

HEADLINE TOPPED EXPECTATIONS, BUT MANUFACTURING SHRANK AT THE MARGIN

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- **Industrial production surprised our expectations, edging up in March (+0.4%) and beating our estimate (-0.2% MoM-sa), as well as market consensus (+0.2% MoM-sa).** Compared to the same month of 2021, industrial output inched down 2.1% (market: -2.9%; our call: -3.5%). Relative to the pre-pandemic period, the headline index remains 2.1% below its February 2020 level (for the twelfth month in a row), and in quarterly terms, March's print led to 0.3% QoQ-sa growth, the first non-negative print since 4Q20.
- **Despite the positive headline result, the breakdown suggests caution: manufacturing inched down 0.6% MoM-sa (-2.4% YoY), while mining inched up 0.9% MoM-sa (+1.0% YoY).** In quarterly terms, manufacturing stayed flat (0% QoQ-sa) in 1Q22, breaking a string of four consecutive drops, as mining expanded 1.0% QoQ-sa — far from fully offsetting 4Q21's steep decline (-5.5%). Across the major categories, it was a mixed bag: capital goods (+8.0% MoM-sa) and durable goods (+2.6% MoM-sa) were the highlights, with intermediate goods (+0.6% MoM-sa) also contributing positively; on the other hand, non-durable goods plunged in March (-3.3% MoM-sa), the first negative print in five months.
- **The diffusion index decelerated and reached 54% (vs. 62%), with 14 out of 26 industrial activities surveyed posting positive figures at the margin (17 in February).** In terms of contribution, vehicles (+0.69 p.p), other chemical products (+0.41 p.p) and machines and equipments (+0.24 p.p) were the highlights. Conversely, food products (-0.24 p.p), oil and biofuel coke (-0.2 p.p) and pharmaceuticals (-0.19 p.p) were the lowlights.
- **This positive quarterly figure for industrial output suggests short-term relief being transmitted from industry to overall activity in the period, following the continued weakening seen recently.** However, we still see the sector facing a challenging environment this year, with the global supply chain facing a slow pace of normalization, along with tight monetary policy and inflationary pressure compromising goods consumption.
- **Our tracking of IBC-Br in March was updated to +0.6% MoM-sa (from +0.5%), owing mainly to solid growth for services' (+1.2% MoM-sa), as well as to a slight retreat for broad retail sales (-0.4% MoM-sa).** We are maintaining our GDP growth tracking at 0.5% QoQ-sa, resting mainly on a good contribution from the services segments, primarily those that are still quite idle compared to the pre-crisis period (e.g., Other Services and Public Services, which account for nearly 30% of total GDP). Moreover, we (still) expect farm output to strengthen, contributing positively in 1Q22. We forecast GDP growth of 0.7% in 2022 and a 0.3% contraction of real activity in 2023.



Figure 1 – Industrial Production Breakdown

	Weights	% MoM			% YoY			% QoQ			Feb-20 %
		Jan-22	Feb-22	Mar-22	Jan-22	Feb-22	Mar-22	Jan-22	Feb-22	Mar-22	Mar-22
Total Industry	100%	-2.0	0.6	0.4	-7.2	-4.2	-2.1	0.7	1.4	0.3	-2.1
Mining	11%	-5.3	5.8	0.9	-6.8	1.3	1.0	-3.3	-0.7	1.0	1.1
Manufacturing	89%	-2.0	0.6	-0.6	-7.3	-4.8	-2.4	0.6	1.4	0.0	-2.5
Capital Goods	8%	-9.7	2.5	8.0	-8.4	-4.7	4.4	-0.9	-1.6	-2.6	16.0
Intermediate Goods	60%	-1.5	1.9	0.6	-5.2	-2.6	-2.2	-0.3	0.6	0.8	1.8
Consumer goods	32%	-1.6	0.1	-2.6	-11.4	-7.0	-3.8	1.9	2.9	0.5	-12.6
Durable	7%	-11.5	1.3	2.6	-25.8	-16.8	-12.8	7.4	4.6	-2.1	-23.1
Non-Durable	25%	0.3	1.8	-3.3	-7.7	-4.2	-1.2	0.3	2.3	1.8	-8.5
Construction Supplies	-	-0.2	-0.3	0.6	-11.2	-10.1	-7.7	-2.9	-1.6	-0.7	5.0

Sources: IBGE, Santander.

