

INDUSTRIAL PRODUCTION PARTIALLY REBOUNDS IN AUGUST

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

- **Industrial production (IP) increased 0.4% MoM-sa (+0.5% YoY) in August**, slightly below market consensus of +0.5% MoM-sa (+1.0% YoY) and above our forecast of -0.3% MoM-sa (-0.5% YoY). August's figure reflected an increase in manufacturing (+1.0% MoM-sa), as mining decreased (-2.7% MoM-sa).
- **Across major economic categories, a positive showing.** Durable goods (+8.0% MoM-sa) and capital goods (+4.3% MoM-sa) were the highlights, partially recovering from recent decreases. Also on the positive side, nondurable goods (+1.0% MoM-sa) maintained a positive trend, with the third increase in a row. The only negative contribution came from intermediate goods (-0.3% MoM-sa), the fourth decrease in a row.
- **In the breakdown, 19 of 25 industrial activities expanded at the margin, with the diffusion index increasing to 76% (from 40% in July).** In terms of contribution, pharmaceuticals (+0.45 p.p.), computer equipment (+0.33 p.p.) and vehicles (+0.32 p.p.) contributed the most, while mining (-0.39 p.p.) miscellaneous goods (-0.10 p.p.) and leather, travel items and footwear (-0.06 p.p.) contributed the least.
- **All in all, a partial recovery print for IP in August.** The breakdown shows that economic categories that tumbled in recent months have partially rebounded. Meanwhile, mining had the second contraction in a row. Despite the positive monthly print, capital goods continue to indicate a negative trend of late, bringing doubt on the outlook for fixed investments. In quarterly terms, August's result implies a -0.2% QoQ-sa carryover to 3Q23. For manufacturing, we calculate a +0.2% QoQ-sa carryover to 3Q23.
- **We continue to see signs of deceleration for broad activity ahead, as we expect more cyclical segments to indicate a continued slowing trend owing to highly restrictive financial conditions.** In addition, we expect the positive impact of the record summer crops to be limited to 1Q23 and the beginning of 2Q23.
- **Our IBC-Br tracking for August is at -0.8% MoM-sa.** Our 3Q23 GDP growth tracking is currently at -0.3% QoQ-sa. We continue to see signs of deceleration for broad activity ahead, as more cyclical segments indicate a continued slowing trend owing to highly restrictive financial conditions. In addition, we expect a negative contribution for farm output at the margin, following broad expansion in 1H23

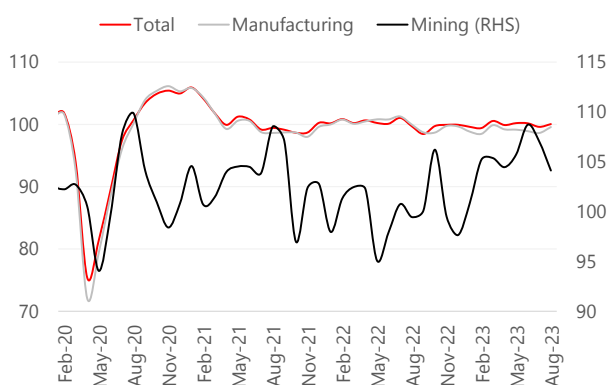


Figure 1 – Monthly Industrial Survey

Industrial Production Breakdown										
	Weights	% MoM-s.a.			% YoY			% QoQ		
		Jun-23	Jul-23	Aug-23	Jun-23	Jul-23	Aug-23	Feb-23	Jun-23	Aug-23
Total Industry	100%	0.0	-0.6	0.4	0.2	-1.1	0.5	0.3	0.2	-0.3
Mining	15%	2.8	-1.6	-2.7	10.9	7.0	3.8	-0.7	2.4	1.4
Manufacturing	85%	-0.2	-0.3	1.0	-1.6	-2.5	-0.1	-0.1	0.0	-0.4
Capital Goods	6%	-2.3	-7.7	4.3	-11.1	-16.9	-15.4	-4.2	-5.5	-7.8
Intermediate Goods	61%	-0.3	-0.5	-0.3	1.8	0.0	0.4	0.0	1.0	-0.7
Consumer goods	32%	0.3	1.6	1.4	-0.7	-0.7	3.4	2.2	0.2	2.0
Durable	4%	-5.5	-3.9	8.0	-4.0	-3.5	2.8	-4.2	-5.5	-7.8
Non-Durable	27%	0.7	1.7	1.0	-0.1	-0.3	3.5	0.0	1.0	-0.7
Construction Supplies	-	0.1	-0.1	-1.5	-1.5	-1.1	-2.0	-1.2	0.1	-0.6

