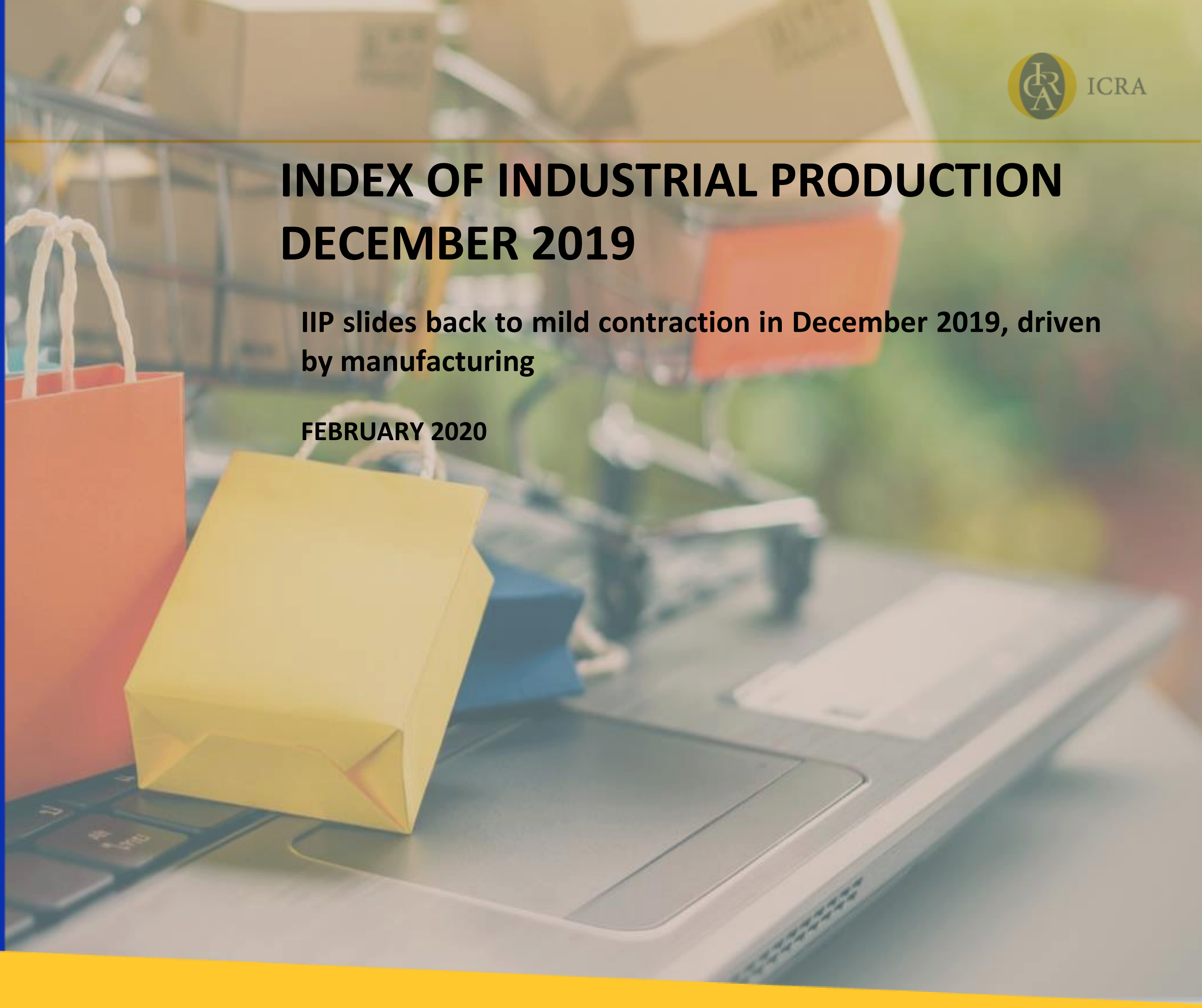

ICRA
A MOODY'S INVESTORS SERVICE COMPANY

INDEX OF INDUSTRIAL PRODUCTION DECEMBER 2019

IIP slides back to mild contraction in December 2019, driven by manufacturing

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HIGHLIGHTS

- The Index of Industrial Production (IIP) slid back into a contraction of 0.3% in year-on-year (YoY) terms in December 2019, weaker than our forecast of a mild 0.5% rise, after only one month of having reported a growth of 1.8% in November 2019 that had benefitted from a favourable base effect.

- On a sectoral basis, there was a deterioration in manufacturing in December 2019 relative to November 2019 (to -1.2% from +2.7%), which offset the improvement in growth of mining (to +5.4% from +1.8%), and narrowing contraction in electricity generation (to -0.1% from -5.0%).

- Five of the six use-based categories, except primary goods, posted a sequential deterioration in their performance in December 2019. Moreover, four of the categories (except intermediate goods and primary goods) continued to report a YoY contraction in that month.

- The optimism generated by the double-digit growth in the output of Coal India Limited (CIL), the rebound in electricity generation to a mild growth after four months of contraction, and the rise in the PMI for manufacturing as well as services, has dissipated following the deepening contraction of automobile production in January 2020. Based on the available data, industrial output is likely to continue to record a mild contraction in January 2020, in our view.

- Fiscal constraints at the state and central government level may prevent a sustained turnaround in the performance of capital goods and infrastructure/construction goods in the near term, which would weigh upon the outlook for industrial output. However, favourable prospects for the rabi crop may support some improvement in consumer sentiment and demand.

OVERVIEW

The IIP recorded a mild contraction of 0.3% in December 2019 in contrast to the 2.5% growth in December 2018 (refer Exhibit 1 and 2), and weaker than our forecast of a 0.5% rise. In terms of the use-based categories, the performance deteriorated in December 2019 relative to December 2018 for capital goods (to -18.2% from +4.2%), consumer durables (to -6.7% from +4.1%), consumer non-durables (to -3.7% from +6.5%) and infrastructure/construction goods (to -2.6% from +9.0%). In contrast, the performance improved in December 2019 relative to December 2018 for intermediate goods (to +12.5% from -0.8%) and primary goods (to +2.2% from -1.1%).

Driven by a waning of the favourable base effect, the YoY performance of the IIP recorded a deterioration to a contraction of 0.3% in December 2019 (+2.5% in December 2018) from the modest growth of 1.8% in November 2019 (+0.2% in November 2018), led by a deterioration in capital goods (to -18.2% from -8.2%), consumer durables (to -6.7% from -1.6%), consumer non-durables (to -3.7% from +1.5%), infrastructure/ construction goods (to -2.6% from -2.4%), and intermediate goods (to +12.5% from +16.5%). Primary goods were an exception, with a sequential improvement in their performance to a growth of 2.2% in December 2019 from the mild contraction of 0.3% in November 2019. Notably, the sequential worsening in the performance of the IIP in December 2019 relative to November 2019, stood in contrast to the turnaround in the core sector output, which has a weight of 40.3% in the IIP (to +1.3% from -0.6%; refer Annexure C).

