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**Brazil Macro | September 2021**

**INFLATION**

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- 1. Forecasting accountability**
- 2. The shape of inflation to come: close to the peak, but with unfavorable composition and uncertainties around the pace of deceleration, so the outlook still demands caution**
- 3. Balance of risks: clearly tilted to the upside, but now we see a few downside risks too**

Forecasting accountability

01

## Forecast accountability: old shocks persist, new ones arrive and the spreading continues

- For IPCA 2021 the disruption of the supply chain continues to impact industrial goods, while shocks continue to spread to services. Moreover, there was a price shock in electrical energy prices and fuels are also on the rise
- For IPCA 2022, we see the services inflation gaining steam through inertia

	old	2021 new	Δ bps
<b>IPCA</b>	<b>7.3</b>	<b>8.5</b>	<b>119</b>
<b>Free prices</b>	<b>5.9</b>	<b>6.7</b>	<b>58</b>
<b>Food-at-home</b>	8.2	8.4	3
<b>Industrial goods</b>	7.4	9.2	42
Tradables	7.4	9.2	36
Non-Tradables	7.4	9.2	5
<b>Services</b>	3.9	4.2	13
Food-service	8.7	8.0	-4
Airline tickets	35.0	43.4	3
Economic activity	1.9	2.3	4
Education	3.0	3.0	0
Inertial	3.3	4.0	5
Salaries	2.4	2.7	1
<b>Administered prices</b>	<b>11.4</b>	<b>13.7</b>	<b>60</b>
Gasoline	29.7	35.6	35
Energy	14.5	19.1	22
Health insurance	2.6	2.6	0
Bus fares	1.5	1.5	0
<b>Cores</b>	<b>5.4</b>	<b>6.3</b>	<b>90</b>

Sources: Santander

	old	2022 new	Δ bps
<b>IPCA</b>	<b>4.1</b>	<b>4.3</b>	<b>20</b>
<b>Free prices</b>	<b>4.2</b>	<b>4.5</b>	<b>21</b>
<b>Food-at-home</b>	3.5	3.5	0
<b>Industrial goods</b>	4.7	4.7	0
Tradables	4.7	4.7	0
Non-Tradables	4.7	4.7	0
<b>Services</b>	4.2	4.8	21
Food-service	6.0	7.2	7
Airline tickets	16.0	16.0	0
Economic activity	2.8	3.6	8
Education	5.5	5.5	0
Inertial	4.1	4.4	2
Salaries	3.1	3.7	3
<b>Administered prices</b>	<b>3.8</b>	<b>3.7</b>	<b>-1</b>
Gasoline	4.5	4.5	0
Energy	-3.0	-7.9	-22
Health insurance	9.0	9.0	0
Bus fares	6.0	6.4	1
<b>Cores</b>	<b>4.1</b>	<b>4.3</b>	<b>20</b>

Sources: Santander

## High-frequency tracking: even higher inflation for 2021 and 2022

- Since the publishing of our scenario-review in September 16th, new data was released and we updated our high frequency tracking further up for 2021 and 2022, mainly based on short-term adjustments focused on core-related groups

	old	2021 new	Δ bps
<b>IPCA</b>	<b>8.5</b>	<b>9.0</b>	<b>51</b>
<b>Free prices</b>	<b>6.7</b>	<b>7.3</b>	<b>44</b>
<b>Food-at-home</b>	8.4	9.4	15
<b>Industrial goods</b>	9.2	9.8	14
Tradables	9.2	9.8	12
Non-Tradables	9.2	9.8	2
<b>Services</b>	4.2	4.7	15
Food-service	8.0	8.0	0
Airline tickets	43.4	50.7	3
Economic activity	2.3	3.2	9
Education	3.0	3.0	0
Inertial	4.0	4.3	2
Salaries	2.7	2.8	1
<b>Administered prices</b>	<b>13.7</b>	<b>13.9</b>	<b>7</b>
Gasoline	35.6	36.1	3
Energy	19.1	19.1	0
Health insurance	2.6	2.6	0
Bus fares	1.5	1.5	0
<b>Cores</b>	<b>6.3</b>	<b>6.6</b>	<b>30</b>

Sources: Santander

	old	2022 new	Δ bps
<b>IPCA</b>	<b>4.3</b>	<b>4.5</b>	<b>24</b>
<b>Free prices</b>	<b>4.5</b>	<b>4.9</b>	<b>29</b>
<b>Food-at-home</b>	3.5	3.5	0
<b>Industrial goods</b>	4.7	5.1	9
Tradables	4.7	5.1	8
Non-Tradables	4.7	5.1	1
<b>Services</b>	4.8	5.4	20
Food-service	7.2	7.4	1
Airline tickets	16.0	16.0	0
Economic activity	3.6	5.0	14
Education	5.5	5.5	0
Inertial	4.4	4.8	3
Salaries	3.7	3.9	1
<b>Administered prices</b>	<b>3.7</b>	<b>3.5</b>	<b>-5</b>
Gasoline	4.5	4.5	0
Energy	-7.9	-7.9	0
Health insurance	9.0	9.0	0
Bus fares	6.4	6.4	0
<b>Cores</b>	<b>4.3</b>	<b>5.0</b>	<b>70</b>

Sources: Santander

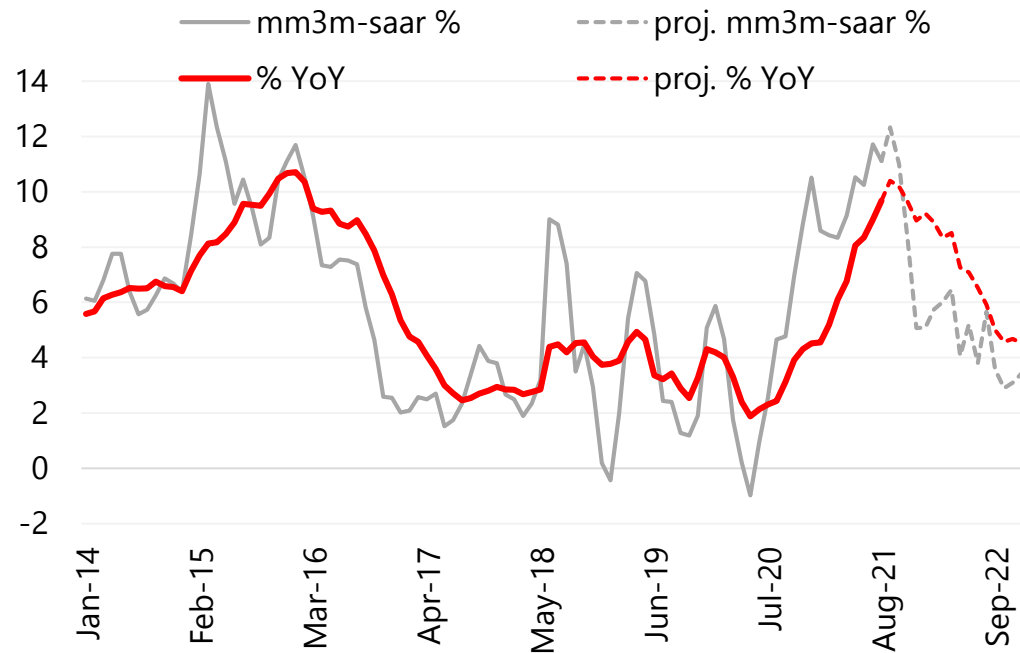
The shape of inflation to come:  
Close to the peak, but with unfavorable  
composition and uncertainties around  
the pace of deceleration

