# Brazil Macro | October 2022

INFLATION

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# Forecasting accountability

01

# Forecast accountability: more pass-through on tax cuts and lower inertial effects

- Also a quicker deceleration of industrial goods

| | 2022 | | |
|---|---|---|---|
| | old | new | Δ bps |
| IPCA | 6.3 | 5.5 | -80 |
| **Free prices** | 10.0 | 9.1 | -66 |
| **Food-at-home** | 13.2 | 12.1 | -18 |
| **Industrial goods** | 9.3 | 8.7 | -16 |
| Tradables | 9.7 | 9.1 | -12 |
| Non-Tradables | 6.3 | 5.3 | -3 |
| **Services** | 9.1 | 8.1 | -35 |
| Food-service | 8.6 | 8.3 | -1 |
| Airline tickets | 54.3 | 31.0 | -14 |
| Economic activity | 8.2 | 7.2 | -11 |
| Education | 7.0 | 7.2 | 1 |
| Inertial | 8.9 | 8.9 | 0 |
| Salaries | 8.4 | 6.7 | -10 |
| **Administered prices** | -2.3 | -4.1 | -45 |
| Gasoline | -18.7 | -25.3 | -34 |
| Energy | -18.8 | -21.3 | -10 |
| Health insurance | 6.9 | 6.4 | -2 |
| Bus fares | 3.4 | 3.0 | -1 |
| Cores | 8.8 | 8.3 | -46 |

Sources: Santander

| | 2023 | | |
|---|---|---|---|
| | old | new | Δ bps |
| IPCA | 5.3 | 5.0 | -31 |
| **Free prices** | 4.6 | 4.4 | -13 |
| **Food-at-home** | 3.2 | 3.2 | 0 |
| **Industrial goods** | 3.0 | 3.0 | 0 |
| Tradables | 3.0 | 3.0 | 0 |
| Non-Tradables | 3.0 | 3.0 | 0 |
| **Services** | 6.3 | 6.0 | -11 |
| Food-service | 6.5 | 6.5 | 0 |
| Airline tickets | 5.0 | 5.0 | 0 |
| Economic activity | 6.0 | 5.8 | -3 |
| Education | 8.0 | 7.8 | -1 |
| Inertial | 6.0 | 5.5 | -4 |
| Salaries | 5.5 | 5.3 | -1 |
| **Administered prices** | 7.5 | 6.7 | -20 |
| Gasoline | 4.0 | -1.0 | -25 |
| Energy | 12.0 | 12.0 | 0 |
| Health insurance | 12.0 | 12.0 | 0 |
| Bus fares | 12.0 | 12.0 | 0 |
| Cores | 6.2 | 5.8 | -40 |

Sources: Santander

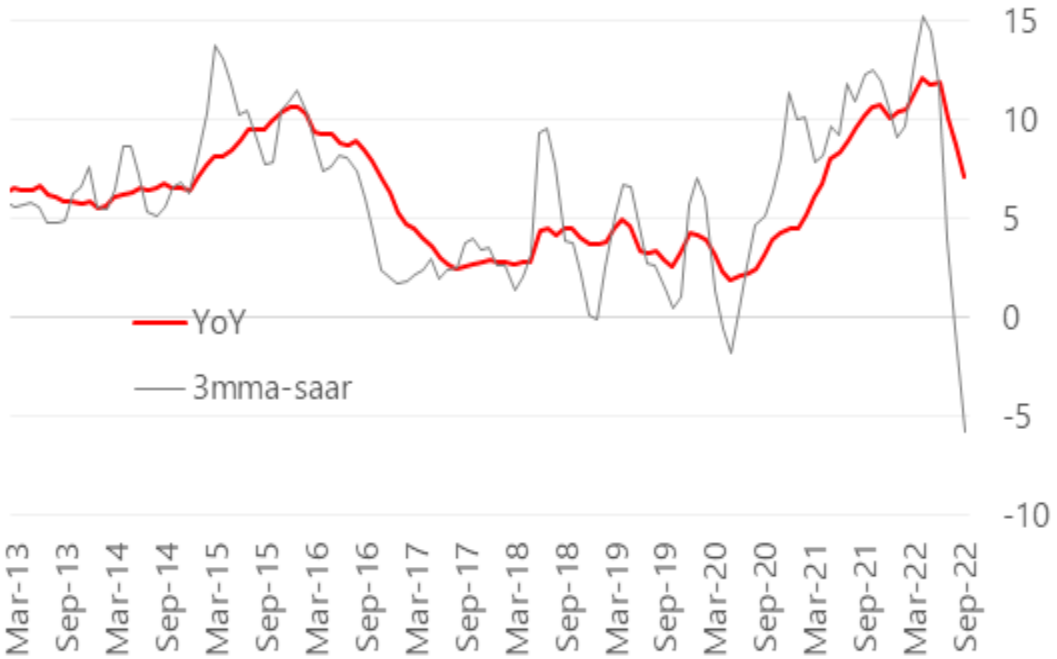
# Picture: headline peak is behind us now and underlying inflation starts to see preliminary relief

02

# Inflation: headline peak

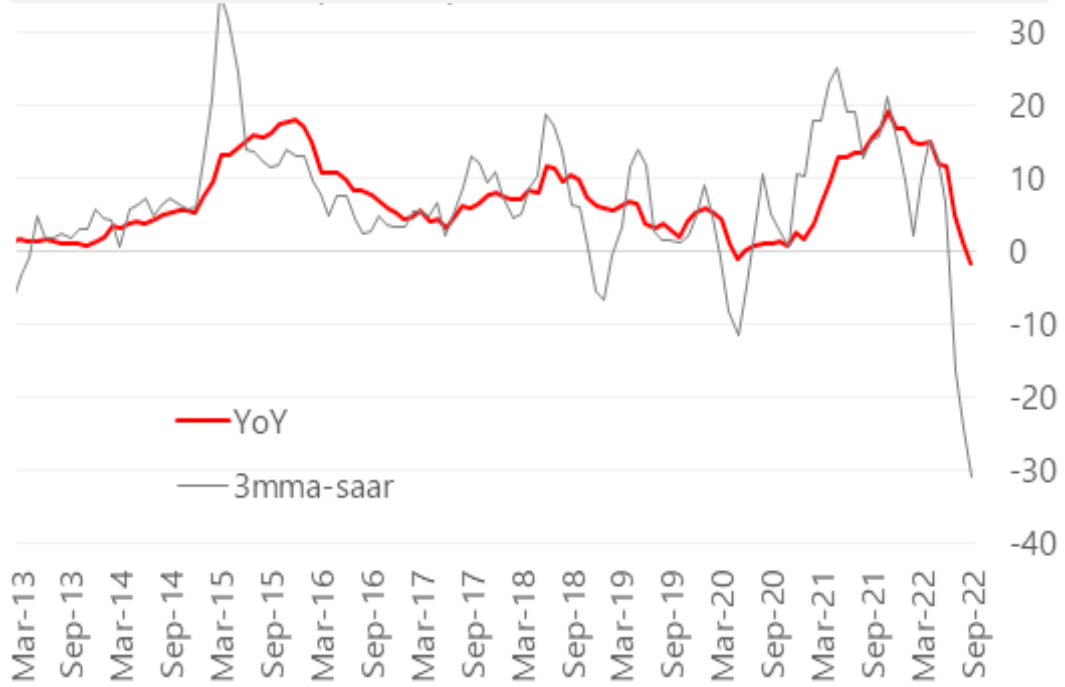
- We already expected inflation to peak, but it is worth highlighting that the major tax cuts in gasoline and electricity helped the movement to be more pronounced
- Regulated prices which comprise fuels and electrical energy (the main items impacted by the tax cut) are falling -30% 3MMA-saar

## Headline IPCA inflation




Sources: IBGE, BCB, Santander

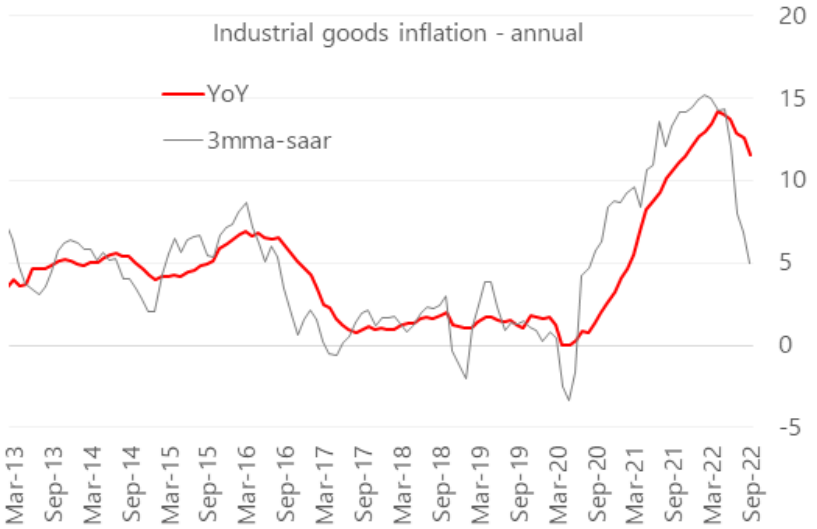
## Regulated prices inflation

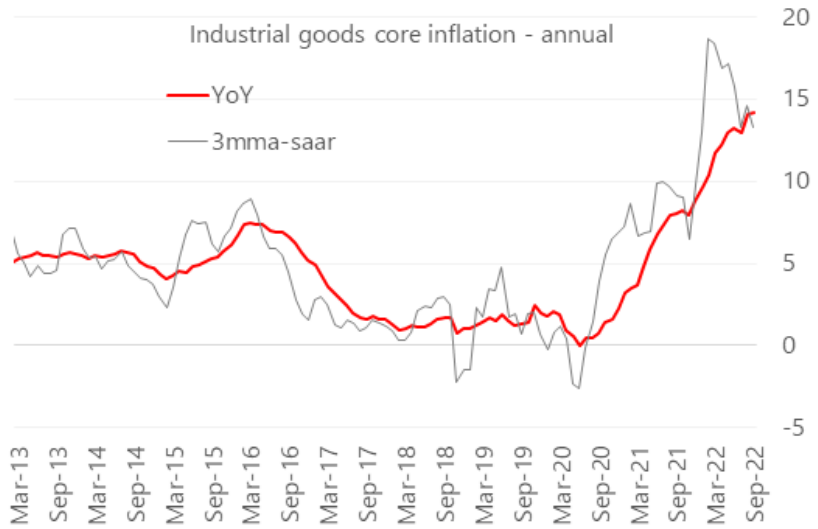


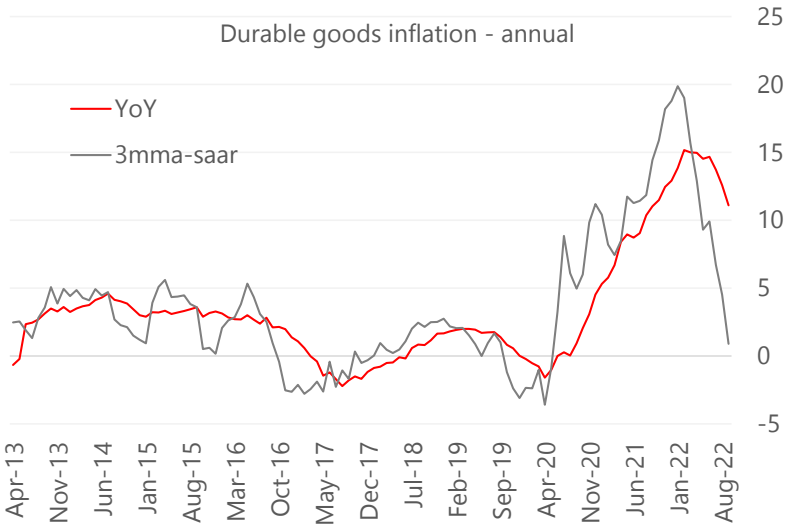

Sources: IBGE, BCB, Santander

# Industrials: the relief is happening

- Headline industrial goods are decelerating sharply: a great part is due to tax cuts in ethanol fuel, but we are seeing relief in the core gauge and in durable goods too



