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## Brazil Macro | February 2021

### Economic Activity

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## SUMMARY

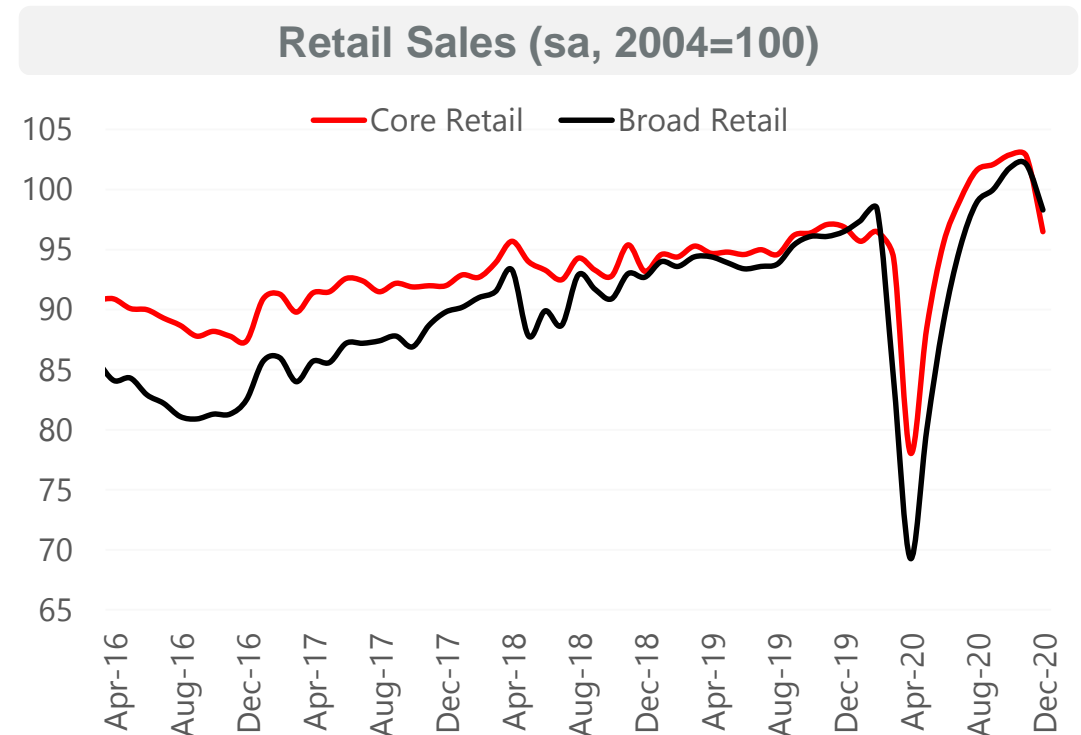
- The releases of economic activity indicators in the last months of 2020 reinforced the likelihood of solid economic growth in 4Q20. The upsurge in the pandemic observed in the first weeks of 1Q21 will likely prompt setbacks in the economy's reopening process, with an unavoidable deterioration in mobility relative to the previous quarter, although we think it will be above the worst periods of the crisis.
- From 2Q21 onward, progress in the massive vaccination campaign in conjunction with a new (smaller) round of emergency aid and with the improvement in mobility should ignite a gradual resumption of economic activity.
- Given the strong development of economic activity at the end of 2020 and the likelihood of a sequential deterioration in 1Q21, we are keeping our projections for GDP in 2020 and 2021 at -4.1% and 2.9%, respectively. The incorporation of a new monetary policy path, with earlier rate hikes, motivated our downward revision of 2022 GDP from 2.5% to 2.3%;
- We expect further deterioration in the unemployment rate in 1Q21, as the labor force continues to recover, combined with a slight decline in the employment rate, following the end of the government's emergency aid program and new mobility restrictions. In our view, after reaching a 16.9% peak in 2Q21, the unemployment rate should fall, following the economic reopening process that will benefit some important labor-intensive sectors.

RETAIL SALES

01

## A sharp drop following a V-shape resumption

- After reaching multi-years high, the expected softening move of retail sales in 4Q20 was materialized, and it was also reinforced by the sharp drop seen in December.
- Consumption was driving the recovery, benefitted by the increase in income transfers for groups with greater propensity to consume essential goods, but also by the new pattern of household spending in the pandemic (with demand shifting from services toward goods).
- Following the sharp resumption seen after second-quarter's tumble, a softening move was expected in 4Q20, mainly due to i) the reduction of the Emergency aid's value, ii) the decline in confidence and iii) inflationary pressures on essential goods.
- Moreover, as the economy gradually reopens, the household consumption moves toward the pattern seen in the pre-crisis period, with more spending with services in detriment to goods.

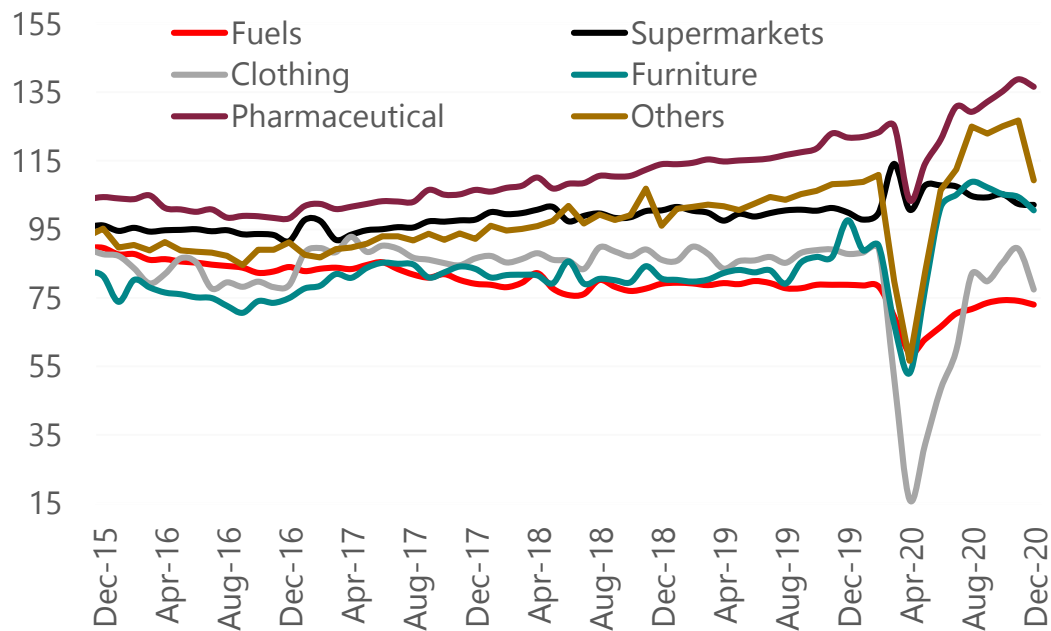


Sources: IBGE, Santander

## Retail sales back to pre-crisis mark

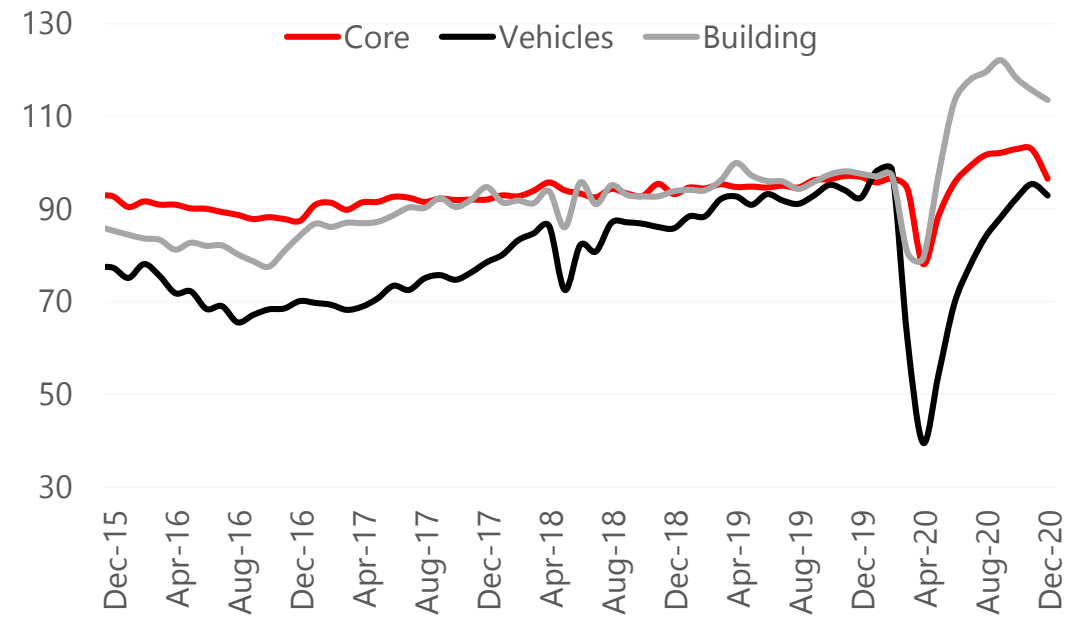
- This softening expectation was materialized, and the downward trend was reinforced by the sharp drop seen in December, which took the indexes back to the readings seen in the pre-pandemic period.

### Core Retail Sales (sa, 2004=100)



Sources: IBGE, Santander

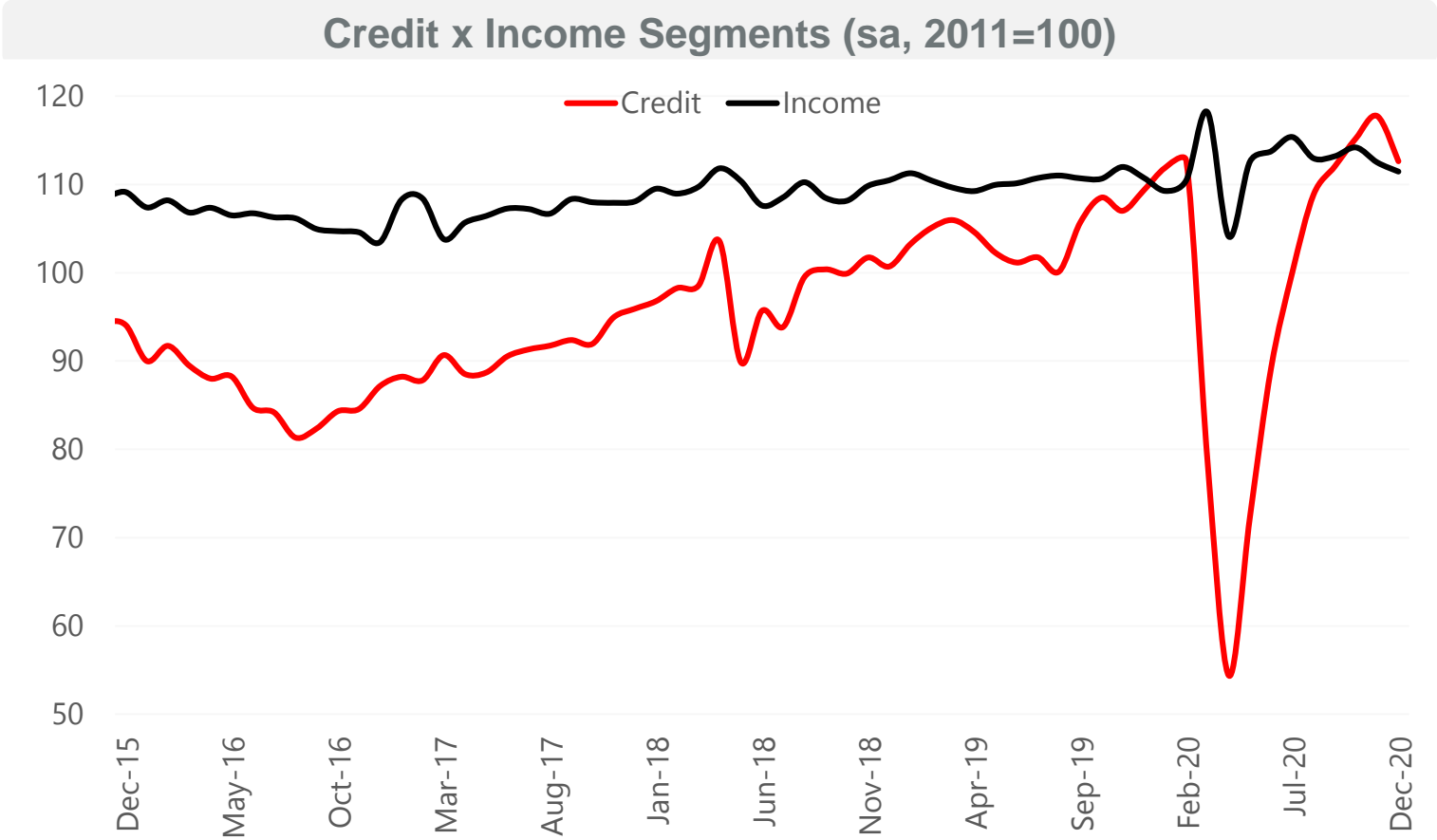
### Broad Retail Sales (sa, 2004=100)



Sources: IBGE, Santander

# The effect of income transferences is highlighted in a sensitivity analysis

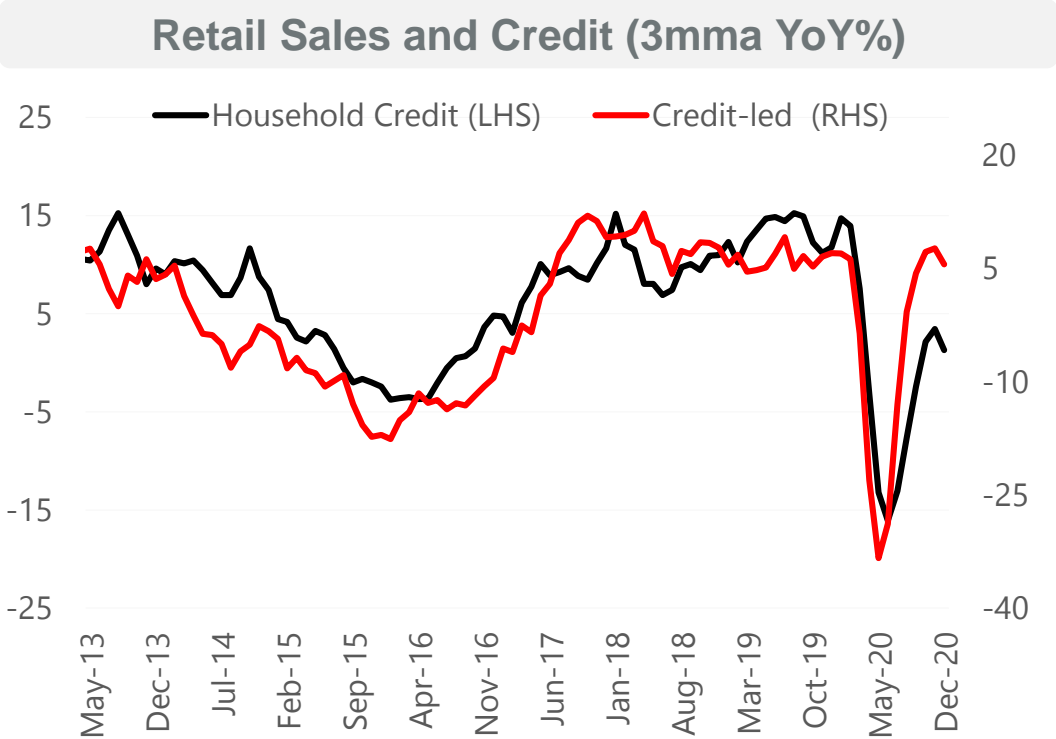
- Alongside the social distancing measures, the sized government transfers seem to have printed a clear pattern for household spending in recent months. Indeed, sales of income-led segments (e.g. supermarkets, pharmaceuticals) fell significantly less than sales in the credit-led segments (e.g. vehicles).



