

JOB GROWTH STALLS AS PARTICIPATION RATE CONTINUES TO FALL

Gabriel Couto*
gabriel.couto@santander.com.br
+5511 3553-8487

- According to the IBGE's National Household Survey (PNAD), the unemployment rate stood at 7.9% in the three months to December. The figure was above our estimate (7.7%) and slightly below the market consensus (8.0%), implying a 3.2 p.p. drop from the year-ago level (11.1%). We calculate that the seasonally adjusted jobless rate stood at 8.5%, a slight drop compared to the November level (8.6%). The full year average unemployment rate stood at 9.3% in 2022, vs. 13.2% in 2021.
- The decrease in seasonally adjusted unemployment rate stemmed from -0.4% and -0.5% MoM-sa variations in the employed population and the labor force, respectively. The labor market participation rate was 61.8% (sa), a decrease from November (62.1%) and its lowest level since August 2021. If the participation rate were fixed at 63% (pre-pandemic historical average), we calculate that the seasonally adjusted unemployment rate would be at 10.4% in December.
- All PNAD data is based on a three-month moving average. We estimate that the monthly unemployment rate stood at 8.7% (sa) in December, an increase compared to November (8.4%). This result followed 0.3% and 0.1% MoM-sa decreases in the employed population and the labor force, respectively. Therefore, the unemployment rate increased at the margin even with a drop in the participation rate. Our monthly estimate for the labor force has declined for the sixth month in a row.
- 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.
- In our view, the December PNAD survey result continued 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. Once again, our monthly estimates indicate declines for both the employed population and the labor force in December. Real wages show additional signs of recovery, benefiting from the deceleration of consumer inflation (compared to mid-2022) and still indicating signs of an overheated job market. We expect the deceleration in the labor market to continue, but the continued low participation rate implies downside risk to our unemployment rate projections. We forecast a tight labor market until at least 3Q23.
- Since December 2022, labor market surveys have had changes in their regular release schedules. The PNAD survey releases have been delayed by the IBGE due to the processing of the Population Census data. In March, this schedule is set to be normalized, with two publications of the PNAD survey: January data is due out on March 17, and February data is expected on March 31. As for the CAGED survey, the Ministry of Labor is taking longer to release the results for January, as is usual for the month due to the processing of full year results of the previous year. The official schedule indicates that the release of January data is expected on March 9 and February data on March 29.

IMPORTANT DISCLOSURES/CERTIFICATIONS ARE IN THE "IMPORTANT DISCLOSURES" SECTION OF THIS REPORT.

U.S. investors' inquiries should be directed to Santander US Capital Markets LLC at (212) 583-4629 / (212) 350-3918.

* Employed by a non-US affiliate of Santander US Capital Markets LLC and is not registered/qualified as a research analyst under FINRA rules.



PNAD Household Survey

According to the IBGE National Household Survey (PNAD), the unemployment rate stood at 7.9% in the three months to December, above our estimate (7.7%) and slightly below market consensus (8.0%), implying a 3.2 p.p. drop from the year-ago rate of 11.1%. We calculate that the seasonally adjusted jobless rate stood at 8.5%, a slight drop compared to the November level (8.6%). The performance of the seasonally adjusted unemployment rate stemmed from 0.4% and 0.5 MoM-sa decreases in the employed population and the labor force.

Figure 1 – 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	-

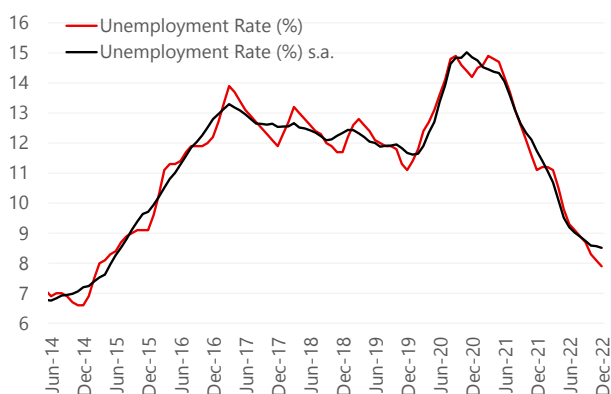
* Seasonally adjusted variation relative to February 2020 (pre-pandemic) reading. For rates, change is in percentage points.

