

INDUSTRIAL PRODUCTION: A WEAK START TO 3Q23

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- **Industrial production (IP) decreased 0.6% MoM-sa (-1.1% YoY) in June.** This result was below both market consensus of -0.3% MoM-sa (-0.5% YoY) and our forecast of +0.3% MoM-sa (0.4% YoY). July's figure reflected a drop in both manufacturing (-0.4% MoM-sa) and mining (-1.4% MoM-sa).
- **Across major economic categories, a negative showing.** Durable goods (-4.1% MoM-sa), capital goods (-7.4% MoM-sa) and intermediate goods (-0.6% MoM-sa) were the negative highlights. On the positive side, only nondurable goods (+1.5% MoM-sa) contributed positively.
- **In the breakdown, 9 of 25 industrial activities expanded at the margin, with the diffusion index increasing to 36% (from 24% in June).** In terms of contribution, pharmaceuticals (+0.43 p.p.) and food products (+0.13 p.p.) contributed the most, while vehicles (-0.40 p.p.), computer equipment (-0.24 p.p.) and mining (-0.21 p.p.) contributed the least.
- **All in all, a negative print for IP in July.** The breakdown shows some worrying signals, as there was another negative result from manufacturing, this time in tandem with a tumble in mining. Capital goods continue to indicate a negative trend, and the diffusion index remained at low levels. In quarterly terms, July's result implies a -0.5% QoQ-sa carryover to 3Q23. For manufacturing, we calculate a -0.7% QoQ-sa carryover to 3Q23.
- **We believe contractionary effects of shaky financial conditions started to materialize in 3Q22, mainly affecting goods-related sectors.** In our view, restrictive financial conditions are likely to continue stifling the performance of industrial output and retail sales in the coming quarters.
- **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 was limited to 1Q23 and the beginning of 2Q23.

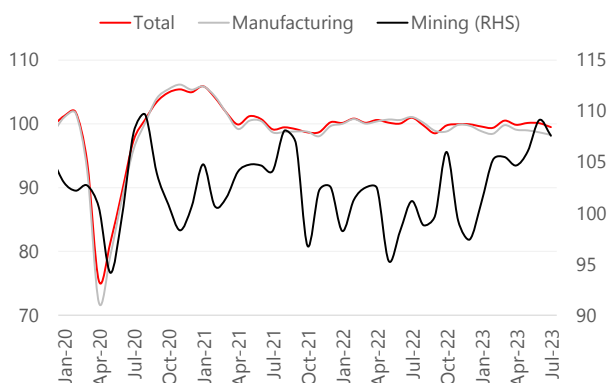


Figure 1 – Monthly Industrial Survey

	Industrial Production Breakdown									
	Weights	% MoM-s.a.			% YoY			% QoQ		
		May-23	Jun-23	Jul-23	May-23	Jun-23	Jul-23	Mar-23	Jun-23	Jul-23
Total Industry	100%	0.3	0.0	-0.6	1.9	0.2	-1.1	-0.1	0.2	0.0
Mining	15%	1.3	2.9	-1.4	12.0	10.9	7.0	3.0	2.6	2.3
Manufacturing	85%	-0.1	-0.3	-0.4	0.3	-1.6	-2.5	-0.4	-0.1	-0.5
Capital Goods	6%	4.0	-2.3	-7.4	-11.3	-11.1	-16.9	-2.5	-5.4	-5.7
Intermediate Goods	61%	0.0	-0.3	-0.6	3.1	1.8	0.0	-0.5	1.0	0.2
Consumer goods	32%	-0.7	0.1	1.4	2.4	-0.7	-0.7	0.9	0.0	0.3
Durable	4%	9.2	-5.7	-4.1	11.1	-4.0	-3.5	-2.5	-5.4	-5.7
Non-Durable	27%	-1.0	0.7	1.5	1.0	-0.1	-0.3	-0.5	1.0	0.2
Construction Supplies	-	0.4	-0.3	0.2	-2.1	-1.5	-1.1	1.4	0.1	0.0