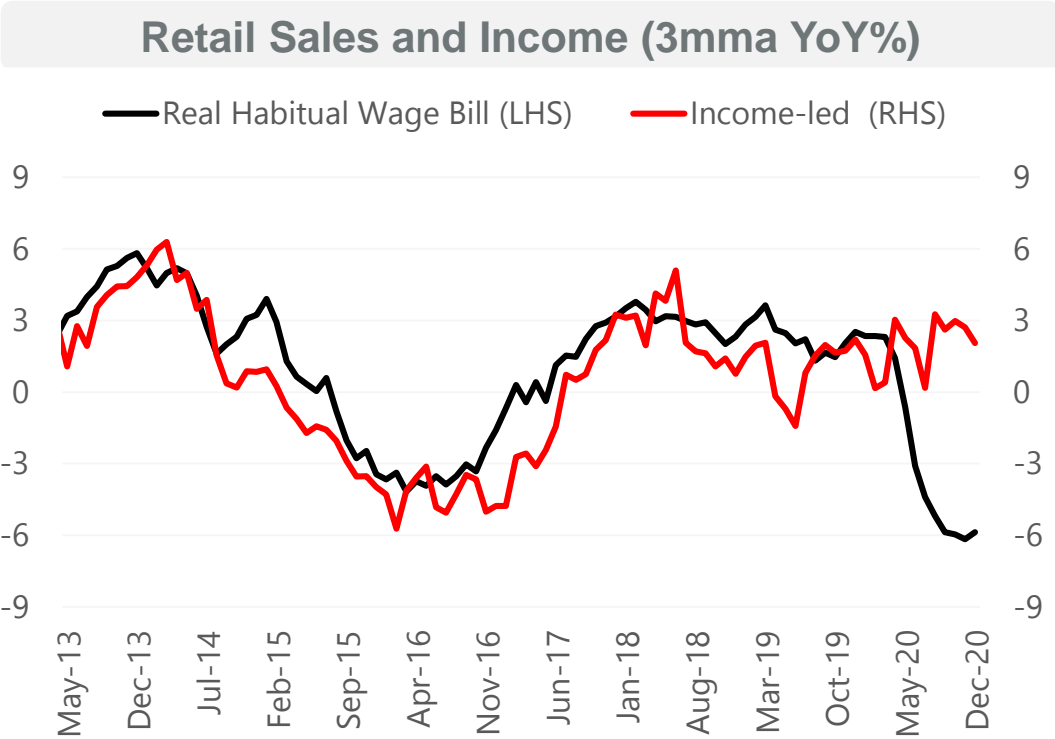
Sources: IBGE, Santander

# The reduction in disposable income should be a headwind for sales

- In terms of outlook, we expect sales in credit-led segments to benefit from lower interest rates in 2021, partially mitigating the effect of the fiscal cliff, while the reduction in disposable income should be a strong headwind for sales in income-led segments.



Sources: IBGE, Santander



Sources: IBGE, Santander



## Retail Sales in 4Q20

Retail Sales Breakdown									
	Oct-20			Nov-20			Dec-20		
	% MoM	% YoY	% QoQ	% MoM	% YoY	% QoQ	% MoM	% YoY	% QoQ
<b>Core Retail Sales</b>	<b>0.8</b>	<b>8.4</b>	<b>8.3</b>	<b>-0.1</b>	<b>3.5</b>	<b>3.9</b>	<b>-6.1</b>	<b>1.1</b>	<b>-0.2</b>
Fuels	1.1	-5.0	9.9	-0.3	-6.6	6.4	-1.5	-6.6	2.7
Hypermarkets, supermarkets	0.9	7.3	-2.8	-2.7	-1.8	-2.5	-0.3	3.4	-2.1
Fabrics, clothing and footwear	6.9	-2.3	76.2	4.7	-3.5	34.0	-13.3	-9.9	13.9
Furniture and home appliances	-1.9	21.9	13.1	-0.8	18.0	0.5	-3.7	2.9	-3.4
Pharmaceutical	2.3	14.0	8.4	2.6	11.8	6.6	-1.6	13.8	4.7
Books, papers and magazine	4.3	-34.5	10.1	4.1	-15.5	1.7	-2.7	-37.5	1.9
Office equipment and supplies	2.8	-10.3	12.8	0.3	-10.7	5.0	-6.8	-12.3	0.7
Other	1.8	18.4	23.6	1.4	16.2	9.0	-13.8	1.6	0.2
<b>Broad Retail Sales</b>	<b>1.8</b>	<b>6.1</b>	<b>13.9</b>	<b>0.3</b>	<b>4.1</b>	<b>7.4</b>	<b>-3.7</b>	<b>2.5</b>	<b>2.8</b>
Building Materials	-3.2	20.9	9.6	-2.2	16.9	1.6	-1.8	18.9	-3.4
Vehicles	4.6	-5.8	31.3	3.4	0.9	19.5	-2.6	1.8	12.4

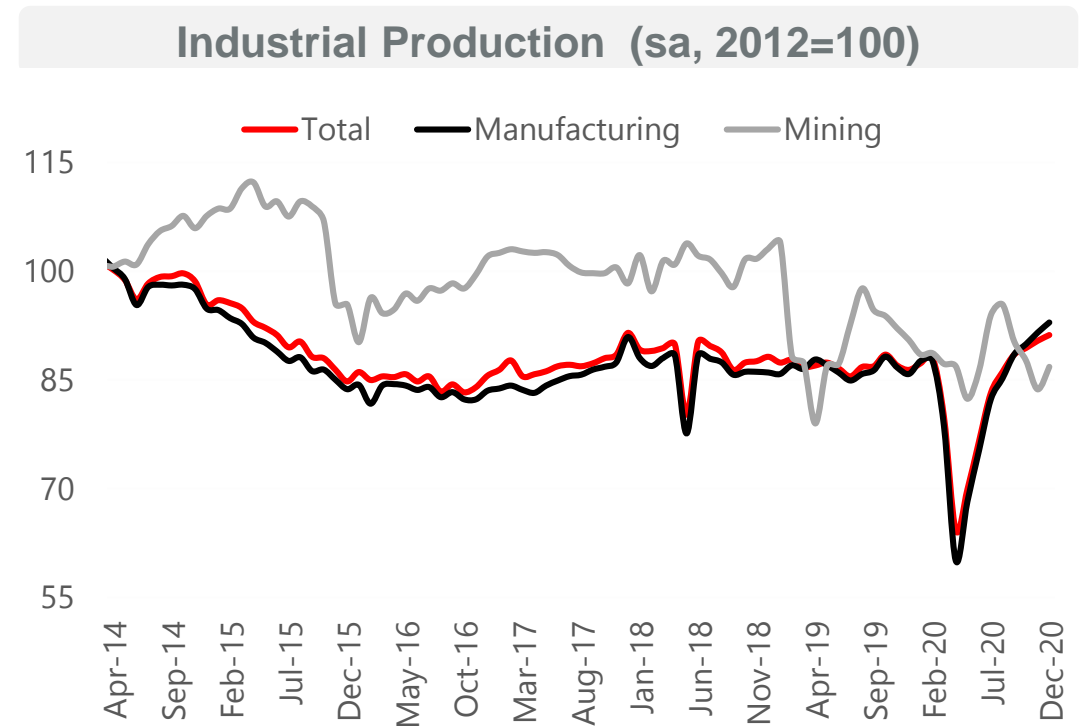
Sources: IBGE, Santander

INDUSTRIAL  
PRODUCTION

02

## A slower but continued resumption of Industrial Production

- Industrial Production came recovering after the sudden stop seen in the worst moments of the crisis, yet not at the same speed seen in retail sales.
- The manufacturing industry has recovered in a fast trend, on the heels of the emergency aid, but also due to a demand shift toward industrialized goods and to some imports substitution.
- In terms of outlook, the manufacturing industry will face an inventories replenishment, which may support industrial production in 1H21 amid an environment with lower demand for goods.
- However, despite this positive outlook, a necessary condition for its materialization is the absence of widespread inputs shortage, which would seriously compromise industry supply capacity.

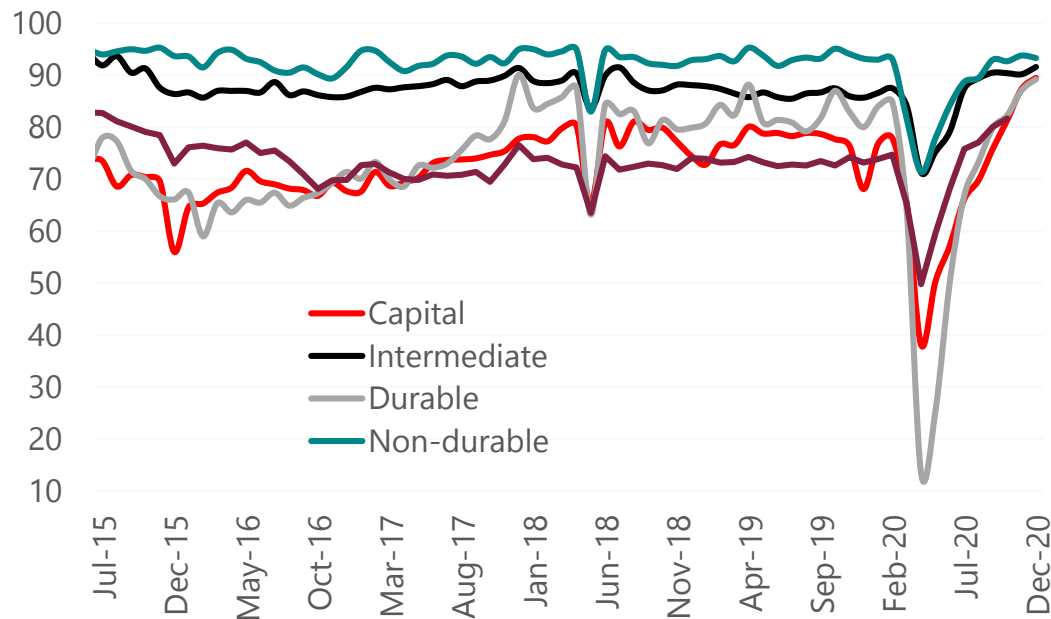


Sources: IBGE, Santander

## Categories related to investments are the highlights

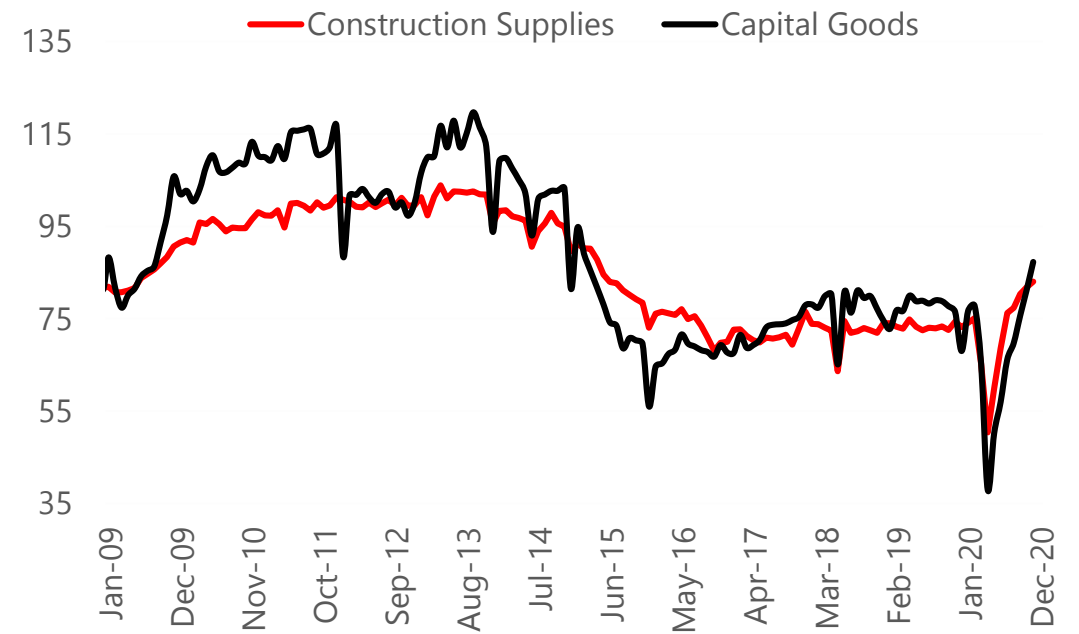
- Construction supplies and capital goods have already far surpassed the pre-crisis mark. The behavior of these categories points to a possible rise in investments in the coming quarters, especially in an environment with looser financial conditions.