In terms of the sectoral classification, manufacturing output contracted by 1.2% in December 2019, in contrast to the YoY growth of 2.9% recorded in December 2018 (refer Exhibit 3). Moreover, electricity generation recorded a YoY decline of 0.1% in December 2019, as opposed to the growth of 4.5% in December 2018. However, the mining sector displayed a turnaround to a growth of 5.4% from the contraction of 1.0%, respectively, in those months.

In sequential terms, there was a deterioration in the performance of manufacturing in December 2019 relative to November 2019 (to -1.2% from +2.7%), which offset the improvement in growth of mining (to +5.4% from +1.8%), and narrowing contraction in electricity generation (to -0.1% from -5.0%). The contraction in manufacturing output in December 2019 reflected the YoY decline in the production of 16 of its 23 sub-sectors, with a considerable weight of 38.6% in the IIP.

The YoY growth in the IIP in November 2019 was retained at the initial 1.8%, despite revisions in some of the constituents such as infrastructure/construction goods (to -2.4% from -3.5%), capital goods (to -8.2% from -8.6%), consumer durables (to -1.6% from -1.5%), consumer non-durables (to +1.5% from +2.0%), and intermediate goods (to +16.5% from +17.1%).

The performance of most of the use-based categories worsened in Q3 FY2020 compared to Q2 FY2020, namely, primary goods (-4.4%; -0.1%), capital goods (-17.3%; -16.6%), infrastructure/construction goods (-7.4%; -3.3%), consumer durables (-7.9%; -7.6%), and consumer non-durables (-3.8%; +3.4%). However, there was an improvement in the YoY growth of intermediate goods to 14.8% in Q3 FY2020 from 9.9% in Q2 FY2020. There was a sharp deterioration in the performance of electricity (to -6.0% from +0.6%) in Q3 FY2020 compared to Q2 FY2020, whereas the contraction narrowed in manufacturing (to -0.3% from -0.4%) and mining (to -0.2% from -1.2%). Overall, the contraction in IIP widened to 0.9% in Q3 FY2020 from 0.4% in Q2 FY2020.

In cumulative terms, the YoY growth of the IIP eased significantly to a marginal 0.5% in April-December FY2020 from 4.7% in April-December FY2019, led by the performance of capital goods (to -12.3% from +6.8%), infrastructure/construction goods (to -2.7% from +8.3%), consumer durables (to -6.6% from +7.4%), primary goods (to +0.3% from +4.2%) and consumer non-durables (to +2.8% from +4.3%), which offset the significant improvement in the expansion of intermediate goods (to +12.2% from +0.5%).

OUTLOOK

The output of CIL recorded a healthy YoY growth for the second consecutive month, and the pace of the same rose to 10.3% in January 2020 from 7.2% in December 2019, which should result in a further 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 electricity generation reverted to a growth of 1.9% in January 2020, from the revised 1.9% contraction recorded in December 2019, driven by thermal electricity generation (to +0.5% from -4.0%) as well as hydroelectricity generation (to +17.0% from +14.7%).

However, the data released by the Society of Indian Automobile Manufacturers indicates a gloomy picture, with a sharp worsening in the YoY contraction in aggregate auto production to 10.6% in January 2020 from 5.2% in December 2019, with a sequential deterioration in the YoY performance of passenger vehicles, commercial vehicles and scooters. This would weigh upon the performance of the manufacturing sector in January 2020.

The optimism generated by the double-digit growth in the output of CIL, the rebound in electricity generation to a mild growth after four months of contraction, and the rise in the PMI for manufacturing as well as services, has dissipated following the deepening contraction of automobile production in January 2020. Based on the available data, industrial output is likely to continue to record a mild contraction in January 2020, in our view.

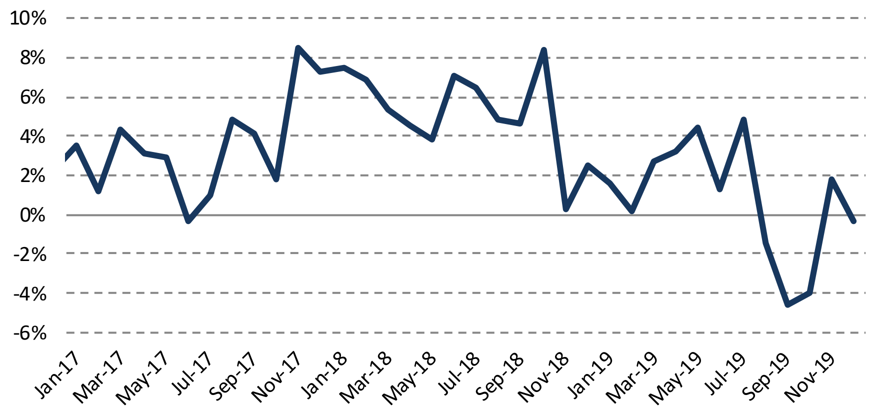
Fiscal constraints at the state and central government level may prevent a sustained turnaround in the performance of capital goods and infrastructure/construction goods in the near term, which would weigh upon the outlook for industrial output. However, favourable prospects for the rabi crop may support some improvement in consumer sentiment and demand.

Exhibit 1: Trend in IIP Growth

		Sectoral			Use-Based Classification					
	IIP	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										
Nov-18	0.2%	2.7%	-0.7%	5.1%	3.2%	-4.1%	-4.1%	4.8%	-3.0%	-0.3%
Dec-18	2.5%	-1.0%	2.9%	4.5%	-1.1%	4.2%	-0.8%	9.0%	4.1%	6.5%
Nov-19	1.8%	1.8%	2.7%	-5.0%	-0.3%	-8.2%	16.5%	-2.4%	-1.6%	1.5%
Dec-19	-0.3%	5.4%	-1.2%	-0.1%	2.2%	-18.2%	12.5%	-2.6%	-6.7%	-3.7%
Apr-Dec FY2019	4.7%	3.1%	4.7%	6.4%	4.2%	6.8%	0.5%	8.3%	7.4%	4.3%
Apr-Dec FY2020	0.5%	0.6%	0.5%	0.8%	0.3%	-12.3%	12.2%	-2.7%	-6.6%	2.8%

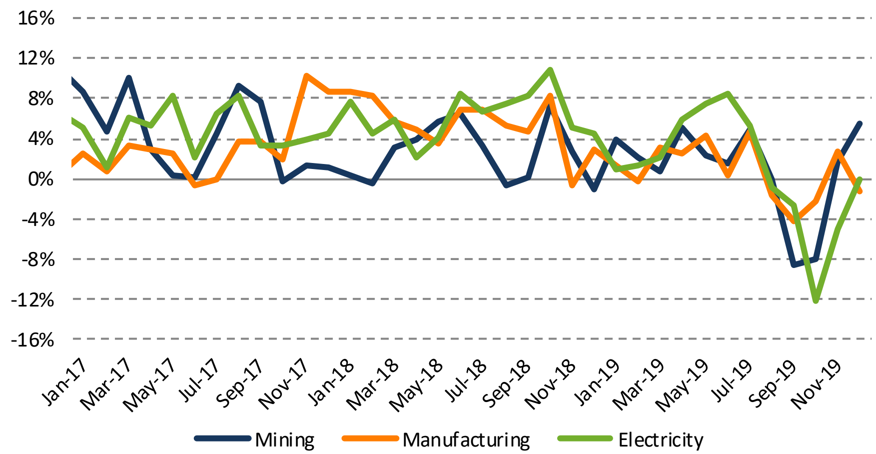
Source: Central Statistics Office (CSO); CEIC; ICRA research