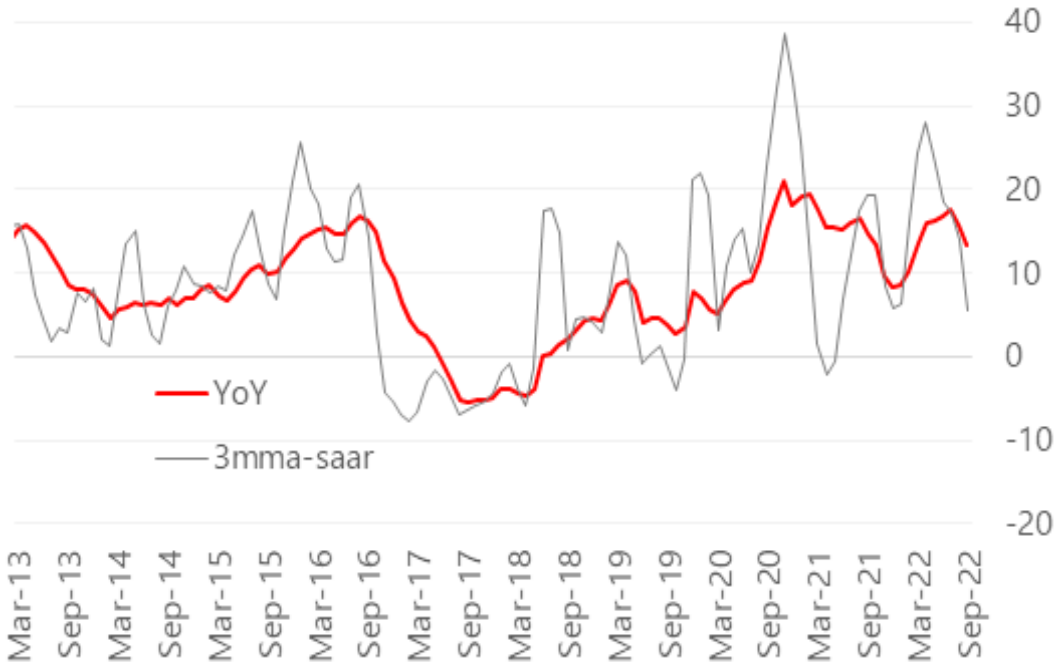




Sources: IBGE, BCB, Santander

# Food inflation: the relief is happening

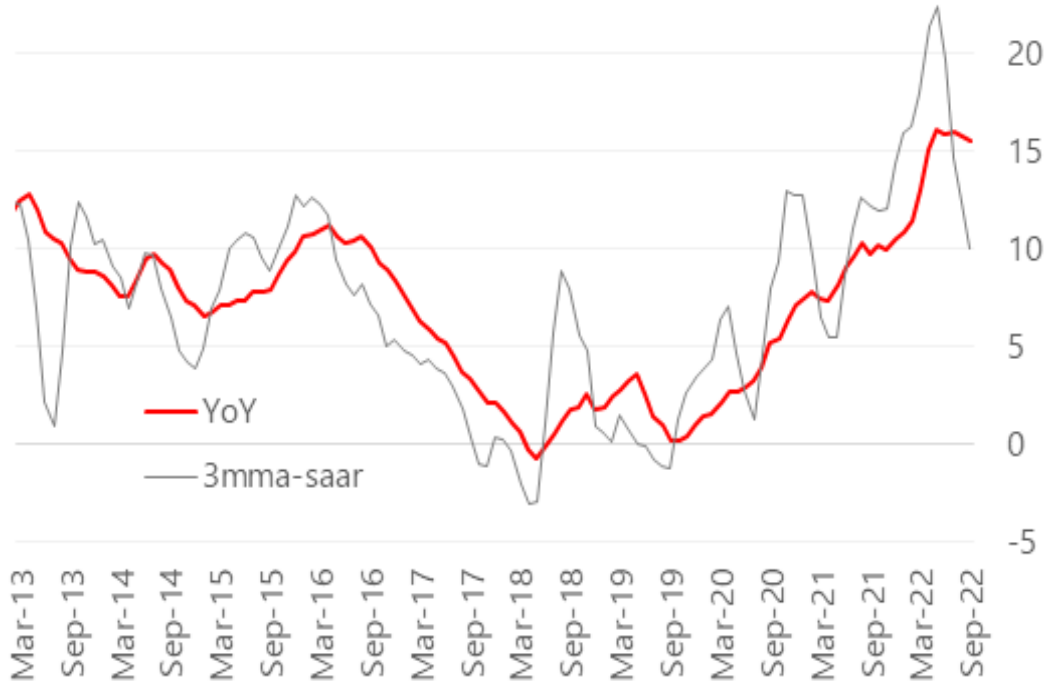
- In food, inflation has been persistent, but at the margin it started to decelerate more clearly
- Core food inflation (mostly industrialized items) are helping in this disinflation process

## Headline Food inflation




Sources: IBGE, BCB, Santander

## Core Food inflation




Sources: IBGE, BCB, Santander

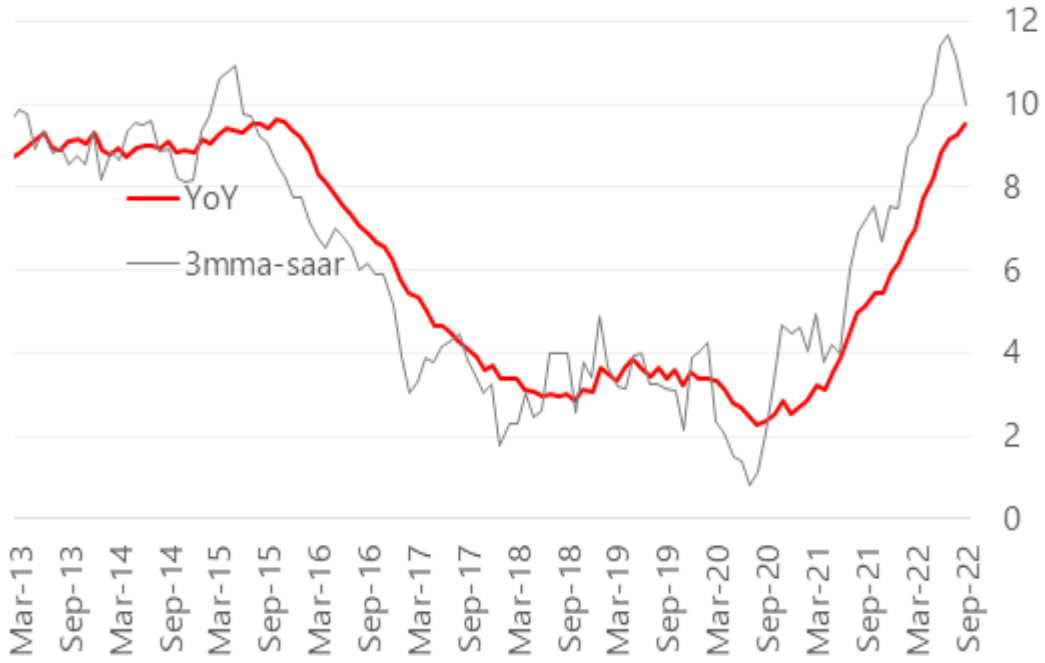
# Services inflation still running high, particularly the core

- Headline services is still running high, although it decelerated a bit at margin (but mostly driven by volatile prices)
- In particular, core services are still hovering 10% 3MMA-saar, with no clear sign of deceleration yet

