Brazil Macro | May 2023

FISCAL POLICY

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INDEX

1. Brief Overview
2. New Fiscal Framework
3. Tax Collection Performance
4. Primary Result and Debt
5. Public Debt Scenario and Simulations
6. Debt Management
7. International Comparison
8. Tables - Forecasts

Brief Overview

In search of primary balance

1

Fiscal Consolidation: Without major changes, challenges remain ahead

- We have only marginally changed our fiscal forecasts in this scenario update. We have lowered our 2023 consolidated primary deficit estimate to 1.1% of GDP (previously: 1.2%), with a small increase in GDP growth forecast and a rise in regional governments surplus to BRL10 billion (previously: BRL5 billion). The latter follows a still declining trend in the year, though with a better end-point, given a slightly higher return of ICMS (VAT) tax on fuels after June.

- On the new fiscal framework, we believe it will be approved without major changes, meaning no significant change to our scenario, as we see challenges to its full implementation. We already have included most of the measures proposed by the administration to increase revenue, including those to compensate the real increase in minimum wage (+1.4%) and rise in individual tax income exemption (IRPF).

- Moreover, we continue to foresee a deterioration in the nominal budget results, also due to heavier debt costs. We rose our nominal deficit estimate back to 8.6% of GDP (previously: 7.8%). We have raised our 2023 gross debt/GDP forecast to 77.8% (from 77.4%), owing to a slower expected growth in the GDP deflator (following commodity prices' tumble).

- For the longer term, we continue to see a risky path toward debt stabilization, in a context of elevated pressure on social spending and the natural difficulties in raising taxes and reducing tax exemptions (4.5% of GDP).

Fiscal Consolidation: In Search for a Primary Balance

Short Term: Marginal scenario update

- **2023 Primary Balance**: marginal improvement
  -BRL110 bn (-1.1% GDP) | Apr (e): - BRL120 bn (-1.2% of GDP)
  Central Gov.: -BRL120 bn (-1.2% GDP) | -BRL5 bn from Apr
  Regional Gov.: +BRL10 bn (0.1% GDP) | +BRL5 bn
- **Revenues:** uncertainty after positive results in 2021-22. Some softening in growth is expected (cyclical and extraordinary). Highly correlated to the commodity prices.
- **Gov. Measures could help revenue result**
  The administration is advancing in altering tax incentives/breaks. Yet, we estimate lower values and part could be used to mitigate the expected cyclical drop
- **Fiscal rules: key issue in the short-term**
  It will be approved. We see challenges to its full implementation. Could maintain outlays at ~19% of GDP
- **Gross Debt/GDP: 77.8%** in **23** (+0.4p.p.)
  We reduced the GDP Deflator estimate from 3.5% to 3.0%, considering lower IGP-M YoY average (-0.3%, from -1.1%).

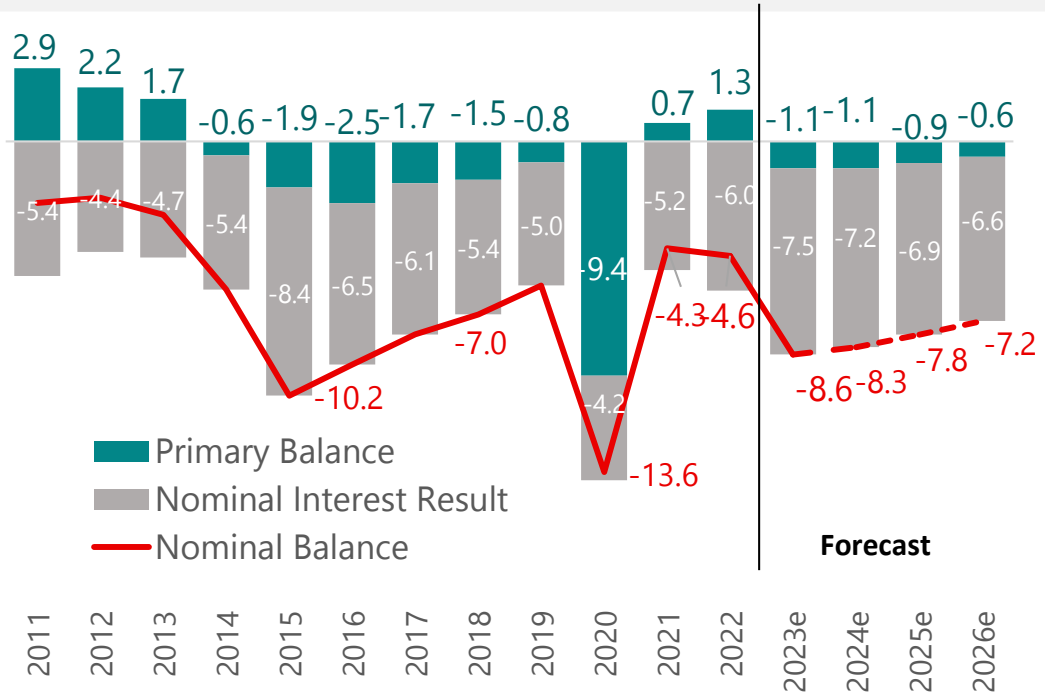
Medium Term: Bumpy Road Ahead

- **Risks: Additional Fiscal + Quasi-Fiscal Stimulus**
  1.0% of GDP in 2023. In a scenario with a positive output gap. We see a gradual and limited quasi-stimulus.
- **Unpaid Debt – Judicial Claims**
  We see more than BRL55 bn unpaid (not in debt statistics)
- **Higher Nominal Deficit (Selic)**
  Nominal Deficit : higher 8.0% of GDP ahead.
  Interest payments is pressuring at the margin.
- **Fiscal adjustment: ~3.0% of GDP**
  In a context of elevated pressure for social spending and natural difficulties to raise taxes
- **Debt-path: on the edge for convergence**
  ~95% of GDP by end of the decade. Sensitivity with macro structural variables (such as GDP, Neutral Rates)
- **Risks for debt convergence**
  Long-term: Neutral interest rate above 5.0%, Potential GDP below 1.5%. Total Expenditures above 19% of GDP.

Fiscal Policy: A higher interest burden to weigh on the debt dynamics

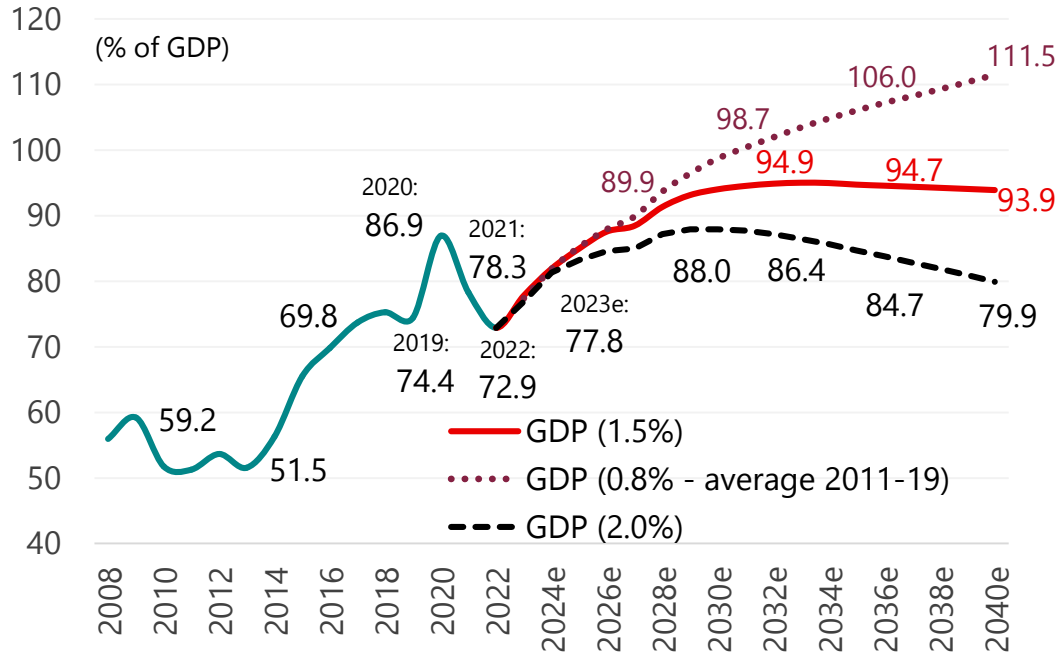
- Interest payments should continue to rise (Selic increase) with the nominal result showing strong deterioration, remaining close to 8.0% of GDP in the coming years. We reduced a tad the interest payment due to the lower issuance of National Treasury, using part of the liquidity reserves.
- We simulated scenarios for the debt trajectory: the main debate will be on the structural macroeconomic variables (GDP, Neutral Interest Rate and GDP Deflator).

Public Sector's Financing Needs (% GDP)



Sources: BCB, Santander.

Scenarios - Gross Debt Scenario (% GDP)



Sources: BCB, Santander

Simulation: Uses our macro estimates until 2026.
Long term Selic: 9.0%, and GDP deflator of 5.0%

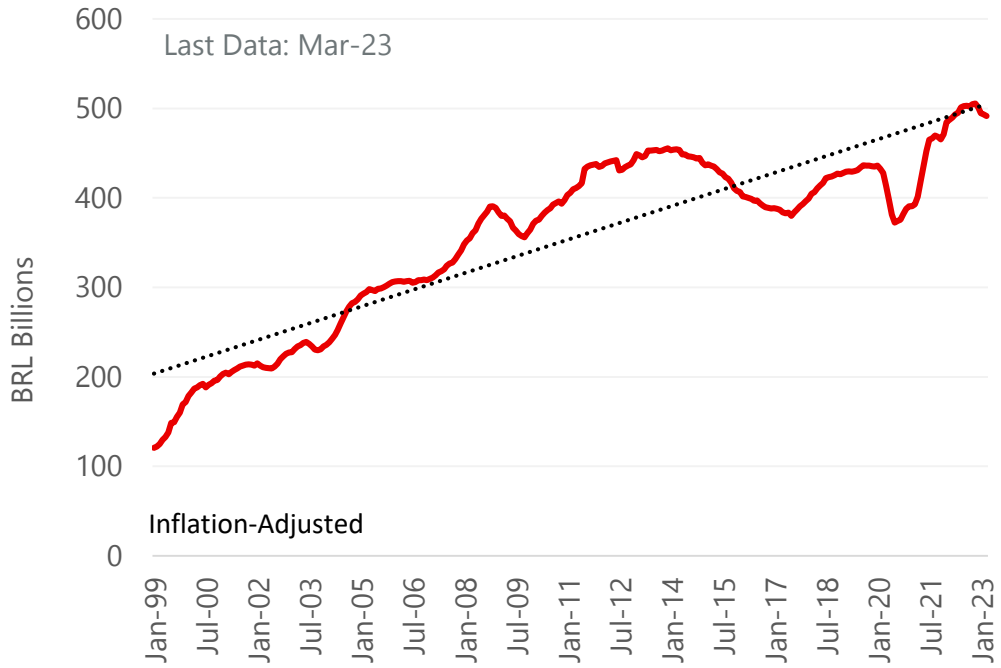
Fiscal : Higher revenues in the short-term, cyclical effects ahead will be on the spotlight

Central Gov. Primary Result

2023 - BRL billion	1st Budget Review (a)	% GDP	Santander (b)	% GDP	Δ (b) - (a)
Total Revenue	**2,376**	**22.2%**	**2,368**	**23.0%**	-7.7
Collected by the Brazilian IRS	1,474	13.8%	1,464	14.2%	-10.4
Net Social Security Revenues	598	5.6%	600	5.8%	2.5
Not Collected by the IRS	304	2.8%	304	2.9%	0.1
Transfers by Revenue Sharing	460	4.3%	471	4.6%	10.9
Net Revenue	**1,916**	**17.9%**	**1,897**	**18.4%**	-18.6
Total Expenditure	**2,023**	**18.9%**	**2,017**	**19.6%**	-5.9
Social Security Benefits	859	8.0%	868	8.4%	9.1
Payroll - Public Servants	365	3.4%	365	3.5%	0.0
Other Mandatory Expenses	283	2.6%	290	2.8%	7.7
Mandatory with Cash Control	323	3.0%	324	3.1%	1.2
Discretionary Expenses	194	1.8%	170	1.6%	-23.9
Central Gov. Budget Gap	-107.6	-1.0%	-120.3	-1.2%	-12.7
Nominal GDP	10,712		10,315		

Sources: Finance Ministry, Santander.

Federal Tax Collection – Corporate Profit Revenues



Sources: Brazilian IRS, Santander.

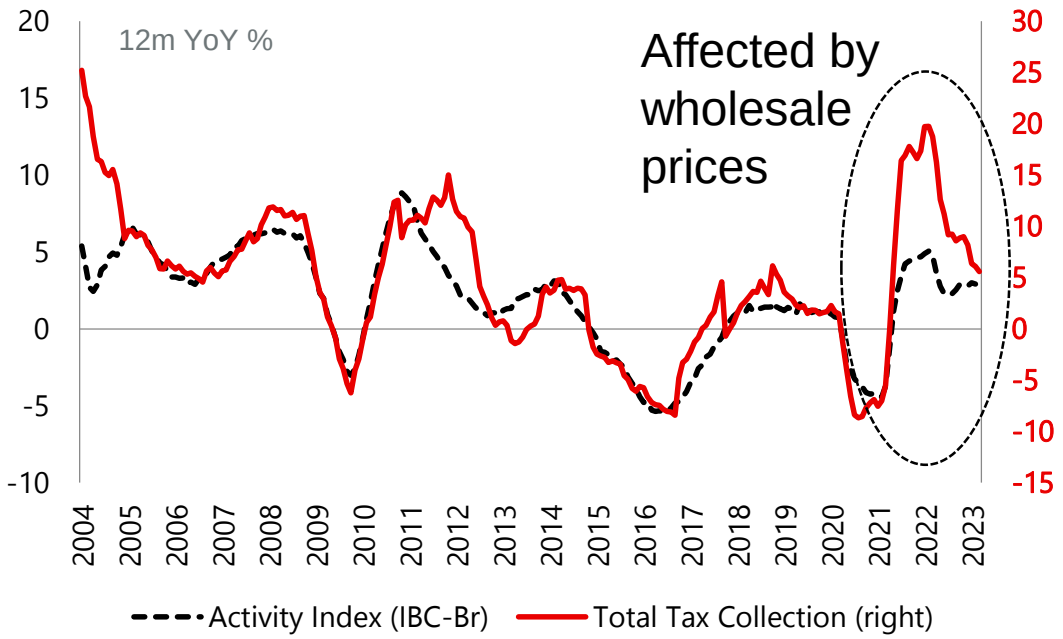
The 2023 budget (LOA) estimate was BRL231 billion (2.2% of GDP) deficit for 2023.
GDP Estimate: Budget Review 1.6%, Santander: 0.8%
A rise in public servant`s wage of 9%. Bolsa Família outlays should be BRL165 bn. We see the budget leftovers in BRL25 billion.
We see as more likely the deficit between 1.4%-1.0% of GDP and a permanent increase in tax burden can reduce this value.

Santander

Fiscal Policy: revenues boosted by commodities in the short term

- Now we are observing a softening in Tax revenues increase after a favorable winds coming from the jump in commodity prices

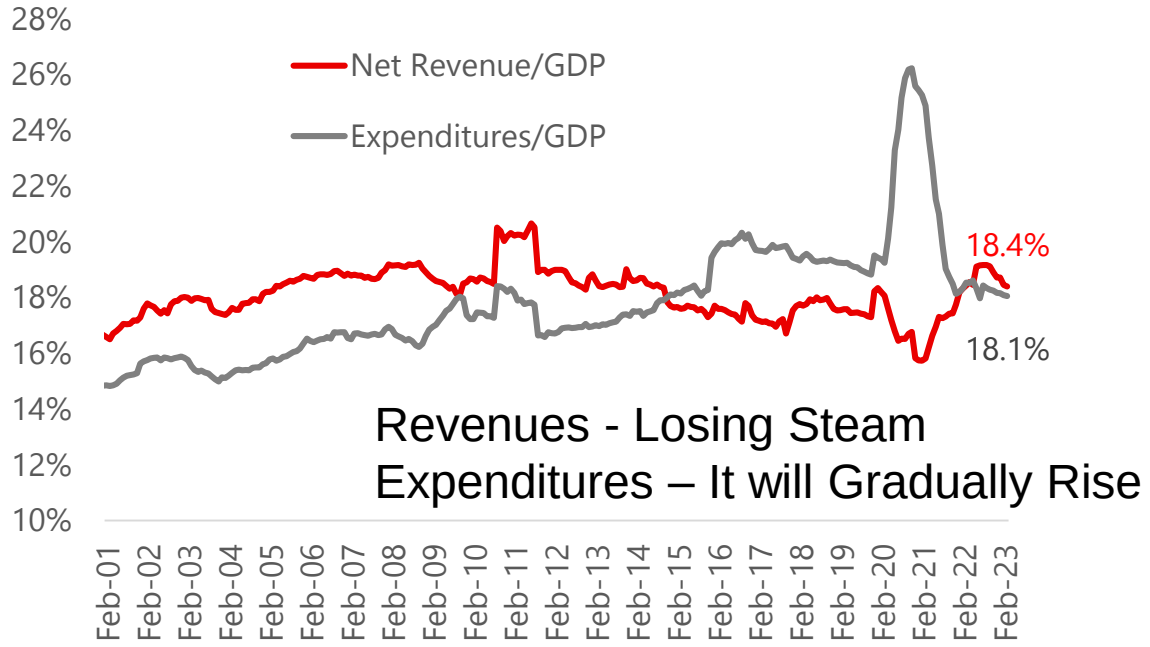
Tax Revenues vs. Activity Index



Sources: National Treasury, BCB, Santander.

Last Data: March 2023

Central Gov. Result – % GDP



Sources: BCB, National Treasury, Santander.

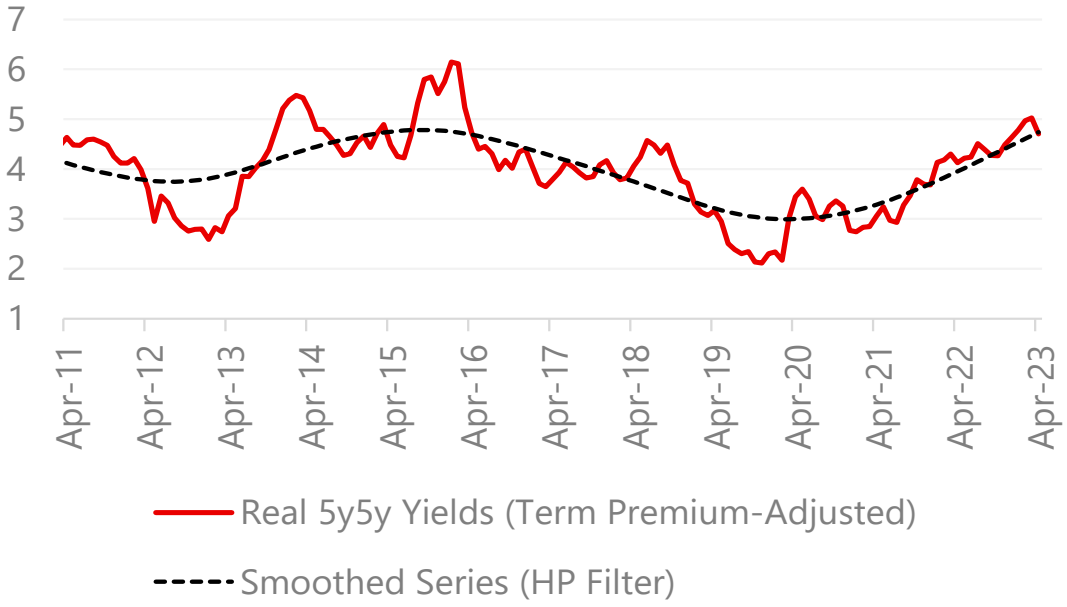
Last Data: March 2023

Key-question: Will the government measures permanently increase the revenues, compensating the cyclical fall?

Macro Background – Higher Interest Rate and Activity Moderating

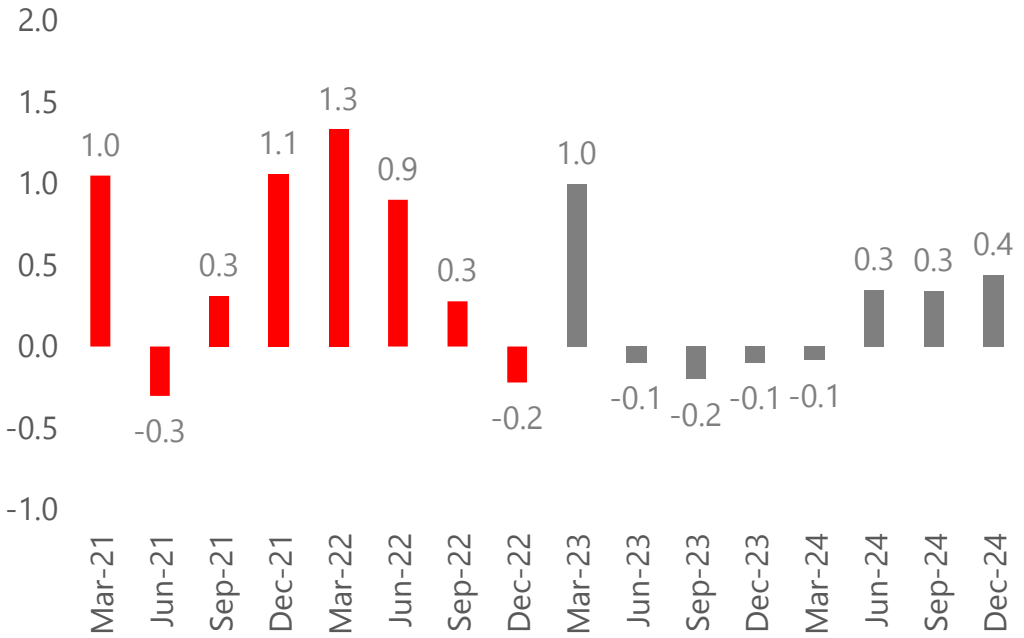
- From a cyclical point of view, we see the sad policy still at restrictive levels and activity is currently slowing down

Neutral Rates Could Be Rising Further



Sources: Brazilian Central Bank, Anbima, Santander.