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 manufacturing sector reverted to a contraction of 1.2% in December 2019 (+2.9% in December 2018), in contrast to the mild growth of 2.7% in November 2019 (-0.7% in November 2018; refer Annexure A), driven primarily by the unfavourable base effect. Moreover, the manufacturing sector exerted the largest drag on the IIP in December 2019 (refer Exhibit 7). In quarterly terms, the output of this sector recorded a marginal YoY decline of 0.3% in Q3 FY2020, in contrast to the YoY growth in Q3 FY2019 (+3.4%). On a cumulative basis, the manufacturing sector growth eased to 0.5% during April-December FY2020 from 4.7% in April-December FY2019.

Sixteen sectors (with a weight of 38.6% in the IIP) displayed a YoY contraction in output in December 2019 (refer Exhibit 4 and 5), as compared to 10 sectors (with a weight of 24.9% in the IIP) in November 2019. In addition, the combined pace of contraction of the output of these sectors worsened to 8.2% in December 2019 from 6.2% in November 2019.

The contraction in the output of machinery and equipment worsened sharply to 20.3% in December 2019 from 3.5% in November 2019. This was partly led by the sharp contraction in the output of separators including decanter centrifuge (-63.3%), which also dampened the IIP performance by 0.6% in December 2019 (refer Annexure B).

Moreover, the contraction in computer, electronic and optical products deepened significantly to 24.9% in December 2019 from 7.9% in November 2019, partly reflecting the trend for printed circuit boards (-69.7%) and meters (-54.0%) in December 2019. Similarly, the contraction widened in December 2019 compared to November 2019 for fabricated metal products (to -13.7% from -5.9%), rubber and plastic products (to -5.2% from -3.4%), paper and paper products (to -8.6% from -7.0%), tobacco products (to -7.3% from -3.7%) and printing and reproduction of recorded media (to -15.5% from -8.0%).

In contrast, the contraction in food products narrowed to 2.7% in December 2019 from 3.1% in the previous month, despite the unfavourable performance in sugar, which dampened the IIP performance by 0.3% in that month. In addition, the YoY decline narrowed in December 2019 compared to the previous month for motor vehicles, trailers and semi-trailers (to -12.1% from -12.7%), and other manufacturing (to -1.4% from -13.4%).

After recording a YoY growth of 3.4% in November 2019, the output of pharma, medicinal

Exhibit 4: Sub-Sectors Displaying Contraction in December 2019

	October 2019	November 2019	December 2019
Number of Sub-Sectors	18	10	16
Weight in the IIP	40.0%	24.9%	38.6%
Combined Growth	-14.7%	-6.2%	8.2%

Source: CSO, CEIC; ICRA research

Exhibit 5: Sub-Sectors Displaying Contraction in December 2019

	Weight (%)	Growth in Dec 2019	Comment
Food Products	0.53	-2.7%	Contracted in Nov 2019
Motor Vehicles, Trailers and Semi-Trailers	0.49	-12.1%	
Machinery and Equipment N.E.C.	0.48	-20.3%	
Fabricated Metal Products ex Machinery and Equipment	0.27	-13.7%	
Rubber and Plastics Products	0.24	-5.2%	
Computer, Electronic and Optical Products	0.16	-24.9%	
Other Manufacturing	0.09	-1.4%	
Paper and Paper Products	0.09	-8.6%	
Tobacco Products	0.08	-7.3%	
Printing and Reproduction of Recorded Media	0.07	-15.5%	
Pharma, Medicinal Chemical and Botanical Products	0.50	-3.3%	Expanded in Nov 2019
Textiles	0.33	-1.4%	
Electrical Equipment	0.30	-3.4%	
Wearing Apparel	0.13	-9.9%	
Beverages	0.10	-4.4%	
Furniture; Manufacturing N.E.C.	0.01	-6.6%	

Source: CSO, CEIC; ICRA research

chemical and botanical products posted a contraction of 3.3% in December 2019, partly on account of the unfavourable performance of digestive enzymes and antacids, which also dampened the IIP performance by 0.4% in that month. Similarly, after recording a YoY expansion in November 2019, the output of textiles (to -1.4% from +2.2%), electrical equipment (to -3.4% from +9.1%), wearing apparel (to -9.9% from +2.5%), beverages (to -4.4% from +4.0%), and furniture manufacturing (to -6.6% from +5.0%) recorded a contraction in December 2019.

Seven sub-sectors of manufacturing, with a weight of 39.0% in the IIP, posted a YoY growth in December 2019 (refer Exhibit 6).

The pace of expansion in the output of basic metals rose to 14.2% in December 2019 from 13.5% in November 2019. The substantial uptick in output of MS slabs (+164.1%), pipes and tubes of steel (77.3%), CR coils and sheets (+43.2%), and HR coils and sheets of mild steel, bolstered the performance of this sub-group in December 2019, and cumulatively boosted the IIP performance by a substantial 2.7% during the month, according to the CSO. Moreover, the robust 48.0% expansion in rail and rail materials supported the performance of this sub-group. However, this was partly offset by the steep contraction in the production of bars and rods of alloy and stainless steel (-54.0%) and steel structurals, which also dampened the IIP performance by 1.0% in December 2019.

Additionally, the pace of growth of other non-metallic mineral products improved modestly to 1.7% in December 2019 from 1.2% in November 2019.

Further, the output of other transport equipment improved to an 11-month high 3.4% in December 2019 from 0.9% in November 2019, boosted by the robust 43.7% expansion in ship building.

In contrast, the YoY growth in the output of coke and refined petroleum products deteriorated to a mild 1.2% in December 2019 from 1.8% in the previous month, dampened by the steep contraction in furnace oil (-39.6%).

