

# Economic Rebound: Understanding high impact Sectors in Manufacturing

Anand Shanker Pandey

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# Objective

- ❖ Compared to quarterly GDP numbers, IIP is a high frequency indicator. It is used in this work to analyze growth in various categories of manufacturing since 2012-13 to August 2020.
- ❖ In the process we also try to understand manufacturing sectors, where government's judicious interventions could help economy to rebound quickly.
- ❖ This work is in line with our efforts to provide quick and regular analysis/update on manufacturing sector in the current indeterminate situation.

# Content

- ❖ Highlights
- ❖ GVA-Mfg and IIP-Mfg
- ❖ Growth in sectoral indices
- ❖ Growth in use-based categories
- ❖ High impact sectors in manufacturing

## Source:

1. IIP data August-2020, Ministry of Statistics & Programme Implementation
2. CSO Press Note, 31 Jan, 29 May, & 31 Aug 2020

## Highlights (1/3)

1. Growth in GVA-Mfg is correlated with that of IIP-Mfg. Regression analysis suggests that growth in GVA-Mfg in Q1 2020-21 is at **-38.8%**, which is very close to the announced growth of **-39.3%**.
2. In 2019-20 i.e. during the period Apr-19 to Mar-20, growth in 17 out of 23 sectoral indices was negative.
3. If we exclude Mar-20 and look at the growth during the period Apr-19 to Feb-20 over the same period of previous year, we find that 13 out of 23 sectoral indices were in red.
4. It indicates that though lockdown announced in the last week of Mar-20 had some negative impact on 2019-20 growth, economy was not in good shape even in the period prior to Mar-20.

## Highlights (2/3)

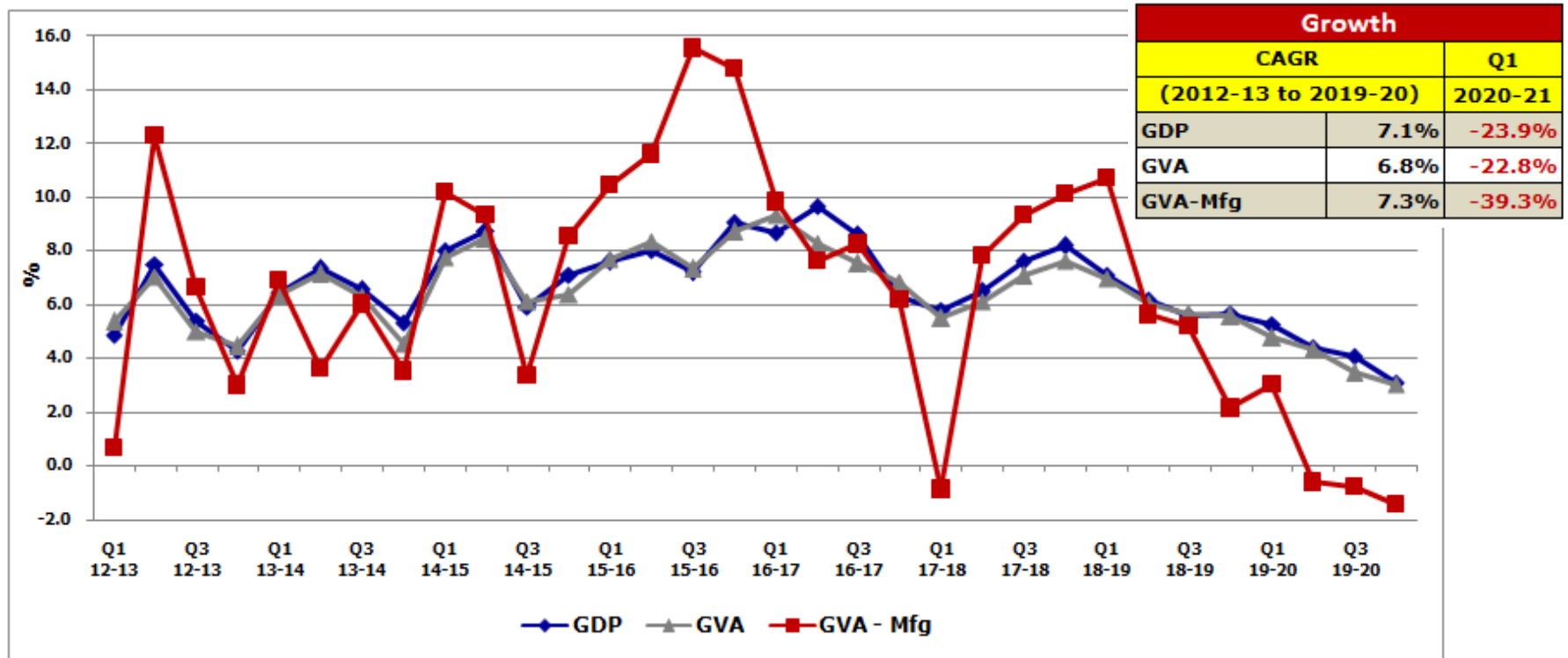
5. Growth in 'Primary Goods', which has ~34% weight in IIP started slowing down after 2015-16. Growth in 'Capital Goods' (~8.2% weight) turned negative in 2019-20.
6. Though growth in 'Intermediate Goods' (~17.2% weight) picked up in 2019-20, it got severely impacted in Apr-Aug 2020-21. Growth in 'Construction Goods' (~12.3%) turned negative in 2019-20 itself.
7. Growth in consumer Durables (~12.8% weight) and Non-Durables (~15.3% weight) turned negative in 2019-20.
8. 7 out of 23 sectors in manufacturing have more than ~67% share in IIP-Mfg. To ensure quick revival of economy through manufacturing, it would be worth pushing for strong policy interventions in these sectors.