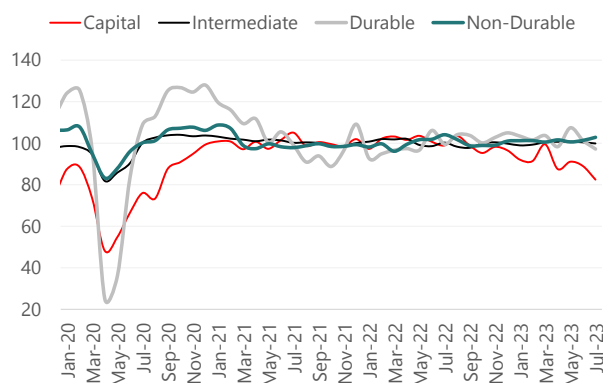
Sources: IBGE, Santander.

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



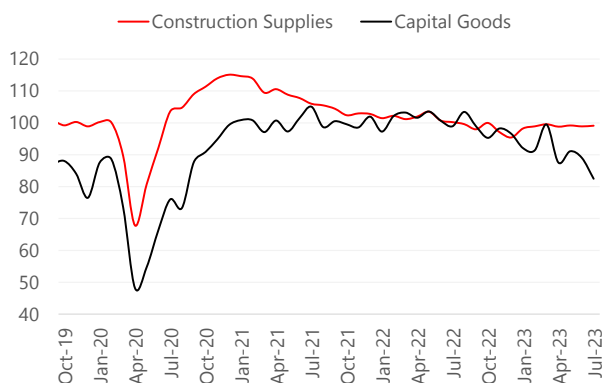
Sources: IBGE, Santander.

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



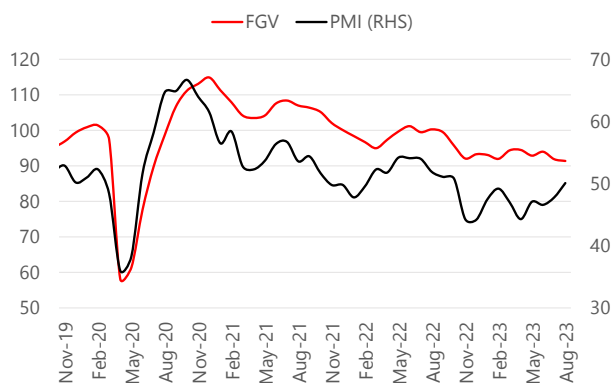
Sources: IBGE, Santander.

