Independent Fiscal Institution

FFR

Fiscal Follow-Up Report

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HIGHLIGHTS

- GDP growth is expected to slow from 2.9% in 2022 to 1.0% in 2023 and 1.4% in 2024.
- In the medium term, real GDP growth is forecast at 2.0%.
- Measures intended by the government may generate an extra collection of R$ 63.4 billion in 2023.
- The revision in revenues not collected by the RFB affected the projections for primary revenue from 2023 to 2032.
- The forecast for primary net revenue is 17.9% of GDP in 2023 and 18.3% of GDP in 2024.
- International literature reinforces the importance of simple fiscal rules, but the new tax framework proposed by the government proved too complex.
- End of the payment system of court-ordered debts (ECs 113 and 114) increases the risks of non-compliance with the rule that limits expenses growth in the medium term.
- The need to increase primary revenues of the new fiscal framework is still a factor of fiscal uncertainty.
- The floor for investments may increase budgetary rigidity by 2.8 p.p., from the current 90.5% to about 93.3%.

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FISCAL FOLLOW-UP REPORT MAY 2023

Covering Letter

A new contour for public accounts

The Fiscal Follow-up Report (RAF, in the original acronym) is the IFI's monthly conjuncture analysis and meets the purposes in Art. 1 of Federal Senate Resolution No. 42 of 2016. Through the RAF, we publish our projections for the Brazilian economy's main macroeconomic and fiscal variables. In this issue, as we traditionally do in May and November, the RAF presents, in addition to the conjuncture analysis, the review of our medium-term fiscal scenario (2023 to 2032).

In the last review, from November 2022, it was alerted that Constitutional Amendment 126 (known as the Transition EC) made it possible to implement election campaign commitments but did not show how this would relate to the sustainability of the accounts in the medium term. The uncertainty demonstrated in the November 2022 RAF was driven by the absence of clear parameters regarding funding sources for the proposed expenditure expansion.

The waiver authorized for this year (R$ 172.1 billion or 1.6% of GDP), coupled with the forecast of a new fiscal rule to replace the current spending ceiling, increased the uncertainties regarding the medium-term fiscal scenarios. However, with the presentation by the Executive Branch and the approval of the new fiscal framework on May 23, as an emergency measure in the House of Representatives, it was possible to adjust the IFI scenarios to contemplate the effects of this measure. Despite the need to go through the Federal Senate for subsequent enactment, the current bill already enables a preliminary evaluation of this important instrument of fiscal governance.

In summary, PLP No. 93 of April 18, 2023, provides for the creation of (i) tolerance intervals for the primary balance targets, (ii) a floor of 0.6% and a ceiling of 2.5% for the real growth of the Federal Government's primary expenses, (iii) growth of expenses linked to the growth of revenues, (iv) a floor for public investments, (v) bonuses for investments in cases where the primary balance exceeds the upper limit of the target, among others.

The IFI's opinion is that the New Fiscal Framework (NAF) provides greater flexibility compared to the current fiscal regime (the spending ceiling instituted by EC 95 of 2016) but is extremely complex. A not-so-recent study by the International Monetary Fund (IMF), published in 2018, presented three principles for future reforms in countries' fiscal rules. According to the text, in which the tax rules of more than 90 countries were examined, in order to increase the effectiveness of tax rules it is necessary to meet some criteria, such as broad coverage, limits to tax aggregates based on solid economic principles, and design that encourages saving resources in good times. A good design of fiscal rules meets, according to the report, three principles: the set of rules should (i) be uniform and ensure debt sustainability, (ii) have incentives to improve compliance, and (iii) be flexible enough but without sacrificing too much simplicity.

The changes made in the text approved by the House of Representatives try to reinforce two of the three principles pointed out in the IMF study: ensure the sustainability of the debt and have incentives to improve compliance with the rules. However, the principle of simplicity has not been met in this draft of the new tax framework.

The complexity of the fiscal rule and the dependence on funding sources that have not yet been presented increase the risks of non-compliance with the proposed rules in the medium term. This scenario of uncertainty regarding primary revenues highlights the size of the effort needed to reach the primary balance target. The IFI's projections, considering the baseline scenario, point to a central government primary deficit of 1.0% in 2024. This scenario shows that an additional effort of at least 0.8 percentage points (p.p.) of GDP is required for the primary balance target to be met in 2024.

Finally, it is worth noting that the new fiscal framework also contemplates, although with little emphasis, important signs regarding the improvement of other fiscal governance instruments, such as the medium-term expenditure frameworks.

Have a good read!

Vilma da Conceição Pinto
IFI Director

Summary

- Economic activity grew above expectations in the first quarter. The recent data point to strong GDP growth in the first three months of the year, influenced, above all, by the record performance of the grain harvest. The resilience of the labor market and the increase in extended income (including income transfers) also contribute to the favorable results of retail trade and services. The lagging effects of the restrictive monetary policy, however, reinforce the perspective of a slowdown in the GDP throughout the year. In the medium term, real GDP growth is assumed to converge to the potential rate (estimated at 2.0%). **(Page 6)**

- According to estimates made based on the measures intended by the government to increase tax collection in the coming years, the IFI projects gains of R$ 63.4 billion in 2023, R$ 110.6 billion in 2024, and R$ 131.3 billion in 2025. In subsequent years, the gains would continue as the Federal Government manages to materialize the income from IRPJ and CSLL obtained from commercial or financial transactions between related parties (transfer pricing) and from ICMS tax benefits, even though there are uncertainties regarding the collection of this revenue in the amounts forecast by the Federal Revenue Office. **(Page 11)**

- In the Baseline Scenario, the IFI's projections indicate a central government primary deficit of 1.0% for 2024. Considering that the primary balance target proposed by the government for 2024 is 0% of GDP and that now, besides the center of the target, it is possible to meet the rule by staying within the tolerance intervals, an additional effort of at least 0.8 percentage points (p.p.) of GDP will be required for the primary result target to be met in 2024. **(Page 23)**

- Last May 24, the House of Representatives concluded its vote on the proposed new fiscal framework. The text, which will now go to the Federal Senate, brought improvements concerning the initial project presented by the Executive Branch. The need to set targets for the primary balance compatible with the sustainability of the public debt and the application of penalties for cases of non-compliance with the rule are some of the changes incorporated in this substitute bill. However, although the new tax rule is more flexible than the current one, its design has proven to be very complex. **(Page 27)**

- The IFI's updated projections indicate that gross debt, as a proportion of GDP, will grow in the coming years, reaching 93.6% of GDP in the baseline scenario and 89.4% of GDP in the average period from 2025 to 2032. This increase is more pronounced until 2027 due to the accumulated primary deficits of the public sector, which would be reversed in the last years of the projection horizon. The government's ability to generate positive primary results in the coming years will determine the path of the debt. **(Page 39)**

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1. MACROECONOMIC CONTEXT

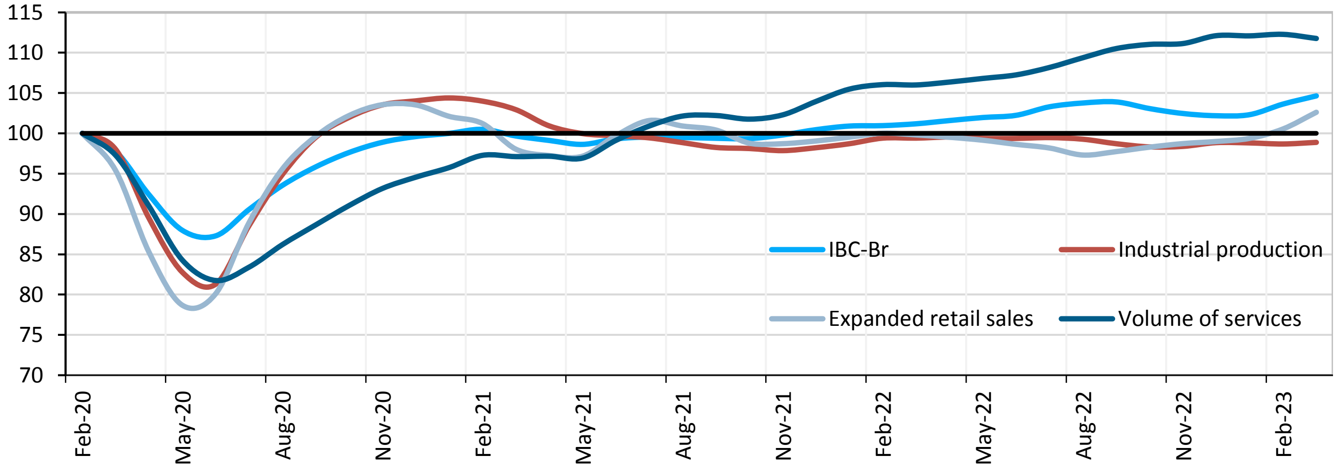
The Fiscal Follow-up Report (RAF) of May presents the updated projections for macro-fiscal variables in the short (2023-2024) and medium term (2025-2032). Incorporating realized data and reevaluating the assumptions behind each of the scenarios (baseline, optimistic, and pessimistic) allows the forecasts to reflect the current state of the economy. The objective of keeping the three scenarios updated is to highlight the degree of uncertainty of the projections, as well as their dependence on different configurations of the conjuncture. An overview of how the projections of the macroeconomic parameters that subsidize the fiscal scenarios are elaborated was presented in Special Study No. 13[1].

1.1 Short-term projections

The performance of economic activity in the first quarter proved to be stronger than initially forecast. In the first three months of the year, the Central Bank's Economic Activity Index (IBC-Br) advanced 2.4% in relation to the immediately previous quarter, driven by the expanded retail trade (3.7%) and services volume (1.4%), while industrial production was stable (Graph 1).

The projection for the GDP in the first quarter was adjusted upwards. After shrinking 0.2% in the fourth quarter of 2022, compared to the previous quarter (seasonally adjusted), the GDP is expected to advance punctually in the first quarter of 2023 (projection of a 1.0% rise revised from 0.8%). Besides the effect on the agriculture and livestock sector, the record performance of the grain harvest, the resilience of the labor market, reflected in the increase of formal jobs (Caged) and in the stability of the unemployment rate (PNAD Contínua [Continuous National Household Sample Survey]), contributes to the favorable results of the retail trade and services.

GRAPH 1. ECONOMIC ACTIVITY INDICATORS
INDEX NUMBER - FEB/20=100 - QUARTERLY MOVING AVERAGE



Source: IBGE. Prepared by: IFI.

[1] Available at: https://www2.senado.leg.br/bdsf/bitstream/handle/id/577405/EE13.pdf.

In subsequent quarters, growth is expected to be closer to zero (an average of -0.1% between April and December), with the effect of tighter monetary policy on the labor market and economic activity. With these quarterly dynamics, the variation in volume GDP in 2023 is estimated at 1.0%, an increase of 0.1 percentage point (p.p.) compared to the previous projection (0.9%), published in November 2022. For 2024, the projection for GDP growth is 1.4%.

The slowdown in the rate of change of GDP in volume, compared to 2022, stems from the lower contributions of domestic demand and net exports to economic growth. This movement reflects, to a large extent, the contractionary monetary policies at home and abroad. The forecast of real GDP growth in the short term is obtained by analyzing the components in the expenditure perspective, detailed in Table 1.

TABLE 1. GDP VOLUME GROWTH FORECASTS

	2022	2023	2024
GDP and components (real variation)	**2.9**	**1.0**	**1.4**
Household consumption	4.3	1.0	1.2
Government Consumption	0.8	1.0	1.2
Gross Fixed Capital Formation	0.7	1.2	1.5
Exports	5.5	2.5	3.0
Imports	0.8	2.0	2.2
Contributions to the GDP volume growth (pp)			
Domestic Demand	**2.0**	**0.9**	**1.2**
Household Consumption	2.6	0.6	0.8
Government Consumption	0.3	0.2	0.2
Investment (GFCF and stock changes)	-0.9	0.1	0.2
Net exports	**0.9**	**0.1**	**0.2**

Source: IBGE. Elaboration and projections: IFI.

The contribution of domestic demand to GDP evolution should decrease from 2.0 p.p. in 2022 to 0.9 p.p. and 1.2 p.p. in 2023 and 2024. The lower contribution of domestic demand to growth in 2023 and 2024 stems mainly from the expected deceleration of the household consumption expenditure component (from 4.3% in 2022 to 1.0% and 1.2% in 2023 and 2024). The increase in the enlarged available wage mass[2], made possible by the expansion of the Bolsa Família program (which should total R$ 170 billion in 2023 and R$ 180 billion in 2024) and of the average labor income, contributes to softening the weakening of consumption, caused by the high level of the real interest rate.

Net exports (external demand), in turn, should contribute with 0.1 p.p. and 0.2 p.p. to the evolution of the GDP this year and next (compared to 0.9 p.p. in 2022). This movement reflects the weakening of demand for imports from trading partners. Exports are expected to advance 2.5% and 3.0% in 2023 and 2024, while imports are expected to vary by 2.0% and 2.2%.

The world economy is experiencing a slowdown in the short term. In the April edition of the *World Economic Outlook* (WEO), the International Monetary Fund (IMF) continues to forecast a slowdown in world GDP, from 3.4% in 2022 to 2.8% in 2023 and 3.0% in 2024 (0.1 p.p. below the forecast made in January for the last two years). However, there was a slight improvement in the growth prospects of Brazil's important trading partners, notably the United States and Europe (Table 2). In the medium term, the forecast for global growth stands at 3.0%, below the growth rates that prevailed before the pandemic (closer to 4.0%).

[2] Gross National Available Household Income (RNDBF), calculated by the Central Bank. SGS - Time Series Management System (code 29028).

TABLE 2. REAL GROWTH PROJECTIONS IN THE IMF *WORLD ECONOMIC OUTLOOK*

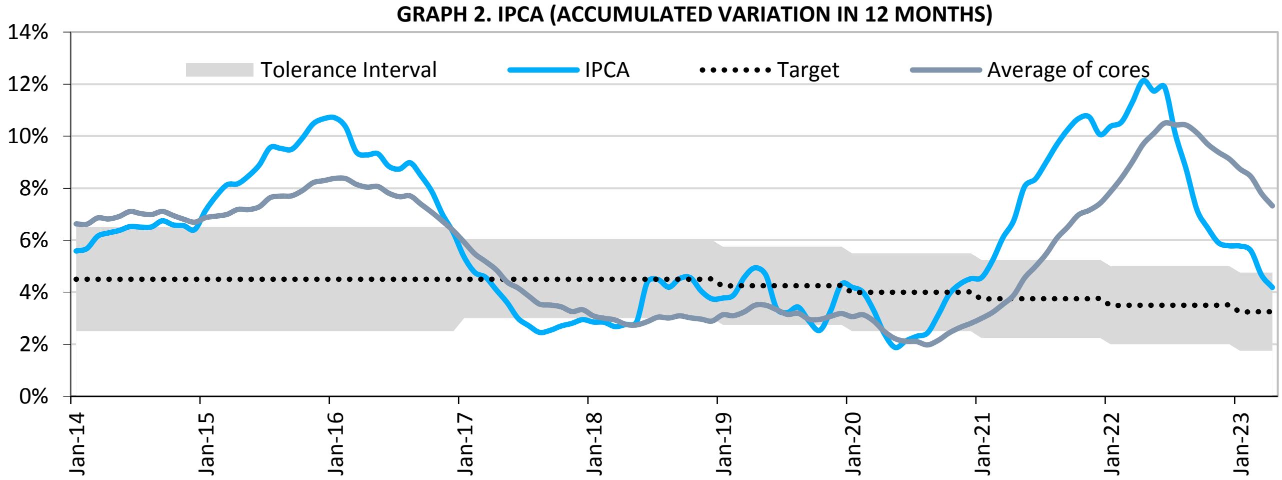
	2022	2023	2024
WWO	3.4	**2.8**	**3.0**
Advanced economies	2.7	**1.3**	**1.4**
Emerging Markets	4.0	**3.9**	**4.2**
China	3.0	**5.2**	**4.5**
United States	2.1	**1.6**	**1.1**
Euro Area	3.5	**0.8**	**1.4**

Source: IMF. Elaboration: IFI.

The IMF baseline scenario[3] assumes that (i) the recent financial sector turmoil will not disrupt global economic activity; (ii) commodity prices will retreat in 2023 due to slowing global demand; (iii) interest rates will remain high for longer than expected due to central banks' focus on bringing inflation back to target - while implementing tools to ensure financial stability; (iv) governments will gradually withdraw support for fiscal policy, reducing packages created to minimize the effects on households and firms of last year's fuel and energy price hikes. In the IMF's evaluation, global GDP growth would decrease by 0.3 p.p. in 2023 and 0.2 p.p. in 2024 (from 2.8% and 3.0% to 2.5% and 2.8%) in an alternative scenario, with the assumption of additional tightening of credit conditions impacting households and companies.

As for price evolution, the IFI expects the IPCA to close the year at 6.0%, decelerating to 4.1% in 2024. Consumer inflation, as measured by the IPCA, slowed down from 0.71% in March to 0.61% in April, accumulating a 4.2% rise over twelve months (Graph 2). The average of the cores monitored by the Central Bank – measures that seek to remove from total inflation the influence of more volatile items – remained above the interval compatible with the target but maintained the gradual deceleration trend (from 7.8% in March to 7.3% in April). The IPCA is expected to rise again in the twelve-month comparison over the second half of the year, with the deflations recorded in July, August, and September of last year leaving the calculation window.

GRAPH 2. IPCA (ACCUMULATED VARIATION IN 12 MONTHS)



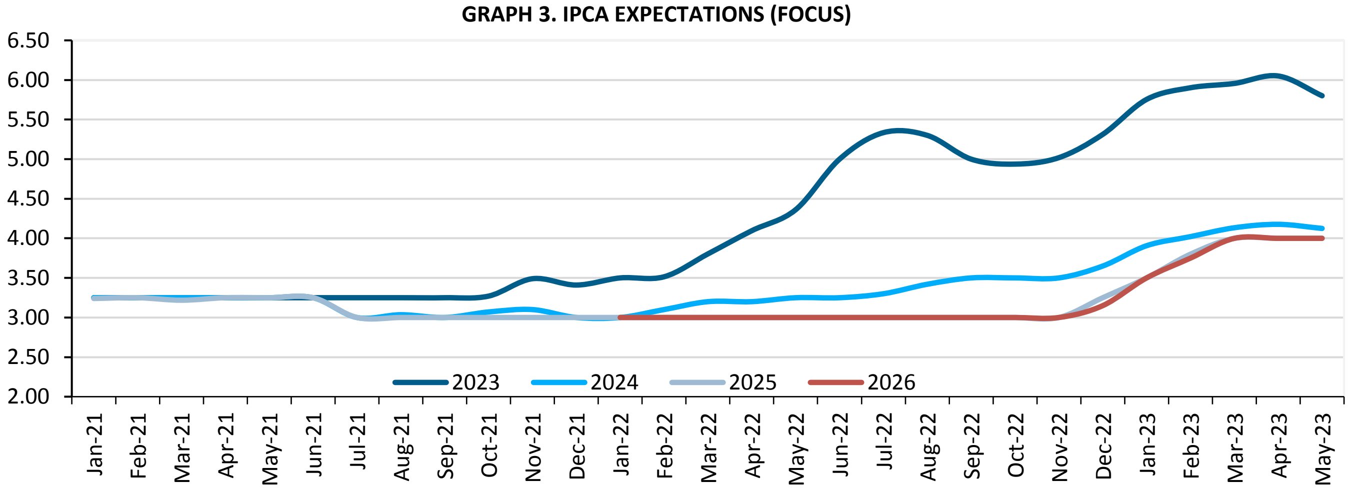
Source: IBGE and Central Bank. Prepared by: IFI.