02

# IPCA annual inflation is probably close to its peak

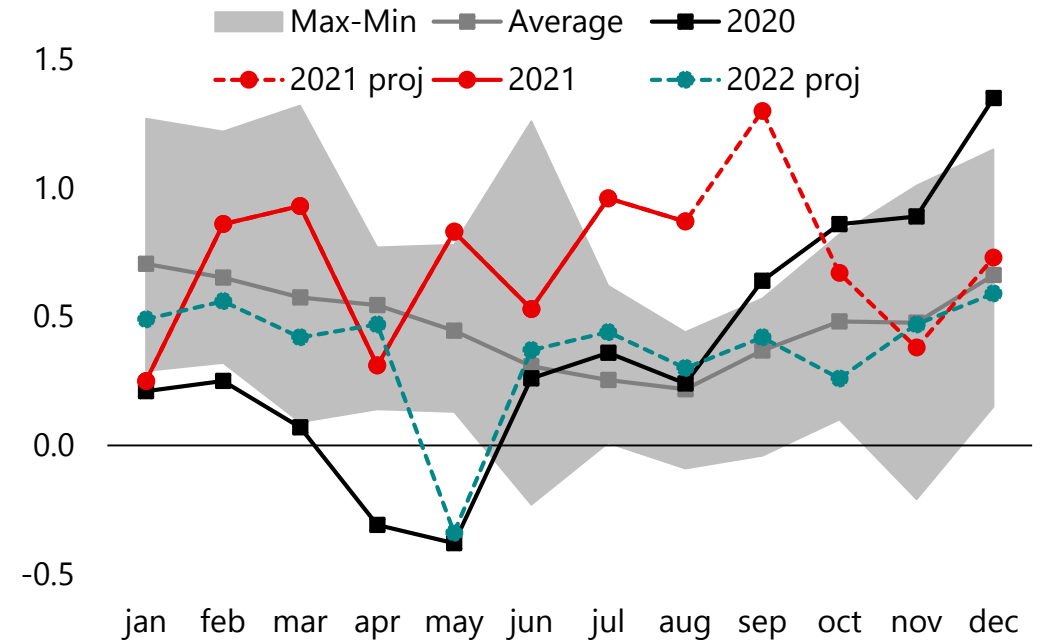
- Even though some upward pressures are still present, from now on the base-effect makes it harder and harder for the year-over-year inflation to keep accelerating
- IPCA YoY should peak at 10.4% In September 2021, very close to the high of 10.7% in December 2015

### IPCA and forecast - annual



Sources: IBGE, Santander

### IPCA monthly seasonality

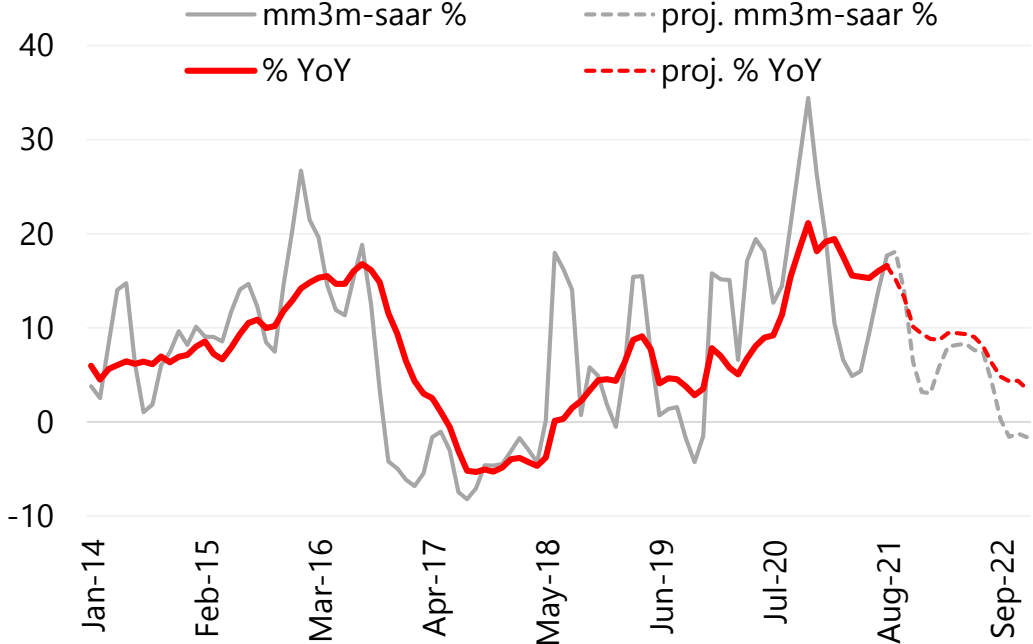


Sources: IBGE, Santander

# Volatile groups are peaking: food and regulated prices

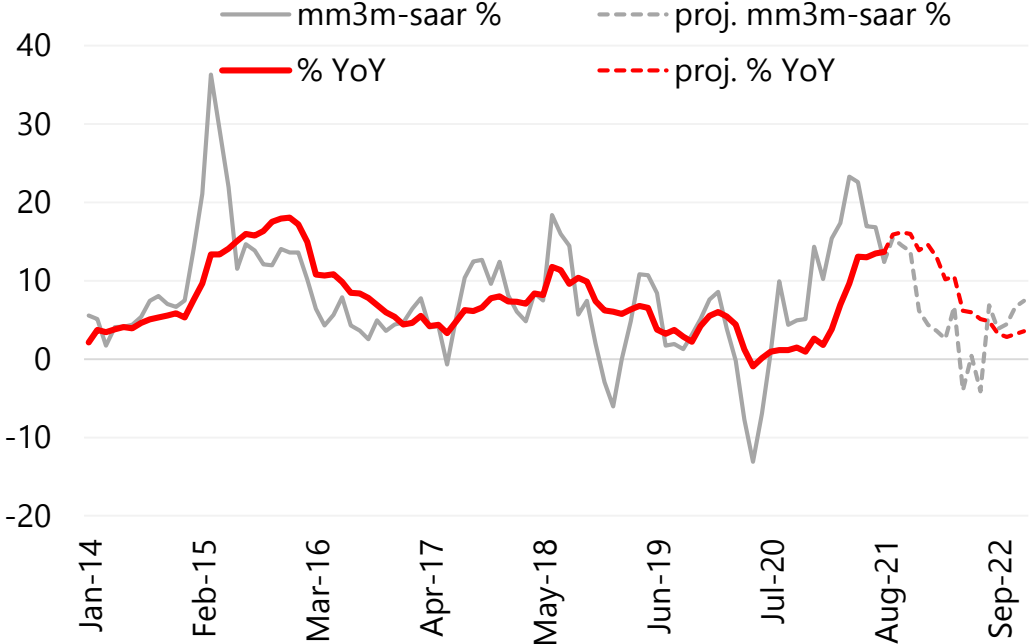
- But those two groups are usually not related to core measures

