Brazil Macro | December 2022

FISCAL POLICY

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Brief Overview

01

Summary – Fiscal Consolidation in the Spotlight

- On the fiscal side, we now forecast a higher consolidated primary surplus for 2022 (1.3% of GDP; previously 1.0%) on the heels of higher dividends from state-owned enterprises (SOEs), stronger domestic activity, still-high commodity prices, and a delayed settlement of court-ordered debt (*Precatórios*). We expect the first positive federal government results in eight years. For 2023, however, we forecast a primary deficit of 1.5% of GDP, considering the continuation of the welfare program *Auxílio Brasil* with monthly payments of BRL600. We assume a fiscal waiver, via a permanent increase in the constitutional spending cap totaling BRL150 billion (the text approved in Senate have a potential fiscal impact above BRL220 billion and could add a downward bias to primary balance estimate).

- For now, we are assuming the implicit fiscal rule considering the fiscal waiver to be approved (on a permanent basis) this year and adjusted by inflation in the future. We see a more consistent public sector primary balance only in 2026-27, calculating a fiscal adjustment totaling ~3.0% of GDP. That figure is necessary to achieve a primary result that is adequate to stabilize the gross debt at 90% of GDP by the end of the decade, with the help of an oil revenue increase from pre-salt production and the positive effects of pension reform. We believe that expenses should not exceed 19% of GDP (a level close to the one when the spending cap was introduced: 19.4% in 2017). In addition, we calculate that the amount of unpaid court-ordered debt (the so-called *Precatórios*) will reach ~1.6% of GDP by 2026.

- Additionally, we expect a deterioration in the nominal (headline) budget results due to a higher interest bill, implying a steeper upward trajectory for government debt in the medium term. The high level of mandatory expenses continues to be a problem that urgently needs fixing (via economic reforms to both curb expenses and boost potential GDP). Next year, a new fiscal framework will be debated in Congress, which should be key to anchoring expectations regarding fiscal consolidation ahead.

Fiscal Consolidation: Eyeing the Next Steps

Short Term: Looking to the Waiver

- 2022 Primary Balance: **R$125 bn** (1.3% GDP) | Oct (e): 1.0%
  - . Central Gov.: +R$65 bn (+0.7% GDP) | +R$20 bn from Oct
  - . Regional Gov.: + R$60 bn (+0.6% GDP) | +R$5 bn from Oct
- 2023 Primary Balance: **-R$150 bn** (-1.5% GDP) | Oct (e): -1.4%
  - . Central Gov.: - R$155 bn (-1.5% GDP) | -R$5 bn from Oct
  - . Regional Gov.: + R$5 bn (0% GDP) | No change
- **Waiver** for 2023 of **R$150 bn (1.5% of GDP)**
- Gross Debt/GDP: **74.6%** in 22 | **80.2%** in 23
  Better starting point. BNDES: R$45 bn in 22 (-25 bn) | New 2020 IBGE GDP (-2pp). 1.2% in BCB Voluntary Deposits/GDP
- 2023: debate about the **fiscal rules**
  A new rule to substitute the spending cap will probably be debated next year. We consider the BRL150bn waiver and later on readjusted by inflation in the medium-term outlook.

Medium Term: Bumpy Road Ahead

- **Risks: Fiscal Stimulus by drop in revenue**
  R$30 bn for Federal Gov. and R$65 bn for regional gov.
- **Unpaid Debt – Judicial Claims**
  We see R$55 bn unpaid by 2023 (not in Fiscal statistics)
- **Higher Nominal Deficit** (Selic)
  Nominal Deficit 2023: above 8.0% of GDP
  Lower FX profits from Swap operations
- **Gross-Debt Peak Estimate**
  92% of GDP in 2031 (-3.0 pp from Sep-22)
- **Debt-path: on the edge for convergence**
  ~86% of GDP in 2040. Sensitivity with macro structural variables (such as Potential GDP, Neutral Rates, Deflator)
- **Risks for debt convergence**
  Long-term: Selic rate higher than 8.5%, Potential GDP below 1.5%. Permanent `Fiscal Waiver` higher than BRL150 bn.

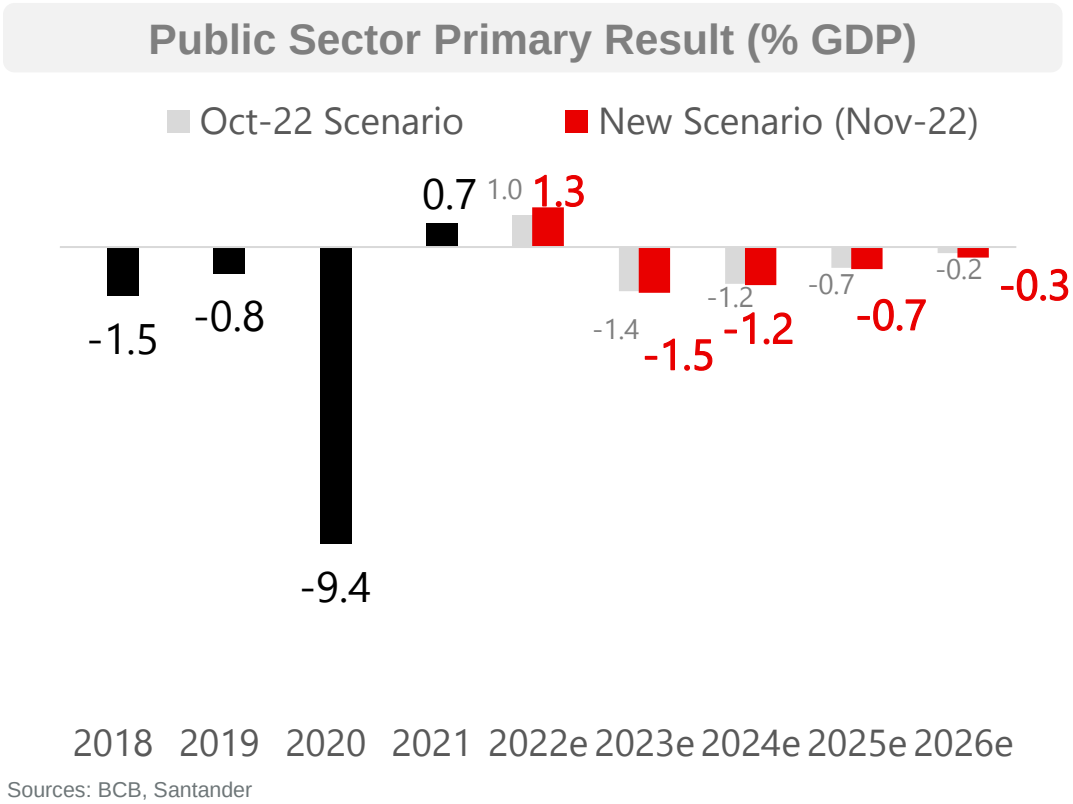
Fiscal Policy: a return to the primary deficit in 2023

- For 2023, we see a deterioration in the budget gap, especially considering the increase in expenditures (with the welfare program totaling R$175 bn) and a payback on revenues after several positive shocks (inflation, activity, SOE dividends and commodities prices, etc).
- In Congress, the rapporteur explained that the minimum wage should increase from R$ 1,212 to R$ 1,320 in 2023 because a readjustment of almost 3% above inflation is foreseen.

2023 - BRL billion	Budget Proposal (PLOA) (a)	% GDP	Santander (b)	% GDP	Δ (b) - (a)
Total Revenue	**2,257**	**21.8%**	**2,303**	**22.3%**	**46**
Collected by the Brazilian IRS	1,378	13.3%	1,398	13.5%	20
Net Social Security Revenues	595	5.8%	590	5.7%	-5
Not Collected by the IRS	284	2.7%	315	3.0%	31
Transfers by Revenue Sharing	453	4.4%	462	4.5%	9
Net Revenue	**1,805**	**17.5%**	**1,841**	**17.8%**	**36**
Total Expenditure	**1,868**	**18.1%**	**1,996**	**19.3%**	**128**
Social Security Benefits	860	8.3%	874	8.5%	14
Payroll - Public Servants	368	3.6%	366	3.5%	-1
Other Mandatory Expenses	295	2.8%	297	2.9%	2
Mandatory with Cash Control	247	2.4%	319	3.1%	71
Discretionary Expenses	99	1.0%	140	1.4%	41
Central Gov. Budget Gap	-63.7	-0.6%	-155.0	-1.5%	63.7

Sources: Ministry of Economy, Santander.

In Congress, the current proposal estimates a BRL231 billion (2.2% of GDP) deficit for 2023. A rise in public servant`s wage of 9%, we estimate 5%. The spending cap limit considered is BRL1,945 bn (including BRL145 bn to be approved in Transition PEC).

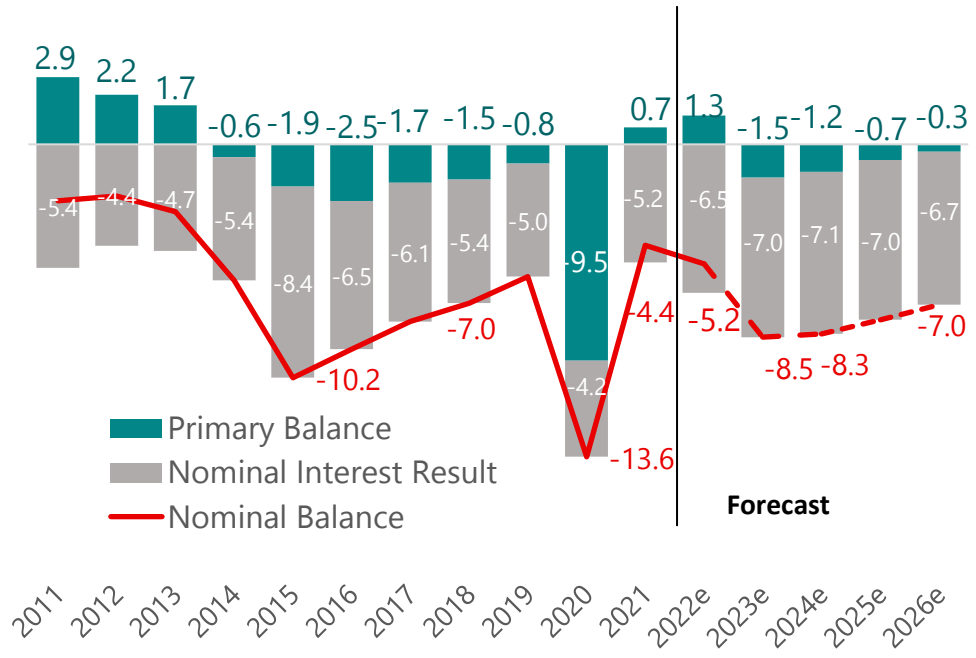


Sources: BCB, Santander

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

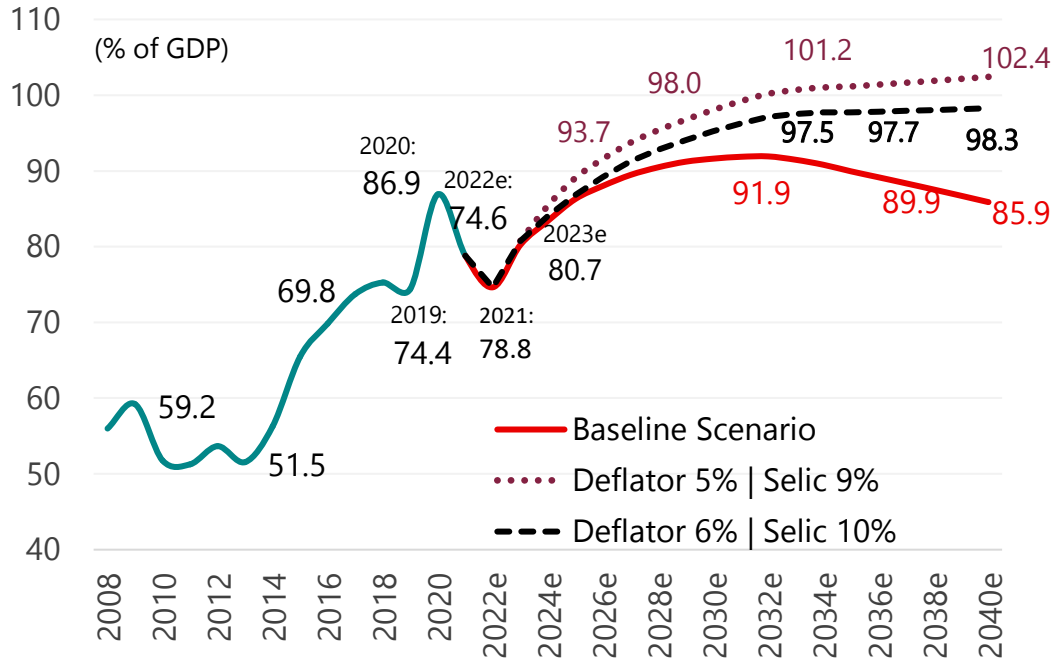
- Interest payments should continue to rise (Selic increase) with the nominal result showing strong deterioration, remaining above 8.0% of GDP in the coming years.
- We simulated scenarios for the debt trajectory: the main debate will be on the structural macroeconomic variables (GDP, Neutral Interest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

Public Sector's Financing Needs (% GDP)



Sources: BCB, Santander.

Scenarios - Gross Debt Scenario (% GDP)

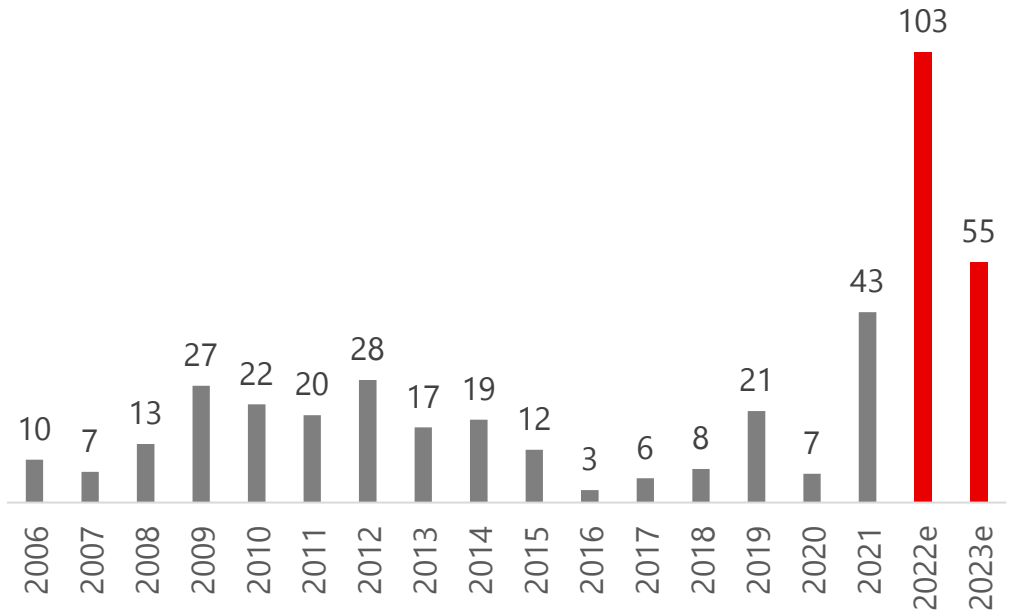


Sources: BCB, Santander

Fiscal Policy: probably less favorable revenues from dividends and Oil

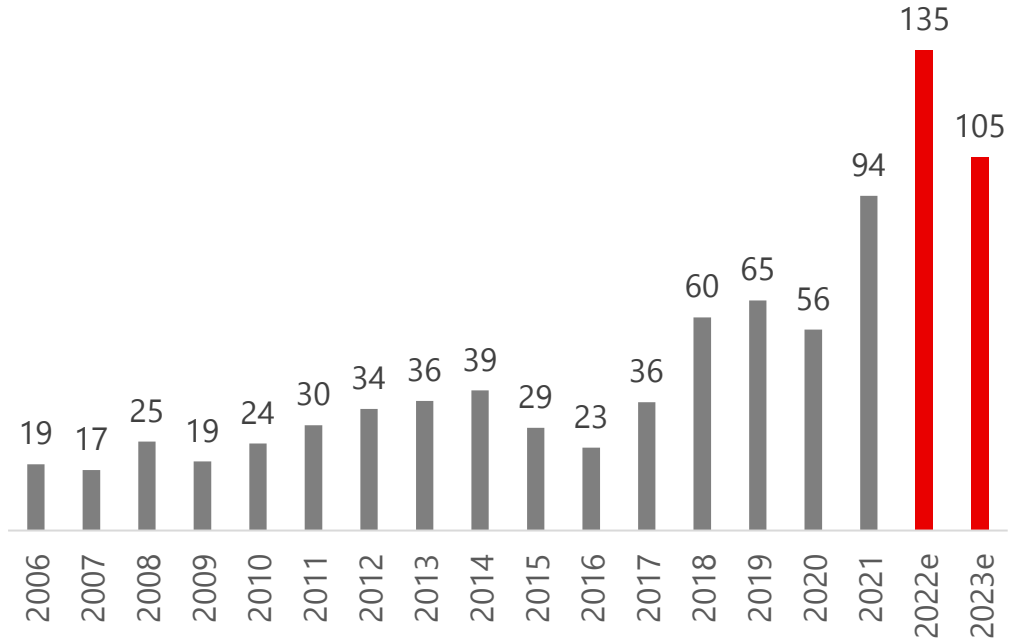
- For the Central Gov. this is year we registered a jump in SOE dividends and revenues from exploitation of Natural Resources (~85% oil-related). According to our calculations, it went up from 1.5% of GDP in 2021 to 2.4% of GDP. In our view, despite the increase in oil production we estimate a return to 1.5% of GDP with a softening in the prices and increases in costs (inflation + interest rates).

SOE Dividends Revenues



Sources: National Treasury, Santander.

Revenues from Exploitation of Natural Resources



Sources: National Treasury, Santander.

Fiscal Policy: Transition PEC to create a fiscal waiver in 2023

- The 2023 budget is unfeasible. It will be necessary to approve a constitutional amendment to keep *Auxilio Brasil* at BRL600. For 2023, there is a pressure of at least BRL150 billion to be debated, which could lead to further deteriorations in the fiscal scenario.
- The reduction in inflation also reduces the space for new spending next year. Compared to the Budget Proposal (IPCA:7.2%) the value correcting by our forecast (5.8%) would be BRL24 billion lower.

Proposed Constitutional Amendment

Transition PEC Proposal	
Measures	**BRL bn**
Outlays	222
Fiscal Waiver	145
Investments ("2021 extra-tax collection")	23
Leftover funds: PIS/PASEP workers' accounts	20
Others Measures (Fiocruz, Universities, etc)	12
Updating the IPCA in the Budget	24

Sources: National Congress, Santander

Not considered in the Transition PEC

Included in our Scenario

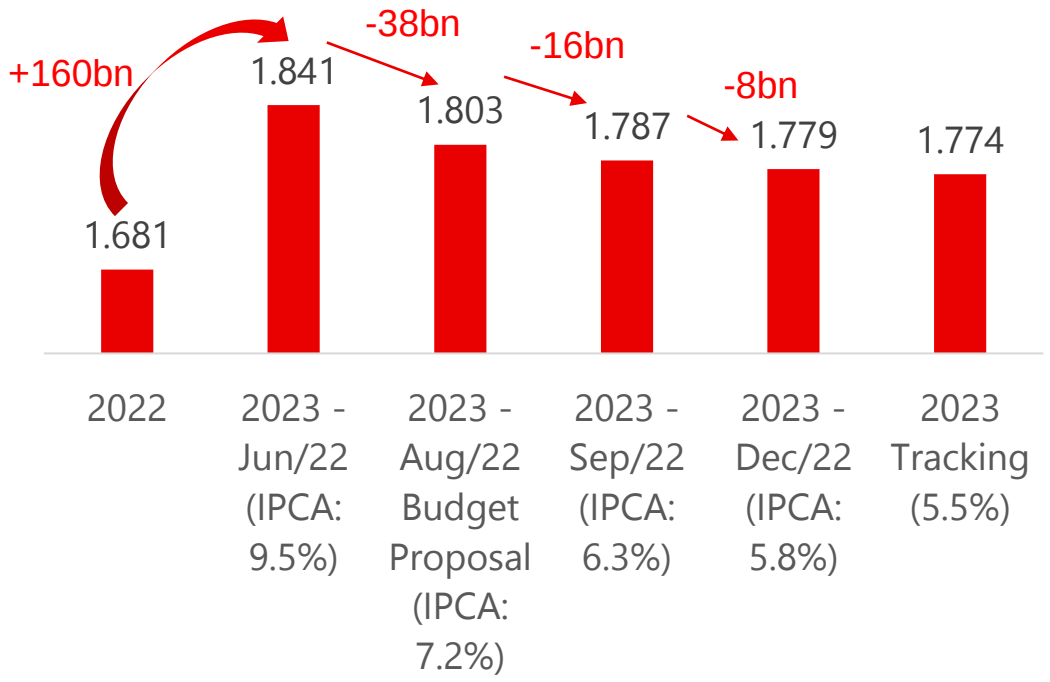
Central Gov. Fiscal Pressures for 2023	
Measures	**BRL bn**
Outlays (I)	150
Auxilio Brasil (complement to BRL 600)	50
Additional benefit for children (BRL150)	14
Real Min. Wage increase 1.4%	7
Public Investments	20
FNDCT (tech fund)	4
Desenrola Brasil (household debt subsidy)	7
Universities and MCMV	15
Discretionary recomposition (Ministries)	9
Update IPCA in the Budget proposal	24

Our estimate, the use of the resources can change during the year.