GDP Growth (% QoQ-sa)

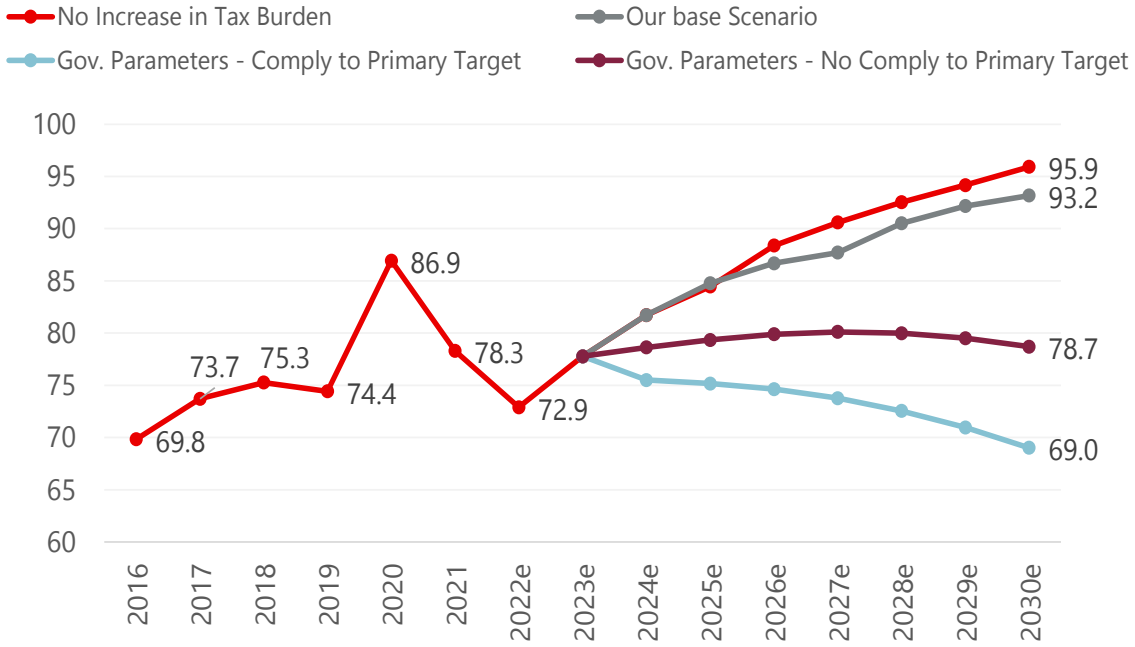


Sources: IBGE, Santander. Santander estimates for 1Q23 onwards

Fiscal Policy: debate over macro parameters in a cyclical downturn

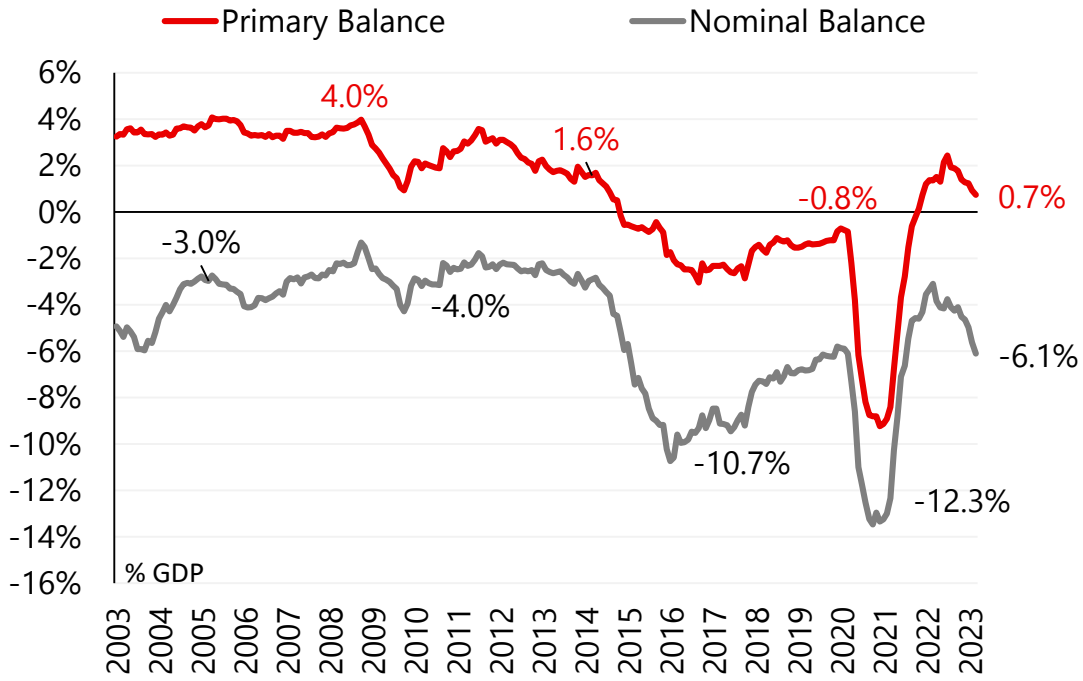
- Interest payments should continue to rise (Selic increase) with the nominal result showing strong deterioration, remaining above 8.0% of GDP in the coming years.
- We simulated scenarios for the debt trajectory: the main debate will be on the structural macroeconomic variables (GDP, Neutral Interest Rate and GDP Deflator).

Government Debt Simulation – The new framework will not guarantee the debt stabilization



Sources: BCB, Santander.

Public Sector – Primary Result



Sources: BCB, National Treasury, Santander.

Notes: Debt issuances: we added a spread of + 1.0 pp in addition to the Selic rate in the models.

2023 GDP Deflator: 3.0% | GDP: 1.0% | Selic Rate (avg): 13.7% | BNDES zero | Voluntary Deposits 1.0% of GDP

2023-40: GDP deflator: 5.0% | Potential GDP: 1.5% | Neutral Selic Rate: 5.0%

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Fiscal – Mitigating the deficit in the short-term, challenges ahead

Central Gov. Primary Balance																
Fiscal Items (% of GDP)	2017	2018	2019	2020	2021	2022	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	Δ 26-17	Δ 30-17
Total Revenue	21.0	21.3	22.1	19.3	21.7	23.3	23.0	22.9	23.0	23.3	23.3	23.2	23.0	22.9	2.3	1.9
Revenues Collected by the IRS (1)	12.7	12.9	12.8	11.8	13.4	14.0	14.1	13.9	14.0	14.1	14.0	13.9	13.8	13.8	1.4	1.1
Net Social Security Revenues (2)	5.7	5.6	5.6	5.3	5.2	5.4	5.8	5.8	5.8	5.9	5.9	5.9	5.9	5.9	0.2	0.2
Revenues Not Collected by the IRS (3)	2.7	2.8	3.7	2.2	3.1	3.9	3.0	3.2	3.2	3.2	3.3	3.3	3.3	3.3	0.6	0.6
Transfers by Revenue Sharing	3.5	3.7	3.9	3.5	4.0	4.6	4.6	4.5	4.4	4.3	4.2	4.1	4.1	4.0	0.8	0.5
Net Revenue	17.5	17.6	18.2	15.8	17.7	18.7	18.4	18.4	18.6	19.0	19.1	19.0	19.0	18.9	1.4	1.4
Total Expenditure	19.4	19.3	19.5	25.6	18.1	18.2	19.6	19.5	19.5	19.6	19.2	19.0	18.6	18.4	0.2	-1.1
Social Security Benefits (4)	8.5	8.4	8.5	8.7	8.0	8.0	8.4	8.6	8.6	8.6	8.5	8.5	8.4	8.4	0.1	-0.1
Payroll (5)	4.3	4.3	4.2	4.2	3.7	3.4	3.5	3.6	3.7	3.8	3.8	3.8	3.7	3.6	-0.5	-0.7
Other Mandatory Expenses (6)	3.0	2.9	2.6	9.5	3.4	3.0	2.8	2.7	2.7	2.7	2.5	2.5	2.4	2.4	-0.3	-0.6
Expenses with Cash Control (7)	1.9	2.0	1.9	1.8	1.6	2.2	3.1	2.9	2.9	2.8	2.8	2.7	2.6	2.5	1.0	0.6
Discretionary Expenses (8)	1.8	1.8	2.2	1.4	1.4	1.5	1.6	1.6	1.6	1.7	1.6	1.6	1.5	1.5	-0.1	-0.3
Central Gov. Primary Balance	-1.9	-1.7	-1.3	-9.8	-0.4	0.5	-1.2	-1.1	-0.9	-0.6	-0.1	0.1	0.3	0.6	1.3	2.5
Public Sector Primary Balance	-1.7	-1.5	-0.8	-9.4	0.7	1.3	-1.1	-1.1	-0.9	-0.6	-0.1	0.1	0.4	0.6	1.1	2.3
Nominal GDP (BRL billion)	6,585	7,004	7,389	7,610	8,899	9,915	10,315	10,833	11,545	12,304	13,113	13,976	14,894	15,874	5,719	9,288

Notes and Hypothesis

(1) Elasticity: Revenues-GDP 2021: 1.7 | 2022: 1.3 | 2023:0.96 | Long-term: 1.04. We see a slowdown in extraordinary revenues from 2023 onwards. Potential GDP: 1.5%. Inflation: 4.0%, GDP deflator 5.0%. (2) Recovery in the formal labor market and earnings (better short-term numbers), expected some softening ahead. (3) Oil revenues will increase with greater federal share in pre-salt, the reduction in prices in medium-term will be compensated with more production. SOE dividends down to historical levels after abnormal gains of late. 4) A permanent fiscal increase of BRL170 billion in 2023 onwards. We assume a fiscal rule that incorporates the waiver for 2023 as a permanent. New fiscal anchor will maintain the expenditures limited to ~19% of GDP (close to the level before enactment of the spending cap law). Real minimum wage increase (IPCA + average of last two years of GDP growth). The government will mitigate the impact of real gains in minimum wage by a tighter rule for the welfare program. Pension Reform approved in 2019 will stabilize the expenditures as % of GDP in the long-term (even with the rapid aging of the population). In the short-run we eliminate the queue. (5) Gradual increase in admissions (faster than the previous scenario, 70% instead of 55%) to the federal workforce ("normalization"). We included the 9% increase in 2023 and 2024, after that is decreasing gradually to 4% in Medium-term. Long-term: digitalization effects contain the increase with lower increase in public workforce. (6) Includes: higher payments in Court-ordered debt budget (sub-cap) – better management with a reduction in long-term, rise in federal contribution to Fundeb (Educational Fund), BPC (pension benefit). Gradual rise of heath expenditures of BRL30 billion, considering establishment of former spending cap lower bound. Court-ordered debts to accumulate to 1.6% of GDP by 2026, with the government negotiating future payments. (7) Bolsa Família for 2023 with a total of BRL165 bn (gradual reduction in outlays after 2024). (8) Discretionary Expenses maintained at ~1.6% - a level that we consider enough to avoid a partial shutdown of public services, with and increase in investment with the reforms. (9) Not consider an increase in Tax exemption from 2023 onwards.

New Fiscal Framework

We see challenges to its full implementation

2

Fiscal Policy: New Fiscal Framework Proposal

New Fiscal Framework Guidelines

1. **Primary result target** - % GDP (bands of +/- 0.25pp): 2023: -0.5% | 2024: 0% | 2025: +0.5% | 2026: 1.0%;

2. **Commitment** to the target up to 2026 (including the bands)

3. **Outlays in the spending ceiling real limit between 0.6% and 2.5%** p.a. (countercyclical mechanism), with FUNDEB and the nursing salary floor excluded from the limits (already existing constitutional rules).

4. Annual growth within the **expenditure growth range limited to 70% of the primary revenue** change in the last 12m.

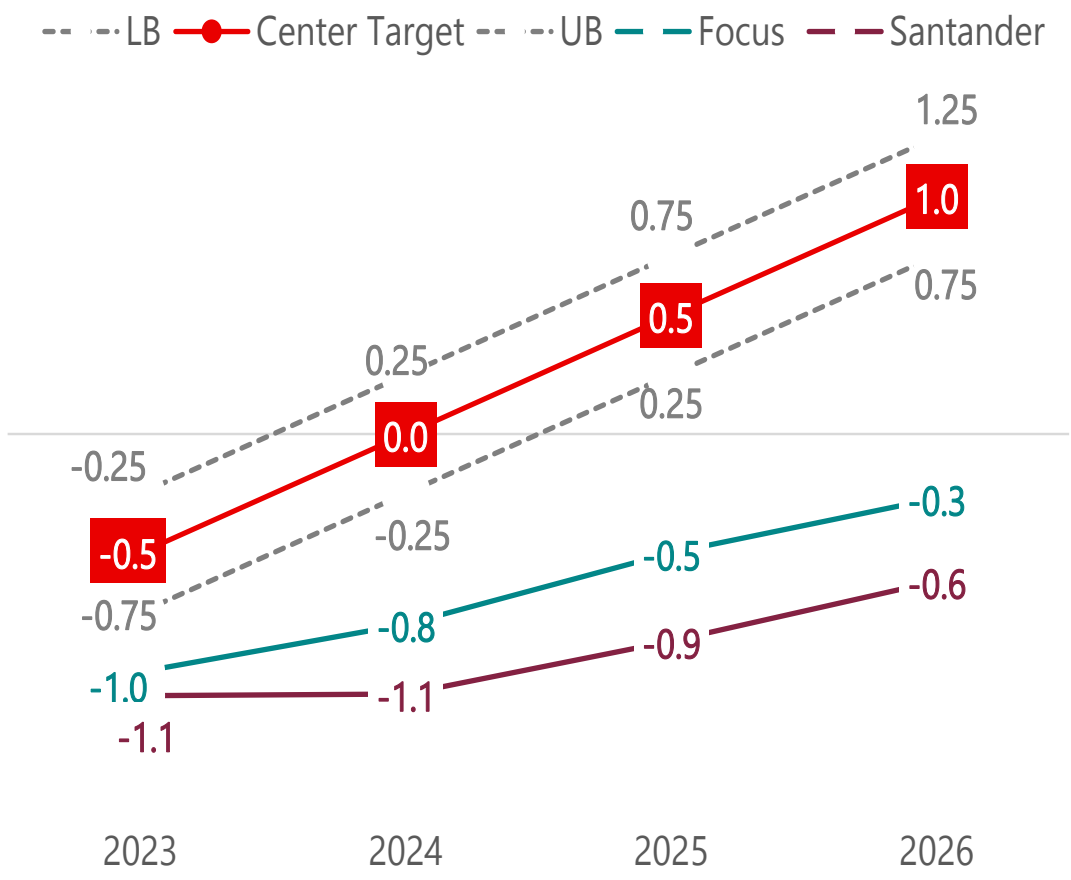
5. **Primary result above the ceiling of the band allows the use of surplus for investments.**

6. Not compliance to the target: a reduction in expenditure growth to 50% of revenue growth in the following year.

7. **Investments floor**. 2023 value updated to IPCA.

Sources: Finance Ministry, Santander.

Primary Result - Target and Scenarios % GDP



Sources: Finance Ministry, Santander

New Fiscal Framework - Efficacy Will Depend Largely on Revenue Performance

Main Aspects of the New Framework

Federal tax collection will be a key factor

- Dependency of Macro Parameters
- Cyclical Payback (?) and Commodities Prices

Necessity of increase in Net Revenues

In total revenue this amount could double if we observe a rise in taxes of which part is shared by subnational entities

Dependency of Macro Parameters:

Gov. Parameters: (permanent) increase in federal net revenue of 1.2% of GDP in 2024

Our scenario: it would be necessary for net revenue to increase by 2.3% of GDP in 2024

No increase: deficits of
-1.2% in 2023, -1.8% of GDP in 2024, -1.6% in 2025, -1.3% in 2026

Details and Global Overview

The Rapporteur's first draft of Lower House should marginally increase the enforcements. We expect an approval by mid-May.

Uncertainty about the details:

- - The level of expenditures limit increase in 2024
- Unlimited outlays maintained similar to the spending cap?
- Transition – new lower bound Education and Health
- The primary target will be set only in LDO (biding for 1 year)?

Some important aspects:

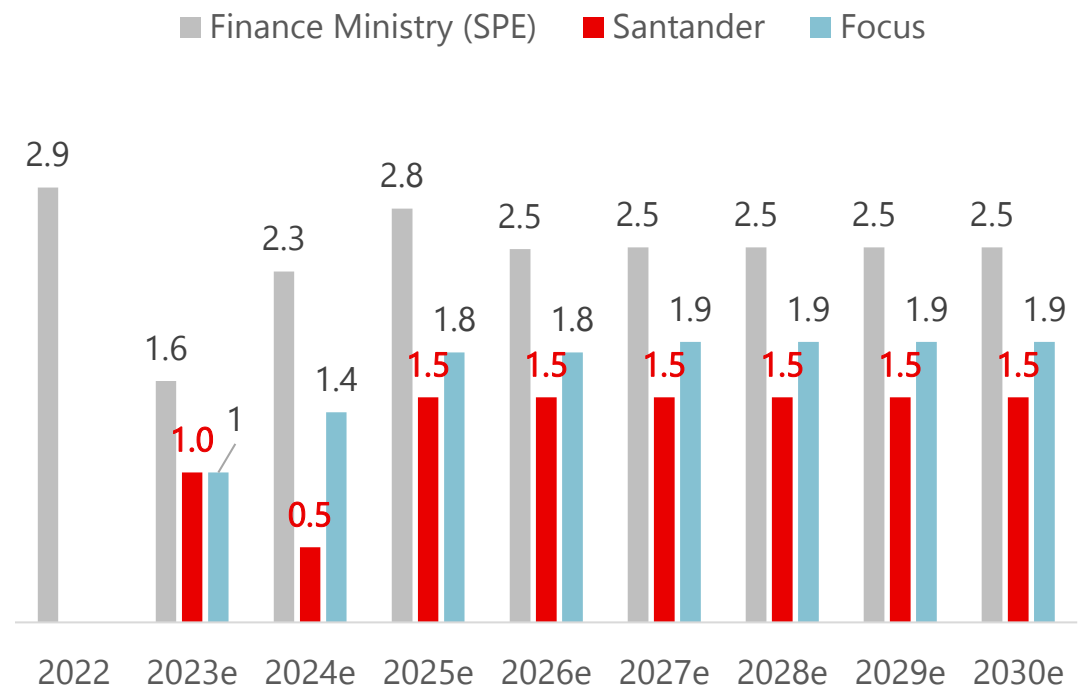
- Pursuit of reaching a primary surplus (Very Important)
- No new exceptions to the spending limit
- Use of past revenues (not using estimates)
- Reducing the size of outlays with a drop in revenues

Challenges:

- Diminish the adjustment by tax increase (outlays are linked)
- Floor for investments (corrected by inflation)
- Gradual drop in expenditures, with necessity to cut discretionary
- Congressional approval of tax burden adjustments
- Less enforcement for the approval of reforms
- Debt Convergency – depending on parameters

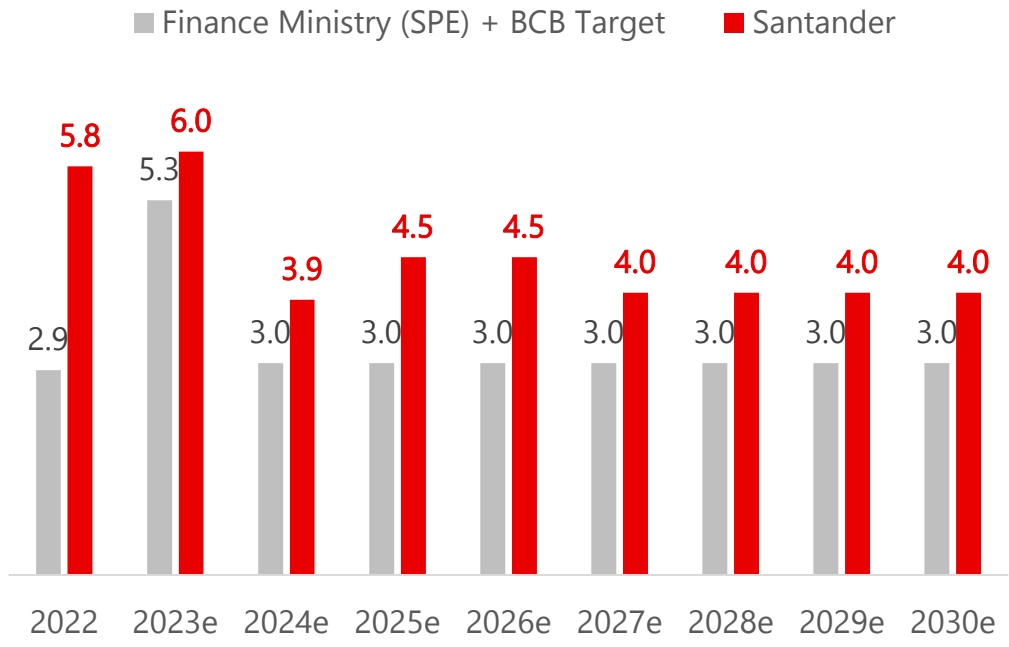
Fiscal Policy: Highly Dependency of the Macro Parameters

GDP Forecast



Sources: Finance Ministry, Santander

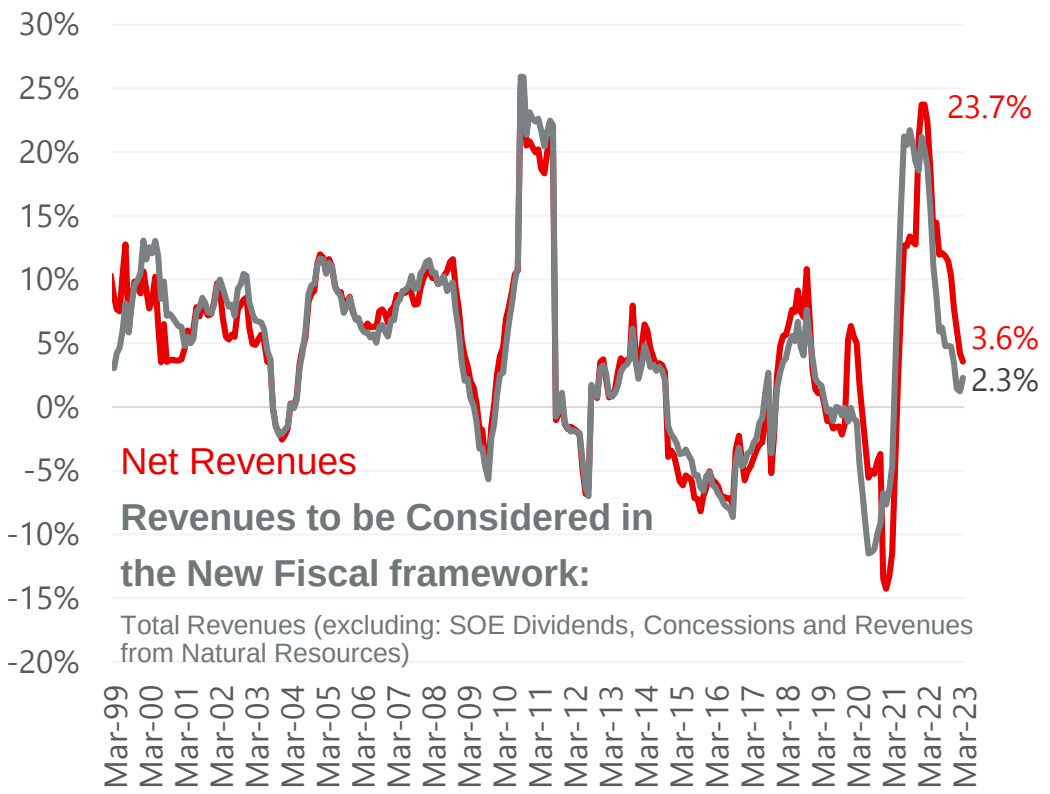
Inflation Estimates



Sources: Finance Ministry, Santander

Fiscal Policy: New Fiscal Framework Proposal

Net Revenue - % YoY



Sources: National Treasury, Santander.

