

INDUSTRIAL SURVEY

ECONOMIC INDICATORS **CNI**

CNI
Brazilian National Confederation of Industry
THE FUTURE OF INDUSTRY

Lack or high cost of raw materials ceases to be the leading problem

In Q4 2022, lack or high price of raw materials are no longer ranked first among the main issues listed. The industrial entrepreneurs kept the mentions on a decreasing trend for the seventh consecutive quarter. Thus, the mentions of this problem reached the lowest level since Q3 2020.

Other problems stood out during this period, such as the high tax load, ranking first, and insufficient internal demand,

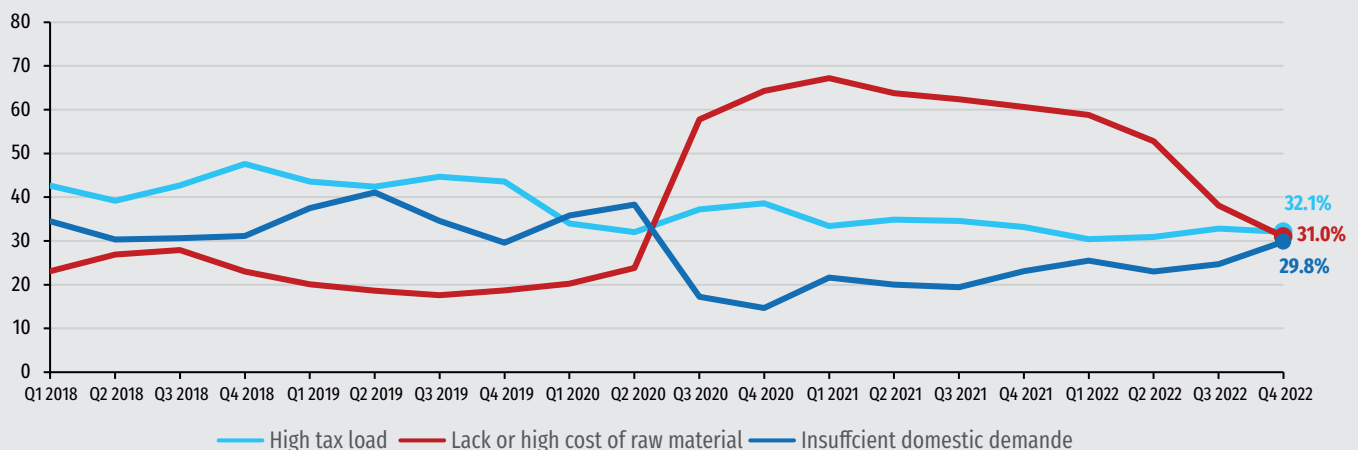
which increased significantly in the last quarter, approaching the pre-pandemic percentages.

Production, industrial employment, and capacity utilization dropped from November to December, a behavior expected for the period. Inventories experienced a slight decrease but are still above planned levels.

Entrepreneurs reported worse financial conditions in the last quarter of 2022. On the other hand, most expectation indices for January 2023 increased, but the optimism remained widespread. The intention to invest remained stable in the period.

Main problems faced by the Industry

Percentage of mentions among the three main problems faced by the Industry in the quarter (%)*



*In the survey, the entrepreneur is asked to mention up to three real problems for his or her company. Thus, the sum of the percentages exceeds 100%. Presented here is the history of the three most frequently mentioned problems in the fourth quarter of 2022.

INDUSTRY PERFORMANCE IN DECEMBER 2022

Industrial production and employment drop in December

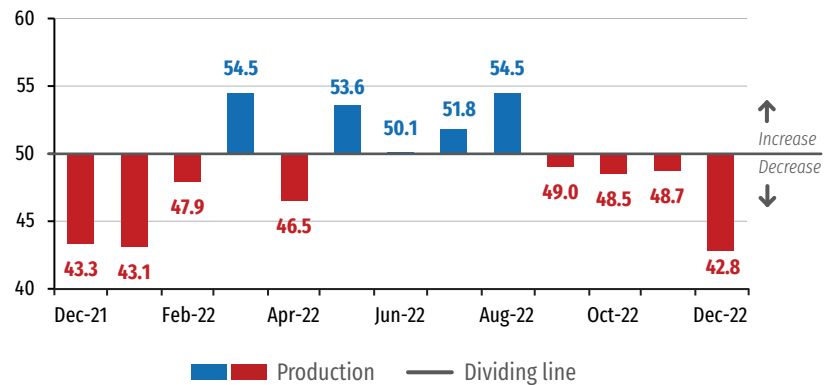
Industrial production decreased from November to December 2022. The production evolution index remained at 42.8 points—a result below the dividing line between production decline and growth.

