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# INDEX OF INDUSTRIAL PRODUCTION

## NOVEMBER 2019

**IIP records mild turnaround in growth to 1.8% in November 2019, after three months of contraction**

**JANUARY 2020**



## HIGHLIGHTS

- In line with our expectations, the Index of Industrial Production (IIP) recorded a turnaround to a mild year-on-year (YoY) growth of 1.8% in November 2019, in contrast to the contraction of 4.0% in October 2019, led by the favourable base effect, as well as factors such as the larger number of working days and easing of rainfall related disruption. However, the pace of growth of the IIP in November 2019 was lower than our forecast (+4.0%).
- On a sectoral basis, there was a sharp turnaround in manufacturing (to +2.7% from -2.3%) and mining (to +1.7% from -8.0%) in November 2019 relative to October 2019, while the contraction in electricity generation narrowed (to -5.0% from -12.2%).
- Five of the six use-based categories, except intermediate goods, posted a sequential improvement in their performance in November 2019. However, four of the categories (except intermediate goods and consumer non-durables) continued to report a YoY contraction in that month.
- Given the base effects and shifts in the festive calendar, it may be more appropriate to look at the average industrial performance in October-November 2019. Despite the turnaround in November 2019, the contraction in industrial output worsened to 1.2% in October-November 2019 from 0.3% in Q2 FY2020.
- On a sectoral basis, the contraction in mining and electricity generation exerted a drag on the industrial performance in October-November 2019, even as manufacturing output recorded a marginal 0.1% YoY rise.
- Early indicators of the IIP for December 2019 have displayed a mixed trend. An improvement in the performance of Coal India Limited (CIL) and electricity generation relative to the previous month would support the performance of the IIP in December 2019. However, the easing of the favourable base effect, coupled with the widening contraction in auto production may well result in industrial output reverting to a contraction in December 2019.



## OVERVIEW

In line with our expectations, the growth of the IIP recorded an improvement to 1.8% in November 2019 from the mild 0.2% in November 2018 (refer Exhibit 1 and 2), but printed lower than our forecast (+4.0%). In terms of the use-based categories, the performance improved for intermediate goods (to +17.1% in November 2019 from -4.1% in November 2018), consumer durables (to -1.5% from -3.0%) and consumer non-durables (to +2.0% from -0.3%). In contrast, the performance worsened in November 2019 relative to November 2018 for capital goods (to -8.6% from -4.1%), infrastructure/construction goods (to -3.5% from +4.8%) and primary goods (to -0.3% from +3.2%).

Driven by a favourable base effect, as well as factors such as the larger number of working days and easing of rainfall related disruption, the YoY performance of the IIP recorded a turnaround to a growth of 1.8% in November 2019 (+0.2% in November 2018) from the revised contraction of 4.0% in October 2019 (+8.4% in October 2018), led by an improvement in consumer durables (to -1.5% from -18.8%), infrastructure/ construction goods (to -3.5% from -9.7%), primary goods (to -0.3% from -6.0%), consumer non-durables (to +2.0% from -1.8%), and capital goods (to -8.6% from -22.0%). In contrast, the YoY expansion in intermediate goods eased to 17.1% in November 2019 from 22.9% in October 2019, while remaining healthy. Notably, the sequential improvement in the performance of the IIP in November 2019 relative to October 2019, was in line with the narrower YoY de-growth in the core sector output, which has a weight of 40.3% in the IIP (to -1.5% from -5.8%; refer Annexure C).

Given that the favourable base effect related to a larger number of working days in November 2019 relative to November 2018, following the earlier onset of the festive season in 2019, contributed to the turnaround in the performance of the IIP, it is appropriate to analyse the average growth trends in October-November 2019, to assess the underlying growth momentum. The performance of most of the use-based categories worsened in October-November 2019 compared to Q2 FY2020, namely, primary goods (-3.2%; -0.1%), infrastructure/construction goods (-6.7%; -3.2%), consumer durables (-10.9%; -7.4%), and consumer non-durables (+0.1%; +3.6%). However, there was an improvement in the YoY performance of capital goods (-15.7%; -16.5%) and intermediate goods (+20.1%; +9.9%) in October-November 2019 compared to Q2 FY2020.

In terms of the sectoral classification, manufacturing output rose by 2.7% in November 2019, in contrast to the YoY decline of 0.7% recorded in November 2018 (refer Exhibit 3). However, there was a deterioration in the performance of mining (to +1.7% from +2.7%) and electricity (to -5.0% from +5.1%) in November 2019 relative to November 2018. In sequential terms, the performance of mining, manufacturing and electricity improved in November 2019 (+1.7%, +2.7%, -5.0%, respectively) relative to October 2019 (to -8.0%, -2.3%, -12.2%, respectively). Manufacturing output rose by 2.7% in November 2019, reflecting the YoY expansion in the production of 13 of its 23 sub-sectors, with a considerable weight of 52.7% in the IIP. Moreover, all the sub-sectors of manufacturing, barring chemicals and chemical products, recorded an improvement in the YoY performance in November 2019 compared to the previous month.

However, there was a deterioration in the performance of mining (to -3.1% from -1.2%) and electricity (to -8.8% from +0.6%) in October-November 2019 compared to Q2 FY2020, whereas manufacturing sector posted a mild improvement (to +0.1% from -0.3%, respectively).

The extent of contraction in the IIP in October 2019 was revised to 4.0% from the initial 3.8%, reflecting the mild revision in manufacturing (to -2.3% from -2.1%). In terms of the use-based categories, there was a downward revision in the performance of infrastructure/construction goods (to -9.7% from -9.2%), capital goods (to -22.0% from -21.9%), consumer durables (to -18.8% from -18.0%), and consumer non-durables (to -1.8% from -1.1%), and an upward revision in the case of intermediate goods (to +22.9% from +22.2%).

In cumulative terms, the YoY growth of the IIP eased significantly to a marginal 0.6% in April-November FY2020 from 5.0% in April-November FY2019, led by the performance of capital goods (to -11.6% from +7.2%), infrastructure/construction goods (to -2.7% from +8.3%), consumer durables (to -6.5% from +7.8%), primary goods (to +0.1% from +4.8%) and consumer non-durables (to +3.9% from +4.0%), which offset the significant improvement in the expansion of intermediate goods (to +12.2% from +0.7%).



## OUTLOOK

The output of CIL recorded a healthy YoY growth of 7.2% in December 2019, after a gap of five months, following an easing of rainfall-related disruption, which should result in an improvement in the performance of the mining sector in the just-concluded month.

Further, tentative data released by the Central Electricity Authority (CEA) indicates that the pace of the YoY contraction in electricity generation narrowed significantly to 2.2% in December 2019 from 6.3% in November 2019, driven by thermal electricity generation (to -4.3% from -9.9%), although the pace of expansion of hydroelectricity generation recorded a sequential downtick (to +14.2% from +23.0%).

