

BRAZIL MACRO

DATA ANALYSIS – LABOR MARKET

No News is Good News

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

- According to the IBGE's National Household Survey (PNAD), the unemployment rate stood at 8.3% in the three months through May, in line with our estimate and the market consensus, and implying a 1.5 p.p. drop from the year-ago level (9.8%). We calculate that the seasonally adjusted unemployment rate stood at 8.2% during the period, slightly above the April level (8.1%).
- The drop in the seasonally adjusted unemployment rate stemmed from +0.2% MoM-sa variations in both the employed population and the labor force. The labor market participation rate was 61.8% (sa), above the April level (61.7%). If the participation rate were fixed at 63% (pre-pandemic historical average), we calculate that the seasonally adjusted unemployment rate would have been 9.9% in May.
- All PNAD data is based on a three-month moving average. Our monthly unemployment rate estimate stood at 8.1% (sa) in May, stable compared to April. This estimate stemmed from +0.2% and +0.1% MoM-sa variations in the employed population and the labor force, respectively.
- Effective real average income posted a -0.4% MoM sa variation in April (data lagged one month relative to other PNAD series), while usual real average income posted a -0.3% MoM-sa variation in May. Despite the negative monthly figures, the overall picture remains of relative stability in real income after a strong recovery in 2H22.
- According to the May CAGED survey, released on June 29, net formal job creation stood at +155k (versus consensus +190k, Santander estimate +150k), above the historical average for the month (+122k) but below the observed in May 2022 (+277k). After our seasonal adjustment, net formal job creation decelerated to 141k, from 152k in April. The number of hirings increased 0.7% MoM-sa, while layoffs increased 1.4% MoM-sa. CAGED results remained considerably above our estimate for the joblessness-neutral level. We estimate that the 3mma of CAGED's gap to the joblessness-neutral level (~90k) stood at +113k (+112k in April).
- In our view, May labor market surveys were in line with expectations, and continued to show a likely
 overheated job market, with roughly the same picture observed since January. We see the CAGED data
 still indicating result compatible with a decreasing unemployment rate. The PNAD survey continues to show
 a 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 than
 to employment growth. We expect the unemployment rate to increase in 2H23, but the continuity of a low
 participation rate should limit this trend.

June 30, 2023

Figure 3. Unemployment Rate and Counterfactual (sa)



PNAD Household Survey

According to the IBGE National Household Survey (PNAD), the unemployment rate stood at 8.3% in the three months to May, in line with both our estimate and the market consensus, implying a 1.5 p.p. drop from the year-ago rate of 9.8%. We calculate that the seasonally adjusted unemployment rate stood at 8.2%, slightly above the April level (8.1%). The performance of the seasonally adjusted unemployment rate stemmed from +0.2% MoM-sa variations in both the employed population and the labor force.

	s.a.		% MoM-sa*			% YoY*			
	Mar-23	Apr-23	May-23	Mar-23	Apr-23	May-23	Mar-23	Apr-23	May-23
Unemployment rate (%)	8.3	8.1	8.2	-0.1	-0.1	0.0	-2.3	-2.0	-1.5
Participation rate (%)	61.8	61.7	61.8	0.0	-0.1	0.1	-0.5	-1.0	-1.0
Labor force (millions)	107.6	107.6	107.9	0.2	0.0	0.2	0.0	-0.7	-0.7
Employment	98.7	98.9	99.1	0.2	0.2	0.2	2.7	1.6	0.9
Unemployment	8.9	8.8	8.8	-0.7	-1.7	0.6	-21.1	-19.9	-15.9
Formalization Rate (%)	57.9	57.9	57.8	-0.2	0.0	-0.1	0.8	0.9	0.8
Formal Workers (millions)	57.1	57.2	57.3	0.0	0.2	0.1	4.1	3.2	2.2
Informal Workers (millions)	41.6	41.6	41.8	0.8	0.0	0.5	0.8	-0.6	-0.9
Average usual earnings (BRL)**	2,909	2,910	2,903	0.0	0.1	-0.3	7.3	7.4	6.5
Average effective earnings (BRL)**	3,026	3,013	-	1.0	-0.4	-	8.0	6.7	-
Usual wage bill (BRL bn)**	282.3	282.8	282.7	0.2	0.2	0.0	10.8	9.6	7.9
Effective wage bill (BRL bn)** * For rates, change is in percentage points.	293.3	293.4	-	0.3	0.0	-	10.2	8.1	-

Figure 1 – PNAD Breakdown

** In real terms

Sources: IBGE, Santander.