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		
		May-23	Jun-23	Jul-23	May-23	Jun-23	Jul-23	Mar-23	Jun-23	Jul-23
Mining	14.6%	1.3	2.9	-1.4	12.0	10.9	7.0	3.0	2.6	2.3
Food products	15.1%	-2.3	-0.3	0.9	6.1	5.1	4.5	1.2	-4.9	-4.2
Oil and biofuel coke	13.5%	7.6	-3.4	0.7	7.0	4.5	1.6	0.0	9.4	8.7
Vehicles	6.2%	7.0	-3.4	-6.5	2.8	-5.2	-9.5	-6.2	0.1	0.2
Metallurgy	4.9%	2.2	-0.4	-0.8	-1.0	0.3	-2.4	-2.8	1.5	1.3
Chemical products	7.4%	-1.0	-0.4	0.2	-7.5	-11.1	-6.7	-2.9	-0.9	-0.8
Machines and equipments	3.8%	14.0	-5.6	-5.0	-2.2	-6.7	-9.8	0.3	-1.5	1.3
Metallic products except machines and equipments	3.0%	6.7	1.7	-4.8	-4.3	-1.3	-3.4	-0.9	-1.4	2.1
Non-metallic minerals	2.7%	2.6	-0.6	0.1	-5.9	-5.4	-4.0	-0.1	0.6	1.4
Rubber and plastic products	3.4%	-0.1	1.7	-3.8	-1.1	1.9	-3.7	1.8	0.1	-0.5
Beverages	3.0%	0.5	-0.5	-1.3	-3.2	-2.2	-3.6	5.5	-1.2	-2.0
Cellulose,paper and paper-based products	3.7%	-0.4	-0.4	0.6	0.9	-5.0	-5.7	-1.3	-0.6	-0.6
Machines, equipments and electric material	2.3%	2.0	0.6	-1.4	-16.4	-12.6	-10.1	-5.5	-2.8	-0.2
Computer equipments, electronics and optical product:	2.0%	0.1	-5.1	-12.1	-13.6	-15.1	-25.3	1.5	-6.6	-11.3
Pharmaceuticals	2.4%	-9.4	-8.6	8.2	1.5	-8.7	-5.6	-2.6	-9.9	-12.5
Manufacture of clothing and accessories	2.0%	-0.4	5.5	-8.0	-10.0	-4.6	-9.6	6.0	-1.7	-1.2
Leather, travel items and footwears	1.4%	4.6	-6.0	1.8	-1.1	-9.4	2.5	5.4	4.0	2.5
Textile products	1.3%	1.1	0.0	-0.1	-0.2	-1.4	-0.5	4.4	2.1	1.5
Other transport equipments, except motor vehicles	1.1%	10.1	-5.9	-0.9	23.9	10.1	9.8	5.9	0.4	2.1
Repair of machines and equipments	1.6%	2.2	0.7	2.3	-3.8	-3.6	3.5	1.4	2.2	4.0
Furniture	1.2%	-2.1	-2.5	-4.6	-5.6	-7.9	-9.0	7.0	-5.1	-6.7
Wood products	1.1%	1.1	-1.7	0.0	-14.0	-12.6	-8.8	6.2	0.0	-0.5
Printing and playback of recordings	0.6%	6.3	-2.0	5.5	16.5	25.3	29.8	0.6	16.0	12.0
Miscellaneous	1.2%	8.2	-3.4	-5.2	-1.5	-2.2	-8.1	3.7	3.8	3.5
Tobacco products	0.4%	3.6	-0.5	-2.5	5.1	6.0	3.3	5.4	-2.4	-1.5

Sources: IBGE, Santander.