Industrial output topped expectations, rising 0.4% MoM-sa in March. This result beat our estimate (-0.2% MoM-sa) and market consensus (+0.2% MoM-sa), and compared to the same month of 2021, industrial output inched down 2.1% (market: -2.9%; our call: -3.5%). Relative to the pre-pandemic period, the headline still shows wide idleness and remains 2.1% below its February 2020 level (for the twelfth month in a row). In the short term, we see a better figure: in quarterly terms, March's print led to a 0.3% QoQ-sa growth, the first non-negative print since 4Q20.

The breakdown suggests caution. Despite the positive headline result, March's growth was driven by mining (+0.9% MoM-sa), while manufacturing inched down 0.6% MoM-sa (-2.4% YoY). In quarterly terms, manufacturing stayed flat (0% QoQ-sa) in 1Q22, breaking a string of four consecutive drops, as mining edged up 1.0% QoQ-sa, though far from fully offsetting 4Q21's steep decline (-5.5%). Across the major categories, it was a mixed bag: capital goods (+8.0% MoM-sa) and durable goods (+2.6% MoM-sa) were the highlights, with intermediate goods (+0.6% MoM-sa) also contributing positively; on the other hand, non-durable goods plunged in March (-3.3% MoM-sa), the first negative print in five months. It is worth noting that construction supplies edged up 0.6% MoM-sa, ending a discouraging streak of ten declines in a row. Capital goods and construction supplies (categories related to investments) remain above the pre-pandemic mark, and the good performances at the margin suggest the resilience of investments (and of domestic demand) in the short term.

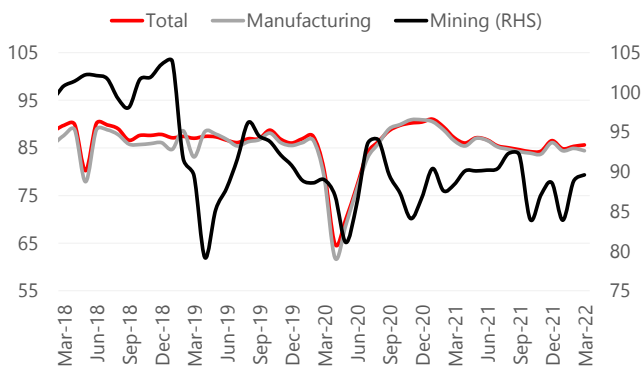
March's growth was less widespread than the previous gain. The diffusion index decelerated, reaching 54% (vs. 62%), with 14 out of 26 industrial activities surveyed posting positive figures at the margin (17 in February). In terms of contribution, vehicles (+0.69 p.p), other chemical products (+0.41 p.p) and machines and equipments (+0.24 p.p) were the highlights. Conversely, food products (-0.24 p.p), oil and biofuel coke (-0.2 p.p) and pharmaceuticals (-0.19 p.p) were the lowlights. In comparison with the pre-pandemic mark, 17 out of 26 activities surveyed remains below this mark, with vehicles (down 13.2%), manufacture of clothing (down 20.9%) and furniture (down 27.9%) as the lowlights. Conversely, other chemical products (up 8%) and machines equipments (up 16.6%) are far above this mark.

This positive quarterly figure for industrial output suggests short-term relief being transmitted from industry to overall activity in the period, following the continued weakening seen recently. However, we still see the sector facing a challenging environment this year, with the global supply chain facing a slow pace of normalization, along with tight monetary policy and inflationary pressure compromising goods consumption. Our tracking of IBC-Br in March was updated to +0.6% MoM-sa (from +0.5%), owing mainly to solid growth for services' (+1.2% MoM-sa), as well as to a slight retreat for broad retail sales (-0.4% MoM-sa). We are maintaining our GDP growth tracking at 0.5% QoQ-sa, resting mainly on a good contribution from the services segments, primarily those that are still quite idle compared to the pre-crisis period (e.g., Other Services and Public Services, which account for nearly 30% of total GDP). Moreover, we (still) expect farm output to strengthen, contributing positively in 1Q22. We forecast GDP growth of 0.7% in 2022 and a 0.3% contraction of real activity in 2023. **For details on Santander's activity outlook, please refer to our last chartbook¹.**

¹ Santander Brazil Economic Activity: "Resilience in 2022, but with Concerns Regarding 2023" – April 19, 2022 – Available on: <https://bit.ly/Std-chart-Econact-apr22>

