

# Impact of macro-economic environment on the automotive industry

ACMA  
April 2022



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Research

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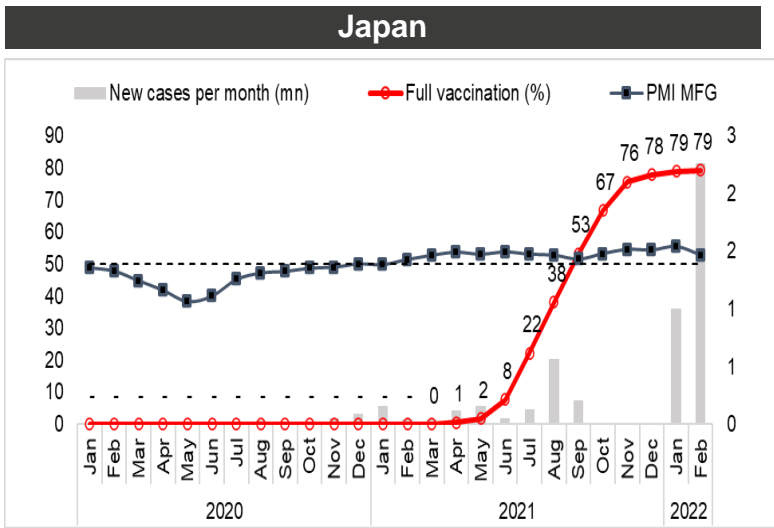
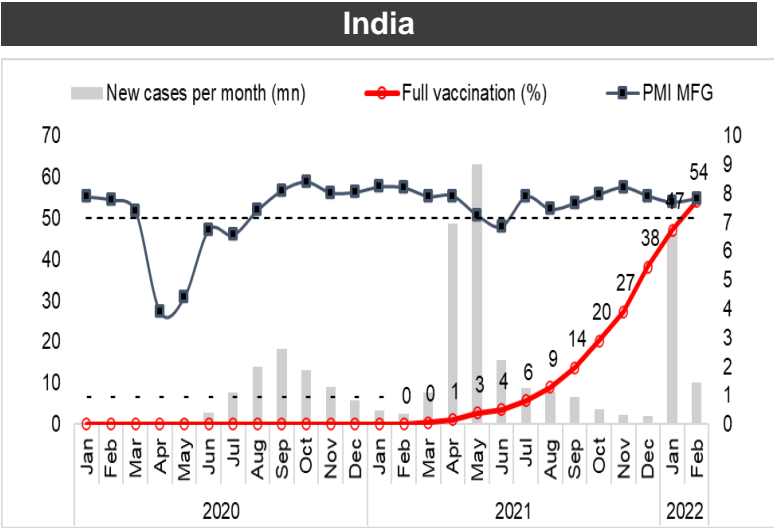
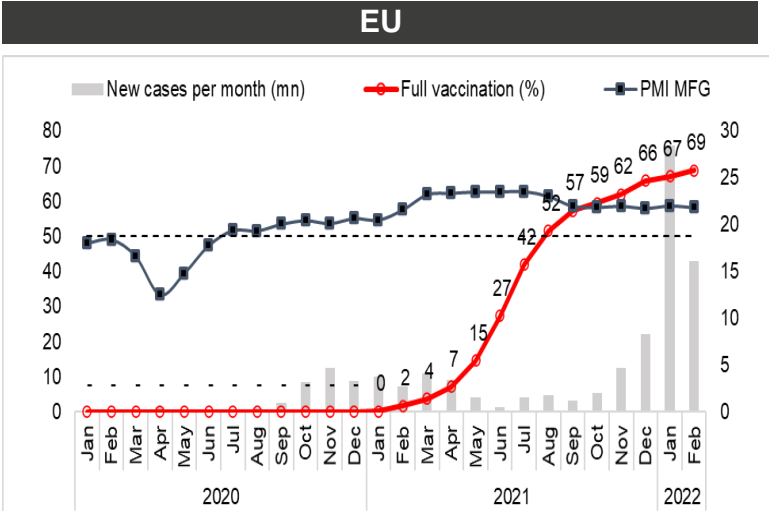
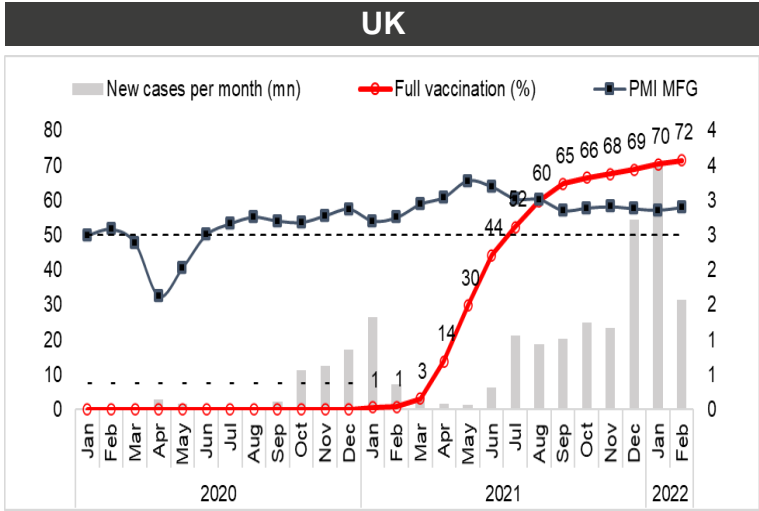
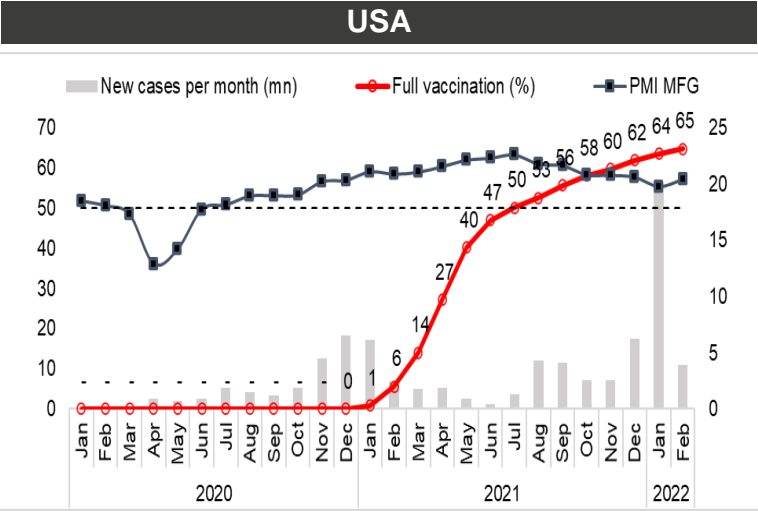
[Indian automobile industry](#)