### Food-at-home inflation and forecast - annual



Sources: IBGE, Santander

### Regulated prices inflation and forecast- annual



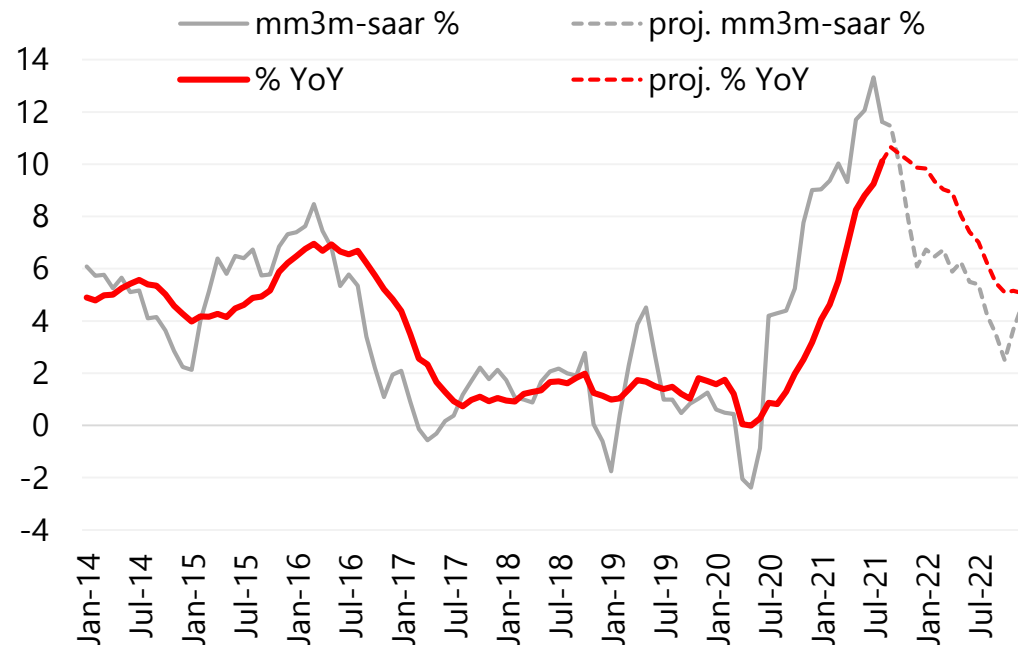
Sources: IBGE, Santander



# Industrial goods headline is also peaking, but its core's deceleration should be slower

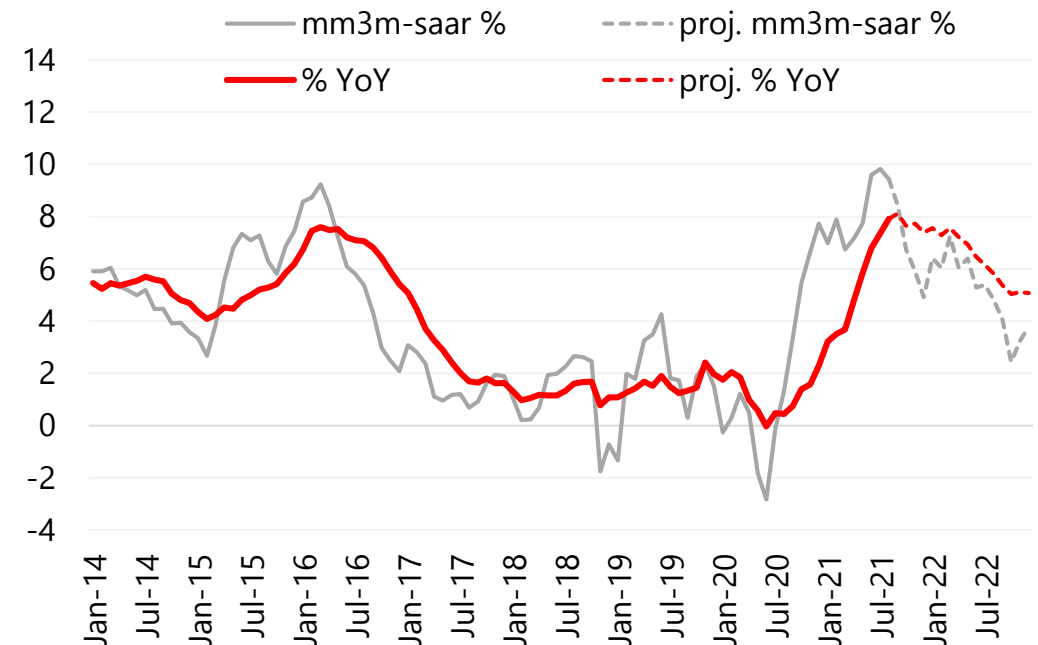
- First, as supply chain problems persist at the margin, the peak on the headline is uncertain, so risks remain on the upside
- Moreover, even if it really peaks (as we expect) the core measure should decelerate on a slower pace, ending 2022 at the same level as the headline, which is not favorable in terms of composition for the inflation scenario