### Industrial Production (sa, 2012=100)



Sources: IBGE, Santander

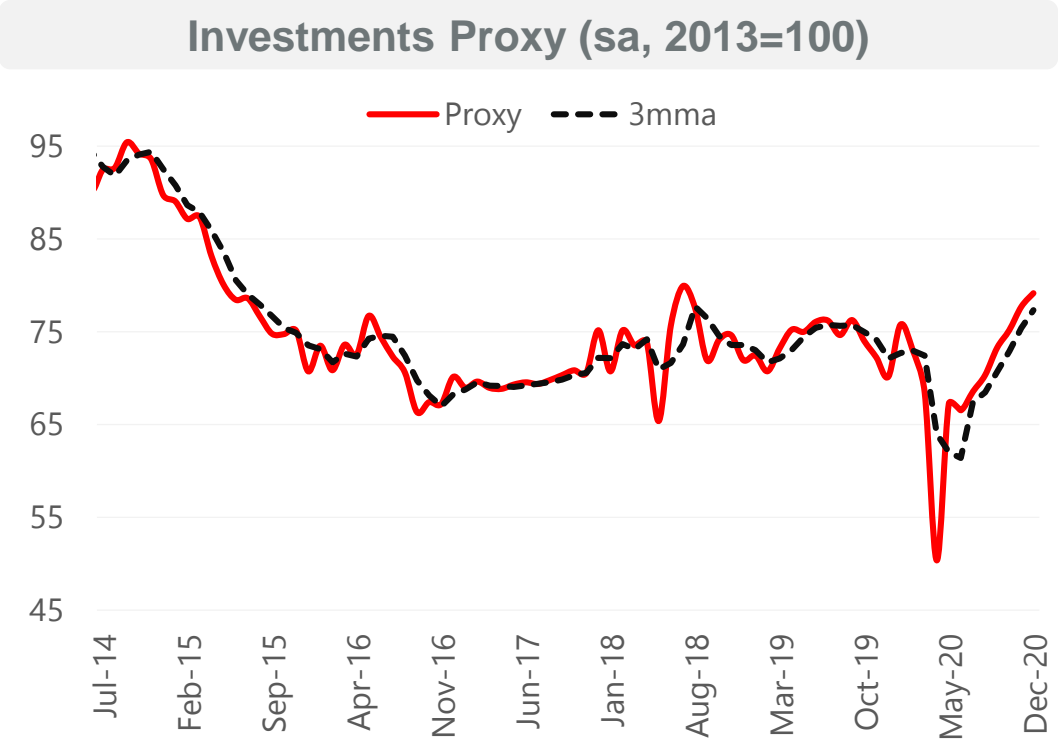
### Related to Investments (sa, 2012=100)



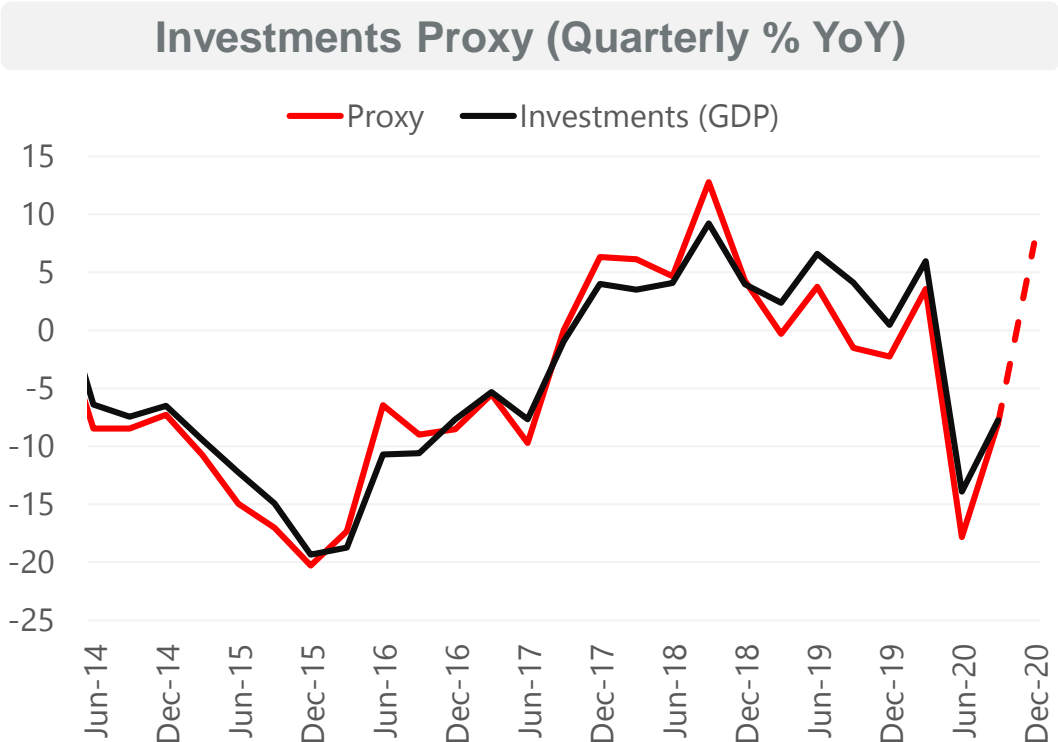
Sources: IBGE, Santander

# An expected rise of investments

- Our monthly investments proxy (built as a weighting of net consumption of capital goods and the building sector) is pointing to solid growth in 4Q20, even filtering the accounting effect of oil platform platforms, which reinforces the upward trend seen since April.



Sources: IBGE, Santander

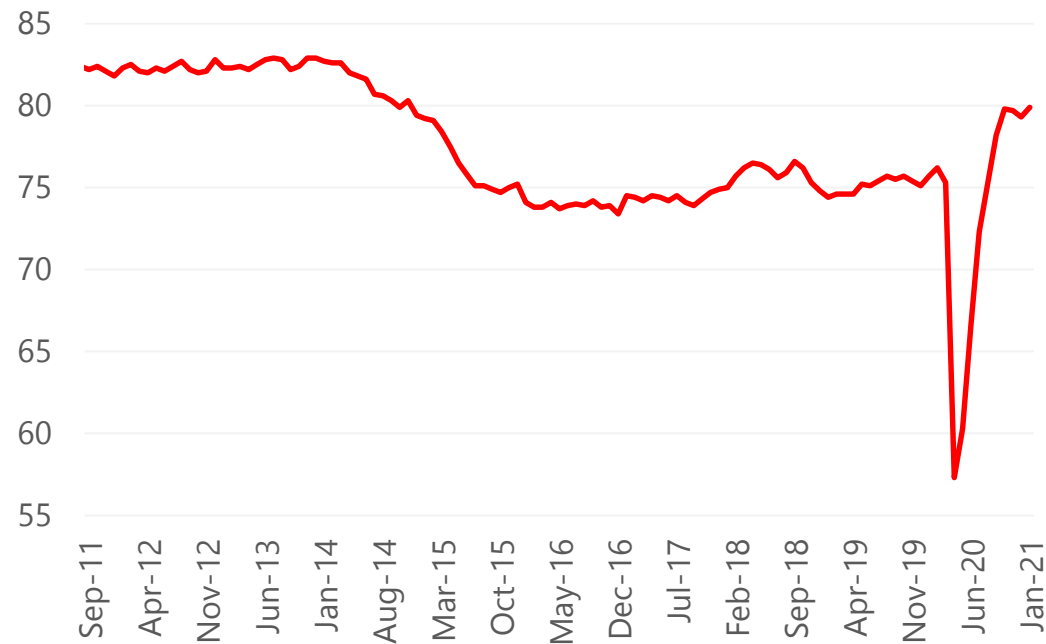


Sources: IBGE, Santander

# Industrial Production Outlook: Confidence

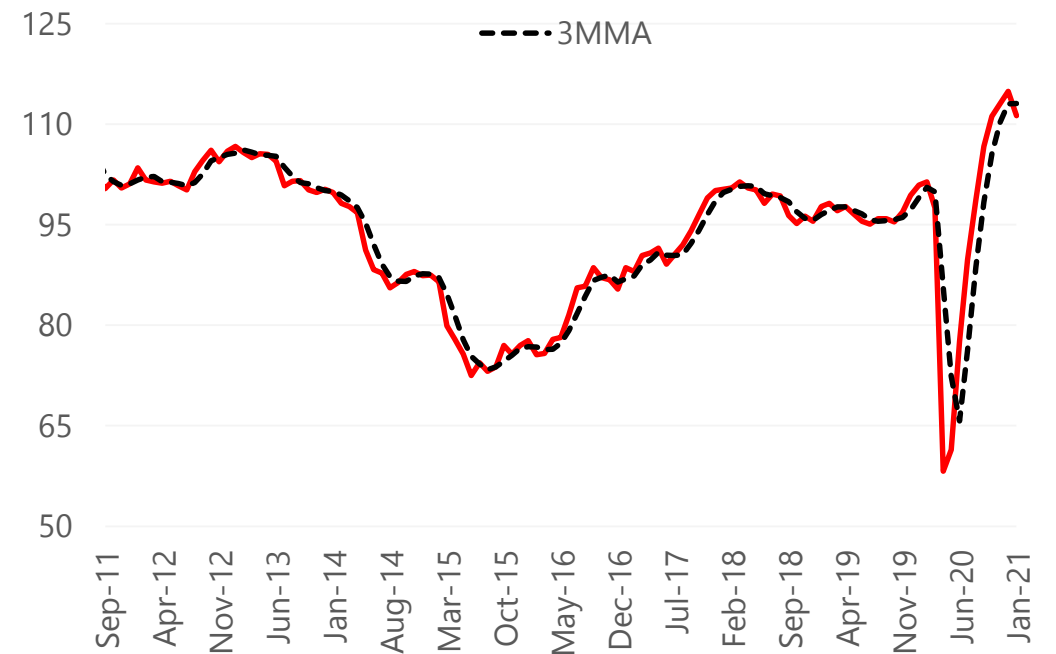
- Despite the deceleration shown in soft data, we expected high confidence and a recovered capacity utilization to continue as important tailwinds for production in the coming months.

### Capacity Utilization (sa, %)



Sources: FGV, Santander

### Industrial Confidence (sa, points)

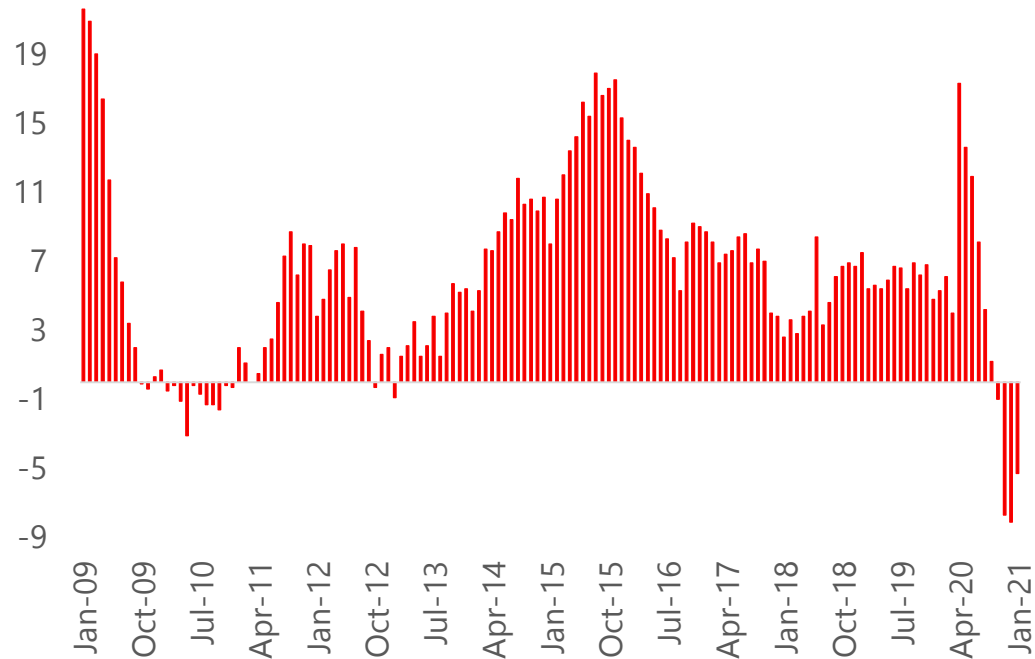


Sources: FGV, Santander

# Industrial Production Outlook: Inventories

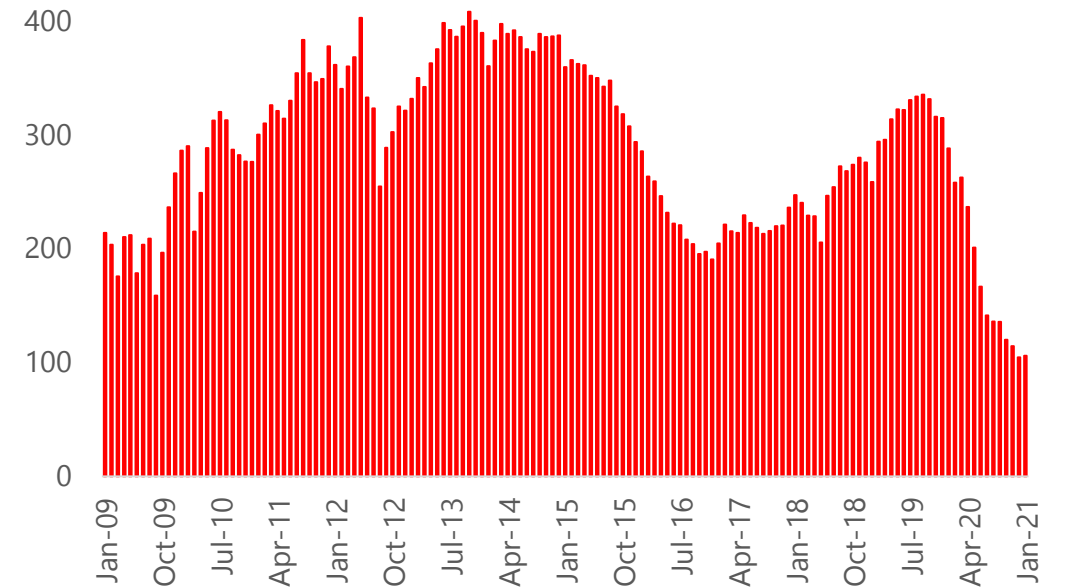
- We expect inventories, still below the desirable, will continue to be an important tailwind for production in the coming months, supporting industrial production in 1H21 amid an environment with lower demand for goods.

