

#### **BRAZIL MACRO**

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## DATA ANALYSIS - ECONOMIC ACTIVITY

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## **New Weak Figure for Industrial Output**

- Industrial production continued weakening in August. The headline index retreated 0.7%, below market consensus (-0.4%) and our call (0%), standing now roughly 2.9% below the pre-pandemic mark. In the breakdown, August's figure stems mainly from a decrease in manufacturing (down 0.7%), the third decline in a row and the seventh drop in 2021. Conversely, mining contributed positively (up 1.3%).
- Among economic categories, there was a widespread drop, with durable goods standing out by retreating 3.4%, the eighth consecutive decline. Moreover, capital goods broke a string of four successive gains (down 0.8%), while intermediate goods were down by 0.6%, having posted weak figures since March 2021 and returning to pre-crisis readings.
- After a weak start to the quarter, industrial output retreated for the third month in a row, implying a
  carryover of -1.5% for 3Q21. This figure reinforces our view that industry will continue to weigh on activity
  in the short term, as the former is still suffering from supply constraints, mainly in durable goods. Our IBCBr tracking for August stands at +0.1% MoM-sa.

Figure 1 - Industrial Production Breakdown

	% MoM				% YoY		% QoQ			
	Jun-21	Jul-21	Aug-21	Jun-21	Jul-21	Aug-21	Jun-21	Jul-21	Aug-21	
Total Industry	-0.5	-1.2	-0.7	12.0	1.2	-0.6	-3.0	-1.4	-1.2	
Mining	-0.4	-1.2	1.3	4.2	-2.7	-1.6	4.6	3.9	0.7	
Manufacturing	-0.7	-1.3	-0.7	13.1	1.8	-0.5	-4.1	-2.4	-1.8	
Capital Goods	1.4	0.9	-0.8	53.8	33.8	29.9	-1.8	1.6	3.2	
Intermediate Goods	-0.7	-0.7	-0.6	10.8	0.1	-2.1	-1.9	-2.2	-2.2	
Consumer goods	-1.5	-0.2	-0.1	6.4	-3.5	-4.3	-8.2	-3.9	-0.8	
Durable	-1.3	-2.8	-3.4	31.5	-9.6	-17.4	-9.8	-7.6	-6.5	
Non-Durable	-1.7	0.5	0.7	2.0	-2.0	-0.8	-5.8	-1.3	1.2	
<b>Construction Supplies</b>	-0.6	-1.5	-0.1	16.8	2.1	1.5	-1.3	-1.8	-1.9	

Sources: IBGE, Santander.

Industrial production marked the second drop in a row in 3Q21. The headline index retreated 0.7%, below market consensus (-0.4%) and our estimate (0%), marking the third consecutive decline, to stand now roughly 2.9% below the pre-pandemic mark (February 2020). Looking at the breakdown, August's figure stems mainly from a decrease in manufacturing (down 0.7%), the third decline in a row and the seventh drop in 2021. Indeed, manufacturing has posted monthly increase only in May-2021. Conversely, mining contributed positively, up 1.3%, following weak figures in June and July. For the remaining months of 2021, we expect heterogeneity in the composition of industrial output, with manufacturing dragging down activity and mining partially mitigating this drag.



Among economic categories, durable goods stood out, retreating for the eighth successive month. Durable goods fell 3.4% and are running at notably depressed levels: down 21.8% since the pre-crisis mark. At the margin, this result reflects a sharp retreat in light vehicle production (-13.3%), as well as computer equipment and electronics (-9.5%). Intermediate goods were down 0.6%, the fifth retreat in a row but with the index posting weak figures since December 2020. Moreover, the recent drops were enough to bring the index back to the pre-crisis reading. Capital goods were in an upward trend in the past few months, but August's result broke the string of four consecutive gains, falling 0.8% and reflecting declines in vehicles (-5.4%) and

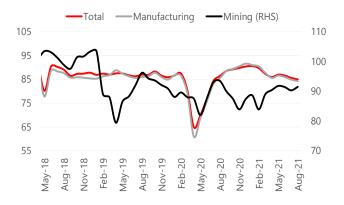
other transport equipment (-23.6%). In contrast, capital goods continue to run at high levels: in comparison to

Among industrial activities, pharmaceuticals and other chemical products were the lowlights. Both indexes posted steep declines: down 9.3% and 6.4%, respectively. Vehicles and computer equipment also posted unhealthy figures, down 3.1% and 4.2%, respectively, with the former retreating for the fourth month running. Conversely, beverages production was up 7.6%, though this was not enough to fully give back July's drop (-9.7%). Our diffusion index (which captures the percentage of industrial activities that show monthly increases) rose to 40% (28% in July) but continues to highlight a quite widespread drop, in our view.