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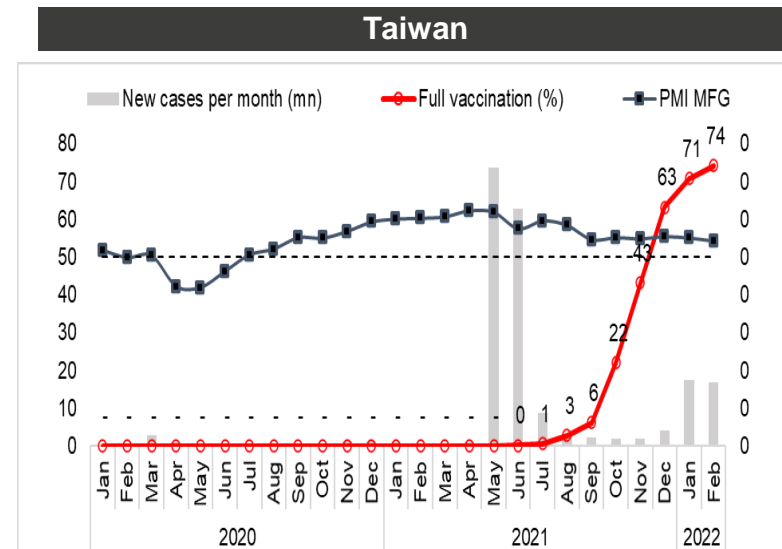
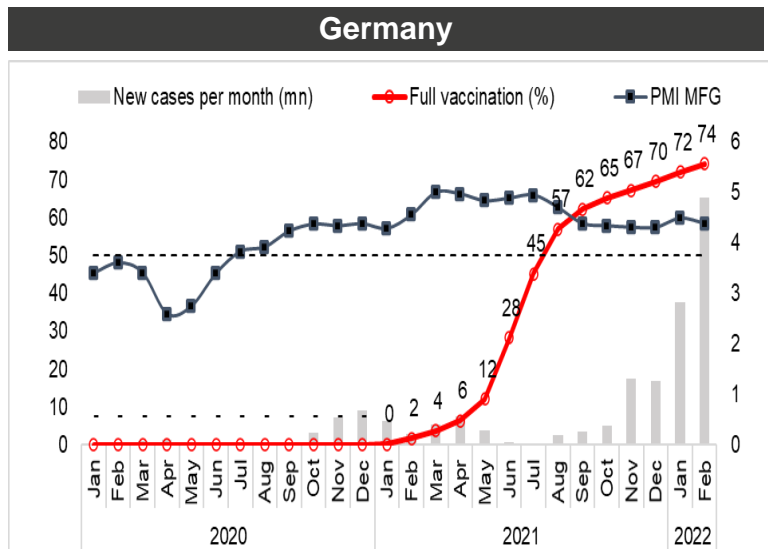
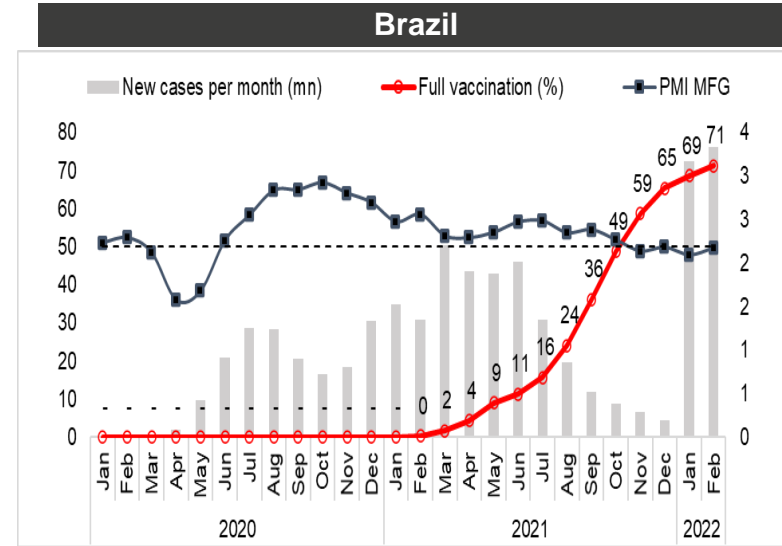
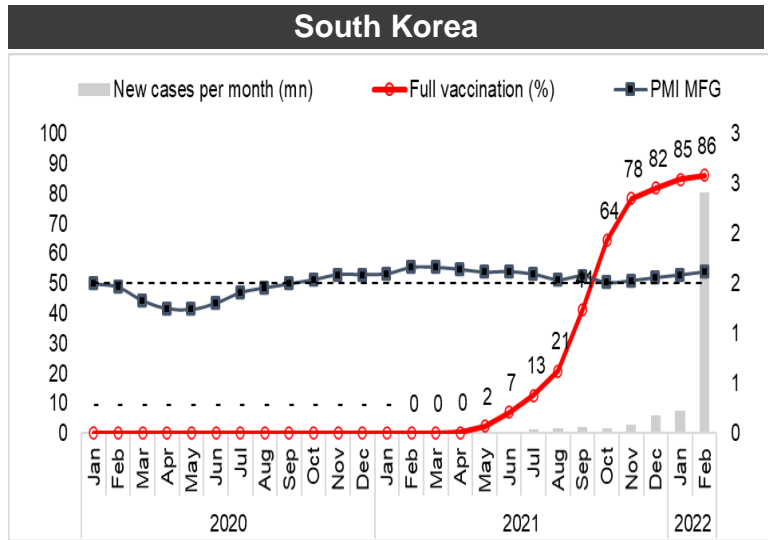
# Economy overview

# Covid-19 impacting economic activities in some countries



Note: Share of total population that have received all doses prescribed by the vaccination protocol.  
 Source: OurWorldinData.org, CEIC, CRISIL

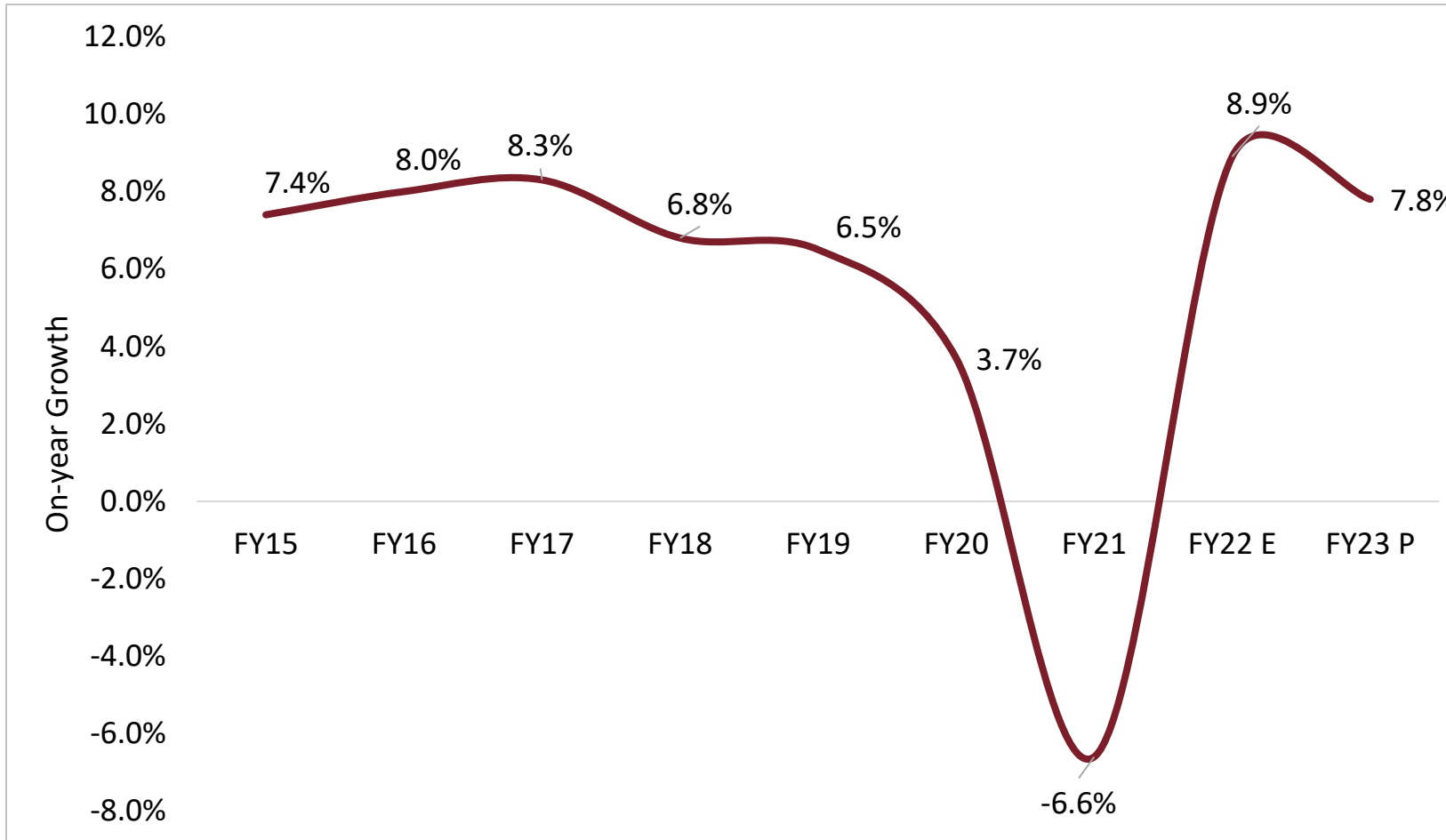
# Covid-19 impacting economic activities in some countries



Note: Share of total population that have received all doses prescribed by the vaccination protocol.  
 Source: OurWorldinData.org, CEIC, CRISIL

# CRISIL estimates FY23 real GDP growth at 7.8%.

## GDP Real (Growth Rate)



### India learning to live with virus:

Real GDP grew 8.4% on-year in Q2 FY22, as the economy came out of the clutches of the second Covid-19 wave

Though the recovery is yet to become broad-based and continues to hinge on government investments and exports, with consumption remaining weak

FY23 growth is currently forecasted at 7.8%, with risks tilted to the downside. The Covid trajectory and the upcoming budget will remain key monitorable.

Private consumption remains the weak link owing to reduced direct fiscal policy support.

GDP – Gross domestic product; Data on 2011-12 base, P=Projected  
Source: Central Statistical Office, MOSPI, CRISIL Research

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# Mobility Trends

# Hi-Frequency indicators

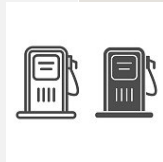
## How are they shaping?

### Mobility indicators and Vaccination progress



Mobility Indicators in March month indicate that most segments such as grocery and pharmacy, parks, workplaces, retail and recreation and transit stations have surpassed pre covid levels

### Fuel and Power consumption



Power consumption growth saw a 5% and 18% growth in March 2022 on y-o-y and m-o-m basis respectively. Diesel consumption witnessed drop of -0.6% in February 2022 on y-o-y basis while petrol consumption saw a growth of 3.5% for the same

### Freight movement & Transporter Profitability



E-waybill generation has been at daily average of 1.49mn in February 2022 compared to January 2022 daily average of 1.36mn for intra-city while for inter-city the same has been about daily average of 0.95mn in February 2022 compared with daily average of 0.86mn in January 2022 reflecting an uptick in commerce

Freight rates edged up on higher diesel prices.