Expenditures – Gradual Decline

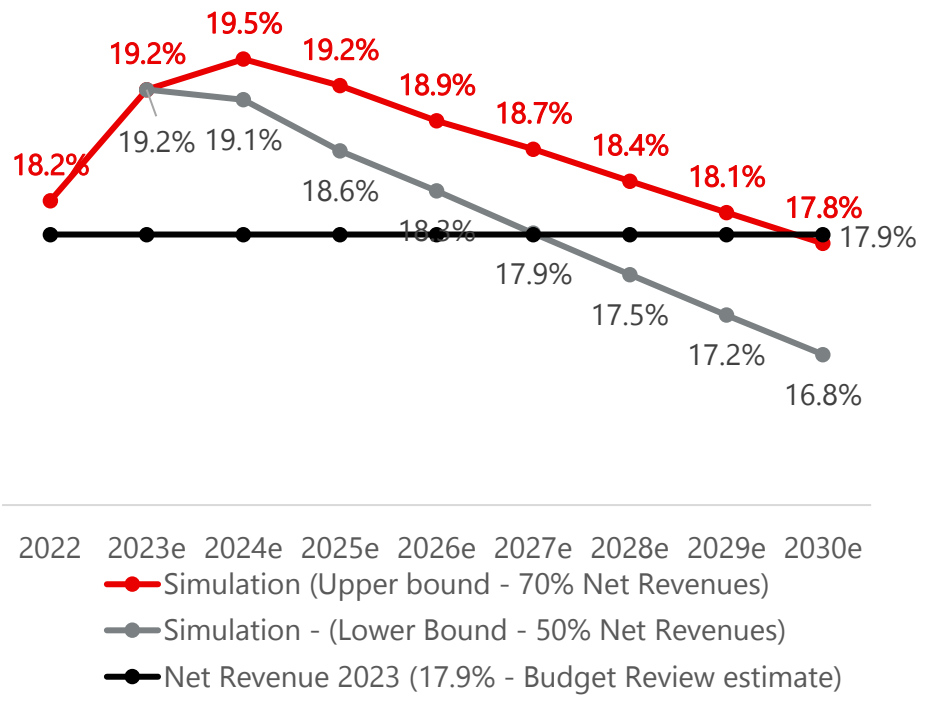
GDP	Net Revenue	Total Expenditure % YoY		Expenditures (% GDP) - 2023:18.9%	
		50%	70%	50%	70%
0.0%	0.0%	0.6%	0.6%	-0.1%	-0.1%
1.0%	1.0%	0.6%	0.7%	-0.3%	-0.2%
2.0%	2.0%	1.0%	1.4%	-0.4%	-0.3%
2.5%	2.5%	1.3%	1.8%	-0.4%	-0.3%
3.0%	3.0%	1.5%	2.1%	-0.5%	-0.4%
4.0%	4.0%	2.0%	2.5%	-0.6%	-0.5%

Nominal GDP = f(REAL GDP, IPCA + 1.0%)

Sources: Finance Ministry, Santander

Fiscal Policy: Expenditures Simulation – No increase in Tax Burden

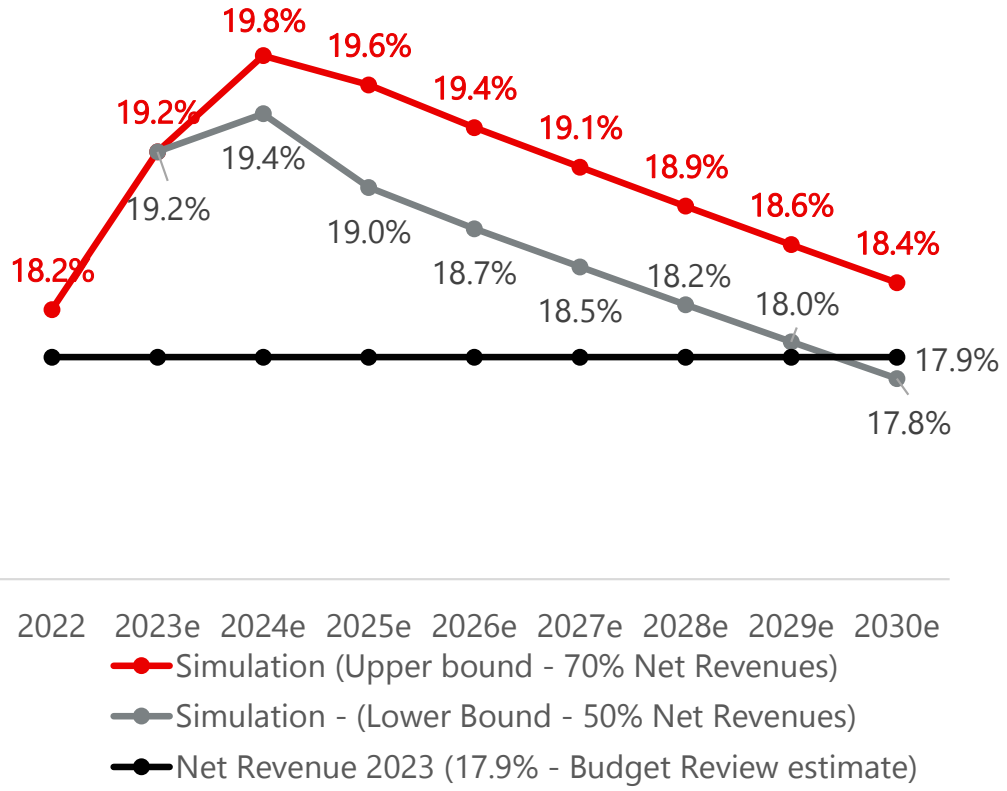
Finance Ministry Parameters



Sources: National Treasury, Santander.

2023 we added BRL30 bn increase in Heath Outlays to increase to reach the new lower bound

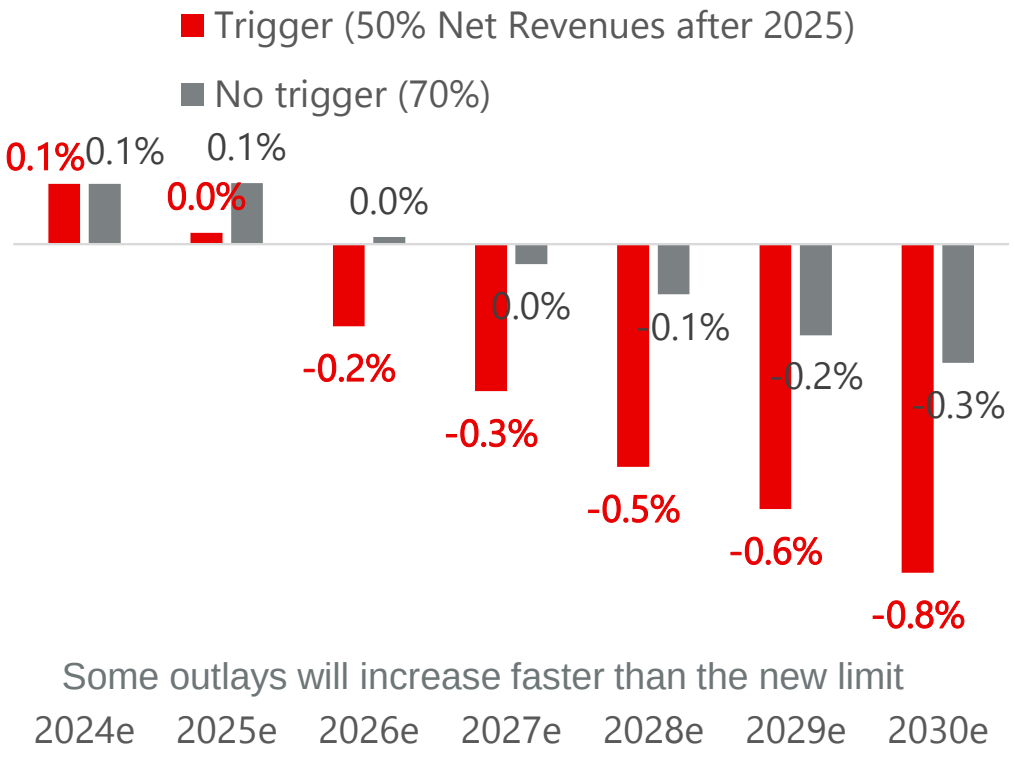
Expenditures – Gradual Decline



Sources: Finance Ministry, Santander

Fiscal Policy: A simulation of the new spending limit

Simulation - Expected cut in discretionary outlays



Sources: National Treasury, Santander.

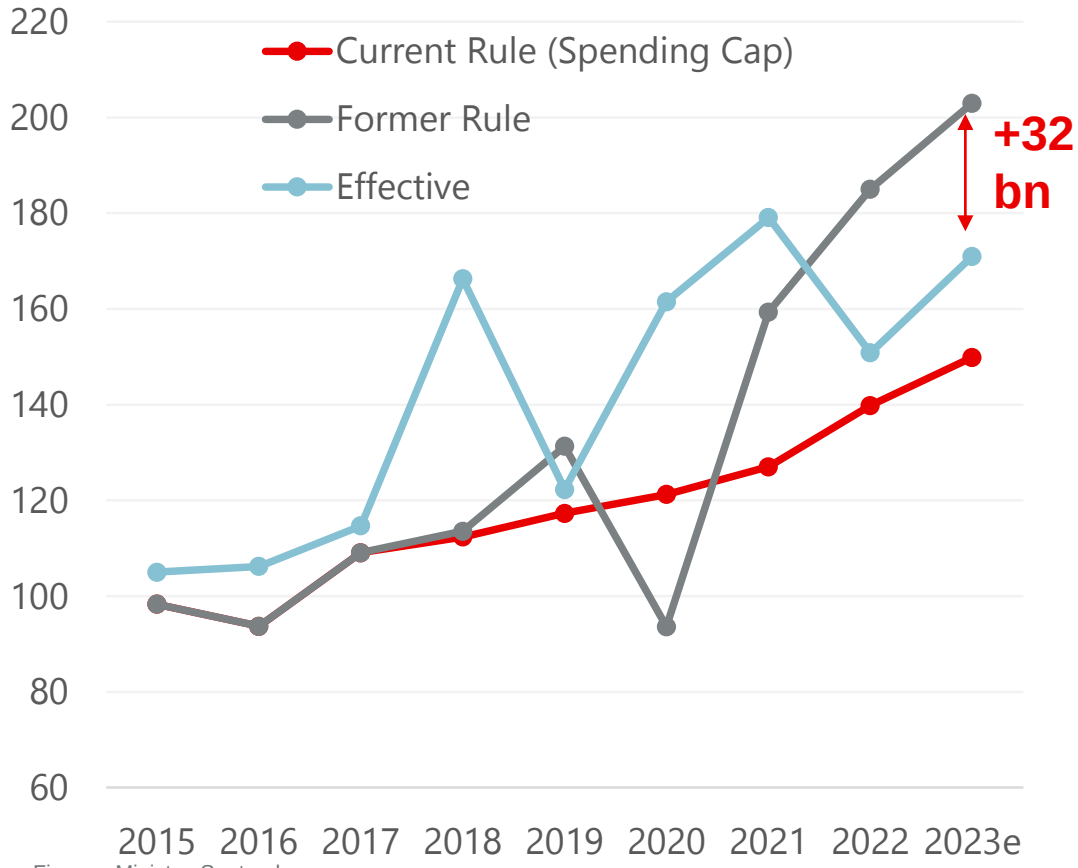
Education: 18% RLI | Health 15% RCL | Minimum Wage = IPCA + 2y GDP average

Public Servants wage = 8% | Welfare Program (Bolsa Família) = IPCA/2

Supposing no changes in the primary targets and the full-effect of the fiscal rule

Pension increase (vegetative): +2.5%

Health Outlays – Lower Bound – BRL bn

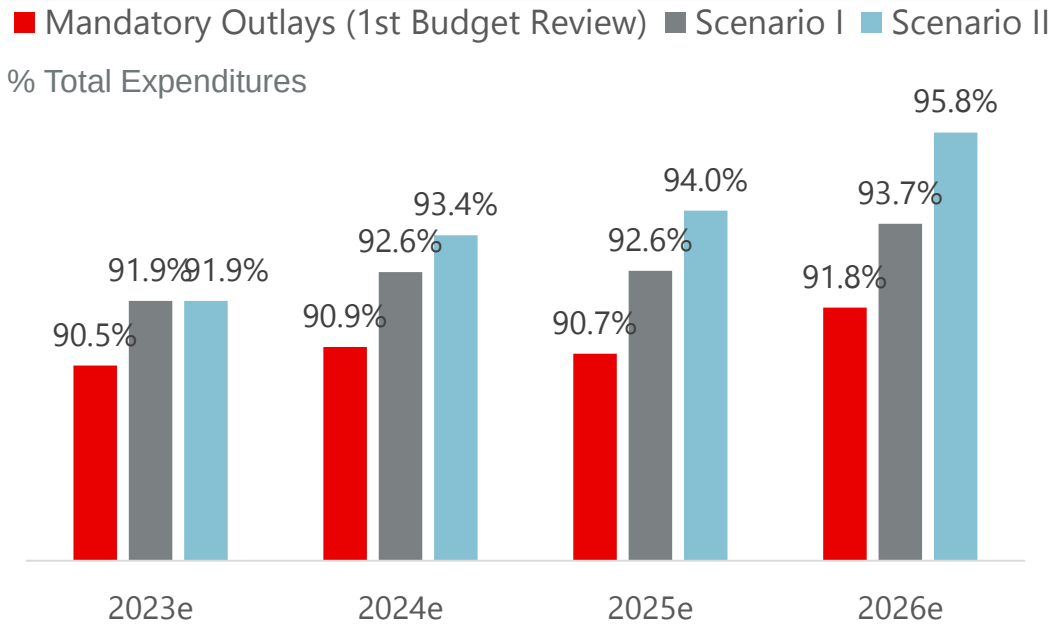


Sources: Finance Ministry, Santander

Fiscal Policy: A simulation of spending scenario

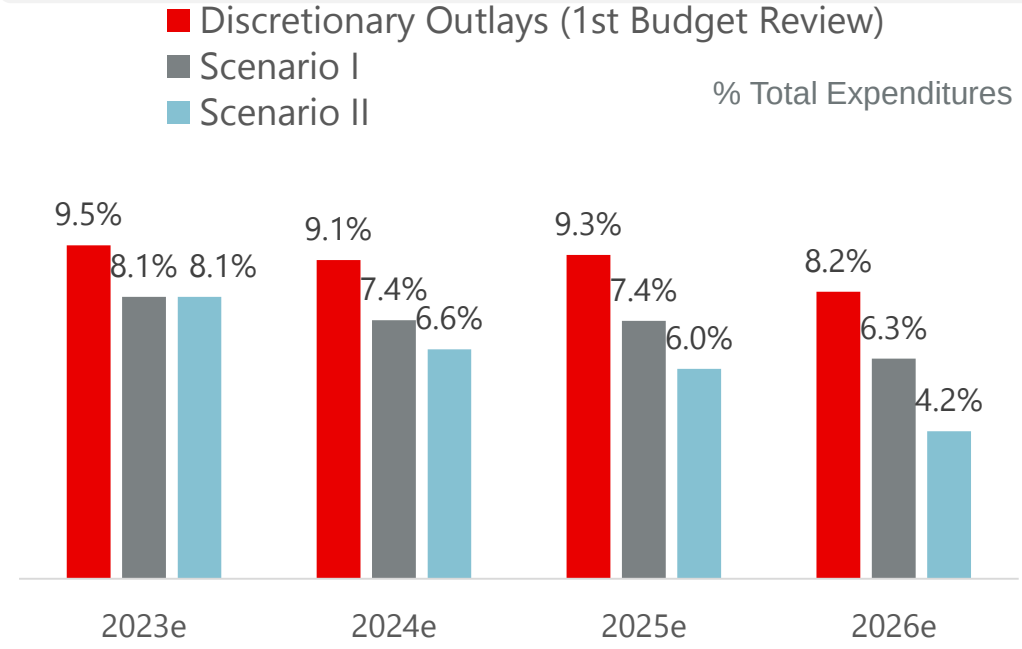
- We compared two scenarios comparing to the Budget Guidelines (PLDO) proposal for 2024 (sent to Congress on April 15)
- We used the PLDO numbers by changing the minimum floor for education and health and the minimum wage rule for adjustments 2024 onwards. We see a pressure in discretionary outlays (remembering that now there is an investment floor of ~BRL72 billion)
- The total increase in outlays from 2023 (Budget Review) and PLDO is 5.8% nominal, probably higher than the one foreseen in the new fiscal framework proposal

Simulation - Expected cut in discretionary outlays



Sources: National Treasury, National Congress, Santander.

Health Outlays – Lower Bound – BRL bn



Sources: National Treasury, National Congress, Santander.

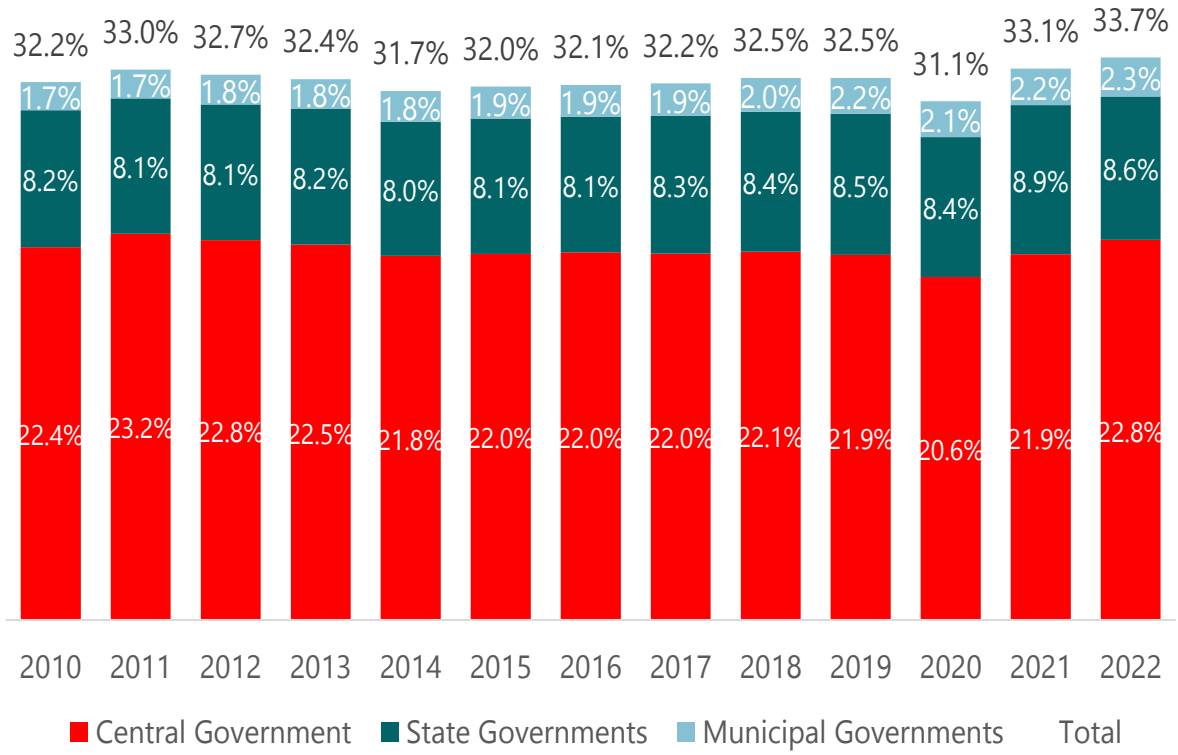
- Scenario I: Increasing the outlays by changing the minimum floor for education and health (BRL30 bn for 2023)
- Scenario II: Scenario I + New minimum wage rule (INPC + two last year GDP)

Fiscal Policy: Is it possible to raise revenues?

Considering OECD data, Brazil's tax revenue was 31.6% of GDP in 2020, the 4th highest among emerging economies.

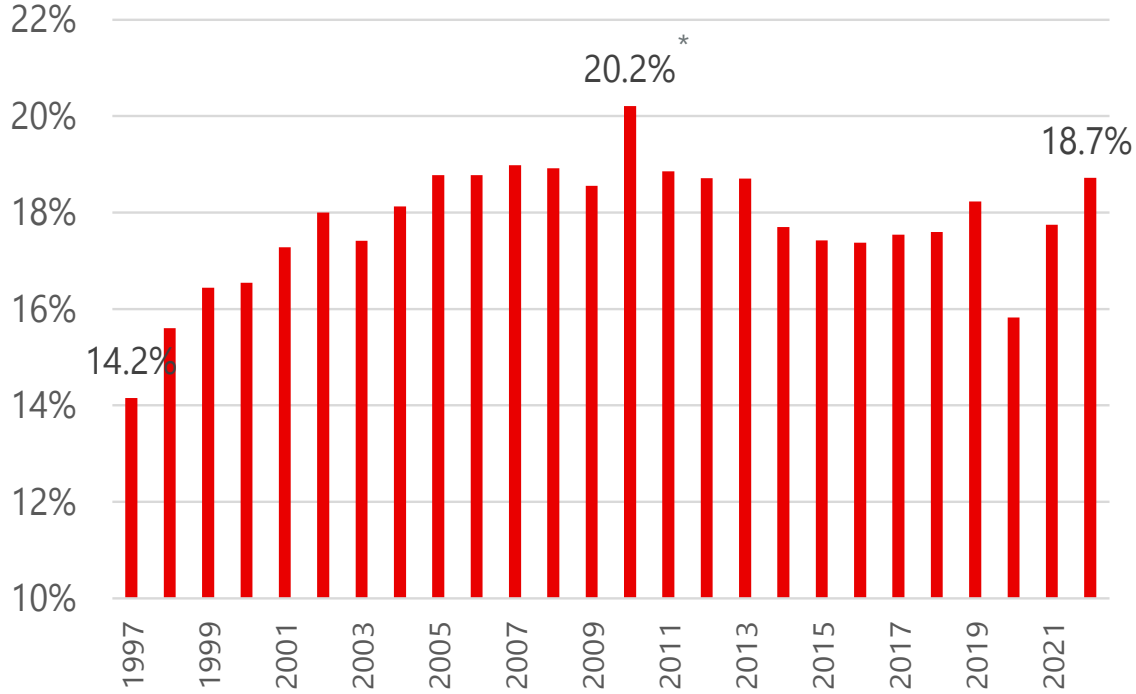
From 1990 to 2020: Brazil's tax revenue rose 3.9 pp, compared to LatAm (4.2 pp) and OCDE countries (2.7 pp).