However, the data released by the Society of Indian Automobile Manufacturers indicates that the YoY decline in aggregate auto production worsened to 5.2% in December 2019 from 1.4% in November 2019, led by passenger vehicles and motorcycles. This would weigh upon the performance of the manufacturing sector in December 2019.

***Early indicators of the IIP for December 2019 have displayed a mixed trend. An improvement in the performance of Coal India Limited (CIL) and electricity generation relative to the previous month would support the performance of the IIP in December 2019. However, the easing of the favourable base effect, coupled with the widening contraction in auto production may well result in industrial output reverting to a contraction in December 2019.***

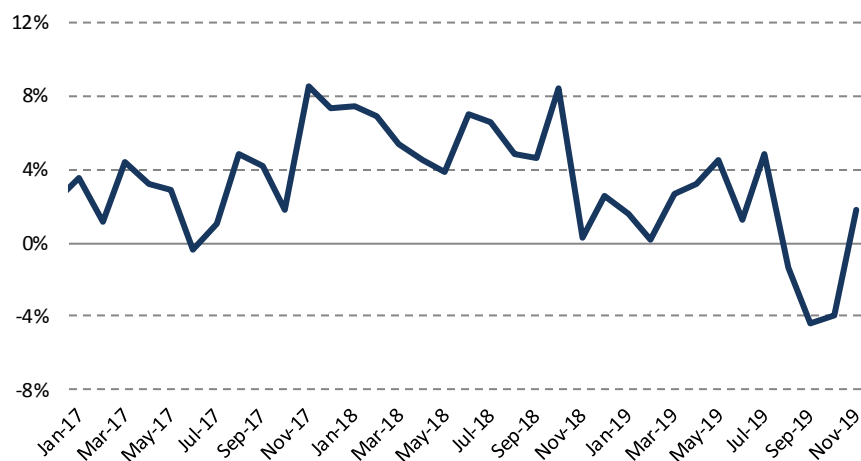


Exhibit 1: Trend in IIP Growth

	IIP	Sectoral			Use-Based Classification					
		Mining	Manufacturing	Electricity	Primary	Capital	Intermediate	Infrastructure/Construction	Durables	Non-Durables
Weight	100.0%	14.4%	77.6%	8.0%	34.0%	8.2%	17.2%	12.3%	12.8%	15.3%
Month										
Oct-18	8.4%	7.3%	8.2%	10.8%	6.1%	16.9%	2.4%	9.0%	17.4%	8.6%
Nov-18	0.2%	2.7%	-0.7%	5.1%	3.2%	-4.1%	-4.1%	4.8%	-3.0%	-0.3%
Oct-19	-4.0%	-8.0%	-2.3%	-12.2%	-6.0%	-22.0%	22.9%	-9.7%	-18.8%	-1.8%
Nov-19	1.8%	1.7%	2.7%	-5.0%	-0.3%	-8.6%	17.1%	-3.5%	-1.5%	2.0%
Apr-Nov FY2019	5.0%	3.7%	4.9%	6.6%	4.8%	7.2%	0.7%	8.3%	7.8%	4.0%
Apr-Nov FY2020	0.6%	-0.1%	0.9%	0.8%	0.1%	-11.6%	12.2%	-2.7%	-6.5%	3.9%

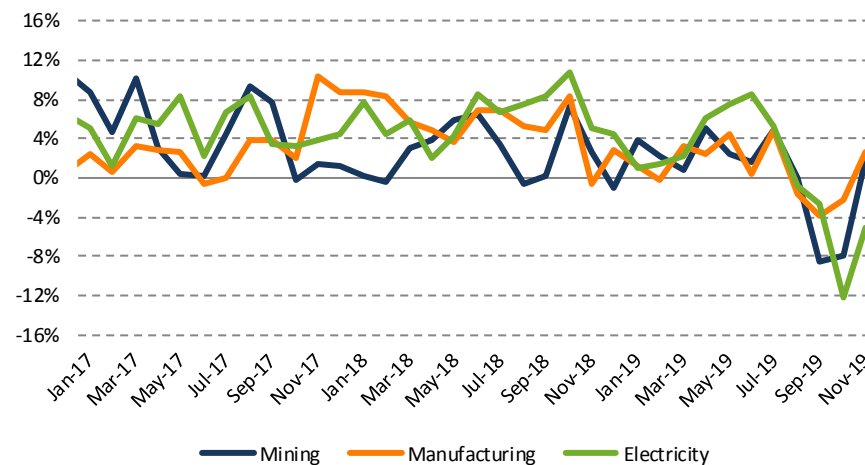
Source: Central Statistics Office (CSO); CEIC; ICRA research

Exhibit 2: YoY Growth in IIP



Source: CSO; CEIC; ICRA research

Exhibit 3: YoY Growth in Sectoral Indices



Source: CSO; CEIC; ICRA research

## SECTORAL CLASSIFICATION

**Manufacturing:** The output of the manufacturing sector recorded a mild growth of 2.7% in November 2019, in the contrast to the YoY decline of 2.3% in October 2019 (refer Annexure A), driven primarily by the favourable base effect. Moreover, the manufacturing sector was the biggest contributor to IIP growth in November 2019 (refer Exhibit 7). Notably, the output of this sector recorded a marginal YoY growth of 0.1% in October-November FY2020, considerably lower than the same in October-November FY2019 (+3.7%). On a cumulative basis, the growth of manufacturing output has declined to a mild 0.9% during April-November FY2020 from 4.9% in April-November FY2019. Nevertheless, this was superior to the performance of the other two sectors in the first eight months of this fiscal.

Ten sectors (with a weight of 24.9% in the IIP) displayed a YoY contraction in output in November 2019 (refer Exhibit 4 and 5), as compared to 18 sectors (with a significantly higher weight of 40.0% in the IIP) in October 2019. In addition, the combined pace of contraction of the output of these sectors narrowed considerably to 5.9% in November 2019 from 14.7% in October 2019.

The YoY contraction in the output of computer, electronic and optical products narrowed significantly to 9.9% in November 2019 from 31.1% in October 2019. Nevertheless, the performance of this sub-sector was dampened by the sharp 52.7% contraction in the output of printed circuit boards in November 2019 (refer Annexure B).

Similarly, the contraction in the output of machinery and equipment moderated to 4.0% in November 2019 from 17.9% in October 2019. The contraction in the output of harvesters and threshers (-58.3%) and printing machinery (-39.7%) weighed upon the performance of this sub-sector in November 2019.