Although the 5.9-point drop is significant, industrial production is expected to slow down in December. It is worth noting, however, that the result is above the average for December (41.8 points), i.e., the drop in production between November and December 2022 was perceived as less severe than in other years.

Industrial employment dropped from November to December 2022, a behavior that is also usual for the period. The index for variation in the number of employees stood at 46.9 points, corresponding to a 2.1 points decrease from November to December. The result has been below the 50-point dividing line since October, indicating the perception of a drop in industrial employment in the last quarter of 2022.

Variation of production

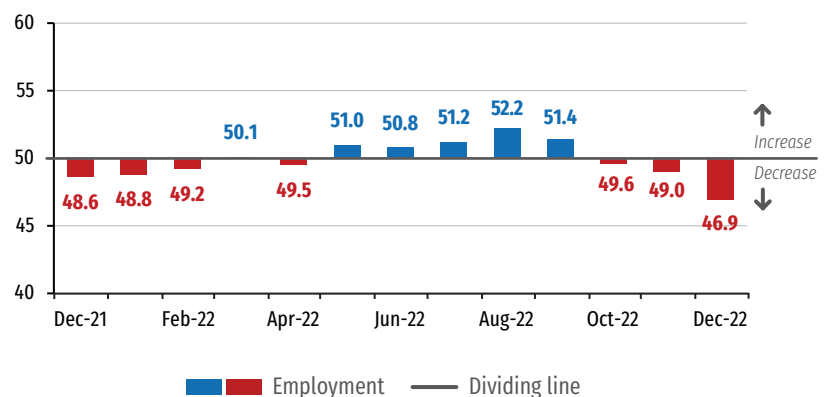
Diffusion index (0 to 100 points)*



*A score above 50 points indicates an increase in production compared to the previous month, while a score below 50 points indicates a decrease in production compared to the previous month. The further the point score is from 50 points, the greater and more widespread the variation.

Variation in the number of employees

Diffusion index (0 to 100 points)*



*A score above 50 points indicates an increase in employment compared to the previous month, while a score below 50 points indicates a decrease in employment compared to the previous month. The further the point score is from 50 points, the greater and more widespread the variation.

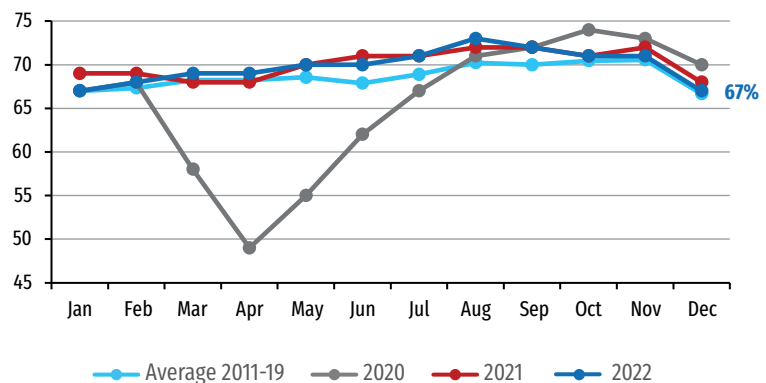
Capacity utilization decreases

In December 2022, capacity utilization decreased by 4 percentage points (pp) compared to November, dropping to 67%. It is worth noting that in December, capacity utilization usually has lower results. Therefore, such a drop is predictable. The December 2022 percentage is lower than the one for the same month in the last two years—a period of atypical industrial activity. Moreover, the percentage stood at an intermediate position in the last two years, and December's results of the years in which industrial activity struggled, such as 2015 and 2016.