## Industrial goods inflation and forecast - annual



Sources: IBGE, Santander

## Core industrial goods and forecast- annual

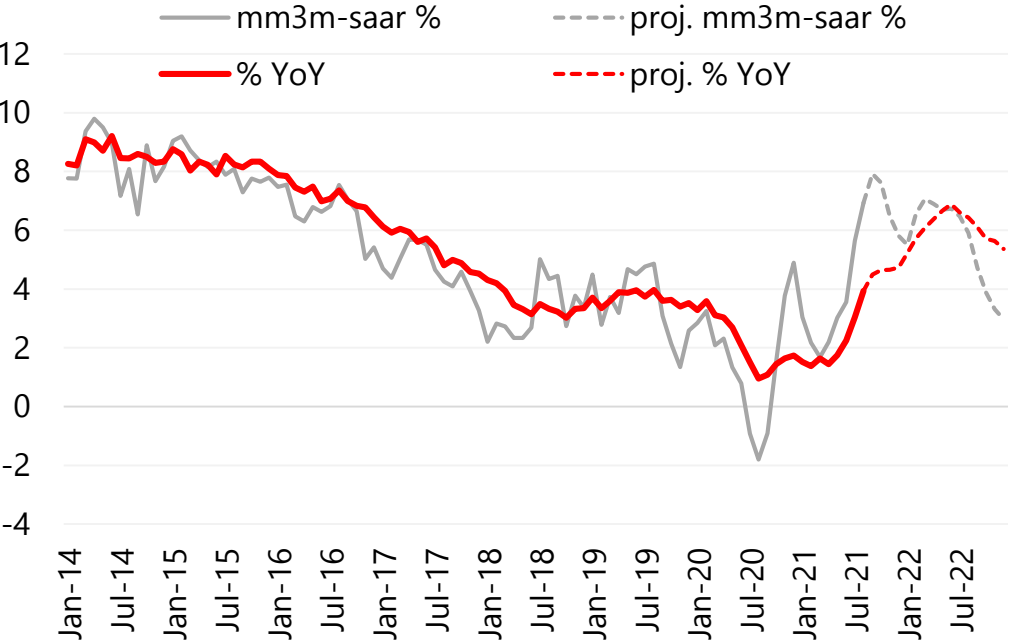


Sources: IBGE, Santander

# Services should continue to accelerate for some months, peaking only in Jul-22

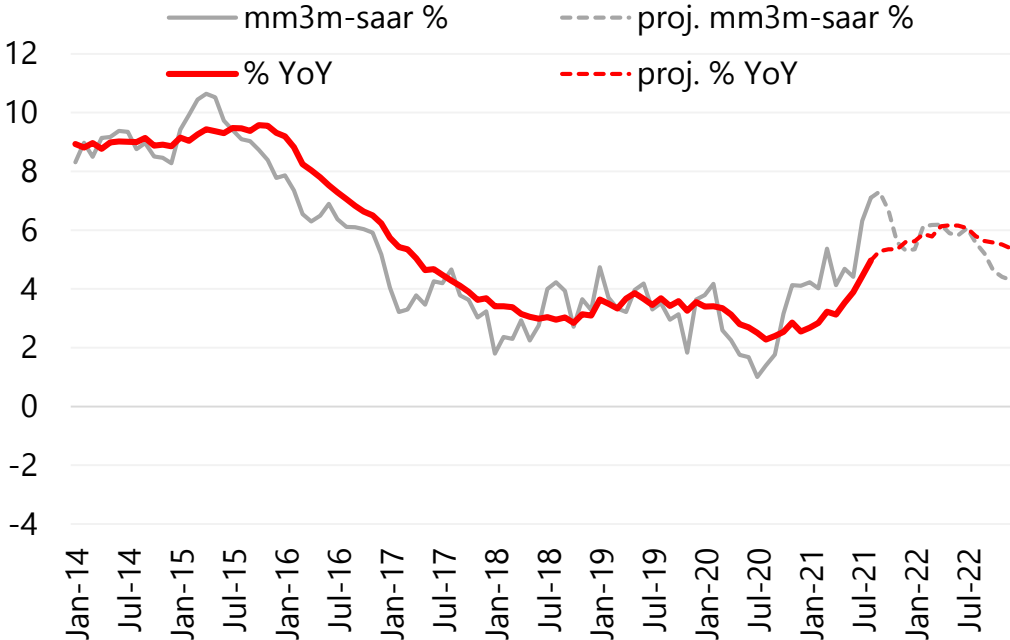
- Although pressures at the margin (3mma-saar) should cool down a bit, we see headline services still accelerating in YoY terms until Jul-22
- For the core gauge, we see a milder acceleration, but with a plateau a bit above 5.0% until mid-2022 too, a quite unfavorable level

**Services inflation and forecast - annual**



Sources: IBGE, Santander

**Core services and forecast- annual**

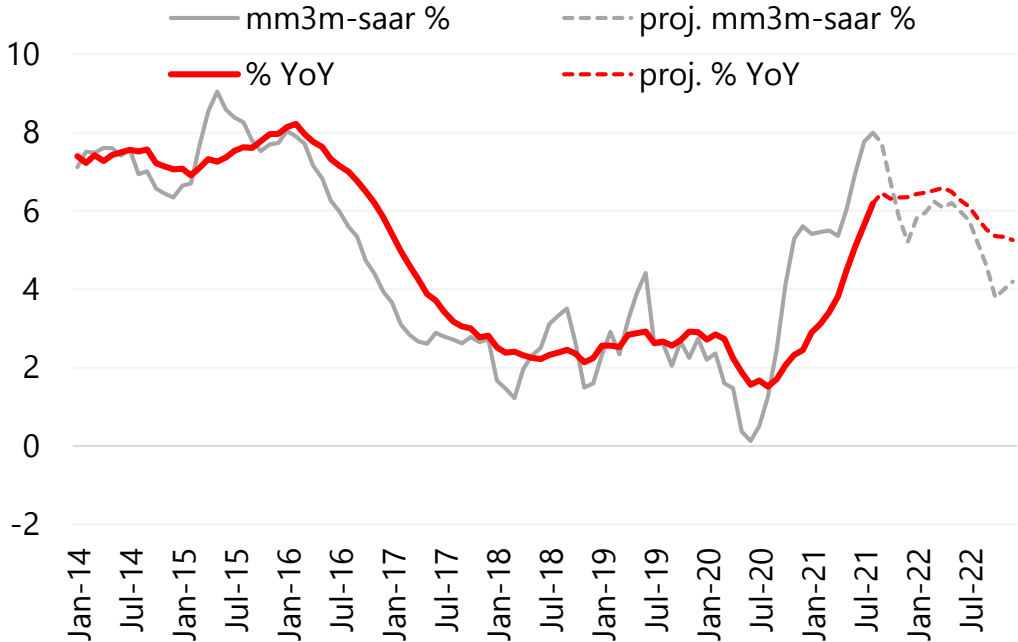


Sources: IBGE, Santander

# This composition should make the deceleration of core measures very slow

- At the margin (3mma-saar) the pressures should show some relief, but the deceleration should be slow in annual terms
- As a result, despite the fact that we envision IPCA annual inflation peaking, it should be with a risky composition
- And the pace of deceleration is quite uncertain and, as a consequence, the bottom is also uncertain

**EX3 Core inflation and forecast - annual**



Sources: IBGE, BCB, Santander

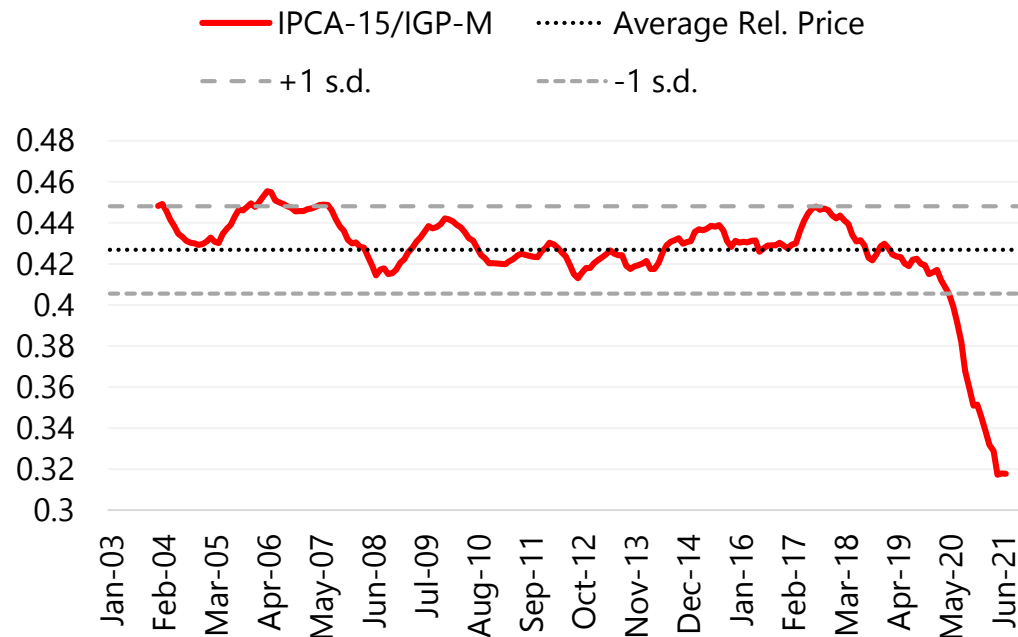
Balance of risks: tilted to the upside, but now we see a few downside risks too