## Highlights (3/3)

9. 3 sectors out of 7 high impact sectors – **‘Basic Metals’, ‘Coke & Refined Petroleum Products’, and ‘Chemicals & Chemical Products’**; deserve special attention. Together these 3 have ~41.8% share in IIP-Mfg.
  
10. Few sectors have very high weight in IIP-Mfg, that necessitates disproportionately large growth oriented policy interventions in the sectors, which currently have low weight in IIP-Mfg, but have very high employment generation potential viz. Textiles, Wearing Apparel, etc.

# GVA-Mfg & IIP-Mfg

# QoQ growth in GDP, GVA, and GVA-Mfg

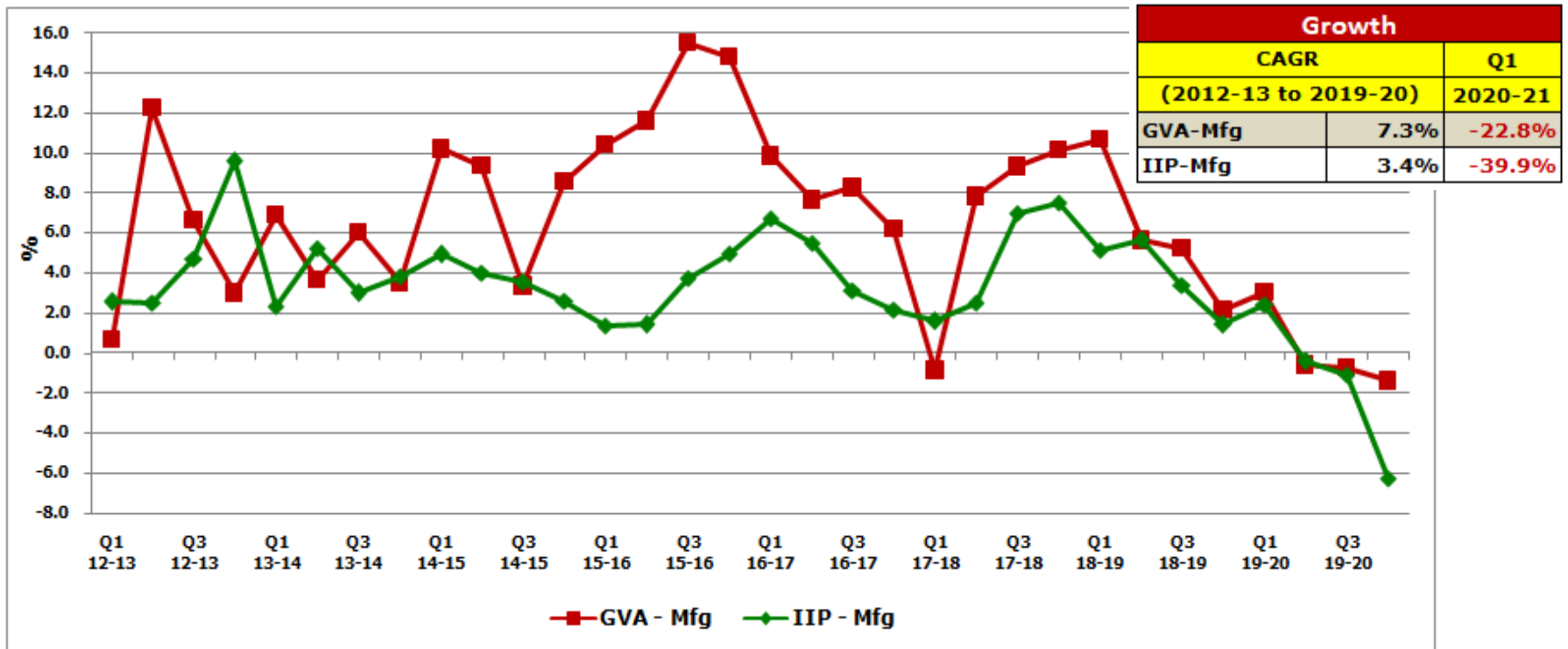


Manufacturing has ~18% share in GVA and its growth rate has been slightly higher than the growth rate of GVA over the period 2012-13 to 2019-20.

It is Quarter on Quarter (QoQ) growth. Q1 2020-21 is over Q1 2019-20. GDP, GVA & GVA-Mfg are at Constant Prices.



# Growth in GVA-mfg is correlated with that of IIP-mfg.



Regression analysis suggests growth of **-38.8%** in GVA-mfg for Q1 2020-21 (April 2020 to June 2020). It is very close to declared growth of **-39.3%** in GVA-mfg for Q1 2020-21.

**It is Quarter on Quarter (QOQ) growth. Q1 2020-21 is over Q1 2019-20.**

# Growth in sectoral indices

In FY20 i.e. during the period Apr-19 to Mar-20, growth in 17 out of 23 sectoral indices was negative.

NIC 2 Digit	Manufacturing Description	Weights in IIP	% Share in IIP-Mfg	Growth			Growth	
				CAGR	FY20	FY20	Q1 FY21	Apr-Aug
				12-13 to 19-20	2019-20	Excluding Mar 20	2020-21	2020-21
10	Food products	5.3025	6.8%	2.2%	2.0%	3.8%	-14.1%	-10.1%
11	Beverages	1.0354	1.3%	0.1%	-2.6%	0.0%	-63.7%	-49.2%
12	Tobacco products	0.7985	1.0%	-3.5%	1.3%	3.1%	-52.5%	-29.9%
13	Textiles	3.2913	4.2%	0.9%	-2.5%	-1.3%	-69.9%	-48.7%
14	Wearing apparel	1.3225	1.7%	6.5%	0.3%	5.0%	-64.4%	-49.4%
15	Leather & related products	0.5021	0.6%	1.5%	-1.8%	0.4%	-60.2%	-42.0%
16	Wood & products of wood and cork, except furniture; manufacture of articles of straw & plaiting materials	0.1930	0.2%	1.8%	8.3%	12.5%	-65.6%	-51.1%
17	Paper & paper products	0.8724	1.1%	-1.8%	-12.8%	-11.2%	-53.9%	-47.9%
18	Printing & reproduction of recorded media	0.6798	0.9%	-1.0%	-7.1%	-4.7%	-49.2%	-39.9%
19	Coke & refined petroleum products	11.7749	15.2%	3.0%	0.0%	0.1%	-22.2%	-21.0%
20	Chemicals & chemical products	7.8730	10.1%	1.9%	-0.4%	1.7%	-24.5%	-15.6%

In red

6

4

Cont.

If we exclude Mar-20, we find that 13 out of 23 sectoral indices were in red.