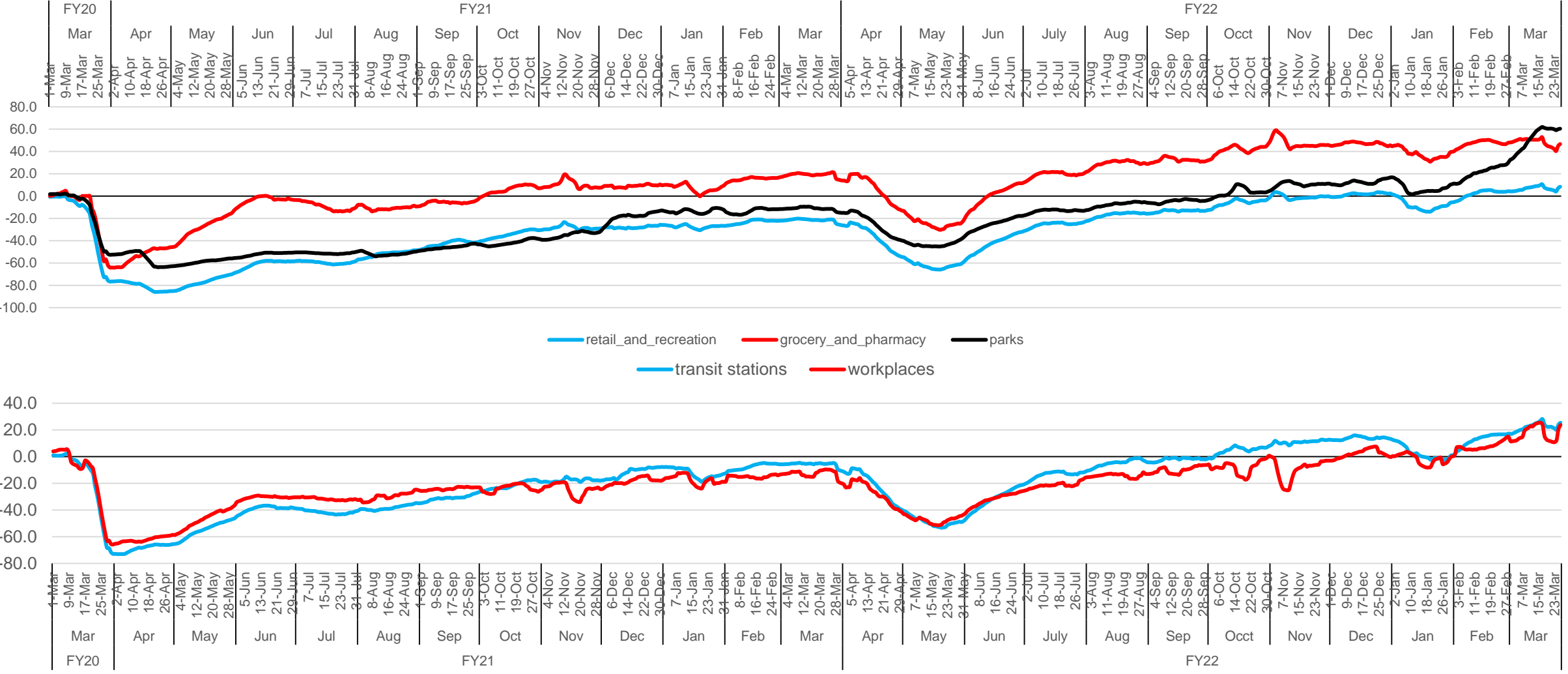
### STU Tendering Tracker



Interactions indicate fresh tenders from southern states like Tamil Nadu in addition with already released tenders from states like Kerala and Karnataka



# Mobility indicators-segmental (India)



Source: CRISIL Research, Covid-19 Community Mobility Reports by Google,

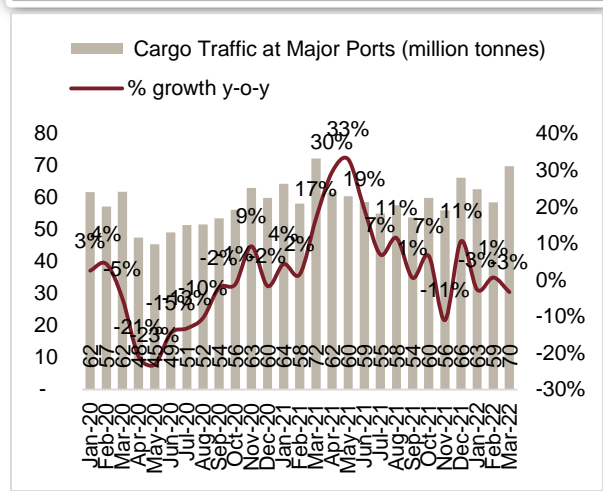
**Research**

Note: Data is 7 day Moving Average data. Google's Community Mobility Reports use smartphone location data to publish reports about people's movement in an area.

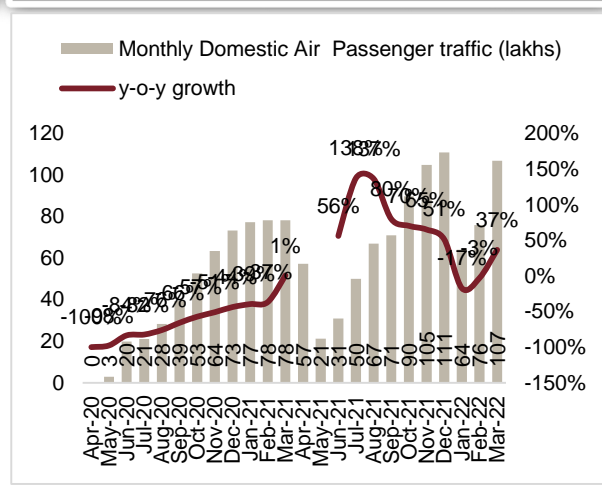


# Overall mobility showing mix trends month on month

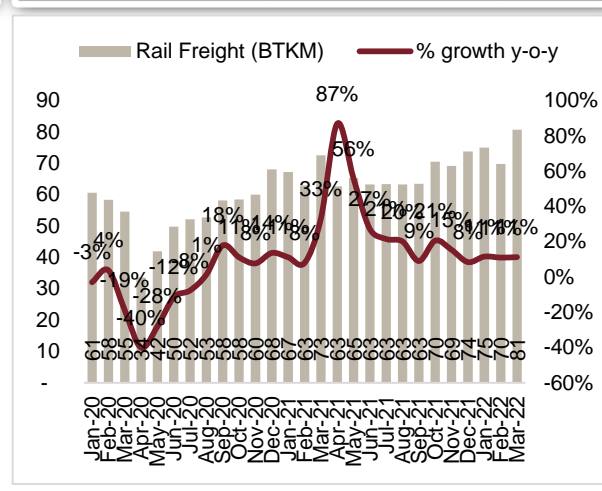
## Port Traffic



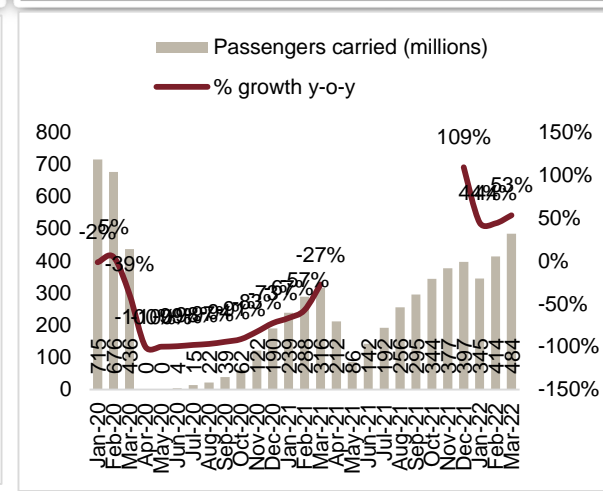
## Air traffic (Domestic)