In addition, the YoY decline in food products narrowed slightly to 1.5% in November 2019 from 2.1% in October 2019. The performance of this segment was dampened by the de-growth in sugar (-48.5%), which pulled down the IIP growth by 0.5% in November 2019.

Further, the YoY contraction narrowed in November 2019 relative to October 2019 for other manufacturing (to -13.5% from -26.3%), motor vehicles, trailers and semi-trailers (to -12.6% from -29.4%), printing and reproduction of recorded media (to -7.8% from -17.7%),

**Exhibit 4: Sub-Sectors Displaying Contraction in November 2019**

	September 2019	October 2019	November 2019
Number of Sub-Sectors	17	18	10
Weight in the IIP	54.2%	40.0%	24.9%
Combined Growth	-8.3%	-14.7%	-5.9%

Source: CSO, CEIC; ICRA research

**Exhibit 5: Sub-Sectors Displaying Contraction in November 2019**

	Weight (%)	Growth in Nov 2019	Comment
Food Products	0.53	-1.5%	Contracted in Oct 2019
Motor Vehicles, Trailers and Semi-Trailers	0.49	-12.6%	
Machinery and Equipment N.E.C.	0.48	-4.0%	
Fabricated Metal Products ex Machinery and Equipment	0.27	-5.8%	
Rubber and Plastics Products	0.24	-1.3%	
Computer, Electronic and Optical Products	0.16	-9.9%	
Other Manufacturing	0.09	-13.5%	
Paper and Paper Products	0.09	-7.1%	
Tobacco Products	0.08	-3.7%	
Printing and Reproduction of Recorded Media	0.1	-7.8%	

Source: CSO, CEIC; ICRA research

paper and paper products (-7.1% from -15.3%), fabricated metal products (to -5.8% from -19.9%), tobacco products (to -3.7% from -7.0%) and rubber and plastic products (to -1.3% from -16.1%).

Thirteen sub-sectors of manufacturing, with a substantial weight of 52.7% in the IIP, posted a YoY expansion in November 2019 (refer Exhibit 6).

The pace of expansion in the output of basic metals rose to 12.9% in November 2019 from 9.1% in October 2019. The substantial uptick in output of MS slabs (+151.1%) and pipes and tubes of steel (+87.2%), bolstered the performance of this sub-group in November 2019, and cumulatively boosted the IIP growth by 2.1% during the month, according to the CSO. However, the 61.0% contraction in the production of bars and rods of alloy and stainless steel dampened the IIP growth by 0.7% in November 2019.

Similarly, the pace of growth in the output of pharma, medicinal chemical and botanical products improved to 3.4% in November 2019 from the low 1.0% in October, supported by the considerable 52.1% expansion in the output of vaccine for veterinary medicine.

Further, the YoY growth in the output of coke and refined petroleum products rose to a mild 1.8% in November 2019 from 0.7% in the previous month.

In contrast, the YoY growth in chemicals and chemical products eased sharply to 8.8% in November 2019 from 32.8% in October 2019. Regardless, the performance of this sub-sector was boosted by the significant YoY uptick in fragrances and oil essentials (+161.5%), which pulled up the IIP growth by 0.3% in November 2019.

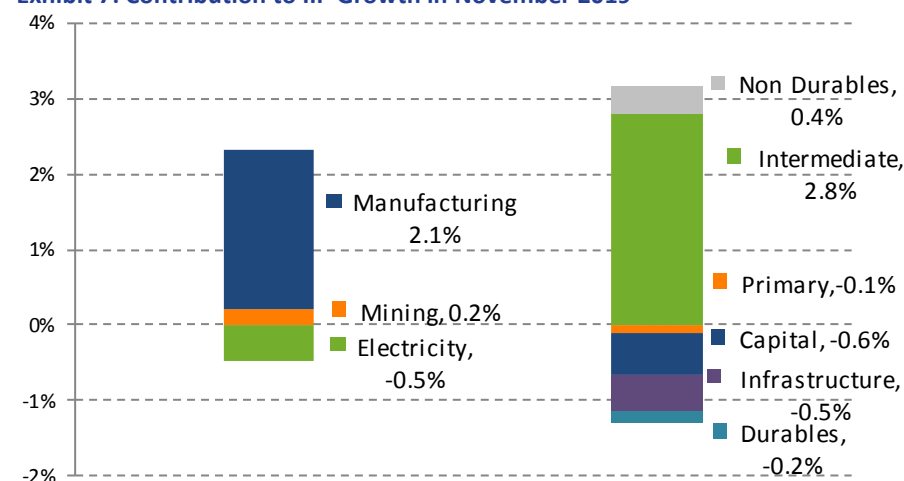
In addition, the output of electrical equipment (to +8.6% from -5.1%) recorded a YoY uptick in November 2019, in contrast to the YoY decline in October 2019. The performance of this sector in November 2019 was bolstered by the sharp rise in the output of electric heaters (+146.0%), which boosted the IIP growth by 0.3% during the month.

**Exhibit 6: Contribution to the Manufacturing Sector by Sub-Sectors**

Sub-Sectors	Weight (%)	Growth in Nov 2019	Contribution to Manuf. Growth
Basic Metals	12.8	12.9%	2.3%
Chemicals and Chemical Products	7.9	8.8%	0.8%
Pharma, Medicinal Chemical and Botanical Products	5.0	3.4%	0.4%
Coke and Refined Petroleum Products	11.8	1.8%	0.3%
Electrical Equipment	3.0	8.6%	0.3%
Others Displaying Expansion	12.3	2.0%	0.3%
Others Displaying Contraction	24.9	-5.9%	-1.7%
Manufacturing	77.6	2.7%	2.7%

Source: CSO, CEIC; ICRA research

**Exhibit 7: Contribution to IIP Growth in November 2019**



Source: CSO; CEIC; ICRA research

**Mining:** The output of the mining sector recorded a mild YoY growth of 1.7% in November 2019 (+2.7% in November 2018), in contrast to the considerable YoY contraction of 8.0% in October 2019 (+7.3% in October 2018). This was driven by the narrowing in the pace of YoY contraction of coal output (to -2.5% in November 2019 from -17.6% in October 2019), even as the performance of crude oil (to -6.0% from -5.1%, respectively) and natural gas (to -6.4% from -5.7%, respectively; refer Exhibit 8) recorded a sequential deterioration.

In overall terms, mining output contracted by 0.1% in April-November FY2020, in contrast to the 3.7% growth in April-November FY2019.

**Electricity:** The YoY decline in electricity generation narrowed significantly to 5.0% in November 2019 (+5.1% in November 2018) from the series-low 12.2% in October 2019 (+10.8% in October 2018). Nevertheless, it pulled down the IIP growth by 0.5% in November 2019.