[3] World Economic Outlook, April 2023: A Rocky Recovery. Available at: https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023

The forecast for free price inflation (4.5% and 3.9%) is explained by (i) the inertial component of inflation (past inflation), (ii) future inflation expectations twelve months ahead (obtained in the Focus Bulletin), (iii) the evolution of the output gap (returning to negative levels in 2023 and 2024), (iv) the dynamics of the exchange rate (R$/US$ 5.21 in 2023 and R$/US$ 5.30 in 2024) and (v) commodity prices (maintenance of the downward trend, with the hypothesis of a gradual return to the historical average). The perspectives for administered prices, corresponding to 25% of the IPCA, are obtained from the Focus Bulletin (10.5% in 2023 and 4.6% in 2024).

The IFI's baseline scenario considers that the Selic rate will start to fall in the second half of the year, reaching 13.00% p.a. by the end of the year and 10.50% p.a. by the end of 2024. The Central Bank's Monetary Policy Committee (Copom) reaffirmed that maintaining the Selic rate (13.75% p.a.), for the time being, is the best strategy until the disinflation process is consolidated and inflation expectations (Graph 3) become anchored. Copom's communication at the last meeting kept a conservative tone without opening space for changes in monetary policy in the short term. Concerning fiscal policy, the committee continued to consider it a potential source of upside risk to inflation but noted that the presentation of the new set of fiscal rules partially reduced the uncertainty associated with extreme scenarios of public debt expansion.

GRAPH 3. IPCA EXPECTATIONS (FOCUS)



Source: Central Bank. Prepared by: IFI.

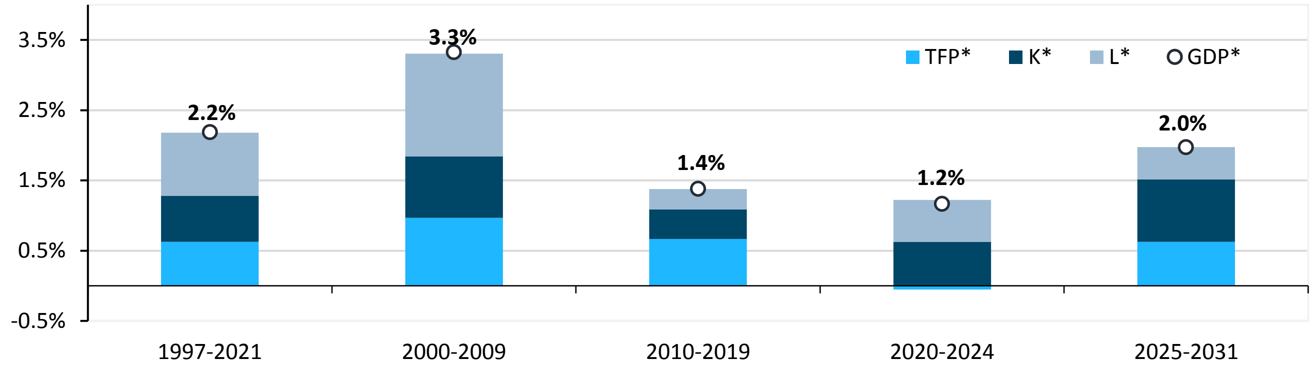
1.2 Medium-term projections

The projection for real GDP growth in the medium term is 2.0%. In the baseline scenario, the idleness of the economy (measured by the output gap) is expected to be eliminated in 2025, at which point the GDP starts to evolve in line with its potential growth[4]. In the 2025-2032 horizon, GDP growth is assumed to stabilize around 2.0%, slightly below the historical average (1997-2021) of 2.2% (Graph 4). This value is composed of the following contributions: (i) +0.6 p.p. (close to the historical average) of the total factor productivity (TFP), (ii) +0.9 p.p. of the capital stock K (higher than the

[4] According to this methodology, the level of output reflects the size of the capital stock, the number of hours worked that the employed population provides, and the total factor productivity (combination of capital and labor productivity). For more information, see the Special Study (EE) No. 4, available at: https://www2.senado.leg.br/bdsf/bitstream/handle/id/536764/EE_04_2018.pdf.

historical average of 0.7 p.p.) and (iii) +0.5 p.p. of the labor stock L (below the historical average of 0.9 p.p., since the labor force is expected to grow more slowly due to the aging of the population).

GRAPH 4. DISAGGREGATION OF THE POTENTIAL GDP GROWTH RATE (P.P.)



Source: IFI.

The inflation rate is heading towards 3.0% in the medium term, while the Selic rate converges to 7.0%. From the moment the real GDP equals the potential GDP, and the inflation rate is anchored to the target (3.0%) – assuming the maintenance of the inflation targets in the June meeting of the National Monetary Council (CMN) – the estimated value for the Selic rate moves towards the value of the natural nominal interest rate (natural real interest rate plus the inflation target). Over the projection horizon, the real interest rate (around 4.0%) is assumed to follow a parity relationship, whereby the domestic interest rate equals the international interest rate[5] plus the country risk premium[6] and the expected depreciation of the exchange rate[7]. In the baseline scenario, the risk premium is positioned at 270 points, and the average exchange rate between 2025 and 2032 is R$/US$ 5.50 (depreciation in the period of around 0.9% per year).

The average difference between the implicit GDP deflator and IPCA is 0.6 p.p. The deflator forecast is based on the following assumptions: (i) the average difference between the variation rates of the deflator of household consumption and the IPCA, observed historically, remains in the next few years, (ii) the deflator of government consumption and the deflator of gross fixed capital formation (GFCF) grow in line with the IPCA, and (iii) the export deflator grows in line with the import deflator (which implies a neutral scenario for the evolution of the terms of trade). Thus, it is assumed that the implicit GDP deflator (4.0%) evolves 0.6 p.p. above the average variation of the IPCA in the medium term.

Nominal GDP. Real growth of 2.0% and the deflator of 4.0% should produce nominal GDP growth between 2025 and 2032 of 6.0%. In current values, the GDP would advance from R$ 10.5 trillion in 2023 to R$ 18.0 trillion in 2032, a level higher than the projection presented in November.

Alternative scenarios. As a way of capturing the uncertainties inherent in the projections of the macroeconomic scenario, we present, in addition to the baseline scenario, the trajectories of the main macro-fiscal variables in two

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[5] As a measure of the international interest rate, the effective interest rate practiced by the *Federal Reserve Bank* (Fed) is considered, discounting American inflation. The assumptions used by the IFI for these variables are derived from the scenarios presented by the *Congressional Budget Office* (CBO).
[6] The trajectory of the country risk (represented by the Embi-Br variable) is defined based on the evaluation and judgment of assumptions about the domestic and international environments.
[7] The exchange rate variation in the medium term is assumed to be given by the difference between domestic and foreign inflation.

alternative scenarios (optimistic and pessimistic). Deviations from the central projection arise from changes (based on assumptions and judgments) in the path of exogenous variables (determined outside the model), such as total factor productivity, overall economic growth, the country risk premium, and the economic policy uncertainty indicator[8], producing more or less benign pictures concerning the baseline scenario.

Pessimistic. The intensification of uncertainties present in the baseline scenario – a more challenging international scenario and the maintenance of fiscal risk at the domestic level – could further deteriorate economic agents' confidence, financial asset prices and inflation expectations. As inflation expectations are positioned above the inflation target throughout the projection horizon, the nominal interest rate is higher. The pessimistic scenario is marked by a much slower reaction of output and the labor market. Between 2025 and 2032, the average GDP growth rate is 1.0%, and the real interest rate converges to a higher level, around 5%.

Optimistic. In the optimistic scenario, a more favorable environment for economic growth is assumed, with more room for the cyclical resumption of activity (closing of the output gap in 2023). Between 2025 and 2032, the outlook for the average GDP growth rate is 3.0% (with a greater advance in total factor productivity), and the real interest rate would converge to the 3.0% level.

Table 3 summarizes the IFI's macroeconomic projections for the baseline and alternative scenarios.

TABLE 3. PROJECTIONS OF THE BASELINE, OPTIMISTIC AND PESSIMISTIC SCENARIOS

	Baseline			Optimistic			Pessimist		
	2023	2024	2025-2032	2023	2024	2025-2032	2023	2024	2025-2032
Nominal GDP (R$ billion)	10,551	11,265	14,881	10,554	11,327	14,983	10,528	11,282	14,698
GDP - Real variation rate (%)	1.0	1.4	2.0	1.7	2.4	3.0	0.4	0.4	1.0
Implicit GDP deflator (% annual average variation)	5.3	5.3	4.0	4.7	4.8	3.8	5.8	6.7	5.4
IPCA (% annual average variation)	5.1	4.9	3.4	4.5	4.4	3.2	5.6	6.3	4.8
IPCA (% year-end to year-end variation)	6.0	4.1	3.2	5.4	3.6	3.0	6.5	5.5	4,.6
Unemployment rate (% of the labor force)	9.5	9.6	9.6	8.7	8.7	8.7	10.1	10.6	11.5
R$/US$ exchange rate (end of period)	5.21	5.30	5.52	5.08	5.15	5.31	5.40	5.57	6.18
Selic (%)	13.00	10.50	7.30	12.50	9.50	6.28	13.75	12.50	10.21
Real interest (%)	6.4	5.3	4.0	5.2	5.2	3.3	8.2	6.7	4.9

Source: IFI.

2. FISCAL SCENARIOS

2.1 Scenarios for total revenue, transfers and net revenue

The new IFI macroeconomic projections, presented in the previous section, subsidized the updating of the central government primary revenue projections for 2023 to 2032. Compared to the November 2022 update[9], the projected values for nominal GDP were higher.

The primary revenue projections are based on the results presented by the IFI in Special Study No. 16[10], November 2021. Generally speaking, there may be intense increases or losses in tax collection in the short run (that is, when we consider

[8] Indicator available on a monthly basis for the Brazilian economy: https://www.policyuncertainty.com/index.html
[9] Page for accessing RAF No. 70, November 2022: https://www2.senado.leg.br/bdsf/bitstream/handle/id/602493/RAF70_NOV2022.pdf.

[10] Link to access the document: https://www12.senado.leg.br/ifi/publicacoes-1/estudos-especiais/2021/novembro.

a few consecutive quarters). In the long run, however, the elasticities tend to revert to 1 so that the collection evolves in line with the economy's growth.

In the coming years, the IFI does not expect tax collection increases like those seen in 2021 and 2022, when a positive commodity shock influenced the Brazilian economy's terms of trade. The outlook is for tax revenue growth to be more in line with the evolution of economic activity. Besides the new estimated values for nominal GDP over the projection horizon, some factors were considered in the projections for central government collection, as described in Table 4.

TABLE 4. MEASURES ANNOUNCED BY THE GOVERNMENT TO RECOMPOSE REVENUES, IMPACTS ESTIMATED BY THE EXECUTIVE, AND IMPACTS CONSIDERED BY THE IFI IN THE PROJECTIONS

Measure	Impact announced by the Ministry of Finance (R$ billion)			Value considered for the IFI projections (R$ billion corrected by the variation of the nominal GDP)									
	2023	2024	2025	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Revenue from the transfer of PIS/PASEP funds to the Treasury	23.0	-	-	23.0	-	-	-	-	-	-	-	-	-
PIS and Cofins on financial revenue	4.4	6.0	6.0	4.4	6.0	6.4	6.8	7.2	7.7	8.1	8.6	9.1	9.6
Return of PIS and Cofins collection on gasoline and ethanol	28.9	54.5	54.5	28.9	54.5	58.2	61.9	65.6	69.4	73.5	77.8	82.4	87.2
Return of PIS and Cofins collection on diesel oil, cooking gas and aviation kerosene	-	18.6	18.6	-	19.9	21.2	22.6	23.9	25.3	26.8	28.4	30.0	31.8
Collection of PIS/Cofins on ICMS credits within the states and the Federal District	31.9	58.0	61.2	-	-	-	-	-	-	-	-	-	-
Collection of IRPJ and CSLL on ICMS tax benefits	47.0	47.0	47.0	7.1	12.5	18.8	21.4	23.5	26.8	30.5	35.8	37.9	40.1
Taxation on income earned abroad	3.3	3.6	6.8	3.3	3.6	6.8	7.2	7.6	8.0	8.5	9.0	9.5	10.1
Update of the value of the exemption range of the IRPF monthly incidence table	-3.2	-5.9	-6.3	-3.2	-5.9	-6.3	-6.7	-7.1	-7.5	-7.9	-8.4	-8.9	-9.4
Transfer Pricing	-	70.0	70.0	-	20.0	26.2	29.8	32.8	37.4	42.5	50.0	52.9	56.0
Total	**135.2**	**251.8**	**257.8**	**63.4**	**110.6**	**131.3**	**143.0**	**153.6**	**167.2**	**181.9**	**201.2**	**213.0**	**225.4**
% of GDP	**-**	**-**	**-**	**0.6%**	**1.0%**	**1.1%**	**1.1%**	**1.1%**	**1.2%**	**1.2%**	**1.3%**	**1.3%**	**1.3%**

Source: Ministry of Finance and IFI. Elaboration: IFI.

Some of the measures listed in Table 4 are contained in the announcement made by the Minister of Finance last January 12[11], such as (i) the revenue to be obtained from the transfer of unclaimed funds from PIS/Pasep accounts to the Treasury (ii) the recomposition of PIS and Cofins revenues on financial revenues[12] and (iii) the return of PIS and Cofins collection on gasoline and ethanol. For example, the PIS/Pasep resources constitute a one-time transfer (R$ 23.0 billion in 2023), while the collection of PIS/Cofins on financial income and fuel constitutes a recomposition of the tax rates.

The table also presents the return of PIS and Cofins taxes on diesel, cooking gas, and aviation kerosene as of 2024. This tax exemption is foreseen until December 31, 2023, by the Provisional Measure (MP) No. 1.157 of January 1, 2023, still under appreciation by the National Congress. According to the 2023 Budget Law (LOA 2023), the tax waiver in question corresponds to R$ 18.6 billion in 2023.

Also presented in Table 4 are the innovations brought by Provisional Measure No. 1,171 of April 30, 2023, which modifies the exemption range of the IRPF table and creates changes in the taxation of income earned from financial investments abroad, a compensatory measure for the income tax exemption. The values for 2023, 2024 and 2025 were obtained from the explanatory statement that accompanied the Measure.

Table 4 shows the impacts of the Bill of Conversion (PLV) No. 8 of 2023, deriving from MP No. 1,152 of December 28, 2022, which changes the transfer pricing rules related to the IRPJ and CSLL. The matter was approved in Congress in May 2023 and awaits presidential sanction. According to the Minister of Finance[13], the government expects to collect up to R$70 billion annually with the change in the system for collecting the IRPJ and CSLL. The minister admitted, however, that the government may be unable to reach this revenue. In any case, the measure would produce important revenue gains starting next year.

In the report of the PLV approved in the plenary session of the Federal Senate, Senator Jayme Campos estimated an impact between R$20 billion and R$25 billion on federal tax revenues in 2024. For projection purposes, the IFI considered a positive effect of R$ 20 billion next year, with gradual increases in subsequent years, until 50% of the amount estimated by the government (R$ 70 billion annually) is reached as of 2030.

Also, according to Table 4, other relevant potential tax collection gains in this and the following years would come from court decisions favorable to the Federal Government regarding the collection of federal taxes on transactions related to ICMS tax benefits and taxes levied on transactions using ICMS credits[14]. The eventual gains from these collections are included in the Annex of Fiscal Risks of the 2024 Budget Guidance Bill (PLDO)[15].

The IFI considers the impact of these court decisions to be very uncertain and difficult to predict. Besides the difficulty in estimating the amounts involved, the possibility that the current legal disputes will extend over the next few years is another uncertainty factor. In any case, considering some judicial decisions favorable to the Federal Government already

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[11] The content of the measures can be accessed at the following *link:* https://www.gov.br/fazenda/pt-br/assuntos/noticias/2023/janeiro/fernando-haddad-apresenta-conjunto-de-medidas-para-recuperacao-fiscal.

[12] The recovery consists of the revoking of Decree 11,322, of December 30, 2022, which reduced by half the rates of PIS and Cofins on the financial income of companies subject to the non-cumulative regime for collecting these taxes.

[13] Page for the story with the Finance Minister's statement: https://valor.globo.com/politica/noticia/2023/05/11/haddad-obtem-vitoria-do-governo-em-mp-sobre-tributacao-de-multinacionais.ghtml.

[14] For illustration purposes, see the article published in the May 15, 2023 edition of Valor Econômico: https://valor.globo.com/legislacao/noticia/2023/05/15/governo-pode-elevar-receitas-com-disputas-bilionarias-de-pis-cofins.ghtml.

[15] *Link to* access the document: https://legis.senado.leg.br/sdleg-getter/documento?dm=9322179&ts=1684343335217&disposition=inline. See Tabela 16 – Ações Judiciais de Natureza Tributária no STF" ["Table 16 - Tax Lawsuits in the STF"], on page 969, and "Tabela 17 – Ações Judiciais de Natureza Tributária no STJ ["Table 17 - Tax Lawsuits in the STJ"] on page 971.

taken[16] , the IFI considered some positive impact on federal tax collection in the coming years for the collection of IRPJ and CSLL levied on companies' ICMS tax benefits. For 2023, 2024, and 2025, the effects considered are, respectively, R$ 7.1 billion, R$ 12.5 billion, and R$ 18.8 billion, with gradual increases in the following years until the percentage of 50% of the estimated collection in the 2024 PLDO.

The last consideration to be made in this first section concerns the revenues from natural resource exploration, which comprise a significant part of the revenue from local oil production. The assumptions used by the IFI for the price of Brent oil were taken from the ANP[17] and the Ten-Year Energy Expansion Plan 2032[18], of the Energy Research Company (EPE). According to the EPE, throughout this decade, especially in the second half, there will be a significant increase in Brazilian oil production driven by the pre-salt exploration fields. This increase, in turn, will affect the Federal Government's unmanaged revenues, such as dividends (from Petrobras) and the exploitation of natural resources.

Table 5 presents the projections for the price of oil (Brent - US$), the exchange rate (obtained from the macroeconomic scenario discussed in the previous section), and the national production of oil (projected by EPE and converted to cubic meters for the purpose of harmonization with the historical series made available by ANP).

TABLE 5. ASSUMPTIONS MADE FOR VARIABLES THAT AFFECT REVENUES FROM OIL AND NATURAL GAS EXPLORATION DURING THE PROJECTION HORIZON (2023-2032)

Year	Brent (US$)			Average exchange rate			Total oil production (m^3)
	Baseline	Optimistic	Pessimist	Baseline	Optimistic	Pessimist	
2023	83.63	91.99	71.09	5.21	5.08	5.40	193,836,900
2024	77.57	85.33	65;93	5.30	5.15	5.57	218,791,950
2025	75.00	82.50	63.75	5.34	5.18	5.71	240,845,250
2026	77.00	84.70	65.45	5.39	5.22	5.84	258,836,100
2027	78.00	85.80	66.30	5.44	5.26	5.96	273,925,200
2028	80.00	88.00	68.00	5.49	5.29	6.10	295,978,500
2029	82.00	90.20	69.70	5.55	5.33	6.24	312,228,300
2030	84.00	92.40	71.40	5.60	5.37	6.39	307,585,500
2031	86.00	94.60	73.10	5.65	5.41	6.54	300,040,950
2032	88.00	96.80	74.80	5.70	5.44	6.70	285,532,200

Source: ANP, EPE, and the Central Bank. Elaboration: IFI.

To conclude this subsection, we highlight the assumption underlying the scenarios, that the tax burden will remain at current levels without any significant changes in tax rates or tax bases. Naturally, this instrument can be used by the government at some point to improve the trajectory of the primary balance. The inclusion of an eventual increase in the tax burden in the scenarios can be done in the future if the government signals actions in this direction.

