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INFLATION

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SUMMARY

- We revised down our IPCA inflation forecast for 2023 to 4.9% (from 5.2%) and our high-frequency tracking is hovering even below that, at 4.7%. We maintained 2024 and 2025 forecasts at 3.9% and 4.5%, respectively.

- Despite the base-effect pushing IPCA YoY upwards until year-end (tax cuts leaving the 12-month sample), the big picture continues to be short-term inflation decelerating for food-at-home, industrial goods, and services. The first two mostly due to a fall in commodity prices in BRL terms, and the latter as a function of a lower headline inflation (inertia) as well as a deceleration in wage growth.

- In view of the services inflation, we explore the conundrum in which services inflation and wage growth are decelerating although unemployment rate is not increasing.

- For the main risks, we assess the potential impact of El Niño for IPCA 2023, as well as the only partial re-anchoring of long-term expectations.

- Regarding long-term inflation expectations, we argue that the re-anchoring process observed from the combination of the CMN decision to keep the inflation target at 3% and the fall of commodity prices in BRL terms is likely exhausted and may no longer be a driver in the short-term.

Forecasting accountability

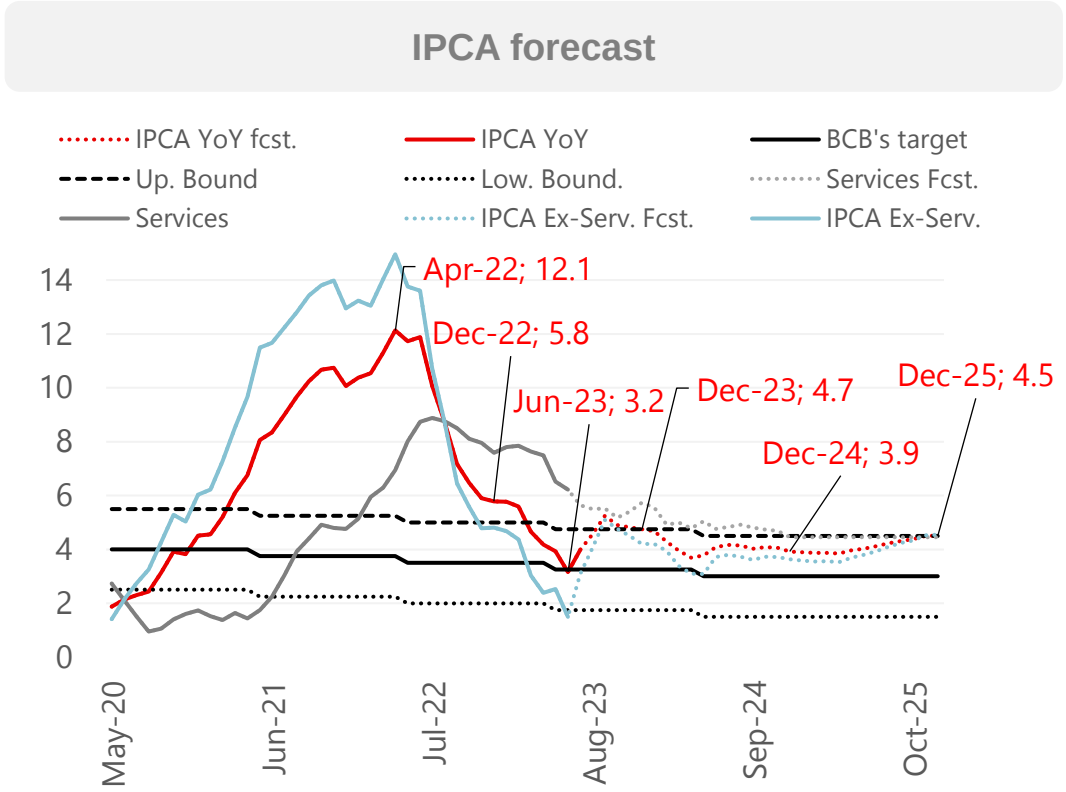
01

We revised our IPCA 2023 forecast downward

- For IPCA 2023 there was a downward adjustment based on recent inflation dynamics (from 5.2% to 4.9%)
- For IPCA 2024 we kept our projection at 3.9%, but we've changed its composition (less services, more food-at-home)
- For IPCA 2025 and 2026 we kept our projection at 4.5%

	2023			2024		
	old	new	Δ bps	old	new	Δ bps
IPCA	5.2	4.9	-29	3.9	3.9	2
Free prices	3.7	3.4	-19	3.5	3.5	3
Food-at-home	1.0	-0.5	-18	1.5	3.9	36
Industrial goods	1.9	2.3	15	2.0	2.0	0
Tradables	1.9	2.4	16	2.0	2.0	1
Non-Tradables	1.9	1.9	0	2.0	2.0	0
Services	6.5	5.9	-16	5.4	4.5	-33
Food-service	6.2	6.1	-1	5.5	4.8	-4
Airline tickets	7.5	7.3	0	5.0	4.9	0
Economic activity	6.0	5.3	-7	5.5	4.0	-16
Education	7.8	7.8	0	5.0	5.5	2
Inertial	6.5	5.8	-5	5.5	4.3	-9
Salaries	6.2	5.0	-7	5.5	4.3	-7
Administered prices	9.8	9.5	-7	5.0	5.0	0
Gasoline	17.7	13.7	-20	5.0	5.0	0
Energy	8.6	7.5	-4	5.0	5.0	0
Health insurance	14.0	11.6	-9	5.0	6.0	4
Bus fares	2.4	4.4	2	5.0	3.0	-2
Cores	5.4	5.0	-43	3.8	3.5	-34

Sources: IBGE, Santander.



Sources: IBGE, Santander.

Our IPCA 2023 tracking is even lower at 4.7%, even after the gasoline price adjustment

- On the one hand, food-at-home, industrial goods, and services are all implying a smaller variation than previously expected
- On the other, administered prices, especially gasoline prices, are above our projection

	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	2023e
IPCA	0.19	0.36	0.26	0.33	0.55	4.7
Food and beverage	-0.81	-0.39	0.19	0.45	0.66	0.6
Food-at-home	-1.23	-0.67	0.13	0.47	0.70	-1.2
Food service	0.28	0.32	0.37	0.40	0.55	5.6
Housing	1.25	0.31	0.31	0.37	0.34	5.2
Electrical energy	4.20	0.03	0.20	0.48	0.02	7.7
Household articles	0.16	0.02	0.16	0.02	0.16	0.6
Apparel	0.07	0.42	0.64	0.27	0.70	3.3
Transportation	0.21	1.48	0.23	0.42	1.03	7.7
Airline tickets	-11.67	9.00	2.50	0.00	19.00	7.6
Gasoline	0.80	3.50	-0.60	-0.20	0.00	15.5
Health and personal care	0.44	0.31	0.34	0.13	0.32	6.8
Personal spending	0.34	0.23	0.29	0.42	0.54	5.1
Education	0.51	0.03	0.02	0.03	0.04	7.8
Communication	-0.08	0.13	0.31	0.28	0.05	4.5
Administered	1.14	1.06	0.29	0.42	0.42	9.7
Free	-0.14	0.12	0.25	0.29	0.59	3.1
Food-at-home	-1.23	-0.67	0.13	0.47	0.70	-1.2
Industrial goods	0.15	0.18	0.20	0.10	0.29	2.2
Services	0.15	0.42	0.34	0.35	0.76	5.7
EX3 Core	0.28	0.31	0.31	0.20	0.42	4.4

Sources: IBGE, Santander.

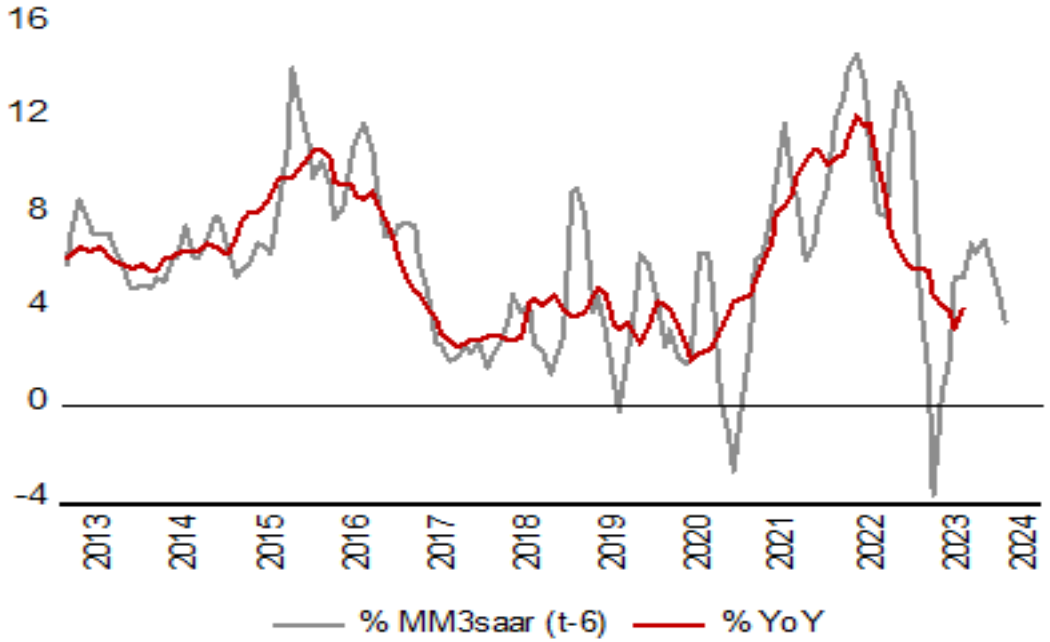
Picture: volatile prices should still support the disinflation in free prices, while the stickier part of inflation maintains its slow deceleration

02

Headline inflation: rebound in July due to base effects

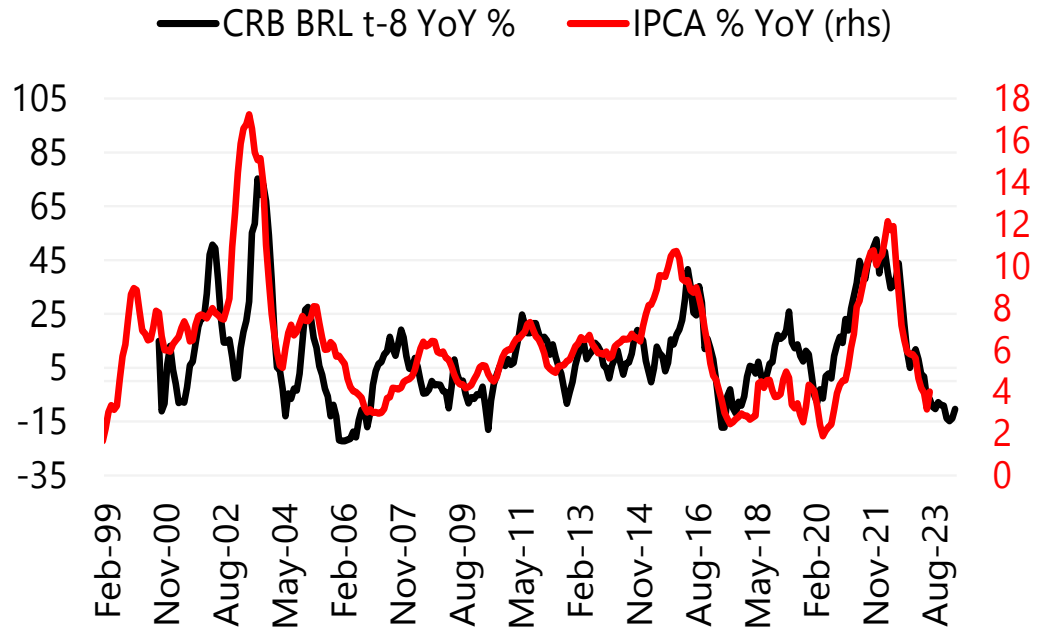
- Headline inflation annual change came below 2023 target in June, but already rebounded to 4% in July
- Major part of the disinflation process was driven by volatile prices (that should still help a bit more)
- While stickier prices are falling at a slow pace, making a faster disinflation pace more difficult

Headline IPCA inflation



Sources: IBGE, BCB, Santander.

IPCA inflation and Commodity prices

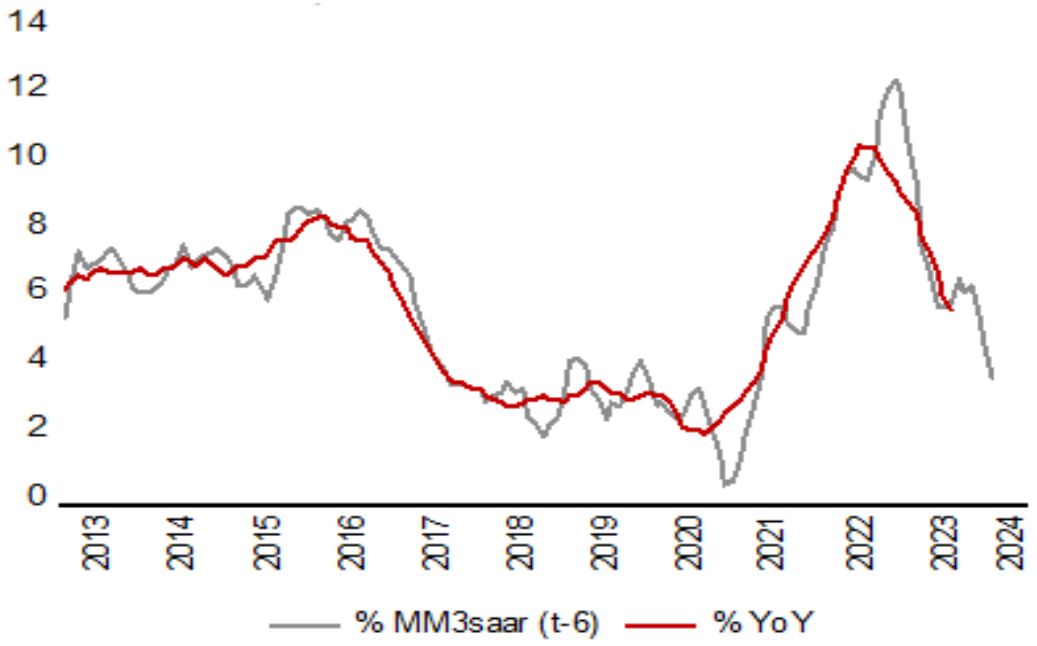


Sources: IBGE, BCB, Santander.

