Santander

Brazil Macro | August 2021

Economic Activity

Lucas Maynard lucas.maynard.da.silva@santander.com.br Gabriel Couto gabriel.couto@santander.com.br



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



SUMMARY

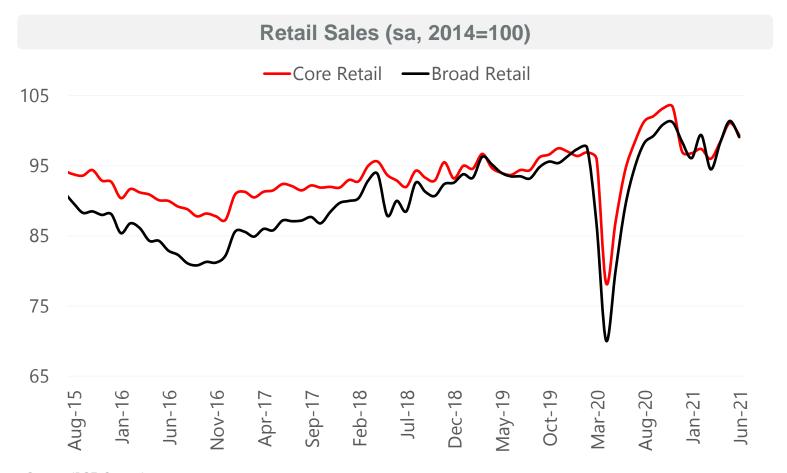
- We have maintained our 2021 GDP estimate at 5.1%. The 1Q21 GDP positive figure stemmed from all the three sectors, yet less cyclical farm output provided the largest contribution (on the supply side). For 2Q21, we expect stability (0% QoQ-sa), but with some heterogeneity in the composition. The tertiary sector should prompt activity, reflecting the recovery of urban mobility and the new round of emergency aid. On the other hand, we expect farm output to partially give back its positive contribution and industry to be a short-term drag on the recovery, reflecting cost increases and the widespread shortage of inputs seen in manufacturing and construction.
- Assuming continued progress in the vaccination rollout, we look for a faster recovery of mobility in 2H21, with a virtual return to "normal mobility" levels at the end of 3Q21 (from December-21 in our previous scenario). Moreover, for 2H21, higher commodities prices, along with advances in the economy's reopening, should contribute to a better momentum. Indeed, some important segments of the tertiary sector (accounting for nearly half of services GDP) are still running at depressed levels, which leaves room for growth as the public health crisis is gradually overcome.
- For 2022, we are maintaining our forecast at 2.0%. We believe that good growth contributions are to come from the lingering positive effects from the commodity cycle and an economy in full-operation mode (over a basis of comparison still somehow affected by social distancing measures in 2021). Those factors are expected to partially mitigate the delayed effects of a less expansionary monetary policy and a little reduction of the fiscal impulses.
- We now estimate an average unemployment rate of 14.1% in 2021 and 13.5% in 2022 (previous estimates: 14.2% and 13.6%, respectively). The vaccine rollout and the increase in urban mobility led to a faster recovery in the labor force and employment. These recent developments are aligned with our scenario. We made slight upward revisions in our trajectories for employment and participation to incorporate higher mobility in 3Q21 and 4Q21.

Santander

RETAIL SALES

RETAIL SALES CONFIRMED EXPECTATIONS OF A POSITIVE 2Q21

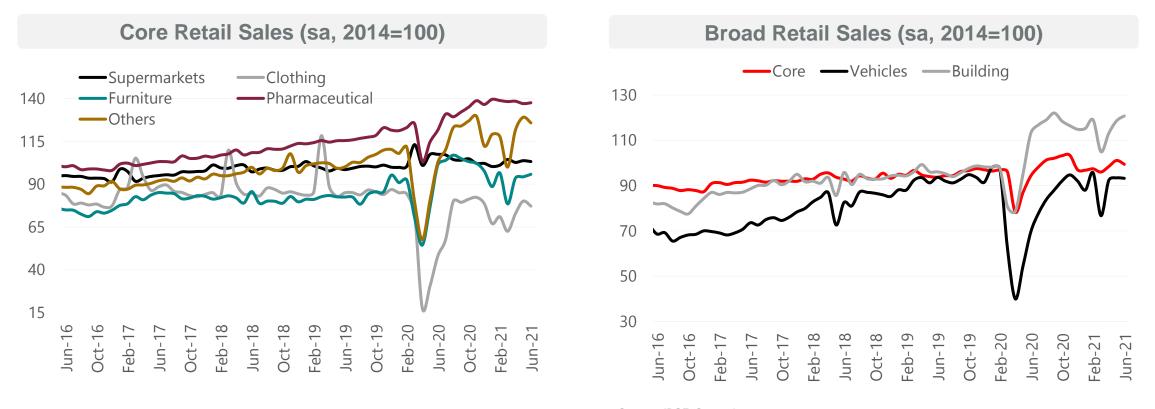
Retail Sales ended 2Q21 with healthy quarterly figures, likely reflecting the effects of the new fiscal stimuli along with the mobility recovery. These figures came in line with the expectations of the tertiary sector prompting up activity in 2Q21, but the expectations are of a moderate pace of resumption for retail sales ahead.





CREDIT-LED SEGMENTS SHOULD KEEP SUPPORTING RETAIL SALES IN 2H21

 Amid the bright outlook for household credit granting, credit-led segments (e.g, building materials, furniture) should keep supporting retail sales in 2H21. The exception to this rule should be vehicles; not due to a lack of demand but to supply shortage.

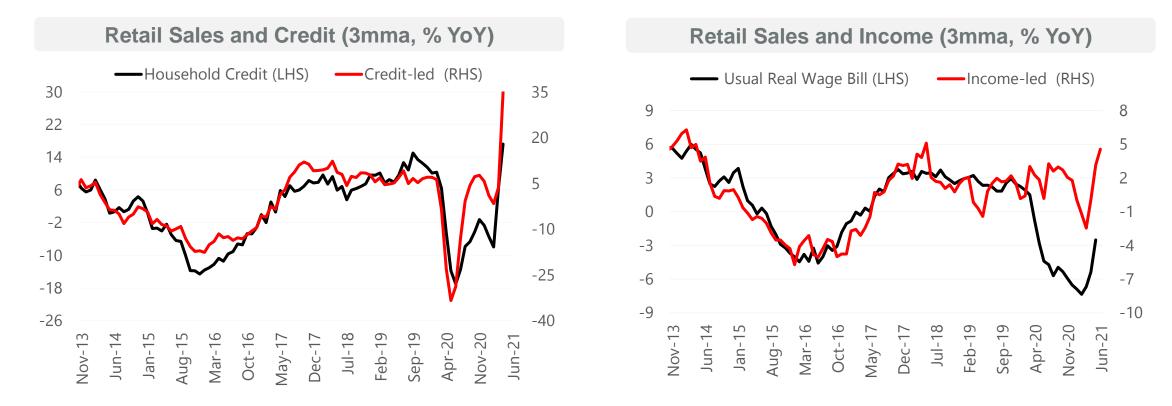


Sources: IBGE, Santander



THE REDUCTION IN DISPOSABLE INCOME SHOULD BE A HEADWIND FOR SALES

In terms of outlook, we expect the reduction in disposable income should be a headwind for sales in income-led segments (e.g, supermarkets, pharmaceuticals). Extensions in the payment of the new round of emergency aid can partially mitigate this scenario.