** In real terms

Sources: IBGE, Santander.

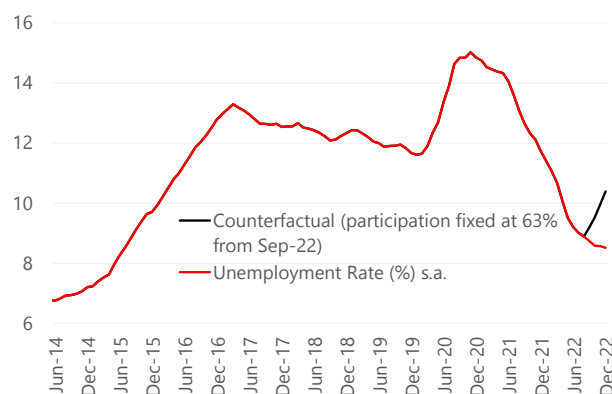
The labor market participation rate stood at 61.8% (sa), a decrease from November (62.1%) and its lowest level since August 2021. Once again, the PNAD survey has shown that the unemployment rate remained stable only because of the drop in the participation rate. If the participation rate were fixed at 63% (pre-pandemic historical average), we calculate that the seasonally adjusted unemployment rate would be at 10.4% in December.

Figure 2. Unemployment Rate



Sources: IBGE, Santander.

Figure 3. Unemployment Rate and Counterfactual (sa)

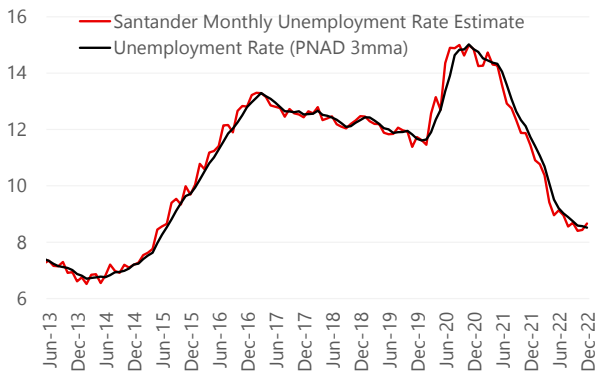


Sources: IBGE, Santander.

All PNAD data is based on three-month moving averages. We estimate that the monthly unemployment rate figure stood at 8.7% (sa) in December, an increase compared to November (8.4%). This result followed -0.3% and -0.1% MoM-sa variations in the employed population and the labor force, respectively. Therefore, the unemployment rate increased at the margin even with a drop in the participation rate. Our monthly estimate for the labor force has declined for the sixth month in a row.



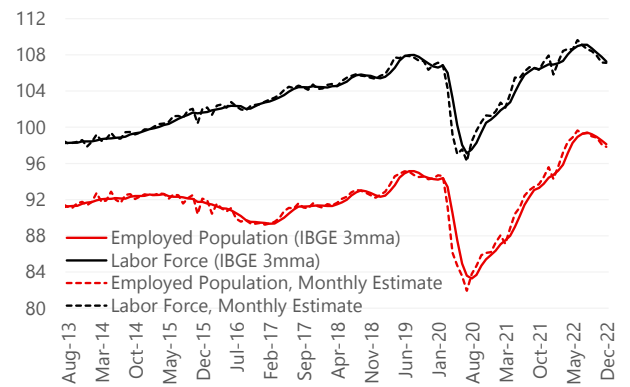
Figure 4. Monthly Unemployment Rate (sa)



Sources: IBGE, Santander.

All PNAD data is constructed as 3-month moving averages. We estimate the monthly figures based on a Kalman Filter, according to BCB's methodology.