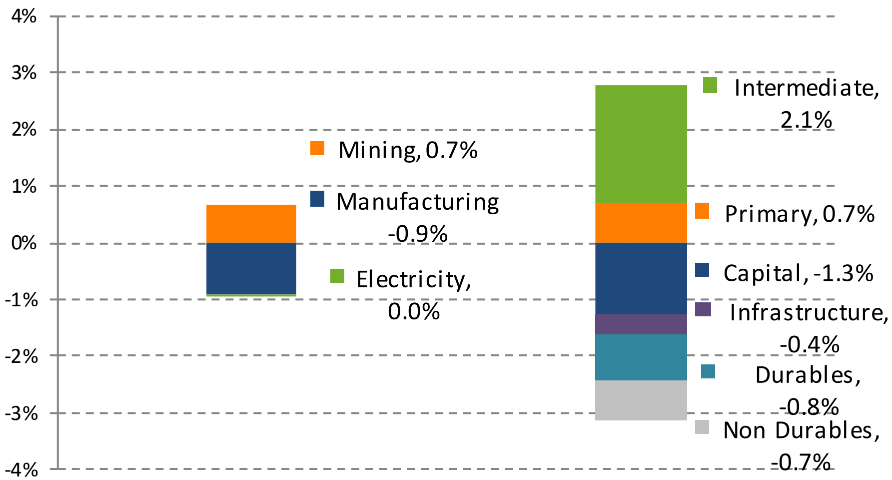
Moreover, the YoY growth in chemicals and chemical products worsened sharply to 0.8% in December 2019 from 8.4% in November 2019.

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

Sub-Sectors	Weight (%)	Growth in Dec 2019	Contribution to Manuf. Growth
Basic Metals	12.8	14.2%	2.4%
Coke and Refined Petroleum Products	11.8	1.2%	0.2%
Other Non-Metallic Mineral Products	4.1	1.7%	0.1%
Chemicals and Chemical Products	7.9	0.8%	0.1%
Other Transport Equipment	1.8	3.4%	0.1%
Others Displaying Expansion	0.7	7.8%	0.1%
Others Displaying Contraction	38.6	-8.2%	-4.0%
Manufacturing	77.6	-1.2%	-1.2%

Source: CSO, CEIC; ICRA research

Exhibit 7: Contribution to IIP Growth in December 2019



Source: CSO; CEIC; ICRA research

Mining: The pace of growth of the mining sector improved considerably to a 14-month high 5.4% in December 2019 (-1.0% in December 2018) from 1.8% in November 2019 (+2.7% in November 2018). This was driven by the turnaround to a YoY growth of coal output (to +6.1% in December 2019 from -2.5% in November 2019), even as the performance of crude oil (to -7.4% from -6.0%, respectively) and natural gas (to -9.3% from -6.4%, respectively; refer Exhibit 8) recorded a sequential deterioration. Mining emerged as the best performing sector in December 2019, boosting the IIP growth by a considerable 0.7% in that month.

Despite the sharp pickup in December 2019, the mining output recorded a contraction of 0.2% in Q3 FY2020, in contrast to the 2.8% growth in Q3 FY2019. However, in cumulative terms, mining output growth eased to a muted 0.6% in April-December FY2020 from 3.1% in April-December FY2019.

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

	Coal	Crude Oil	Natural Gas
Weight	10.33%	8.98%	6.88%
Oct-18	11.3%	-5.0%	-0.9%
Nov-18	3.7%	-3.5%	0.5%
Dec-18	1.1%	-4.3%	4.3%
Oct-19	-17.6%	-5.1%	-5.7%
Nov-19	-2.5%	-6.0%	-6.4%
Dec-19	6.1%	-7.4%	-9.3%

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

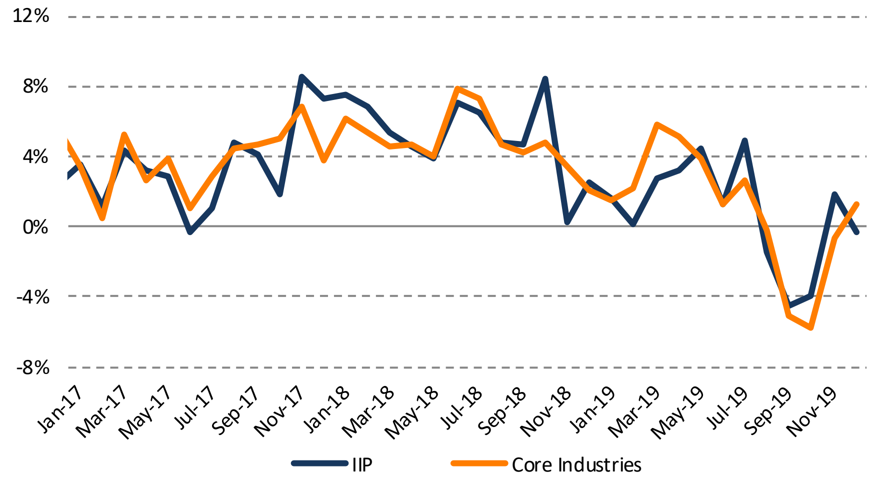
Electricity: The YoY decline in electricity generation narrowed to 0.1% in December 2019 (+4.5% in December 2018) from 5.0% in November 2019 (+5.1% in November 2018).

Data released by the CEA indicates that the sequential improvement in electricity generation in December 2019 relative to the previous month was driven by thermal electricity generation (to -4.0% from -9.0%), even as the pace of growth of hydroelectricity generation eased to 14.7% in December 2019 from 23.0% in the previous month.

Moreover, the PLF for coal and lignite-based plants rose somewhat to 54.4% in December 2019 from 51.7% in November 2019.

The electricity generation recorded a contraction of 6.0% in Q3 FY2020, in sharp contrast to the healthy 6.9% expansion in Q3 FY2019. Moreover, the cumulative growth in electricity generation declined to a subdued 0.8% in April-December FY2020 from 6.4% in April-December FY2019. Despite this, growth in electricity was superior to the performance of the other two sectors during 9M FY2020.

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



Source: CSO; CEIC; ICRA research

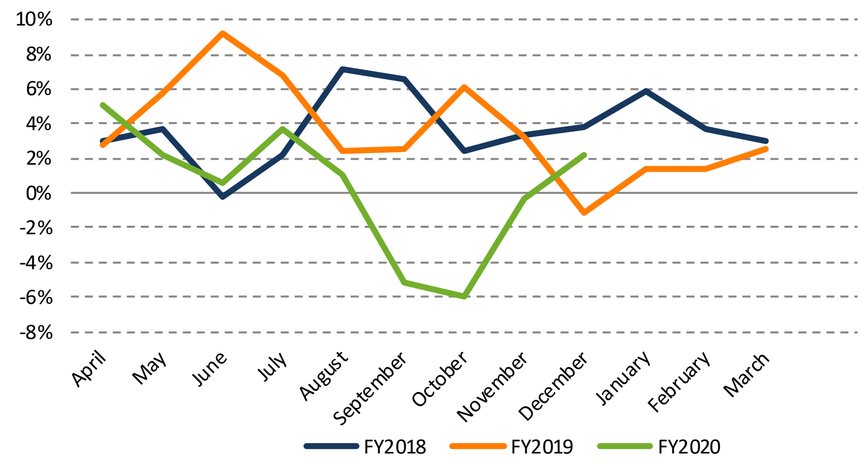
USE-BASED CLASSIFICATION

Primary Goods: The primary goods sub-index reverted to a YoY growth of 2.2% in December 2019 (-1.1% in December 2018) from a mild contraction of 0.3% in November 2019 (+3.2% in November 2018; refer Exhibit 10).