## Headline services inflation

Sources: IBGE, BCB, Santander

## Core services inflation

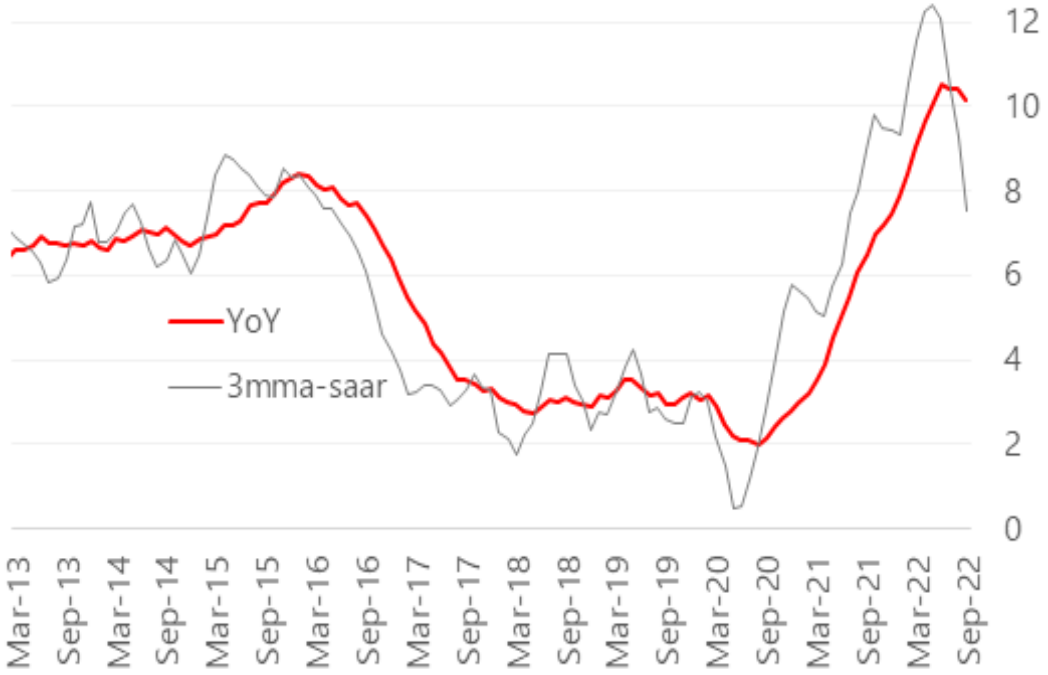



Sources: IBGE, BCB, Santander

# Core gauges: preliminary relief and a possible peak

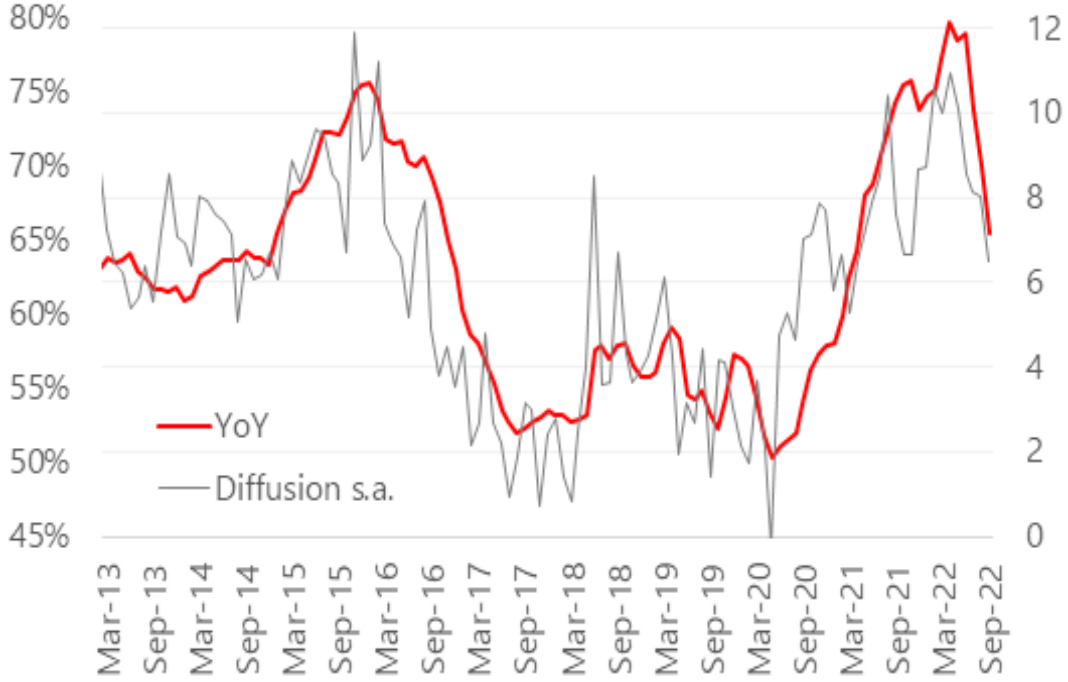
- Core gauges started to decelerate at the margin, apparently core inflation could be around the peak
- Part of the movement could be influenced by the tax cuts, but we are starting to see some relief in underlying inflation indeed
- The diffusion index also started to fall

## Core inflation peaking?




Sources: IBGE, BCB, Santander

## Diffusion index cooling down



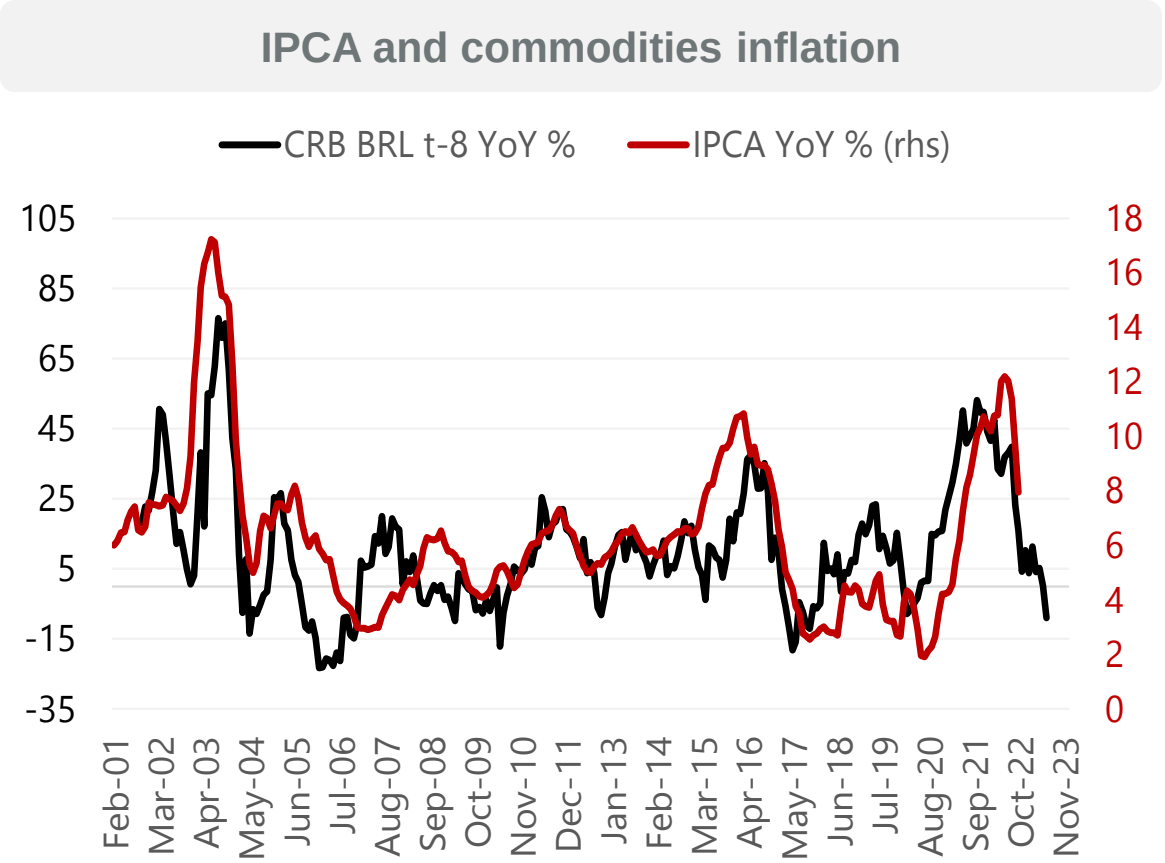

Sources: IBGE, BCB, Santander

# Looking ahead: the focus now is on the dynamic of core gauges and expectations

03

# What to expect from now on? A relief from “imported inflation”

- Commodities prices in BRL terms continue to point to further deceleration for IPCA ahead

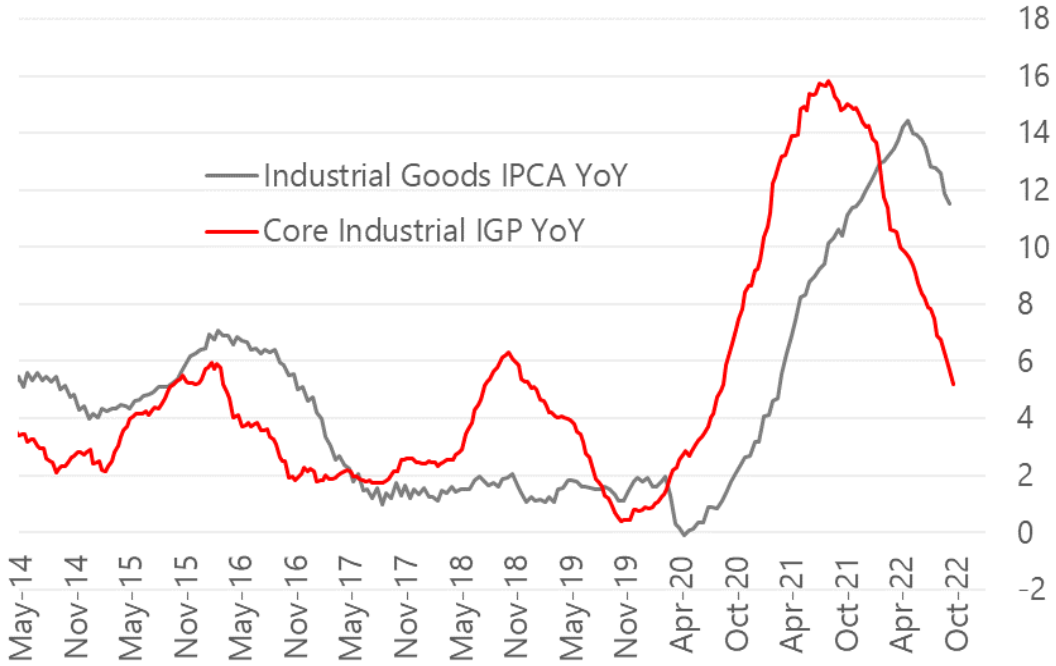



Sources: IBGE, Bloomberg, Santander

# Some preliminary signs of lower pressure on the industrial side

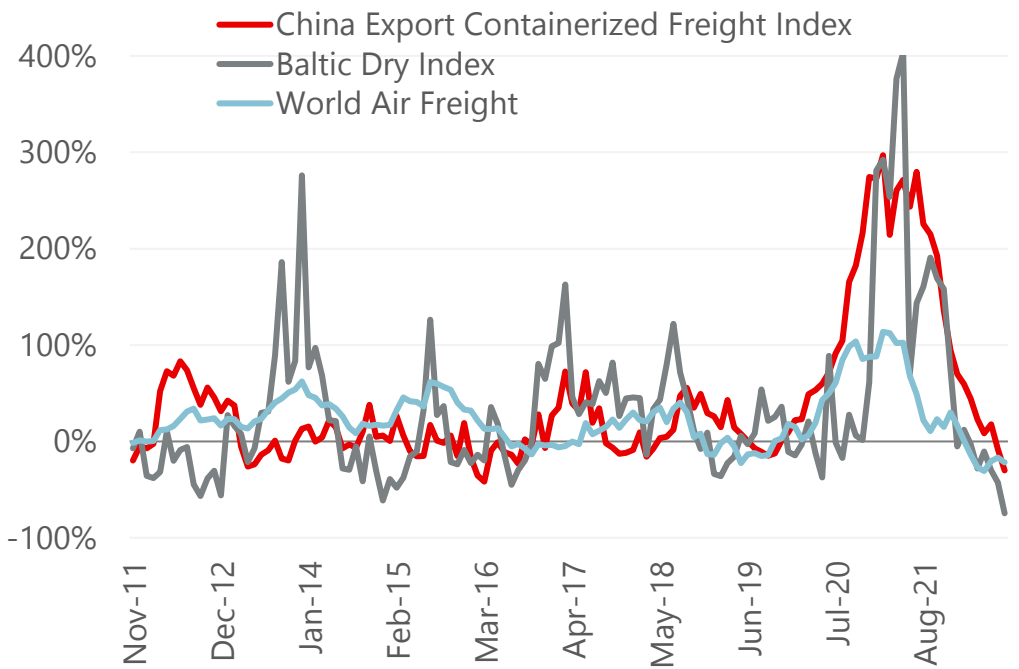
- Industrial goods inflation at the wholesale/producer level is decelerating sharply and the consumer level will continue to follow
- Anecdotal evidences that at least part of the supply shocks are fading: freight costs, for example

