



**ICRA**

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# INDEX OF INDUSTRIAL PRODUCTION

## OCTOBER 2019

**Contraction in IIP eases to 3.8% in October 2019, led by manufacturing**

**DECEMBER 2019**



## HIGHLIGHTS

- The pace of contraction of the Index of Industrial Production (IIP) in year-on-year (YoY) terms eased to 3.8% in October 2019 from 4.3% in September 2019, despite an unfavourable base effect, fewer working days and the disruption caused by the late withdrawal of the monsoon. Moreover, the contraction in the IIP in October 2019 was narrower than our forecast (-5.5%).
- Nevertheless, industrial output contracted for the third month in a row in October 2019. Moreover, the YoY decline in industrial production in October 2019 was widespread, covering all three sectors, namely, mining (-8.0%), manufacturing (-2.1%) and electricity (-12.2%), and five of the six use-based categories except intermediate goods (which expanded by a robust 22.2% in October 2019).
- While the sharp contraction in October 2019 in capital goods (-21.9%) and consumer durables (-18.0%) is discomfiting, it comes on an extremely high base of October 2018 (+16.9% and +17.4%, respectively).
- The 9.2% contraction in infrastructure/construction goods in October 2019 is unsurprising, given the disruption caused by heavy rainfall to construction activities.
- The performance of the output of Coal India Limited (CIL), automobile production and electricity generation has displayed an improvement in November 2019 relative to the previous month. Moreover, the easing in rainfall would support a revival in construction related activities, which should boost the production of core items like cement and steel. Such factors, in conjunction with a favourable base effect, suggest a likely turnaround in the performance of the IIP to a modest YoY growth in November 2019.
- We expect GDP growth in Q3 FY2020 to broadly print in line with the level recorded in Q1 FY2020, and mark a moderate sequential improvement from the weak 4.5% displayed in Q2 FY2020. The extent to which revenue considerations necessitate expenditure compression by the central and state governments in Q4 FY2020, would crucially influence the pace of GDP growth in that quarter



## OVERVIEW

The performance of industrial output recorded a broad-based and sharp weakening to a contraction of 3.8% in October 2019 from the YoY growth of 8.4% in October 2018 (refer Exhibit 1 and 2), reflecting the high base, fewer working days on account of an earlier onset of the festive season in 2019 and rainfall-related disruptions. In terms of the use-based categories, the performance worsened sharply for capital goods (to -21.9% in October 2019 from +16.9% in October 2018), consumer durables (to -18.0% from +17.4%), infrastructure/construction goods (to -9.2% from +9.0%), primary goods (to -6.0% from +6.1%) and consumer non-durables (to -1.1% from +8.6%). In contrast, the YoY growth of intermediate goods improved appreciably to 22.2% in October 2019 from 2.4% in October 2018.

Despite the unfavourable base effect, the YoY contraction of the IIP narrowed to 3.8% in October 2019 (+8.4% in October 2018) from 4.3% in September 2019 (+4.6% in September 2018), driven by the sharp improvement in intermediate goods (to +22.2% from +7.0%). However, the performance worsened in October 2019 relative to the previous month in the case of consumer durables (to -18.0% from -9.9%), infrastructure/ construction goods (to -9.2% from -6.8%), primary goods (to -6.0% from -5.2%), consumer non-durables (to -1.1% from -0.4%), and capital goods (to -21.9% from -20.3%). While the sharp contraction in capital goods and consumer durables in October 2019 appears discomfiting, it comes on an extremely high base of October 2018 (+16.9% and +17.4%, respectively). In our view, we should await the data for November 2019, to get a clearer sense of how these two categories are likely to perform in Q3 FY2020. Notably, the sequential narrowing in the contraction of the IIP in October 2019 relative to September 2019, was in contrast to the deeper YoY de-growth in the core sector output, which has a weight of 40.3% in the IIP (to -5.8% from -5.1%; refer Annexure C).

In terms of the sectoral classification, mining, manufacturing and electricity generation contracted by 8.0%, 2.1% and 12.2%, respectively, in October 2019, in contrast to the healthy YoY growth recorded in October 2018 (+7.3%, +8.2% and +10.8%, respectively; refer Exhibit 3). In sequential terms, the performance of mining and manufacturing improved in October 2019 (to -8.0% and -2.1%, respectively) relative to September 2019 (to -8.6% and -4.0%, respectively), whereas the contraction in electricity generation worsened considerably in the same months (to -12.2% from -2.6%, respectively). Manufacturing output contracted by 2.1% in October 2019, reflecting the YoY decline in the production of 18 of its 23 sub-sectors with a considerable weight of 40.0% in the IIP. Moreover, 10 sub-sectors displayed a double-digit contraction in October 2019. The narrowing in the pace of contraction of manufacturing output to 2.1% in October 2019 from 4.0% in September 2019, was led by an improvement in only six of the 23 sub-sectors, namely chemicals and chemical products, basic metals, pharma, medicinal chemical and botanical products, coke and refined petroleum products, fabricated metal products, and furniture manufacturing, which have a substantial weight of 40.2% in the IIP. In contrast, 17 sub-sectors (with a weight of 37.4% in the IIP) recorded a sequential worsening in their YoY performance in October 2019, highlighting the unevenness in the manufacturing sector in that month.

The extent of contraction in the IIP in September 2019 was retained at the initial level of 4.3%, despite mild revisions in the case of manufacturing (to -4.0% from -3.9%) and mining (to -8.6% from -8.5%). In terms of the use-based categories, there was a downward revision in the performance of infrastructure/construction goods (to -6.8% from -6.4%) and primary goods (to -5.2% from -5.1%), whereas there was an upward revision in the case of capital goods (to -20.3% from -20.7%).

In cumulative terms, the YoY growth of the IIP eased significantly to a marginal 0.5% in April-October FY2020 from 5.7% in April-October FY2019, led by the performance of capital goods (to -12.0% from +8.9%), infrastructure/construction goods (to -2.4% from +8.7%), consumer durables (to -7.0% from +9.4%), primary goods (to +0.2% from +5.1%) and consumer non-durables (to +4.3% from +4.6%), which offset the significant improvement in the expansion of intermediate goods (to +11.3% from +1.5%).



## OUTLOOK

The output of CIL continued to decline on a YoY basis for the fifth month in a row in November 2019, although the pace of the same narrowed considerably to 3.9% from 21.0% in October 2019, following an easing of rainfall-related disruption, which should result in some improvement in the performance of the mining sector in the just-concluded month.

Moreover, the data released by the Society of Indian Automobile Manufacturers indicates that the YoY decline in aggregate auto production narrowed significantly to 1.4% in November 2019 from 26.2% in October 2019. Benefitting from this, the performance of the manufacturing sector should record an improvement in November 2019.