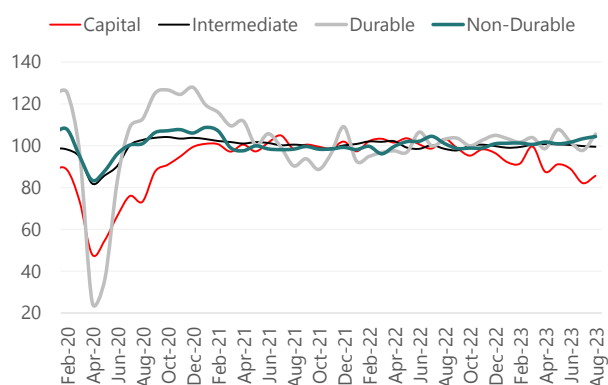
Sources: IBGE, Santander.

Figure 2 – Industrial Production Index (sa, 2022=100)



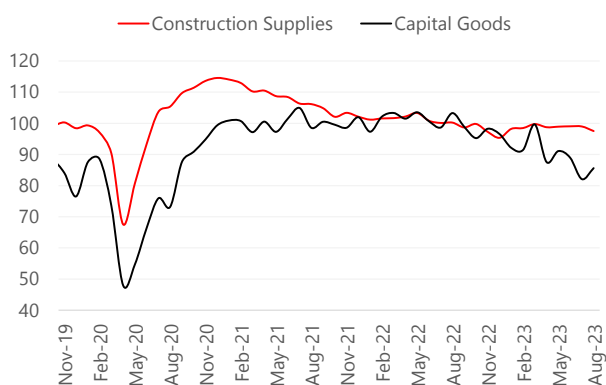
Sources: IBGE, Santander.

Figure 3 – Economic Categories (sa, 2022=100)



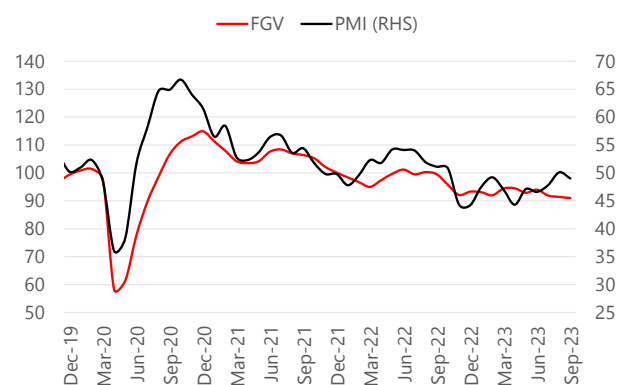
Sources: IBGE, Santander.

Figure 4 – Related to Investment (sa, 2022=100)



Sources: IBGE, Santander.

Figure 5 – Manufacturing Soft Data (sa)*



Sources: Markit, FGV, Santander.

* Neutral level: 100 points for FGV and 50 points for PMI.