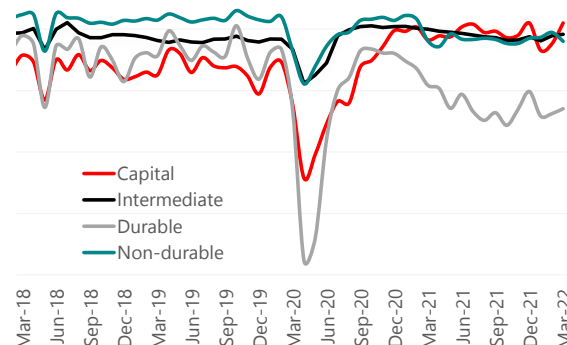


Figure 2.A – Industrial Production Index (sa, 2012=100)



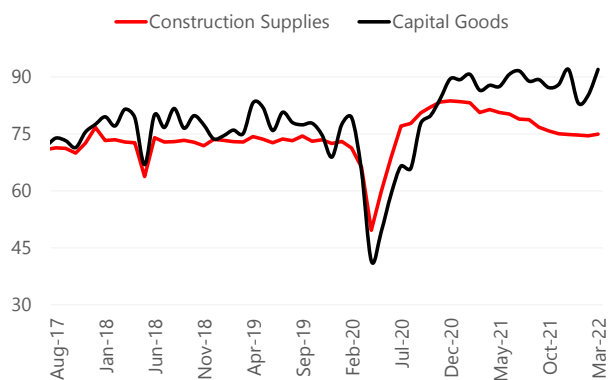
Sources: IBGE, Santander.

Figure 2.B – Economic Categories (sa, 2012=100)



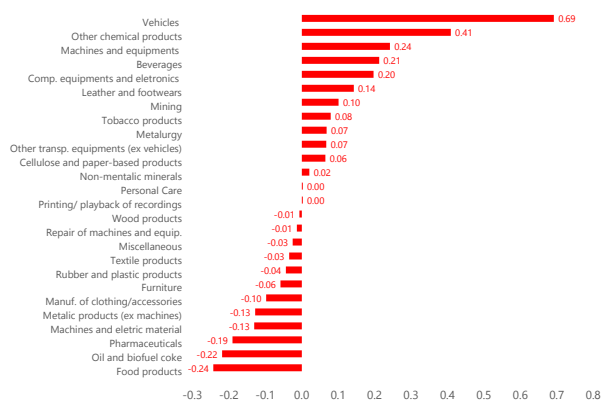
Sources: IBGE, Santander.

Figure 3.A – Industrial Production Related to Investment (sa, 2012=100)



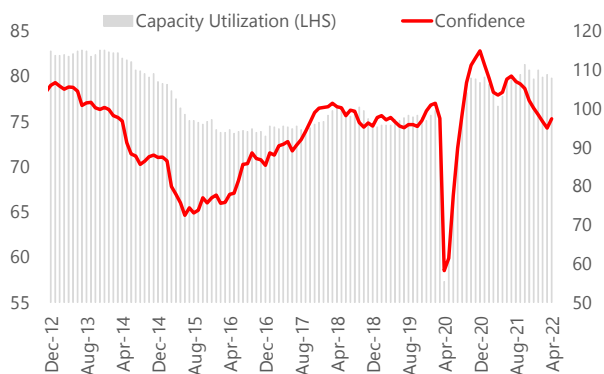
Sources: IBGE, Santander.

Figure 3.B – Contributions by Activities (sa, p.p.)



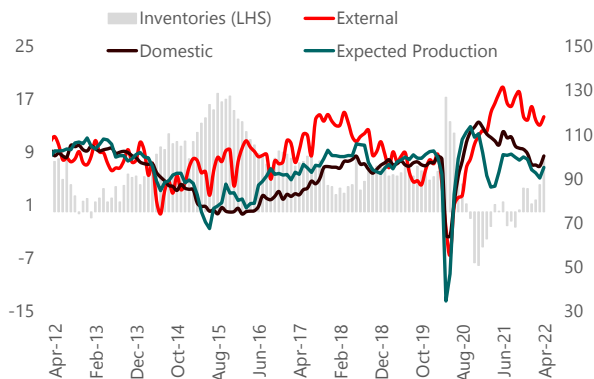
Sources: IBGE, Santander

Figure 4.A – Confidence (points, sa) x Capacity Utilization (% sa)



Sources: FGV, Santander.

