Tesouro Nacional

2023

Federal Fiscal Risks Report

October

Tesouro Nacional

Ministério da Fazenda

Governo Federal
Brasil
União e Reconstrução

Finance Minister
Fernando Haddad

Executive Secretary of the Ministry of Finance
Dario Carnevalli Durigan

Secretary of the National Treasury
Rogério Ceron de Oliveira

Deputy Secretary of the National Treasury
Viviane Aparecida da Silva Varga

Undersecretary for Strategic Fiscal Policy Planning
David Rebelo Athayde

General Coordinator of Planning and Fiscal Risks
Cristina Gonçalves Rodrigues

Planning and Fiscal Risks Support Coordinator
Cristiano Beneduzi

Fiscal Modeling and Analysis Coordinator
Seiji Kumon Fetter

Technical Staff
Alex Sander Ferreira da Silva
Ana Cristina Bittar de Oliveira
André Luiz Greve Pereira
Carolina Avelino Carvalho
Cristiano Santos Lucio de Melo
Gabriela Lopes Souto
João Alberto Travassos Evangelista
Jonathas Delduque Júnior
Leandro Gonçalves de Brito
Leno Silva Rocha
Marcos Minoru Taketomi
Marcus Lima Franco
Natália Ayres Lopes
Pedro Padilha Pontes
Pedro Petronillio Hernandes
Ricardo Milsztajn
Rodrigo André de Castro Souza Rego
Rodrigo Leandro de Moura
Sâmia Marques Russo
Tiago Zaterka Segantini

Content Development
General Coordination of Relations and Financial Analysis of States and Municipalities - COREM/STN
General Coordination of Analysis, Information and Execution of Financial Transfers
Transfers - COINT/STN
General Coordination of Control and Payment of Public Debt - CODIV/STN
General Coordination of Economic-Fiscal Studies - CESEF/STN
General Coordination for the Execution and Control of Fiscal Operations - COGEF/STN
General Coordination of Financial Assets - COAFI/STN
General Coordination of Fiscal Operations - CGFIS/STN
General Coordination of Corporate Participations - COPAR/STN
General Coordination of Planning and Fiscal Risks - COPEF/STN
General Coordination of Public Debt Strategic Planning - COGEP/STN

Art
Social Communication Advisory Service (ASCOM/National Treasury)
Chartic Project - Viviane Barros and Hugo Pullen

Information
E-mail: ascom@tesouro.gov.br
Available at: https://www.tesourotransparente.gov.br/temas/estatisticas-fiscais-e-planejamento/riscos-fiscais

Last modified: October 27, 2023.

Table of contents

Introduction ***14***

1 Fiscal Risk Management ***15***

1.1 Definition **15**

1.2 Classification **15**

1.3 Prevention, Mitigation and Monitoring of Fiscal Risks **16**

1.4 Provisions and Reserves **18**

2 Macroeconomic risks ***19***

2.1 Sensitivity of Revenues Collected by the RFB **22**

2.1 Sensitivity of Primary Expenditure **25**

2.2 Public Debt Sensitivity **28**

2.2.1 Public Sector Net Debt (PSND) and General Government Gross Debt (GGGD) 28

3 Specific Fiscal Risks ***31***

3.1 Contingent Liabilities **33**

3.1.1 Judicial claims 33

3.1.2 Contingent Liabilities Being Recognized by the STN 38

3.1.3 Warranties 40

3.1.4 Constitutional Financing Funds 48

3.2 Assets **50**

3.2.1 Federal Government Active Debt 50

3.2.2 Financial Assets Not Related to Subnational Entities 52

3.3 Sub-national entities **52**

3.4 State-owned companies **55**

3.5 Public Service Concessions and Public-Private Partnerships **58**

3.5.1 Public Service Concessions 58

3.5.2 Public-Private Partnerships 61

3.6 Student Financing Fund (Fies) **62**

3.7 Financial System Risks **64**
3.7.1 Credits from the Central Bank of Brazil 64
3.7.2 National Financial System 65
3.8 Demographic changes **65**
3.9 Environmental Risks **67**
3.9.1 Disasters and Natural Phenomena 67
3.9.2 Climate Change 69

Index of Charts

Chart 1 - Specific fiscal risk factors related to liabilities 11
Chart 2 - Specific Fiscal Risk Factors Related to Assets 12
Chart 3 - Tax and Contribution Revenues - Estimated (LOA) vs. Historical 19
Chart 4 - Change in Real GDP - Estimated (LOA) vs. Historical 20
Chart 5 - Debt Projections - PSND and GGGD 28
Chart 6 - GGGD Variation Factors in 2023 29
Chart 7 - PSND Variation Factors in 2023 29
Chart 8 - Public Debt Sensitivity Analysis - GGGD 30
Chart 9 - Public Debt Sensitivity Analysis - PSND 30
Chart 10 - Breakdown of Specific Fiscal Risks 32
Chart 11 - Impact of Specific Fiscal Risks 32
Chart 12 - Evolution of the Stock of Judicial Claims against the Federal Government 33
Chart 13 - Expenditure on legal actions. 34
Chart 14 - Judicial Claims Against the Federal Government by Nature or Group (Possible and Probable Risk) 35
Chart 15 - Settlement of Contingent Liabilities 38
Chart 16 - Evolution of Guarantees for Credit Operations 40
Chart 17 - Percentage of Outstanding Guarantees per Period 41
Chart 18 - Federal Government's Share in the Net Assets of the Guarantee Funds 45
Chart 19 - FGE: Indemnities x Recoveries (flow) 47
Chart 20 - Evolution: Loss and Recovery Stock (Constitutional Funds) 49
Chart 21 - Distribution of DAU by Type of Credit and Rating 50
Chart 22 - Recovery Expectations by Rating 51
Chart 23 - Evolution of the DAU with good prospects of recovery (Classes A and B) 51

Chart 24 - Revenues from Concessions ____ 59
Chart 25 - Fies Exposure by Financing Period ____ 62
Chart 26 - Status of Fies Contracts Granted up to 2017 ____ 63
Chart 27 - BCB credits under PROER ____ 64
Chart 28 - Demographic Impact on Selected Health and Education Expenditures ____ 66
Chart 29 - Risk and Disaster Management Program - LOA and Share of GDP ____ 67
Chart 30 - Federal Government expenditures related to the Climate Change program ____ 69

Table Index

Table 1 - Federal government publications that monitor fiscal risks ____ 17
Table 2 - Central Government Primary Revenues Indexed to Macroeconomic Parameters ____ 22
Table 3 - Revenues Managed by the RFB - % Impact of a 1 p.p. Variation in Each Parameter ____ 23
Table 4 - Revenues - Impact of a 1 p.p. Change in Macroeconomic Variables ____ 24
Table 5 - Central Government Primary Expenditure Indexed to Macroeconomic Parameters ____ 25
Table 6 - Effects of the Minimum Wage (MW) and INPC ____ 26
Table 7 - Primary Expenditure - % Impact of the 1 p.p. Variation in the INPC ____ 26
Table 8 - Effect of a 0.1 p.p. change in the IPCA and a 0.1 p.p. change in the RLA on the expenditure limit established by LC 200/2023 ____ 27
Table 9 - Fiscal Risk Factors Related to Liabilities and Assets ____ 31
Table 10 - Probable and possible risk lawsuits ____ 36
Table 11 - Judicial Expenditures in relation to Primary Expenditures ____ 37
Table 12 - Guarantee Funds with Federal Government participation ____ 44
Table 13 - FGE Solvency Indicators ____ 46
Table 14 -- Evolution of the degree of leverage ____ 46
Table 15 - Estimated impact of maintaining the SCE ____ 47
Table 16 - Provision for Doubtful Debts in the Constitutional Funds ____ 48
Table 17 - Recovery and Inventory of Credits Written Off as Losses ____ 49
Table 18 - Estimated DAU Collection ____ 51
Table 19 - Financial Assets Not Related to Subnational Entities ____ 52
Table 20 - Fiscal Risks Resulting from Claims and Guarantees on States and Municipalities ____ 53
Table 21 - Intergovernmental Relations Fiscal Risks ____ 54
Table 22 - Uncertainties arising from Legislative Proposals ____ 54
Table 23 - Estimated Flows - Non-Dependent State-Owned Companies ____ 55

Table 24 - Required vs. Observed Capital Ratios ____ 56
Table 25 - Fiscal risks in administrative claims ____ 60
Table 26 - Estimated Cash Flow from BCB Credits ____ 64

Executive Summary

Now in its 5th edition, the Federal Fiscal Risks Report (RRFU) prepared by the National Treasury Secretariat (STN) continues its goal of offering society an instrument of fiscal transparency that shows, in summary form, the situation of the fiscal risks to which the Federal Government is exposed. Fiscal risks are the possibility of events occurring that could affect public accounts, jeopardizing the achievement of the fiscal results established as goals and objectives. The report classifies fiscal risks into two groups: macroeconomic and specific. Macroeconomic fiscal risks are related to cyclical or structural changes in the economy, while specific risks are of various origins, related to government programs and the public sector's balance sheet (figures for assets or liabilities).

- Macroeconomic Fiscal Risks

Approximately 90.2% of primary revenue is subject to volatility in real GDP, inflation, the wage bill, the exchange rate, interest rates or the price of oil. Revenue collected by the Brazilian Federal Revenue Office (RFB), such as income tax and social security contributions, represents the largest portion subject to risk due to the volatility of macroeconomic parameters.

The variation in real GDP represents the greatest source of risk for revenues, followed by the variation in inflation and the wage bill. A 1 p.p. variation in real GDP impacts primary revenue by R$11.6 billion, while a 1 p.p. variation in inflation impacts it by R$11.0 billion. The 1 p.p. variation in the nominal wage bill is reflected in a variation of R$ 6.2 billion, mainly due to the variation in the collection of the social security contribution.

On the primary expenditure side, volatility is linked to variations in the minimum wage and the INPC (a price index reflecting living costs for families earning up to 5 minimum wages), mainly impacting expenditure on Social Security and Assistance Benefits, the payment of Unemployment Benefit and the payment of Salary Allowance. In 2022, approximately 52.2% of total primary expenditure expanded due to the direct influence of inflation and the minimum wage.

A R$1 increase in the minimum wage implies a total increase of R$394.9 million in expenses, with a net impact of R$262.9 million on the RGPS (social security) deficit, R$70.5 million on Assistance benefits and R$55.2 million on FAT benefits (Unemployment Benefit and Salary Allowance).

With the publication of Complementary Law No. 200, of August 30, 2023, the primary expenditure limit is now adjusted annually by the IPCA accumulated over 12 months up to June and by a real growth component, based on the real variation in Adjusted Net Revenue, accumulated over the same period, as defined by regulation. This change added to the sensitivity of primary expenditure due to inflation, already present in the Spending Ceiling established by EC No. 95/2016, the sensitivity of primary revenue performance. As allowed by LC 200/2023, the Executive Branch's spending limit can be increased for 2024, depending on the performance of inflation and Adjusted Net Revenue accumulated in 2023, rising by R$1.9 billion if inflation in 2023 is 0.1 p.p. higher than that considered in the 2024 Budget Proposal (PLOA) and by R$1.4 billion if Adjusted Net Revenue grows, in real terms, is 0.1 p.p. more than the amount considered in the budget.

After returning to levels close to those seen in the pre-pandemic in 2022, the General Government Gross Debt (GGGD) should close 2023 at 74.9% of GDP, up 2.0 p.p. compared to the end of 2022. From then on, public debt rises at decreasing rates, reaching a peak of 76.6% of GDP in 2025, with a subsequent drop to 76.4% of GDP in 2026. This debt aggregate is highly sensitive to interest rates, GDP growth and the primary balance. In a sensitivity exercise of the debt with macroeconomic variables, it was found that a 1 p.p. increase in the Selic rate in the period from 2023 to 2026 causes a 1.4 p.p. increase in the GGGD at the end of 2026. Reductions of 1 p.p. in GDP growth and the primary balance alone result in an increase of approximately 4.4 p.p. and 3.2 p.p., respectively, in the GGGD at the end of 2026. In a scenario where the adverse shocks to interest rates, GDP growth and the primary balance are combined, the increase in the GGGD could reach almost 9.1 p.p. in 2026.

- Specific Fiscal Risks

Despite the limitations of the analysis that the sum of all the risks brings with it, mainly due to the different probabilities of occurrence, the Federal Government's exposure to the specific fiscal risks presented in this Report reached R$6.0 trillion, representing an increase of R$244 billion compared to that recorded at the end of 2022. During 2023, the exposure related to assets reached R$1.5 trillion, while the exposure associated with liabilities reached R$4.5 trillion.

The value of the stock of lawsuits against the Federal Government, considering probable and possible risk, totaled R$3,905.8 billion in September 2023, representing an increase of 3.9% compared to the previous year, of which 71.2% (R$2,782.8 billion) refer to possible risk lawsuits and 28.8% (R$1,123.0 billion) to lawsuits classified as probable risk of loss. Annual expenditure on legal losses has followed this upward trend: while in 2014 this expense was R$18.8 billion, for the year 2024, in nominal terms, it is estimated to reach R$66.9 billion, which corresponds to 3.1% of primary expenditure (estimate of amount paid and primary expenditure - PLOA 2024).

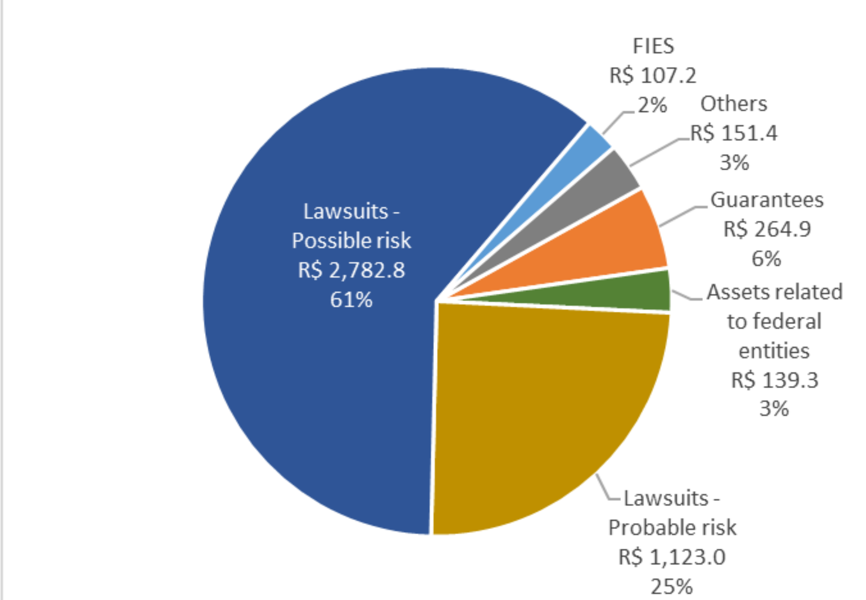
The amount of the Federal Government's contingent liabilities in the process of being settled by the STN, also known as debts in the process of being recognized (debts arising from the extinction/dissolution of federal administration entities, direct debts of the Federal Government and debts arising from the Wage Variation Compensation Fund - FCVS) for 2023 is R$106.1 billion compared to R$112.4 billion in 2022, of which around 93.8% relates to the FCVS.

The Federal Government's guarantees for credit operations amounted to R$59.8 billion from 2016 to August 2023. The unenforced number of counter-guarantees by the Federal Government, due to court orders issued, which exceeded R$40 billion in 2021, was zeroed out in 2022, due to contractual renegotiations. However, in the last few months of the same year, this balance grew again due to new lawsuits filed by states questioning how they will be compensated for the loss of ICMS revenue by the states as a result of the reduction in the rates on energy and telecommunications brought in by LC 194/22. In 2023, these new injunctions have prevented the execution of counter-guarantees. The growth in unenforceable counter-guarantees characterizes the materialization of the fiscal risk involved in the Federal Government's granting of guarantees.

The Guarantee Funds, in which the Federal Government participates, continue to be a support mechanism for public policies aimed at economic recovery. Credit operations related to the actions of the National Support Program for Micro and Small Enterprises - Pronampe and the Emergency Credit Access Program - Peac are guaranteed by the Operations Guarantee Fund (FGO) and the Investment Guarantee Fund (FGI), respectively. At the end of June 2023, the Federal Government held R$75.7 billion in quotas in funds of this nature, which represents more than 95.1% of the total net worth of the Guarantee Funds.

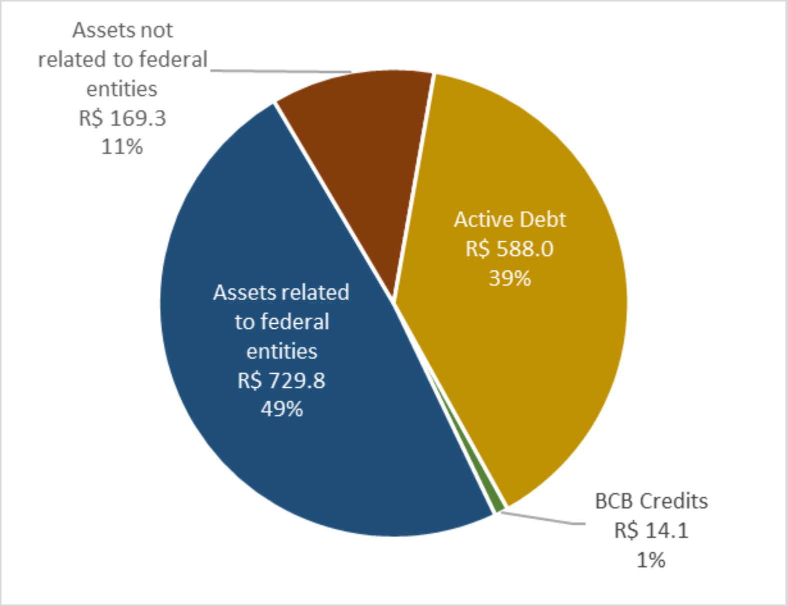
The figure indemnified by the Export Credit Insurance, from the start of its activities until June 2023, is approximately US$1.7 billion, 97.0% of which occurred between 2018 and June 2023. As it is a primary expense, the realization of the Export Guarantee Fund's (FGE) fiscal risk has an impact on the Federal Government's primary result.

Chart 1 - Specific fiscal risk factors related to liabilities
Data in R$ billion
Sources: AGU, STN, SIAFI



Out of an asset of R$2.8 trillion in the Federal Government's Active Debt, R$587.9 billion is expected to be recovered, most of which will impact the primary result. Around R$2.3 trillion (79%) is considered a loss. This expectation is based on the history of payment over the last fifteen years.
The Federal Government's financial assets not related to sub-national entities, under the management of the STN (originating from Loans granted to Financial Institutions, Rural Credit Operations, Credit Assignment Operations, Export Credit Operations, Loans to Non-Financial Entities and the Emergency Employment Support Program) remained at R$169.3 billion.

Chart 2 - Specific Fiscal Risk Factors Related to Assets
Data in: R$ billion
Source: AGU, STN, SIAFI



In the context of the Federal Government's relationship with sub-national entities, fiscal risks are presented in various configurations. Debts and guarantees with states and municipalities reached R$966.5 billion, while contingent liabilities resulting from injunctions to EC 109/2021, for the Federal Government to finance the payment of overdue precatory payment balances, are estimated at R$139.3 billion, totaling R$1,105.8 billion.

The estimated impacts of legislative proposals that change the inter-federative relationship over a ten-year period are approximately R$825.3 billion. Although these proposals do not qualify as fiscal risk, according to the concept adopted by this report, they are important sources of uncertainty for the Federal Government.

As far as state-owned companies are concerned, the risk of frustrated revenue from dividends and interest on equity is considered remote. However, the possible risk of the need for an emergency contribution in 2024 is considered, mainly due to the concrete difficulties faced by some companies.

The fiscal risks of federal public service concessions are mitigated by the very structure of the contracts signed. It should be noted, however, that the risk of frustrated revenue from concessions over the course of the year is mitigated in the bimonthly assessments of primary revenue and expenditure.

In relation to the Student Financing Fund (Fies), in June 2023, the value of the exposure stock of operations already granted under the program reached R$103.5 billion. Of this amount, R$69.7 billion corresponds to the full outstanding balance of contracts in arrears, which represents 67.3% of the total portfolio. The amount of the adjustment for estimated losses is R$47.2 billion.

The estimated impact of Brazil's demographic change on selected health expenditure in 2032 is R$9.3 billion and, on education, the pressure to reduce spending is R$1.3 billion, at 2022 prices. These impacts are due to the change in the age structure, with an increase in the number of elderly people and a reduction in the number of young people in the population.

Environmental fiscal risks, arising from disasters and natural phenomena, are usually associated with climate change or caused and originated by human activity. Between 2012 and 2023 (June), between 0.01% and 0.06% of GDP per year will be spent on risk and disaster management actions, including the planning and control of associated risks (Program 2218 of the LOA), while climate change mitigation actions have been on the rise since 2021 (Program 1058 of the LOA).

Introduction

The Federal Government's Fiscal Risks Report, now in its fifth edition, is a publication by the National Treasury Secretariat (STN) that summarizes the situation of the fiscal risks to which the Federal Government is exposed. The information presented here contributes to the identification and analysis of events that could lead to deviations from the fiscal planning established by the government. To this end, the document analyzes different sources of risk that can affect public revenues and expenditures, as well as events that have an impact on the public debt.

The STN's role in relation to the Federal Government's fiscal risks is established by item XXXIV of article 36 of the Regimental Structure of the Ministry of Finance, approved by Decree No. 11.344, of January 1, 2023. To fulfill this regimental mission, the STN's General Coordination of Fiscal Planning and Risks (COPEF) works to consolidate the identification and assessment of risks that have an impact on short-, medium- and long-term fiscal projections.

This Risk Report complements the role played by the Fiscal Risk Annex (ARF) of the Budget Guidelines Law (LDO), encompassing the identification and quantification of the main fiscal risks, thus establishing a system for monitoring and evaluating these risks. The information presented here updates the figures published in the ARF, broadens the scope of some analyses, provides graphic and objective management assessments of the main fiscal risks and discusses new perspectives for the coming years

The fifth edition of the Fiscal Risks Report is structured in three sections, in addition to this Introduction and the Executive Summary. Section 1 presents conceptual aspects that guide the analysis of fiscal risks. Section 2 assesses the risks of fluctuations in macroeconomic parameters and their impact on revenue, expenditure and the public debt. Section 3 discusses specific risks, which consist of an extensive set of risks related to contingent assets and liabilities, risks arising from sub-national entities, state-owned companies, environmental risks, among others.

1 Fiscal Risk Management

1.1 Definition

Fiscal risks are the potential occurrence of unforeseen events that could affect public accounts, jeopardizing the achievement of fiscal results established as goals and objectives. For these events to be classified as fiscal risks, a necessary condition is that they cannot be controlled or avoided by the government. In this way, while unforeseen expenditures resulting, for example, from court decisions unfavorable to the government, are considered fiscal risks, expenditures arising from government decisions or policies, such as aid, are not considered fiscal risks, even if they lead to deviations from fiscal targets.