## Core-PPI-Industrial vs. Industrial goods in IPCA




Sources: FGV, Santander

## Freight Costs % YoY

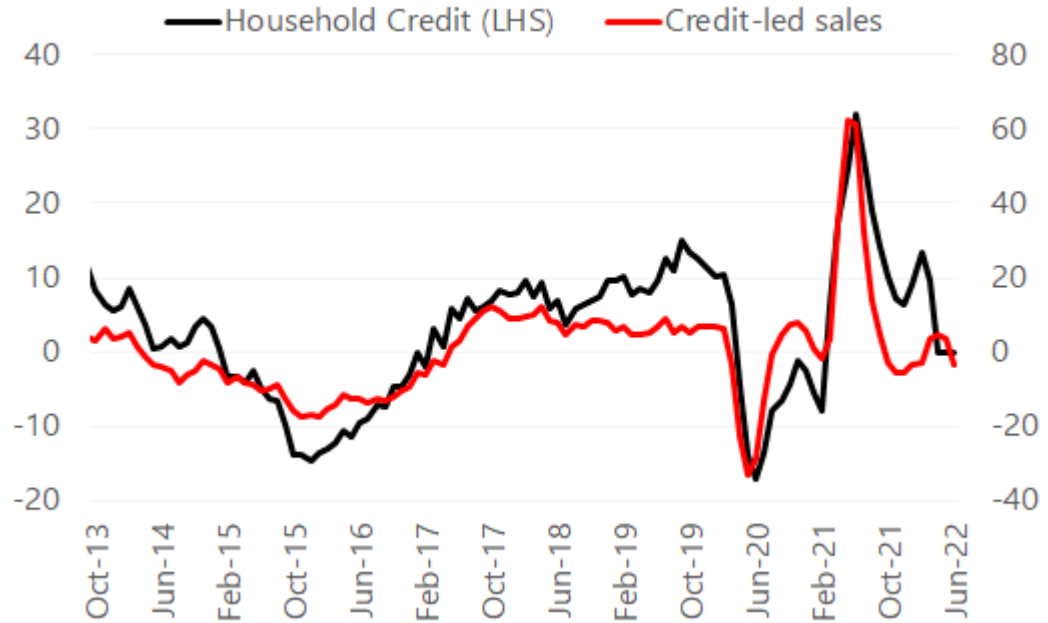



Sources: Bloomberg

# Lower demand for durable goods

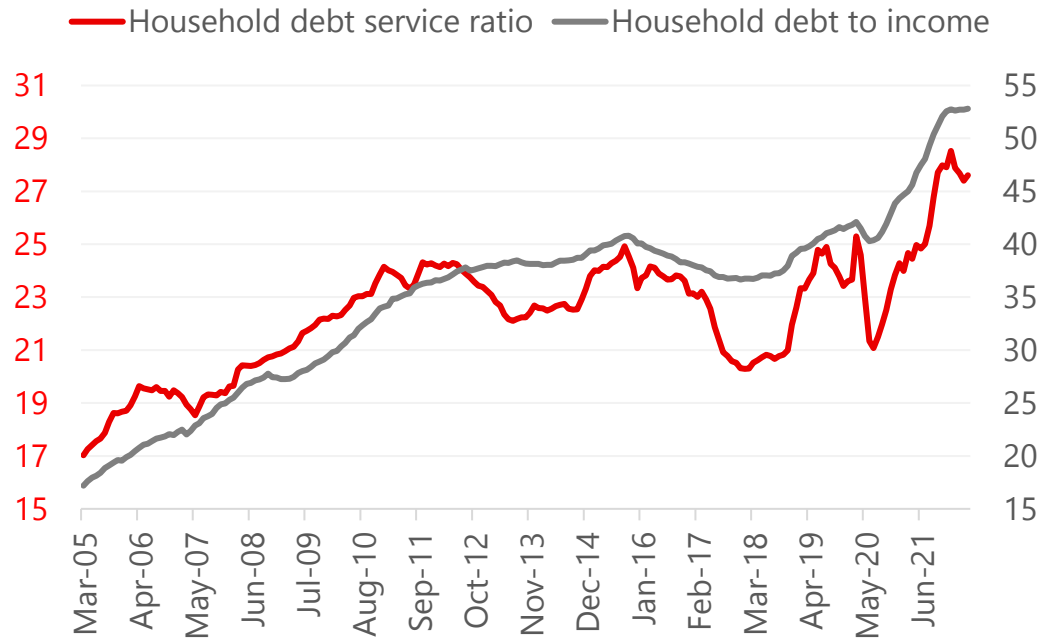
- For households, new loans are slowing down and debt is at the highest levels (and still rising)
- Credit-led retail sales are slowing

## Credit-led retail sales and New loans to households - % YoY mm3




Sources: IBGE, BCB, Santander

## Households are highly indebted

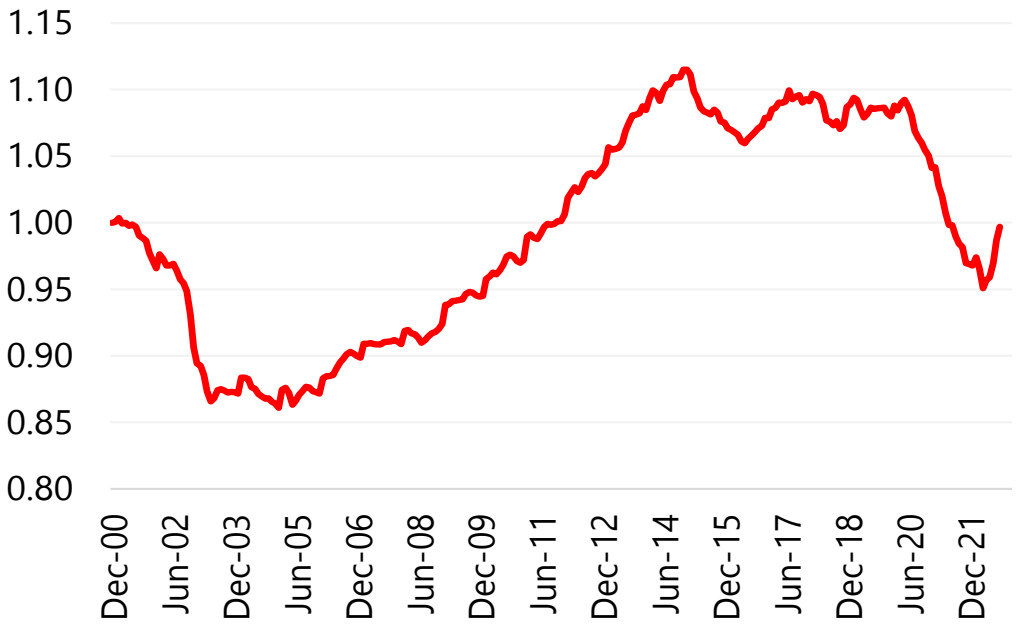



Sources: BCB, Santander

# Services: still the main risk

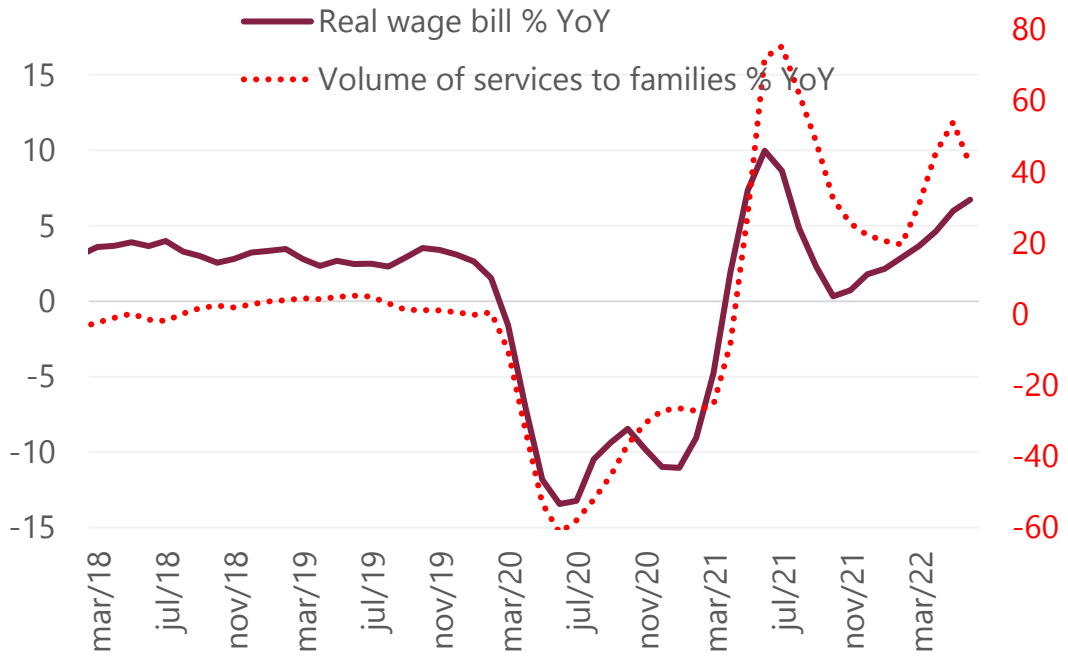
- Services are now benefiting from the end of social distancing measures and enjoying a relative-price adjustment (after lagging all the shocks in other sectors)
- Looking ahead, we expect the economy to cool down (monetary policy acting), rising unemployment and helping services inflation to cool down