Core gauges show relief, some components still high

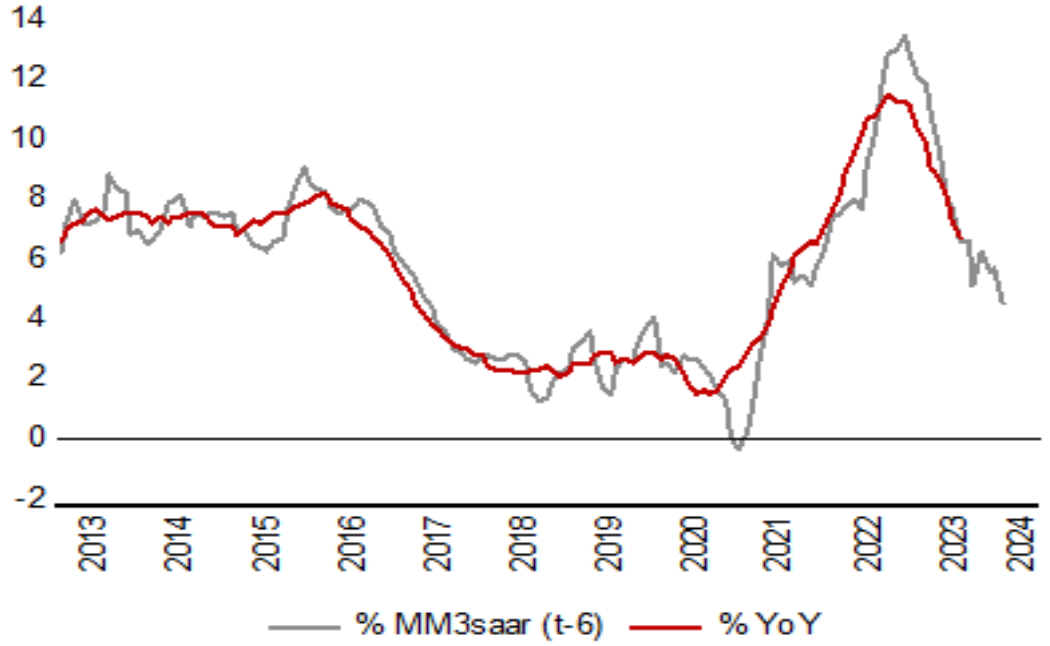
- Average of core inflation indexes still pointing downward with trend at 3.6% 3MMA-saar
- The deceleration has ranged over all core indexes, however not with the same intensity – EX3 is falling more slowly
- EX3 core accounts for services and industrial goods core inflation, in which the latter is decelerating faster than the former

Average core IPCA inflation



Sources: IBGE, BCB, Santander.

EX3 core

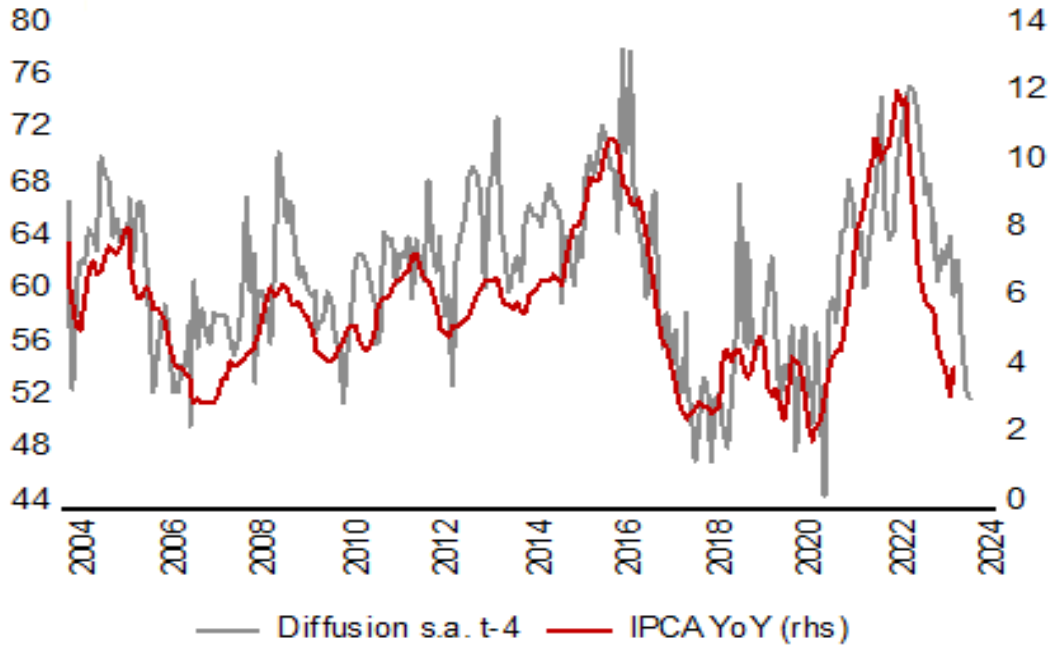


Sources: IBGE, BCB, Santander.

Wide deceleration can be seen in the diffusion index and the P55 core

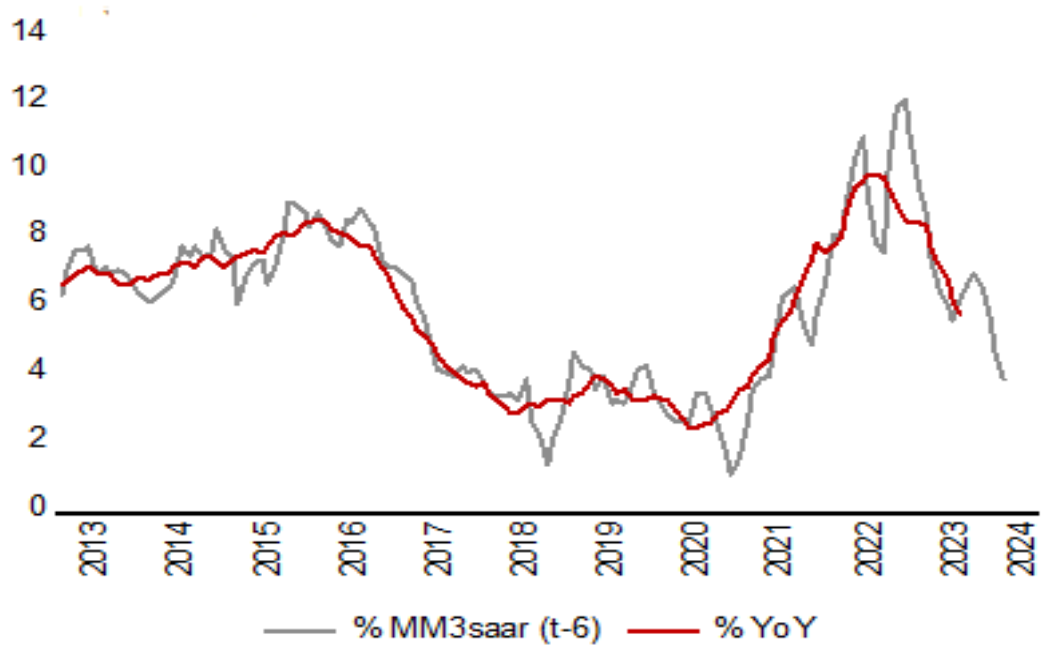
- The deceleration is not concentrated in a few items, and ranges over different groups
- The diffusion index (at 51.8% s.a.) cooled down to a level compatible with inflation around the target (3.0%) in the medium run
- P55 core, that corresponds to the inflation change of the percentile 55 of the subitems in IPCA, is also pointing downward (3.7% 3MMA-saar)

Diffusion index



Sources: IBGE, BCB, Santander.

P55 core

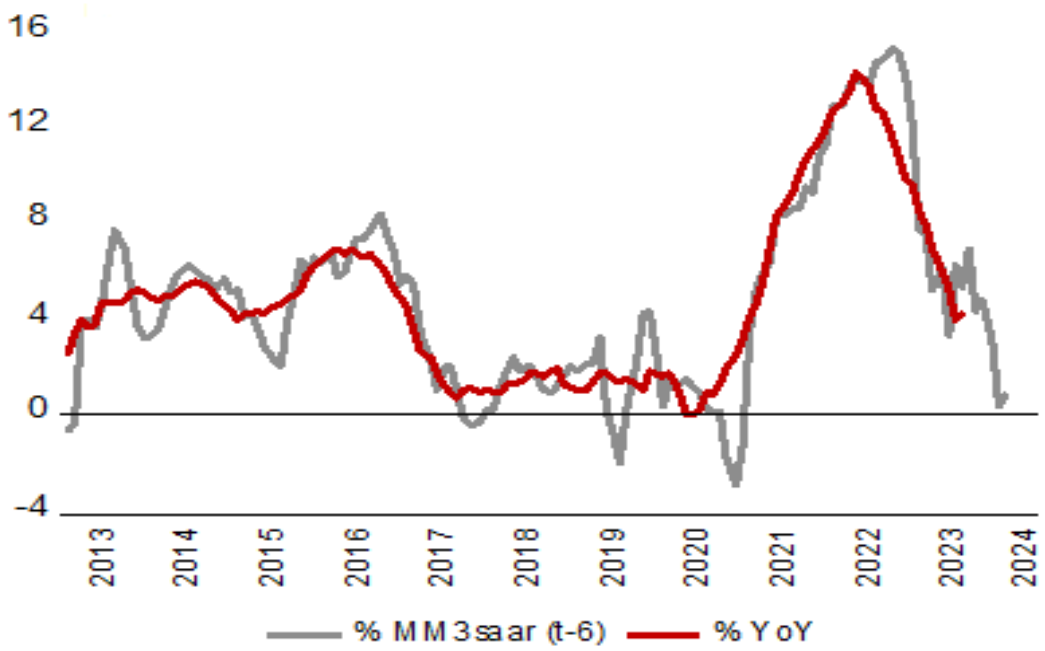


Sources: IBGE, BCB, Santander.

Industrials: the major relief is happening

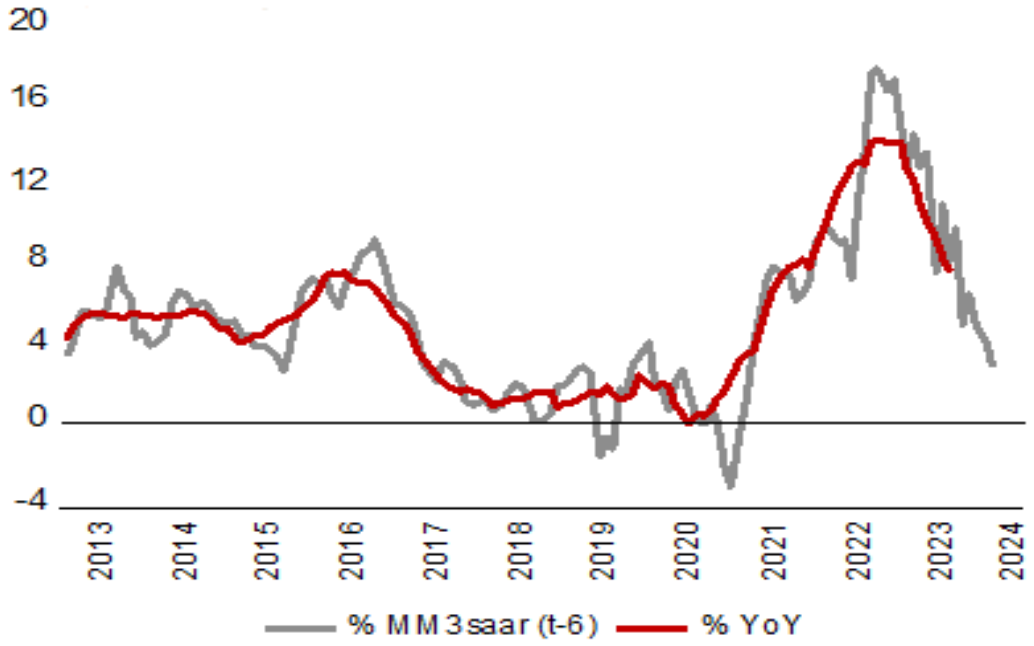
- Industrial goods are decelerating sharply with the trend at 0.8% 3MMA-saar, way below the inflation target
- The same can be said about core industrial goods, still in a level slightly higher level (3.0% 3MMA-saar), as it was not impacted by short-term measures (e.g., new autos subsidy)

Headline industrial goods inflation



Sources: IBGE, BCB, Santander.

Core industrials inflation

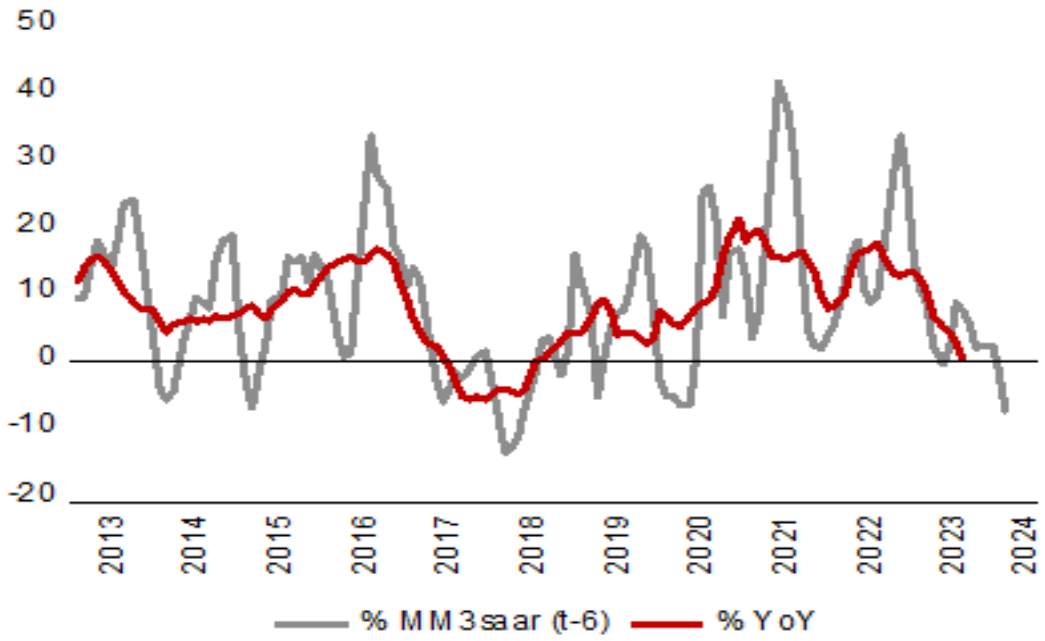


Sources: IBGE, BCB, Santander.

Food inflation: the major relief is happening

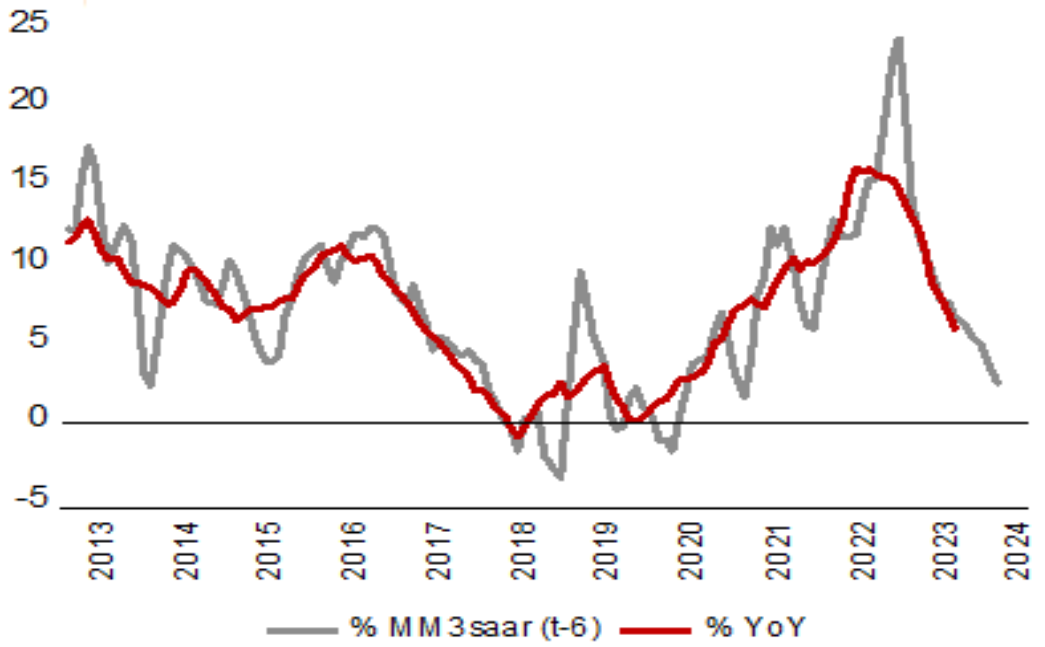
- For food, inflation has decelerated significatively in annual terms, and the trend implies that it will continue to be true in the coming months
- Core food inflation (mostly industrialized items) is also helping in the disinflation process, although a bit slower

Headline food inflation



Sources: IBGE, BCB, Santander.