[16] See: https://www.stj.jus.br/sites/portalp/Paginas/Comunicacao/Noticias/2023/26042023-Beneficios-do-ICMS-so-podem-ser-excluidos-do-IRPJ-e-da-CSLL-se-contribuinte-cumprir-requisitos-legais.aspx#:~:text=Not%C3%ADcias%20of%20STJ-,Benef%C3%ADcios%20of%20ICMS%20the%C3%B3%20can%20be%20exclu%20C3%ADdos%20of%20IRPJ%20and,suspended%20by%20the%20STF.

[17] National Agency of Petroleum, Natural Gas and Biofuels.

[18] Page for accessing the documents: https://www.epe.gov.br/pt/publicacoes-dados-abertos/publicacoes/plano-decenal-de-expansao-de-energia-2032.

2.1.1 Short-term projections: 2023–2024

Table 6 presents the new IFI projections for central government primary revenue in 2023 and 2024, comparing them to the November 2022 projections. In the November scenarios, information was available through September, while in the current revision, the data is updated with Treasury information through March.

TABLE 6. IFI BASELINE SCENARIO PROJECTIONS FOR CENTRAL GOVERNMENT PRIMARY REVENUE, PUBLISHED IN 2022 AND 2023 (R$ BILLION)

Baseline scenario (R$ million)	Review Nov/22				Review May/23				Diff. May/23-Nov/22			
	2023	% of GDP	2024	% of GDP	2023	% of GDP	2024	% of GDP	2023	p.p. of GDP	2024	p.p. of GDP
1. Total Primary Revenue	**2,318.2**	**22.5%**	**2,540.8**	**23.1%**	**2,360.3**	**22.4%**	**2,575.1**	**22.9%**	**42.1**	**-0.1%**	**34.2**	**-0.3%**
Revenues Collected by RFB, except RGPS and fiscal incentives	1,442.3	14.0%	1,545.0	14.1%	1,488.4	14.1%	1,614.0	14.3%	46.2	0.1%	69.0	0.3%
Net collection for the RGPS	568.4	5.5%	628.3	5.7%	578.3	5.5%	638.8	5.7%	9.9	0.0%	10.5	-0.1%
Revenues not Collected by RFB	307.6	3.0%	367.6	3.3%	293.5	2.8%	322.3	2.9%	-14.0	-0.2%	-45.2	-0.5%
Fiscal incentives	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%
2. Transfers by revenue sharing	**433.7**	**4.2%**	**461.1**	**4.2%**	**47.,6**	**4.5%**	**516.6**	**4.6%**	**38.9**	**0.3%**	**55,5**	**0.4%**
3. Net transfer revenue [(1)-(2)]	**1,884.5**	**18.3%**	**2,079.7**	**18.9%**	**1,887.7**	**17.9%**	**2,058.5**	**18.3%**	**3.2**	**-0.4%**	**-21.2**	**-0.7%**

Source: IFI.

The IFI's projection for central government primary revenue in 2023 became 22.4% of GDP. For the total primary revenue of the central government in 2023, the IFI now forecasts R$2,360.9 billion (22.4% of GDP), an amount R$42.1 billion (0.1 p.p. of GDP) higher than the November projection. For 2024, primary revenue is expected to reach R$2,575.1 billion (22.9% of GDP), against R$2,540.8 billion (23.1% of GDP) projected in November.

The expectation of a lower volume of revenues not collected by the RFB is the main factor explaining the revision in the primary revenue projection for 2023. For 2023, the decrease in the forecast for total primary revenue as a proportion of GDP (0.1 p.p.) between the November 2022 and May 2023 scenario revisions was due to the worsening in expectations for non-managed revenues (0.2 p.p. of GDP less between November and May). This downward revision in the projection occurred due to the lower estimate for revenue from the exploitation of natural resources by R$ 11.3 billion (0.1 p.p. of GDP) because of: (i) an expected lower oil price in 2023 (US$ 83.63 now, against US$ 88.98 in November), and (ii) the lower production expected in the year, according to the Ten-Year Expansion Plan for Energy 2032 of the EPE (193.8 million m^3 now, against 201.3 million m^3 in November).

Estimates for non-managed revenues also influenced the revision of the primary revenue projection in 2024. The IFI's estimates for total central government primary revenue as a proportion of GDP in 2024 were also revised downward due to revisions made to the projections for revenues not collected by the RFB. The biggest influence for this result was the revision made to the projection for dividends and participations, from R$ 67.8 billion (0.6% of GDP) in November to R$ 40.6 billion (0.4% of GDP) in May 2023. The explanation for this lies in the government's revealed intentions to retain a larger share of the profits of state-owned enterprises in order to increase investments by these companies in the coming years.

Expectation for transfers in 2023 rose 0.3 p.p. of GDP between last November and now. The IFI's new projection for central government transfers by revenue sharing in 2023 is R$ 472.6 billion (4.5% of GDP), up from R$ 433.7 billion (4.2% of GDP) forecast in November 2022. The upward revision in the projection occurred due to the behavior of tax collections shared by the Union with the subnational entities (IPI and IR), especially the income tax, as well as revenues from the exploitation of natural resources. As an illustration, in the 12 months ending in March, transfers totaled R$ 465.1 billion (4.6% of GDP).

The IFI's projection for transfers by revenue sharing in 2024 is R$ 516.6 billion (4.6% of GDP), against R$ 461.1 billion (4.2% of GDP) estimated last November. The 0.4 p.p. of GDP increase in the projection between the last scenario revision and the current one is due to expected revenues from natural resource exploration, as well as the continued increase in the participation of the Corporate Income Tax (IRPJ) in managed revenues, driven by tax collections in operations with tax benefits under the ICMS.

The net primary revenue of the central government is expected to reach 17.9% of GDP in 2023 and rise to 18.3% in 2024. Based on the new projections for total primary revenue and transfers, the net revenue of the central government[19] in 2023 is now expected to be R$ 1,887.7 billion (17.9% of GDP), an increase of R$ 3.2 billion (0.4 percentage points of GDP) compared to the November projection. For 2024, the IFI expects a net revenue of R$ 2,058.5 billion (18.3% of GDP), against R$ 2,079.7 billion (18.9% of GDP) forecasted in November, a difference explained in part by the downward revisions in non-managed revenues and upward revisions in transfers by revenue sharing (Table 6).

2.1.2 Medium-term projections: 2025–2032

In the medium term, revenues should evolve in line with economic activity. On the managed revenue side, the scenarios consider a continuous increase in collection from 2022 on, with the economy's growth converging to rates around 2.0% (baseline scenario), 3.0% (optimistic), and 1.0% (pessimistic). The economic activity also influences the net collection for the RGPS and some subgroups of the non-managed revenues, such as dividends, exploration of natural resources, educational salary contribution, etc.

Even in the pessimistic scenario, the IFI's estimate is for continued real growth in the economy. The increase in nominal GDP values over the projection horizon influences the trajectory of managed revenues, making the nominal values higher in the years ahead.

Continued economic growth tends to favor the expansion of tax bases. The maintenance of continued real GDP growth may also favor non-managed revenues, such as concessions and permits, by attracting the interest of foreign capital for infrastructure assets in Brazil. The growth of the economy also allows for a recomposition of the tax bases of several taxes, which can eventually increase, for a certain period, the elasticities of government revenues. The IFI's EE No. 16, referenced in this text, estimated elasticities of tax collection with respect to GDP considering short and long-term horizons, as well as situations in which the output gap[20] is positive or negative.

Table 7 presents the projections for total gross revenues and their components (revenues managed by the Federal Revenue Office, RGPS, and non-managed revenues), as well as projections for transfers to the subnational entities and for net revenues in the baseline, optimistic and pessimistic scenarios, in the period from 2023 to 2032.

[19]The net revenue of the Federal Government corresponds to total revenues after deducting the transfers by revenue sharing, which are destined to subnational entities. An example of this deduction is the Municipalities and States Participation Funds (FPE and FPM), which consist of the apportionment of the Income Tax and the Tax on Industrialized Products (IR and IPI) collection.

[20] Output gap is an unobservable variable that seeks to measure the deviations of GDP from what would be the potential growth of an economy. If this difference is positive, the gap is said to be positive; if negative, the gap is negative. If the difference is close to zero, GDP is considered to be growing at the potential level.

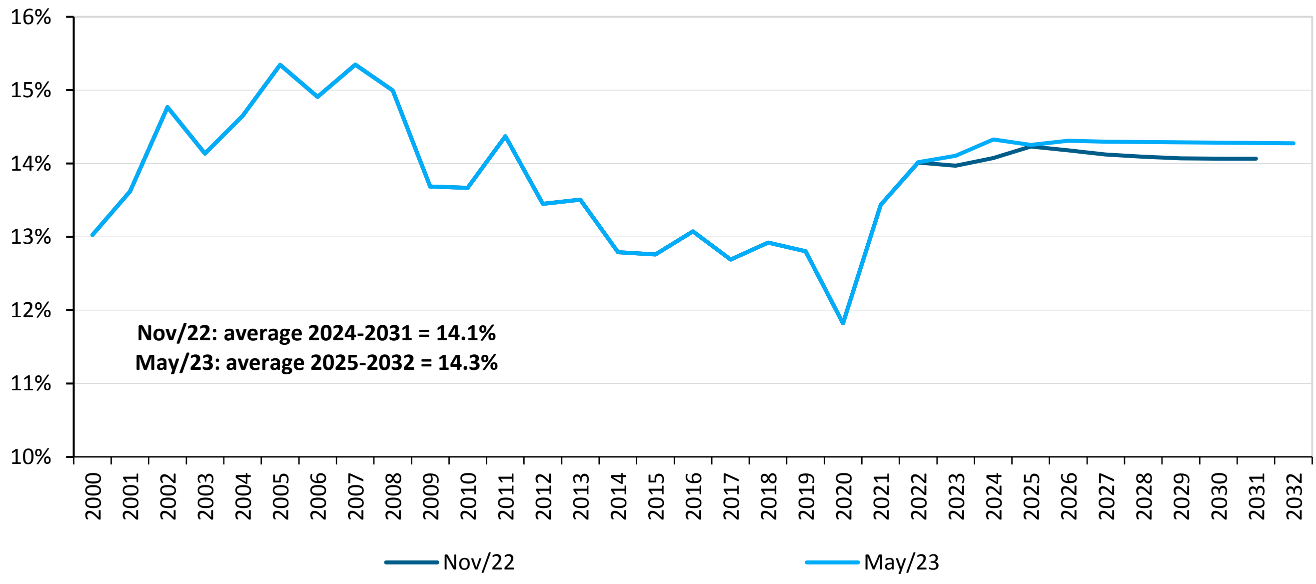
TABLE 7. IFI PROJECTIONS FOR CENTRAL GOVERNMENT PRIMARY REVENUES - R$ BILLION

	Baseline			Optimistic			Pessimist		
	2023	2024	2025-2032	2023	2024	2025-2032	2023	2024	2025-2032
Total Revenue	2,360.3	2,575.1	3,400.8	2,383.6	2,632.8	3,657.2	2,329.7	2,511.9	3,285.6
Revenue collected by RFB, except RGPS	1,488.4	1,614.0	2,125.9	1,496.0	1,637.9	2,279.8	1,485.2	1,590.4	2,065.7
Net collection for the RGPS	578.3	638.8	842.5	580.1	646.6	906.2	577.0	637.3	820.2
Revenues not managed by RFB	293.5	322.3	432.3	307.4	348.2	471.2	267.5	284.3	399.7
Transfers by revenue sharing	47.6	516.6	690.6	475.0	524.2	740.7	471.6	509.0	671.0
Net revenue	1,887.7	2,058.5	2,710.1	1.908.5	2,108.6	2,916.4	1,858.2	2,002.9	2,614.6

Source: IFI.

Managed revenues are expected to converge to the level of 14.3% of GDP between 2025 and 2032. Graph 5 shows the trajectories forecast by the IFI for the central government's managed revenues in the baseline scenario, excluding RGPS revenues, as a proportion of GDP, from 2023 to 2032. In the medium term, between 2025 and 2032, the managed revenues would correspond to 14.3% of GDP in the current revision of the projections. In November, from 2024 to 2031, the IFI estimated an average percentage for managed revenues as a proportion of GDP of 14.1%.

GRAPH 5. REVENUES COLLECTED BY THE RFB/GDP - REVISIONS OF NOV/22 AND MAI/23, IN THE BASE SCENARIO



Source: National Treasury Secretariat, Central Bank, and IFI. Prepared by: IFI.

Increases in managed revenues in 2021 and 2022 were due to favorable commodity prices. After the decrease observed in 2020 due to the effects of the pandemic on economic activity, the managed revenues registered a vigorous recovery in 2021, when they reached 13.4% of GDP, and in 2022, when they reached the level of 14% of GDP. This 2.2 p.p. increase in GDP between 2020 and 2022 is explained, to a large extent, by the positive shock in commodity prices, which favored, in this period, the resumption of economic activity and the increase in tax collection.

Revenue recomposition measures will favor the expected increase in managed revenues in the medium term. The more favorable projections for managed revenues over the projection horizon in the baseline scenario are explained by the measures presented in Table 4. In November 2022[21], for projection purposes, the IFI had only considered the return of the PIS and Cofins taxes on gasoline and ethanol in a staggered manner (half in 2023 and half in 2024).

In a conservative estimate, the measures intended by the government to recompose the tax rates and the tax base of some federal taxes may gradually increase tax collection in the coming years. According to Table 4, the impact could be on the order of R$ 63.4 billion (0.6% of the GDP) in 2023, R$ 110.6 billion (1.0% of the GDP) in 2024, and R$ 131.3 billion (1.1% of the GDP) in 2025.

According to the results of EE No. 16, the elasticity of managed revenues to GDP was 1.02 in the short run (for both the positive and negative output gap). In the long run, the estimated elasticities were 0.98 in the case of a positive output gap and 0.90 in the negative output gap situation. The projections of managed revenues presented here consider that the revenue-GDP elasticity is equal to 1 in the long run.

It is important to point out that, for the revenue projections, the 2023-2024 biennium was considered short-term, and the 2025 to 2032 period medium-term. It also applies to the other subgroups of primary revenues, to be presented later.

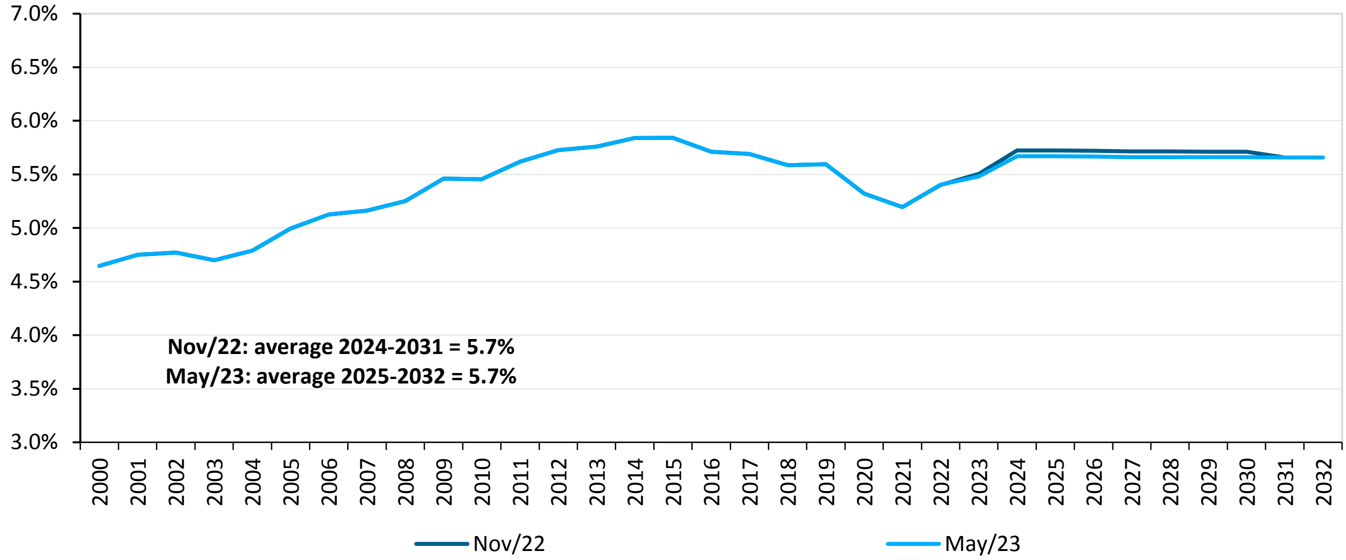
The results for the elasticity of the RGPS net revenue with respect to GDP, found in EE No. 16, were: 0.90 (positive gap) and 0.60 (negative gap) in the short term and 1.06 (positive and/or negative gap) in the long-term. The projections presented in this report consider the following values for this elasticity: 1.015 in 2023, 1.035 in 2024, and 1.0 from 2025 onward. This adaptation was made to contemplate the end of the exemption of the social security contribution on the payroll of 17 sectors in December 2023[22].

The net collection for the RGPS is expected to converge to 5.7% of GDP in the medium term. In the long run, an elasticity of 1.06 would configure a situation in which RGPS revenues would gradually increase their share of GDP. In recent years, however, this proportion has decreased, partly due to the company payroll reduction. As an illustration, in 2014, the net collection for the RGPS accounted for 5.8% of GDP. In 2019, before the pandemic, this share had retreated to 5.6% of GDP. By 2023, the IFI projects that this proportion will be 5.5%. As of 2024, with the end of the payroll tax exemption for 17 sectors of the economy, the net collection for the RGPS is expected to stabilize at 5.7% of the GDP (Graph 6).

[21] For further explanation, see RAF No. 70, November 2022, at https://www2.senado.leg.br/bdsf/bitstream/handle/id/602493/RAF70_NOV2022.pdf.

[22] The extension of this tax exemption until 2023 was made through Law 14.288, of December 31, 2021. *Link to* access the law: http://www.planalto.gov.br/ccivil_03/_ato2019-2022/2021/lei/L14288.htm.

GRAPH 6. RGPS/GDP REVENUES - REVISIONS OF NOV/22 AND MAY/23, IN THE BASELINE SCENARIO

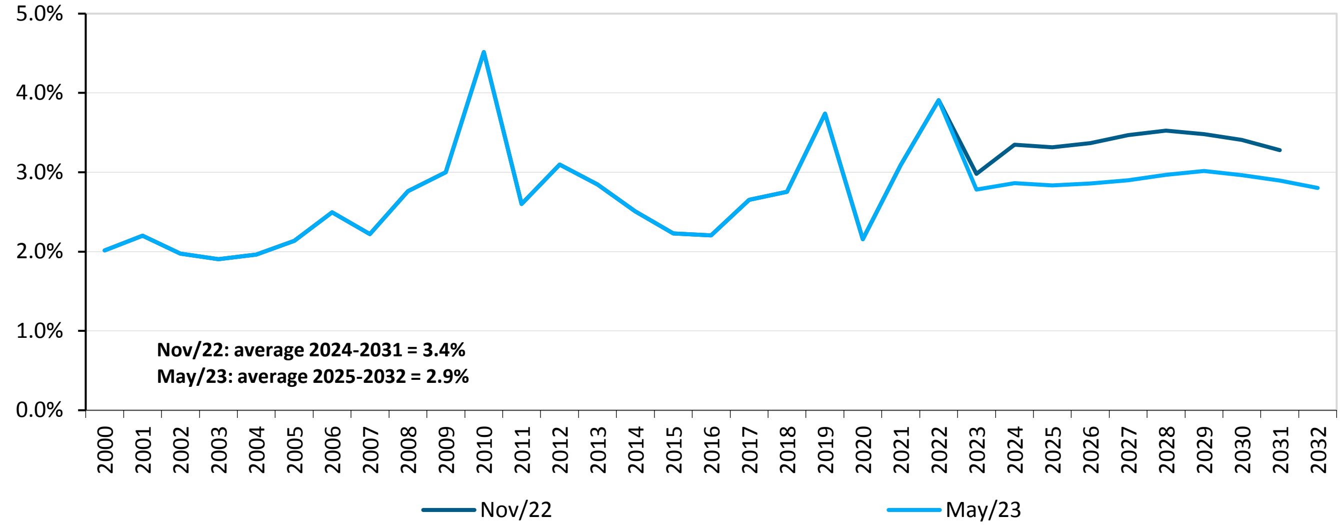


Source: National Treasury Secretariat, Central Bank, and IFI. Prepared by: IFI.