The Organization for Economic Cooperation and Development (OECD) and multilateral organizations recommend that countries: (1) establish instruments for identifying fiscal risks; (2) spell out the means for managing them; and (3) take them into account when discussing the direction of fiscal policy. This recommendation corroborates the disclosure and management of fiscal risks as one of the pillars of a transparent and sound fiscal policy and emphasizes the need for clarity and accountability in a government's policy choices and financial trade-offs.

1.2 Classification

The fiscal risks presented in this report are differentiated into two categories, macroeconomic risks and specific risks:

a) <u>Macroeconomic risks:</u> these present the fiscal impacts when there are fluctuations in macroeconomic variables. When macroeconomic variables deviate from the government's projections, these movements are expected to have an impact on government revenues, expenditures and public debt. The analyses presented in this report identify the degree of sensitivity of these fiscal variables to changes in the main macroeconomic variables and quantify the financial impact resulting from these variations. Identifying these risks generates relevant information for planning budget execution, complying with fiscal rules and monitoring the sustainability of public finances.

b) <u>Specific risks</u>: these are fiscal risks that do not arise from changes in macroeconomic variables. Specific risks cover a wide range of cases and are related to events that are beyond the government's control, but whose occurrence could impact public accounts. This category includes contingent assets and liabilities, such as lawsuits, guarantees, the Federal Government's Active Debt and risks related to financial assets. Specific risks also include risks arising from decentralized entities, such as state companies and sub-national entities, as well as risks arising from public policies, such as public service concessions and student financing.

1.3 Prevention, Mitigation and Monitoring of Fiscal Risks

The fiscal risks dealt with in this document are diverse in nature and are associated with different processes related to their identification, measurement and management. In the Brazilian context, the risks are largely subject to an institutional and regulatory framework that already establishes that their management takes place within the scope of the duties of specific bodies. In this environment, which brings together many interlocutors who deal with different issues using different methodologies, the consolidation of information must be guided by the harmonization of concepts and the standardization of fiscal impacts. In this sense, in the different analyses presented, the aim is to distinguish, in each case, between primary and financial impacts, between flow values and stock values, financial years, as well as explaining the criteria used to measure risks and build projections.

It is crucial to understand that prevention and mitigation play different roles in fiscal risk management. Prevention focuses on reducing the likelihood of a fiscal risk materializing, while mitigation aims to minimize the financial impact should that risk materialize. The choice of prevention and mitigation strategies must be adapted to the unique characteristics of each fiscal risk, seeking effective and balanced management of public finances.

In addition, various documents published by the Federal Government monitor aspects related to the fiscal risks dealt with here, as shown in Table 1.

Table 1 - Federal government publications that monitor fiscal risks
Source: STN/MF

Publication	Related Risk	Institutions in charge
Budget Guidelines Draft Law, Annex V, Fiscal Risks	Macroeconomic and Specific Fiscal Risks	STN/MF com informações de outras instituições
Fiscal Projections Report	Macroeconomic Risks	SUPEF/SUDIP/STN/MF
Macroeconomic Overview	Macroeconomic Risks	SPE/MF
Annual Debt Report	Public Debt	SUDIP/STN/MF
Public Debt Projections Report	Public Debt	SUDIP/STN/MF
Fiscal Management Report	Guarantees, Public Debt	STN/MF
Report on Secured Credit Operations	Guarantees	SUDIP/STN/MF
Accountability of the President of the Republic	Contingent assets and liabilities and other specific risks	PR, CGU e MF
Finance Bulletin of the Subnational Entities	Subnational Entities	SURIN/STN/MF
General Government Fiscal Statistics	Subnational Entities	SUPEF/STN/MF
Bulletin of Federal State-Owned Enterprises	State-owned companies	SEST/MGI
Bulletin of Federal Government Shareholdings	State-owned companies	SUGEF/STN/MF
Financial Stability Report	Financial sector	BCB
Draft Budget Guidelines Law, Annex IV, items IV.5, IV.6 and IV.7: Actuarial Valuations of the Pension Fund Systems	Long-term analysis of social security systems	MF e MPS
Management Report to the Board of Directors Export Financing and Guarantee	Export Guarantee Fund - FGE	BNDES
Primary Revenue and Expenditure Assessment Report	Macroeconomic Fiscal Risks	SOF/STN/MF

[1] *https://www.tesourotransparente.gov.br/publicacoes/anexo-de-riscos-fiscais-da-ldo/2024/20*
[2] *https://www.tesourotransparente.gov.br/publicacoes/relatorio-de-projecoes-fiscais/2023/20*
[3] *https://www.gov.br/fazenda/pt-br/centrais-de-conteudos/publicacoes/conjuntura-economica/panorama-macroeconomico/copy_of_2022/panmacro_spe_slides_-agosto2023.pdf*
[4] *https://www.tesourotransparente.gov.br/publicacoes/relatorio-anual-da-divida-rad/2022/114*
[5] *https://www.tesourotransparente.gov.br/publicacoes/relatorio-de-projecoes-da-divida-publica/2023/26*
[6] *https://www.tesourotransparente.gov.br/temas/contabilidade-e-custos/relatorio-de-gestao-fiscal-rgf-uniao*
[7] *https://www.tesourotransparente.gov.br/publicacoes/relatorio-quadrimestral-de-operacoes-de-credito-garantidas-rqg/2023/27*
[8] *https://www.gov.br/cgu/pt-br/assuntos/auditoria-e-fiscalizacao/avaliacao-da-gestao-dos-administradores/prestacao-de-contas-do-presidente-da-republica*
[9] *https://www.tesourotransparente.gov.br/temas/estados-e-municipios/boletim-de-financas-dos-entes-subnacionais-conteudos-relacionados*
[10] *https://www.tesourotransparente.gov.br/temas/estatisticas-fiscais-e-planejamento/estatisticas-fiscais-do-governo-geral*
[11] *https://www.gov.br/economia/pt-br/centrais-de-conteudo/publicacoes/boletins/boletim-das-empresas-estatais-federais*
[12] *https://www.tesourotransparente.gov.br/publicacoes/boletim-das-participacoes-societarias-da-uniao/2021/114*
[13] *https://www.bcb.gov.br/publicacoes/ref*
[14] *https://www.gov.br/planejamento/pt-br/assuntos/planejamento-e-orcamento/orcamento/orcamentos-anuais/2024/pldo/10_pldo2024___anexo_iv_05___projecoes_atuariais_do_rgps.pdf*
[14] *https://www.gov.br/planejamento/pt-br/assuntos/planejamento-e-orcamento/orcamento/orcamentos-anuais/2024/pldo/11_pldo2024___anexo_iv_06___projecoes_atuariais_do_rpps.pdf*
[14] *https://www.gov.br/planejamento/pt-br/assuntos/planejamento-e-orcamento/orcamento/orcamentos-anuais/2024/pldo/12_pldo2024___anexo_iv_07___avaliacao_atuarial_do_sistema_de_pensoes_milita-res_ das_forcas_armadas___volume_i.pdf*
[15] *https://www.bndes.gov.br/wps/portal/site/home/transparencia/fundos-governamentais/fundo-de-garantia-a-exportacao-fge/relatorios*
[16] *https://www.tesourotransparente.gov.br/publicacoes/relatorio-de-avaliacao-de-receitas-e-despesas-primarias-rardp/2023/13*

1.4 Provisions and Reserves

It is important for countries to maintain a reserve or "fiscal space" in their fiscal planning, in case certain risks materialize. However, its value is not linked to the evolution of the stock of fiscal risks. According to best practice, when such reserves are included in the budget, any perception that overspending can be financed unconditionally should be avoided. Thus, criteria for accessing these resources should be established delimiting the amounts for additional credits during budget execution, as well as for financing unexpected events.

OCDE[1] emphasizes the responsibility of departments and agencies to monitor and prevent their fiscal risks, to allocate resources in their budgets for probable materialization and to identify resources in their own budgets in case an unexpected risk materializes, before claiming resources from the general budget reserve.

In Brasil[2], provisions for judicial and administrative losses are related to administrative and judicial actions filed against the Federal Government, but which can be reliably estimated. For this reason, they are amounts that can be recognized in the Federal Government's liabilities. Thus, whether or not they are recognized as liabilities depends on the level of risk classification attributed to the process in its analysis, and may fall into the following classifications: a) Probable Risk: occurs when the probability of loss on the part of the Federal Government is high, giving rise to the recording of liabilities in the balance sheet; b) Possible Risk: occurs when the probability of loss is not high, but considerable. These amounts are considered contingent liabilities and are not recognized in the Federal Government's balance sheet, but are mentioned in the notes to the financial statements; c) Remote Risk: occurs when the probability of losing the lawsuit is considered remote, and no record is made or disclosed in the notes to the financial statements.

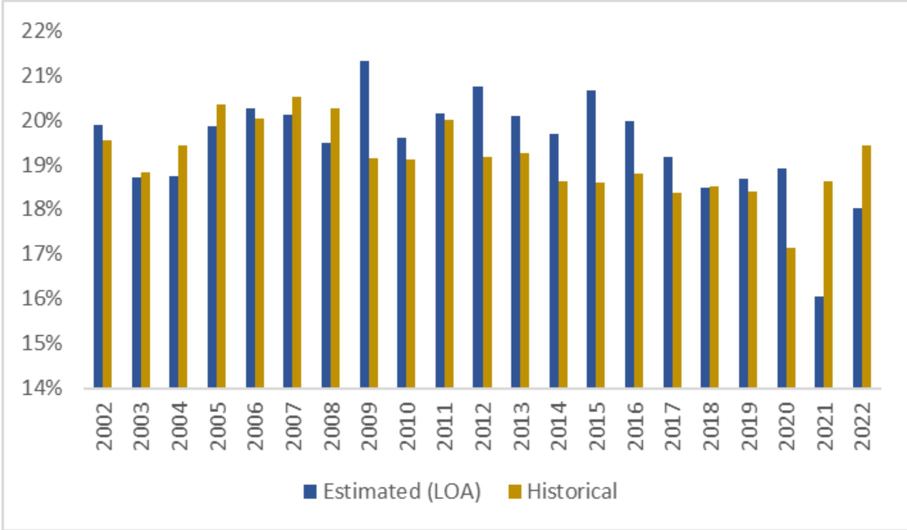
[1] OECD, op. cit.

[2] https://www.tesourotransparente.gov.br/visualizacao/riscos-fiscais-com-demandas-judiciais-e-precatorios

2 Macroeconomic risks

The variation in macroeconomic parameters (real GDP, inflation, wage bill, exchange rate, interest rates, oil prices, among others) in relation to the projections included in the budget documents is the most common source of fiscal risks. In fact, experience has shown that countries deviate, to a greater or lesser degree, from the planned fiscal targets, due to changes in the economic situation over the course of the budget year. These deviations generally stem from the difficulties inherent in macroeconomic projections, which depend on assumptions that are often simplified and are not capable of capturing all the interactions between variables.

Chart 3 - Tax and Contribution Revenues - Estimated (LOA) vs. Historical
Data in: % GDP
Source: STN/MF

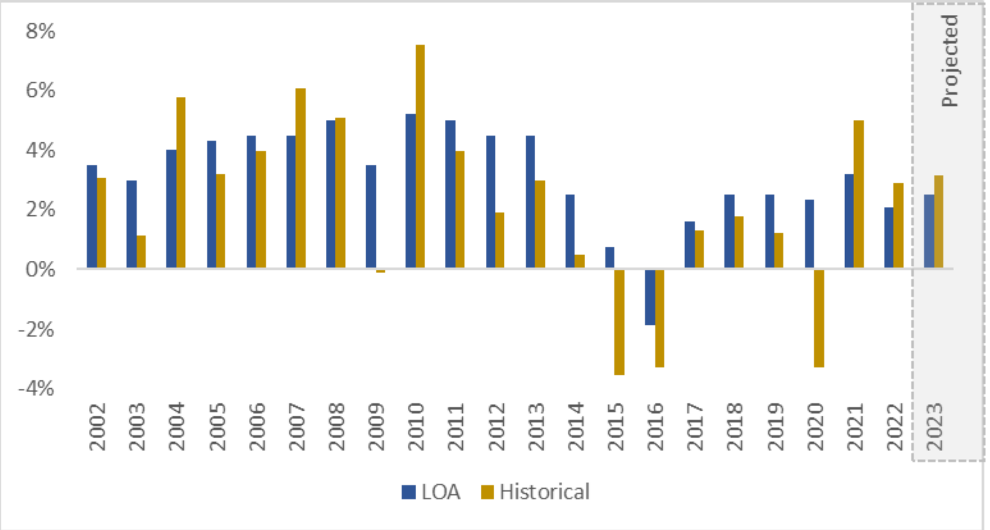


In the case of Brazil, there has been a significant discrepancy between the projections contained in the Annual Budget Law (LOA) and the actual figures for primary revenue, especially from 2009 onwards, where the actual figure is lower than the projected figure up to 2020. Much of this difference is explained by the discrepancy between the amounts forecasted and actually recorded for economic growth and inflation. From 2021 onwards, the actual figures were more favorable than expected with the return of social activities and the consequent recovery of the economy after the Covid-19 pandemic.

In fact, in 2021, the Brazilian economy showed resilience after the adversities of the 2020 health crisis and grew by 5.0%, while in 2022 it grew by 2.9%. The expectation for 2023 is growth of 3.2%, according to the September 2023 Parameters Grid of the Ministry of Finance's Economic Policy Secretariat. In addition, there was a reduction in the primary deficit from 9.8% in 2020 to 0.4% in 2021. In 2022, a primary surplus of 0.5% was recorded.

The 2021 GDP reflected the reopening of the economy and the large fiscal expansion due to aid to the world's population, bailouts for the financial system and the real economy, which led to the world entering a commodities cycle later in the year. As a result, public revenues, boosted by this cycle, showed a significant improvement, despite the tax cuts made to internally alleviate part of this price hike, especially in fuel prices.

Chart 4 - Change in Real GDP - Estimated (LOA) vs. Historical
Data in: %
Source: LOA, IBGE and SPE Grid of 13/09/2023



Regarding 2022, the slowdown in growth was due to the conflict between Russia and Ukraine and the effects of the contractionary monetary policy to contain the advance of inflation. During the year, all productive sectors recorded lower growth rates compared to 2021, but the commodities cycle continued to contribute to the performance of tax revenues. The year was also marked by extraordinary revenues from new concessions and high dividends.

The year 2023 began with the Selic rate at 13.75% p.a. and in September it reached 12.75% p.a., and the market outlook for the end of the year is to reach 11.75%, showing the beginning of the monetary easing cycle that should positively impact the economy over the coming months. The government expects higher growth compared to the previous year, driven by the record grain harvest, the reopening of China and the good condition of water reservoirs this year[3].

In 2023, Complementary Law no. 200, of August 30, was approved, instituting a new sustainable fiscal regime to guarantee the country's macroeconomic stability and create the right conditions for socioeconomic growth, as provided for in art. 6 of Constitutional Amendment no. 126, of December 21, 2022. This regime brings a new dynamic to the spending limit, which will be adjusted annually by the IPCA and by a real growth component ranging from 0.6% to 2.5%, linked to the performance of federal revenue. The proposed regime makes it possible to adjust the federal budget to meet social and public investment policies with fiscal responsibility.

However, with regard to the dynamics of variation in expenditure, it should be noted that this depends to a large extent on variations in macroeconomic parameters, mainly - inflation and the Minimum Wage. These, in turn, directly affect spending on payroll expenditures, social security and assistance benefits, salary allowance and unemployment benefit, which together account for approximately 70.9% of primary spending by the Central Government made up of the National Treasury, Social Security and the Central Bank.

[3] PLOA 2024 Presidential Message.

With regard to the behavior of the General Government Gross Debt (GGGD), an initially upward trajectory is estimated over the next few years from 72.9% of GDP in 2022 to 76.6% in 2025, fundamentally due to nominal interest rates which more than offset the estimated nominal growth in GDP and the Primary Balance, which is reversed in 2026 with a drop of 0.2 p.p., closing the horizon at 76.4% of GDP.

Based on this situation, the next section of this chapter analyzes the fiscal risks generated by the variability of the macroeconomic parameters used to forecast the Revenues Collected by the Brazilian Federal Revenue Office (RFB), primary expenditures and the government's primary balance, as well as the public debt.

2.1 Sensitivity of Revenues Collected by the RFB

Assessing the sensitivity of revenue collection initially involves identifying the revenue lines that are related to the economic cycle. Within the scope of the budget, revenue is presented in three major groups: Revenue Collected by the RFB; Net Social Security Revenues; and Revenue not Collected by the RFB. Table 2 shows the share of each group in total primary revenue in 2022.

The Revenues Collected by the RFB constitute the main group within the set of revenues (60.1%) and include the main taxes and contributions of the national tax system, as shown in Table 2. Due to the nature of its tax base, it is easy to see that there is a high correlation between the collection of this revenue and the economic cycle. Similarly, the tax base for social security revenues is the payroll, which is also linked to the economic cycle, with wages and employment levels rising in economic expansions and the opposite behavior in recessions.

Table 2 - Central Government Primary Revenues Indexed to Macroeconomic Parameters
Source: National Treasury and RFB/MF Results

Revenue Items	Revenue in 2022 (R$ million)	Share of Total Primary Revenue	Indexers
Revenue Collected by the RFB	1,390,000	60.1%	GDP, Inflation, Exchange Rate, Wage Bill, Interest (Selic-Over)
Net Social Security Revenues	535,710	23.2%	GDP, Inflation, Wage Bill
Revenues Not Collected by the RFB			
Educational Contribution	27,292	1.2%	GDP, Inflation
Exploitation of Natural Resources	132,482	5.7%	Oil Prices, Iron Ore, Foreign Exchange
Subtotal (A)[1]	2,085,484	90.2%	
Concessions and Permissions	46,847	2.0%	
Contribution to Civil Service Social Security	17,284	0.7%	
Dividends	87,004	3.8%	
Other + Own Revenues + FGTS Compl.	76,743	3.3%	
Subtotal (B)[2]	227,878	9.9%	
Fiscal Incentives	-57	0.0%	
Total of Items	2,313,305	100.0%	

[1] Subtotal of revenue items related to macroeconomic parameters
[2] Subtotal of revenue items not related to macroeconomic parameters

Revenues not collected by the RFB, on the other hand, are a very heterogeneous group that includes, for example, revenues from Concessions and Permissions, Contribution to Civil Service Social Security (CPSS), Own Revenues and Revenues from Agreements, among others. In the analysis of items related to the economic cycle, only the Educational Contribution (“*salário-educação*”, a social contribution for funding public education) owed by companies on the total remuneration paid or credited, in any capacity, to employees (art. 15 of Law no. 9.424/96) and the Exploitation of Natural Resources proved to be significant, and in the latter item the explanatory variables are the prices of specific commodities (oil, iron ore) and the exchange rate.

Table 3 shows the estimated effect of a variation of 1 percentage point (p.p.) in the main parameters on the collection of taxes that make up the Revenue Collected by the RFB, based on the parameters estimated by the Economic Policy Secretariat (SPE/MF). The sensitivity analysis shows that the rate of economic growth and inflation are the parameters that most affect the total revenue managed by the RFB. Taxes are affected by more than one parameter at the same time. By analogy, the effect of the variation in these parameters on revenue is the result of the combination of two factors: price and quantity effects.

Revenues collected by the RFB, except for social security, are most affected by the real GDP growth rate and inflation, which influence the main taxes collected, such as the Contribution to Social Security Financing (COFINS), Contribution to the Social Integration Program (PIS), Contribution to Civil Service Asset Formation Program (PASEP) and Income Tax (IR). As far as social security revenues are concerned, there is a strong relationship with the wage bill, a variable that makes up most of the tax base for this contribution.

Table 3 - Revenues Managed by the RFB - % Impact of a 1 p.p. Variation in Each Parameter
Source: National Treasury and RFB/MF Results

Parameter	Impact on Revenue Collected by the RFB	
	Excluding Social Security	Social Security
GDP	0.60%	0.16%
Inflation (IER)[1]	0.57%	0.16%
Exchange rate	0.09%	-
Wage Bill	0.07%	0.78%
Interest (Selic-Over)	0.02%	-

[1] The Estimated Revenue Index (IER) is made up of a weighted average that assigns 55% to the average IPCA rate and 45% to the average IGP-DI rate.

In nominal terms, GDP is the variable that has the biggest impact on primary revenue. As can be seen in Table 4, a 1 p.p. rise in GDP, all other things being equal, results in an increase of R$11.5 billion in revenue, most of which is concentrated in the Revenue Collected by the RFB (R$10.5 billion). Similarly, an increase in inflation of 1 p.p., all other things being equal, results in an increase of R$11.0 billion in total revenue. In aggregate, considering a joint increase of all the variables by 1 p.p., there would be an increase in revenue of approximately R$30.7 billion.

It should be borne in mind that macroeconomic variables are correlated with each other, so assuming that only one variable will move, while the others remain static, is a necessary simplification for carrying out this hypothetical exercise. In addition, it is worth noting that the RFB also develops projections of its Collected Revenues using a methodology that considers a larger set of explanatory variables. As such, there may be differences between the figures estimated for this report and the official estimates calculated by the Federal Revenue Office for the purposes of the bimonthly reports assessing primary income and expenditure and budget documents.

Table 4 - Revenues - Impact of a 1 p.p. Change in Macroeconomic Variables
Data in: R$ million
Source: RFB/MF

Revenue items	Variables				
	GDP	Inflation (IER)[1]	Ex. Rate	Wage Bill	Interest (Selic-Over)
Revenue Administered by the RFB	10,553	10,025	1,583	1,231	352
Social Security Income	1,010	1,010	0	4,925	0
Total	**11,563**	**11,035**	**1,583**	**6,156**	**352**

[1] The Estimated Revenue Index (IER) is made up of a weighted average that assigns 55% to the average IPCA rate and 45% to the average IGP-DI rate.

2.1 Sensitivity of Primary Expenditure

Primary expenditure is made up of various headings, including payroll expenditures, social security benefits, assistance benefits linked to the minimum wage, Salary Allowance and Unemployment Benefit, etc. Forecasting risks are generally due to variations in macroeconomic parameters and estimated figures. Therefore, this subsection presents the sensitivity analysis of the Central Government's primary expenditures in relation to the macroeconomic parameters updated according to the SPE/MF Parameter Grid of September 13, 2023.

The sensitivity analysis in this section was based on expenditure aggregates whose variation is directly related to two main parameters: the National Consumer Price Index (INPC) and the minimum wage (SM). The expenses directly impacted by these parameters are social security and assistance benefits, the Salary Allowance and Unemployment Benefit, which together accounted for 52.2% of the Central Government's primary expenditures in 2022, as can be seen in Table 5.