Effective versus common capacity utilization index stood at 42.2 points in December, which is equivalent to a drop of 3.0 points compared to the previous month. This result is slightly lower than the historical average for December (42.4 points), indicating that capacity utilization is still lower than usual.

Average capacity utilization

Percentage (%)



Inventories are above the planned level

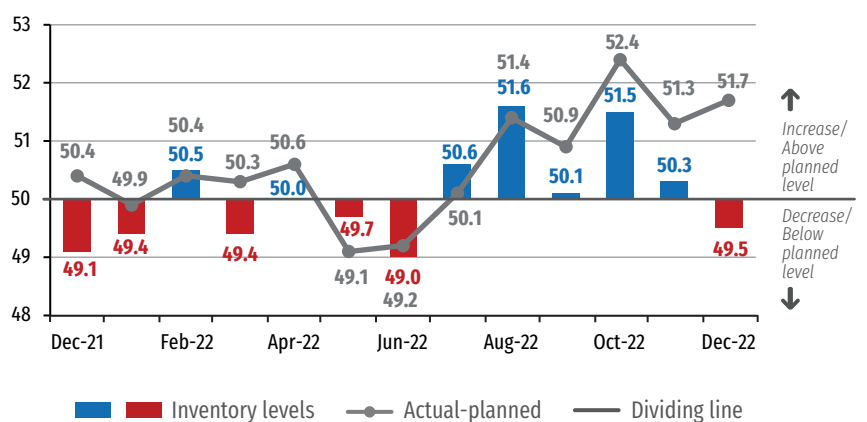
Inventories have decreased slightly but are above the target level in December 2022.

The inventory level variation index stood at 49.5 points, just below the 50-point dividing line, indicating a slight drop in inventory levels compared to the previous month.

The index of the actual inventory level against the planned level stood at 51.7 points in December, meaning the actual inventory is above the level planned by companies. Since July 2022, this index's results have been above 50 points, indicating stocks are above planned levels.

Variation in inventory levels and actual inventory against the planned level

Diffusion index (0 to 100 points)*



*A score above 50 points indicates an increase in inventory levels or that actual inventory is above planned levels. A score below 50 points indicates a decline in inventory levels or that actual inventory is below planned levels. The further away from 50 points, the greater the change or the distance from planned levels.

FINANCIAL CONDITIONS OF THE INDUSTRY IN Q4 2022

Worsening financial conditions across industries

The indicator that measures satisfaction with operating profit dropped 0.8 points in the quarter, from 48.1 points to 47.3 points. The result remains below the dividing line of 50 points, indicating dissatisfaction of entrepreneurs with the profit margin. The drop shows increased dissatisfaction between the third and fourth quarters of 2022.

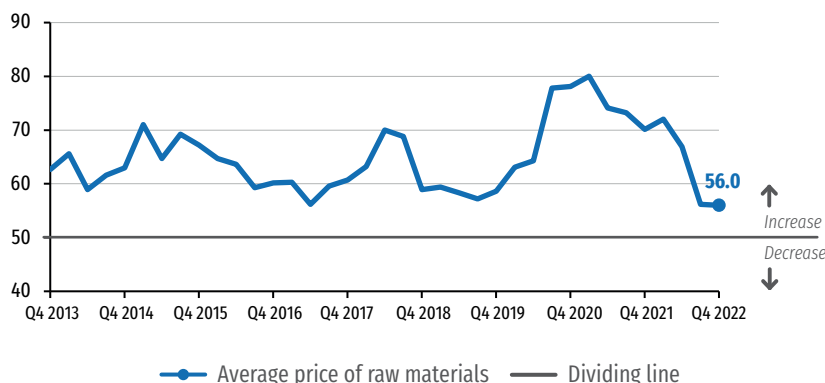
The indicator for satisfaction with the company's financial status stood at 51.8 points, down by 0.4 points from the previous quarter. Despite the slight drop, the result remains above the 50-point dividing line, indicating that there is still satisfaction with the financial status in the period.