### Inventories Perception (sa, points)



Sources: Anfavea, Santander

### Total Inventories (sa, Units in Thousands)



Sources: Anfavea, Santander

# Industrial Production in 4Q20

Industrial Production Breakdown									
	% MoM			% YoY			% QoQ		
	Oct-20	Nov-20	Dec-20	Oct-20	Nov-20	Dec-20	Oct-20	Nov-20	Dec-20
<b>Total Industry</b>	<b>1.0</b>	<b>1.1</b>	<b>0.9</b>	<b>0.3</b>	<b>2.6</b>	<b>8.3</b>	<b>14.9</b>	<b>9.1</b>	<b>5.1</b>
Mining	-2.9	-4.6	3.7	-6.2	-9.1	-3.9	4.1	-5.0	-7.7
Manufacturing	1.6	1.8	1.5	1.1	4.2	10.2	16.7	11.2	7.1
Capital Goods	7.2	7.4	2.4	2.2	13.0	35.4	30.8	26.7	22.0
Intermediate Goods	-0.1	-0.2	1.6	3.3	3.5	8.2	11.7	5.9	1.8
Consumer goods	0.7	1.9	0.4	-4.3	-0.5	4.1	18.4	11.0	6.1
Durable	3.0	5.8	2.4	-8.1	2.7	14.1	65.4	31.0	17.5
Non-Durable	-0.3	1.2	-0.5	-3.2	-1.4	1.9	9.7	6.5	3.2
Construction Supplies	2.0	1.8	1.8	10.3	11.5	20.5	17.3	10.7	7.1

Sources: IBGE, Santander

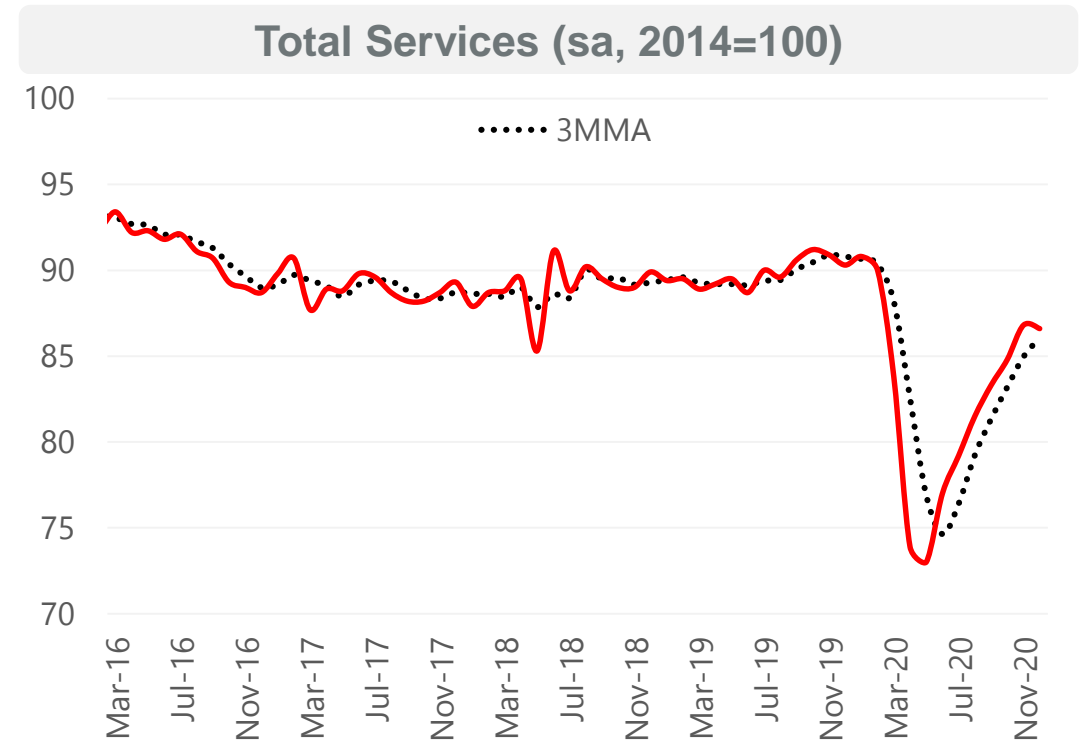


SERVICES

03

## A laggard and heterogeneous resumption

- The data confirm that the services sector has been deeply hit by the effects of the pandemic. The social distance measures adopted to avoid the spread of the crisis had a huge impact on the consumption of services.
- The impact of the pandemic on the services sector and the pace of recovery were quite heterogeneous. Indeed, services less related to social interaction (such as Information and Other Services) have not been seriously hurt by the crisis, and have already recovered virtually all the losses registered in the period.
- On the other hand, Services to Families and Transport, the segments most hurt by social distancing, were gradually recovering on the heels of an increase in mobility. In terms of outlook, we expect a full recovery only after substantial progress is made in the massive vaccination campaign.

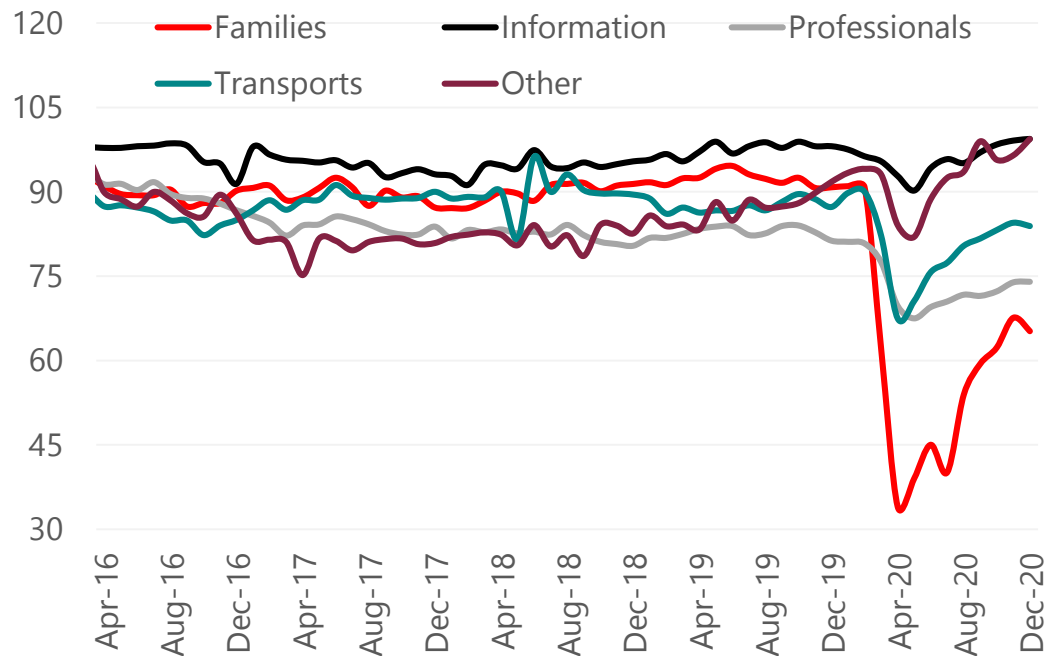


Sources: IBGE, Santander

# Services Outlook: Mobility

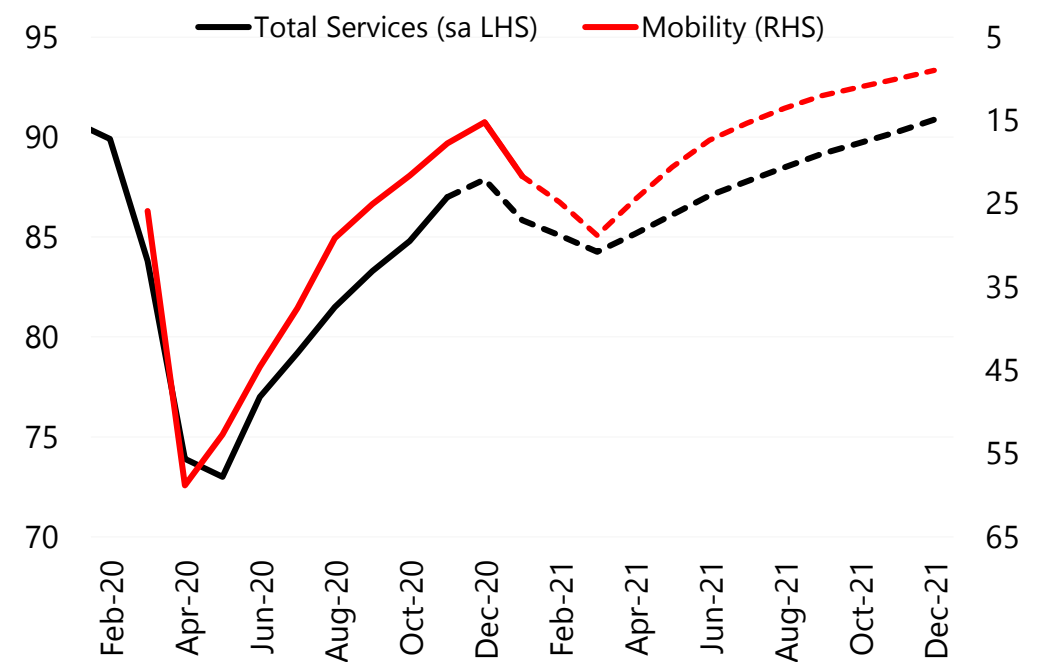
- We expect services sector to be the main driver of the recovery, but this resumption is intrinsically related to the evolution of mobility, which we believe to deteriorate in 1Q21. On the heels of the progress in vaccination campaign, we expect a gradual increase in mobility from 2Q21 onward.

**Total Services Breakdown (sa, 2014=100)**



Sources: IBGE, Santander

**Services and Mobility\***



Sources: Google, IBGE, Santander  
 \* Lockdown index with inverted axis (RHS)

## Services Sector in 4Q20

Services Breakdown									
	% MoM			% YoY			% QoQ		
	Oct-20	Nov-20	Dec-20	Oct-20	Nov-20	Dec-20	Oct-20	Nov-20	Dec-20
<b>Total Services</b>	<b>1.8</b>	<b>2.4</b>	<b>-0.2</b>	<b>-7.4</b>	<b>-5.0</b>	<b>-3.3</b>	<b>8.9</b>	<b>7.2</b>	<b>5.8</b>
<b>Families</b>	<b>4.9</b>	<b>8.5</b>	<b>-3.6</b>	<b>-29.9</b>	<b>-26.0</b>	<b>-25.4</b>	<b>41.5</b>	<b>36.2</b>	<b>27.2</b>
Accommodation and Food Services	6.5	9.6	-4.1	-30.3	-25.8	-25.8	46.2	40.4	31.2
Other Services Provided to Families	-3.5	1.5	-0.5	-27.4	-27.6	-22.8	20.4	17.3	7.5
<b>Information</b>	<b>1.4</b>	<b>0.7</b>	<b>0.3</b>	<b>-0.1</b>	<b>1.3</b>	<b>1.5</b>	<b>3.7</b>	<b>3.3</b>	<b>3.1</b>
Technology	1.7	0.0	0.2	3.4	3.1	2.8	2.5	2.3	2.3
Telecommunication	-0.2	-0.6	-0.3	-2.8	-3.2	-2.8	0.7	0.2	-0.5
Information Technology	5.4	0.5	1.9	14.6	14.0	10.7	5.8	6.7	7.5
Audiovisual	0.2	5.4	1.0	-21.6	-9.5	-7.4	16.6	13.8	9.4
<b>Professional</b>	<b>1.1</b>	<b>2.2</b>	<b>0.1</b>	<b>-13.4</b>	<b>-10.5</b>	<b>-7.3</b>	<b>3.9</b>	<b>2.8</b>	<b>3.0</b>
Professional	1.9	3.2	-1.4	-6.5	-2.3	-1.2	7.0	4.8	3.1
Administrative	0.7	1.3	1.5	-16.0	-13.6	-10.0	3.5	3.1	3.3
<b>Transportation</b>	<b>1.8</b>	<b>1.6</b>	<b>-0.7</b>	<b>-8.1</b>	<b>-4.8</b>	<b>-2.1</b>	<b>9.7</b>	<b>6.8</b>	<b>5.1</b>
Ground Transportation	1.4	2.3	-3.0	-10.6	-7.5	-3.6	12.4	9.7	5.2
Water Transportation	1.1	-1.5	1.2	9.0	4.8	10.5	0.9	2.2	1.7
Air Transport	0.9	6.8	3.5	-37.7	-31.9	-34.6	66.0	43.8	25.9
Storage and Mail	1.9	1.5	0.4	0.4	5.5	6.3	3.6	1.7	2.6
<b>Other Services</b>	<b>-3.3</b>	<b>0.8</b>	<b>3.0</b>	<b>8.6</b>	<b>7.2</b>	<b>8.6</b>	<b>9.5</b>	<b>6.0</b>	<b>2.3</b>

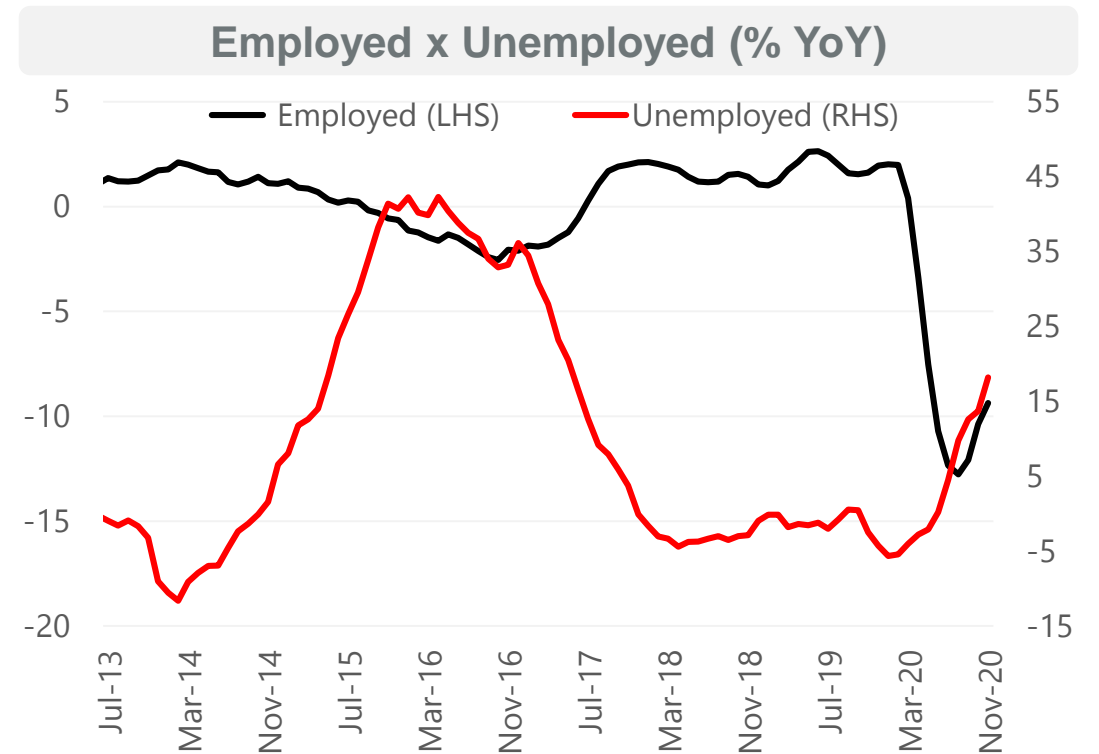
Sources: IBGE, Santander

LABOR MARKET

04

## Labor market still fragile

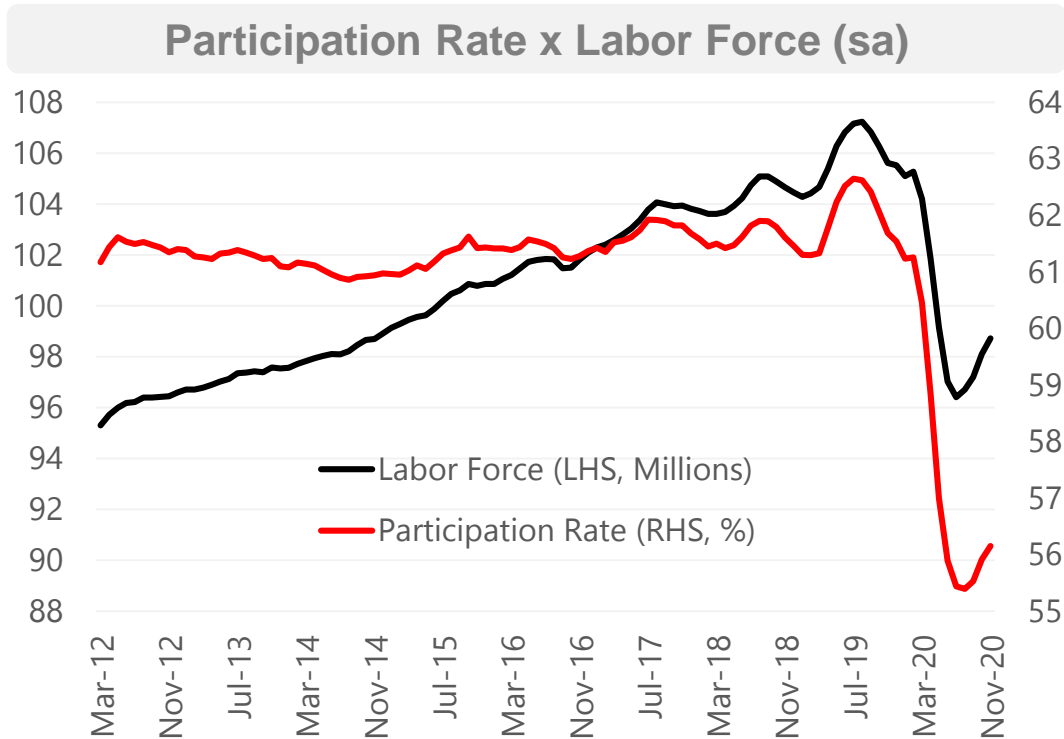
- We still see the current job market situation as fragile. The informal sector, which has suffered the most during the pandemic, shows no clear signs of a more consistent recovery.
- We estimate that the seasonally adjusted unemployment rate rose to 14.6% in November, from 14.5% in October, reaching the series all-time high.
- Despite CAGED's recent better results, we believe the PNAD survey shows a more precise picture of the labor market. We believe CAGED results may be underreporting layoffs in the recent period, as the number of responding establishments is below the historical average.
- Looking ahead, we expect further deterioration in the unemployment rate in 1Q21, as the labor force continues to recover, combined with a slight decline in the employment rate, following the end of the government's emergency aid program and new mobility restrictions.