Brazilian Tax Burden - % GDP



Sources: National Treasury, Santander.

Historical Net Revenues - % GDP



Sources: Finance Ministry, Santander

* 1.9% of GDP in extraordinary revenues

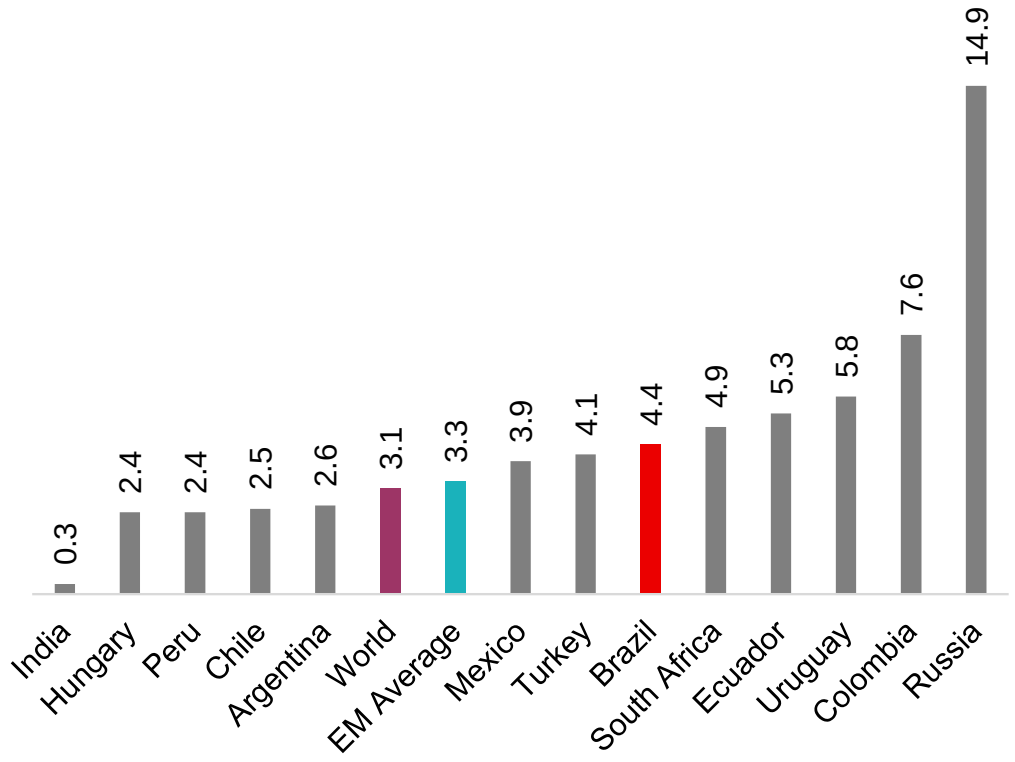
Brazil: Tax Relief Is 1.3 pp of GDP Higher Than Global Average

Fiscal Incentives expected for 2023 - % GDP

2023 Tax Incentives	BRL Billion	%	% of GDP
Simples Nacional	89	19.5%	0.9%
IRPF - Exempt Deductions and Earning	75	16.5%	0.7%
Zona Franca Manaus (Trade Zone)	55	12.1%	0.5%
Agriculture	52	11.4%	0.5%
Non-profit Org.	35	7.7%	0.3%
Savings and Credit Bonds - LCA, LCI, etc	19	4.2%	0.2%
Medicines and Medical Equip.	18	4.0%	0.2%
Employee Benefits	16	3.5%	0.2%
Regional Development	15	3.3%	0.1%
Automotive Sector	10	2.2%	0.1%
Payroll Tax Exemption	9	2.0%	0.1%
IT sector	8.6	1.9%	0.1%
Scientific Research and Tech.	7	1.5%	0.1%
Aircraft and Ships	5	1.1%	0.0%
Individual Enterpreneur (MEI)	5	1.1%	0.0%
ProUni	3	0.7%	0.0%
Others	34	7.5%	0.3%
Total	**456**	**100.0%**	**4.4%**

Sources: National Treasury, Santander.

2020's Tax Relief by Country - % GDP

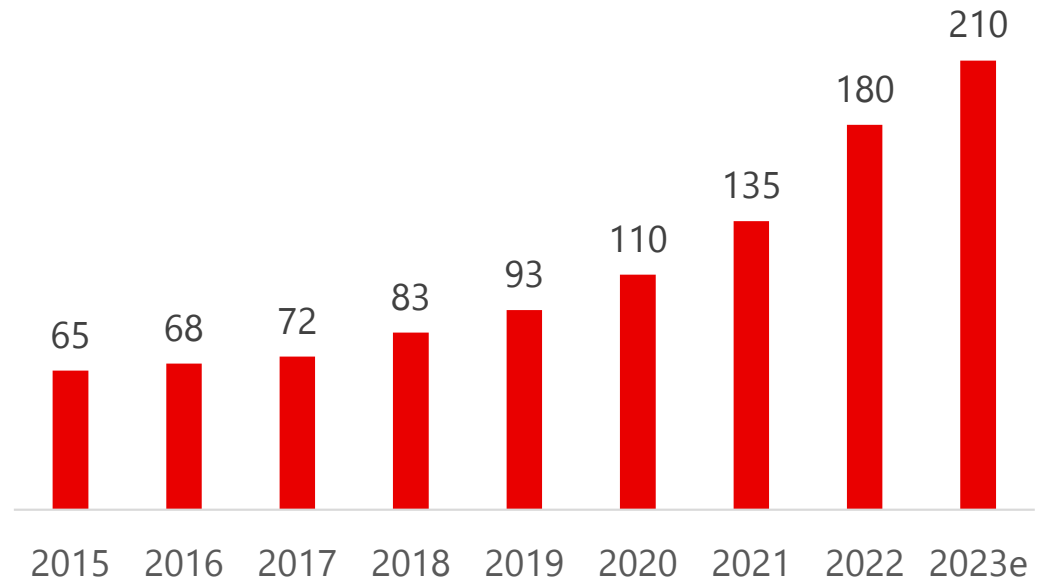


Sources: OECD, Santander

The measures to increase revenues are on Tax Breaks and Tax Basis Incentives

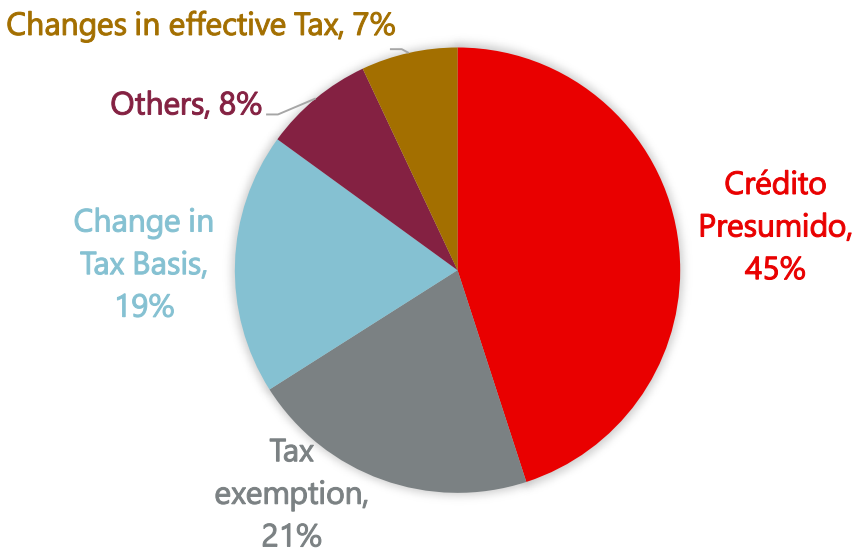
- A main proposal could be the use ICMS credit could only be deducted from the IRPJ and CSLL calculation base if it was earmarked for investments (tax benefits that require a contribution from the taxpayer, such as job creation or factory construction). According to Ministry of Finance projections, the measure might generate between R$85 billion and R$90 billion. Yet, recall that almost half of the revenues on IRPJ is transferred to states and municipalities, reducing its impact. According to our calculations, depending on the parameters (such as the effective rate and % of the funding subsidy) and removing the subnational transfers, **the total potential is reduced to an interval between BRL30-40 billion in a year.** Recently, the Supreme Court (STF) revoked the suspension of the ruling in favor of the federal government related to the use of VAT (ICMS) credits to reduce the corporate income tax basis (preserving "credito presumido"). We believe that potential increase in federal revenues could reach close to BRL20 billion annually. Among sectors, retailers would be more affected, but some may be able to mitigate the impact if they pass through this possible increase in the tax rate to consumers through higher prices.

Total ICMS (VAT) states tax breaks – BRL billion



Sources: National Treasury FEBRAFITE, Santander.

ICMS Tax Break Profile - 2021



Sources: National Treasury, Santander

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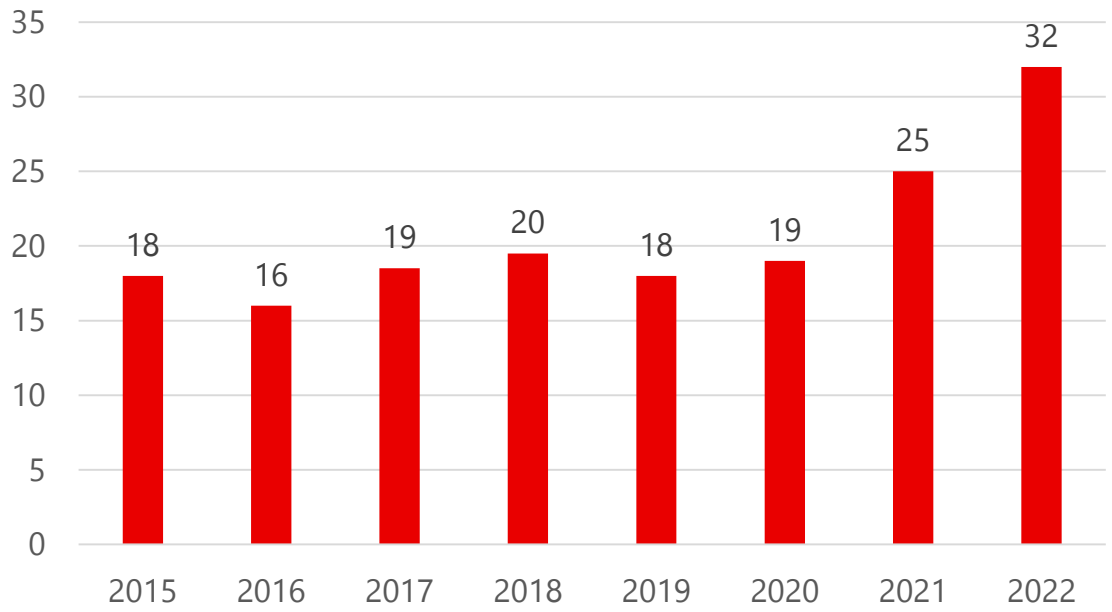
Exports to Tax Havens



Sources: SECEX, Santander.

Transfer Price Taxation - BRL billion

	Transfer Price (intercompany)	Discount 10%	Discount 20%	Discount 30%
Public Sector (IRPJ+CSLL)	34%	5.9	11.9	17.8
	30%	5.2	10.5	15.7
	25%	4.4	8.7	13.1
Fed. Gov (IRPJ+CSLL)	34%	2.9	5.6	8.4
	30%	2.5	4.9	7.4
	25%	2.1	4.1	6.2

Sources: BCB,S, Santander

The measures to increase revenues are on Tax Breaks and Tax Basis Incentives

- We believe that the government will achieve BRL30-40 billion with the current measures, mostly impacting the 2024 result
- We see part of this compensating the cyclical reduction the central gov. net revenues, so we expect new measures to be announced ahead

Measures mentioned in the Newsflow

Measures - BRL bn	Gov. Estimate	Our Estimate for Fed. Gov.*	Likely?
Original Plan			
Sports betting winnings - taxable income	12-15	5**	Yes
Tranfer Price - (Exports to tax havens)	20-30	6.5	
Tax of imported goods purchased by individuals online	7-8	6	Yes, yet could face popular pressure
Restricting corporates' to deduct ICMS tax benefits in income taxes	85-90	20	We still see it being negociated
Big Techs (offshore matrix)	2	2	Yes
Others			
Lottery "Raspadinha"	3	3	Yes, could be not go the Fed. Gov.
Legalization of gambling ("Jogos de Azar")	-	30-40	Approved in Lower House
End of JCP*	-	8	Only in General Income Tax Reform
Tax on Dividends (15%)***	-	25-30	

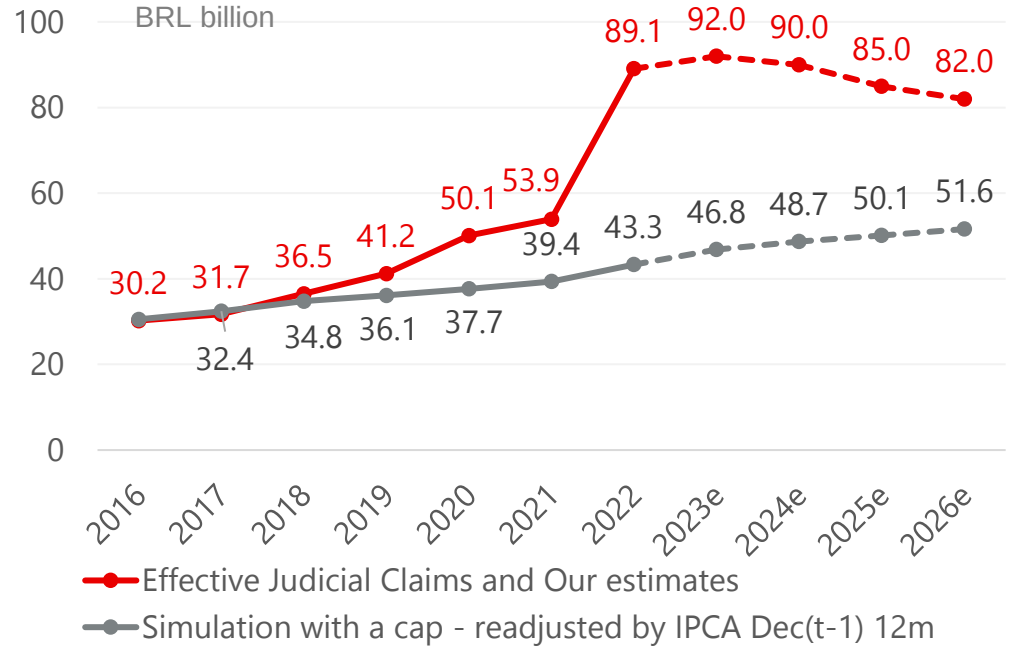
* Most part of the measures are related to income taxes - that is half shared with subnational entities
** Including the one-off in the first year of BRL3bn
*** Probably will be a compensation on the reduction in corporate income tax (34%)

Sources: Finance Ministry, Broadcast, Santander.

The judicial claims remains limited and accumulating a non-paid debt (not in the statistics)

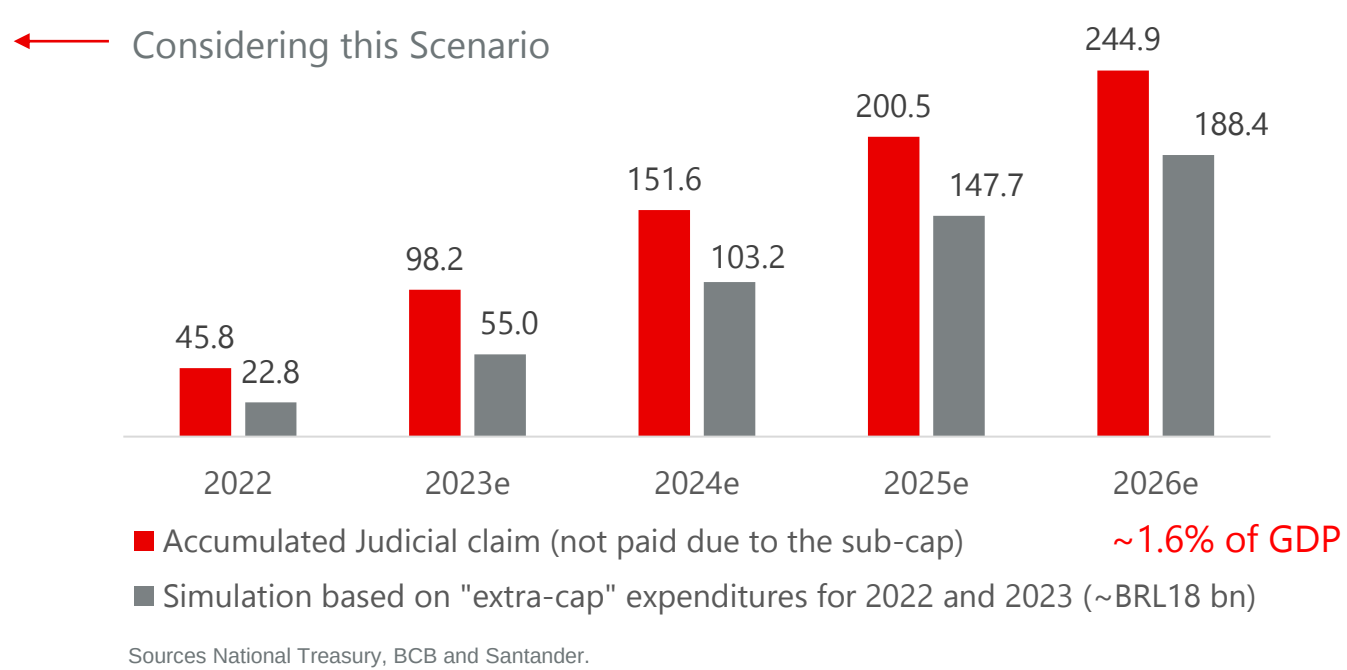
- In order to reduce the judicial claims payments, the government proposed to create a ceiling for these liabilities and postponing the remaining for the next few years (or paying outside the spending cap limit).
- Creating a cap since 2016 would reduce the judicial claim payments in 2022 to close to BRL43 billion, from the BRL89.1 billion official number. We believe that ~BRL55 billion will be accumulated for being paid in the future. If not paid the court-ordered debt could reach a total of 1.6% of GDP in 2026

Simulation - A limit for Judicial Claims payments



Sources: National Treasury, BCB and Santander.

Simulation with a cap – Accumulated judicial claims



Sources National Treasury, BCB and Santander.

Tax Collection Performance

Moderation expected ahead

3

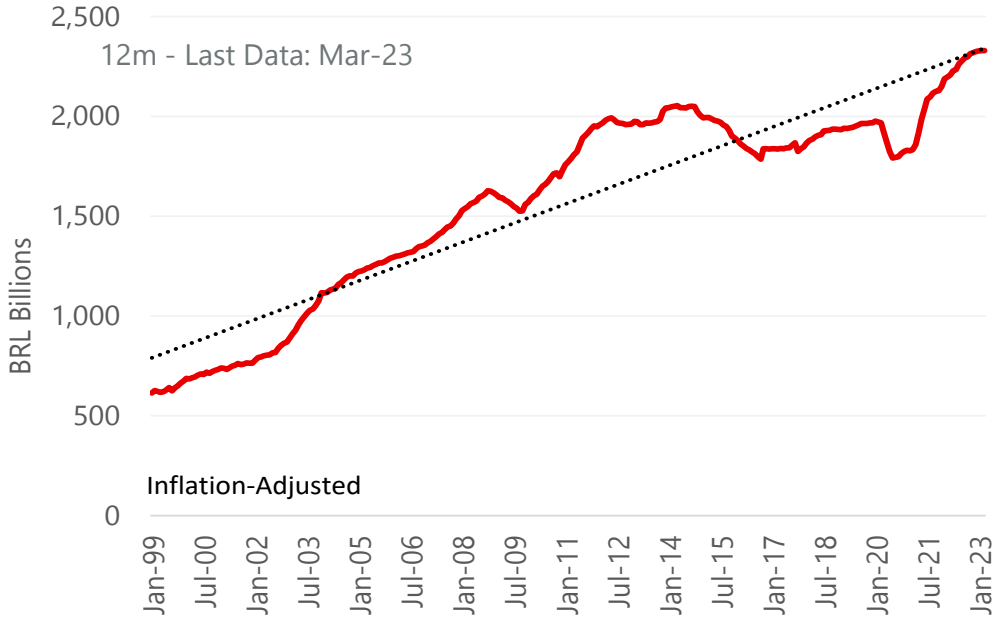
Revenues Impact – Price Effect + Activity Recovery

- We see a strong recovery in federal tax collection in recent months, mainly direct taxes linked to the corporate sector, which have posted good results. We can also observe that the increase in tax collection is highly correlated with sectors linked to the commodity boom, especially those related to metals & oil revenues.
- In our view, we expect revenue growth to slowdown ahead, for the following reasons: i) Greater basis for comparison; ii) commodity prices losing steam; iii) normalization of the consumption basket - with more services (lower tax collection); iv) activity at a slower pace of growth;

Federal Tax Revenue – Losing Steam

Sources: Brazilian IRS, Santander.