The index measuring ease of access to credit dropped in the quarter from 43.7 points to 42.7 points. The result shows that companies still find it difficult to obtain credit, albeit the result is above last year's average (42.7 points).

The indicator for the variation of raw material prices dropped slightly by 0.2 points to 56.0 points. The result remains above the 50-point dividing line, indicating that raw material prices remain high. It is noteworthy, however, that the rise in input prices has become much less critical throughout 2022: in the first quarter, the index stood at 72.0 points; in the second quarter, 66.9 points; in the third quarter, it dropped to 56.2 points.

Average price of raw materials

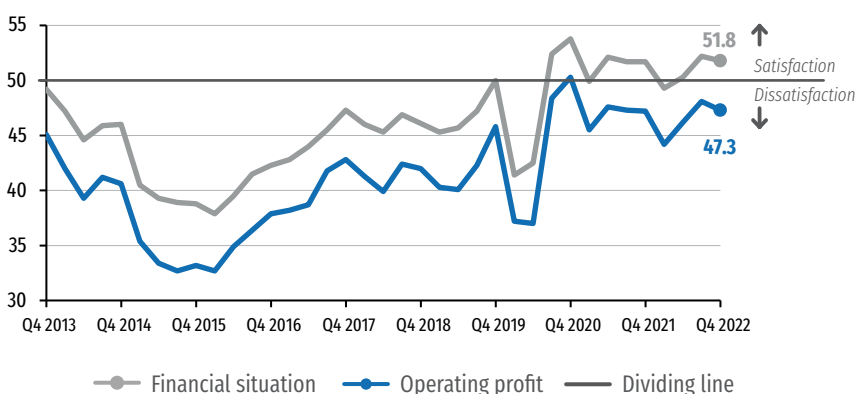
Diffusion index (0 to 100 points)*



* The index ranges from 0 to 100. A score above 50 points indicates an increase in the price of raw materials. A score below 50 points indicates a decrease in the price of raw materials.

Satisfaction with operating profit and financial situation

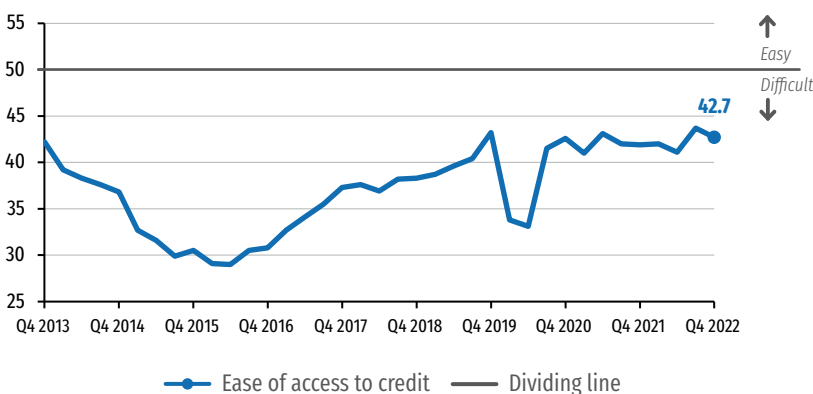
Diffusion index (0 to 100 points)*



* Satisfaction indices range from 0 to 100. A score above 50 points indicates satisfaction. A score below 50 indicates dissatisfaction.

Ease of access to credit

Diffusion index (0 to 100 points)*



* The index ranges from 0 to 100. A score above 50 points indicates easy access to credit. A score below 50 points indicates difficult access to credit.

PROBLEMS FACED BY THE INDUSTRY IN Q4 2022

Lack or high cost of raw materials ranks second

After ranking first for nine consecutive quarters as the main problem faced by industrial companies, lack or high cost of raw materials came second in Q4 2022. Gradually, entrepreneurs mentioned this issue less often.

The percentage of industrial entrepreneurs who mentioned lack or high cost of raw materials as one of the main problems dropped from 38.1% to 31.0%. The 7.1-pp drop in the quarter was the seventh in a row. Since Q1 2021, the accumulated drop is 36.2 pp.