Table 5 - Central Government Primary Expenditure Indexed to Macroeconomic Parameters
Data in: R$ million
Source and Elaboration: STN/MF

Expenditure Items	Expenditure in 2022	Share of Total Primary Expenditures	Index
Payroll expenditures	337,942	18.8%	Agreed Adjustments e INPC[1]
Social Security Benefits	796,977	44.2%	Minimum Wage and INPC
Assistance Benefits (LOAS and RMV)	78,827	4.4%	Minimum wage
Unemployment Benefit	40,707	2.3%	Minimum wage e INPC
Educational Contribution	23,564	1.3%	Minimum wage
Subtotal I[2]	**1,278,016**	**70.9%**	
Other Mandatory Expenses	371,839	20.6%	
Executive Branch Discretionary Expenditure	152,143	8.4%	
Subtotal II[3]	**523,982**	**29.1%**	
Total (I+II)	**1,801,998**	**100.0%**	

[1] For the expenses with Personnel and Social Charges, the impact of the risk related to the price index is low, since this index is a parameter for correcting only the retirements and pensions of the public servants who migrated to inactivity without the right to parity.
[2] Expenses indexed to Macroeconomic parameters.

Social security expenditures and revenues are directly affected by the INPC and the SM, the latter being the floor for social security benefits and remuneration in the formal labor market. In turn, the variation in the INPC is the adjustment factor for social security benefits above the minimum wage and for the contribution bands. Assistance benefits (Lifetime Monthly Income - RMV and Continuous Cash Benefit - BPC) and the Salary Allowance are affected directly by the SM and indirectly by the INPC, since this index currently makes up the minimum wage adjustment index. Unemployment Benefit, on the other hand, is directly affected by both indices, since the floor for payment of the benefit is set at one minimum wage and the ceiling is adjusted by the INPC variation.

In Table 6, the sensitivity of RGPS (social security) expenses and collection is shown in response to a R$1.00 change in the minimum wage or a 0.1 p.p. change in the INPC. Each real increase in the minimum wage generates an increase, in 2024, of R$ 394.9 million per year in Central Government expenditure and an increase of R$ 6.3 million in social security collection, resulting in a net reduction of R$ 388.6 million in the Central Govenrment’s primary balance in 2024

Table 6 - Effects of the Minimum Wage (MW) and INPC
Data in: R$ million
Source: Bodies responsible for each projection, according to Resolution No. 10/2023 of the Budget Execution Board (JEO).
Elaboration: STN/MF

Breakdown	Increase of R$ 1,00 in MW	Increase of 0,1 p.p. in INPC[1]		
	Benefits of up to 1 MW	Benefits of up to 1 MW	Benefits above 1 MW	Total
I. RGPS Revenues[2]	6.3	-	-	8.4
II. Social Security Benefits	269.3	354.4	481.9	836.3
III. RPGS Deficit	262.9	-	-	827.9
IV. Assistance Benefits	70.5	70.9	-	70.9
IV.1 RMV	0.7	0.7	-	0.7
IV.2 BPC/LOAS	69.8	70.2	-	70.2
V. FAT	55.2	71.8	28.4	100.2
V.1 Salary Allowance	19.7	25.7	0.0	25.7
V.2 Unemployment Benefit	35.5	46.1	28.4	74.5
Total Revenue(I)	**6.3**			**8.4**
Total Expenditures (II+IV+V)	**394.9**	**497.0**	**510.3**	**1,007.3**
Total Results (III+IV+V)	**388.6**			**999.0**

[1] The variation in the INPC has a direct impact on expenses whose readjustment is associated with its variation or, indirectly, through its impact on the readjustment of the Minimum Wage.
[2] Due to the updated methodology for calculating the impact of the Minimum Wage on RGPS revenue, which considers the overall impact of the Minimum Wage, it is not possible to separate the impact into minimum wage bands and, for this reason, this information is not shown in the table.

Table 7 shows the impact on selected primary expenditure of changes in the INPC. As you can see, apart from the Unemployment Benefit, all the other expenses have an equal relationship with variations in the INPC, so that an increase of 1 p.p. in the INPC leads to an increase of the same proportion in the respective expense.

Table 7 - Primary Expenditure - % Impact of the 1 p.p. Variation in the INPC
Source and Elaboration: STN/MF

Primary Expenditure	Impact resulting from the 1 p. p. variation in INPC
Social Security Benefits	1.00%
RMV	1.00%
BPC/LOAS	1.00%
Salary subsidy	1.00%
Unemployment insurance	1.61%

In turn, inflation measured by the INPC affects the readjustment of a larger number of beneficiaries, generating an increase of R$1,007.3 million in Central Government expenditures in 2024 and an increase of R$8.4 million in social security revenues, resulting in a net decrease of R$999.0 million in the Central Government result in 2024. To assess the impact on the space for Discretionary Expenditure and compliance with the Expenditure Limit, look at the "Total Expenditure" line, while to assess the impact on compliance with the primary balance target, look at the "Total Result" line.

Another possible analysis in relation to the variation in macroeconomic parameters is the impact of the IPCA on the spending limit. With the enactment of Complementary Law No. 200/2023, the Spending Ceiling established by EC No. 95/2016 was repealed and a new spending limit was established for the Federal Government's branches and autonomous bodies. As of 2024, this new spending limit is equivalent to the allocation updated in 2023, adjusted annually by the IPCA accumulated over 12 months up to June of the previous year to which the budget law refers and by a real growth component.

This real growth component is given by a proportion of the real variation in Adjusted Net Revenue (RLA), which will depend on compliance with the primary balance target in the financial year prior to drawing up the Budget (LOA), equivalent to 70% if the target is met and 50% otherwise, but never less than 0.6% and never more than 2.5%. As Table 8 shows, a deviation of 0.1 p.p. from the estimated change in the IPCA causes a change of R$1,886.2 million in the expenditure limit, given the possibility of an increase in the Executive branch's limit if the accumulated IPCA in 2023 exceeds the accumulated IPCA up to June of that year. On the other hand, the 0.1 p.p. deviation in the RLA could cause a variation of R$1,384.4 million in the Executive branch's expenditure limit, which exceptionally in 2024 could be increased by supplementary credit if the real growth in the RLA estimated for that year is higher than the real variation in the RLA accumulated up to June 2023.

Table 8 - Effect of a 0.1 p.p. change in the IPCA and a 0.1 p.p. change in the RLA on the expenditure limit established by LC 200/2023
Data in: R$ million
Source and Elaboration: STN/MF

Branch of government and agencies	2023	2024		
	Calculation Basis[1] LC nº 200/2023	IPCA[2] Readjustment: Change of 0.1 p.p. of IPCA	Real[3] Readjustment: Change of 0,1 p.p. of RLA	Projection[4] of the expenditure limit subject to LC 200/2023[4]
Executive Branch	1,886,227.3	1,886.2	1,384.4	2,011,330.4
Legislative Branch [5]	15,538.1	n.a.	n.a.	16,301.6
Judiciary Branch [5]	53,485.1	n.a.	n.a.	56,113.2
Federal Public Prosecutor's Office [5]	8,166.2	n.a.	n.a.	8.567,5
Federal Public Defender's Office [5]	677.1	n.a.	n.a.	710.4
Total	**1,964,093.9**	**1,886.2**	**1,384.4**	**2,093,023.1**

[1] The basis for calculating the expenditure limit for the year 2024 is given by the value of the appropriations updated in 2023, in force at the time of publication of LC 200/2023, in accordance with its article 3, paragraph 1, item I.

[2] The inflation adjustment for the Executive Branch could be equivalent to the variation in the IPCA accumulated in 2023 (currently projected at 4.85%). For the other branches, it will be 3.16%, equivalent to the variation in the IPCA over the 12 months ending June 2023.

[3] For the year 2024, as the primary result target for 2022 has been met, the proportion of 70% of the real increase in the RLA accumulated over 12 months up to June 2023, calculated in accordance with §2 of art. 5 of LC no. 200/2023, equivalent to 1.70% (70% x 2.43%), is considered. However, as provided for in art. 14 of the LC, the Executive branch's real adjustment may be increased if the 2nd Bimonthly Report for 2024 indicates a higher increase in the RLA.

[4] It considers an inflationary adjustment of 4.85% for the executive branch and 3.16% for the other branches, and a real adjustment of 1.70% for all branches.

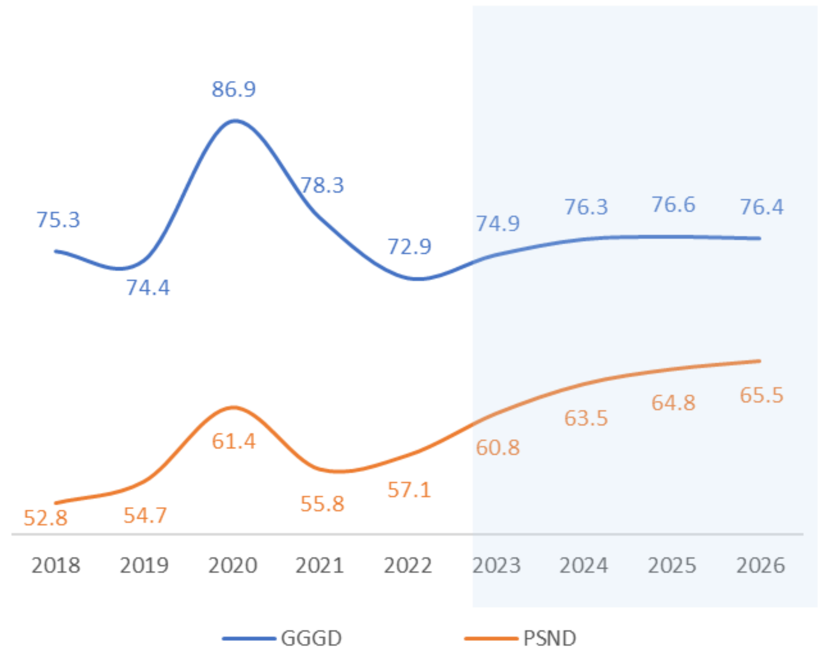
[5] The information on the change in the IPCA and the change in the RLA for the other Branches was not presented, given that the parameters that define the respective limits for 2024 have already been determined, namely: the change in the IPCA accumulated over 12 months up to June 2023 (3.16%) and 70% of the real change in the RLA accumulated over the same period (2.43%).

2.2 Public Debt Sensitivity

2.2.1 Public Sector Net Debt (PSND) and General Government Gross Debt (GGGD)

In 2023, the GGGD showed an upward trend. Analyses indicate that, at the end of 2023, the General Government Gross Debt (GGGD) would represent 74.9% of GDP - an increase of 2.0 p.p. compared to the end of 2022. It is estimated that the GGGD will follow an upward trajectory over the next few years, pressured by nominal interest rates, reaching 76.4% of GDP by the end of 2026, as shown in Chart 5.

Chart 5 - Debt Projections - PSND and GGGD
Data in: %GDP
Source: Historical, BCB. Projections: STN/ MF



GGGD growth is primarily explained by the differential between the interest burden and GDP growth. According to Chart 6, although nominal GDP growth pushes the gross debt down, this movement is more than offset by the nominal interest burned. In addition, the primary deficit also puts upward pressure on the debt.

The PSND, in turn, would reach 60.8% of GDP at the end of 2023 - an increase of 3.7 p.p. compared to 2022. The PSND also shows an increasing trajectory over the projection horizon, closing 2026 at 65.5% of GDP.

Similarly to the GGGD, the most important factor in the growth of the PSND is nominal interest, as can be seen in Chart 7. Although it also benefits from nominal GDP growth in 2023, the PSND is more pressured by nominal interest since the assets that are deducted from this indicator have lower remuneration.

Chart 8 shows the results of simulations of adverse shocks to three key variables for public debt dynamics, namely: i) GDP growth 1 p.p. per year lower than the reference scenario (also considering an estimated impact on the primary of lower growth); ii) interest rate 1 p.p. per year higher than the reference scenario until the end of the projection horizon; iii) primary balance lower than the reference scenario by 1% of GDP per year; iv) the three shocks combined. The shocks to GDP and the primary balance were applied from 2024, while the shock to the SELIC rate was applied from the next COPOM meeting (November). The shocks here are stylized to provide an analysis of the sensitivity of the debt to standardized changes in the variables.

Chart 6 - GGGD Variation Factors in 2023
Data in: %GDP
Source: STN/MF.

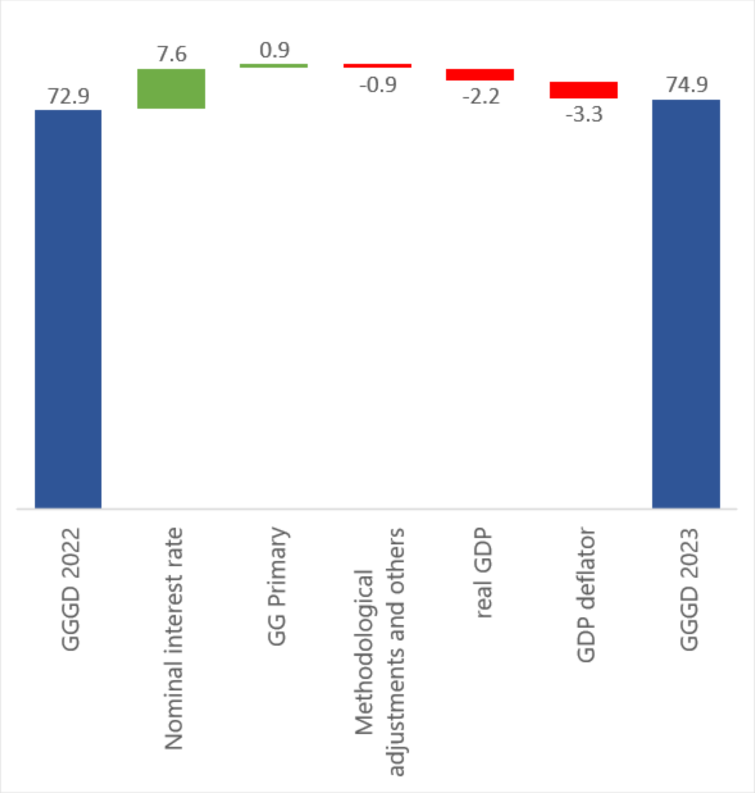
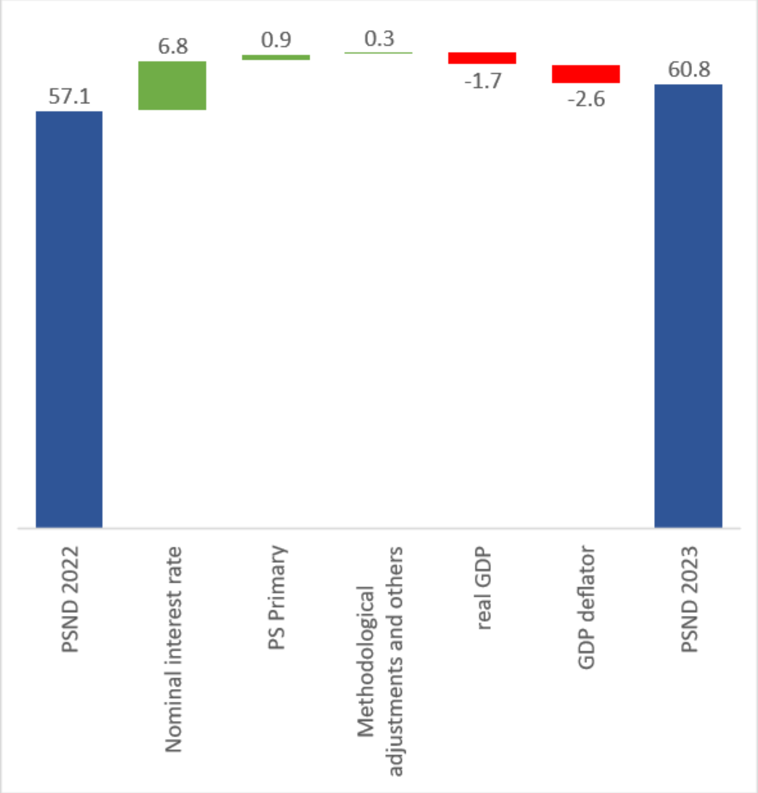


Chart 7 - PSND Variation Factors in 2023
Data in: %GDP
Source: STN/MF.



The increase in the interest rate would raise the GGGD to 77.8% of GDP, an increase of 1.4% of GDP compared to the baseline scenario at the end of 3 years. The GDP and primary shocks alone would result in similar effects. At the end of 2026, the primary shock would result in an indebtedness of 79.6% of GDP, which would represent an effect of 3.2 p.p. of GDP compared to the reference scenario. In turn, the combination of the three shocks would take the GGGD to 85.5% of GDP in 2026, equivalent to a 9.1 p.p. increase in indebtedness compared to the baseline scenario.

It is reasonable to assume that an adverse shock to one of these variables is combined with negative impacts on the others. In other words, a scenario with a higher primary deficit tends to be accompanied by higher real interest rates and lower GDP growth, even if the proportions of the shocks do not occur as stylized in the sensitivity analysis in Chart 8. Thus, lower debt/GDP levels in the medium term require the continuation of reforms that favor the business environment and higher GDP growth, especially those that favor fiscal consolidation.

The analysis and conclusion based on the net debt indicator are similar, as shown in Chart 9. For example, it should be mentioned that the effect of a combined shock would reach 8.8 p.p. of GDP at the end of 2026, in a scenario where the PSND would reach 74.3% of GDP, compared to 65.5% in the reference scenario (no impacts).

Chart 8 - Public Debt Sensitivity Analysis - GGGD
Data in: % of GDP. Source: Historical, BCB.
Projections: STN/MF

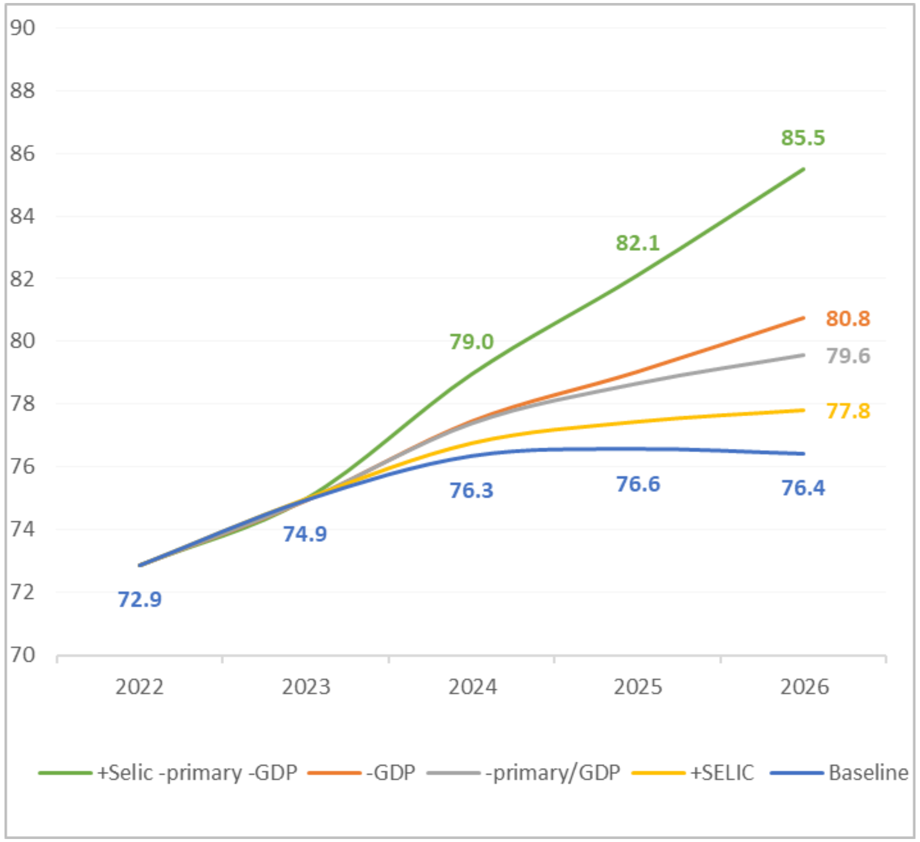
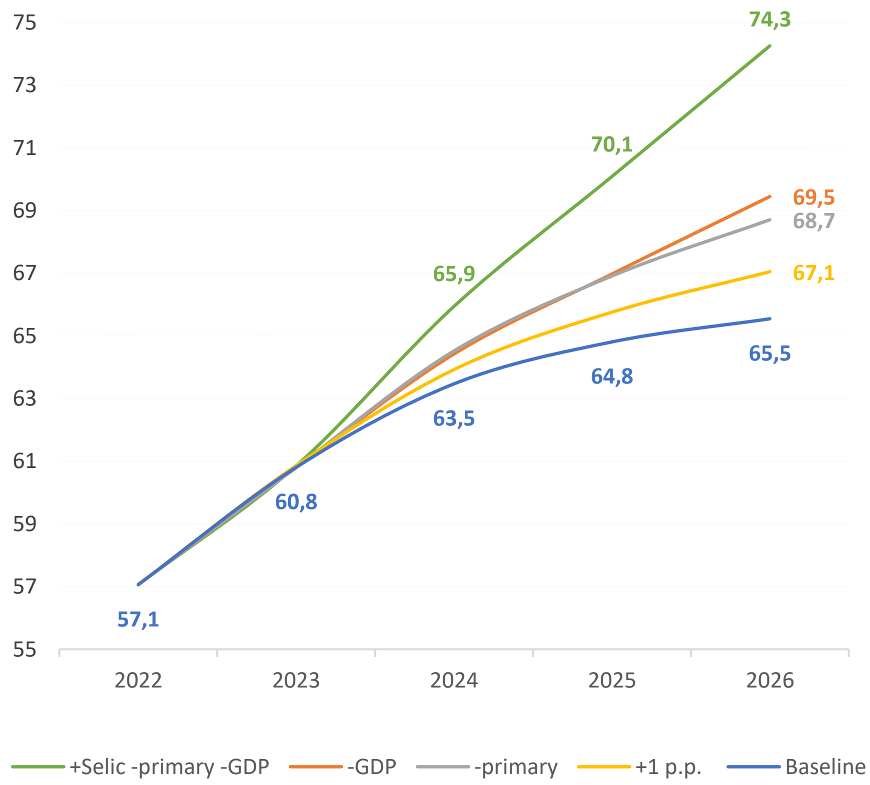


Chart 9 - Public Debt Sensitivity Analysis - PSND
Data in: % of GDP. Source: Historical, BCB.
Projections: STN/MF



3 Specific Fiscal Risks

Specific risks relate to events that occur irregularly and have various origins, usually associated with government programs, contingent liabilities and the public sector's balance sheet (values of assets or liabilities). Their analysis involves a qualitative assessment of the particularities of each issue, seeking to identify the materialization of the risk in the short term, as well as measuring its cost.

