, following the decline of the general government debt-to-GDP ratio itself. In 2022 and following years, a new increase is expected for these indicators, in a context still marked by primary fiscal deficits. Further ahead, the expectation is for a faster favorable evolution with consistent fiscal consolidation and economic recovery, in a combined process of reduction of repo operations and floating-rate bonds.

The reduction of debt refixing in 12 months is a necessary condition for the convergence of the FPD to the benchmark portfolio. As shown in the previous sections, the ideal profile for the public debt assumes the preference for financing instruments with fixed-rate or inflation-linked bonds, as long as both can be issued with longer maturity. However, a strategy focused on longer bonds should be gradual and responsive to the market conditions at each moment, preventing issuances that pressure the yield curve. This is a medium- and long-term strategy.

5 Final Remarks



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The 2022 ABP starts from a scenario of steady recovery of global economic activity and gradual monetary policy normalization at the international level. In the domestic front, the scenario considers both economic and fiscal recovery, together with special attention to inflation control and the path of interest rates.

In 2021, although the COVID-19 pandemic and its effects upon the global economy have added challenges to the macroeconomic and financial scenario, public debt indicators have shown favorable performance compared to the previous year.

Thus, in the short term, the forecast is for the improvement in some debt indicators, in particular the share of debt maturing in 12 months. A better debt composition, however, is expected in the medium term. Thus, the achievement of a desirable debt profile must be made through a sustainable trajectory, which requires attention to market conditions and their cyclical implications for the balance between costs and risks of the public debt.

The Federal Government remains committed to fiscal responsibility and the current fiscal rules. The further advancement of the reform agenda is needed to ensure favorable conditions for the FPD management and economic growth.