Brazil Macro | March 2023

Economic Activity

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INDEX

1. Retail Sales
2. Industrial Production
3. Services
4. Labor Market
5. GDP
6. Baseline Scenario

SUMMARY

- **We are maintaining our estimates for 2023 and 2024.** For the full-year 2022, 4Q22's data release pointed to a 2.9% growth. For 2023, we continue to forecast a slowdown in domestic demand and in cyclical components, stemming mainly from an expected global growth deceleration and the effects of a tight BCB policy. Conversely, expectations of strong growth for non-cyclical sectors like farm output, and an expansion in the real wage bill will (owing to both labor income recovery and government transfers) prop up domestic activity this year (and avoid a sharper loss of momentum). As per the quarterly GDP path, we expect a strong 0.5% growth in 1Q23 owing to a boosted farm output, while for the remaining quarters we expect sequential declines of -0.2% QoQ-sa per quarter. For 2024, we see still the economy struggling to gather momentum, given the persistence of global headwinds and the slow pace of rate cuts (mirrored in a still tight BCB policy stance); we have maintained our GDP forecast at +0.5%.

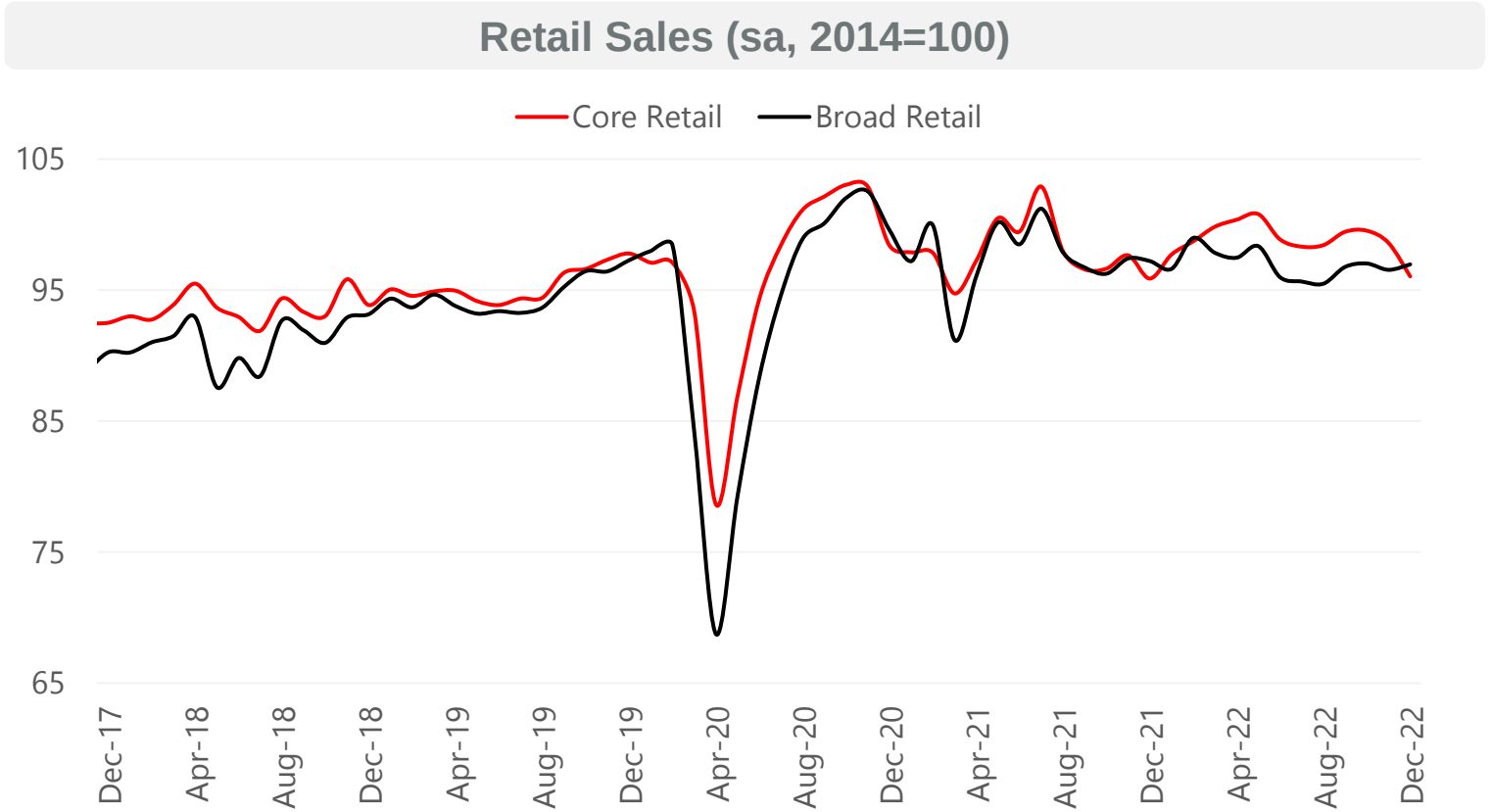
- **In our view, the labor market continued to show a strong performance since our last scenario review.** The PNAD (household) survey kept showing a healthy job market, with a single-digit unemployment rate. Considering both the slower-than-expected expansion of the labor force in the short term and the increase in our GDP forecasts for 2022 and 2023, we have reduced our joblessness estimates. However, we continue to expect some deceleration in the job creation once the effects of a tighter monetary policy start to kick in — especially in 1Q23. We still forecast an increase of the jobless rate for 2023, as our GDP growth review was concentrated in sectors that are not labor-intensive (such as farm output). We continue to envision a tight labor market until 2Q23 (we see the NAIRU on a declining path but hovering around 10—11%).

RETAIL SALES

01

Following a Strong 1H, Retail Sales Showed a Continued Weakening Across 2H22

- Contractionary effects of tight financial conditions started to kick in 3Q22 and hit retail sales more prominently in the last quarter of 2022.

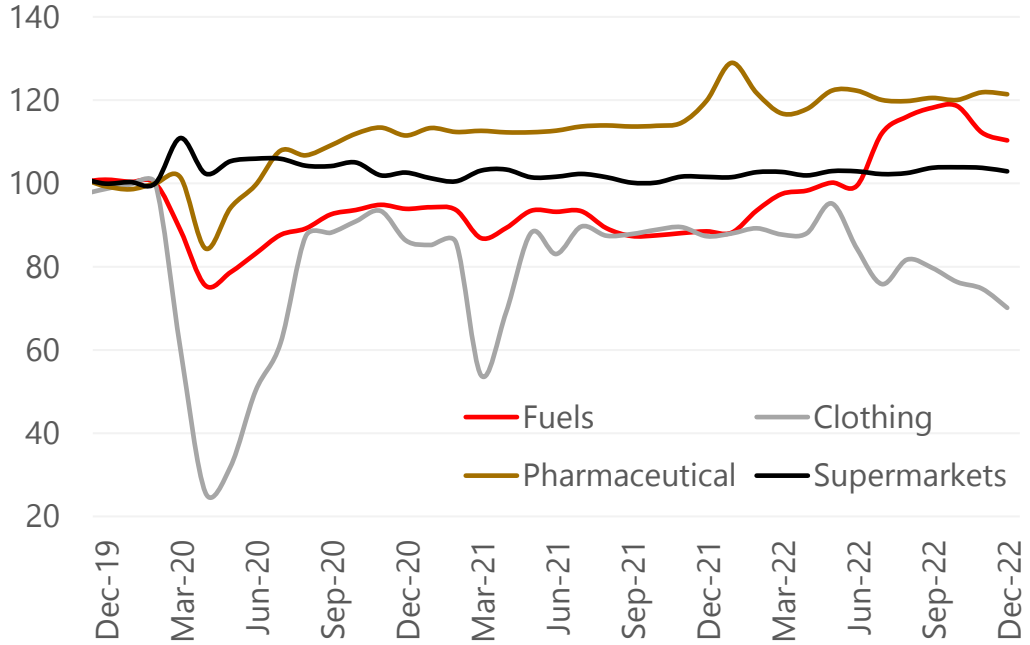


Sources: IBGE, Santander

Among Retail Activities, a Mixed Bag in 2H22

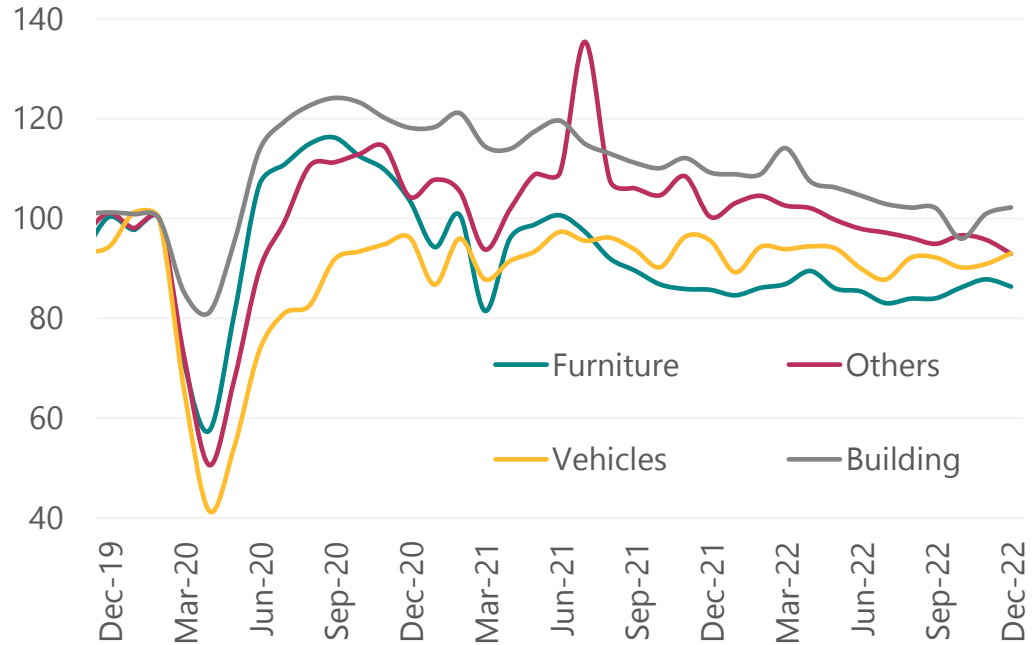
- As expected, credit-led segments were the lowlights owing to the critically restrictive levels of financial conditions. We see a continued challenging environment for these segments this year. Conversely, income-led segments showed resilience in the wake of government transfers boosting and tax cuts. For 2023, increase in government spending along with resilience of wage growth may support consumption.