Table 9 - Fiscal Risk Factors Related to Liabilities and Assets
Data in: R$ million
Prepared by: STN/MF

Fiscal Risks	Impact Primary (P) Financial (F)	Inventory		Percentage of Total	Estimated Flows	
		2022	2023		2023	2024
Risks Related to Liabilities		**4,436,209.79**	**4,568,579.73**	**75.27%**	**111,264.40**	**124.525,80**
Contingent Liabilities in Adjustment[1]	F	104,830.50	106,100.00	1.75%	25.141,90	43.775,30
Federal Government Warranties [2]	F	276,900.00	264,900.00	4.36%	15.080,60	9.500,00
Liabilities of Federative Entities [3]	F	139,300.00	139,300.00	2.29%	N/A	N/A
Export Credit Insurance[4]	P	34,561.09	29,342.23	0.48%	4.340,00	3.196,00
Judicial Claims - Probable Risk[5]	P	1,016,900.00	1,123,000.00	18.50%	65.600,00	66.900,00
Judicial Claims - Possible Risk[5]	P	2,741,800.00	2,782,800.00	45.85%		
Constitutional Fund Liabilities[6]	P	15,920.60	15,920.60	0.26%	1.101,90	1.154,50
FIES [7]	P	105,997.60	107,216.90	1.77%	N/A	N/A
Risks Related to Assets		**1,389,575.00**	**1,501,207.88**	**24.73%**	**169,680.03**	**132.269,04**
Assets Related to Federative Entities[8]	F	692,680.40	729,793.10	12.02%	28.500,00	40.600,00
Assets Not Related to Federal Entities[9]	F	107,582.70	169,311.48	2.79%	43.066,43	4.162,14
Dividends and IOE [10]	P	N/A	N/A	N/A	49.859,40	36.650,20
Active Debt[11]	P	575,432.90	587,962.30	9.69%	46.138,20	46.408,70
BCB Credits [8]	F	13,879.00	14,141.00	0.23%	2.116,00	4.448,00
Total Federal Government Exposure		**5,825,784.79**	**6,069,787.61**	**100%**		

N/A (not applicable or not available).
[1] 2023 stock corresponds to the estimate in LOA 2023.
[2] 2023 stock corresponds to the position on April 30, 2023.
[3] Refers to the stock of writs of payment issued by the states. Year 2022, position as of December 31, 2022. The figure is repeated for 2023.
[4] Inventory in 2023 corresponds to the position on June 30, 2023.
[5] 2023 Inventory corresponds to the position on September 26, 2023.
[6] Inventory on December 31, 2022.
[7] Inventory of 2023 to the position on June 30, 2023.
[8] Estimated flows from 2023 to the 2nd semester.
[9] Stock on August 31, 2023.
[10] Dividends: foreseen in PLOA 2024.
[11] DAU flow for 2023 corresponds to the June 2023 base.

The Federal Government's exposure to fiscal risks in 2023 amounted to R$6.0 trillion, distributed in risks that can materialize either through the non-receipt of revenues associated with assets, or through the increase in unforeseen expenses related to the Federal Government's liabilities, with primary and financial impact, as detailed in Table 9. Chart 10 and Chart 11 show, respectively, the composition and impacts of the specific risks.

It is important to note, however, that the fiscal risks listed have different thematic natures with a wide variety of types and degrees of impact, as well as probabilities of occurrence varying between remote, possible and probable. In this way, the analyses resulting from the summary presented in Table 9 must take these factors into account, so that the overall view of the Federal Government's fiscal risks is not affected.

Chart 10 - Breakdown of Specific Fiscal Risks
Data in: R$ billion
Prepared by: STN/MF

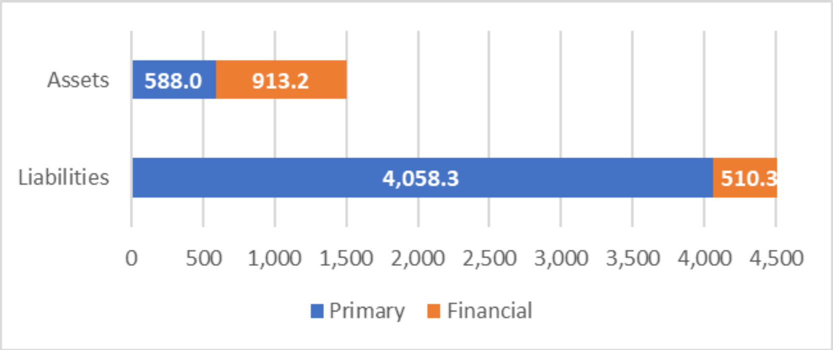
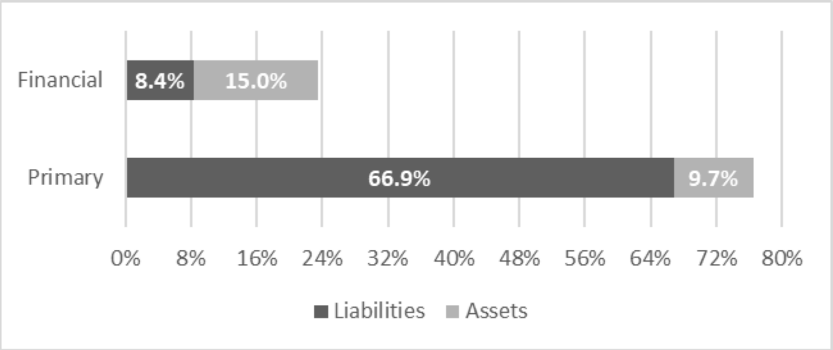


Chart 11 - Impact of Specific Fiscal Risks
Data in: Percentage
Prepared by: STN/MF



3.1 Contingent Liabilities

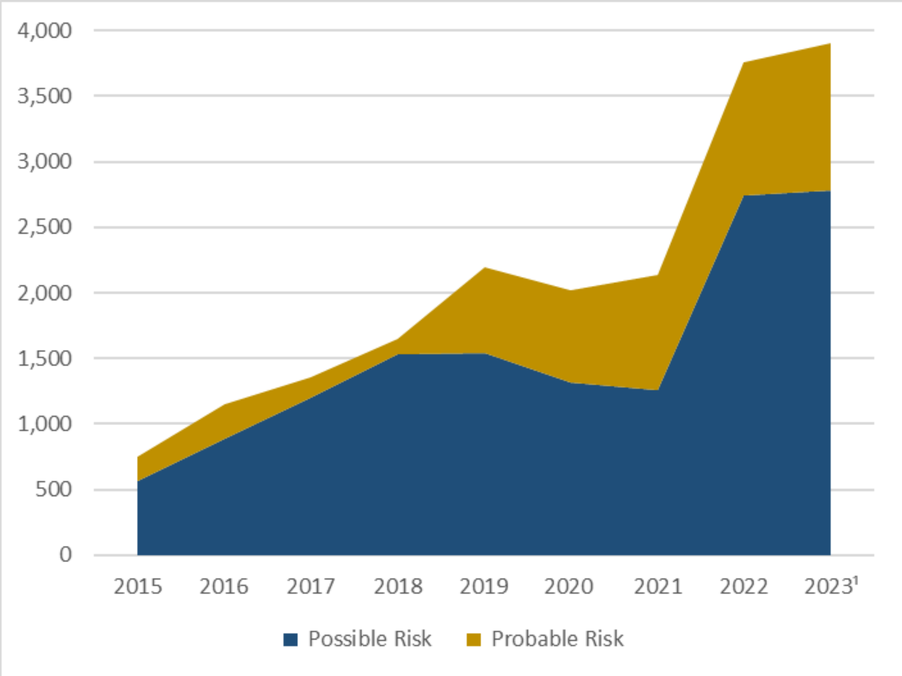
Contingent liabilities refer to possible new obligations whose confirmation depends on the occurrence of one or more future events, or whose probability of occurrence and magnitude depend on unforeseeable exogenous conditions. Also considered contingent liabilities are obligations that arise from past events, but which are not yet recognized in the financial statements because it is unlikely that they will have to be settled or because the amount cannot yet be measured with sufficient certainty.

3.1.1 Judicial claims

Judicial claims against the Federal Government are defined as a fiscal risk, as they may result in court decisions against the Treasury.

Possible risk lawsuits, considered contingent liabilities, are not provisioned for and therefore do not impact the Federal Government's Balance Sheet. On the other hand, probable risk lawsuits, in which the Federal Government is directly involved, are recorded by the National Treasury in accounts for a provision for legal losses, sensitizing the Federal Government's Balance Sheet, since the loss of resources in the future is probable and it is feasible to estimate their value with sufficient certainty. From 2022 onwards, the actions classified as probable risk were detailed in the LDO's Fiscal Risks Annex, with the aim of improving the availability of information to the public.

Chart 12 - Evolution of the Stock of Judicial Claims against the Federal Government
Data in: R$ billion



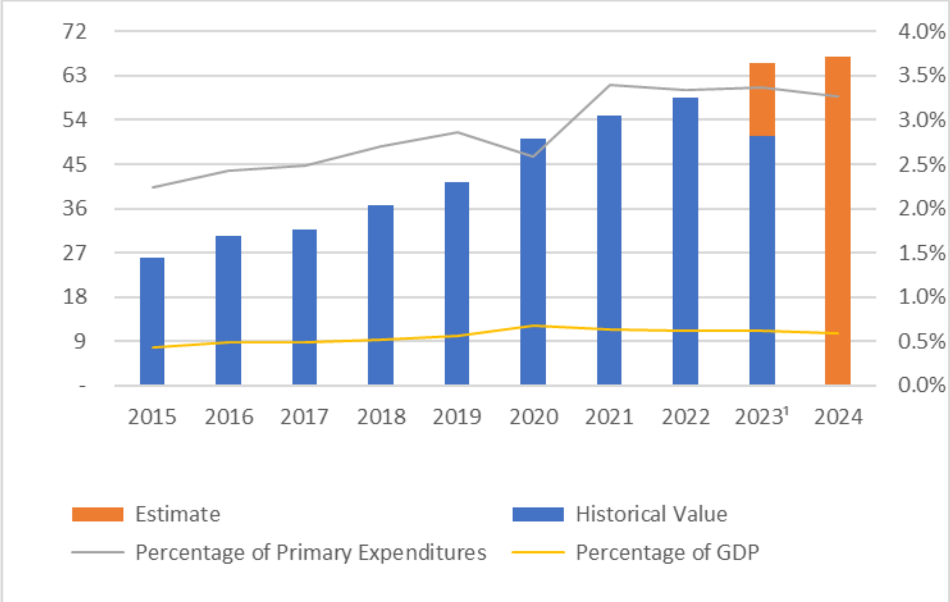
[1] Position on September 27, 2023.

Judicial claims against the Federal Government, its autonomous agencies or foundations are classified by the Federal Attorney General's Office (AGU) according to the probability of loss, which may be probable risk, possible risk or remote risk, according to criteria defined by AGU Normative Ordinance No. 68/2022.

From 2015 to 2023, lawsuits against the Federal Government showed significant growth in terms of value. Historically, probable risk lawsuits show a greater rate of increase, especially from 2019 onwards. In September 2023, probable and possible risk lawsuits totaled R$3,905.8 billion, as shown in Chart 12, of which 71.2% (R$2,782.8 billion) refer to possible risk lawsuits and 28.8% (R$1,123.0 billion) to lawsuits classified as probable loss, according to information provided by the Federal Attorney General's Office (AGU), the Secretariat for the Coordination and Governance of State-Owned Companies (SEST) and the Central Bank (BCB).

Recently, there has been a significant increase in the amount of possible risk actions, basically due to three major actions:
a) Pension reform, EC 103/2019;
b) Lifetime Review; and
c) FGTS monetary correction.

Chart 13 - Expenditure on legal actions.
Data in: R$ billion
Source: STN/MF, SPE/MF and PLOA 2023. Prepared by: STN/MF.



[1] Historical value up to September 2023 and estimated from October to December 2023.

Estimates of the value of tax lawsuits are made by the Brazilian Federal Revenue Office (RFB), which adopts as a premise the broad base of taxpayers subject to the same legal status, based on aggregated information. These figures represent the hypothetical situation applied to the total group of taxpayers who would be in the same legal situation and would benefit from any decision unfavorable to the Treasury, regardless of whether they had gone to court.

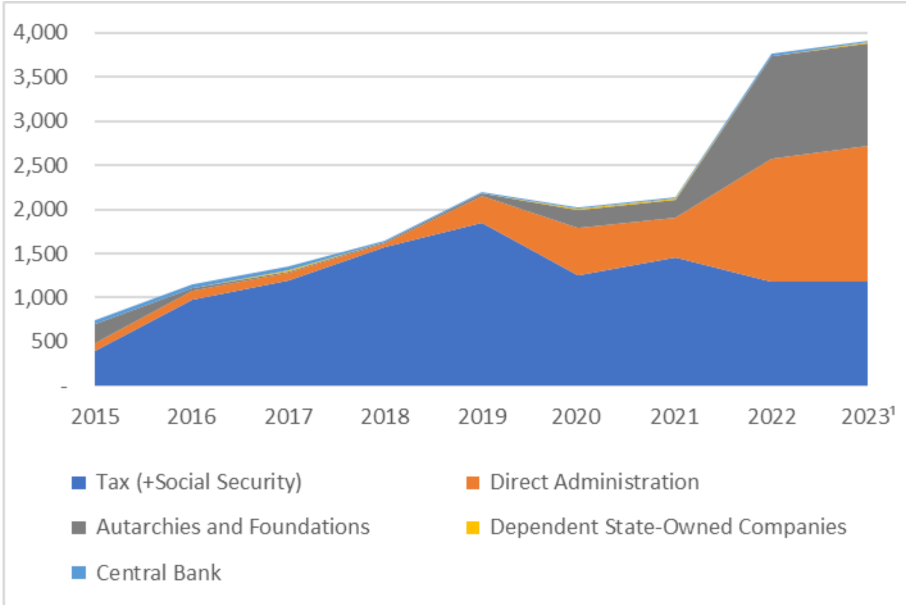
In addition to the growth in the stock of lawsuits that represent fiscal risk for the Federal Government, there is an increase in the materialization of this type of risk, as shown in Chart 13. While the average payment for lawsuits between 2015 and 2023 is R$43.9 billion, for 2024, in nominal terms, it is estimated that it will reach R$66.9 billion (an increase of more than 52% in relation to the average), representing approximately 3.0% of primary expenditure. In the same vein, the payment of lawsuits, as a share of the GDP, has been reaching increasingly significant levels. In 2015, this type of expenditure accounted for around 0.5% of GDP, reaching a peak of 0.7% of GDP in 2020.

As shown in Chart 14, which considers probable and possible risk lawsuits, the most significant amounts refer to lawsuits against the Direct Administration, which in the last two years have exceeded the amount of tax lawsuits (against the Federal Government) and represent around 40% of all lawsuits classified as possible and probable fiscal risk.

Considering that the effect of court rulings directly affects the primary result, either through increased expenditure or loss of revenue, their upward trajectory reveals itself as an important element threatening Brazil's fiscal balance, directly impacting the main fiscal rules, such as the expenditure limit and the primary result target itself.

Thus, important changes in the New Fiscal Regime were Constitutional Amendments No. 113, of December 8, 2021, and No. 114, of December 16, 2021, which brought significant changes to the system for paying court-ordered debt. Until 2026, the rules set a limit for the allocation in the budget proposal for each financial year of expenses related to the payment of court judgments under art. 100 of the Federal Constitution. This limit was defined on the basis of the amount of expenditure paid as a result of a court judgment in 2016, including unpaid debts, and with a forecast of correction by the variation in the Broad National Consumer Price Index (IPCA), accumulated over twelve months, from January to December of the previous year to which the budget law refers, under the terms of item II, § 1 of art. 107 of the Transitional Constitutional Provisions Act of the Federal Constitution.

Chart 14 - Judicial Claims Against the Federal Government by Nature or Group (Possible and Probable Risk)
Data in: R$ billion
Source: AGU, SEST/ME and BCB. Prepared by: STN/MF



As explained in this section and in the Fiscal Risks Annex of the LDO 2024, expenditure on court judgments and writs of payment has grown significantly in recent years (Table 11), accounting for a considerable part of the Central Government's primary expenditure. Nonetheless, given the new system for paying court-ordered debt established by the ECs mentioned above, it is estimated that the accumulated liability by 2027 will be R$199.9 billion, or 1.4% of GDP, under the assumptions that there is no early payment of court-ordered debt with a discount, nor its use in matching operations[4].

[4] Fiscal Projections Report of the National Treasury Secretariat, June 2023, available at: https://www.tesourotransparente.gov.br/publicacoes/relatorio-de-projecoes-fiscais/2023/20?ano_selecionado=2023

Table 10 - Probable and possible risk lawsuits
Data in: R$ billion
Source: AGU, SEST/MGI and BCB. Prepared by: STN/MF

Judicial claims	Baseline Year								
	2015	2016	2017	2018	2019	2020	2021	2022	2023[1]
Possible risk	**565.1**	**884.0**	**1,195.1**	**1,528.0**	**1,540.1**	**1,316.1**	**1,260.4**	**2,741.8**	**2,782.8**
Tax (+ Social Security)	327.0	828.3	1,139.5	1,512.8	1,342.1	862.9	842.6	892.8	798.9
Other	238.1	55.6	55.6	15.2	198.0	453.2	417.8	1,849.0	1,983.9
Direct Administration	1.0	4.0	3.1	3.7	171.6	230.6	209.3	1,161.8	1,298.3
Autarchies and Foundations	194.7	8.3	8.3	3.5	16.0	211.6	198.9	675.9	673.4
Dependent State-Owned Companies	2.0	2.0	2.1	2.0	4.0	4.9	3.7	3.6	4.1
Central Bank	40.4	41.3	42.1	6.0	6.4	6.1	5.9	7.7	8.1
Probable Risk	**181.7**	**269.7**	**162.6**	**117.6**	**659.7**	**707.2**	**871.9**	**1,016.9**	**1,123.0**
Tax (+ Social Security)	65.8	152.5	56.3	60.3	500.0	384.7	614.2	293.9	380.4
Other	116.0	117.2	106.3	57.3	159.8	322.5	257.7	723.0	742.6
Direct Administration	84.5	98.9	87.9	42.7	136.9	306.3	240.5	227.4	245.5
Autarchies and Foundations	22.0	8.5	7.0	2.5	8.2	1.0	5.2	482.5	482.5
Dependent State-Owned Companies	3.5	2.9	2.7	3.1	5.4	5.4	3.0	3.2	4.7
Central Bank	6.0	6.9	8.7	9.0	9.3	9.8	9.1	9.9	9.9
Total	**746.8**	**1,153.7**	**1,357.7**	**1,645.6**	**2,199.8**	**2,023.3**	**2,132.3**	**3,758.7**	**3,905.8**

[1] Position September 2023, AGU (Technical Note No. 00075/2023/SGE/AGU, dated September 26, 2023, with updates in relation to Technical Note No. 00050/2023/DGE/AGU, dated July 3, 2023), SEST and BCB.

More detailed information on the fiscal risk of lawsuits against the Federal Government can be found in the Fiscal Risks Annex and its updates, at the following e-mail address:
https://www.gov.br/tesouronacional/pt-br/estatisticas-fiscais-e-planejamento/planejamento-fiscal/riscos-fiscais

Table 11 - Judicial Expenditures in relation to Primary Expenditures
Data in: R$ billion
Source: STN/MF, SPE/MF and PLOA 2023. Prepared by: STN/MF

Expenditures	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023[2]	2024[3]
Judicial actions (amounts paid) [1]	18.8	26.1	30.3	31.7	36.5	41.3	50.3	54.9	58.7	65.6	66.9
Total Primary Expenditures	1,046.50	1,164.50	1,249.40	1,279.00	1,351.80	1,441.80	1,947.20	1,613.90	1,801.90	1,949.09	2,188.38
% of Total Primary Expenditures	1.80%	2.20%	2.40%	2.50%	2.70%	2.90%	2.60%	3.40%	3.26%	3.37%	3.06%

[1] Amounts paid refer to all Federal Government Expenditure in compliance with court rulings (Financial Year and RAP).
[2] Estimated amounts paid refers to Updated Appropriation for payment of court judgments (position: September 2023).
Primary Expenditure Estimate: Primary Revenue and Expenditure Assessment Report - 4th Quarter 2023.
[3] Estimated amounts paid and primary expenditure: PLOA 2024.

Box 1 - Judicial Fiscal Risks Monitoring Board

The Council for Accompanying and Monitoring Judicial Fiscal Risks was created by Decree No. 11.379/2023, with the aim of proposing measures to improve the governance of accompanying and monitoring the judicial fiscal risks of the Federal Government, its municipalities and foundations. In addition, its function is to encourage the adoption of solutions designed to strengthen and subsidize the activities of the judicial representation bodies of the Federal Government, its municipalities and foundations, in the monitoring of judicial events capable of affecting public accounts, observing the guidelines of Complementary Law No. 101, of May 4, 2000 (Fiscal Responsibility Law). It is made up of the heads of the following bodies: The Federal Attorney General's Office, which will chair it; the Ministry of Finance; and the Ministry of Planning and Budget.

In an advisory capacity, the collegiate body is responsible for: establishing guidelines and actions; proposing updates to procedures for recognizing, measuring and evidencing contingent liabilities arising from lawsuits; and suggesting measures for coordination between the bodies that are part of the processes for following up and monitoring the Federal Government's judicial fiscal risks.

It is also the Council's responsibility to request information on the economic impact of judicial theses and the respective calculation methodology, and on expenditure on writs of payment and small claims; and to liaise with public and private bodies and entities to seek technological solutions in the management of the Federal Government's judicial fiscal risks.

In addition, the Council must prepare reports and studies to improve the management of judicial fiscal risks, indicate factors to avoid litigation, and prevent and resolve disputes involving the Public Authority.

Committee

Decree 11.379/2023 also creates a permanent Technical Committee for the Follow-up and Monitoring of Judicial Fiscal Risks, which will provide support and advice on the implementation of the Council's decisions.

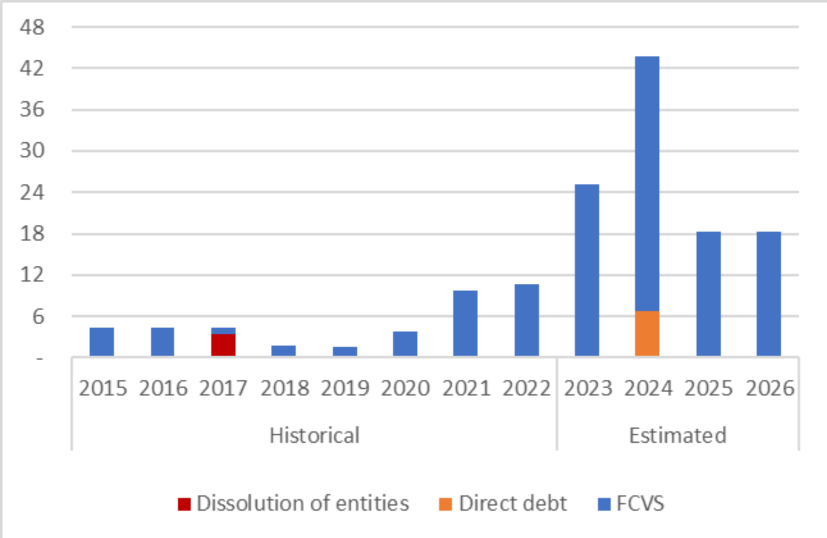
The Committee is made up of a representative from the following bodies: Attorney General's Office of the National Treasury (PGFN); Attorney General's Office of the Federal Government (PGU); Federal Attorney's Office (PGF); Litigation General Secretariat of the Federal Attorney's General Office (AGU); National Treasury Secretariat/Ministry of Finance; Special Secretariat of the Federal Revenue of Brazil/Ministry of Finance; Executive Secretariat/Ministry of Finance; Federal Budget Secretariat/Ministry of Planning and Budget; and Executive Secretariat/Ministry of Planning and Budget.