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

- The 2023 budget is unfeasible. It will be necessary to approve a constitutional amendment to keep *Auxilio Brasil* at BRL600. For 2023, there is a pressure of at least BRL150 billion to be debated, which could lead to further deteriorations in the fiscal scenario.
- The reduction in inflation also reduces the space for new spending next year. Compared to the Budget Proposal (IPCA:7.2%) the value correcting by our forecast (5.8%) would be BRL24 billion lower.

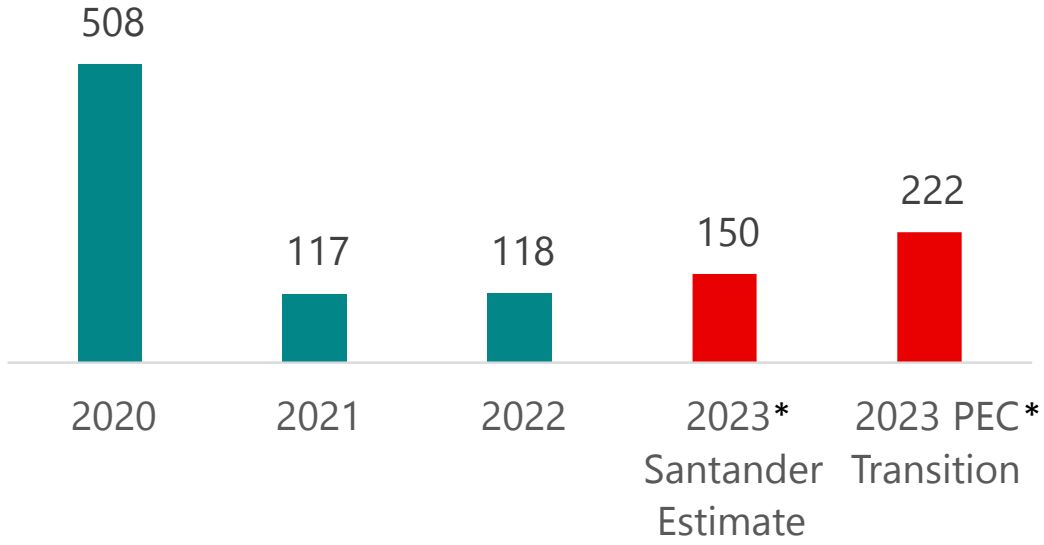
Spending Cap for 2023 – Probably will be breached



Sources: Ministry of Economy, Santander

In Congress, the last budget proposal considers the spending cap limit in BRL1945 (including BRL145 bn to be approved in Transition PEC)

Fiscal Stimulus ("Extra-Cap") BRL billion



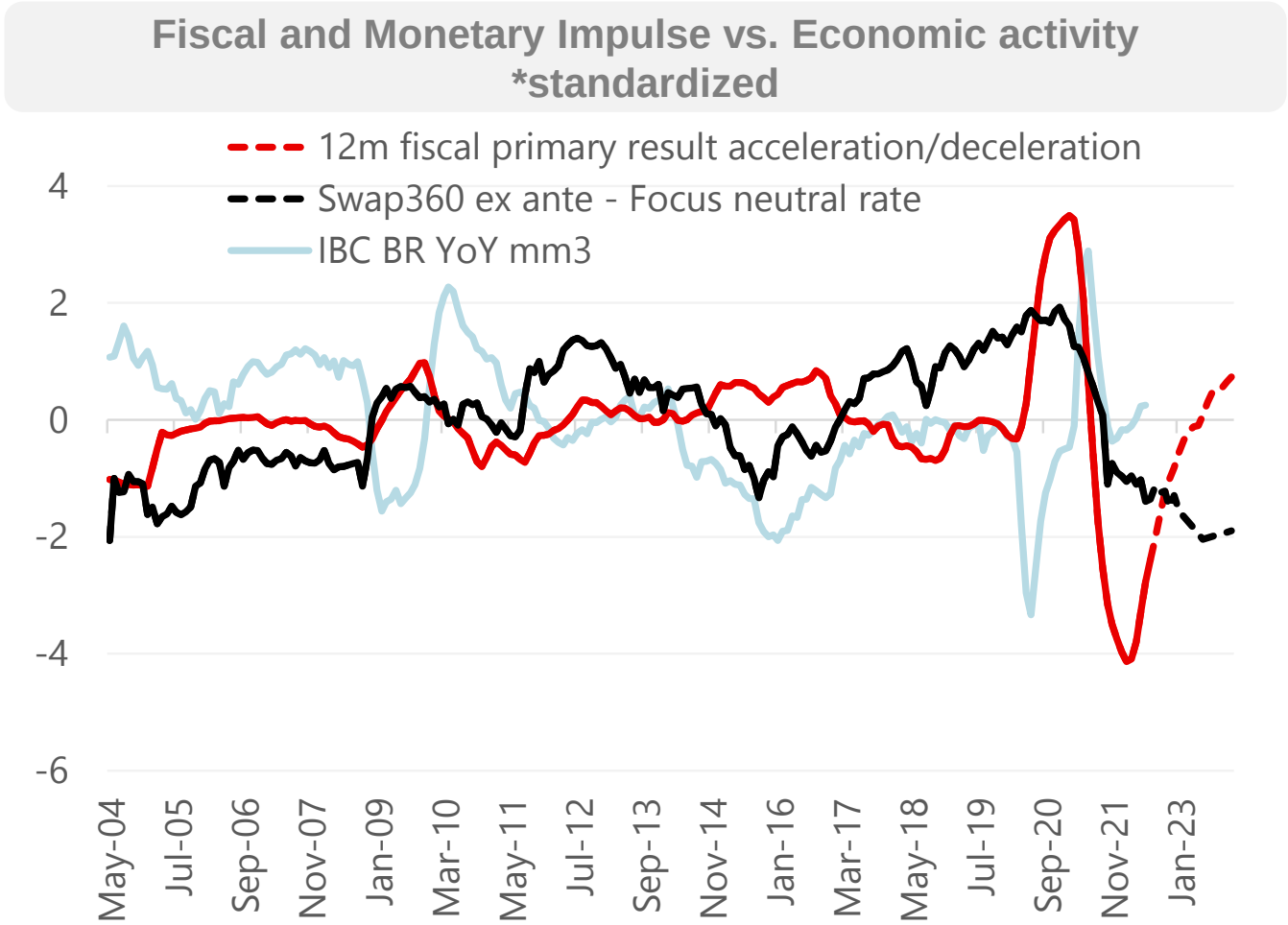
* Considering the BRL24 billion that could be reduced in the spending cap limit estimated in the Budget Draft if the 2022YE IPCA estimate (7.2%) is updated to our IPCA estimate (5.8%)

Fiscal Stimulus and Welfare Program

02

Fiscal Impulse in the short-term “helping” the activity

- The new fiscal stimulus measures tend to boost activity in the short term.
- For the fiscal policy we used the change in primary result as a proxy for the stimulus. For the monetary policy we use as a proxy an “ex-ante Real Interest Rate”, which is Swap360 minus 12-month ahead inflation expectations.

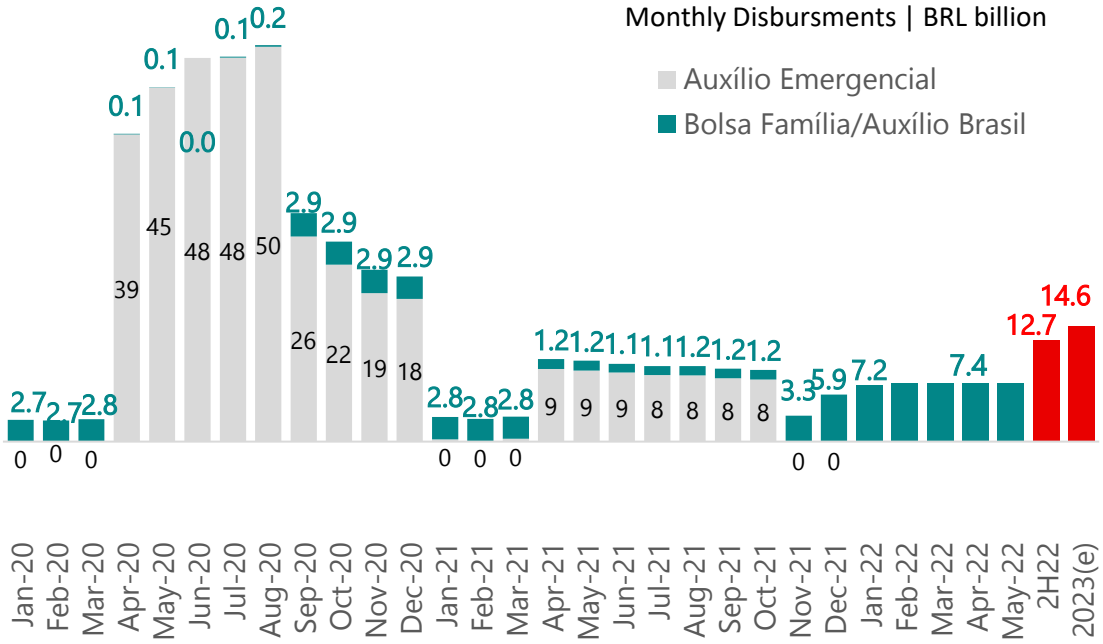


Sources: BCB, National Treasury, Bloomberg Santander

Fiscal Policy: increase in the welfare program outlays

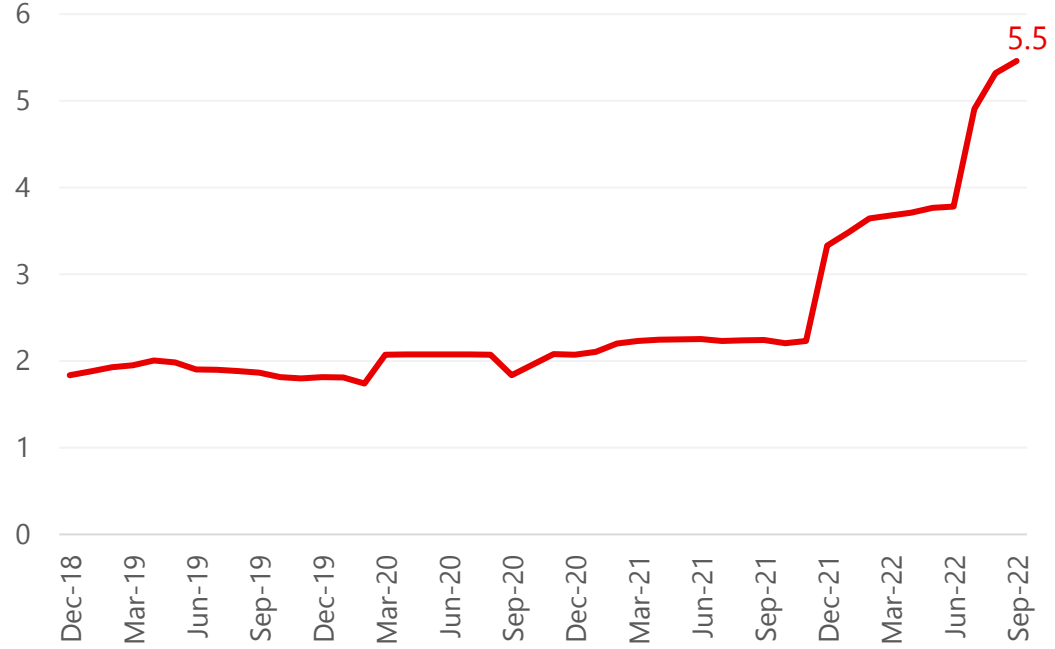
- The monthly disbursements with welfare program could reach closer to BRL14 billion, with a yearly total budget of BRL175 billion.
- We observed an increase in single person families. According to some estimates in the Minister, it will be possible to reduce the welfare program in ~BRL16 billion by correcting the *Cadastro Único* registers.

Welfare Program Outlays



Sources: Ministry of Economy, Santander

Welfare Program - Single Person Families



Sources: *Ministério da Cidadania,* Santander

List of Social benefit programs in Brazil that could finance a new program

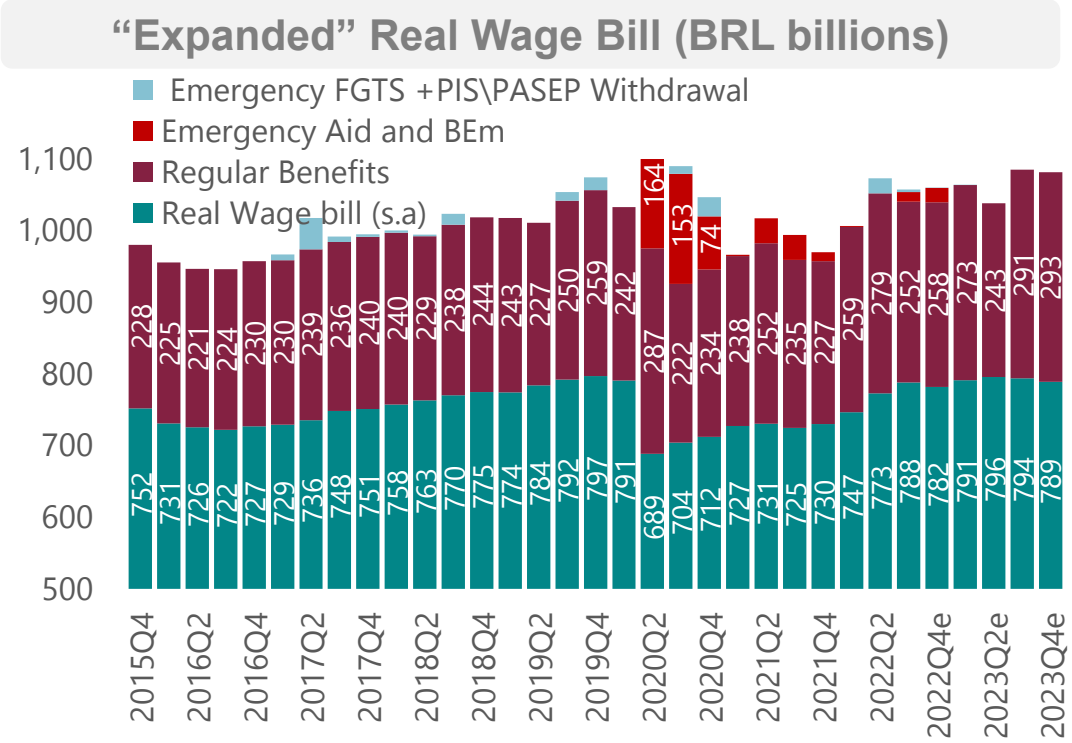
Benefits	Average Monthly Value (BRL)	Beneficiaries (millions)	Total Cost (BRLbillion)	Eligibility
Auxílio Brasil*	607	21.2	175	Extremely poor monthly income of up to BRL105 per person. Poor families with monthly income between R$105 and R$200 per person. Extra BRl150 benefit for children
BPC (Pension)	1,212	4.8	75.6	Elderly person, 65+ years old, and the disabled person, of any age, with long-term impairments
Salário Família	56	5.6	3.8	Benefit paid to a worker who has a gross monthly income equal to or less than R$1,656 and children under 14 years old or disabled
Seguro-Defeso	280	0.8	2.8	Benefit paid during periods when fishing is prohibited
Abono Salarial	74	23.7	22.8	Benefit ensures the value of an annual minimum wage to Brazilian workers who receive an average of up to two minimum wages
Seguro Desemprego	530	5.7	39.3	Having been dismissed without just cause; Having no personal income; Be unemployed when applying for the benefit;
Salário Maternidade	590	0.1	0.8	Women who need to leave work because of the birth of a child, adoption or even in cases of abortion.
Auxílio Reclusão	1,498	0.0	0.6	Social security benefit paid to dependents of the worker who committed a crime
Auxílio Gás*	110	5.7	3.8	Cooking-gas benefit for families in Cad Único
Farmácia Popular	120	16.4	2.4	Free medication for the treatment of hypertension (high blood pressure), diabetes and asthma.
Total	**178.8**	**73.7**	**327.0**	**-**

* Millions of Families

Sources: The National Treasury Secretariat, Ministry of Economy and Santander estimates.

Labor: Lower inflation and higher real wages positively impacted the real wage bill

- We increased our projection of the expanded real wage bill to a 5.6% growth in 2022, due to a higher employment trajectory and the positive impact of lower inflation on average real wages. This also affected our 2023 projections.



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

Old

	2021	2022(E)	2023(E)	2024(E)
Real Wage Bill	+0.6%	+5.5%	+2.4%	+1.7%
Real Wage Bill (With Government Transfers)	-8.0%	+5.0%	+2.1%	+1.0%

New

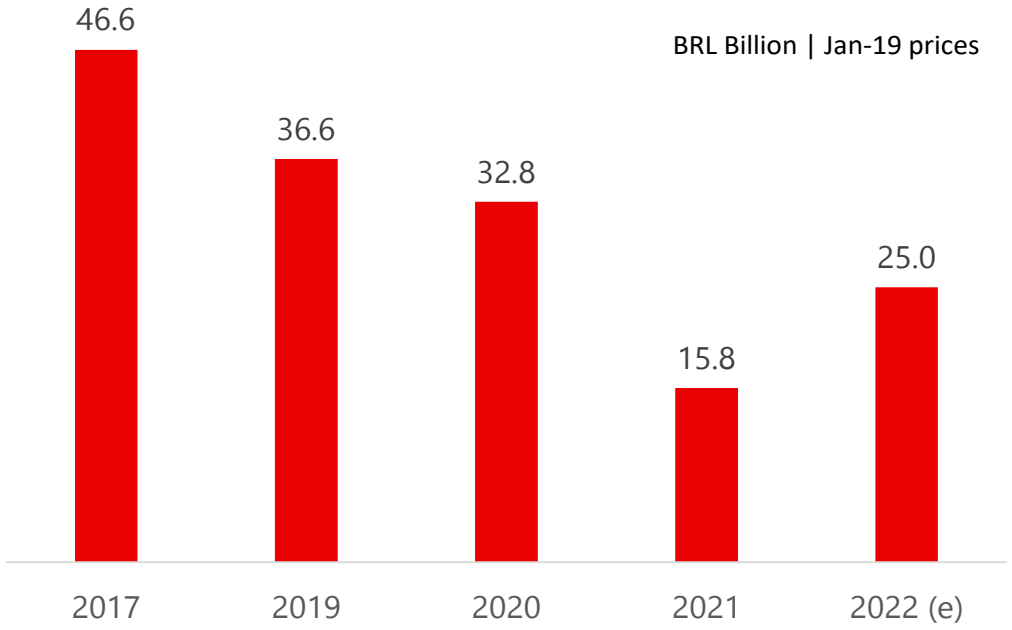
	2021	2022(E)	2023(E)	2024(E)
Real Wage Bill	+0.6%	+6.1%	+2.6%	+1.8%
Real Wage Bill (With Government Transfers)	-8.0%	+5.6%	+2.5%	+1.1%

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

Fiscal Stimulus thought FGTS fund and Core Household NPL

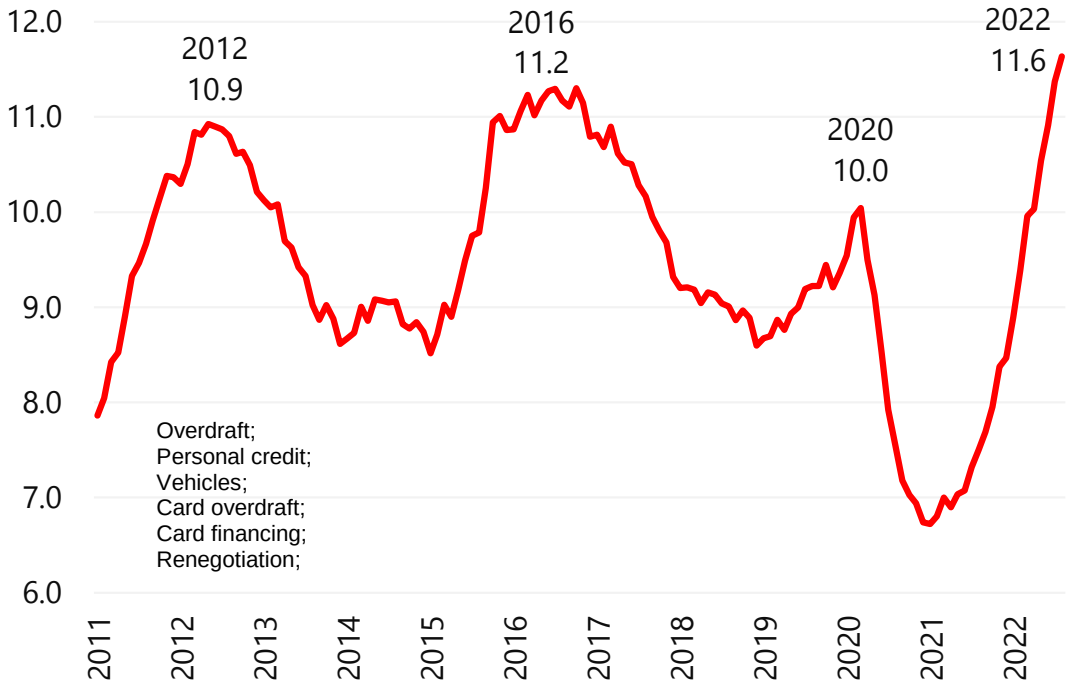
- We estimate that FGTS withdrawals added 0.6 p.p. to the growth of the “expanded” real wage bill.
- Household indebtedness keep rising fast since the pandemic onset, reaching the peak of the series in July at 53.1%.
- We made a Core Household NPL with the most problematic categories, and we see that NPL is at the same level that the 2016 past crisis and is at a rising trend.