The projection of dividends and participations influenced the reduction in estimates for non-managed revenues in the medium term. Graph 7 compares the trajectories of the projections for non-managed revenues as a proportion of GDP for the current (May 2023) and November 2022 revisions in the baseline scenario. The main factor explaining the difference between the curves was the change in the projection of the collection of dividends and participations, which was reduced in the projection horizon due to the preferences revealed by the government for distributing fewer dividends and retaining a larger portion of the profits of state-owned companies, in order to expand investments in the coming years. Until the beginning of the next decade, the average annual reduction in the projection of revenues, coming from dividends and participations, was 0.3 p.p. of the GDP.

In the 2023 to 2032 projection horizon, revenues from natural resource exploration will remain relevant as production from the pre-salt fields increases. According to the EPE, in a document referenced in the introductory part of this section, domestic oil production should jump from around 200 million cubic meters per year, the volume currently produced, to around 300 million cubic meters per year by the end of the decade. This increase in production tends to raise revenue from natural resource exploitation from 1.3% of GDP to 1.5% by the end of the decade.

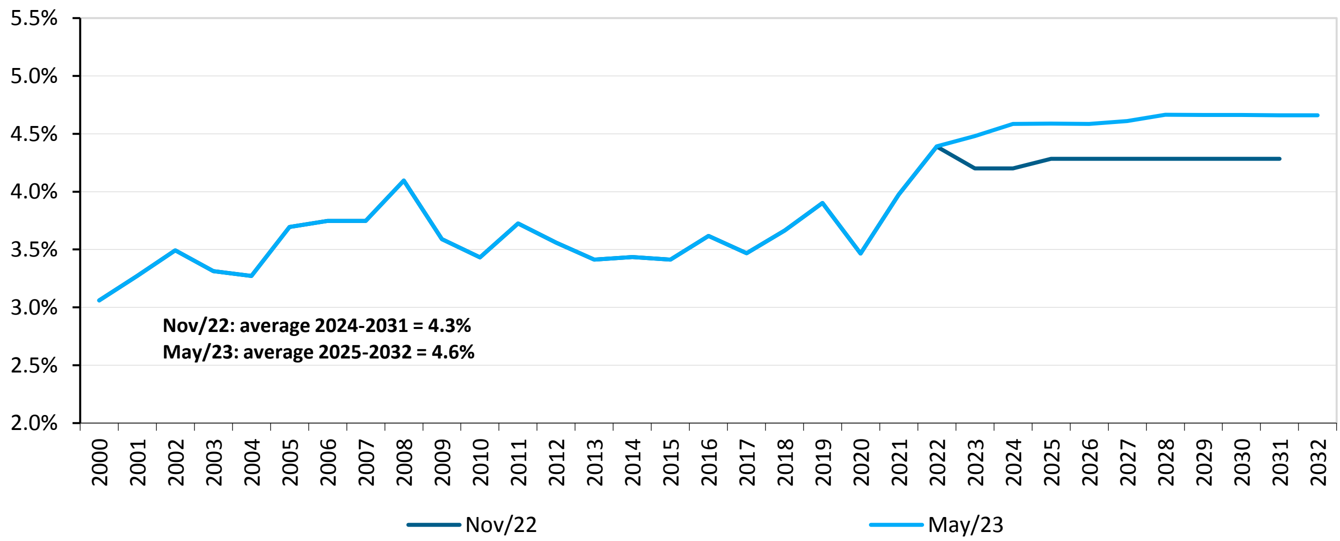
GRAPH 7. REVENUES NOT COLLECTED BY THE RFB/GDP - REVISIONS OF NOV/22 AND MAY/23, IN THE BASE SCENARIO



Source: National Treasury Secretariat, Central Bank, and IFI. Prepared by: IFI.

Graph 8 shows the projections for transfers by revenue sharing of the central government until 2032. After the retraction verified in 2020 (as a proportion of GDP), transfers will increase marginally in the next few years due mainly to the expected increase in corporate income tax collection and the exploitation of natural resources. The IFI expects transfers to reach 4.5% of GDP this year, increase to 4.6% in 2024, and converge to 4.7% by the end of the decade.

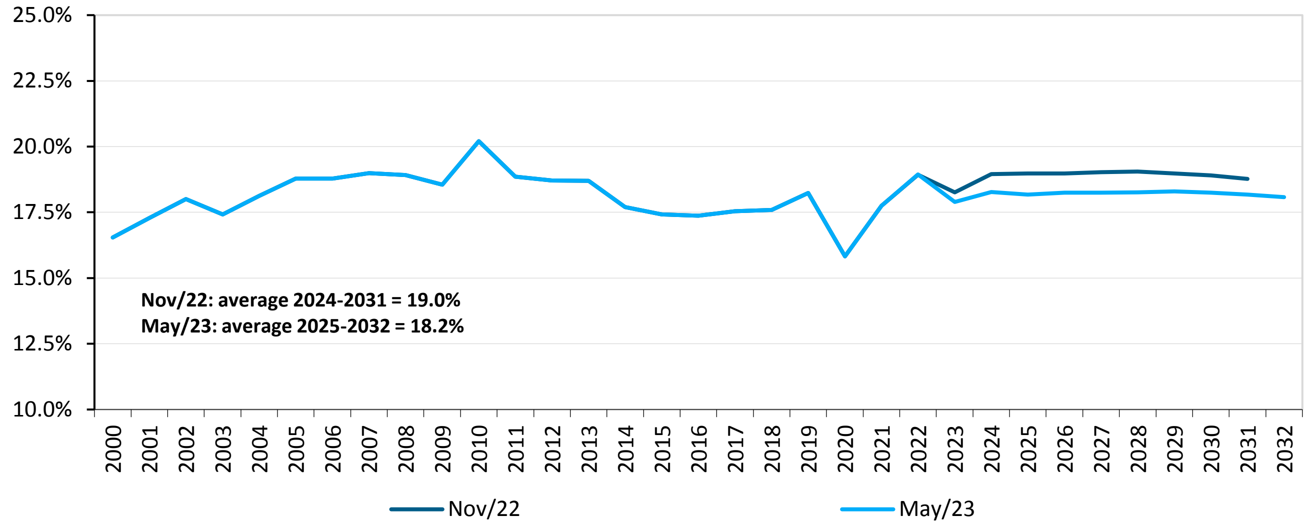
GRAPH 8. TRANSFERS/GDP - REVISIONS OF NOV/22 AND MAI/23 IN THE BASE SCENARIO



Source: National Treasury Secretariat, Central Bank, and IFI. Prepared by: IFI.

Net primary revenue is expected to converge to the level of 18.2% of GDP in the medium term. Finally, Graph 9 presents the net revenue projection from 2023 to 2032. The IFI predicts that the variable will reach 17.9% of GDP in 2023. In the following years, this share will oscillate due to the downward revision in total primary revenue, especially in non-managed revenues, and the increase in the projection of transfers to subnational entities. Net revenue is expected to reach the level of 18.2% of GDP per year in the medium term (2025-2032).

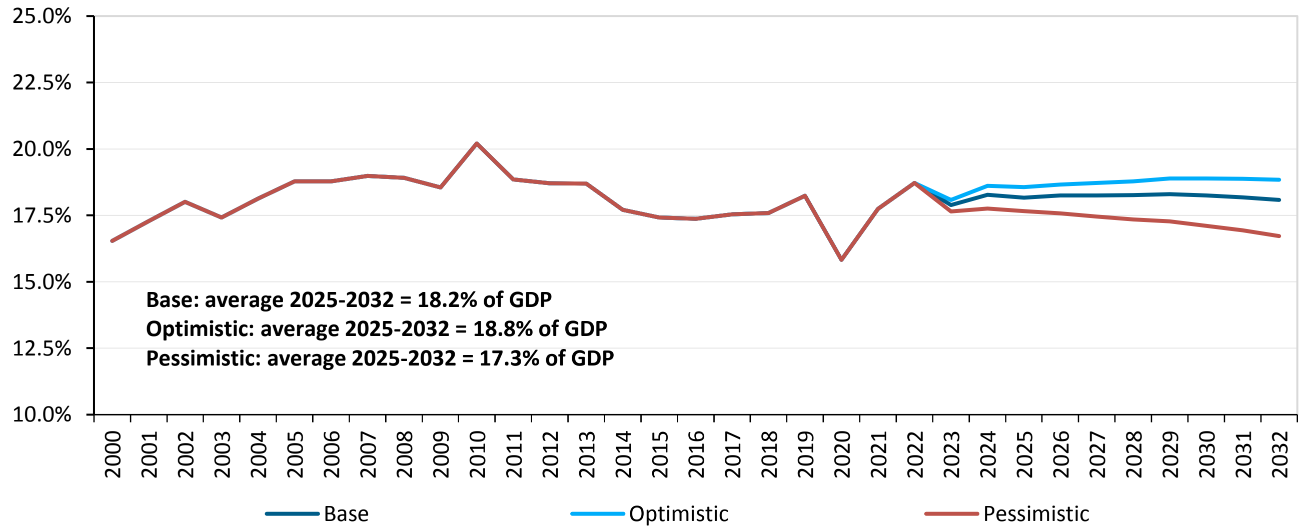
GRAPH 9. NET REVENUE/GDP - REVISIONS OF NOV/22 AND MAI/23 IN THE BASE SCENARIO



Source: National Treasury Secretariat, Central Bank, and IFI. Elaboration: IFI.

To conclude this section, Graph 10 shows the different trajectories assumed by net revenues as a proportion of GDP in the three reference scenarios. While net revenue remains around 18% of GDP in the baseline and optimistic scenarios, in the pessimistic scenario, the indicator's trajectory is declining, reaching 16.7% of GDP in 2032. In the pessimistic scenario, the economy's average growth is 1.0% between 2025 and 2032, indicating the importance of real growth for maintaining the dynamics of the Federal Government's primary revenues.

GRAPH 10. NET REVENUE/GDP - BASE, OPTIMISTIC AND PESSIMISTIC SCENARIOS



Source: National Treasury Secretariat, Central Bank, and IFI. Prepared by: IFI.

2.2 Scenarios for the Central Government's primary expenditures and primary balance

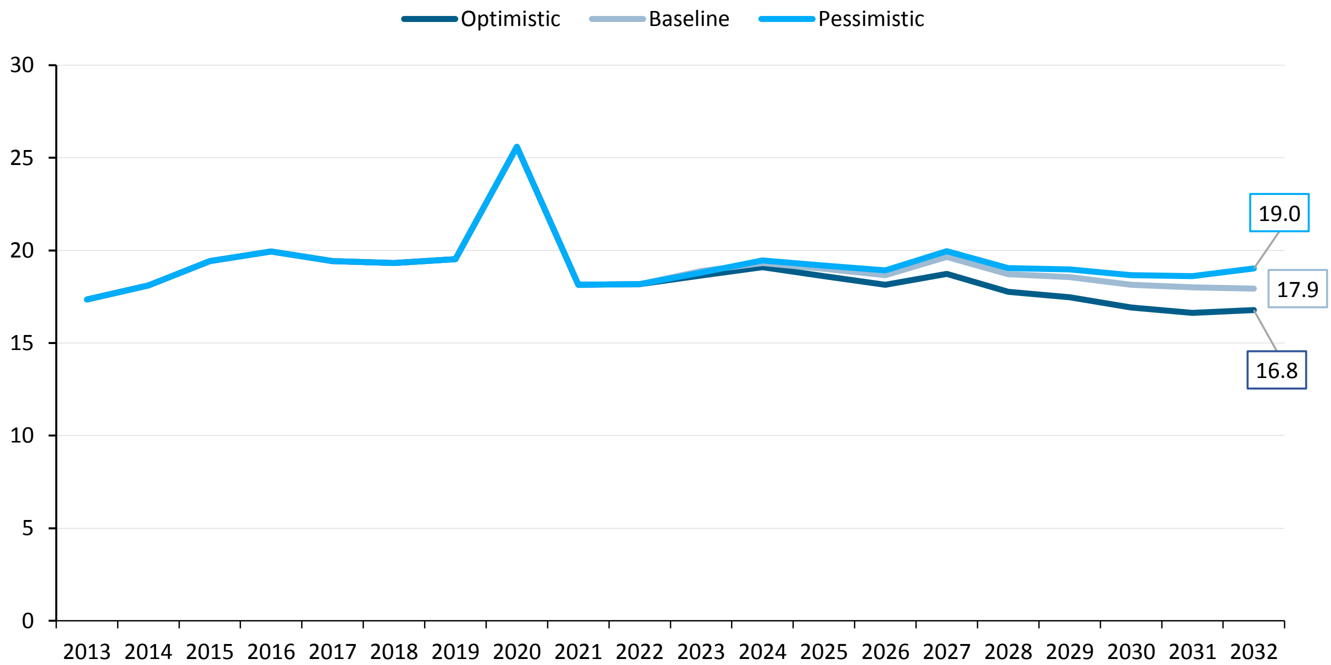
The new projection for the central government's primary deficit in 2023 is R$ 104.7 billion or 1.0% of GDP. The deficit is lower than the R$ 124.6 billion projected by the IFI in April. The main factor is the expected revenue growth, as discussed in the previous section. On the expenditure side, the projection grew by R$4.9 billion. It is worth noting that this scenario is compatible with meeting the primary deficit target of R$65.9 billion due to the provisos made possible by Constitutional Amendment 126. In the medium term, the risk of not meeting the primary target is high due to the new fiscal framework recently approved by the House of Representatives. This risk stems from the need to increase primary revenues to meet the expected targets for the coming years. As for the spending cap, the greatest risk of non-compliance with the rule is concentrated as of 2027, due to the trajectory of expenses with judicial sentences and court-ordered debts, in view of the end of the special postponement regime instituted by ECs 113 and 114 (known as EC of "*Precatórios*" [court-ordered debts]).

We look at these and other issues in the following topics.

2.2.1 Scenarios for the Central Government's primary expenditures

In the baseline scenario, primary expenditure should reach R$ 1,992.4 billion or 18.9% of GDP in 2023 (Graph 11). To elaborate the new scenarios, we used values up to March 2023, considering the data released by the National Treasury in its latest monthly bulletin. The advance in relation to the 18.2% of GDP reached in 2022 results from the projected increase in expenses due to EC No. 126 of 2022. In the baseline scenario, spending is expected to reach 17.9% of GDP in 2032. In the alternative scenarios, primary expenditure varies basically as a function of macroeconomic parameters, such as inflation and GDP.

GRAPH 11. PRIMARY EXPENDITURES - IFI SCENARIOS (% OF GDP)



Source: Treasury (2013 to 2022) and IFI (following years).

On the expenditure side, the current scenario contemplates the new minimum wage appreciation policy proposed by the Executive Branch. The IFI scenarios were adjusted to contemplate the new minimum wage (MW) appreciation policy proposed by the Executive via Bill (PL) No. 2,385 of May 05, 2023[23]. The new adjustment system is very similar to the practice adopted in the years before the pandemic and consists of annually increasing the nominal value of the minimum wage by the accumulated inflation over 12 months up to November, measured by the INPC, plus the real economic growth of two previous years. Thus, for 2024, the value of the minimum wage of 2023 should be adjusted by the inflation over 12 months until November 2023 (estimated by the IFI at 5.9%) and by the real GDP growth of 2022 (2.9%, according to IBGE).

Although the policy of increasing the value of the minimum wage has the objective of regulating the labor market, it plays an important role in the composition of the government's expenses and revenues. Basically, this role derives from the relevant weight of expenses indexed to the MW. Expenses such as welfare benefits, social security, and labor benefits, among others, have their evolution determined, in part, by the trajectory of the MW. Thus, for each additional R$ 1.0 of MW, the Federal Government's primary expenses increase by R$ 389.8 million. Extrapolating this estimate to an increase of R$ 119 in the MW of 2024, compared to 2023, the expected impact on primary expenditures in 2024 should be R$ 46.4 billion, of which R$ 30.4 billion referring to the correction for inflation and R$ 16 billion due to the real appreciation generated by this adjustment. The table below details the composition of the Federal primary expenses that are indexed to the MG and their respective expected costs.

TABLE 8. EXPECTED IMPACT OF THE MINIMUM WAGE RATE POLICY ON EXPENDITURE IN 2024 – BASELINE SCENARIO (R$ MILLION)

	R$ 1.00 increase in the minimum wage	Increase from R$1,320 to R$1,439	Price effect (INPC 5.9%)	Actual Gain (GDP 2.9%)
RGPS Deficit	272	32,320	21,185	11,136
RGPS Collection	23	2,785	1,825	959
Social security benefits	295	35,105	23,010	12,095
Social Benefits	61	7,235	4,742	2,493
FAT [Workers' Assistance Fund]	34	4,046	2,652	1,394
Salary Allowance	19	2,237	1,466	771
Unemployment Insurance	15	1,809	1,186	623
Total revenues	**23**	**2,785**	**1,825**	**959**
Total Expenses	**390**	**46,386**	**30,404**	**15,982**
Total result	**366**	**43,602**	**28,579**	**15,022**

Source: 2024 PLDO and IFI.

Table 9 compares the IFI's baseline scenario for 2023 primary expenditure with the realized 2022 data and the Executive's most recent projections for 2023. Next, we comment on some of the most relevant variations in the period.

[23] Available at: https://www.camara.leg.br/proposicoesWeb/prop_mostrarintegra?codteor=2269057&filename=Tramitacao-PL%202385/2023.

TABLE 9. PROJECTIONS OF MAY/23 VERSUS EXECUTIVE AND REALIZED IN 2022 – PRIMARY EXPENDITURE – BASELINE SCENARIO (R$ BILLION AND VAR. %)

Discrimination	2022 (Realized)	Government (REAV 2nd bi of 2023)	IFI (May/23)	Difference (IFI – Gov.)		Difference (IFI – 2022)	
	R$ bi			R$ bi	%	R$ bi	%
Primary Expenditure	1,802.0	2,047.5	1,992.4	**-55.1**	**-2.7**	**190.4**	**10.6**
Mandatory	1,649.9	1,853.6	1,823.6	**-30.0**	**-1.6**	**173.7**	**10.5**
Social Security	797.0	864.8	870.9	**6.1**	**0.7**	**73.9**	**9.3**
Payroll	337.9	364.0	354.2	**-9.8**	**-2.7**	**16.2**	**4.8**
Salary Allowance and Unemployment Benefit	64.3	71.9	72.6	**0.7**	**1.0**	**8.3**	**13.0**
BPC	78.8	90.6	86.6	**-4.0**	**-4.4**	**7.8**	**9.9**
Bolsa Família [Family Grant] / Auxilio Brasil [Brazil Aid]	88.1	168.7	170.5	**1,8**	**1.1**	**82.4**	**93.5**
Court-ordered debt (cost and capital)	17.3	26.2	25.5	**-0.7**	**-2.7**	**8.2**	**47.0**
FUNDEB Supplementation	32.9	37.8	39.4	**1.6**	**4.2**	**6.5**	**19.8**
Subsidies and Grants	15.3	22.5	15.8	**-6.7**	**-29.6**	**0.5**	**3.4**
Legislative, Judiciary, MPU and DPU	15.0	20.7	16.6	**-4.1**	**-19.9**	**1.6**	**10.6**
Payroll tax reduction	3.1	0.0	0.0	**0.0**	**-**	**-3.1**	**-100.0**
Extraordinary Credits	47.0	4.8	4.8	**0.0**	**0.0**	**-42.2**	**-89.9**
Other compulsory expenses	153.1	181.7	166.7	**-15.0**	**-8.2**	**13.6**	**8.9**
Executive Branch Discretionary	152.1	193.9	168.8	**-25.0**	**-12.9**	**16.7**	**11.0**

Source: National Treasury, Primary Revenue and Expenditure Assessment Reports and IFI. Elaboration: IFI.

