# INDUSTRIAL COST INDICATOR



# 2018 sees highest increase in industrial costs in the series

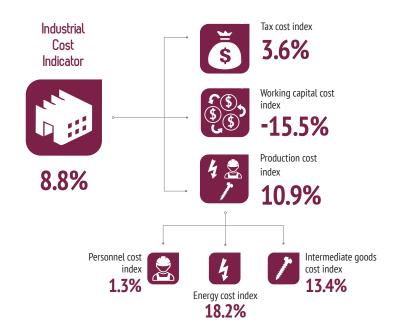
Industrial costs increased by 8.8% in 2018 as compared to the average for 2017, marking the highest growth rate since the beginning of the historical series in 2006. The increase in the indicator was driven by costs of intermediate goods and by energy costs.

Industrial profitability edged down in 2018 from the 2017 average, as prices of domestic manufactured goods increased less than industrial costs. Despite the reduced profitability, industry gained competitiveness throughout 2018 in both the domestic and international market, as the increase in prices in reals of imported manufactured goods and in prices, also in reals, of goods manufactured in the United States outpaced the rise in costs of Brazilian industry.

It is worth noting that industrial costs grew more strongly in the second and third quarters of the year, influenced by the truck drivers' strike, by the devaluation of the Brazilian currency, which pushed up costs of intermediate products costs, and by an increase in energy costs. It should be stressed, however, that industrial costs fell by 0.3% in the fourth quarter on a quarter-over-quarter basis. This marked the first quarterly decrease in the indicator since the third quarter of 2016. This decline in late 2018 is explained mainly the reduction in costs of imported intermediate goods, in working capital costs and in tax costs.

## Change in the average for 2018 as compared to the 2017 average

Seasonally adjusted



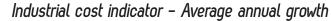


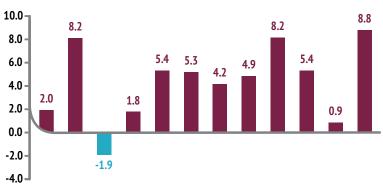


#### INDUSTRIAL COST INDICATOR AND ITS COMPONENTS

### Industrial costs grow by 8.8% in 2018

Industrial costs edged up by 8.8% in 2018 from the 2017 average. The increase in costs was led by the 13.4% growth in costs of intermediate goods and the 18.2% rise in energy costs. Tax costs also contributed to the increase in the year as it posted growth of 3.6%. The only component of the industrial cost indicator that declined in 2018 was working capital costs, which dropped by 15.5% as compared to 2017.





2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

# Costs of intermediate goods experience highest increase since the beginning of the series

Costs of intermediate goods increased by 13.4% in 2018 as compared to the average for 2017, marking the highest growth rate since the historical series started in 2006. The increase was observed in both domestic and imported intermediate goods.

Cost of domestic intermediate goods rose by 11.9%, the highest average annual growth in the series. One of the possible reasons behind the sharp increase in costs of domestic intermediate goods was the truck drivers' strike, which took place in the second quarter of the year and affected productive chains in subsequent months. The minimum freight rate table also contributed toward the increase in industrial input prices. Another factor that contributed to the increase in prices of domestic intermediate goods was the rise in energy costs and costs of imported intermediate products, which are passed on in longer production chains.

Costs of imported intermediate goods rose by 22.3% in 2018 as compared to the average for 2017, marking the second highest increase in the series, second only to the growth rate observed in 2015, when they rose by 32.3%. The increase

in costs of imported intermediate goods is influenced by the devaluation of the real during 2018. It is worth noting that costs of imported intermediate goods fell by 4.7% in the fourth quarter of 2018, breaking the upward trend that had been in place since the fourth quarter of 2017.

# Cost index of domestic and imported intermediate goods – Historical series

Base: 2006 average = 100



--- Cost index of imported intermediate goods

--- Cost index of domestic intermediate goods





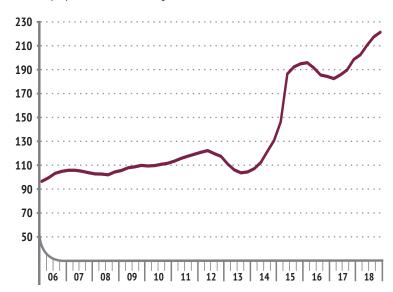
## Energy costs up by 18.2% in 2018

Energy costs edged up by 18.2% in 2018 from the average for 2017, marking the second highest increase in the series started in 2006, a rate outpaced only by the 41.3% increase observed in 2015.