Core food inflation

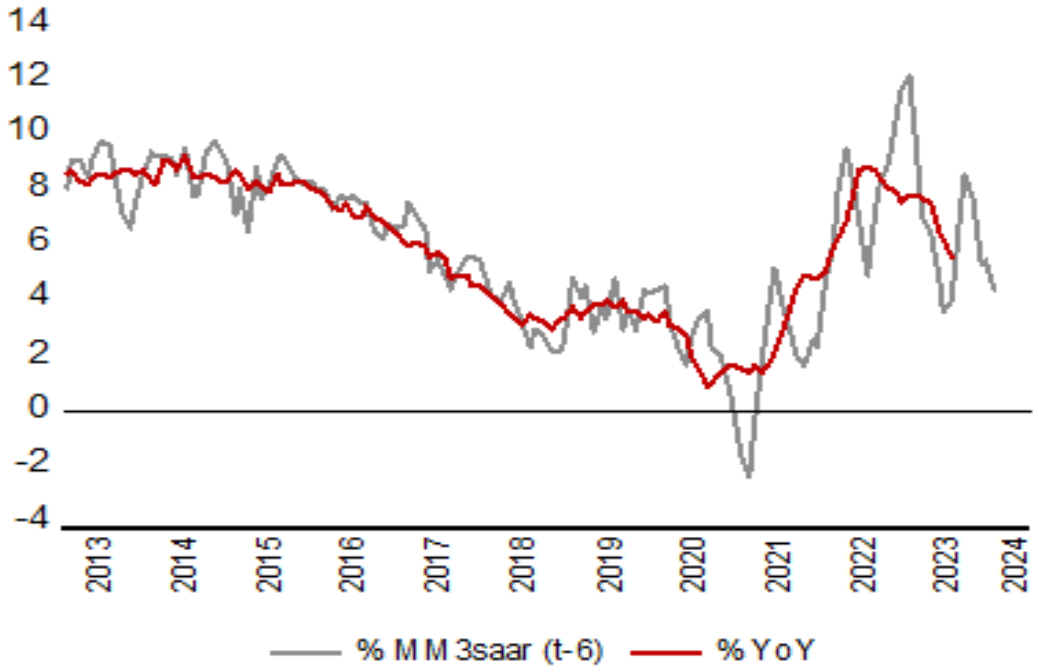


Sources: IBGE, BCB, Santander.

Consistent services disinflation yet to be seen

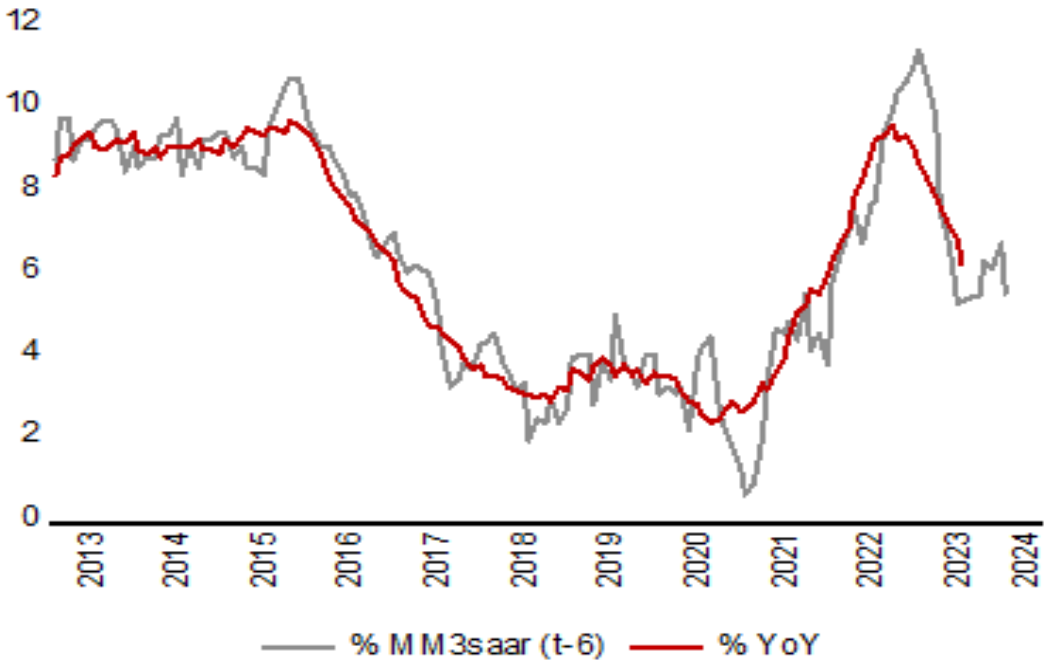
- Headline services went to 5.6% in July 2023 (from 8.9% YoY in July 2022), while the 3MMA-saar measure is drifting around 5%
- Core services inflation decelerated from 9.5% YoY in September 2022 to 6.1% in July 2023. The trend is also floating around 5%
- Therefore, services disinflation is happening, although they continue considerably above the inflation target
- **Question:** Was the faster core services disinflation in July a data point or the beginning of a convincing movement?

Headline services inflation



Sources: IBGE, BCB, Santander.

Core services inflation

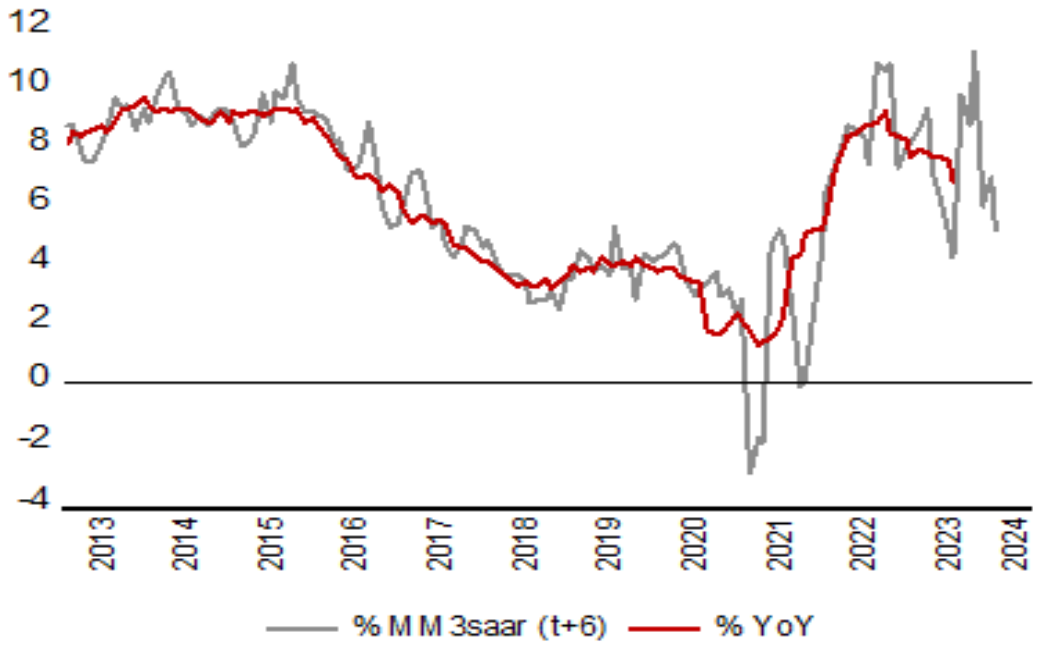


Sources: IBGE, BCB, Santander.

Services breakdown reveals heterogeneity in the slowdown process

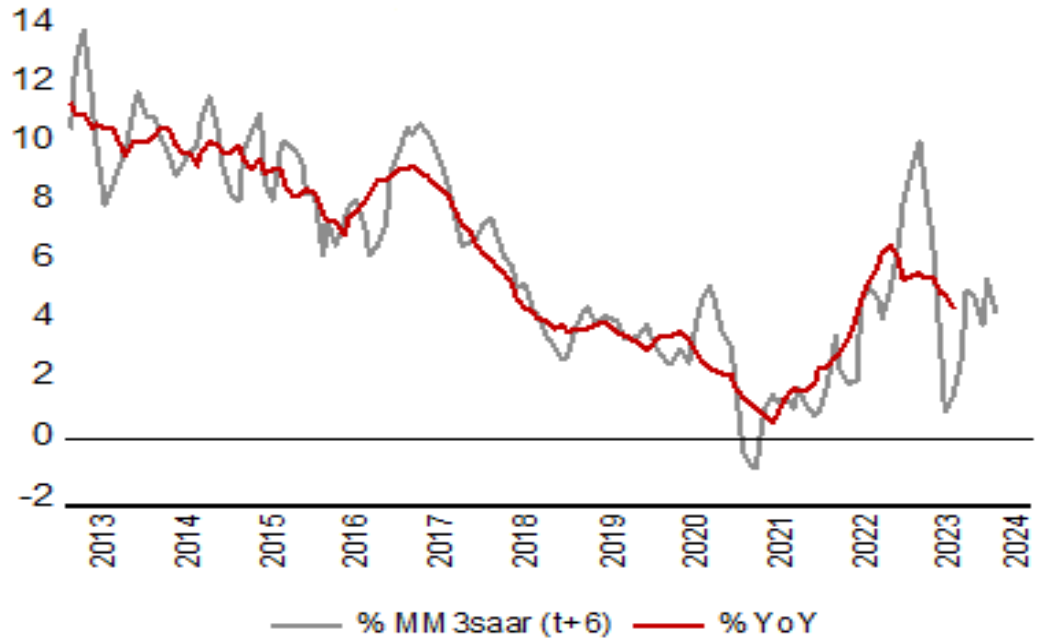
- Inertial services and services related to wages are decelerating slowly, down around 200 bps of their local maxima in 2H22
- Their trends are currently at 5.1% and 4.4% 3MMA-saar, respectively, which suggests a small room for further YoY fall
- It is worth pointing that Education, a relevant part of inertial services, is running sideways at 8.3% YoY since February 2023

Inertial services



Sources: IBGE, BCB, Santander.

Services related to wages

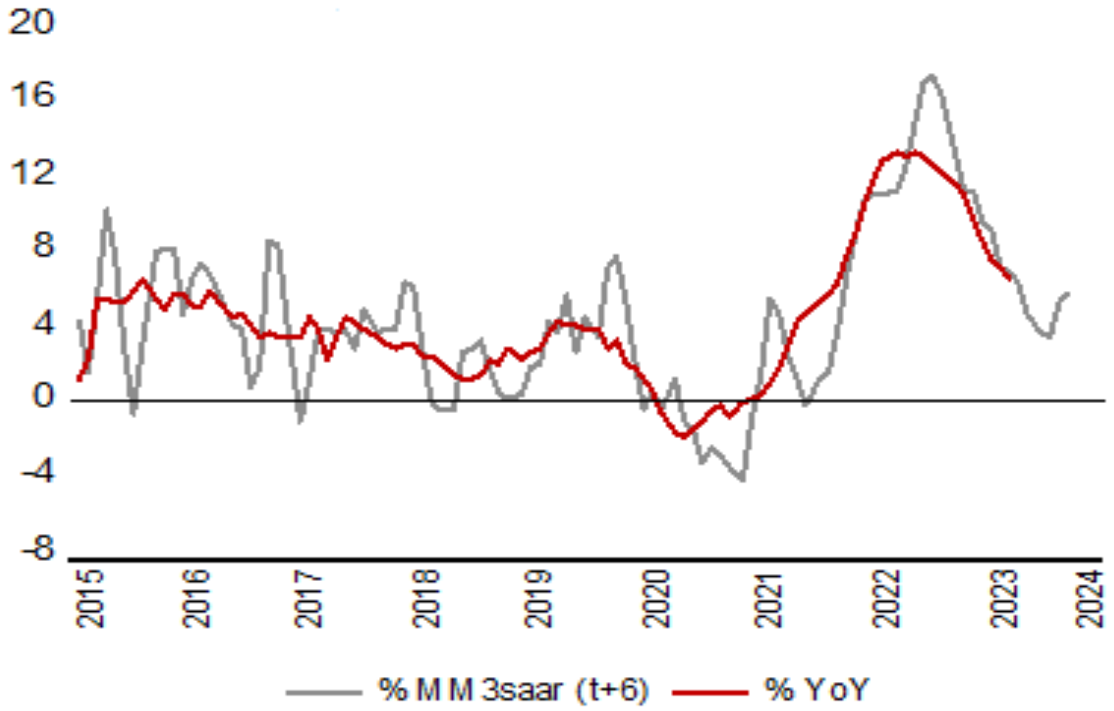


Sources: IBGE, BCB, Santander.

Services breakdown reveals heterogeneity in the slowdown process

- Services linked to economic activity peaked at 9.2% YoY in July 2022 and has been falling since then, reaching 6.6% YoY in July 2023
- Despite this impressive fall, its trend running at 5.9% 3MMA-saar and already rebounded. What should be a constraint for a continued deceleration

Services linked to economic activity

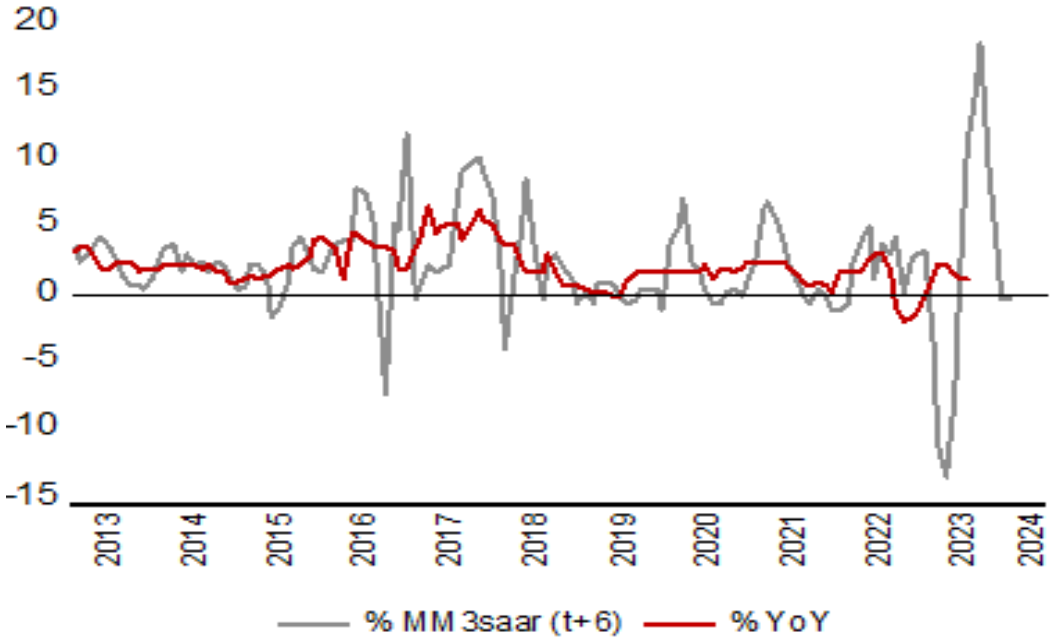


Sources: IBGE, BCB, Santander.