Data released by the CEA indicates that the considerable sequential improvement in electricity generation in November 2019 relative to the previous month was driven by thermal electricity generation (to -9.9% from -18.9%), as well as an uptick in the pace of growth of hydroelectricity generation (to +23.0% from +17.9%).

Moreover, the PLF for coal and lignite-based plants rose somewhat to 51.7% in November 2019 from 49.5% in October 2019.

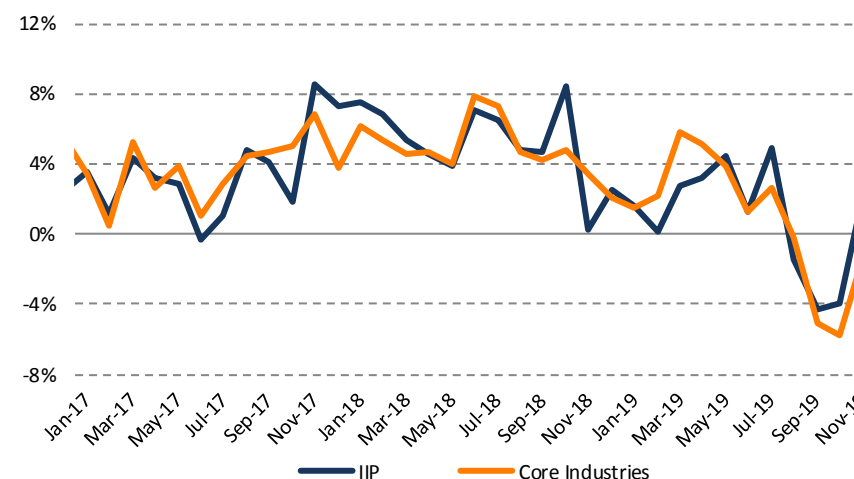
The cumulative growth in electricity generation declined to a subdued 0.8% in April-November FY2020 from 6.6% in April- November FY2019.

**Exhibit 8: YoY Growth of Coal, Crude Oil and Natural Gas**

	Coal	Crude Oil	Natural Gas
<b>Weight</b>	<b>10.33%</b>	<b>8.98%</b>	<b>6.88%</b>
Sep-18	6.5%	-4.2%	-1.7%
Oct-18	11.3%	-5.0%	-0.9%
Nov-18	3.7%	-3.5%	0.5%
Sep-19	-20.5%	-5.4%	-4.9%
Oct-19	-17.6%	-5.1%	-5.7%
Nov-19	-2.5%	-6.0%	-6.4%

Source: Index of Eight Core Industries, Ministry of Commerce and Industry, Office of the Economic Advisor; ICRA research

**Exhibit 9: YoY Growth in IIP and Core-Sector Industries**



Source: CSO; CEIC; ICRA research



## USE-BASED CLASSIFICATION

**Primary Goods:** The YoY contraction in the primary goods sub-index eased to a mild 0.3% in November 2019 (+3.2% in November 2018) from 6.0% in October 2019 (+6.1% in October 2018; refer Exhibit 10).

Regardless, the YoY decline in electricity generation exerted a drag on the primary goods sub-index, and pulled down the IIP growth by 0.5% in November 2019.

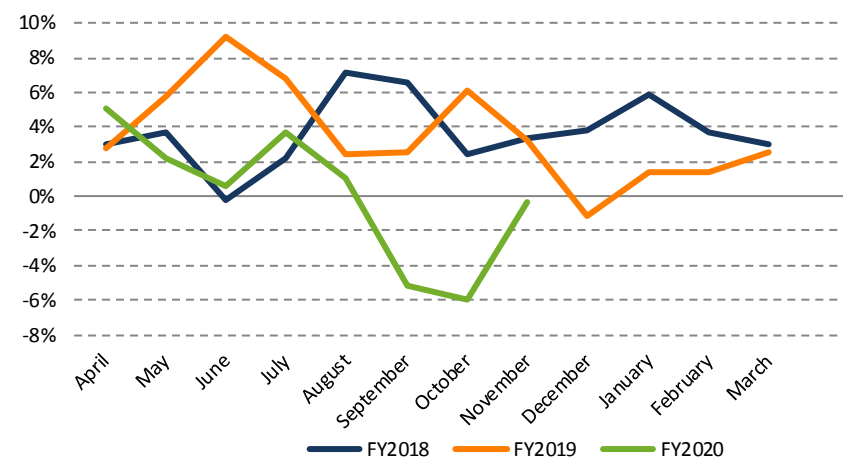
The YoY performance of this sub-index deteriorated to a contraction of 3.2% in October-November FY2020, from the modest 4.7% growth in October-November FY2019. Overall, the growth of primary goods dipped to a marginal 0.1% in April- November FY2020 from 4.8% in April-November FY2019.

**Capital Goods:** The output of capital goods recorded a YoY contraction for the twelfth month in a row in November 2019. However, the pace of the same narrowed considerably to 8.6% (-4.1% in November 2018) from 22.0% in October 2019 (+16.9% in October 2018; refer Exhibit 11), partly due to favourable base effect. The continued contraction in capital goods output highlights the prevailing weakness in investment activity as well as the YoY contraction (12.3%) in Government of India's capital expenditure in November 2019.

The steep YoY contraction in the output of printing machinery (-39.7%; with a weight of 0.5% in the IIP) and harvesters and threshers (-58.3%; with a weight of 0.2% in the IIP), dampened the performance of the capital goods segment in November 2019, as per the data released by CSO.

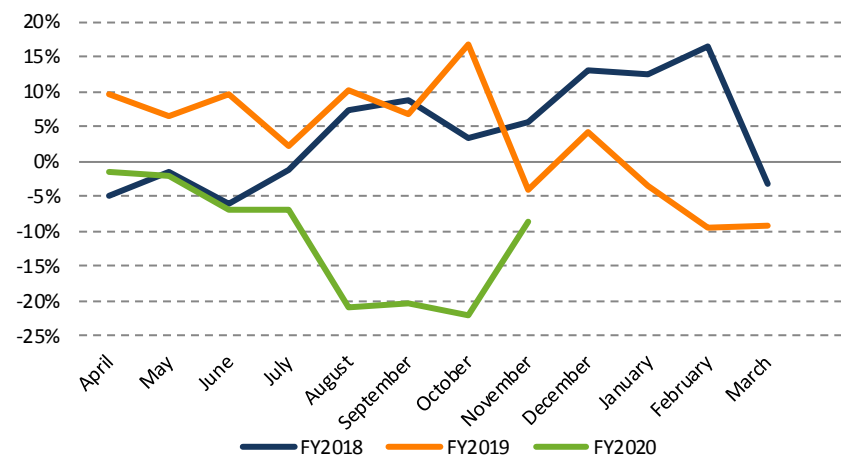
In addition, the performance of this sub-index worsened sharply in October-November FY2020 with a YoY contraction of 15.7%, in contrast to the moderate 6.0% expansion October-November FY2019. Similarly, the capital goods sub-index contracted by 11.6% in April-November FY2020, marking a considerable deterioration from the healthy 7.2% expansion in the corresponding months of FY2019. Moreover, capital goods emerged as the worst performing use-based group in the first eight months of FY2020.

