

Sequential increase at the start of 2021

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- **Industrial production data for January has confirmed our expectation of a sequential gain at the start of 2021:** the headline index increased 0.4% MoM-sa, in line with consensus. This result highlights a full recovery from the economic impact of the Covid crisis, with **industrial production reaching levels 3.7% above the pre-crisis mark**. In comparison to the same month last year, the YoY variation was +2.0%.
- **In the January breakdown, the positive result was mainly driven by Capital Goods, which bodes well for likely future increases in investments spending.** Durable Goods declined, breaking a string of eight gains in a row, reflecting, in part, the monthly fall seen in auto production.
- **In terms of outlook, we expect industrial production to be supported in 1H21 by an inventory replenishment process despite lower demand for industrial goods.** Accordingly, downside risk to this scenario is the widespread shortage of inputs to manufacturing (also a worldwide issue), that may compromise supply capacity of the domestic industry.

Figure 1 - Industrial Production Breakdown

	% MoM			% YoY			% QoQ		
	Nov-20	Dec-20	Jan-21	Nov-20	Dec-20	Jan-21	Nov-20	Dec-20	Jan-21
Total Industry	1.1	0.8	0.4	2.6	8.3	2.0	9.1	5.0	3.4
Mining	-4.3	4.2	1.5	-9.1	-3.9	0.2	-5.1	-6.7	-4.5
Manufacturing	1.7	1.4	-0.1	4.2	10.2	2.3	11.0	6.7	4.8
Capital Goods	7.6	3.0	4.5	13.0	35.4	17.0	27.0	22.5	19.8
Intermediate Goods	-0.2	1.4	-1.3	3.5	8.2	2.3	5.7	1.6	0.5
Consumer goods	1.9	0.4	1.0	-0.5	4.1	-1.2	11.0	6.1	4.6
Durable	5.1	1.5	-0.7	2.7	14.1	-4.2	30.3	16.4	10.9
Non-Durable	1.2	-0.4	2.0	-1.4	1.9	-0.4	6.6	3.3	2.7
Construction Supplies	1.6	1.7	-0.1	11.5	20.5	11.5	10.5	6.8	5.4

Sources: IBGE, Santander.

Industrial production increased on a sequential basis and remains well above the pre-crisis level. The headline index posted monthly growth of 0.4% MoM-sa, the ninth gain in a row, and compared to the same month last year (still in the pre-pandemic period) was +2.0% YoY. January's figure stems mainly from the mining industry (1.5%) driven by an increase in oil production, partially offset by a slight decrease (0.1%) in manufacturing following eight consecutive increases.

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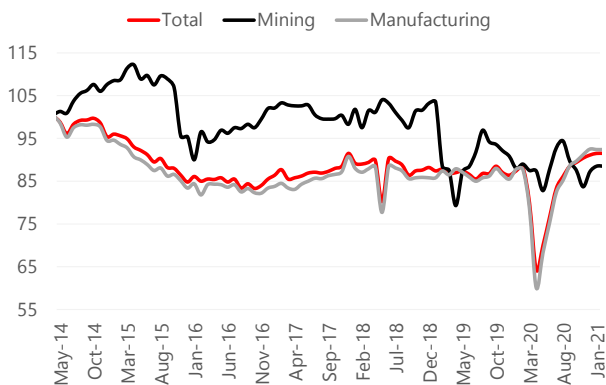
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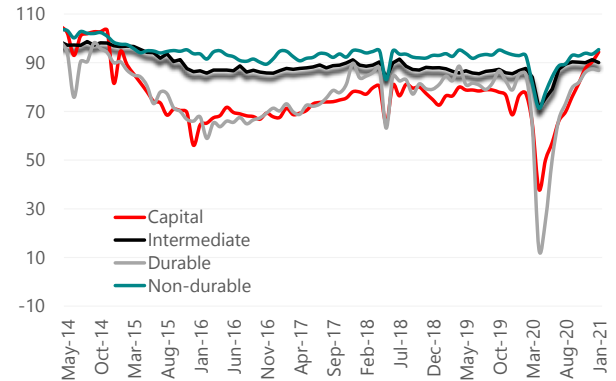
Among categories, January’s positive figure stems mainly from capital goods and non-durable goods. Intermediate Goods showed a decrease at the margin (-1.3%), after a sharp recovery since May, but still remains almost 2.7% above the pre-pandemic mark. Durable goods were a negative highlight (-0.7%), reflecting the plummet in Other Transport Equipment (-45.8%), Computer Equipment (-38.8%) and Vehicles (-9.6%). Construction supplies, also related to investments as capital goods, slightly decreased (-0.1%), but the upward trend seen in both categories points to a likely rise in investments spending ahead, especially in an environment with still looser financial conditions. Our monthly investment proxy — built as a weighting of net consumption of capital goods and the building sector — is pointing to growth of 2.7% 3MMA-sa in January, following the sharp increase of 20% seen in 4Q20 GDP release (though contaminated by an accounting effect of oil platform imports).