Total Federal Tax Collection –

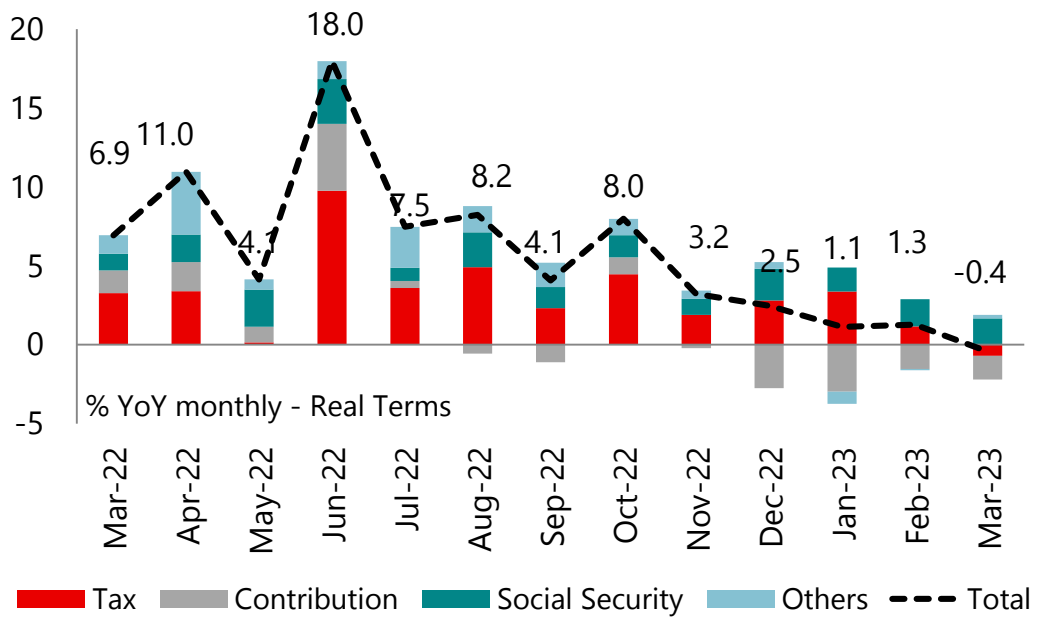


Sources: Brazilian IRS, Santander.

Now, federal tax collection is showing signs of losing steam

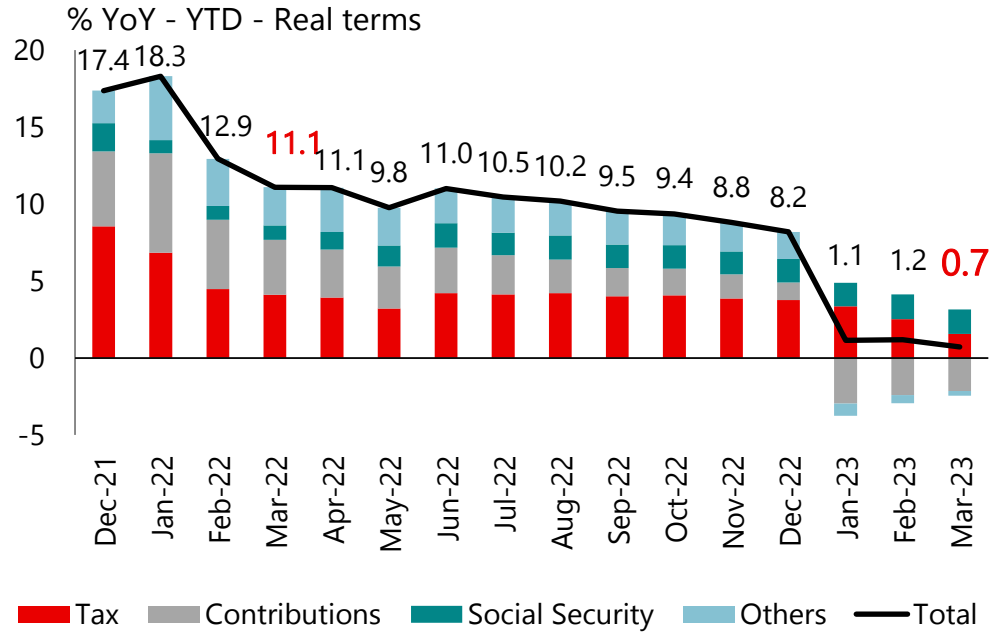
- The March result was the first interannual real drop since Jan-21 (25 months with positive result). The monthly result represents a 0.4% YoY real drop. Our core measure of federal tax Collection (not considering extraordinary revenues) showed a 0.5% YoY drop.
- The tax collection with seasonal adjustment (same as used in IBC-Br index) showed a drop of 0.1% MoM in March, after a 2.9% MoM drop in February and a small increase in January of 0.1% MoM.

Federal Tax Revenue: Monthly (%YoY)



Sources: Brazilian IRS, Santander.

Federal Tax Revenue: YTD (%YoY)

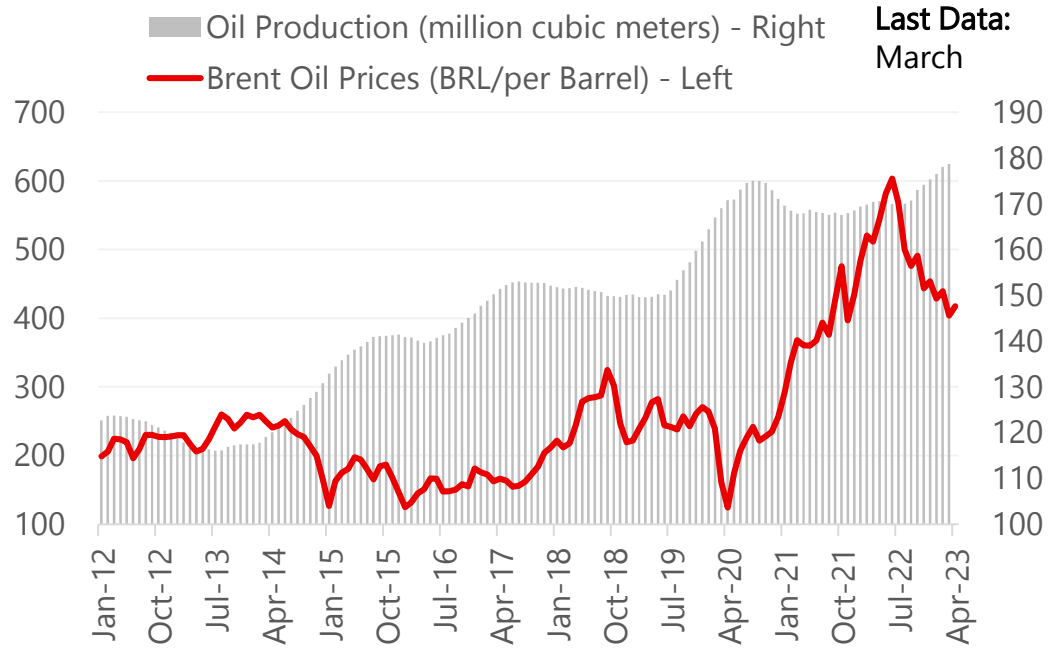


Sources: Brazilian IRS, Santander.

Oil Revenues – still helping the public sector revenues

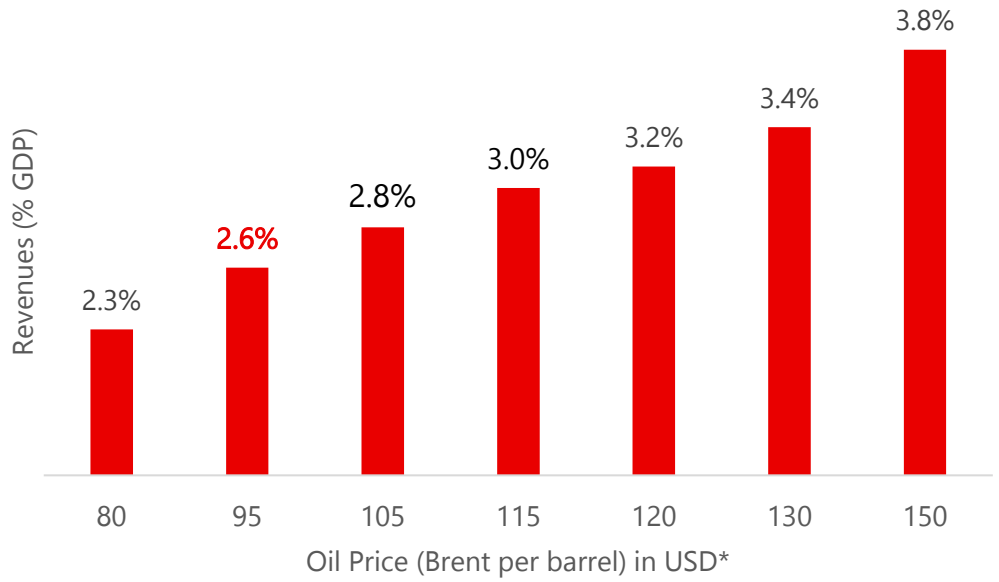
- In energy, oil prices tumbled on fears about contagion from crises involving some international banks triggered a broad risk-off sentiment in the market. With lower 2Q23 and 3Q23 prices, we now see our Brent forecast (year-average) at USD90/bbl for 2023 (from USD95/bbl previously), but we are keeping our year-end forecast unchanged at USD95/bbl for 2023.
- The positive oil-shock to public sector Revenues should reduce from ~3% of GDP in 2022 to 2.6% of GDP in 2023.

Oil production and Prices



Sources: Bloomberg, ANP, Santander

Public Sector – Oil Revenues



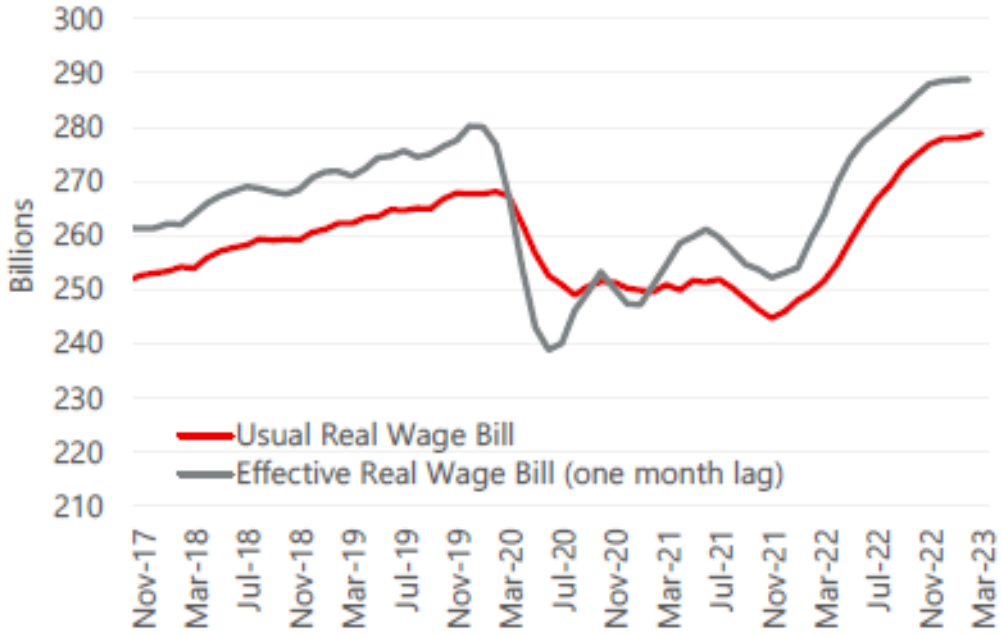
FX rate maintained at BRL5.40

Sources: National Treasury, Santander

Labor Market: Still resilient and tax revenues presenting a good performance

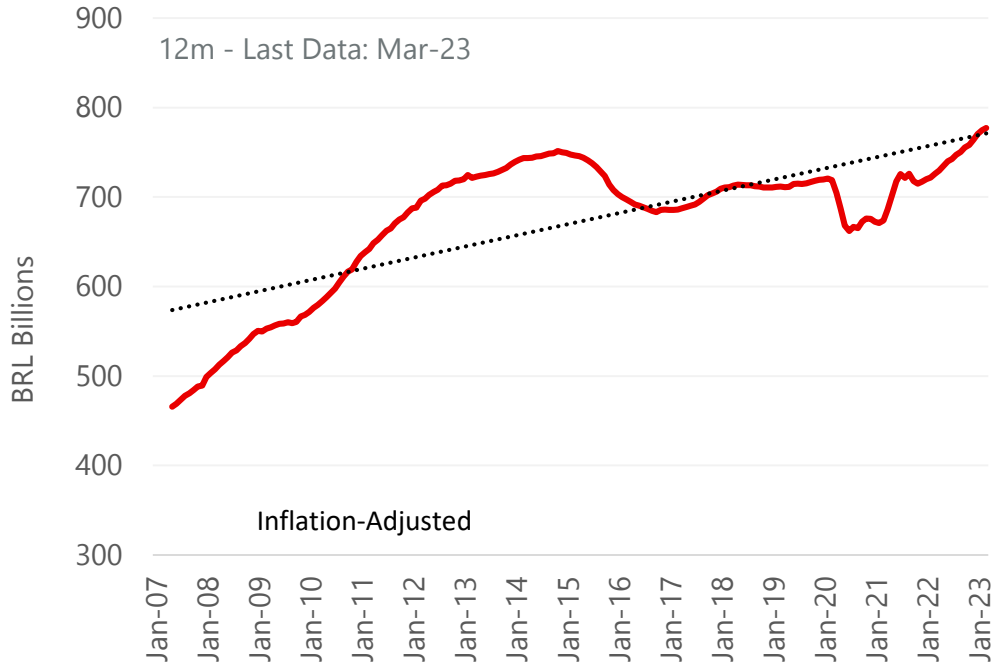
- In the breakdown, the we observed a rise of 6.0% YoY in the Social Security Contribution in March, due to the increase in the real wage bill (part of this due to lower inflation figures). The tax collection on workers' earnings dropped 0.6% YoY, after months showing a recovery. We expect positive numbers related to labor market ahead, yet for the year we continue to forecast a slowdown in domestic demand and in cyclical components,

Real Wage Bill (BRL, sa)



Sources: IBGE, Ministry of Economy, Santander.

Tax Collection linked to Labor Market



Sources: National Treasury, IBGE, Ministry of Economy, Santander.

Primary Result and Debt

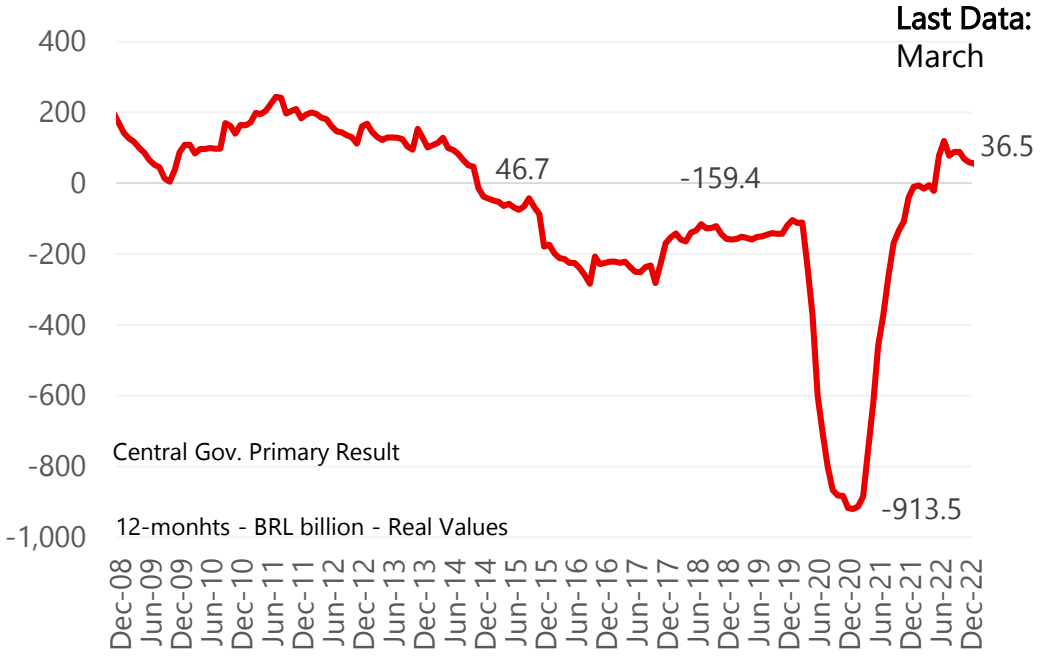
Returning to a Primary Deficit

4

Central Gov: Gradual Return to Primary Deficit

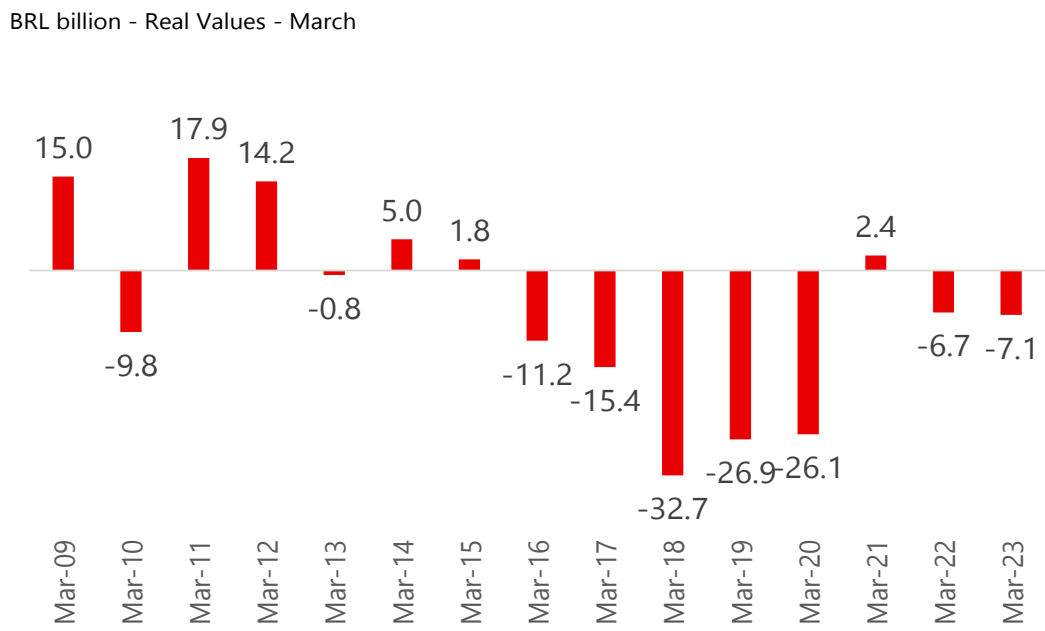
- In 12-month reading, the Central Gov. registered a primary surplus of BRL36.5 bn (0.3% of GDP), from BRL56.1 bn (0.5% of GDP) in January. For 2023, our forecast for the Central Gov. Result is a deficit of BRL125 bn (1.2% of GDP).
- We continue to believe that the monthly result will lose steam ahead with the increase in expenses (already in the pipeline) and with a more modest increase in revenues (some measures starting to being more effective). We believe that the tax collection performance will be a key thermometer for the fiscal result this year, and it is highly correlated to the commodities prices

Central Gov. Primary Balance – 12m % GDP



Sources: National Treasury, Santander.

Central Gov. March Result – BRL bn



Sources: National Treasury, Santander

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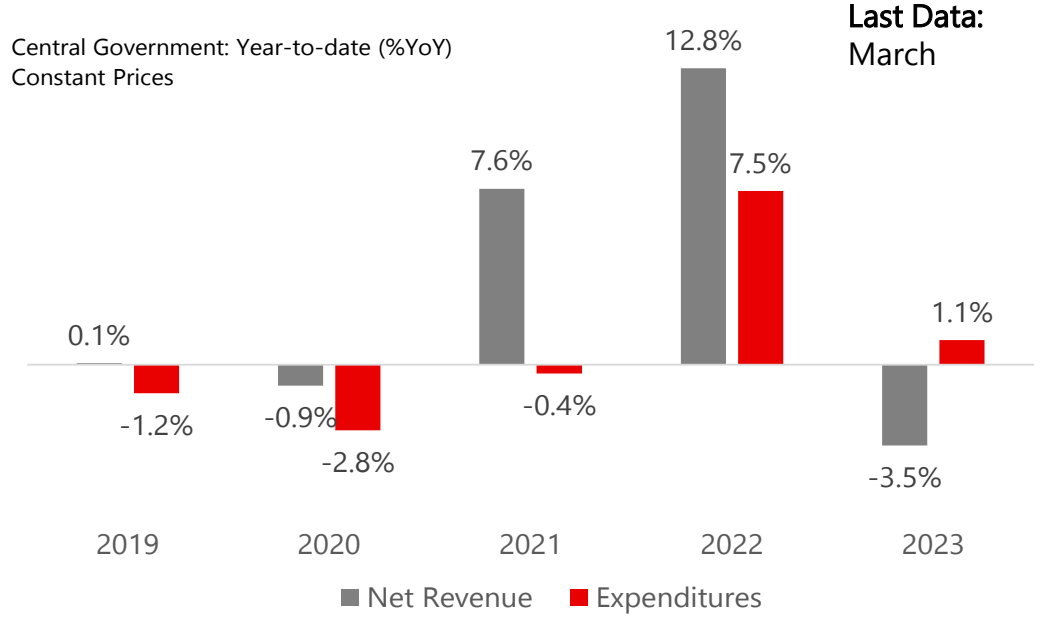
Central Gov. Primary Balance –



Sources: National Treasury, Santander

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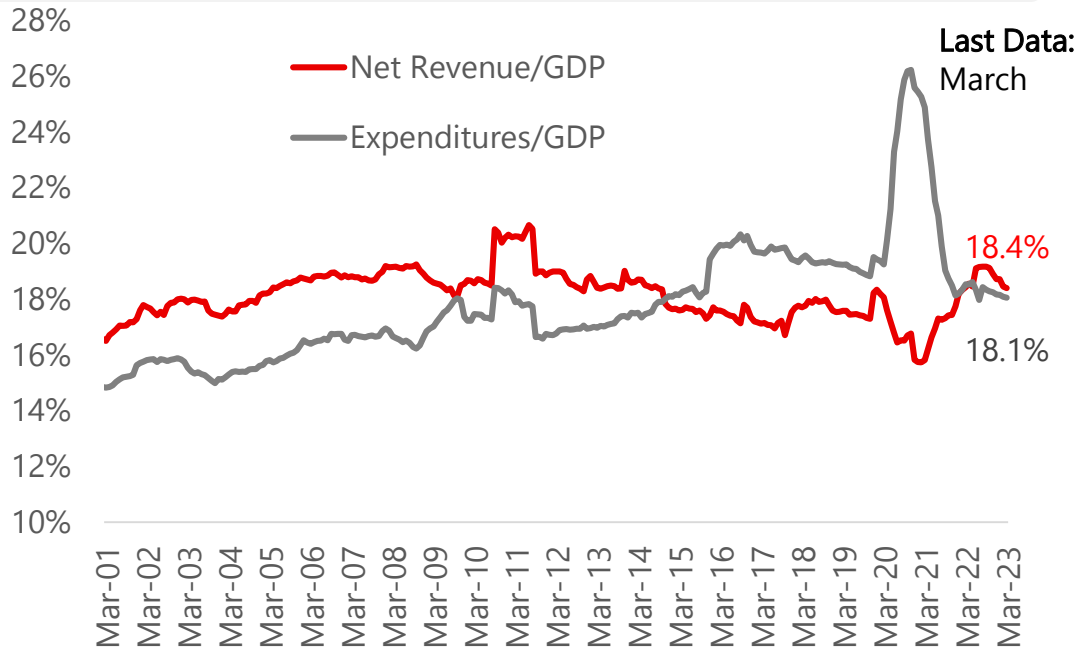
Revenue and Expenditures (%GDP)

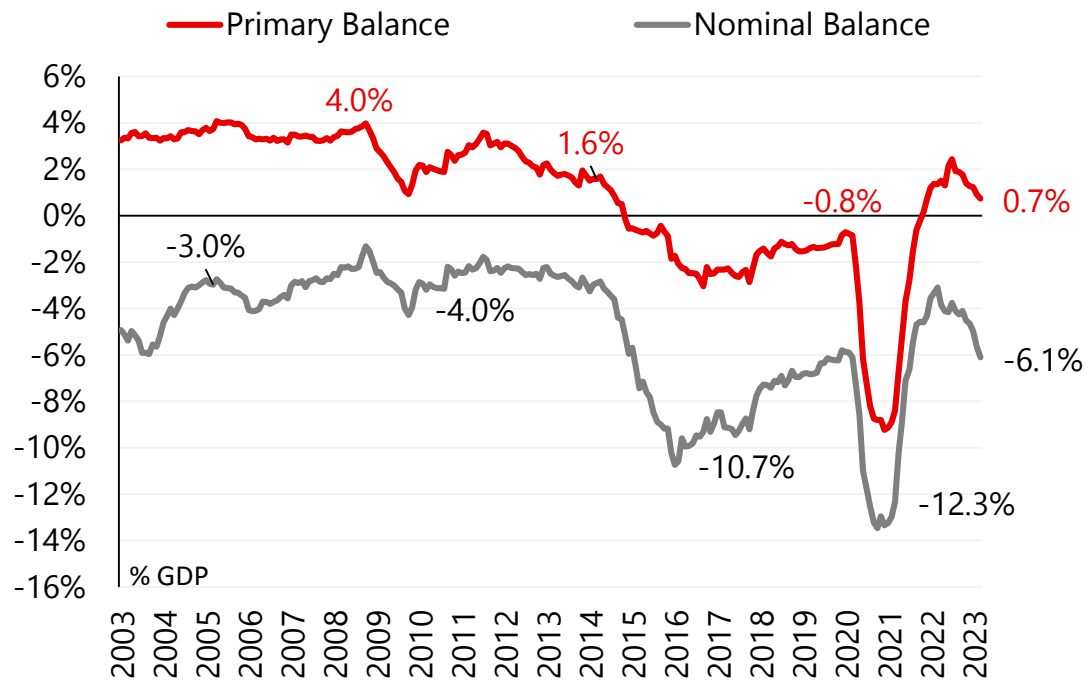


Sources: National Treasury, Santander.