We expect industry to remain a short-term drag on activity. Following the second quarter's weak industrial GDP figures (down 0.2%), industry should weigh on production in 3Q21, in our view. According to FGV, the perception of inventories is at historically low levels, which, in usual cycles, use to be a tailwind for production growth ahead. This time around, however, amid important supply hurdles seen worldwide in the wake of the pandemic, low inventories now could mean that local industry is having a hard time overcoming high costs and widespread input shortages. Additionally, domestic and external demand remains relatively healthy, reinforcing our belief that the recent weak figures for industrial output stem mainly from supply constraints, not lack of demand. Our IBC-Br tracking for August stands at 0.1% MoM-sa. For details on Santander's activity outlook, please refer to our last chartbooks¹.

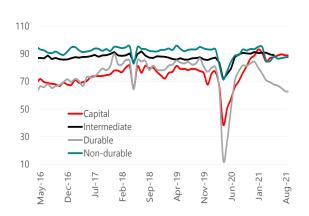
Figure 2.A. – Industrial Production Index (sa, 2012=100)

the pre-crisis mark, the index is up 15.8%.



Sources: IBGE, Santander.

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

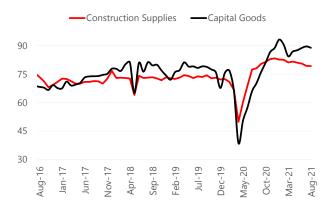


Sources: IBGE, Santander.

<sup>&</sup>lt;sup>1</sup> Santander Brazil Economic Activity - "Chartbook – Downgrading the Estimate for 2022" – September 20, 2021 – Available on: https://bit.lv/Std-chart-econact-set21

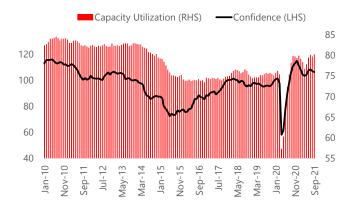
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Figure 3.A. – Industrial Production Related to Investment (sa, 2012=100)



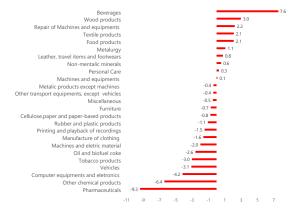
Sources: IBGE, Santander.

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



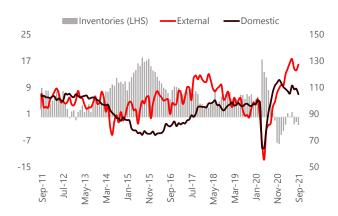
Sources: FGV, Santander.

Figure 3.B. – Industrial Production by Activity (sa, MoM %)



Sources: IBGE, Santander

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



Sources: FGV, Santander.