**Exhibit 10: YoY Growth of Primary Goods**



Source: CSO, CEIC; ICRA research

**Exhibit 11: YoY Growth of Capital Goods**



Source: CSO, CEIC; ICRA research

**Intermediate Goods:** The pace of expansion of intermediate goods output eased to 17.1% in November 2019 (-4.1% in November 2018) from a series-high 22.9% in October 2019 (+2.4% in October 2018; refer Exhibit 12), while remaining healthy. Accordingly, intermediate goods remained the fastest growing use-based category for the seventh month in a row.

The performance of this sub-index benefitted from the high growth in MS slabs, pipes and tubes of steel, and fragrances and oil essentials (with a combined weight of 1.4% in the IIP), which boosted the IIP growth by a significant 2.4% in November 2019, according to the data released by the CSO. However, there was a steep YoY decline in the output of printed circuit boards (-52.7%; with a weight of 0.2% in the IIP) in November 2019.

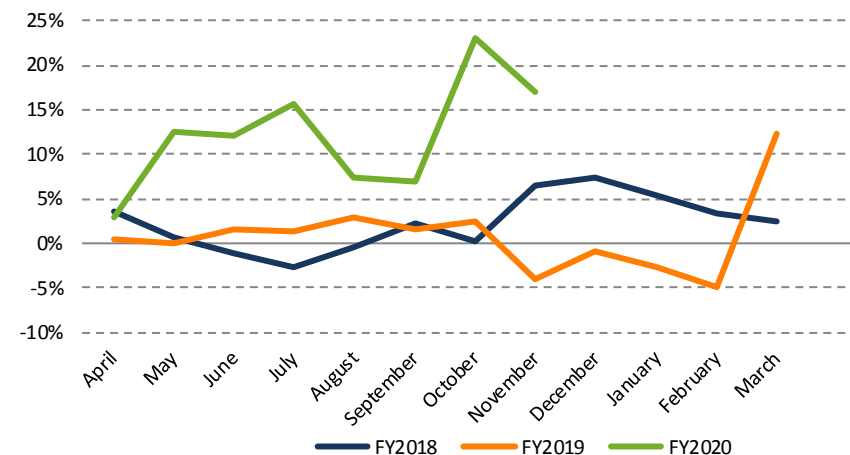
Moreover, this sub-index recorded a healthy 20.1% growth in October-November FY2020, in sharp contrast to a mild 0.9% contraction in October-November FY2019. Overall, the growth of intermediate goods output improved considerably to 12.2% in April-November FY2020 from the low 0.7% in April-November FY2019.

**Infrastructure/construction goods:** Led by the favourable base effect, the YoY contraction in infrastructure/construction goods output moderated to 3.5% in November 2019 (+4.8% in November 2018) from the series-low 9.7% in October 2019 (+9.0% in October 2018; refer Exhibit 13). Moreover, some pickup in construction activity after the easing in rainfall, is likely to have contributed to the narrowing contraction in output of infrastructure/construction goods in November 2019. The pace of capital spending of the Central and state governments would be a key driver of the trend in this category as well as capital goods in the remainder of FY2020.

As per the data released by the CSO, the output of HR coils and sheets of mild steel (with a weight of 1.4% in the IIP) bolstered the IIP growth by 0.3% in November 2019. In contrast, bars and rods of alloy and stainless steel (weight of 0.6% in the IIP), and steel structures (weight of 0.8% in the IIP), dampened the IIP growth by 1.0% in that month.

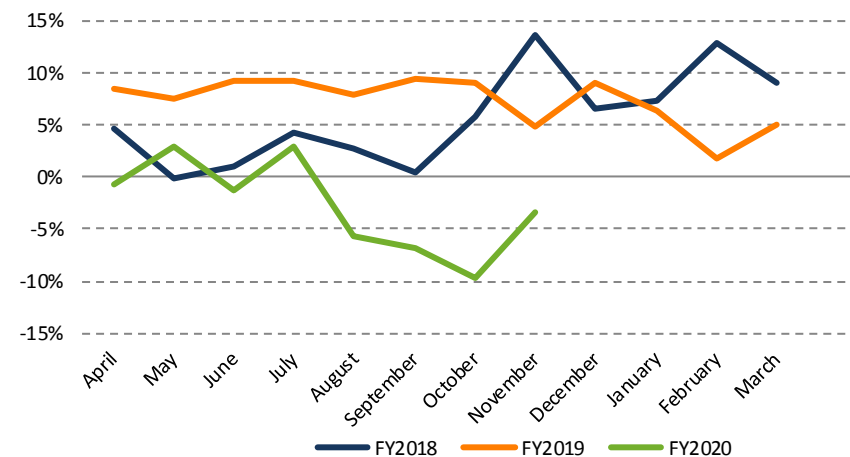
The sub-index recorded a 6.7% decline in October-November FY2020, in contrast to the 6.9% expansion in October-November FY2019. Moreover, the output of infrastructure/construction goods contracted by 2.7% in April-November FY2020, as opposed to the healthy 8.3% growth in April-November FY2019.

**Exhibit 12: YoY Growth of Intermediate Goods**



Source: CSO; CEIC; ICRA research

**Exhibit 13: YoY Growth of Infrastructure/Construction Goods**



Source: CSO; CEIC; ICRA research

**Consumer Durables:** The contraction in the output of consumer durables narrowed sharply to 1.5% in November 2019 (-3.0% in November 2018) from the substantial 18.8% in October 2019 (+17.4% in October 2018; refer Exhibit 14), reflecting the favourable base effect.

A sharp 146.0% expansion in the output of electric heaters (with a weight of 0.3% in the IIP) boosted the performance of this sub-index. However, auto components/spare accessories heaters (with a weight of 2.6% in the IIP) pulled down the IIP growth by 0.3% in November 2019, according to the data released by the CSO.