Q1 2020-21 and Apr-Aug 2020-21 are over Q1 2019-20 and Apr-Aug 2019-20 respectively.

Even prior to Mar-20, economy was not in good shape.

NIC 2 Digit	Manufacturing Description	Weights in IIP	% Share in IIP-Mfg	Growth			Growth	
				CAGR	FY20	FY20	Q1	Apr-Aug
				12-13 to 19-20	2019-20	Excluding Mar 20	2020-21	2020-21
21	Pharmaceuticals, medicinal chemical & botanical products	4.9810	6.4%	12.7%	-0.1%	2.3%	-4.6%	-0.6%
22	Rubber & plastics products	2.4222	3.1%	-0.5%	-7.4%	-5.5%	-39.0%	-25.2%
23	Other non-metallic mineral products	4.0853	5.3%	2.7%	-1.9%	0.4%	-41.2%	-30.2%
24	Basic metals	12.8043	16.5%	5.3%	11.0%	14.5%	-41.7%	-26.4%
25	Other non-metallic mineral products	2.6549	3.4%	-0.2%	-14.7%	-12.7%	-60.1%	-40.4%
26	Computer, electronic & optical products	1.5704	2.0%	6.7%	-10.5%	-7.3%	-63.3%	-44.2%
27	Electrical equipment	2.9983	3.9%	-1.5%	-4.5%	-1.8%	-67.6%	-47.2%
28	Machinery & equipment n.e.c.	4.7653	6.1%	2.1%	-12.7%	-10.1%	-61.1%	-43.8%
29	Motor vehicles, trailers & semi-trailers	4.8573	6.3%	1.7%	-18.3%	-15.5%	-77.0%	-56.8%
30	Other transport equipment	1.7763	2.3%	5.6%	-6.2%	-5.9%	-77.8%	-51.6%
31	Furniture	0.1311	0.2%	10.3%	-7.2%	-5.5%	-64.8%	-47.9%
32	Other manufacturing	0.9415	1.2%	-3.4%	-12.5%	-8.6%	-64.7%	-53.3%
<b>Manufacturing (Total)</b>		<b>77.6332</b>	<b>100.0%</b>	<b>3.4%</b>	<b>-1.4%</b>	<b>0.7%</b>	<b>-39.92%</b>	<b>-28%</b>