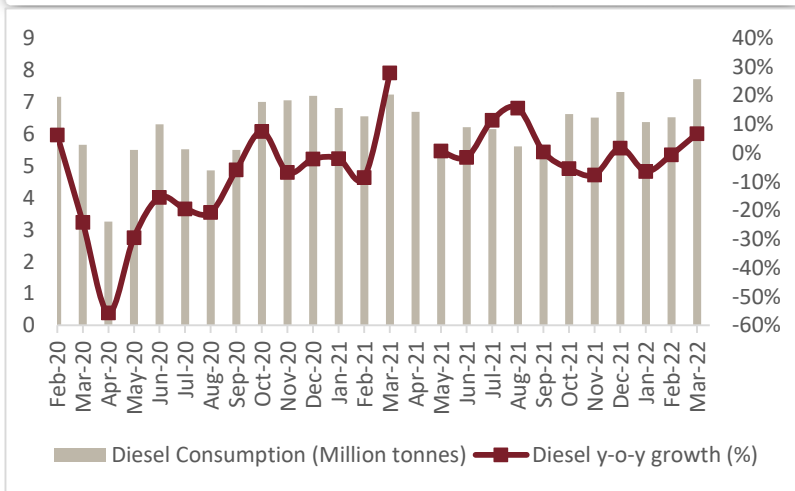
## Rail Cargo



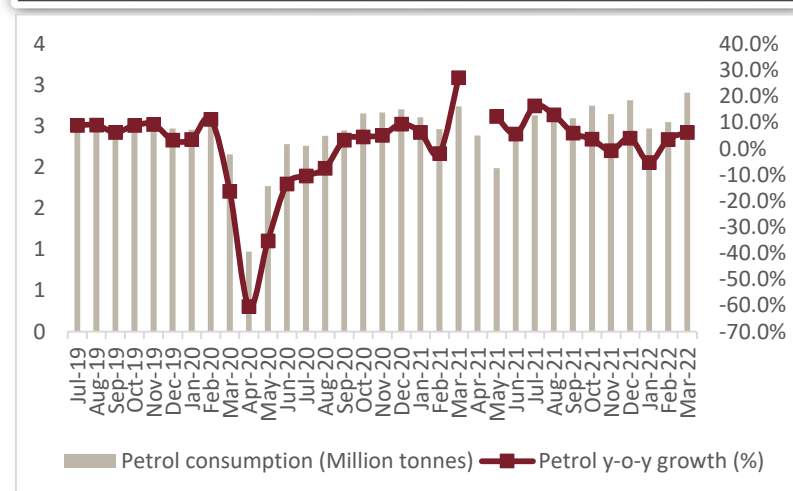
## Rail passenger



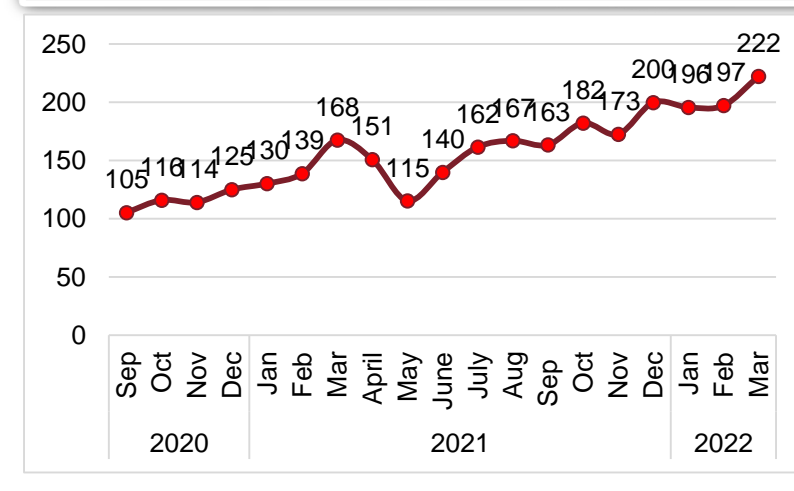
## Monthly diesel consumption



## Monthly petrol consumption

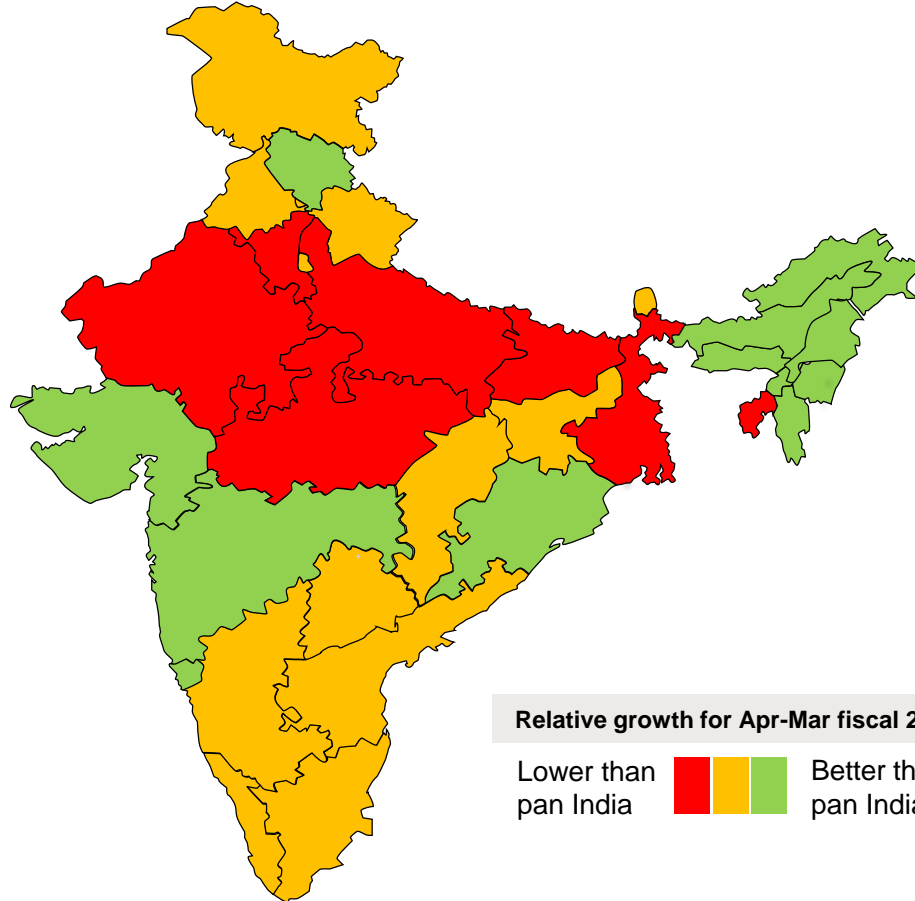


## NETC/Fastag collections-Indexed to Feb-20 levels

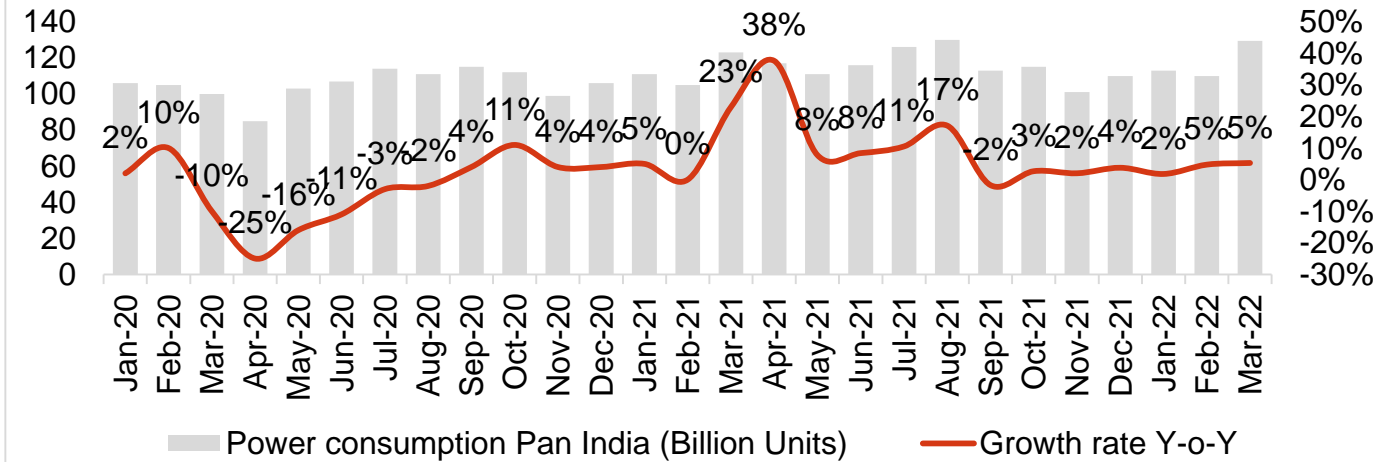


# Power consumption poses single digit growth in Mar 2022; East region performs better than other regions in Apr–Mar FY22 period

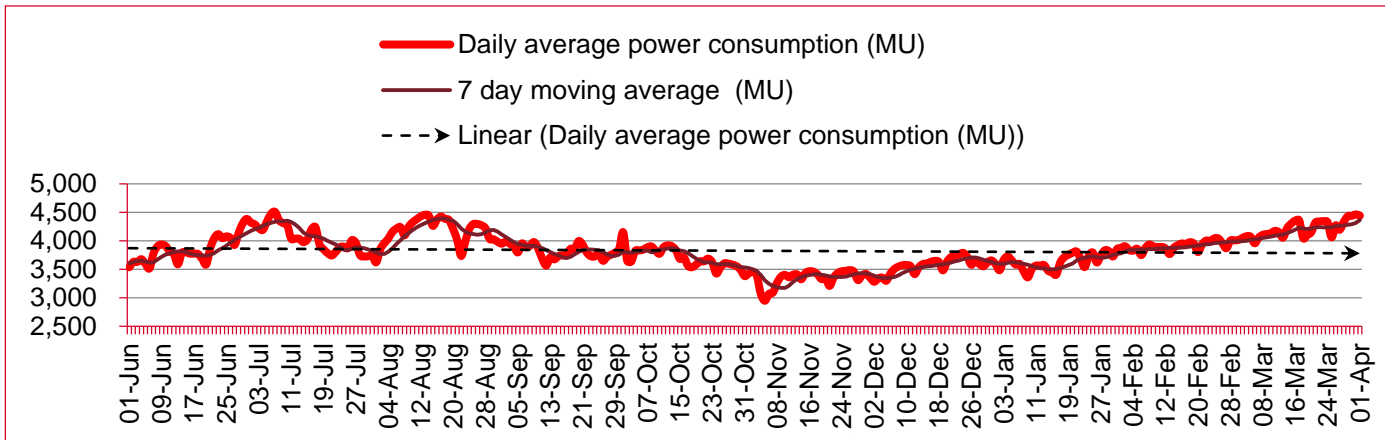
Eastern region seeing a better trajectory in power consumption