Further, tentative data released by the Central Electricity Authority (CEA) indicates that the pace of the YoY contraction in electricity generation halved to 6.5% in November 2019 from 13.3% in October 2019, driven by thermal electricity generation (to -10.0% from -18.9%), as well as a pickup in the expansion of hydroelectricity generation (to +24.3% from +17.9%). ICRA expects electricity demand to grow by a muted 2.5-3.0% in FY2020. Agricultural demand will be subdued following the replenishment of groundwater levels. Moreover, household demand may record a muted growth in the next few quarters. The momentum of the recovery in the manufacturing sector would drive the growth of electricity generation in the remainder of FY2020. With healthy reservoir levels, hydroelectricity generation would remain robust in FY2020. This, in conjunction with an increasing share of other renewable generation sources (mainly wind and solar), would thereby squeeze thermal electricity generation in the next few quarters.

*The performance of various lead indicators, including the output of CIL, automobile production and electricity generation, as well as the consumption of various fuels and port cargo traffic, has displayed a marked improvement in November 2019 relative to the previous month. Moreover, the easing in rainfall would support a revival in construction related activities, which should boost the production of core items like cement and steel. Such factors, in conjunction with a favourable base effect, suggest a likely turnaround in the performance of the IIP to a modest YoY growth in November 2019, after three months of contraction since August 2019.*

*As of now, we expect GDP growth in Q3 FY2020 to broadly print in line with the level recorded in Q1 FY2020, and mark a moderate sequential improvement from the weak 4.5% displayed in Q2 FY2020. The extent to which revenue considerations necessitate expenditure compression by the central and state governments in Q4 FY2020, would crucially influence the pace of GDP growth in that quarter.*

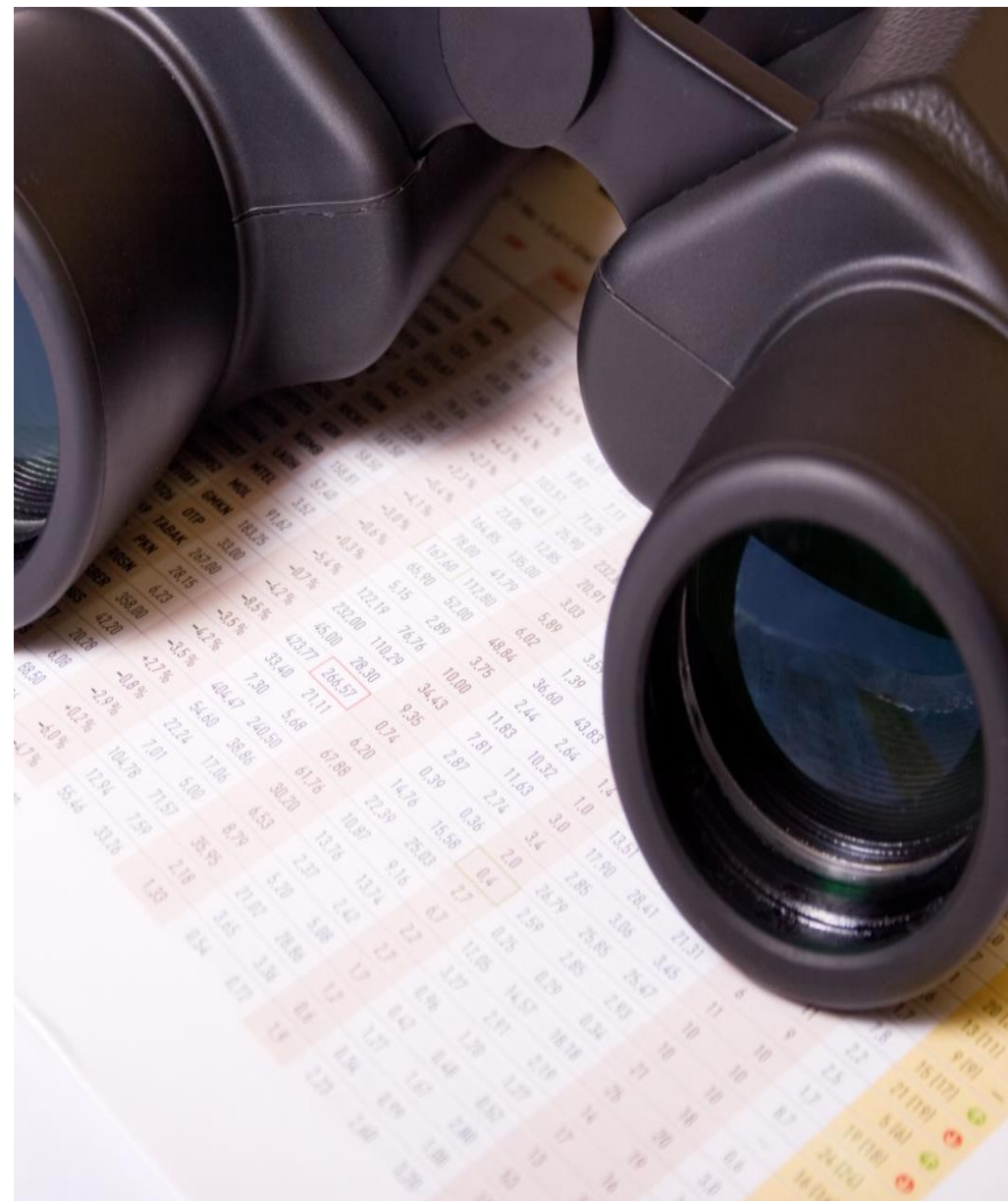
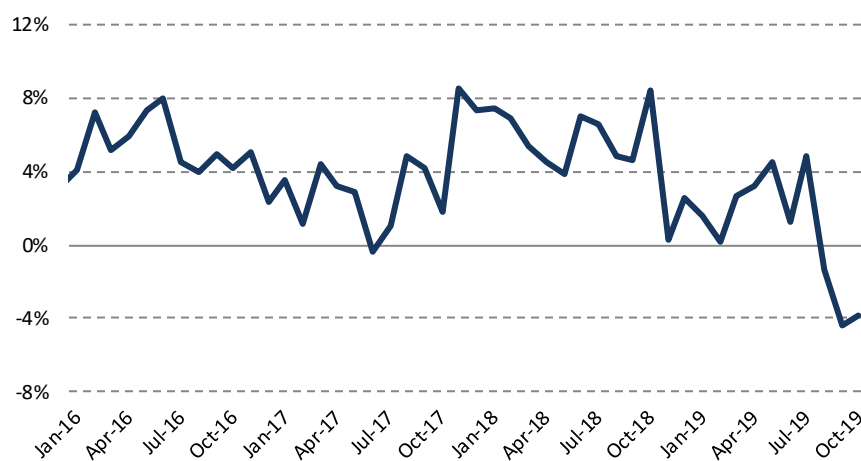