Income-led Segments (sa, Feb/20=100)



Sources: IBGE, Santander

Credit-led segments (sa, 2014=100)



Sources: IBGE, Santander

Retail Sales Breakdown

Retail Sales Breakdown											
		% MoM			% YoY			% QoQ			%
Weights*		Oct-22	Nov-22	Dec-22	Oct-22	Nov-22	Dec-22	Jun-22	Sep-22	Dec-22	Feb-20*
66.9%	Core Retail Sales	0.1	-0.9	-2.6	2.7	1.4	0.4	1.3	-1.3	-0.7	-1.1
8.3%	Fuels	0.4	-5.4	-1.6	34.3	27.0	23.8	6.7	16.2	-1.5	10.3
30.6%	Hypermarkets, supermarkets	0.1	-0.1	-0.8	2.7	2.8	2.5	0.3	0.2	0.7	2.9
6.2%	Fabrics, clothing and footwear	-4.3	-2.1	-6.1	-15.0	-16.4	-11.9	1.0	-11.3	-6.8	-29.9
7.4%	Furniture and home appliances	2.5	1.9	-1.6	-0.8	2.6	0.3	1.3	-3.8	3.7	-13.6
5.1%	Pharmaceuticals	-0.4	1.5	-0.4	5.3	6.4	0.8	-1.4	-0.6	0.8	21.4
0.9%	Books, papers and magazine	-4.3	-3.5	0.1	13.7	0.1	0.3	16.9	0.8	-4.7	-38.3
0.6%	Office equipment and supplies	2.1	-3.4	-0.6	8.5	-0.2	0.1	2.4	-2.0	0.5	-13.3
7.8%	Other personal items	1.8	-0.9	-2.9	-8.4	-10.6	-8.4	-3.4	-3.8	-1.0	-7.1
100%	Broad Retail Sales	0.3	-0.5	0.4	0.3	-1.4	-0.6	-0.6	-1.3	0.9	-1.5
8.9%	Building Materials	-6.0	5.2	1.3	-12.8	-11.1	-7.1	-4.1	-3.5	-2.6	2.2
24.2%	Vehicles	-2.2	0.8	2.4	-0.8	-5.5	-1.8	0.4	-2.3	0.7	-6.9

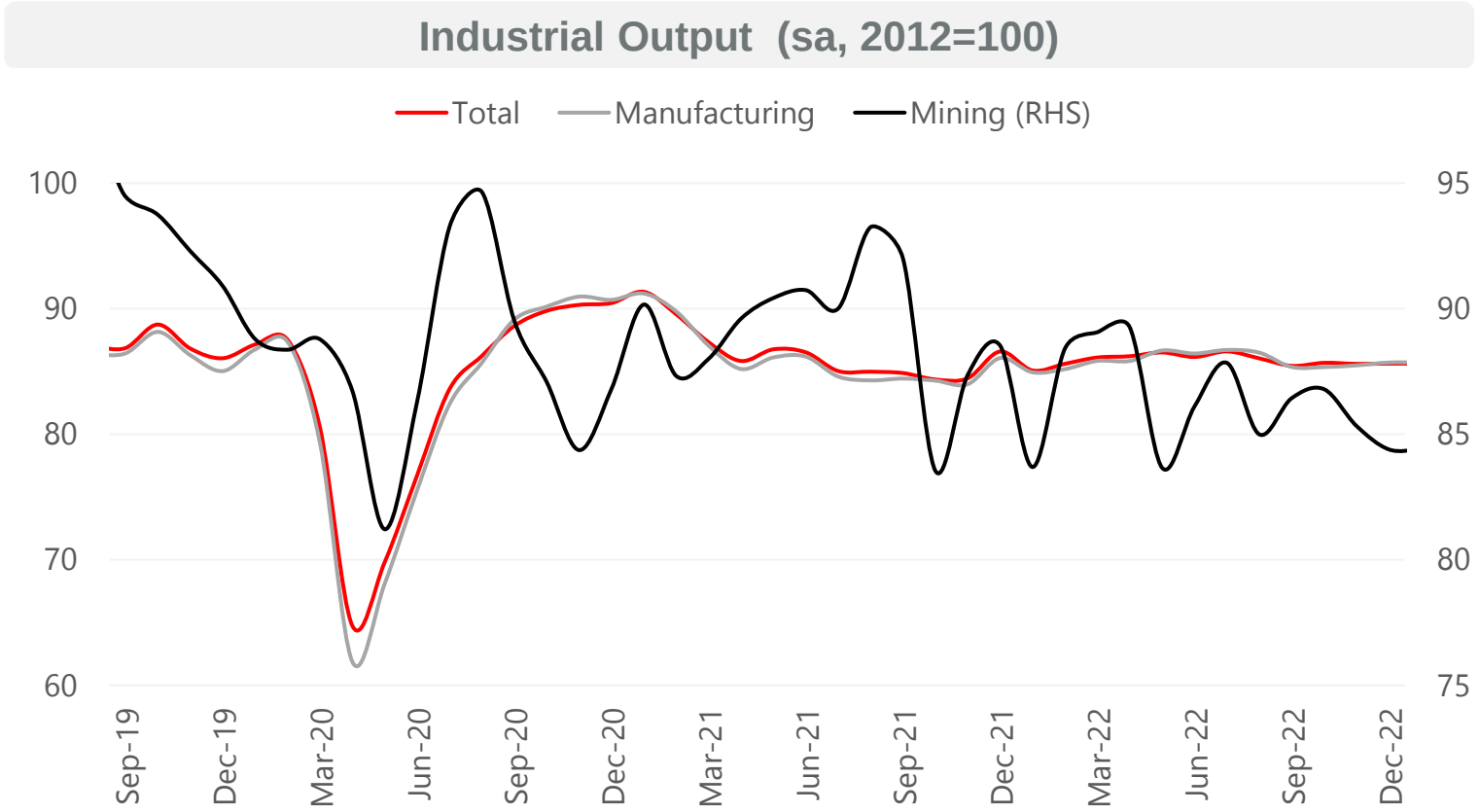
Sources: IBGE, Santander.
* For details, please see: https://bit.ly/Std-econact-020923.

INDUSTRIAL PRODUCTION

02

Following a Demand Boost in 1H22, Industrial Output Weakened across 2H22

- Following the continued strengthening seen across 1H22 (amid a boosted demand for goods and gradual easing of global supply chain hurdles), industrial output (mainly manufacturing) clearly decelerated in the transition between 2Q and 3Q. As financial conditions contractionary effects materializes, industrial output reacted with continued weakening. In 2023, the outlook remains challenging for cyclical industrial activities.

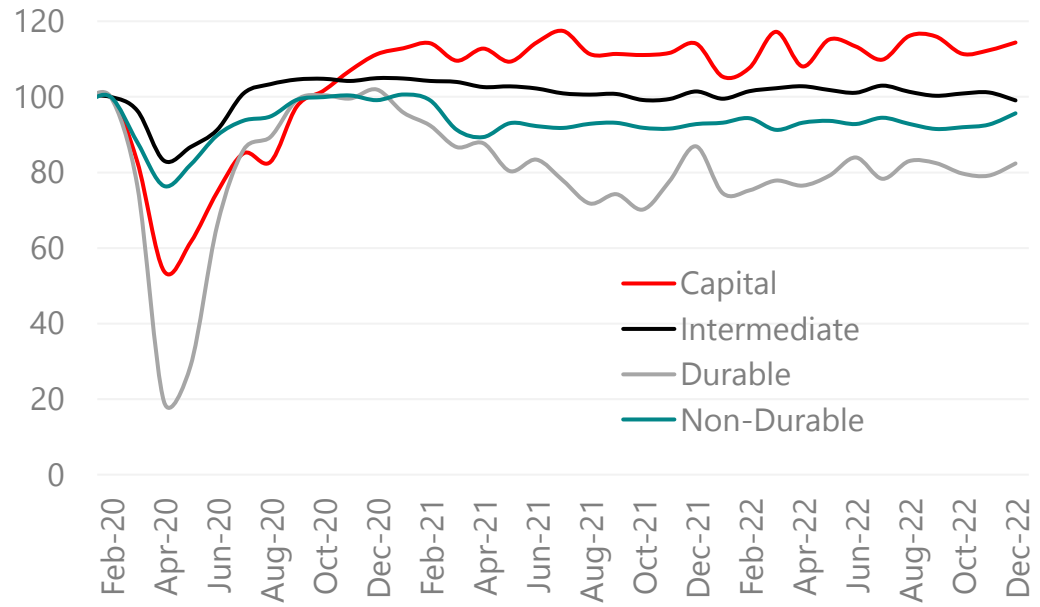


Sources: IBGE, Santander

Commodity-related Sectors and Construction Bring Resilience to Investments

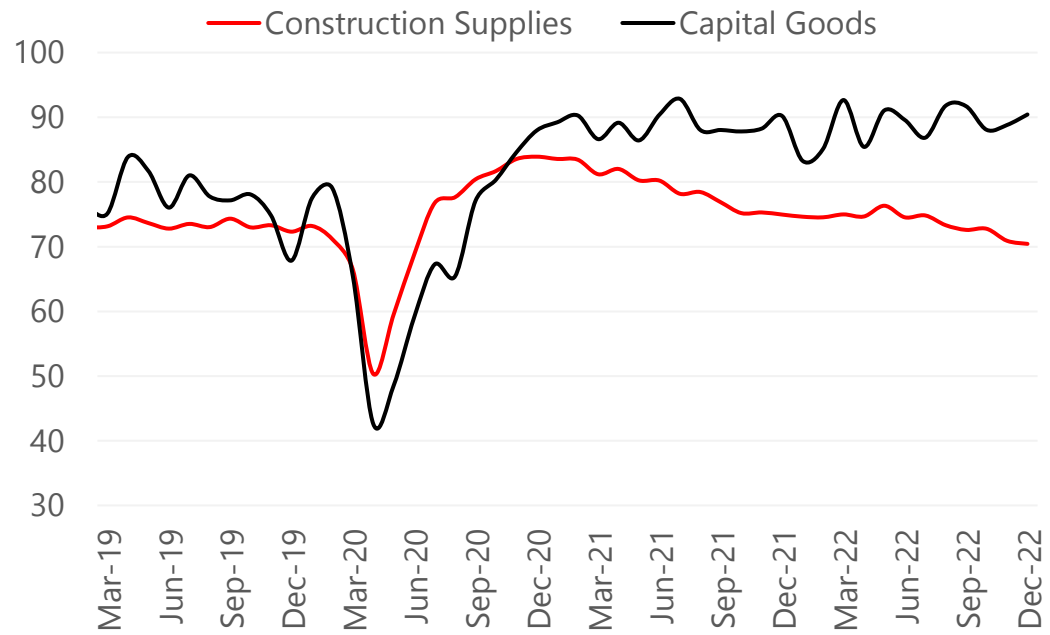
- We see commodity-related capital goods sectors showing resilience, and the construction sector (with longer cycle) entered a positive path benefitted from the historically low interest rates set during the pandemic. These elements bring resilience to investments amid an environment with rising interest rates.