FGTS funds workers withdrawn



Sources: Caixa, MCM, Santander

Household Non-Earmarked NPL - Core



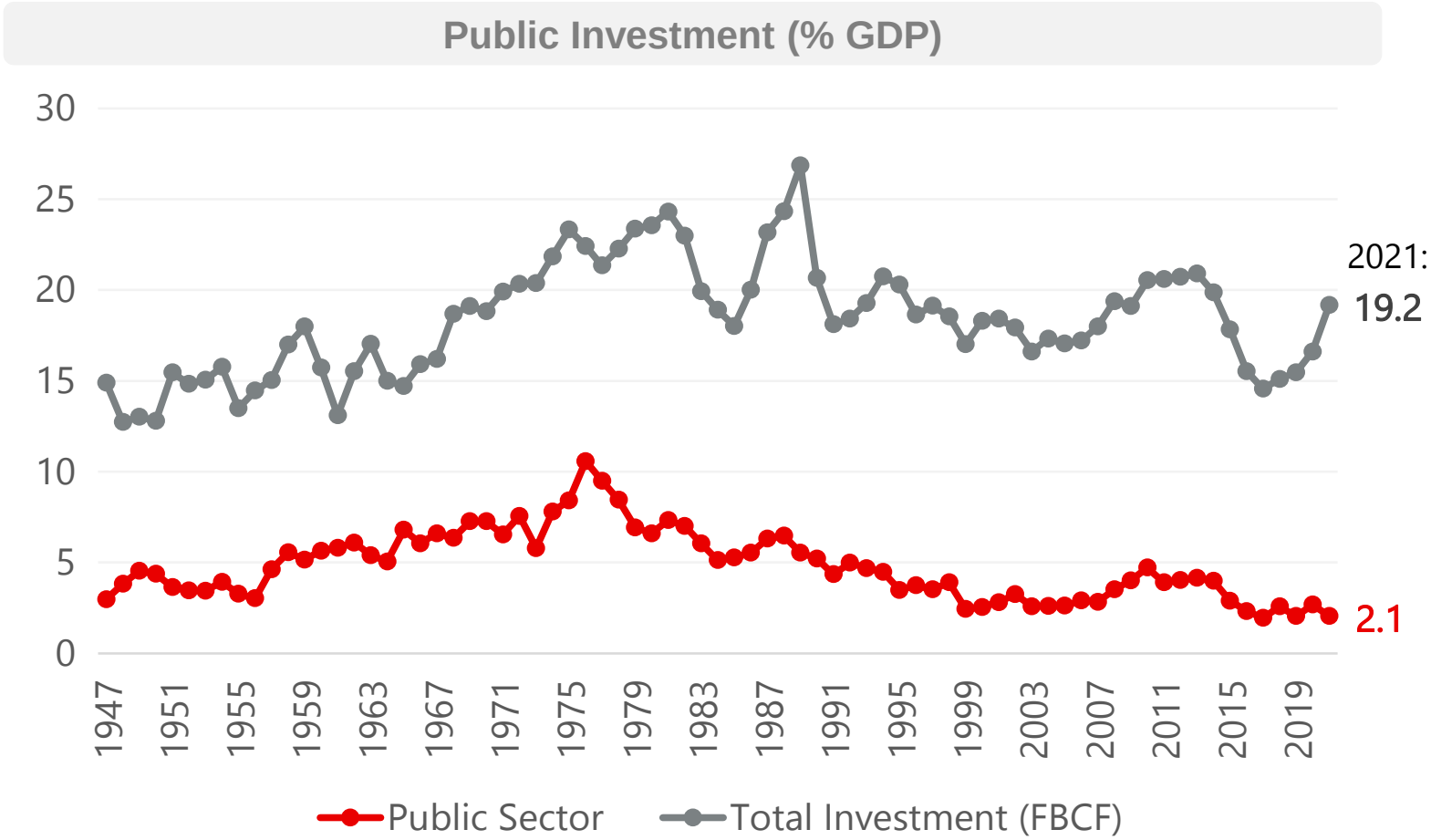
Sources: BCB, Santander.

Public Investment and Others

03

Public Investment at low levels

- Part of the recent fiscal adjustment was made by a reduction on discretionary expenditures, mainly public investments.



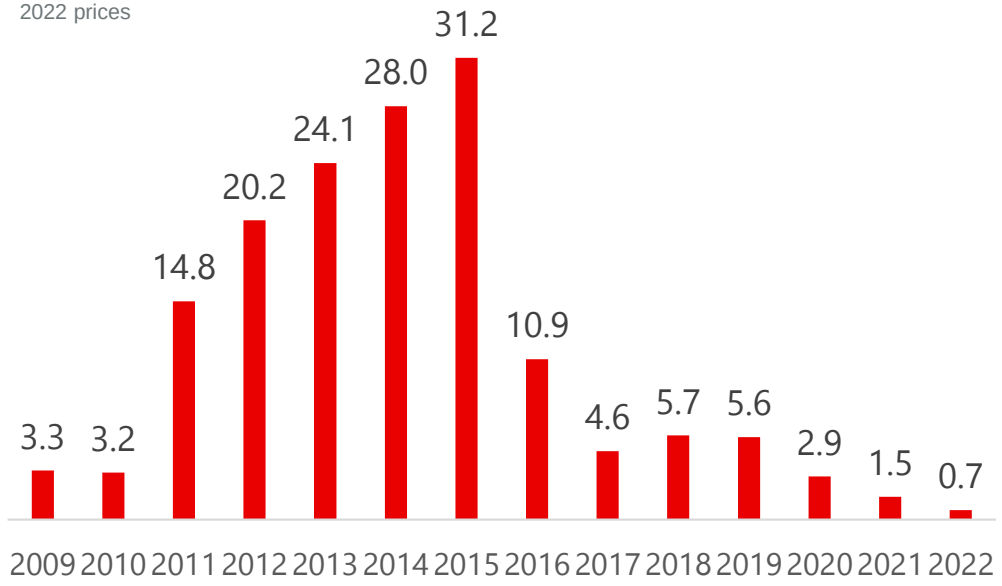
Sources: IBRE, National Treasury, BCB and Santander.

Fiscal – Former Programs that could be increased

- Considering the increase in the 2023 we could see an increase in Housing Program and rise in public investment.

Housing Program – BRL billion

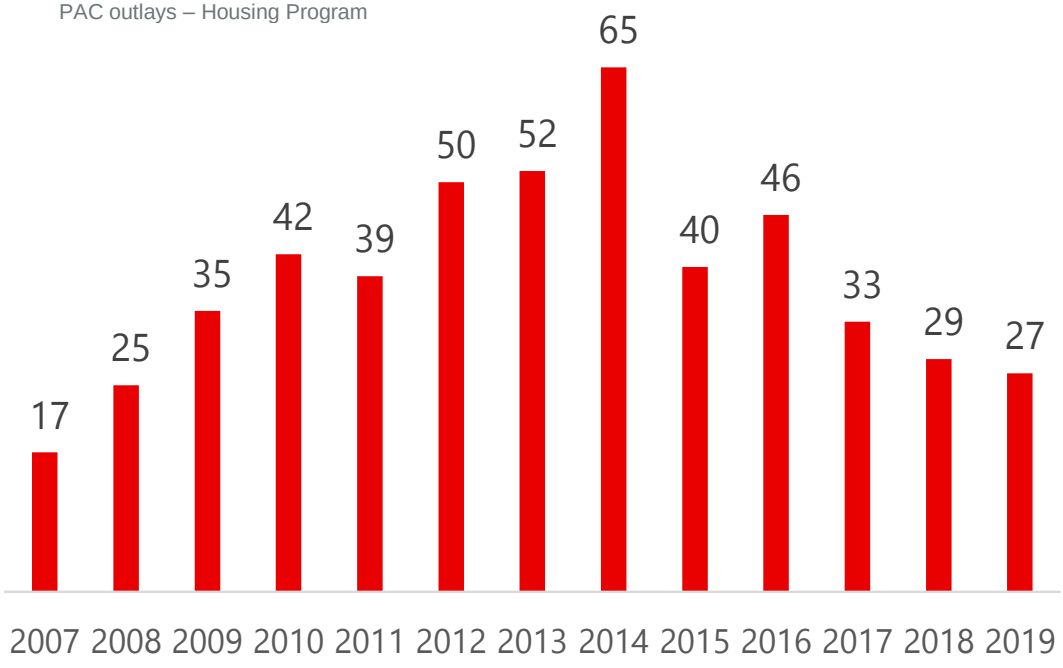
Minha Casa, Minha Vida (2009-2020)
Casa Verde Amarela (2021-)
2022 prices



Sources: National Treasury, Santander

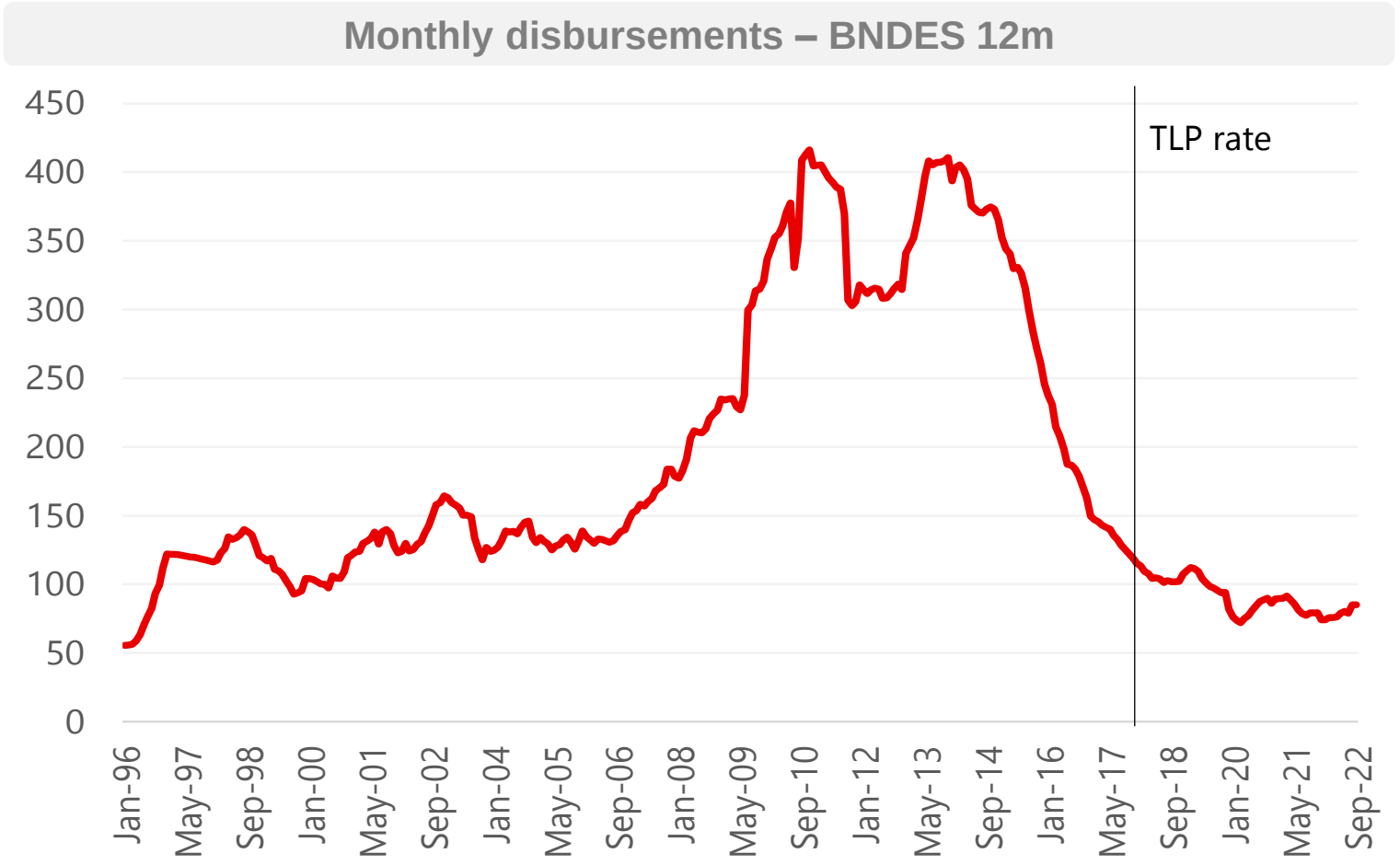
Investment Plan (PAC) – not considering Housing

PAC outlays – Housing Program



Sources: National Treasury, Santander

BNDES – Public Bank

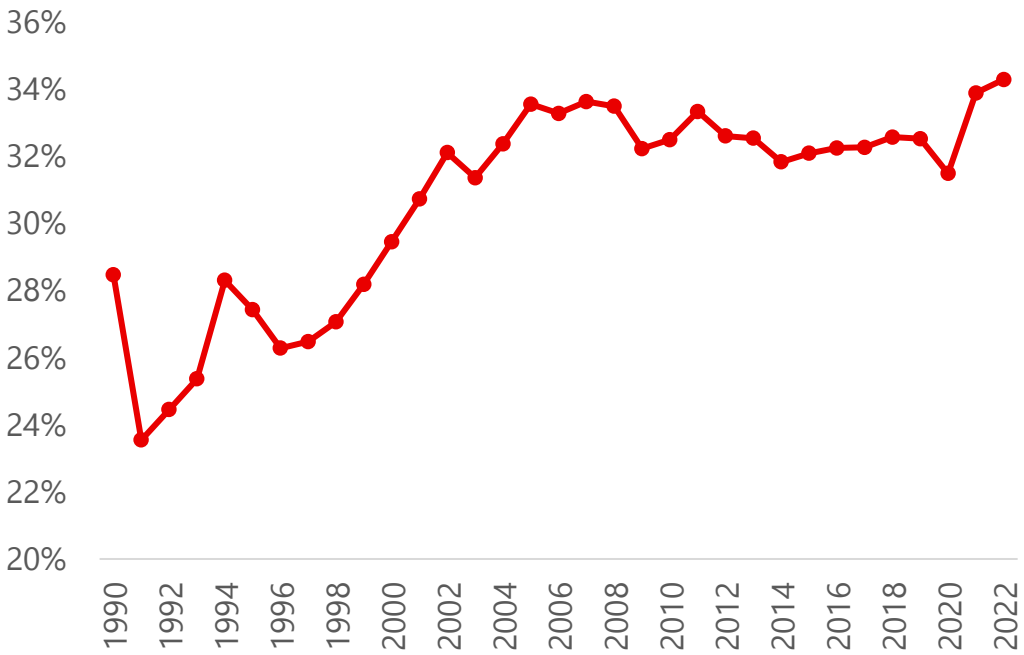


Sources: BNDES, Santander.

Difficulty in the Fiscal Adjustment - Expenses or Revenues?

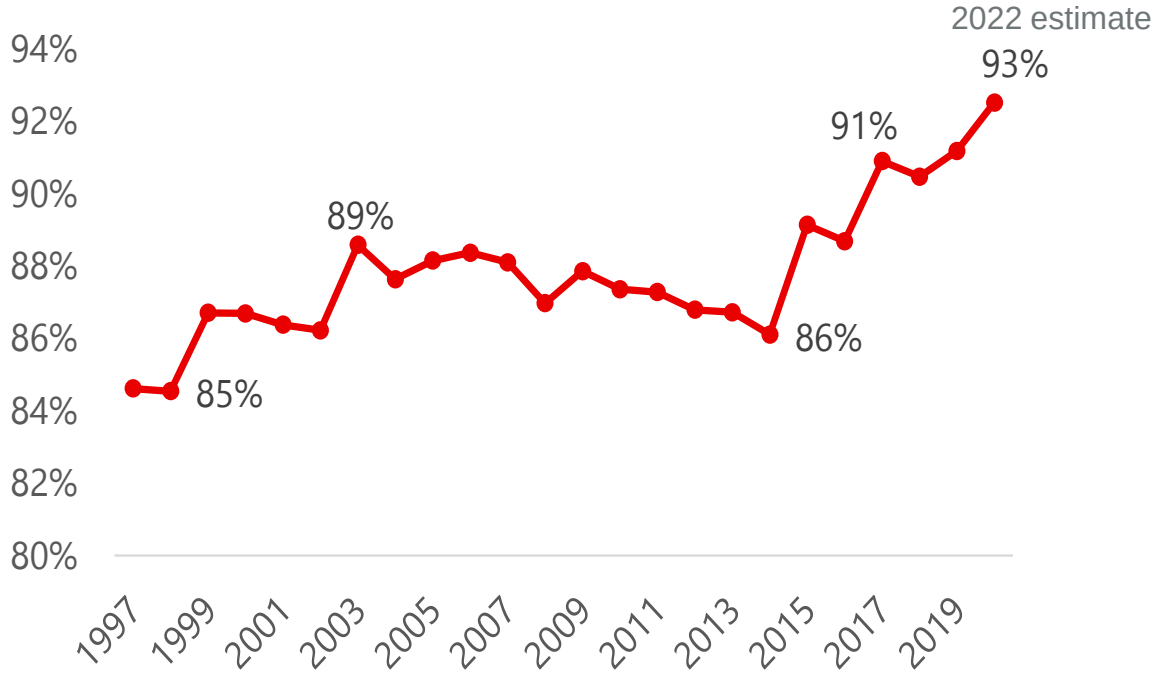
- There is a limit to increase taxes and to reduce the discretionary expenses.

Tax Burden (% GDP) – Is it possible to raise taxes?



Sources: IBRE, National Treasury, BCB and Santander.

Mandatory Outlays / Total Expenses



Before 2008 there is no classification of discretionary expenses, we maintained the historical pattern among the expenses with flow control

Court-ordered Debt – *Precatórios* on the rise

04

Outlook – Judicial Claims official estimate soared; the risks remains high

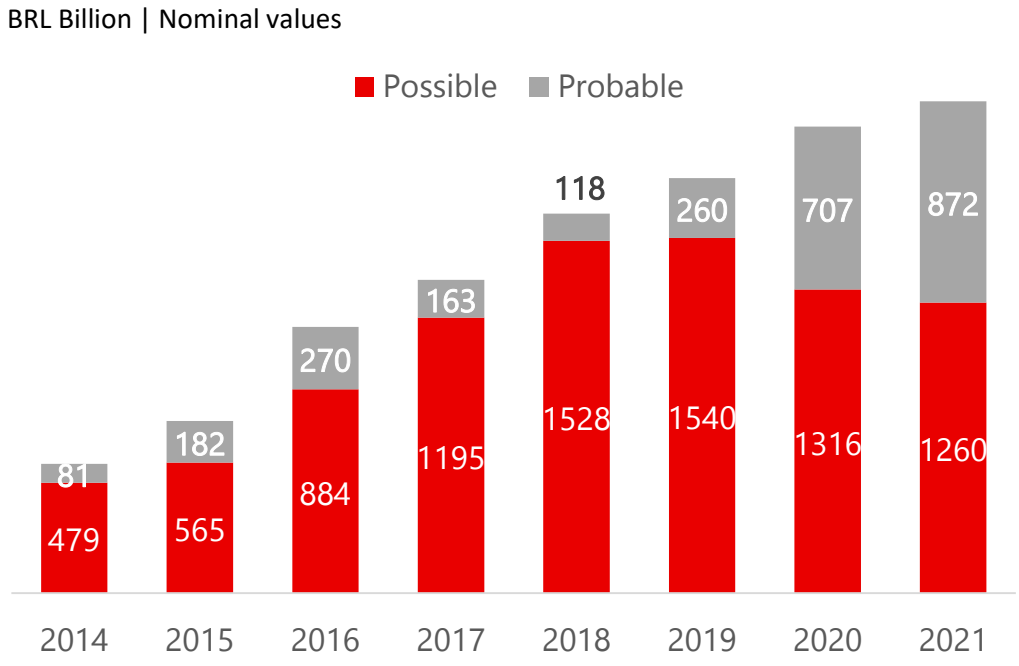
- Regarding probable judicial claims, the amount increased from BRL707.2 billion in 2020 to BRL872 billion in 2021, an increase of 23.3%. Claims of a tax nature correspond to 66.9% of the possible risk and 70.4% of the probable risk.