05

# Upside risk: large distortion of relative price between the wholesale and consumer levels

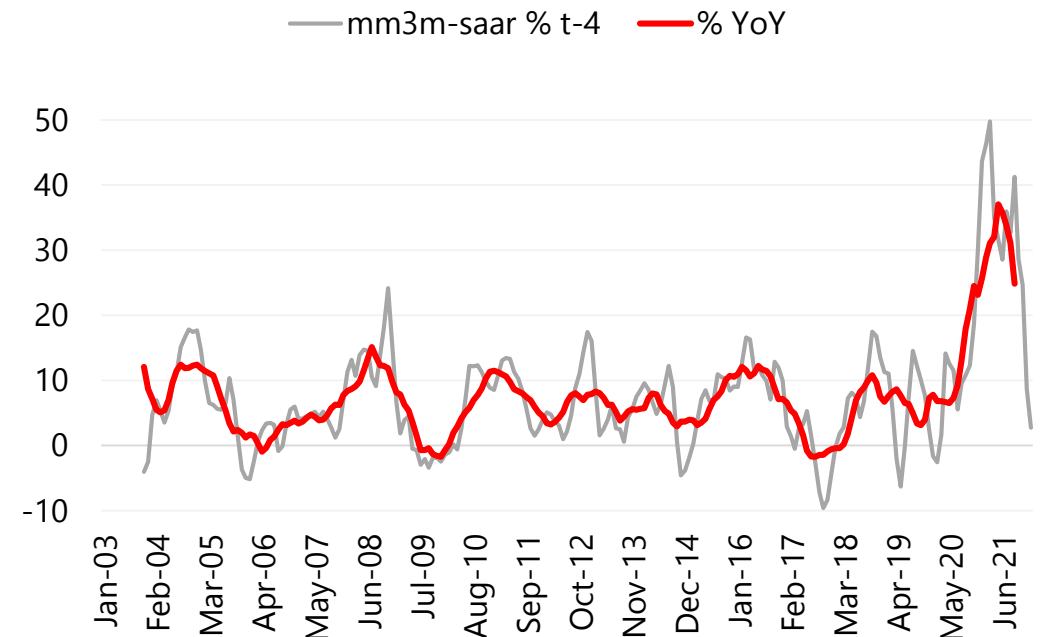
- Although IGP-M (PPI) probably have already peaked, there is still the backlog of raises at the producer level to reach the consumers
- As a result, even with a cool down of IGP-M, IPCA should not decelerate at the same pace (specially because services will also accelerate)

### Relative price level: IPCA (CPI) / IGP-M (PPI)



Sources: IBGE, FGV, Santander

### IGP-M inflation: 3mma-saar starts to cool down

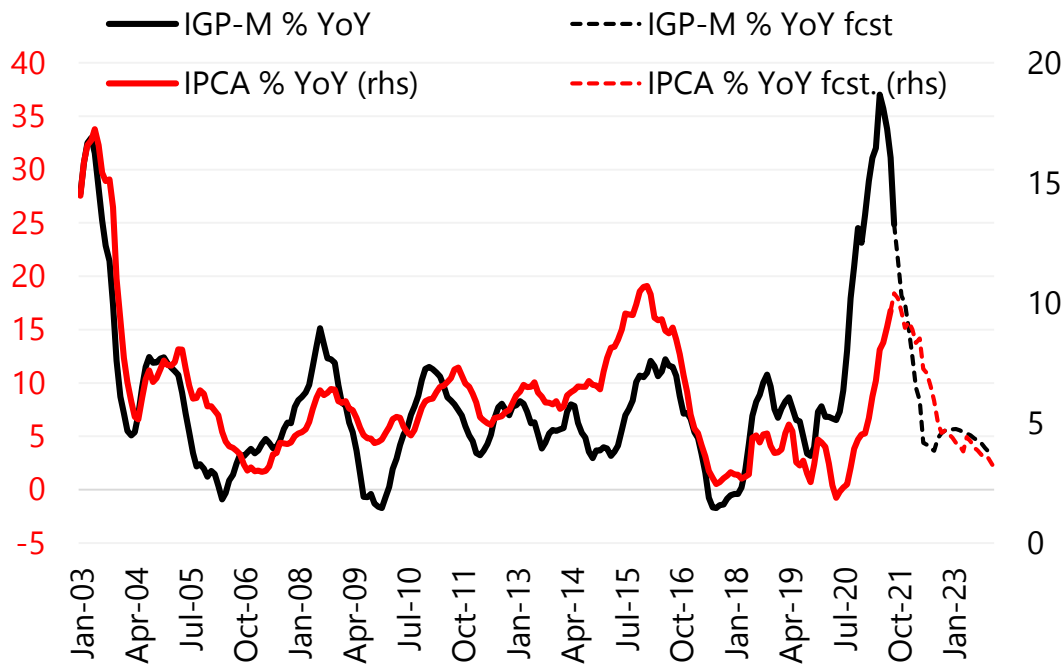


Sources: FGV, Santander

# Assuming our IGP-M and IPCA forecasts the relative price would continue distorted

- And this is why even projecting a decelerating IGP-M, we continue to believe that risks for IPCA are tilted to the upside
- For the convergence to be reached via IGP-M we would have to see it not only decelerating, but also deflating
- Hence, we see a risk of the convergence coming from IPCA accelerating more than we expect

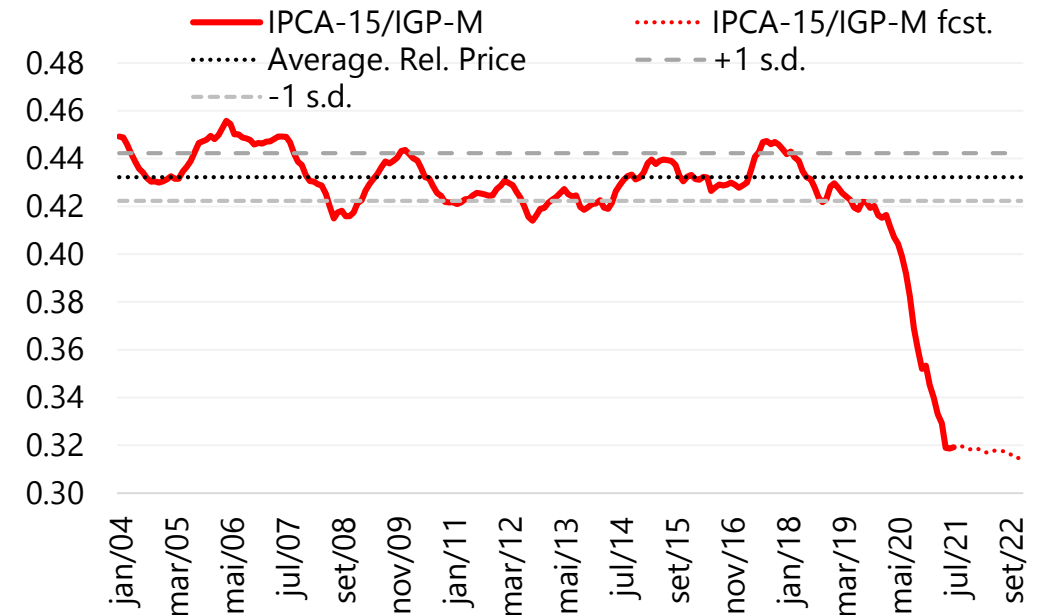
## IGP-M inflation: 3mma-saar shows first signs of cooling down