Economic Categories (sa, 2012=100)



Sources: IBGE, Santander

Related to Investments (sa, 2012=100)



Sources: IBGE, Santander

Industrial Production Breakdown

Industrial Production Breakdown											
		% MoM			% YoY			% QoQ			Feb-20 %
	Weights	Oct-22	Nov-22	Dec-22	Oct-22	Nov-22	Dec-22	Jun-22	Sep-22	Dec-22	Dec-22
Total Industry	100%	0.3	-0.1	0.0	1.7	0.9	-1.3	0.8	-0.3	-0.5	-2.2
Mining	**11%**	**0.4**	**-1.7**	**-1.1**	**4.5**	**-2.9**	**-4.0**	**-0.8**	**0.1**	**-1.1**	**-4.5**
Manufacturing	**89%**	**0.0**	**0.2**	**0.3**	**1.4**	**1.3**	**-0.8**	**1.2**	**-0.1**	**-0.8**	**-1.9**
Capital Goods	8%	-4.0	0.8	1.8	-0.2	0.7	0.9	1.9	1.6	-1.1	14.4
Intermediate Goods	60%	0.6	0.3	-2.1	1.9	1.3	-2.6	0.8	-0.4	-1.2	-0.9
Consumer goods	32%	0.4	0.0	2.2	2.4	0.5	1.4	0.8	0.3	0.2	-8.9
Durable	7%	-3.4	-0.7	4.1	11.8	2.0	-5.8	5.3	1.8	-1.0	-17.6
Non-Durable	25%	0.5	0.8	3.2	0.4	0.2	3.1	0.3	-0.3	0.5	-4.3
Construction Supplies	**-**	**0.2**	**-2.6**	**-0.7**	**-3.3**	**-5.8**	**-7.0**	**0.6**	**-2.1**	**-3.0**	**-1.0**

Sources: IBGE, Santander.

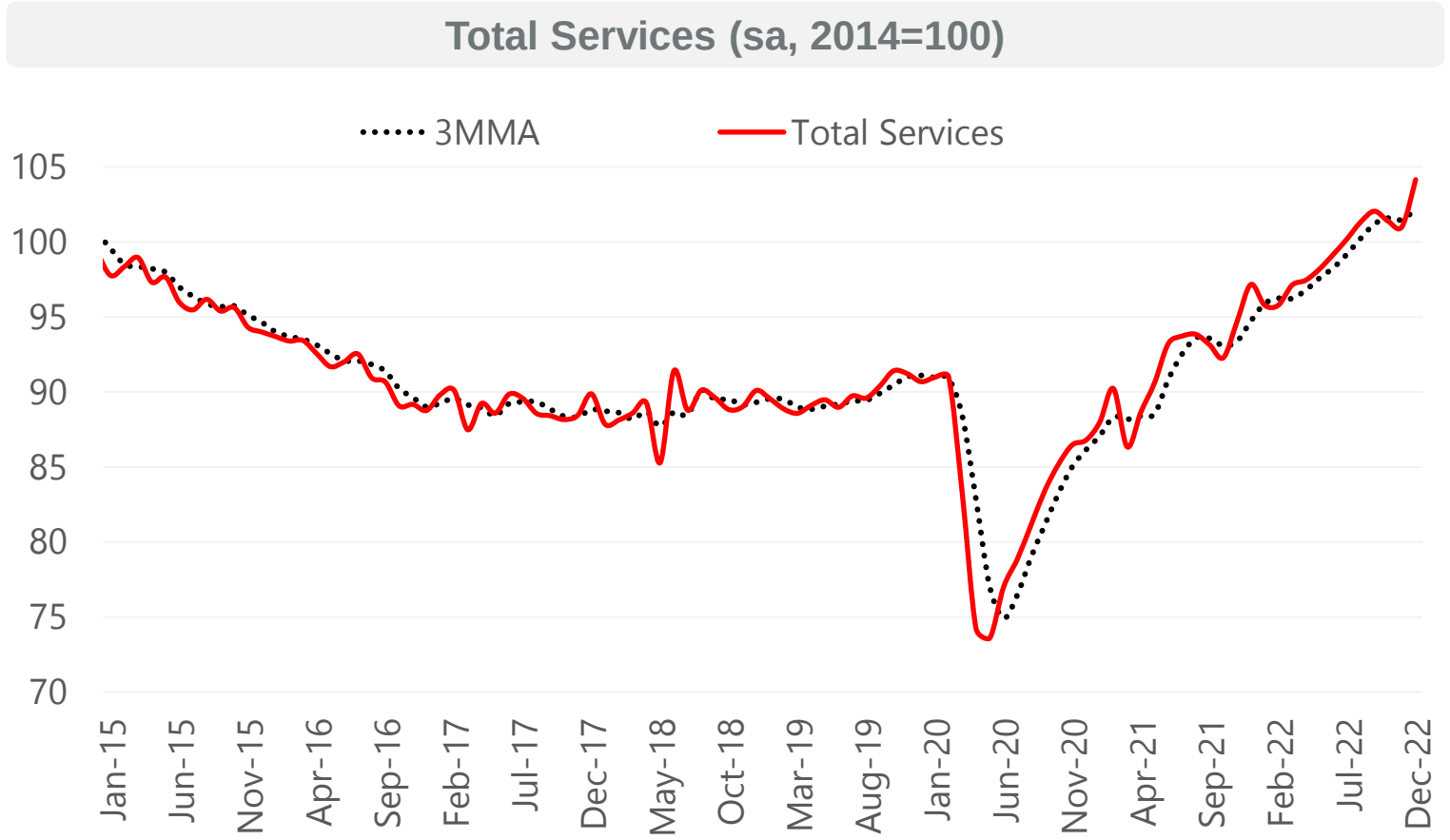
* For details, please see: https://bit.ly/Std-econact-020223.

SERVICES

03

Services Continue to Surprise to the Upside in 4Q

- Advances in the reopening process continued to strengthen the services sector, with the headline index marking a healthy streak of consecutive gains. Moreover, despite some one-off gains due to tax cuts in telecommunication, the index is running at all-time high levels.

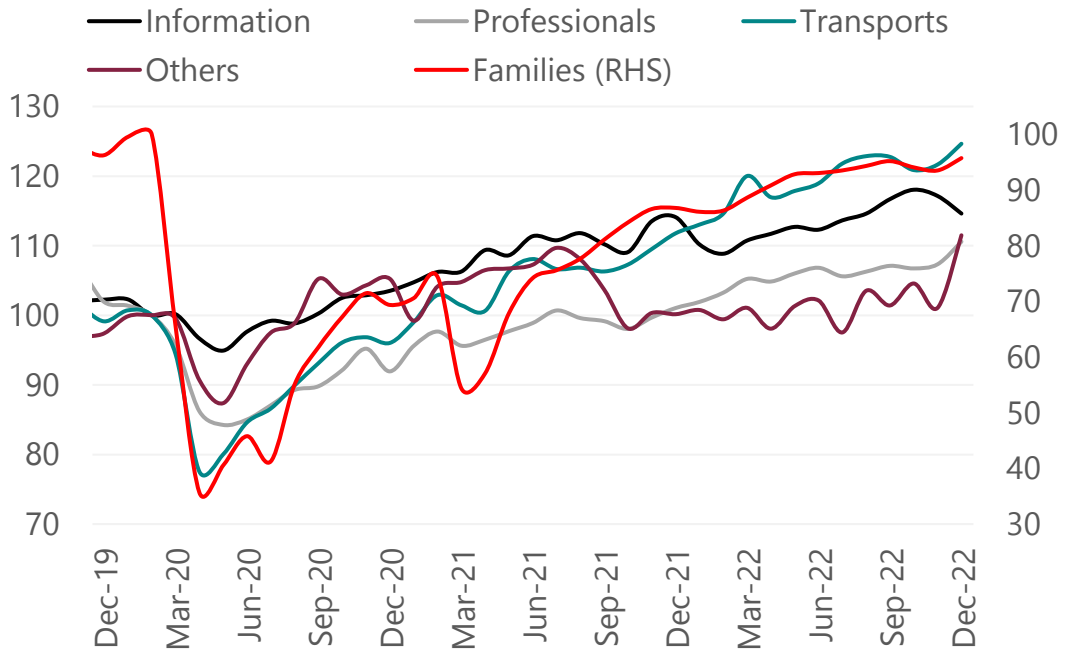


Sources: IBGE, Santander

Mobility-Related Activities Recover and Services Show Sharper Growth Trend

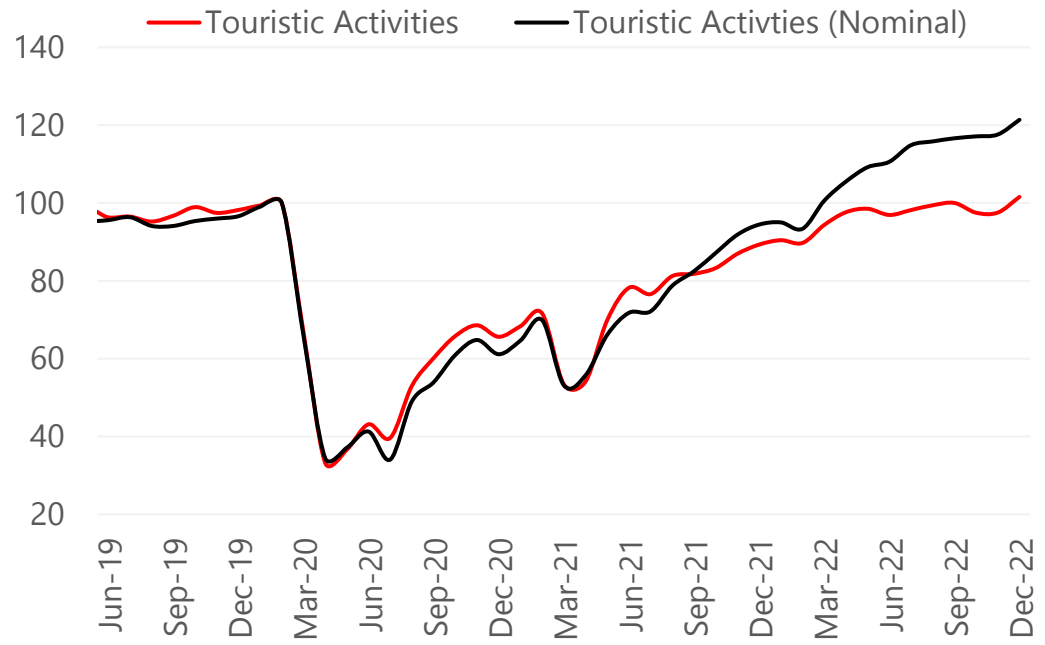
- Mobility-related segments like services to families continue to gain traction, on the heels of the consolidation of economy's reopening process. However, we highlight that segments like transports and information services had been showing sharper growth trend in comparison to the pre-pandemic path. In our view, this reflects i) increasing digitalization of the economy and ii) increasing e-commerce sales.