## Relative price: IPCA Services/IPCA Ex-Services




Sources: IBGE, Santander

## Increase in real wage bill sustaining demand for services

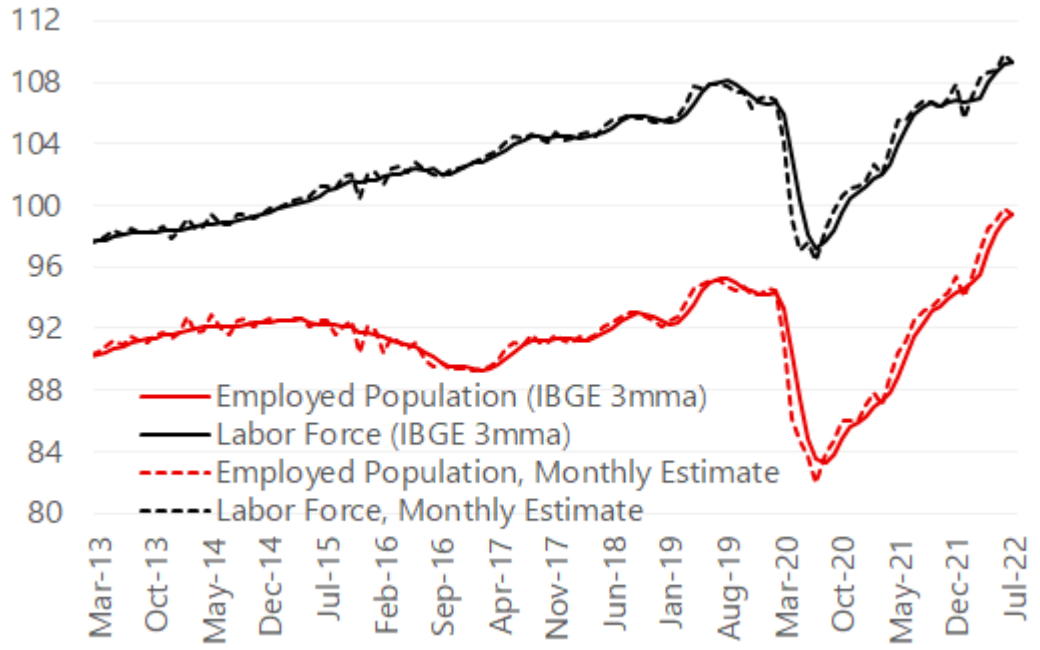



Sources: IBGE, Santander

# But the job market hotness is not impacting wages, at least not yet

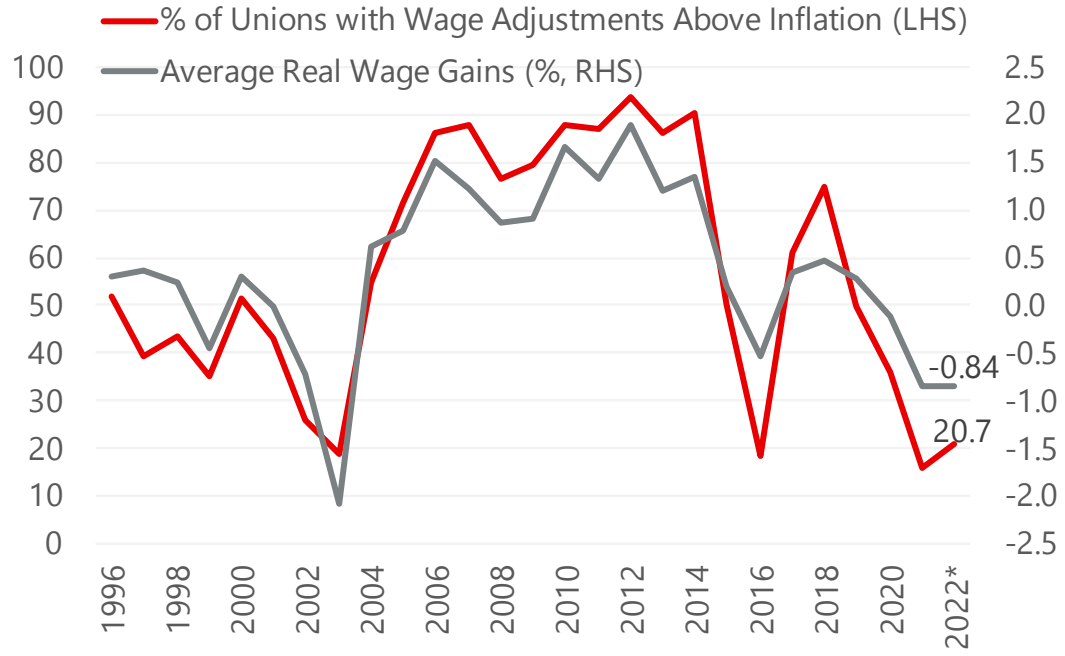
- The real wage bill is increasing on the back of rising employment, not on higher wages
- In fact, wages adjustments above inflation are at the lowest levels in history
- The risk is that real wage adjustments pick up

## Employment is way above pre-pandemic




Sources: IBGE, Santander.

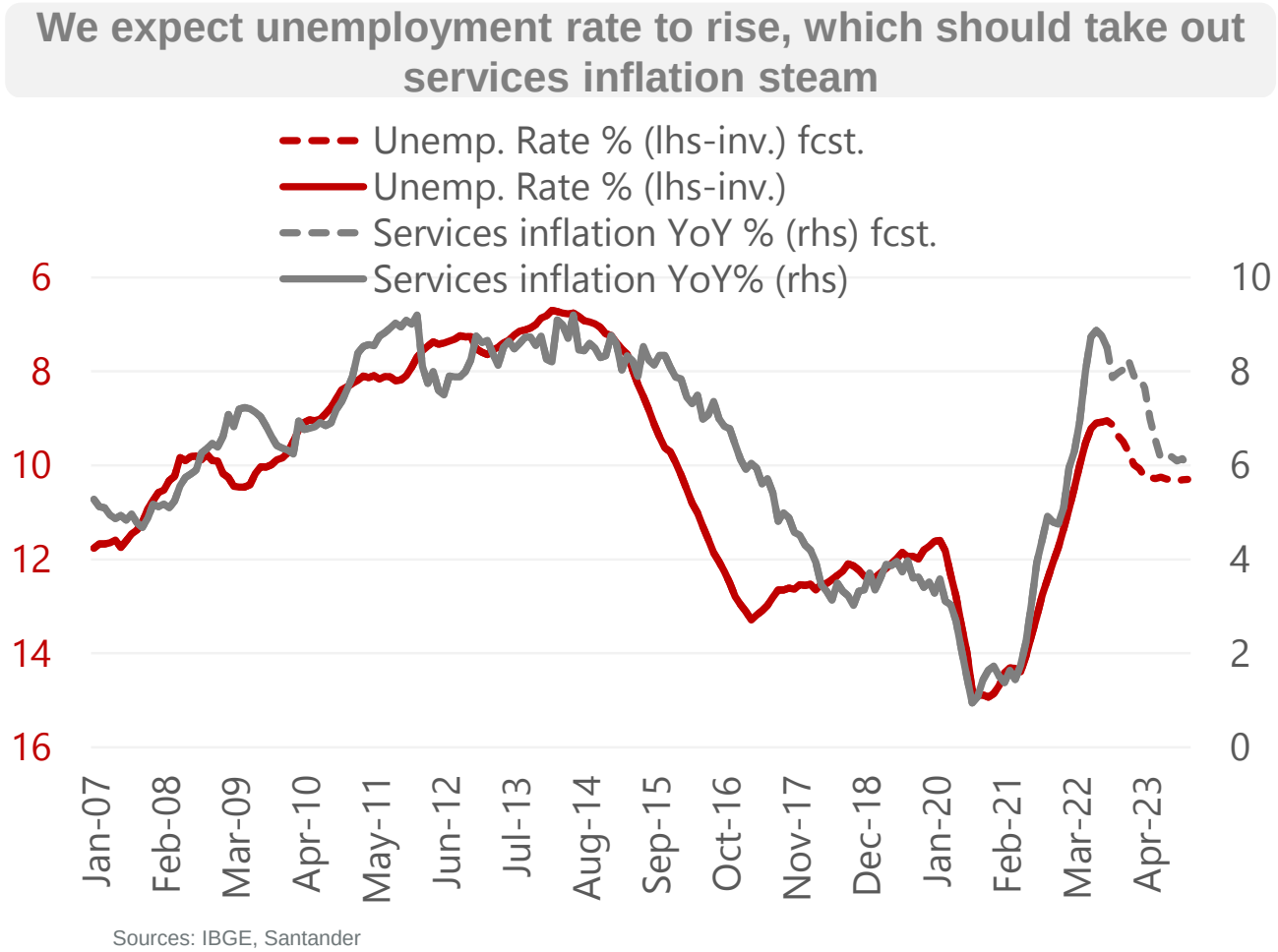
## But the % of wages adjustments above inflation is at the lowest levels in history




Sources: Dieese, IBGE, Santander.