Judicial Claims Increase – BRL billion

BRL Billions	2021	2022
Personnel	**10.5**	**13.7**
Judicial Claims	7.3	10.5
RPVs (small value requisitions	2.1	1.9
Others	1.1	1.3
Pension Benefits	**22.6**	**30**
Judicial Claims	10.5	15.7
RPVs (small value requisitions	12.1	14.3
Continuing Benefits	**1.4**	**1.6**
Judicial Claims	0.2	0.3
RPVs (small value requisitions	1.2	1.4
Other cost capital expenses	**20.8**	**43.7**
Judicial Claims	17.7	40.3
RPVs (small value requisitions	1.9	2.3
Others	1.3	1.1
Total	**55.4**	**89.1**

Sources: National Treasury, MCM, Santander

LDO Judicial Claims: Probable and Possible Risk



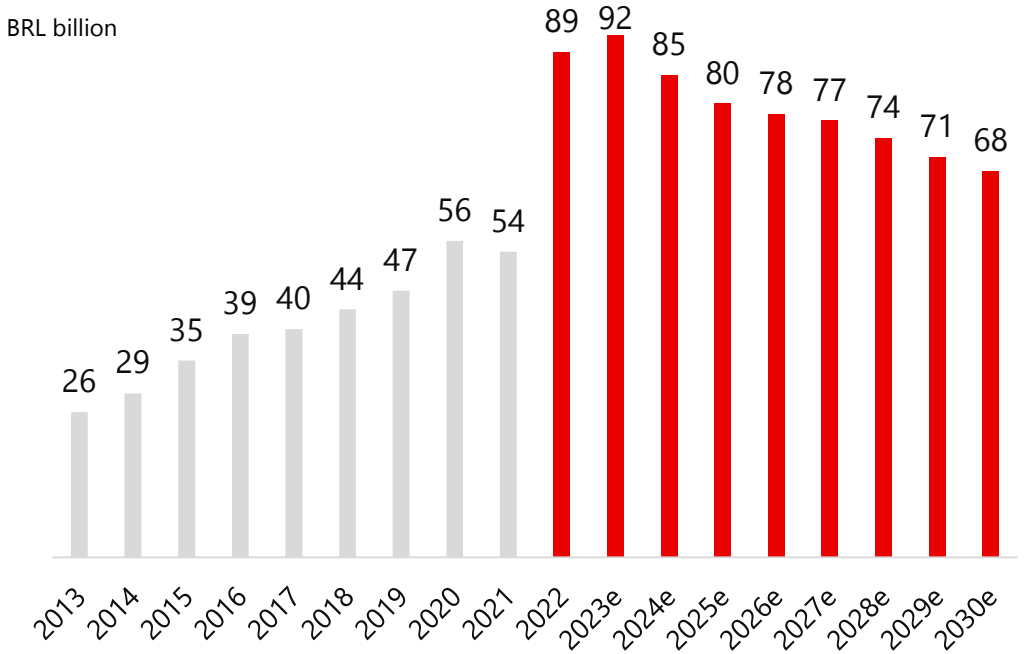
Sources: AGU, LDO 2020, Santander.

This judicial claims are included in the Budget Guidelines (LDO) as a potential and probable fiscal risks. Differently from the previous table from the “General Budget Report”, this numbers are the potential of liabilities in the Supreme Court judgments.

We estimate an increase in judicial claims over the next years

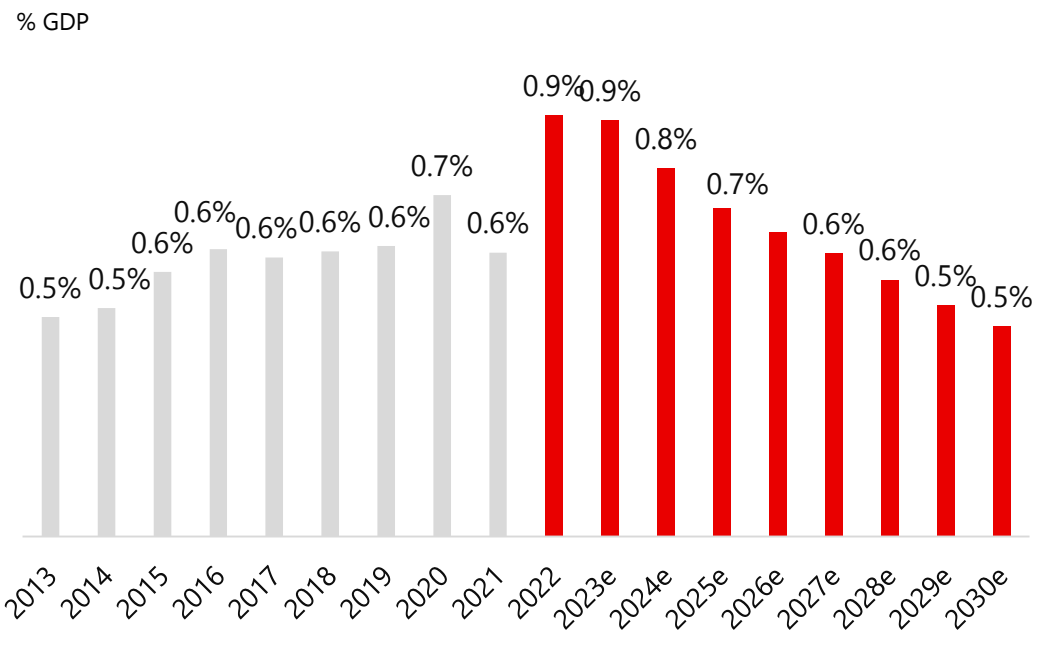
- We constructed a forecast based on the Budget Guidelines (LDO) probable judicial claim for next the years. In the short-run we see more pressure from the Fundef (educational fund) and those related to pension payments.
- Our preliminary estimate is only a preliminary "educated-guess" in view of the difficulty in estimating and the uncertainties related to the legal process. Either way, it has a relevant fiscal risk and requires a fiscal discipline in management to this increase.

Our Preliminary Estimates for judicial claims budget



Sources: LDO 2023, Santander

Judicial claims estimates



Sources: LDO 2023, Santander

Based on the PLDO 2023

National Treasury estimates

- The National Treasury unveiled a report to explain the judicial claims payments for 2022,
- There is a risk of accumulating this expenditures over time, and with the increase in Selic rate this amount could be even higher.

Estimated Payments - Judicial Claims 2022

	Value BRL bn
Limit for payment of Judical Claims	19.9
RPVs	24.4
Other Sentences - Considered in the Expenditure Ceiling	2.7
Recomposition of canceled court documents - Law 13,463/17	0.5
Monetary Update of the claims to be paid with the limit	2.4
Claims in installments (with correction) - art. 100, §20, ADCT	4.2
Fundef judicial claims (rule 40% + 30% + 30%)	7.9
Total	**62.0**

Sources: National Treasury, Santander

Estimated without *"Encontro de Contas"* (debt cancelations)

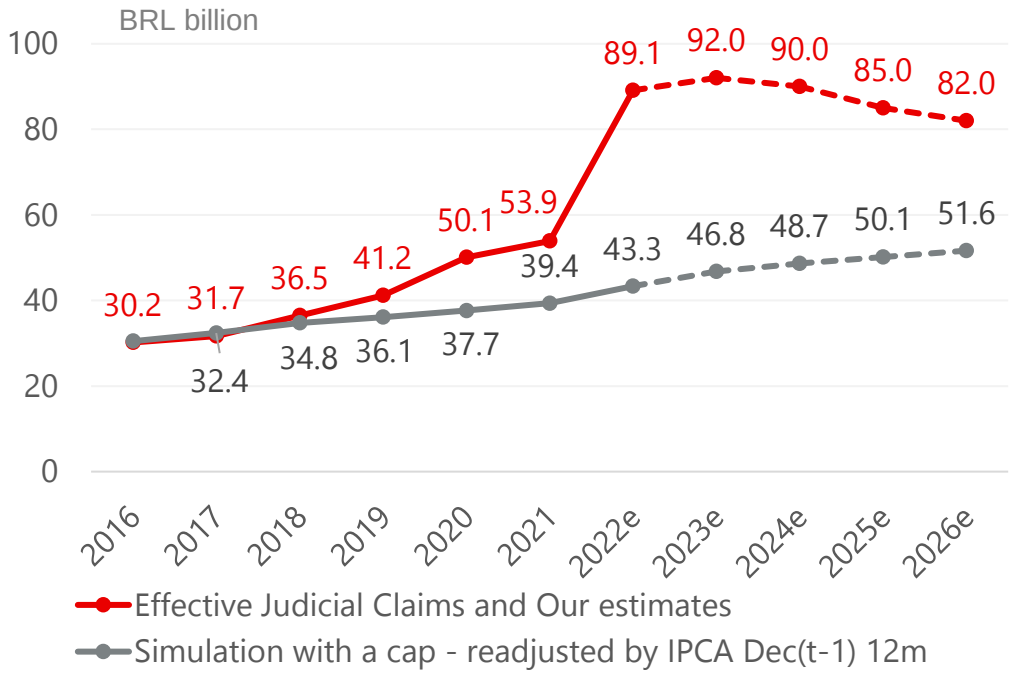
Item	2022	2023
Expected Judicial Claims	89.1	92.1
Subcap (PEC Precatórios)	40.5	43.1
Payments in the year	62.0	61.6
Precatórios unpaid (accumulated)	22.9	57.6

Sources: National Treasury, Santander

Simulation – effects of creating a cap for the court ordered debt payment

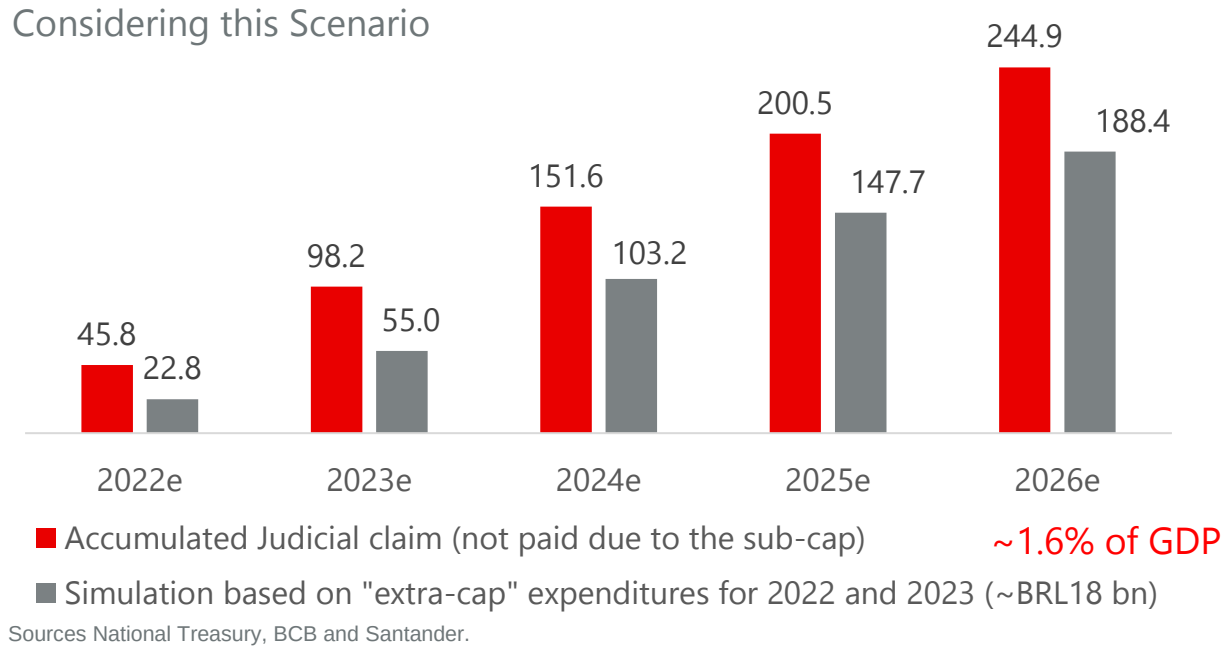
- In order to reduce the judicial claims payments, the government proposed to create a ceiling for these liabilities and postponing the remaining for the next few years (or paying outside the spending cap limit).
- Creating a cap since 2016 would reduce the judicial claim payments in 2022 to close to 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.

The Supreme Court (STF) decided on December 1 that the so-called "life revision" for some pensioners is constitutional. Based on this mechanism, all social security contributions made to the INSS by workers before July 1994 will be accounted for in the calculation of some pensions, increasing their payments. In our view, this will bring a fiscal impact of BRL50 billion in 10 years. While that may not affect our primary balance estimates, we calculate that the amount of unpaid court-ordered debt (the so-called *precatórios*) should increase to ~1.6% of GDP by 2026 (from 1.3% of GDP).

Fiscal Baseline Scenario – Primary Result and Simulations

05

Past Legislations - Summary of the Impact of the Proposals

- We believe that the total impact, if all the measures are approved, would be BRL129 billion (1.3% of GDP) in full-year.
- For 2022, we included BRL65 billion impact of the legislation to cap the ICMS tax (VAT). There is still uncertainty in the overall impact and its effects, especially 2023 onwards. We believe that the impact on states accounts will be massive in 2023 without measures to compensate the impact, for this year the states can accommodate, in our view.
- The constitutional amendment (*PEC Auxílios*) will be limited to 2022, totaling BRL42 billion (0.4% of GDP) of impact. We added part of the increase in *Auxílio* Brasil for next year (from BRL89 billion to BRL120 billion).

Complementary Law – ICMS cap on Essential Goods

Fiscal Impact of Measures	2022		Full-Year	
	BRL bn	% GDP	BRL bn	% GDP
LC194 ICMS Cap (Impact)	**65**	**0.7%**	**129**	**1.3%**
1. Fuels ICMS Cap 17-18%	20	0.2%	40	0.4%
Gasoline	14	0.1%	28	0.3%
Diesel	5	0.1%	10	0.1%
Ethanol	1	0.0%	2	0.0%
2. Telecom cap	5	0.1%	10	0.1%
3. Eletricity	20	0.2%	40	0.4%
ICMS cap to 17-18%	5	0.1%	10	0.1%
Changing the ICMS base (TUSD/TUST)	15	0.2%	30	0.3%
4. Zeroing PIS-Cofins and CIDE Gasoline**	16	0.2%	32	0.3%
5. Zeroing PIS/Cofins Ethanol**	3.5	0.0%	7	0.1%
Total Impact	**65**	**0.7%**	**129**	**1.3%**

** Tax breack for the Federal Gov. (without compliance to Fiscal Resp. Law)

Sources: National Congress, Santander.

PEC *Auxílios* – Fiscal Stimulus in 2022

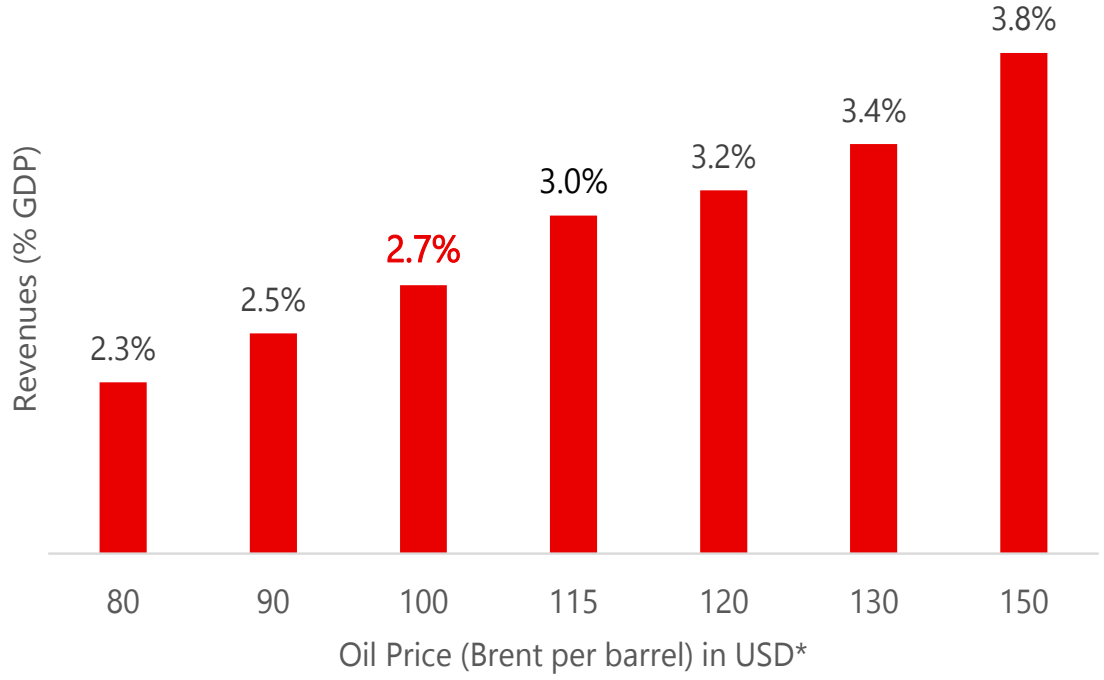
Expenditures	BRL billion	%GDP
Double Auxilio Gas Budget	2	0.0%
Transport for eldery (subsidy)	2.5	0.0%
Truckers voucher (1k benefit)	5.4	0.1%
Taxi Drivers voucher and Alimenta Brasil	2.5	0.0%
Ethanol (subsidy)	3.8	0.0%
Complement to Auxilio Brasil (BRL600) 2022	26	0.3%
Total	**42.2**	**0.4%**

Sources: National Congress, Santander.

Background – Oil revenues to help for some time

- We see oil-related direct revenue at around 3.0% of GDP in 2022 considering the consolidated public sector. We estimate oil revenue elasticity by an error correction model at around 0.8. In the Figure below, we explore the different scenarios for international oil prices, keeping the exchange rate at BRL5.30/USD in the average (Brent at USD100/bbl). If oil prices rise further, the fiscal result tends to be even more favorable, with the possibility of recording a primary surplus, as occurred in 2021.

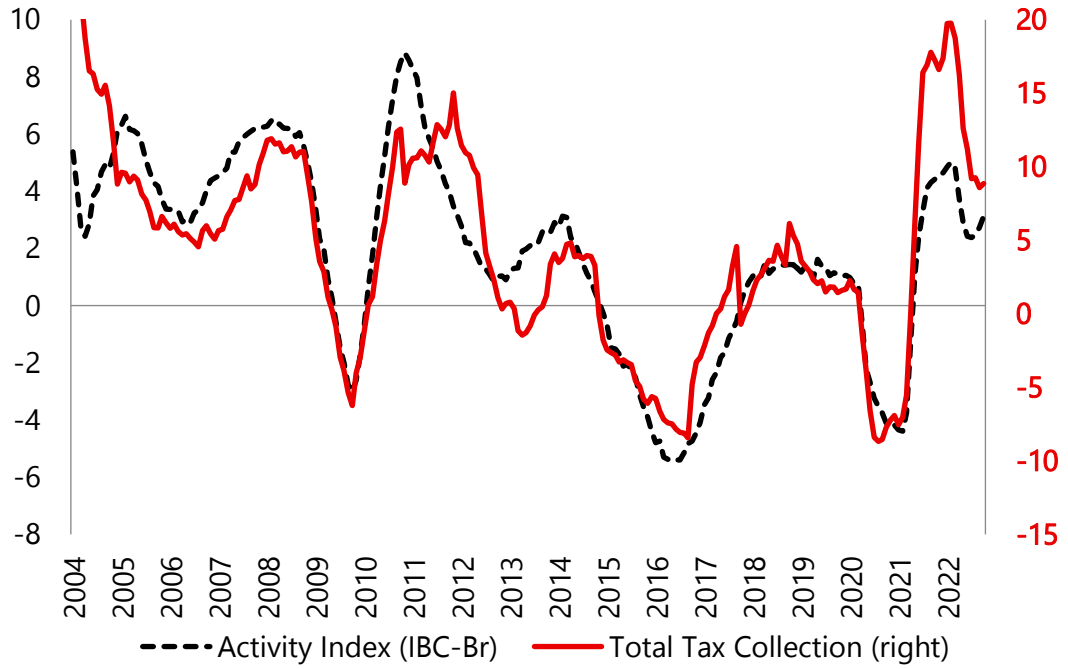
Consolidated Public Sector Oil Revenue – 2023



FX rate maintained at BRL5.30

Sources: Confaz, Santander.

Economic Activity and Tax collection

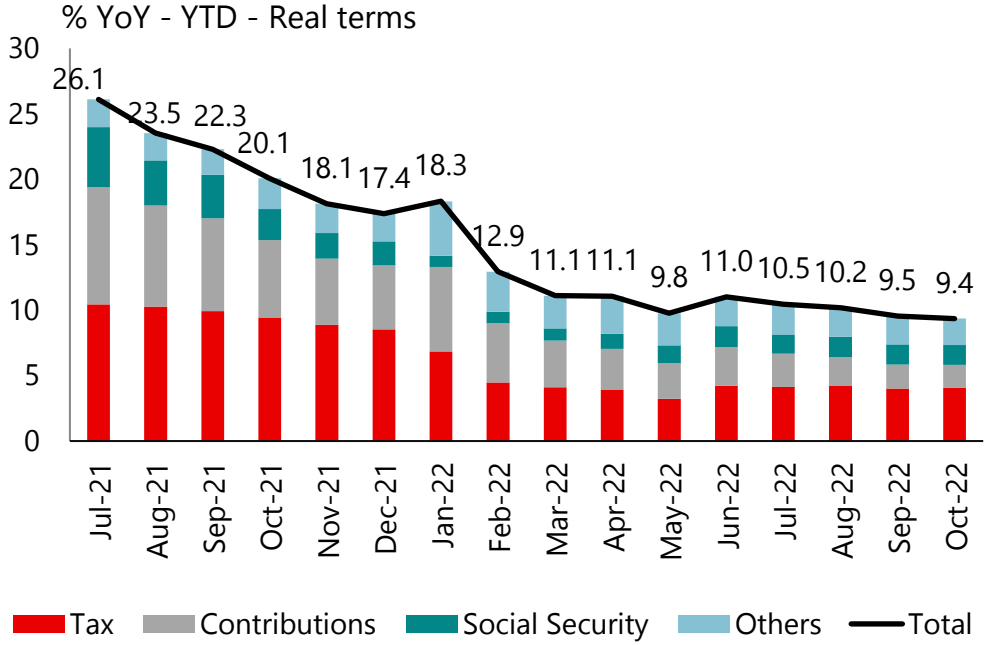


Sources: National Treasury, Santander.