Public Sector Primary Result slowing down gradually

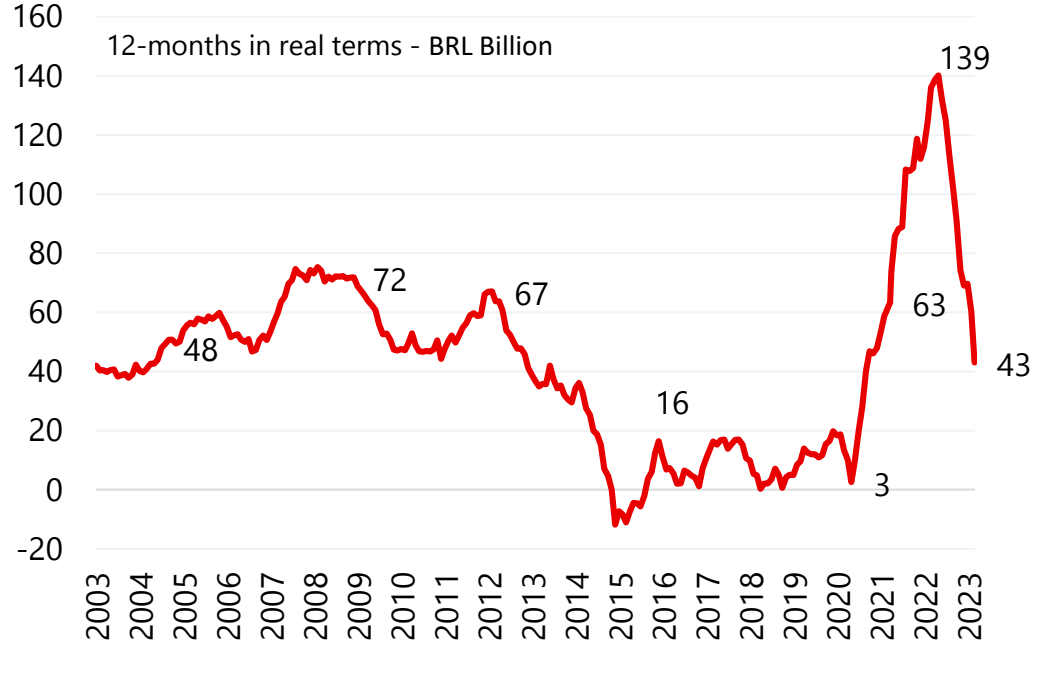
- In the 12-month reading, the public sector's primary surplus reached BRL75 billion (0.7% of GDP) in March, after peaking at 2.4% in July of 2022. Regional governments reached a surplus of BRL43 billion (0.4% of GDP) — the peak was registered in May (BRL128.7 billion, or 1.4% of GDP). Despite the solid recent performance, we believe that fiscal expansion already in the pipeline (totaling ~2.0 p.p. of GDP), in the context of a softening in commodity prices and in real activity, will likely prompt a return to a primary deficit in 2023 (1.1% of GDP)

Public Sector – 12m % GDP



Sources: Brazilian Central Bank, Santander.

Regional Gov. – Primary Result

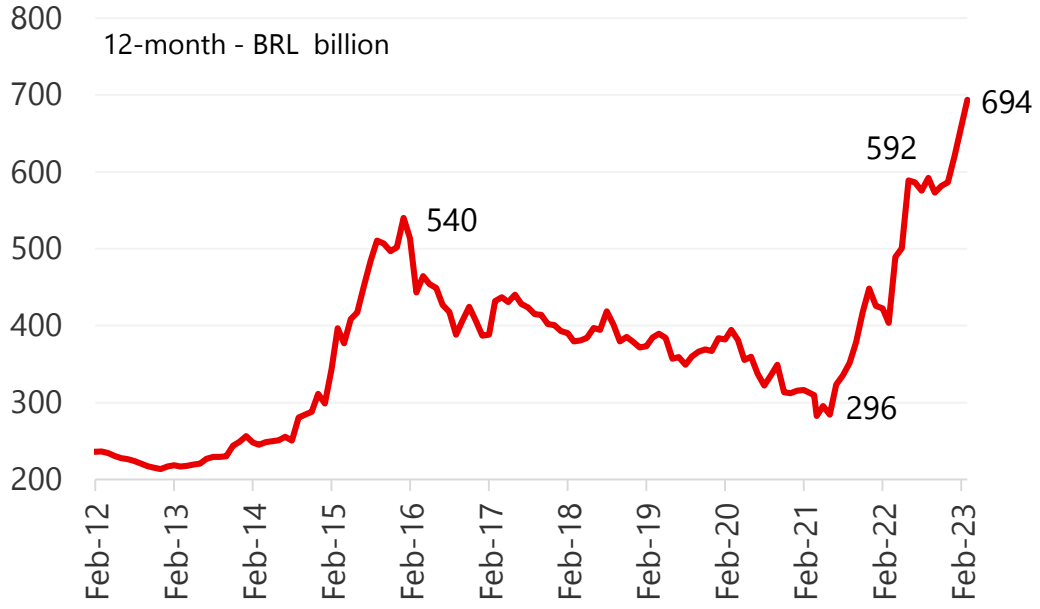


Sources: Brazilian Central Bank, Santander.

Increase in Interest Payments should pressure the debt ahead

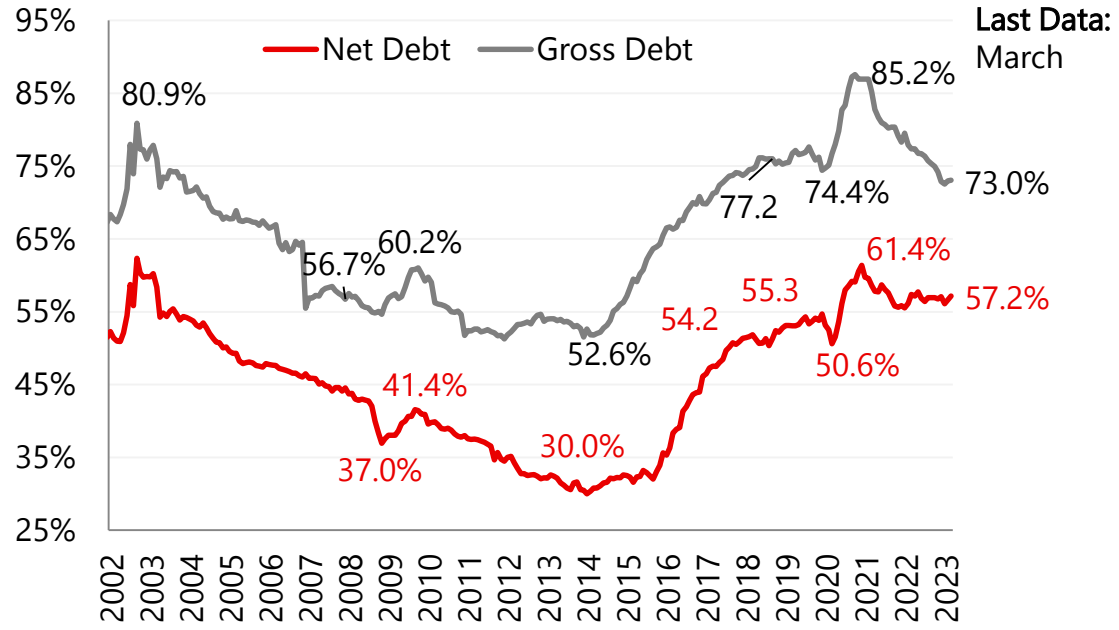
- Interest payments totaled BRL65 billion in March, compared to BRL30.7 billion in Mar-22. The result of FX swap operations contributed to this increase (gains of BRL40.3 bn in Mar-22 and BRL11.7 bn last month). In the 12-month, nominal deficit totaled BRL618 billion (6.1% of GDP), compared to BRL425 bn (4.7% of GDP) in Dec-22.
- Debt data registered a rise in March. Gross Debt reached 73% of GDP (+0.1 pp in the month), reflecting the interest accrual (+0.8pp), compensated by the increase in Nominal GDP and debt redemptions.

Nominal Interest Result – BRL billion



Sources: Brazilian Central Bank, Santander.

Public Sector Debt (12m % GDP)



Sources: Brazilian Central Bank, Santander.

Public Debt and Simulations

A risky path toward debt stabilization

5

Fiscal Accounts: Trajectories for the Brazilian Government Debt

- Public sector's primary balance (% GDP) required for the stabilization of the gross public debt-to-GDP ratio at **80%**
- We see the neutral interest rate hypothesis at 5.0%, this implies a larger primary surplus needed to stabilize the debt.
- Not considering the effects of the cyclical recovery, the long-term outlook will require a remaining 3.0p.p. of GDP primary fiscal adjustment, just to stabilize the ratio debt-to-GDP around the level of ~80% of GDP.

- **Current situation:**

. Real interest rate (ex-ante) 1-year: 7.5%,
. GDP: 1% in 2023 and 0.5% in 2024

Liquidity reserves close to 9 months of debt maturities

Increase in debt cost (Selic + IPCA)

- **Steady-state:**

According to our hypothesis:
. Real interest rate at +5.0%
. Potential GDP at +1.5%,

. The primary surplus must reach >2% of GDP to maintain the gross debt stable.

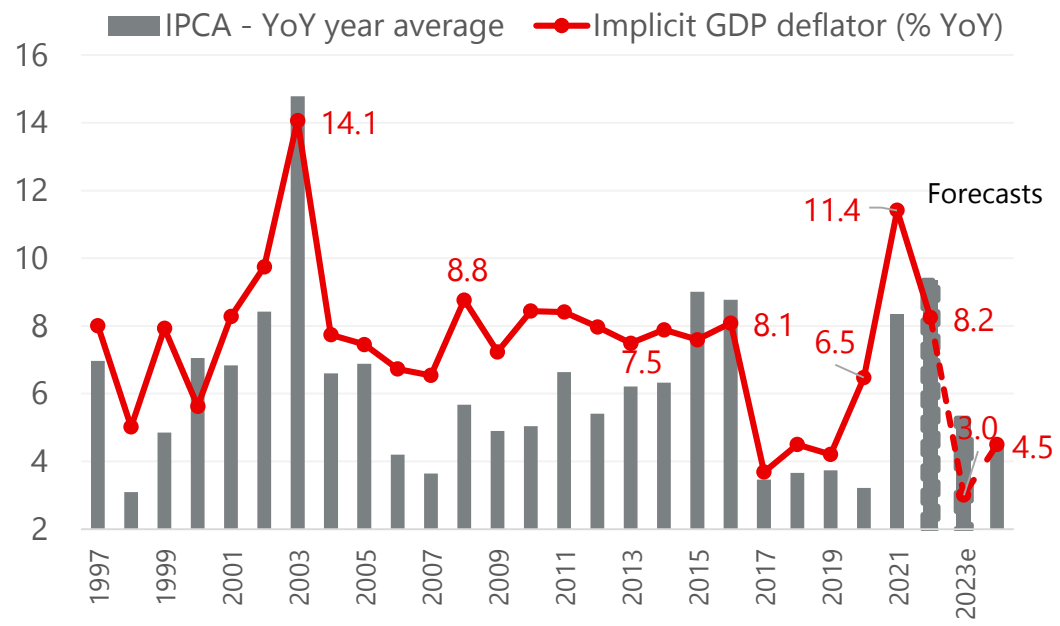
		Real Interest Rate						
		1.0%	*2.0%*	*3.0%*	*4.0%*	*5.0%*	*6.0%*	*7.0%*
GDP Growth	*0.0%*	0.8	1.6	2.4	3.2	4.0	4.8	5.6
	1.0%	0.0	0.8	1.6	2.4	3.2	4.0	4.8
	1.5%	-0.4	0.4	1.2	2.0	2.8	3.5	4.3
	1.8%	-0.6	0.2	0.9	1.7	2.5	3.3	4.1
	2.0%	-0.8	0.0	0.8	1.6	2.4	3.1	3.9
	2.5%	-1.2	-0.4	0.4	1.2	2.0	2.7	3.5

Sources: BCB, Santander.

GDP Deflator Impact – Opposite effect in 2023 on lower IGP-M

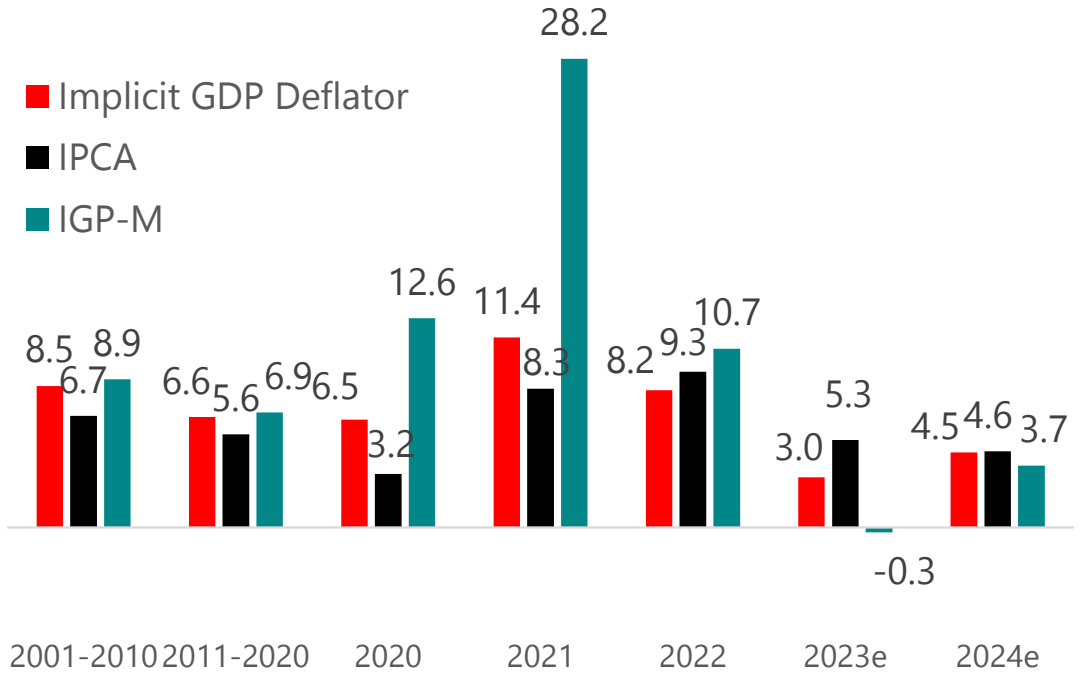
- After helping the increase in Nominal GDP, we estimate that the GDP Deflator will be lower than the IPCA numbers.
- We reduced the GDP Deflator estimate from 3.9% to 3.5%, considering lower IGP-M YoY average (-0.3%, from -1.1%).

IPCA and GDP Deflator



Sources: IBGE, Santander.

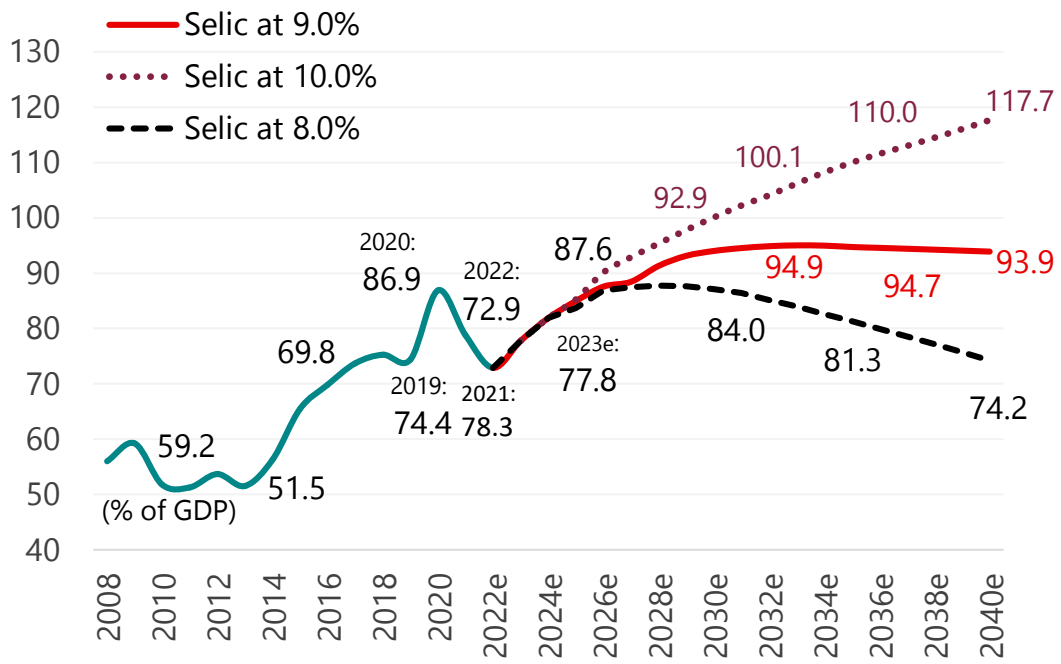
IPCA, IGP-DI and GDP Deflator



Sources: IBGE, FGV, Santander.

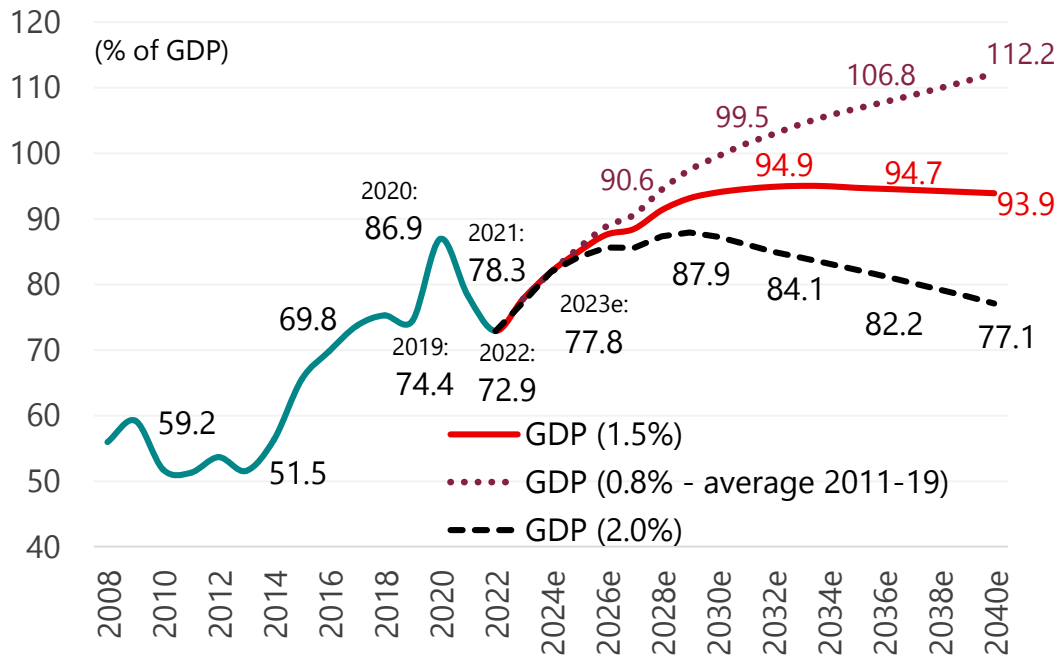
Debt Scenarios: Sensitivity to Changes in the Long Run Macro-outlook

Government Debt – Simulations for Selic Rate Hypotheses



Sources: BCB, Santander

Government Debt– Simulating for GDP Deflator Hypotheses



Sources: BCB, Santander.

Notes: Debt issuances: we added a spread of + 1.0 pp in addition to the Selic rate in the models.

2023 GDP Deflator: 3% | GDP: 1% | Selic Rate (avg): 13.6% | BNDES payment: zero | Voluntary Deposits 1.0% of GDP

2023-40: GDP deflator: 5.0% | Potential GDP: 1.5% | Neutral Real Rate: 5.0%

Debt Management

Debt cost on the rise, liquidity reserves to navigate uncertainties

6

Annual Borrowing Plan 2023

- In our view, the outlook for debt management remains challenging in the medium-term, considering the higher level of domestic debt, in context of an increase in the debt cost and the uncertainty about the fiscal consolidation ahead. In addition, it will be important the level of liquidity reserve and favorable market conditions. In the short-term, the liquidity debt cushion is at a comfortable level to navigate the uncertainties.
- National Treasury increased debt issuance in March, totaling BRL169 bn in the month, after an average of BRL73 bn in first two months of the year. This issuance was concentrated in floating rate (49%) bonds. Considering this, the weekly bond issuances reached BRL24 bn up to March, rising from BRL19 bn up to February. For 2023, we estimate a necessity of ~BRL25 bn in issuances per week to keep liquidity reserves stable until the end of the year.