## Monthly trend for power consumption in India

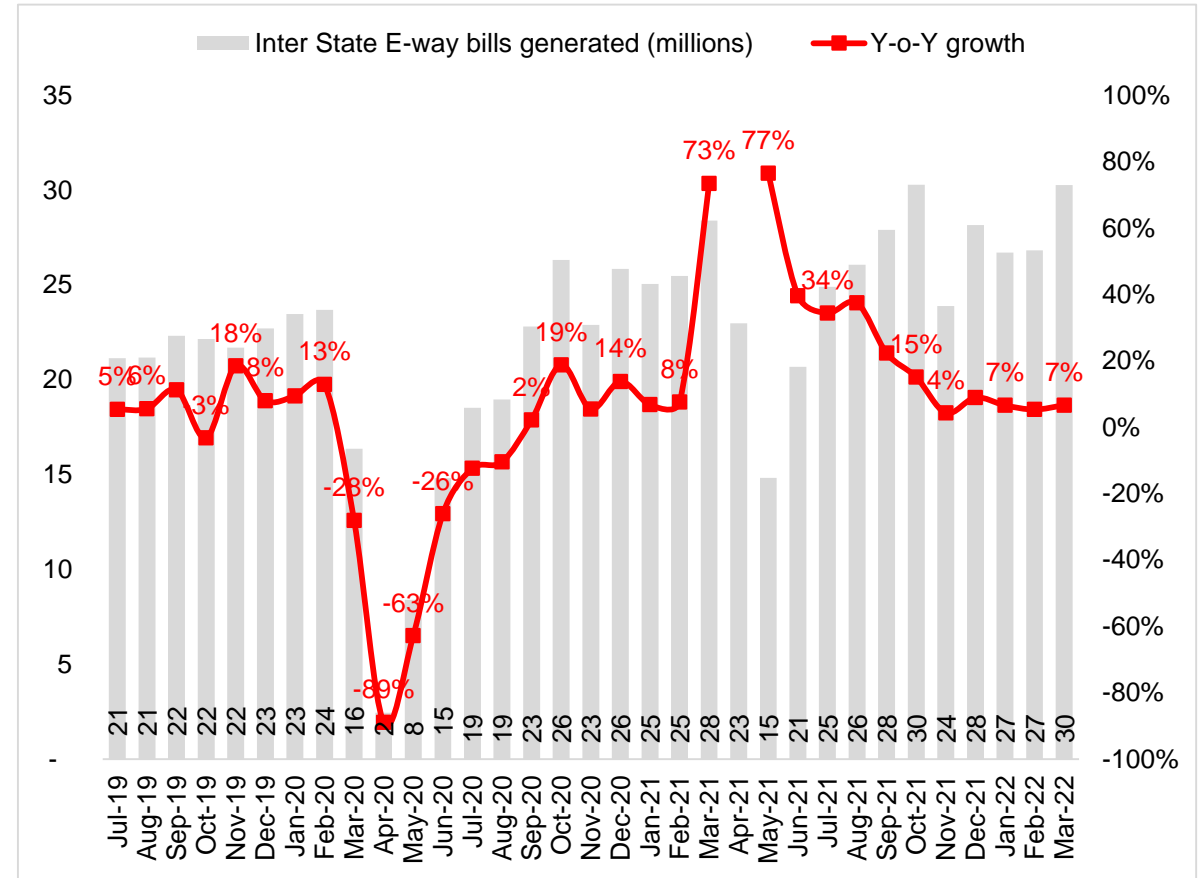
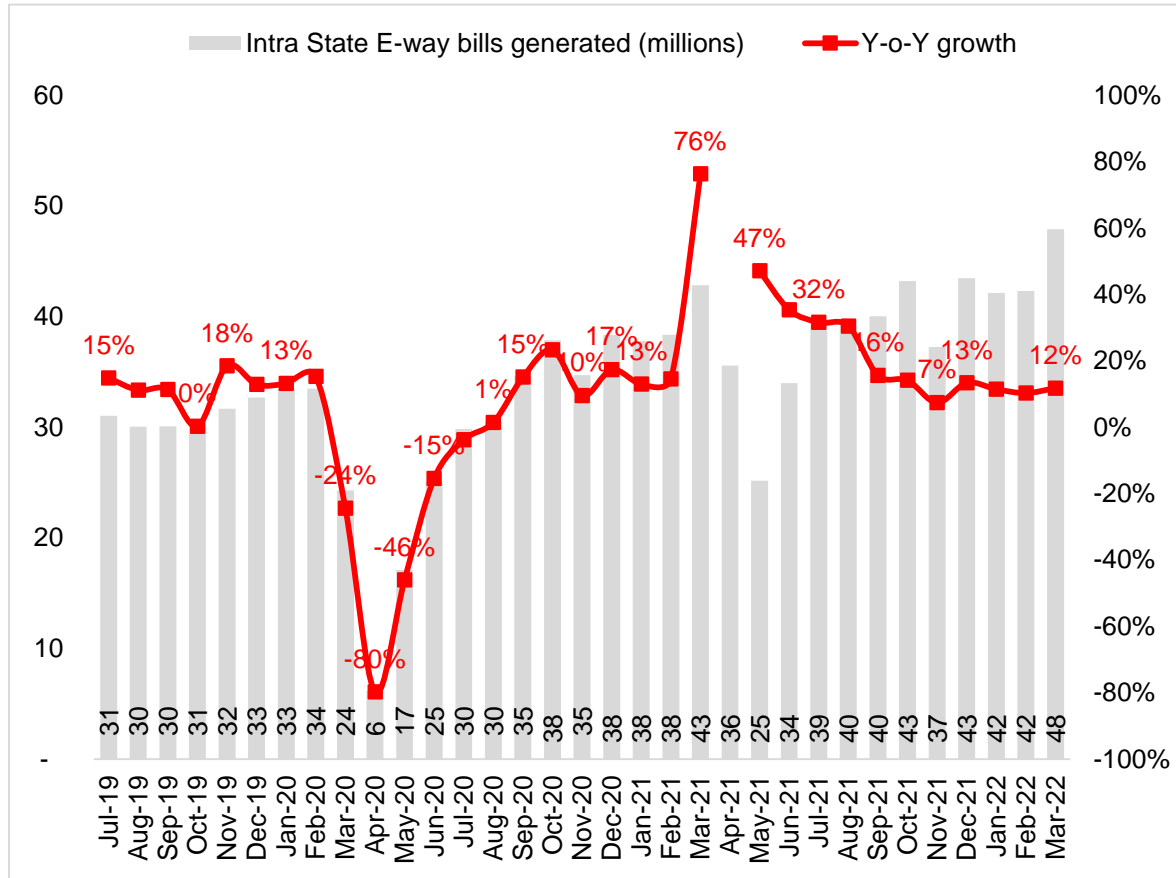


## Daily trend for power consumption in India



# Intra state and Inter state E-waybill trend

Number of E-way bills generated in India (millions)

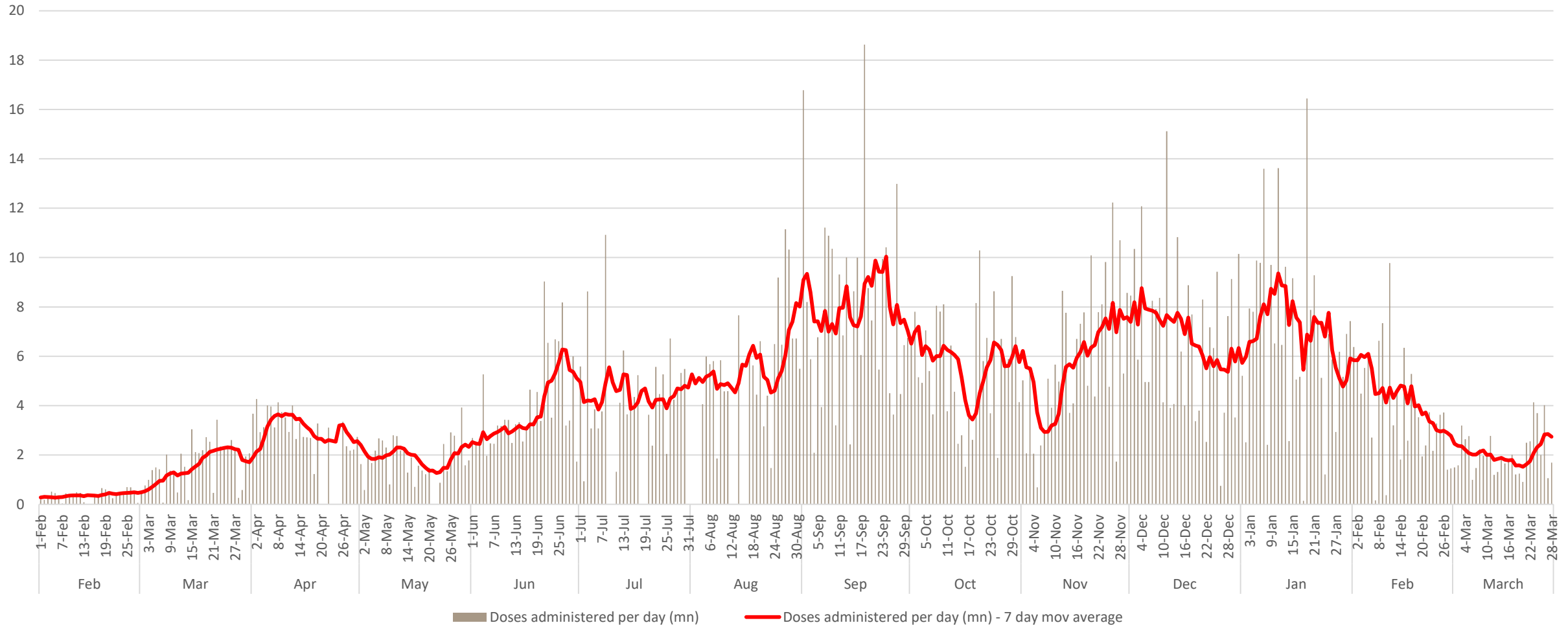


Agri, last mile distribution and market load operations do not come under ambit of E-way bill hence the E-way bills mentioned here may not represent the entire movement of goods in the country