Figure 6 - Industrial Production by Activity

	Industrial Activities Breakdown									
	Weights	% MoM			% YoY			% QoQ		
		Jun-23	Jul-23	Aug-23	Jun-23	Jul-23	Aug-23	Apr-23	Jul-23	Aug-23
Mining	14.6%	2.8	-1.6	-2.7	10.9	7.0	3.8	-0.7	2.4	1.4
Food products	15.1%	-0.2	0.9	1.0	5.1	4.5	7.6	-2.8	-4.0	-1.8
Oil and biofuel coke	13.5%	-3.3	1.1	0.2	4.5	1.6	6.5	2.5	9.0	3.5
Vehicles	6.2%	-3.5	-6.5	5.2	-5.2	-9.5	-10.7	-6.4	0.2	-2.7
Metallurgy	4.9%	-0.6	-0.8	-1.1	0.3	-2.4	-4.5	-1.1	1.1	-0.3
Chemical products	7.4%	-0.4	0.3	2.2	-11.1	-6.7	-4.5	-2.9	-0.7	0.1
Machines and equipments	3.8%	-5.6	-4.9	4.2	-6.7	-9.8	-7.0	-0.8	1.3	-3.4
Metallic products except machines and equipments	3.0%	1.7	-4.7	1.9	-1.3	-3.4	0.0	-3.6	2.1	1.7
Non-metallic minerals	2.7%	-0.5	0.1	-0.2	-5.4	-4.0	-6.1	0.7	1.4	0.5
Rubber and plastic products	3.4%	1.6	-3.8	2.9	1.9	-3.7	-0.2	0.9	-0.3	-0.1
Beverages	3.0%	-0.4	-1.2	1.3	-2.2	-3.6	-2.3	3.5	-1.8	-1.3
Cellulose,paper and paper-based products	3.7%	-0.4	0.7	0.0	-5.0	-5.7	-4.2	-1.3	-0.4	-0.2
Machines, equipments and electric material	2.3%	0.5	-1.4	1.9	-12.6	-10.1	-7.2	-6.4	-0.1	0.3
Computer equipments, electronics and optical products	2.0%	-4.7	-14.4	16.6	-15.1	-25.3	-9.4	2.7	-11.3	-12.3
Pharmaceuticals	2.4%	-9.2	9.3	18.6	-8.7	-5.6	8.6	-5.9	-12.4	-4.1
Manufacture of clothing and accessories	2.0%	5.5	-8.1	2.8	-4.6	-9.6	-7.9	1.1	-1.2	0.4
Leather, travel items and footwears	1.4%	-6.0	1.7	-4.2	-9.4	2.5	-5.2	5.2	2.4	-3.3
Textile products	1.3%	-0.1	-0.2	-1.0	-1.4	-0.5	2.1	4.8	1.2	0.2
Other transport equipments, except motor vehicles	1.1%	-6.3	-0.9	1.4	10.1	9.8	7.6	3.6	1.8	-2.5
Repair of machines and equipments	1.6%	0.9	2.1	0.2	-3.6	3.5	2.9	0.5	4.2	4.1
Furniture	1.2%	-2.3	-4.4	5.1	-7.9	-9.0	-1.4	0.9	-6.2	-4.8
Wood products	1.1%	-1.6	0.2	4.9	-12.6	-8.8	-1.9	2.7	0.1	0.8
Printing and playback of recordings	0.6%	-2.3	5.1	1.4	25.3	29.8	27.6	11.2	11.6	7.9
Miscellaneous	1.2%	-4.3	-5.6	-8.0	-2.2	-8.1	-18.3	1.3	3.1	-5.1
Tobacco products	0.4%	-0.1	-2.1	7.2	6.0	3.3	14.7	4.7	-0.5	2.0

Sources: IBGE, Santander.

Figure 7 - Heatmap Showing Industrial Production by Activity (% MoM-sa)