Total Services Breakdown (sa, 2014=100)



Sources: IBGE, Santander

Touristic Activities (sa, Feb/20=100)



Sources: IBGE, Santander.

Services Sector Breakdown

Services Breakdown											
		% MoM			% YoY			% QoQ			Feb-20 %
	Weights	Oct-22	Nov-22	Dec-22	Oct-22	Nov-22	Dec-22	Jun-22	Sep-22	Dec-22	Dec-22
Total Services	100%	-0.7	-0.4	3.1	9.7	6.5	6.0	2.1	3.0	1.0	14.4
Families	**8%**	**-1.2**	**-0.6**	**2.4**	**11.4**	**7.8**	**9.2**	**6.0**	**2.3**	**0.1**	**-4.3**
Accommodation and Food	7%	-1.6	-0.5	2.7	10.5	6.6	8.8	5.8	2.3	-0.7	-5.8
Other Services to Families	1%	-0.7	0.8	0.8	17.0	15.1	12.0	4.0	3.0	1.6	-3.0
Information	**31%**	**1.2**	**-0.8**	**-2.2**	**8.4**	**3.4**	**0.0**	**0.0**	**2.4**	**1.4**	**14.6**
Technology	26%	1.4	-1.0	-3.4	10.0	3.3	-0.3	2.5	2.8	1.3	13.9
Telecommunication	19%	-2.8	-0.7	-0.7	-4.9	-6.4	-6.6	-0.6	0.0	-1.9	-11.2
Information Technology	7%	7.5	-4.7	-7.9	28.8	14.0	5.7	4.7	5.8	3.4	52.3
Audiovisual	5%	-3.4	8.1	-0.9	-4.4	4.6	1.7	0.7	0.1	1.7	-1.9
Professional	**23%**	**-0.3**	**0.6**	**3.0**	**8.3**	**7.1**	**7.4**	**2.3**	**0.4**	**1.8**	**10.6**
Professional	7%	-3.6	0.3	2.6	8.5	7.4	7.9	2.4	2.0	-0.1	25.3
Administrative	16%	0.6	0.7	2.7	8.2	7.0	7.3	2.2	0.1	1.8	4.0
Transportation	**31%**	**-1.5**	**0.7**	**2.5**	**12.3**	**10.6**	**10.2**	**1.8**	**3.9**	**-0.1**	**24.6**
Ground Transportation	18%	-1.1	-0.4	3.3	18.5	15.7	15.2	5.8	4.1	-0.4	24.3
Water Transportation	2%	-0.4	4.1	-2.3	9.2	14.2	6.6	3.7	5.8	-0.2	32.4
Air Transport	3%	-9.8	3.3	7.6	8.8	3.8	4.4	-5.2	-3.7	-3.8	2.5
Storage and Mail	9%	-0.8	0.3	0.8	4.2	3.4	4.8	-4.1	5.0	0.9	19.1
Other Services	**7%**	**3.1**	**-3.3**	**10.3**	**6.4**	**0.3**	**10.1**	**0.1**	**0.3**	**4.8**	**11.5**
Touristic Activities	-	-2.5	0.0	4.1	16.5	11.9	12.6	6.8	1.5	-0.3	1.5

Sources: IBGE, Santander.

* For details, please see: https://bit.ly/Std-econact-101422.

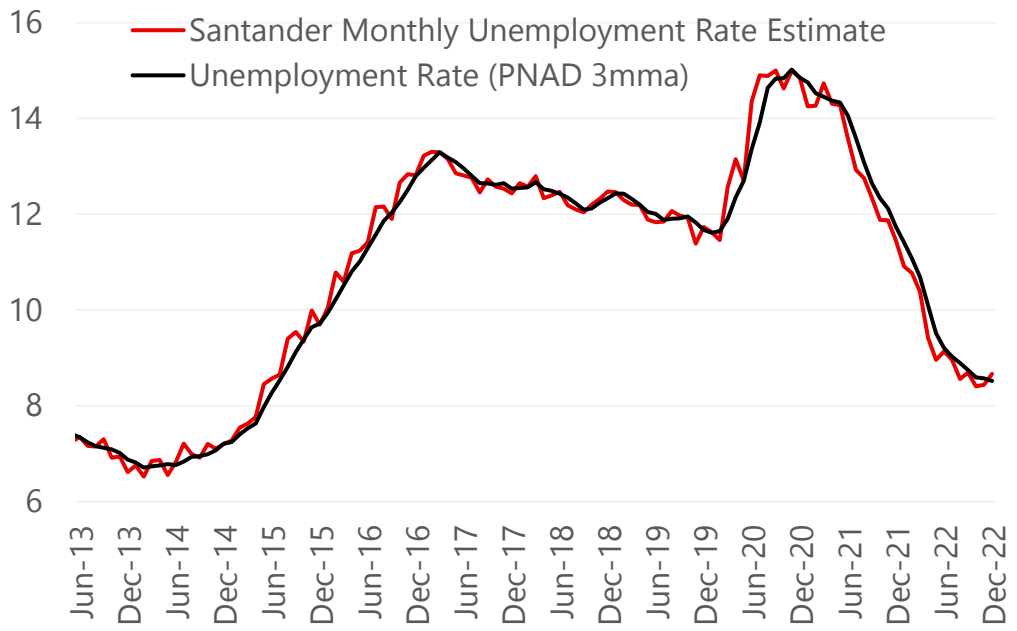
LABOR MARKET

04

Labor Market Remains Overheated, But With Clearer Signs of Deceleration

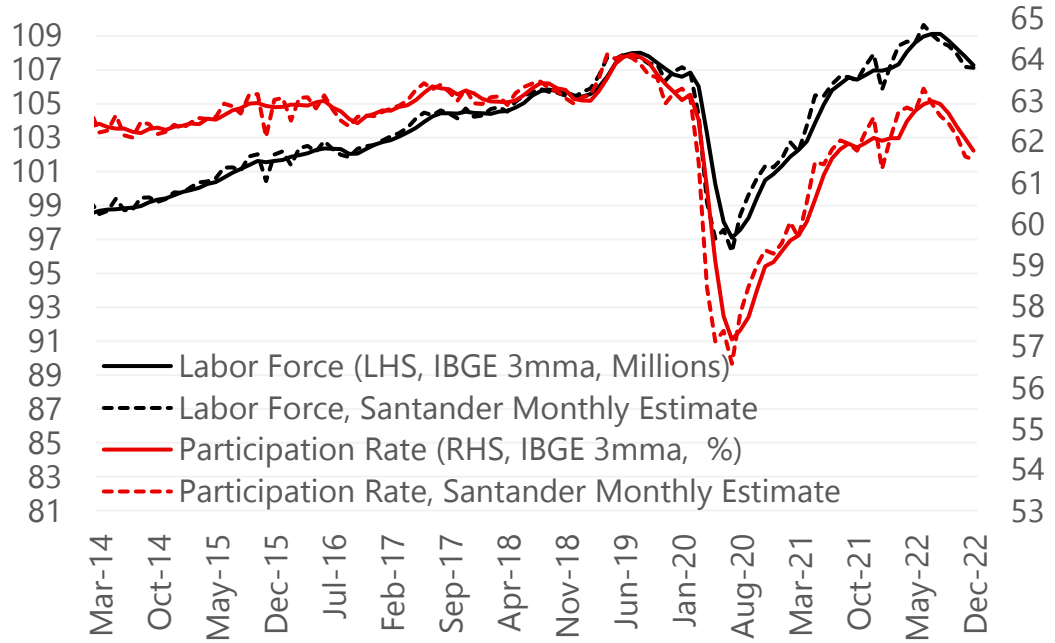
- The PNAD survey continues to show a likely overheated job market, but with a clearer deceleration trend. In our assessment, the unemployment rate remains low more because of a reduction in the participation rate than because of employment growth.

Unemployment Rate (sa)



Sources: IBGE, Santander.

Labor Force and Participation Rate (sa)

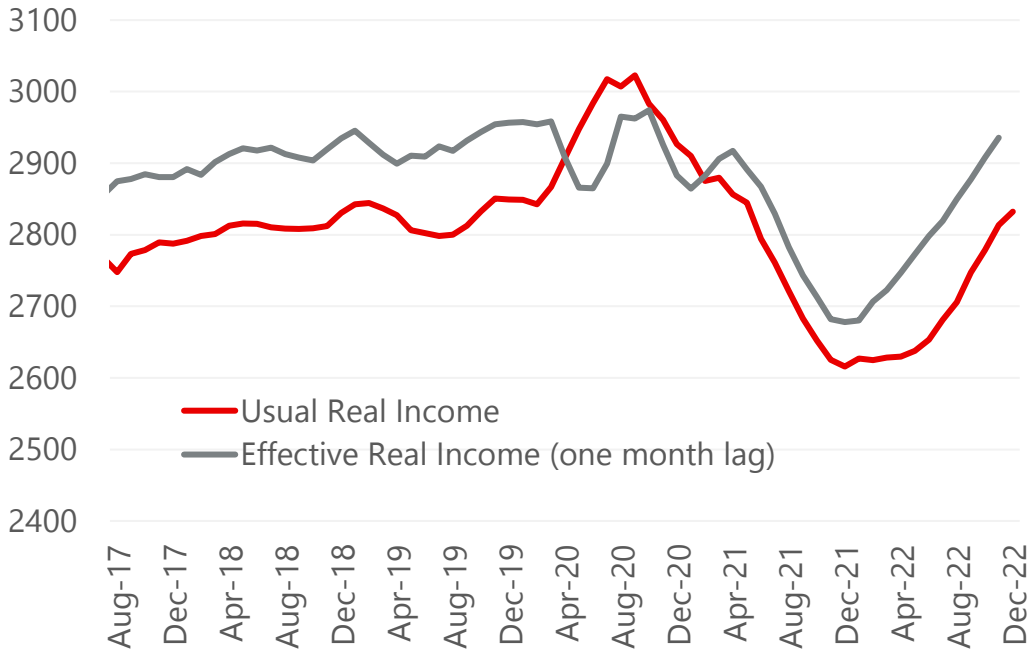


Sources: IBGE, Santander.