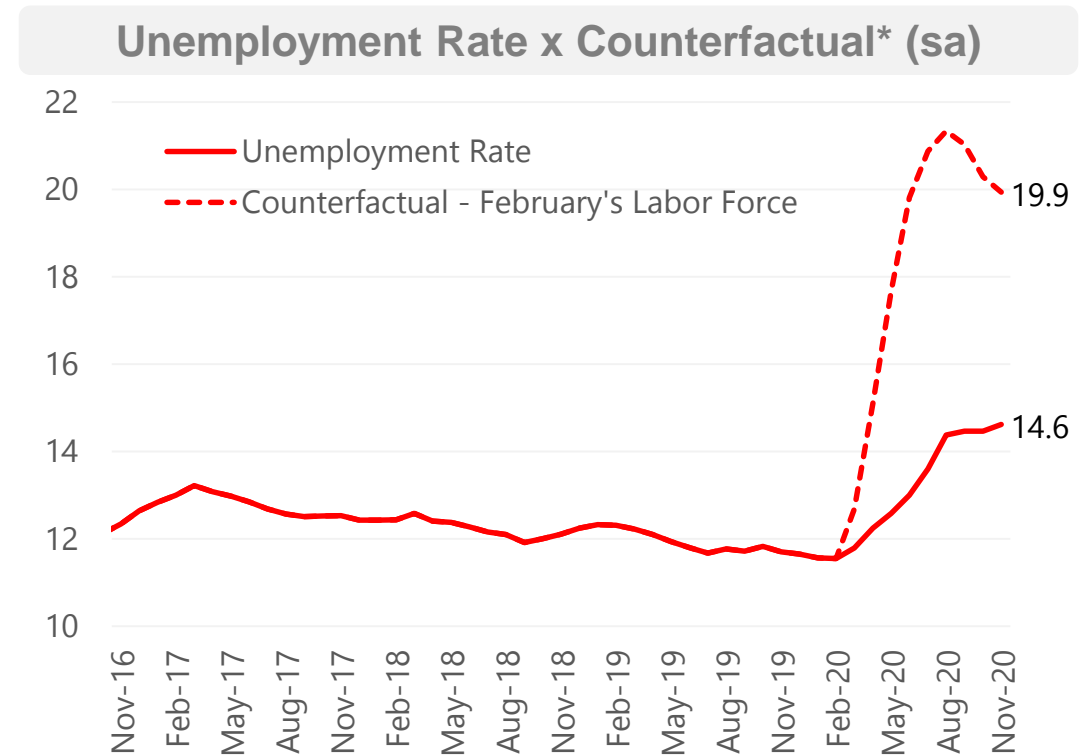
Sources: IBGE, Santander

## Labor force and participation rate still in depressed levels

- The sharp drop in labor force has limited the rise in unemployment rate throughout 2020. If the labor force had stayed at February levels, unemployment rate would be close to 20%.



Sources: IBGE, Santander.



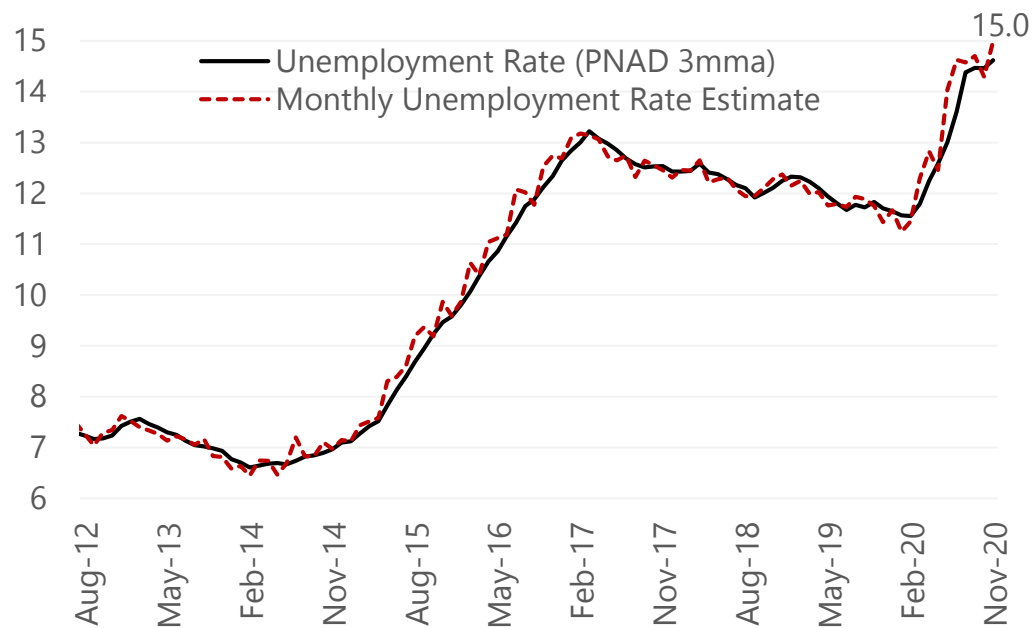
Sources: IBGE, Santander.

\*Labor force at Feb-20 level

# Higher unemployment in Nov-20, especially in monthly figures

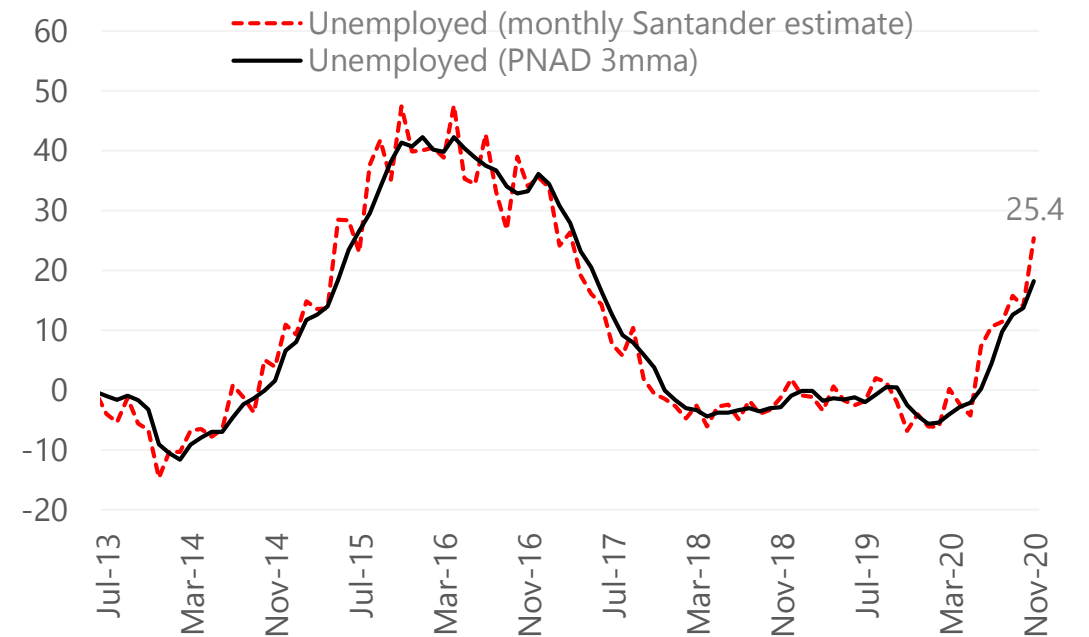
- IBGE's PNAD data, based on a 3 month moving average, implied in a slight increase of seasonally adjusted unemployment rate. However, we estimate the monthly reading to have posted a more significant rise.

### Unemployment: Santander Monthly Estimate (sa)



Sources: IBGE, Santander.

### Unemployed: Santander Monthly Estimate (YoY)

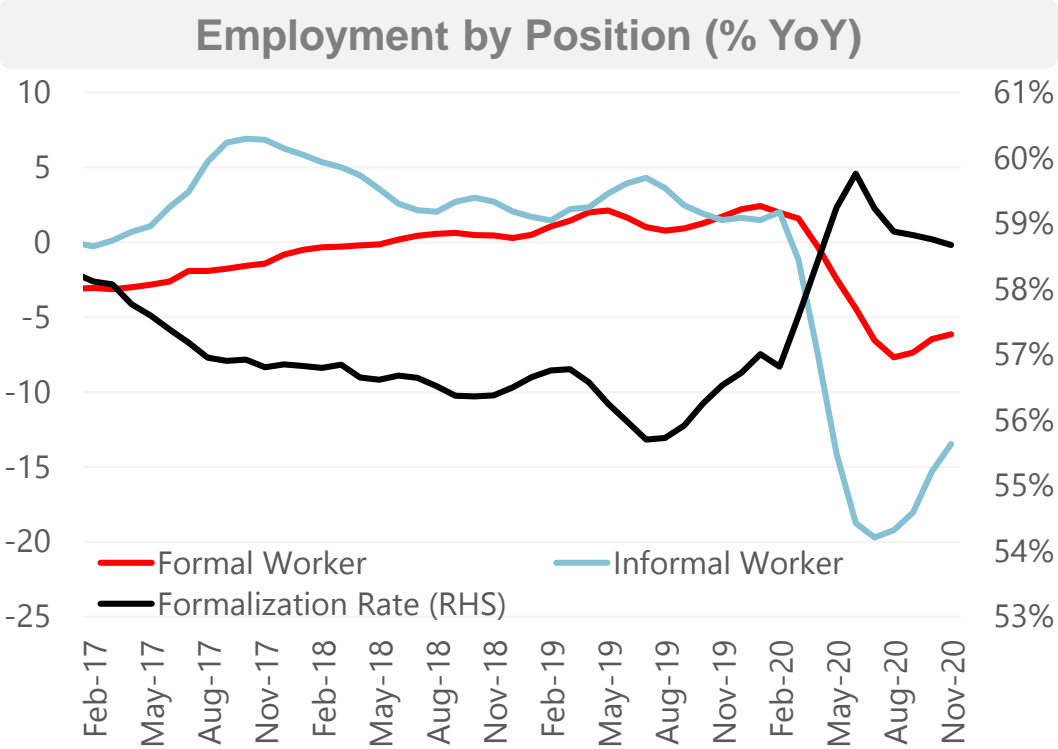


Sources: IBGE, Santander.

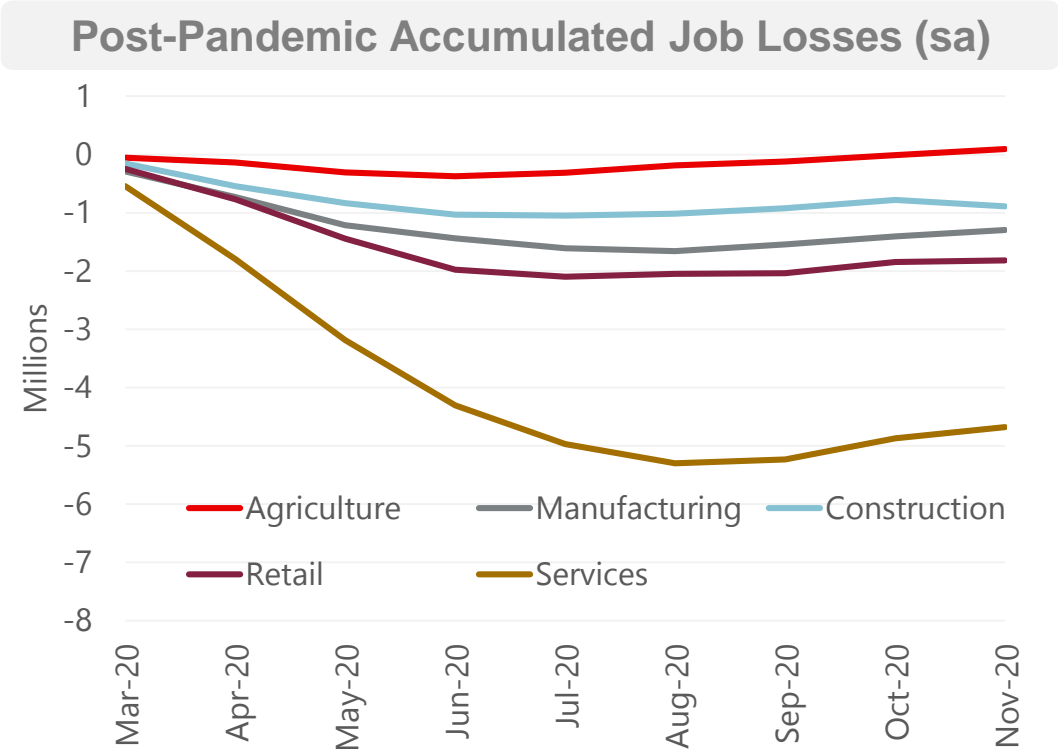


# Activities with greater social interaction suffered the most

- Most of the job losses during the pandemic are in services, especially in the informal sector. Activities that depend the most on social interaction will be the key factor for labor market recovery.



