

# **Economic Rebound: An update & mapping demand outlook under scenario of households' income loss**

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## 1. Prologue

In order to kick start economic growth government is nudging private sector to invest in capacity creation through announcements of various incentives viz. reduction in corporate income tax rate, production linked incentives (PLIs), etc.

We know that India's growth story has been primarily driven by credit led consumption growth. During the period FY12 to FY20, growth rate in nominal 'private final consumption expenditure' (PFCE) has been at a higher level than the growth rate in nominal per capita 'gross national disposable income'. In real terms growth in PFCE has slowed down significantly in FY20, while investments growth has turned negative<sup>1</sup>.

India has limited risk capital. Banking system is constrained to finance growth, it has limited equity capital to resolve the NPA problem. Therefore, investments led growth has greater financial risk particularly at the time when both global and domestic economic uncertainties are very high<sup>2</sup>.

In the post COVID scenario, consumption pattern of households could go through some change. After-all, there is no denying from the fact that a large number of households have suffered from income loss whether it is in the form of salary income or investment income. How this new experience will play out in short to medium term, is very difficult to predict at this point of time.

Considering government's focus on manufacturing, in the previous article – 'Economic Rebound: Understanding high impact Sector in Manufacturing', we tried to understand sectors, where government's judicious interventions could help economy to rebound quickly. Article used IIP information to analyze various categories from 2012-13 to August 2020. As IIP is a high frequency indicator, it helps us to keep a close watch on a fast developing economic environment on monthly basis.

This article is an update on previous work, and attempts to analyse recently released IIP data for the month of September 2020 in the right context. Article also attempts to map the impact of households' income loss on demand outlook of various sectors using a 2x2 matrix.

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<sup>1</sup> The Growth Paradox: Will cut in repo rate bring back consumption growth? Anand Shanker Pandey, IASCC, Hyderabad, July 26, 2020

<sup>2</sup> The Indian Economy: Making a Case for the Government to Play its Economic Role, Anil K Sood, IASCC, Hyderabad, April 16, 2020

## 2. Analysis of manufacturing categories for September 2020

Manufacturing has 23 categories, and 17 out of 23 categories were in red in the month of September last year i.e. Sep-19. If we look at the growth of these 23 categories in Sep-20 over same month of last year i.e. Sep-19, base effect would be at play. Therefore, while looking at the growth in Sep-20 over Sep-19, we should also look at growth in Sep-20 over Sep-18, and growth in Sep-19 over Sep-18. Along-with month on month growth numbers, H1 FY21 growth numbers are also given in the table below.

NIC 2 Digit	Manufacturing Description	Weights in IIP	Growth			Growth
			Sep-20	Sep-20	Sep-19	H1 FY21
			Over Sep-19	Over Sep-18	Over Sep-18	Over H1 FY20
10	Food products	5.3025	0.4%	1.7%	1.3%	-9.0%
11	Beverages	1.0354	-15.3%	-18.5%	-3.9%	-43.9%
12	Tobacco products	0.7985	-7.2%	3.7%	11.7%	-25.6%
13	Textiles	3.2913	-11.7%	-16.4%	-5.3%	-41.2%
14	Wearing apparel	1.3225	-14.1%	-12.9%	1.4%	-43.7%
15	Leather & related products	0.5021	0.9%	0.3%	-0.6%	-35.3%
16	Wood & products of wood and cork, except furniture; manufacture of articles of straw & plaiting materials	0.1930	-15.4%	1.6%	20.1%	-44.6%
17	Paper & paper products	0.8724	-7.7%	-16.2%	-9.3%	-32.4%
18	Printing & reproduction of recorded media	0.6798	-20.1%	-26.8%	-8.4%	-37.7%
19	Coke & refined petroleum products	11.7749	-10.4%	-15.2%	-5.3%	-19.4%
20	Chemicals & chemical products	7.8730	5.1%	3.8%	-1.2%	-11.7%

- **Food Products**

Food products category has grown in Sep-20, albeit slowly at 0.4%. Though it does not get impacted much by income loss, its growth would slow down if the current economic situation lasts for long.

- **Textiles**

This is one of the largest employment generating sectors. Its decline is in double digit (-11.7%) despite favourable base effect. Over Sep-18, it has declined by 16.4%.