The projection for RGPS spending was revised upwards by incorporating the execution until March 2023. Excluding the expenses with judicial sentences and court-ordered debts, the nominal growth of accumulated social security expenses from January to March was 9.8% compared to the same period in 2022. This percentage for the growth in social security spending in the first quarter is slightly higher than projected by the IFI in the baseline scenario for 2023. Until the November revision, we expected nominal growth of 11.7%, and now the projection indicates growth of 9.5% in 2023. Considering judicial sentences and court-ordered debts, which, it is worth saying, are limited by Ecs No. 113 and 114, the growth was 11.1%, and now it is 9.3%. With this, the projection for RGPS expenditures rose from R$ 880.5 billion to R$ 870.9 billion, compared to the R$ 864.8 billion estimated by the Executive Branch in the last bimonthly evaluation[24] In relation to 2022, the R$ 870.9 billion would represent a nominal growth of 9.3%, reflecting the effect of the real readjustment of the minimum wage on the projection of this expense item.

In line with the revision of the RGPS, spending on BPC also showed a slight increase in the projection for 2023. According to IFI's projections, in 2023, the increase in BPC expenditure, excluding sentences and court-ordered debts, would be 10.2%, and the expense would reach R$ 84.4 billion. When incorporating the projection with sentences and court-ordered debts, the estimate for 2023 reaches R$ 86.6 billion, below the R$ 90.6 billion estimated in November 2022. The Executive Branch's current projection is somewhat higher: R$ 90.6 billion.

[24] Available at: https://sisweb.tesouro.gov.br/apex/f?p=2501:9::::9:P9_ID_PUBLICACAO:47037.

Expenditure with the Bolsa Família [Family Grant] program is expected to be R$ 170.5 billion, reflecting the joint impact of the program's reformulation and the registration review that is being carried out by the government. From January to May, the Bolsa Família Program (PBF) expense was R$ 68.4 billion. According to data from the Ministry of Citizenship, in May, an average amount of R$ 672.45 (US$ 397.22) was paid per family, totaling R$ 14.1 billion in monthly expenses with the program. The IFI's projections consider the maintenance of this value for the rest of the year, that is, without significant changes in the number of families benefited or in the average monthly ticket[25].

The PBF, replacing the Auxílio Brasil prog'am, was created in early 2023 through Provisional Measure No. 1,164 of March 2, 2023.[26] The benefit consists of the direct transfer of (i) income to the families, in the minimum value of R$ 600 per family, (ii) an additional benefit of R$ 150 per child from 0 to 6 years old, and (iii) a benefit of R$ 50 per pregnant woman, child and adolescent up to 18 years old. The income considered for eligibility to the PBF has also increased, so the number of eligible families should increase.[27]

2.2.2 Scenarios for the primary balance

In the baseline scenario, the IFI projects a primary deficit of R$ 104.7 billion, or 1.0% of GDP, in 2023 (Table 10). In relation to 2022, the IFI estimates a worsening of 1.5 p.p. of GDP due to (i) increases in the forecast of expenses due to the effectiveness of EC 126, which allowed a *waiver* for 2023, with the condition that the government presents a new fiscal framework, replacing the current spending ceiling, and (ii) a reduction in the forecast of revenues not managed by the federal revenue, due to an expected decrease in revenues associated with the commodities sector for this year, in relation to the shocks observed in 2022. The government's current projection for the primary deficit is a little worse, at R$ 136.2 billion.

TABLE 10. CENTRAL GOVERNMENT PRIMARY BALANCE – BASELINE SCENARIO

Discrimination	2022 (realized)		2023 (IFI baseline scenario)		Difference	
	R$ bi	% PIB	R$ bi	% PIB	R$ bi	% PIB
Total Revenue	2,313.3	23.3	2,360.3	22.4	47.0	-1.0
Transfers to States and Municipalities	457.2	4,.6	47.6	4.5	15.4	-0.1
Net Revenue	1,856.1	18.7	1,887.7	17.9	31.6	-0.8
Primary Expenditure	1,802.0	18.2	1,992.4	18.9	190.4	0.7
Mandatory	1,649.9	16.6	1,823.6	17.3	173.7	0.6
Discretionary (Executive Branch)	152.1	1.5	168.8	1.6	16.7	0.1
Primary balance	54.1	0.5	-104.7	-1.0	-158.8	-1.5
Primary target	**-170.5**	**-1.7**	**-65.9**	**-0.6**	**104.6**	**1.1**

Source: National Treasury Secretariat and IFI. Elaboration: IFI.

In the optimistic scenario, the projection is for a primary deficit of 0.6% of GDP in 2023, against a deficit of 1.0% in the baseline scenario (Graph 12). As for the period from 2025 to 2032, projected net revenues should average 18.8% of GDP, up from the 18.1% of GDP projected in the current baseline scenario for the same period. On the other hand, expenditures present an average of 17.5% of GDP, below the baseline scenario average of 18.5% of GDP. Thus, the projection for the primary balance, in the optimistic scenario, varies from a deficit of 0.6% of GDP in 2023, after a deficit of 0.4% in 2021, and from a surplus of 0.5% in 2022 to a surplus of 2.2% of GDP in 2032.

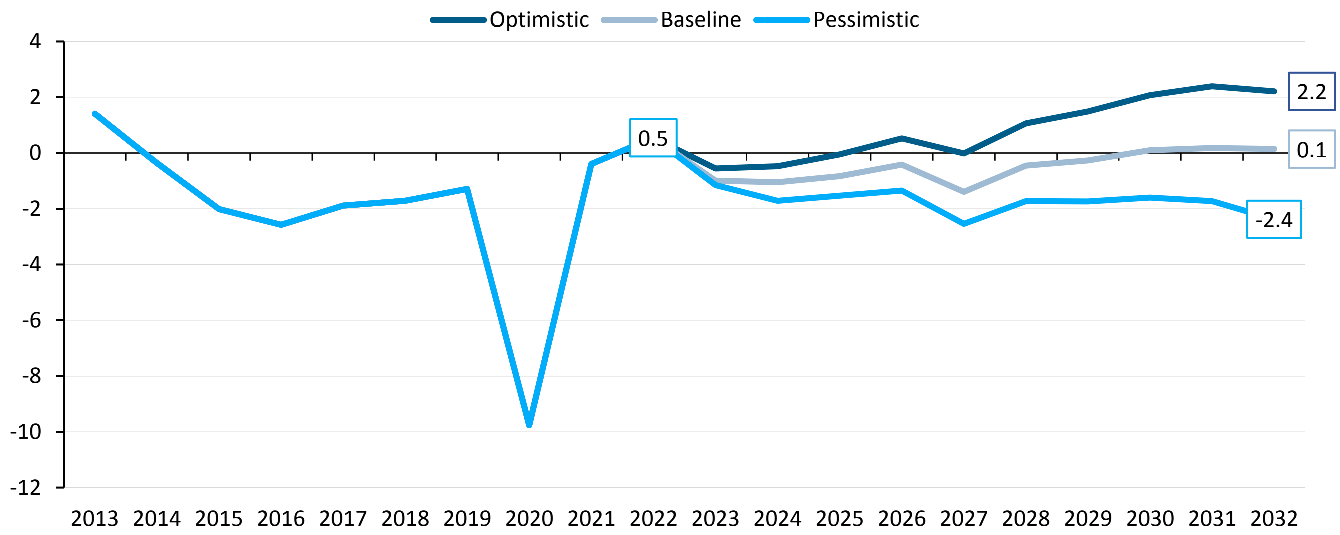
The primary deficit estimated in the pessimistic scenario will reach R$ 121.2 billion or 1.2% of GDP in 2023. Between 2025 and 2032, net revenues are estimated at 17.3% of GDP, by annual average, about 1.0 p.p. below those

[25] See https://www.mds.gov.br/webarquivos/MDS/2_Acoes_e_Programas/Bolsa_Familia/Informes/2023/Informe_Bolsa_Familia_N_8.pdf.
[26] Available at: https://www.congressonacional.leg.br/materias/medidas-provisorias/-/mpv/156003.
[27] For more details, see https://www.gov.br/pt-br/noticias/assistencia-social/2023/03/o-bolsa-familia-e-um-programa-da-sociedade-brasileira-diz-lula/cartilha_bolsa_familia.pdf.

estimated in the baseline scenario. On the expenditure side, the yearly average projected for the period is 19.0% of GDP, higher than the average of the baseline scenario by 0.5 p.p. of GDP. Unlike the other two scenarios, in the pessimistic one, the primary balance does not become positive, and the deficit even increases again at the end of the forecast period.

Graph 12 compares the central government primary balance curves in the three current scenarios: baseline, optimistic and pessimistic, as a percentage of GDP.

GRAPH 12. PRIMARY BALANCE - IFI SCENARIOS (% OF GDP)



Source: Treasury (2013 to 2022) and IFI (following years).

2.2.3 New fiscal framework: PLP No. 93 of 2023

The Bill of Supplementary Law (PLP) No. 93 was presented by the Executive Branch on April 18, 2023, to comply with the provisions of Art. 6 of Constitutional Amendment (EC) No. 126, of December 21, 2022, which established that the President of the Republic should send to the National Congress a proposal to institute a sustainable fiscal regime.

The deadline foreseen in Art. 6 of EC 126 was compatible with the deadline for sending the Annual Budget Bill (PLOA). The anticipation of the disclosure of the new fiscal rule, however, was done to allow the elaboration of the Budget Guidelines Bill (PLDO) to be made based on the new rules foreseen in the presented PLP. The new fiscal framework has also contributed to reducing uncertainty and, consequently, fiscal risk.[28]

The project's rapporteur, federal deputy Cláudio Cajado (PP-BA), presented on May 16th a substitute to PLP 93[29]. This substitute brought an important change in relation to what was foreseen in the proposal originally sent by the Executive Branch: the applicability, even if partial, of item VIII of Art. 163 of the Federal Constitution.

To put it into context, item VIII of Art. 163 of the FC was inserted in 2021 by EC 109 (EC of Fiscal Emergency) and foresees that a complementary law will dispose about the sustainability of the public debt. On the other hand, EC 126 (Transition EC) established in Art. 6 that a complementary law should institute a sustainable fiscal regime but does not associate that regime or the concept "sustainable" with Art. 163. In this sense, the proposal of the new fiscal framework sent by the Executive Branch had not explicitly considered the compatibility of the fiscal rules with item VIII of Art. 163 of the FC, so the inclusion made by the rapporteur was positive in this aspect.

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[28] As evidenced in the April IFI Fiscal Follow-up Report: https://www2.senado.leg.br/bdsf/bitstream/handle/id/608922/RAF75_ABR2023.pdf.
[29] An infographic is available at: https://www.camara.leg.br/internet/agencia/infograficos-html5/novo-arcabouco-fiscal/index.html.

The first part of the PLP provides for the creation of the "sustainable fiscal regime" and establishes that it will apply only to the federal fiscal and social security budgets, and that its objective is to ensure macroeconomic stability and create the right conditions for socioeconomic growth. Still in that chapter, PLP 93 deals with the limitations and conditions regarding creating expenses and revenue waivers. It is worth noting that these topics are already part of the current Brazilian fiscal framework.

The28econdd chapter of the New Fiscal Framework (NAF), the name given to PLP 93 of 2023, deals with the fiscal targets for primary balance. In this chapter, the original version of the NAF brings three innovations in relation to the regime currently in force in the country: (i) tolerance intervals for primary balance targets; (ii) medium-term fiscal framework; and (iii) definition of criteria for varying primary expenditures in each new legislature[30].

Currently, the Federal Government's primary balance targets are defined annually in the fiscal targets annex of the Budget Guidelines Law (LDO), as per the provisions of § 1 of Art. 4 of Complementary Law No. 101, of May 4, 2000 (Fiscal Responsibility Law – LRF). According to the LRF, the LDO will include this annex of fiscal targets in which "annual targets will be established, in current and constant values, related to revenues, expenses, nominal and primary results, and the amount of public debt, for the year to which they refer and for the following two years."

The NAF's proposal establishes that § 1 of Art. 4 will not apply to the Federal Government and provides instead that the annex of fiscal targets will include, for the fiscal year to which it refers and for the following three fiscal years, in current and constant values, the annual targets for the primary balance of the central government. A subtle difference is in the time horizon of the LDO projections, which are now four years (the year to which the LDO refers and the three following ones) and no longer three years, as foreseen in the LRF. However, while the original version sent by the Executive Branch emphasizes, in § 2, that the primary result target will only be for the fiscal year to which the LDO refers and that the following three would be only projections, the substitute approved on May 23[31] removes this distinction, maintaining the text as "annual targets" for the primary balance of the Federal Government for the fiscal year to which the law refers and the following three, besides providing that these primary results be compatible with the sustainable trajectory of the public debt.

Item II of Art. 2 of the NAF provides that the annex of fiscal targets will include tolerance ranges for the central government's primary balance targets. Thus, as the LDO bill was prepared to contemplate some elements of the new fiscal framework, this tolerance interval has already been considered in the budget guidelines for 2024 which are in Congress.

Regarding the tolerance intervals for the primary balance targets, the 2024 PLDO establishes, in Art. 2, that the goal for 2024, for the primary balance of the central government, is R$ 0.0 (zero real) and sets as a tolerance interval an upper limit of a R$ 28.8 billion surplus, and a lower limit of a R$ 28.8 billion deficit[32]. According to the parameters foreseen in the 2024 PLDO, this tolerance interval is equivalent to 0.25 p.p. of GDP, up or down.

In summary, this tolerance range will work like inflation targets, where there is the center of the target and the limits. If the realized inflation is within the band, the target is considered to be met, and if it is outside this range, either up or down, the target is considered not to have been met.

[30] This innovation was changed in the substitute text presented by deputy Cláudio Cajado on May 16 and approved as an urgent measure on May 23 by the House of Representatives.

[31] The rapporteur's opinion, with the text approved on May 23, can be found at: https://www.camara.leg.br/proposicoesWeb/prop_mostrarintegra?codteor=2277318&filename=Tramitacao-PLP%2093/2023.

[32] The 2024 PLDO sets the tolerance intervals only for the year 2024. In the IFI scenarios, this tolerance range (+/- 0.25 p.p.) was used for the entire predictive horizon, i.e. until 2032.

With regard to inflation targets, which are set for a three-year horizon by the National Monetary Council [CMN], in the event of non-compliance, i.e., if inflation at the end of the year falls outside the tolerance interval, the president of the Central Bank (BC) "must publicly disclose the reasons for non-compliance, through an open letter to the Minister of Finance, president of the CMN, containing a detailed description of the causes of non-compliance, the measures to ensure the return of inflation to the established limits, and the time frame within which the measures are expected to take effect."[33]

In the case of the primary balance targets, if it is above the maximum limit (primary surplus), it can be used to increase public investments in the following year. It is worth mentioning that this situation will not be considered a goal breach, so the upper limit of the primary target will only serve as an indicator to determine the investment bonus for the following year[34].

If the primary result falls below the minimum limit, the goal will be considered as not achieved, and, in this case, the sanction consists of a change in the rule that will correct the primary expenses. The rule states that primary expenditures should grow in line with the growth of revenues but are limited to 70% of revenue growth in cases where the primary target is met and 50% in cases where the target is not met.

Another sanction, brought by the bill's rapporteur in the House of Representatives, consists of partially or totally applying the provisions of Art. 167-A of the Federal Constitution.

The second major innovation in relation to the current regime is the provision for a medium-term fiscal framework (MTFF)[35]. This MTFF, subtly brought in the NAF wording, tries to introduce in the Brazilian budget process an important fiscal governance instrument, which is already adopted in several countries, the *medium-term expenditure framework* (MTEF).[36]

The figure below illustrates the tax rule under its different ramifications. Next, aspects of the text approved by the House of Representatives will be detailed.

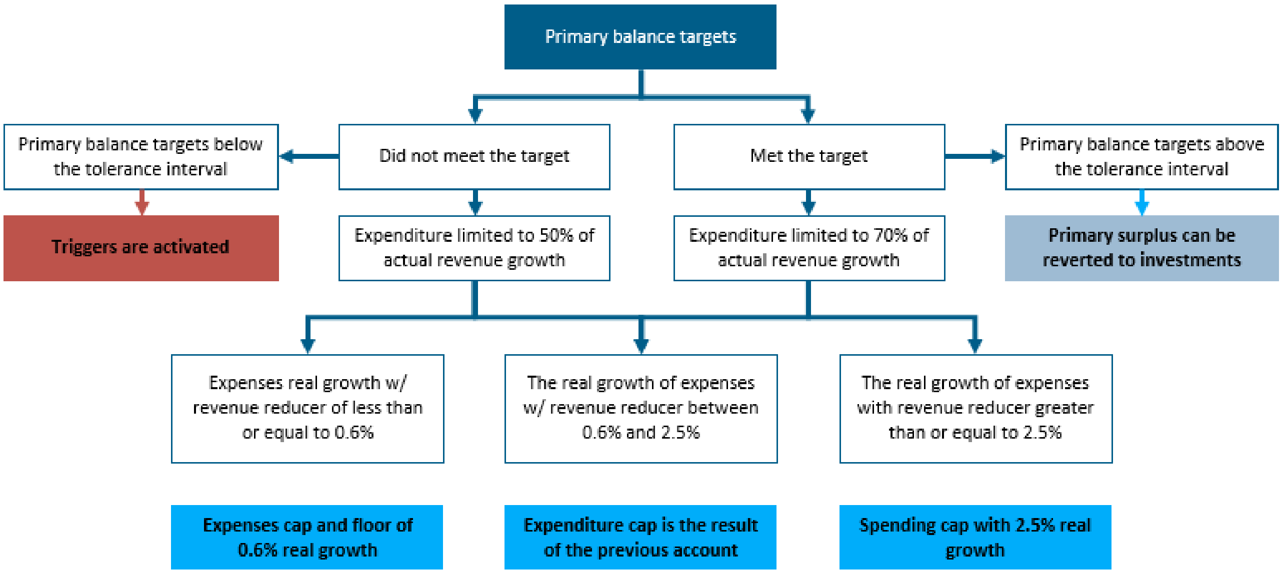
[33] See more at: https://www.bcb.gov.br/controleinflacao/metainflacao.

[34] In the rule proposed by the Executive, the use of the primary surplus was limited to R$ 25 billion, corrected by the inflation. However, with the new wording, the investments made due to excess of primary realization are limited to 0.25 p.p. of GDP.

[35] In the November 2017 issue of RAF, the IFI did an analysis on the different medium-term framework instruments. For more details, see: https://www2.senado.leg.br/bdsf/bitstream/handle/id/534520/RAF_10_Box_2.pdf.

[36] World Bank study details the MTEF and presents a case study for Brazil: https://documents1.worldbank.org/curated/en/354601468330959258/pdf/Beyond-the-annual-budget-global-experience-with-medium-term-expenditure-frameworks.pdf.

CHART 1. POSSIBLE OUTCOMES FOR THE NEW TAX RULE



Elaboration: IFI.