Services breakdown reveals heterogeneity in the slowdown process

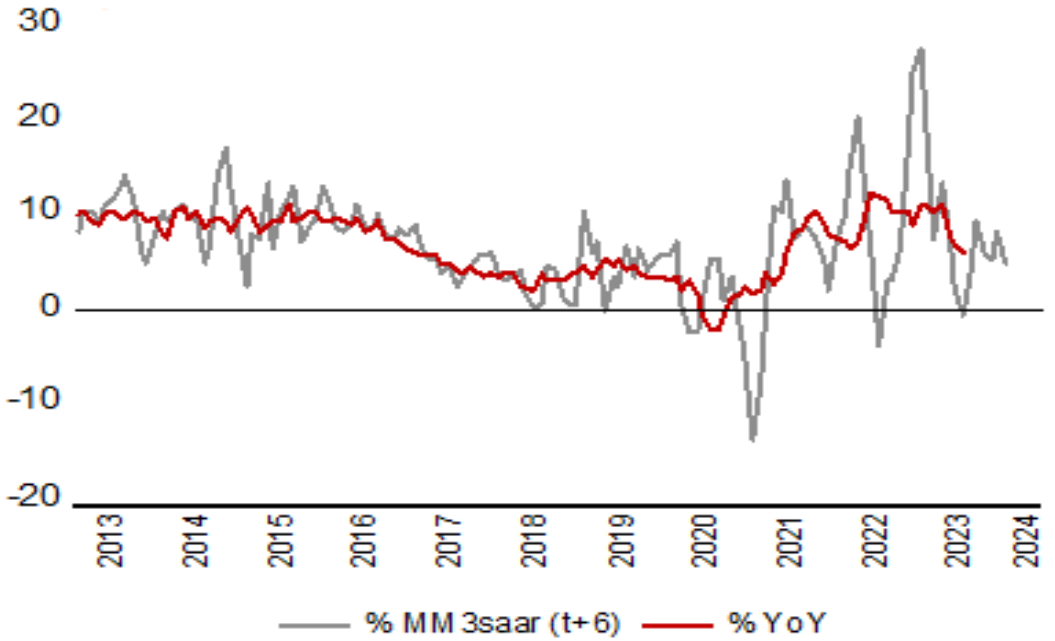
- Telecom services inflation passed its local peak finding itself at 1.3% YoY and -0.4% 3MMA-saar
- Volatile services is seeing a disinflation in annual terms (6.0% YoY) and at the margin (5.0% 3MMA-saar)

Telecom services



Sources: IBGE, BCB, Santander.

Volatile services (food service + airline tickets)



Sources: IBGE, BCB, Santander.

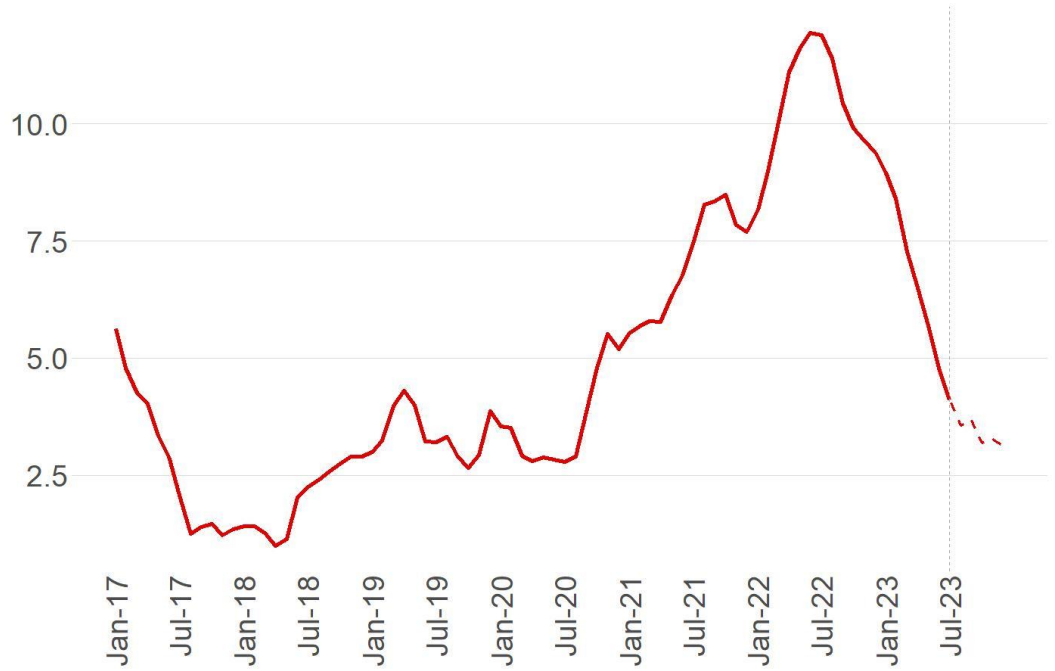
Looking ahead: the disinflation process in the stickier part should continue, but the pace of convergence to the inflation target is uncertain

03

What to expect from now on? Headline should rebound in the coming months

- IPCA in 12-month should rebound due to base effects, as the impact of last year tax reduction measures fades away
- Most of the rebound will be seen in regulated prices, while free prices are expected to continue its descending trajectory

Free prices forecast



Sources: IBGE, Santander

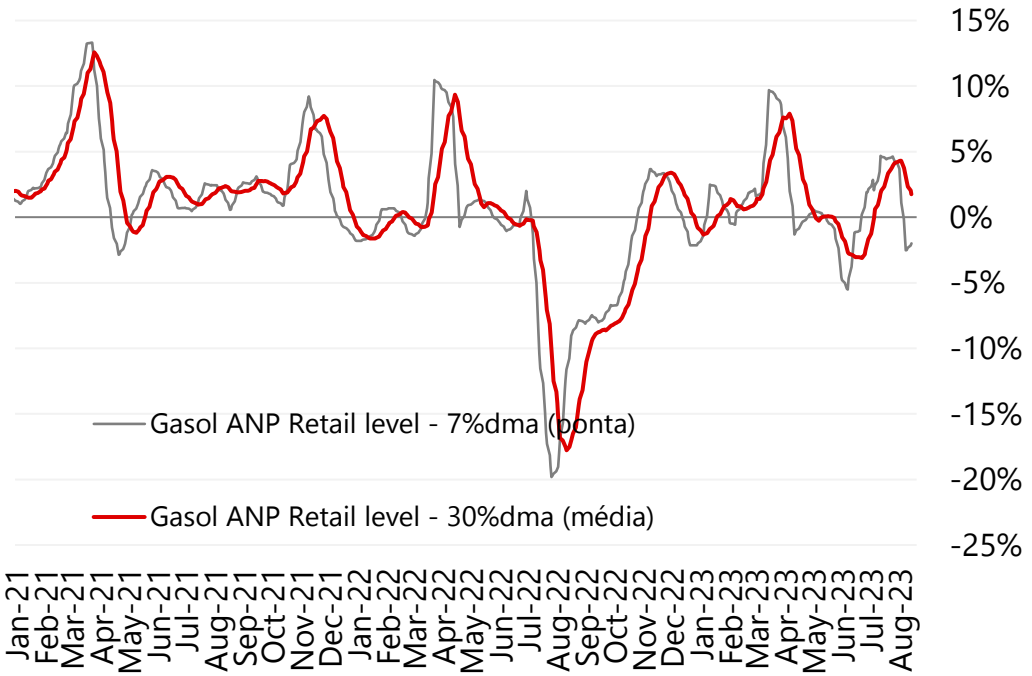
Regulated prices forecast

Sources: IBGE, Santander

Especially after the fuel adjustment at the refinery level

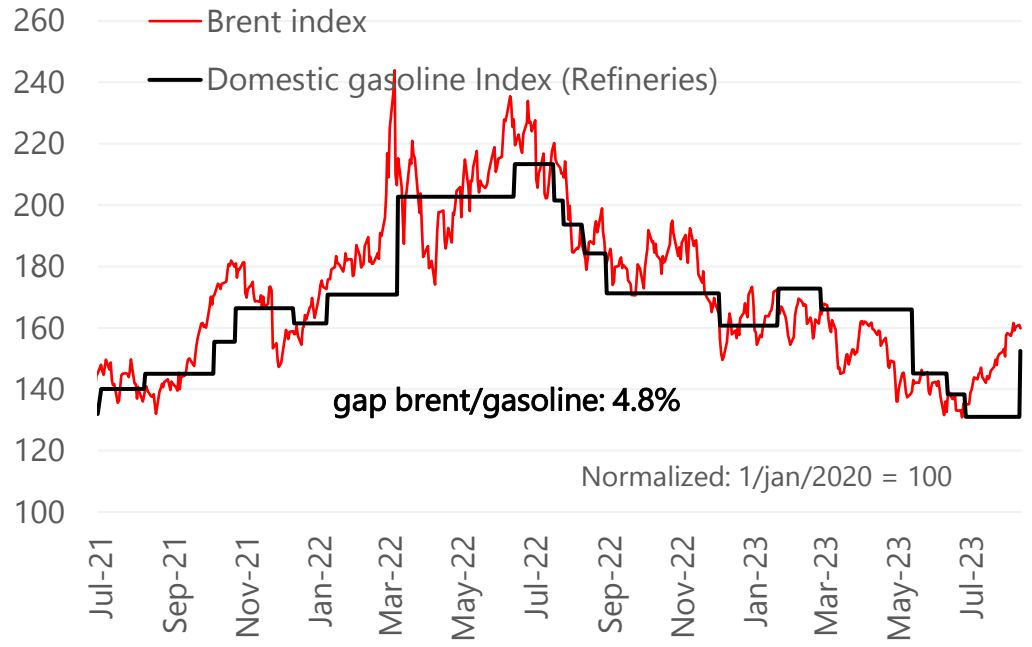
- After the last gasoline adjustment, we do not envision any other adjustment in gasoline prices looking ahead for this year
- Even though the gasoline tracking using Brent – instead of the international gasoline (Gulf) – price is still slightly positive, at +4.8%
- Gasoline prices at the consumer level, that were beginning to recede after the tax reinstatement in July, will rebound after adjustment at the refinery level

ANP gasoline price should rebound in the coming weeks



Sources: ANP, Santander

Gasoline gap is still positive

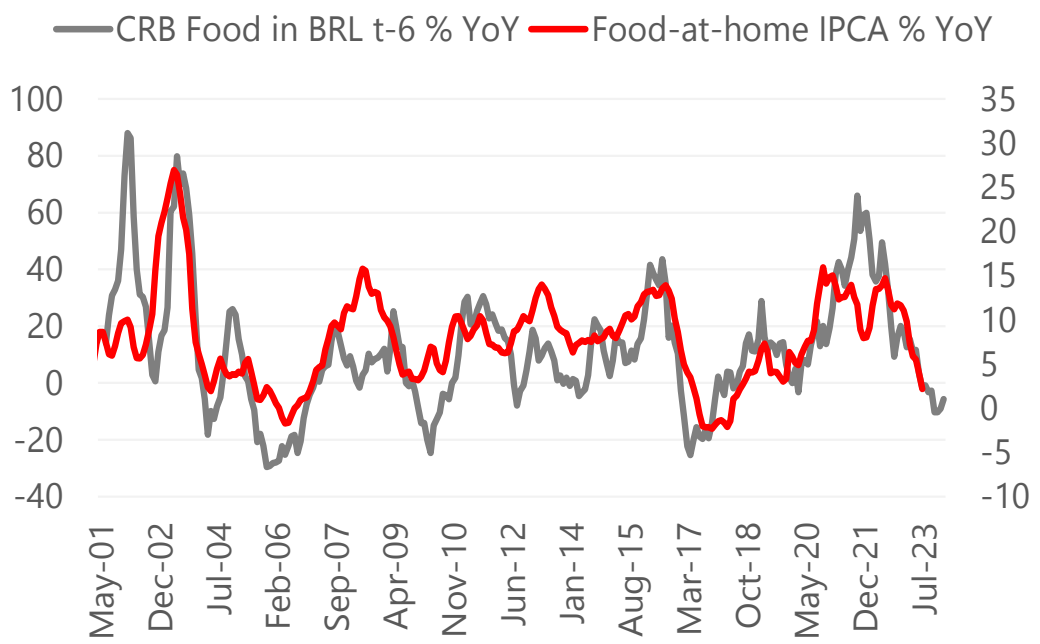


Sources: Bloomberg, Santander

Food-at-home: there is more space for disinflation

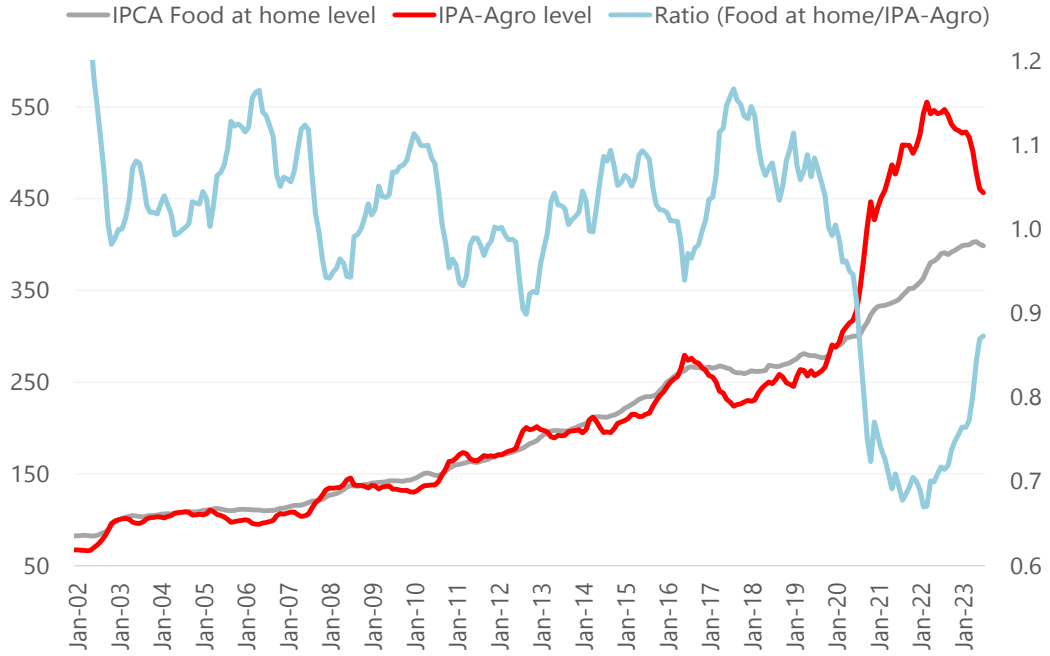
- Food-related commodity prices continue to indicate space for a disinflation ahead
- Wholesale prices are still falling, opening space for further fall at the consumer level

Food inflation on IPCA and CRB Food in BRL terms



Sources: IBGE, Bloomberg, Santander.

Distortion of relative price (consumer x wholesale)

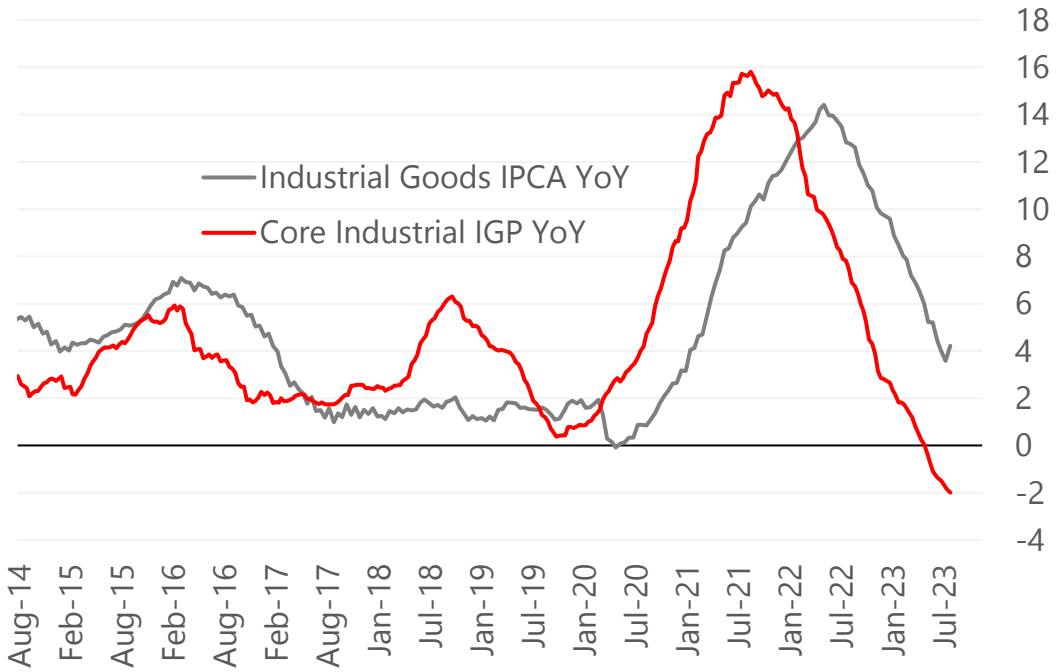


Sources: IBGE, FGV, Santander.