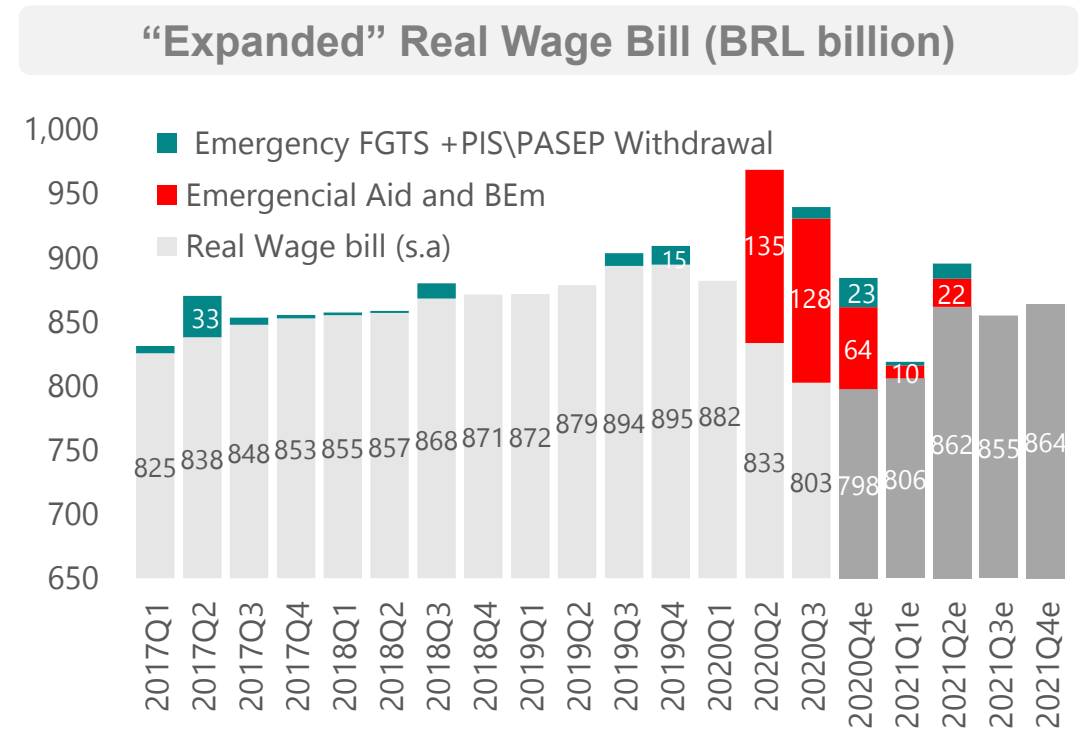
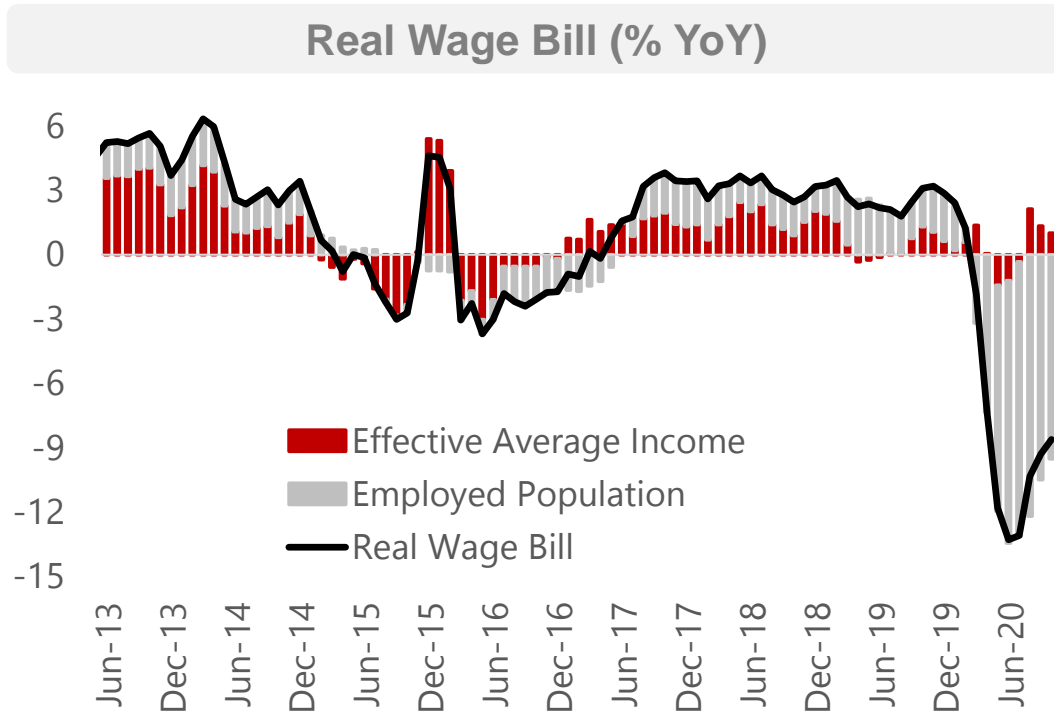
Sources: IBGE, Santander.



Sources: IBGE, Santander.

## Cash transfers avoided a sharp drop of the “expanded”\* real wage bill

- The real wage bill has suffered a considerable tumble in the beginning of the pandemic, and remains in very low levels. Government cash transfers more than compensated this effect, as we estimate the “expanded” real wage bill had a 3.1% growth in 2020.



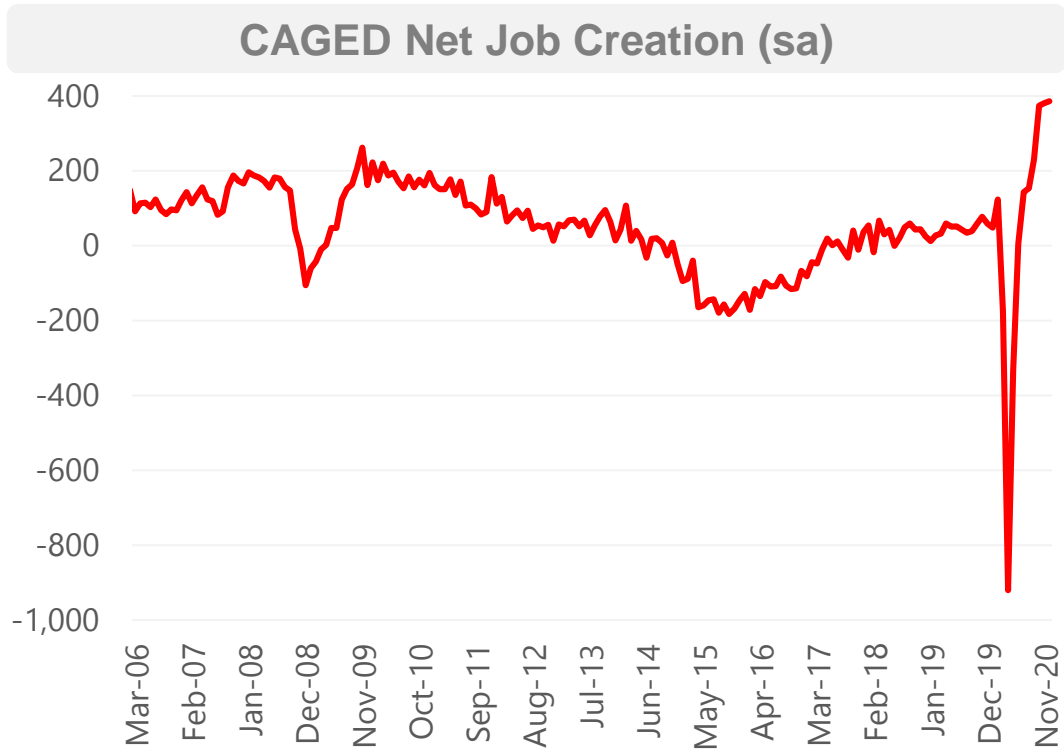
Sources: IBGE, Santander.

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

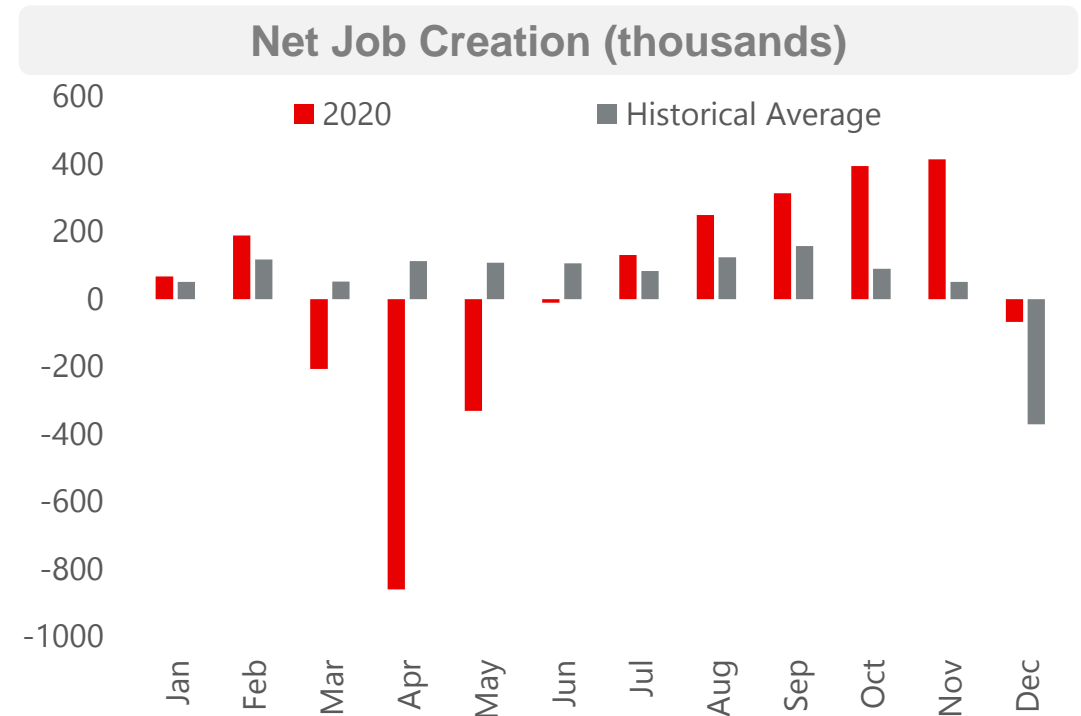
\* Includes labor income, regular and extraordinary government transferences. More details on: Santander Brazil – “Labor Market - 2021 Thermometer” – Available on <http://bit.ly/Sant-lbrmkt-040221>

## CAGED has shown strong results in the past few months

- Since September, CAGED results have posted consecutive records for net formal job creation. We believe this may be due to underreporting in the data.



Sources: Ministry of Economy, Santander.

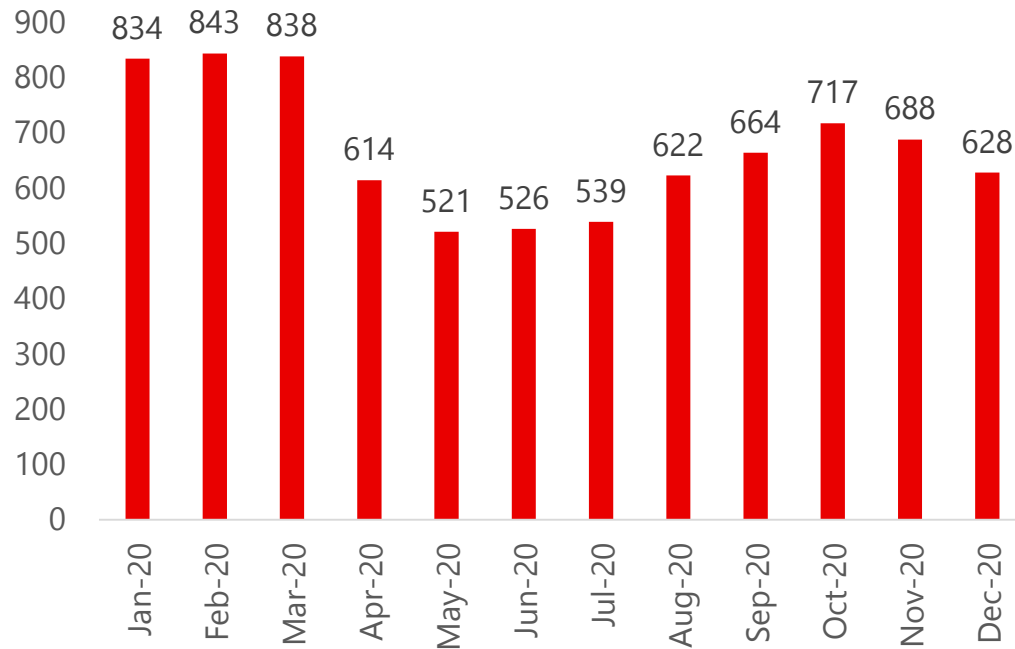


Sources: Ministry of Economy, Santander.

## Signs of underreporting in CAGED data

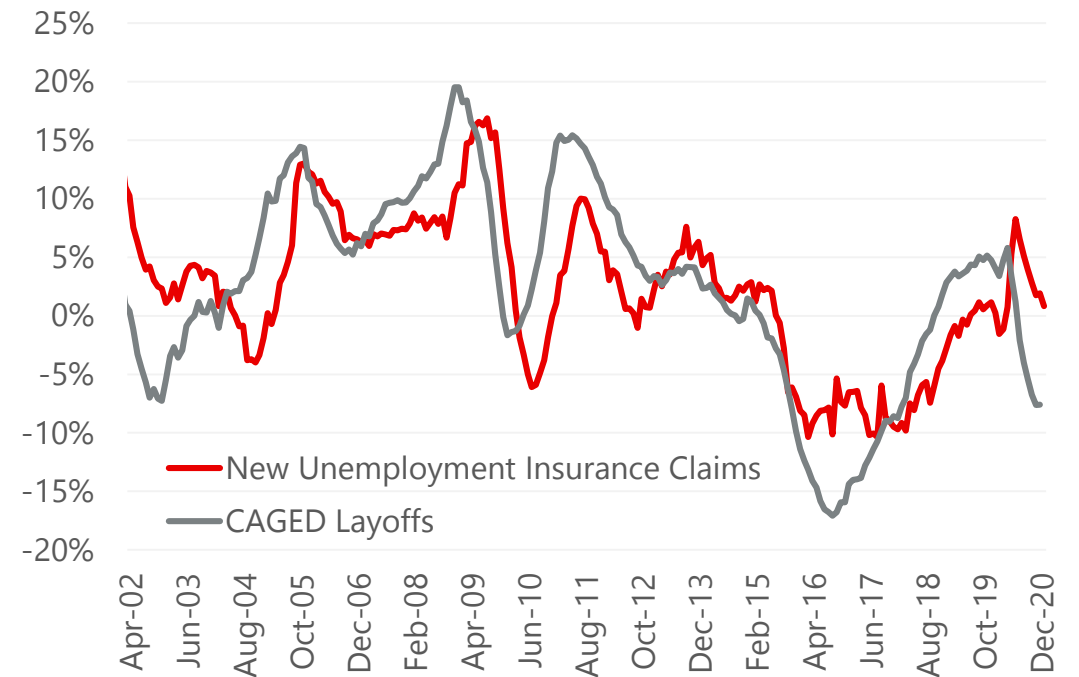
- In our view, the low level of responding firms since April may indicate underreporting of layoffs in the data. This hypothesis is reinforced by the gap between CAGED registry of layoffs and new unemployment insurance claims.