The text approved by the House of Representatives inserted the theme of debt sustainability. According to the PLP, debt sustainability occurs with "the establishment of primary result targets until the DBGG/GDP ratio stabilizes. The time horizon proposed in the text is ten years so that the Federal Government must demonstrate the expected effect and compatibility, in the medium term, of meeting the primary balance targets on the trajectory of convergence of the public debt, showing the levels of fiscal results consistent with the stabilization of the General Government Gross Debt (DBGG) as a proportion of the GDP.

The project shows that fiscal adjustment measures must be adopted to achieve public debt sustainability. The list of measures adopted includes: (i) obtaining a primary balance compatible with the sustainability of the DBGG/GDP; (ii) adopting limits on expenditure growth; (iii) applying the triggers of Art. 167-A; and (iv) revenue recovery and management.

In the following, we will address each of the points and detail the measures.

(i) **Obtaining** a primary balance compatible with the sustainability of the DBGG/GDP.

According to the proposal, the primary balance compatible with debt sustainability will be achieved by adopting primary result targets for the reference year of the LDO and the following three years.

These targets now have tolerance intervals of +/- 0.25 p.p. of GDP. Adopting targets with tolerance intervals gives the government more flexibility and is in line with one of the principles found in the international literature.

If the realized primary result is above the upper limit of the target tolerance range, there is an investment bonus. If it falls below the lower limit of the tolerance interval, there are two penalties: (i) a lower percentage will be applied to the possible growth of primary expenditures (50% of the growth in revenues), and (ii) automatic triggers will be set in motion until the limit is restored.

(ii) **Adoption of** spending growth limits.

The new expenditure ceiling keeps some characteristics of the current rule. The new fiscal framework approved by the House of Representatives keeps some characteristics of the current model, such as the setting of a limitation per branch and the exclusion of some expenses from the rule. An important difference between the two models is in the concept of primary expenditure that will be subject to limitation. In the current rule, the verification of compliance with the ceiling is done by calculating the paid expenses (of the fiscal year, plus the rests to be paid), while in the new fiscal framework, the concept adopted will be the budget appropriation. Another important difference is that we now have, besides a ceiling, a floor for total primary expenditures.

The real growth of budget appropriations could vary between 0.6% and 2.5% per year. According to the new fiscal framework, the floor for real expenditure growth will be 0.6%, and the ceiling 2.5%. The growth of expenses will be linked to the growth of revenues and will respect the system illustrated with formulas below in Chart 1.

CHART 2. ASCERTAINMENT OF ANNUAL LIMITS (COMMON TO ALL YEARS)

If...	then...
$(\alpha \cdot \Delta\%Rec_{t-1}) \leq 0.6\%$	$\Delta\%Desp_t = 0.6\%$
$0{,}6\% < (\alpha \cdot \Delta\%Rec_{t-1}) < 2.5\%$	$\Delta\%Desp_t = (\alpha \cdot \Delta\%Rec_t)$
$(\alpha \cdot \Delta\%Rec_{t-1}) \geq 2.5\%$	$\Delta\%Desp_t = 2.5\%$

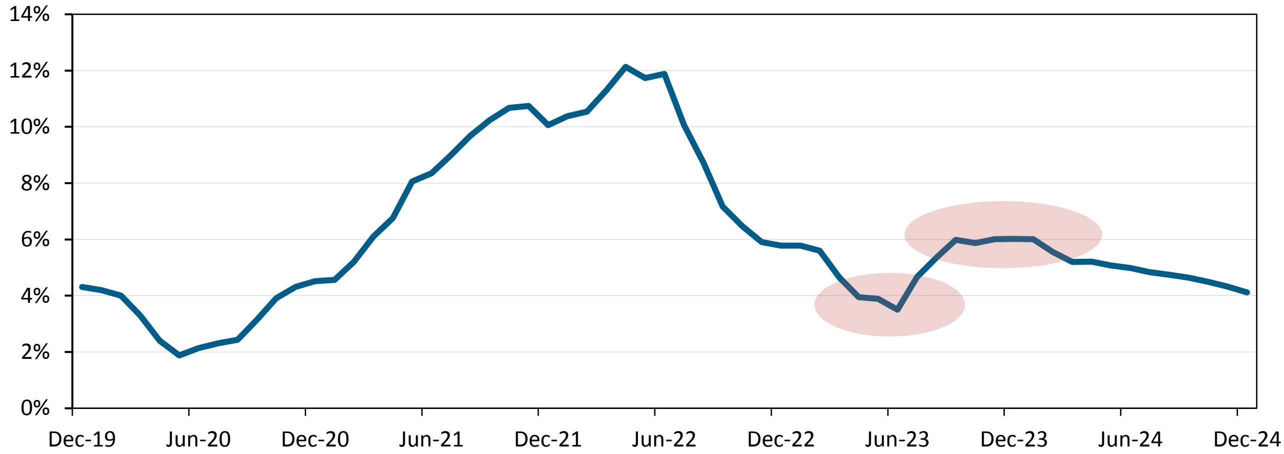
The parameter α can assume two values: 70% or 50%. It will be 70% if the primary target is met and 50% if the primary falls below the lower limit of the tolerance interval.

The calculation basis for the first year of the new fiscal framework considers the 2023 LOA. According to § 1 of Art. 3 of PLP 93, the budget appropriations contained in the 2023 LOA (Law No. 14,535, of 2023), plus supplementary (CS_{2023}) and special (CE_{2023}) credits, in effect on the date PLP 93 is enacted, will compose the calculation basis for the first year the rule is in effect. Thus, the calculation basis of the 2024 limit ($Base_{t=2024}$) will be:

$$Base_{t=2024} = LOA_{2023} + CS_{2023} + CE_{2023}$$

Inflation behavior this year may contribute to increasing the new expenditure ceiling by about R$ 42.2 billion. The new fiscal framework foresees that the inflation to be used to correct the expenditure ceiling will be the 12-month accumulated inflation rate until June of the year before the fiscal year of reference (Art. 4). According to PLP 93, if the accumulated inflation in the 12 months to December is higher than the inflation used to correct expenses, this excess can be used to increase expenses through supplementary credits, respecting the tolerance intervals for the real growth of expenses of, at least, 0.6% and, at most, 2.5%. These credits cannot be incorporated into the calculation basis of the following years' limits, except for 2024. Since the estimated mid-year inflation (accumulated over 12 months until June 2023) is expected to be 2 p.p. lower than the inflation at the end of that year, this excess could result in a potential increase in expenses of R$ 42.2 billion. The graph below and the table that follows illustrate this situation.

GRAPH 13. IPCA ACCUMULATED IN 12 MONTHS (%)



Source: IBGE and IFI. Prepared by: IFI.

TABLE 11. DIFFERENCE IN PERCENTAGE POINTS BETWEEN JUNE AND DECEMBER 2023 INFLATION (% AND P.P.)

IPCA accumulated over 12 months		
	FOCUS	**IFI**
Jun/23	3.8	4.0
Dec/23	5.8	6.0
Δ p.p.	**2.0**	**2.0**

Source: Central Bank and IFI. Elaboration: IFI.

An article included by the rapporteur allows additional supplementation for 2024. The Art. 15, included in the substitute of PLP 93, allows the government to use the difference between the revenue growth forecast for 2024 and the revenue growth used to define the 2024 limit for opening supplementary credits. The same article defines that if the forecast is not confirmed, the difference must be made up in the following year's ceiling. This provision makes it possible to open supplementary credits if 2024 revenues grow at levels above the forecast for the middle of that year.

The rule makes it possible for the opening credits of 2024 to compose the limits of 2025. Paragraph 1 of article 4 explains that the difference between inflation ascertained at the end of June and the end of December may be used as a supplementary credit, but these credits will not compose the calculation base for future limits. However, this rule will not apply to credits opened in 2024, which will be incorporated into the calculation basis of the expenditure ceiling.

The new fiscal framework reduces the number of exceptions to the expenditure ceiling rule. The text sent by the Executive Branch and the one approved by the House of Representatives differ greatly regarding the exceptions to the proposed limit. The chart below compares the expense items that were excluded from the limits and basis for calculating the rule in both versions of the bill.

CHART 3. EXCEPTIONS TO THE NEW FISCAL FRAMEWORK - INITIAL TEXT X SUBSTITUTE BILL

Initial text of PLP No. 93, of 2023	Substitute to PLP No. 93, of 2023
§2 The calculation basis and the limits established in this article do not include:	**§2 The calculation basis and the limits established in this article do not include:**
I - the constitutional transfers established in § 1 of Art. 20, in item III of the sole paragraph of Art. 146, in § 5 of Art. 153, in Art. 157, in items I and II of the head of Art. 158, in Art. 159 and in § 6 of Art. 212, <u>the expenses referring to item XIV of the head of Art. 21, all of the Constitution, and the complements dealt with in items V and VII of the head of Art. 60 of the Transitory Constitutional Provisions Act;</u>	I - the transfers established in § 1 of Art. 20, in item III of the sole paragraph of Art. 146, in § 5 of Art. 153, in Art. 157, in items I and II of the head of Art. 158, in Art. 159 and in § 6 of Art. 212 of the Federal Constitution;
II - the supplementations dealt with in items IV and V of the head of Art. 212-A of the Constitution;	
III - the extraordinary credits referred to in § 3 of Art. 167 of the Constitution;	II - the extraordinary credits referred to in § 3 of Art. 167 of the Federal Constitution;
IV - the transfers to the health funds of the States, Federal District and Municipalities, in the form of complementary financial resources for compliance with the national base salaries for nurses, nursing technicians, nursing auxiliaries and midwives, in accordance with the provisions of paragraphs 12, 13, 14 and 15 of Art. 198 of the Constitution;	
V - expenses with socio-environmental or climate change-related projects funded with resources from donations, and expenses with projects funded with resources resulting from judicial or extra-judicial agreements signed as a result of environmental disasters;	IIII - expenses in the amounts that refer to resources funded by donations or resources resulting from judicial or extra-judicial agreements signed to repair damage as a result of a disaster.
VI - the expenses of federal public universities, of federal public companies that provide services to federal university hospitals and federal institutions of education, science and technology, linked to the Ministry of Education, and other scientific, technological and innovation institutions funded with their own revenues, from donations or from agreements, contracts or other sources, entered into with other federal entities or private entities;	IV - the expenses of federal public universities, federal state-owned companies that provide services to federal university hospitals and federal institutions of education, science and technology, linked to the Ministry of Education, and other scientific, technological and innovational institutions funded with their own revenues, from donations or from agreements, contracts or other sources, entered into with other federal entities or private entities;
VII - expenses funded with resources originating from transfers from the other federal entities to the federal government for the direct execution of engineering works and services;	V - expenses in the amounts funded with resources coming from transfers from the other federal entities to the Federal Government destined to the direct execution of engineering works and services;
VIII - expenses for compliance with the provisions of §20 of Art. 100 of the Constitution, of §3 of Art. 107-A of the Transitory Constitutional Dispositions Act and the monetary updating of the court-ordered debts enrolled in the fiscal year;	VI - expenses for compliance with the provisions of §20 of Art. 100 of the Federal Constitution, of §3 of Art. 107-A of the Transitory Constitutional Dispositions Act;
IX - expenses for compliance with the provisions of Art. Constitutional Amendment No. 114, of December 16, 2021;	Art. 13. Court-ordered debt obligations arising from demands related to the Federal Government's supplementation of the Fund for Maintenance and Development of Basic Education and the Appreciation of Teaching (Fundef), as established in Art. 4 of Constitutional Amendment No. 114, of December 16, 2021, shall not be included in the calculation basis and in the limits for the Executive Branch established under Art. 3 of this Complementary Law.
X - non-recurring expenses of the Electoral Justice for holding elections;	VIII - non-recurring expenses of the Electoral Justice for holding elections;
XI - expenses related to capital increase of non-financial and non-dependent state-owned companies;	
XII - the legal transfers established in subitems "a" and "b" of the item II of the head of Art. 39 of Law No. 11.284, of March 2, 2006, and in Art. 17 of Law No. 13,240, of December 30, 2015; and	IX - the legal transfers established in subitems "a" and "b" of the item II of the head of Art. 39 of Law No. 11.284, of March 2, 2006, and in Art. 17 of Law No. 13,240, of December 30, 2015; and
XIII - expenses related to charging for the management of water resources by the National Water and Basic Sanitation Agency, in accordance with the provisions of Law 9433 of January 8, 1997, and Law 10881 of June 9, 2004.	
§ 6 For the purposes of this head, the acts practiced in compliance with the provisions in § 11 and § 21 of Art. 100 of the Constitution.	VII - expenses for compliance with the provisions of paragraphs 11 and 21 of Art. 100 of the Federal Constitution.

Source: House of Representatives. Prepared by: IFI.

(iii) **Application** of triggers foreseen in Art. 167-A.

According to the approved text, the situations in which sanctions can be applied are:

a) mandatory primary expenditures as a percentage of total primary expenditures greater than 95%.
All triggers provided by Art. 167-A apply, **except for** the one forbidding the concession or extension of tax incentives or benefits.

b) primary below the lower limit of the tolerance interval in the first year.
Only the following prohibitions apply:
(a) creation of positions, jobs, or functions that imply an increase in expenses.
(b) changes in career structure that imply an increase in expenses.
(c) creation or increase of aids, bonuses, allowances, representation funds or benefits of any nature.
(d) concession or expansion of a tax benefit or incentive.

c) primary below the lower limit of the tolerance interval from the second year on.
All triggers provided by Art. 167-A.

Cases (ii) and (iii) can be replaced, partially or totally, by a complementary bill with adjustment measures that compensate for the savings generated by the application of the triggers.

According to PLP 93, the trigger referring to the prohibition of adopting measures that imply an increase of mandatory expenses above the inflation rate does not apply to the appreciation of the minimum wage.

(iv) **revenue recovery** and management.

The project did not address the issue. The great point of uncertainty regarding the sustainability and credibility of the framework lies in the capacity to generate revenues capable of meeting the expected primary balance targets.

The IFI assesses that the NAF confers greater flexibility concerning the current fiscal regime (expenditure ceiling instituted by EC 95, 2016) but it is extremely complex. A not-so-recent study by the International Monetary Fund (IMF) presented three principles for future reforms in countries' fiscal rules. The study is from 2018.

According to the study, in which the tax rules of more than 90 countries were examined, in order to increase the effectiveness of tax rules, it is necessary that they have several features, such as (i) wide coverage, (ii) limits on tax aggregates based on strong economic principles, and (iii) a design that encourages saving of resources in good times. The three principles for good fiscal rule design, noted in the report, indicate that the rule set should (i) be uniform and ensure debt sustainability, (ii) have incentives to improve compliance, and (iii) be flexible enough but without sacrificing simplicity too much.[37]

The changes made in the text approved by the House of Representatives try to reinforce two of the three principles pointed out in the IMF study, namely: to ensure the sustainability of the debt and to have incentives to improve compliance with the rules. However, the principle of simplicity has not been met in this draft of the new tax framework.

Finally, the chart below explains the main differences between the proposal of the Executive Branch and the substitute bill presented by Deputy Cláudio Cajado (PP-BA), approved on May 23, mainly in terms of desirable aspects for tax rules, according to international experience.

[37] The study can be accessed at: https://www.imf.org/external/datamapper/fiscalrules/sdn1804-on-second-generation-fiscal-rules.pdf.

CHART 4. COMPARISON OF THE BILLS

Aspect	Original Executive Bill	Substitute Bill
Debt Sustainability	It did not mention.	Incorporates the provisions of item VIII of Art. 163 of the Federal Constitution.
Duration of the parameters	Change every new legislature.	The parameters are fixed, that is, without periodic change.
Sanction in case of non-compliance with the primary target	None. (Note: there is a penalty in relation to the expenditure ceiling rule).	It uses the triggers foreseen in Art. 167-A of the FC as a sanction. (Note: triggers may be suspended if PLP with adjustment measures is sent).
Safeguard mechanisms and safe return to the limit	Maintained the current expenditure ceiling mechanism by excluding extraordinary credits from the limit.	Maintained the current expenditure ceiling mechanism by excluding extraordinary credits from the limit.
Simplicity	The rule is extremely complex	The rule is extremely complex.
Applicability	Dependence on revenues not yet realized can influence this point. Adjustable parameters make the rule better to apply; however, there were no criteria for setting these parameters.	Dependence on revenues not yet realized can influence this point.
Public investment protection	Incorporated through a floor and bonuses in case of a primary balance excess.	Incorporated through a floor and bonuses in case of a primary balance excess. The possibilities of government spending cuts become limited.
Flexibility	The rule is more flexible than the current expenditure ceiling one.	The rule is more flexible than the current expenditure ceiling one.
Effect on spending rigidity	Mandatory expenditures in relation to total primary expenses go from 90.5% to 93.3% with the new rule. (Note: this occurs if the investment floor becomes classified as mandatory)	Mandatory expenditures in relation to total primary expenditures go from 90.5% to 93.3% with the new rule. (Note: this occurs if the investment floor becomes classified as mandatory)

Elaboration: IFI.

3. SCENARIOS FOR THE PUBLIC DEBT

The updated scenarios for the General Government Gross Debt (DBGG) for the 2023 to 2032 horizon are presented below, considering the projections presented in the previous sections for macroeconomic and fiscal variables.

According to the Central Bank, the DBGG ended 2022 at 72.9% of GDP, a reduction of 5.4 p.p. in relation to December 2021. The drop in the indicator registered last year was mainly due to the growth in nominal GDP, responsible for the 8.0 p.p. reduction in the indicator, which was partially offset by the payment of nominal interest (+7.4 p.p.). Negative net debt issuance also helped to reduce (4.5 p.p.) the DBGG as a proportion of GDP last year.

In 2023, in the accumulated 12 months to March, the DBGG reached 73.0% of GDP. Even though the debt has remained relatively stable, the contribution of the nominal GDP to the evolution of the indicator was reduced from 8.0 p.p. to 1.5 p.p.. At the same time, the conditioning factors caused the debt to increase by 1.7 p.p., mainly due to interest payments (2.1 p.p.). The data, therefore, indicate a trend of lower nominal GDP contributions to the fall or even stability of the debt/GDP ratio in the months ahead, as predicted and discussed in the last scenario revision presented by the IFI in November 2022.

As will be discussed later in this text, the expected increase in the debt/GDP ratio in 2023 will occur due to the reversal of the primary balance of the consolidated public sector, which will go from a surplus of 1.3% of GDP in 2022 to a probable deficit of 1.4% of GDP in 2023. In addition, interest expense is expected to be a pressure factor for the debt this year. The IFI's projection for the implied real DBGG rate is 6.0% p.a. this year, down from the 4.8% p.a. realized in 2022.

The scenarios outlined by the IFI for the evolution of the gross debt in the coming years consider the substitute text to the PLP No. 93 of 2023[38], approved by the House of Representatives on May 23. The simulations carried out indicate that even with the approval of the fiscal framework, which will limit the growth of the central government's primary expenditures to percentages of the variation of recurrent net revenues, the stabilization of public debt would only be achieved with an increase in revenues (as a proportion of GDP), a situation in which the government would be able to meet the fiscal targets announced for the period from 2023 to 2026.

The intended recomposition of several primary expenditures will tighten the budget execution even further, giving the government less room to reduce discretionary spending. The projections calculated by the IFI for gross debt, given the macroeconomic and fiscal scenarios discussed above, indicate an increase in the indicator over the entire projection horizon (2023-2032).