Sources: IBGE, Santander



Retail Sales Breakdown										
		Apr-21			May-21			Jun-21		
	% MoM	% YoY	% QoQ	% MoM	% YoY	% QoQ	% MoM	% YoY	% QoQ	
Core Retail Sales	2.5	23.6	-1.8	2.7	15.9	1.5	-1.7	6.2	3.0	
Fuels	2.8	19.4	-3.6	6.8	19.5	-1.8	-1.2	11.5	2.8	
Hypermarkets, supermarkets	-1.6	-1.8	1.2	1.0	-4.3	2.4	-0.5	-3.0	1.2	
Fabrics, clothing and footwear	16.3	300.7	-9.5	10.2	165.3	-0.6	-3.6	61.8	14.7	
Furniture and home appliances	19.1	71.1	-6.9	0.9	22.7	-5.8	1.6	-5.4	7.5	
Pharmaceutical	0.1	34.0	0.2	-1.0	19.5	-0.3	0.4	13.1	-0.9	
Books, papers and magazine	8.7	96.0	-12.6	4.2	59.3	1.8	5.0	17.2	15.7	
Office equipment and supplies	10.5	46.7	-5.4	3.1	32.7	-2.9	-3.5	3.3	3.3	
Other	21.5	104.6	-6.0	6.3	59.6	0.4	-2.6	22.6	11.7	
Broad Retail Sales	4.0	40.9	-1.2	3.2	26.2	0.1	-2.3	11.5	3.0	
Building Materials	7.7	44.3	-2.8	4.9	25.7	-3.6	1.9	5.3	3.9	
Vehicles	20.3	131.6	-3.7	1.2	72.3	-4.8	-0.2	33.1	7.1	

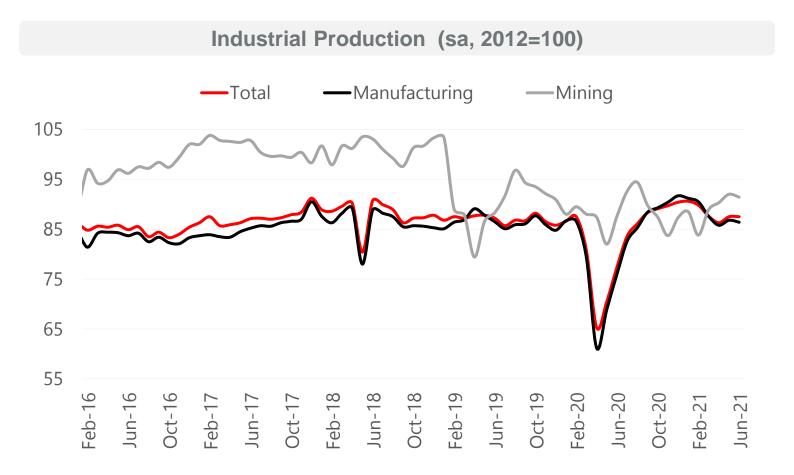


INDUSTRIAL PRODUCTION



INDUSTRY WEIGHED ON ACTIVITY IN 2Q21 DUE TO SUPPLY-CHAIN PROBLEMS

 Industrial production ended 2Q21 with a quarterly retreat, stemming mainly from manufacturing (with mining partially mitigating the hit). We expect manufacturing (and building) to keep suffering from costs increases and widespread shortage of inputs in 2H21.

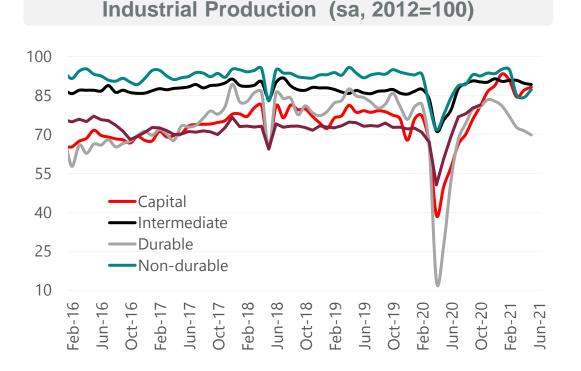


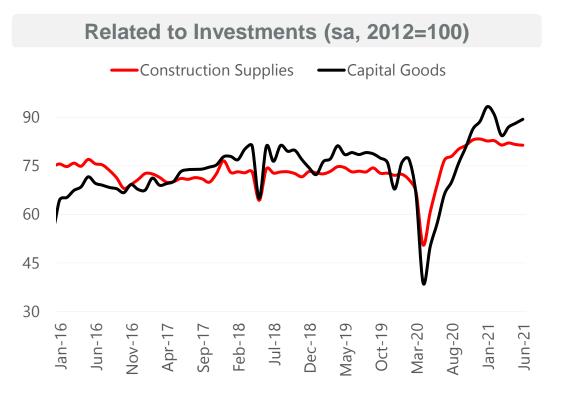




INVESTMENTS SHOULD SLOW DOWN AMID TIGHTER FINANCIAL CONDITIONS

 After standing at high levels recently, we expect domestic capital goods production to soften ahead, amid tighter financial conditions and a softening in commodities prices. Nonetheless this more adverse outlook, regarding the full-year GDP of 2021, we still expect a solid contribution from investments.



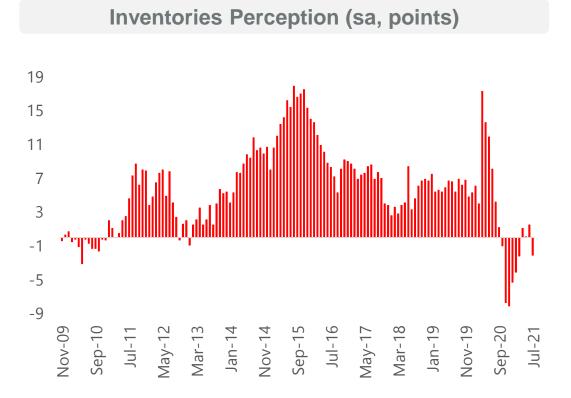


Sources: IBGE, Santander

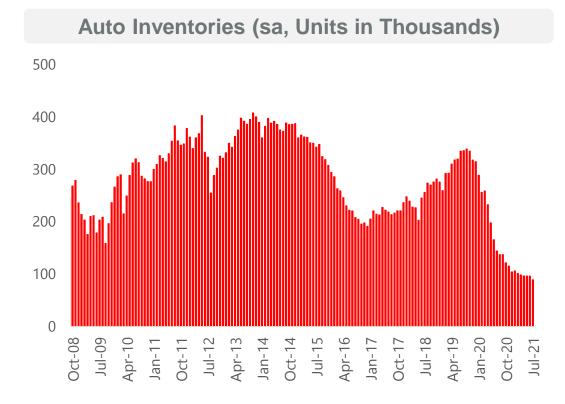


INVENTORIES STILL STAND AT HISTORICALLY LOW LEVELS

 We understand this is a widespread pattern present among the manufacturing sectors (not exclusive from auto vehicle sector). The low level of inventories leaves room for production growth but conditioned to the overcoming of the shortage in inputs issue and of the sanitary crisis.