The labor market participation rate stood at 61.8% (sa), above the April level (61.7%). If the participation rate were fixed at 63% (pre-pandemic historical average), we calculate that the seasonally adjusted unemployment rate would have been 9.9%.

Figure 2. Unemployment Rate

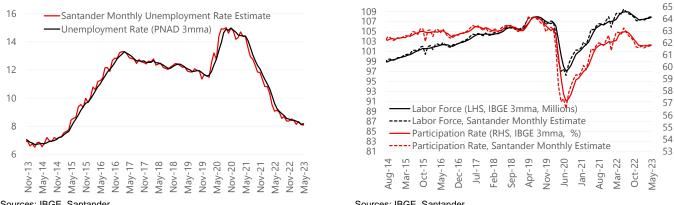


Sources: IBGE, Santander.

All PNAD data is based on three-month moving averages. Our monthly unemployment rate estimate stood at 8.1% (sa) in May, stable compared to April. This estimate stemmed from +0.2% and +0.1% MoM-sa variations in the employed population and the labor force, respectively.

Figure 4. Monthly Unemployment Rate (sa)

Figure 5. Participation Rate and Employment (sa)



Sources: IBGE, Santander,

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.

Formal employment posted a +0.1% MoM-sa variation, while informal employment had a +0.5% MoM-sa variation. This result led the formalization rate to 57.8% (sa), below the April level (57.9%). After reaching a peak of 58.4% in December 2022, the formalization rate has stabilized at levels slightly below 58%.

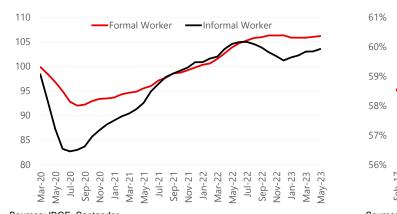
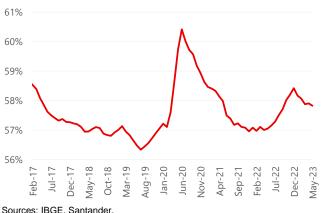


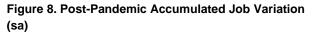
Figure 6. Employed Population (sa, Jan-20=100)

Figure 7. Formalization Rate (sa)



Sources: IBGE, Santander,

The services sector was the highlight of job creation in May, with the exception of the transportation segment, which showed a contraction compared to April. Agriculture also contributed negatively to employment in May, as manufacturing, retail and construction remained close to stability at the margin. In our view, more cyclesensitive sectors tend to signal deceleration or stability in employment ahead, due to tight financial conditions.



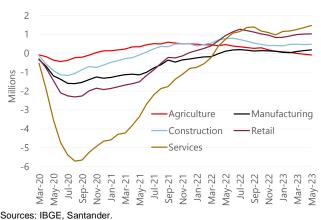
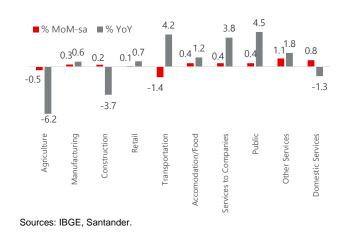


Figure 9. Employed Population Growth



The effective real average income posted a -0.4% MoM sa variation in April (data lagged one month relative to other PNAD series), while usual real average income posted a -0.3% MoM-sa variation in May. Despite the negative monthly figures, the overall picture remains of relative stability in real income after a strong recovery in 2H22.

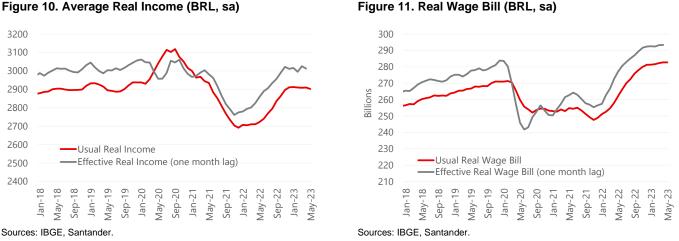


Figure 10. Average Real Income (BRL, sa)

CAGED Formal Job Survey

According to the May CAGED survey, released on June 29, net formal job creation stood at +155k (versus consensus +190k, Santander estimate +150k), above the historical average for the month (+122k) but below the observed in April 2022 (+277k). After our seasonal adjustment, net formal job creation decelerated to 141k from 152k in April. The number of hirings had a +0.7% MoM-sa variation, while layoffs had a +1.4% MoM-sa variation. The three-month average now points to a payroll expansion of 199k jobs, stable compared to April. We estimate that the 3mma of CAGED's gap to the joblessness-neutral level (~90k) stood at +113k (+112k in April). In the past three months, the gap has increased considerably¹.

