



BRAZIL MACRO

July 28, 2023

DATA ANALYSIS - LABOR MARKET

Felipe Kotinda* felipe.kotinda@santander.com.br +5511 3553-8487

A STILL HOT JOB MARKET

- According to the IBGE's National Household Survey (PNAD), the unemployment rate stood at 8.0% in the three months through June (consensus: 8.2%; Santander: 8.0%), implying a 1.3 p.p. drop from the yearago level (9.3%). We calculate that the seasonally adjusted unemployment rate stood at 8.0% during the period, stable from the May level (8.0%).
- Despite the stability in the seasonally adjusted unemployment rate, June posted variations of 0.2% MoMsa in the employed population and 0.1% MoMsa for the labor force. The labor market participation rate was 61.8% (sa), above May's level (61.7%). If the participation rate were fixed at 63% (pre-pandemic historical average), we calculate that the seasonally adjusted unemployment rate would be at 9.8%.
- All PNAD data is based on a three-month moving average. Our monthly unemployment rate estimate stood at 7.9% (sa) in June, below the 8.0% (sa) in May. This result followed 0.2% MoM-sa and 0.1% MoM-sa variations in the employed population and the labor force, respectively.
- The effective real average income posted a 0.1% MoM-sa variation in May (data lagged one month relative
 to other PNAD series), while usual real average income posted a 0.3% MoM-sa variation in June. Despite
 the positive monthly figures, the overall picture remains of relative stable real income after a strong recovery
 in 2H22.
- According to the June 2023 CAGED survey, net formal job creation stood at 157k, (versus consensus 163k, Santander estimate 154k), above the historical average for the month (+122k) but below that observed in June 2022 (+278k). After our seasonal adjustment, net formal job creation decelerated to 97k, from 131k in May. The number of hirings had a -0.3% MoM-sa variation, while layoffs had a 1.5% MoM-sa variation. The three-month (sa) average now points to a payroll expansion of 124k jobs, a deceleration compared to May. We estimate that the 3mma of CAGED's gap to the unemployment-neutral level (~90k) fell to +36k (+104k in May).
- In our view, June labor market surveys came in line with our expectations, and continued to show a likely overheated job market, with signs of stabilization at the margin. We see the CAGED data still indicating results compatible with a decreasing unemployment rate, though losing steam at the margin. The PNAD survey continues to show flattish overall behavior, considering unemployment and participation rates, as well as real wages. We still believe that the unemployment rate remains low due more to a reduction in the participation rate rather than to employment growth. We expect the unemployment rate to increase in 2H23, but the continuity of a low participation rate could limit this trend.



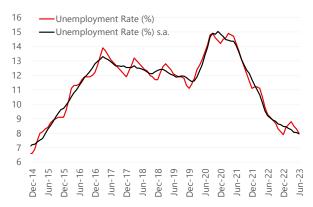
Figure 1 - PNAD Breakdown

	s.a.		% MoM-sa*			% YoY*			
	Apr-23	May-23	Jun-23	Apr-23	May-23	Jun-23	Apr-23	May-23	Jun-23
Unemployment rate (%)	8.1	8.0	8.0	-0.2	0.0	-0.1	-2.0	-1.5	-1.3
Participation rate (%)	61.7	61.7	61.8	-0.1	0.1	0.0	-1.0	-1.0	-1.0
Labor force (millions)	107.5	107.7	107.8	-0.1	0.2	0.1	-0.7	-0.7	-0.7
Employment	98.9	99.0	99.2	0.1	0.2	0.2	1.6	0.9	0.7
Unemployment	8.7	8.7	8.6	-2.3	0.0	-1.1	-19.9	-15.9	-14.2
Formalization Rate (%)	57.9	57.8	57.6	0.0	-0.1	-0.1	0.9	8.0	0.4
Formal Workers (millions)	57.2	57.2	57.2	0.1	0.1	-0.1	3.2	2.2	1.4
Informal Workers (millions)	41.6	41.8	42.0	0.1	0.5	0.5	-0.6	-0.9	-0.4
Average usual earnings (BRL)**	2,923	2,918	2,927	0.1	-0.2	0.3	7.5	6.6	6.2
Average effective earnings (BRL)**	3,025	3,027	-	-0.4	0.1	-	6.7	5.8	-
Usual wage bill (BRL bn)**	283.9	284.0	285.8	0.2	0.0	0.6	9.6	7.9	7.2
Effective wage bill (BRL bn)**	294.4	295.1	-	0.0	0.2	-	8.1	6.7	-

^{*} For rates, change is in percentage points.

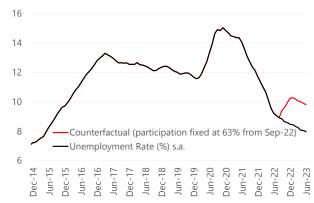
Sources: IBGE, Santander.

Figure 2. Unemployment Rate



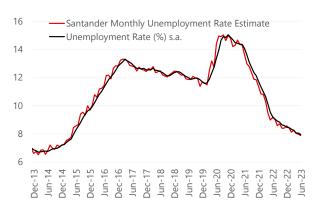
Sources: IBGE, Santander.

Figure 3. Unemployment Rate and Counterfactual (sa)



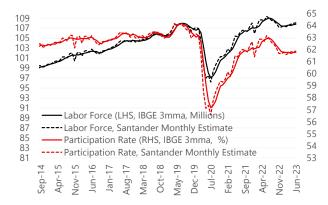
Sources: IBGE, Santander.

Figure 4. Monthly Unemployment Rate (sa)



Sources: IBGE, Santander.