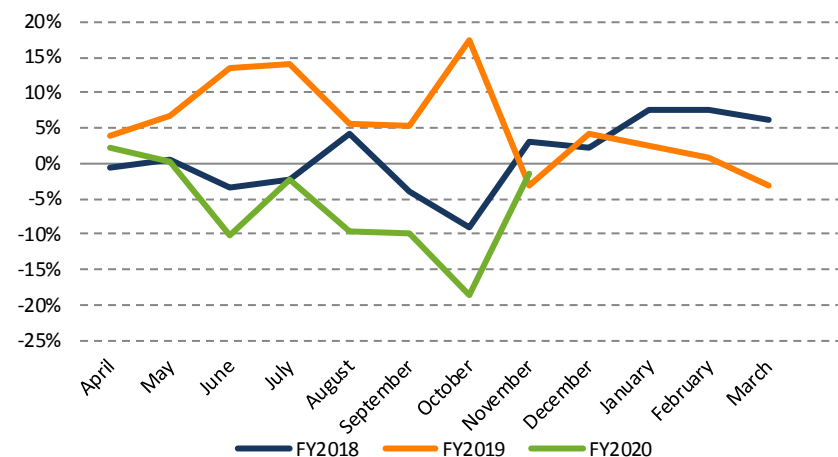
The performance of consumer durables deteriorated in October-November FY2020, with a considerable YoY contraction of 10.9%, as opposed to the 7.1% growth in the corresponding months in FY2019. Cumulatively, consumer durables output recorded a contraction of 6.5% in April-November FY2020, in sharp contrast to the healthy 7.8% expansion in April-November FY2019.

**Consumer Non-Durables:** After reporting a contraction in the previous two months, consumer non-durables output reverted to a mild growth of 2.0% in November 2019. The improvement in this month from the contraction of 1.8% in October 2019, was driven by the base effect (-0.3% in November 2018; +8.6% in October 2018). Notably, this was the second-best performance among all the use-based categories in IIP.

As per the data released by the CSO, the healthy 52.1% growth in vaccine for veterinary medicine (with a weight of 0.5% in the IIP), supported the IIP growth in November 2019. In contrast, the sharp 48.5% YoY decline in sugar production (with a weight of 0.8% in the IIP), weighed upon the IIP growth by 0.5% in November 2019.

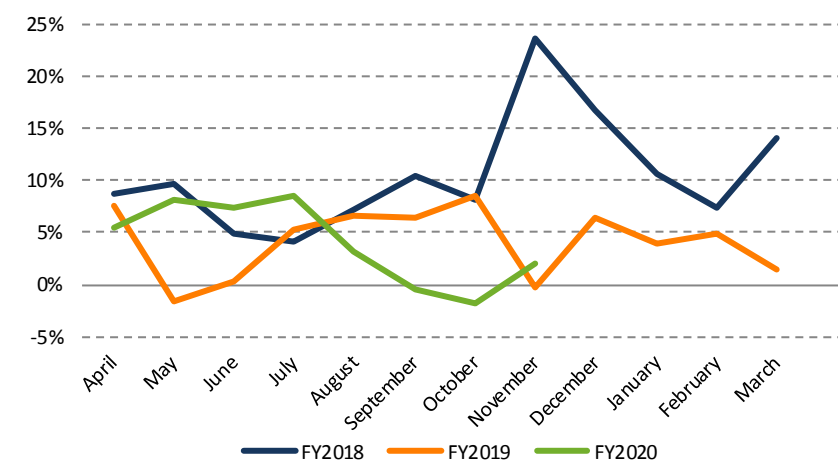
The growth of this sub-index eased to mild 0.1% in October-November FY2020 from 3.8% in October-November FY2019. In cumulative terms, the growth in consumer non-durables stood at 3.9% in April-November FY2020, mildly lower than the same in April-November FY2019 (+4.0%).

**Exhibit 14: YoY Growth of Consumer Durables**



Source: CSO; CEIC; ICRA research

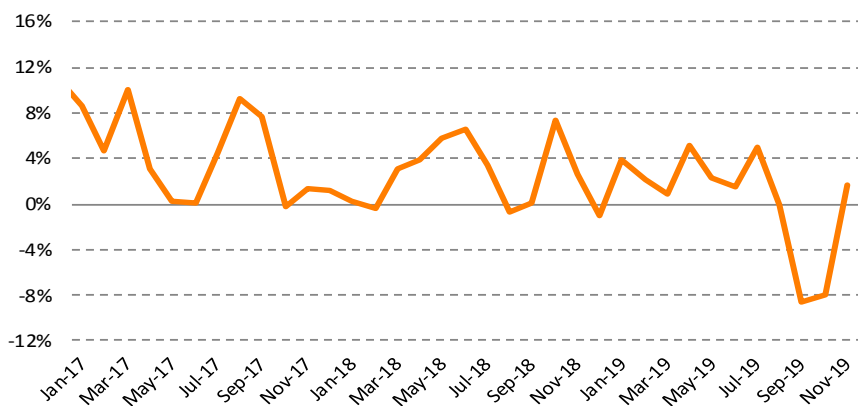
**Exhibit 15: YoY Growth of Consumer Non-Durables**