Sources: FGV, IBGE, Santander



## Relative price level: IPCA-15 (CPI) / IGP-M (PPI)

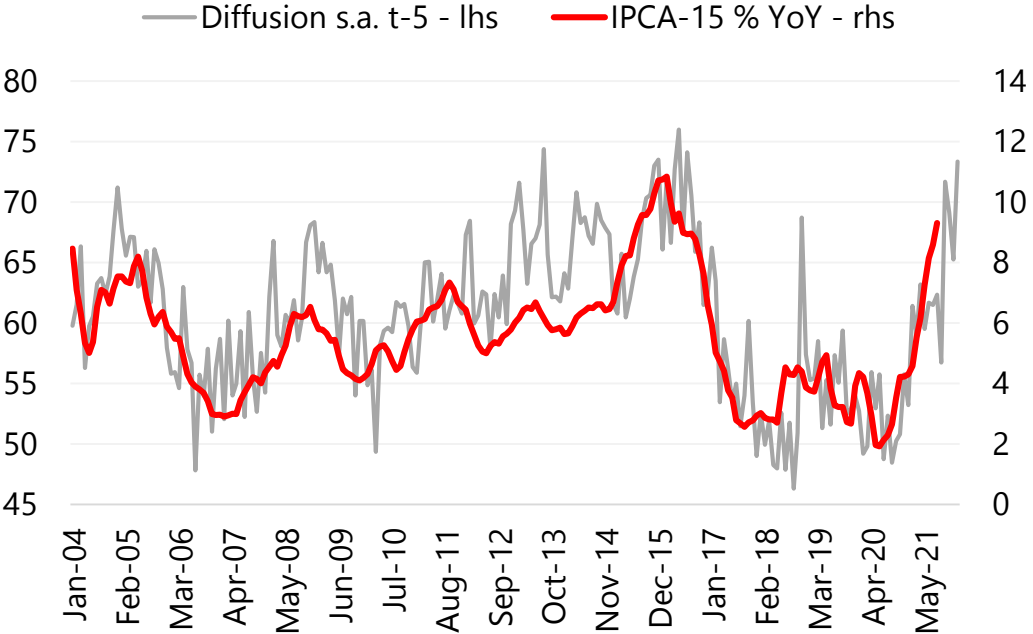


Sources: IBGE, FGV, Santander

# Upside risk: shocks are spreading, particularly to services

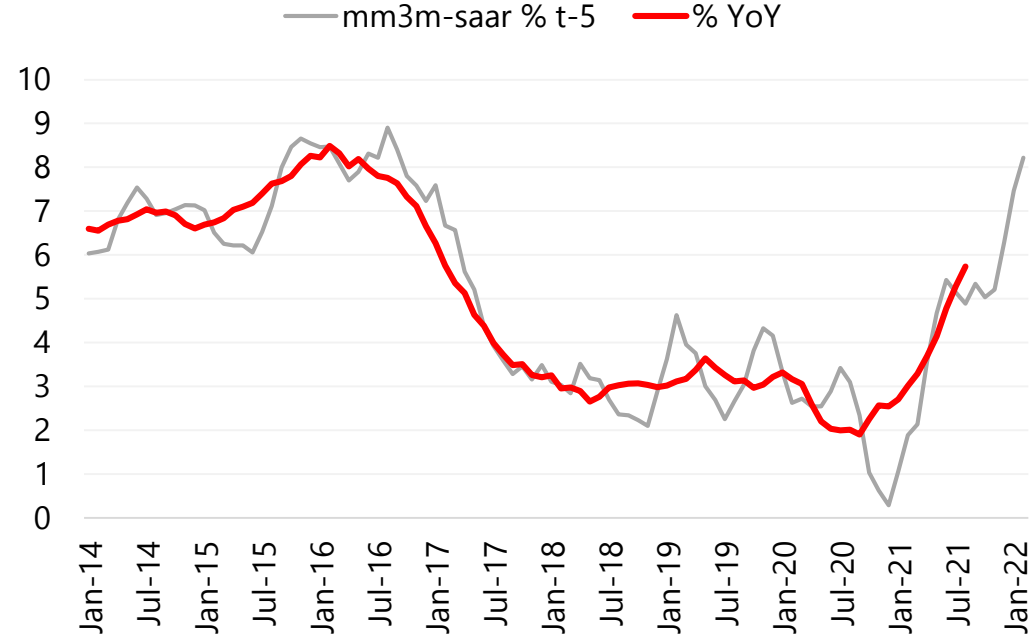
- The spreading of primary shocks to general prices makes it more difficult to control inflation