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



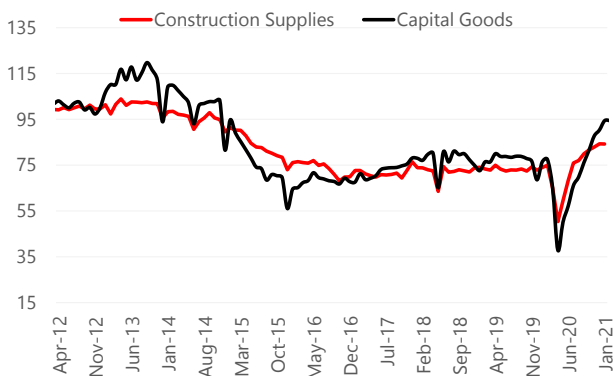
Sources: IBGE, Santander.

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



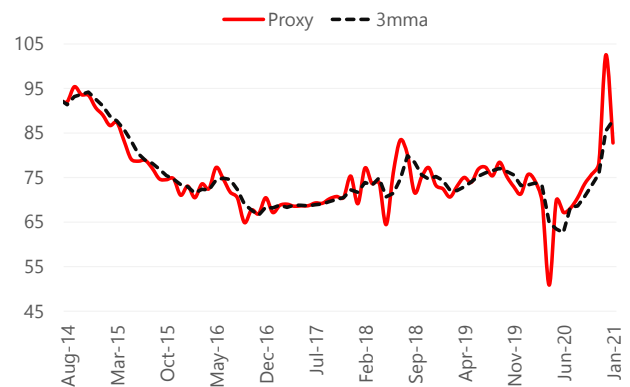
Sources: IBGE, Santander.

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



Sources: IBGE, Santander.

Figure 3.B - Monthly Investment Proxy Index (sa, 2013=100)



Sources: IBGE, Santander.



Figure 4 – Recovery Breakdown

Jan-21	MoM %	YoY %	Feb-20 % Chg	Carryover 1Q21 (%)
Total Industry	0.4	2.0	3.7	1.3
Mining	1.5	0.2	-0.6	2.7
Manufacturing	-0.1	2.3	5.2	1.4
Capital Goods	4.5	17.0	21.8	9.1
Intermediate Goods	-1.3	2.3	2.7	-0.4
Consumer goods	1.0	-1.2	2.6	1.9
Durable	-0.7	-4.2	1.6	2.0
Non-Durable	2.0	-0.4	2.6	2.1
Construction Supplies	-0.1	11.5	12.3	1.5

Sources: IBGE, Santander.

We expect industrial production to contribute positively to economic activity in 1Q21, though not enough to avoid a sequential decline of GDP this period. After solid growth in the final quarter of 2020, first month's result implies a carryover of 1.3% for 1Q21 in industrial production. We expect inventory replenishment to support industrial production in 1H21 amid an environment with lower demand for industrial goods. The level of inventories below the desirable (see Figure 6.B), the still high industrial confidence and high capacity utilization (see Figure 6.A) are to remain an important tailwind for production in the coming months. A downside risk to this scenario is the widespread shortage inputs seen in manufacturing sectors (also a worldwide issue), that may compromise supply capacity of domestic industry. Auto production decreased in February, especially for consumption related segments, and the outlook for March is some factories is already granting mandatory vacation to its employees.