In red

Total in red

11

17

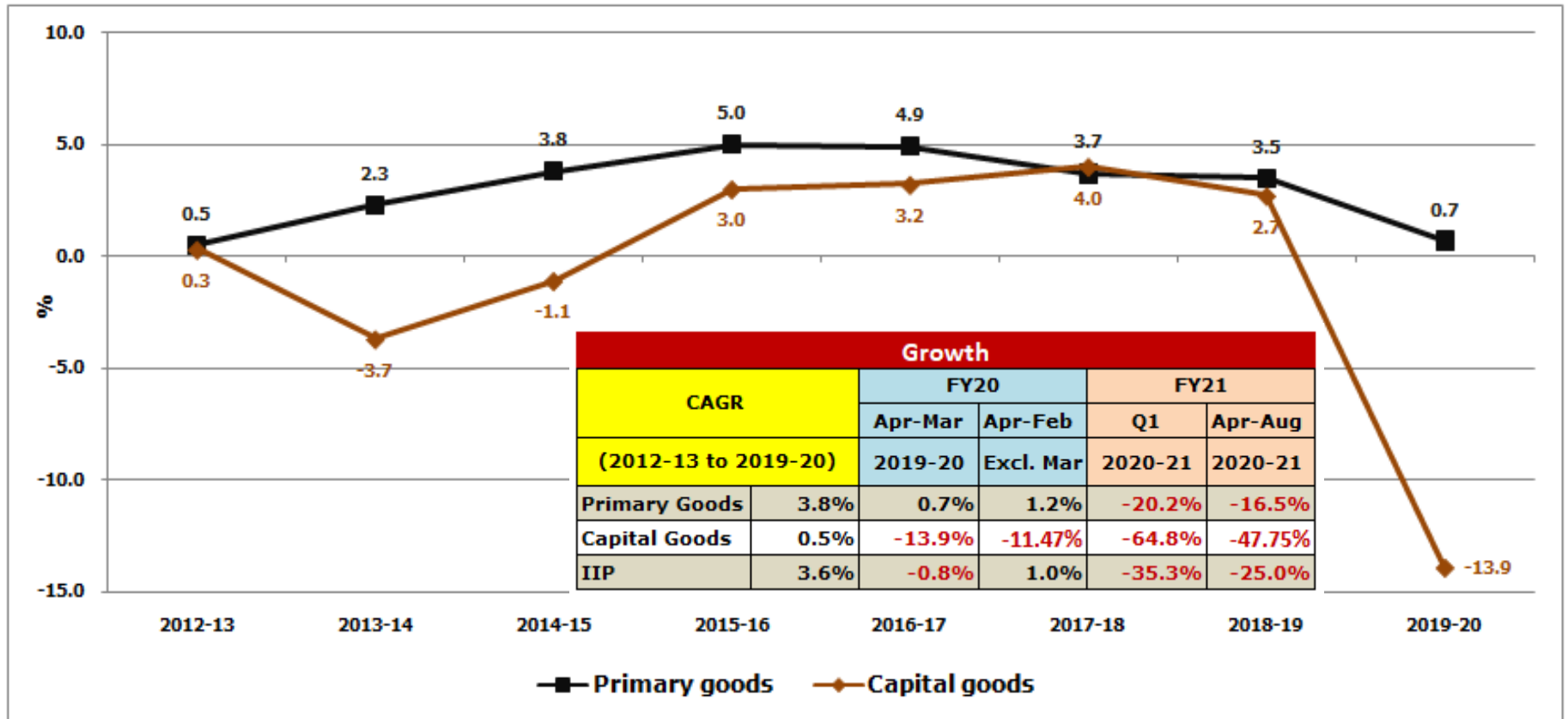
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