Figure 5 - Heatmap Showing Industrial Production by Activity

			By Activ	rity (% Mo	M sa)							
	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21
Food products	1.85	-4.59	-2.91	-4.02	2.58	0.00	0.21	-3.66	2.71	-1.90	-2.05	2.09
Oil and biofuel coke	0.80	-1.39	-0.91	-1.33	-1.34	-0.52	2.42	-9.66	2.96	3.87	2.66	-2.59
Vehicles	13.61	3.42	9.93	3.89	-0.48	-7.89	-9.49	1.16	-0.43	-3.61	-2.70	-3.08
Metalurgy	4.47	2.93	1.66	20.91	-13.53	1.68	-0.55	0.44	2.42	0.97	-0.96	1.07
Other chemical products	0.73	-4.27	6.20	0.20	0.51	2.54	-3.57	0.41	2.46	-1.00	-1.82	-6.38
Machines and equipments	12.23	2.25	3.71	6.15	-2.32	2.91	-1.15	2.22	-1.97	2.64	-3.91	0.11
Metalic products except machines and equipments	1.98	1.82	2.15	5.14	-2.56	-4.33	-1.19	-4.22	0.88	-3.00	-0.51	-0.39
Non-mentalic minerals	4.57	2.02	0.55	0.98	0.86	-0.54	-2.48	1.99	-0.65	-0.55	-1.86	0.56
Rubber and plastic products	1.66	1.85	1.50	2.95	-0.92	-0.10	-3.83	-3.23	-3.34	-1.04	-2.09	-1.07
Beverages	1.04	-1.78	2.96	-7.24	-0.60	-1.51	-5.32	4.54	4.03	1.89	-9.65	7.55
Cellulose,paper and paper-based products	3.02	-0.82	0.28	-2.58	5.11	0.63	-0.09	-2.60	-0.37	-3.60	0.29	-0.76
Machines, equipments and eletric material	5.70	-0.12	2.16	0.59	0.70	-1.28	-2.70	-3.74	-0.38	-3.02	-1.69	-1.98
Computer equipments, eletronics and optical products	4.64	-0.84	-2.06	5.19	-9.86	1.17	-0.90	-4.16	0.54	2.16	-4.88	-4.16
Pharmaceuticals	5.04	4.11	-9.88	8.40	-0.45	-2.26	-7.51	-0.12	7.38	0.93	3.69	-9.34
Manufacture of clothing and accessories	11.63	5.35	8.65	9.10	1.27	-4.58	-23.50	-1.88	6.71	-1.50	3.19	-1.62
Leather, travel items and footwears	15.57	4.73	5.76	-3.31	1.43	-6.86	-14.37	-4.77	6.73	5.23	-1.91	0.78
Textile products	5.19	2.53	1.76	15.11	-2.51	-9.46	-6.24	-5.57	-2.44	0.39	-0.52	2.11
Other transport equipments, except motor vehicles	0.45	-3.80	13.95	-6.73	-16.85	6.84	34.73	-0.18	-3.11	10.40	-15.24	-0.40
Repair of Machines and equipments	3.98	-0.44	1.78	1.31	-6.31	2.14	5.70	-0.71	-3.00	-2.36	2.26	2.21
Furniture	1.69	-1.30	-2.16	1.11	2.67	-0.59	-9.40	-8.28	5.59	-5.16	-0.14	-0.72
Personal Care	2.28	-4.19	-0.68	0.39	3.89	-3.66	0.00	-2.72	1.10	-1.19	2.20	0.29
Wood products	5.14	3.45	0.37	-0.92	-2.33	-1.43	4.65	2.78	-5.49	1.33	-1.79	2.97
Printing and playback of recordings	0.00	21.55	24.42	-3.27	2.66	9.88	20.56	-34.99	-1.09	3.31	8.82	-1.47
Miscellaneous	-2.48	4.39	1.55	-0.33	14.33	-8.61	-0.10	-3.46	0.11	-3.47	-2.25	-0.46
Tobacco products	20.09	-18.31	-3.41	10.13	-13.69	11.90	2.77	-5.39	-1.82	-4.29	-11.88	-3.03

Sources: IBGE, Santander.