Industrial goods: there is more space for disinflation

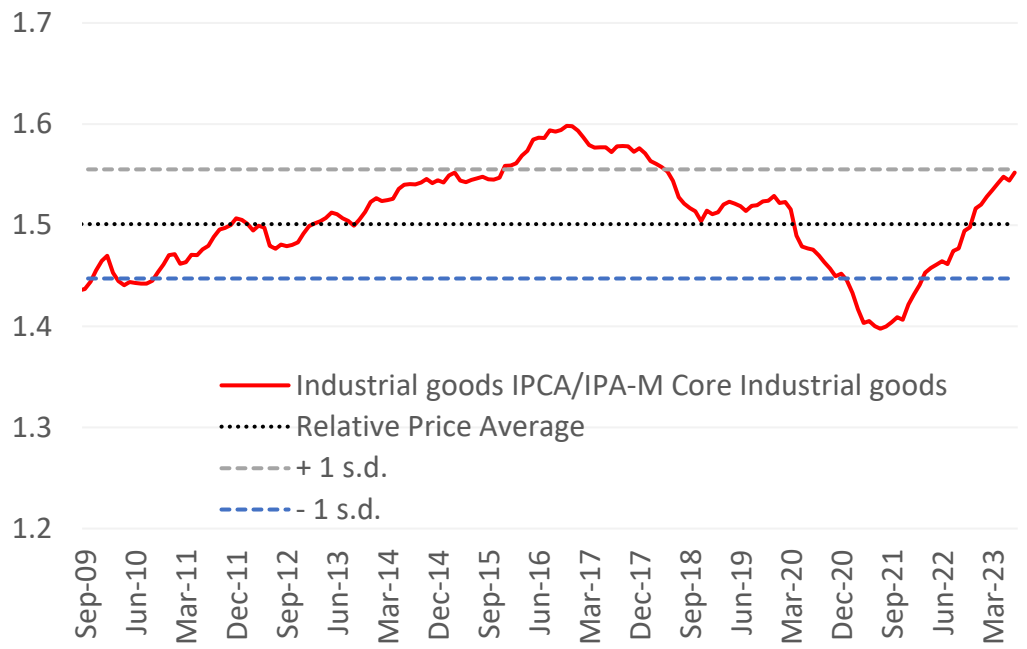
- Industrial goods inflation at the wholesale/producer level is decelerating as well. The consumer level prices are expected to follow
- This could also be seen by the ratio between industrial goods at consumer and wholesale levels, as it is almost 1 standard deviation above the historical average at the margin

Core-PPI-Industrial vs. Industrial goods in IPCA



Sources: IBGE, FGV, Santander.

Relative price (consumer x wholesale)

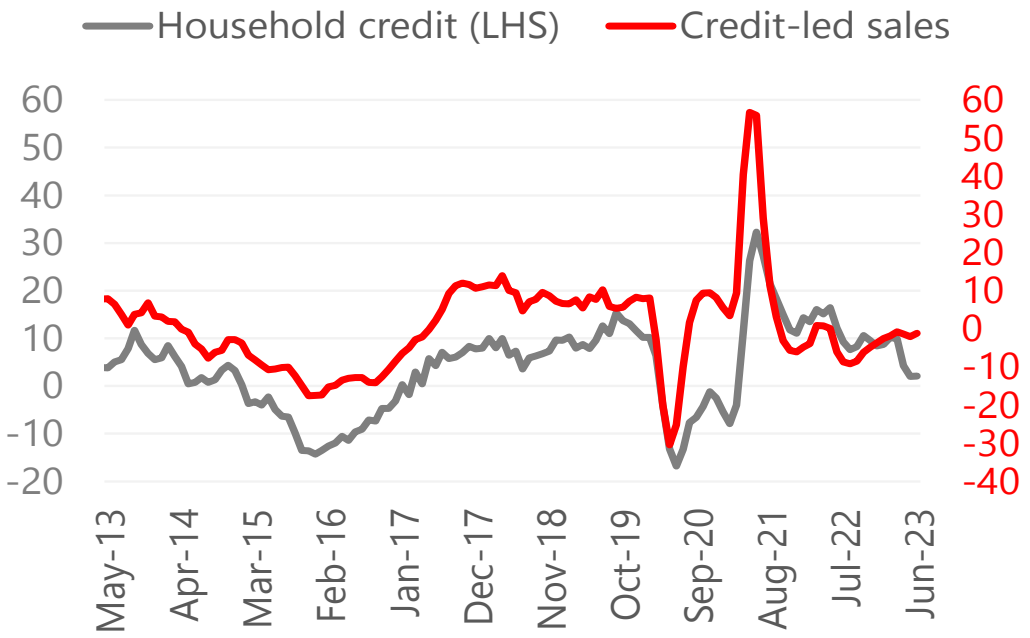


Sources: IBGE, FGV, Santander.

Lower demand for durable goods

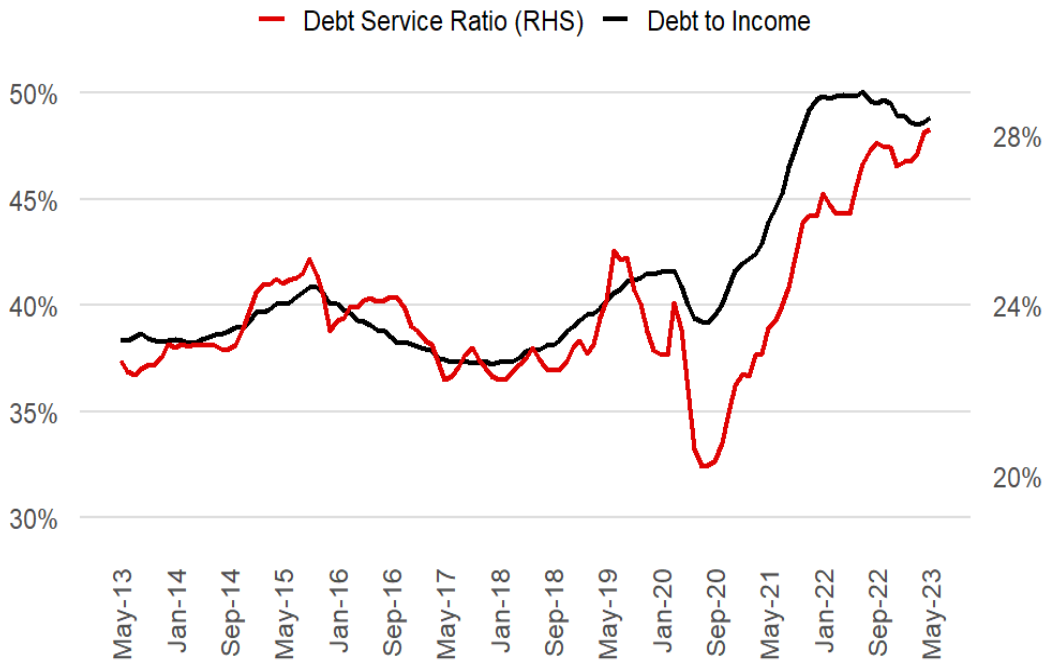
- For households, new loans have decelerated (slightly positive level though), and debt-income and debt-service ratio levels are high, suggesting a small space for demand through credit
- In fact, credit-led sales are already at negative level (% YoY 3MMA) with even more space to fall given the current household credit level

Credit-led retail sales and New loans to households (% YoY 3MMA)



Sources: IBGE, BCB, Santander

Households are highly indebted

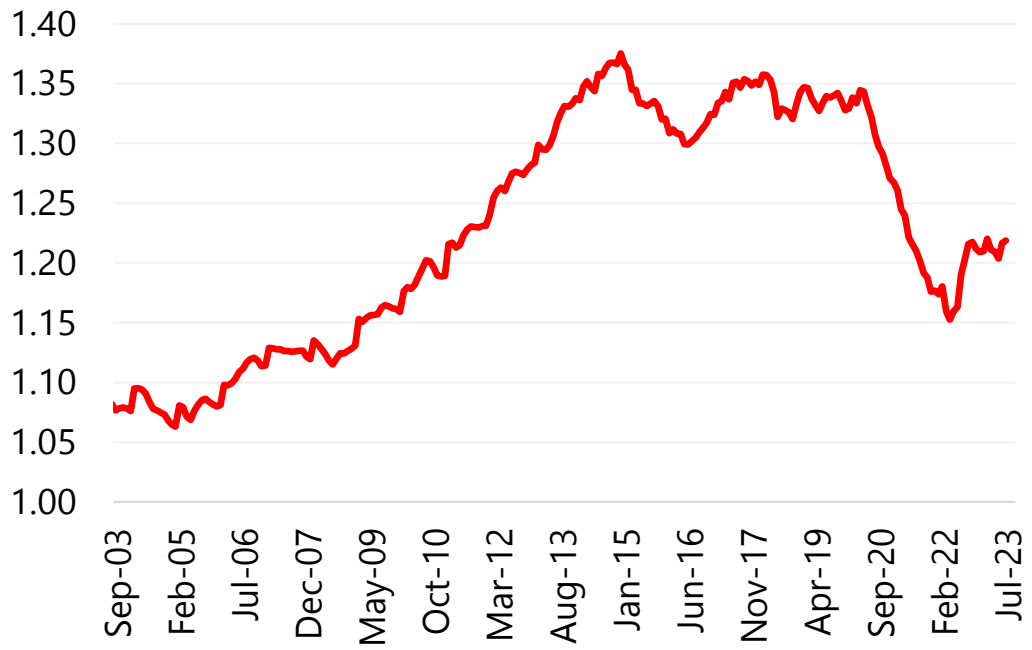


Sources: BCB, Santander

Services: a slower disinflation, as prices at this sector are more inertial

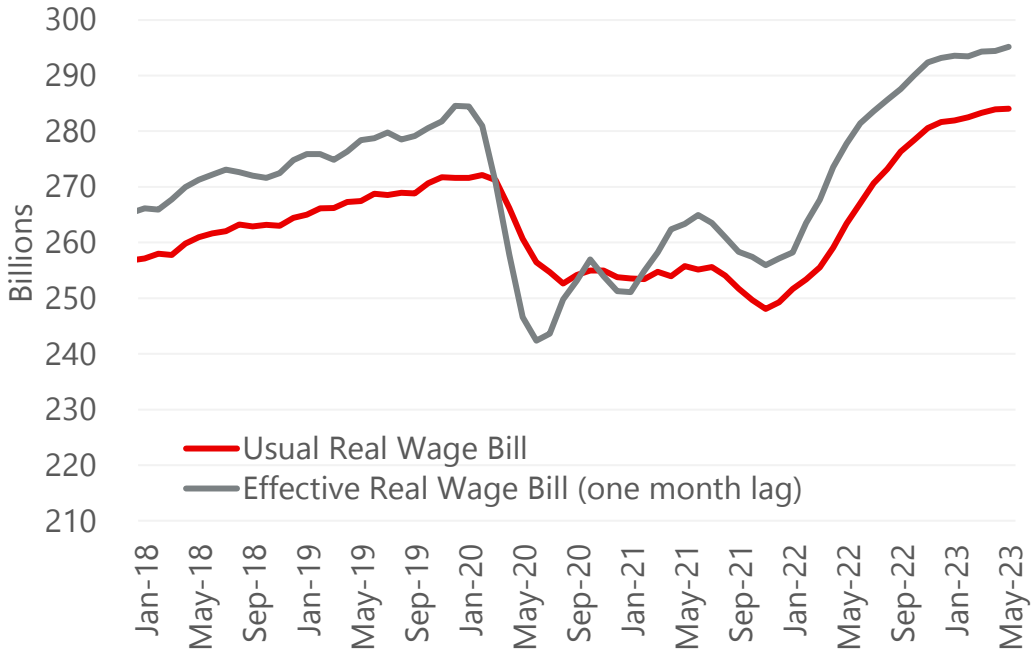
- Services is still lagging the non-services inflation, as the relative price between IPCA services/IPCA ex-services is still distorted
- As a result, services should continue to run above the rest of IPCA for a while
- Services inflation has also been supported by a low unemployment rate and a surge in real wages bill, that influences more this sector compared to credit

Relative price: IPCA Services/IPCA Ex-Services



Sources: IBGE, Santander

Increase in income to levels above pre-pandemic is supporting services

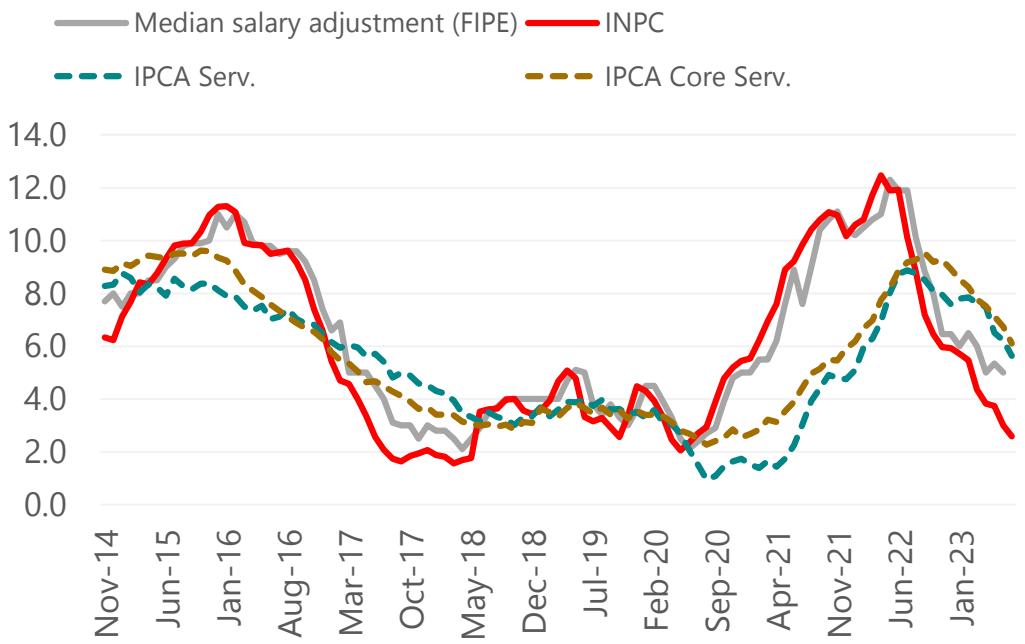


Sources: IBGE, Santander

Services: cost pressures should be cooling down as wage adjustments decelerate

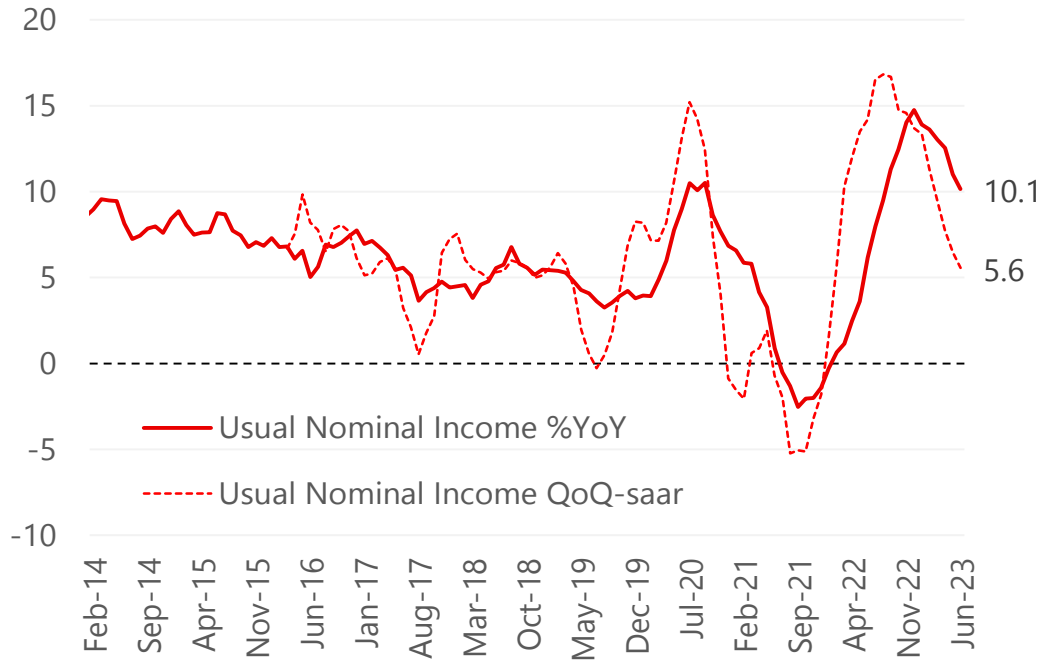
- Although services is expected to continue running above the rest of IPCA for a while, cost pressures should be falling as the sector is labor intensive and wage growth is softening
- Wages adjustments reported by FIPE lags the INPC and show a deceleration following the fall in headline inflation
- Usual nominal income growth is also decelerating with 3MMA-saar at 5.6%