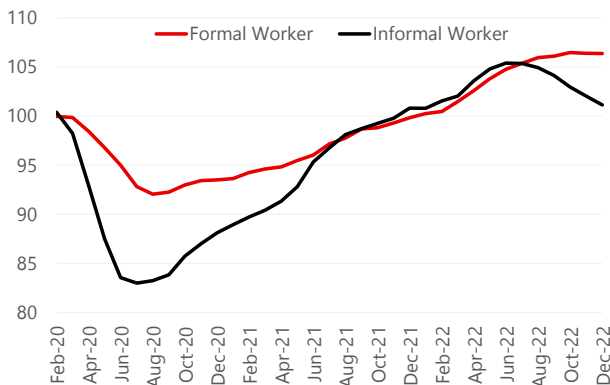
Figure 5. Participation Rate and Employment (sa)



Sources: IBGE, Santander.

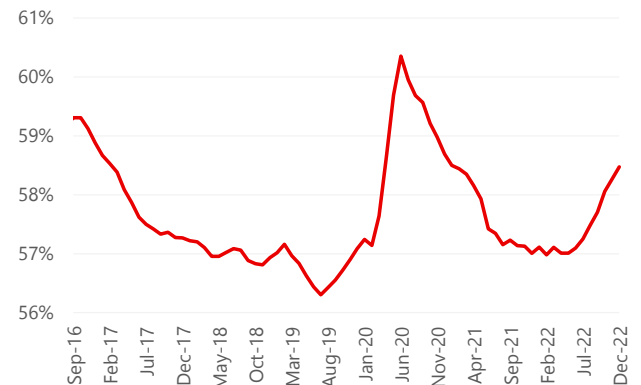
Formal employment posted a 0.0% MoM-sa variation, while informal employment had a -0.9% MoM-sa variation. This result led the formalization rate to 58.5% (sa), above the October level (58.0%) and the highest reading since normalization of the pandemic's composition effect (August 2021). The recent readings show a clear declining trend in informal labor, as formal jobs are stabilizing.

Figure 6. Employed Population (sa, Jan-20=100)



Sources: IBGE, Santander.

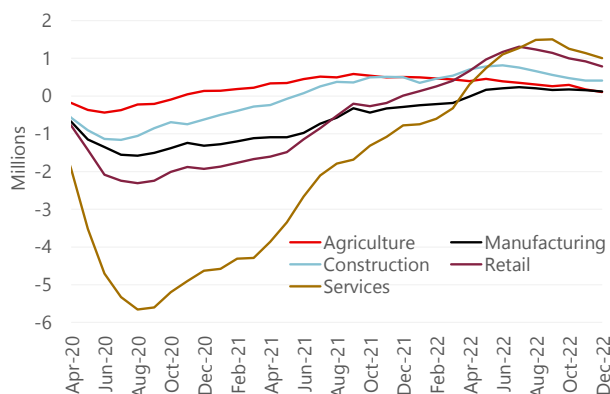
Figure 7. Formalization Rate (sa)



Sources: IBGE, Santander.

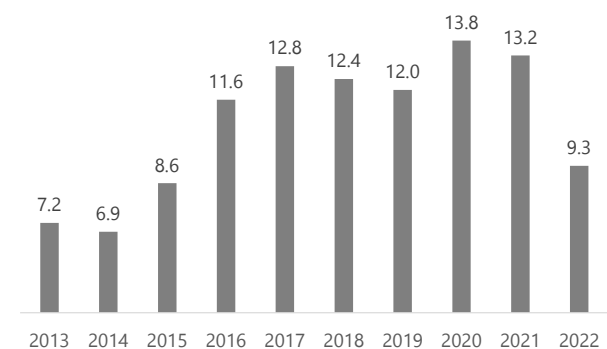
The services sector was the highlight of job creation in 2022 but continued to decline at the margin, with similar trends seen in retail and construction. In our view, more cycle-sensitive sectors tend to indicate deceleration or stability in employment due to tight financial conditions. The full year average unemployment rate stood at 9.3% in 2022, vs. 13.2% in 2021.

Figure 8. Post-Pandemic Accumulated Job Variation (sa)



Sources: IBGE, Santander.