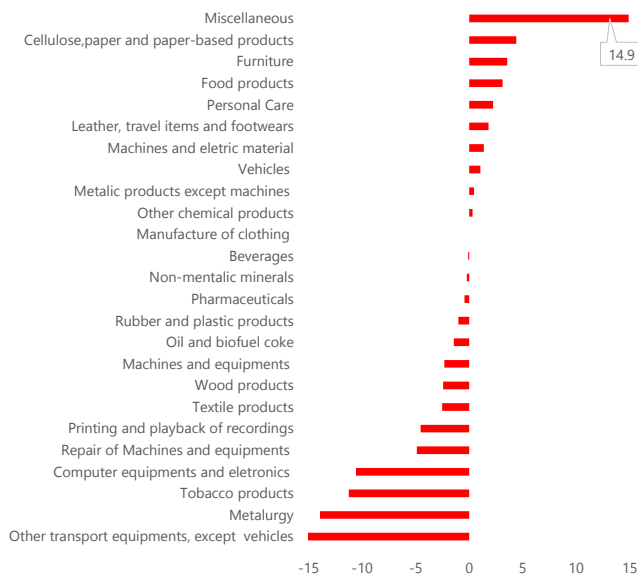
Regarding GDP, we expect the strong carryover for 2021 of GDP fourth quarter's result to be mitigated by the deterioration in economic activity expected for 1Q21. Our current estimate is a decrease of 0.4%, especially in the tertiary sector, given the materialization of the fiscal cliff and the setback of the economy's reopening process following the pandemic's resurgence. Indeed, our proprietary coincident indicators of services already points in this direction¹. **For more details regarding our economic activity scenario, see link below².**

¹ Santander Brazil Economic Activity - "IGet Services – Services Show Gains at the Margin" – March 4, 2021- Available on: <http://bit.ly/Sant-IGET-services-feb21>

² Santander Brazil Economic Activity - "Economic Activity Chartbook - Lingering impacts to slow the recovery" – February 23, 2021- Available on: <http://bit.ly/Sant-econact-chart-fev21>

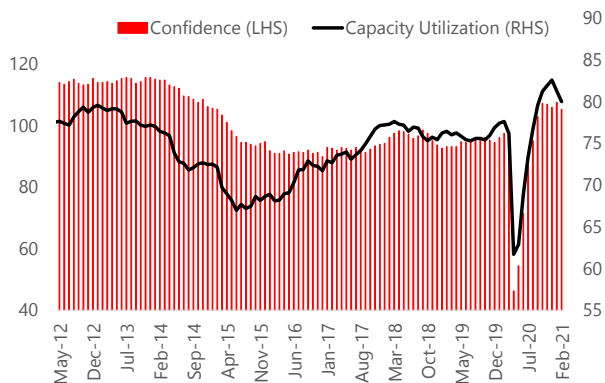


Figure 5 - Industrial Production by Activities (sa, MoM%)



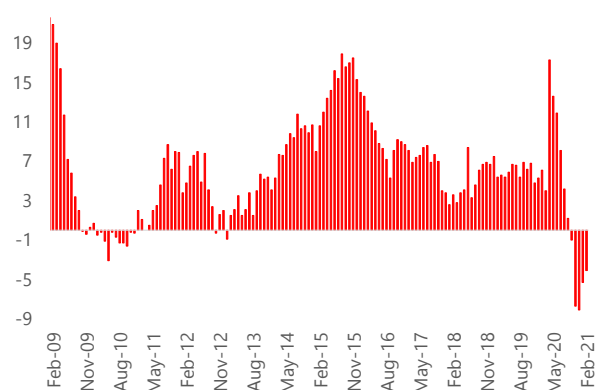
Sources: IBGE, Santander.

Figure 6.A – Confidence (points, sa) x Capacity Utilization (% sa)



Sources: FGV, Santander.

Figure 6.B – Inventories Perception (points, sa)



Sources: FGV, Santander.