With the May result, the 12-month accumulated net job creation reached 1.784 million (adjusted to postdeadline declarations), from 1.906 million in April. Overall, the main sectors indicated relatively stable performances from April. Services had the most relevant acceleration, to 92k (sa) from 80k in April. On the other hand, retail, construction and manufacturing decelerated, and have offset the positive influence from services.

/ar-23 <mark>195.2</mark> 2,168 1,973	Apr-23 180.0 1,865 1,685	May-23 155.3 2,000	Mar-23 305.6 2,070	Apr-23 151.6 1,922	May-23 141.4 1,936
2,168	1,865				
•	-	2,000	2,070	1,922	1 936
1,973	1 605				1,550
	1,685	1,845	1,764	1,771	1,795
1.6	2.5	2.6	1.9	1.6	2.1
33.6	26.9	28.0	32.9	24.3	20.3
17.9	14.2	5.8	38.4	17.8	12.9
1.5	2.1	0.0	1.7	1.4	-0.4
18.6	27.6	15.4	66.4	21.1	19.7
-0.3	2.9	19.6	17.2	5.0	-5.0
122.3	103.9	83.9	147.1	80.3	91.8
	1.6 33.6 17.9 1.5 18.6 -0.3	1.6 2.5 33.6 26.9 17.9 14.2 1.5 2.1 18.6 27.6 -0.3 2.9	1.6 2.5 2.6 33.6 26.9 28.0 17.9 14.2 5.8 1.5 2.1 0.0 18.6 27.6 15.4 -0.3 2.9 19.6	1.62.52.61.933.626.928.032.917.914.25.838.41.52.10.01.718.627.615.466.4-0.32.919.617.2	1.62.52.61.91.633.626.928.032.924.317.914.25.838.417.81.52.10.01.71.418.627.615.466.421.1-0.32.919.617.25.0

Figure 12 – CAGED Breakdown (thousands)

Sources: Ministry of Labor, Santander.

¹ Santander Brazil Special Report: "Estimating a Neutral Level for Caged Net Job Creation Data" – August 15, 2022 – Available on: https://bit.ly/Std-special-081522

5

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 17. Observed CAGED vs. Neutral

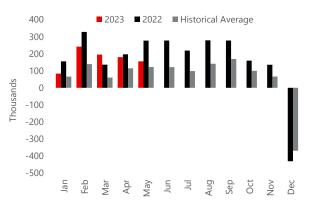


Sources: Ministry of Labor, Santander.

Final Remarks

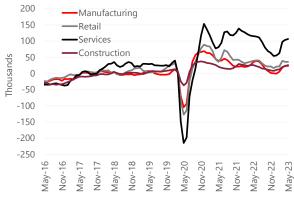
In our view, May labor market surveys were in line with expectations, and continued to show a likely overheated job market, with roughly the same picture observed since January. We see the CAGED data still indicating a result compatible with a decreasing unemployment rate. The PNAD survey continues to show a 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 than to employment growth. We expect the unemployment rate to increase in 2H23, but the continuity of a low participation rate should limit this trend.

Figure 14. Net Formal Job Creation



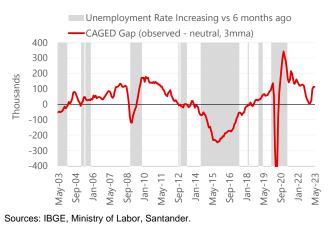
Sources: Ministry of Labor, Santander.

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



Sources: Ministry of Labor, Santander.

Figure 18. Net Formal Job Creation Gap (sa)



0



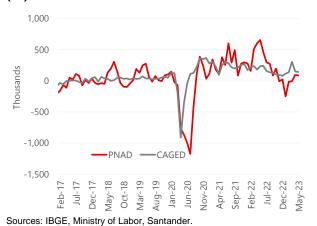
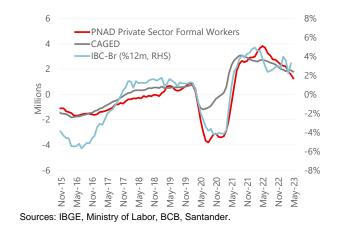


Figure 20. Net Job Creation and IBC-Br (12m)





CONTACTS / IMPORTANT DISCLOSURES

Brazil Macro Rese	arch				
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		
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* Gilmar Lima*	Economist – Special Projects	gabriel.couto@santander.com.br	5511-3553-8487		
Global Macro Rese	Economist – Modeling	gilmar.lima@santander.com.br	5511-3553-6327		
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		
Aline de Souza Cardoso*	Head, Brazil	aline.souza.cardoso@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.