Revenues Impact – Price Effect + Activity Recovery

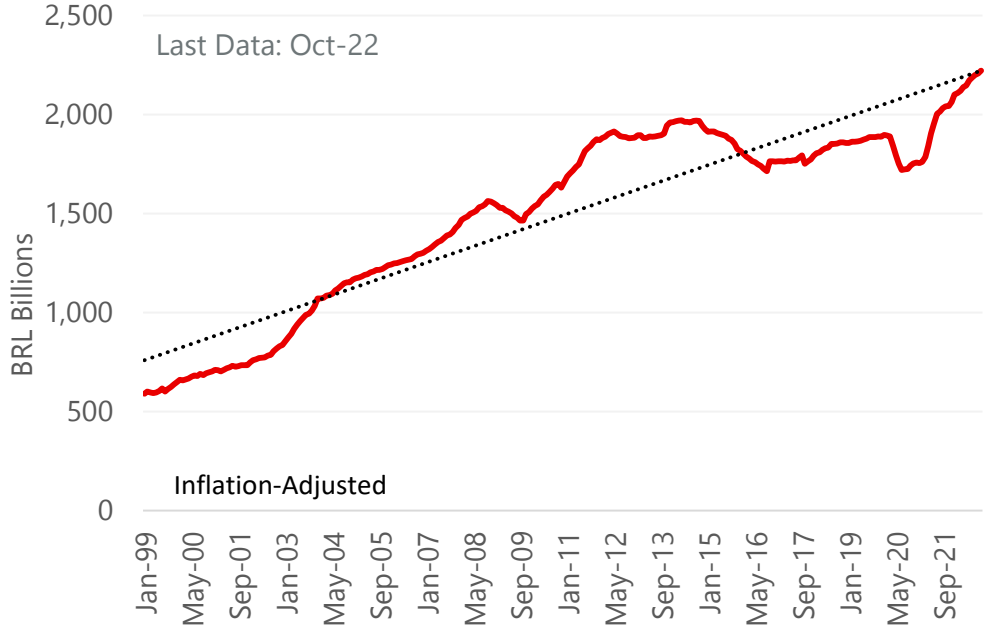
- We see a strong recovery in federal tax collection in recent months, mainly direct taxes linked to the corporate sector, which have posted good results. We can also observe that the increase in tax collection is highly correlated with sectors linked to the commodity boom, especially those related to metals & oil.
- In our view, we expect revenue growth to slow down 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 after the crisis recovery;

Federal Tax Revenue: Year-to-date (%YoY)



Sources: Brazilian IRS, Santander.

Total Federal Tax Collection –

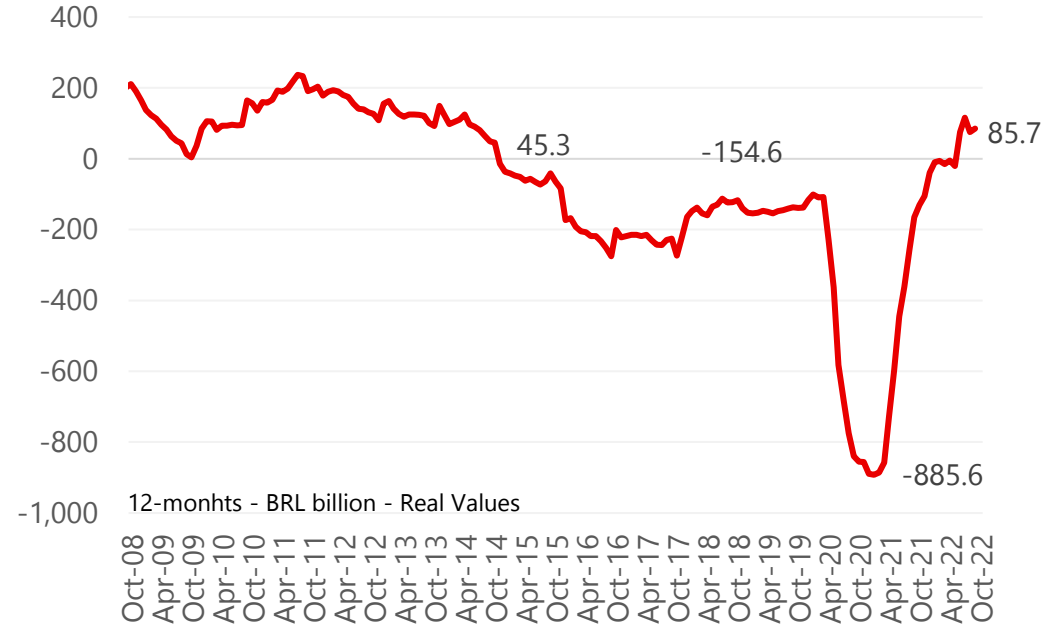


Sources: Brazilian IRS, Santander.

Central Gov. Primary Result

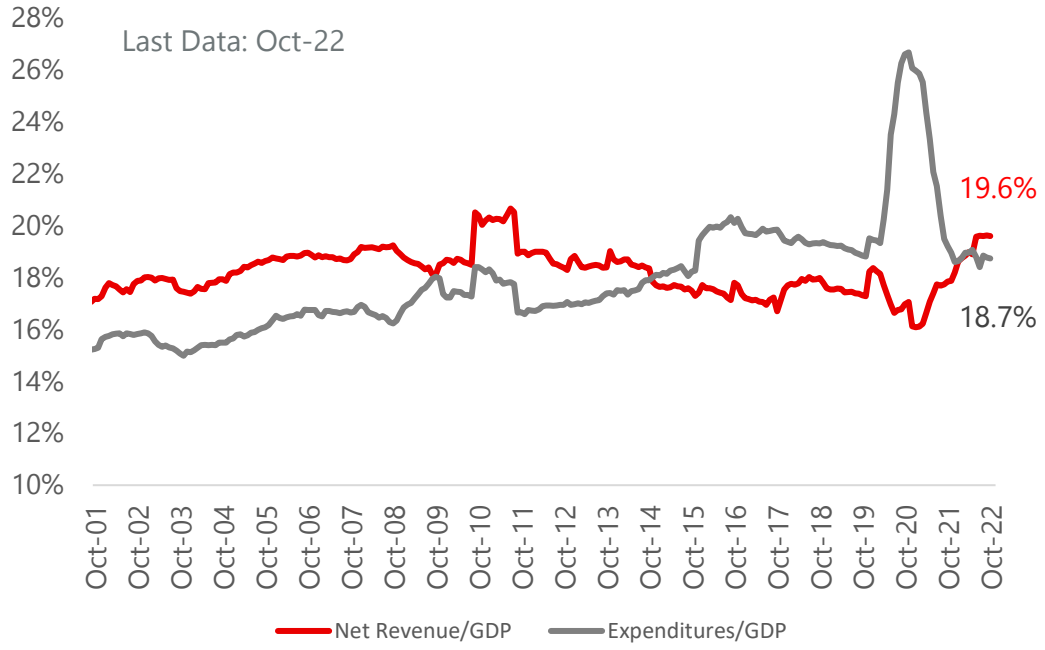
- The Central Government posted a BRL30.8 bn primary surplus in October (month with a seasonal favorable result due to higher corporate revenues). It was the best result for the month since 2016, and since 2012 in YTD terms. In the revenues, the result registered a positive performance (+4.4% YoY in the month and +12.8% YoY in YTD terms), particularly thanks to taxes based on corporate profits. On expenditure side, we observed 3.1% YoY rise in the month and +2.3% YoY in YTD terms.
- In YTD terms, the result totals a primary surplus of BRL64.4 billion, compared to a deficit of -BRL53.1 billion in the same period in 2021 (nominal terms). In the 12-month reading in real terms, the result reached a surplus of BRL85.7 billion (vs. R$85 billion in September) or 1.0% of GDP.

Central Gov. Primary Result - 12-month



Sources: National Treasury, Santander.

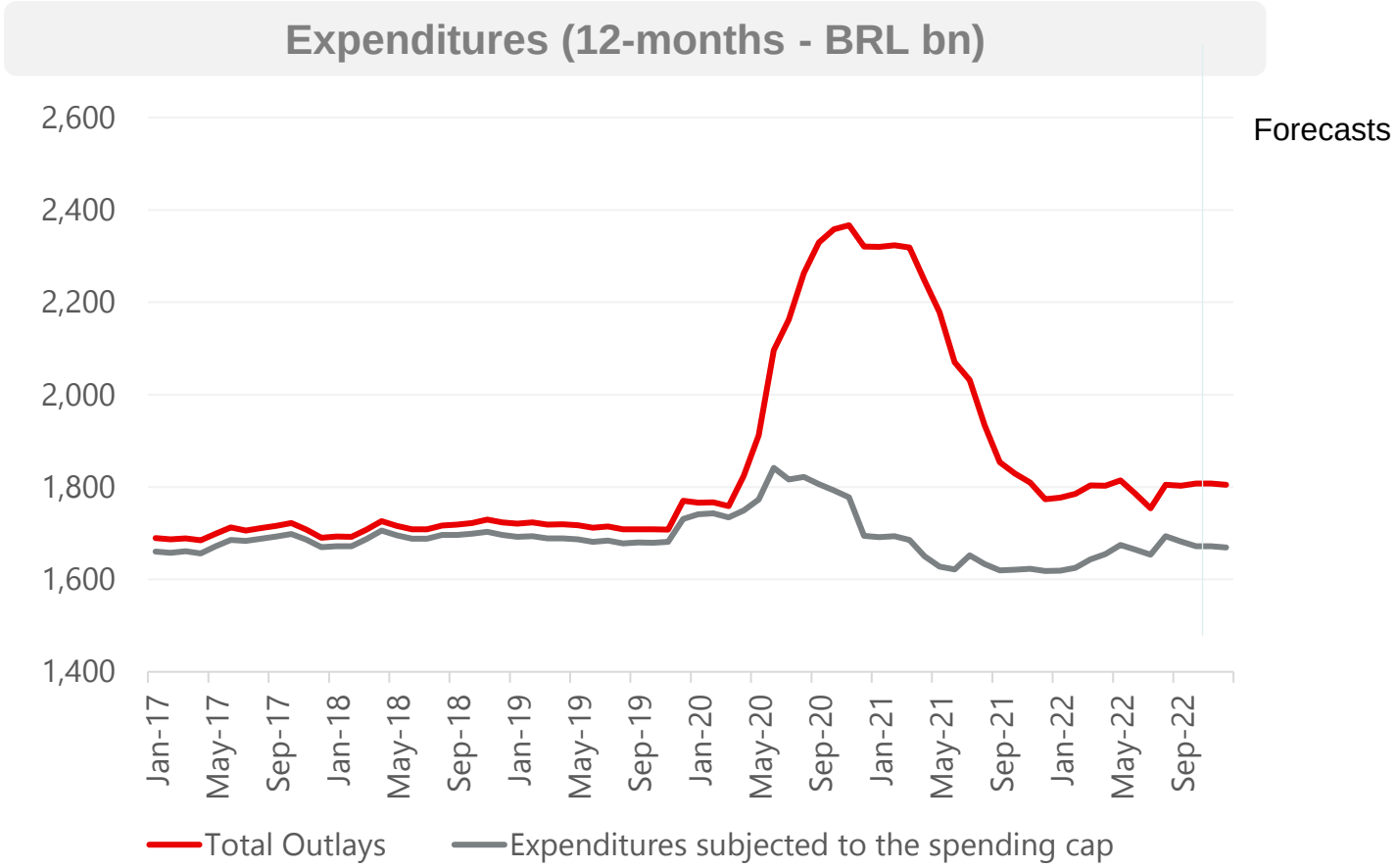
Breakdown of Fiscal Result



Sources: National Treasury, Santander.

Increase in the expenditures not subjected to the spending cap rule

- For a third year running, we have seen a constitutional amendment to increase fiscal stimulus outside the constitutional spending cap limit (for which we currently see no fiscal margin for additional outlays). This year was approved a legislation would entail BRL42 billion in government spending outside the spending cap, up from an original estimate of BRL35 billion. Next year there is a debate to create a fiscal waiver above BRL140 billion.

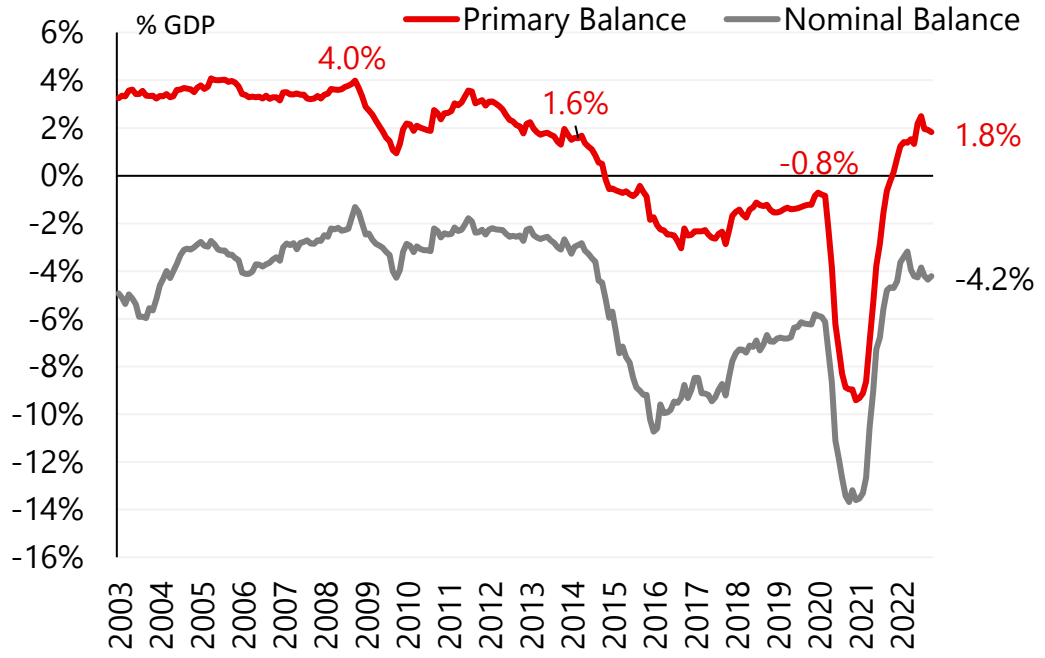


Sources: National Treasury, Santander.

Public Sector Primary Result Improving with the Price-effect

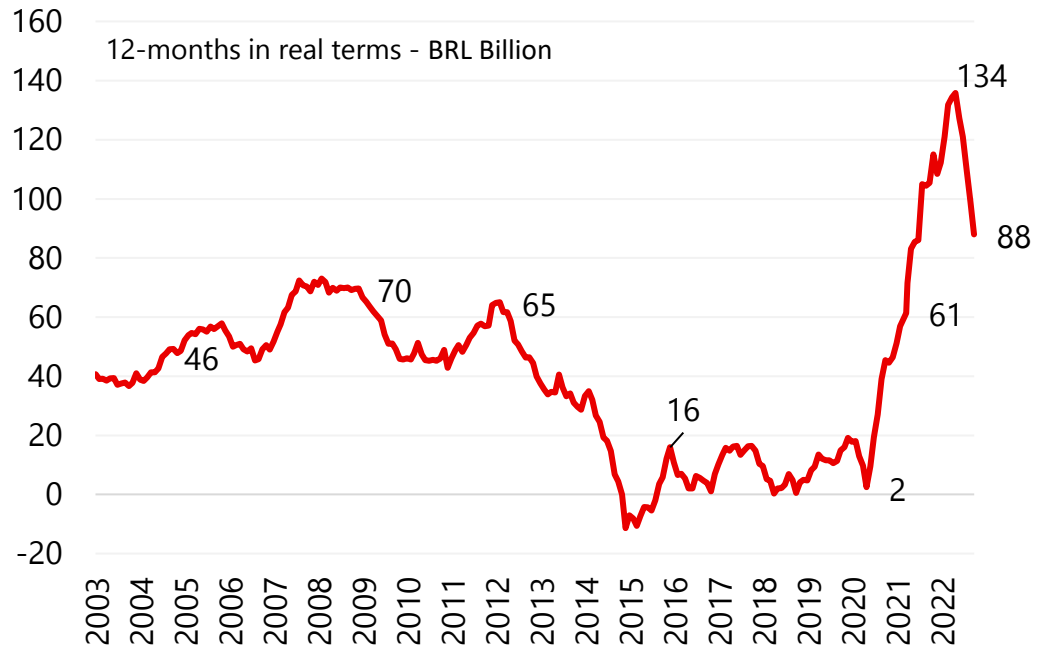
- On November 30, the Brazil Central Bank (BCB) unveiled the consolidated public sector's fiscal balance for October. For the month, the public sector posted a primary surplus of BRL27.1 billion, in line with our forecast (BRL26.2 billion) and matching the market median (BRL27.1 billion). Even in a favorable month with respect to seasonality, regional governments registered a deficit of BRL3.9 billion (close to our call of BRL4.3 billion), due to the impact of reduced revenue, after legislation capped the VAT (ICMS) tax on essential goods. In nominal terms, the state's revenue dropped 12.2% YoY in the month.

Public Sector – 12m % GDP



Sources: Brazilian Central Bank, Santander.

Regional Gov. – Primary Result

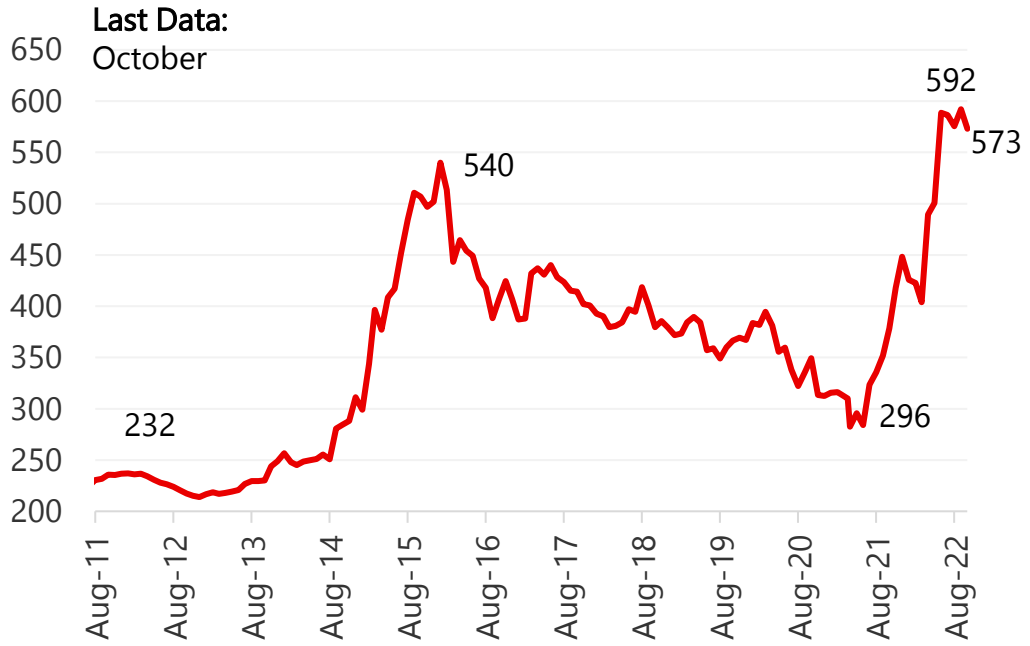


Sources: Brazilian Central Bank, Santander.

Increase in Interest Payments should pressure the debt ahead

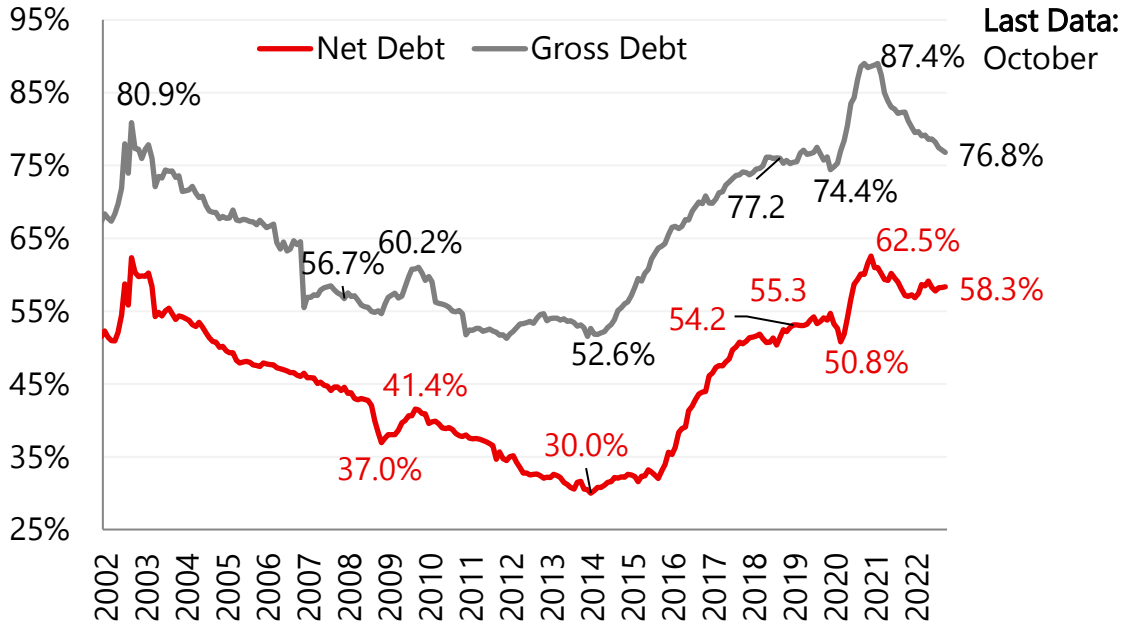
- Interest payments totaled BRL41.6 billion in October, compared to BRL60.4 billion in same month of last year. The decrease was influenced by the result of FX swap operations (a gain of BRL12.8 billion in October 2022 and a loss of BRL12.9 billion in October 2021). In the 12-month period up to October, the nominal result totaled BRL400 billion (4.2% of GDP), up 0.15pp from September.
- Debt registered mixed results in September. Gross debt fell to 76.8% of GDP (-0.3 p.p. in the month), with an increased nominal GDP. Net debt remained flat at 58.3% of GDP. Voluntary deposits in the BCB (not included in debt statistics) shrank 0.2pp, to 0.8% of GDP.