Weight	By Activity (% MoM sa)													
		Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
14.6%	Mining	-1.29	0.65	6.10	-6.32	-1.86	3.27	4.32	0.16	-0.86	1.21	2.83	-1.56	-2.71
15.1%	Food products	-1.79	-2.97	7.07	7.00	4.39	-3.03	-1.13	-0.17	-2.84	-2.24	-0.24	0.90	0.99
13.5%	Oil and biofuel coke	-5.37	-3.44	-1.26	1.30	-0.41	-1.34	0.70	2.45	3.63	7.60	-3.29	1.09	0.16
6.2%	Vehicles	9.59	1.05	-9.71	7.67	-3.61	-5.76	-0.05	-0.46	-2.84	6.98	-3.48	-6.47	5.23
4.9%	Metallurgy	1.30	-7.45	5.15	4.29	-6.77	-0.93	1.77	0.68	-0.87	2.12	-0.56	-0.77	-1.10
7.4%	Chemical products	-0.16	0.05	-3.77	1.25	-0.71	-1.42	-2.16	0.38	0.53	-0.99	-0.39	0.33	2.16
3.8%	Machines and equipments	2.78	-2.43	-3.44	0.19	-2.95	0.59	-0.82	7.31	-11.95	13.90	-5.57	-4.94	4.21
3.0%	Metallic products except machines and equipments	-1.36	2.18	-1.14	-1.79	6.57	-3.42	-0.95	-1.04	-5.19	6.74	1.71	-4.74	1.94
2.7%	Non-metallic minerals	2.40	-3.26	-2.13	-1.34	-4.25	2.69	0.04	1.63	-2.08	2.64	-0.55	0.12	-0.18
3.4%	Rubber and plastic products	-0.22	-0.75	-3.07	1.68	-0.16	1.54	-0.20	0.49	-0.50	0.13	1.62	-3.79	2.85
3.0%	Beverages	0.78	-4.61	-6.39	7.38	-1.64	1.17	3.85	0.68	-2.96	0.63	-0.39	-1.17	1.34
3.7%	Cellulose,paper and paper-based products	-1.78	-1.67	-1.58	0.48	0.29	-1.34	-0.50	0.01	0.09	-0.48	-0.40	0.74	0.02
2.3%	Machines, equipments and electric material	-0.17	0.39	-2.59	0.03	0.99	-3.96	-4.08	1.85	-3.93	2.17	0.47	-1.37	1.90
2.0%	Computer equipments, electronics and optical products	-3.50	-1.33	-0.80	-3.10	2.61	-2.68	1.53	8.75	-10.18	0.53	-4.65	-14.45	16.56
2.4%	Pharmaceuticals	3.67	-6.63	0.95	7.12	17.46	-12.69	-2.24	0.54	-0.56	-9.29	-9.15	9.32	18.55
2.0%	Manufacture of clothing and accessories	2.91	-3.47	-9.58	-2.92	11.96	0.99	-0.21	-4.29	-0.27	-0.37	5.53	-8.08	2.79
1.4%	Leather, travel items and footwears	4.66	-0.88	-10.05	-1.00	5.70	0.35	0.59	3.44	0.55	4.57	-6.02	1.74	-4.16
1.3%	Textile products	-4.65	-1.80	1.12	-4.95	3.08	2.86	1.44	0.45	0.41	0.97	-0.12	-0.23	-0.98
1.1%	Other transport equipments, except motor vehicles	2.37	3.19	-0.11	-1.28	2.66	2.88	0.54	3.69	-6.39	10.07	-6.31	-0.91	1.41
1.6%	Repair of machines and equipments	1.46	-2.05	-4.29	0.58	2.38	0.24	-1.38	1.33	0.13	2.29	0.93	2.15	0.24
1.2%	Furniture	-2.39	-0.56	-8.07	7.73	5.76	1.75	0.68	-4.06	-0.17	-1.91	-2.27	-4.36	5.06
1.1%	Wood products	-1.89	-8.75	-10.76	11.31	-0.42	2.04	1.44	0.37	-0.56	1.40	-1.64	0.16	4.89
0.6%	Printing and playback of recordings	0.73	-4.51	3.99	-0.49	6.25	-3.07	8.06	0.93	7.18	6.11	-2.28	5.12	1.37
1.2%	Miscellaneous	6.38	-6.61	-8.77	10.10	-14.22	10.44	1.44	-2.35	0.37	8.71	-4.30	-5.57	-7.97
0.4%	Tobacco products	-1.18	9.73	-3.68	1.57	-7.27	8.05	4.92	-2.02	-4.26	3.95	-0.11	-2.10	7.19

Sources: IBGE, Santander.



Figure 8 - Heatmap Showing Industrial Production by Activity (contribution)