Source: GST Network, CRISIL Research,

# A large chunk of adult population has now been vaccinated

Trend of daily vaccination pace



Million doses per day

# High frequency parameters seeing sequential improvement

Segments	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22
<b>Core Sectors</b>																								
Coal	-15%	-14%	-16%	-6%	4%	21%	12%	3%	2%	-2%	-4%	0%	9%	7%	7%	19%	21%	8%	15%	8%	5%	8%	7%	
Crude Oil	-6%	-7%	-6%	-5%	-6%	-6%	-6%	-5%	-4%	-5%	-3%	-3%	-2%	-6%	-2%	-3%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	
Natural Gas	-20%	-17%	-12%	-10%	-9%	-11%	-9%	-9%	-7%	-2%	-1%	12%	25%	20%	21%	19%	21%	28%	26%	24%	20%	12%	13%	
Petroleum Refinery Products	-24%	-21%	-9%	-14%	-19%	-9%	-17%	-5%	-3%	-3%	-11%	-1%	31%	15%	2%	7%	9%	6%	14%	4%	6%	4%	9%	
Fertilizers	-4%	7%	4%	7%	7%	0%	6%	2%	-3%	3%	-4%	-7%	4%	-10%	2%	1%	-3%	0%	0%	3%	4%	-2%	-1%	
Steel	-83%	-40%	-23%	-6%	-2%	3%	-3%	-4%	3%	3%	-2%	32%	494%	55%	25%	9%	5%	3%	5%	1%	-1%	3%	6%	
Cement	-85%	-21%	-7%	-13%	-15%	-4%	3%	-7%	-7%	-6%	-5%	41%	607%	12%	8%	22%	36%	11%	15%	-3%	13%	14%	5%	
Electricity	-23%	-15%	-10%	-2%	-2%	5%	10%	2%	5%	5%	0%	22%	39%	7%	8%	11%	15%	1%	3%	2%	3%	1%	4%	
<b>Auto-offtake</b>																								
Two Wheelers	-100%	-84%	-39%	-15%	3%	12%	17%	13%	7%	7%	10%	73%	NM	26%	3%	-2%	-15%	-17%	-25%	-34%	-11%	-21%	-27%	-21.00%
Cars	-100%	-88%	-59%	-18%	11%	55%	39%	-14%	13%	-7%	-1%	108%	NM	113%	118%	45%	8%	-41%	-27%	-19%	-13%	-8%	-7%	-4.00%
Uvs + Vans	-100%	-76%	-43%	1%	26%	38%	39%	3%	23%	25%	33%	153%	NM	118%										
Three Wheelers	-100%	-95%	-80%	-77%	-75%	-72%	-5%	-22%	-6%	-6%	-3%	16%	NM	-49%	-9%	41%	60%	54%	19%	-7%	25%	-10%	-2%	-1.00%
<b>Auto-Vaahan</b>																								
2W	-76%	-89%	-40%	-36%	-27%	-13%	-25%	-19%	12%	-7%	-16%	-35%	171%	155%	18%	28%	7%	-9%	-6%	0%	-19%	-13%	-10%	-4%
Cars+Uvs	-91%	-86%	-37%	-23%	-4%	10%	-6%	7%	24%	-2%	13%	34%	913%	171%	43%	63%	39%	22%	-11%	-19%	-10%	-10%	-7%	-5%
<b>Others</b>																								
PMI Manufacturing	27.4	30.8	47.2	46	52	56.8	58.9	56.3	56.4	57.7	57.5	55.4	55.5	50.8	48.1	55.3	52.3	53.7	55.9	57.6	55.5	54	54.9	54
IIP Overall	-57%	-33%	-17%	-11%	-7%	1%	5%	-2%	2%	-1%	-3%	24%	134%	29%	14%	11%	12%	3%	4%	1%	1%	1%	2%	
Diesel consumption	-56%	-29%	-15%	-19%	-21%	-6%	8%	-7%	-2%	-2%	-8%	28%	106%	1%	-2%	11%	16%	0%	-6%	-8%	2%	-6%	-1%	6.70%
Rail freight (NTKM)	-40%	-28%	-12%	-8%	1%	18%	11%	8%	14%	11%	8%	33%	87%	56%	27%	21%	20%	9%	21%	15%	8%	11%	11%	11%
Bitumen consumption	-73%	-19%	37%	-4%	39%	38%	49%	18%	21%	-3%	-10%	45%	343%	12%	-23%	5%	16%	-2%	5%	-22%	-18%	-2%	3%	-12%
<b>Total credit</b>	-73%	-19%	37%	-4%	39%	38%	49%	18%	21%	-3%	-10%	45%	6%	5%	6%	6%	7%	7%	7%	7%	10%	7%	8%	9%
Industry credit	2%	2%	2%	1%	0%	0%	-2%	-1%	-1%	-1%	0%	0%	0%	1%	0%	1%	2%	2%	4%	4%	8%	6%		
-Micro and Small	-2%	-3%	-4%	-2%	-1%	0%	1%	0%	1%	1%	2%	1%	4%	5%	6%	9%	10%	10%	12%	13%	20%	20%		
-Medium	-6%	-5%	-9%	-3%	3%	14%	17%	21%	15%	19%	21%	29%	50%	52%	61%	66%	63%	49%	49%	49%	87%	75%		
-Large	3%	3%	4%	1%	1%	-1%	-3%	-2%	-2%	-3%	-2%	-1%	-2%	-2%	-3%	-3%	-1%	-1%	1%	0%	1%	0%		

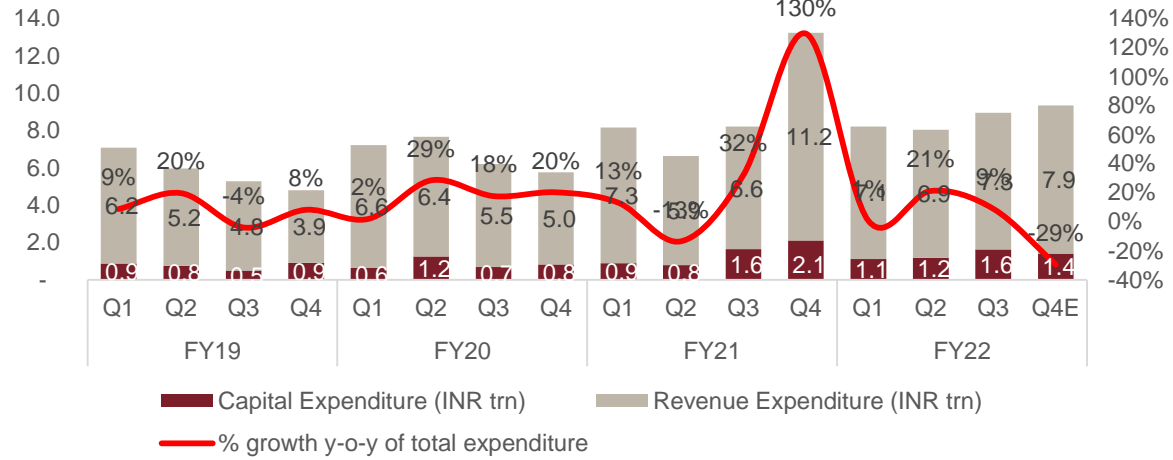
## Research

Source: CSO, RBI and CRISIL estimates

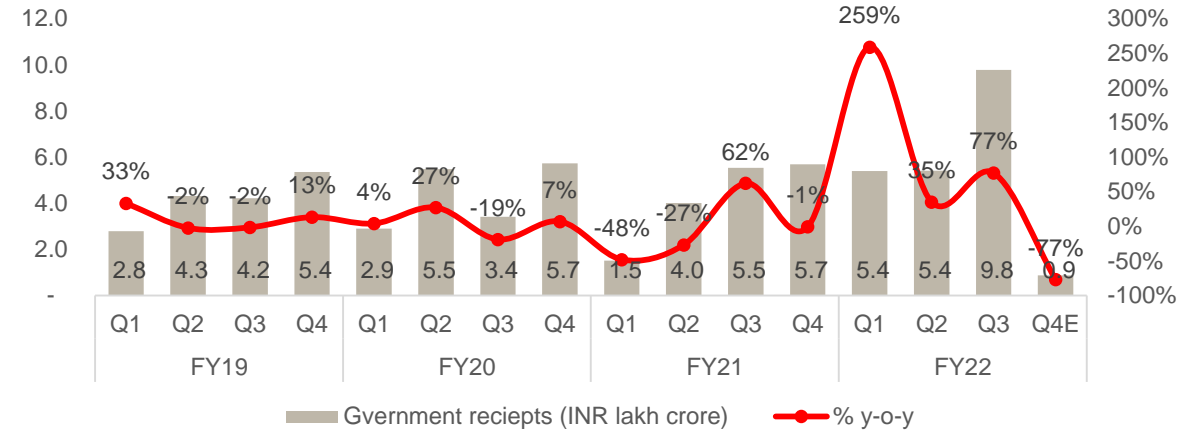
Note\* - (based on MOSPI classification)