Figure 7 - “Heatmap” Showing Industrial Production by Activities

		By Activity (% 3MMA sa)											
		Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21
Food products		0.97	0.69	1.19	0.84	0.84	0.53	0.56	1.44	-0.68	-1.72	-3.80	-1.51
Oil and biofuel coke		1.67	0.13	-6.78	-1.76	-2.60	6.06	2.02	3.20	0.98	-0.37	-1.14	-1.22
Vehicles		0.43	-7.30	-33.36	-40.49	-23.62	72.62	35.26	22.33	11.64	10.03	7.30	5.60
Metallurgy		1.61	1.26	-10.24	-8.96	-9.06	9.37	6.83	8.15	3.49	2.80	7.92	1.22
Other chemical products		1.46	-0.25	-3.25	-4.92	-0.51	4.49	4.53	2.01	-1.05	0.96	0.88	1.95
Machines and equipments		0.61	0.87	-12.50	-11.23	-5.49	12.98	9.22	9.67	5.46	6.12	4.11	2.36
Metalic products except machines and equipments		-0.09	-3.06	-11.49	-8.84	-0.17	14.43	9.72	6.34	3.26	3.24	3.17	2.19
Non-mentalic minerals		-0.37	-3.64	-12.29	-8.53	1.55	15.40	10.30	6.72	3.58	2.37	1.17	0.44
Rubber and plastic products		0.73	-3.43	-11.89	-11.43	-1.42	13.15	11.42	6.58	3.52	2.27	2.79	1.63
Beverages		-0.27	-6.85	-17.62	-6.04	12.09	25.16	7.59	1.00	-0.96	0.53	-2.09	-1.53
Cellulose,paper and paper-based products		1.52	1.13	0.06	-2.81	-2.48	-1.24	2.02	2.82	1.32	1.09	-0.52	1.21
Machines, equipments and eletric material		0.04	-2.99	-14.35	-11.43	0.53	19.17	12.73	6.84	3.75	3.17	1.65	1.63
Computer equipments, eletronics and optical products		-1.82	-3.12	-15.70	-8.24	1.27	20.05	10.68	6.67	1.71	0.86	1.30	-2.17
Pharmaceuticals		1.05	-0.89	-0.74	-0.04	4.24	1.96	-2.59	-1.18	0.35	-0.11	0.65	-0.95
Manufacture of clothing and accessories		0.16	-13.55	-24.13	-27.99	-10.79	19.00	17.82	18.34	10.74	9.65	9.02	6.61
Leather, travel items and footwears		-1.57	-9.15	-24.85	-23.55	-5.07	23.64	15.82	16.95	13.04	9.85	2.89	1.88
Textile products		0.84	-6.67	-18.57	-21.44	-4.79	24.51	21.94	13.21	6.09	3.71	6.95	4.78
Other transport equipments, except motor vehicles		-5.52	-5.10	-28.82	-29.21	-8.10	52.45	24.15	0.59	-2.79	3.56	0.58	-3.34
Repair of Machines and equipments		-1.21	-0.61	-2.91	-3.82	-4.06	-0.79	-0.89	0.45	-0.10	1.74	0.88	-0.68
Furniture		0.80	-7.46	-19.69	-15.53	8.18	28.05	15.78	7.47	1.58	-0.04	0.00	1.39
Personal Care		1.59	1.63	2.24	-0.77	-0.28	0.56	0.81	0.12	-3.10	-0.82	-1.44	0.81
Wood products		0.53	-4.91	-7.71	-7.83	4.21	10.61	8.99	4.78	2.59	2.37	0.66	-1.21
Printing and playback of recordings		-13.09	-29.05	-8.85	-9.80	11.27	0.00	0.28	-21.65	4.01	24.74	13.38	5.62
Miscellaneous		-0.24	-4.84	-13.41	-19.50	-10.75	13.54	21.07	10.67	4.36	2.65	3.06	6.23
Tobacco products		3.58	-0.86	-5.54	-2.82	3.18	6.91	3.28	9.96	0.14	-1.26	-5.55	-2.51