Exhibit 1: Trend in IIP Growth

	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										
Sep-18	4.6%	0.1%	4.8%	8.2%	2.6%	6.9%	1.5%	9.5%	5.4%	6.4%
Oct-18	8.4%	7.3%	8.2%	10.8%	6.1%	16.9%	2.4%	9.0%	17.4%	8.6%
Sep-19	-4.3%	-8.6%	-4.0%	-2.6%	-5.2%	-20.3%	7.0%	-6.8%	-9.9%	-0.4%
Oct-19	-3.8%	-8.0%	-2.1%	-12.2%	-6.0%	-21.9%	22.2%	-9.2%	-18.0%	-1.1%
Apr-Oct FY2019	5.7%	3.9%	5.8%	6.8%	5.1%	8.9%	1.5%	8.7%	9.4%	4.6%
Apr-Oct FY2020	0.5%	-0.4%	0.5%	1.6%	0.2%	-12.0%	11.3%	-2.4%	-7.0%	4.3%

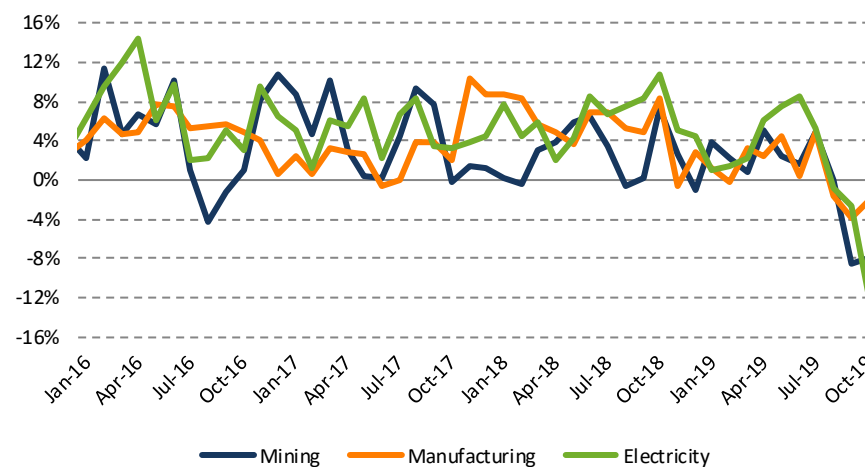
Source: Central Statistics Office (CSO); CEIC; ICRA research

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 YoY decline in the manufacturing sector halved to 2.1% in October 2019 from the revised 4.0% in September 2019 (refer Annexure A). However, the manufacturing sector exerted the biggest drag on the performance of the IIP in October 2019 (refer Exhibit 7). On a cumulative basis, the growth of manufacturing output has declined to a mild 0.5% during April-October FY2020 from 5.8% in April-October FY2019.

Eighteen sectors (with a substantial weight of 40.0% in the IIP) displayed a YoY contraction in output in October 2019 (refer Exhibit 4 and 5), as compared to 17 sectors (with a higher weight of 54.2% in the IIP) in September 2019. In addition, the combined pace of contraction of the output of these sectors widened sharply to 14.4% in October 2019 from 8.3% in September 2019.

The YoY contraction in the output of machinery and equipment worsened slightly to 18.1% in October 2019 from 17.9% in September 2019. The performance of this sub-sector was dampened by the sharp 74.2% contraction in the output of harvesters and threshers in October 2019 (refer Annexure B).

The contraction in output of computer, electronic and optical products deteriorated sharply to 31.3% in October 2019 from 11.1% in September 2019. The contraction in the output of printed circuit boards (-55.5%) and electric and non-electric meters (-46.4%) weighed upon the performance of this sub-sector in October 2019.

Further, the YoY decline in the output of other transport equipment widened to 18.8% in October 2019 from 8.6% in September 2019. The performance of this segment was dampened by the de-growth in two-wheelers, which pulled down the IIP growth by 0.5% in October 2019.

Similarly, the YoY contraction in other manufacturing worsened significantly to 26.4% in October 2019 from 7.5% in September 2019, driven by the sharp contraction in the output of cut and polished diamonds (-51.4%)

In addition, the performance worsened in October 2019 relative to September 2019 for motor vehicles, trailers and semi-trailers (to -27.9% from -24.8%), rubber and plastic products (to -15.6% from -12.7%), printing and reproduction of recorded media (to -17.3%

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

	August 2019	September 2019	October 2019
Number of Sub-Sectors	16	17	18
Weight in the IIP	40.5%	54.2%	40.0%
Combined Growth	-11.2%	-8.3%	-14.4%

Source: CSO, CEIC; ICRA research

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

	Weight (%)	Growth in Oct 2019	Comment
Motor Vehicles, Trailers and Semi-Trailers	0.49	-27.9%	Contracted in Sep 2019
Machinery and Equipment N.E.C.	0.48	-18.1%	
Other Non-Metallic Mineral Products	0.41	-9.5%	
Textiles	0.33	-6.8%	
Fabricated Metal Products ex Machinery and Equipment	0.27	-19.5%	
Rubber and Plastics Products	0.24	-15.6%	
Other Transport Equipment	0.18	-18.8%	
Computer, Electronic and Optical Products	0.16	-31.3%	
Beverages	0.10	-7.2%	
Other Manufacturing	0.09	-26.4%	
Paper and Paper Products	0.09	-15.4%	
Printing and Reproduction of Recorded Media	0.07	-17.3%	
Leather and Related Products	0.05	-6.3%	
Furniture; Manufacturing N.E.C.	0.01	-15.2%	
Food Products	0.53	-2.1%	Expanded in Sep 2019
Electrical Equipment	0.30	-4.3%	
Wearing Apparel	0.13	-2.6%	
Tobacco Products	0.08	-7.6%	

Source: CSO, CEIC; ICRA research

from -7.7%), other non-metallic mineral products (to -9.5% from -2.9%), textiles (to -6.8% from -5.4%), beverages (to -7.2% from -3.0%), paper and paper products (to -15.4% from -9.2%), and leather and related products (to -6.3% from -0.3%).

In contrast, the de-growth narrowed in October 2019 compared to September 2019 in the case of fabricated metal products (to -19.5% from -22.5%) and furniture manufacturing (to -15.2% from -22.7%).

The output of food products (to -2.1% from +3.0%), wearing apparels (to -2.6% from +3.9%), electrical equipment (to -4.3% from +1.0%) and tobacco products (to -7.6% from +12.4%) posted a YoY contraction in October 2019, in contrast to the YoY expansion in September 2019.

Only five sub-sectors of manufacturing, with a weight of 37.6% in the IIP, posted a YoY expansion in October 2019 (refer Exhibit 6).

The pace of growth in the output of basic metals rose to 9.4% in October 2019 from 9.1% in September 2019. The substantial uptick in output of MS slabs (+166.0%) and pipes and tubes of steel (+54.7%), boosted the performance of this sub-group in October 2019, according to the CSO. However, the 55.4% contraction in the production of bars and rods of alloy and stainless steel dampened the IIP growth by 0.6% in October 2019.