Source: CSO; CEIC; ICRA research

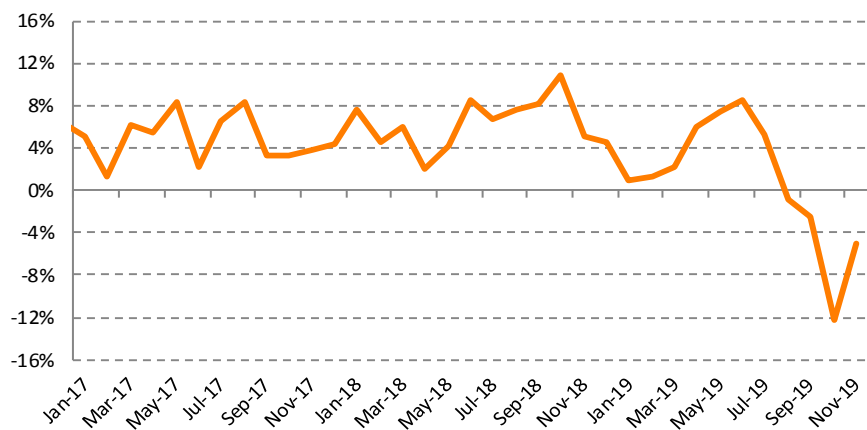
## ANNEXURE A

**Exhibit 16: YoY Growth in Mining**



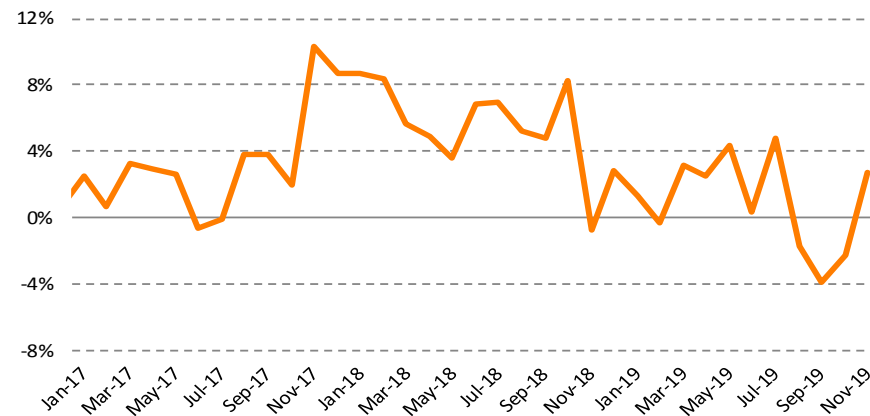
Source: CSO; CEIC; ICRA research

**Exhibit 18: YoY Growth in Electricity**



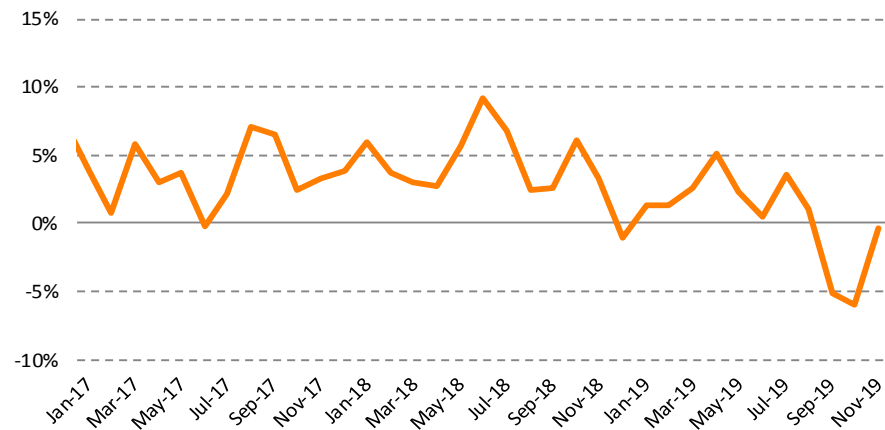
Source: CSO; CEIC; ICRA research

**Exhibit 17: YoY Growth in Manufacturing**



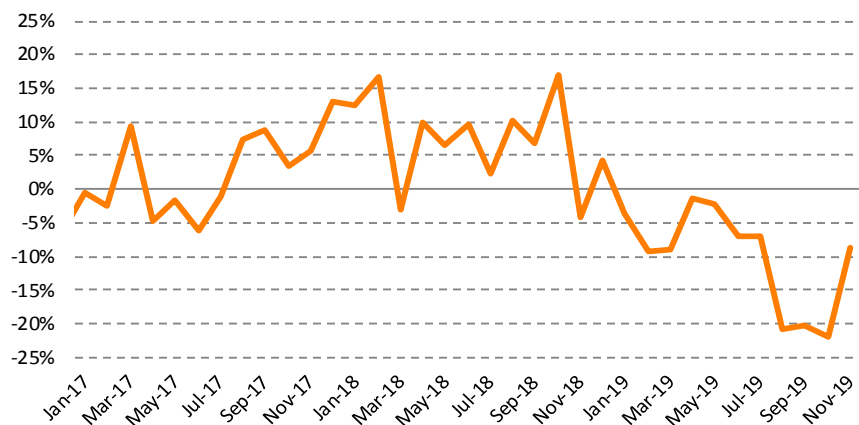
Source: CSO; CEIC; ICRA research

**Exhibit 19: YoY Growth in Primary Goods**

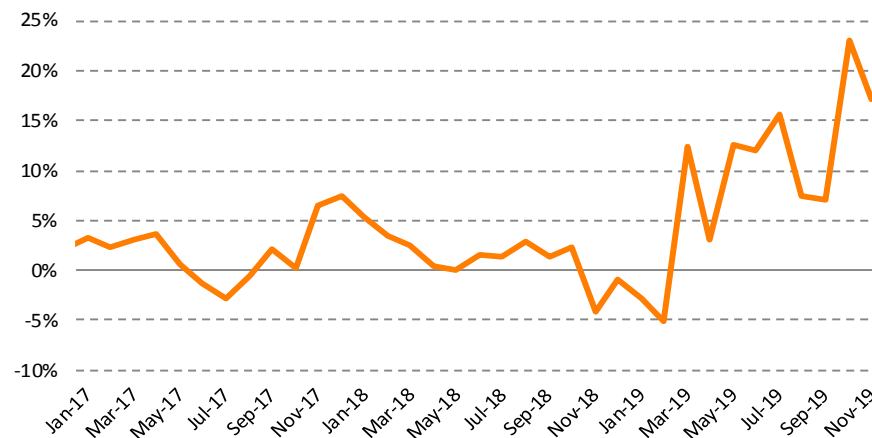


Source: CSO; CEIC; ICRA research

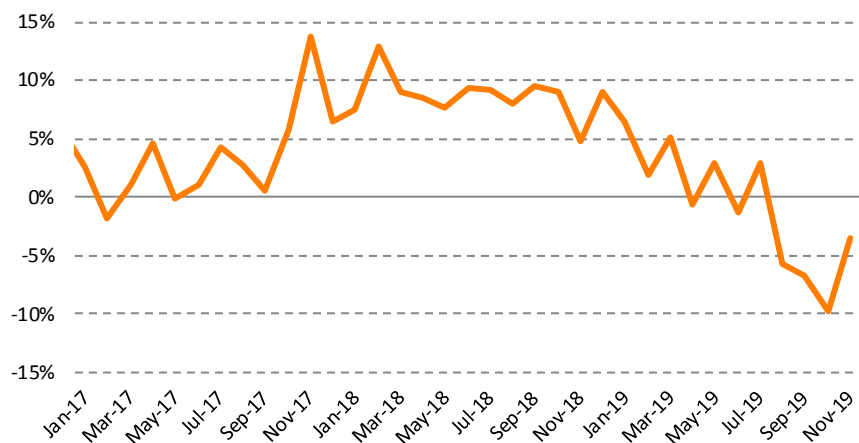


**Exhibit 20: YoY Growth in Capital Goods**

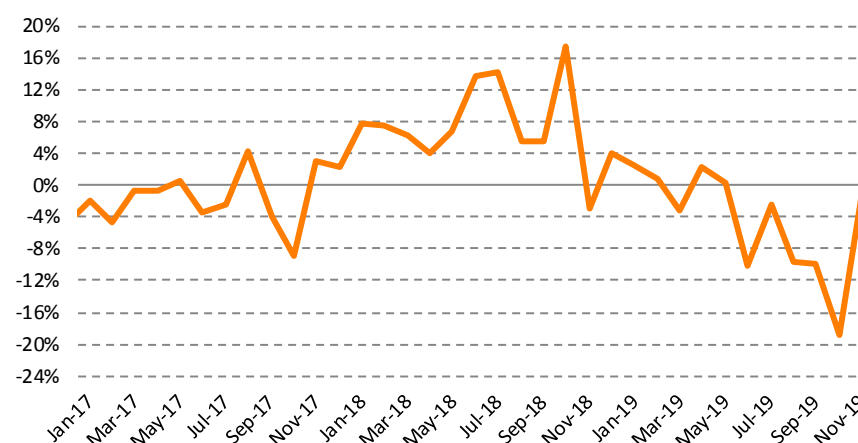
Source: CSO; CEIC; ICRA research

**Exhibit 21: YoY Growth in Intermediate Goods**

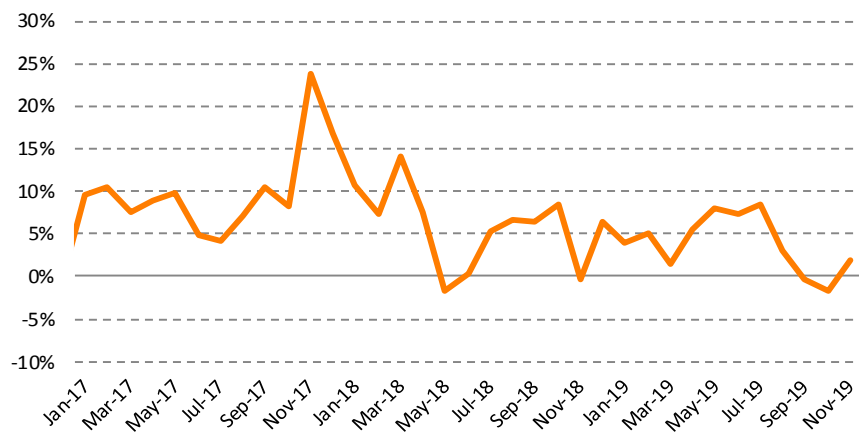
Source: CSO; CEIC; ICRA research

**Exhibit 22: YoY Growth in Infrastructure/Construction**

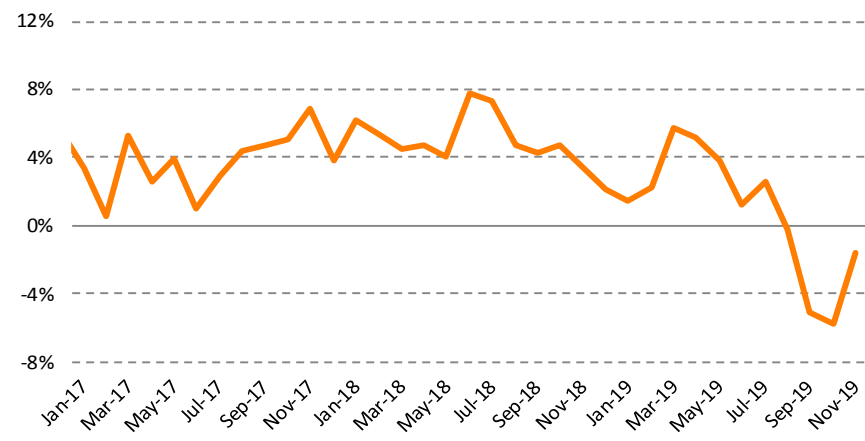
Source: CSO; CEIC; ICRA research

**Exhibit 23: YoY Growth in Consumer Durables**

Source: CSO; CEIC; ICRA research

**Exhibit 24: YoY Growth in Consumer Non-Durables**

Source: CSO; CEIC; ICRA research

**Exhibit 25: YoY Growth in Core Sector**

Source: CSO; CEIC; ICRA research

## ANNEXURE B

Items	Weight (%)	Growth in Nov 2019	Manufacturing Sub-Sector	Use-Based Classification
Printing machinery	0.46	-39.7%	Machinery and equipment n.e.c.	Capital goods
Harvesters and threshers	0.21	-58.3%	Machinery and equipment n.e.c.	
Fragrances & Oil essentials	0.2	161.5%	Chemicals and chemical products	Intermediate goods
MS slabs	0.84	151.1%	Basic Metals	