- **Wearing Apparel**

Decline in another large employment generating sector is in double digit (-14.1%). This category had registered a modest growth of 1.4% in Sep-19.

- **Paper & Paper Products**

Despite favourable base effect this category declined by 7.7%. Decline in Sep-19 was at -9.3%.

- **Coke & Refined Petroleum Products**

Surprisingly this category is down by double digit (-10.4%) despite having a favourable base effect. Over Sep-18, it has declined by 15.2%.

- **Chemicals & Chemical Products**

This category has registered a growth of 5.1%. It has a favourable base effect as its growth in Sep-19 was negative.

NIC 2 Digit	Manufacturing Description	Weights in IIP	Growth			Growth
			Sep-20 Over Sep-19	Sep-20 Over Sep-18	Sep-19 Over Sep-18	H1 FY21 Over H1 FY20
21	Pharmaceuticals, medicinal chemical & botanical products	4.9810	7.0%	4.8%	-2.1%	-2.0%
22	Rubber & plastics products	2.4222	9.1%	-4.9%	-12.8%	-19.6%
23	Other non-metallic mineral products	4.0853	-7.1%	-9.3%	-2.3%	-27.0%
24	Basic metals	12.8043	3.7%	12.5%	8.4%	-21.2%
25	Fabricated metal products, except machinery & equipment	2.6549	6.1%	-18.1%	-22.8%	-33.1%
26	Computer, electronic & optical products	1.5704	-7.5%	-17.5%	-10.8%	-38.4%
27	Electrical equipment	2.9983	10.0%	11.4%	1.3%	-36.8%
28	Machinery & equipment n.e.c.	4.7653	-3.6%	-21.2%	-18.3%	-36.1%
29	Motor vehicles, trailers & semi-trailers	4.8573	2.1%	-24.4%	-26.0%	-48.3%
30	Other transport equipment	1.7763	7.7%	-1.6%	-8.6%	-41.9%
31	Furniture	0.1311	-10.8%	-30.7%	-22.4%	-41.0%
32	Other manufacturing	0.9415	-25.7%	-31.4%	-7.6%	-49.1%
<b>Manufacturing (Total)</b>		<b>77.6332</b>	<b>-0.6%</b>	<b>-4.8%</b>	<b>-4.3%</b>	<b>-23.6%</b>

- **Pharmaceuticals, Medicinal Chemical & Botanical Products**

This category has registered a growth of 7%. It has a favourable base effect as its growth in Sep-19 was negative.

- **Rubber & Plastics Products**

This category has registered a growth of 9.1%. It has a huge favourable base effect as its decline in Sep-19 was in double digit (-12.8%). Therefore, its growth in Sep-20 over Sep-18 is negative (-4.9%).

- **Basic Metals**

This category is doing well. It has registered a growth of 3.7%. In Sep-19, its growth was at 8.4%.

- **Electrical Equipment**

This category is doing quite well. It is the only category which has registered a double digit growth in Sep-20, it grew by 10%. In Sep-19 also it was in green as it registered a growth of 1.3%.

- **Motor Vehicles, Trailers & Semi-trailers**

This category has registered a growth of 2.1%. It has a huge favourable base effect as its decline in Sep-19 was in double digit (-26%). Therefore, its growth in Sep-20 over Sep-18 is negative (-24.4%).

- **Other transport equipment**

This category has registered a growth of 7.7%. It has a favourable base effect as its decline in Sep-19 was at -8.6%. Therefore, its growth in Sep-20 over Sep-18 is negative (-1.6%).

### 3. Analysis of use-based categories for September 2020

Primary Goods, and Capital Goods have declined further in Sep-20 despite having favourable base effects. Intermediate Goods show a dip in Sep-20. Infrastructure / Construction Goods, and Consumer Durables have shown slight uptick as both have favourable base effect. But over Sep-18 both are in red. Consumer non-durables has registered a growth of 4.1%.