In addition, the output of chemical and chemical products (to +31.8% from -1.4%), pharma, medicinal chemical and botanical products (to +2.3% from -1.6%), and coke and refined petroleum products (to +0.7% from -5.3%), recorded a YoY uptick in October 2019, in contrast to the YoY decline in September 2019.

In contrast, the YoY growth in wood and wood products deteriorated to 6.4% in October 2019 from 15.7% in September 2019.

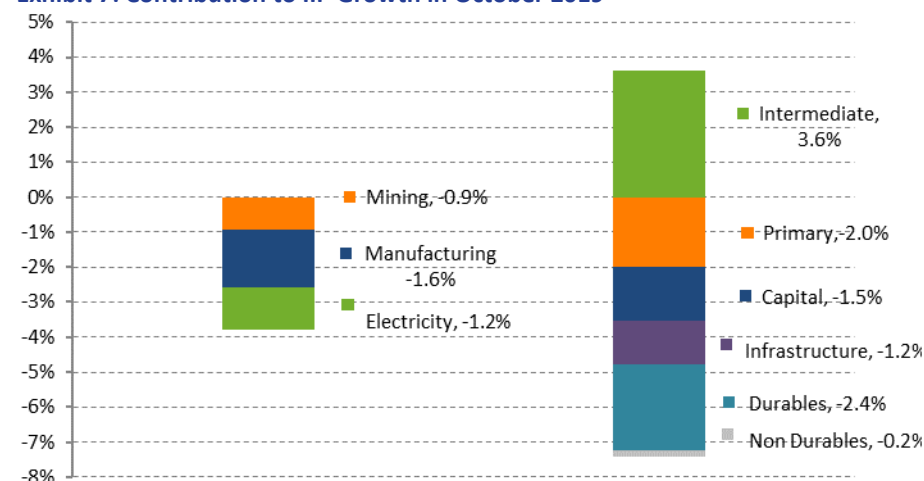
**Mining:** The YoY contraction in the output of the mining sector narrowed to 8.0% in October 2019 (+7.3% in October 2018) from the revised 8.6% in September 2019 (+0.1% in September 2018). This was driven by the improvement in the pace of YoY contraction of coal output (to -17.5% in October 2019 from -20.5% in September 2019) as well as the

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

Sub-Sectors	Weight (%)	Growth in Oct 2019	Contribution to Manuf. Growth
Chemicals and Chemical Products	7.9	31.8%	2.8%
Basic Metals	12.8	9.4%	1.7%
Pharma, Medicinal Chemical and Botanical Products	5.0	2.3%	0.2%
Coke and Refined Petroleum Products	11.8	0.7%	0.1%
Wood and Wood Products and Cork ex Furniture; Articles of Straw and Plaiting Materials	0.2	6.4%	0.0%
Others Displaying Expansion	0.0	0.0	0.0%
Others Displaying Contraction	40.0	-14.4%	-6.9%
Manufacturing	77.6	-2.1%	-2.1%

Source: CSO, CEIC; ICRA research

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



Source: CSO; CEIC; ICRA research

output of crude oil (to -5.1% from -5.3%, respectively). However, the YoY decline in the output of natural gas worsened to 5.7% from 4.9%, respectively (refer Exhibit 8).

In overall terms, mining output contracted by 0.4% in April-October FY2020, in contrast to the 3.9% growth in April-October FY2019.

**Electricity:** The YoY decline in electricity generation widened significantly to a series-low 12.2% in October 2019 (+10.8% in October 2018) from 2.6% in September 2019 (+8.2% in September 2018).

Data released by the CEA indicates that the sharp sequential deterioration in electricity generation in October 2019 relative to the previous month was driven by sharp worsening in thermal electricity generation (to -18.9% from -9.6%), as well as a milder downtick in the pace of growth of hydroelectricity generation (to +17.9% from +19.3%).

Moreover, the PLF for coal and lignite-based plants stood at 49.2% in October 2019, lower the same in the previous month (51.1%).

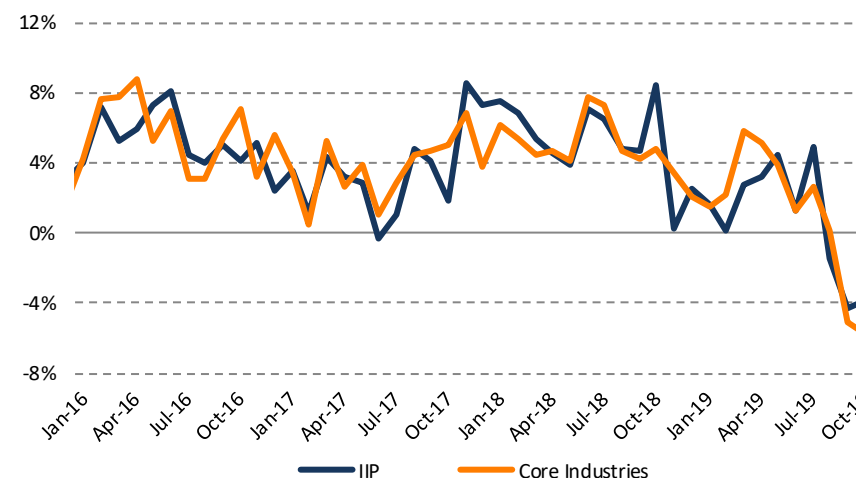
The cumulative growth in electricity generation declined to a subdued 1.6% in April-October FY2020 from 6.8% in April-October FY2019; however, this was superior to the performance of the other two sectors in the first seven months of this fiscal.

**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>
Aug-18	2.4%	-3.7%	1.0%
Sep-18	6.5%	-4.2%	-1.7%
Oct-18	11.3%	-5.0%	-0.9%
Aug-19	-8.6%	-5.5%	-3.9%
Sep-19	-20.5%	-5.3%	-4.9%
Oct-19	-17.5%	-5.1%	-5.7%

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 worsened to 6.0% in October 2019 (+6.1% in October 2018) from 5.2% in September 2019 (+2.6% in September 2018; refer Exhibit 10). Moreover, this was the weakest performance of primary goods since September 2012.

The YoY decline in mining and electricity, exerted a drag on primary goods sub-index, and also pulled down the IIP growth by 2.2% in October 2019.

Overall, the growth of primary goods dipped to a muted 0.2% in April-October FY2020 from 5.1% in April-October FY2019.