**CAGED: number of responding firms (thousands)**



Sources: Ministry of Economy, Santander.

**Layoffs x Unemployment Insurance (12mma, YoY)**



Sources: Ministry of Economy, Santander.

## Labor market in November

PNAD Breakdown									
	s.a.			% YoY			% Feb-20*		
	Sep-20	Oct-20	Nov-20	Sep-20	Oct-20	Nov-20	Sep-20	Oct-20	Nov-20
<b>Unemployment rate (%)</b>	<b>14.5</b>	<b>14.5</b>	<b>14.6</b>	<b>2.8</b>	<b>2.7</b>	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>	<b>3.1</b>
Participation rate (%)	55.5	55.9	56.2	-7.0	-6.1	-5.4	-5.7	-5.3	-5.1
Labor force (millions)	97.2	98.1	98.7	-9.2	-7.6	-6.3	-8.1	-7.2	-6.6
Employment	83.1	83.9	84.3	-12.1	-10.4	-9.4	-10.0	-9.2	-8.8
Unemployment	14.1	14.2	14.4	12.6	13.7	18.2	1.9	2.0	2.3
<b>Formalization Rate (%)</b>	<b>58.8</b>	<b>58.8</b>	<b>58.7</b>	<b>3.0</b>	<b>2.4</b>	<b>2.0</b>	<b>2.0</b>	<b>1.9</b>	<b>1.9</b>
Formal Workers (millions)	48.9	49.3	49.5	-7.4	-6.5	-6.1	-4.0	-3.6	-3.5
Informal Workers (millions)	34.2	34.6	34.8	-18.1	-15.3	-13.5	-6.0	-5.6	-5.4
Average usual earnings	-	-	-	8.3	5.8	4.0	-	-	-
Average effective earnings	-	-	-	1.3	1.0	-	-	-	-
Usual wage bill	-	-	-	-4.9	-5.3	-5.9	-	-	-
Effective wage bill	-	-	-	-9.3	-8.6	-	-	-	-

\* Variation relative to February's reading. For rates, change is in percentage points.

Sources: IBGE, Santander.

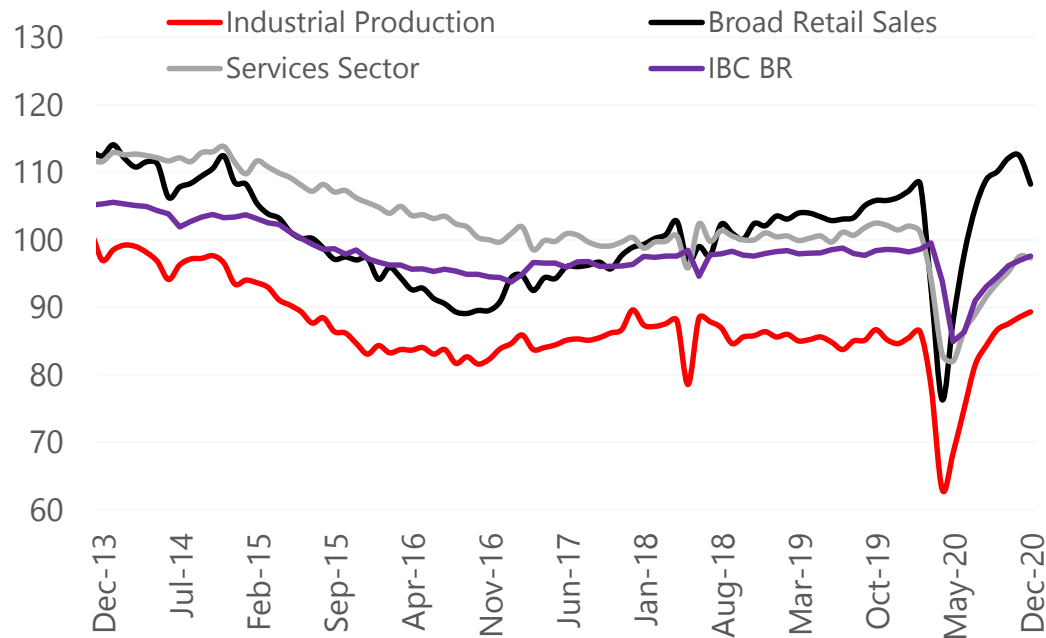
GDP

05

## Economic Activity at the end of 4Q20

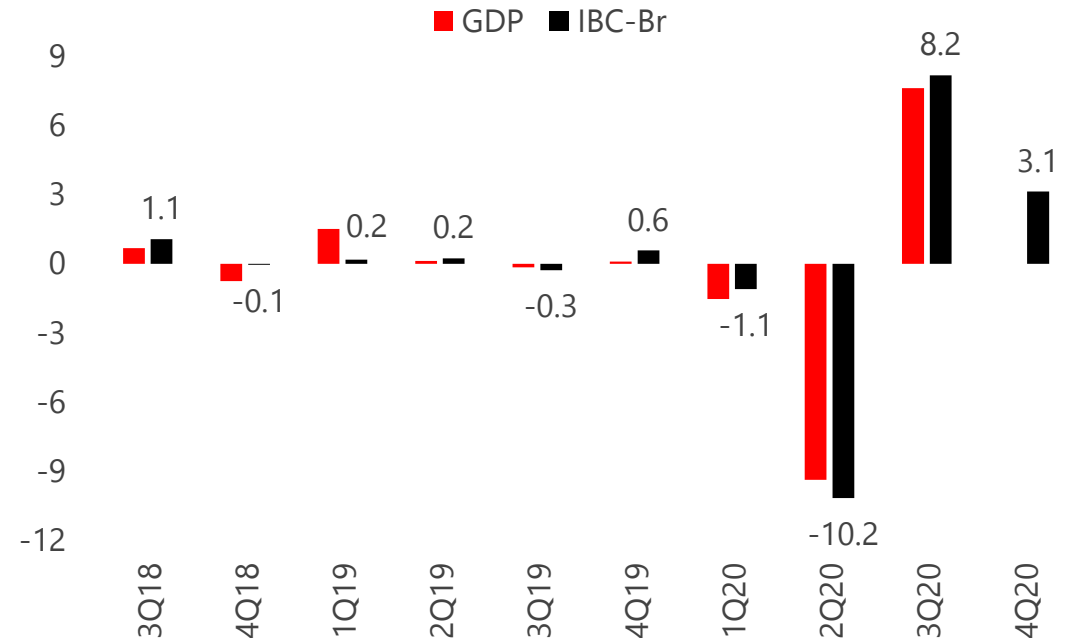
- The releases of economic activity indicators in the last months of 2020 reinforced the likelihood of solid economic growth in 4Q20, but the development seen in the tertiary sector may have anticipated the expected softening pace of economic activity at the start of 2021.

### Economic Activity (sa, 2011=100)



Sources: BCB, IBGE, Santander.

### GDP vs IBC-Br (sa, % QoQ)

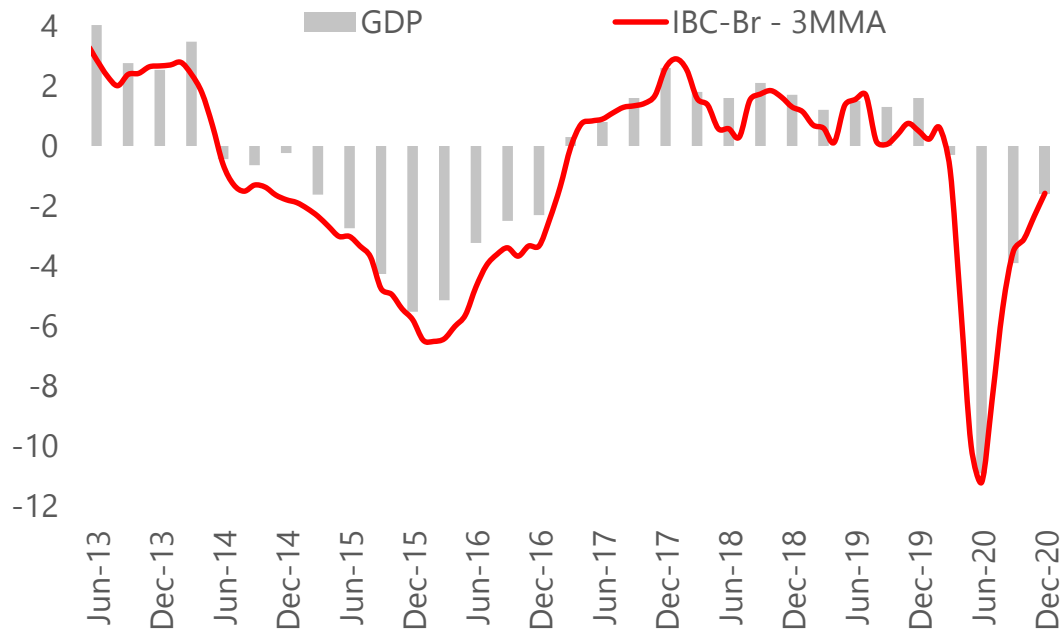


Sources: BCB, IBGE, Santander.

## Economic Activity at the end of 4Q20

- Despite the solid growth seen in 1H20, the main activity indexes registered a relevant drop in the full-year metric, but the figures seen until now provide evidence that supports our projection for general activity. Indeed, our tracking for GDP 4Q20 is at 2.8% QoQ-sa, which is in line with our projection of a -4.1% drop in 2020.

IBC-Br and GDP Tracking (% YoY)



Sources: BCB, IBGE, Santander.

	Dec-20	% MoM	% QoQ	% Feb-20	2020%
<b>IBC-Br</b>	<b>0.6</b>	<b>3.1</b>	<b>-1.4</b>	<b>-4.1</b>	
Industrial Production	0.9	5.1	3.4	-4.5	
Core Retail Sales	-6.1	-0.2	0.0	1.2	
Broad Retail Sales	-3.7	2.8	-0.1	-1.5	
Services Sector	-0.2	5.8	-3.8	-7.9	



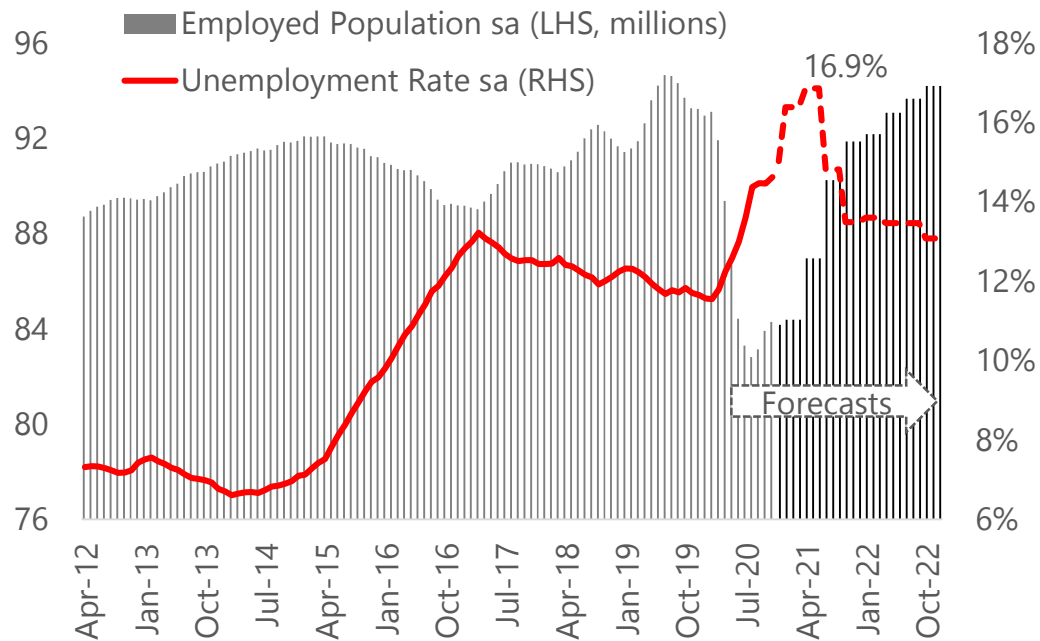
BASELINE SCENARIO

06

## Two distinct moments for unemployment in 2021

- Unemployment rate should spike in 1H21, as labor force returns to pre-crisis levels. We expect employment to have a lagged recovery in comparison with labor force.

### Unemployment Rate and Employed Population



Sources: IBGE, Santander.

	2019	2020e	2021e	2022e
<b>Unemployment Rate *</b>				
Average	11.9	13.2	15.4	13.4
End of Period (s.a.)	11.7	15.0	13.5	13.1
<b>Unemployed Population **</b>				
Average	12.6	13.2	16.0	14.4
End of Period	12.3	14.9	14.3	14.2

\* in %

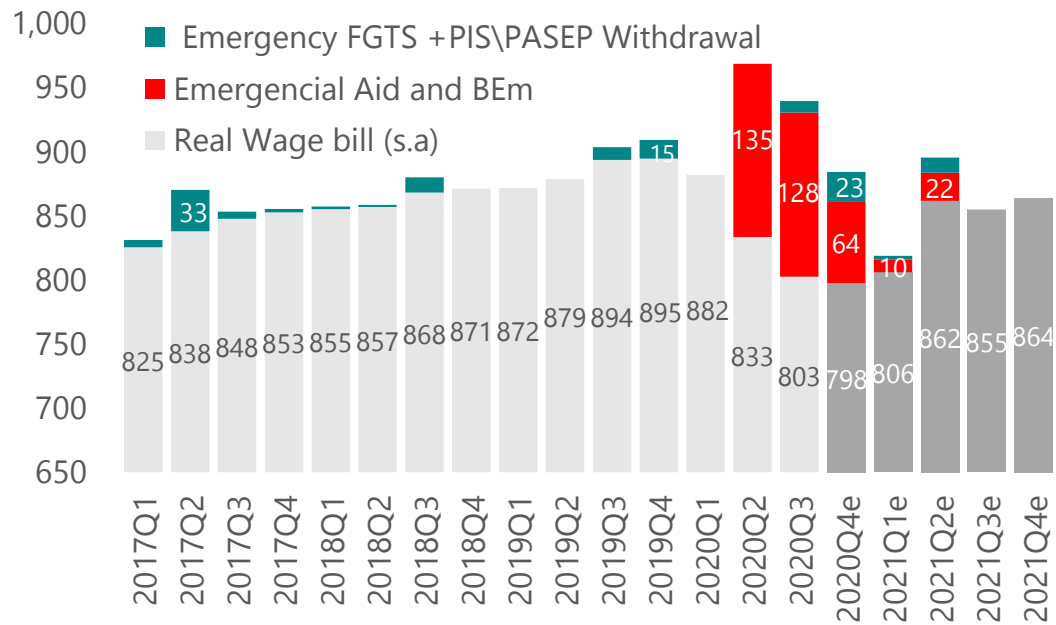
\*\* in Millions

Sources: IBGE, Santander.