3.1.2 *Contingent Liabilities Being Recognized by the STN*

The Federal Government's contingent liabilities in the process of being settled by the STN can be classified as: Debts arising from the Wage Variation Compensation Fund (FCVS); Direct Federal Government Debts; and Debts arising from the Extinction/Dissolution of Federal Administration Entities. With a few exceptions, payments of these liabilities to creditors are made through Federal Public Debt securities, a form of securitization with a financial impact.

The Federal Government's liabilities arising from the FCVS comprise the largest contingent Federal Government liability in the process of being settled. Despite the interruption in the flow of FCVS novations between 2012 and 2015, with the publication of Laws No. 13932, of December 11, 2019, and No. 14257, of December 1, 2021 (which made changes to Law No. 10150/2000), there was an improvement in the prospect of an increase in the flow of novation processes, starting in 2022. The Federal Government's liabilities arising from the FCVS have been progressively settled through successive contracts between the Federal Government and the financial agents (or their assignees, or the FGTS). Since 1998, 599 novation or assumption contracts have been signed, totaling R$ 248.9 billion as of August 2023. The contracts establish payment through long-term bonds called CVS, maturing on January 1, 2027, but which have been paying monthly interest installments since January 1, 2005, and monthly principal installments since January 1, 2009.

Chart 15 - Settlement of Contingent Liabilities
Data in: R$ billion
Source and Elaboration: STN/MF



The estimate of the stock to be paid results from: (i) the calculation of the balances in the contracts already submitted for approval (by the agents to Caixa); and (ii) the periodic actuarial assessments carried out by a company hired by Caixa, which includes the portion of contracts not submitted for approval. Chart 15 shows the evolution of regulated liabilities from 2015 to 2022 and the estimate from 2023 to 2026.

Regarding Direct Debts, it should be noted that their settlement is the responsibility of the commission provided for in article 3 of Decree 10.802/2021, which regulates the recognition and settlement of obligations by the Federal Government. Although the regularization forecast for 2023 (June position) is R$6.2 billion, for the time being the commission

Debts arising from the extinction/dissolution of entities: Commitments assumed by the Federal Government because of the extinction/dissolution of municipalities/companies.
Direct Federal Debts: These arise from a variety of events. Two stand out: (i) the attribution to the Federal Government of commitments arising from investments made in the extinct territories; and (ii) legal provisions that self-direct federal financial institutions to provide financial aid, or participate in some public policy, with the commitment of subsequent reimbursement by the Federal Government.
FCVS: A public fund of an accounting and financial nature, whose purpose is to guarantee the term limit for the amortization of borrowers' debt arising from housing loans, through the assumption of the rights and obligations of the now defunct SFH Housing Insurance. It is managed by Caixa Econômica Federal.

has only ruled on a debt of R$106.6 million, which, in turn, has not had its enforceability recognized and therefore does not constitute a financial/budgetary impact for the Federal Government in this 2023 financial year.

The stock of Contingent Liabilities in the Recognition Phase for 2023 is R$106.1 billion, of which around 93.8% relates to the FCVS.

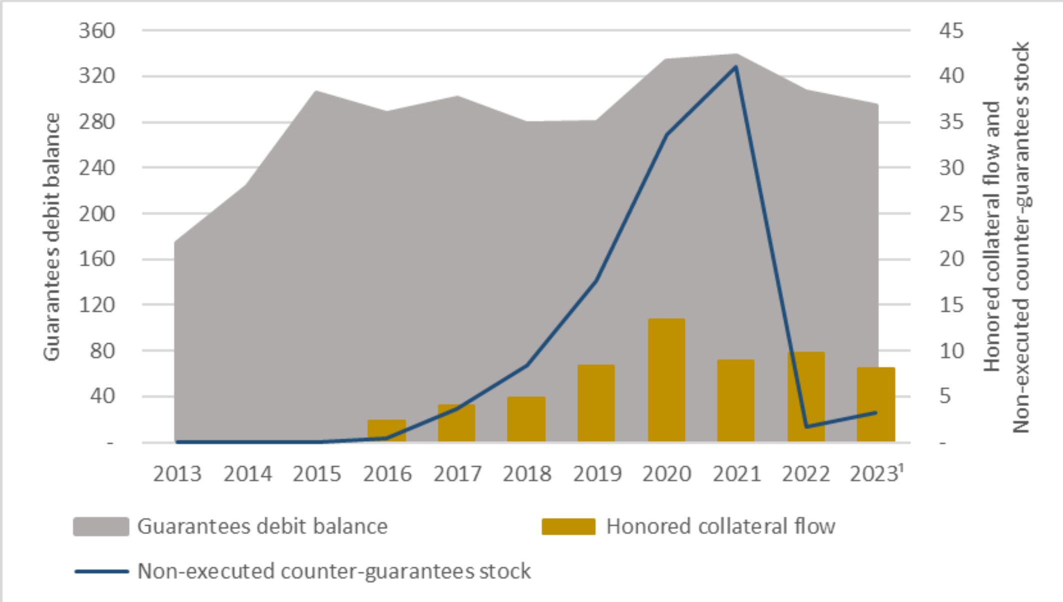
3.1.3 Warranties

3.1.3.1 Federal Government Warranties and Cross Warranties - Credit Operations

Within the STN, the Guarantees System includes the granting, control and enforcement of guarantees and counter-guarantees. As such, the STN monitors any delays in payments on guaranteed contracts, setting deadlines for settling any pending issues and alerting debtors to the sanctions, penalties and consequences provided for in the contracts and in the relevant legislation.

If the borrower fails to make the payment within the established deadlines, the Federal Government, as guarantor, settles the debt with the creditor and then calls in the counter-guarantees provided for in the contract to recover the amounts spent, including, in addition to the original amount owed, default interest, fines and any other charges provided for in the financing contracts.

Chart 16 - Evolution of Guarantees for Credit Operations
Data in R$ billion
Source and Elaboration: STN (Quarterly Report on Guaranteed Credit Operations - RQG)



[1] Position in August 2023

According to the provisions set out in item IV of article 29 and article 40 of Supplementary Law 101/2000 (Fiscal Responsibility Law - LRF), the Federal Government can grant guarantees for internal or external credit operations, this mechanism being defined as the commitment to comply with a financial or contractual obligation assumed by a member of the Federation, or an entity linked to it.

Chart 16 shows the evolution of the Federal Government's guarantees for credit operations from 2013 to 2023 (as of August). The outstanding balance, which represents the stock of all existing guaranteed contracts, shows an upward trend until 2021, with a slight decrease between 2021 and 2023 (August position), when it reached R$ 294.0 billion. It's important to note that the increase in the stock observed from 2019 to 2021 is mainly due to currency devaluation.

The flow of honored guarantees shows the Federal Government's annual spending on honoring unpaid debts of federal entities, with a financial impact. After 11 years (2005 to 2015) without the need to honor guarantees granted, in 2016 the STN once again started paying honors, accumulating an amount of R$59.8 billion from 2016 to August 2023. In 2022, honors amounted to R$9.8 billion. In 2023, until August, the amount honored was R$8.1 billion. The STN's forecast is that this amount will end the year at R$15.1 billion.

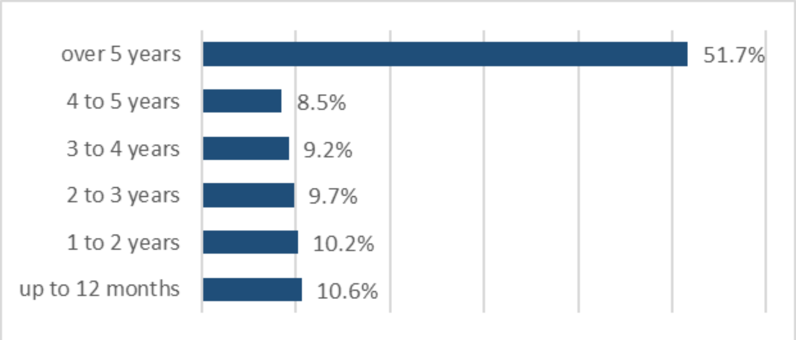
Chart 16 also highlights the growing stock of counter-guarantees not executed by the Federal Government, which characterized the materialization of fiscal risk in guarantee operations, from R$3.6 billion in 2017 to a total of R$40.9 billion in 2021. With the signing of the contracts relating to article 9-A of LC 159/17 and article 23 of LC 178/2021, the entire stock of guarantees to be recovered, including under the Fiscal Recovery Regime, was brought to zero in 2022, since the entire balance was renegotiated. However, in the last few months of the same year, this balance grew again due to new lawsuits filed by states questioning how they will compensate for the loss of ICMS collection by the states as a result of the reduction in the rates on energy and telecommunications brought in by LC 194/2022. In 2023, new injunctions have been granted preventing the execution of counter-guarantees, as in the case of the states of Espírito Santo and Sergipe.

The write-off of the amounts of guarantees to be recovered occurs concurrently with the incorporation of these amounts (recalculated in accordance with LC no. 178/21) into the accounts of art. 9-A and art. 23, i.e. there is still the expectation of receiving these amounts. What happens is that they are now part of the debt managed by the Federal Government and are therefore accounted for in their own accounts.

Regarding provisions and reserves, the amounts guaranteed by the Federal Government for states that have joined the RRF are accounted for by the STN as a provision, since the state's accession creates the expectation of default on its outstanding obligations. In addition, each year the STN requests a specific and sufficient budget appropriation to pay the obligations estimated for the following year.

Lastly, Chart 17 shows the percentage of outstanding guarantees per period, which totals R$402.4 billion (outstanding balance plus accrued interest), illustrating the Federal Government's degree of exposure to the outstanding balance of its guarantees.

Chart 17 - Percentage of Outstanding Guarantees per Period
Source and Elaboration: STN



The outstanding balance of guarantees rises due to new disbursements on existing contracts, the contracting of new credit operations with disbursements, the indexation of the outstanding balance (in the case of domestic guaranteed debt) and the increase in exchange rates (in the case of foreign guaranteed debt). On the other hand, amortizations and the appreciation of the real against foreign currencies reduce the outstanding balance.

Every four months, STN publishes the Guaranteed Credit Operations Report (RQG). Editions of this report can be accessed at the following website:
https://www.tesourotransparente.gov.br/publicacoes/relatorio-quadrimestral-de-operacoes-de-credito-garantidas-rqg/2023/28

3.1.3.2 Private Guaranteed Funds with Federal Government Participation

Guarantee Funds are private in nature and have separate assets from their shareholders. Their assets are made up of shareholder contributions and income from their management. Shareholders' liability is limited to the amount contributed. Fees and commissions are charged to the beneficiaries of the guarantees to ensure the fund's long-term sustainability. The Federal Government can be the sole shareholder or participate jointly with other shareholders, in accordance with a specific law that defines the fund's purpose and operating parameters. The funds are managed by a federal financial institution which acts on behalf of the funds and receives a fee for the services it provides.

The Federal Government currently participates as a shareholder in the following private guaranteed funds:

a) Shipbuilding Guarantee Fund (FGCN): The purpose of the FGCN is to guarantee the credit risk of financing operations for the construction or production of ships and the risk arising from the performance of Brazilian shipyards. Created by Law 11.786/2008, the FGCN is managed by Caixa Econômica Federal.

b) Popular Housing Guarantee Fund (FGHab): created by Law No. 11.977/2009, was set up to guarantee housing finance contracts in the *Minha Casa Minha Vida* Program, when the events of Death and Permanent Disability (MIP), Physical Damage to the Property (DFI) and Temporary Reduction of Payment Capacity (RTCP)/unemployment occur). Originally, it had a limit of 2 million contracts, which was reached in 2016. In 2022, Law 14.462/2022 expanded its purpose to cover new operations from June 2022. In addition, Law 14.620/2023 allowed for unlimited participation by the Federal Government in the FGHab, with funds contributed according to budget availability. FGHab is managed by CAIXA, as defined in its Bylaws.

For the Federal Government, the main objective of setting up a fund is to guarantee the risk of operations involving the financing of specific sectors of the Brazilian economy, such as shipping and housing.
Thus, since 2009, by promoting guarantees for credit operations, the Guarantee Funds have acted as an instrument for mitigating risks and making public programs and policies viable. The guarantees offered complement the requirements of the lending agent and are intended to encourage private sector participation and, consequently, promote economic stimulus in specific sectors.

c) Educational Credit Operations Guarantee Fund (FGEDUC): The purpose of FGEDUC is to guarantee the risk in educational credit operations, within the scope of the Higher Education Student Financing Fund (Fies) for student financing operations contracted until the end of 2017. Created by Law No. 12.087/2009, FGEDUC is managed by CAIXA.

d) Student Financing Fund Guarantee Fund (FG-Fies): The purpose of FG-Fies is to guarantee loans to students under the Fies program from the first semester of 2018. Like FGEDUC, FG-Fies is managed by CAIXA. The Federal Government's participation in this fund was authorized by Law No. 13,530/2017.

e) Investment Guarantee Fund (FGI): Its purpose is to guarantee financing for micro, small and medium-sized enterprises for the acquisition of capital goods. The traditional IGF is a perennial product, while the PEAC IGF is a credit guarantee program with a duration determined by law (Law 14.042/2020), with the aim of expanding access to credit for Individual Microentrepreneurs (MEIs), micro, small and medium-sized enterprises (MSMEs), enabling them to maintain employment and income by granting financing guarantees to this public. The program is currently valid until December 31, 2023 and the Federal Government's participation in this fund was authorized by Law No. 12,087/2009. Provisional Measure No. 1,189/2023 introduced the Emergency Program for Access to Solidarity Credit (Peac-FGI Solidarity Credit RS) to deal with the catastrophe that occurred in September 2023 in municipalities in the state of Rio Grande do Sul, by making guarantees available via the FGI, and increasing the Federal Government's authorization to participate in the FGI by R$100 million. The FGI is managed by the BNDES.

f) Operations Guarantee Fund (FGO): The purpose of FGO PRONAMPE is to guarantee part of the risk of loans and financing granted by the Fund's member financial institutions and institutions authorized to operate by the BCB, to micro, small and medium-sized companies, individual micro-entrepreneurs, self-employed professionals and road haulers, for the acquisition of capital goods inherent to their activity. Law No. 13,999/2020 established the FGO PRONAMPE, with the aim of developing and strengthening small businesses, by granting credit to finance business activity in its various dimensions, which can be used for investments and working capital. Provisional Measure No. 1,176/2023 defined that part of the FGO's resources will be used to grant guarantees under the National Program for Renegotiation of Debts of Individuals in Default - *Desenrola Brasil*. Provisional Measure No. 1,189/2023, published in September, authorized an additional contribution to the FGO of up to R$100 million, intended exclusively to cover the operations of beneficiaries who suffered material losses because of extreme weather events in municipalities in the state of Rio Grande do Sul. The FGO is managed by Banco do Brasil (BB).

In addition to the Funds mentioned above, the Federal Government has already participated as a shareholder in the Public-Private Partnership Guarantee Fund (FGP), which was aimed at granting guarantees to PPPs. This Fund, however, was closed in 2017 and replaced by the FGIE, which had a similar purpose. Subsequently, Law no. 14. 227, of October 21, 2021, expanded the scope of the FGIE, which was renamed the Sustainable Regional Infrastructure Development Fund (FDIRS) and ceased to act exclusively as a guarantee fund, with its main objective being the structuring and development of concession projects and public-private partnerships of the Federal Government, States, the Federal District and Municipalities, from financing technical services for modeling projects to arranging the necessary guarantees and sources of funds, through partnerships with the private sector.

As can be seen in Table 12, at the end of June 2023, the Federal Government held R$75.7 billion in quotas in the private guarantee funds listed above, a percentage equivalent to 95.1% of the funds' net assets.

Table 12 - Guarantee Funds with Federal Government participation
Data in: R$ million Position: June 2023

Guarantee Fund	Federal Government participation	Shareholders' Equity
FGI	20,104.5	20,419.2
FGI Traditional	1,130.7	1,445.4
FGI Peac	18,973.8	18,973.8
FGO	41,423.0	41,761.0
FGO Original	1,107.4	1,445.4
FGO Pronampe	40,315.6	40,315.6
FGEDUC	9,380.0	9,380.0
FG-Fies	2,717.7	4,616.4
FGCN	58.2	59.2
FGHab	2,016.2	3,357.6
Total	**75,699.5**	**79,593.5**

Fiscal Risks

The fiscal risks related to private guarantee funds are associated with events that could reduce the net worth of the funds and, as a result, reduce the value of the Federal Government's respective quotas. Events in which guarantees granted are called in generate an obligation on the part of the funds to pay honors and the consequent subrogation of credit rights over the defaulted party. If the credits are not recovered, there will be a reduction in the funds' assets and, consequently, a loss of federal resources. In this sense, the amounts exposed to risk correspond to the value of the Federal Government's shares in each fund. Changes in the Federal Government's shares are recorded in the BGU.

It should be noted that when private guarantor funds pay honors, there is no direct impact on the Federal Government's income or expenses, as there is no flow of funds into or out of the Single Account, since only the private fund's resources are being moved. However, these operations have an impact on the Federal Government's assets, since they affect the value of its shares in these private funds, a situation that would harm the Federal Government's cash flow in the event of a redemption. In this context, there is only a direct fiscal impact on income and expenditure when the Federal Government's resources are contributed or redeemed through the acquisition or sale of shares in private guarantee funds, respectively with funds leaving or entering the Single Account. In other words, contributions to and redemptions from guarantee funds have an impact on the Federal Government's primary income and expenditure.

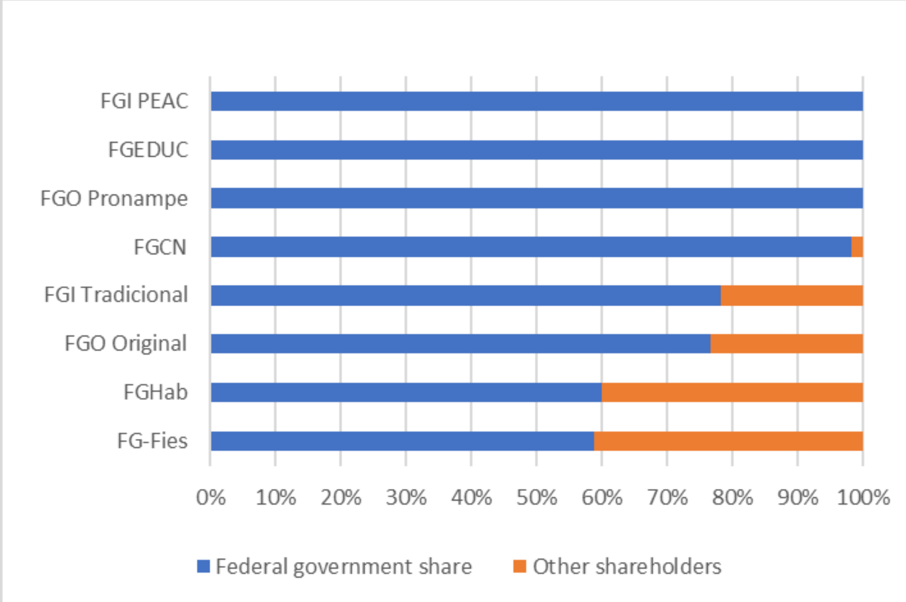
However, in the specific case of FGEDUC, the payment of honors generates primary revenue to the detriment of the Fund's assets, since the payment of the honor is made to FIES with resources entering the Federal Government's Single Account. In this sense, the tendency is for the payment of honors to continue, until the payment is limited due to the stop loss, a protection measure for the fund defined in its statute.

Chart 18 shows the Federal Government's participation as a percentage of the funds' net assets, and consequently its exposure in the event of a devaluation of assets.

In the case of the FG-Fies, the Federal Government paid R$500 million into the Fund in 2023, in accordance with the 2023-2025 Three-Year Plan (CG-Fies Resolution No. 53/2022). As a result, the R$3 billion limit on contributions to the Fund authorized by Decree No. 9,305 of 2018 was reached. As contributions were made by the providers, the Federal Government's share was reduced from 63.4% in Dec/22 to 58.9% in Jun/23, with an increase in the providers' share, meeting the objective of sharing risks and encouraging educational institutions to improve the selection of students with greater learning potential and offer quality courses.

Regarding FGHab, as of 2023, there is no prohibition on new contributions from the Federal Government, subject to its budgetary and financial availability as set out in the annual appropriations, due to the enactment of Provisional Measure No. 1,162 of February 14, 2023, converted into Law No. 14,620/2023. There is no prospect of losing the assets already contributed, since the fund has historically remained sustainable and therefore has low exposure to risk.

Chart 18 - Federal Government's Share in the Net Assets of the Guarantee Funds
Position: June 2023
Source: Fund Administrators Prepared by: STN/MF



3.1.3.3 Export Credit Insurance - Export Guarantee Fund

Export Credit Insurance (SCE) is the Federal Government's public instrument for covering commercial, political and extraordinary risks, backed by the Export Guarantee Fund (FGE), which could affect credit operations for Brazilian exports. The SCE can cover financing granted by any bank, public or private, Brazilian or foreign, to Brazilian exports, with no restrictions on goods or services or on the importer's country.

The FGE's main actuarial information is presented in Table 13, highlighting the fund's total exposure values, which total US$6.1 billion (as of June 2023), and the solvency metric, which is the fund's capacity to meet its current obligations, in addition to its capacity to retain new obligations.

Table 13 - FGE Solvency Indicators
Data in: Millions Position: June 2023
Source: ABGF. Prepared by: CAMEX/SE/MDIC

Indicadores de Solvência	June 2023	May 2023	△%
FGE Net Equity (Accounting) (R$) [1]	42,492.9	42,474.0	0.0%
FGE Net Equity (Accounting) (US$)	8,817.4	8,334.9	5.8%
PPNG (Provision for unearned premiums) (US$)	369.1	375.7	-1.7%
Total Current Exposure (Total Current Coverage) (A) (US$)	6,087.6	6,115.4	-0.5%
Required capital (k%) (B)	9.9%	9.9%	0.6%
Solvency Margin (Required Net Worth) - PLE) = (A)x(B) (US$)	603.2	602.5	0.1%

[1] *Dollar Ptax for sale on the last day of the month.*

Regarding the Fund's degree of leverage, this has decreased over the years because of the reduction in the securities guarantee and the increase in net assets, as shown in Table 14. The level of default on June 30, 2023, was approximately 2.9%.