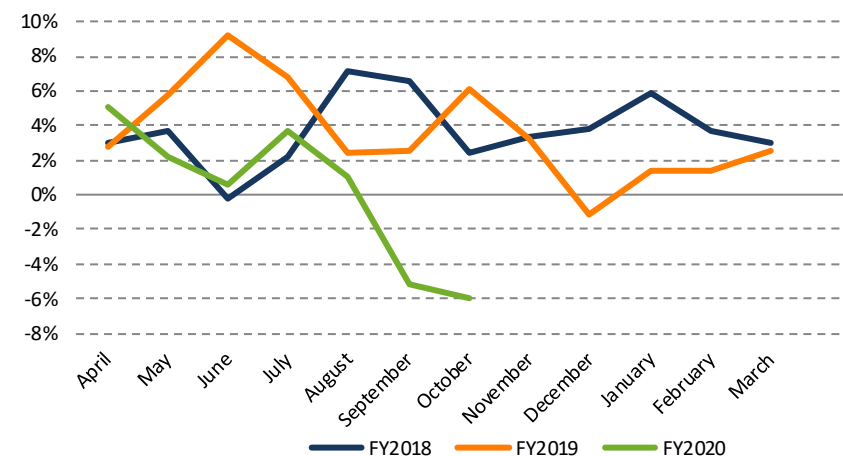
**Capital Goods:** The output of capital goods recorded a YoY contraction for the tenth month in a row in October 2019, the pace of which widened to 21.9% (+16.9% in October 2018) from 20.3% in September 2019 (+6.9% in September 2018; refer Exhibit 11). The continued contraction in capital goods output highlights the prevailing weakness in investment activity, despite the pickup in the Government of India's capital spending in the post-election period.

The steep YoY contraction in the output of harvesters and threshers (-74.2%; with a weight of 0.2% in the IIP), dampened the performance of the capital goods segment in October 2019.

In contrast, there was a robust 56.1% expansion in the output of shipbuilding (with a weight of 0.2% in the IIP), according to the data released by the CSO.

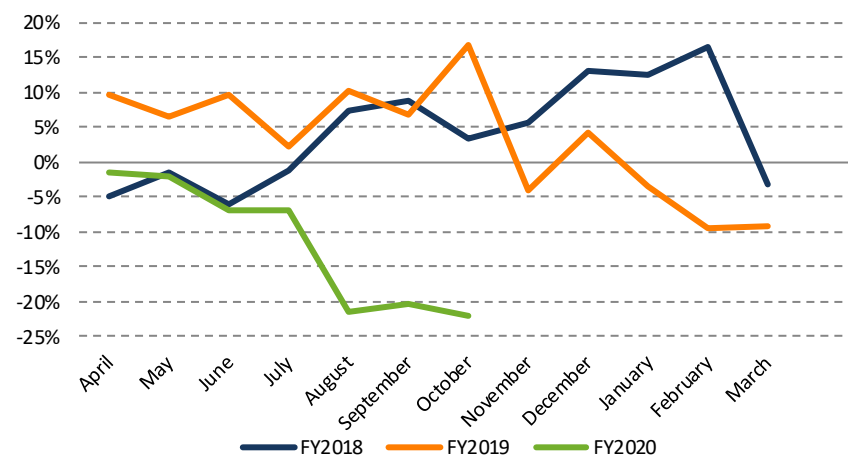
On a cumulative basis, the capital goods sub-index contracted by 12.0% in April-October FY2020, marking a considerable deterioration from the healthy 8.9% expansion in the corresponding months of FY2019. In addition, capital goods emerged as the worst performing use-based group in the first seven months 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 growth of intermediate goods output rose sharply to a series-high 22.2% in October 2019 (+2.4% in October 2018) from 7.0% in September 2019 (+1.5% in September 2018; refer Exhibit 12). Intermediate goods remained the fastest growing use-based category for the sixth month in a row, and stood out as the only use-based category recording a YoY growth in October 2019.

The performance of this sub-index was bolstered by the robust YoY growth in MS slabs (+166.0%), and fragrances and oil essentials, which together boosted the IIP growth by a significant 4.4% in October 2019, according to the data released by the CSO. Moreover, the healthy growth in the output of pipes and tubes of steel (+54.7%) and industrial valves (+28.3%) supported the performance of this sub-index in October 2019. In contrast, the steep 55.5% contraction in printed circuit boards weighed upon the performance of intermediate goods in October 2019.

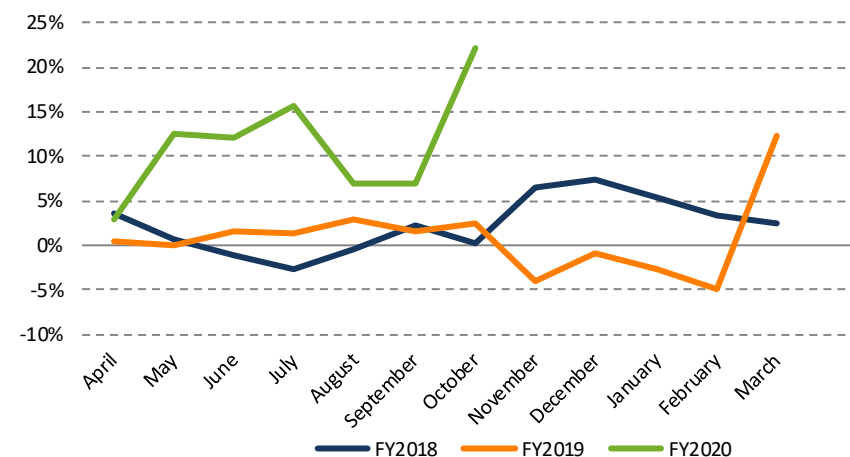
Overall, the growth of intermediate goods output improved considerably to a healthy 11.3% in April-October FY2020 from the low 1.5% in April-October FY2019, led by the double-digit expansion in four of the seven months. In addition, this was the best performing use-based group in the first seven months of FY2020.

**Infrastructure/construction goods:** The YoY contraction in infrastructure/construction goods output worsened to a series-low 9.2% in October 2019 (+9.0% in October 2018) from 6.8% in September 2019 (+9.5% in September 2018; refer Exhibit 13). The heavy rainfall in the post-monsoon period is likely to have dampened construction activity, contributing to the contraction in the output of infrastructure/construction goods during October 2019.

As per the data released by the CSO, the output of bars and rods of alloy and stainless steel (with a weight of 0.6% in the IIP) recorded a sharp 55.4% YoY contraction in October 2019, dampening the IIP growth by 0.6% during the month. However, the impact of this was partially offset by the substantial YoY increase in the output of HR coils and sheets of mild steel (with a weight of 1.4% in the IIP), which boosted the IIP growth by 0.4% in October 2019.