Sources: Anfavea, Santander

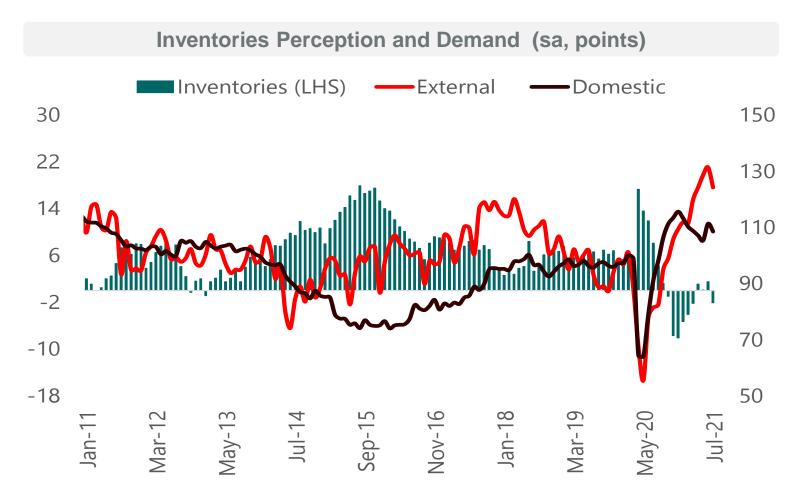


Sources: Anfavea, Santander



WEAK OUTPUT OF INDUSTRY IS NOT DUE TO LACK OF DEMAND

 The effects of the widespread shortage of inputs are spotlighted when we bring to the equation the demand perception among businessmen. Indeed, both demands are still at solid readings, which, along with the low inventories level, would be a tailwind for production.





	Industrial Production Breakdown									
		% MoM			% YoY			% QoQ		
	Apr-21	May-21	Jun-21	Apr-21	May-21	Jun-21	Apr-21	May-21	Jun-21	
Total Industry	-1.5	1.4	0.0	34.7	24.1	12.0	-2.6	-3.5	-2.5	
Mining	1.6	1.9	-0.7	3.7	11.8	4.0	1.3	4.5	4.8	
Manufacturing	-2.1	1.2	-0.5	40.2	25.8	13.1	-3.4	-4.8	-3.8	
Capital Goods	3.1	1.4	1.4	124.9	76.6	54.8	-2.3	-4.9	-1.5	
Intermediate Goods	-1.2	-0.6	-0.6	25.6	18.1	10.8	-0.2	-1.1	-1.6	
Consumer goods	-0.6	1.2	-0.9	41.4	27.0	6.2	-8.0	-11.7	-8.2	
Durable	-1.8	-2.2	-0.6	429.8	149.5	30.9	-10.5	-11.1	-8.6	
Non-Durable	-1.1	3.6	-1.3	17.4	13.2	1.6	-6.3	-9.5	-6.4	
Construction Supplies	0.8	-0.6	-0.3	66.4	34.2	17.3	-1.1	-1.5	-0.8	

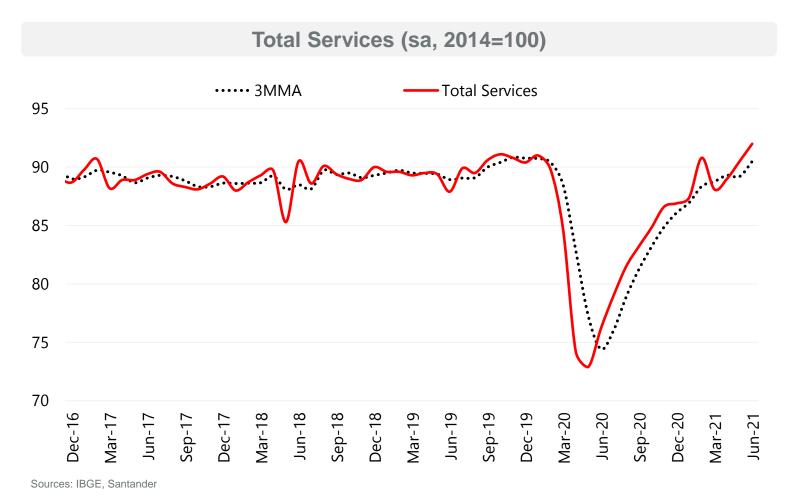


SERVICES

03

SOLID GROWTH AND RESILIENCE AMID THE REOPENING OF THE ECONOMY

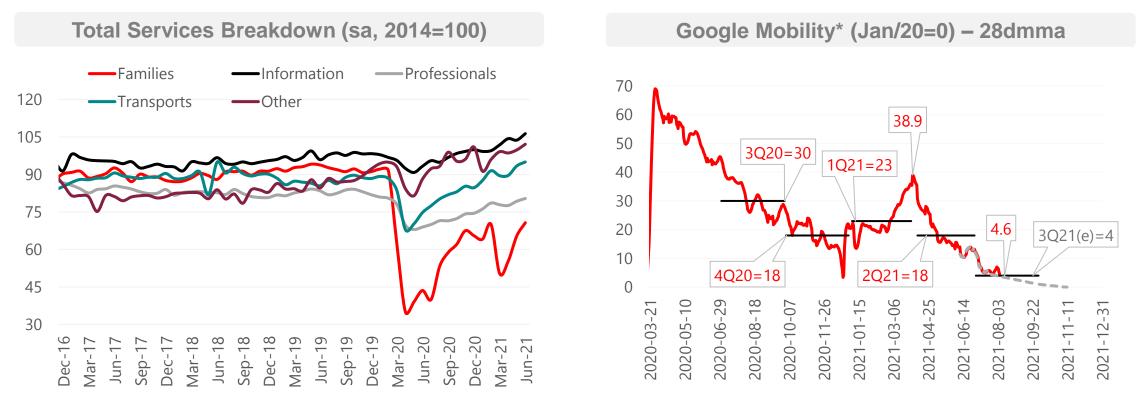
 Following the reopening of the economy and the demand shifting from goods towards services, the services sector showed solid growth in 2Q21, mainly driven by mobility-related segments such as Services to Families (e.g, food services, accommodation) and Transports (notably Air Transports). The headline index fully gave back March's losses and now runs above the pre-pandemic mark.





SOLID GROWTH AND RESILIENCE AMID THE REOPENING OF THE ECONOMY

 Looking at the details, we still can see a heterogeneous pattern among the subsectors. Information and Other Services have fully recovered from the pandemic, likely reflecting some capacity of adapting. On the other hand, the Air Transport segment of Transports, Professional and Services to Families still show idleness, which leaves room for growth ahead as mobility recovers.