Figure 9. Unemployment Rate (% , full-year average)

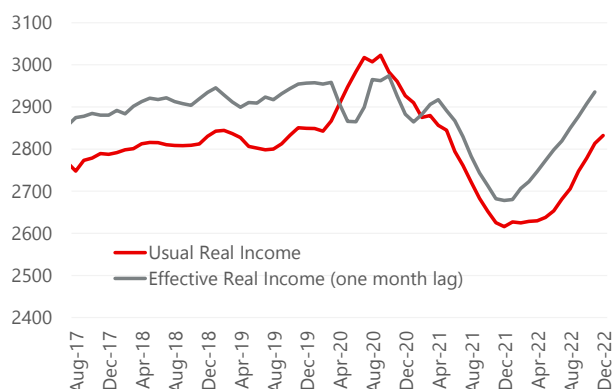


Sources: IBGE, Santander.



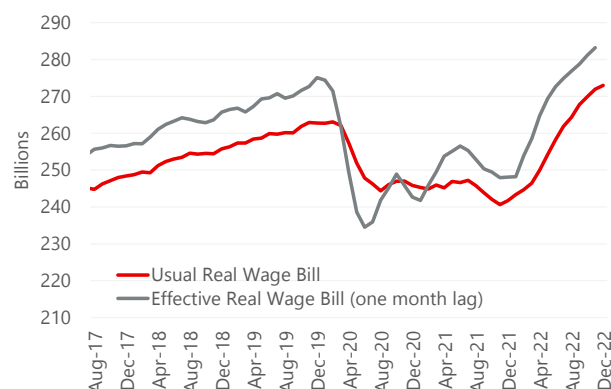
As for average real income indicators, there was additional improvement at the margin. In our view, the results are being boosted both by the recent deceleration seen in YoY IPCA inflation (since mid-2022) and by the overheated job market. The effective real wage bill posted a +0.9% MoM-sa variation 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.

Figure 10. Average Real Income (BRL, sa)



Sources: IBGE, Santander.

Figure 11. Real Wage Bill (BRL, sa)



Sources: IBGE, Santander.

Schedule for Upcoming Labor Market Releases and the Latest CAGED Survey Results

Since December 2022, labor market surveys have had changes in their regular release schedules. The PNAD survey releases have been delayed by the IBGE due to the processing of the Population Census data. In March, this schedule is set to be normalized, with two publications of the PNAD survey: January data is due out on March 17, and February data is expected on March 31. As for the CAGED survey, the Ministry of Labor is taking longer to release the results for January, as is usual for the month due to the processing of full year results of the previous year. The official schedule indicates that the release of January data is expected on March 9 and February data on March 29.

According to the December CAGED survey, released on January 31, net formal job creation stood at -431k (vs. consensus -330k, Santander estimate -390k), below both the historical average for the month (-367k) and the figure posted in December 2021 (-266k).

Figure 12 – CAGED Breakdown (thousands)

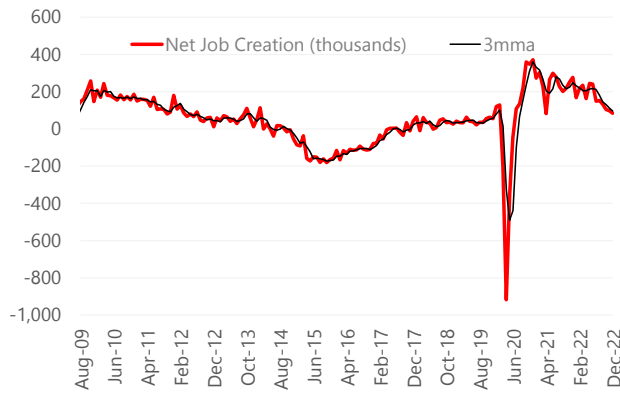
	Headline			Headline (s.a.)		
	Oct-22	Nov-22	Dec-22	Oct-22	Nov-22	Dec-22
Net Creation	159.5	135.5	-431.0	104.9	97.7	84.8
Creation	1,789.5	1,747.9	1,382.9	1,792.3	1,783.9	1,796.0
Destruction	1,630.0	1,612.4	1,813.9	1,687.5	1,686.3	1,711.3
Mining	0.7	0.9	-0.3	0.6	1.6	1.7
Construction	5.3	-18.8	-74.5	5.3	4.3	8.2
Manufacturing	13.1	-26.6	-113.0	6.5	3.2	6.3
Utilities	1.1	0.0	-0.9	1.5	0.8	1.6
Retail	49.4	106.0	-17.3	19.9	16.2	11.0
Agriculture	-1.4	-18.2	-36.9	10.9	11.6	10.5
Services	91.3	92.2	-188.1	60.1	59.9	45.4