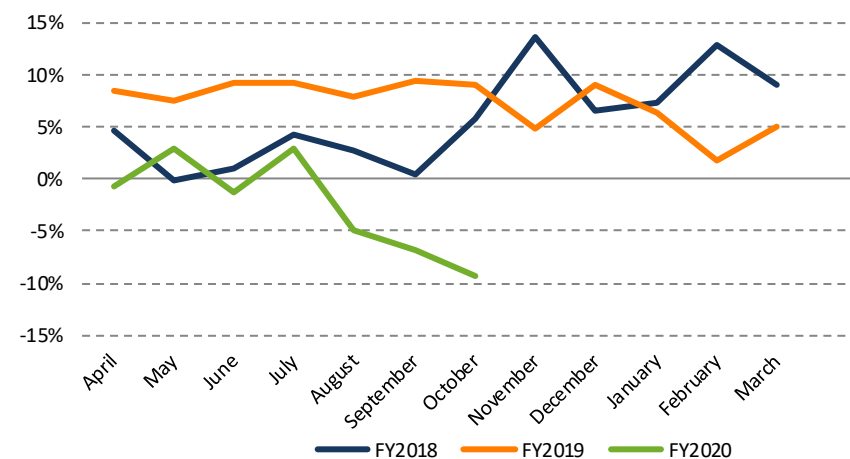
The output of infrastructure/construction goods contracted by 2.4% in April-October FY2020, in sharp contrast to the healthy 8.7% growth in April-October FY2019.

**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 worsened sharply to 18.0% in October 2019 (+17.4% in October 2018) from 9.9% in September 2019 (+5.4% in September 2018; refer Exhibit 14), partly on account of an unfavourable base. This was the weakest YoY performance in consumer durables sub-index in the current series. Notably, consumer durables exerted the biggest drag on the performance of the IIP in October 2019.

The contraction in the output of auto components/spares and accessories (with a weight of 2.6% in the IIP) and two-wheelers (with a weight of 1.4% in the IIP), cumulatively pulled down the IIP growth by 1.1% in October 2019, according to the data released by the CSO. Moreover, the steep YoY decline in the output of cut and polished diamonds (-51.4%) and electric and non-electric meters (-46.4%) dampened the performance of this sub-index in October 2019.

In contrast, there was a robust 158.5% expansion in the output of electric heaters, which boosted the IIP growth by 0.3% in October 2019, as per the data released by the CSO.

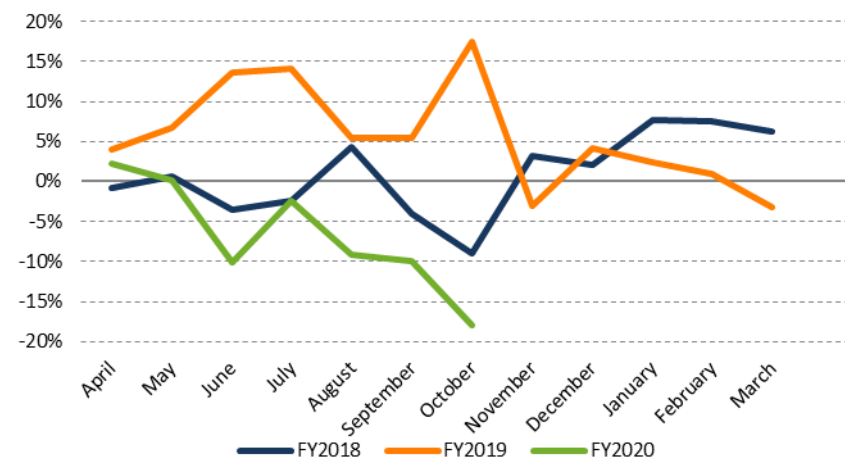
Cumulatively, consumer durables output recorded a contraction of 7.0% in April-October FY2020, which was in sharp contrast to the healthy 9.4% expansion in April-October FY2019.

**Consumer Non-Durables:** Consumer non-durables output contracted for the second month in a row, and the pace of the YoY decline deteriorated to 1.1% in October 2019 (+8.6% in October 2018) from 0.4% in September 2019 (+6.4% in September 2018). This was the weakest performance in this sub-index in 16 months, and partly reflects an unfavourable base effect.

However, data released by the CSO indicates that the healthy growth in digestive enzymes and antacids, with a weight of 0.2% in the IIP, supported the IIP growth by 0.4% in October 2019.

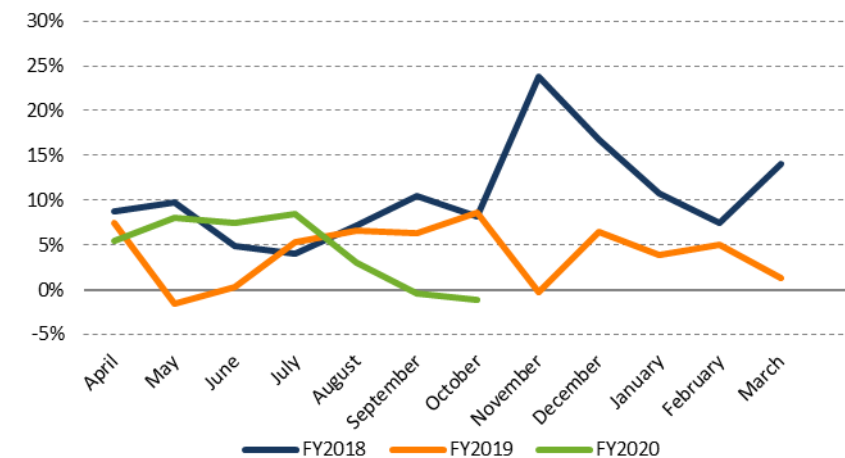
In cumulative terms, the growth in consumer non-durables stood at 4.3% in April-October FY2020, mildly lower than the growth of 4.6% in April-October FY2019.

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



Source: CSO; CEIC; ICRA research

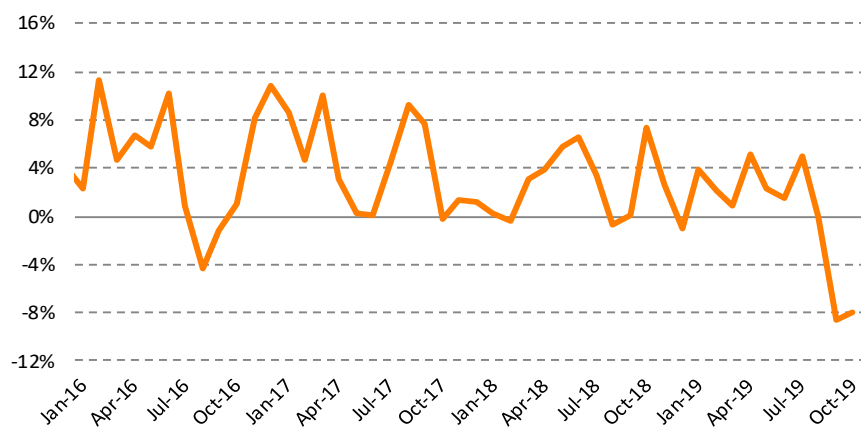
**Exhibit 15: YoY Growth of Consumer Non-Durables**