Sources: IBGE, Santander

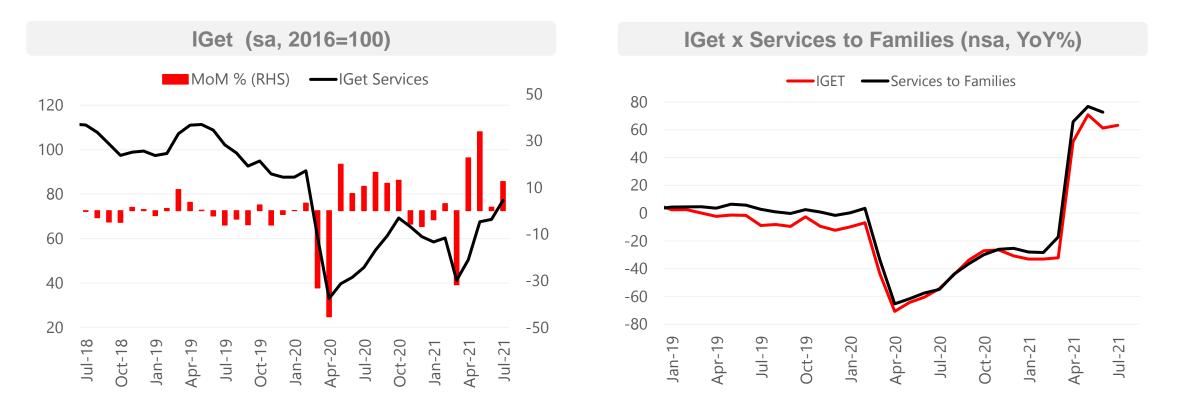
Sources: Google, Santander

* Lockdown index: Data until August 05.



IGET POINTS TO SEQUENCIAL RECOVERY OF SERVICES TO FAMILIES

• This segment was hard hit by the pandemic since it was unable to adapt like other segments of the tertiary sector. As vaccination takes place and mobility recovers, services to families should prompt tertiary sector in 2H20.

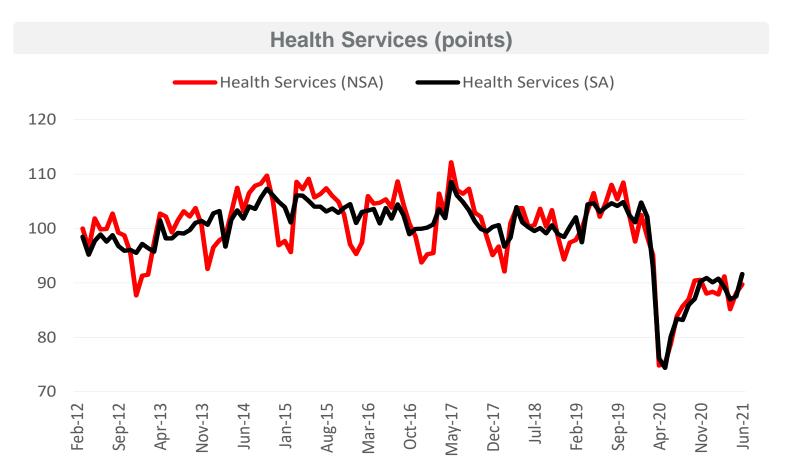


Sources: Santander



LESS CYCLICAL SERVICES SHOW IDLENESS, LEAVING ROOM FOR GROWTH AHEAD

 Health services are not captured in the IBGE's monthly survey but are important in the composition of GDP (mercantile health services in Other Services and non-mercantile health services in Public Services). We expect these segments to recover ahead as mobility increases and sanitary crisis is gradually overcome.



Sources: Datasus, Santander. Our seasonal adjustment procedure.



SERVICES SECTOR BREAKDOWN

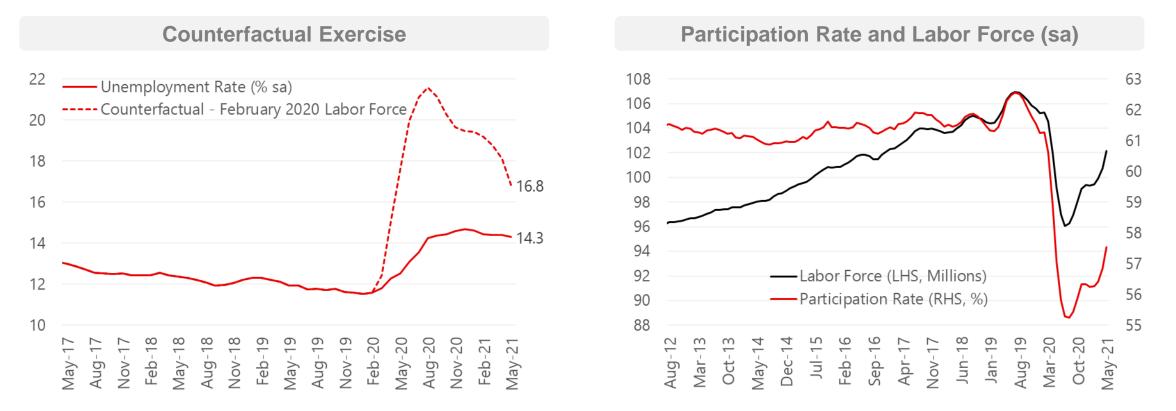
				Services B	reakdown					
			% MoM		% YoY			% QoQ		
	Weights	Apr-21	May-21	Jun-21	Apr-21	May-21	Jun-21	Apr-21	May-21	Jun-21
Total Services	100%	1.0	1.7	1.7	20.1	23.3	21.2	2.7	0.9	2.0
Families	8%	9.7	18.3	8.1	65.8	76.8	72.7	-10.9	-14.3	3.7
Accommodation and Food	7%	11.3	18.6	8.5	76.8	87.9	82.2	-11.8	-15.3	3.9
Other Services to Families	1%	1.5	6.9	2.6	27.8	35.8	34.5	3.5	3.7	6.6
Information	31%	2.5	-0.6	2.5	12.8	14.1	13.6	2.4	3.8	4.6
Technology	26%	2.7	-1.1	1.3	11.7	12.5	10.8	2.9	3.6	3.7
Telecommunication	19%	0.7	0.0	-0.3	0.9	1.9	0.7	-0.1	0.0	0.0
Information Technology	7%	4.8	-0.9	1.5	31.2	31.5	26.7	6.7	8.2	8.2
Audiovisual	5%	0.3	1.4	12.0	23.6	31.5	44.2	1.0	6.2	12.1
Professional	23%	-0.4	2.2	1.4	12.2	16.3	16.5	4.1	2.4	2.0
Professional	7%	0.5	1.3	1.3	14.9	25.7	21.4	3.9	2.7	2.3
Administrative	16%	-1.4	2.8	1.2	11.1	12.7	14.8	4.1	1.7	1.2
Transportation	31%	0.1	4.2	1.7	31.0	32.6	28.0	5.0	3.3	3.5
Ground Transportation	18%	-1.1	4.2	1.0	37.1	32.8	29.5	6.1	3.6	2.3
Water Transportation	2%	7.4	-3.8	0.6	17.1	14.0	15.9	8.6	7.4	6.4
Air Transport	3%	-21.8	71.6	21.2	136.4	217.5	161.8	-16.2	-14.8	6.9
Storage and Mail	9%	1.0	3.9	-1.9	21.2	23.0	14.4	5.7	4.3	3.7
Other Services	7%	-0.5	1.2	2.3	17.0	22.2	15.6	1.8	3.2	4.9



LABOR MARKET

LABOR FORCE NORMALIZATION AT A FASTER PACE

 After consecutive months of recovery since mid-2020, labor force has decelerated between January and March 2021. However, April and May data has shown a better outlook for labor force normalization, that should be benefited by higher levels of urban mobility in the coming months.