Regarding claims, the total volume of indemnities paid out by the FGE, from the start of its activities until June 2023, is approximately US$1.7 billion, 97.0% of which occurred between 2018 and June 2023. Of this amount, US$53.8 million was recovered.

Table 14 -- Evolution of the degree of leverage
Data in: R$ million Position: 06/2023
Source: ABGF, BNDES. Prepared by: STN/M

Item	2018	2019	2020	2021	2022	2023[1]
Asset Warranty (A)	31,147.9	24,362.4	25,415.3	24,988.2	20,007.5	16,313.5
Contractual Obligations to be Disbursed (B)	8,673.1	4,721.7	2,460.0	4,146.6	871.1	95.0
Approved Amounts Not Yet Contracted (C)	9,315.4	1,937.8	3,026.1	1,852.4	4,379.8	4,029.3
Net Worth (D)	30,341.7	33,444.9	35,215.5	36,999.1	40,676.6	42,492.9
Leverage Level I [A/D]	1.03	0.73	0.72	0.68	0.49	0.38
Leverage Level II [(A+B+C)/D]	1.62	0.93	0.88	0.84	0.62	0.48

[1] *Position on June 30, 2023.*

The last few years have seen a sharp drop in Brazil's exposure related to the use of the public Export Credit Insurance instrument, backed by the FGE. This is mainly due to:

a) The Export Warranty Fund (FGE), which backs the insurance, began to face more significant budget restrictions from 2017 onwards, when the volume of claims in operations covered by the SCE increased significantly due to the sovereign defaults of Mozambique, Venezuela and Cuba;
b) As a secondary effect, the increase in budget constraints faced by the Fund led to the adoption of additional internal prudential mechanisms for the approval of new operations, such as the impossibility for committees to assess operations with a potential financial impact in the same financial year as approval when there is no adequacy between the budget allocation and the commitments already made;

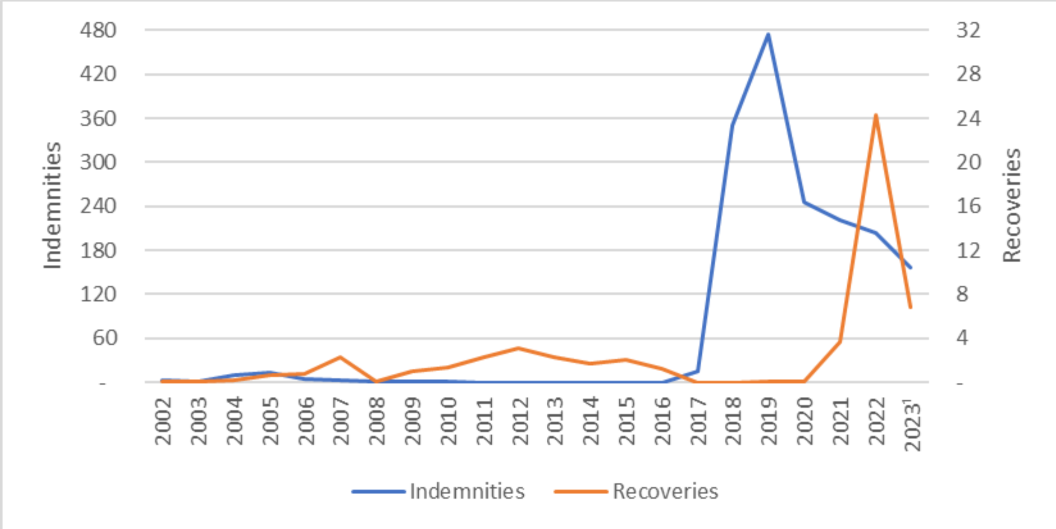
The FGE, established by Provisional Measure No. 1583-1/97, converted into Law No. 9818/99, is a public fund of the Federal Government, of an accounting nature, linked to the Ministry of Finance, financially managed by the BNDES, whose purpose is to cover the warranties provided by the Federal Government in operations covering export credit.
In approved FGE operations, the residual term is the disbursement term plus the repayment term, counted from the evaluation date.
In the case of completed operations, the residual term is defined as:
(i) if there is no balance to be disbursed on the valuation base date, the remaining repayment term;
(ii) in the case of operations with a balance to be disbursed, the maximum theoretical disbursement period calculated on the valuation base date (not considering any disbursements made up to that date), plus the repayment period.

c) It should be noted that the Attorney General's Office of the National Treasury (Opinion No. 4.392/2022/ME, of April 4, 2022), clarified that there is no need for a specific budget appropriation for the approval of new operations, since it does not imply any expenditure;

d) As a secondary result of the punishments arising from lawsuits involving companies that held a significant share of the former public policy position, especially in the infrastructure sector, some of the approved operations had their balances canceled and were excluded from national exposure;

e) In addition, a significant number of export operations covered by the SCE have been concluded and their balances removed from this exposure.

Chart 19 - FGE: Indemnities x Recoveries (flow)
Data in: US$ million
Source: ABGF, BNDES. Prepared by: STN/MF



1 In 2023, the values are accumulated until June 2023 and converted to US$ at the PTAX rate on June 30, 2023.

In June 2023, the FGE's total exposure stood at US$6.1 billion, with the following breakdown by debtor sector: 49.5% in Passenger Air Transport, 32.1% in Infrastructure, 5.4% in Electricity, 5.1% in Defense, 3.9% in Subway Transport and 4% in other sectors. As for the FGE's exposure by financial agent, in June 2023, 91.2% of the total portfolio corresponded to operations financed by the BNDES.

As it is a primary expense, the realization of the FGE's fiscal risk has an impact on the Federal Government's primary result. The estimated impact of maintaining the SCE in 2024 and the following three years is shown in Table 15.

Table 15 - Estimated impact of maintaining the SCE
Data in: US$ million
Source and preparation: CAMEX/SE/MDIC.

2024	2025	2026	2027	From 2028 on
633.0	493.0	415.0	340.0	1,158.0

The estimates were based on the estimated budget impact in 2024, weighted by the run-off for the following years, provided by ABGF.

3.1.4 Constitutional Financing Funds

The Constitutional Financing Funds are the main financing instruments of the National Regional Development Policy (PNDR), contributing to the economic and social development of the Central-West (FCO), Northeast (FNE) and North (FNO) regions, by granting benefits to productive agents of all sizes and sectors, especially micro, mini, and small ones, which receive differentiated treatment.

As the Funds are public in nature and are part of the Federal Government's assets, fiscal risks are related to default on financing. Provisions for doubtful debtors are therefore set up for installments of principal and charges overdue by more than 180 days. In turn, installments overdue by more than 360 days are recorded as a loss in memorandum accounts until all procedures for their proper collection have been completed.

According to the balance sheet of the Funds, as of December 31, 2022, for the FCO, the FNE and the FNO, it can be seen that expenses with provisions for doubtful debtors amounted to R$13.5 million, R$919.6 million and R$173.6 million in 2022, respectively, totaling R$1,106.7 million (R$1,260.3 million in 2021, a reduction of 12.18% in the 2021/2022 period). These amounts are presented in the profit and loss accounts of the respective funds' balance sheets. In addition, the banks managing these funds project the expected provision amounts for future years, as shown in Table 17.

Table 16 - Provision for Doubtful Debts in the Constitutional Funds
Data in: R$ million
Source: Managing Banks Elaboration: STN/MF

Funds	Made	Estimate			
	2022	2023	2024	2025	2026
FCO	13.5	12.2	11.0	9.9	8.9
FNE	919.6	862.8	944.9	1,035.5	1,123.6
FNO	173.6	226.9	198.7	169.2	133.7
Total	**1,106.7**	**1,101.9**	**1,154.5**	**1,214.5**	**1,266.2**

Credits written off as losses and recorded in memorandum accounts may be recovered in the future, even if only to a small extent. These credits, which once generated a negative fiscal impact at the time of the provision, could positively affect the primary result in the event of recovery. Table 17 details credit recovery by Fund, while Chart 20 shows recovery since 2018.

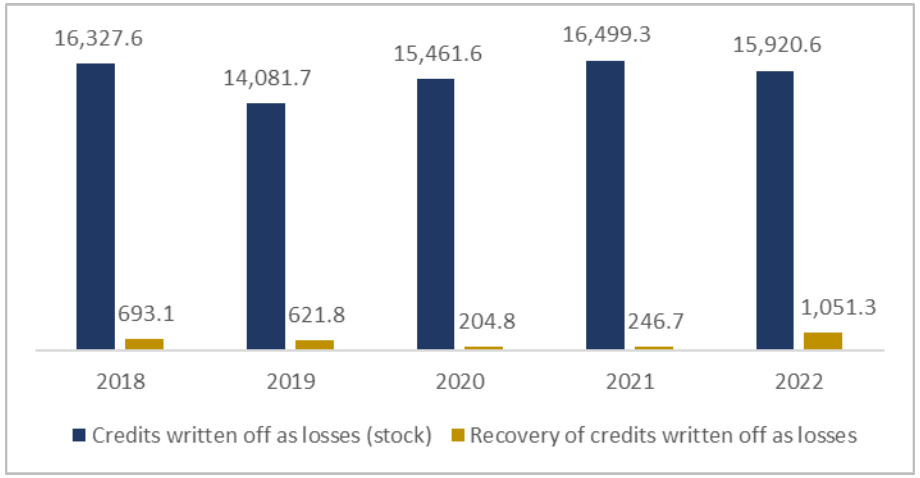
The impact of these operations on fiscal statistics, whether it's a provision for doubtful accounts or the recovery of credits written off as losses, occurs under the heading of the result of the constitutional funds and affects the primary result of the Central Government.

Law 7.827, of September 27, 1989, regulating article 159, item I, line "c" of the Constitution of the Federative Republic of Brazil, created the Constitutional Financing Funds for the Central-West (FCO), the Northeast (FNE) and the North (FNO), with the aim of contributing to the economic and social development of the Central-West, Northeast and North Regions, through federal financial institutions of a regional nature, by carrying out financing programs for the productive sectors.
The resources that make up the Constitutional Funds correspond to 3% of the proceeds from the collection of IPI and IR (in addition to the returns and results of their investments, as well as the result of the remuneration of resources not currently invested, calculated based on an official index and the available funds from previous years), distributed as follows:
FNO - 0.6%
FCO - 0.6%
FNE - 1.8%

Table 17 - Recovery and Inventory of Credits Written Off as Losses
Data in: R$ million Position: December 2022
Source: Balance sheets of the Constitutional Funds and information sent by the managing banks.   Prepared by: STN/ MF

Funds	Recovery of credits written off as losses (A)	Inventory of credits written off as losses (B)	Recovery ratio (A/B)
FCO	6.5	728.2	0.90%
FNE	791.2	11,096.2	7.13%
FNO	253.6	4,096.1	6.19%
Total	**1,051.3**	**15,920.6**	**6.60%**

Chart 20 - Evolution: Loss and Recovery Stock (Constitutional Funds)
Data in: R$ million
Source: Managing Banks



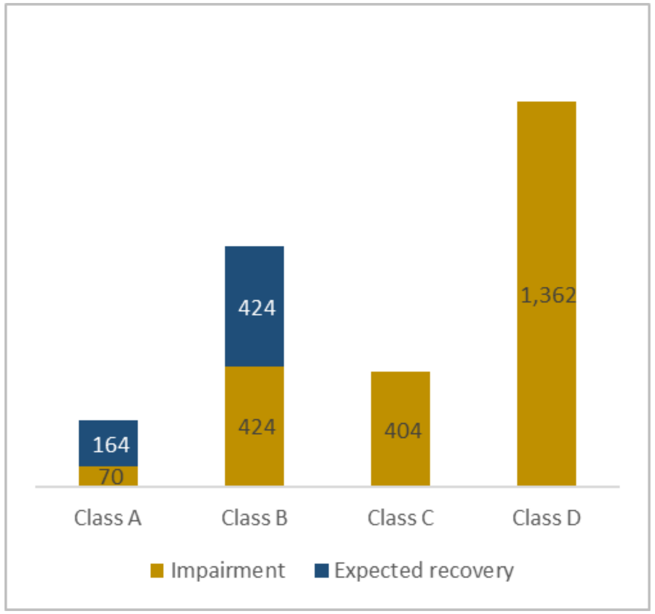
3.2 Assets

3.2.1 Federal Government Active Debt

The Federal Government's Active Debt (DAU) refers to the set of credits held by the Federal Government that have not been paid by the debtors when due, and the government is authorized to charge interest, fines and monetary restatement on the amounts owed. The fiscal risk involved consists of the Federal Government not receiving the amounts to which it is entitled or receiving them after the previously scheduled deadlines.

Chart 21 shows the DAU, by type of credit and rating, totaling a stock of R$2.84 trillion, as of June 2023. Of this amount, R$1,362 billion (48%) refers to credits classified as irrecoverable (Class D), while only R$234 billion (8%) refers to credits with a high prospect of recovery (Class A). The remaining credits are classified with medium and low prospects of recovery.

Chart 21 - Distribution of DAU by Type of Credit and Rating
Data in: R$ billion Position: June 30, 2023
Source: PGFN



The Office of the Attorney General for National Treasury (PGFN) is the body responsible for managing the Active Debt. It must register the credits claimed by the various government bodies, as well as providing the necessary collection, whether amicably or in court.
The methodology for classifying debts registered as Active Debt has the following rating structure:
a) Class "A": credits with a high prospect of recovery;
b) Class "B": credits with a medium prospect of recovery;
c) Class "C": credits with low recovery prospects;
d) Class "D": irrecoverable credits.

Article 13 of MF Ordinance No. 293, of June 12, 2017, states that credits rated C and D will be derecognized from the Federal Balance Sheet and must remain in a control account until they are extinguished or reclassified.

Based on the history of DAU compliance, the expectations for recovery of class "A" and "B" credits over the next 15 years are 70% and 50% respectively, with consequent adjustments for losses of 30% and 50%, as shown in Chart 22. Therefore, of the balance of R$2.84 trillion (base June 2023), around R$2.25 trillion (79%) are considered losses. As a result, R$587.9 billion is expected to be recovered over the next 15 years, with most of this impacting the primary result.

Another relevant aspect is the evolution of the Federal Government's Active Debt for those credits with a high and medium prospect of recovery (respectively, Classes A and B). Over the last 5 years there has been an increase in the stock of credits with a better prospect of recovery, corresponding to an average of 10.7% of GDP in the period from 2018 to June 2023, as shown in Chart 23.

Chart 22 - Recovery Expectations by Rating
Data in: R$ billion Position: 06/30/23
Source: PGFN

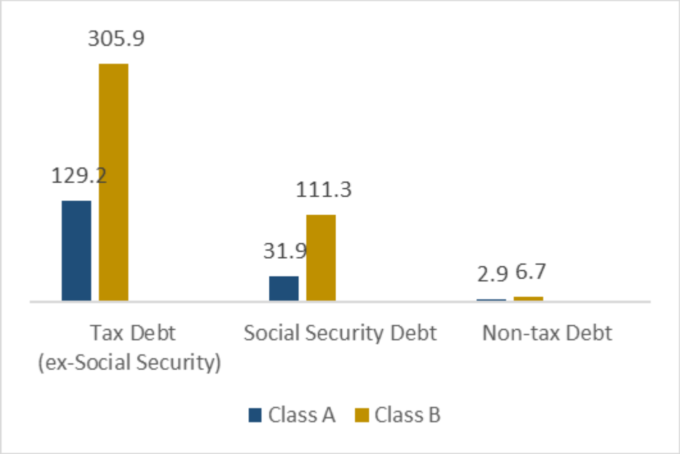
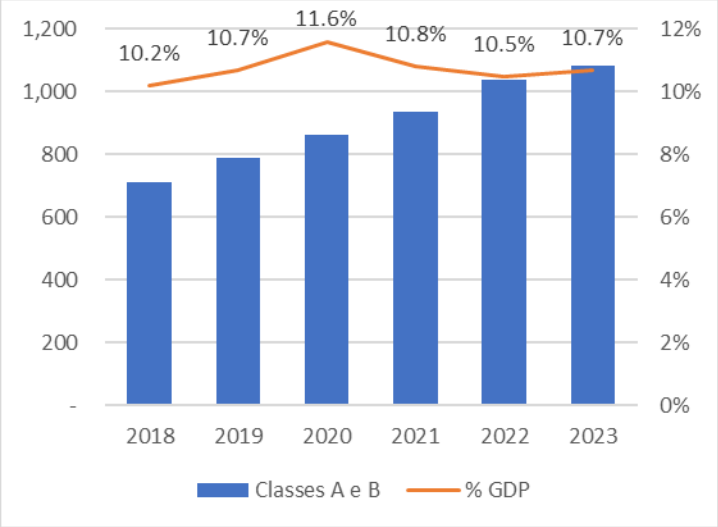


Chart 23 - Evolution of the DAU with good prospects of recovery (Classes A and B)
Data in: R$ billion Position: June 30, 2023



The estimated collection of DAU credits does not consider irrecoverable and difficult-to-recover credits and includes tax transaction agreements for these classes, which amount to a stock of more than R$ 466.0 billion. Table 18 shows the collection flows for the current and next fiscal years.

Table 18 - Estimated DAU Collection
Data in: R$ billion
Source: PGFN

Collection of Credits Estimated Amount			
2023	**2024**	**2025**	**2026**
46.1	46.4	47.8	45.8

Non-tax debt is classified as the Public Treasury's claims arising from fines of a non-tax nature, land rents, leases, rents or occupancy fees, procedural costs, prices of services provided by public establishments, indemnities, restitutions, recoveries from those responsible who have been definitively judged, as well as claims arising from obligations in foreign currency, subrogation of mortgages, guarantees, sureties or other guarantees, contracts in general or other legal obligations (acc. to Law No. 4.320/1964).

3.2.2 Financial Assets Not Related to Subnational Entities

The Federal Government's financial assets not related to sub-national entities, under the management of the STN, are currently classified into six categories, according to the rule or act that gave rise to them: Originating from Loans granted to Financial Institutions; Originating from Rural Credit Operations; Originating from Credit Assignment Operations; Originating from Export Credit Operations; Originating from Loans to Non-Financial Entities and the Emergency Employment Support Program - PESE/FOPAG.

The fiscal risk involved in these financial assets relates to the possibility of the estimated flows not being realized, thus compromising the Federal Government's financial revenues. Based on information provided by the financial institutions contracted by the Federal Government to manage the credits, R$4.57 billion has been recorded in the SIAFI as adjustments for losses on financial assets not related to subnational entities (position August 31, 2023). From the flow estimates, Table 19 shows the respective amounts receivable, by year, according to the financial asset:

Table 19 - Financial Assets Not Related to Subnational Entities
Data in: R$ million
Source: STN/MF

Financial Due	Stock [1]	Estimated Flow			
		2023	2024	2025	2026
Loans to Financial Institutions	84,201.26	37,827.46	2,096.09	8,694.14	8,173.14
Rural Credit	3,618.12	177.4	109.3	127.8	55.3
Credit assignment (or structured)	4,297.03	2,371.06	1,161.45	997.85	577.87
Export Credit	5,029.34	783.38	795.3	795.3	795.3
Loans to Non-Financial Entities	71,206.73	10.55	-	-	-
Emergency Employment Support Program - PESE/FOPAG	959.00	1,896.58	-	-	-
Total	**169,311.48**	**43,066.43**	**4,162.14**	**10,615.10**	**9,601.61**

[1] On August 31, 2023.

3.3 Sub-national entities

The Federal Government's exposure to fiscal risks arising from sub-national entities results from two main sources: (i) payment defaults related to the Federal Government's financial credits with sub-national entities; (ii) the Federal Government honoring guarantees on loans contracted by sub-national entities. The Federal Government's financial credits to states and municipalities result from debt financing and refinancing programs, implemented in accordance with specific legislation and formalized through contracts between the parties. In turn, the guarantees granted by the Federal Government to sub-national entities apply to external loans, mostly taken out with multilateral organizations, and to internal loans contracted with federal financial institutions.

Table 20 shows the Federal Government's stock of credits with sub-national entities and the expected flow of payments to the Federal Government, already considering the approval of the Fiscal Recovery Regime (RRF) for the states of Rio de Janeiro, Rio Grande do Sul and Goiás, as well as the adhesion of Minas Gerais via an injunction. In addition, the expected flow of payments is presented for the credit operations of sub-national entities guaranteed by the Federal Government, which could potentially require discharge by the Federal Government with judicial restrictions on the execution of counter-guarantees. The flow of receipts from Law 9.496/97 has also been subject to changes due to the STF's preliminary injunctions regarding the offsetting or suspension of the states' debts to the Federal Government due to the loss of ICMS revenue. In addition, the debt of the municipality of São Paulo was reduced due to a conciliation regarding the Campo de Marte airport.

Table 20 - Fiscal Risks Resulting from Claims and Guarantees on States and Municipalities
Data in: R$ billion
Source and Elaboration: STN/MF

Assets/Liabilities	Stock [1]	Flow of Receipts / Payments			
		2023[5]	2024	2025	2026
Assets	**729.8**	**28.5**	**40.6**	**48.1**	**54.7**
Law 9.496/1997 [2]	576.9	19.1	26.0	29.4	32.5
Law 8.727/1993 [3]	6.1	0.1	0.1	0.2	0.2
Sanitation Portfolio	0.3	0.1	0.1	0.1	0.1
DMLP [4]	3.3	0.2	0.1	0.0	0.0
MP nº 2.185/2001	4.0	0.3	0.3	0.4	0.4
RRF - Reimbursement of honors	0.0	0.8	1.9	3.0	4.1
LC nº 159/2017 – Art. 9º A e Decreto	99.2	7.1	12.0	14.9	17.3
LC nº 178/2021 – Art. 23	40.1	0.8	0.1	0.1	0.1
Contingent Liabilities	**236.7**	**38.1**	**40.3**	**39.1**	**37.7**
Guarantees to States - Domestic	87.2	15.9	16.7	15.5	14.5
Guarantees to States - Foreign	118.5	16.3	16.8	16.9	16.6
Guarantees to Municipalities - Domestic	9.5	2.8	3.0	2.7	2.4
Guarantees to Municipalities - Foreign	21.5	3.2	3.8	4.1	4.0
Total	**966.5**	**66.6**	**80.9**	**87.2**	**92.4**

[1] Position of managed debts: June 30, 2023. Position of guarantees: April 30, 2023.
[2] Law No. 9,496/1997 considering the application of the RRF to the states of Goiás (from January 2022), Rio Grande do Sul and Rio de Janeiro (from June 2022), as well as Minas Gerais (forecast from December 2023).
[3] Law 8.727/1993 considering the application of the RRF to the state of Goiás (as of January 2022).
[4] The DMLP figures only take into account the interest, because the amortization in 2024 will not be paid to the Federal Government.
[5] The 2023 flow takes into account the suspension of payments until March, due to injunctions obtained by the states of MA, AL, SP, MG, AC, RN and PE as a result of LC 194/2022.