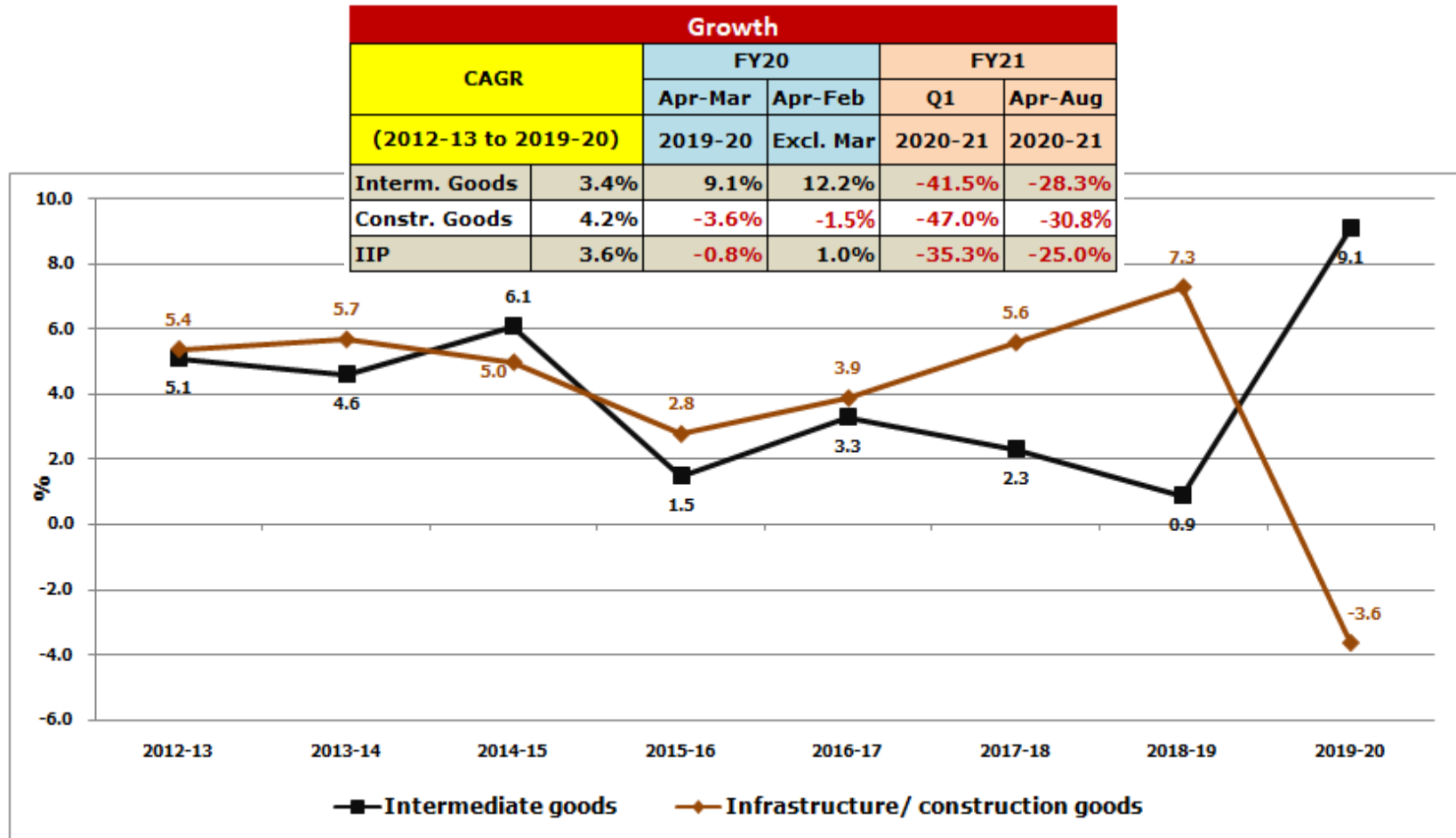
# Growth in use-based categories