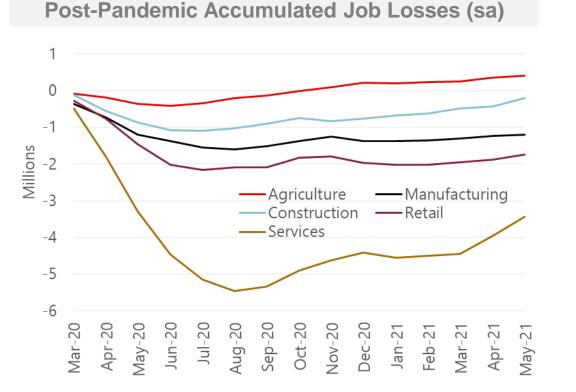


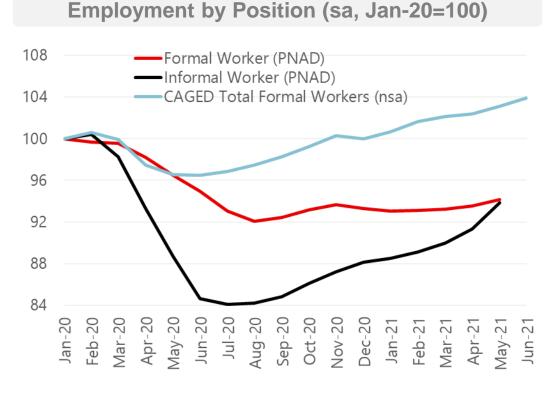
Sources: IBGE, Santander.



SERVICES SECTOR STILL THE LAGGARD

 Most of the job losses during the pandemic are in the services sector. We expect a partial recovery of employment in the services sector, concentrated in 2H21, as urban mobility reaches higher levels and benefits informal workers. We consider that labor market still has considerable slacks, as informal workers represent over 40% of the employed population in normal times.



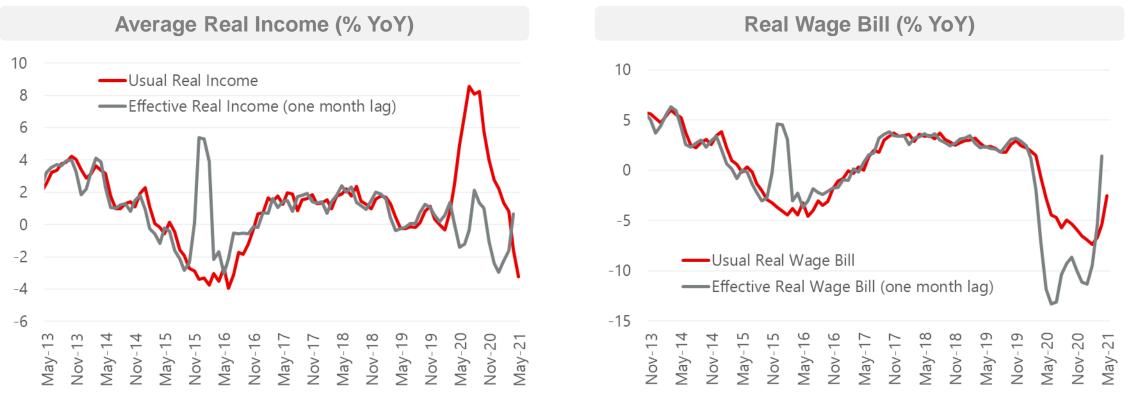


Sources: IBGE, Santander.



WORSENING IN REAL WAGE BILL RECENT DATA

 Real wage bill is still in a precarious situation. There has been a decoupling between the usual and effective real wage bills due to composition effect, as job losses were concentrated among employees with lower wages. These differences decreased in April, but the discrepancies have returned in May.



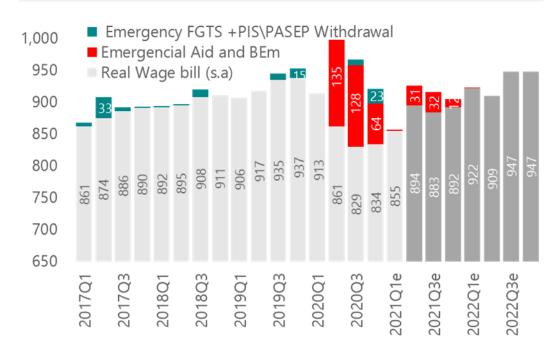
Sources: IBGE, Santander.



"EXPANDED" REAL WAGE BILL WILL DROP IN 2021, WITH PARTIAL RECOVERY IN 2022

 We revised slightly up our "expanded" real wage bill estimates for 2022 (+3.5%, from +3.3%), considering higher disbursements for pensions and the Bolsa Família program, as well as a faster recovery in employment.

"Expanded" Real Wage Bill (BRL billion)



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

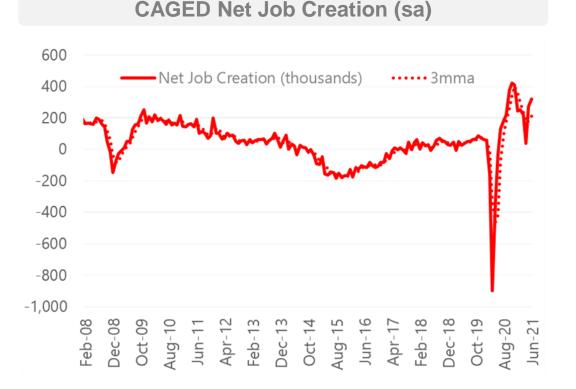
	2020	2021(E)	2022(E)
Wage Bill (Without Fiscal Aid)	-6.9%	+2.5%	+5.7%
Wage Bill (With Fiscal Aid)	+2.2%	-5.2%	+3.5%

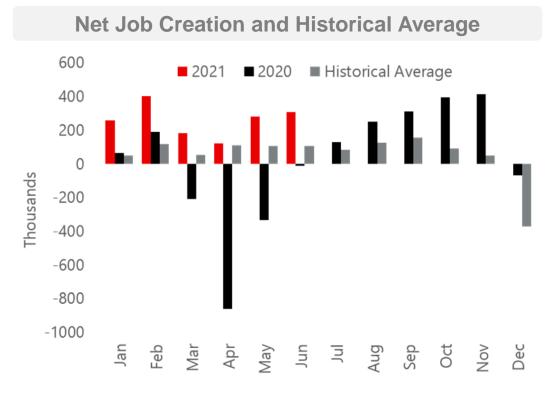
Sources: National Treasury, IBGE, Ministry of Economy, Santander.



CAGED HAS SHOWN STRONG RESULTS IN THE PAST FEW MONTHS

 Since January 2021, CAGED recovery seems to be more aligned with most economic activity statistics, after possible underreporting issues in 2H20. The higher mobility levels in May and June, as well as the new round of the government's job protection program (BEm), have led to another acceleration in net formal job creation.