# Central government finances in a relatively healthier position compared to last year

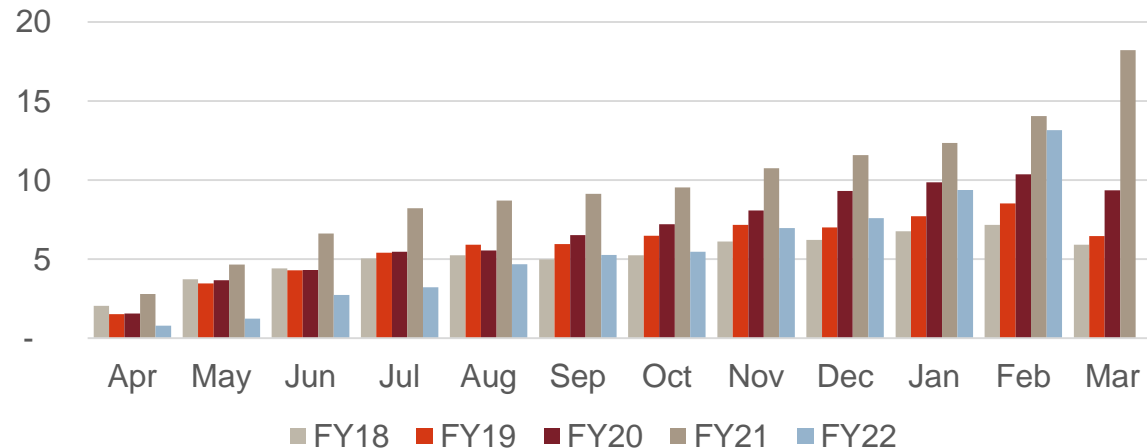
Government expenditure at a peak in Q4FY21, Q4FY22 cautious thus far



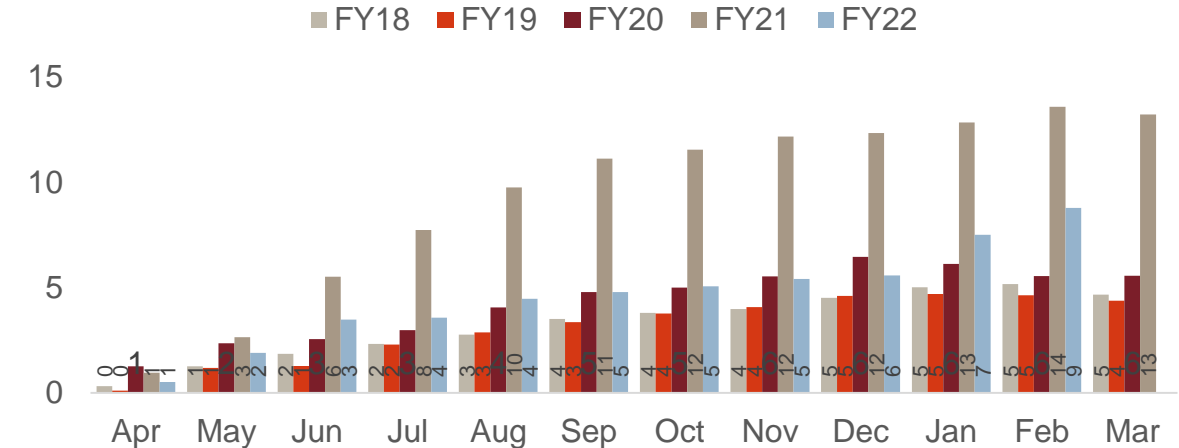
Receipts in Q4FY22 substantially lower than previous years



m-o-m build up of cumulative fiscal deficit in value terms (INR trillion)

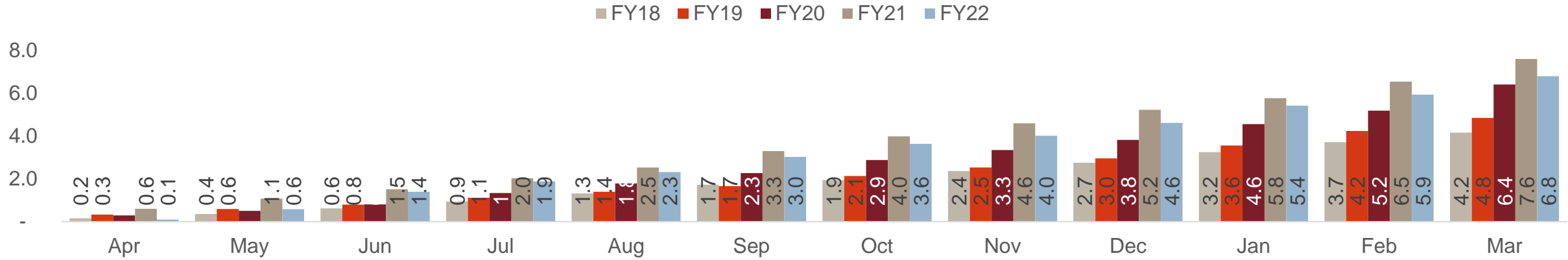


m-o-m build-up of cumulative market borrowings of the govt. (INR trillion)

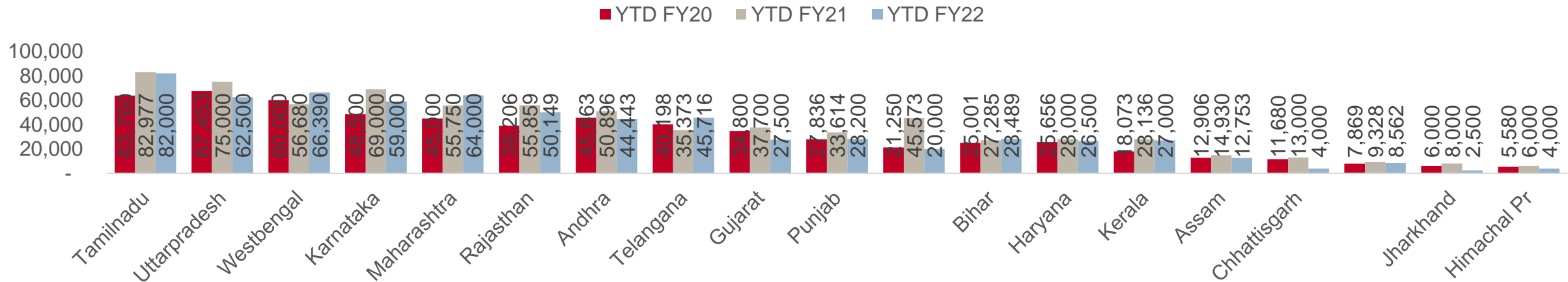


# State government borrowings similar to last year as partial lockdowns hurt state revenues

m-o-m build-up of state government G-sec borrowings (INR trillion/INR lakh crore)



Year to date G-sec borrowings of various state governments and comparable levels for past year (INR crores)