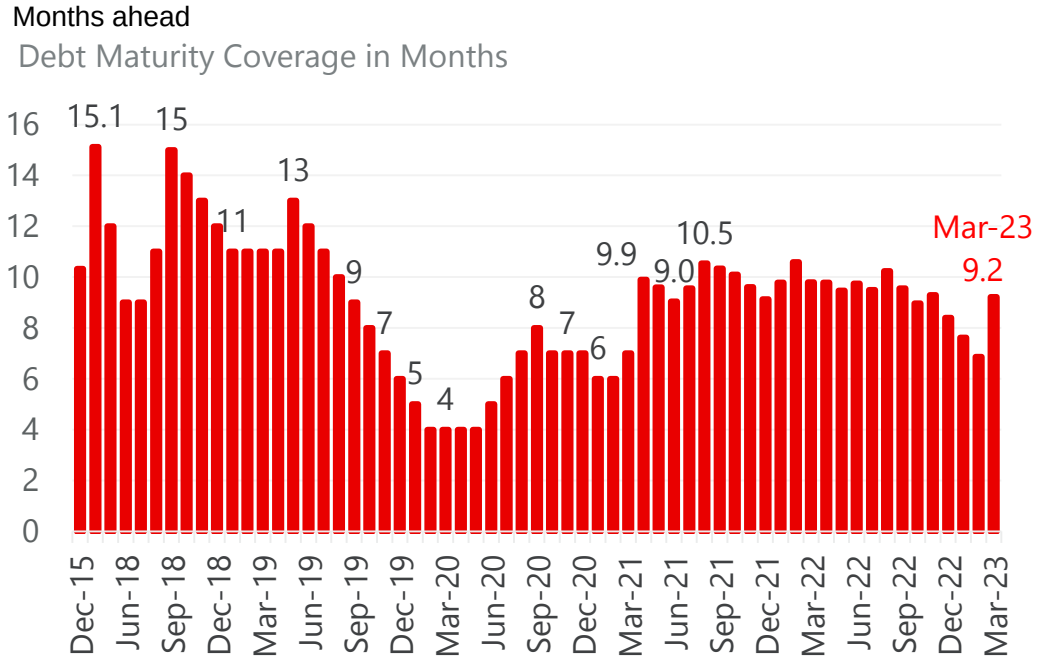
Annual Borrowing Plan (PAF 2023)									
	2020	2021	2022	Feb-23	Mar-23	PAF 2023 range		PAF 2022 range	
Outstanding volume (BRL billion)						Min	Max	Min	Max
Federal Public Debt	5,010	5,614	5,951	5,856	5,892	6,400	6,800	6000	6400
Composition (%)									
Fixed-rate	34.8	28.9	27.0	23.7	24.7	23	27	24	28
Inflation-linked	25.3	29.3	30.3	31.3	32.0	29	33	27	31
Floating-rate	34.8	36.8	38.3	40.6	39.1	38	42	38	42
FX	5.1	5.0	4.4	4.3	4.2	3	7	3	7
Maturity Structure									
% maturing in 12 months	27.6	21	22.1	22.5	22.1	19	23	19	23
Average maturity (years)	3.6	3.8	3.0	4.0	4.0	3.8	4.2	3.8	4.2

Sources: National Treasury; Santander

Treasury's Cash Position at comfortable level to navigate the uncertainties

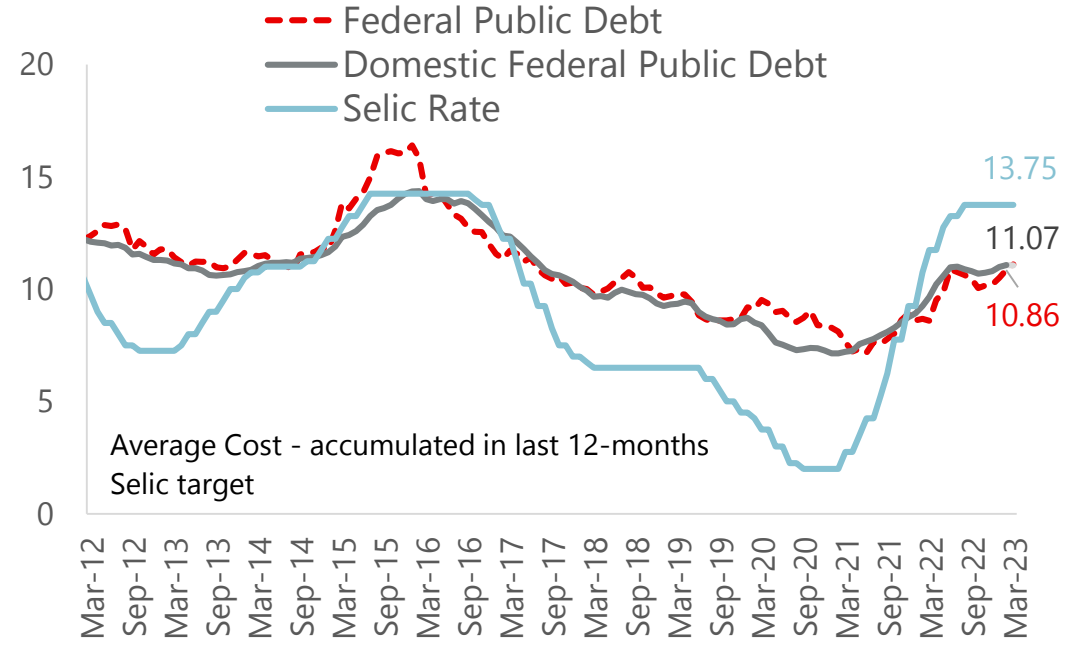
- The liquidity reserves level is equivalent of almost 9.2 months of debt maturities, showing a recovery from 6.9 in Feb-23, 7.6 in Jan-23 and 8.4 in Dec-22,
- The cost of domestic new issuances rose to 12.7% in the last 12m, +0.3pp from Feb-23. The average cost of the outstanding debt accumulated in 12m increase to 11.1% (+0.2 pp).

Liquidity cushion coverage of domestic debt



Sources: National Treasury, Santander.

Average cost of Federal Debt - 12 months – (%)

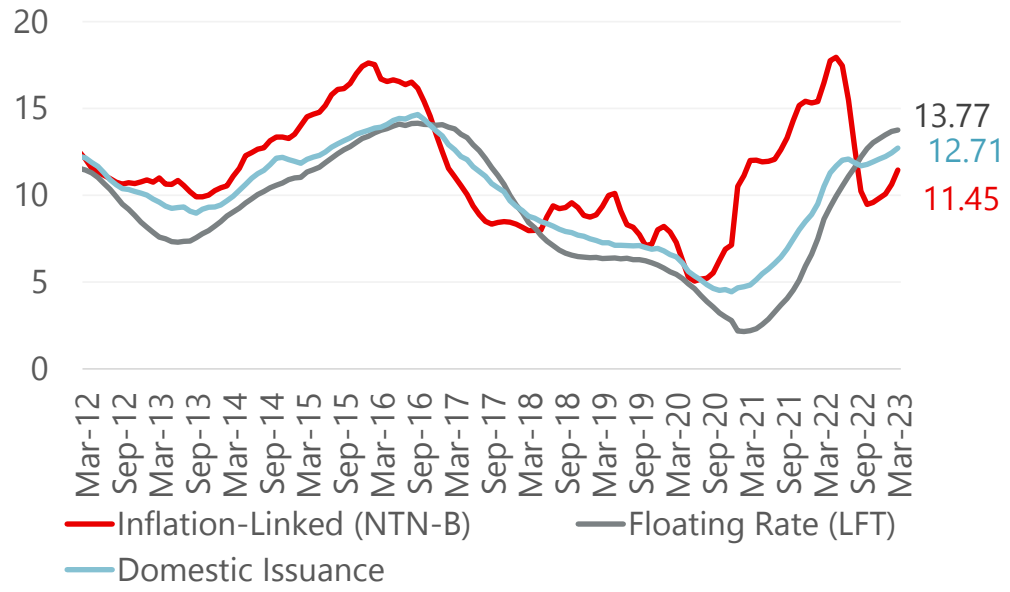


Sources: National Treasury, Santander.

At the margin there is an increase in debt cost related to Selic

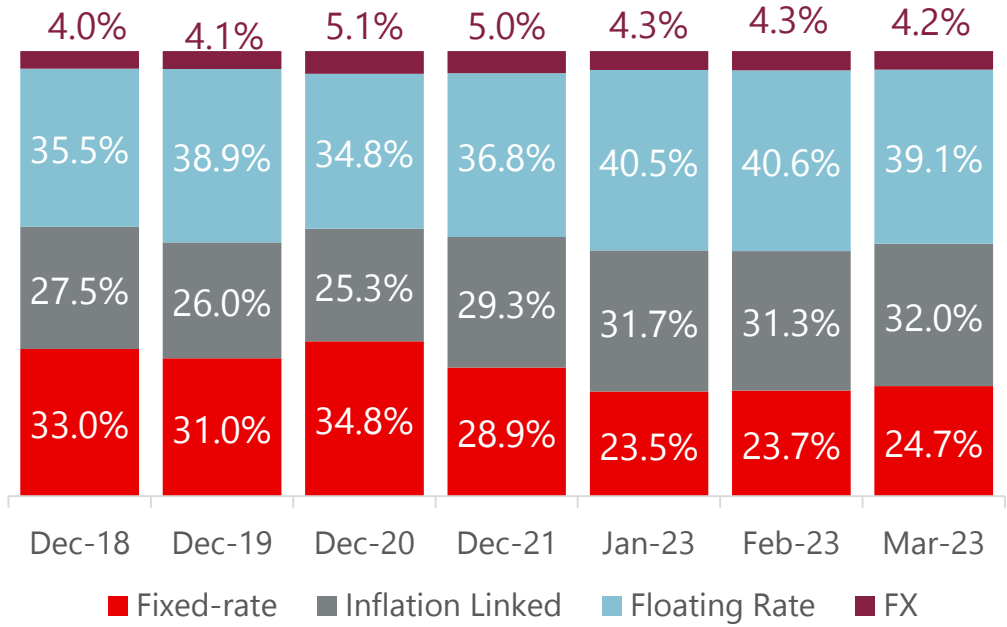
- The debt cost is the highest since Jun-17. The NTN-B (inflation-linked bonds) issuance cost in the last 12m reached 11.5% p.y. (from 10.6% in Feb-23). The cost of LFT (floating rate) in 12m was maintained close to 12.5%. We believe that the Selic rate (currently at 13.75%) will continue to add a pressure in the debt costs in coming months,

Average Debt Cost in the last 12 M (Accum.)



Sources: National Treasury, Santander.

Debt Profile - %

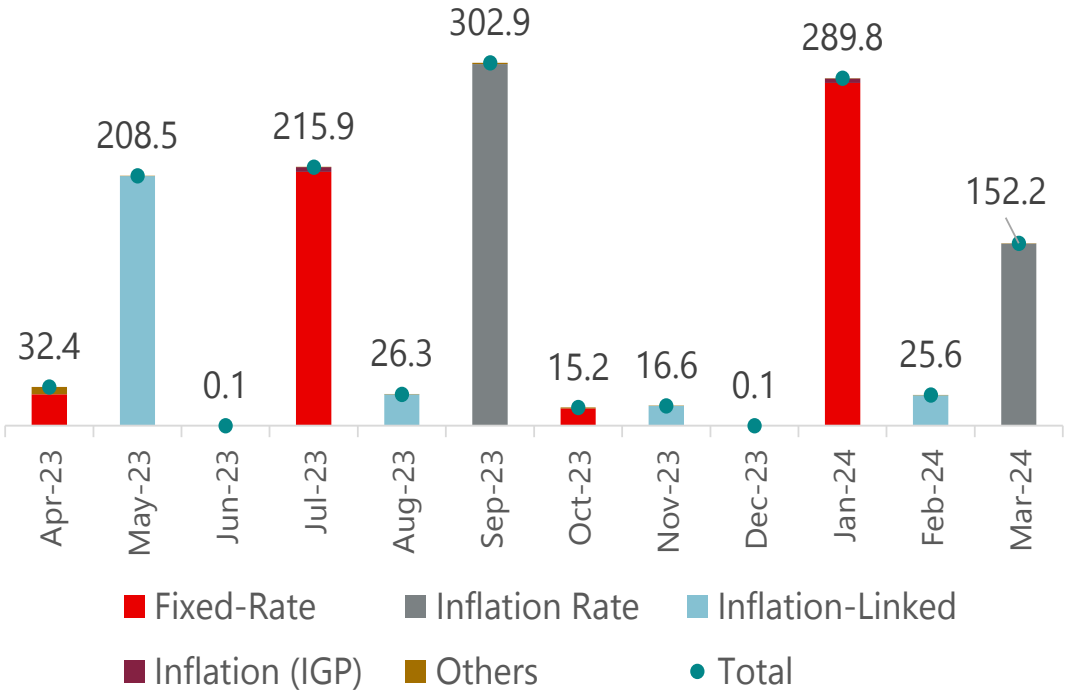


Sources: National Treasury, Santander.

Fiscal – The debt is at a higher level

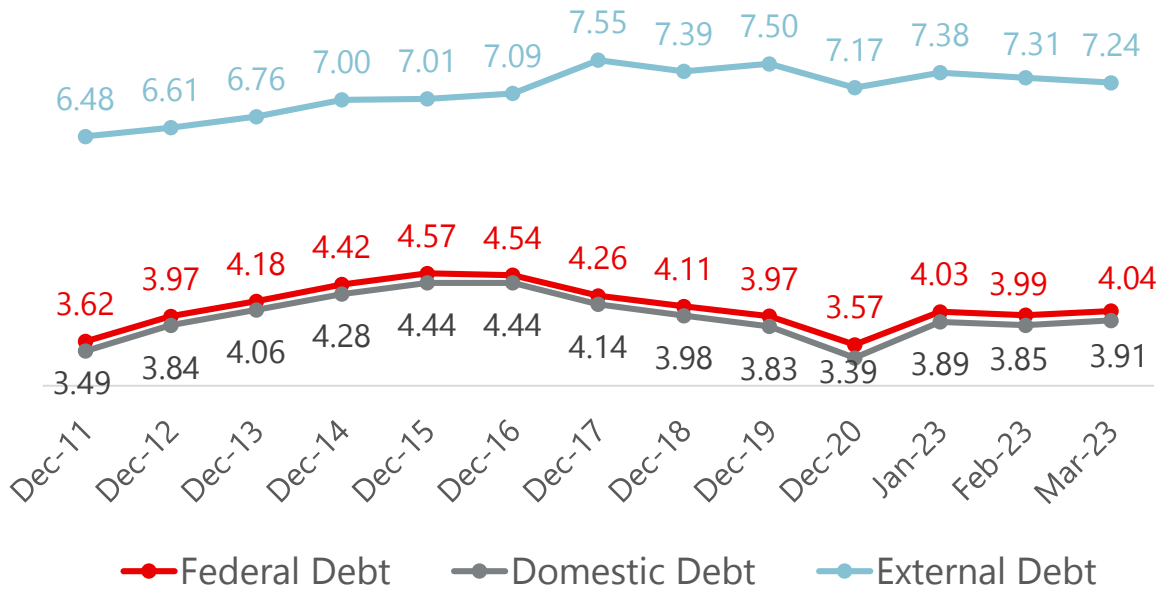
- Despite the increase in liquidity reserves the debt maturity level is still challenging. Structural reforms will help to increase debt maturity and reach a sustainable primary surplus.

Debt maturity - (BRL billion)



Sources: National Treasury, Santander

Average Maturity (years)

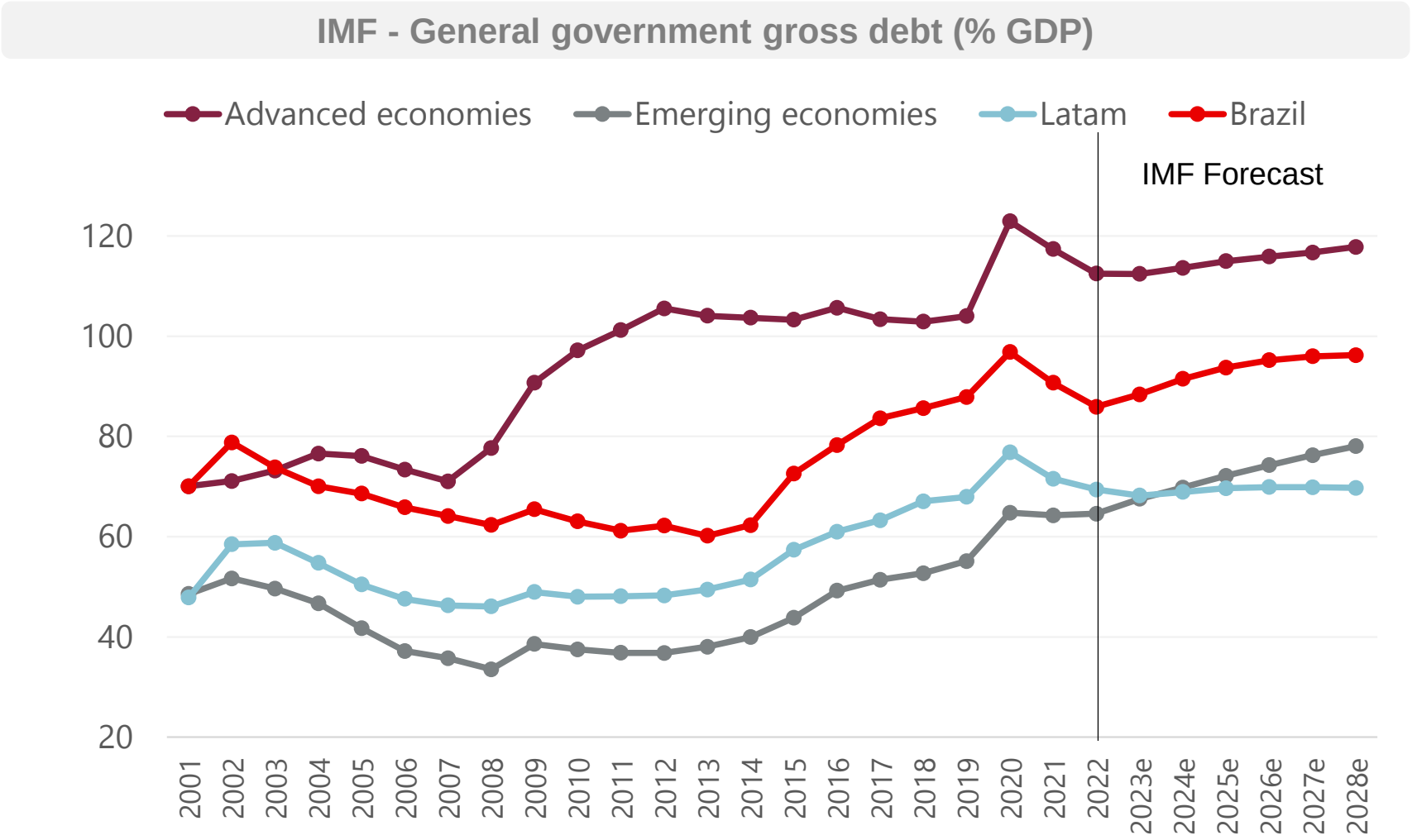


Sources: National Treasury, Santander.

International Comparison

7

International Comparison – IMF Gross Debt Forecast

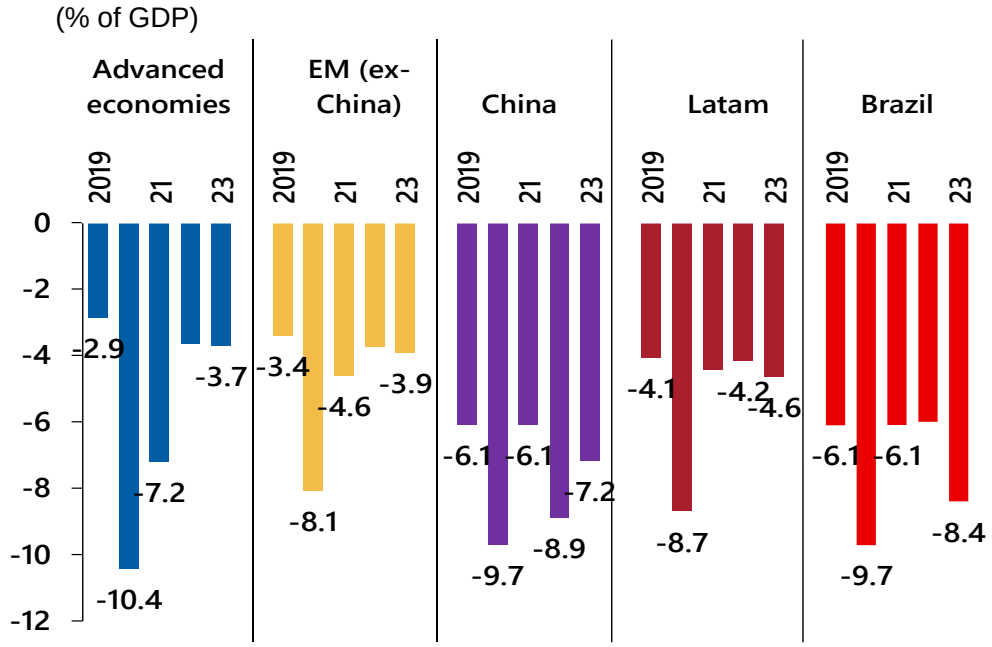


Sources: IMF, Santander.