# With monetary policy kicking in, unemployment should rise and curb services inflation

- With unemployment rising and wages controlled, demand for services should reduce
- The end of the “normalization” of the consumption basket should also make demand for services lower for the next quarters
- With that, broad core gauges should start to converge

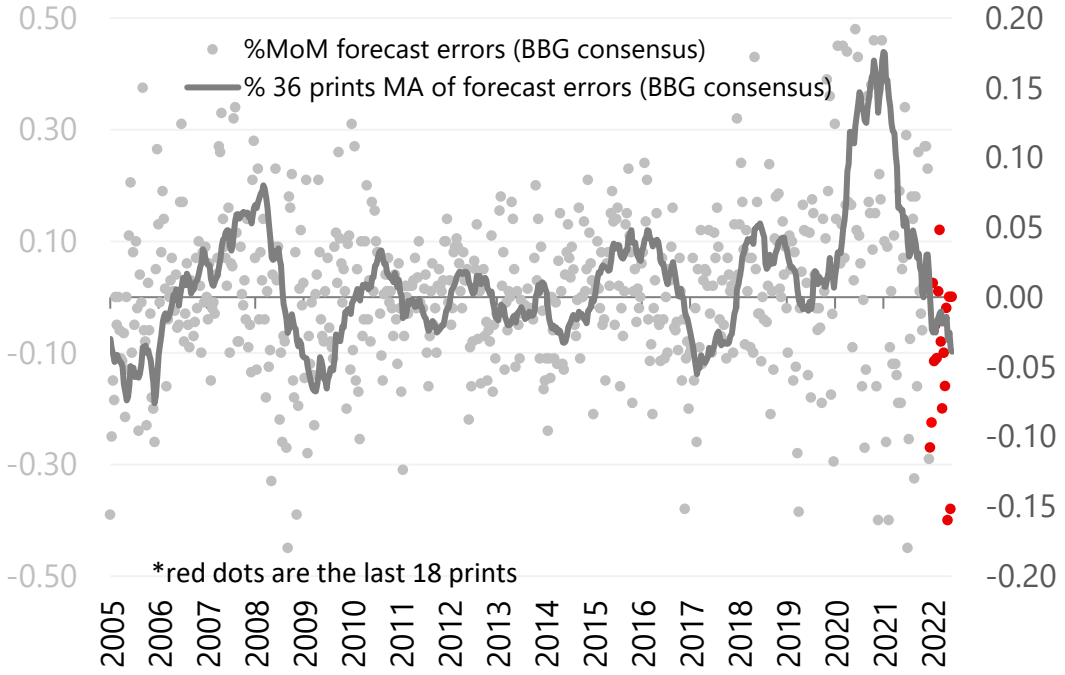



Sources: IBGE, Santander

# Inflation expectations at the wholesale level: the market has only been surprised downwards

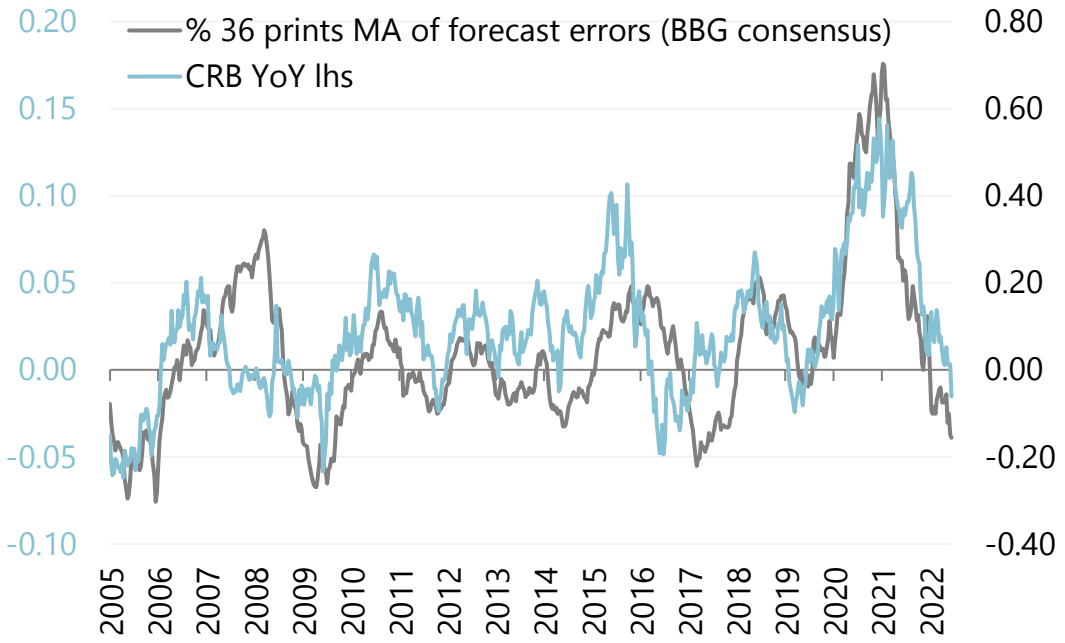
- For the past 18 prints, 13 were below what the consensus expected. That is, the market overestimated inflation 72% of the times (83% if you count the 2 times the consensus was exactly equal to the realized print)
- The surprises seem to be mostly driven by the commodity prices in BRL terms: once it peaked YoY, IGP surprises started to reduce

## Inflation surprises at the wholesale/producer level (IGP-10, IGP-M, IGP-DI)




Sources: IBGE, Santander

## IGP (PPI) surprises tend to be led by commodity prices in BRL terms

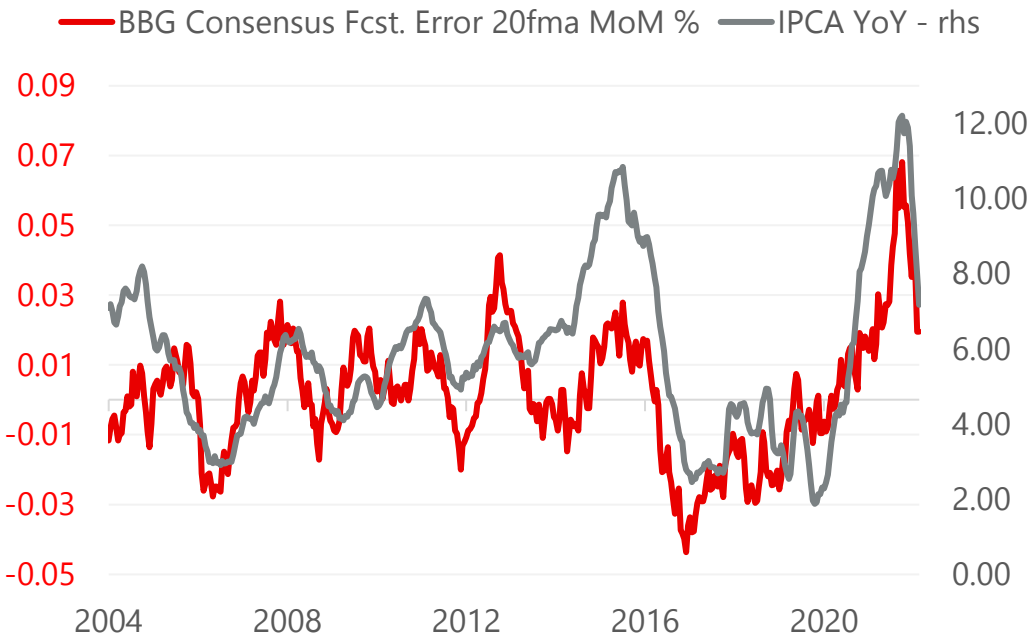



Sources: IBGE, Santander

# Inflation expectations at the consumer level: surprises starting to end

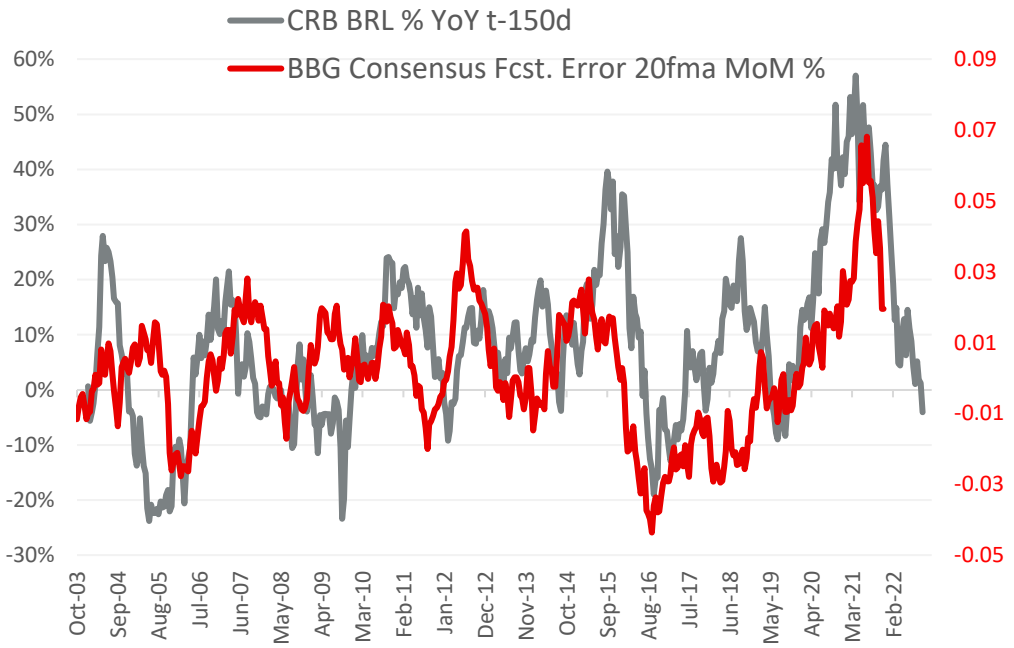
- Monthly inflation surprises are highly correlated to the state of inflation: if inflation is accelerating, upward surprises follow and vice-versa. Consequently, as IPCA has peaked, inflation surprises are starting to come downwards
- Having stated that inflation at the producer level is led by commodity prices and the exchange rate, by transitivity, inflation at the consumer level is also led by commodity prices in BRL terms and it is pointing towards further deceleration of surprises in IPCA