Sources: Ministry of Labor, Santander.

After our seasonal adjustment, net formal job creation decelerated to 85k, from 98k in November. The number of hirings had a +0.7% MoM-sa variation, while layoffs had a +1.5% MoM-sa variation. The three-month average now points to a payroll expansion of 96k jobs, vs. 112k in November.

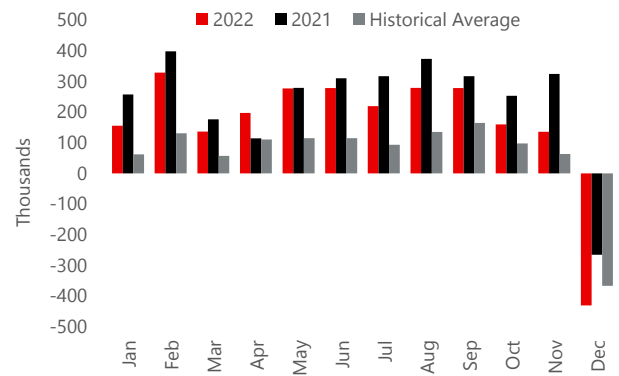


Figure 13. Net Formal Job Creation (sa)



Sources: Ministry of Labor, Santander.

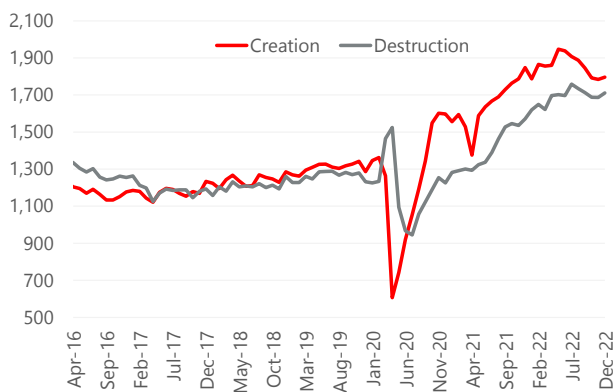
Figure 14. Net Formal Job Creation



Sources: Ministry of Labor, Santander.

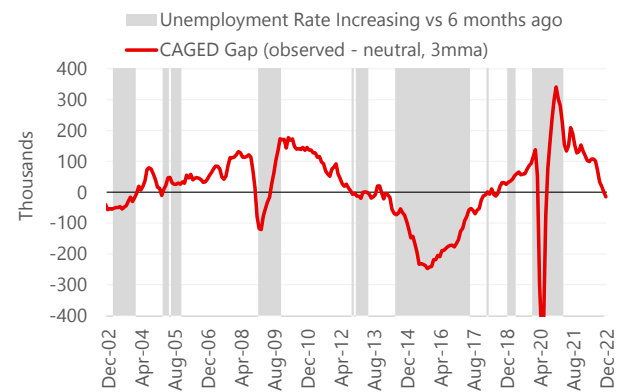
We estimate that the 3mma of CAGED’s gap to the joblessness-neutral level (~110k) stood at -14k in December (+1k in November), heading into negative terrain. Accumulated net job creation in 2022 stood at 2.037 million (adjusted for post-deadline declarations), down from 2.778 million in 2021. We expect 2023 net job creation to be below 1 million, in line with our forecast of an increasing unemployment rate.

Figure 15. Job Creation and Destruction (sa)



Sources: Ministry of Labor, Santander.