Moreover, the healthy YoY rise in mining (led by coal and electricity) boosted the performance of the primary goods sub-index, and pushed up the IIP growth by 0.7% in December 2019. However, the output of furnace oil (-39.6%; with a weight of 0.6% in the IIP) recorded a steep YoY contraction in December 2019.

Overall, the performance of this sub-index deteriorated to a contraction of 4.4% in Q3 FY2020, from the modest 2.7% growth in Q3 FY2019. Moreover, the growth of primary goods dipped to a marginal 0.3% in April-December FY2020 from 4.2% in April-December FY2019.

Exhibit 10: YoY Growth of Primary Goods



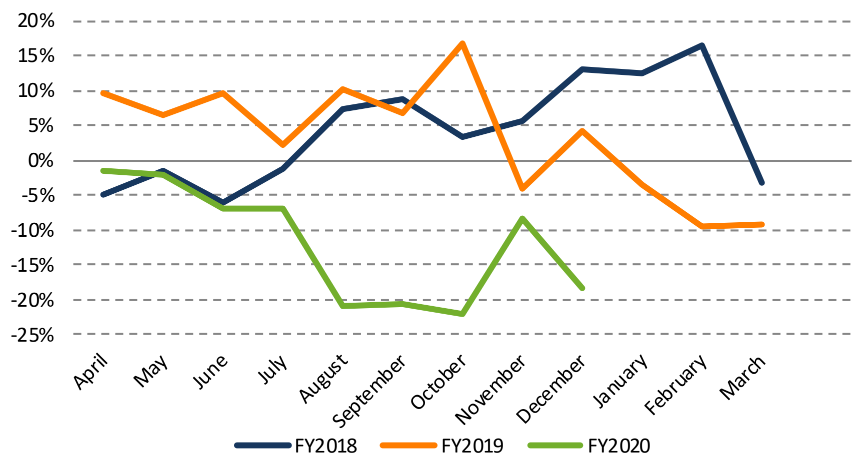
Source: CSO, CEIC; ICRA research

Capital Goods: The output of capital goods recorded a YoY contraction for the twelfth month in a row in December 2019, with the pace of the same worsening considerably to 18.2% (+4.2% in December 2018) from 8.2% in November 2019 (-4.1% in November 2018; refer Exhibit 11), partly due to the unfavourable base effect. This was the worst performing use-based category in December 2019.

The steep YoY contraction in the output of separators including decanter centrifuge (-63.3%; with a weight of 0.2% in the IIP), dampened the performance of capital goods and pulled down the performance of the IIP by 0.6% in December 2019, as per the data released by CSO. However, the output of ship building and parts thereof (with a weight of 0.2% in the IIP) recorded a sharp YoY expansion of 43.7% in December 2019.

The performance of this sub-index worsened sharply in Q3 FY2020 with a contraction of 17.3%, in contrast to the moderate 5.4% growth Q3 FY2019. Similarly, the capital goods sub-index contracted by 12.3% in April-December FY2020, marking a considerable deterioration from the healthy 6.8% expansion in the corresponding months of FY2019. Moreover, capital goods emerged as the worst performing use-based group in the first nine months of FY2020.

Exhibit 11: YoY Growth of Capital Goods



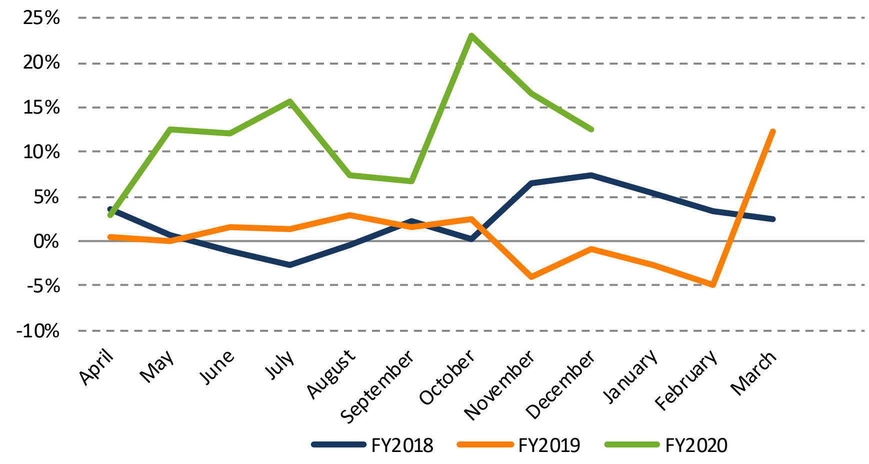
Source: CSO, CEIC; ICRA research

Intermediate Goods: The pace of expansion of intermediate goods output eased to 12.5% in December 2019 (-0.8% in December 2018) from 16.5% in November 2019 (-4.1% in November 2018; refer Exhibit 12), while remaining healthy. Intermediate goods remained the fastest growing use-based category for the eighth month in a row.

The performance of this sub-index benefitted from the high growth in MS slabs, pipes and tubes of steel (with a combined weight of 1.2% in the IIP), which supported the performance of the IIP by a significant 2.1% in December 2019, according to the data released by the CSO. However, there was a steep YoY decline in the output of printed circuit boards (-69.7%; with a weight of 0.2% in the IIP) in December 2019.

Moreover, this sub-index recorded a healthy 14.8% growth in Q3 FY2020, in sharp contrast to the mild 0.9% contraction in Q3 FY2019. Cumulatively, the growth of intermediate goods output improved considerably to 12.2% in April-December FY2020 from the low 0.5% in April-December FY2019.

Exhibit 12: YoY Growth of Intermediate Goods



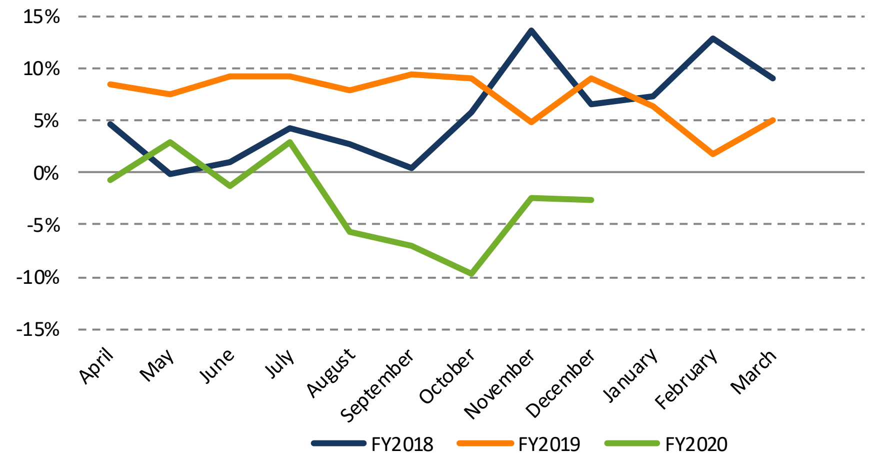
Source: CSO; CEIC; ICRA research

Infrastructure/construction goods: Led by the unfavourable base effect, the YoY contraction in infrastructure/construction goods output worsened mildly to 2.6% in December 2019 (+9.0% in December 2018) from the revised 2.4% in November 2019 (+4.8% in November 2018; refer Exhibit 13). 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, 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), together dampened the IIP performance by 1.0% in December 2019. In contrast, the output of CR coils and sheets, and HR coils and sheets of mild steel (with a combined weight of 2.0% in the IIP) bolstered the IIP by 0.8% in that month.