Nominal Interest Result – BRL billion



Sources: Brazilian Central Bank, Santander.

Public Sector Debt (12m % GDP)



Sources: Brazilian Central Bank, Santander.

Fiscal – Short-term relief with price shock, challenges ahead

Central Gov. Primary Balance																
Fiscal Items (% of GDP)	2017	2018	2019	2020	2021	2022e	2023e	2024e	2025e	2026e	2027e	2028e	2029e	2030e	Δ 26-17	Δ 30-17
Total Revenue	21.0	21.2	22.1	19.3	21.7	23.4	22.1	22.3	22.5	22.9	22.9	23.0	23.0	23.0	1.9	2.0
Revenues Collected by the IRS (1)	12.7	12.9	12.8	11.8	13.4	14.0	13.4	13.3	13.4	13.6	13.7	13.6	13.6	13.6	1.0	0.9
Net Social Security Revenues (2)	5.7	5.6	5.6	5.3	5.2	5.4	5.7	5.7	5.8	5.9	5.9	5.9	5.9	5.9	0.2	0.2
Revenues Not Collected by the IRS (3)	2.6	2.7	3.7	2.1	3.1	4.1	3.0	3.3	3.3	3.4	3.4	3.4	3.4	3.4	0.7	0.8
Transfers by Revenue Sharing	3.5	3.7	3.9	3.5	3.9	4.6	4.4	4.4	4.3	4.3	4.3	4.2	4.2	4.1	0.8	0.6
Net Revenue	17.5	17.6	18.2	15.8	17.7	18.9	17.7	17.9	18.2	18.6	18.7	18.8	18.8	18.9	1.1	1.3
Total Expenditure	19.4	19.3	19.5	25.6	18.1	18.2	19.2	19.2	19.0	19.0	18.7	18.5	18.3	18.1	-0.5	-1.3
Social Security Benefits (4)	8.5	8.4	8.5	8.7	8.0	8.0	8.4	8.5	8.4	8.5	8.5	8.4	8.4	8.4	0.1	-0.1
Payroll (5)	4.3	4.3	4.2	4.2	3.7	3.5	3.5	3.6	3.5	3.6	3.5	3.5	3.5	3.4	-0.8	-0.9
Other Mandatory Expenses (6)	3.0	2.9	2.6	9.5	3.4	3.1	2.9	3.0	2.9	2.8	2.7	2.7	2.6	2.6	-0.2	-0.4
Expenses with Cash Control (7)	1.9	2.0	1.9	1.8	1.6	2.0	3.1	2.9	2.8	2.8	2.7	2.7	2.6	2.5	0.9	0.6
Discretionary Expenses (8)	1.8	1.8	2.2	1.4	1.4	1.7	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	-0.4	-0.5
Central Gov. Primary Balance	-1.9	-1.7	-1.3	-9.8	-0.4	0.6	-1.5	-1.3	-0.8	-0.3	0.0	0.3	0.5	0.8	1.5	2.7
Public Sector Primary Balance	-1.7	-1.5	-0.8	-9.4	0.7	1.3	-1.5	-1.2	-0.7	-0.3	0.0	0.3	0.6	0.8	1.3	2.5
Nominal GDP (BRL billion)	6,585	7,004	7,389	7,610	8,899	9,917	10,407	10,899	11,494	12,121	12,820	13,587	14,399	15,260	5,536	8,674

*IRS - Brazilian Internal Revenue Service

Notes and Hypothesis

(1) Elasticity: Revenues-GDP 2021: 1.7 | 2022: 1.3 | Long-term: 1.05. We see a slowdown in extraordinary revenues from 2023 onwards. Potential GDP: 1.5% (until 2026), 2.0% (after 2026). Inflation: Center target (3.0%), GDP deflator (3.9%). (2) Faster recovery in the formal labor market and earnings (better short-term numbers). (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. 4) A permanent fiscal waiver of BRL150 billion in 2023. We assume a fiscal rule that incorporates the waiver for 2023 as a permanent shift in the constitutional spending cap, which remains indexed to IPCA inflation up to 2026. 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 5 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 (repressed by the pandemic). (5) Gradual increase in admissions (faster than the previous scenario, 70% instead of 55%) to the federal workforce ("normalization"). In the short-term (2024-25) decomposition of 80%, We included the 5% increase in mid-2023 and 2024, after that is decreasing gradually to 3% in Medium-term. Long-term: digitalization effects contain the increase. (6) Includes: higher payments in Court-ordered debt budget (including in the fiscal rule) – better management with a reduction in long-term, rise in federal contribution to Fundeb (Educational Fund), BPC (pension benefit). Court-ordered debts to accumulate to 1.6% of GDP by 2026, with the government negotiating future payments. (7) The main change was the increase in the welfare program (*Auxílio Brasil*). 2022 budget: BRL90 billion (from BRL35 bn of the former Bolsa Família). For 2023 onwards a more efficient and focalized welfare program (gradual reduction in outlays after 2024), yet with an increase to BRL175 billion. (8) Discretionary Expenses maintained at ~1.3% - 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.

There is no silver bullet in terms of fiscal reforms

Rolling Impact of some fiscal measures (% GDP)	2023	2024	2025	2026
Revenues				
Tax Reform (Broad Reform)	**0.1**	**0.3**	**0.7**	**0.9**
Profits & Dividends (Aliquot of 15%)	0.3	0.6	0.9	1.1
Personal income tax exemption (BRL1,903 to BRL 2,500 per month)	-0.3	-0.5	-0.8	-1.1
10% linear drop in tax exemptions	0.2	0.4	0.6	0.8
End of JCP payment deduction ("Interest on Equity Capital")	0.1	0.2	0.3	0.4
Limit on tax deductions (private health)	0.1	0.2	0.3	0.3
Changes in Personal Income Tax (35% on earnings > BRL25k per month)	0.1	0.1	0.2	0.2
Eletrobras Capitalization (could happen in 2022, one-off)	0.3	0.0	0.0	0.0
Exclusive Funds (one-off)	0.2	0.0	0.0	0.0
Expenditures				
Administrative Reform	**0.0**	**0.1**	**0.1**	**0.2**
Min. Wage De-indexation (social benefits)	0.2	0.4	0.6	0.8
End of Wage Bonus 'Abono' (for formal workers)	0.2	0.4	0.6	0.7
End of Wage Bonus 'Abono' (only above 1 Min. Wage)	0.1	0.2	0.3	0.4
Extending grace period: unemployment insurance benefit	0.1	0.2	0.3	0.4
Freezing of social security benefits (only above 3 Min. Wages)	0.04	0.07	0.10	0.13
Public sector wage ceiling	0.0	0.1	0.1	0.1

Sources: The National Treasury Secretariat, Ministry of Economy and Santander estimates.

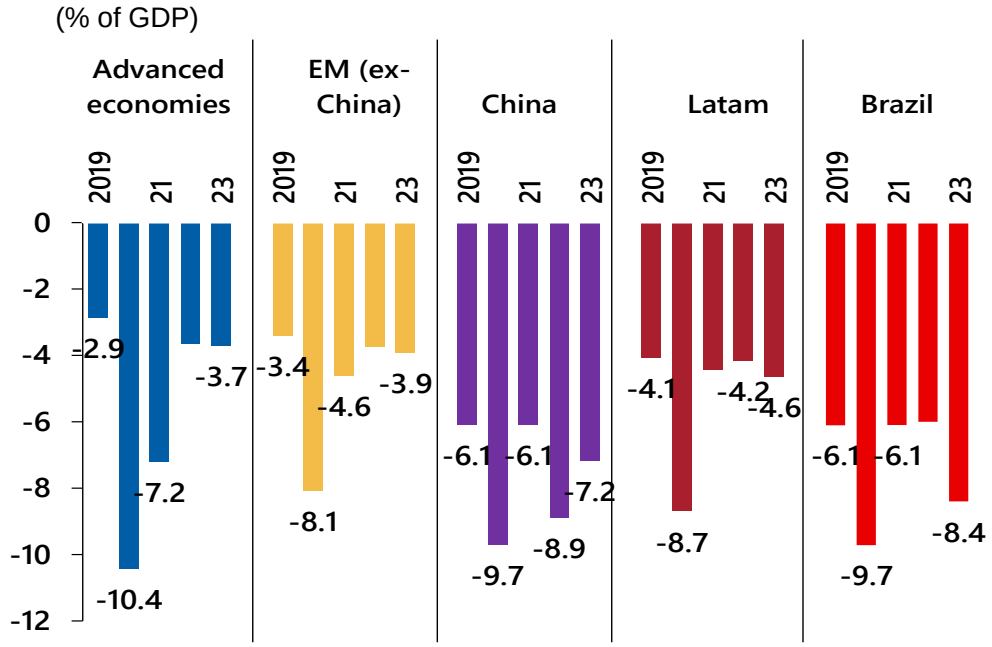
International Comparison

06

International Comparison – Increase in interest rates

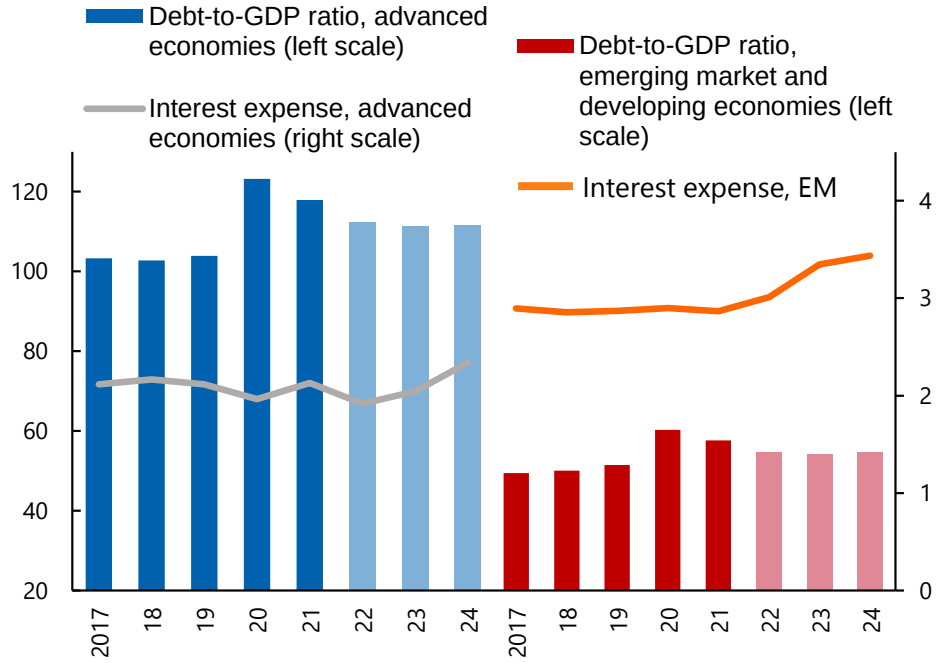
- The effect of current monetary tightening on fiscal accounts

National Budget Balances by Income Group



Sources: IMF, Santander.

National Gross Debt and Interest Expense by Income Group

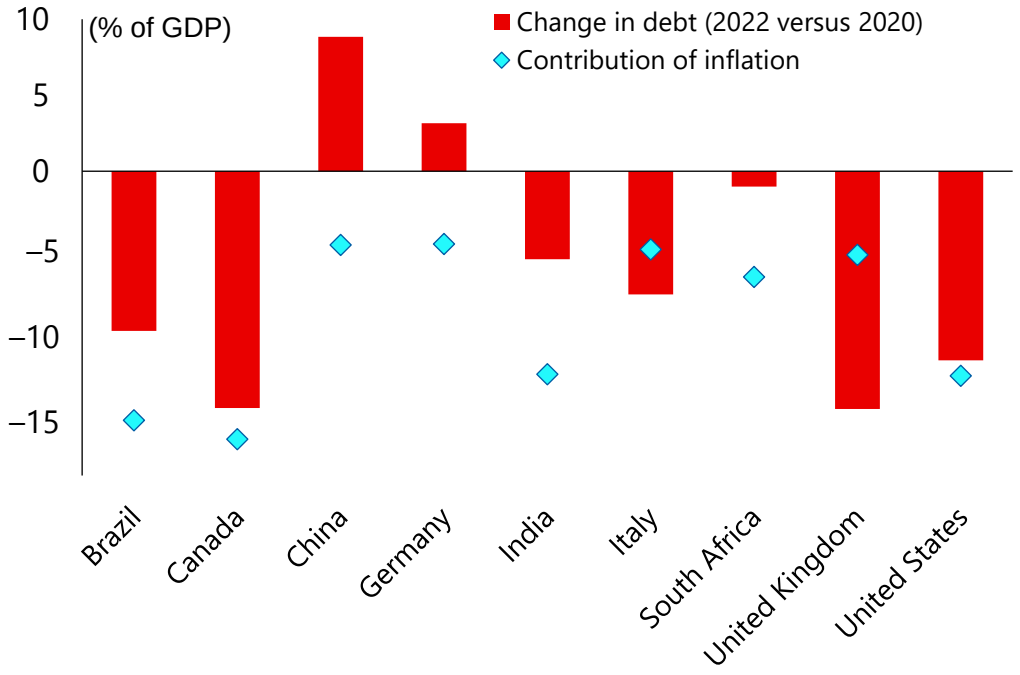


Sources: IMF, World Economic Outlook; IMF staff calculations. Note: China is excluded. Bars for 2022–24 are projected data.

International Comparison – Inflation impact on Fiscal

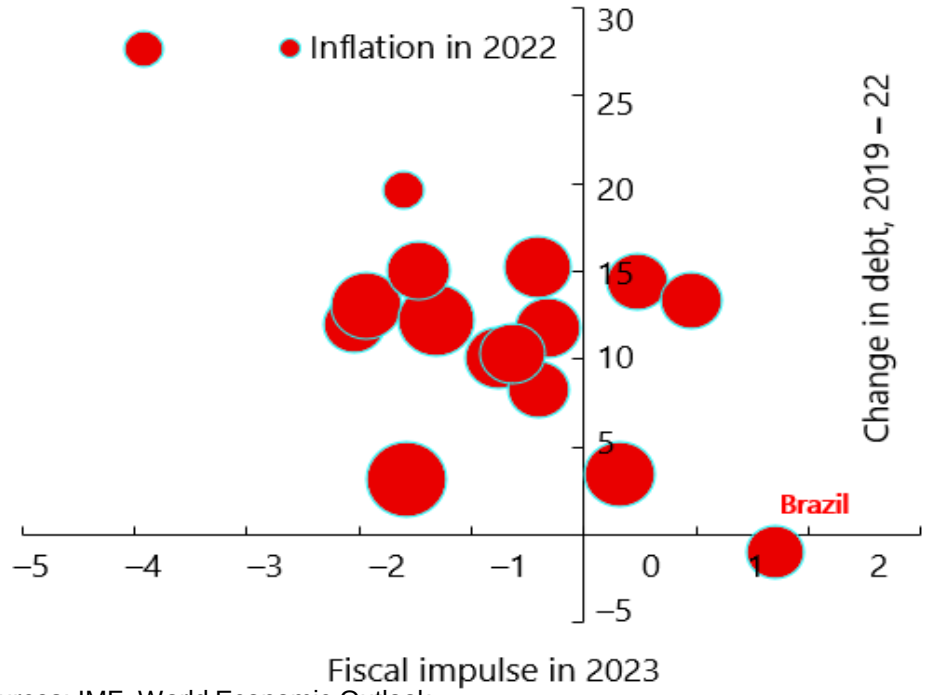
- Inflation had an effect on fiscal accounts.

Effect of Inflation Shock on the Debt Ratio



Sources: IMF, Santander.

Fiscal Impulse, Inflation, and Debt for G20 Countries

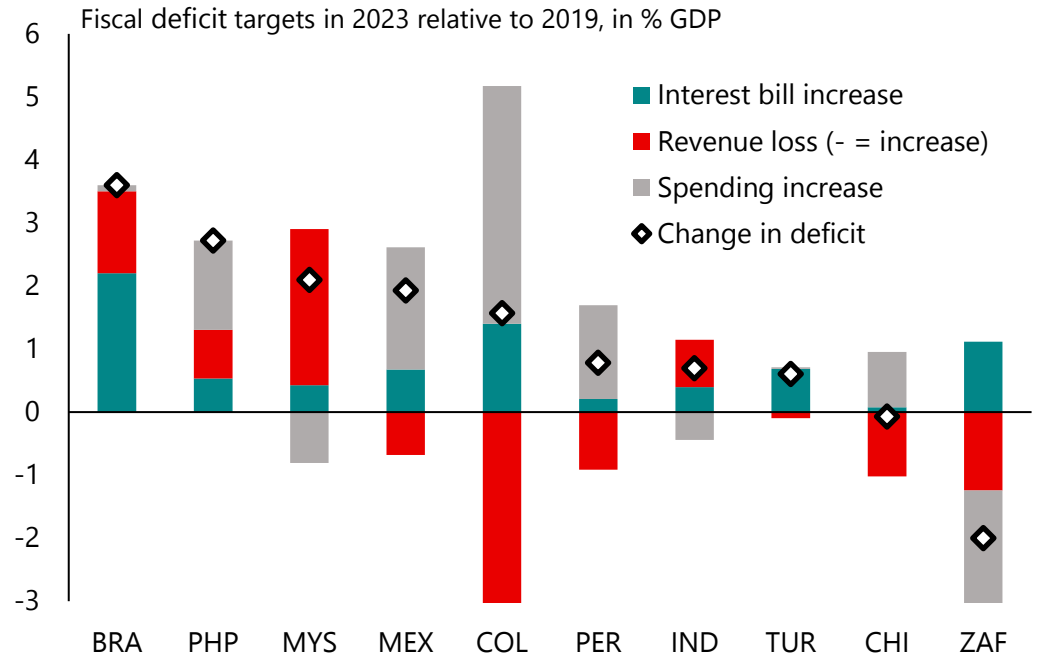


Sources: IMF, World Economic Outlook.
Note: Includes Spain; excludes Argentina, Russia, Saudi Arabia, and Tűrkiye. Fiscal impulse is measured by the change in the cyclically-adjusted primary balance. The size of the bubble reflects the inflation rate.

International Comparison – The EM Fiscal Outlook in 2023

- Change in EM fiscal accounts for 2023

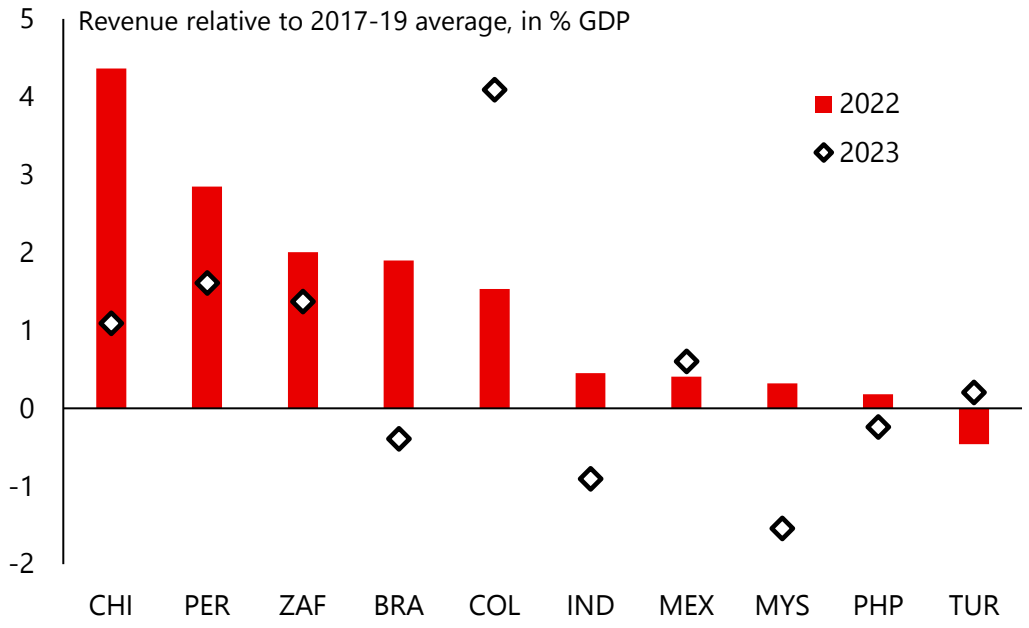
Larger Fiscal Deficits in 2023



Sources: Haver, IIF, Santander

For Brazil: Our estimate.