FIPE wage adjustment (% YoY)
Services inflation (% YoY)



Sources: IBGE, FIPE, Santander

Usual nominal income growth

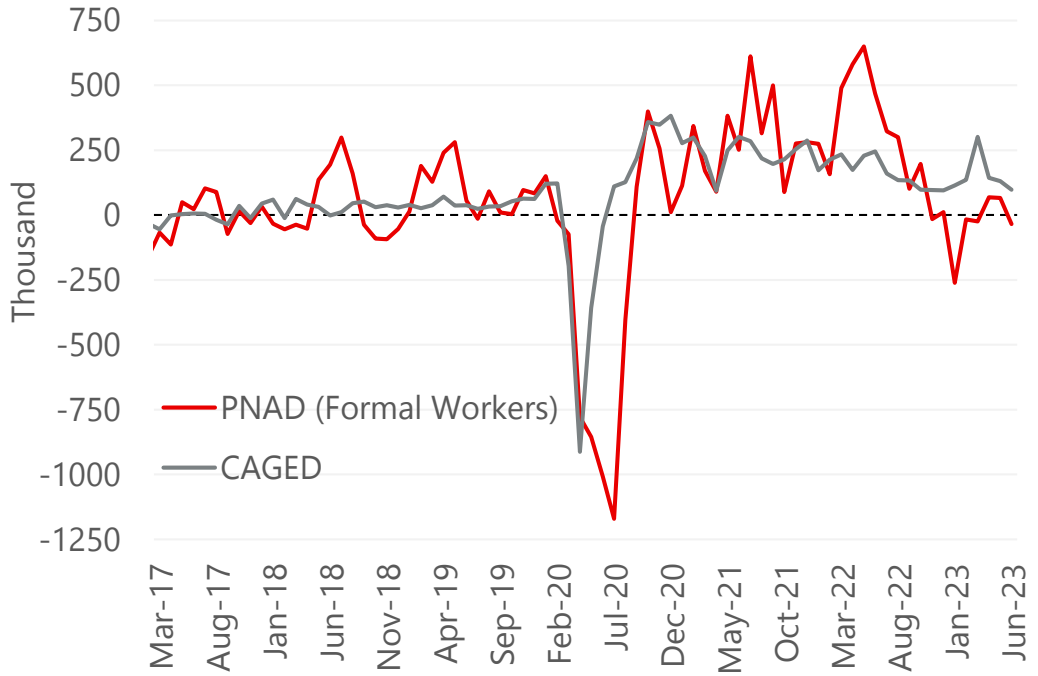


Sources: IBGE, Santander

Services: the job market is already showing signs of softening

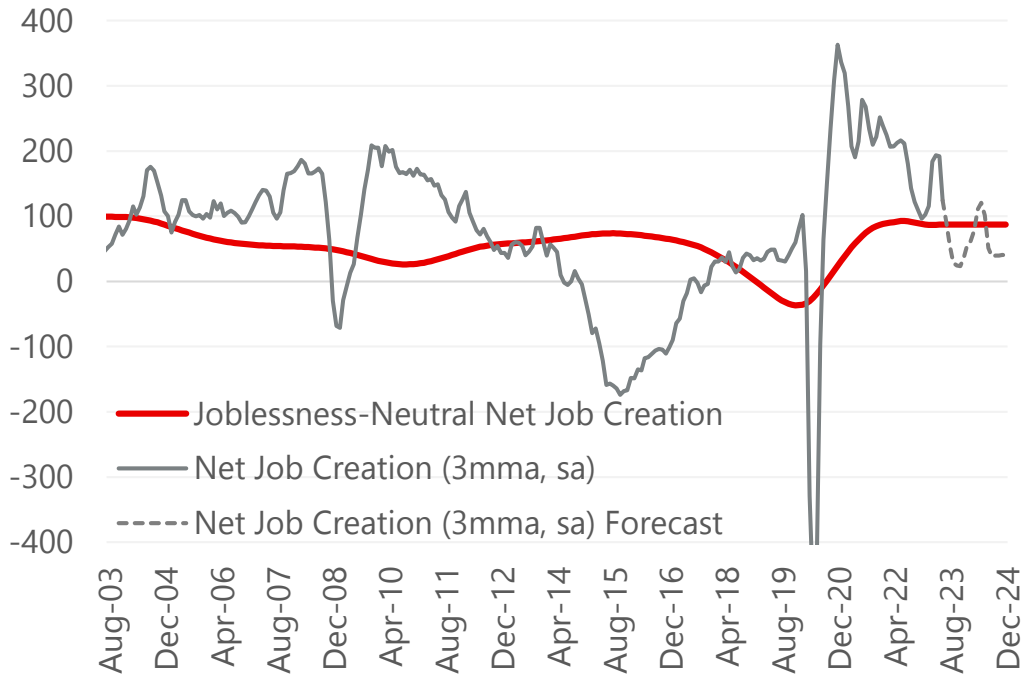
- Formal net job creation is weakening in both measures (PNAD and CAGED)
- Looking ahead, CAGED is expected to fall below its neutral rate, leading to a growth in unemployment rate

Formal net job creation is weakening



Sources: IBGE, Ministry of Labor, Santander.

CAGED should decelerate to below its neutral rate

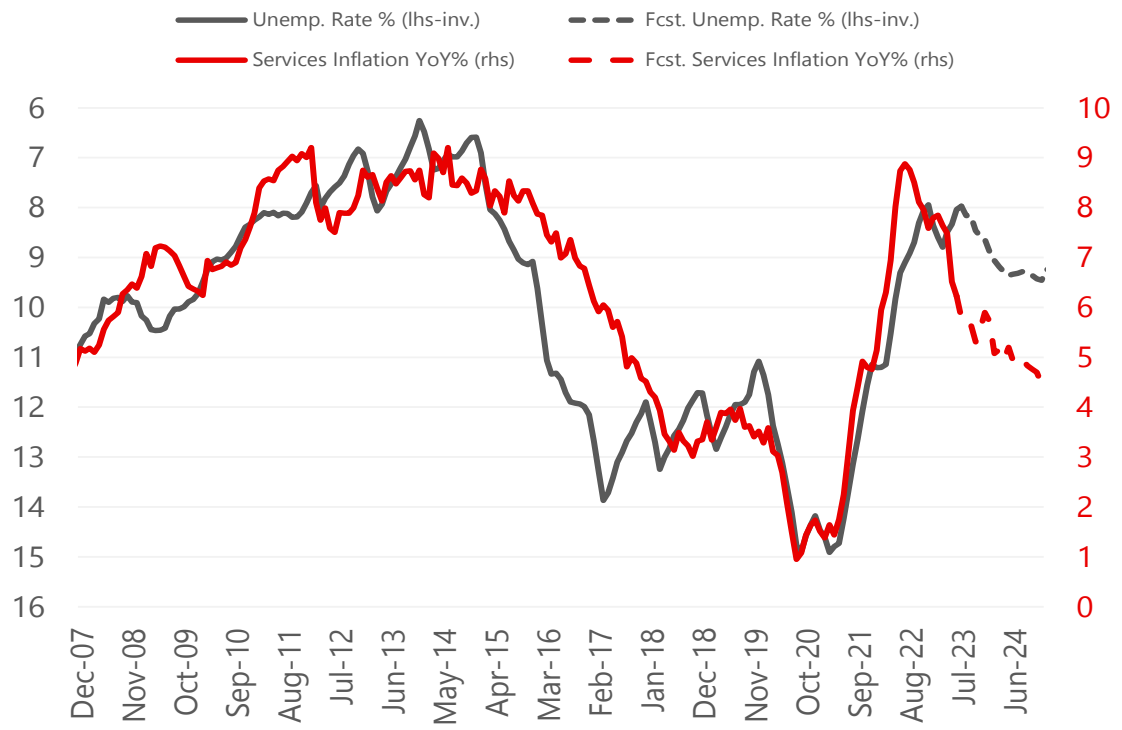


Sources: Ministry of Labor, Santander.

Services inflation, wage growth and unemployment rate conundrum

- To sum up, services inflation and wages are both easing, despite a sustained unemployment rate
- In any case, services inflation should keep its downward trajectory in the short-term, as we expect it to reduce to 4.5% in 2024
- The uncertainty is whether it can recede to the inflation target, given that the job market remains tight, even with an increase in unemployment rate

We expect unemployment rate to rise, which should take out services inflation steam

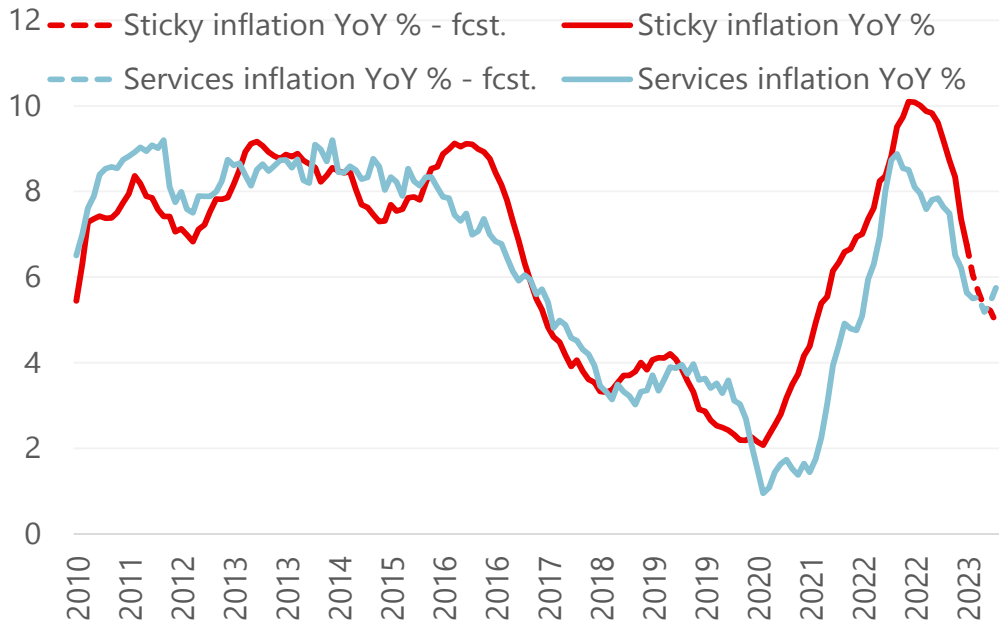


Sources: IBGE, Santander.

Sticky and semi-sticky inflation on a downward trend

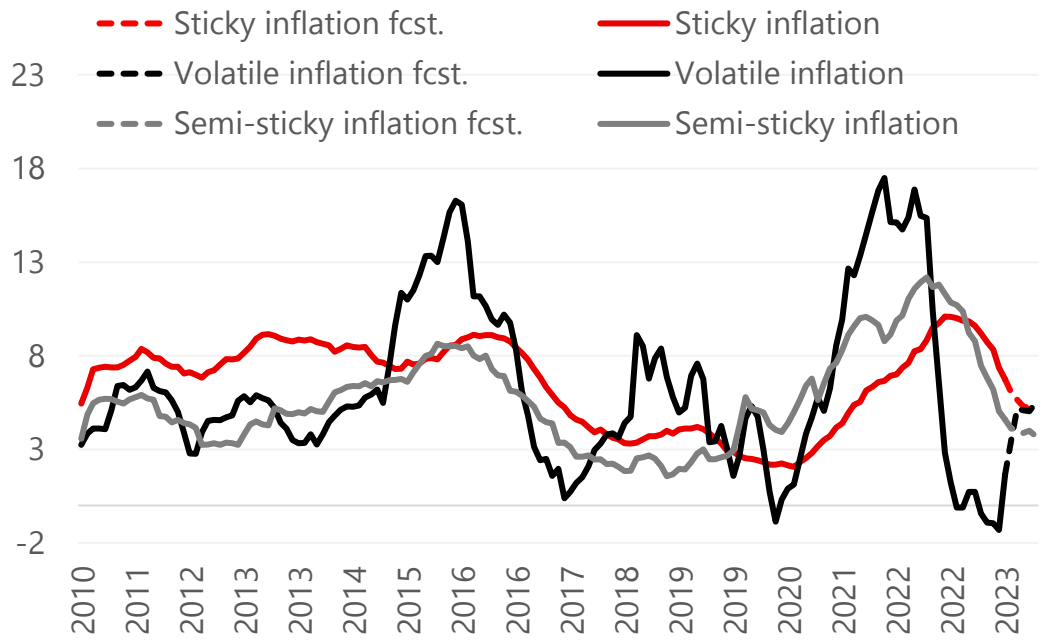
- In other words, the volatile part of inflation is rebounding on the back of the tax reinstatement and gasoline readjustment
- However, sticky and semi-sticky items should continue to slow down, reaching 4.9% and 3.7% by 2023YE, respectively (from peaks of 10.1% and 12.2%)

Sticky inflation vs. Services inflation



Sources: IBGE, Santander.