Sr. No.	Use-based Category	Weights in IIP	Growth			Growth
			Sep-20 Over Sep-19	Sep-20 Over Sep-18	Sep-19 Over Sep-18	H1 FY21 Over H1 FY20
1	Primary goods	34.0486	-1.5%	-6.6%	-5.2%	-14.2%
2	Capital goods	8.2230	-3.3%	-23.1%	-20.5%	-40.6%
3	Intermediate goods	17.2215	-1.4%	5.3%	6.8%	-23.4%
4	Infrastructure/ construction goods	12.3384	0.7%	-6.3%	-7.0%	-25.7%
5	Consumer durables	12.8393	2.8%	-8.0%	-10.5%	-39.1%
6	Consumer non-durables	15.3292	4.1%	3.0%	-1.1%	-7.8%
Total		100				
1	Manufacturing	77.6332	-0.6%	-4.8%	-4.3%	-23.6%
2	Mining	14.3725	1.4%	-7.3%	-8.6%	-15.3%
3	Electricity	7.9943	4.9%	2.1%	-2.6%	-8.0%
General		100	0.2%	-4.3%	-4.6%	-21.0%

Overall, Manufacturing is down by 0.6% in Sep-20 despite having a favourable base effect. Mining shows slight uptick but it is still down by 7.3% over Sep-18. Electricity registered a growth of 4.9%.

#### 4. Impact of Income loss on demand outlook of various sectors

One of the harsh realities of the ongoing crisis is that households' income has been impacted negatively. Probably it would be the first time when in the post reform era a large number of households' have suffered from loss of income, whether it is in the form of salary income or investment income. People have lost jobs, people have been retired prematurely, and people have taken salary cuts. How will this new experience change the consumption behaviours of households? Will they continue to borrow and spend as they were doing till recently? Will the nature of contract between employees and employers go through a change? It is very difficult to predict households' likely response at this point of time. In such an indeterminate situation, how to look at the demand outlook of various sectors?

We attempted using a 2x2 matrix which has two dimensions value-chain complexity and socio-economic effects/nature of demand to map various sectors<sup>3</sup>.

Value-chain complexity refers to interdependencies i.e. to the extent to which products and services are dependent on the other elements for meeting the needs. If a value chain resembles a dense network of activities or people, which get influenced by each other, it'll have high complexity.

And socio-economic effects of demand or nature of demand refers to the extent to which the existing economic and social equilibrium are impacted when households suffer from loss of income for considerable a period of time and households see uncertainties over future income. The matrix has following 4 quadrants –