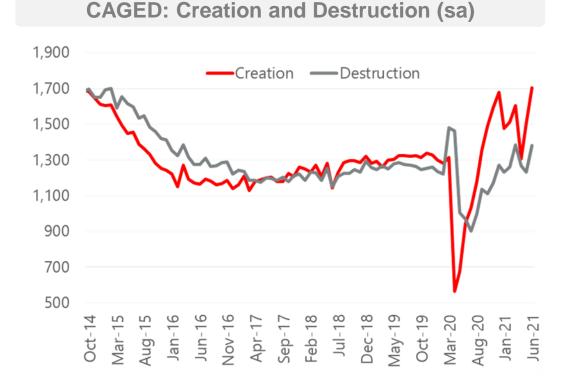
Sources: Ministry of Economy, Santander.

Sources: Ministry of Economy, Santander.

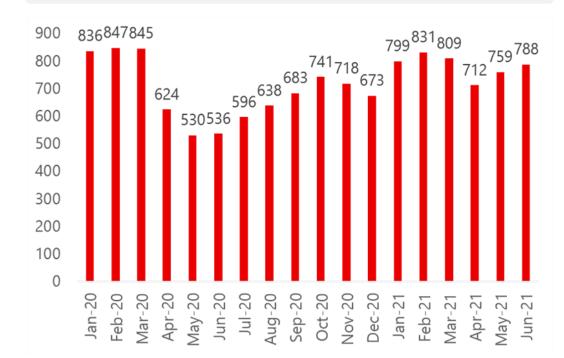


CAGED: SIGNS OF UNDERREPORTING HAVE SIGNIFICANTLY DECREASED

In our view, the strong figures of CAGED in 2H20 are related to underreporting in layoffs. This problem looks smaller since January, as job destruction is closer to the pre-pandemic levels, as well as the number of reporting establishments.



Sources: Ministry of Economy, Santander.



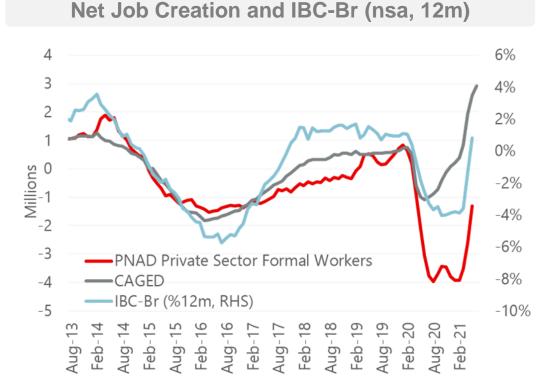
CAGED: Number of Reporting Establishments

Sources: Ministry of Economy, Santander.

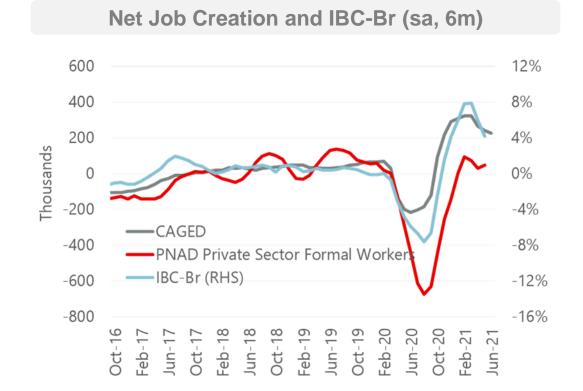


SINCE JANUARY, CAGED REFLECTS FORMAL JOB MARKET BETTER

 The 12m accumulated formal job creation data looks biased (overestimation in CAGED, underestimation in PNAD). However, the 6m accumulated data indicates that there was an actual improvement of the formal labor market at the margin, as shown by CAGED data.



Sources: Ministry of Economy, BCB, IBGE, Santander.

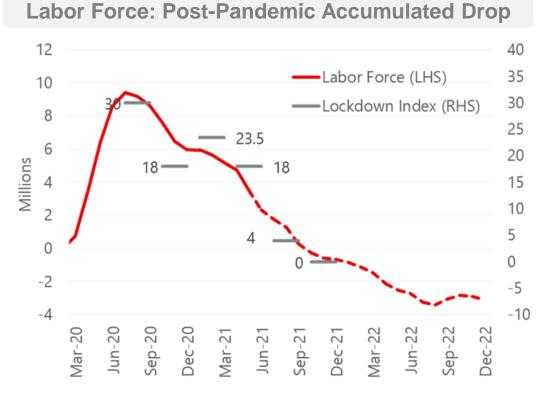


Sources: Ministry of Economy, BCB, IBGE, Santander.

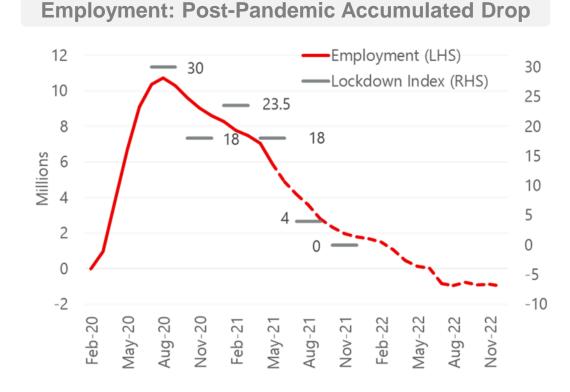


HIGHER MOBILITY TO IMPACT EMPLOYMENT AND THE LABOR FORCE

 As vaccination advances and mobility recovers, we should see higher levels in both the employment population and in the labor force.



Sources: IBGE, Google, Santander.



Sources: IBGE, Google, Santander.



			PNAD Brea	akdown						
		s.a.			% YoY			% Feb-20*		
	Mar-21	Apr-21	May-21	Mar-21	Apr-21	May-21	Mar-21	Apr-21	May-21	
Unemployment rate (%)	14.4	14.4	14.3	2.5	2.1	1.7	2.8	2.8	2.7	
Participation rate (%)	56.4	56.8	57.5	-4.2	-2.1	0.4	-4.9	-4.4	-3.7	
Labor force (millions)	99.9	100.7	102.2	-4.4	-1.3	2.9	-5.4	-4.6	-3.1	
Employment	85.5	86.2	87.6	-7.1	-3.7	0.9	-7.6	-6.9	-5.5	
Unemployment	14.4	14.5	14.6	15.2	15.2	16.4	2.2	2.3	2.4	
Formalization Rate (%)	57.8	57.5	57.0	0.6	-0.6	-1.9	1.1	0.8	0.2	
Formal Workers (millions)	49.5	49.6	49.9	-6.2	-4.7	-2.4	-3.4	-3.2	-2.9	
Informal Workes (millions)	36.1	36.6	37.6	-8.4	-2.3	5.7	-4.2	-3.6	-2.6	
Average usual earnings	-	-	-	0.8	-1.5	-3.2	-	-	-	
Average effective earnings	-	-	-	-1.6	0.7	-	-	-	-	
Usual wage bill	-	-	-	-6.7	-5.4	-2.5	-	-	-	
Effective wage bill	-	-	-	-5.4	1.4	-	-	-	-	

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

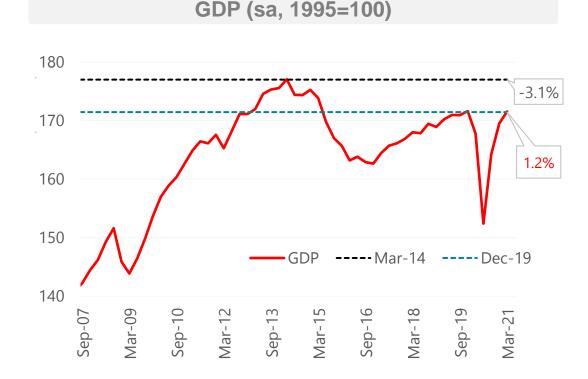


GDP

05

GDP SURPRISED POSITIVELY, PLACING THE INDEX BACK TO THE PRE-CRISIS LEVEL

Following the monthly surprises across 1Q21, GDP figure reinforced the economy's resilience amid the pandemic's relapse. The sequential climbs seen since 3Q20 fully gave back the pandemic losses, placing the headline index back to the pre-crisis mark (4Q19). Among the sectors, despite the small proportion, farm output was the main contributor to the 1.2% GDP growth.