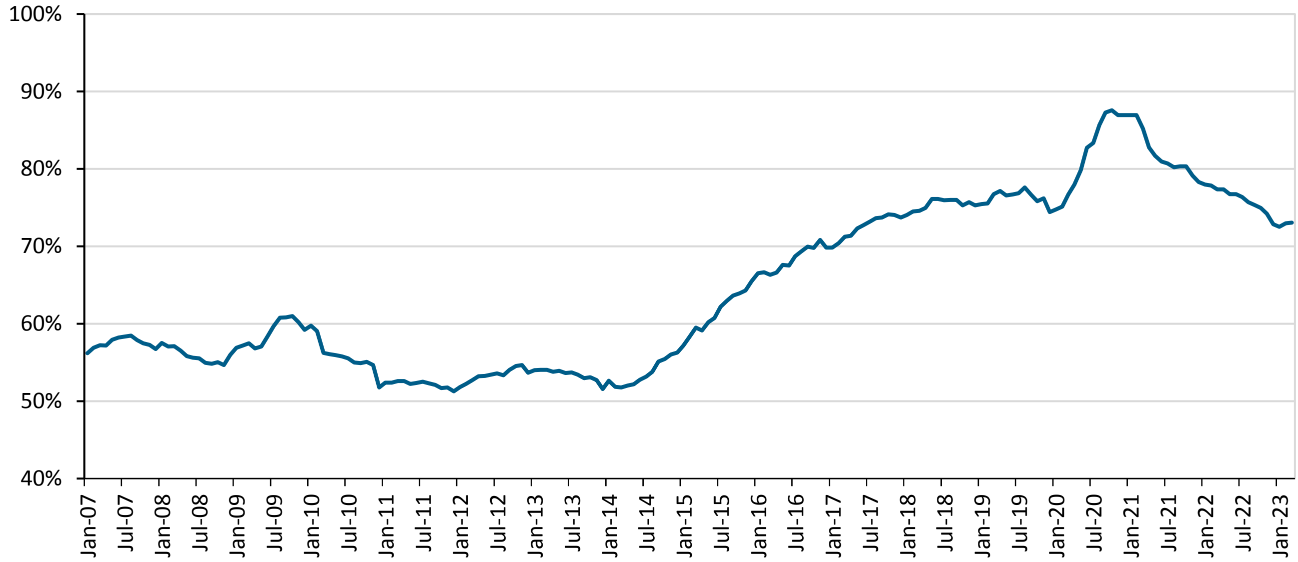
Of course, such debt trajectory could change if the government manages to raise the recurrent revenue considered for calculating the primary expenditure limits. The scenarios indicate that eventual revenue frustrations will bring difficulties in meeting the fiscal targets, besides constituting risks to fiscal policy credibility.

3.1 Recent evolution of interest and debt

Gross debt fell to 72.5% of GDP in January and then rose to 73.0% in the following months. Graph 14 shows the evolution of the DBGG as a proportion of GDP since January 2007. As of February 2021, the gross debt assumed a downward trajectory. In January 2023, the indicator reached the level of 72.5% of GDP, rising to 73.0% in February and remaining at the same level in March. By the end of 2023, as will be presented later in this text, the DBGG is expected to rise to the level of 78.1% of GDP in the baseline scenario.

[38]Link to the page for following the proceedings of the matter https://www.congressonacional.leg.br/materias/materias-bicamerais/-/ver/plp-93-2023.

GRAPH 14. DBGG AS A PROPORTION OF GDP



Source: Central Bank. Prepared by: IFI.

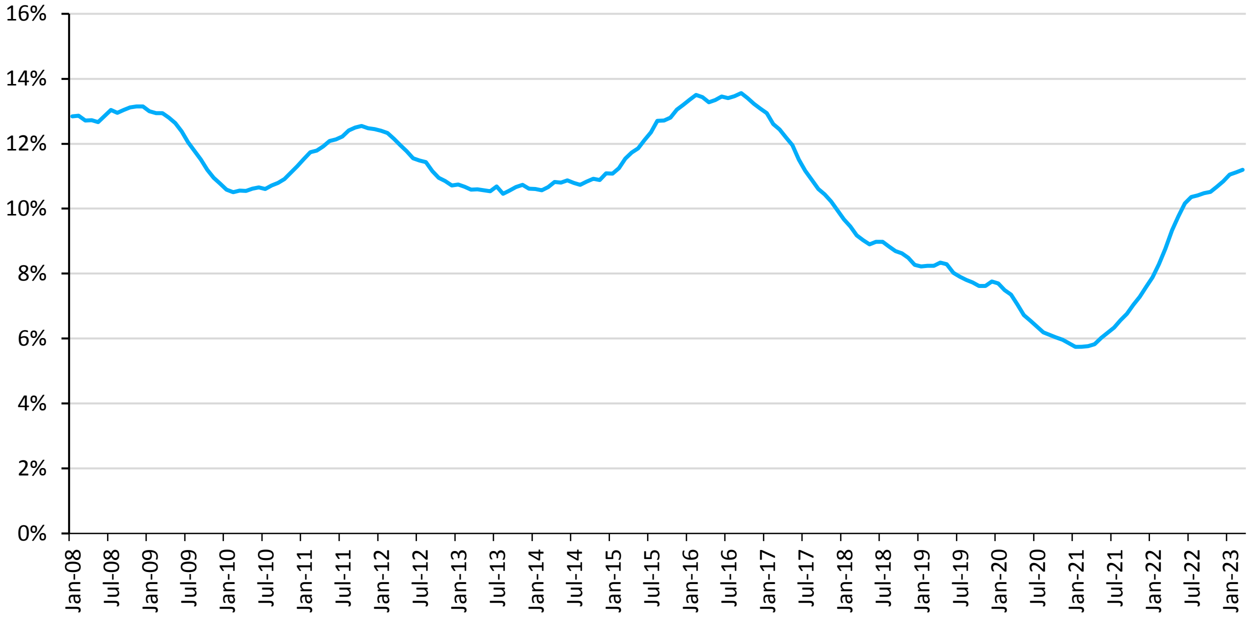
Debt fell due to nominal GDP, but the average cost rose due to monetary tightening. In the latest scenario revisions, the IFI highlighted the effects of nominal GDP growth for reducing the debt/GDP ratio and the temporary nature of the phenomenon, determined by a positive commodity shock that favored Brazil in the months immediately following the most acute phase of the pandemic. The inflation underlying this context required the Central Bank to increase the economy's basic interest rates, which in turn affected the average cost of debt by making it more expensive for the Treasury to issue new bonds.

The implicit interest rate on gross debt began to rise in March 2021, when the Central Bank started the last monetary tightening cycle. In the second half of 2022, the pace of increase of the implicit rate decreased due to the cooling of inflation, which began to decrease due to reductions in PIS/Cofins and ICMS levied on gasoline and ethanol mainly. The maintenance of the Selic rate at relatively high levels continues to influence the cost of issuing new bonds (Graph 15).

In the 12 months to March 2023, according to the Central Bank, the implicit rate of the gross debt reached 11.2% p.a., up 2.4 p.p. in relation to the same month in 2022. As an illustration, in February 2021, the implicit rate had reached 5.7% p.a. This upward movement of the rate is expected to persist, at least until the Central Bank starts reducing the Selic, which could happen before the end of 2023.

As discussed earlier, the increase in the implicit rate and the effects on the interest account were partially offset by the sharp rise in nominal GDP, which brought the debt down. The weakening of economic activity and the projected reversal of the public sector primary balance starting this year will affect the dynamics of the gross debt. Such effects may be magnified with the prospect of deficits materializing in the coming years.

GRAPH 15. DBGG IMPLICIT RATE - ACCUMULATED IN 12 MONTHS



Source: Central Bank. Prepared by: IFI.

In a 12-month comparison, the net interest payment of the public sector rose from R$ 284.2 billion (3.4% of GDP) in June 2021 to R$ 693.6 billion (6.8% of GDP) in March 2023 (Graph 16). This increase in public sector interest expenses, besides having canceled out part of the gains from the primary surplus in the last two years, should contribute to worsening the nominal result in the months ahead.

GRAPH 16. NOMINAL INTEREST EXPENDITURES OF THE CONSOLIDATED PUBLIC SECTOR ACCUMULATED IN 12 MONTHS (% OF GDP)

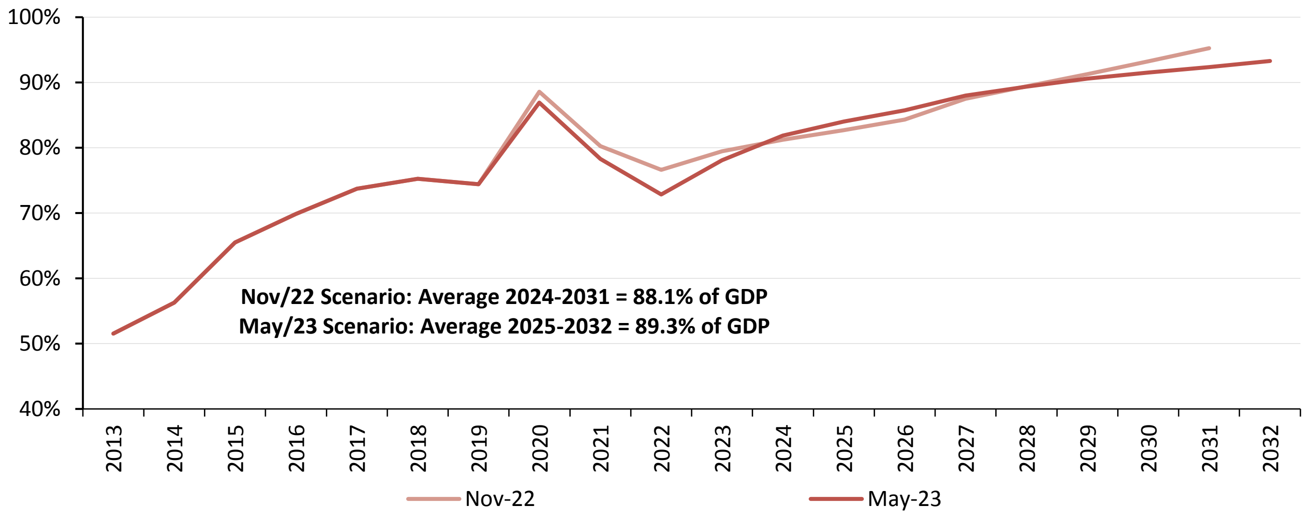
Source: Central Bank. Prepared by: IFI.

Table 15, at the end of the section, presents the projections for the nominal result of the consolidated public sector. That is, in addition to the primary balance of the central government, already discussed in the previous section, the trajectories for states, municipalities, and state-owned enterprises, as well as interest payments, are considered.

3.1.1 Forecasts

In the scenario revision presented in November 2022, the IFI projected gross debt at 79.5% of GDP in 2023. Now, the projection for the indicator is 78.1% of GDP at the end of the year. Contributing to this revision were the higher expected nominal GDP growth (from 6.0% in November 2022 to 6.4% now) and the lower debt level at the end of last year (Graph 17).

GRAPH 17. IFI PROJECTIONS FOR THE DBGG AT SELECTED MOMENTS IN TIME (2023-2032) - % OF GDP



Source: Central Bank. Prepared by: IFI.

An increase in debt starting this year will occur due to the projected public sector primary deficit. The projected increase in the DBGG as a proportion of GDP beginning in 2023 is largely explained by the reversal, already at the end of this year, of the public sector primary surplus to deficit. For this year and the next, the IFI projects primary public sector deficits of 1.4% of GDP. In the projection horizon (2023-2032), the primary deficits projected for the consolidated public sector result from estimated revenue growth lower than the amounts realized in the last two years, in addition to the projected increase in primary expenditures.

At the same time that primary deficits are projected for the coming years, in the medium term (2025-2032), nominal GDP should have an average annual growth of 6.0%, lower than the variations registered in 2021 (16.9%) and 2022 (11.4%). The real growth of the economy is expected to converge to around 2.0% per year, a lower variation than in 2021 (5.0%) and 2022 (2.9%).

An eventual payment of the stock of court-ordered payments of government debts in 2027 will affect the debt dynamics in the medium term. It is also necessary to consider for the dynamics of the debt in the coming years that, in 2021, a limit to expenses with court-ordered payments of government debts was introduced in the Constitution, relieving the budget execution in the short-term and reducing the federal government's primary expenses, which, consequently, favored its primary balance until 2026. The constitutional rule does not provide, however, how the stock of these court-ordered debts will be paid off after 2027. For this reason, the IFI considers that the accumulated debts will be fully paid off in 2027, which will produce an additional worsening in the primary balance of the central government (and the public sector, therefore) in that year.

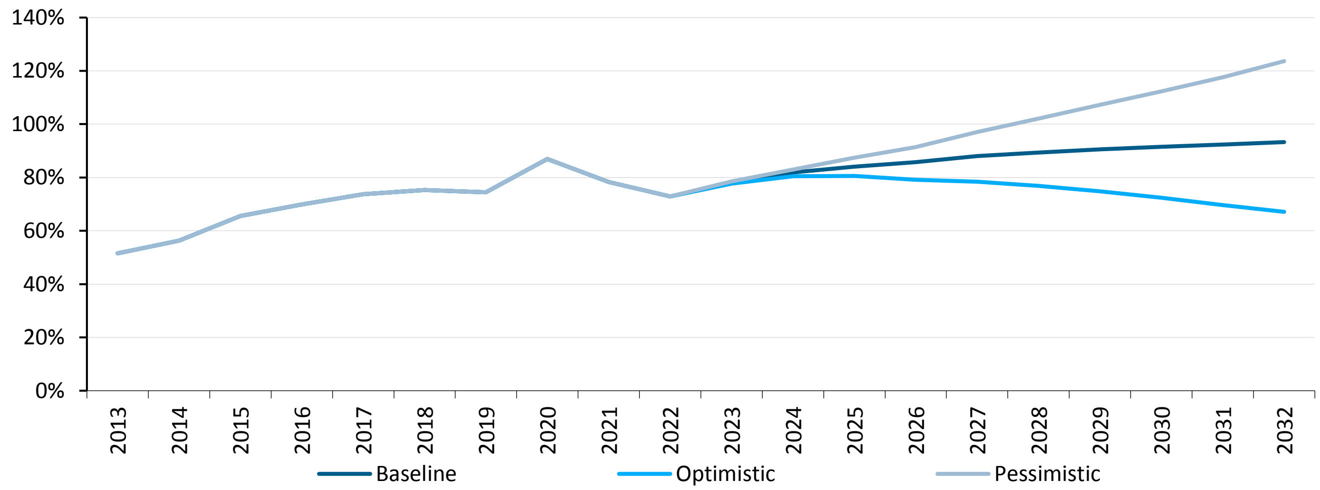
The return of payments of court-ordered debts in 2027 influences the trajectory of the DBGG as of that year, generating a jump of 2.3 p.p. in DBGG in the baseline scenario, which will rise from 85.7% of GDP in 2026 to 88.0% of GDP in 2027.

For 2023, in the optimistic and pessimistic scenarios, the IFI estimates the debt/GDP ratio at 77.7% and 78.6%, in that order. The baseline scenario predicts that the DBGG will reach the level of 93.3% of GDP in 2032, while in the optimistic and pessimistic scenarios, the debt would reach 67.1% and 123.7%, respectively.

Debt dynamics depend on meeting the stipulated primary result targets. Considering the macroeconomic parameters presented in the first section and given the trajectory of the expected public sector primary results, there will be an increase in the DBGG as a proportion of GDP in the coming years. This increase in debt exposes the challenges to meeting the central government's primary balance targets, which depend fundamentally on an increase in recurring primary revenues. It is important to highlight risks that may compromise the projected growth of the economy and, consequently, also undermine confidence in the sustainability of public accounts in the medium and long-term.

Graph 18 consolidates the expected trajectories in the three IFI scenarios.

GRAPH 18. IFI'S PROJECTIONS FOR THE DBGG IN THE DIFFERENT SCENARIOS - % OF GDP



Source: Central Bank. Prepared by: IFI.

Table 12 shows the average values of the main debt assumptions from 2023 to 2032. Table 13, in turn, shows the projections for the DBGG as a percentage of GDP in the three IFI medium-term scenarios.

TABLE 12. MAIN MACROECONOMIC AND FISCAL ASSUMPTIONS FOR THE DEBT SCENARIOS – AVERAGES FROM 2024 TO 2031 (NOV/22) AND 2025 TO 2032 (MAY/23) IN THE BASELINE SCENARIO

Baseline Scenario		
	Nov/22	**May/23**
Primary balance (R$ billion)	-139.6	-56.5
Primary balance (% of GDP)	-1.0%	-0.4%
Nominal GDP (R$ billion)	13,526	14,881
Real GDP growth (%)	2.0%	2.0%
Real implicit debt rate (% p.a.)	3.9%	3.9%
Gross debt (% of GDP)	**88.1%**	**89.3%**

*** In the Nov/22 revision, the medium term considered was the period from 2024 to 2031. In May/22, the average changed to considering the period from 2025 to 2032 as medium-term.*
Source: IFI.

TABLE 13. PROJECTIONS FOR THE DBGG IN % OF GDP UNTIL 2032 - RAF OF NOV/22 AND CURRENT

Year	Baseline		Optimistic		Pessimist	
	Nov/22	May/23	Nov/22	May/23	Nov/22	May/23
2017	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%
2018	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%
2019	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%
2020	88.6%	86.9%	88.6%	86.9%	88.6%	86.9%
2021	80.3%	78.3%	80.3%	78.3%	80.3%	78.3%
2022	76.6%	72.9%	76.5%	72.9%	76.7%	72.9%
2023	79.5%	78.1%	78.2%	77.7%	81.2%	78.6%
2024	81.2%	81.9%	77.2%	80.4%	87.2%	83.0%
2025	82.7%	84.0%	76.1%	80.6%	94.4%	87.5%
2026	84.3%	85.7%	74.7%	79.1%	101.1%	91.4%
2027	87.5%	88.0%	73.6%	78.4%	110.6%	97.1%
2028	89.4%	89.4%	71.8%	76.8%	118.9%	102.1%
2029	91.3%	90.6%	69.8%	74.8%	127.7%	107.2%
2030	93.2%	91.5%	67.7%	72.4%	137.3%	112.3%
2031	95.3%	92.4%	65.5%	69.6%	147.6%	117.6%
2032	-	93.3%	-	67.1%	-	123.7%

Source: IFI.

Table 14 presents an exercise conducted by the IFI to illustrate the primary balance required to stabilize the DBGG as a proportion of GDP at the level of 78.1%, the projection for the indicator, in the baseline scenario, at the end of 2023.

TABLE 14. PRIMARY BALANCE REQUIRED TO STABILIZE GROSS DEBT AT 76.6% OF GDP

DBGG in t 78.1%		Implicit Real Interest from the DBGG							
		0.5%	1.0%	2.0%	3.5%	3.9%	4.1%	4.7%	5.9%
Real GDP (% p.a.)	0.5%	0.0%	0.4%	1.2%	2.3%	2.6%	2.8%	3.3%	4.2%
	1.0%	-0.4%	0.0%	0.8%	1.9%	2.2%	2.4%	2.9%	3.8%
	1.5%	-0.8%	-0.4%	0.4%	1.5%	1.8%	2.0%	2.5%	3.4%
	2.0%	-1.1%	-0.8%	0.0%	1.1%	1.5%	1.6%	2.1%	3.0%
	2.5%	-1.5%	-1.1%	-0.4%	0.8%	1.1%	1.2%	1.7%	2.6%
	3.0%	-1.9%	-1.5%	-0.8%	0.4%	0.7%	0.8%	1.3%	2.2%
	3.5%	-2.3%	-1.9%	-1.1%	0.0%	0.3%	0.5%	0.9%	1.8%

Source: IFI elaboration.

The primary balance required to stabilize the debt as a proportion of GDP would be 1.5% in the medium term. For example, with an implicit interest rate on gross debt at 3.9% p.a. and GDP growth of 2.0% (average projections for the medium term in the baseline scenario), the primary surplus required to stabilize the DBGG at 78.1% of GDP is 1.5%. Table 14 indicates that the higher the interest rate, the higher the primary required to stabilize the debt. On the other hand, higher economic growth decreases the amount of primary balance required for this. Under the hypothesis of real interest rates at 2.0% p.a. and GDP growth of 3.5%, even a primary deficit of 1.1% of GDP would stabilize the gross debt at the level projected by the IFI for December 2023 (78.1% of GDP).