Sources: IBGE, Santander

Figure 8 - “Heatmap” Showing Industrial Production by Economic Category

		By Activity (% MoM sa)												
		Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	
Capital Goods	Computer equipments, eletronics and optical products	-21.2	21.4	-37.3	14.2	12.6	13.1	11.7	-2.9	0.2	9.0	26.2	-22.7	
	Machines, equipments and eletric material	-12.9	7.0	-25.5	-4.6	34.3	-6.3	-3.9	14.3	7.1	7.1	2.6	-9.7	
	Machines and equipments	-6.1	-2.2	-38.4	13.7	19.3	12.2	0.1	18.8	1.5	9.3	13.8	-11.3	
	Vehicles	-5.8	-5.1	-90.1	331.9	57.4	9.7	5.4	34.1	6.0	18.0	32.7	-16.1	
	Other transport equipments, except motor vehicles	-31.9	23.6	-50.9	20.3	34.5	10.5	-14.9	-0.2	-7.9	4.1	13.5	-9.7	
Intermediate Goods	Miscellaneous	-1.2	-14.4	-6.8	7.5	9.0	5.5	1.0	-1.1	-4.8	-1.5	19.9	-10.0	
	Mining	18.3	-0.8	10.1	-14.1	4.9	2.6	-3.2	-2.8	-2.0	-3.2	5.7	4.4	
	Food products	-0.9	-0.1	19.8	-8.1	4.2	2.9	-4.7	7.2	-10.6	-4.6	-4.9	-4.7	
	Textile products	5.0	-13.3	-42.4	1.9	42.9	20.9	9.5	11.1	1.1	1.9	17.7	-7.4	
	Cellulose,paper and paper-based products	2.4	-1.8	-2.4	-7.1	7.7	1.7	-0.2	5.8	-3.4	1.4	-1.4	2.8	
	Oil and biofuel coke	-2.4	-1.5	-16.7	16.2	-2.2	6.0	2.5	-3.3	4.0	-7.7	-7.7	-6.1	
	Other chemical products	6.0	-2.4	-16.3	-1.8	13.6	11.6	-1.6	0.7	-5.8	10.3	1.8	-4.3	
	Rubber and plastic products	4.7	-7.6	-30.8	10.3	24.2	9.0	4.9	3.9	-0.1	-1.2	11.4	-7.5	
	Non-mentalic minerals	-0.9	-8.5	-29.7	20.9	23.6	7.8	3.0	6.9	-1.5	1.4	5.9	-5.1	
	Metallurgy	5.8	-7.7	-30.2	9.4	3.3	18.9	3.7	6.9	5.0	1.8	22.4	-19.6	
	Metalic products except machines and equipments	1.9	-4.5	-34.5	19.5	21.7	10.0	4.2	2.8	1.5	4.1	8.1	-7.3	
	Machines and equipments	-12.4	8.2	-43.2	9.5	31.8	13.7	7.3	10.2	1.7	-0.1	28.8	-18.8	
	Vehicles	-4.4	-16.6	-81.6	99.3	64.7	37.0	12.2	13.5	-2.1	8.9	25.8	-17.8	
Durable Goods	Miscellaneous	1.2	-10.7	-28.8	6.4	36.5	9.9	-2.7	15.3	-6.9	8.2	1.7	-9.3	
	Computer equipments, eletronics and optical products	-17.6	10.5	-50.4	38.2	61.8	11.4	-7.8	16.5	-10.1	-8.7	10.6	-38.8	
	Machines, equipments and eletric material	-2.8	-3.6	-71.1	69.0	104.6	17.3	-2.0	9.2	-11.5	2.2	9.2	-9.3	
	Vehicles	-14.2	-1.0	-99.9	1390.0	184.3	54.8	20.8	14.4	-8.5	22.3	14.3	-9.6	
	Other transport equipments, except motor vehicles	-18.9	14.4	-97.3	513.8	538.8	-8.6	-16.4	29.9	-23.4	30.5	0.4	-45.8	
	Furniture	4.9	-15.3	-69.0	72.7	62.2	7.3	6.7	-2.7	-5.4	-0.1	12.2	-6.6	
	Miscellaneous	-25.4	11.1	-64.1	-5.0	18.7	77.0	-2.3	23.3	-6.6	-0.5	0.3	-2.6	
	Non Durable Goods	Food products	0.2	4.2	-9.5	-1.7	14.2	-2.4	-3.4	5.0	-6.5	2.0	1.1	-3.5
		Beverages	1.5	-21.5	-37.3	77.2	27.5	1.6	-2.9	-0.4	-2.7	-1.6	-5.9	-3.6
		Textile products	-9.3	-19.7	-63.5	64.4	62.7	22.4	3.0	2.4	-3.7	-2.3	13.9	-2.9
Manufacture of clothing and accessories		-3.8	-24.4	-64.1	17.7	34.7	24.1	16.9	14.2	4.7	8.4	12.6	-4.6	
Leather, travel items and footwears		-0.7	-29.7	-63.4	58.1	24.3	25.6	18.8	34.7	-0.8	8.0	14.0	-12.1	
Printing and playback of recordings		14.9	65.9	-38.0	-83.0	164.5	-49.4	-29.3	15.0	36.3	23.5	-54.4	243.9	
Oil and biofuel coke		-4.1	-9.7	-9.6	6.2	-0.8	3.8	-0.1	12.7	-10.7	8.4	2.1	5.1	
Personal Care		2.7	11.3	-4.7	-4.2	14.3	0.7	-13.1	7.6	-7.7	-1.8	3.4	-0.3	
Pharmaceuticals		-10.7	-3.0	2.0	3.7	13.2	-12.8	-4.8	18.4	-8.2	-11.9	30.9	-12.7	
Miscellaneous		1.8	2.5	-29.3	-1.4	42.1	9.1	-3.3	1.5	-4.1	1.5	8.6	-8.3	

Sources: IBGE, Santander.



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