## IPCA inflation surprises are highly correlated to the state of inflation




Sources: IBGE, Santander

## CRB in BRL is pointing to further deceleration of IPCA inflation surprises

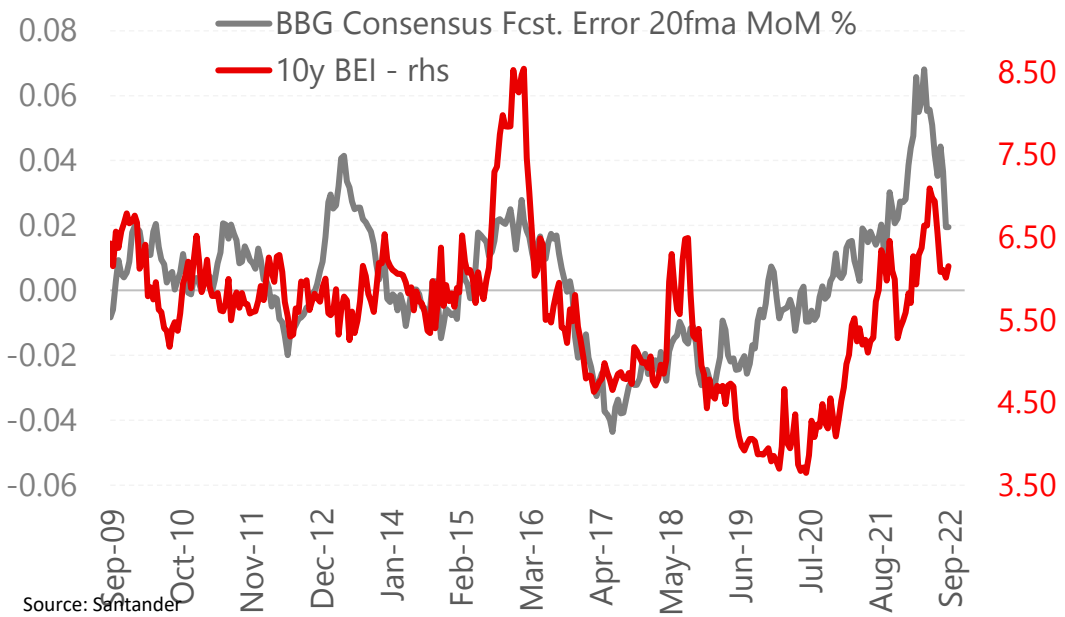



Sources: IBGE, Santander

# Short-term inflation surprises tend to influence medium/long-term expectations

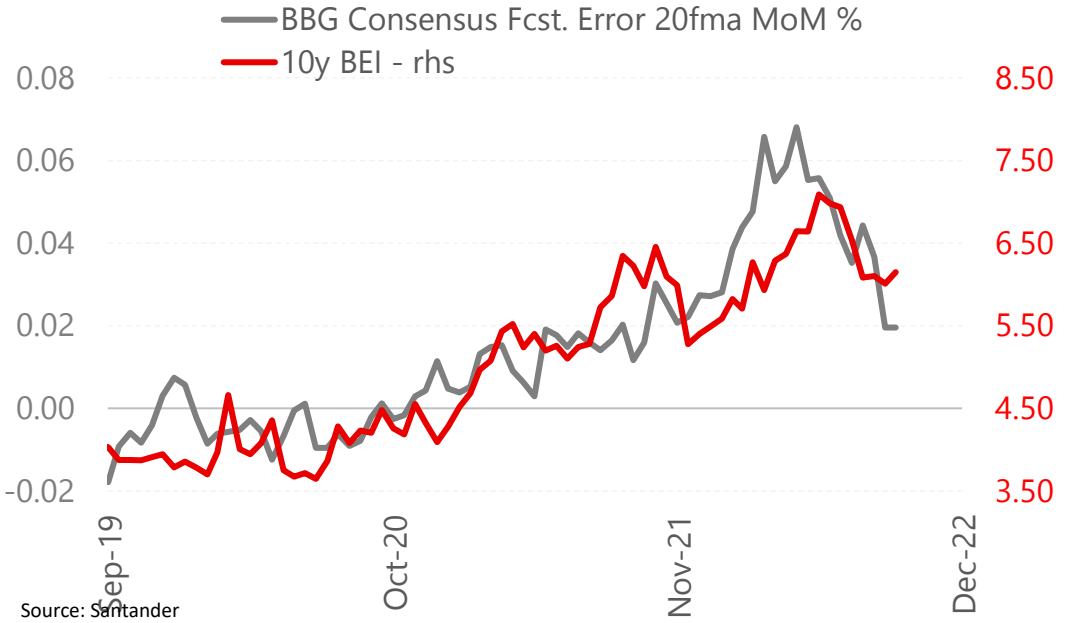
- Short-term surprises usually are incorporated in long term expectations
- With surprises coming down, expectations could continue to see a relief

## Inflation surprises tend to influence the break-even inflation




Source: Santander

## ZOOM Inflation surprises and 10y break-even inflation

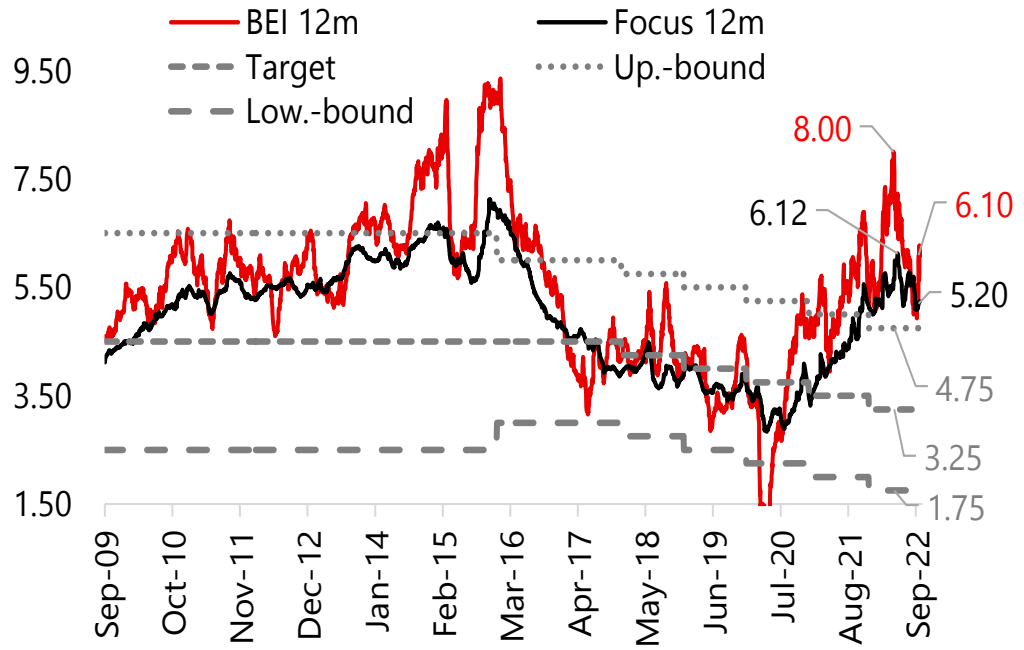



Source: Santander

# Inflation expectations: a relief in medium-term expectations?

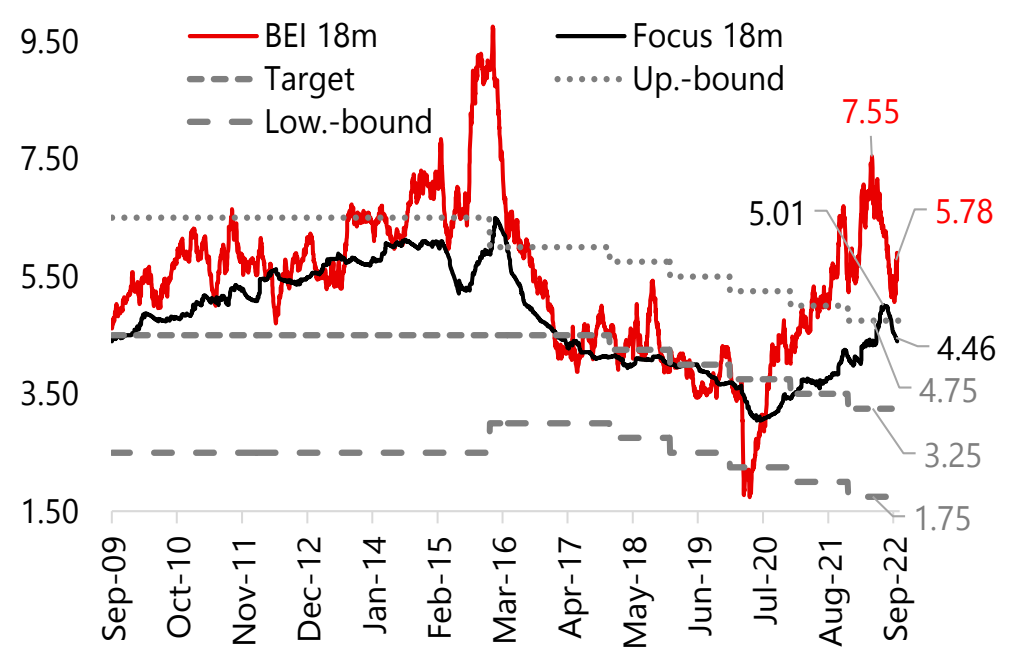
- Although they are still far from the mid-target, both survey- and market-based expectations are seeing a relief recently
- The end of upward surprises in inflation should help the convergence to continue, but there is a risk that services/core gauges remain high and prevent/delay the convergence to the exact mid-target