The sub-index recorded a sharp 7.4% decline in Q3 FY2020, in contrast to the 7.6% expansion in Q3 FY2019. Moreover, the output of infrastructure/ construction goods contracted by 2.7% in April-December FY2020, as opposed to the healthy 8.3% growth in April-December FY2019.

Exhibit 13: YoY Growth of Infrastructure/Construction Goods



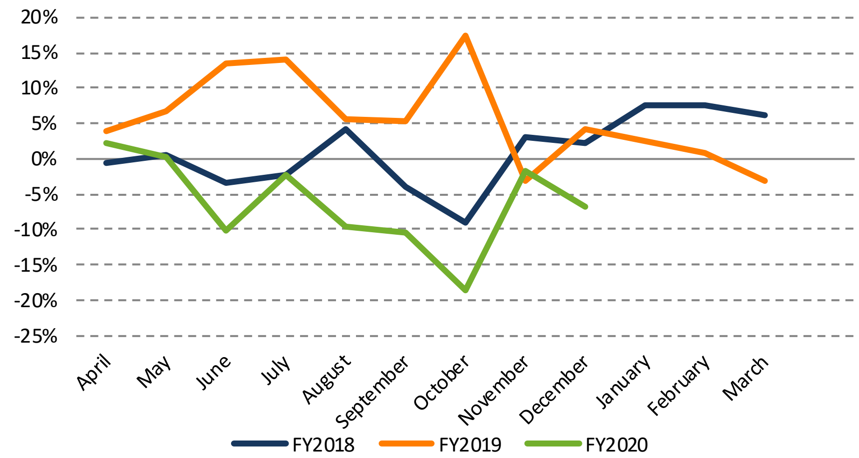
Source: CSO; CEIC; ICRA research

Consumer Durables: The contraction in the output of consumer durables worsened to 6.7% in December 2019 (+4.1% in December 2018) from the mild 1.6% in November 2019 (-3.0% in November 2018; refer Exhibit 14), reflecting the unfavourable base effect.

A sharp 54.0% contraction in the output of electric and non-electric heaters (with a weight of 0.2% in the IIP) dampened the performance of this sub-index in December 2019, according to the data released by the CSO.

The performance of consumer durables deteriorated in Q3 FY2020, with a considerable YoY contraction of 7.9%, as opposed to the 6.1% growth in the Q3 FY2019. In cumulative terms, consumer durables output recorded a contraction of 6.6% in April-December FY2020, in sharp contrast to the healthy 7.4% expansion in April-December FY2019.

Exhibit 14: YoY Growth of Consumer Durables



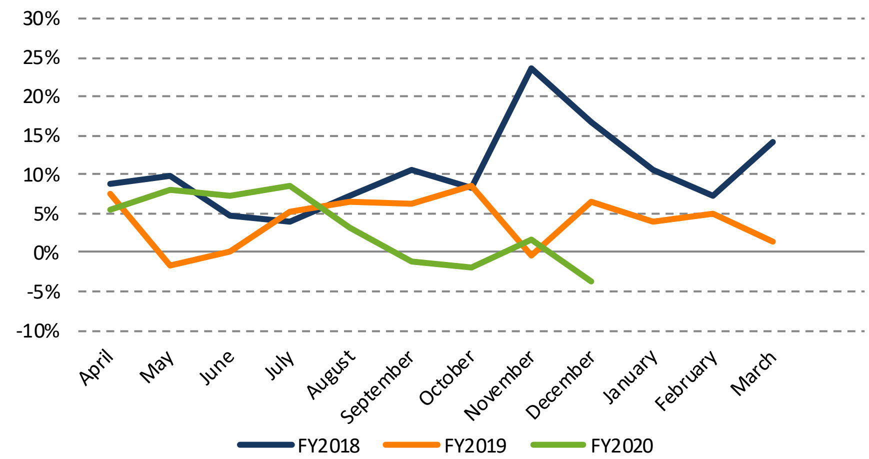
Source: CSO; CEIC; ICRA research

Consumer Non-Durables: Consumer non-durables output recorded YoY contraction of 3.7% in December 2019, in contrast to the growth of 2.0% in November 2019. The deterioration in this month was driven by the unfavourable base effect (+6.5% in December 2018; -0.5% in November 2018).

As per the data released by the CSO, the output of digestive enzymes and antacids (with a weight of 0.2% in the IIP) and sugar (with a weight of 0.8% in the IIP), pulled down the IIP performance by 0.7% in December 2019.

This sub-index recorded a subdued performance, with a 3.8% contraction in Q3 FY2020 as opposed to a growth of 4.8% in Q3 FY2019. Cumulatively, the growth in consumer non-durables stood at low 2.8% in April-December FY2020, lower than the same in April-December FY2019 (+4.3%).

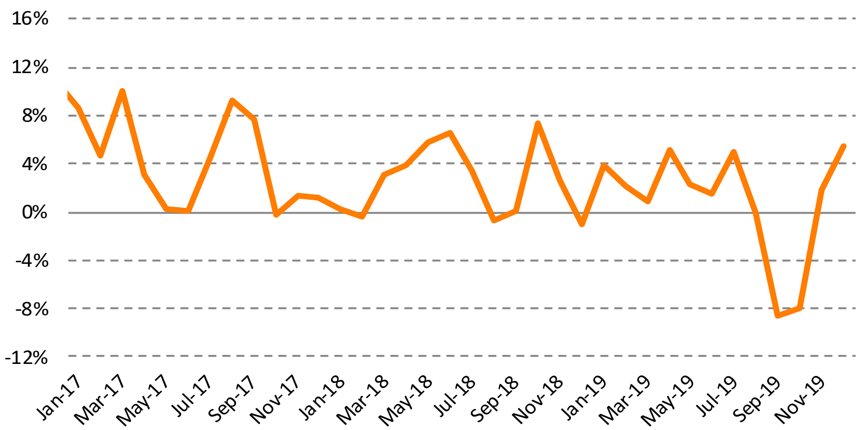
Exhibit 15: YoY Growth of Consumer Non-Durables