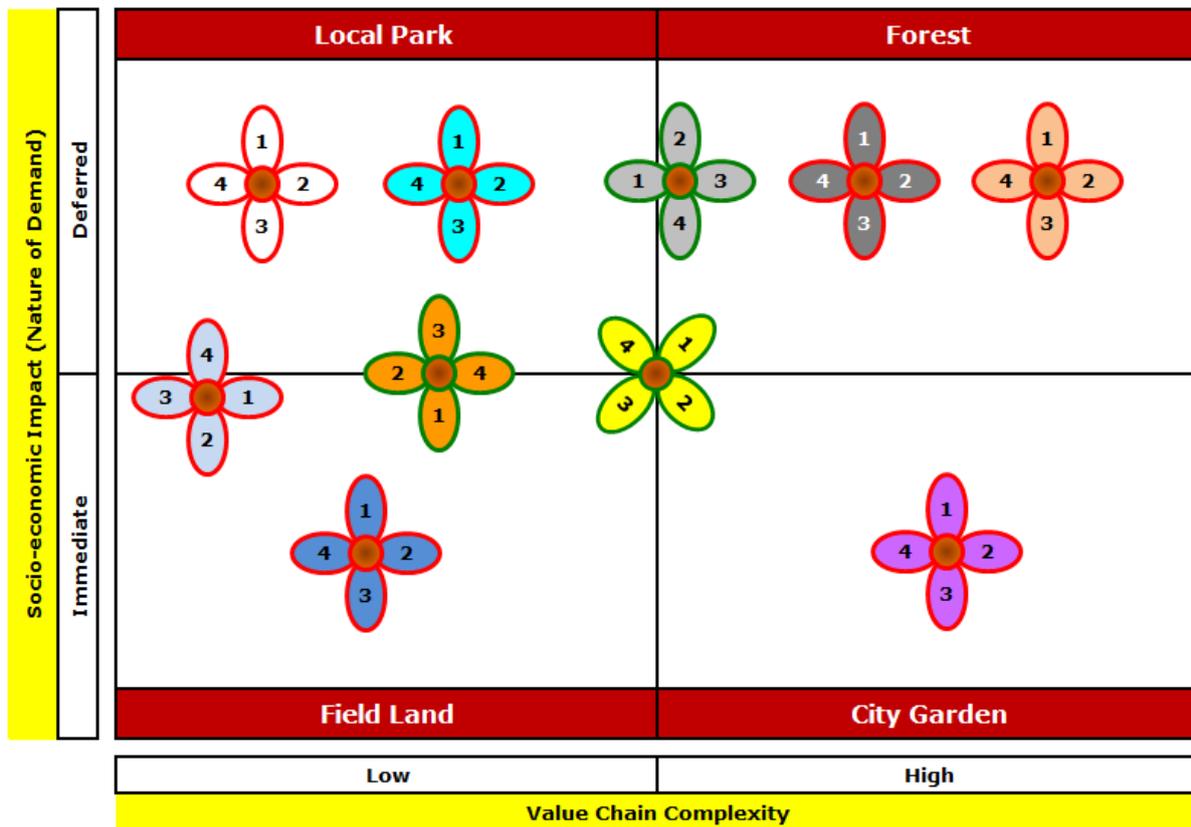
##### **A. Field Land**

(Immediate Nature of demand; Low value-chain complexity)

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<sup>3</sup> Adapted the framework used in article 'Post COVID-19 Lockdown Business Context: Navigating Strategic and Organizational Choices', Dr Anujayesh Krishna, IASCC, Hyderabad, May 28, 2020

In this category demand does not vary significantly, but if the present crisis continues for long, this category will also get negatively impacted. Probably that is the reason 'Food Products', and 'Pharmaceuticals ...' have not been impacted much in H1 FY21. Apart from those two sectors, firms operating in the space of Agri-inputs, Fertilizers, etc would also not see much demand contraction.



**Product / Service**

<b>Agro-chemicals:</b> 1. Crop Care Chemicals, 2. Growth Regulators, 3. Soil Conditioners, 4. Specility & Water Soluble Fertilizers	<b>Basic Metals:</b> 1. Iron & Steel, 2. Aluminium, 3. Copper, 4. Other non-ferrous
<b>Construction:</b> 1. Residential, 2. Commercial, 3. Infrastructure, 4. Projects	<b>Fertilizers:</b> 1. Urea, 2. DAP, 3. SSP, 4. Others
<b>Tourism:</b> 1. Hotels, 2. Restaurants, 3. Tours & Travels, 4. Local communities & Temple Administration	<b>Transportation:</b> 1. Aviation, 2. Buses, 3. Taxis, 4. Trains
<b>White Goods:</b> 1. Home Appliances, 2. AC, 3. Consumer Electronoics, 4. Passenger Vehicles	

**Product along-with segments**

<b>Caustic Soda:</b> 1. Alumina, 2. Textiles, Pulp & Paper, 3. Soap & Detergents, 4. Others	<b>Cement:</b> 1. Households, 2. Infrasturctures, 3. Projects, 4. Others
<b>Soda Ash:</b> 1. Glass, 2. Chemicals, 3. Soap & Detergents, 4. Others	<b>Sugar:</b> 1. Households, 2. Hotels/Restaurants, 3. Exports, 4. Religious/Social Functions

## **B. Local Park**

(Deferred Nature of demand; Low value-chain complexity)

This category generally covers non-essential nature of demand. As demand depends on discretionary incomes and savings of households, it slows down. Probably that is the reason we see 39.1% contraction in demand of consumer durables in H1 FY21. White Goods, Tourism, etc. belong to this category.

## **C. City Garden**

(Immediate Nature of demand; High value-chain complexity)

This category is characterized by pooled and network interdependencies, and hence constraints to demand are interactions and networks. Transport services come under this category. And as the nature of the current health crisis is highly contagious, transport services are going to be badly affected.

## **D. Forest**

(Deferred Nature of demand; High value-chain complexity)

In this category products and services offered do not make a difference from one day to another, but potentially yield gains in the long run. Government's investments and policies influence demand in this category. Probably that is the reason manufacturing category 'Basic Metals' is doing well.

### **Placing products in the matrix**

Generally a product goes to different segments and those segments could lie into different quadrants – Field Land, Local Park, City Garden, and Forest; therefore, it becomes quite complex to analyze demand outlook for a product. To explain the concept of this framework, products – Caustic Soda, Cement, Soda Ash, and Sugar are mapped into the framework.

### **Data Sources:**

1. IIP data September 2020, Ministry of Statistics and Program Implementation, Government of India

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