**Diffusion index and IPCA YoY**



Sources: IBGE, Santander

**Average of Core IPCA measures - annual**

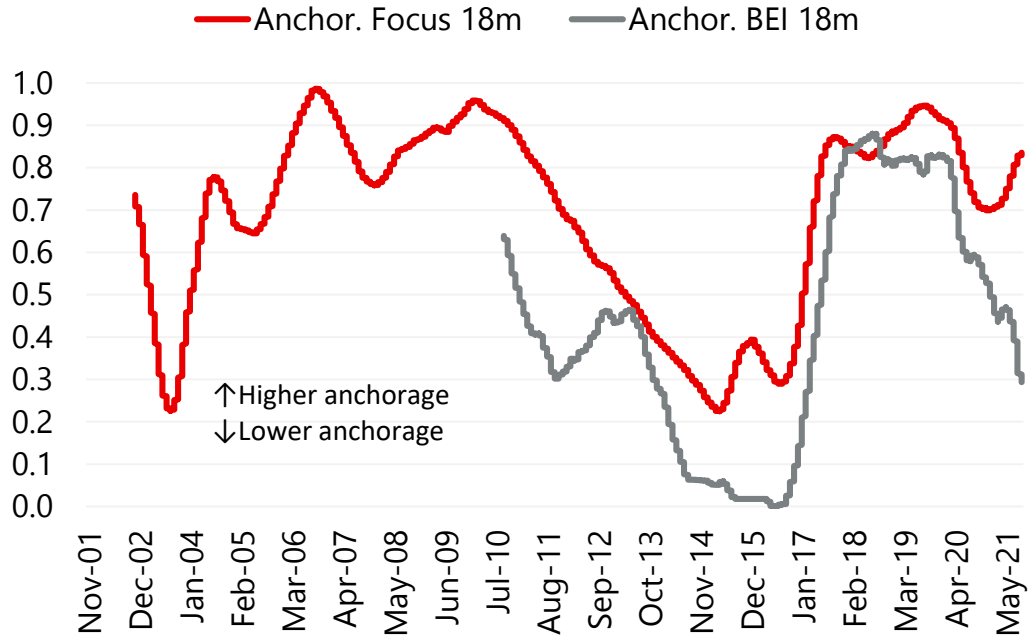


Sources: IBGE, BCB, Santander

# Upside risk: lower anchoring of expectations and rising inertia (?)

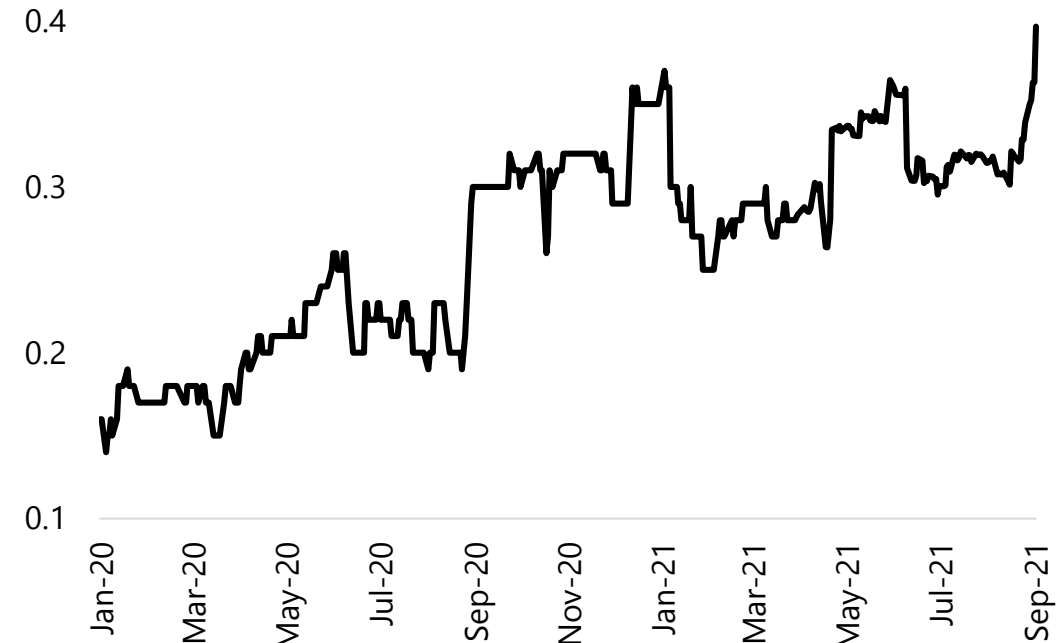
- Inflation expectations anchoring indices point suggest risks of lower levels of anchoring
- The dispersion between inflation forecasters' projections is another sign of lower anchoring level