Average Real Income Shows Strong Recovery

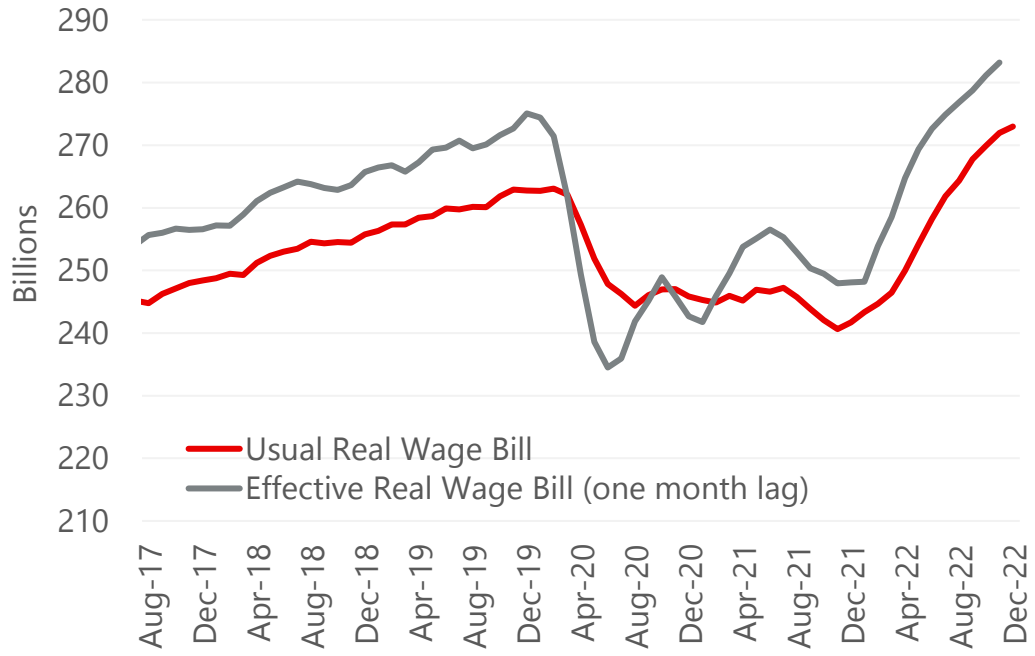
- The effective real wage bill posted a +0.9% MoM-sa variation in November (data lagged one month relative to other PNAD series), while the usual real wage bill had a +0.7% MoM-sa variation in December. Both real wage bill series continue to benefit from the positive impact of a recovering trend in average real wages.

Average Real Income (BRL, sa)



Sources: IBGE, Santander.

Real Wage Bill (BRL, sa)

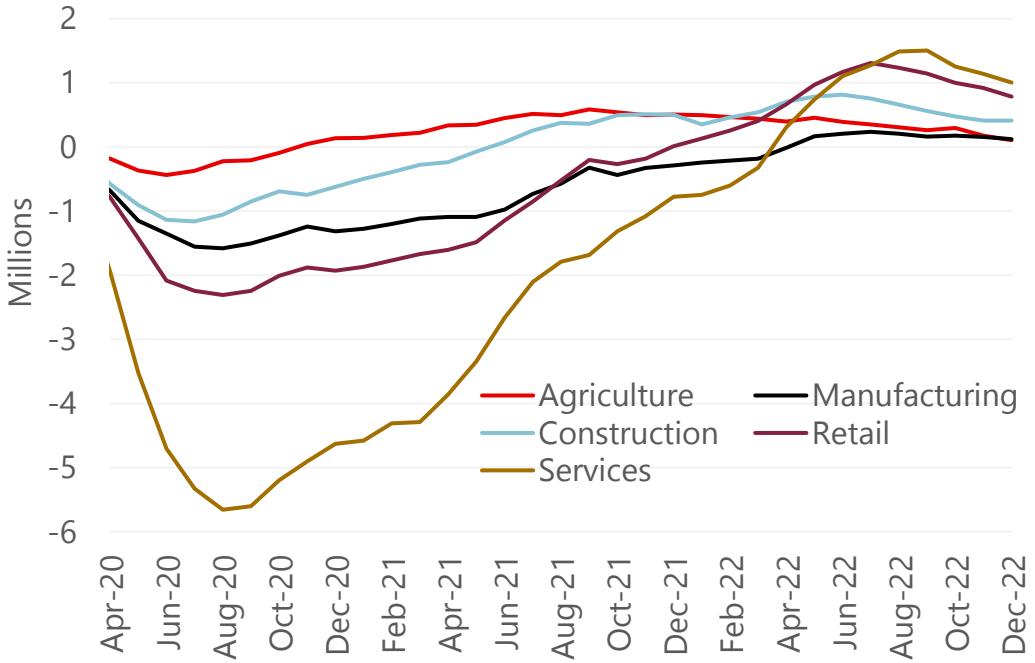


Sources: IBGE, Santander.

All Main Sectors Above the Pre-Crisis Mark

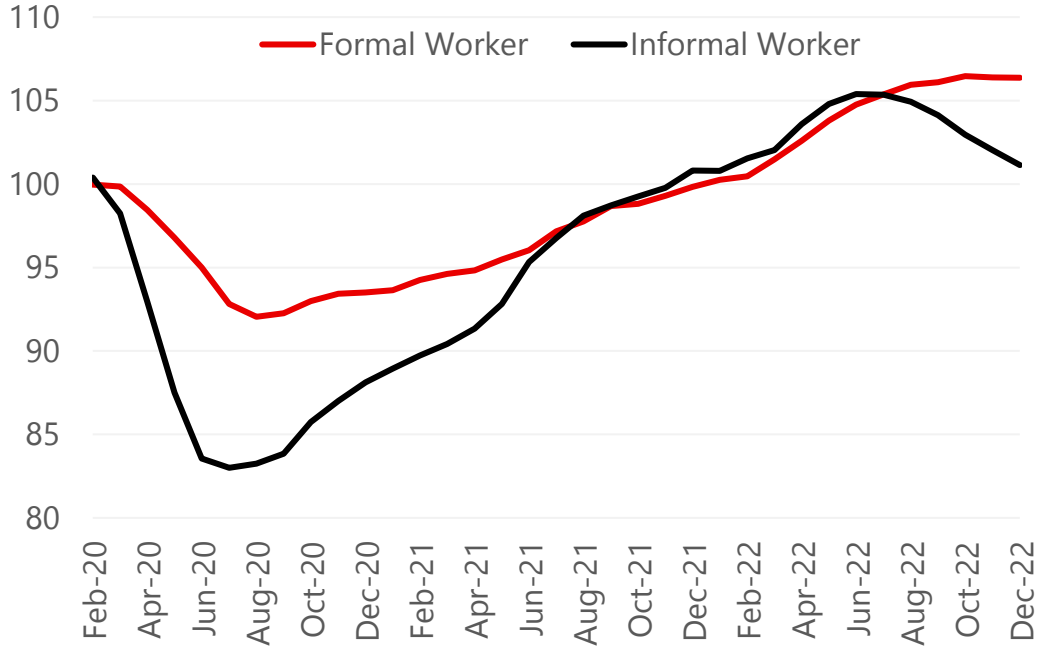
- The services sector was the highlight of job creation in 2022 but continued to decline at the margin, with similar trends seen in retail and construction. In our view, more cycle-sensitive sectors tend to indicate deceleration or stability in employment due to tight financial conditions.

Post-Pandemic Accumulated Job Losses (sa)



Sources: IBGE, Santander.

Employment by Position (sa, Jan-20=100)

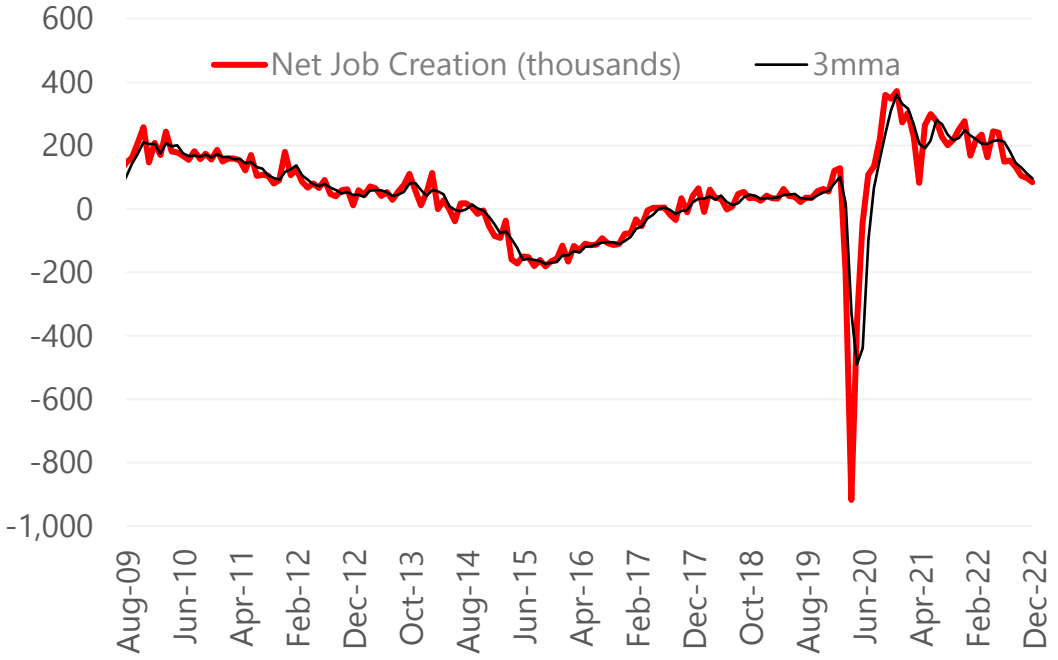


Sources: IBGE, Santander.