Pipes and tubes of Steel	0.34	87.2%	Basic Metals	
Printed Circuit Boards (whether or not mounted with IC chips /components)	0.22	-52.7%	Computer, electronic and optical products	
Bars and Rods of Alloy and Stainless Steel	0.57	-61.0%	Basic Metals	Infrastructure/ construction goods
Electric heaters	0.25	146.0%	Electrical Equipment	Consumer durables
Vaccine for veterinary medicine	0.45	52.1%	Pharmaceuticals, medicinal chemical and botanical products	Consumer non-durables
Sugar	0.76	-48.5%	Food products	

Source: CSO; ICRA research

## ANNEXURE C

Growth in Index of Core Industries	Index of Core Industries	Coal	Crude Oil	Natural Gas	Refinery Products	Fertilizers	Steel	Cement	Electricity
<b>Weight</b>	<b>100.00%</b>	<b>10.33%</b>	<b>8.98%</b>	<b>6.88%</b>	<b>28.04%</b>	<b>2.63%</b>	<b>17.92%</b>	<b>5.37%</b>	<b>19.85%</b>
Month									
Sep-18	4.3%	6.5%	-4.2%	-1.7%	2.5%	2.5%	3.2%	11.8%	8.2%
Oct-18	4.8%	11.3%	-5.0%	-0.9%	1.3%	-11.5%	2.4%	18.5%	10.8%
Nov-18	3.3%	3.7%	-3.5%	0.5%	2.3%	-8.1%	5.3%	8.8%	5.1%
Sep-19	-5.1%	-20.5%	-5.4%	-4.9%	-6.6%	5.4%	-1.5%	-2.0%	-2.6%
Oct-19	-5.8%	-17.6%	-5.1%	-5.7%	0.4%	11.8%	-1.9%	-7.7%	-12.2%
Nov-19	-1.5%	-2.5%	-6.0%	-6.4%	3.1%	13.6%	-3.7%	4.1%	-5.7%
<b>FY2019 YTD</b>	<b>5.1%</b>	<b>9.0%</b>	<b>-3.6%</b>	<b>-0.7%</b>	<b>5.3%</b>	<b>-1.3%</b>	<b>3.6%</b>	<b>14.2%</b>	<b>6.6%</b>
<b>FY2020 YTD</b>	<b>0.0%</b>	<b>-5.3%</b>	<b>-5.9%</b>	<b>-3.1%</b>	<b>-1.1%</b>	<b>4.0%</b>	<b>5.2%</b>	<b>-0.0%</b>	<b>0.7%</b>

Source: Index of Eight Core Industries, Ministry of Commerce and Industry, Office of the Economic Advisor; CEIC; ICRA research



# ABOUT ICRA

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