Source: CSO; CEIC; ICRA research

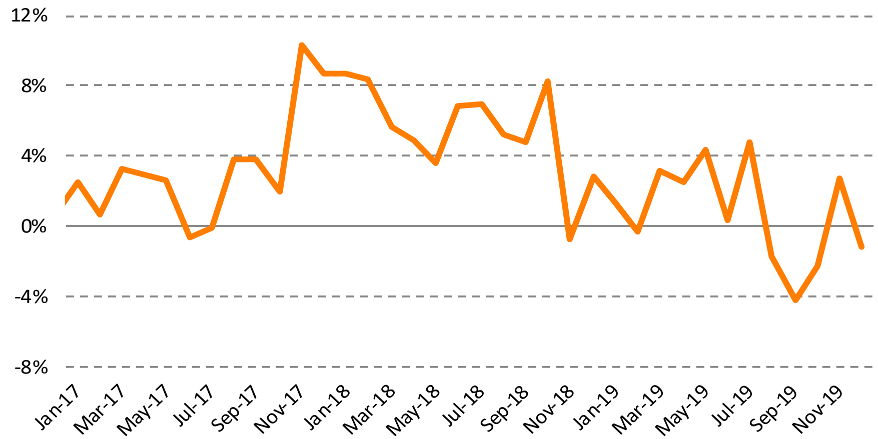
ANNEXURE A

Exhibit 16: YoY Growth in Mining



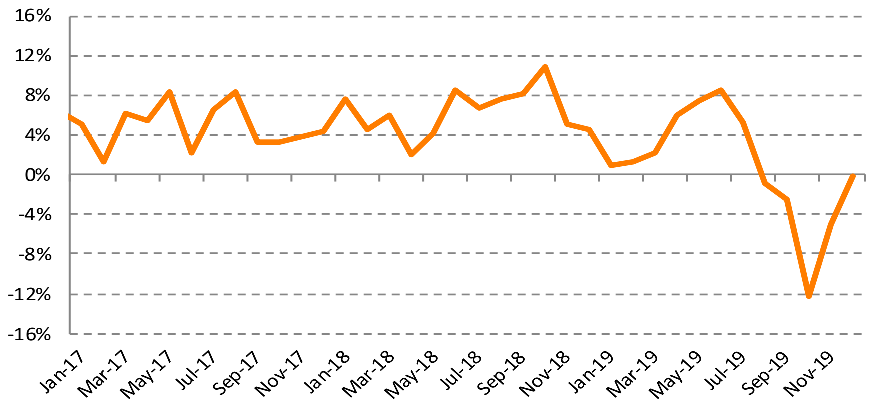
Source: CSO; CEIC; ICRA research

Exhibit 17: YoY Growth in Manufacturing



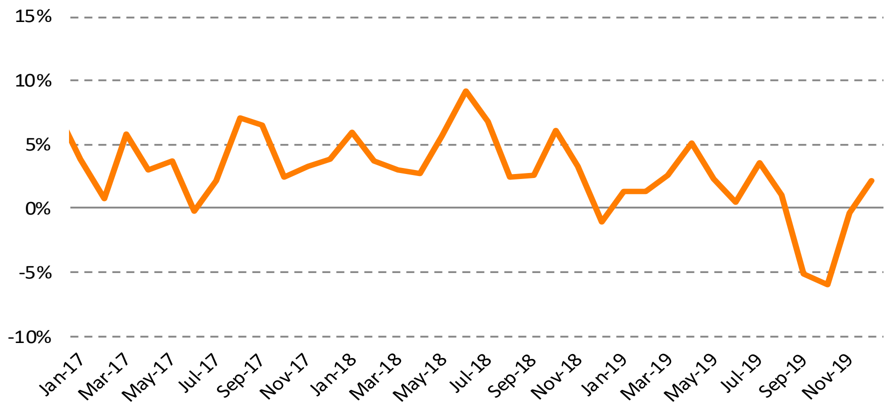
Source: CSO; CEIC; ICRA research

Exhibit 18: YoY Growth in Electricity



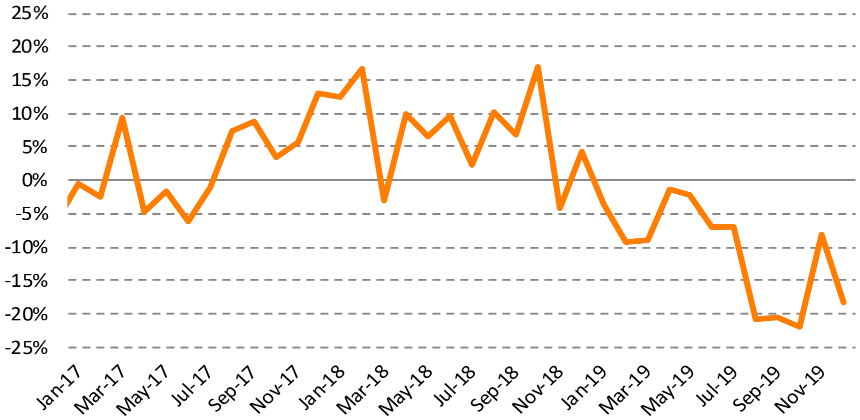
Source: CSO; CEIC; ICRA research

Exhibit 19: YoY Growth in Primary Goods



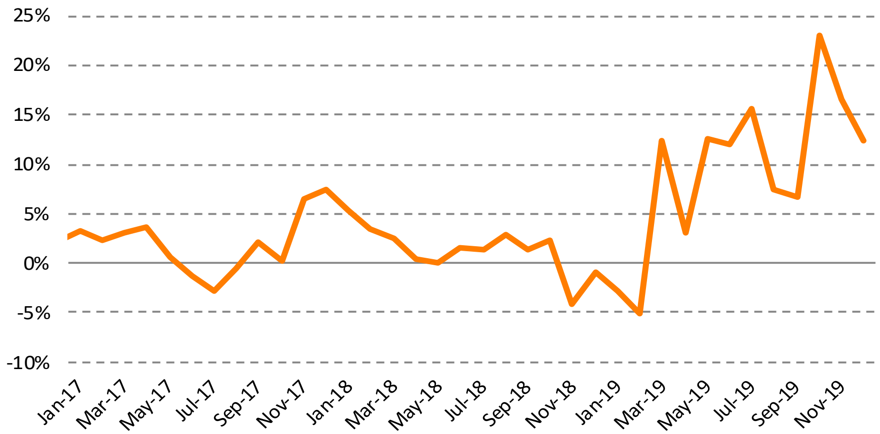
Source: CSO; CEIC; ICRA research

Exhibit 20: YoY Growth in Capital Goods



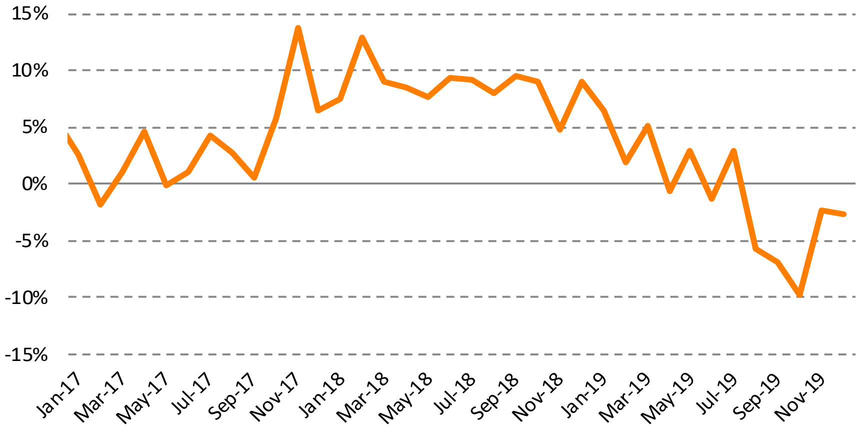
Source: CSO; CEIC; ICRA research

Exhibit 21: YoY Growth in Intermediate Goods



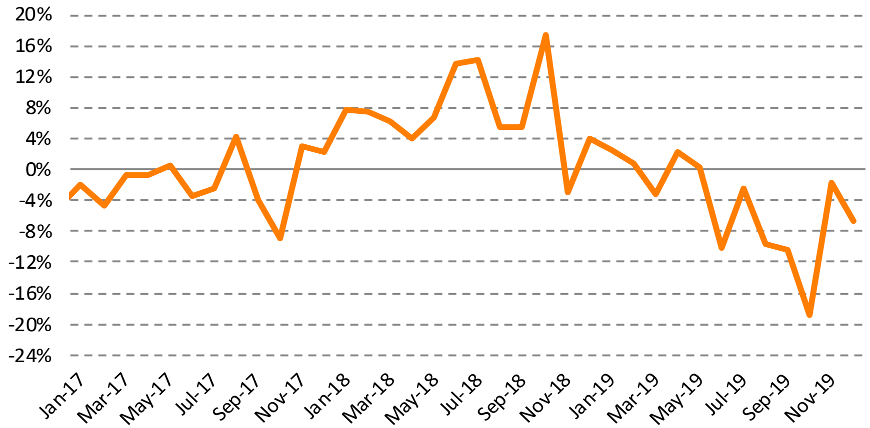
Source: CSO; CEIC; ICRA research

Exhibit 22: YoY Growth in Infrastructure/Construction



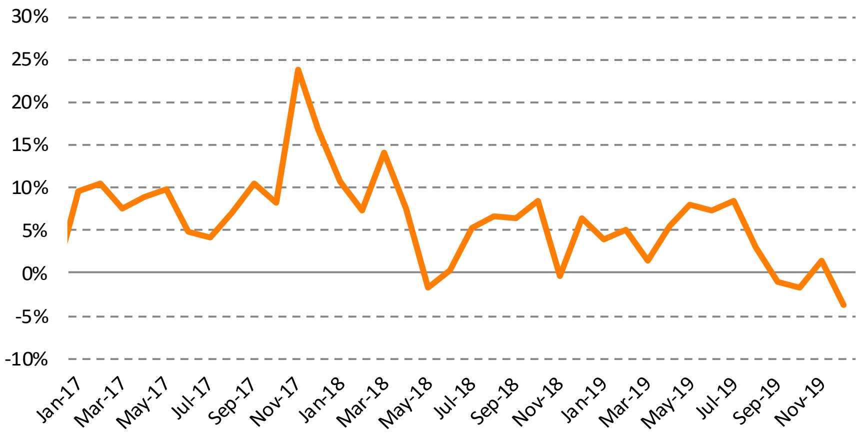
Source: CSO; CEIC; ICRA research

Exhibit 23: YoY Growth in Consumer Durables



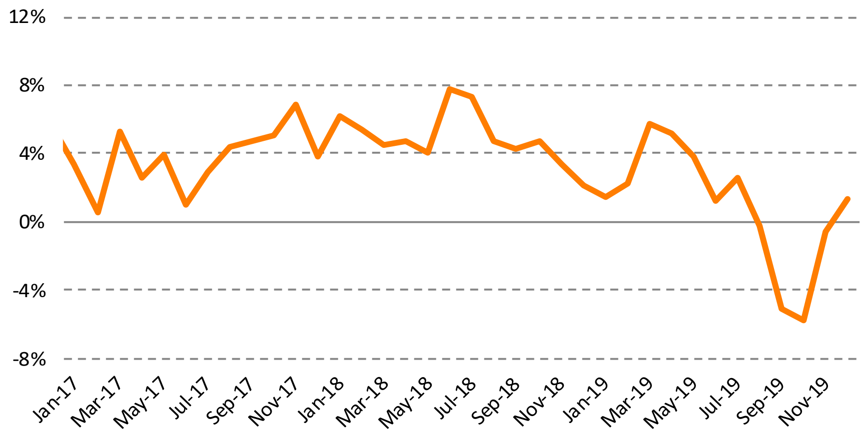
Source: CSO; CEIC; ICRA research

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 Dec 2019	Manufacturing Sub-Sector	Use-based Classification
Furnace oil	0.58	-39.6%	Coke and refined petroleum products	Primary goods
Ship building and parts thereof	0.19	43.7%	Other transport equipment	Capital goods