Monthly Payroll Expansion at a Slower Pace

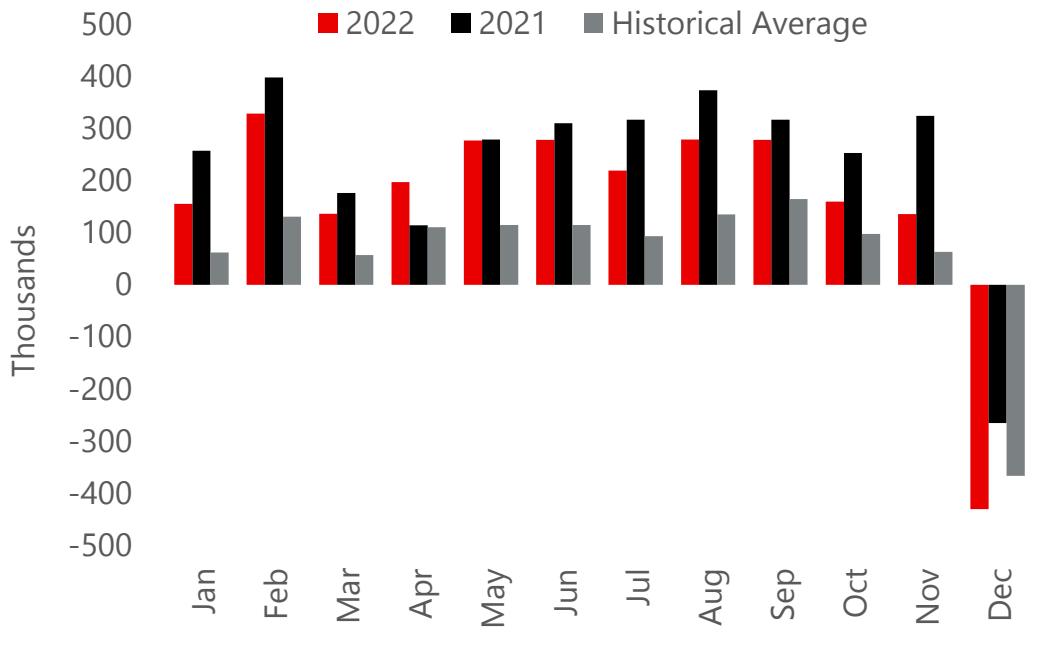
- Based on the December CAGED survey, after our own seasonal adjustment, net formal job creation decelerated to 85k, from 98k in November. The three-month average now points to a payroll expansion of 96k jobs, from 112k in November.

CAGED Net Job Creation (sa)



Sources: Ministry of Labor, Santander.

Net Job Creation and Historical Average

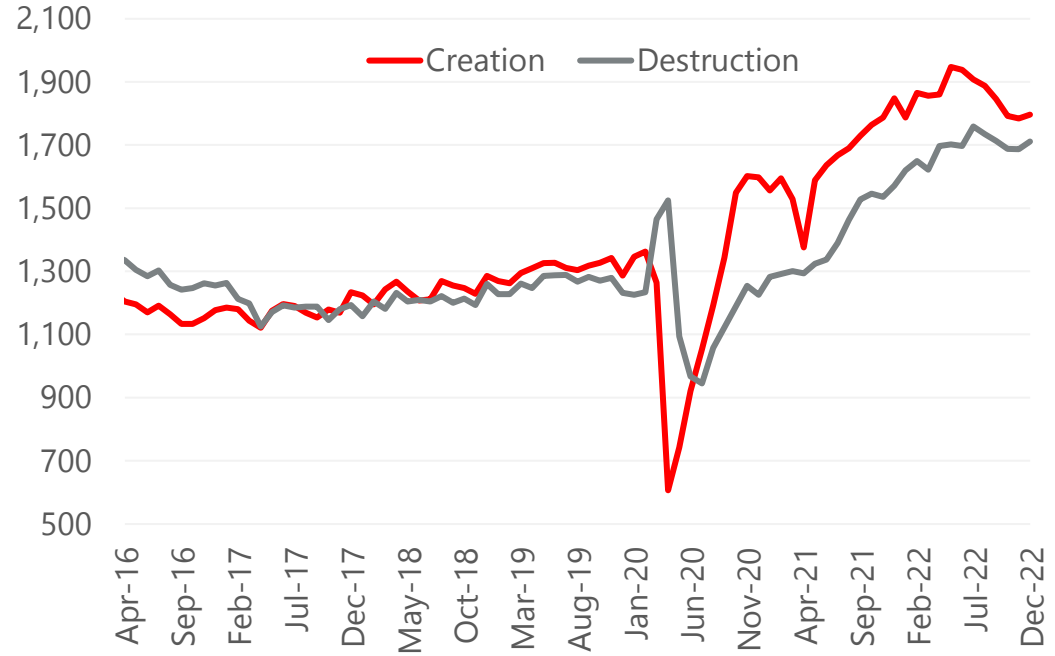


Sources: Ministry of Labor, Santander.

CAGED: Net Job Creation Now Below Joblessness-Neutral Level

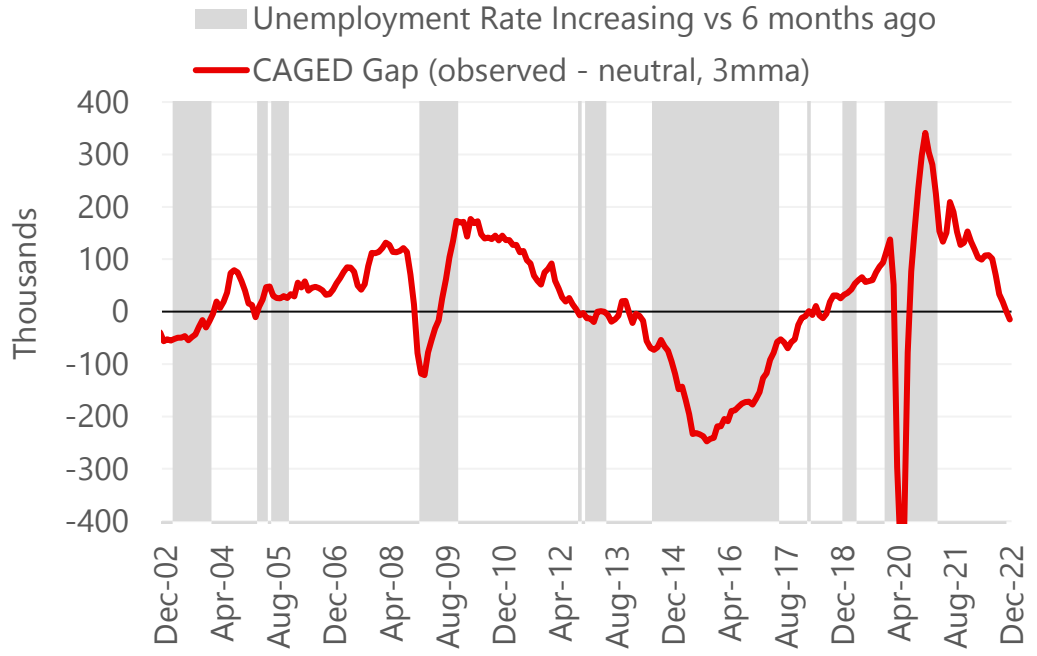
- The number of hirings had a +0.7% MoM-sa variation, while layoffs had a +1.5% MoM-sa variation. We estimate that the 3mma of CAGED's gap to the joblessness-neutral level (~110k) stood at -14k (+1k in November), consolidating into negative terrain.

CAGED: Creation and Destruction (sa)



Sources: Ministry of Labor, Santander.

Net Job Creation Gap (sa)



Sources: Ministry of Labor, IBGE, Santander.

December 2022 PNAD Results

PNAD Breakdown	s.a.			% YoY			% Feb-20*		
	Oct-22	Nov-22	Dec-22	Oct-22	Nov-22	Dec-22	Oct-22	Nov-22	Dec-22
Unemployment rate (%)	8.6	8.6	8.5	-3.8	-3.5	-3.2	-3.1	-3.1	-3.1
Participation rate (%)	62.4	62.1	61.8	0.5	0.1	-0.4	-0.8	-1.1	-1.4
Labor force (millions)	108.2	107.8	107.3	1.7	1.0	0.2	1.4	1.0	0.4
Employment	98.9	98.5	98.1	6.1	5.0	3.8	4.8	4.4	4.0
Unemployment	9.3	9.2	9.1	-30.1	-29.5	-28.6	-25.3	-25.7	-26.6
Formalization Rate (%)	58.1	58.3	58.5	0.9	1.1	1.5	0.9	1.1	1.3
Formal Workers (millions)	57.4	57.4	57.4	7.8	7.1	6.5	6.5	6.4	6.4
Informal Workers (millions)	41.5	41.1	40.8	3.8	2.2	0.2	2.6	1.7	0.8
Average usual earnings (BRL)**	2,778	2,814	2,832	4.7	7.2	8.2	-2.3	-1.0	-0.4
Average effective earnings (BRL)**	2,908	2,935	-	7.2	9.3	-	-1.6	-0.6	-
Usual wage bill (BRL bn)**	269.9	272.0	273.0	11.5	13.0	12.8	2.6	3.4	3.8
Effective wage bill (BRL bn)**	281.2	283.2	-	13.0	14.0	-	3.6	4.3	-

* Seasonally adjusted variation relative to February 2020 (pre-pandemic) reading. For rates, change is in percentage points.