## “Expanded” real wage bill will drop in 2021

- The reintroduction of the Emergency Aid and the anticipation of some cash transfers through social programs will raise the “expanded” real wage bill in 2Q21, in our view. However, the full-year scenario will still post a considerable drop in this indicator.

### “Expanded” Real Wage Bill (BRL billion)



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

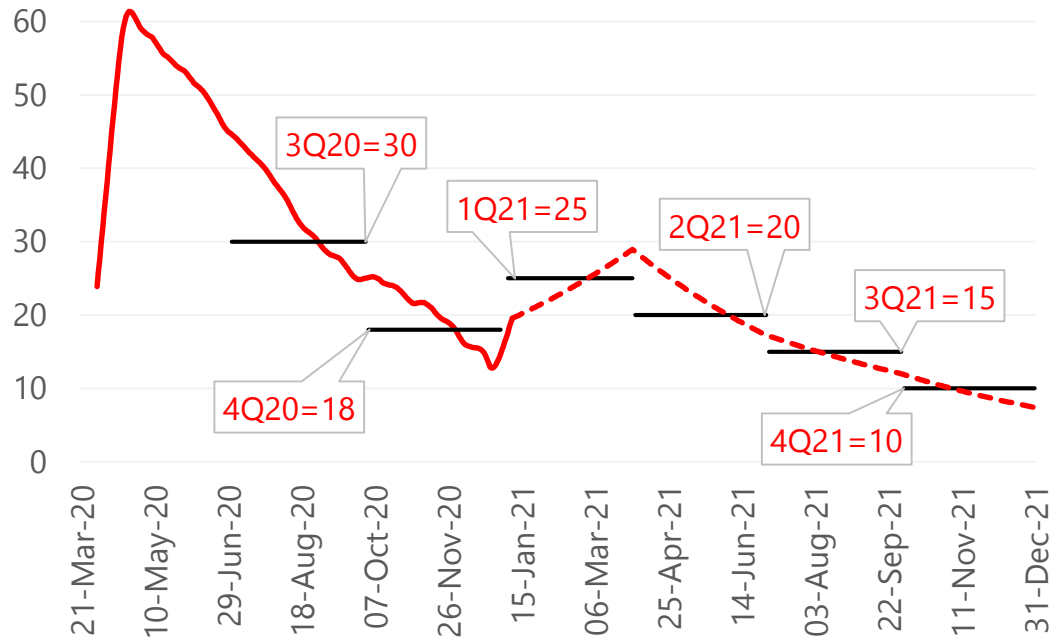
	2020(E)	2021(E)
Wage Bill (Without Fiscal Aid)	-6.3%	+2.1%
Wage Bill (With Fiscal Aid)	+3.1%	-6.6%

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

# Rollback in economy's reopening will imply a retraction in 1Q21

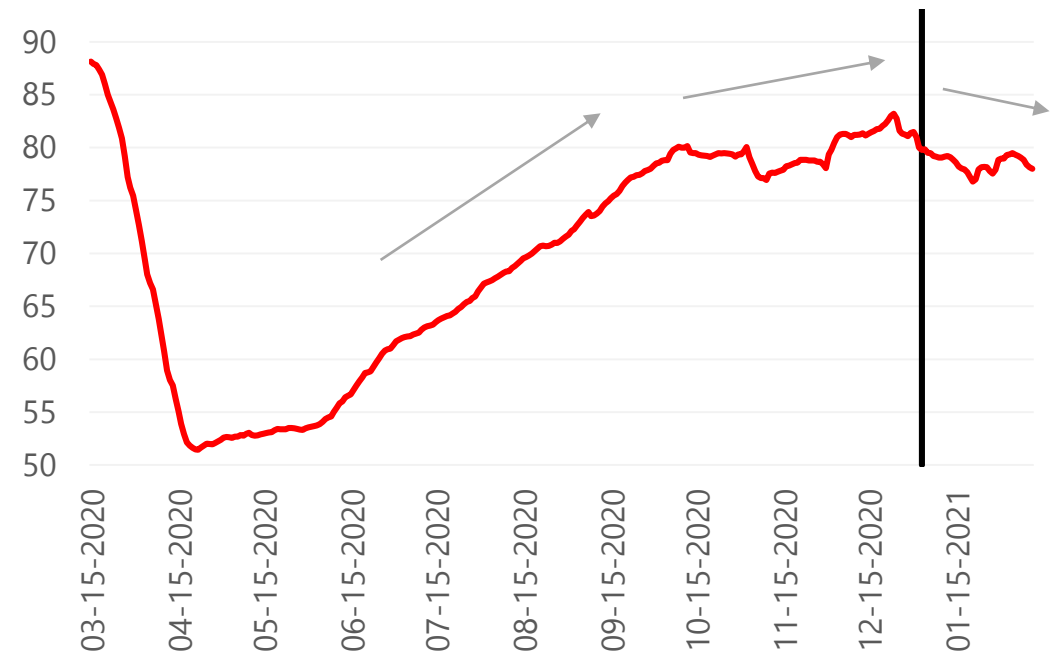
- The upsurge in the pandemic observed in recent weeks will likely lead to a rollback in the economy's reopening process with an unavoidable deterioration in mobility relative to 4Q20.

### Google Mobility (Jan/20=0) – 28dmma



Sources: Google, Santander..

### Daily Activity Index (Jan/20=100) – 28dmma

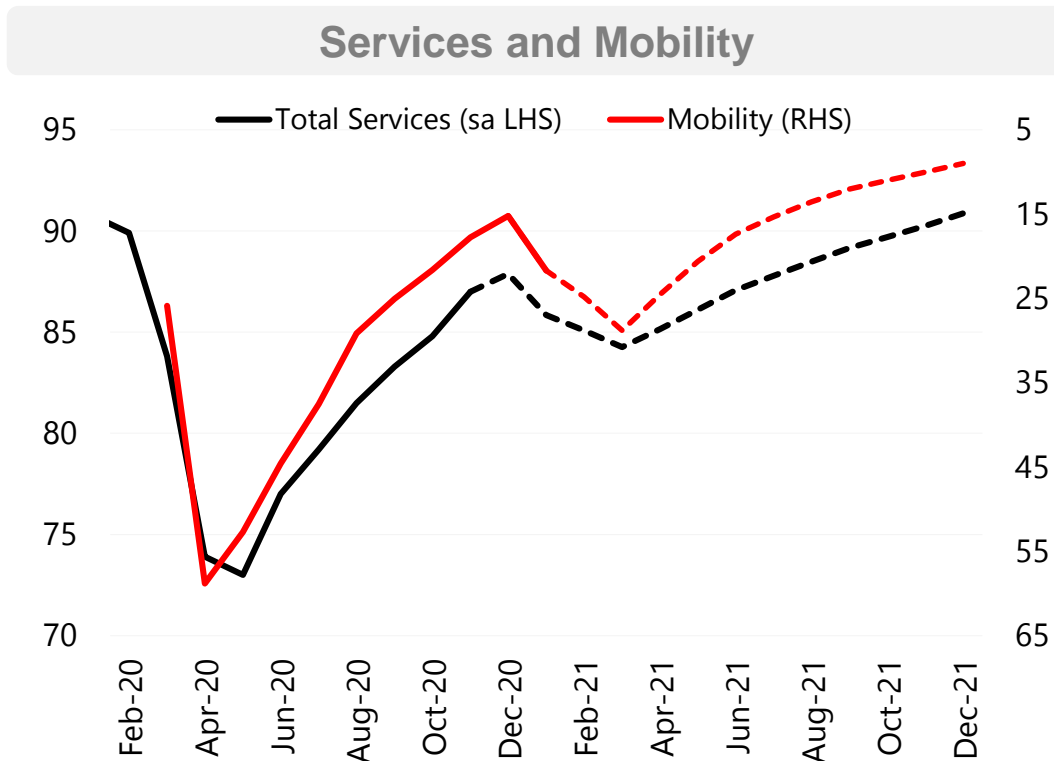


Sources: Google, Apple, Fenabreve, ONS, Santander.

\* Black line marks 01/01/2021

## Lingering impacts of the pandemic to slow the speed of recovery

- After a weak start in 1Q21, we expect progress in vaccination and a rise in mobility to reignite economic activity from 2Q21 onwards.



Sources: Google, IBGE, Santander..

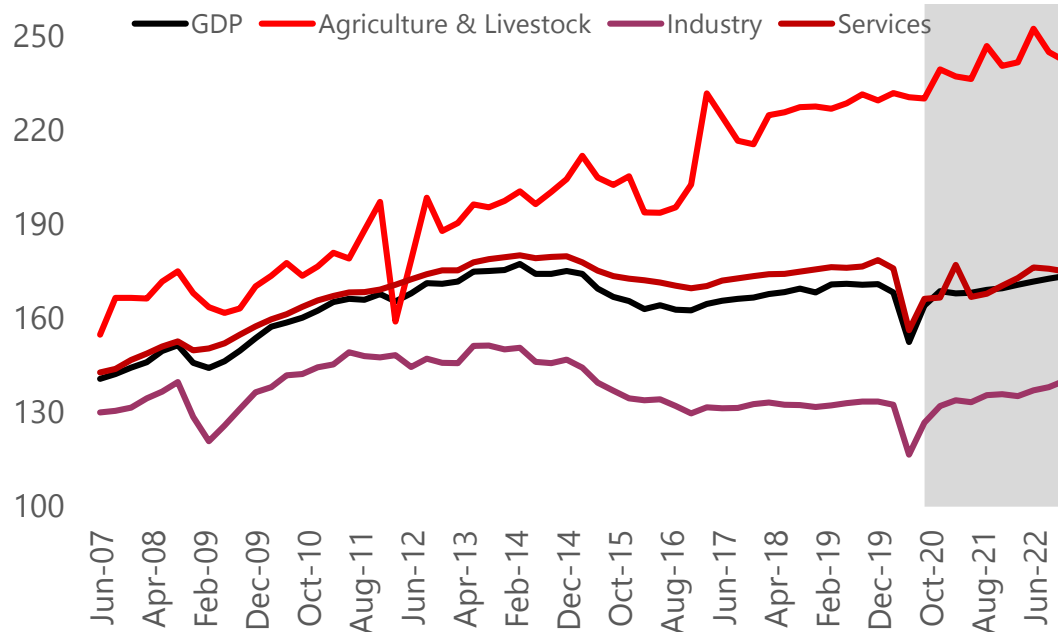
Baseline Scenario			
	YoY	QoQ	Full Year
4Q20	-1.2%	2.8%	-4.1%
1Q21	-1.5%	-0.4%	
2Q21	10.3%	0.3%	
3Q21	3.0%	0.5%	
4Q21	0.6%	0.3%	2.9%
1Q22	2.8%	0.5%	
2Q22	2.8%	0.4%	
3Q22	2.2%	0.4%	
4Q22	1.4%	0.4%	2.3%

Sources: IBGE, Santander.

## With lower growth, output gap will close only in 2024

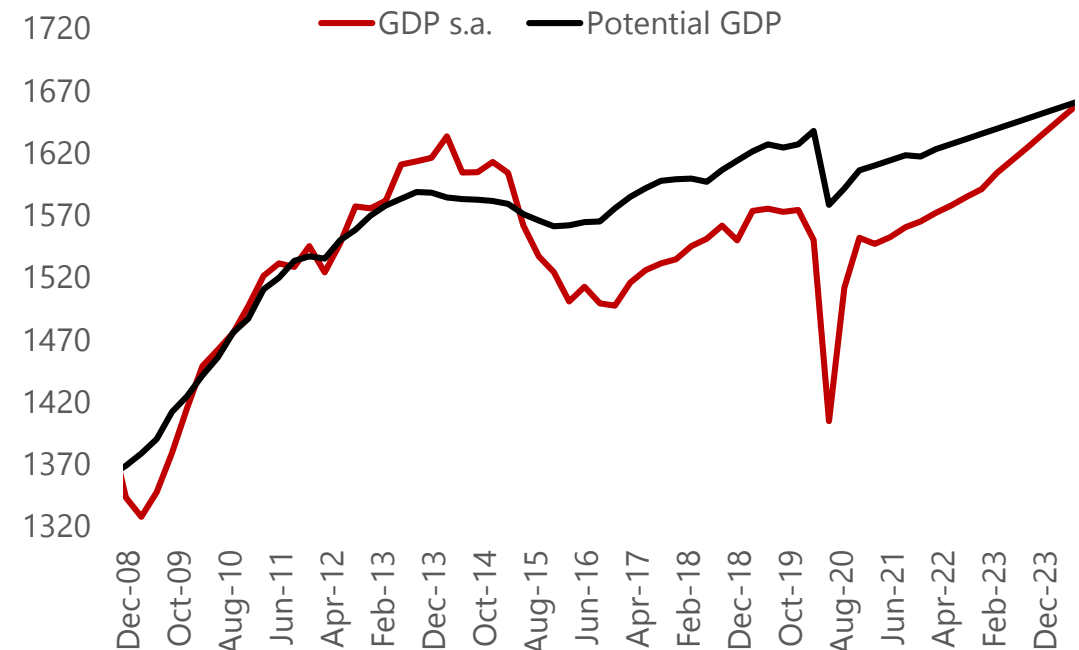
- Given this pace of recovery, we expect GDP to reach pre-pandemic readings no earlier than 1H22. With the lower growth (due to the incorporation of the new monetary policy path), we expect output gap to close only in 1H2024.

### GDP Breakdown (sa, 1995=100)



Sources: IBGE, Santander.

### GDP Output Gap



Sources: IBGE, Santander.

## Macro Scenario: Projections

- For our latest Scenario Review 'THE PERSISTENCE OF (FISCAL) RISKS' (sent on February 11, 2020).
- **Click on the link:** <http://bit.ly/Sant-ScenRev-fev21>

Macroeconomic variables		Previous	Current
GDP (%)	2020E	-4.1	-4.1
	2021E	2.9	2.9
	2022E	2.5	2.3
IPCA (%)	2021E	3.0	3.6
	2022E	3.2	3.2
Selic Rate (% end of period)	2021E	2.50	4.00
	2022E	4.50	4.50
FX Rate - USDBRL (end of period)	2021E	4.60	5.20
	2022E	4.15	5.40
Current Account Balance (% of GDP)	2021E	-0.7	1.2
	2022E	-1.9	0.5
Primary Fiscal Balance (% of GDP)	2021E	-3.1	-3.1
	2022E	-2.3	-2.2
Gross Public Debt (% of GDP)	2021E	91.6	89.1
	2022E	93.6	91.2

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

# Brazil Macroeconomic Research Team

# Thank you.

Our purpose is to help people and businesses prosper.

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

## Simple Personal Fair



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