The high tax load returned to first place in the ranking of the main problems. The option mentioned by 32.1% of the industrial entrepreneurs showed a 0.7-pp decrease compared to the previous quarter.

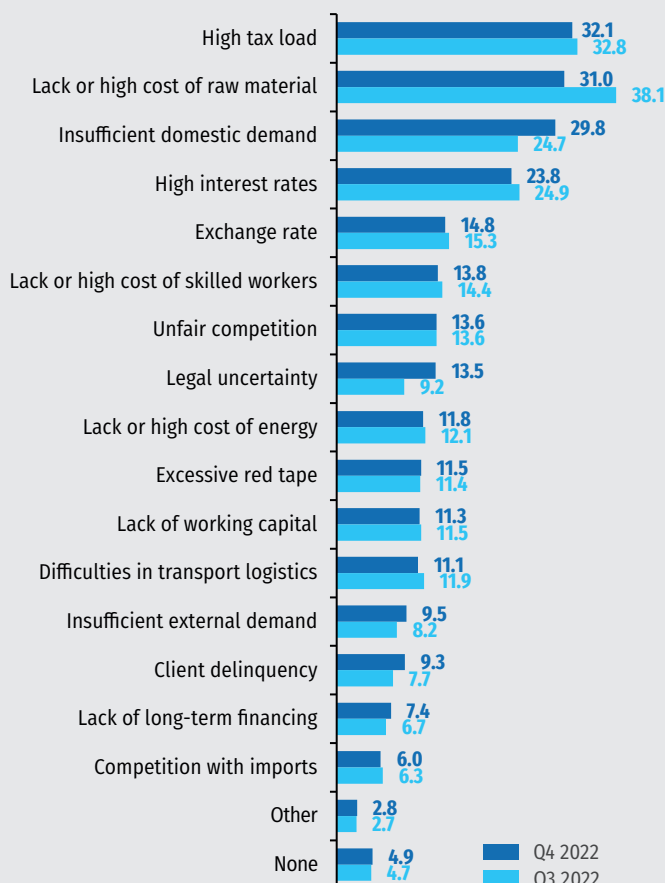
Historically, the high tax load problem usually ranked first, but due to the pandemic and the consequent unbalance in the supply chains, it moved into second place, as inputs and raw materials became more important.

Insufficient internal demand ranked third, mentioned by 29.8% of the entrepreneurs. There was a 5.1 pp increase in the number of mentions, comparing the third quarter to the fourth quarter of 2022. Throughout the historical series, this problem reached high percentages and usually ranked in the highest positions.

The high-interest rates ranked fourth, down 1.1 pp, after six consecutive quarters of increases. The problem was chosen by 23.8% of the industrial entrepreneurs. It is worth noting that 2022 was marked by successive

Main problems faced by the Industry in the quarter

Percentage of total industries (%)*



* In the survey, the entrepreneur is asked to mention up to three real problems for his or her company. Thus, the sum of the percentages exceeds 100%.

increases in this item, with percentages above 20% in all quarters of the year, indicating that this problem has gained prominence and remains a concern. Such perception from entrepreneurs is related to the country's economic scenario, due to the consecutive adjustments in the Selic rate.

Finally, lack or high cost of skilled workers, which had been increasing in the most recent quarters, dropped by 0.6 pp, mentioned by 13.8% of the industrial entrepreneurs.

INDUSTRY EXPECTATIONS IN JANUARY 2023

Expectations rose in January

In January 2023, most expectation indexes increased, so the optimism of industrial entrepreneurs became more intense and widespread.