Figure 6 - Heatmap Showing Industrial Production by Economic Category

			By Activity	(% MoM s	a)								
		Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21
Capital Goods	Computer equipments, eletronics and optical products	2.9	-1.6	4.2	26.0	-14.4	5.5	-4.3	-5.6	11.0	5.2	-4.0	-1.3
	Machines, equipments and eletric material	5.0	4.4	4.4	-1.6	0.4	-6.9	3.7	-1.3	0.0	-5.7	-5.8	7.5
	Machines and equipments	8.1	4.1	10.0	-2.1	1.9	1.5	-2.9	0.1	0.6	3.3	-1.4	4.2
	Vehicles	28.2	4.2	10.9	11.4	-2.5	2.4	-4.2	2.1	3.8	4.3	3.4	-5.4
	Other transport equipments, except motor vehicles	-0.9	-11.5	9.7	24.9	-23.2	21.1	-1.9	-6.7	22.8	-0.9	-0.7	-23.6
	Miscellaneous	0.3	-2.4	-1.3	3.6	-1.1	1.8	0.8	-1.1	-2.6	-7.6	-2.9	-1.0
ntermediate Goods	Mining	-4.0	-2.6	-1.9	1.8	3.3	-0.2	1.0	2.5	0.3	-0.9	-1.9	1.1
	Food products	3.5	-4.6	-6.6	-2.9	0.1	2.0	0.3	-3.2	0.6	-2.7	0.0	0.7
	Textile products	5.0	3.3	1.6	8.3	-2.1	-7.0	-3.2	-4.6	-3.0	1.8	-4.9	6.0
	Cellulose,paper and paper-based products	2.4	-0.4	-0.8	-1.6	4.5	1.2	-0.9	-2.1	0.8	-4.4	-0.4	-1.3
	Oil and biofuel coke	-1.9	-0.7	-0.3	-1.5	-3.5	1.0	4.1	-12.7	-1.5	9.0	4.6	-5.4
	Other chemical products	0.4	-3.9	6.3	0.1	1.4	2.2	-3.6	-2.3	2.9	-0.7	-2.0	-4.5
	Rubber and plastic products	2.5	1.5	1.0	4.6	-2.4	-0.6	-2.1	-2.3	-3.3	-0.2	-3.3	-2.1
	Non-mentalic minerals	3.9	2.2	0.8	0.1	0.9	0.3	-2.0	2.0	-0.9	0.1	-1.9	0.7
	Metalurgy	4.9	2.2	1.2	17.1	-10.6	2.5	-0.2	-0.7	4.7	0.3	-1.1	0.7
	Metalic products except machines and equipments	1.0	3.6	1.8	3.4	0.2	-4.3	-0.4	-1.7	-1.3	-3.1	-1.4	-0.4
	Machines and equipments	9.4	1.7	0.5	7.2	-4.6	1.3	3.1	-2.2	4.0	-1.4	-3.7	-2.5
	Vehicles	16.2	-1.2	6.2	13.2	-13.0	-2.6	-3.9	-4.4	0.0	3.5	-8.1	-0.8
	Miscellaneous	4.5	3.1	4.9	-3.9	-0.4	-3.2	0.6	-1.5	-0.9	3.0	-6.2	-0.9
Durable Goods	Computer equipments, eletronics and optical products	3.5	-1.3	-3.1	-7.3	-19.9	1.4	6.5	-2.7	-1.6	3.8	-2.8	-9.5
	Machines, equipments and eletric material	8.9	-3.8	-2.6	2.1	-4.7	2.7	-2.7	-3.8	-2.7	3.3	-4.7	1.3
	Vehicles	15.5	3.5	3.7	4.2	-2.2	-6.4	-16.3	-0.7	-8.9	1.5	-14.3	-13.3
	Other transport equipments, except motor vehicles	26.9	-18.9	20.6	-1.3	-38.4	9.1	71.6	-7.6	-7.4	16.1	-16.3	7.6
	Furniture	-4.7	0.2	-3.9	-0.3	3.3	-1.3	0.3	-10.3	4.3	-3.6	-1.3	0.7
	Miscellaneous	17.9	1.8	1.6	-4.7	6.4	5.1	13.6	-10.6	-0.6	-0.8	-2.1	-2.6
Non Durable Goods	Food products	0.8	-1.4	0.0	-2.1	0.4	-0.1	-2.1	1.1	2.0	-0.3	-2.2	0.6
	Beverages	-0.5	-0.7	0.6	-0.8	-1.6	-0.4	-0.6	-11.5	8.9	-3.9	0.7	-1.6
	Textile products	6.1	-2.4	-0.9	7.8	-0.4	-4.0	-8.4	-5.1	2.3	1.7	-0.9	-1.4
	Manufacture of clothing and accessories	10.2	2.8	9.0	9.4	0.2	-7.5	-13.9	-10.4	12.0	-1.5	1.8	-1.1
	Leather, travel items and footwears	16.2	5.4	7.1	-3.8	0.1	-7.0	-11.1	-5.7	4.1	5.4	-1.1	2.0
	Printing and playback of recordings	-8.8	34.1	88.9	-14.7	5.3	34.3	20.5	-35.1	-10.8	-12.5	22.4	-5.4
	Oil and biofuel coke	6.3	-5.9	0.7	-2.4	5.2	-2.8	-6.5	5.3	6.7	-2.8	0.7	0.2
	Personal Care	2.0	-4.3	-1.2	0.1	2.1	-1.7	1.0	-3.9	2.2	-1.9	1.6	0.4
	Pharmaceuticals	7.9	3.0	-12.6	15.4	-5.1	1.6	-7.9	-2.3	8.6	1.2	4.4	-14.1
	Miscellaneous	-0.5	-0.7	0.6	-0.8	-1.6	-0.4	-0.6	-11.5	8.9	-3.9	0.7	-1.6

Sources: IBGE, Santander.



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