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

Weight	By Activity (% MoM sa)													
		Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23
14.6%	Mining	2.96	-2.33	0.92	6.28	-6.36	-1.85	3.71	4.14	0.27	-0.79	1.32	2.90	-1.42
15.1%	Food products	2.19	-1.83	-2.74	6.98	7.01	4.40	-3.00	-1.08	-0.17	-2.90	-2.31	-0.29	0.86
13.5%	Oil and biofuel coke	4.08	-3.95	-4.01	-1.42	1.22	-0.44	-1.35	0.66	2.36	3.51	7.61	-3.39	0.66
6.2%	Vehicles	-3.34	10.67	0.42	-9.89	7.78	-3.66	-5.85	-0.14	-0.58	-2.87	7.02	-3.42	-6.47
4.9%	Metallurgy	2.37	1.18	-7.65	5.21	4.37	-6.80	-0.91	1.79	0.71	-0.82	2.17	-0.45	-0.78
7.4%	Chemical products	-4.35	0.99	-0.52	-4.04	1.28	-0.76	-1.44	-2.21	0.33	0.49	-1.02	-0.43	0.23
3.8%	Machines and equipments	-2.70	3.60	-2.90	-3.47	0.16	-2.98	0.58	-0.90	7.11	-11.94	13.97	-5.61	-4.96
3.0%	Metallic products except machines and equipments	-3.30	-1.25	2.15	-1.14	-1.80	6.54	-3.40	-0.94	-1.03	-5.17	6.69	1.73	-4.79
2.7%	Non-metallic minerals	-1.13	2.48	-3.37	-2.12	-1.34	-4.28	2.71	0.04	1.64	-2.07	2.65	-0.55	0.11
3.4%	Rubber and plastic products	1.01	0.72	-1.02	-3.24	1.69	-0.21	1.41	-0.27	0.39	-0.59	-0.05	1.70	-3.84
3.0%	Beverages	-0.32	1.29	-4.92	-6.44	7.40	-1.59	1.35	3.88	0.44	-2.91	0.51	-0.48	-1.26
3.7%	Cellulose,paper and paper-based products	1.63	-1.55	-1.82	-1.55	0.54	0.27	-1.39	-0.18	-0.30	0.08	-0.44	-0.44	0.58
2.3%	Machines, equipments and electric material	-4.46	1.12	-0.45	-2.69	0.01	0.93	-4.01	-4.16	1.75	-3.96	1.97	0.62	-1.41
2.0%	Computer equipments, electronics and optical products	-0.52	-2.60	-2.62	-1.02	-3.11	2.04	-2.18	1.12	8.14	-10.08	0.07	-5.11	-12.05
2.4%	Pharmaceuticals	4.74	4.59	-6.67	0.79	7.12	17.26	-12.76	-2.32	0.47	-0.66	-9.36	-8.57	8.25
2.0%	Manufacture of clothing and accessories	-4.04	3.16	-3.71	-9.59	-2.93	11.96	0.97	-0.23	-4.31	-0.27	-0.36	5.54	-8.02
1.4%	Leather, travel items and footwears	-9.93	4.54	-0.95	-9.97	-0.97	5.71	0.36	0.58	3.45	0.54	4.59	-5.98	1.75
1.3%	Textile products	-1.16	-5.25	-1.67	1.13	-4.84	3.08	2.89	1.50	0.44	0.56	1.06	-0.04	-0.11
1.1%	Other transport equipments, except motor vehicles	-0.88	1.42	3.85	-0.03	-1.33	2.77	2.93	0.72	3.02	-6.11	10.10	-5.91	-0.86
1.6%	Repair of machines and equipments	-5.25	2.42	-2.63	-4.29	0.53	2.34	0.23	-1.47	1.28	0.09	2.24	0.67	2.33
1.2%	Furniture	-4.02	-1.14	-0.94	-7.88	7.48	5.72	2.04	0.26	-4.31	-0.13	-2.12	-2.47	-4.61
1.1%	Wood products	-4.57	0.86	-10.07	-11.18	11.31	-0.38	1.84	1.44	0.25	-0.79	1.05	-1.65	-0.01
0.6%	Printing and playback of recordings	-1.34	6.43	-5.29	3.66	-0.83	3.44	-9.73	12.63	2.32	6.31	6.31	-2.05	5.46
1.2%	Miscellaneous	-0.52	3.80	-5.62	-9.72	11.46	-14.18	10.62	1.56	-1.98	0.43	8.15	-3.36	-5.24
0.4%	Tobacco products	-2.19	2.15	9.30	-4.99	1.13	-7.48	7.90	4.80	-1.89	-4.78	3.63	-0.50	-2.46

Sources: IBGE, Santander.