** In real terms

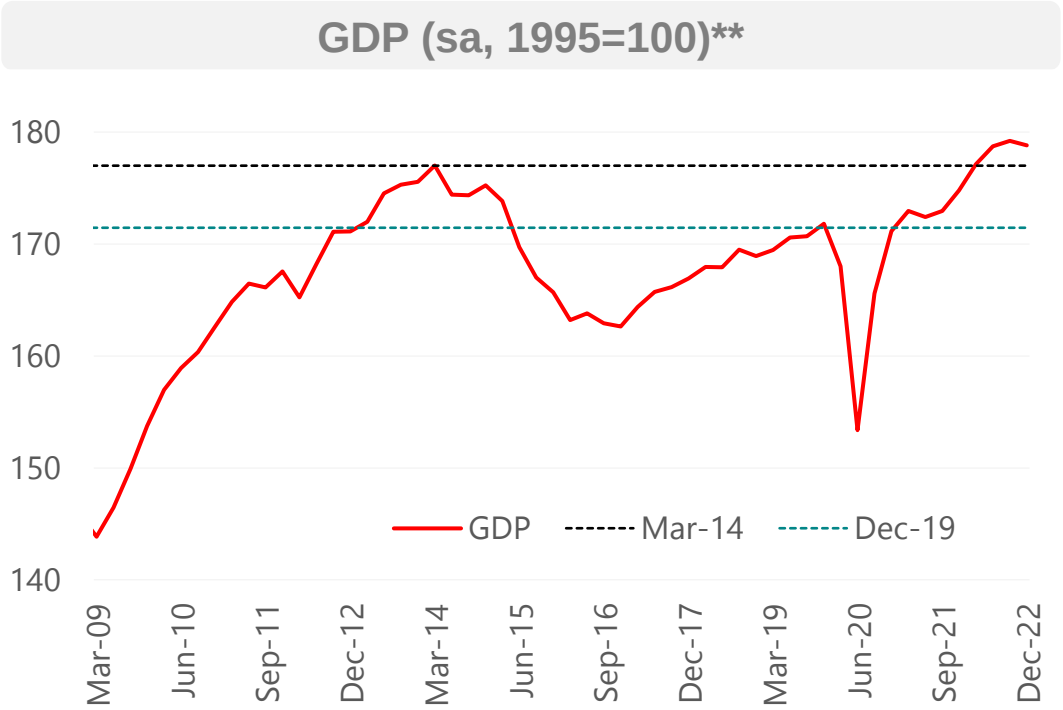
Sources: IBGE, Santander.

GDP

05

A Weak GDP Print after a Strong Streak

- After GDP lost steam in 3Q22, 4Q22's data pointed to a weak -0.2% QoQ-sa (+1.9% YoY) figure and confirmed that broad activity entered into negative territory at the end of 2022. In annual terms, Brazil's economy ended 2022 posting strong growth of 2.9% (+5.0% in 2021 and -3.3% in 2020), well above the estimates made in the beginning of the year (market consensus was roughly at 0.2%). A preliminary estimate for the output gap suggests that it is currently running approximately at 1.3%.



	3Q22		4Q22		2022	4Q19*	2023**
	% YoY	% QoQ	% YoY	% QoQ	%	%	%
GDP	3.6	0.3	1.9	-0.2	2.9	4.1	0.2
Supply							
Taxes	3.3	1.1	2.4	0.2	2.1	5.4	0.9
Farm Output	**3.2**	**-0.5**	**-2.9**	**0.3**	**-1.7**	**0.6**	**-0.2**
Industry	**2.8**	**0.7**	**2.6**	**-0.3**	**1.6**	**3.6**	**0.5**
Mining	-2.6	0.0	1.4	2.5	-1.7	-0.2	2.4
Manufacturing	1.7	0.0	1.0	-1.4	-0.3	-0.9	-0.7
Construction	6.6	0.0	3.2	-0.7	6.9	15.8	0.3
Utilities	11.2	0.6	10.8	-0.4	10.1	10.6	0.2
Services	**4.5**	**0.9**	**3.3**	**0.2**	**4.2**	**6.0**	**0.9**
Retail	2.0	0.2	2.1	-0.9	0.8	3.1	-0.1
Transports	8.8	0.9	5.3	0.2	8.4	9.4	1.2
Information	6.9	3.8	4.9	1.8	5.4	24.9	4.2
Financial	1.7	1.7	2.4	0.9	0.4	4.2	1.4
Other Services	9.8	1.5	8.3	0.9	11.1	11.1	2.1
Rents	3.2	1.4	3.2	0.7	2.5	7.9	1.5
Public Services	1.5	1.1	-0.3	-0.5	1.5	-1.0	-0.1
Demand							
Consumption	**4.6**	**1.0**	**4.3**	**0.3**	**4.3**	**3.8**	**1.2**
Government	**1.0**	**1.2**	**0.5**	**0.3**	**1.5**	**2.1**	**0.6**
Investments	**5.0**	**2.6**	**3.5**	**-1.1**	**0.9**	**19.1**	**1.4**
Exports	**8.1**	**3.7**	**11.7**	**3.5**	**5.5**	**12.8**	**3.8**
Imports	**10.6**	**5.5**	**4.6**	**-1.9**	**0.8**	**7.1**	**2.9**

Sources: IBGE, Santander.

** "4Q22 GDP Shrank 0.2% QoQ-sa"* – March 02, 2023 - Available on: https://bit.ly/Std-GDP-4Q22

** GDP is 4.1% above the pre-pandemic mark (Dec-19) and 1.0% above the spike immediately before the great domestic recession (2014-2016).

BASELINE SCENARIO

06

GDP: Key Hypotheses, Basic Description and Risks

- Main hypothesis: The effects of a tight monetary policy stance will prevail on economic activity from 1Q23 onward. We assume no further weather problems compromising the main crop harvest in 2023. A tight labor market, new government transfers and the recovery in real income imply resilience in consumption despite weaker economic activity.

- We are maintaining our estimates for 2023 and 2024. For the full-year 2022, 4Q22's data release pointed to a 2.9% growth. For 2023, we continue to forecast a slowdown in domestic demand and in cyclical components, stemming mainly from an expected global growth deceleration and the effects of a tight BCB policy. Conversely, expectations of strong growth for non-cyclical sectors like farm output, and an expansion in the real wage bill will (owing to both labor income recovery and government transfers) prop up domestic activity this year (and avoid a sharper loss of momentum). As per the quarterly GDP path, we expect a strong 0.5% growth in 1Q23 owing to a boosted farm output, while for the remaining quarters we expect sequential declines of -0.2% QoQ-sa per quarter. For 2024, we see still the economy struggling to gather momentum, given the persistence of global headwinds and the slow pace of rate cuts (mirrored in a still tight BCB policy stance); we have maintained our GDP forecast at +0.5%.

- **Upside risks:** Stronger than expected recovery in real household income due to the lower jobless rate and a greater impact of government transfers on consumption. Resilience in commodity prices could mean a persistent impulse for investment.

- **Downside risks:** Stronger than expected inflationary resilience, leading the BCB to keep a tight policy stance for even longer. Worsening weather problems, dampening farm output.

GDP Path and Breakdown

GDP Baseline Scenario			
	YoY	QoQ	Full Year
4Q21	2.1%	1.1%	5.0%
1Q22	2.4%	1.3%	
2Q22	3.7%	0.9%	
3Q22	3.6%	0.3%	
4Q22	1.9%	-0.2%	2.9%
1Q23	2.5%	0.5%	
2Q23	0.5%	-0.2%	
3Q23	0.1%	-0.2%	
4Q23	-0.1%	-0.2%	0.8%

Sources: IBGE, Santander.

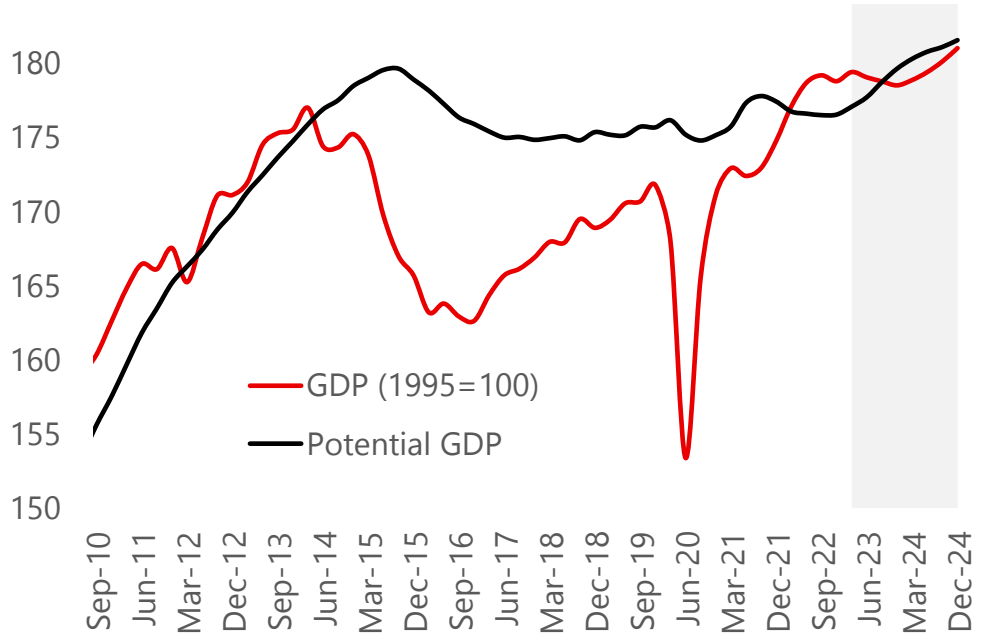
GDP Projections						
	2018	2019	2020	2021	2022	2023e
GDP	1.8	1.2	-3.3	5.0	2.9	0.8
Farm Output	1.3	0.4	4.2	0.3	-1.7	7.6
Industry	0.7	-0.7	-3.0	4.8	1.6	0.2
Services	2.1	1.5	-3.7	5.2	4.2	0.7
Household	2.4	2.6	-4.6	3.7	4.3	1.0
Government	0.8	-0.5	-3.7	3.5	1.5	2.0
Investments	5.2	4.0	-1.7	16.5	0.9	0.5
Exports	4.1	-2.6	-2.3	5.9	5.5	4.6
Imports	7.7	1.3	-9.5	12.0	0.8	1.4

Sources: IBGE, Santander

Output Gap Closed Until Mid-2023

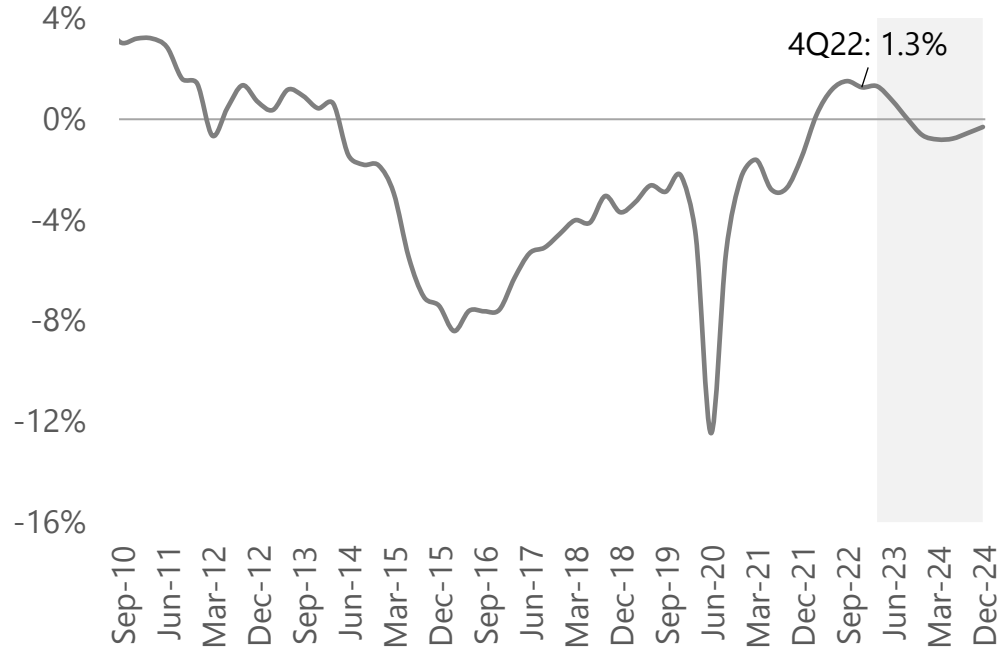
- The strength of economic activity in 2022 took the output gap to positive terrain for the first time since 2014 in 2Q22. We expect the GDP to remain above potential until mid-2023. The GDP contraction expected for 2023 and the growth below potential in 2024 should maintain a negative output gap at least until YE-2024 (~-0.5%). Our long-term potential growth stands at the 1.5%.