International Comparison – Increase in interest rates

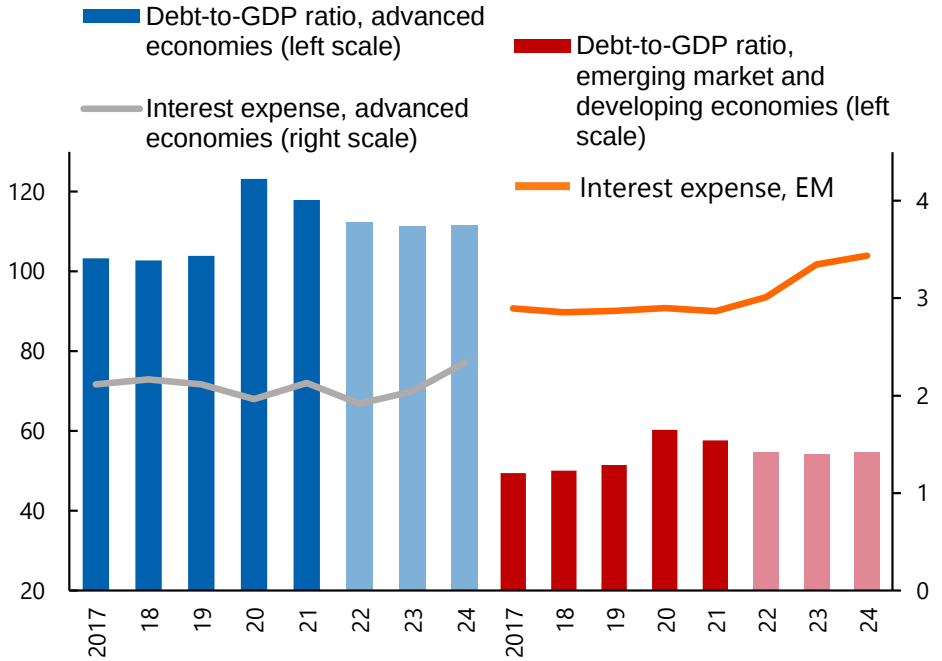
- The effect of current monetary tightening on fiscal accounts

National Budget Balances by Income Group



Sources: IMF, Santander.

National Gross Debt and Interest Expense by Income Group

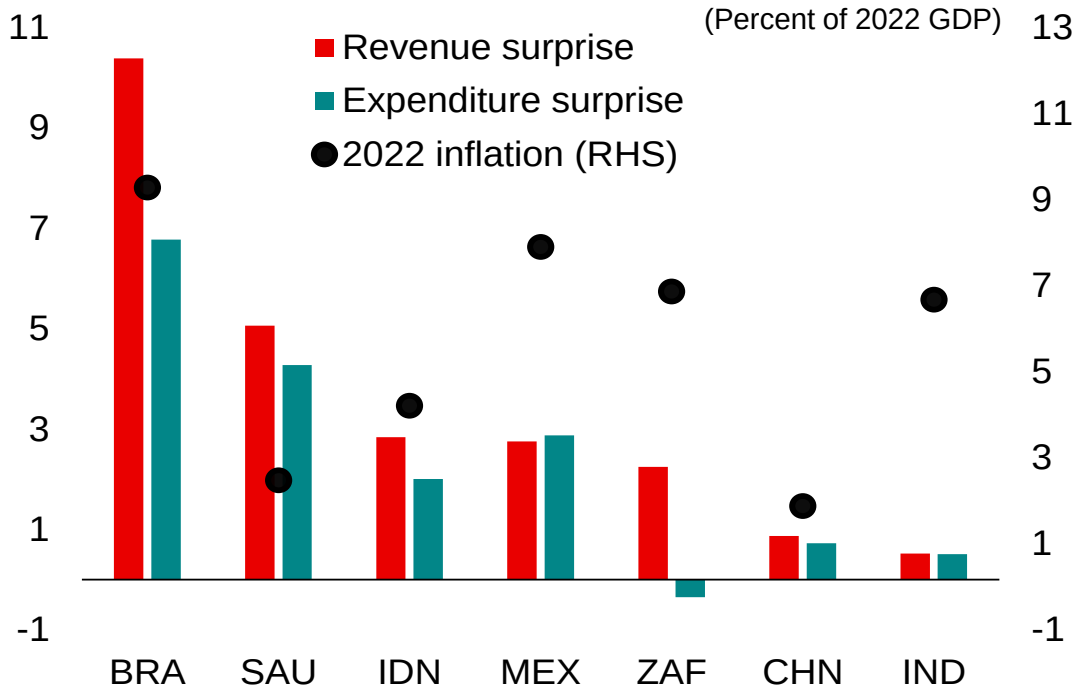


Sources: IMF, World Economic Outlook; IMF staff calculations. Note: China is excluded. Bars for 2022–24 are projected data.

IMF – Fiscal Monitor selected charts

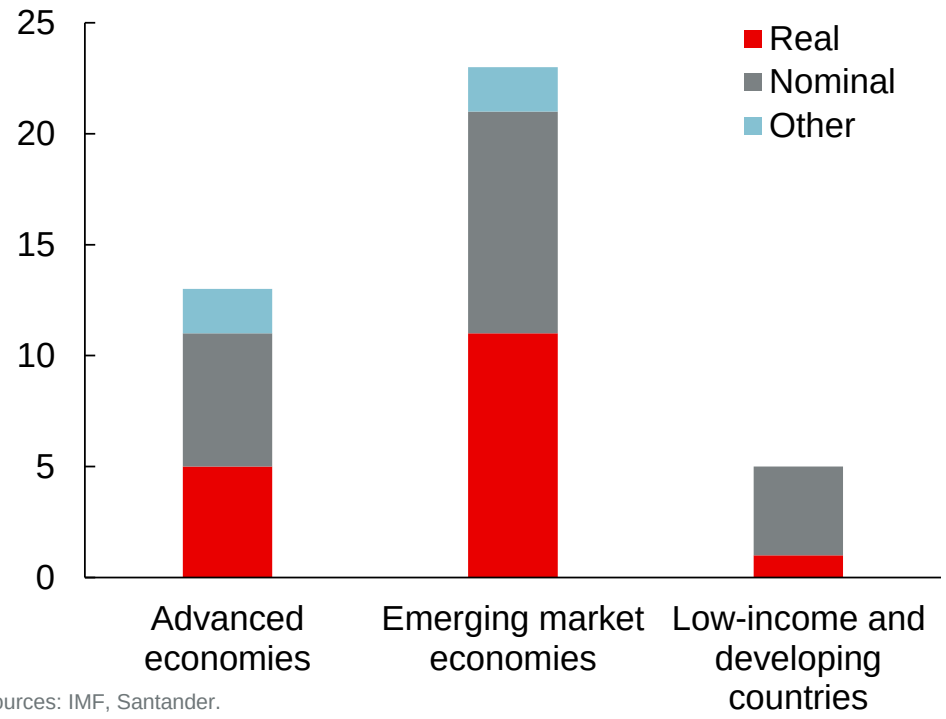
- IMF: “In 2022, most governments enjoyed positive revenue surprises, stemming in part from tax buoyancy related to inflation surprises. On average, these revenue surprises amounted to 3.1 percent of GDP in advanced economies and 2.5 percent in emerging market economies. Commodity exporters (for example, Australia, Brazil, Saudi Arabia)”
- Ceilings on real spending growth are relatively more frequent in emerging market economies than in other groups of economies

What Share of Revenue Surprises Was Saved?



Sources: IMF, Santander.

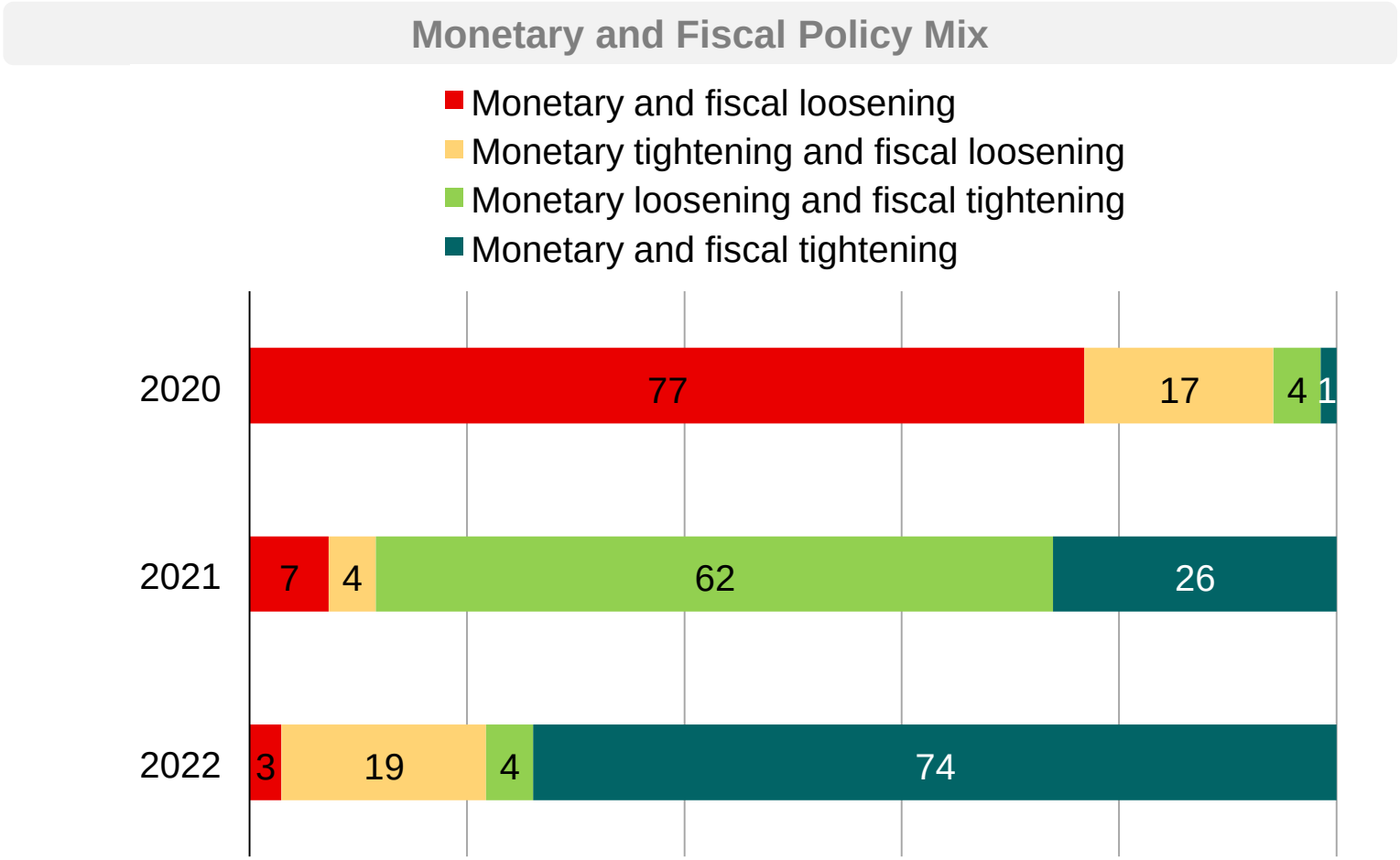
Countries with National Expenditure Rules



Sources: IMF, Santander.

IMF – Fiscal Monitor selected charts

- IMF: “Nearly three-quarters of economies tightened both fiscal and monetary policy in 2022, up from a quarter in 2021”



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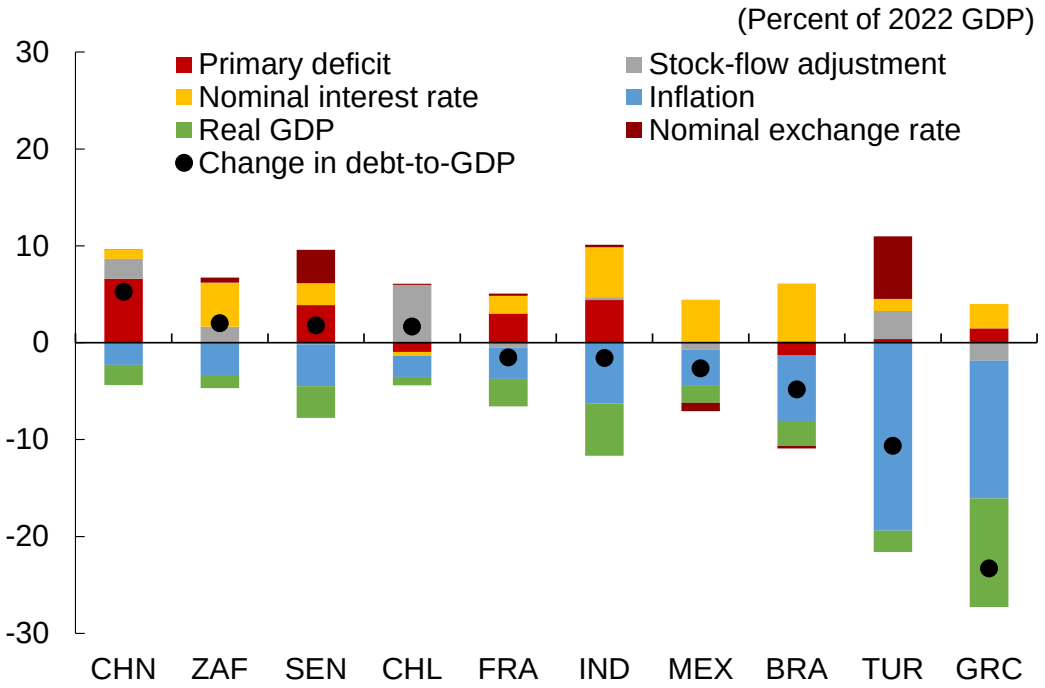
IMF – Fiscal Monitor selected charts

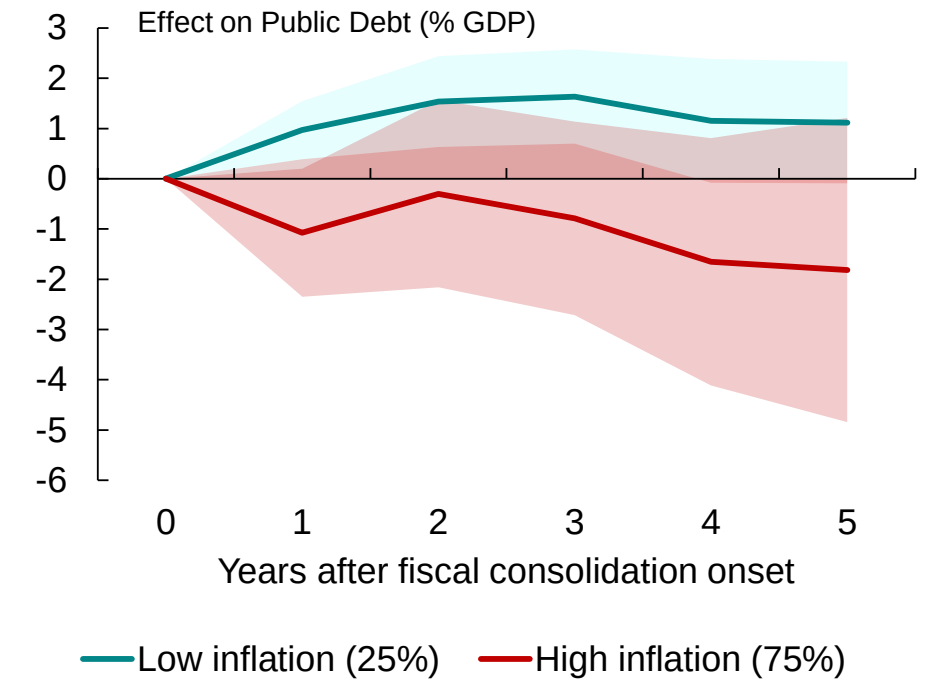
- The effect of current monetary tightening on fiscal accounts

Drivers of Annual Change in General Government Debt, 2022



Sources: IMF, Santander.

Effects of Fiscal Consolidation: High Inflation versus Low Inflation

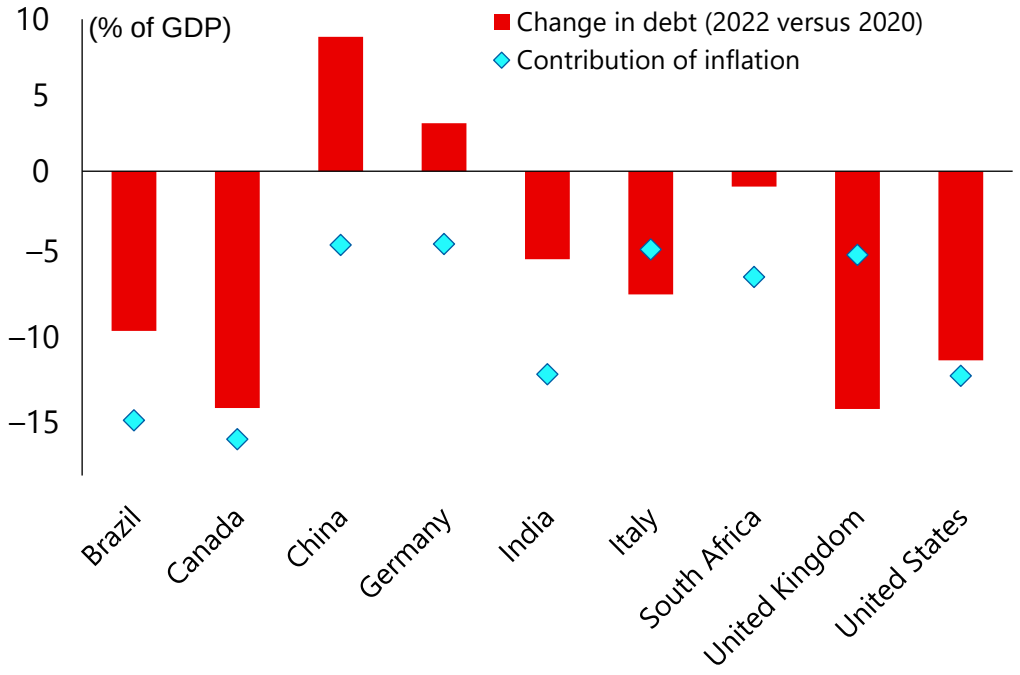


Sources: IMF, Santander.

International Comparison – Inflation impact on Fiscal

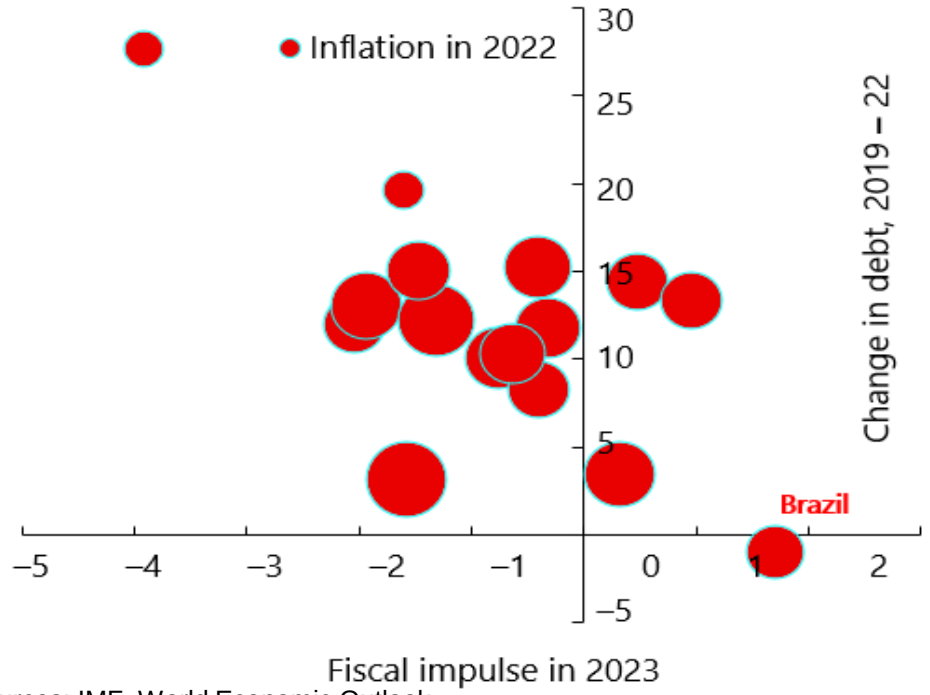
- Inflation had an effect on fiscal accounts.

Effect of Inflation Shock on the Debt Ratio



Sources: IMF, Santander.

Fiscal Impulse, Inflation, and Debt for G20 Countries



Sources: IMF, World Economic Outlook.
Note: Includes Spain; excludes Argentina, Russia, Saudi Arabia, and Tűrkiye. Fiscal impulse is measured by the change in the cyclically-adjusted primary balance. The size of the bubble reflects the inflation rate.

Tables - Forecasts

The forecasts refers to our latest Scenario Update

"Fine Tuning this Year's GDP Estimate"
(sent on May 5, 2023)

For the full report click on the link:

https://bit.ly/Std-scenupdate-may23

MACRO SCENARIO: Forecasts

Macroeconomic Variables		Previous		Current
GDP (%)	2023E	0.8	↑	1.0
	2024E	0.5	→	0.5
	2025E	1.5	→	1.5
IPCA (%)	2023E	6.1	↓	6.0
	2024E	3.9	→	3.9
	2025E	4.5	→	4.5
Selic Rate (% end of period)	2023E	13.00	→	13.00
	2024E	11.00	→	11.00
	2025E	8.00	→	8.00
FX Rate - USDBRL (end of period)	2023E	5.40	→	5.40
	2024E	5.50	→	5.50
	2025E	5.55	→	5.55
Current Account Balance (% of GDP)	2023E	-3.1	→	-3.1
	2024E	-3.4	→	-3.4
	2025E	-3.1	→	-3.1
Primary Fiscal Balance (% of GDP)	2023E	-1.2	↑	-1.1
	2024E	-1.1	→	-1.1
	2025E	-0.9	→	-0.9
Gross Public Debt (% of GDP)	2023E	77.4	↑	77.8
	2024E	81.7	↑	81.9
	2025E	84.8	↑	85.0

Sources: Santander | Note: The arrows denote the direction of changes since our previous scenario publication (as of April 6, 2023)

The forecasts refers to our latest Scenario Update

"Fine Tuning this Year's GDP Estimate"
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MACRO SCENARIO: Santander Brazil's Global Macro Assumptions – Summary

Global Macro Scenario								
	2018	2019	2020	2021	2022	2023E	2024E	2025E
Global GDP (%)	3.5	2.8	-3.5	5.9	3.4	2.4	2.3	2.6
China GDP (%)	6.7	6.0	2.3	8.1	3.0	5.9	5.3	5.0
US GDP (%)	3.0	2.2	-3.5	5.7	2.1	0.5	0.6	1.5
US Inflation (Core PCE, %)	2.1	1.6	1.5	4.9	5.0	3.7	2.5	2.0
US Interest Rate (FFR, %)	2.50	1.75	0.25	0.25	4.50	5.25	3.75	2.50
US Interest Rate (UST10y, %)	2.7	1.9	0.8	1.8	3.9	3.8	3.2	3.0
Dollar Index - DXY	96	96	90	96	104	102	100	100
Commodity Prices - CRB	409	401	444	571	558	514	474	445

*Core PCE is referred to the y/y variation for Q4.

Source: Santander

The forecasts refers to our latest Scenario Update

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For the full report click on the link:

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Our culture is based on believing that everything we do should be:

Simple Personal Fair

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