Electricity costs rose by 12.8% in the period, but the component that experienced the highest increase was fuel oil costs, which recorded growth of 41.3% in 2018 as compared to the 2017 average.

#### Energy cost index - Historical series

Seasonally adjusted - Base: 2006 average = 100

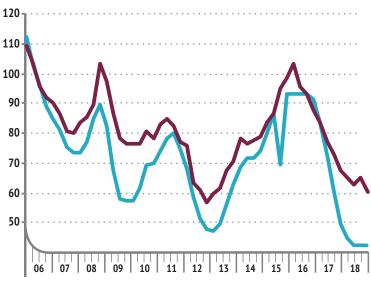


## Working capital costs close the year on a down note

After growing in the third quarter, working capital costs are down in the fourth quarter of 2018 due to uncertainties about the election period. The indicator closes the year down by 15.5% from the average for 2017.

Working capital cost index and quarterly average SELIC rate target – Historical series

Seasonally adjusted - Base: 2006 average = 100



-O- Working capital costs

--- SELIC rate target - quarterly average





#### PROFITABILITY AND COMPETITIVENESS

# Devaluation of Brazilian real drives up industrial competitiveness in 2018

Industrial profitability fell in 2018 as compared to the 2017 average because while industrial costs experienced an 8.8% increase on a seasonally adjusted basis, prices of manufactured products rose by 8.4%, indicating that industry is having a hard time fully passing on the increase in its costs to consumers.

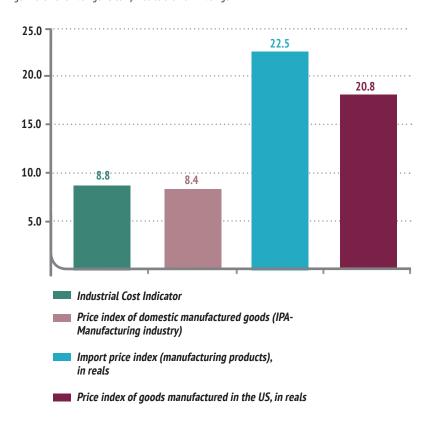
The devaluation of the real throughout 2018 contributed to the increase in industry's competitiveness against imported products, which compete with the Brazilian industry in the domestic market. While industrial costs rose by 8.8%, prices in reals of imported manufactured goods edged up by 22.5% from the 2017 average.

The Brazilian industry also increased its competitiveness in the international market. While industrial costs posted growth of 8.8%, the price index of goods manufactured in the US, in reals, edged up by 20.8% in the period.

It is worth emphasizing that the exchange rate devaluation has a two-fold impact on industrial competitiveness. It has a positive short-term effect resulting from the increased prices of foreign competing goods, but it also has a negative medium-term impact that drives up costs of imported intermediate goods.

#### Profitability and competitiveness

Percentage change in the 2018 average as compared to the 2017 average





#### Industrial cost indicator and its components

	Q4 2018/ Q3 2018*	Q4 2018/ Q4 2017**	2018 average/ 2017 average**
INDUSTRIAL COST INDICATOR - ICI	-0.3	9.6	8.8
Production cost index	0.4	12.9	10.9
Personnel cost index	1.2	2.9	1.3
Intermediate goods cost index	0.1	15.8	13.4
Domestic intermediate goods price index	1.1	14.5	11.9
Imported intermediate goods price index	-4.7	23.8	22.3
Energy cost index	1.7	18.1	18.2
Working capital cost index	-6.6	-9.6	-15.5
Tax cost index	-2.8	-1.9	3.6

Source: CNI.

Note: \* seasonally adjusted results.

#### Industrial cost indicator and price indexes

	Q4 2018/ Q3 2018*	Q4 2018/ Q4 2017**	2018 average/ 2017 average**
INDUSTRIAL COST INDICATOR - ICI	-0.3	9.6	8.8
Price index of domestic manufactured goods (IPA-Manufacturing industry)	0.8	10.7	8.4
Import price index (manufacturing products), in reals	-5.6	23.1	22.5
Price index of goods manufactured in the US, in reals	-4.3	25.8	20.8

Source: CNI.

Note: \* seasonally adjusted results.



#### Learn more

For more information on the survey, including previous editions, methodology and historical series, visit: <a href="https://www.cni.com.br/e\_ici">www.cni.com.br/e\_ici</a>

<sup>\*\*</sup> original results.

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