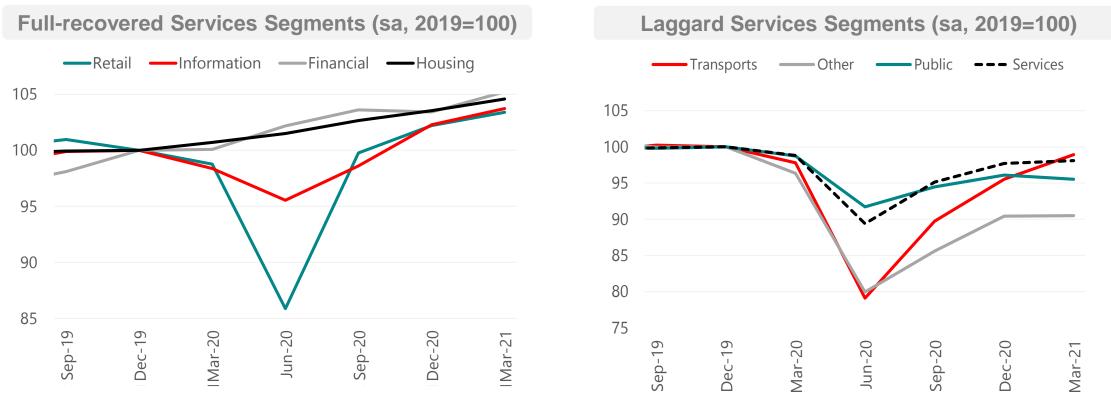


		1Q21						
	Weights	% YoY	% QoQ					
GDP	100%	1.0	1.2					
Supply								
Taxes	14%	1.9	2.1					
Agriculture	10%	5.2	5.7					
Industry	17%	3.0	0.7					
Services	58%	-0.8	0.4					
Demand								
Consumption	60%	-1.7	-0.1					
Government	18%	-4.9	-0.8					
Investments	19%	17.0	4.6					
Exports	18%	0.8	3.7					
Imports	-19%	7.7	11.6					



SERVICES AT DEPRESSED LEVELS LEAVE ROOM TO GROWTH AHEAD

Despite the less pronounced impact of the pandemic's relapse, almost half of GDP services still stands below its pre-pandemic mark: Transports, Public Services and Other Services are down by 1.1%, 4.5% and 9.5%, respectively. We expect these segments to prompt activity, as economy gradually reopens, and the public health crisis is overcome.



Sources: IBGE, Santander



BASELINE SCENARIO



GDP: KEY HYPHOTHESES, BASIC DESCRIPTION AND RISKS

- We assume increased mobility along with progress in the vaccination campaign to prompt a safer resumption of economic growth in 2H21, with no major setbacks (e.g., new lockdowns). Moreover, we assume limited episodes of corporate bankruptcy, meaning no major and persistent impact on the country's productive capacity.
- We expect stability in 2Q21, with the tertiary sector propping up activity stemming from the recovery of mobility and the payment of the Emergency Aid – but dragged by the give back of agriculture's growth and industrial weak performance. The higher commodities prices and the economy's reopening should contribute to a better 2H21. Half of Services still stands at low levels, which leaves room for growth as the sanitary crisis is overcome.
- The lingering effects from the commodities cycles in conjunction with an economy in full-operation mode (over a basis of comparison affected by restriction measures) should contribute to more robust growth in 2022, despite the delayed effects of a less expansionary monetary policy path and a little reduction of the fiscal impulse.
- **Upside risks:** stronger than expected effect of economic reopening on services reliant on social interaction. Faster than expected solution to supply-chain disruptions in manufacturing.
- Downside risks: an additional increase of infections despite a more disseminated vaccine rollout and delays in the vaccination campaign would likely impair the economy's reopening process. A prolonged shortage of inputs in some production chains, along with likely implications of the drought for both electricity generation and agriculture output. An even stronger inflationary shock making the BCB's policy stance even tighter.



GDP Baseline Scenario									
	YoY	QoQ	Full Year						
4Q20	-1.1%	3.2%	-4.1%						
1Q21	1.0%	1.2%							
2Q21	12.6%	0.0%							
3Q21	5.1%	0.6%							
4Q21	2.3%	0.3%	5.1%						
1Q22	2.2%	0.7%							
2Q22	2.3%	0.6%	·						
3Q22	1.8%	0.4%							
4Q22	1.6%	0.3%	2.0%						

GDP Breakdown										
	2017	2018	2019	2020	2021e	2022e				
GDP	1.3	1.8	1.4	-4.1	5.1	2.0				
Agriculture	14.2	1.3	0.6	2.0	2.1	2.0				
Industry	-0.5	0.7	0.4	-3.5	5.3	1.9				
Services	0.8	2.1	1.7	-4.5	4.4	2.2				
Household	2.0	2.4	2.2	-5.5	4.7	2.0				
Government	-0.7	0.8	-0.4	-4.7	2.0	1.2				
Investments	-2.6	5.2	3.4	-0.8	10.9	2.4				
Exports	4.9	4.1	-2.4	-1.8	9.4	2.4				
Imports	6.7	7.7	1.1	-10.0	13.9	6.9				

Sources: IBGE, Santander



LABOR MARKET: UNEMPLOYMENT RATE REDUCING SLOWLY, BALANCED RISKS

- The vaccine rollout and the increase in urban mobility led to a faster recovery in the labor force and employment, in our view. These recent developments are aligned with our scenario.
- Upside risks: Positive surprises from economic activity indicators may lead to a faster than expected recovery in employment. Furthermore, additional surprises in mobility levels can favor informal jobs.
- Downside risks: The further extension of the Emergency Aid may keep part of the population away from the labor market for longer, implying additional delays in the recovery of the informal sector.
- We made slight upward revisions in our trajectories for employment and participation to incorporate higher mobility in 3Q21 and 4Q21. We now estimate an average unemployment rate of 14.1% in 2021 and 13.5% in 2022 (from previous estimates of 14.2% and 13.6%, respectively).