## 12-month ahead survey- and market-based inflation expectations




Sources: IBGE, Santander

## 18-month ahead survey- and market-based inflation expectations

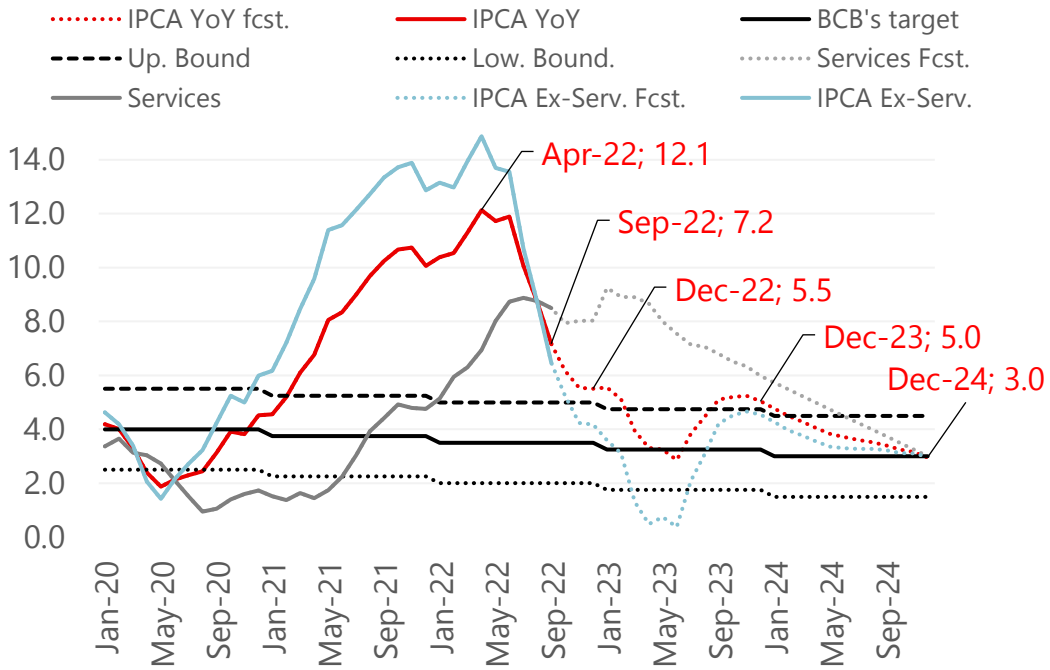



Sources: IBGE, Santander

# Inflation outlook: the worst is behind, attentions turn to re-anchoring of expectations

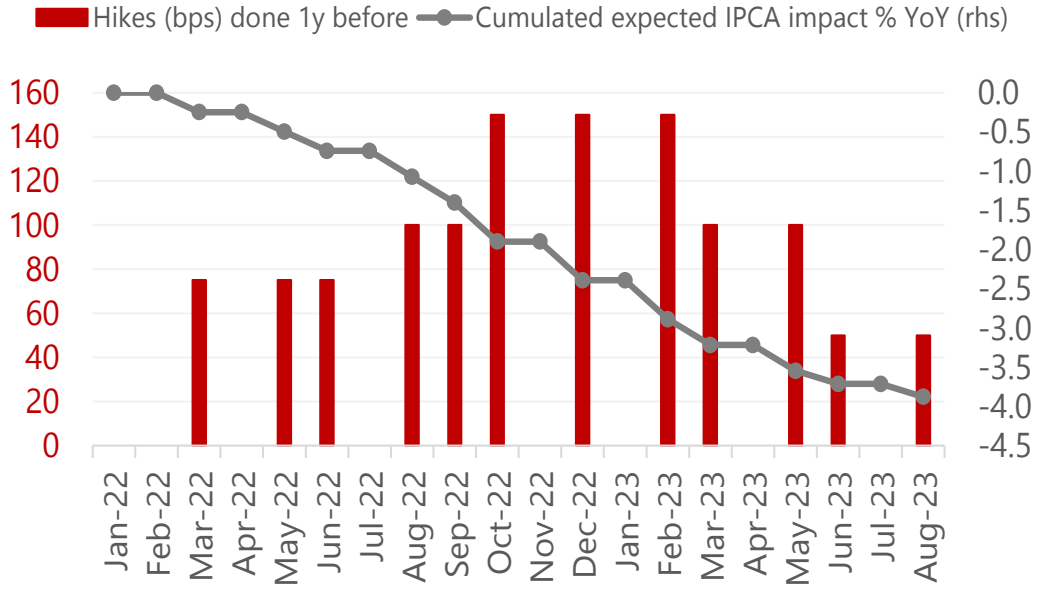
- The risks for inflation now are the “quality” (core gauges high) and the expectations
- We believe the bulk of the monetary policy tightening is about to kick-in more intensely: so far, just 425-bps of Selic hikes have reached the economy; 750-bps are yet to come. This should be enough to control the risks cited above in the medium-term and bring inflation back to the target by 2024

## IPCA forecast




Sources: IBGE, BCB, Santander

## Monetary policy lag: date of expected impact of each Selic hike done so far and likely effect on IPCA




*BCB’s models consider 4 to 6 quarters of monetary policy lag, here we use 4 quarters (12 months).
**Impact on IPCA estimated just by cumulating the BCB’s model rule-of-thumb of +100 bps Selic = -33 bps IPCA YoY.

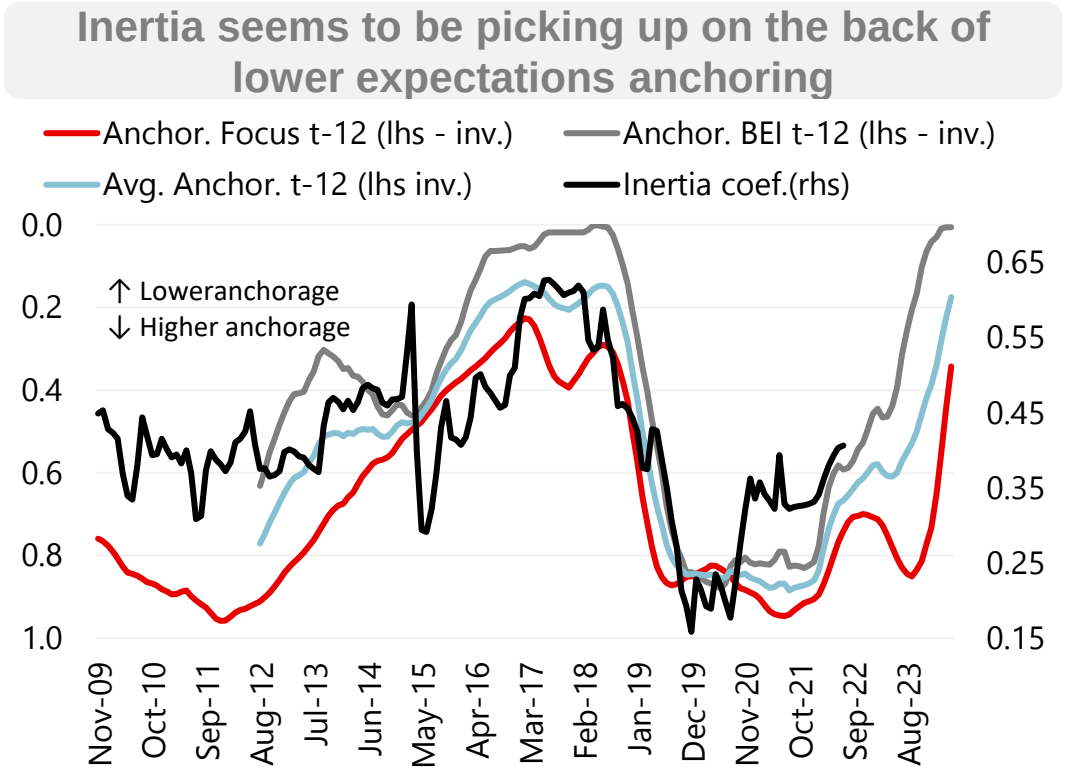
Sources: BCB, Santander

# Main Risks: inertia, wages, and fiscal outlook

04

# With expectations detached from the target, inertia gains steam

- The unanchoring of inflation expectations makes the price-setting process more based on past inflation, rising inertia
- Therefore, if expectations do not re-anchor, we could see higher inflation for longer
- The tight job-market we are currently seeing is also a risk, if it starts to translate into higher wages, affecting mostly services inflation

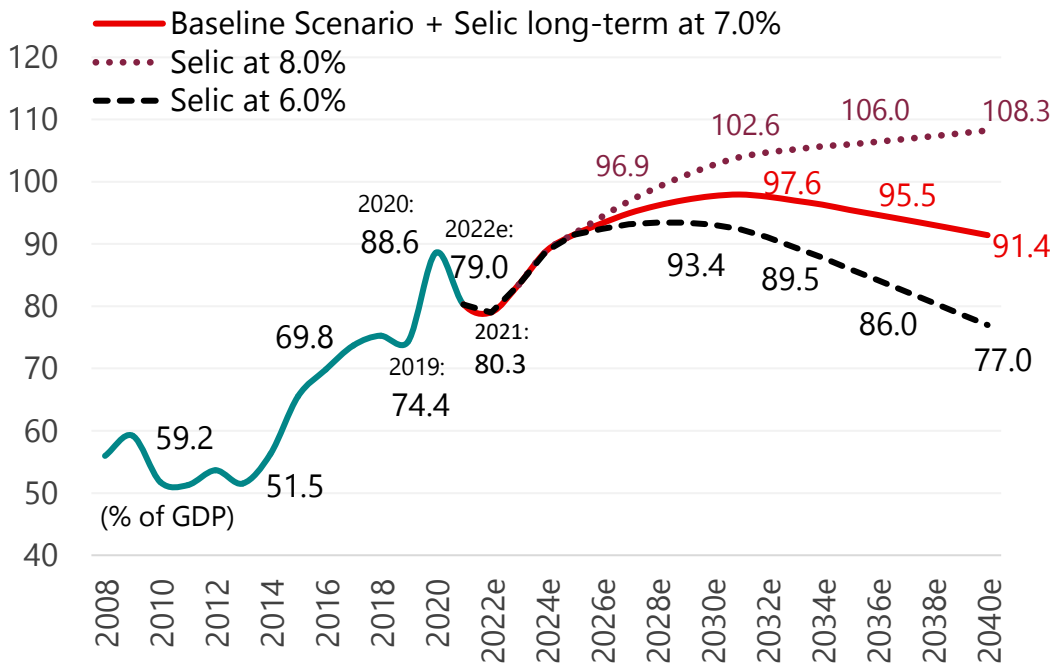



Sources: Santander

# Uncertainty regarding fiscal outlook

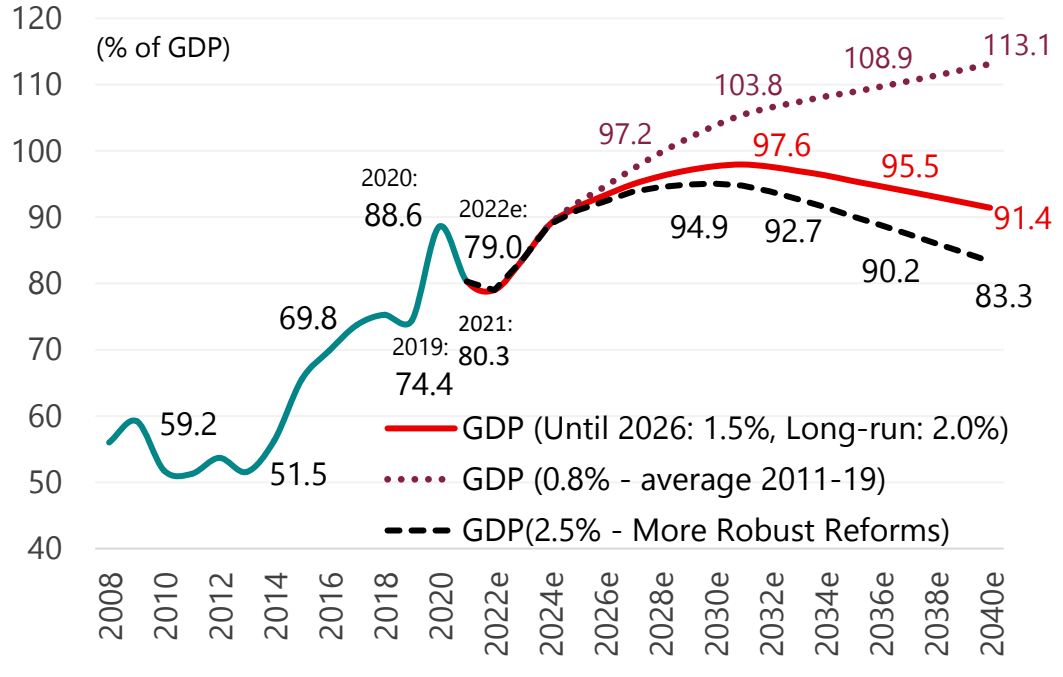
- Small changes in estimates for potential output and/or neutral interest rates leads to challenging outlooks for the debt-to-GDP ratio
- With uncertainties regarding the fiscal outlook, inflation expectations could remain detached from the target

## 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 + BRL30 billion in 2022)

2022 GDP Deflator: 10% | GDP: 1.9% | Selic Rate: 14.25%

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)

# Thank you.

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