EM Revenues: favorable winds from *commodities*



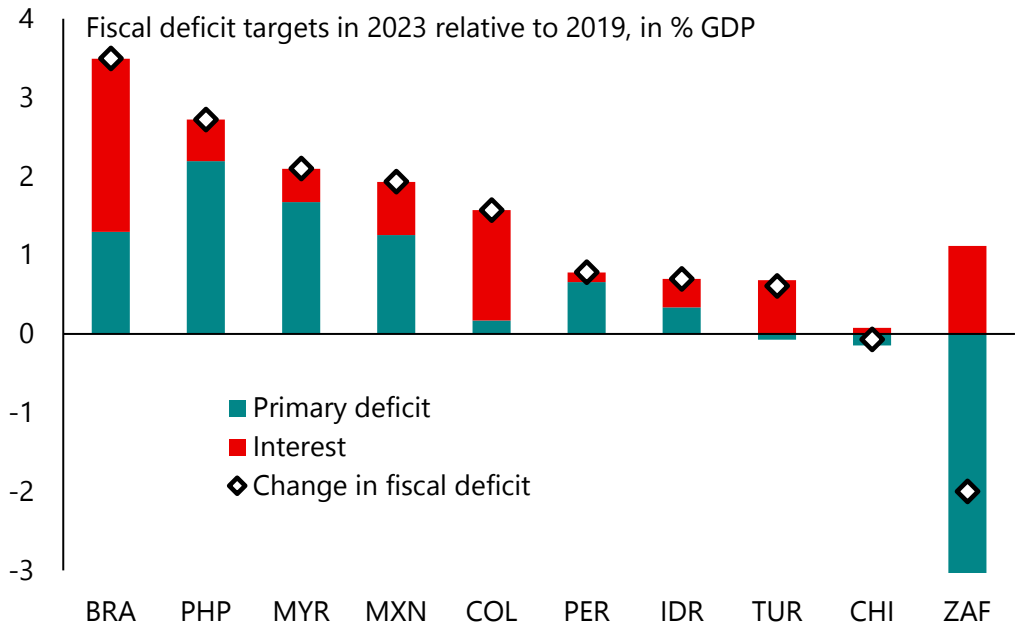
Sources: Haver, IIF, Santander

For Brazil: Our estimate.

International Comparison – The EM Fiscal Outlook in 2023

- Change in EM fiscal accounts for 2023

Changes in Fiscal Deficit Target



Sources: Haver, IIF, Santander

For Brazil: Our estimate.

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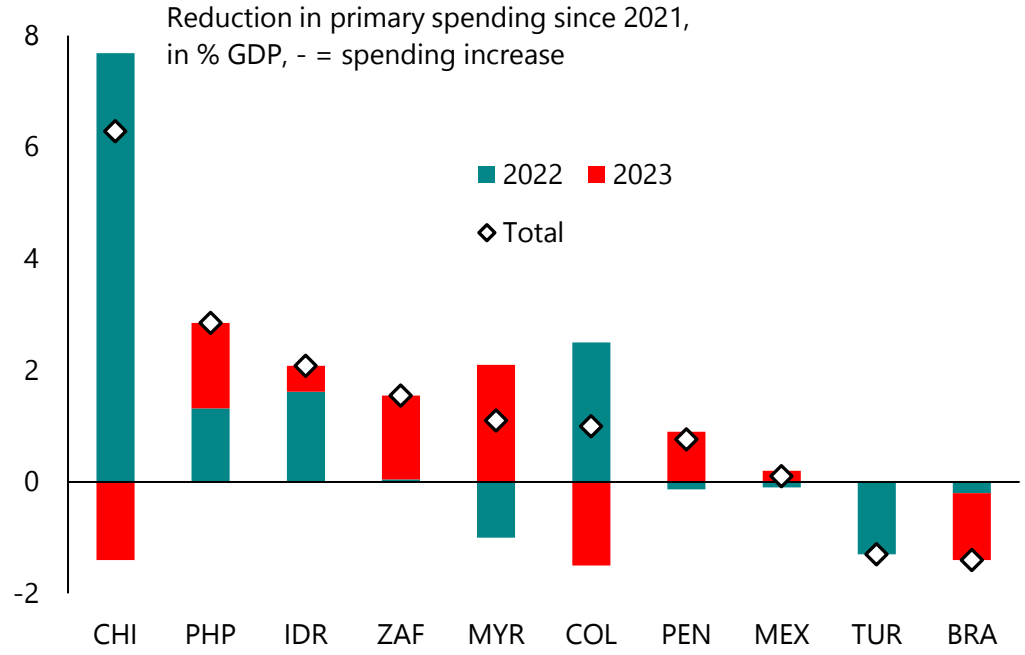


Sources: Haver, IIF, Santander

For Brazil: Our estimate.

Public Debt Scenario and Simulations

07

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 4.0%, 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 ~2.5-3.0pp 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: ~8.4%,
. GDP: 3% in 2022 and 0.8% in 2023

Liquidity reserves close to 10 months of debt maturities

Increase in debt cost (Selic + IPCA)

- **Steady-state:**

According to our hypothesis:
. Real interest rate at +4.0%
. Potential GDP at +1.5% until 2026,

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

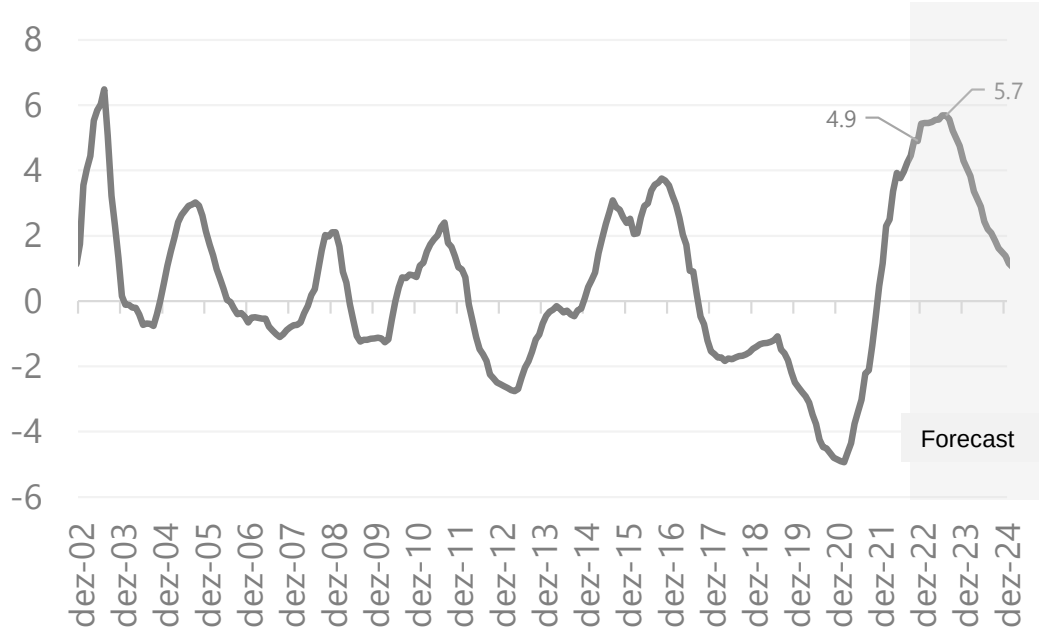
		Real Interest Rate						
		1.0%	*2.0%*	*3.0%*	*4.0%*	*5.0%*	*6.0%*	*7.0%*
GDP Growth	*0.0%*	0.8	1.6	2.4	3.2	4.0	4.8	5.6
	1.0%	0.0	0.8	1.6	2.4	3.2	4.0	4.8
	1.5%	-0.4	0.4	1.2	2.0	2.8	3.5	4.3
	1.8%	-0.6	0.2	0.9	1.7	2.5	3.3	4.1
	2.0%	-0.8	0.0	0.8	1.6	2.4	3.1	3.9
	2.5%	-1.2	-0.4	0.4	1.2	2.0	2.7	3.5

Sources: BCB, Santander.

Monetary Policy: No Change in Outlook for Now; Risks Skewed to the Upside

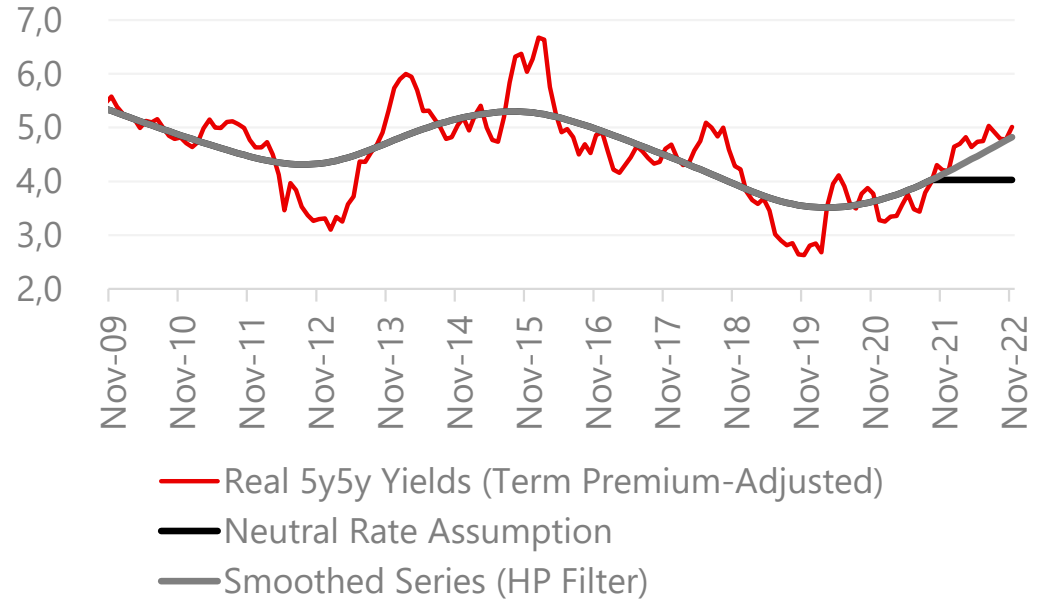
- We maintain our call for steady Selic rate all through the 1H23, with cuts starting in August (5th meeting of the year). We project Selic at 12.00% for YE2023 and 9.00% for YE2024.
- For now, our numbers imply the tightest monetary policy stance in more than 20 years, with neutrality only in 2025. However, the relapse of fiscal risks could increase the necessary dose of (nominal-rate) hikes to put the IPCA on track to meet the BCB's target.

Neutral Rates Could Be On The Rise



Sources: Brazilian Central Bank, Santander.

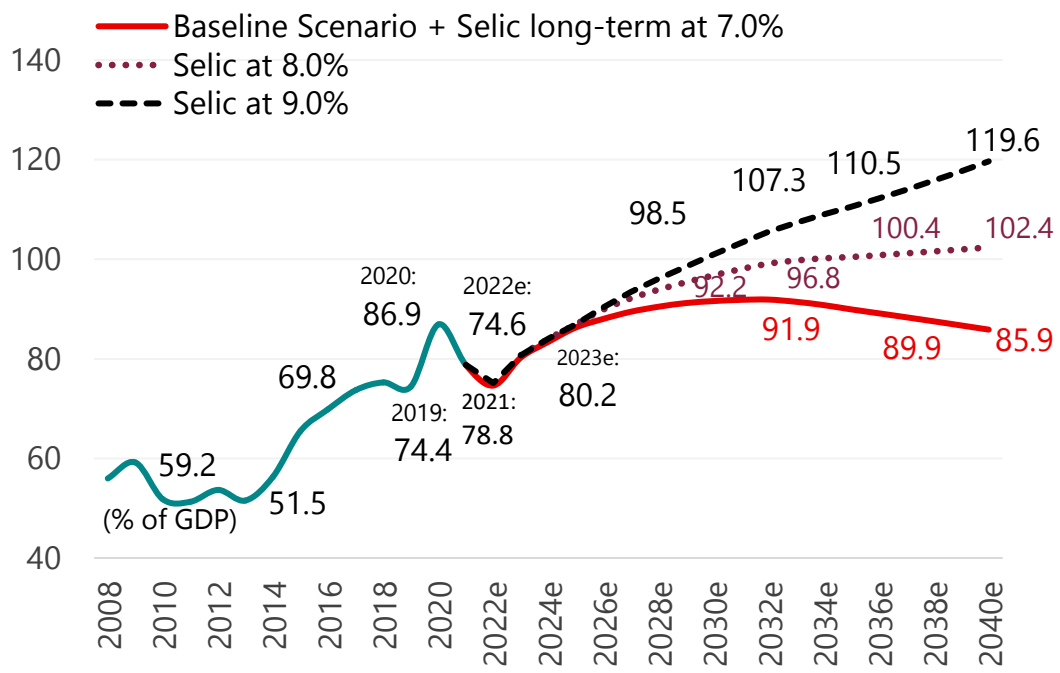
Neutral Rates Could Be Rising Further



Sources: Brazilian Central Bank, Anbima, Santander.

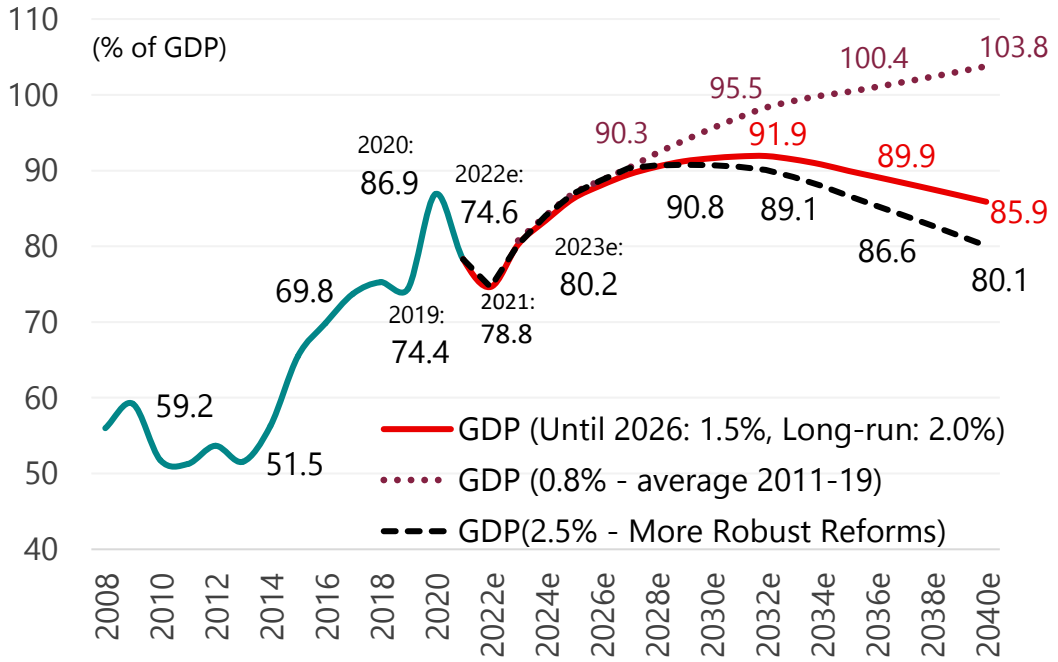
Debt Scenarios: Sensitivity to Changes in the Long Run Macro-outlook

Government Debt – Simulations for Selic Rate Hypotheses



Sources: BCB, Santander

Government Debt– Simulating for Trend GDP Hypotheses



Sources: BCB, Santander.

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

PEC Emergencial: Funds (+BRL150 billion for liquidity cushion in 2021 + BRL47 billion in 2022)

2022 GDP Deflator: 8.2% | GDP: 3% | Selic Rate: 13.75% | BNDES 60 billion | Voluntary Deposits 1.0% of GDP

2022 GDP Deflator: 3.8% | GDP: 0.8% | Selic Rate: 12% | BNDES zero | Voluntary Deposits 1.1% of GDP

2023-40: GDP deflator: 3.9%, which is Inflation target + 0.9%
(close to the average difference of the last decade between IPCA and GDP deflator)

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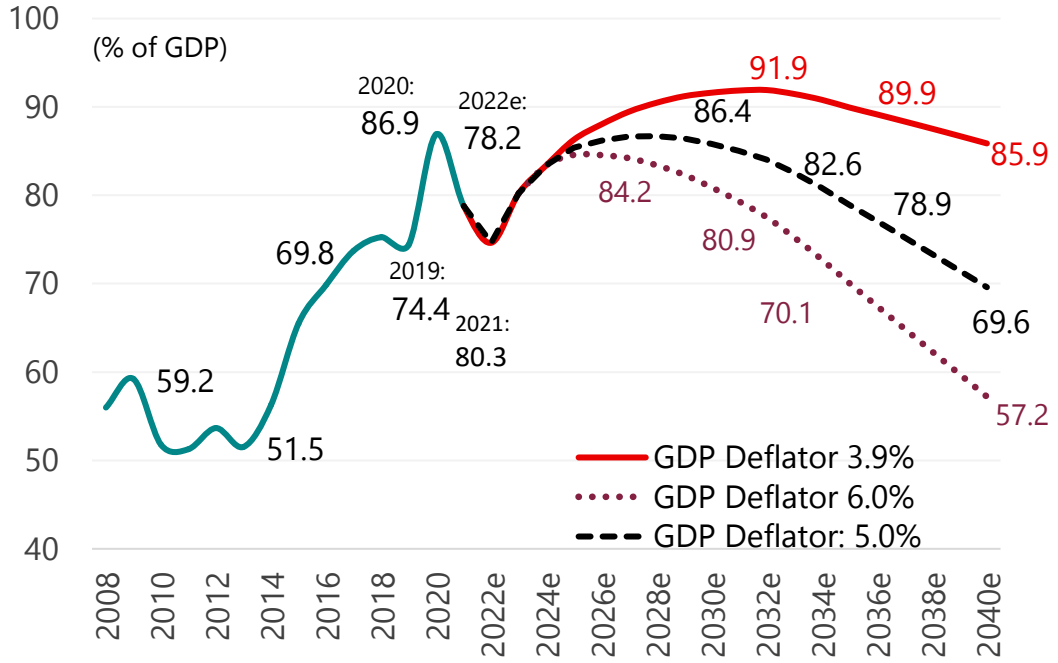
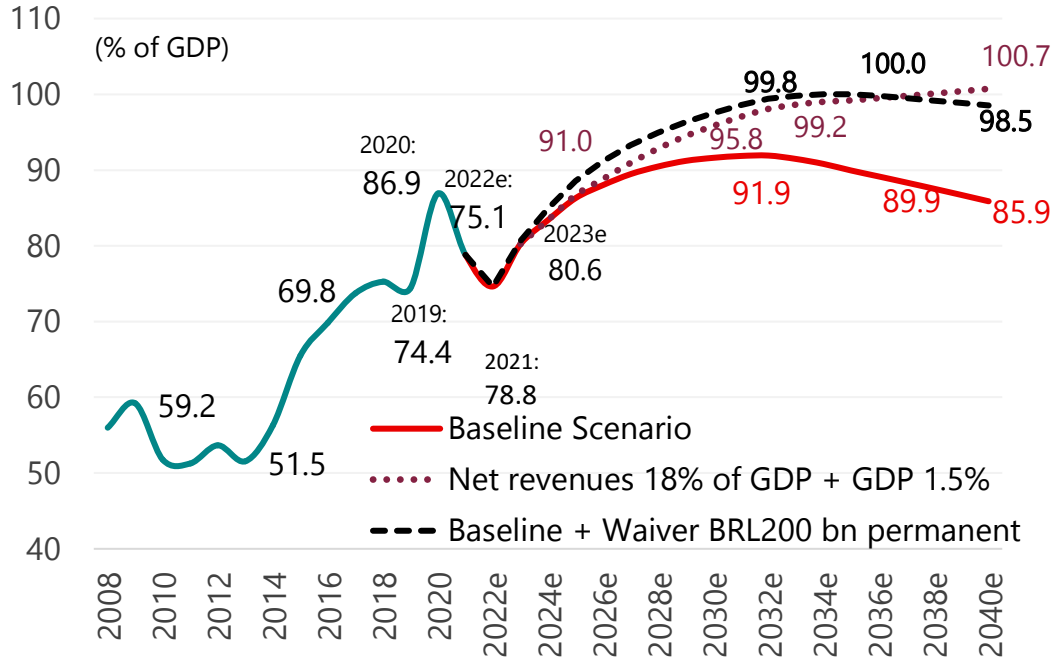
Debt Scenarios: Sensitivity to Changes in the Long Run Macro-outlook

Government Debt – Simulations for GDP Deflator



Sources: BCB, Santander

Government Debt– Scenarios Simulations



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Debt Management – Debt cost on the rise, liquidity reserves to navigate uncertainties

08

Annual Borrowing Plan 2022

- On November 25, the National Treasury published the monthly debt report for October. Weekly bond issuances reached R$22.5 billion through October. Net Issuance totaled -R$9.1 billion, marking the fourth consecutive month with negative net emissions. For the year, the value is at -R$284.6 billion. In October, we observed a high fixed rate bond (LTN) maturity (BRL106 billion). In the debt composition, floating rate bonds (37.9%) are the only kind that have a percentage of the total below the one estimated in the Annual Borrowing Plan (PAF, in Portuguese), at 38-42%.