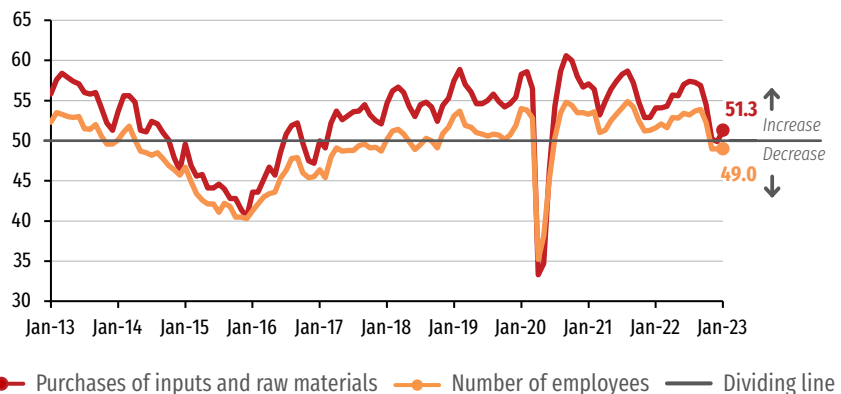
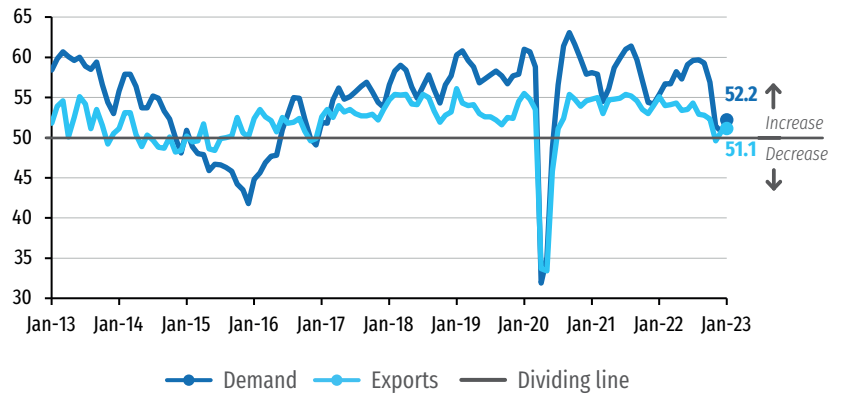
The expectation indices for demand, purchases of raw materials, and quantity exported increased, indicating greater optimism among entrepreneurs and expectations of growth over the next six months. However, the expectation index for the number of employees remained stable—slightly below 50 points.

The demand expectation index stood at 52.2 points, a 1.4-point increase compared to December. The exported quantity expectation index increased slightly by 0.4 point, to 51.1 points. The expectation index of purchases of raw materials stood at 51.3 points, a result 1.4 point higher than in December.

The expectation index for the number of employees remained stable compared to December and November, at 49.0 points. This result indicates there is an expectation of a reduction in the number of employees.

Expectation indices

Diffusion index (0 to 100 points)*



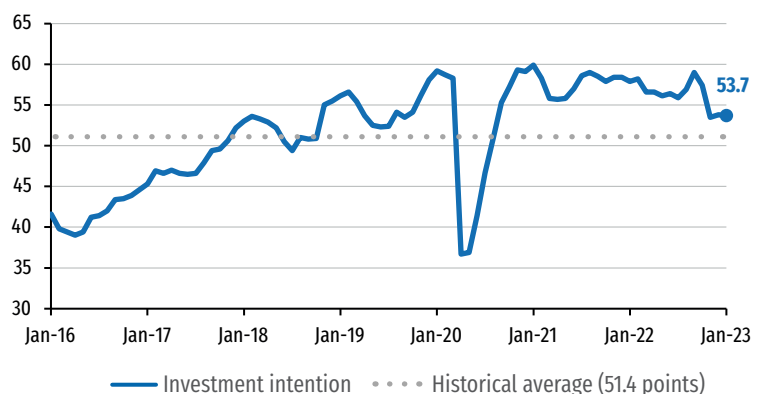
* A score above 50 points indicates expectations of growth, while a score below 50 points indicates an expected decrease. The further away from 50 points, the greater and more widespread the expected variation.

Intentions to invest remains virtually stable

Intention to invest remained stable in December. The intention to Invest index reached 53.7 points, remaining above the historical average of 51.4 points, which indicates that there is an intention to invest in the industry.

Investment intention

Diffusion index (0-100 points)*



* The higher the index, the greater the industry's propensity to invest.