Source: CSO; CEIC; ICRA research

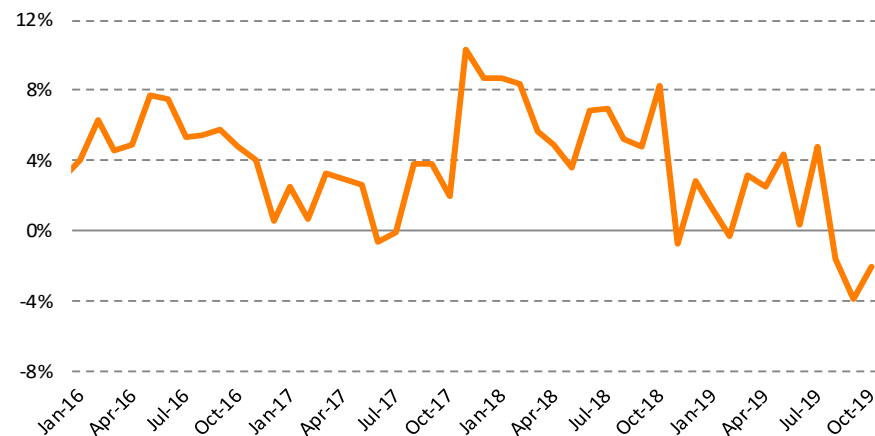
## ANNEXURE A

**Exhibit 16: YoY Growth in Mining**



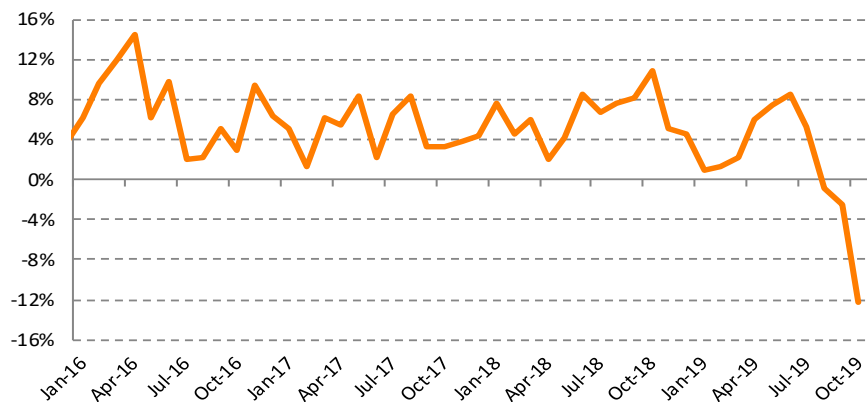
Source: CSO; CEIC; ICRA research

**Exhibit 17: YoY Growth in Manufacturing**



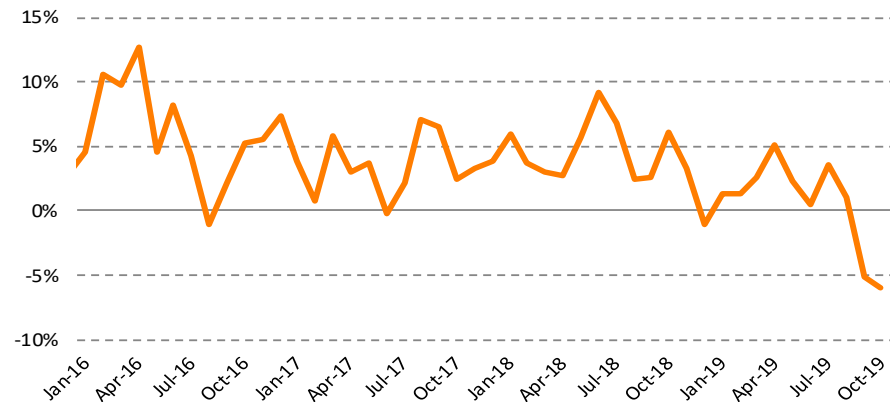
Source: CSO; CEIC; ICRA research

**Exhibit 18: YoY Growth in Electricity**



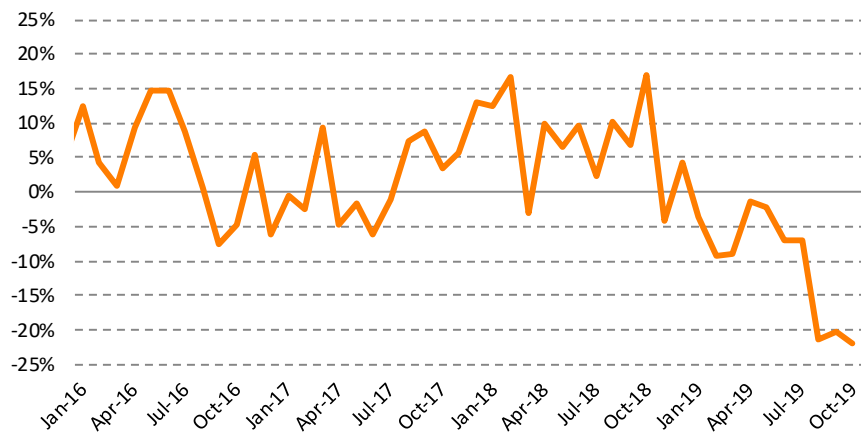
Source: CSO; CEIC; ICRA research

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

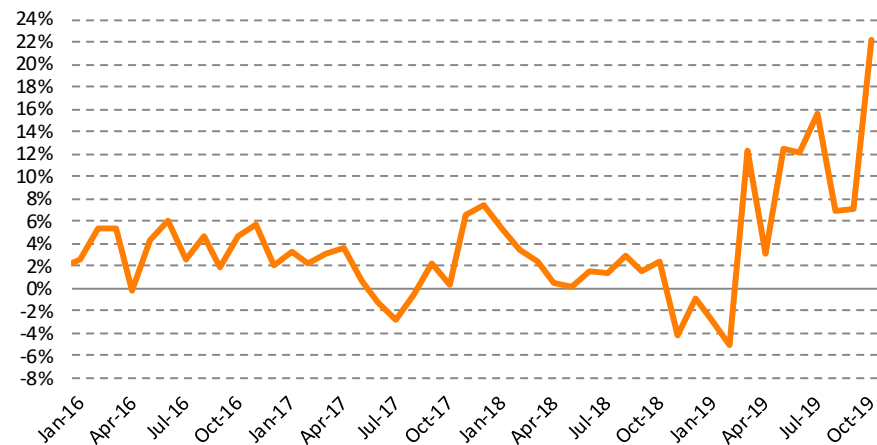


Source: CSO; CEIC; ICRA research

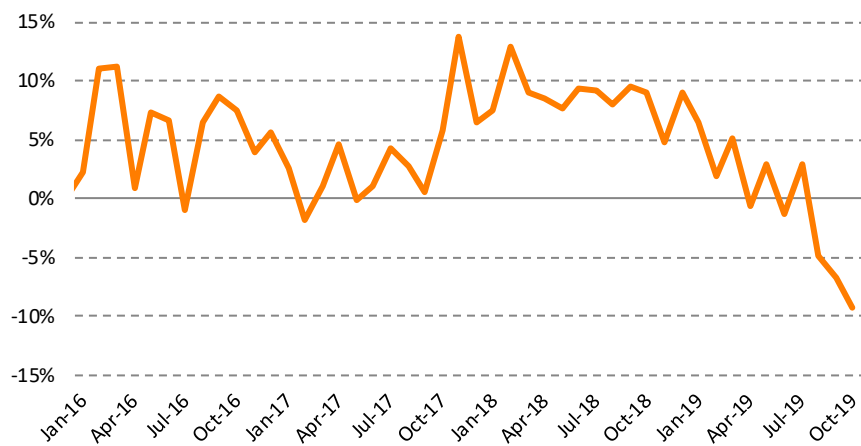


**Exhibit 20: YoY Growth in Capital Goods**

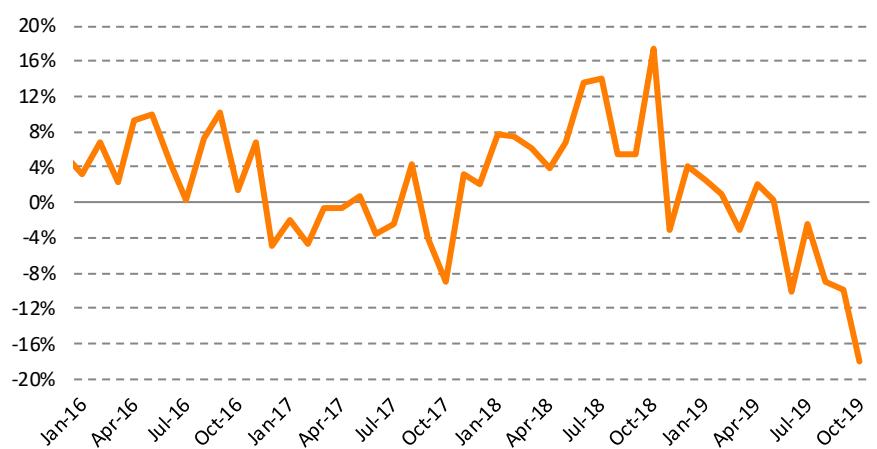
Source: CSO; CEIC; ICRA research

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

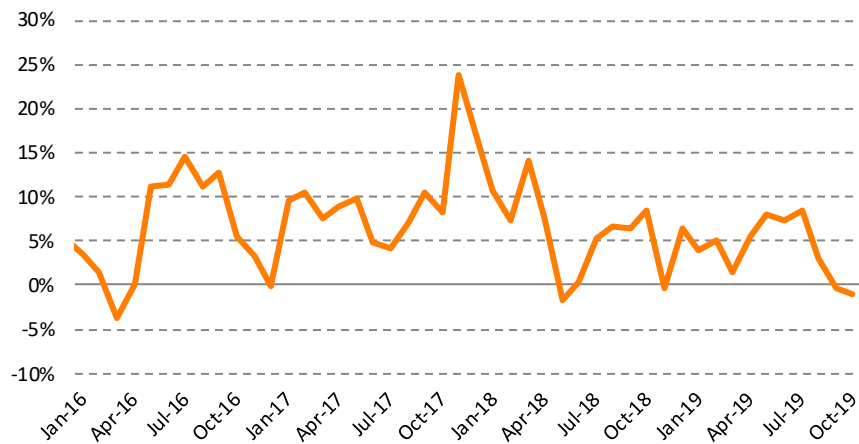
Source: CSO; CEIC; ICRA research

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

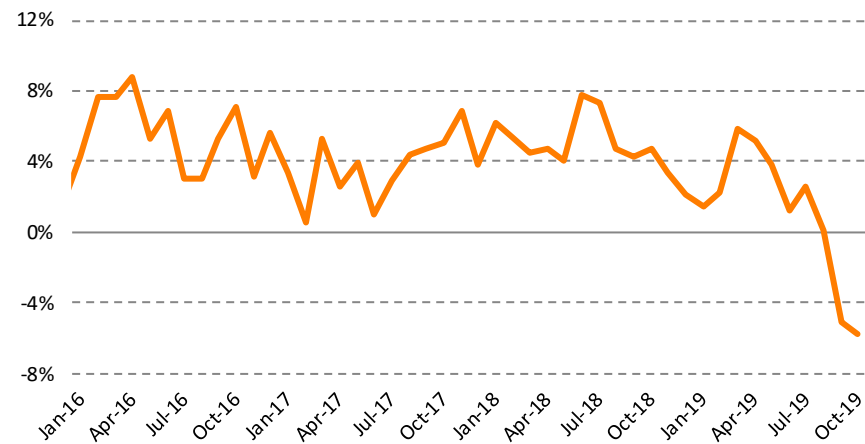
Source: CSO; CEIC; ICRA research

**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 Oct 2019	Manufacturing Sub-Sector	Use-Based Classification
Ship building and parts thereof	0.19	56.1%	Other transport equipment	Capital goods
Harvesters and threshers	0.21	-74.2%	Machinery and equipment n.e.c.	
MS slabs	0.84	166.0%	Basic Metals	Intermediate goods