Figure 16. Net Formal Job Creation Gap (sa)



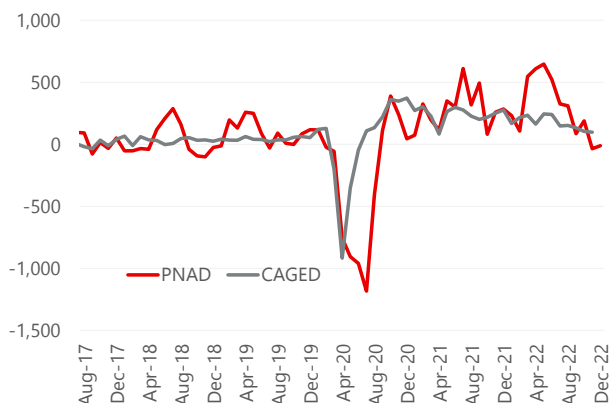
Sources: Ministry of Labor, Santander.

Final Remarks

In our view, the December PNAD survey result continued 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. Once again, our monthly estimates indicate declines for both the employed population and the labor force in December. Real wages show additional signs of recovery, benefiting from the deceleration of consumer inflation (compared to mid-2022) and still indicating signs of an overheated job market. We expect the deceleration in the labor market to continue, but the continued low participation rate implies downside risk to our unemployment rate projections. We forecast a tight labor market until at least 3Q23.

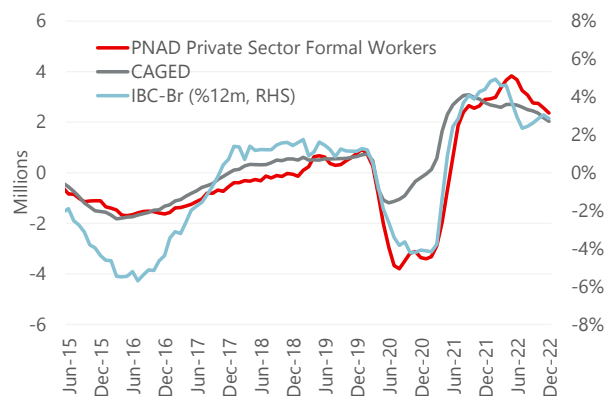


Figure 17. CAGED vs. PNAD Net Formal Job Creation (sa)



Sources: Ministry of Labor, Santander.

Figure 18. Net Job Creation and IBC-Br (12m)



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



CONTACTS / IMPORTANT DISCLOSURES

Brazil Macro Research

Ana Paula Vescovi*	Chief Economist	anavescovi@santander.com.br	5511-3553-8567
Mauricio Oreng*	Head of Macro Research	mauricio.oreng@santander.com.br	5511-3553-5404
Jankiel Santos*	Economist – External Sector	jankiel.santos@santander.com.br	5511-3012-5726
Ítalo Franca*	Economist – Fiscal Policy	italo.franca@santander.com.br	5511-3553-5235
Daniel Karp Vasquez*	Economist – Inflation	daniel.karp@santander.com.br	5511-3553-9828
Tomas Urani*	Economist – Global Economics	tomas.urani@santander.com.br	5511-3553-9520
Lucas Maynard*	Economist – Economic Activity	lucas.maynard.da.silva@santander.com.br	5511-3553-7495
Felipe Kotinda*	Economist – Commodities	felipe.kotinda@santander.com.br	5511-3553-8071
Gabriel Couto*	Economist – Special Projects	gabriel.couto@santander.com.br	5511-3553-8487
Fabiana Moreira*	Economist – Credit	fabiana.de.oliveira@santander.com.br	5511-3553-6120
Gilmar Lima*	Economist – Modeling	gilmar.lima@santander.com.br	5511-3553-6327