Sticky, semi-sticky and volatile inflation decomposition

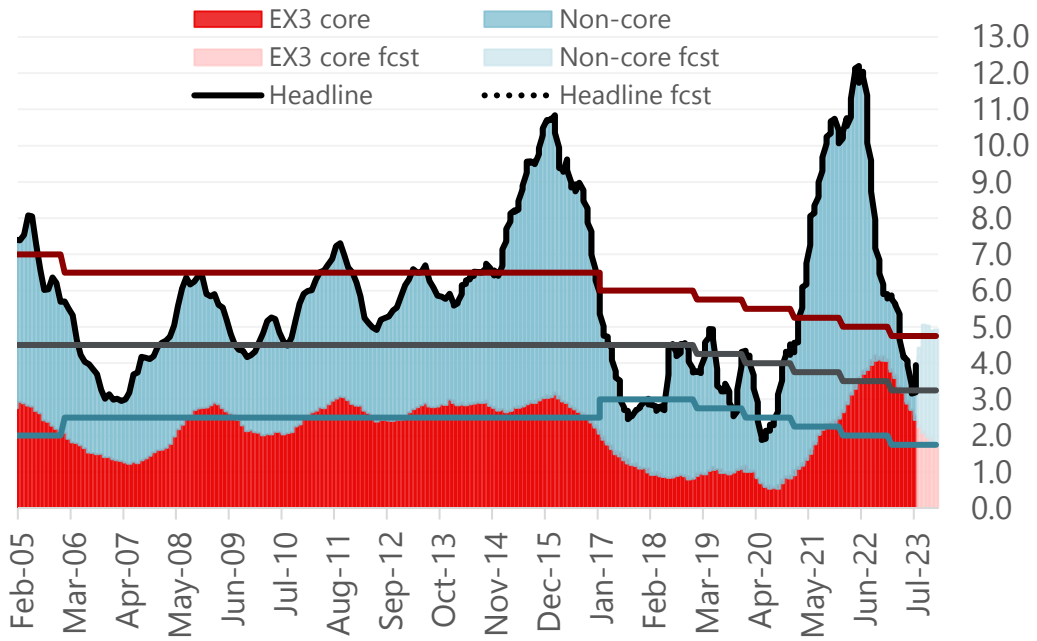


Sources: IBGE, Santander.

Bottom-line: volatile inflation is rebounding, but core gauges is expected to decelerate

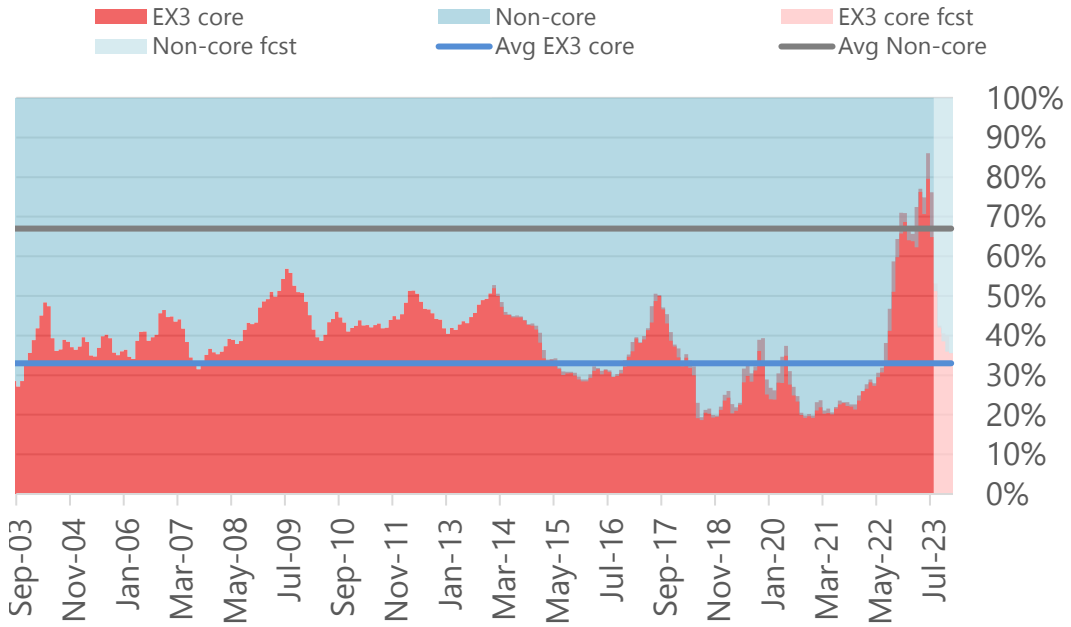
- The disinflation process is entering a tricky period where volatile and headline inflation are rebounding, but core/sticky inflation is still decelerating
- The rebound should last 3 months (July to September), but not interfere in the disinflation process (therefore, a risk factor)
- The contribution of the core to headline inflation should continue the downward trend until the end of the year and recede back to account for around 30% of total inflation (which is the historical average)

IPCA decomposition: core and non-core



Sources: IBGE, Santander.

Contribution of core and non-core to headline IPCA



Sources: IBGE, Santander.

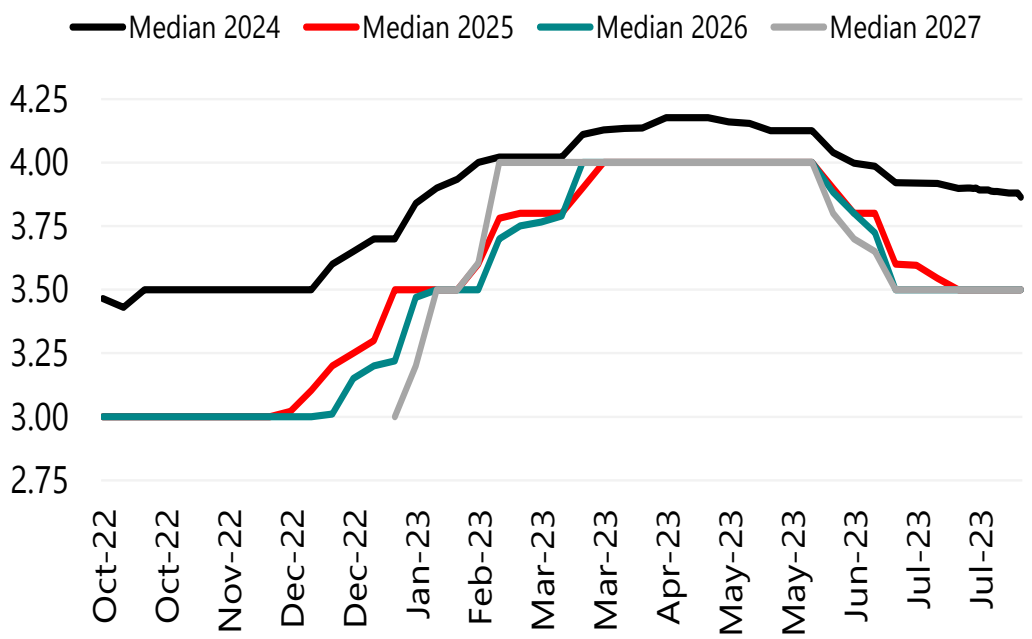
Main Risks: expectations re-anchored only partially and El Niño

04

Further re-anchoring in inflation expectations is uncertain

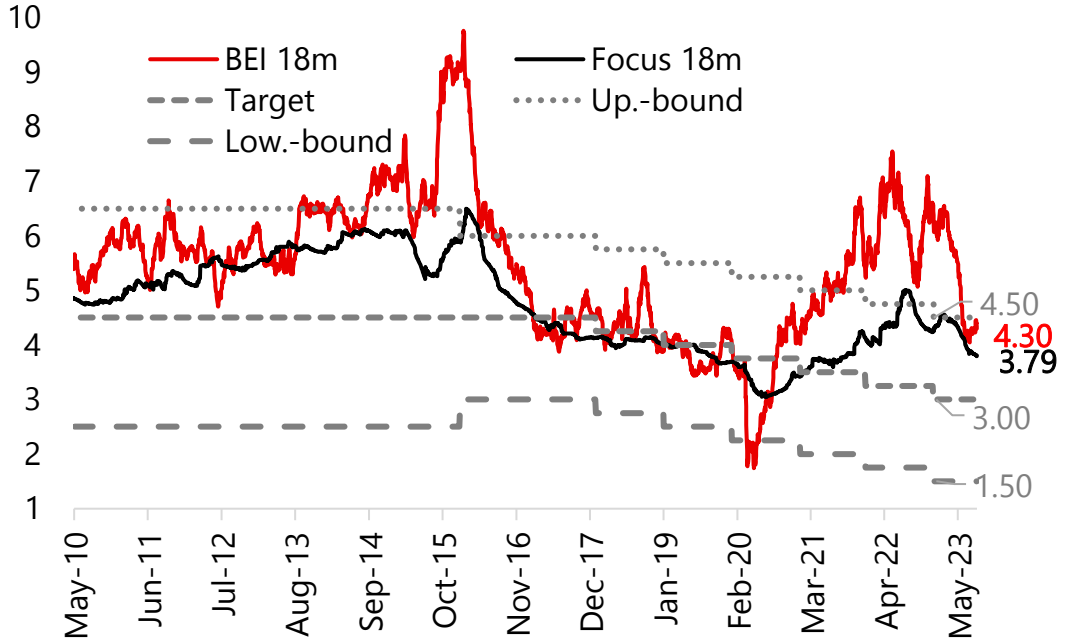
- Long-term expectations re-anchored only partially, remaining +50 bps above the target, which makes the disinflation process more difficult
- BEI fell sharply, however, it already rebounded from the year bottom, and is still above survey-based expectations and the target
- Further re-anchoring depends on: (i) BCB's action/communication; (ii) short-term inflation dynamics; and (iii) the approvement of measures that improves the primary balance in the medium-term

Survey-based Inflation expectations are above the target



Sources: BCB, Santander.

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

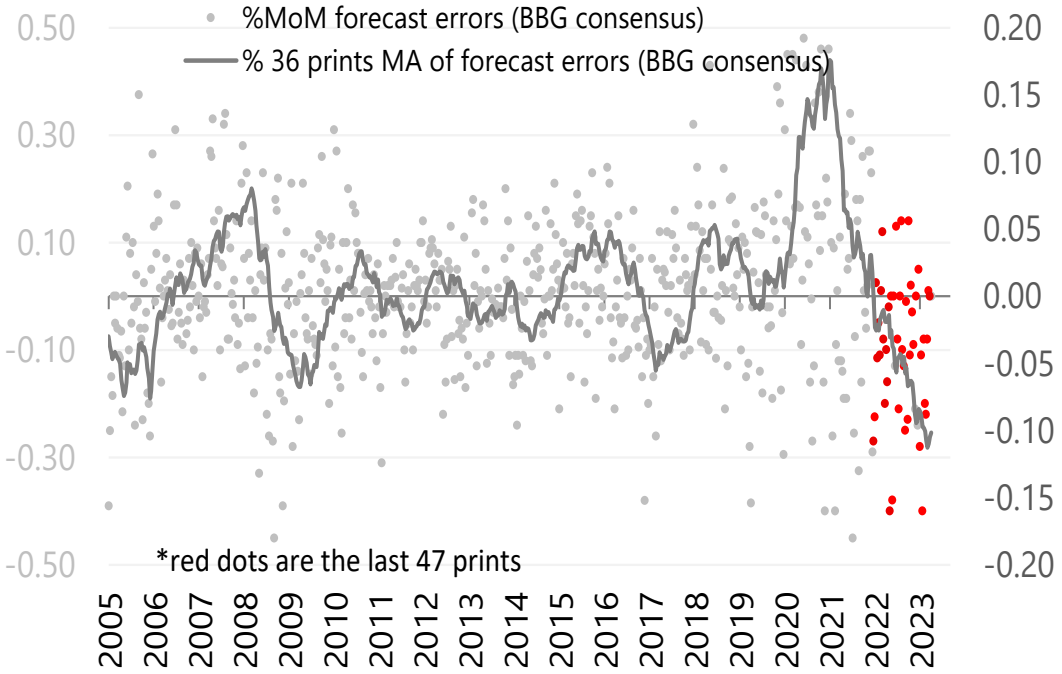


Sources: BCB, Bloomberg, Santander.

A stronger disinflation now could help further re-anchoring

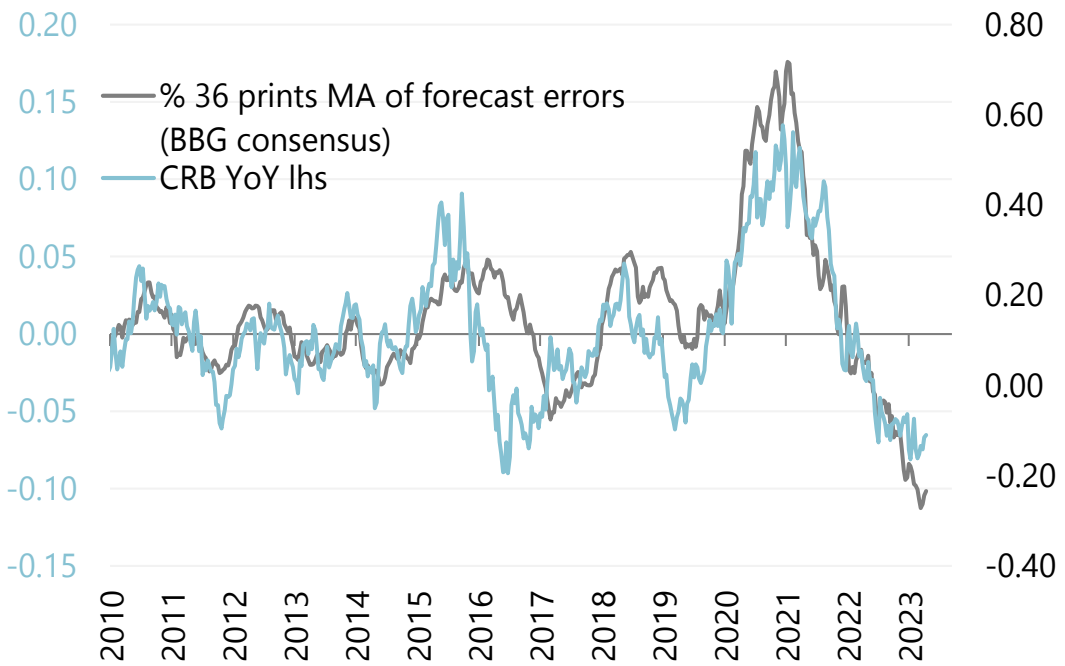
- In the short-term, only inflation dynamics may support a fall on inflation expectations from the three points mentioned in the previous slide
- In the IGPs, for the past 47 prints, 70% came in below expectations (11% came in line and just 19% came in above forecasts)
- The surprises appear to be mostly driven by the commodity prices in BRL terms

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



Sources: FGV, Bloomberg, Santander.

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

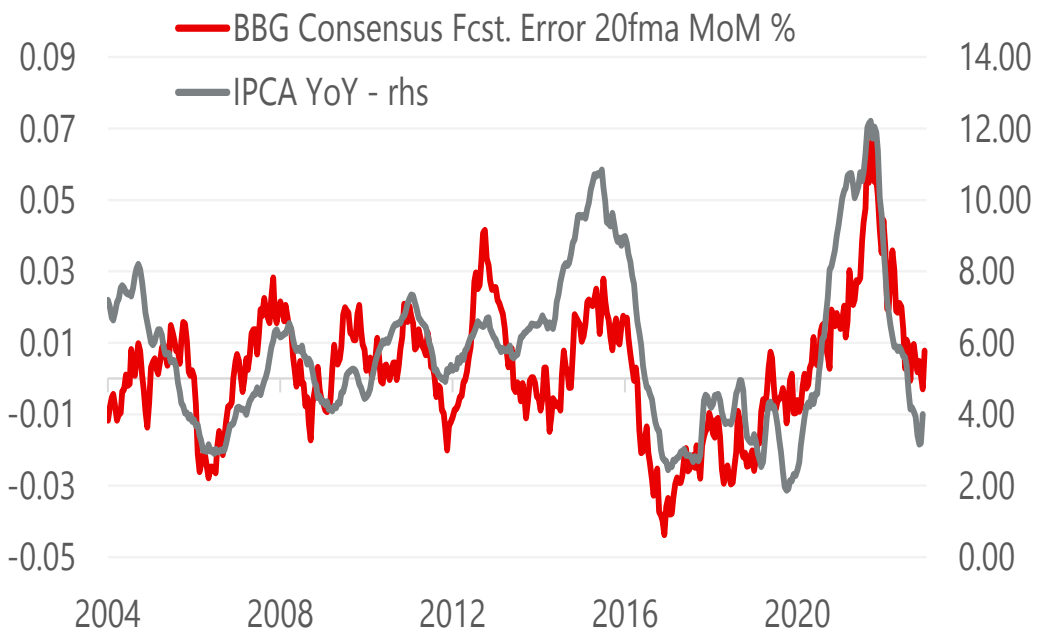


Sources: FGV, Bloomberg, Santander.