**Growth in Primary Goods, which has ~34% weight in IIP started slowing down after 2015-16. Growth in Capital Goods (~8.2% weight) turned negative in 2019-20.**



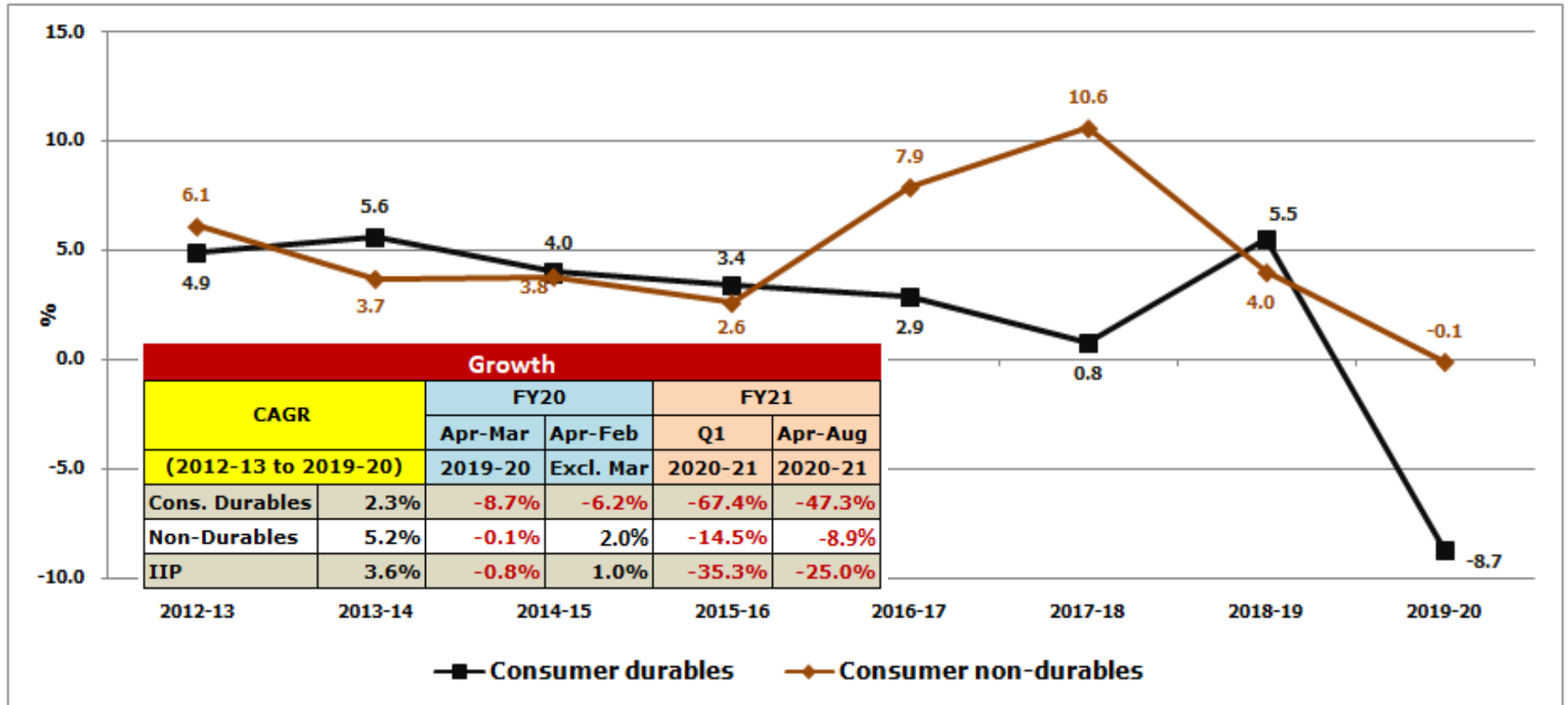
**IIP = IIP-Mfg + IIP-Mining + IIP-Electricity**