RESULTS

Financial conditions in the quarter

	OPERATING PROFIT MARGIN			AVERAGE PRICE OF RAW MATERIALS			FINANCIAL SITUATION			ACCESS TO CREDIT		
	Q4 2021	Q3 2022	Q4 2022	Q4 2021	Q3 2022	Q4 2022	Q4 2021	Q3 2022	Q4 2022	Q4 2021	Q3 2022	Q4 2022
General Industry	47.2	48.1	47.3	70.1	56.2	56.0	51.7	52.2	51.8	41.9	43.7	42.7
BY INDUSTRIAL SEGMENT												
Mining and quarrying	53.3	51.4	51.5	69.9	58.5	59.4	56.9	59.3	56.7	45.8	54.2	49.6
Manufacturing	47.0	47.9	47.1	70.1	56.1	56.0	51.5	52.0	51.7	41.8	43.3	42.5
BY SIZE												
Small ¹	43.0	44.8	44.0	71.5	59.4	59.2	46.1	47.5	46.6	37.6	40.1	38.1
Medium ²	45.1	46.2	45.1	70.2	57.1	56.1	49.7	51.7	50.2	41.3	43.2	42.1
Large ³	50.3	50.7	50.1	69.4	54.2	54.4	55.6	54.8	55.3	44.3	45.7	45.2

Indicators range from 0 to 100 points. A score above 50 points indicates satisfaction with the operating profit margin and financial status, easy access to credit, or an increase in the average price of raw materials. A score below 50 points indicates dissatisfaction with the operating profit margin and financial status, difficult access to credit, or a decrease in the average price of raw materials.

1 - Company with 10 to 49 employees. 2 - Company with 50 to 249 employees. 3 - Company with 250 or more employees.

Main problems in Industry

	GENERAL			SMALL			AVERAGE			LARGE		
	Q3 2022	Q4 2022		Q3 2022	Q4 2022		Q3 2022	Q4 2022		Q3 2022	Q4 2022	
Items	%	%	Position	%	%	Position	%	%	Position	%	%	Position
High tax load	32.8	32.1	1	34.3	35.9	1	35.6	34.2	1	30.5	29.1	3
Lack or high cost of raw material	38.1	31.0	2	39.1	31.6	2	39.9	30.6	3	36.7	31.0	2
Insufficient domestic demand	24.7	29.8	3	21.6	25.1	3	24.1	30.8	2	26.5	31.7	1
High interest rates	24.9	23.8	4	21.8	21.0	5	22.5	22.4	4	27.6	26.0	4
Exchange rate	15.3	14.8	5	6.3	7.1	13	12.3	11.2	10	21.3	20.6	5
Lack or high cost of skilled workers	14.4	13.8	6	17.7	17.3	6	17.8	15.6	5	10.9	11.1	9
Unfair competition	13.6	13.6	7	21.4	22.6	4	16.1	15.2	6	8.4	8.3	13
Legal uncertainty	9.2	13.5	8	6.3	12.1	9	10.6	13.5	8	10.0	14.2	7
Lack or high cost of energy	12.1	11.8	9	13.4	13.7	8	11.5	14.5	7	11.8	9.5	11
Excessive red tape	11.4	11.5	10	9.1	11.2	11	12.5	10.3	11	12.0	12.3	8
Lack of working capital	11.5	11.3	11	15.1	14.3	7	10.8	12.3	9	10.0	9.2	12
Difficulties in transport logistics	11.9	11.1	12	7.5	5.9	15	9.5	9.6	12	15.4	14.4	6
Insufficient external demand	8.2	9.5	13	5.7	7.6	12	8.3	8.1	14	9.3	11.1	9
Client delinquency	7.7	9.3	14	11.8	11.4	10	7.7	9.6	12	5.7	8.0	14
Lack of long-term financing	6.7	7.4	15	5.2	6.8	14	5.8	7.4	15	7.9	7.6	15
Competition with imports	6.3	6.0	16	6.0	5.2	16	7.2	5.8	16	5.9	6.6	16
Other	2.7	2.8		2.3	2.4		2.0	2.5		3.2	3.1	
None	4.7	4.9		7.0	5.5		4.3	6.0		3.8	4.0	

Note: In the survey, the entrepreneur is asked to flag up to three real problems for his or her company. Thus, the sum of the percentages exceeds 100%.