### Inflation Expectations Anchoring Indices



Sources: Santander

### IPCA 2022 Focus' Expectations Standard-Deviation

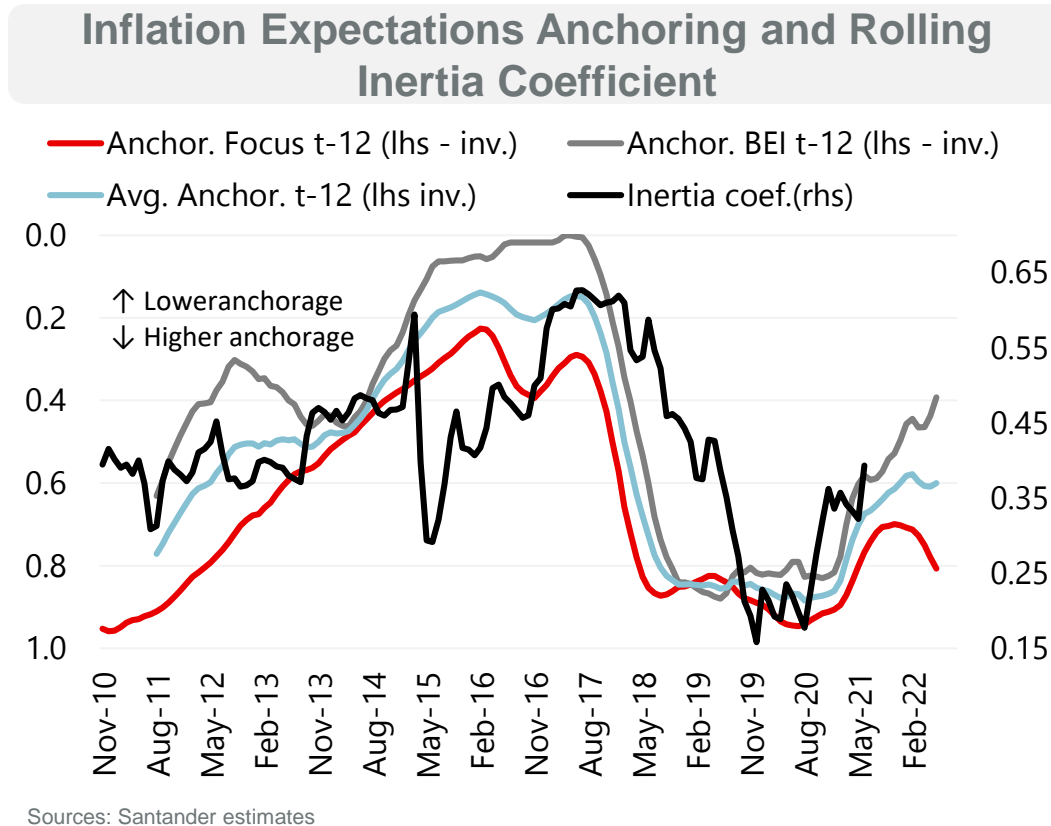


Sources: BCB, Santander



## Upside risk: lower anchoring of expectations and rising inertia (?)

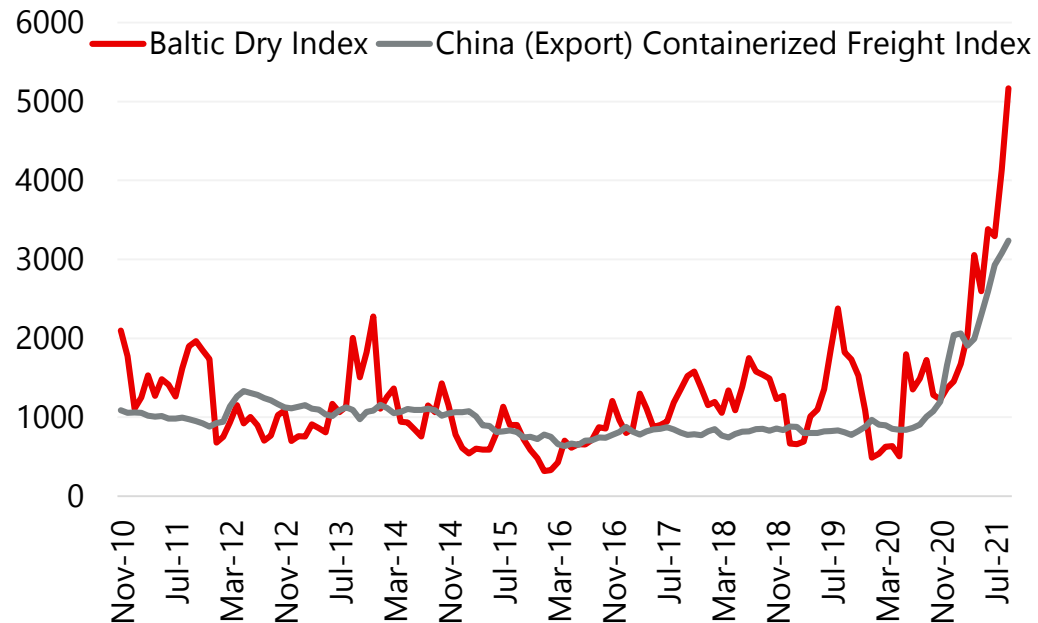
- The possible lower level of inflation expectations anchoring relates to a possible rise in the coefficient of inertia in a Phillips' Curve to forecast inflation



# Upside risk: Supply chain disruption is still a problem; global energy shortage is a new one

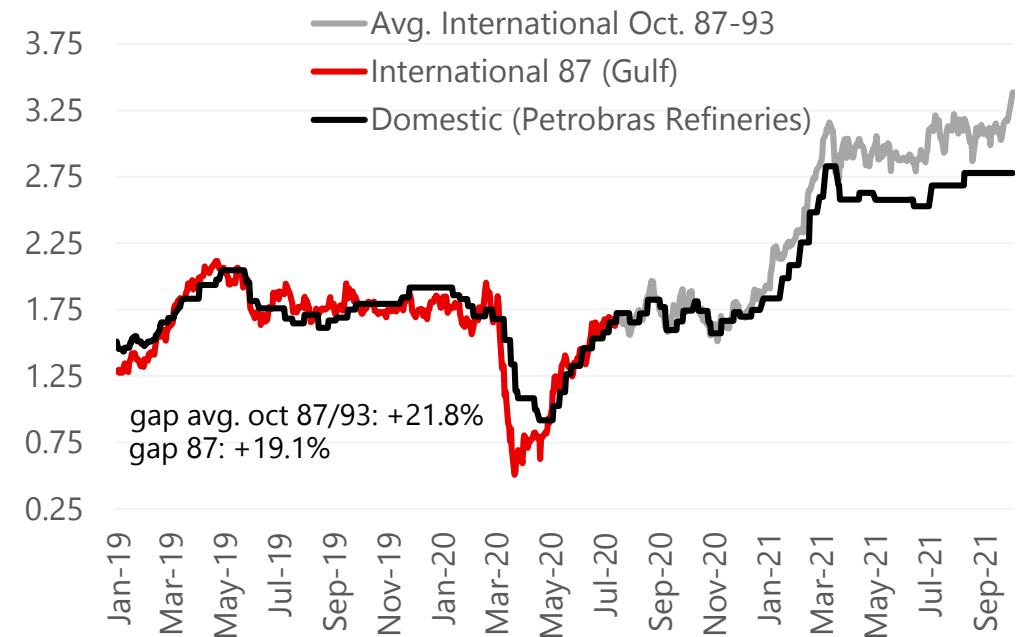
- Problems with the supply chain are still happening at the margin, being a risk for inflation
- Now energy shortages across the globe are also a risk, which is pushing oil prices up

## Skyrocketing freight costs is just one anecdotal evidence of the supply chain problems



Sources: Bloomberg

## Gap between international and domestic gasoline prices is high



Sources: Bloomberg

# Downside risk: the grains' harvest next year might be record

- Weather forecasts are improving, which can push food inflation closer to 0% in IPCA 2022

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Columns Blogs

HOME > COLUMNS > BLOGS > SOUTH AMERICA CALLING > FLIP-FLOPPING FORECASTS IN CENTRAL BRAZIL

## South America Calling

### Flip-Flopping Forecasts in Central Brazil

9/23/2021 | 10:44 AM CDT

By John Baranick, DTN Meteorologist



7 Day Total Precipitation Forecast (in)  
Valid 09/23/2021 00:00 UTC - 09/29/2021 00:00 UTC  
DTN

Scattered showers are now forecast to develop this weekend into next week across Mato Grosso and other central Brazil states this weekend into next week. (DTN image)

Two weeks ago, I mentioned central Brazil could see its wet season start on time. Last week, that looked like a pipe dream and a delay was likely. This week, the forecast changed again.

It is inconsistent forecasts like this that make meteorologists understandably look like fools. I am no stranger to being wrong on weather forecasts, it comes with the gig. And, of course, I do not like to be wrong. But the inconsistency is something I like to avoid. Especially when it comes to bringing insights into something as important as central Brazil's wet season.

Like I have mentioned previously over the last few weeks, central Brazil has a very distinct wet-dry season dynamic being so close to the equator. Wet season rains allow a good share of the region to double-crop soybeans in the spring and summer with corn in the fall and winter, a very lucrative endeavor when all goes to plan. Southern states do not have this typical dynamic, but conditions still allow much of this region to double crop as well.

But the window for this to work out in Brazil is very tight. Wet season rains typically shut down at the end of April or early May, when the double-cropped (safrinha) corn should be in the fill stage. When the weather cooperates, subsoil moisture that builds during the wet season is more than enough to carry the crop through to maturity. But any delays to planting put the corn at risk for entering the dry season during pollination, especially if the dry season comes earlier than normal.

Sources: <https://bit.ly/2ZLvOBd>

## Downside risk: “bonus tariff” could lower 2022 electrical energy tariff adjustments

- We assume the “bonus tariff” will be returned to consumers (in the form of lower tariff adjustments) in a 5 year plan
- However, it is possible that the process is accelerated, which would allow for lower adjustments in 2022, being a downside risk for IPCA 2022
- We project +11% of tariff adjustments, but some consultancies are projecting lower numbers

### Inflação de energia deve desacelerar em 2022, mas alívio no bolso será parcial

Perda de força dos preços, porém, se deve ao fato de o IBGE calcular o IPCA cheio com base na bandeira vigente em dezembro de cada ano

Por Anaïs Fernandes e Letícia Fucuchima — De São Paulo

17/09/2021 05h01 - Atualizado há uma semana



Três casas consultadas pelo Valor trabalham na mesma direção. Precificando o pior cenário hidrológico possível, com acionamento total das termelétricas, a consultoria PSR estima um índice de reajuste de 5% (nominal), na média Brasil, em 2022 - ante projeção inicial de 22%, que não levava em conta medidas de modicidade tarifária. Na TR Soluções, empresa de tecnologia aplicada ao setor elétrico, a estimativa de reajuste médio caiu de 18,61% para 1,81%. Já na Thymos Energia, a previsão é de 7,67%.

Sources: <https://glo.bo/3AIRgdp>

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