Though growth in Intermediate Goods (~17.2% weight) picked up in 2019-20, growth in Construction Goods (~12.3%) turned negative in 2019-20 itself.



IIP = IIP-Mfg + IIP-Mining + IIP-Electricity

**Growth in consumer Durables (~12.8% weight) and Non-Durables (~15.3% weight) turned negative in 2019-20.**



**IIP = IIP-Mfg + IIP-Mining + IIP-Electricity**



# High impact sectors

**7 out of 23 sectors have more than ~67% weight in IIP-Mfg. Top 3 - ‘Basic Metals’, ‘Coke & Refined Petroleum Products’, and ‘Chemicals & Chemical Products’; alone have ~41.8% weight in IIP-Mfg.**

NIC 2 Digit	Manufacturing Description	Weights in IIP	% Share in IIP-Mfg	Growth Apr-Aug 2020-21
24	Basic metals	12.8043	16.5%	-26.4%
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21	Pharmaceuticals, medicinal chemical & botanical products	4.9810	6.4%	-0.6%
29	Motor vehicles, trailers & semi-trailers	4.8573	6.3%	-56.8%
28	Machinery & equipment n.e.c.	4.7653	6.1%	-43.8%
<b>Total</b>		<b>52.3584</b>	<b>67.4%</b>	

**Large employment creating sectors – Textiles & ‘Wearing Apparel’, appear at number 9 & 15 respectively in terms of weight in IIP-Mfg .**

**Considering current state of economy , it would be prudent to push growth through policy interventions & investments in top 3 sectors , which would help quickly to turnaround economy.**

❖ **Basic Metals**

- ✓ Strong push in the form of large investments in infrastructure projects is needed from the government to spur the demand.
- ✓ Government could also nudge PSUs to go for larger scale CAPEX projects.

❖ **Coke & Refined Petroleum Products**

- ✓ Rationalization of taxes on petroleum products, and aggressive cut down on cost of ownership of vehicles would help the sector.
- ✓ Increased industrial activities due to increased infrastructure and CAPEX projects would help the sector.

## **Growth in 'Chemicals & Chemical Products' would require more of policy interventions rather than investments from government.**

### **❖ Chemicals & Chemical Products**

- ✓ Need is to incentivise and encourage investments in knowledge / innovation based products.
- ✓ Encourage investments in consumer products.
- ✓ Rather than looking for large and mega integrated chemical complexes, may be it is the time to push for small and modular multiple manufacturing units near the demand centres.
- ✓ Look at the genuine cases where domestic producers have cost disadvantages over imports, but desist from creating barriers to the imports.

**Detailed discussions on what can be done and how, are not the scope of this work .**

# End