Figure 4.B – Inventories Perception (Excessive-Insufficient) and Demand (points, sa)



Sources: FGV, Santander.



Figure 5 - Heatmap Showing Industrial Production by Activity

		By Activity (% MoM sa)											
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
11.2%	Mining	1.92	0.00	0.11	0.22	2.10	-0.22	-8.79	3.69	1.72	-5.30	5.84	0.90
13.9%	Food products	-2.23	1.85	-1.49	-1.62	2.53	-3.55	-5.68	6.49	3.88	1.28	2.53	-1.75
10.3%	Oil and biofuel coke	-7.62	0.11	6.46	1.67	-2.26	0.95	4.17	-0.90	-0.10	3.13	-3.04	-2.12
10.1%	Vehicles	-1.59	0.59	4.08	-4.90	-4.85	0.93	-4.44	7.37	10.60	-14.98	4.29	6.85
5.4%	Metallurgy	-0.55	4.44	0.11	-1.91	0.00	-2.81	-2.56	-2.40	1.87	-3.79	4.18	1.26
5.3%	Other chemical products	0.73	1.86	0.71	-1.61	-5.21	2.26	1.79	1.45	0.00	-2.76	0.63	7.72
4.9%	Machines and equipments	-1.17	1.39	2.22	-2.59	0.21	1.80	-4.58	0.87	-0.11	-2.49	-1.00	4.94
3.6%	Metallic products except machines and equipments	-2.63	-4.29	0.38	-1.66	-0.78	0.52	-4.82	1.23	-0.68	-4.35	3.98	-3.56
3.6%	Non-mentalic minerals	-0.43	-0.33	1.20	-2.49	-0.11	-0.33	-3.34	1.85	1.81	-3.67	0.46	0.57
3.5%	Rubber and plastic products	-2.27	-4.54	1.04	-3.21	-1.66	1.93	-0.95	-2.27	-0.61	-4.18	2.56	-1.25
3.3%	Beverages	6.19	7.08	1.65	-11.10	6.03	0.00	-3.45	-2.00	2.90	-6.78	6.04	6.43
3.0%	Cellulose,paper and paper-based products	-2.16	-0.46	-0.74	0.37	-0.37	1.12	1.19	-0.36	2.55	-1.69	-3.71	2.16
2.6%	Machines, equipments and eletric material	-5.15	-2.15	2.32	-4.54	-0.66	4.39	-12.61	5.69	-2.21	-4.09	2.50	-5.02
2.5%	Computer equipments, eletronics and optical products	-4.97	-0.96	6.26	-3.93	-7.08	0.59	-6.85	7.04	14.47	-11.75	1.01	7.88
2.3%	Pharmaceuticals	-6.91	7.92	0.82	3.01	-11.00	8.20	-8.86	7.16	-7.40	-3.09	12.50	-8.27
2.3%	Manufacture of clothing and accessories	-6.24	6.34	1.34	-0.44	0.30	1.47	-8.85	7.48	-0.74	-0.90	-0.90	-4.26
1.6%	Leather, travel items and footwears	-10.08	4.66	13.49	-8.58	-0.13	-1.48	-5.99	3.62	5.17	-6.38	-1.28	8.92
1.6%	Textile products	-4.73	0.38	-0.51	-3.06	2.11	-1.80	-6.43	1.54	-0.83	-1.95	-1.56	-2.16
1.5%	Other transport equipments, except motor vehicles	-1.15	-2.33	8.17	-7.92	-2.20	-2.86	-2.53	4.97	5.76	-11.09	12.47	4.47
1.3%	Repair of Machines and equipments	-0.71	-2.30	-2.21	1.35	1.93	-1.60	-1.04	3.29	5.35	-6.59	-1.47	-1.04
1.3%	Furniture	-6.59	0.29	-0.86	-0.87	-1.17	-3.40	-4.13	2.23	0.00	-5.46	2.48	-4.51
1.3%	Personal Care	-3.44	-0.69	-1.10	2.32	-1.48	2.10	-3.73	-3.26	0.53	-1.78	0.21	0.21
1.0%	Wood products	-3.11	-4.58	3.46	-3.25	-4.13	1.84	-10.05	8.95	3.05	-4.21	-1.68	-0.67
1.0%	Printing and playback of recordings	-18.27	-6.82	6.82	-0.47	-7.84	-20.36	-13.92	-6.47	13.83	0.47	-13.49	0.27
1.0%	Miscellaneous	-10.96	-0.22	4.11	-9.39	1.06	1.40	-3.10	1.42	3.27	-2.60	6.98	-2.50
0.6%	Tobacco products	-4.56	1.67	-2.70	-10.87	-3.66	2.95	7.10	5.36	5.08	0.58	1.37	13.22