	2019	2020	2021e	2022e	2023e
Unemployment Rate *					
Average	11.9	13.2	14.1	13.5	12.7
End of Period (s.a.)	11.7	14.8	13.7	13.1	12.2
Unemployed Population	**				
Average	12.6	13.2	14.5	14.5	13.9
End of Period	12.3	14.8	14.6	14.2	13.4

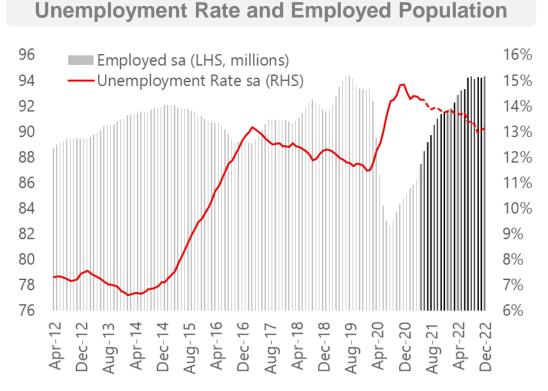
* in %

** in Millions

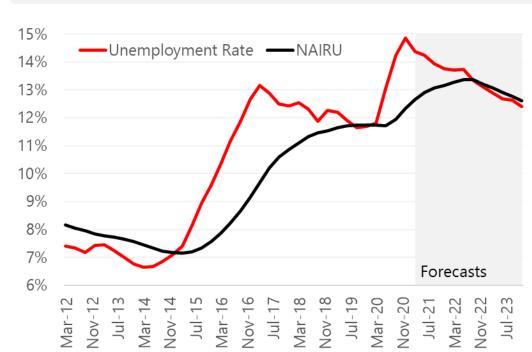


JOB MARKET SLACKS TO REMAIN UNTIL 2022

We estimate that the Non-Accelerating Inflation Rate of Unemployment (NAIRU) has increased significantly due to the pandemic but is still around 1.5 pp below the current unemployment rate. We expect the unemployment rate to slowly fall throughout 2021, 2022 and 2023, and to reach the NAIRU level in mid-2022, with both series moving lower in tandem, subsequently.



Sources: IBGE, Santander.



Unemployment Rate and the NAIRU (sa)



MACRO SCENARIO: PROJECTIONS

 For our latest Scenario Review 'ADVANCES IN CONTROLLING THE PANDEMIC, SETBACKS IN QUELLING INFLATION' (sent on August 12, 2021). Click on the link: <u>https://bit.ly/Std-scenrev-081221</u>

Macroeconomic variables		Previous		Current
	2021E	5.1	Ð	5.1
GDP (%)	2022E	2.0	Ð	2.0
	2023E	1.5	Ð	1.5
	2021E	6.7	Ŷ	7.3
IPCA (%)	2022E	4.0	•	4.1
	2023E	3.3	Ð	3.3
	2021E	7.00	Ŷ	7.50
Selic Rate (% end of period)	2022E	7.00	P	7.50
	2023E	7.00	Ð	7.00
	2021E	5.05	Ð	5.05
FX Rate - USDBRL (end of period)	2022E	5.55	Ð	5.55
	2023E	5.20	Ð	5.20
	2021E	-0.5	Ŷ	0.0
Current Account Balance (% of GDP)	2022E	-0.8	P	-0.5
	2023E	-1.0		-1.7
	2021E	-1.9	ዮ	-1.6
Primary Fiscal Balance (% of GDP)	2022E	-1.7	P	-1.2
	2023E	-1.3	ጭ	-0.9
	2021E	82.2	•	81.6
Gross Public Debt (% of GDP)	2022E	84.3		83.5
	2023E	87.2		86.2



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

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



Raissa Freitas

Business Manager raifreitas@santander.com.br +55 (11) 3553-7424

Brazil Macroeconomic Research Team

Ana Paula Vescovi

Chief Economist anavescovi@santander.com.br +55 (11) 3553-8567

Jankiel Santos

Economist – External Sector jankiel.santos@santander.com.br +55 (11) 3012-5726

Tomas Urani

Economist – Global Economics tomas.urani@santander.com.br +55 (11) 3553-9520

Lucas Maynard

Economist – Economic Activity lucas.maynard.da.silva@santander.com.br +55 (11) 3553-7495

Gilmar Lima

Economist – Modeling gilmar.lima@santander.com.br +55 (11) 3553-6327

Mauricio Oreng

Head of Research & Strategy mauricio.oreng@santander.com.br +55 (11) 3553-5404

Ítalo Franca

Economist – Fiscal Policy italo.franca@santander.com.br +55 (11) 3553-5235

Daniel Karp Vasquez

Economist - Inflation daniel.karp@santander.com.br +55 (11) 3553-9828

Felipe Kotinda

Economist - Credit felipe.kotinda@santander.com.br +55 (11) 3553-8071

Gabriel Couto

Economist – Special Projects gabriel.couto@santander.com.br +55 (11) 3553-8487

IMPORTANT DISCLOSURES

This report has been prepared by Santander Investment Securities Inc. ("SIS"; SIS is a subsidiary of Santander Holdings USA, Inc. which is wholly owned by Banco Santander, S.A. "Santander"), on behalf of itself and its affiliates (collectively, Grupo Santander) and is provided for information purposes only. This document must not be considered as an offer to sell or a solicitation of an offer to buy any relevant securities (i.e., securities mentioned herein or of the same issuer and/or options, warrants, or rights with respect to or interests in any such securities). Any decision by the recipient to buy or to sell should be based on publicly available information on the related security and, where appropriate, should take into account the content of the related prospectus filed with and available from the entity governing the related market and the company issuing the security. This report is issued in Spain by Santander Investment Bolsa, Sociedad de Valores, S.A. ("Santander Investment Bolsa"), and in the United Kingdom by Banco Santander, S.A., London Branch. Santander London is authorized by the Bank of Spain. This report is not being issued to private customers. SIS, Santander London and Santander Investment Bolsa are members of Grupo Santander.

ANALYST CERTIFICATION: The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed, that their recommendations reflect solely and exclusively their personal opinions, and that such opinions were prepared in an independent and autonomous manner, including as regards the institution to which they are linked, and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report, since their compensation and the compensation system applying to Grupo Santander and any of its affiliates is not pegged to the pricing of any of the securities issued by the companies evaluated in the report, or to the income arising from the businesses and financial transactions carried out by Grupo Santander and any of its affiliates: Lucas Maynard and Gabriel Couto*.

*Employed by a non-US affiliate of Santander Investment Securities Inc. and not registered/qualified as a research analyst under FINRA rules, and is not an associated person of the member firm, and, therefore, may not be subject to the FINRA Rule 2242 and Incorporated NYSE Rule 472 restrictions on communications with a subject company, public appearances, and trading securities held by a research analyst account.

The information contained herein has been compiled from sources believed to be reliable, but, although all reasonable care has been taken to ensure that the information contained herein is not untrue or misleading, we make no representation that it is accurate or complete and it should not be relied upon as such. All opinions and estimates included herein constitute our judgment as at the date of this report and are subject to change without notice.

Any U.S. recipient of this report (other than a registered broker-dealer or a bank acting in a broker-dealer capacity) that would like to effect any transaction in any security discussed herein should contact and place orders in the United States with SIS, which, without in any way limiting the foregoing, accepts responsibility (solely for purposes of and within the meaning of Rule 15a-6 under the U.S. Securities Exchange Act of 1934) for this report and its dissemination in the United States.

© 2021 by Santander Investment Securities Inc. All Rights Reserved.