Surprises at the producer level have not fully reached consumers yet

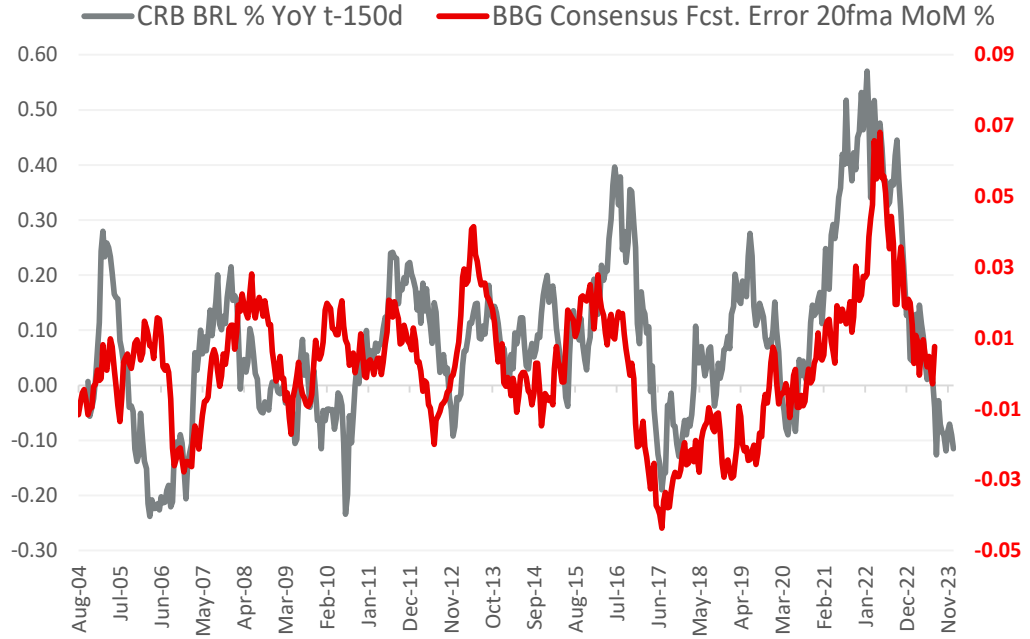
- IPCA inflation surprises are still lagging the CRB deceleration, what could imply more downward surprises
- Although the correlation between current headline inflation (which is rebounding) and surprises suggests that we might not see more downward surprises in the short-term

IPCA inflation surprises are highly correlated to the state of inflation



Sources: IBGE, Bloomberg, Santander.

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

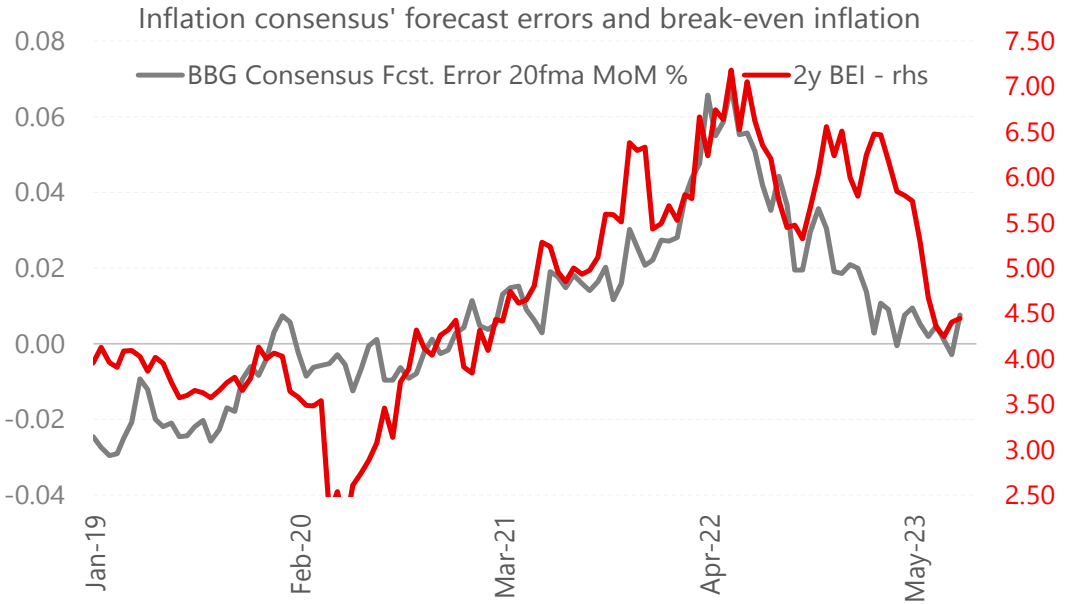


Sources: Bloomberg, Santander.

If we see short-term inflation surprises, it could influence medium/long-term expectations

- Short-term surprises usually are incorporated in market-based (BEI) long-term expectations
- Then the BEI tends to drive the survey-based expectations

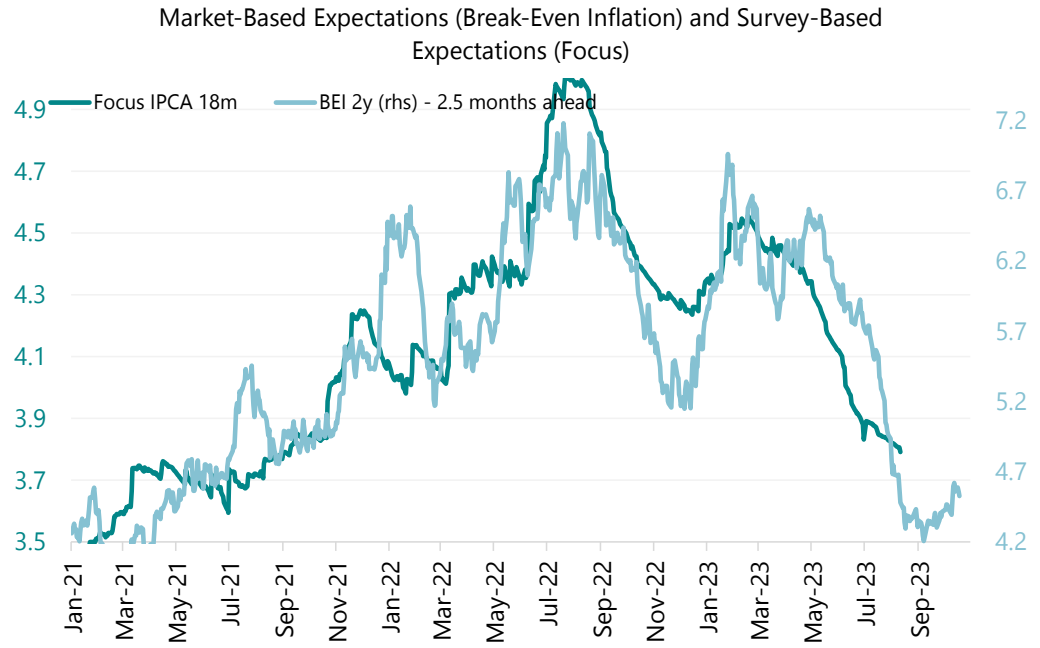
2y BEI is starting to fall at the margin, because of recent IPCA downward surprises



Source: Santander
*12 month moving average of the monthly IPCA (and IPCA-15) prints' consensus error at Bloomberg

Sources: Bloomberg, Santander.

Usually the BEI anticipates movements on Focus

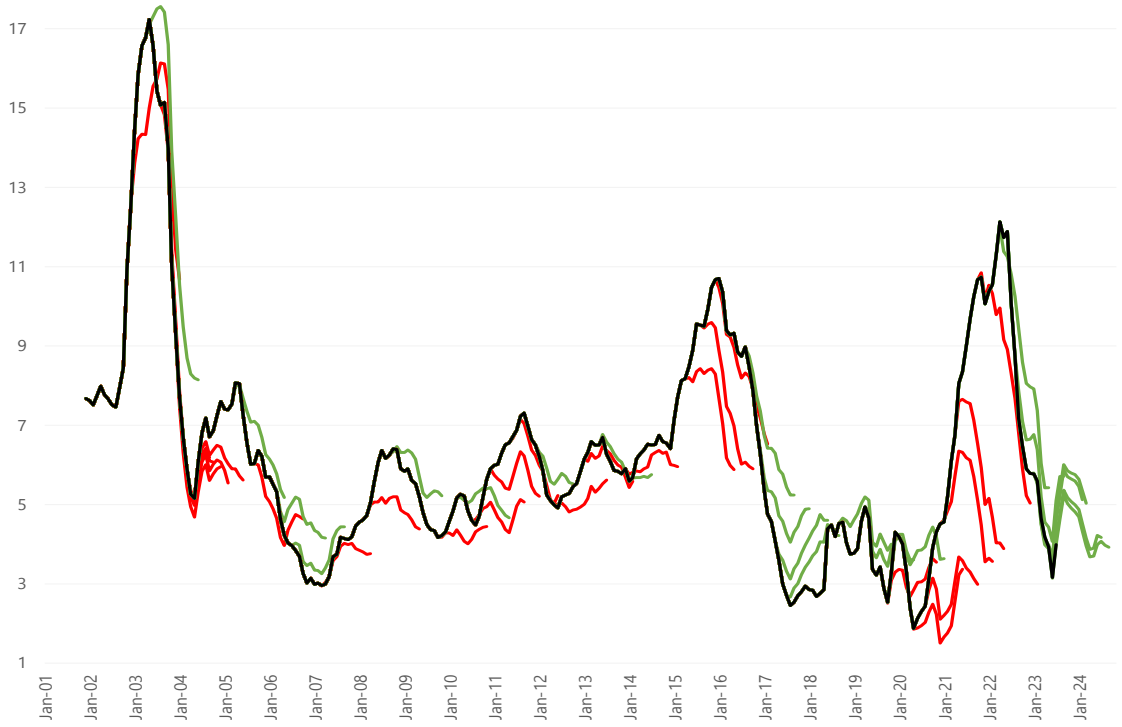


Sources: BCB, Bloomberg, Santander.

History shows that usually we are surprised downwards during disinflation processes

- Survey-based expectations tend to underestimate (overestimate) the inflation path when it is rising (falling)

IPCA YoY and survey-based expectations in different periods of time

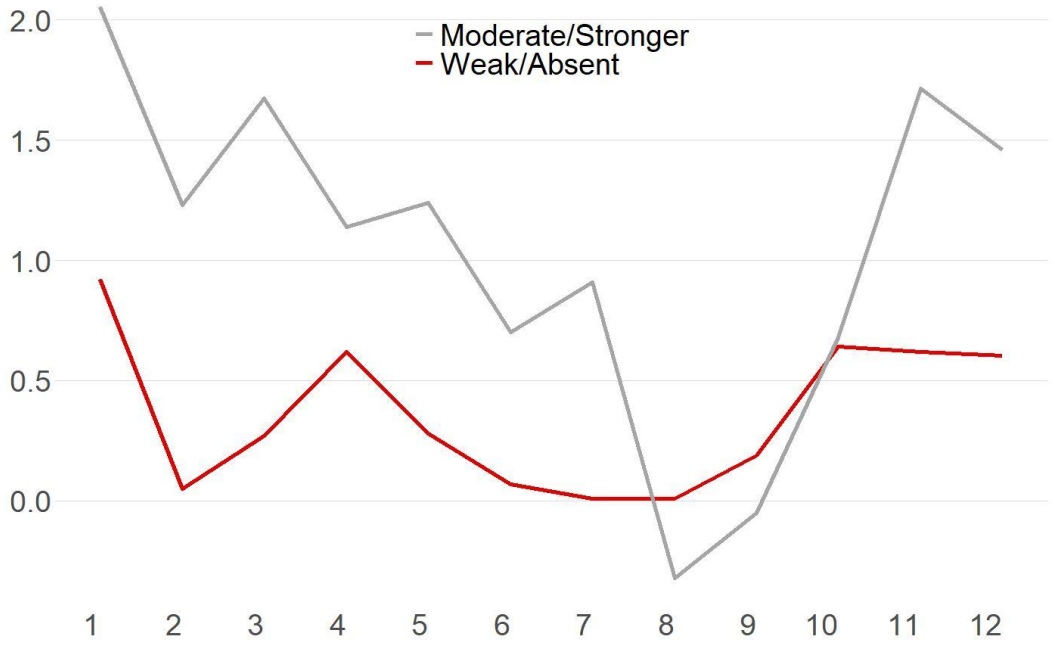


Sources: BCB, Santander.

Other risks: El Niño

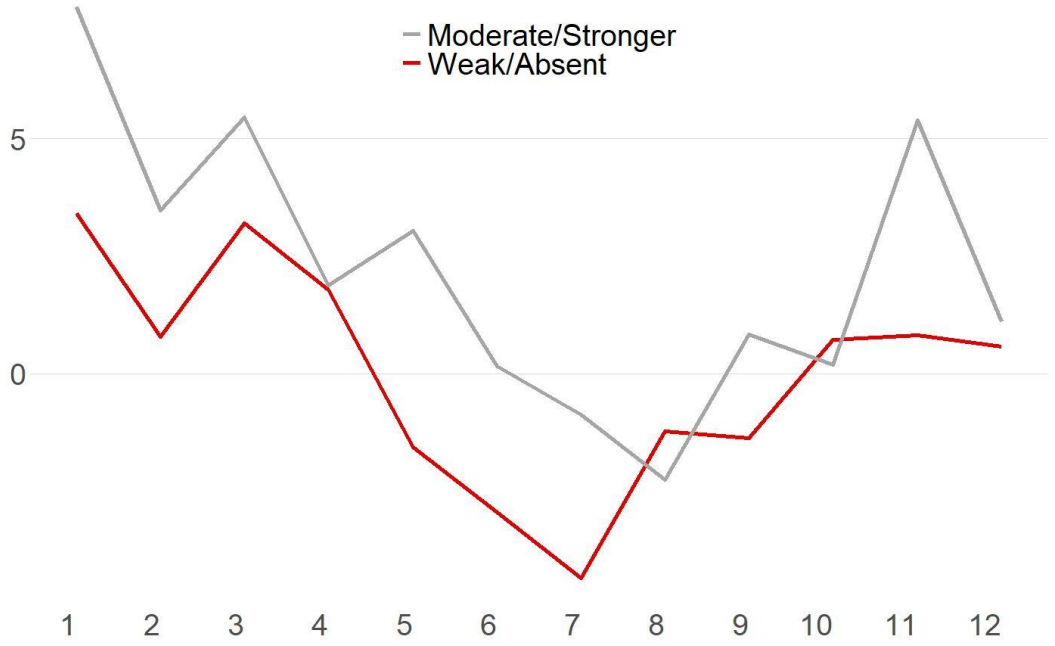
- El Niño will be a reality, the question now is about its intensity (95% chance of strong El Niño until February 2024 according to NOAA) and possible effects on inflation
- As it alters the rainfall pattern (associated with increased rainfall in the South, Southeast, and Central-West), it should guarantee an endured period of “green flag” for electrical energy
- For food, it is historically associated with higher fresh-food inflation, then an upward risk for 4Q inflation

MoM food-at-home is usually higher during moderate or stronger El Niño



Sources: IBGE, Santander.

MoM fresh food is the driver behind higher food-at-home inflation



Sources: IBGE, Santander.

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