The trajectories for the nominal public sector result are affected by interest expenses. Finally, Table 15 presents the projections for the primary and nominal results, in addition to interest expenses in the three reference scenarios. The projections indicate the persistence of significant nominal deficits due to relatively high-interest expenses. Only in the optimistic scenario, in which the public sector achieves primary surpluses from 2026 on, does the nominal result assume a declining trend, although still in deficit.

TABLE 15. NOMINAL RESULT OF THE CONSOLIDATED PUBLIC SECTOR (% OF GDP)

Year	Baseline			Optimistic			Pessimist		
	Nominal result	Primary balance	Interest	Nominal result	Primary balance	Interest	Nominal result	Primary balance	Interest
2018	-7.0%	-1.5%	5.4%	-7.0%	-1.5%	5.4%	-7.0%	-1.5%	5.4%
2019	-5.8%	-0.8%	5.0%	-5.8%	-0.8%	5.0%	-5.8%	-0.8%	5.0%
2020	-13.3%	-9.2%	4.1%	-13.3%	-9.2%	4.1%	-13.3%	-9.2%	4.1%
2021	-4.3%	0.7%	5.0%	-4.3%	0.7%	5.0%	-4.3%	0.7%	5.0%
2022	-4.6%	1.3%	5.9%	-4.6%	1.3%	5.9%	-4.6%	1.3%	5.9%
2023	-8.8%	-1.4%	7.5%	-4.6%	-1.0%	3.6%	-5.3%	-1.7%	3.6%
2024	-8.4%	-1.4%	7.0%	-7.7%	-0.8%	6.9%	-9.4%	-2.4%	7.0%
2025	-7.4%	-1.1%	6.3%	-5.9%	-0.2%	5.8%	-10.4%	-1.7%	8.7%
2026	-6.4%	-0.6%	5.8%	-3.5%	0.5%	4.0%	-9.1%	-1.3%	7.7%
2027	-7.1%	-1.4%	5.7%	-4.3%	0.2%	4.4%	-11.1%	-2.4%	8.7%
2028	-6.1%	-0.5%	5.6%	-3.0%	1.1%	4.1%	-10.5%	-1.6%	9.0%
2029	-5.8%	-0.3%	5.5%	-2.4%	1.5%	3.8%	-10.8%	-1.5%	9.2%
2030	-5.3%	0.1%	5.4%	-1.6%	2.0%	3.6%	-10.9%	-1.3%	9.5%
2031	-5.1%	0.1%	5.3%	-1.0%	2.2%	3.3%	-11.3%	-1.4%	9.9%
2032	-5.1%	0.1%	5.2%	-0.9%	2.0%	3.0%	-12.2%	-1.9%	10.2%

Source: IFI.

3.2 Stochastic scenarios for debt

The probability of the DBGG exceeding 90% of GDP by 2027 was estimated at 43%. As done in the last mid-term scenario review RAF (issue #70, published in November 2022[39]), we supplement the three deterministic scenarios (baseline, optimistic and pessimistic) with stochastic scenarios, presented below. To do this, we simulated 1,500 stochastic scenarios[40] for the DBGG and combined them with our base case scenario, using a methodology inspired by the work of the European Commission[41], the IMF[42], and the *Office for Budget Responsibility*[43] (OBR, the UK's IFI). The stochastic scenarios make it possible to estimate probabilities concerning the trajectory of the public debt in the coming years. Given the assumptions contained in our baseline scenario, the probability of the DBGG crossing the 90% of GDP threshold in some year between 2023 and 2027 was estimated to be 43%.

It is important to note that the stochastic scenarios are not directly comparable to the other two deterministic scenarios (optimistic and pessimistic) because they are based on different assumptions. To construct **deterministic** scenarios, we assume that well-defined economic events, which have not necessarily occurred in the past, will happen in the future. In addition, they incorporate indispensable qualitative assessments about relevant fiscal events that the IFI sees as likely for the coming years.

The construction of the **stochastic** scenarios, in turn, is done by drawing successive random deviations from the baseline scenario. These deviations are drawn from a sample of historical deviations of debt determinants.

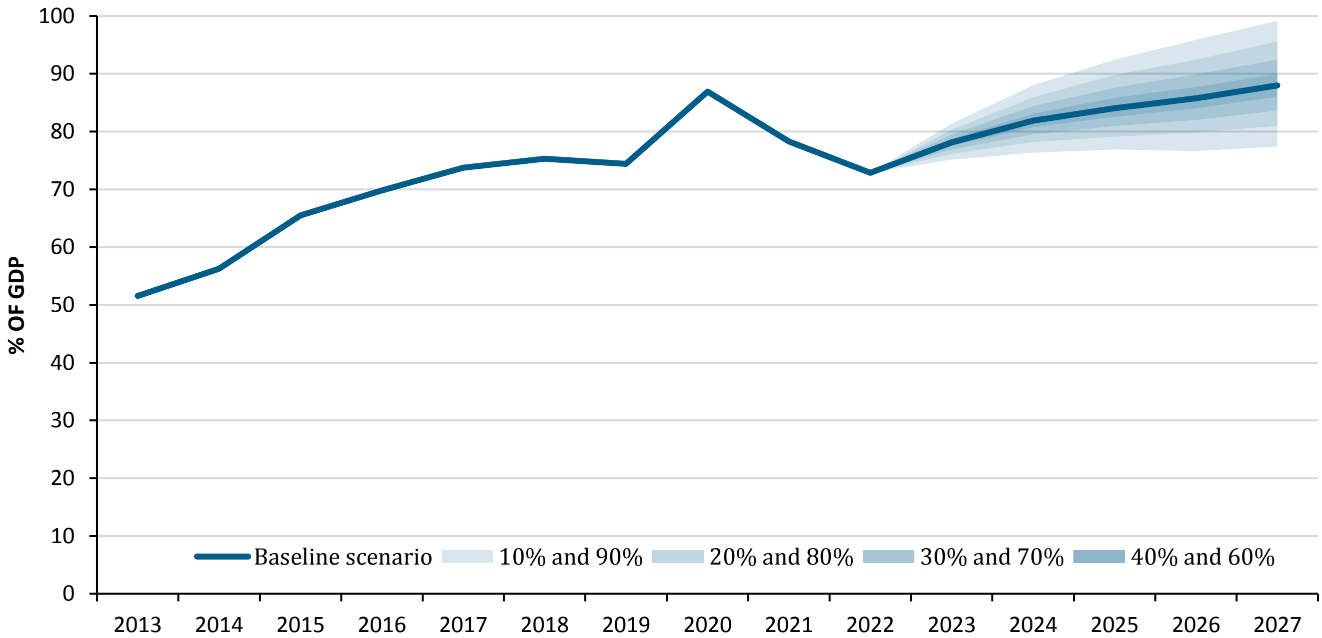
[39] Available at https://www2.senado.leg.br/bdsf/bitstream/handle/id/602493/RAF70_NOV2022.pdf.
[40] That is, scenarios that have random components to represent uncertain, unpredictable economic events.
[41] Berti, Katia (2013). *Stochastic public debt projections using the historical variance-covariance matrix approach for EU countries*. Economic papers, n. 480, p. 1-25, 2013. Available at: https://ec.europa.eu/economy_finance/publications/economic_paper/2013/ecp480_en.htm.
[42] di Giovanni, J. e Gardner, E. H. (2008). *A Simple Stochastic Approach to Debt Sustainability Applied to Lebanon*. IMF Working Paper No. 2008/097. Available at: https://www.imf.org/en/Publications/WP/Issues/2016/12/31/A-Simple-Stochastic-Approach-to-Debt-Sustainability-Applied-to-Lebanon-21891.
[43] Steel, Daniel (2021). *Evaluating forecast uncertainty with stochastic simulations*. OBR Working Paper No. 17. December 2021. Available at: https://obr.uk/docs/dlm_uploads/working_paper_no17_uncertainty.pdf.

Our deterministic and stochastic scenarios serve different purposes. The former seeks to highlight the trajectory of the DBGG in a situation where a sequence of alternative *but known and well-defined* economic events materialize; the stochastic scenarios seek to communicate the *uncertainty* about the future trajectory of the DBGG. For an explanation of the procedure, see subsection 3.3 of RAF #70.

In Graph 19, below, the values on the left axis indicate the percentage that the DBGG represents of GDP. The percentages at the end of the curves, on the right, indicate which percentile of the 1,500 simulated trajectories each line represents. For example, 60% of the simulated trajectories[44] lie below the line labeled "60%". In other words, in each year, 40% of the trajectories lie above this line. By 2027, the "60%" percentile will be almost equal to 90% of GDP.

Graph 19 also suggests that it is unlikely that the DBGG will continue on a downward path in the coming years, as all the percentile curves point to a resumption of debt growth as a proportion of GDP. In particular, the probability that gross debt in 2027 will be higher than the level at the end of 2022 (72.9% of GDP) was estimated at 96.9%.

GRAPH 19. BASELINE AND STOCHASTIC SCENARIOS FOR THE DBGG



Source: IFI.

[44] To make it easier to see the essential elements, the 1,500 trajectories have not been included in the graph.

TABLE 16. IFI PROJECTIONS FOR THE CENTRAL GOVERNMENT PRIMARY BALANCE - BASELINE SCENARIO (% OF GDP)

Discrimination	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Gross Revenue	23.3	22.4	22.9	22.8	22.8	22.9	22.9	23.0	22.9	22.8	22.7
Transfers by revenue sharing to E&M	4,.6	4.5	4,.6	4,.6	4,.6	4,.6	4.7	4.7	4.7	4.7	4.7
Net Revenue	18.7	17.9	18.3	18.2	18.3	18.2	18.3	18.3	18.2	18.2	18.1
Primary Expenditure	18.2	18.9	19.3	19.0	18.7	19.6	18.7	18.6	18.1	18.0	17.9
Mandatory	16.6	17.3	17.8	17.6	17.3	18.4	17.4	17.3	16.9	16.8	16.7
Social security benefits	8.0	8.3	8.8	8.8	8.6	9.2	8.8	8.8	8.5	8.5	8.5
Personnel expenses and social contribution	3.4	3.4	3.3	3.2	3.1	3.2	3.0	2.9	2.9	2.8	2.8
Salary allowance and unemployment insurance	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Salary Allowance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Unemployment insurance	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
BPC	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Compensation to RGPS for Exemption of Payroll Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Supplementation by the Federal Government to Fundeb	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Legislative, Judiciary, Prosecutor's Office and Public Defender's Office	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Court Rulings and Court-Ordered Debt (current and capital expenditure)	0.2	0.2	0.3	0.2	0.2	0.6	0.3	0.3	0.3	0.3	0.4
Subsidies and Grants	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other compulsory expenses	2.9	3.2	3.2	3.1	3.1	3.0	3.0	2.9	2.9	2.8	2.8
without Flow Control	0.7	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.2
with Flow Control	2.2	3.0	3.0	3.0	2.9	2.9	2.8	2.8	2.7	2.7	2.7
of which Bolsa Família [Family Grant] / Auxílio Brasil [Brazil Aid]	0.9	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.3	1.3
Discretionary of the Executive Branch	1.5	1.6	1.5	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2
Primary Balance	0.5	-1.0	-1.0	-0.8	-0.4	-1.4	-0.4	-0.3	0.1	0.2	0.1
Note:											
Nominal GDP (R$ billion)	9,915.3	10,551.4	11,264.9	12,037.7	12,795.1	13,549.4	14,347.8	15,192.0	16,085.7	17,026.1	18,017.6

TABLE 17. IFI PROJECTIONS FOR THE CENTRAL GOVERNMENT PRIMARY BALANCE - OPTIMISTIC SCENARIO (% OF GDP)

Discrimination	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Gross Revenue	23.3	22.6	23.4	23.5	23.8	24.1	24.4	24.7	24.9	25.2	25.4
Transfers by revenue sharing to E&M	4.6	4.5	4.7	4.7	4.7	4.8	4.9	5.0	5.1	5.1	5.2
Net Revenue	18.7	18.1	18.7	18.8	19.0	19.2	19.5	19.7	19.9	20.0	20.2
Primary Expenditure	18.2	18.7	19.2	18.8	18.4	19.2	18.4	18.3	17.9	17.7	18.0
Mandatory	16.6	17.2	17.8	17.5	17.2	18.0	17.2	17.1	16.8	16.7	17.0
Social security benefits	8.0	8.3	8.8	8.8	8.6	9.1	8.7	8.7	8.4	8.4	8.8
Personnel expenses and social contribution	3.4	3.4	3.3	3.1	3.0	3.1	2.9	2.8	2.8	2.7	2.7
Salary allowance and unemployment insurance	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
Salary Allowance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Unemployment insurance	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
BPC	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.9	0.9	0.9
Compensation to RGPS for Exemption of Payroll Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Supplementation by the Federal Government to Fundeb	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
Legislative, Judiciary, Prosecutor's Office and Public Defender's Office	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Court Rulings and Court-Ordered Debt (current and capital expenditure)	0.2	0.2	0.2	0.2	0.2	0.5	0.3	0.3	0.3	0.3	0.3
Subsidies and Grants	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other compulsory expenses	2.9	3.2	3.2	3.1	3.1	3.1	3.1	3.0	3.0	2.9	2.9
without Flow Control	0.7	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
with Flow Control	2.2	2.9	3.0	2.9	2.9	2.8	2.8	2.8	2.8	2.7	2.7
of which Bolsa Família [Family Grant] / Auxílio Brasil [Brazil Aid]	0.9	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.4	1.3	1.3
Discretionary of the Executive Branch	1.5	1.5	1.5	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.0
Primary Balance	0.5	-0.6	-0.5	0.0	0.6	0.0	1.1	1.5	2.0	2.3	2.1
Note:											
Nominal GDP (R$ billion)	9,915.3	10,553.6	11,327.0	12,195.8	13,055.8	13,927.7	14,861.5	15,857.3	16,921.7	18,060.6	19,269.6

TABLE 18. IFI PROJECTIONS FOR THE CENTRAL GOVERNMENT PRIMARY BALANCE - PESSIMISTIC SCENARIO (% OF GDP)

Discrimination	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Gross Revenue	23.3	22.1	22.3	22.2	22.0	21.9	21.8	21.7	21.5	21.3	21.0
Transfers by revenue sharing to E&M	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.4	4.3
Net Revenue	18.7	17.7	17.8	17.7	17.6	17.5	17.3	17.3	17.1	16.9	16.7
Primary Expenditure	18.2	18.8	19.3	18.8	18.4	19.6	18.6	18.5	18.1	18.0	18.3
Mandatory	16.6	17.3	17.8	17.5	17.2	18.3	17.3	17.2	16.9	16.8	17.1
Social security benefits	8.0	8.3	8.8	8.7	8.5	9.2	8.7	8.8	8.4	8.5	8.8
Personnel expenses and social contribution	3.4	3.4	3.3	3.2	3.2	3.4	3.2	3.2	3.1	3.1	3.1
Salary allowance and unemployment insurance	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Salary Allowance	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Unemployment insurance	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
BPC	0.8	0.9	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8
Compensation to RGPS for Exemption of Payroll Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Supplementation by the Federal Government to Fundeb	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Legislative, Judiciary, Prosecutor's Office and Public Defender's Office	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Court Rulings and Court-Ordered Debt (current and capital expenditure)	0.2	0.2	0.2	0.2	0.2	0.5	0.3	0.3	0.3	0.3	0.3
Subsidies and Grants	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other compulsory expenses	2.9	3.2	3.2	3.1	3.1	3.0	2.9	2.8	2.8	2.7	2.7
without Flow Control	0.7	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
with Flow Control	2.2	3.0	2.9	2.9	2.8	2.8	2.7	2.6	2.6	2.5	2.5
of which Bolsa Família {Family Grant] / Auxílio Brasil [Brazil Aid]	0.9	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3
Discretionary of the Executive Branch	1.5	1.4	1.5	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2
Primary Balance	0.5	-1.1	-1.6	-1.1	-0.9	-2.1	-1.2	-1.2	-1.0	-1.0	-1.6
Note:											
Nominal GDP (R$ billion)	9,915.3	10,527.5	11,282.2	12,137.4	12,939.8	13,737.7	14,590.3	15,501.1	16,473.6	17,507.6	18,607.3

IFI Projections

SHORT TERM

IFI Projections	2023			2024		
	April	May	Comparison	April	May	Comparison
GDP - real growth (% per year)	0.88	1.04	▲	1.42	1.36	▼
Nominal GDP (R$ billion)	10,511.40	10,551.39	▲	11,209.94	11,264.90	▲
IPCA - accum. (% in year)	5.62	6.02	▲	4.05	4.12	▲
Exchange rate - end of period (R$/US$)	5.25	5.21	▼	5.33	5.30	▼
Employment - growth (%)	0.68	0.68	=	0.80	0.77	▼
Payroll - growth (%)	4.20	4.20	=	1.42	1.37	▼
Selic rate - end of period (% p.a.)	13.00	13.00	=	10.00	10.50	▲
Real interest *ex-ante* (% per year)	5.88	6.43	▲	5.22	5.29	▲
Public Sector Consolidated Primary Balance (% of GDP)	-1.39	-1.39	=	-1.20	-1.45	▼
of which Central Government	-1.19	-0.99	▲	-1.00	-1.05	▼
Nominal Net Interest (% of GDP)	7.42	7.46	▲	6.57	6.98	▲
Nominal Balance (% of GDP)	-8.80	-8.85	▼	-7.77	-8.42	▼
General Government Gross Debt (% of GDP)	78.07	78.11	▲	81.01	81.88	▲

MEDIUM TERM

		Projections									
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
GDP - real growth (% per year)	**2.90**	1.04	1.36	2.04	2.02	2.01	1.98	1.97	1.97	1.94	1.91
Nominal GDP (R$ billion)	**9,915**	10,551	11,265	12,038	12,795	13,549	14,348	15,192	16,086	17,026	18,018
IPCA - accum. (% in year)	**5.78**	6.02	4.12	3.19	3.24	3.24	3.24	3.24	3.24	3.24	3.24
Exchange rate - end of period (R$/US$)	**5.22**	5.21	5.30	5.34	5.39	5.44	5.49	5.55	5.60	5.65	5.70
Employment - growth (%)	**7.39**	0.68	0.77	1.06	1.05	1.04	1.03	1.03	1.03	1.01	1.00
Payroll - growth (%)	**6.91**	4.20	1.37	2.04	2.02	2.01	1.98	1.97	1.97	1.94	1.91
Selic - end of period (% per year)	**13.75**	13.00	10.50	8.50	8.00	7.00	7.00	7.00	7.00	7.00	7.00
Real interest *ex-ante* (% per year)	**7.72**	6.43	5.29	5.00	3.97	3.93	3.91	3.90	3.89	3.89	3.89
Public Sector Consolidated Primary Balance (% of GDP)	**1.27**	-1.39	-1.45	-1.13	-0.56	-1.35	-0.47	-0.29	0.06	0.14	0.10
of which Central Government	**0.55**	-0.99	-1.05	-0.83	-0.41	-1.39	-0.45	-0.26	0.09	0.18	0.14
Nominal Net Interest (% of GDP)	**5.91**	7.46	6.98	6.32	5.83	5.71	5.59	5.46	5.37	5.28	5.16
Nominal Balance (% of GDP)	**-4.64**	-8.85	-8.42	-7.45	-6.39	-7.07	-6.06	-5.75	-5.31	-5.14	-5.06
General Government Gross Debt (% of GDP)	**72.9**	78.1	81.9	84.0	85.7	88.0	89.4	90.6	91.5	92.4	93.3

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