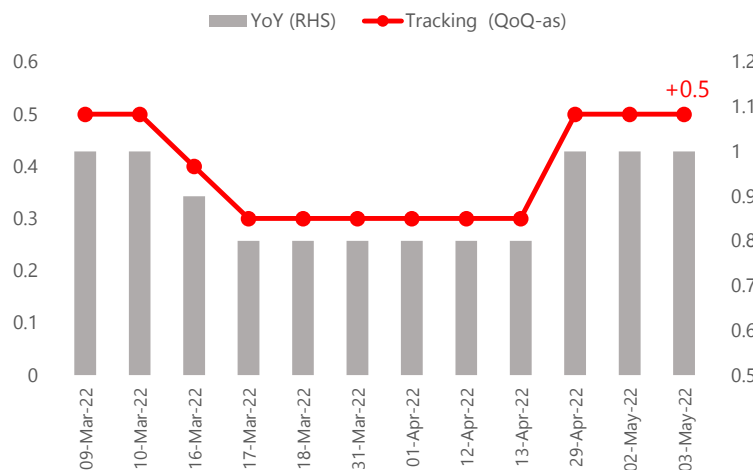
Sources: IBGE, Santander.

Figure 6 - Heatmap Showing Industrial Production by Economic Category

		By Activity (% MoM sa)											
		Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
Capital Goods	Computer equipments, eletronics and optical products	0.2	7.2	4.2	-3.6	-6.5	3.4	-6.2	2.8	12.4	-0.7	-13.7	21.6
	Machines, equipments and eletric material	-2.4	0.4	-5.7	-5.3	8.9	1.4	2.0	0.5	-4.7	-0.3	-2.5	-3.9
	Machines and equipments	2.6	-0.3	3.4	-2.3	4.4	0.1	-1.8	-1.5	-2.0	-1.2	-5.4	9.5
	Vehicles	-0.5	7.0	-0.1	11.0	-4.5	-16.9	10.3	-5.3	12.4	-24.4	14.2	14.8
	Other transport equipments, except motor vehicles	5.8	17.3	-8.6	2.3	-18.6	1.3	1.0	0.8	15.4	-6.4	24.4	3.8
Miscellaneous	-2.7	-0.3	-7.9	-3.0	-0.3	-2.9	4.8	4.0	0.4	-4.4	10.4	-6.8	
Intermediate Goods	Mining	3.0	0.9	-0.4	-1.9	1.2	0.0	-5.9	3.9	0.6	-6.2	6.9	0.1
	Food products	-5.5	0.5	-2.8	0.0	0.8	-1.2	-16.4	20.2	6.8	1.1	1.8	-4.3
	Textile products	-5.8	-3.4	1.0	-5.8	4.3	-1.3	-5.2	0.4	-0.9	-1.9	-1.0	-2.0
	Cellulose,paper and paper-based products	-1.4	1.2	-0.9	-0.8	-0.8	1.6	1.1	-0.4	2.5	-1.9	-4.6	2.8
	Oil and biofuel coke	-12.9	-1.2	9.2	3.8	-3.9	0.6	10.3	-2.9	-1.4	2.7	-1.6	0.4
	Other chemical products	-3.7	4.3	-0.7	-1.2	-4.5	1.6	4.5	0.3	0.0	-1.5	0.4	7.1
	Rubber and plastic products	-1.8	-2.3	-1.5	-4.2	-0.8	1.6	2.2	-5.3	-1.4	-2.0	1.4	-1.8
	Non-mentalic minerals	1.8	-1.7	2.0	-2.7	-0.3	-0.2	-3.8	2.2	2.1	-4.0	0.7	1.0
	Metallurgy	-1.3	5.6	-0.2	-1.5	-0.2	-3.3	-3.0	-2.7	1.9	-3.5	4.6	1.3
	Metallic products except machines and equipments	-2.0	-1.6	-3.4	-1.7	-0.3	-0.9	-1.7	-1.7	-1.0	-0.9	-1.5	-1.9
	Machines and equipments	0.2	3.5	-2.3	-2.4	-2.3	0.7	-2.6	1.3	2.6	-1.4	3.3	3.4
	Vehicles	0.2	1.0	-0.5	-7.6	2.6	-1.0	-4.4	3.6	2.4	-0.3	3.5	1.4
	Miscellaneous	-1.6	-0.5	2.1	-6.1	-1.4	3.5	-2.2	-1.3	4.3	-1.8	1.6	-0.5
Durable Goods	Computer equipments, eletronics and optical products	-3.1	0.2	1.2	-2.5	-11.4	-5.9	-2.0	1.1	13.6	-8.0	2.3	4.1
	Machines, equipments and eletric material	-6.0	-3.3	3.3	-6.6	1.3	2.6	-19.5	7.9	-4.3	-4.7	2.3	-9.9