Global Macro Research

Maciej Reluga*	Head Macro, Rates & FX Strategy – CEE	maciej.reluga@santander.pl	48-22-534-1888
Rodrigo Park *	Economist – Argentina	rpark@santander.com.ar	54-11-4341-1272
Ana Paula Vescovi*	Economist – Brazil	anavescovi@santander.com.br	5511-3553-8567
Juan Pablo Cabrera*	Economist – Chile	jcabrera@santander.cl	562-2320-3778
Guillermo Aboumrad*	Economist – Mexico	gjaboumrad@santander.com.mx	5255-5257-8170
Piotr Bielski*	Economist – Poland	piotr.bielski@santander.pl	48-22-534-1888
Mike Moran	Head of Macro Research, US	mike.moran@santander.us	212-350-3500

Fixed Income Research

Juan Arranz*	Chief Rates & FX Strategist – Argentina	jarranz@santanderrio.com.ar	5411-4341-1065
Mauricio Oreng*	Senior Economist/Strategist – Brazil	mauricio.oreng@santander.com.br	5511-3553-5404
Juan Pablo Cabrera*	Chief Rates & FX Strategist – Chile	jcabrera@santander.cl	562-2320-3778

Equity Research

Miguel Machado*	Head Equity Research Americas	mmachado@santander.com.mx	5255 5269 2228
Alan Alanis*	Head, Mexico	aalanis@santander.com.mx	5552-5269-2103
Andres Soto	Head, Andean	asoto@santander.us	212-407-0976
Walter Chiarvesio*	Head, Argentina	wchiarvesio@santanderrio.com.ar	5411-4341-1564
Mariana Cahen Margulies*	Head, Brazil	mmargulies@santander.com.br	5511-3553-1684

Electronic

Bloomberg
Reuters

SIEQ <GO>
Pages SISEMA through SISEMZ

This research report (“report”) has been prepared by Santander US Capital Markets LLC (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 report 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. Santander US Capital Markets LLC, 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: Gabriel Couto*.

* Employed by a non-US affiliate of Santander US Capital Markets LLC and is not registered/qualified as a research analyst under FINRA rules and is not an associated person of the member firm and therefore is not subject to FINRA Rule 2241 or FINRA Rule 2242 and restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. The information contained within this report has been compiled from sources believed to be reliable. Although all reasonable care has been taken to ensure the information contained within these reports is not untrue or misleading, we make no representation that such information is accurate or complete and it should not be relied upon as such. All opinions and estimates included within this report constitute our judgment as of the date of the 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 Santander US Capital Markets LLC, 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. Hong Kong (HK): This report is distributed in Hong Kong by Banco Santander, S.A. (a public limited liability company incorporated in Spain) which has a branch in Hong Kong. Banco Santander, S.A., Hong Kong Branch is regulated as a Registered Institution by the Hong Kong Monetary Authority for the conduct of Advising and Dealing in Securities (Regulated Activity Type 4 and 1 respectively) under the Securities and Futures Ordinance. This report is not intended for distribution to any persons other than professional investors. Banco Santander, S.A. or its affiliates may have a holding in any of the securities discussed in this report; for securities where the holding is greater than 1%, the specific holding is disclosed in the Important Disclosures section above. The recipient of this report must not distribute it to any person without the prior written consent of Banco Santander, S.A.. Singapore (SG): This report is distributed in



Singapore by Banco Santander, S.A. which has a branch in Singapore. It is not intended for distribution to any persons other than institutional investors, accredited investors and expert investors (each as defined in the Securities and Futures Act 2001 of Singapore). Recipients of this report should contact Banco Santander, S.A., Singapore Branch at researchsingapore@gruposantander.com for matters arising from, or in connection with, this report. Mainland China (CN): This report is being distributed in Mainland China by Banco Santander, S.A. which has two branches in Mainland China, being Shanghai Branch and Beijing Branch ("Santander China"). Santander China is regulated by China Banking and Insurance Regulatory Commission. Banco Santander, S.A., Shanghai Branch is licensed for foreign currency business, RMB business and derivative business. Banco Santander, S.A., Beijing Branch is licensed with foreign currency business. The recipient of this report must not distribute it to any person without the prior written consent of Banco Santander, S.A. © 2023 by Santander US Capital Markets LLC All Rights Reserved.