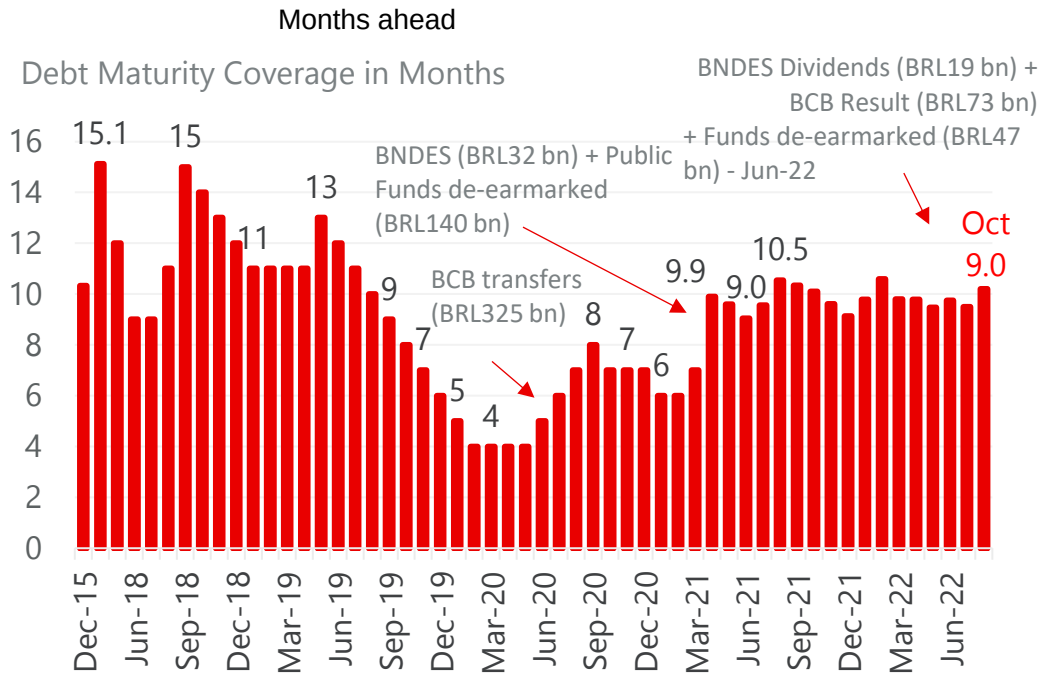
Annual Borrowing Plan (PAF 2022)								
	2020	2021	Sep-22	Oct-22	PAF 2022 range		PAF 2021 Revised (May21)	
Outstanding volume (BRL billion)					Min	Max	Min	Max
Federal Public Debt	5,010	5,614	5,752	5,778	6000	6400	5,500	5,800
Composition (%)								
Fixed-rate	34.8	28.9	28.2	27.1	24	28	31	35
Inflation-linked	25.3	29.3	29.9	30.4	27	31	26	30
Floating-rate	34.8	36.8	37.1	37.9	38	42	33	37
FX	5.1	5.0	4.7	4.6	3	7	3	7
Maturity Structure								
% maturing in 12 months	27.6	21	24	22.4	19	23	22	27
Average maturity (years)	3.6	3.8	4.0	4.0	3.8	4.2	3.4	3.8

Sources: National Treasury; Santander

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

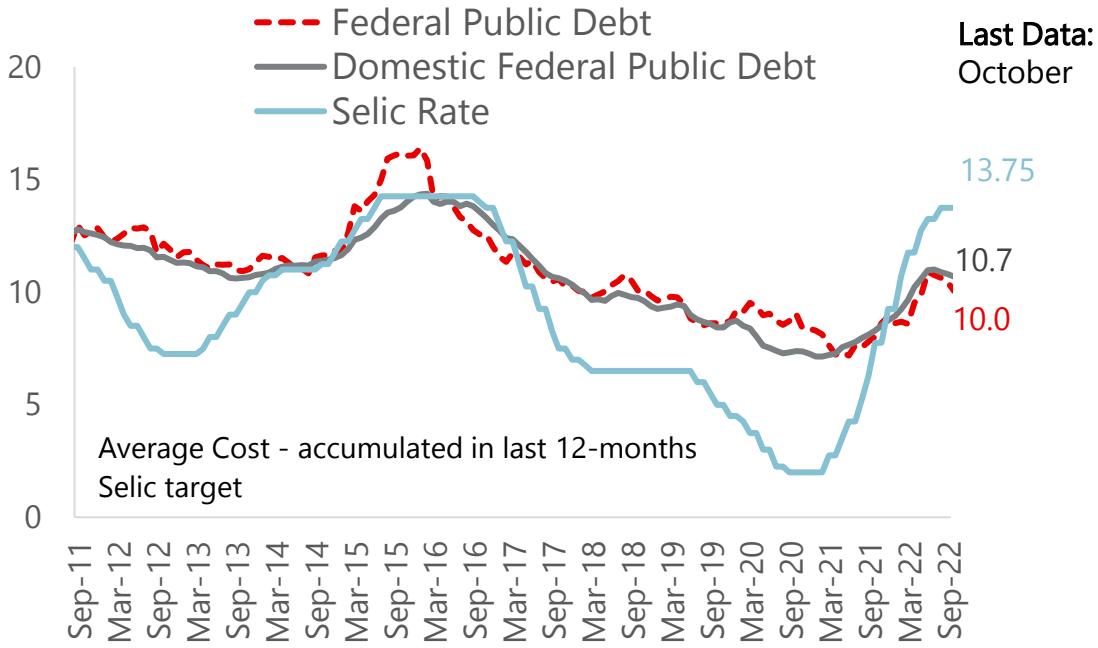
- With debt shortening it is important to keep the level of the liquidity cushion at comfortable levels.
- The domestic debt cost continued to rise, due to both inflation and Selic increase
- Public debt liquidity reserves dropped R$2.5 billion in September (-0.2% MoM in nominal terms), reaching R$1,029 billion and reflecting net issuances with a high level of bond maturities in the month. This level of liquidity reserves covers close to 9.0 months of debt maturities (from 9.6 in September).

Liquidity cushion coverage of domestic debt



Sources: National Treasury, Santander.

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

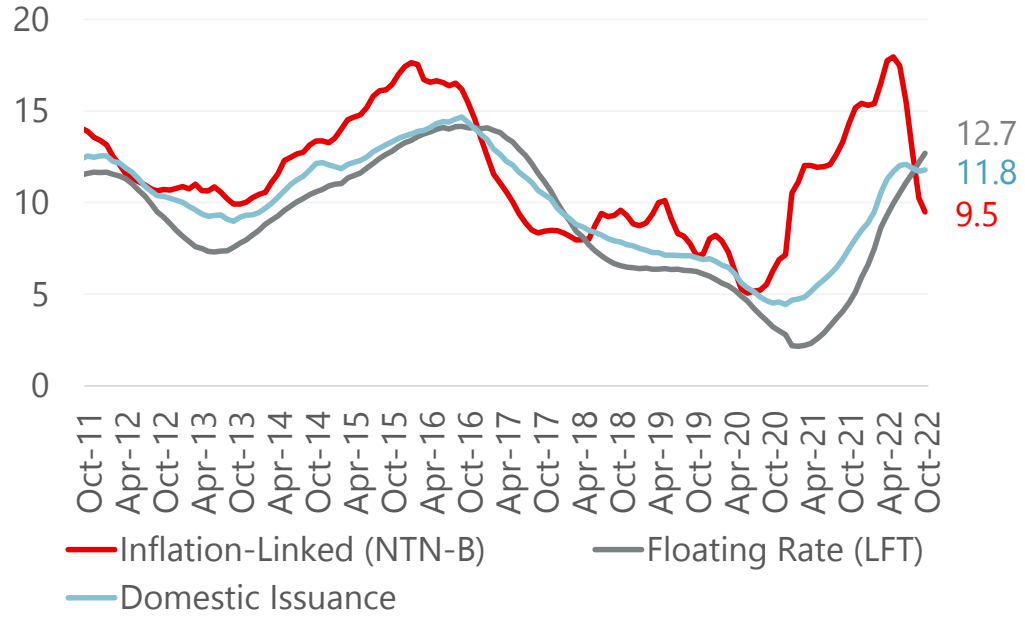


Sources: National Treasury, Santander.

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

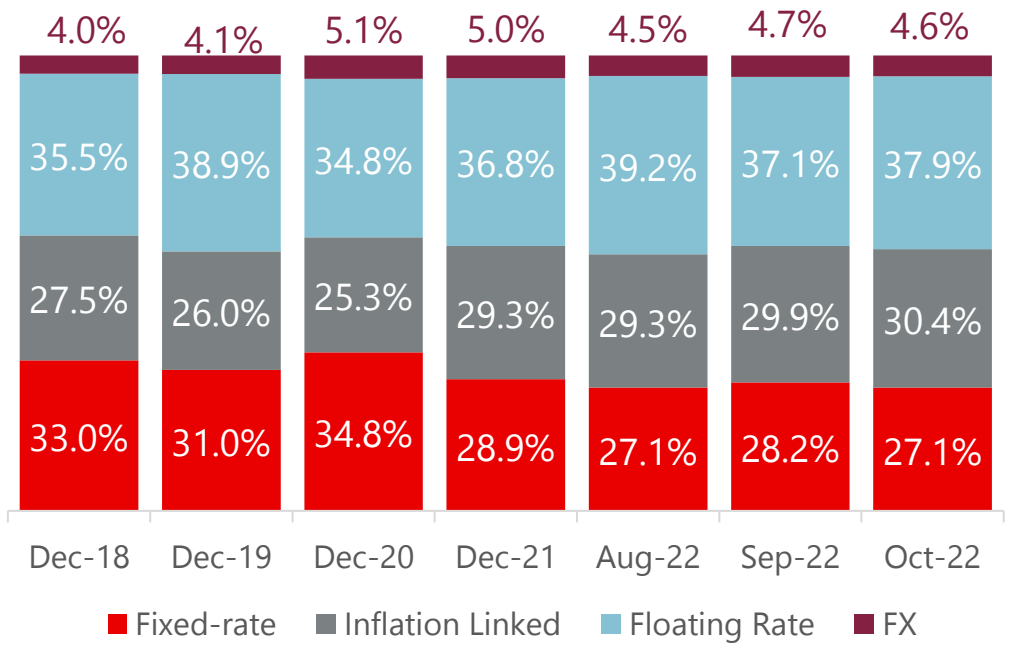
- The cost of new domestic issuances remained stable, at 11.8% p.a. vs. 11.7% p.a. in September. The debt cost of LFT bonds accumulated in the last 12 months increased to 11.6% (from 11.1% in September and 4.5% in December 2021), and the recent rise in the Selic rate (currently at 13.25%) could create additional pressure on debt costs in the coming months, in our view. The debt maturing through year-end totals R$22.8 billion, while R$1,267 billion is maturing in the next 12 months. We highlight the large maturity in January (R$293 billion, mainly in LTN bonds).

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



Sources: National Treasury, Santander.

Debt Profile - %

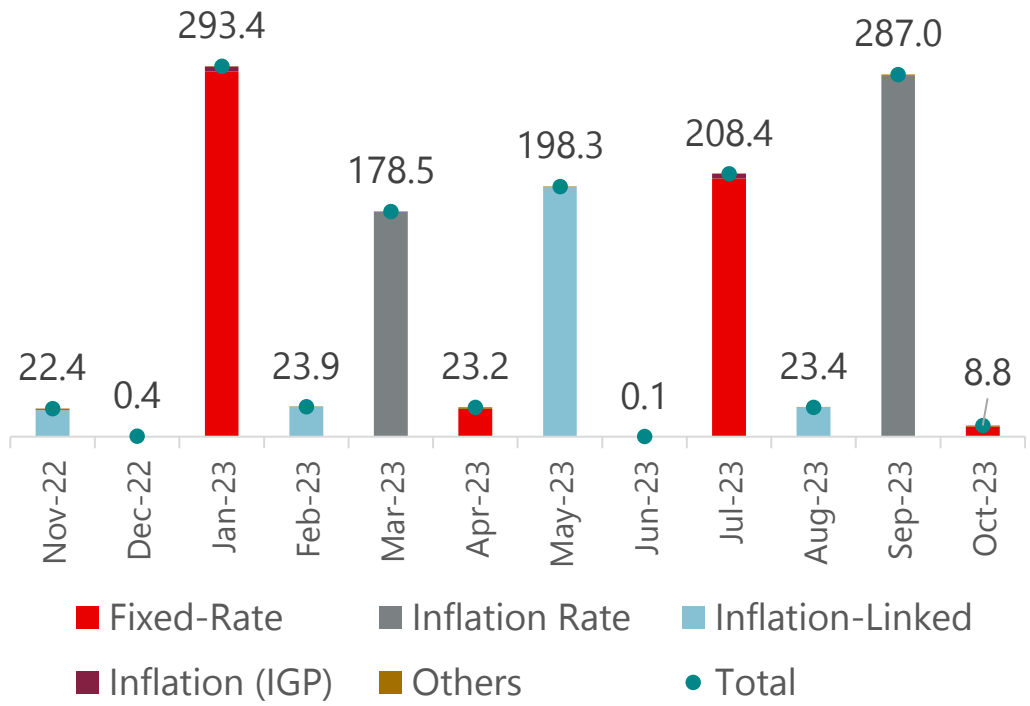


Sources: National Treasury, Santander.

Fiscal – The debt is at a higher level and with a shorter maturity

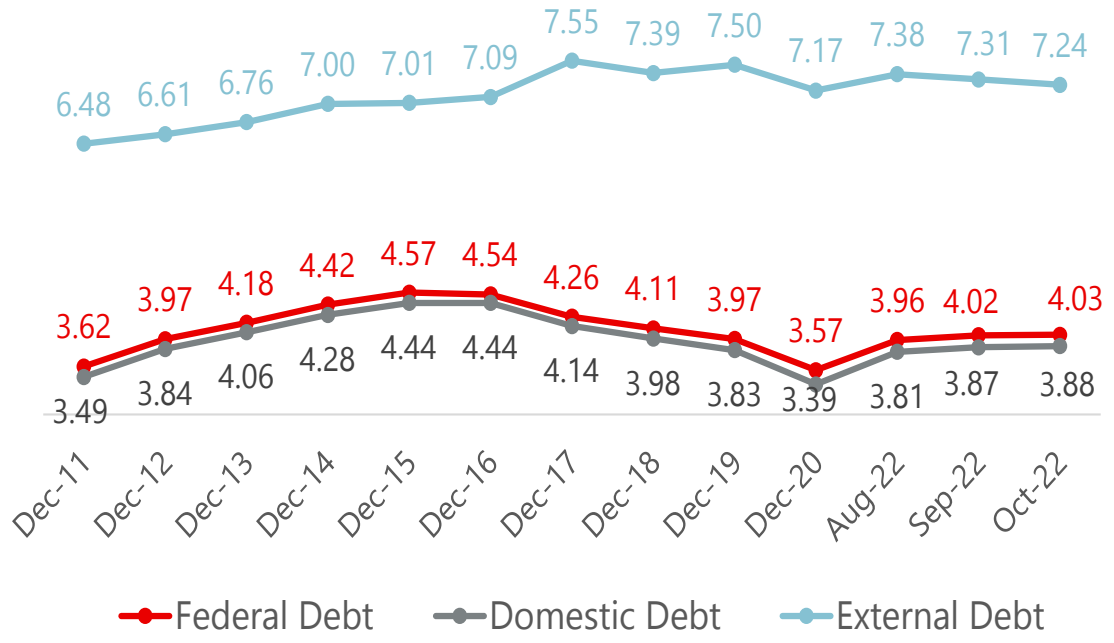
- Despite the increase in liquidity reserves the debt maturity level is still challenging. Structural reforms will help to increase debt maturity and reach a sustainable primary surplus.

Debt maturity - (BRL billion)



Sources: National Treasury, Santander

Average Maturity (years)

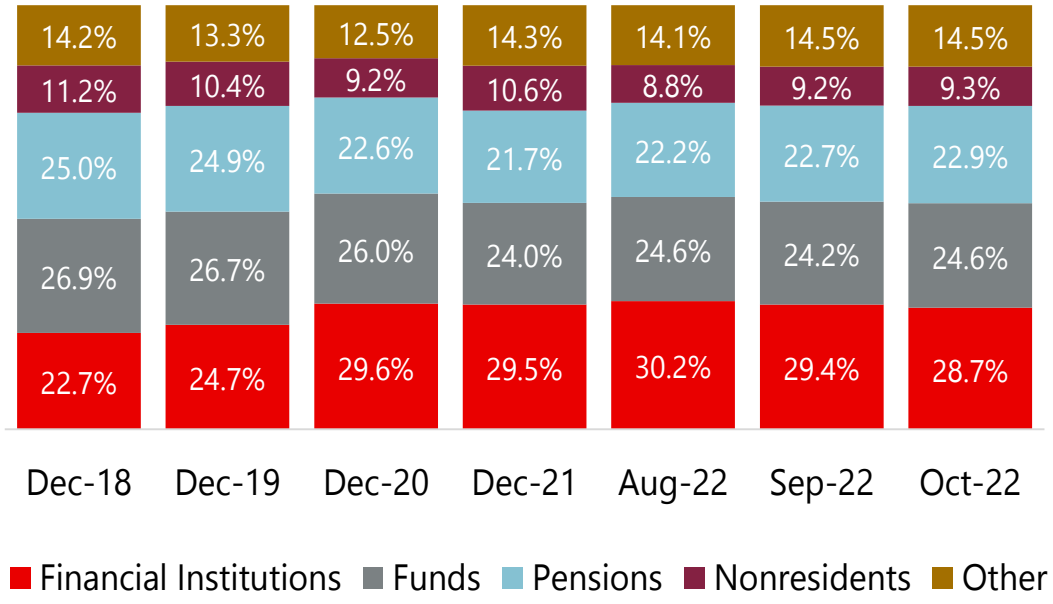


Sources: National Treasury, Santander.

Fiscal – Holders

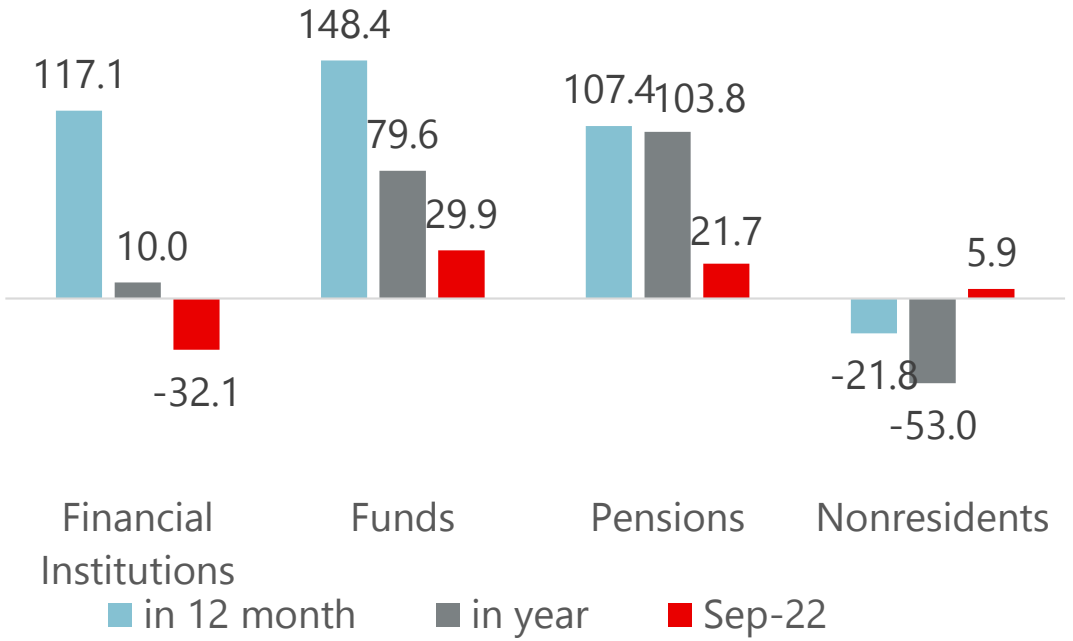
- Non-residents registered a positive flow of BRL5.9 bn in October, totaling -BRL53 bn in the year and -BRL21.8 bn in last 12m. The percentage as debt holders reached 9.3% (-1.3pp from Dec-21 and compared to 9.2% in Sep). Financial institutions continue to be the main holders (28.7%).

Debt Holders - (% Total Debt)



Sources: National Treasury, Santander

Debt Holders Change



Sources: National Treasury, Santander.

Tables - Forecasts

09

MACRO SCENARIO: Forecasts

Macroeconomic Variables		Previous		Current
GDP (%)	2022E	2.8	↑	3.0
	2023E	0.7	↑	0.8
	2024E	0.5	→	0.5
IPCA (%)	2022E	5.5	↑	5.8
	2023E	5.0	↑	5.4
	2024E	3.0	↑	3.5
Selic Rate (% end of period)	2022E	13.75	→	13.75
	2023E	12.00	→	12.00
	2024E	9.00	→	9.00
FX Rate - USDBRL (end of period)	2022E	5.30	→	5.30
	2023E	5.40	→	5.40
	2024E	5.50	→	5.50
Current Account Balance (% of GDP)	2022E	-2.1	↓	-3.1
	2023E	-2.2	↓	-3.1
	2024E	-2.4	↓	-3.4
Primary Fiscal Balance (% of GDP)	2022E	1.0	↑	1.3
	2023E	-1.4	↓	-1.5
	2024E	-1.2	→	-1.2
Gross Public Debt (% of GDP)	2022E	78.2	↓	74.6
	2023E	82.8	↓	80.2
	2024E	88.0	↓	83.4

Sources: IBGE, The National Treasury, BCB and Santander.

The forecasts refers to our latest Scenario Review

"Bigger GDP, Higher Inflation, and Increased Fiscal Concerns"
(sent on December 9, 2022)

For the full report click on the link:

https://bit.ly/Std-scenreview-dec22

MACRO SCENARIO: Santander Brazil's Global Macro Assumptions – Summary

Global Scenario (Baseline)									
	2018	2019	2020	2021	2022E		2023E		2024E	
Global GDP (%)	3.5	2.8	-3.5	5.9	2.4	→	2.0	↓	2.0	→
China GDP (%)	6.7	6.0	2.3	8.1	3.2	↓	4.8	↓	5.0	→
US GDP (%)	3.0	2.2	-3.5	5.7	1.9	↑	0.4	↑	0.7	→
US Inflation (Core PCE, %)	2.1	1.6	1.5	4.9	4.8	→	3.4	→	2.3	→
US Interest Rate (FFR, %)	2.50	1.75	0.25	0.25	4.50	→	5.00	→	3.50	→
US Interest Rate (UST10y, %)	2.7	1.9	0.8	1.8	3.9	↓	4.0	→	3.0	→
Dollar Index - DXY	96	96	90	96	108	↓	105	↓	100	→
Commodity Prices - CRB	409	401	444	571	540	↓	509	↓	460	↓

Sources: Bloomberg, Santander

The forecasts refers to our latest Scenario Review

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