On the guarantees side, in 2021 the Federal Government, through the STN, honored R$9.0 billion in defaulted payments for services on these debts contracted by states and municipalities. In 2022, R$9.8 billion was paid and up to July 2023, a further R$7.6 billion.

In addition, it should be noted that EC 109/2021 revoked the Federal Government's obligation to finance, directly or through the financial institutions under its control, the payment of the remaining balances of overdue and unpaid court-ordered debts of states and municipalities at the end of 2024. However, a lawsuit to reverse this cancellation is currently pending in the courts. As of December 31, 2022, the backlog of unpaid state and municipal debt was R$139.3 billion. An estimate of the potential financial impact of this Amendment, if the Federal Government were obliged to provide a line of credit in the amount of the balance on the consolidated debt, would be equal to this amount.

Table 21 consolidates the fiscal risks arising from intergovernmental relations. The Federal Government's exposure to risks arising from default on debt payments and the payment of guarantees granted by the Federal Government amounts to R$966.5 billion, which corresponds to 9.0% of GDP.

Another source of uncertainty for the Federal Government in its inter-federative relationship comes from the approval of legislation that benefits sub-national entities at the same time as it burdens the Federal Government. Bills approved or in the process of being approved by the National Congress can have a series of impacts on the amounts estimated for the flow of payments.

Table 21 - Intergovernmental Relations Fiscal Risks
Data in: R$ billion
Source and Elaboration: STN/MF

Fiscal Risks	Amount [1]	Percentage of GDP
From assets	729.8	6.8%
Resulting from Guarantees	236.7	2.2%
Injunctions to EC nº 109/2021	139.3	1.3%
Total	**1,105.80**	**10.3%**

[1] Position: Assets, June 30, 2023; Guarantees, April 30, 2023 and Injunctions, December 31, 2022.

After an agreement was reached between the Federal Government, the states and the Federal District to deal with compensation for the loss of ICMS tax collection by the entities because of LC 194/2022, the Federal Government presented PLP 136/2023, which was converted into Complementary Law 201/2023, setting out the criteria for this compensation of tax collection losses. The federal legislature is also considering PEC 51/2019, which provides for a 1% increase each year for the States' Participation Fund (FPE) from the 2nd year after its approval until the 4th year and then a further increase of around 1.5% in the 5th year, so that the FPE will then reach a final percentage of 26% of the product of the collection of Income Tax (IR) and the Tax on Industrialized Products (IPI). This percentage is currently 21.5%. Table 22 shows the estimated impacts of these legislative proposals for the Federal Government, both immediately and over a ten-year period.

Finally, the episodes of default on payments by the federal entities and the events of redemptions and honoring of guarantees by the Federal Government result from a situation of imbalance in the public accounts of the sub-national entities. To define conditions for granting credit operations and to mitigate fiscal risks arising from relations with other federal entities, the Federal Government, through the STN, monitors the public finances of sub-national entities. The monitoring of performance indicators and the overview of the public finances of the states and state capitals is presented in the Subnational Entities Finance Bulletin, published annually by the National Treasury Secretariat.

Table 22 - Uncertainties arising from Legislative Proposals
Data in: R$ billion
Source and Elaboration: STN/MF

Analyzed proposal	Impact on Fed. Govt's cash flow	
	2023	Next 10 years
PEC nº 51/2019 (FPE)	0	403.4
PEC nº 51/2019 (FPE + Fundeb)	0	421.9
Total	**0**	**825.3**

More detailed information on subnational entities can be found in the Municipalities and State Governments section of the STN website, at the following address: https://www.gov.br/tesouronacional/pt-br/estados-e-municipios

3.4 State-owned companies

The fiscal risks of non-dependent state-owned companies controlled directly by the Federal Government (the scope of this section) refer mainly to revenue expectations and unplanned expenditure. This is a group of 29 state-owned companies, 24 of which are public companies and 5 are mixed-capital companies.

Table 23 shows the estimated flows for the current and next financial years, which form the basis for calculating the fiscal risks related to state-owned companies and are described in the side note.

The risk assessment of non-dependent state-owned companies, in most of the risk elements mapped, requires the separation of the Federal Financial Institutions (FFI) category from the other state-owned companies that carry out economic activities or provide public services, due to the regulations specific to the financial sector, especially regarding compliance with capitalization indicators.

The fiscal risk associated with IFFs, in general, is not related to a shortage of cash (liquidity), but to insufficient regulatory capital to meet the capital requirement ratios ("Basileia", "Tier I" Capital and "Core Capital"). Any capitalization or reduction in dividends and interest on capital required for this compliance represents a direct fiscal impact, since it is an increase in expenses or a reduction in primary revenue, as these institutions do not make up the Consolidated Public Sector for the purposes of calculating fiscal results.

Table 23 - Estimated Flows - Non-Dependent State-Owned Companies
Data in: R$ milhões
Sources: STN/MF, SEST/MPO, LDO e PLOA 2024.Prepared by: STN/MF

Nature of Flow	**Flow** Estimated Amount					**Impact** Financial (F) Primary (P)
	2023	**2024**	**2025**	**2026**	**2027**	
Income from Dividends and IOE [1]	49,859.40	36,650.20	35,202.90	36,226.00	39,377.40	F e P
Transfers for Capital Increase [2]	2.6	N/A	N/A	N/A	N/A	F e P
Primary Results of State-Owned Companies [3]	-6,607.00	-7,308.00	-5,659.30	-6,663.20	-6,684.20	P

N/A - information not available.
[1] Dividends foreseen in the PLOA 2024.
[2] Transfers for capital increase from LOA 2023 + registered accounts payable
[3] Fiscal targets set in the PLDO 2024 (2025, 2026 and 2027) and PLOA 2024 (2023 and 2024).

The fiscal risks related to non-dependent state-owned companies refer to the possibility of the following events occurring, depending on their nature:
Revenue frustration - income from dividends and/or interest on own capital (JCP) lower than the estimated income in the composition of the Central Government's fiscal result;
Emergency contribution - capital contribution or economic subsidy on an emergency basis to meet the need for resources or capital of a particular state company; and
Additional fiscal effort (primary compensation) - the need for the National Treasury to compensate for any primary result not achieved by all state-owned companies that are considered in the target set in the Budget Guidelines Law.

The group of FFIs is made up of five companies, which are shown with their respective regulatory indicators in Table 24. The FFI data refers to the latest indices published and are compared with the regulatory minimums established in the national standards for meeting the Basel III capital requirements (including the additional core and systemic capital, and not including the additional countercyclical capital). BB and CAIXA's minimum requirement ratios are higher because they include the systemic risk core capital surcharge (of 1 p.p.), applicable only to institutions whose total exposure exceeds 10% of GDP.

All FFIs have capital ratios above the regulatory minimums. Institutions must maintain a safety margin to mitigate possible shocks throughout the year.

Table 24 - Required vs. Observed Capital Ratios
Sources: Quarterly Information (ITR); CMN Resolution No. 4,958/2021 and updates.
Prepared by: STN/MF

Indicators	IFF with Systemic Relevance			IFF without Systemic Relevance			
	Min Req.	BB	CAIXA	Min Req.	BNDES	BASA	BNB
Main Capital	8.00%	12.21%	13.70%	7.00%	28.33%	13.40%	10.68%
Capital Level I	9.50%	14.13%	13.93%	8.50%	28.33%	13.40%	11.58%
Basileia	11.50%	15.72%	16.56%	10.50%	34.38%	13.40%	12.66%

[1] Includes conservation ACP and systemic ACP.
[2] Includes ACP conservation.

For BNB, the risk of non-payment of dividends has been classified as a possible risk, due to lawsuits before control bodies and other instances, whose decisions may affect its annual results and capital structure. The Bank's management has sought to properly manage the impacts; however, it should be noted that BNB's dividends are not relevant in terms of the National Treasury's overall revenues, registering only 0.25% in 2022 (0.53% in 2021).

With regard to the other (non-financial) companies, the total dividends projected for 2024 will be lower than those expected for 2023 and those realized for 2022, mainly due to the impact of Petrobras, which is expected to record a net profit lower than the record of R$188.3 billion for the year ended on December 31, 2022, a result which had a favorable impact on the payments received during the 2022 and 2023 financial years.

Of the R$49.9 billion estimated for 2023, R$41.8 billion had already been received by the end of September. Therefore, the risk that the Federal Government will suffer a loss in the collection of dividend/interest on equity (IOE) income, including from financial institutions, so that they can safely comply with their operating limits, can be considered a remote risk in 2023, and Petrobras has already announced, in a Material Fact, the dividend payments that will be made by the end of the year, as well as the approval by the company's Board of Directors of the change in the formula for calculating shareholder remuneration, with a change from 60% to 45% of free cash flow, due to the revision of elements of the company's 2024-2028 Strategic Plan.

As for the frustration of dividends and emergency contributions for future years, the risk is remote for most of the IFFs. BNB may evaluate a possible breach of its minimum requirements with the retention of profits or other capital management measures, but it is considered a remote risk that an emergency contribution will materialize. This perception is reinforced by the fact that the Budget Guidelines Bill for 2024 (PLDO 2024), Bill No. 4 of 2023-CN, in its current version (§10 of art. 51), prohibits the receipt of contributions for future capital increases in public companies or mixed-capital financial companies.

It is to be expected that some non-financial state-owned companies will face financial difficulties, but most have improved their performance. Infraero, Emgea, ECT, Casa da Moeda and the dock companies (CDC, CDP, Codeba, CDRJ, Codern, SPA-Codesp) adopted measures to obtain better results. The financial statements indicate trends of improvement in some companies and possible worsening in others. Emgea and Codern may show a worsening financial situation, which may also be observed at ECT. There is no provision for an increase in capital in the 2023 LOA and the amount of registered but unpaid commitments is R$2.6 million, far below the historical level of this expense.

Emgea has a history of cash flow difficulties. The National Treasury considers it possible to make contributions from 2024 onwards. Negotiations are underway to renegotiate debt maturities, a procedure that has already been carried out in other occasions. Emgea's obligations to the FGTS are guaranteed by the Federal Government itself, but the situation of default can lead to greater restrictions, which depend on this type of renegotiation from time to time. The company's assets exceed its obligations in value, but Emgea's challenge is to have sufficient liquidity in the long term to pay its obligations.

Codern is also at risk of a worsening economic situation and a risk assessment of emergency contributions is possible in 2024. The lease of the Areia Branca Salt Terminal, promoted by ANTAQ on the São Paulo stock exchange, in parallel with the expansion of direct investments in infra-structure in the port area, should represent a reduction in expenses, but also in the company's revenues.

ENBPar is exposed to the risk of needing an emergency contribution from Eletronuclear, due to the high investments planned for the implemen-tation of the Angra III plant.

Regarding the additional fiscal effort, higher deficit targets have been set for the coming years, which negatively affects the public accounts, and the new estimated results indicate a worsening in the annual results. Despite the current expectation that the National Treasury will need to make up for the primary result of federal state-owned companies in 2023, for the following years, there is no need for additional fiscal effort by the central government. State-owned companies depend on their performance to meet primary result expectations. In this sense, changes in the economic scenario can alter the results.

Despite this, the Amending Message to the 2024 PLDO, Message No. 393, of August 4, 2023, proposed an amendment to Article 3 so that, in addition to the companies in the Petrobras Group (§1), the companies in the ENBPar Group (INB and Eletronuclear) (§2) would not be included in the primary deficit target, as well as the expenses in the Investment Budget for the New Growth Acceleration Program, limited to R$ 5.0 billion reais (§3). That said, any prospect of the Central Government having to make an additional fiscal effort to offset the primary result of the federal state-owned companies is considered remote.

3.5 Public Service Concessions and Public-Private Partnerships

3.5.1 Public Service Concessions

3.5.1.1 Expenditures perspective

The modeling of infrastructure concession contracts adopts the guideline of transferring the most relevant risks to the concessionaire, such as construction and demand risks. The Federal Government is responsible for covering extraordinary events, such as acts of God, force majeure or events of prince, when there is a unilateral change to the contract.

There are contracts that provide for the possibility of economic and financial rebalancing, which could eventually place a burden on the federal government. However, even in cases where there is an economic and financial rebalancing of the contract, the Granting Authority has some compensation mechanisms that do not cause a fiscal impact, such as a tariff review or extension of the contractual term.

In addition, there is the possibility of terminating contracts, either early or not. In these cases, it is possible that investments have been made in reversible assets that have not yet been fully amortized or depreciated, and the Federal Government may have to make payments to the concessionaire, depending on how the form of compensation is defined.

However, even in these cases, the risk of the Federal Government having to face any payment to the concessionaire can be mitigated, as there is the possibility that the asset will be re-bid and the indemnities will be borne by the future contractors, as provided for in art. 15, § 1, of Law No. 13,448, of June 5, 2017, which deals with the re-bidding of partnership contracts in the road, rail and airport sectors.

Concessions are governed by Law No. 8.987/1995, which defines a public service concession as "the delegation of its provision, made by the granting authority, through a competitive bidding process, to a legal entity or consortium of companies that demonstrate the capacity to perform it, at their own risk and for a fixed term". Infrastructure concession auctions can be of two types:
- for the lowest tariff (highways, for example); and
- for a higher concession fee (airports, for example).

3.5.1.2 Revenues perspective

As far as concession revenue projections are concerned, the amounts collected come from the concessionaire's obligation to pay a concession grant as defined in the contract. Part of the revenue comes from existing contracts and part from the signing of new contracts. In this context, the main fiscal risks arise, on the one hand, from the possibility of default by concessionaires with contracts in force and, on the other hand, from the failure to sign new contracts scheduled for that period. In addition, there is the risk of demand which could impact the receipt of variable grants, i.e. grants proportional to the concession's revenue.

In terms of the possibility of non-payment of current concession grants, the risk factors are related to legal challenges, legislative changes, requests for economic and financial rebalancing or even the insolvency of the concessionaire. With the new regime for the payment of court-ordered debts and the regulation of the supply of these credits, concession revenues forecast as primary revenues may be affected. This is due to concessionaires requesting payment of their concessions using writs of payment, which could represent a fiscal risk due to the possibility of frustrated primary revenues. In terms of the possibility of new contracts not being signed, the main risk factors to be considered when drawing up the Annual Budget Law are the feasibility of the auction schedule that precedes these contracts and the lack of bids from interested parties ("deserted auction").

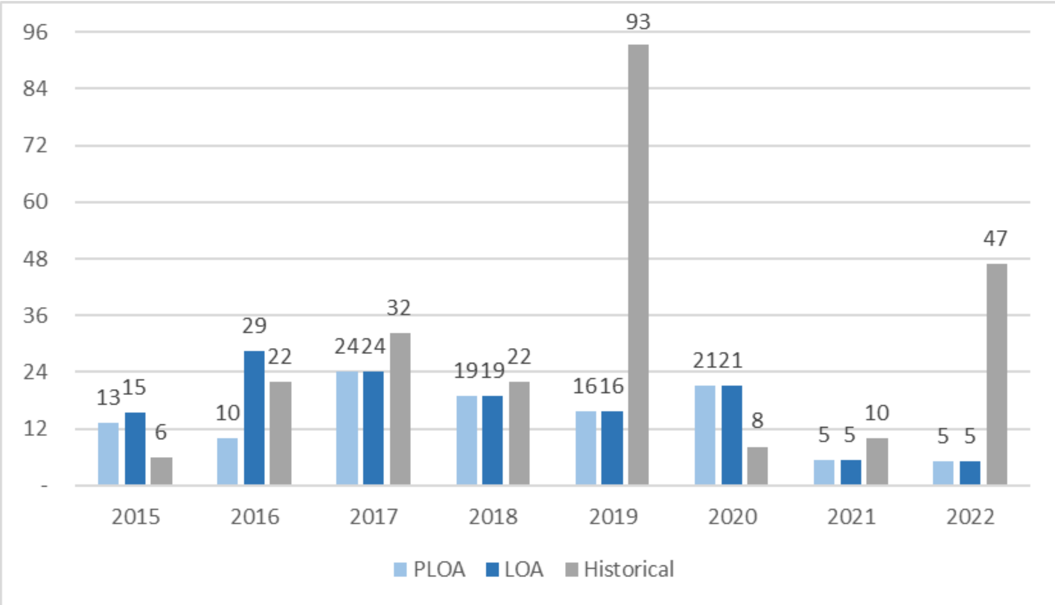
In addition, there is a risk of grant revenues being converted into cross-investments by the concessionaire, because of new bidding processes or the extension of railroad and highway concession contracts under Law No. 13,448 of 2017, which reduces the potential for new federal revenues, as well as their predictability. Revenue projections for new contracts may also be affected by recently observed practices of directing the concessionaire's funds directly to state-owned companies, various works and linked accounts, as provided for in bidding notices. Any legislative changes that link the economic benefit of the concession to specific investments or sectors could also have a negative impact on the Federal Government's potential revenues.

To mitigate the risk of frustrated revenues from concessions throughout the year, the processes are monitored and any changes in estimates are reflected in the bimonthly primary revenues and expenditures assessment reports. Regarding the risk of a deserted auction, its mitigation by the granting authority involves ensuring that there is adherence between the economic model designed and market expectations, as well as ensuring that the bidding process is conducted in such a way as to minimize uncertainties, favoring predictability and transparency.

Chart 24 shows the evolution of revenues from concessions and the dynamics between the figures in the PLOA, the LOA and the revenues actually recorded. Given that the projections for the PLOA are from June/July of the previous year, there are variations between the amounts forecasted in the budget documents and the amounts actually recorded, since it is common for new bidding processes to be announced in this timeframe. In addition, any premiums from auctions that have not yet taken place are not considered in the projections made.

It should be noted that, in 2019, the difference between the amount recorded in the year and the forecast in the LOA was mainly due to the auction of the excess volumes of the onerous assignment contract in the oil and gas sector, which was not forecast in that year's LOA. In 2020, the difference between the amount forecast and the amount realized was

Chart 24 - Revenues from Concessions
Data in: R$ billion
Source and Elaboration: STN/MF



mainly due to the non-realization of revenues from hydroelectric power plant generation concessions associated with the Eletrobras privatization process, initially forecast in the LOA. In 2021, the difference was mainly due to the inflow of resources from new concessions in the telecommunications, road and airport sectors, which were not initially foreseen in the LOA. In 2022, revenue from new concessions was higher than forecast and this difference can be explained mainly by the fact that the LOA did not initially provide for the entry of the signing bonus from the Second Auction of Excess Volumes from the Transfer of Rights (LVECO), as well as the grant bonus from concessions associated with privatization processes, namely: a) new concession contracts for the generation of hydroelectric power plants, a process associated with the privatization of Eletrobras; and b) electricity generation concessions associated with the privatization of Companhia Estadual de Geração e Transmissão de Energia Elétrica (CEEE-GT).

3.5.1.3 Fiscal Risks from Administrative Claims

The sectoral ministries and regulatory agencies are responsible for supervising the fiscal risks of concessions and PPPs, and for managing, monitoring and inspecting current contracts and registering contingent assets and liabilities.

In addition, sectoral ministries and regulatory agencies also have the role of structuring and implementing bidding processes for concession and PPP projects and are the bodies responsible for defining the allocation of risks between the public and private sectors for each contract.

Table 25 - Fiscal risks in administrative claims
Data in: R$ million
Source: Regulatory Agencies. Prepared by: STN/MF

Rebalancing Contracts	Economic and Financial Rebalancing Classified as Probable by the Agencies			
	2023	2024	2025	2026
Revenues perspective	1.379.4	45.5	44.1	42.4
Expenditures perspective	0.0	0.0	0.0	0.0
Total	**1,379.4**	**45.5**	**44.1**	**42.4**

Table 25 shows the sum of the estimated fiscal impact for the Federal Government because of administrative claims for economic and financial rebalancing classified as likely to be realized by the regulatory agencies. The risk relating to administrative claims with a fiscal impact for the Federal Government is estimated at R$1,379.4 million in 2023, R$45.5 million in 2024, R$44.1 million in 2025 and R$42.4 million in 2026. It should be noted, however, that some demands have an impact estimate that is not available, and that the list mentioned is not exhaustive and does not exhaust the possibility of new demands arising. As such, the potential impact may be higher than the amounts mentioned.

It should be noted here that the contract rebalancing planned for 2023 is largely due to the impact of the Covid-19 pandemic on the 2022 budget, a risk considered to be force majeure and allocated to the Federal Government. These rebalancing of the effects of Covid-19 approved in 2022 could still lead to reductions in the airport sector's contributions due in 2023.

3.5.2 Public-Private Partnerships

Public-Private Partnerships (PPPs) within the scope of the Federal, State, Federal District and Municipal Governments are governed by Law 11,079 of December 30, 2004. Article 4 of this law states that "one of the guidelines to be observed when contracting a public-private partnership must include the objective sharing of risks between the parties".

In this sense, regarding federal PPPs, it is worth mentioning that the Federal Government, considering its direct and indirect administration, currently has only one PPP contract, which is the Data Center Complex contracted by a consortium formed by Banco do Brasil and Caixa Econômica Federal with GBT S/A. However, as the state-owned companies involved are not dependent and the contracts do not foresee any kind of guarantee from the granting authority to the concessionaire, there are no risks allocated to the Federal Government.

3.6 Student Financing Fund (Fies)

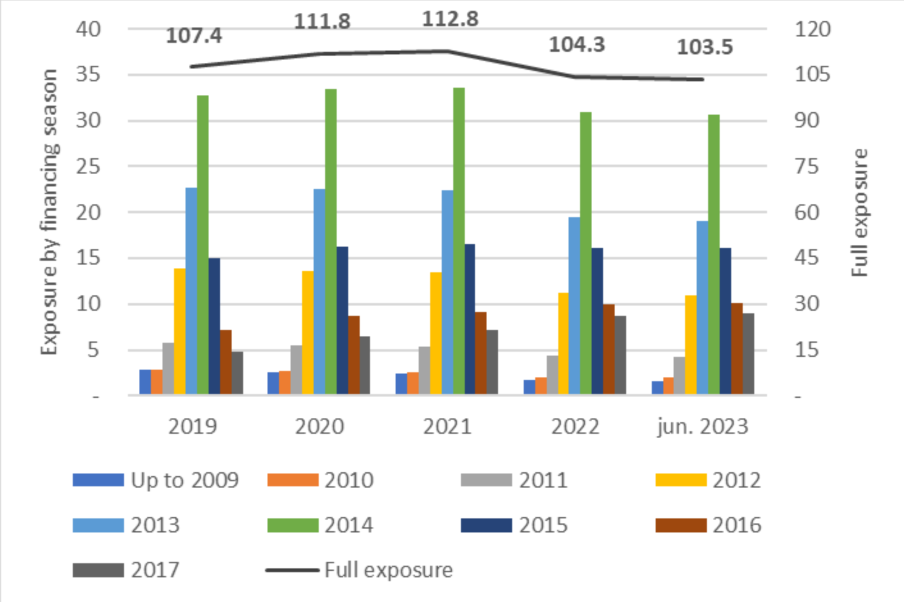
Fies is a fund of an accounting nature managed by the Ministry of Education (MEC), which aims to finance the graduation of students enrolled in non-free higher education courses and with a positive evaluation in the assessment processes conducted by the MEC. The program currently has 2.39 million active financing contracts in Brazil.