Pipes and tubes of Steel	0.34	54.7%	Basic Metals	
Industrial Valves of different types-safety, relief and control valves(non-electronic, non-electrical)	0.53	28.3%	Machinery and equipment n.e.c.	
Printed Circuit Boards (whether or not mounted with IC chips /components)	0.22	-55.5%	Computer, electronic and optical products	
Bars and Rods of Alloy and Stainless Steel	0.57	-55.4%	Basic Metals	Infrastructure/ construction goods
Electric heaters	0.25	158.5%	Electrical Equipment	Consumer durables
Meters (electric and non-electric)	0.16	-46.4%	Computer, electronic and optical products	
Cut & Polished diamonds	0.16	-51.4%	Other manufacturing	

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									
Aug-18	4.7%	2.4%	-3.7%	1.0%	5.1%	-5.3%	4.0%	14.6%	7.6%
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%
Aug-19	0.1%	-8.6%	-5.5%	-3.9%	2.6%	3.0%	5.1%	-5.1%	-0.9%
Sep-19	-5.1%	-20.5%	-5.3%	-4.9%	-6.6%	5.5%	-1.5%	-1.9%	-2.6%
Oct-19	-5.8%	-17.5%	-5.1%	-5.7%	0.3%	11.8%	-1.7%	-7.7%	-12.4%
<b>FY2019 YTD</b>	<b>5.3%</b>	<b>9.9%</b>	<b>-3.7%</b>	<b>-0.9%</b>	<b>5.7%</b>	<b>-0.3%</b>	<b>3.3%</b>	<b>15.0%</b>	<b>6.9%</b>
<b>FY2020 YTD</b>	<b>0.2%</b>	<b>-5.7%</b>	<b>-5.8%</b>	<b>-2.5%</b>	<b>-1.6%</b>	<b>2.7%</b>	<b>6.6%</b>	<b>-0.6%</b>	<b>1.5%</b>

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



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