GDP (sa, average 1995=100)



Sources: IBGE, Santander.

Output Gap (%)



Sources: IBGE, Santander.

Lower Participation Rate Has Led Us to Reduce our Unemployment Rate Estimates

- There was a considerable slowdown in employment growth, and the jobless rate has not yet started increasing only due to an important decline in the labor supply. Considering the lower-than-expected participation rate in the short term, we have reduced our joblessness estimate for 1Q23, impacting our average unemployment rate estimate for 2023.

- We continue to expect the unemployment rate to increase once the participation rate stabilizes and eventually starts to catch up with the historical average. We revised our forecast for the average unemployment rate in 2023 to 9.6% (prior: 10.0%) and maintained the 10.1% estimate for 2024.

- **Upside risks:** Faster than expected growth in employment, on the heels of further positive surprises on labor intensive services. Lower than expected participation rate, resulting in a tight labor market for longer

- **Downside risks:** Stronger inflationary pressures leading the BCB to adopt an even tighter monetary policy stance in the medium term.

	2020	2021	2022	2023e	2024e
Unemployment Rate *					
Average	13.8	13.2	9.2	9.6	10.1
End of Period (s.a.)	14.9	11.7	8.2	10.2	10.3
Unemployed Population **					
Average	13.8	13.9	9.9	10.6	11.3
End of Period	15.0	12.6	9.3	11.2	11.4

* in %

** in Millions

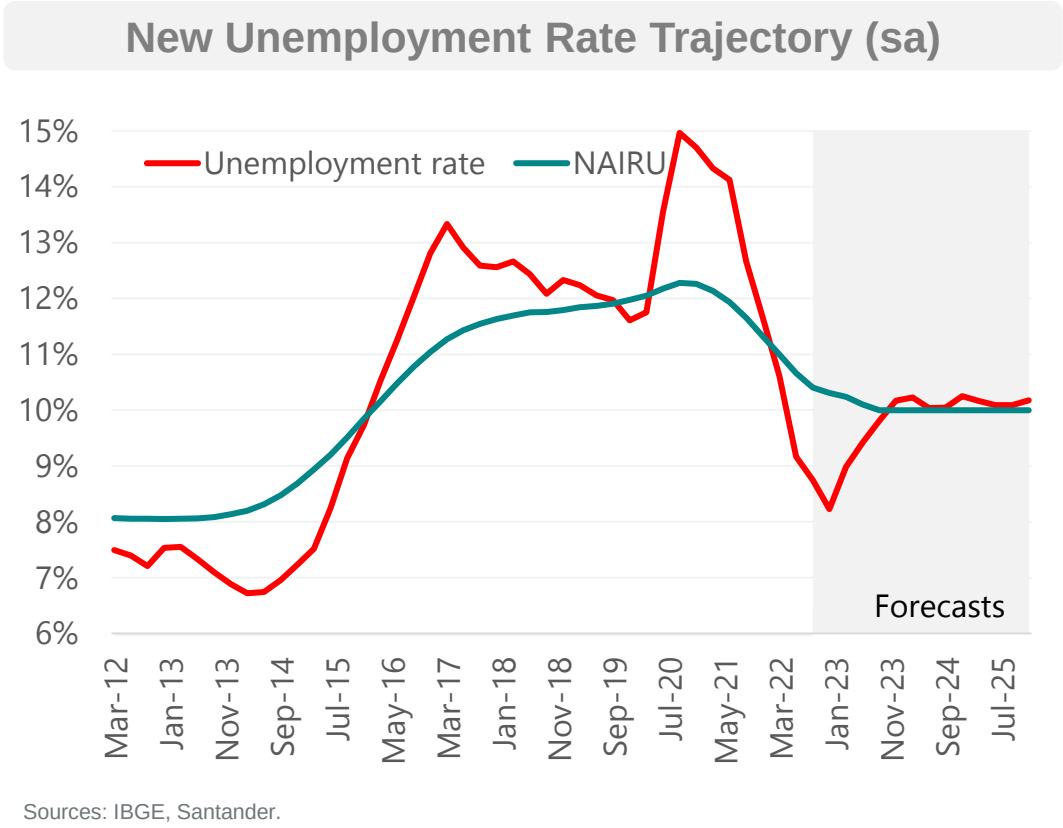
Sources: IBGE, Santander.

Job Market to Remain Tight Until 3Q23

- We have reduced our joblessness estimate for 1Q23, impacting our average unemployment rate estimate for 2023. We envision a tight labor market until 3Q23 (we see the NAIRU stabilizing around 10%), which adds to the difficult conditions for the disinflation process expected ahead.

		Dec-22	Feb-22
Unemployment Rate (avg)	2023	10.0	9.6
	2024	10.1	10.1
	2025	10.1	10.1
Unemployment Rate (YE, sa)	2023	10.1	10.2
	2024	10.1	10.2
	2025	10.2	10.2
Unemployed (YE, Millions sa)	2023	11.1	11.2
	2024	11.3	11.4
	2025	11.5	11.5

Sources: IBGE, Santander.

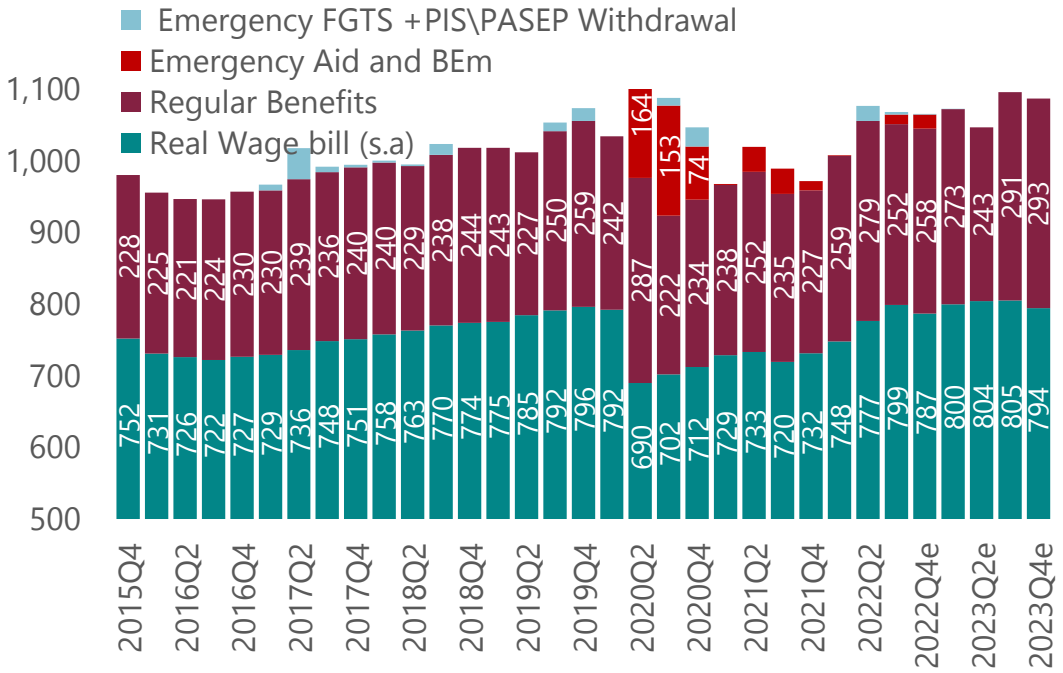


Sources: IBGE, Santander.

“Expanded” Real Wage Bill: Better Figures for 2022 and 2023

- As for the “expanded” real wage bill growth, we have increased our projections for 2022, 2023, and 2024 to 6.4%, 2.6%, and 1.2%, respectively (from 5.6%, 2.5%, and 1.1%, respectively), considering a stronger recovery in average wages in the short term.

“Expanded” Real Wage Bill (BRL billion)



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

	2021	2022(E)	2023(E)	2024(E)
Real Wage Bill	+0.6%	+7.2%	+2.8%	+0.6%
Real Wage Bill (With Government Transfers)	-8.0%	+6.4%	+2.6%	+1.2%

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

Macro Scenario: Projections

- For our Scenario Update 'MORE PERSISTENT INFLATION, HIGHER INTEREST RATE' (sent on February 09, 2023), click on the link: https://bit.ly/Std-scenupdate-feb23

Macroeconomic Variables		Previous		Current
GDP (%)	2023E	0.8	→	0.8
	2024E	0.5	→	0.5
	2025E	1.5	→	1.5
IPCA (%)	2023E	5.4	↑	5.9
	2024E	3.5	↑	3.7
	2025E	3.0	↑	4.0
Selic Rate (% end of period)	2023E	12.00	↑	13.00
	2024E	9.00	↑	11.00
	2025E	7.00	↑	8.00
FX Rate - USDBRL (end of period)	2023E	5.40	→	5.40
	2024E	5.50	→	5.50
	2025E	5.55	→	5.55
Current Account Balance (% of GDP)	2023E	-3.1	→	-3.1
	2024E	-3.1	↓	-3.4
	2025E	-3.4	↑	-3.1
Primary Fiscal Balance (% of GDP)	2023E	-1.5	↑	-1.4
	2024E	-1.2	→	-1.2
	2025E	-0.7	↓	-0.8
Gross Public Debt (% of GDP)	2023E	80.2	↓	78.8
	2024E	83.5	↓	83.4
	2025E	86.4	↑	86.7

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

Thank you.

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

Simple Personal Fair

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