	Vehicles	-0.1	-8.5	1.9	-13.7	-13.7	16.2	-2.7	16.9	27.2	-18.8	0.1	12.0
	Other transport equipments, except motor vehicles	1.7	-7.5	18.1	-17.8	7.5	-3.5	-5.0	5.4	-3.3	-9.4	11.5	10.4
	Furniture	-14.4	6.6	-7.9	3.0	-3.1	-3.2	-0.5	-9.0	3.3	-12.1	6.9	-0.1
Miscellaneous	-12.0	-1.6	-1.0	-0.9	-4.1	0.4	-23.6	23.8	0.7	6.5	-5.9	4.1	
Non Durable Goods	Food products	0.2	2.0	-0.5	-2.6	0.6	-4.8	2.6	-1.1	4.4	0.1	2.2	1.1
	Beverages	-7.9	6.1	-2.9	-1.0	-1.2	-2.4	-3.5	0.0	6.8	-6.0	4.4	0.2
	Textile products	-5.1	2.2	1.6	-1.7	-2.1	3.3	-12.1	4.2	-2.4	-2.1	2.7	-0.1
	Manufacture of clothing and accessories	-5.6	8.1	-2.1	2.7	-0.9	0.1	-2.6	-0.5	0.0	5.3	-3.9	-6.1
	Leather, travel items and footwears	-3.2	2.0	8.3	-2.2	2.0	0.6	0.6	1.6	3.7	-2.5	-2.6	-0.1
	Printing and playback of recordings	-34.1	-3.3	-12.0	23.0	-6.1	24.5	-35.7	3.5	35.9	31.0	-37.2	0.7
	Oil and biofuel coke	3.0	5.3	-2.8	0.6	0.3	0.4	-6.0	3.8	3.8	6.8	-7.1	-5.7
	Personal Care	-4.4	2.3	-2.3	1.1	-0.4	1.2	-2.1	6.9	1.0	0.6	-0.3	-1.1
	Pharmaceuticals	-3.3	8.1	1.7	3.9	-16.3	10.5	-6.6	6.3	-8.1	-3.8	15.3	-11.9
	Miscellaneous	-7.9	6.1	-2.9	-1.0	-1.2	-2.4	-3.5	0.0	6.8	-6.0	4.4	0.2

Sources: IBGE, Santander.

Figure 7 – 1Q22 GDP Growth Tracking (% , QoQ-sa and YoY-nsa)



Sources: IBGE, Santander



Figure 8 – Santander Tracking

1Q22 GDP Growth						
Date	Release	Reference	Tracking (%)		Projection (%)	
			QoQ-sa	YoY	QoQ-sa	YoY
09-Mar-22	Industry	Jan-22	0.5	1.0	0.5	1.0
10-Mar-22	Retail Sales	Jan-22	0.5	1.0	0.5	1.0
16-Mar-22	Services	Jan-22	0.4	0.9	0.5	1.0
17-Mar-22	IBC-Br	Jan-22	0.3	0.8	0.5	1.0
18-Mar-22	PNAD	Jan-22	0.3	0.8	0.5	1.0
31-Mar-22	PNAD	Feb-22	0.3	0.8	0.5	1.0
01-Apr-22	Industry	Feb-22	0.3	0.8	0.5	1.0
12-Apr-22	Services	Feb-22	0.3	0.8	0.5	1.0
13-Apr-22	Retail Sales	Feb-22	0.3	0.8	0.5	1.0
29-Apr-22	PNAD	Mar-22	0.5	1.0	0.5	1.0
02-May-22	IBC-Br	Feb-22	0.5	1.0	0.5	1.0
03-May-22	Industry	Mar-22	0.5	1.0	0.5	1.0

Sources: IBGE, Santander.



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