Granting credit to students exposes the Federal Government to the credit risk of Fies, in the form of delays and defaults. The amount**Erro! Indicador não definido.** of the exposure of Fies operations granted up to 2017 reached R$103.5 billion, as shown in Chart 25, which shows, in addition to the behavior of the stock from 2019 to June 2023, its compositions by period in which the financing was granted.

Late payments on loans granted up to 2009 and between 2010 and 2017, counted from one day in arrears, were observed in 1,648,127 contracts, equivalent to 69.1% of the total. The total outstanding balance of contracts in arrears is R$69.7 billion, representing 67.3% of the total portfolio, as detailed in Chart 26.

The amount of the adjustment for estimated losses on Fies contracts reached R$47.2 billion. In June 2023, 2.0 million contracts were in amortization, with a total outstanding balance of R$87.7 billion, which represents an increase of 4.0% compared to 2022.

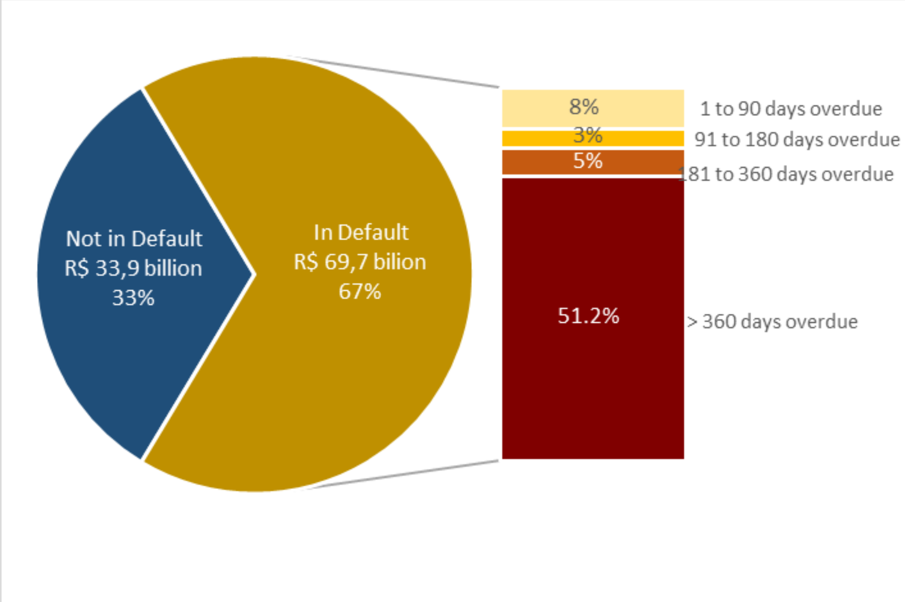
Chart 25 - Fies Exposure by Financing Period
Data in: R$ billion
Position: 06/30/2023
Source: FNDE. Prepared by: STN/MF



- *The portfolio of loans granted under Fies is distributed in three phases, according to the evolution provided for in the contract:*
- *- Utilization phase - the period during which the student is attending higher education, limited to the regular duration of the course, with quarterly interest payments;*
- *- Grace period - a period of 18 months which begins immediately after the completion of the course, with quarterly interest payments;*
- *- Amortization phase - a period that begins in the month immediately following the end of the grace phase, when the monthly installment is established.*

However, Fies contracts up to 2017 rely on risk mitigation instruments, such as conventional guarantees, joint guarantees and the Educational Credit Operations Guarantee Fund (FGEDUC), with 70% of the contract portfolio being guaranteed exclusively by FGEDUC. When considering simultaneous coverage by the FGEDUC and the guarantee, this percentage rises to 82.0% of the portfolio. Contracts formalized up to 2009 do not have a guarantee fund co-opening, but are only guaranteed by a conventional guarantee or joint guarantee.

Chart 26 - Status of Fies Contracts Granted up to 2017
Position: 30/06/2023
Source: FNDE. Prepared by: STN/MF



As of 2018, with a view to ensuring the sustainability of Fies and in compliance with the principles and regulations on fiscal responsibility, the New Fies was implemented through Law No. 13,530/2017, adopting measures to mitigate the Fund's fiscal risk, notably related to the sharing of credit risk with maintaining entities and mechanisms to guarantee the return on financing.

As of the entry into force of Law No. 14.375/2022, originating from Provisional Measure No. 1.090/2021, the renegotiation of student debts with Fies in contracts signed until the second semester of 2017 is authorized. Under the new law, students whose debts are overdue and unpaid for more than 90 days on the date of publication of the measure (December 30, 2021) can get a 12% discount on payment in cash, or pay the debt in 150 months in installments, with interest and fines forgiven. When the debt is over 360 days old, discounts starting at 77% can be applied, and can reach 99% for debtors registered in the Federal Government's Single Registry for Social Programs (CadÚnico).

CG-Fies Resolution No. 27 of 2018 defined the criteria for characterizing default, credit risk and adjustments for accounting losses. Contracts in arrears are those with unpaid installments from the first day after the due date. Delinquent contracts are those with unpaid installments from the ninetieth day after the due date. The calculation of the accounting loss adjustment only considers defaults during the amortization phase of the contract, and therefore does not consider installments due during the utilization and grace phases. In addition, contracts are classified according to the number of days they are in arrears and a provision factor is then applied according to this classification.

3.7 Financial System Risks

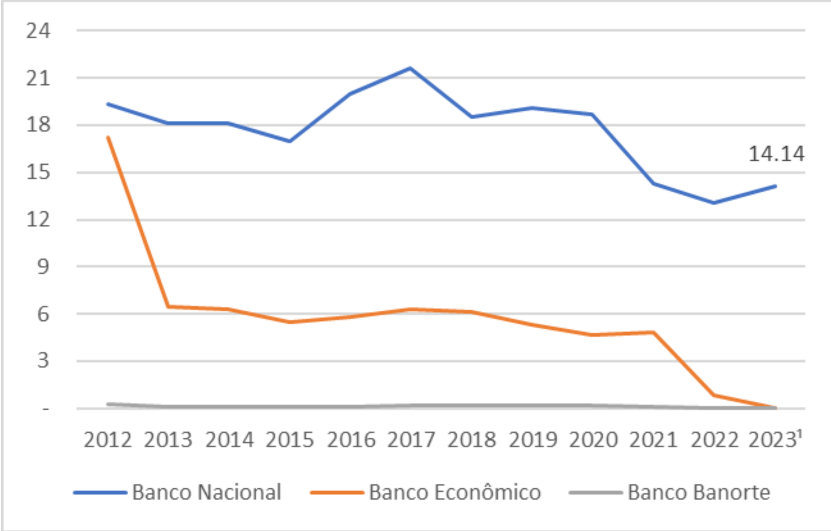
3.7.1 Credits from the Central Bank of Brazil

These are credits originating from operations under the Program to Encourage the Restructuring and Strengthening of the National Financial System (PROER) and overdrafts on the Bank Reserves account. These credits affect the public accounts in an essentially financial way, mainly in terms of credit risk, and initially do not represent a fiscal risk.

In each period of the BCB's balance sheet, the values of these loans are updated based on their original characteristics, considering the guarantees and a predefined methodology. In addition to write-offs due to receipt of installments and recognition of interest, an adjustment to recoverable value is made. Chart 27 shows the annual variation in the BCB's credit balances, which totaled R$14.1 billion in the 1st half of 2023, exclusively with Banco Nacional's balance.

Table 26 shows the cash flow estimates for the current year and the following three years. Banco Econômico, after settling part of its debt in advance, had its shareholding control transferred to Banco BESA S.A., which in turn fully settled Banco Econômico's debt with the BCB in April 2023. Therefore, only Banco Nacional remains in extrajudicial liquidation.

Chart 27 - BCB credits under PROER
Data in: R$ billion
Source: BCB



[1] Position: 1st Semester 2023

Table 26 - Estimated Cash Flow from BCB Credits
Data in: R$ million
Source: BCB

Instituition	2023[1]	2024	2025	2026
Banco Nacional	2,116.0	4,448.0	4,753.0	5,054.0

[1] Estimates for the 2nd semester

3.7.2 National Financial System

These are the fiscal risks that would originate in the National Financial System (SFN) and that could arise from the potential use of public resources in a privately controlled systemic institution.

The assessment of the SFN's resilience published in the minutes of the meetings of the BCB's Financial Stability Committee (COMEF) highlights, in its latest document of August 29 and 30, 2023, that the Financial Institutions have maintained adequate provisions, above the estimates of expected losses. In addition, the SFN's capitalization and liquidity levels have remained higher than prudential requirements. The results of the stress tests show that the system is resilient. The evaluation of macroeconomic stress scenarios indicates that the system would not present a significant problem if the scenarios considered were to materialize.

Thus, no solvency problems are found in systemic banks, even under the severe conditions simulated, and the fiscal risk arising from the SFN can be considered very low.

3.8 Demographic changes

In the coming decades, Brazil will undergo a profound change in its age structure, with an increase in the number of elderly people in the population and a reduction in the number of young people. This demographic transformation poses challenges for public policies, as it directly influences the demand for different forms of state action. The case of the Continuous Cash Benefit (BPC) is illustrative. The potential effects on spending of demographic change, for example, are significant. The ageing of the Brazilian population and the increase in life expectancy, combined with the annual increase in the minimum wage, which is higher than the increase in average income, suggest that spending on the BPC is likely to increase substantially soon.

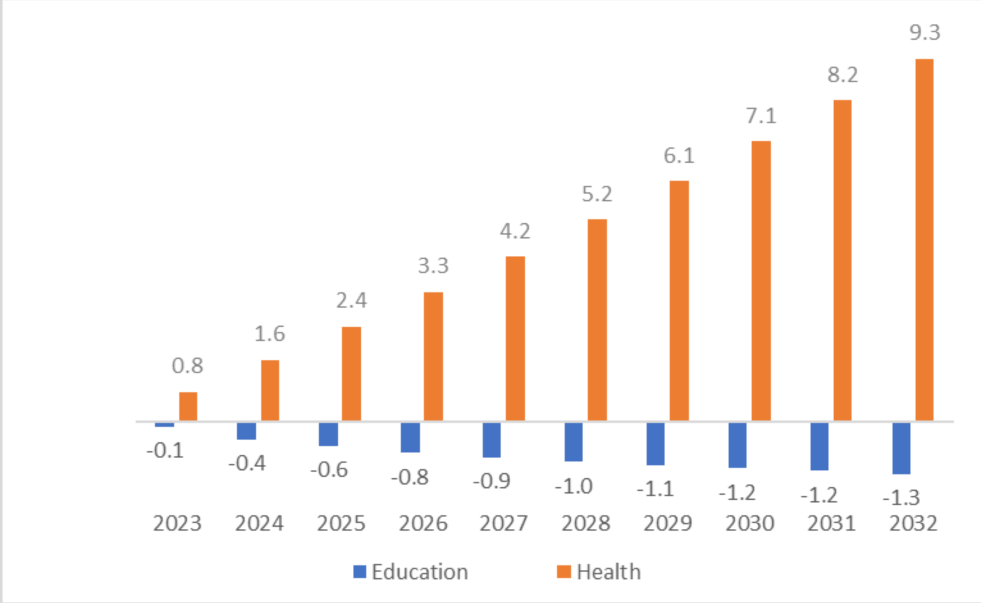
Regarding education, these dynamics work in a favorable way, generating less pressure on spending, given that the size of the young population has fallen not only in relative terms, but also in absolute terms. In education spending, the so-called flow control spending will be considered as a proxy, which generally corresponds to all spending in the area, except for active and inactive personnel, the Basic Education Maintenance and Development Fund–Fundeb, the Educational Contribution and the primary impact of FIES. These expenses amounted to R$29.3 billion in 2022.

In the health sector, on the other hand, there is strong pressure to increase spending because of the ageing of the population, given that the older population demands proportionally more health services. To estimate the impact of demographic change on health spending, the Pharmaceutical Assistance, including the Popular Pharmacy, and Medium and High Complexity Care (hospital and outpatient care) blocks are analyzed, which totaled R$70.3 billion in 2022. Therefore, the expenses analyzed in Health and Education together reached R$99.6 billion in 2022, a drop of 2.3% compared to 2021.

Chart 28 shows the estimated impact of demographic change on selected health and education expenditures in the 2023-2032 period. This impact was measured as the difference between the projection of expenditures considering the demographic evolution of the population (growth and change in age composition), according to IBGE projections, in relation to a counterfactual scenario in which the size and composition of the population remained constant at 2022 levels. These scenarios also assume that the current coverage of the services provided and the current level of efficiency in the provision of services are constant.

In the case of health, there is pressure to expand spending by R$9.3 billion in 2032, due to demographic change (population growth and ageing). On the other hand, the pressure for spending on education, of - R$1.3 billion in 2032, decreases in line with demographic change and, as a result just for the expenses assessed for both health and education, there is an additional demand for public spending in 2032 of approximately R$8.0 billion at 2022 prices. This figure represents 8.0% of the amount spent in 2022 on the same programs.

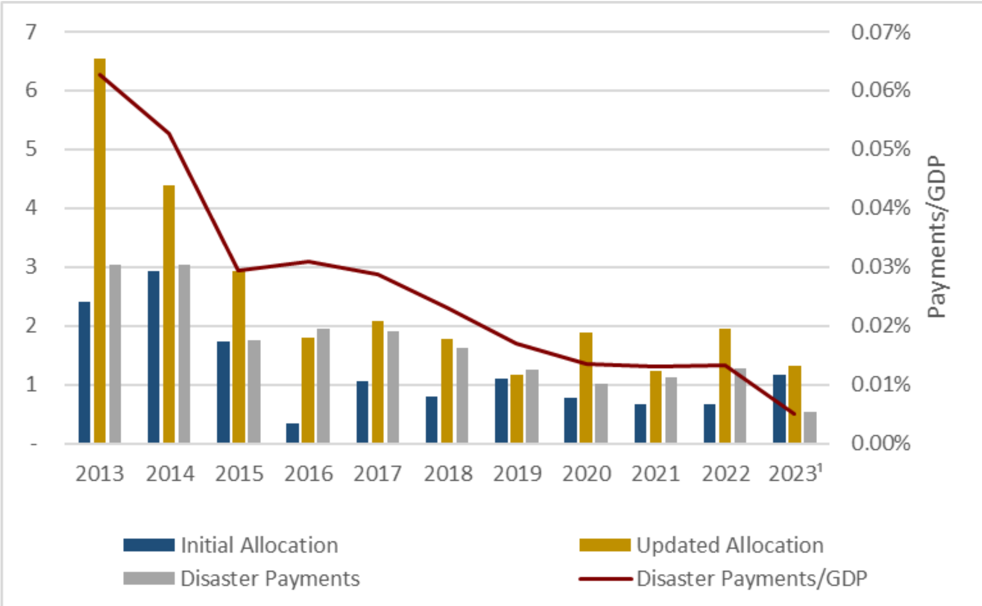
Chart 28 - Demographic Impact on Selected Health and Education Expenditures
Data in: R$ billion, 2022 prices
Source and Elaboration: STN/MF



3.9 Environmental Risks

Environmental fiscal risks are those arising from disasters and natural phenomena, which can be associated with climate change or caused and originated by human activity. Such occurrences can affect public accounts, affecting the established fiscal path and results. Such risks imply major challenges for governments and, every year, countries are facing an increasing number of events related to the environment. Globally, the occurrence of at least one extreme weather event per year is estimated to cost an average of 0.8% of GDP[5].

Chart 29 - Risk and Disaster Management Program - LOA and Share of GDP
Data in: R$ billion
Source: Siafi, IBGE Elaboration: STN/MF



[1] Position in June 2023

Depending on the magnitude of the events, the impact on public finances can be significant, requiring timely action involving huge resources, which can cause countries to lose sight of their fiscal targets. Therefore, international organizations such as the International Monetary Fund (IMF), the World Bank and the Organization for Economic Cooperation and Development (OECD) point to natural disasters as an important source of fiscal risk.

3.9.1 Disasters and Natural Phenomena

The term disasters can be understood as "a serious interruption in the functioning of a community or society, on any scale, due to hazardous events that interact with conditions of exposure, vulnerability and capacity, leading to human, material, economic and environmental losses and/or impacts."

---

[5] Regional Climate Change. Platform of Economy and Finance Ministries, BID, 2021.

Each country responds in a particular way to the dimensions of exposure, vulnerability and hazard characteristics it encounters and, in this sense, disasters can cause major losses, depending on the geographic location, magnitude and time interval in which such events occur, and significantly affect public finances. This is because, in the event of certain disasters, it is common to expect governments to carry out actions to mitigate possible impacts, whether material or not.

Disaster contingent liabilities can be explicit, based on contracts or laws, in which there is a legal provision for payment associated with the occurrence of their risks, or implicit, when the expenditure is made because of society's moral expectation that the government will act, due to political pressure or to speed up the economic recovery of the affected locality.

In Brazil, the events associated with disasters and natural phenomena are mainly regionalized droughts or excessive rainfall, especially in the Northeast and South. Historically, the occurrence of most of these events has been characterized by their seasonality and their low potential to constitute unfavorable fiscal impacts, although there is often irreparable loss of life. Between 2013 and 2023 (June), between 0.01% and 0.06% of GDP per year will be spent on actions aimed at these events, including planning and controlling the associated risks, as shown in Chart 29. Since 2016, spending on disasters has been decreasing as a proportion of GDP, despite a significant increase in the allocation for this action in 2020 and 2022, in nominal terms.

The Risk and Disaster Management program (Program 2218), which is included in the LOA, focuses on prevention and control actions, as well as disaster response actions. This program is made up of various government actions aimed at, among other things:

- identifying the risks of natural disasters;
- supporting the reduction of natural disaster risks in critical municipalities;
- improving the coordination and management of preparedness, prevention, mitigation, response and recovery actions for civil protection and defense;
- monitoring and warning of natural disasters;
- promoting response actions to assist the affected population and recover from disasters, especially through financial, material and logistical resources, complementary to the actions of states and municipalities.

In addition to the budgetary provision for resources in the civil protection and defense action in the Risk and Disaster Management program, it is possible for the government to make resources available via extraordinary credits in certain situations that require swift and specific action. Finally, it should be noted that the figures presented in this section do not exhaust the federal government's actions on environmental issues.

Main rules of the legal framework for dealing with disaster risks:

- Law No. 8.742/1993 - provides for the competence of the Federal Government to carry out assistance actions of an emergency nature, in conjunction with the other federal entities;

- Law No. 12.340/2010 (alt. Law No. 12.983/2014) - provides for the transfer of federal funds to the bodies and entities of federal entities for disaster prevention and response actions;

- Law No. 12.608/2012 - establishes the National Civil Protection and Defense Policy - PNPDEC and provides for the National Civil Protection and Defense System and the National Civil Protection and Defense Council - CONPDEC;

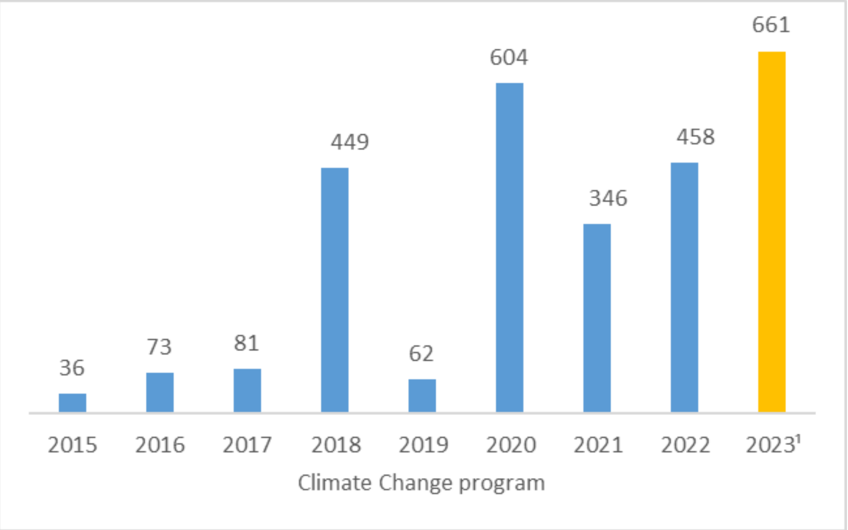
- Decree No. 10.593/2020 - provides for the organization and operation of the National Civil Protection and Defense System and the National Civil Protection and Defense Council and the National Civil Protection and Defense Plan and the National Disaster Information System.

3.9.2 Climate Change

According to the literature, climate change can have a significant impact on long-term growth and prosperity and has a direct impact on the economic well-being of countries. Furthermore, the measures adopted around the world to deal with these changes are related to mitigation, adaptation and the transition to a low-carbon economy.

In Brazil, Law No. 12. 187, of December 29, 2009, established the National Policy on Climate Change - PNMC, whose guidelines include climate change mitigation actions in line with sustainable development, which are, whenever possible, measurable so that they can be properly quantified and verified a posteriori; adaptation measures to reduce the adverse effects of climate change and the vulnerability of environmental, social and economic systems; support and promotion of activities that effectively reduce emissions or promote removals by sinks of greenhouse gases; and promotion of the dissemination of information, education, training and public awareness of climate change.

Chart 30 - Federal Government expenditures related to the Climate Change program
Data in: R$ million
Source and Elaboration: STN/MF



[1] Until September 2023. Refers to the updated allocation.

The UN's 2030 Agenda and the Paris Agreement establish a global commitment to achieving sustainable development and combating climate change. Brazil has committed to reducing its greenhouse gas emissions progressively, with the aim of achieving climate neutrality by 2050. The Ministry of Finance plays a central role in implementing these targets, as it is part of the Interministerial Committee on Climate Change - CIM, which is responsible for climate change strategies. Strengthening the connection between fiscal policy and climate change is fundamental to fulfilling these commitments, and the Ministry plans to collaborate in the development of an action plan to ensure the sustainability of these policies.

In addition, the instruments included in the National Policy on Climate Change, provided for in Article 6 of Law No. 12.187/2009, materialize various measures to deal with the issue, from the perspective of the Federal Government. In this sense, part of these instruments is included in the Climate Change Program (Program 1058), which includes the following actions:

- Implementing and Monitoring the National Policy on Climate Change and the Nationally Determined Contribution;
- Reducing Vulnerability to the Effects of Desertification; and
- Promoting Studies and Projects for Mitigation and Adaptation to Climate Change.

The amounts paid to the Climate Change program since 2015 are detailed below, with a forecast of R$661 million by 2023. Finally, it should be noted that the amounts presented in this section do not exhaust the federal government's actions on environmental issues.