Separators including decanter centrifuge	0.16	-63.3%	Machinery and equipment n.e.c.	
MS slabs	0.84	164.1%	Basic Metals	Intermediate goods
Pipes and tubes of Steel	0.34	77.3%	Basic Metals	
Printed Circuit Boards (whether or not mounted with IC chips /components)	0.22	-69.7%	Computer, electronic and optical products	
Rail and rail materials	0.12	48.0%	Basic Metals	Infrastructure/ construction goods
CR Coils & Sheets	0.68	43.2%	Basic Metals	
Bars and Rods of Alloy and Stainless Steel	0.57	-54.0%	Basic Metals	
Meters (electric and non-electric)	0.16	-54.0%	Computer, electronic and optical products	Consumer durables

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
Weight	**100.00%**	**10.33%**	**8.98%**	**6.88%**	**28.04%**	**2.63%**	**17.92%**	**5.37%**	**19.85%**
Month									
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%
Dec-18	2.1%	1.1%	-4.3%	4.3%	-4.9%	-2.4%	10.1%	11.6%	4.5%
Oct-19	-5.8%	-17.5%	-5.1%	-5.7%	0.3%	11.8%	-1.9%	-7.7%	-12.2%
Nov-19	-0.6%	-2.5%	-5.9%	-6.5%	3.2%	13.6%	-0.1%	4.3%	-5.0%
Dec-19	1.3%	6.1%	-7.4%	-9.3%	3.1%	10.1%	1.9%	5.4%	-1.6%
FY2019 YTD	**4.8%**	**7.8%**	**-3.7%**	**-0.1%**	**4.1%**	**-1.5%**	**4.3%**	**13.9%**	**6.4%**
FY2020 YTD	**0.2%**	**-3.8%**	**-6.1%**	**-3.8%**	**-0.6%**	**4.7%**	**5.2%**	**0.6%**	**0.6%**

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

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