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

		By Activity (Contribution p.p. sa)												
Weight		Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23
14.6%	Mining	0.43	-0.34	0.13	0.91	-0.93	-0.27	0.54	0.60	0.04	-0.11	0.19	0.42	-0.21
15.1%	Food products	0.33	-0.28	-0.41	1.05	1.06	0.66	-0.45	-0.16	-0.03	-0.44	-0.35	-0.04	0.13
13.5%	Oil and biofuel coke	0.55	-0.53	-0.54	-0.19	0.17	-0.06	-0.18	0.09	0.32	0.47	1.03	-0.46	0.09
6.2%	Vehicles	-0.21	0.66	0.03	-0.61	0.48	-0.23	-0.36	-0.01	-0.04	-0.18	0.43	-0.21	-0.40
4.9%	Metallurgy	0.12	0.06	-0.38	0.26	0.22	-0.34	-0.05	0.09	0.04	-0.04	0.11	-0.02	-0.04
7.4%	Chemical products	-0.32	0.07	-0.04	-0.30	0.10	-0.06	-0.11	-0.16	0.02	0.04	-0.08	-0.03	0.02
3.8%	Machines and equipments	-0.10	0.14	-0.11	-0.13	0.01	-0.11	0.02	-0.03	0.27	-0.46	0.54	-0.22	-0.19
3.0%	Metallic products except machines and equipments	-0.10	-0.04	0.06	-0.03	-0.05	0.20	-0.10	-0.03	-0.03	-0.16	0.20	0.05	-0.14
2.7%	Non-metallic minerals	-0.03	0.07	-0.09	-0.06	-0.04	-0.11	0.07	0.00	0.04	-0.06	0.07	-0.01	0.00
3.4%	Rubber and plastic products	0.03	0.02	-0.04	-0.11	0.06	-0.01	0.05	-0.01	0.01	-0.02	0.00	0.06	-0.13
3.0%	Beverages	-0.01	0.04	-0.15	-0.19	0.22	-0.05	0.04	0.12	0.01	-0.09	0.02	-0.01	-0.04
3.7%	Cellulose,paper and paper-based products	0.06	-0.06	-0.07	-0.06	0.02	0.01	-0.05	-0.01	-0.01	0.00	-0.02	-0.02	0.02
2.3%	Machines, equipments and electric material	-0.10	0.03	-0.01	-0.06	0.00	0.02	-0.09	-0.09	0.04	-0.09	0.04	0.01	-0.03
2.0%	Computer equipments, electronics and optical products	-0.01	-0.05	-0.05	-0.02	-0.06	0.04	-0.04	0.02	0.16	-0.20	0.00	-0.10	-0.24
2.4%	Pharmaceuticals	0.11	0.11	-0.16	0.02	0.17	0.42	-0.31	-0.06	0.01	-0.02	-0.23	-0.21	0.20
2.0%	Manufacture of clothing and accessories	-0.08	0.06	-0.07	-0.19	-0.06	0.24	0.02	0.00	-0.09	-0.01	-0.01	0.11	-0.16
1.4%	Leather, travel items and footwears	-0.14	0.07	-0.01	-0.14	-0.01	0.08	0.01	0.01	0.05	0.01	0.07	-0.09	0.03
1.3%	Textile products	-0.01	-0.07	-0.02	0.01	-0.06	0.04	0.04	0.02	0.01	0.01	0.01	0.00	0.00
1.1%	Other transport equipments, except motor vehicles	-0.01	0.02	0.04	0.00	-0.02	0.03	0.03	0.01	0.03	-0.07	0.12	-0.07	-0.01
1.6%	Repair of machines and equipments	-0.08	0.04	-0.04	-0.07	0.01	0.04	0.00	-0.02	0.02	0.00	0.04	0.01	0.04
1.2%	Furniture	-0.05	-0.01	-0.01	-0.09	0.09	0.07	0.02	0.00	-0.05	0.00	-0.02	-0.03	-0.05
1.1%	Wood products	-0.05	0.01	-0.11	-0.12	0.12	0.00	0.02	0.02	0.00	-0.01	0.01	-0.02	0.00
0.6%	Printing and playback of recordings	-0.01	0.04	-0.03	0.02	0.00	0.02	-0.06	0.08	0.01	0.04	0.04	-0.01	0.03
1.2%	Miscellaneous	-0.01	0.05	-0.07	-0.12	0.14	-0.17	0.13	0.02	-0.02	0.01	0.10	-0.04	-0.06
0.4%	Tobacco products	-0.01	0.01	0.04	-0.02	0.00	-0.03	0.03	0.02	-0.01	-0.02	0.02	0.00	-0.01

Sources: IBGE, Santander.



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