Weight		By Activity (Contribution p.p, sa)												
		Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
14.6%	Mining	-0.19	0.09	0.89	-0.92	-0.27	0.48	0.63	0.02	-0.13	0.18	-0.41	-0.23	-0.39
15.1%	Food products	-0.27	-0.45	1.07	1.06	0.66	-0.46	-0.17	-0.03	-0.43	-0.34	-0.04	0.14	0.15
13.5%	Oil and biofuel coke	-0.73	-0.47	-0.17	0.18	-0.06	-0.18	0.09	0.33	0.49	1.03	-0.44	0.15	0.02
6.2%	Vehicles	0.59	0.07	-0.60	0.47	-0.22	-0.36	0.00	-0.03	-0.18	0.43	-0.22	-0.40	0.32
4.9%	Metallurgy	0.06	-0.37	0.25	0.21	-0.33	-0.05	0.09	0.03	-0.04	0.10	-0.03	-0.04	-0.05
7.4%	Chemical products	-0.01	0.00	-0.28	0.09	-0.05	-0.11	-0.16	0.03	0.04	-0.07	-0.03	0.02	0.16
3.8%	Machines and equipments	0.11	-0.09	-0.13	0.01	-0.11	0.02	-0.03	0.28	-0.46	0.53	-0.21	-0.19	0.16
3.0%	Metallic products except machines and equipments	-0.04	0.07	-0.03	-0.05	0.20	-0.10	-0.03	-0.03	-0.16	0.20	0.05	-0.14	0.06
2.7%	Non-metallic minerals	0.06	-0.09	-0.06	-0.04	-0.11	0.07	0.00	0.04	-0.06	0.07	-0.01	0.00	0.00
3.4%	Rubber and plastic products	-0.01	-0.03	-0.11	0.06	-0.01	0.05	-0.01	0.02	-0.02	0.00	0.06	-0.13	0.10
3.0%	Beverages	0.02	-0.14	-0.19	0.22	-0.05	0.04	0.12	0.02	-0.09	0.02	-0.01	-0.03	0.04
3.7%	Cellulose,paper and paper-based products	-0.07	-0.06	-0.06	0.02	0.01	-0.05	-0.02	0.00	0.00	-0.02	-0.01	0.03	0.00
2.3%	Machines, equipments and electric material	0.00	0.01	-0.06	0.00	0.02	-0.09	-0.09	0.04	-0.09	0.05	0.01	-0.03	0.04
2.0%	Computer equipments, electronics and optical products	-0.07	-0.03	-0.02	-0.06	0.05	-0.05	0.03	0.18	-0.21	0.01	-0.09	-0.29	0.33
2.4%	Pharmaceuticals	0.09	-0.16	0.02	0.17	0.42	-0.31	-0.05	0.01	-0.01	-0.22	-0.22	0.23	0.45
2.0%	Manufacture of clothing and accessories	0.06	-0.07	-0.19	-0.06	0.24	0.02	0.00	-0.09	-0.01	-0.01	0.11	-0.16	0.06
1.4%	Leather, travel items and footwears	0.07	-0.01	-0.14	-0.01	0.08	0.01	0.01	0.05	0.01	0.07	-0.09	0.02	-0.06
1.3%	Textile products	-0.06	-0.02	0.01	-0.06	0.04	0.04	0.02	0.01	0.01	0.01	0.00	0.00	-0.01
1.1%	Other transport equipments, except motor vehicles	0.03	0.04	0.00	-0.01	0.03	0.03	0.01	0.04	-0.07	0.11	-0.07	-0.01	0.02
1.6%	Repair of machines and equipments	0.02	-0.03	-0.07	0.01	0.04	0.00	-0.02	0.02	0.00	0.04	0.01	0.03	0.00
1.2%	Furniture	-0.03	-0.01	-0.09	0.09	0.07	0.02	0.01	-0.05	0.00	-0.02	-0.03	-0.05	0.06
1.1%	Wood products	-0.02	-0.09	-0.11	0.12	0.00	0.02	0.02	0.00	-0.01	0.01	-0.02	0.00	0.05
0.6%	Printing and playback of recordings	0.00	-0.03	0.02	0.00	0.04	-0.02	0.05	0.01	0.04	0.04	-0.01	0.03	0.01
1.2%	Miscellaneous	0.08	-0.08	-0.11	0.12	-0.17	0.13	0.02	-0.03	0.00	0.11	-0.05	-0.07	-0.10
0.4%	Tobacco products	0.00	0.04	-0.02	0.01	-0.03	0.03	0.02	-0.01	-0.02	0.02	0.00	-0.01	0.03

Sources: IBGE, Santander.



CONTACTS / IMPORTANT DISCLOSURES

Brazil Macro Research

Ana Paula Vescovi*	Chief Economist	anavescovi@santander.com.br	5511-3553-8567
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
Adriano Valladao Ribeiro*	Economist – Inflation	adriano.ribeiro@santander.com.br	5511-3553-7495
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	5511-3553-7350
Felipe Kotinda*	Economist – Commodities	felipe.kotinda@santander.com.br	5511-3553-8071
Gabriel Couto*	Economist – Activity	gabriel.couto@santander.com.br	5511-3553-8487
Gilmar Lima*	Economist – Modeling	gilmar.lima@santander.com.br	5511-3553-6327
Ana Julia Carvalho*	Economist – Special Projects	ana.carvalho.silva@santander.com.br	5511-3553-8071

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
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

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