RESULTS

Industry Performance

	PRODUCTION EVOLUTION			NUMBER OF EMPLOYEES EVOLUTION			CAPACITY UTILIZATION (%)			ACTUAL-USUAL CAPACITY UTILIZATION			INVENTORIES LEVELS EVOLUTION			ACTUAL-PLANNED INVENTORIES		
	Dec-21	Nov-22	Dec-22	Dec-21	Nov-22	Dec-22	Dec-21	Nov-22	Dec-22	Dec-21	Nov-22	Dec-22	Dec-21	Nov-22	Dec-22	Dec-21	Nov-22	Dec-22
Total	43.3	48.7	42.8	48.6	49.0	46.9	68	71	67	43.6	45.2	42.2	49.1	50.3	49.5	50.4	51.3	51.7
BY INDUSTRIAL ACTIVITY																		
Mining and quarrying	46.2	50.0	49.9	46.4	48.4	47.9	75	77	75	49.2	49.5	47.3	43.0	49.9	47.7	48.8	52.1	52.2
Manufacturing	43.3	48.6	42.7	48.7	49.0	46.9	68	71	67	43.5	45.0	42.1	49.3	50.3	49.5	50.5	51.4	51.7
BY COMPANY SIZE																		
Small ¹	45.9	49.4	43.5	48.4	48.4	46.4	63	66	63	43.3	45.5	41.9	47.1	48.4	47.6	46.4	47.7	46.9
Medium ²	43.4	48.3	42.9	48.4	49.6	48.0	66	69	66	42.4	44.6	41.6	50.3	50.2	50.4	50.1	51.3	51.8
Large ³	42.0	48.5	42.5	48.8	48.9	46.6	72	74	70	44.4	45.4	42.7	49.4	51.3	49.9	52.6	53.1	54.0

Indicators range from 0 to 100 points. A score above 50 points indicates an increase, above-planned inventories, or capacity utilization higher than usual. On the other hand, a score below 50 points suggest a decrease, lower-than-planned inventories, or a capacity utilization lower than usual.

1 - Company with 10 to 49 employees. 2 - Company with 50 to 249 employees. 3 - Company with 250 or more employees.

Industrial Expectations

	DEMAND			EXPORTS VOLUMES			PURCHASES OF RAW MATERIALS			NUMBER OF EMPLOYEES			INVESTMENT INTENTIONS*		
	Jan-22	Dec-22	Jan-23	Jan-22	Dec-22	Jan-23	Jan-22	Dec-22	Jan-23	Jan-22	Dec-22	Jan-23	Jan-22	Dec-22	Jan-23
Total	55.4	50.8	52.2	55.1	50.7	51.1	54.1	49.9	51.3	51.6	49.0	49.0	57.9	53.8	53.7
BY INDUSTRIAL ACTIVITY															
Mining and quarrying	58.0	50.0	56.3	63.3	48.4	51.7	54.3	50.2	54.8	50.7	50.6	50.2	63.4	63.3	64.7
Manufacturing	55.3	50.9	52.1	54.9	50.7	50.9	54.1	49.8	51.2	51.6	48.8	48.9	57.6	53.3	53.3
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Medium ²	56.1	50.5	52.2	56.9	52.9	54.1	54.2	49.4	50.8	51.7	49.0	48.9	54.4	51.4	50.4
Large ³	55.3	51.1	53.1	55.0	50.7	51.2	54.1	50.2	52.6	51.3	48.9	49.5	65.3	61.5	61.8

Indicators range from 0 to 100 points. A score above 50 points indicates expectations of growth, while a score below 50 points indicates an expected decrease.

*Indicator ranges from 0 to 100 points. The higher the index, the greater the propensity to invest in the industry.

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Technical specifications

Sample profile

1,688 enterprises, including 694 small, 571 medium and 423 large companies.

Collection period

January 3-13, 2023.

Document completed on January 19, 2023.



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For further information on sectorial and regional results, previous issues, methodology, and historical series, please visit: www.cni.com.br/e_sondindustrial

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