Figure 5. Participation Rate and Employment (sa)



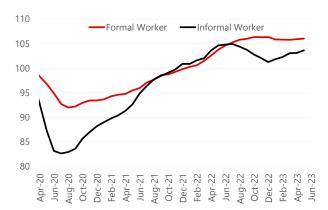
Sources: IBGE, Santander.

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

^{**} In real terms

1

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



Sources: IBGE, Santander.

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

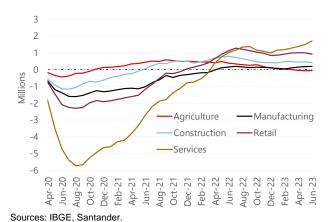


Figure 10. Average Real Income (BRL, sa)



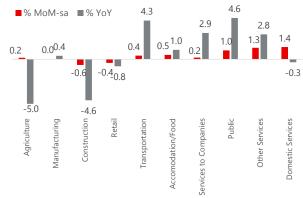
Sources: IBGE, Santander.

Figure 7. Formalization Rate (sa)



Sources: IBGE, Santander.

Figure 9. Employed Population Growth



Sources: IBGE, Santander.

Figure 11. Real Wage Bill (BRL, sa)



Sources: IBGE, Santander.



Figure 12 - CAGED Breakdown (thousands)

	Headline			Headline (s.a.)			
	Apr-23	May-23	Jun-23	Apr-23	May-23	Jun-23	
Net Creation	180	155	157	144	131	97	
Creation	1,865	2,000	1,914	1,918	1,931	1,925	
Destruction	1,685	1,845	1,757	1,774	1,800	1,828	
Mining	2.5	2.6	1.8	1.7	2.1	1.3	
Construction	26.9	28.0	21.0	23.0	18.5	9.8	
Manufacturing	14.2	5.8	9.7	16.6	10.0	10.8	
Utilities	2.1	0.0	0.6	1.4	-0.4	0.3	
Retail	27.6	15.4	20.6	20.8	18.9	17.0	
Agriculture	2.9	19.6	27.2	4.1	-5.0	-5.9	
Services	103.9	83.9	76.4	76.3	86.7	63.9	

Sources: Ministry of Labor, Santander.

Figure 13. Net Formal Job Creation (sa)



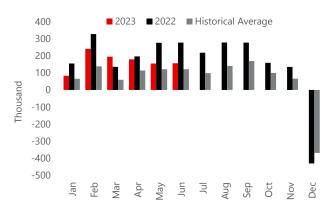
Sources: Ministry of Labor, Santander.

Figure 15. Job Creation and Destruction (sa)



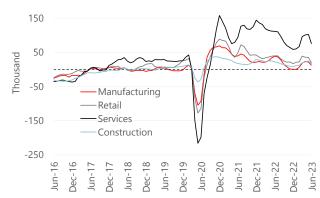
Sources: Ministry of Labor, Santander.

Figure 14. Net Formal Job Creation



Sources: Ministry of Labor, Santander.

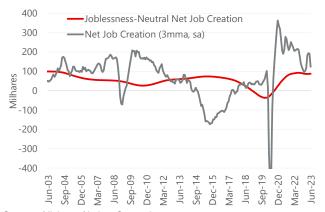
Figure 16. Net Formal Job Creation (3mma, sa)



Sources: Ministry of Labor, Santander.

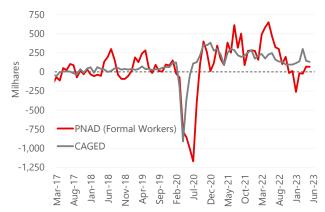


Figure 17. Observed CAGED vs. Neutral



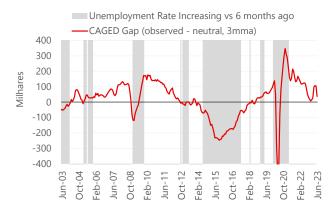
Sources: Ministry of Labor, Santander.

Figure 19. CAGED vs. PNAD Net Formal Job Creation (sa)



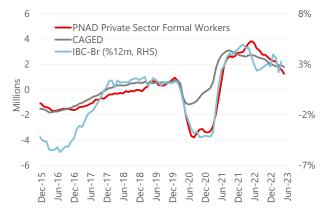
Sources: IBGE, Ministry of Labor, Santander.

Figure 18. Net Formal Job Creation Gap (sa)



Sources: IBGE, Ministry of Labor, Santander.

Figure 20. Net Job Creation and IBC-Br (12m)



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



CONTACTS / IMPORTANT DISCLOSURES

Brozil Maara Basa	anala		
Brazil Macro Rese		10	
Ana Paula Vescovi*	Chief Economist	anavescovi@santander.com.br	5511-3553-8567
Mauricio Oreng*	Head of Macro Research Economist – External Sector	mauricio.oreng@santander.com.br	5511-3553-5404
Jankiel Santos* Ítalo Franca*	Economist – External Sector Economist – Fiscal Policy	jankiel.santos@santander.com.br italo.franca@santander.com.br	5511-3012-5726 5511-3553-5235
Daniel Karp Vasquez*	Economist – Fiscal Folicy Economist – Inflation	daniel.karp@santander.com.br	5511-3553-9828
Tomas Urani*	Economist – Illiation Economist – Global Economics	tomas.urani@santander.com.br	5511-3553-9520
Henrique Danyi Correia*	Economist – Credit / Monetary Policy	henrique.danyi@santander.com.br	5511-3553-5404
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
Gilmar Lima*	Economist – Modeling	gilmar.lima@santander.com.br	5511-3553-6327
Global Macro Rese	earch	·	
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 Rese	earch		
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
Aline de Souza Cardoso*	Head, Brazil	aline.souza.cardoso@santander.com.br	5511-3553-1684
Electronic			

Bloomberg SIEQ <GO>
Reuters 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: Felipe Kotinda*. 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.