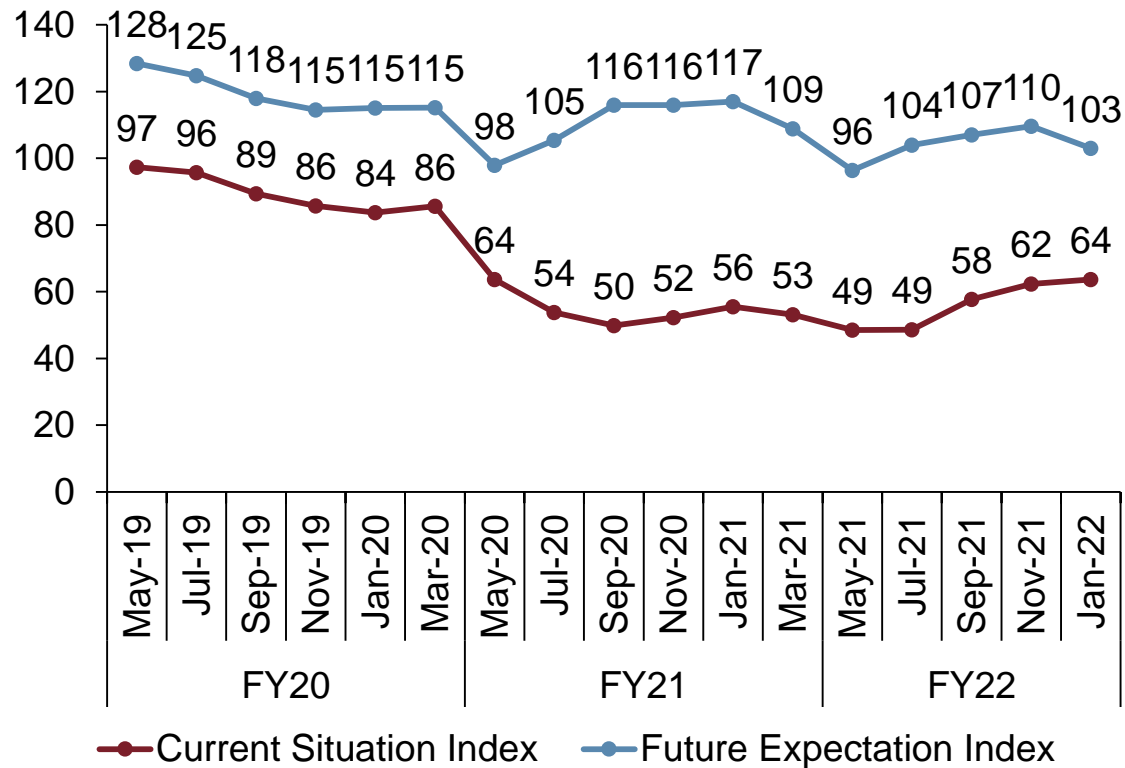


# Perceptions and Expectations on the General Economic Situation

## Consumer Confidence Index



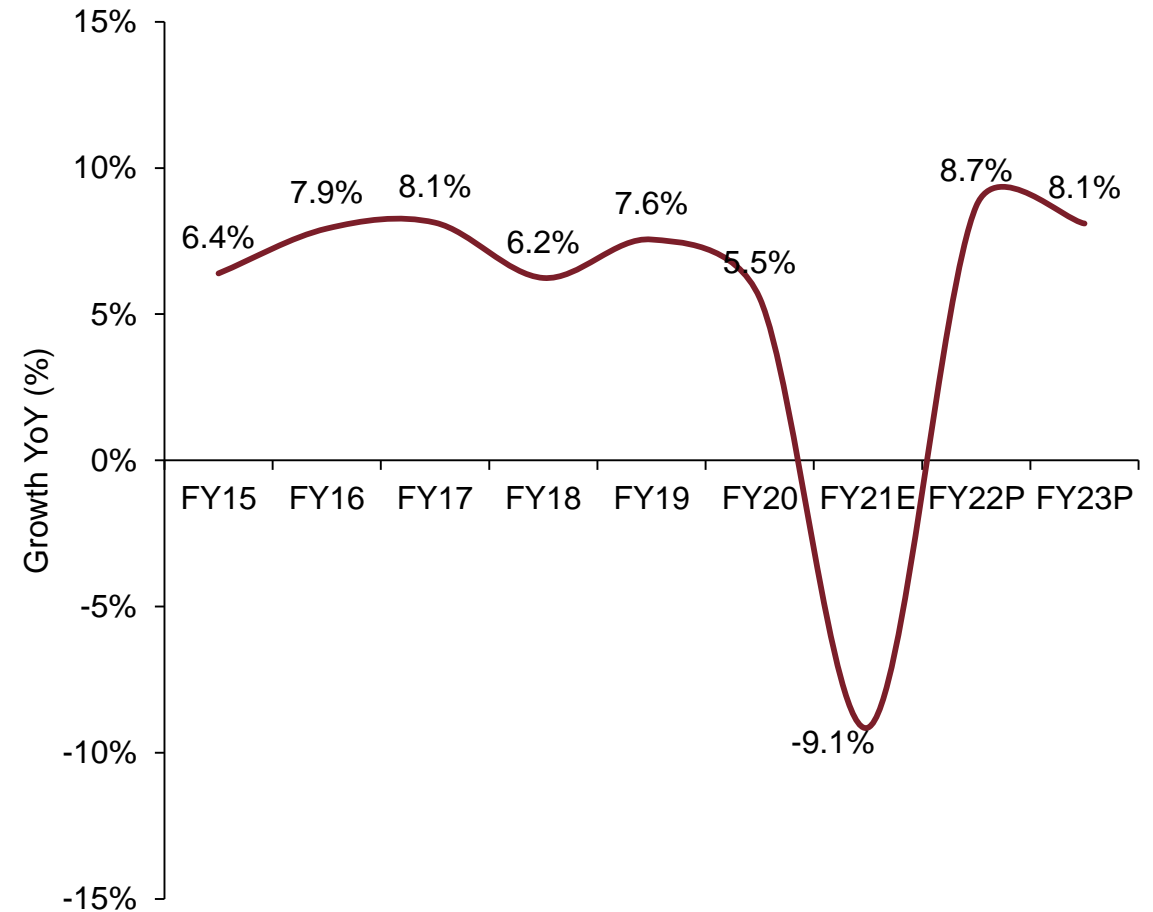
Consumer confidence continued to improve from the historic low recorded in July 2021 though the pace slowed down in January 2022; the current situation index increased to 63.7 in January 2022 from 62.3 in the previous survey round



Source: CRISIL Research, RBI, NCAER

## PFCE to continue its momentum in FY23, albeit at a slower pace

### PFCE Growth



NOTE: New series considered with a base year - 2011-12

Source: CRISIL Research

# Rural Scenario and Government Spending

# Low government support and higher input cost to impact farm sentiments in FY23

## Agri scenario lends support to a struggling economy

### Crop scenario



- Rabi CVI expected to improve marginally in FY22 on account of higher crop prices. However, the crop quality is impacted due to unseasonal rainfall which could alter crop prices when farmers sell their produce in madis.
- Higher input cost and low realizations to impact farm sentiments in the near term

### MNREGA



- As on 31<sup>st</sup> March 2022, Rs. 1,06,290 cr has been spent against Rs. 98,000 cr allocated
- Around 72.44 million households have worked under the scheme in FY22, while the full-year number in last fiscal was 75 million



## Government support

### PM Kissan and PM Garib Kalyan Yojana



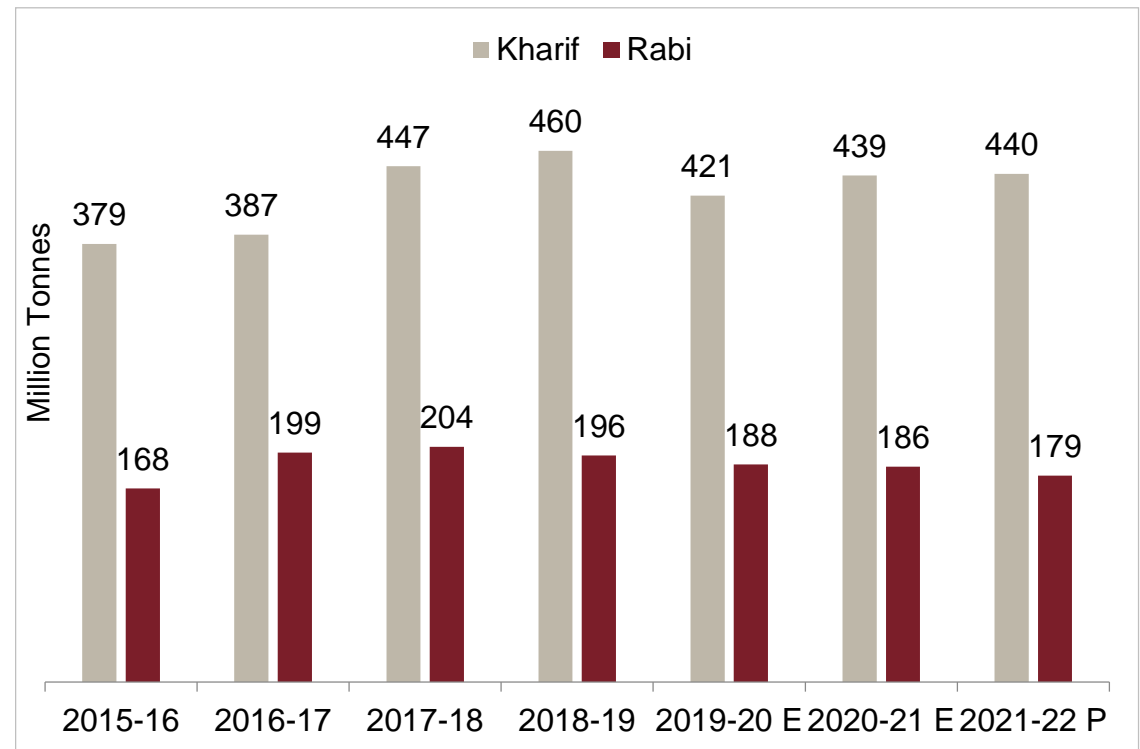
- A total of 12 crore beneficiaries have been transferred money under PM Kissan Yojana in fiscal 2022
- As per a statement from PMO (Prime Minister Office), PM Kisan 11th Installment List 2022 for Rs 2000 will be transferred directly in the bank account of eligible beneficiaries by first week of April 2022.

Source: Ministry of Rural Development

Source – Industry, CRISIL Research

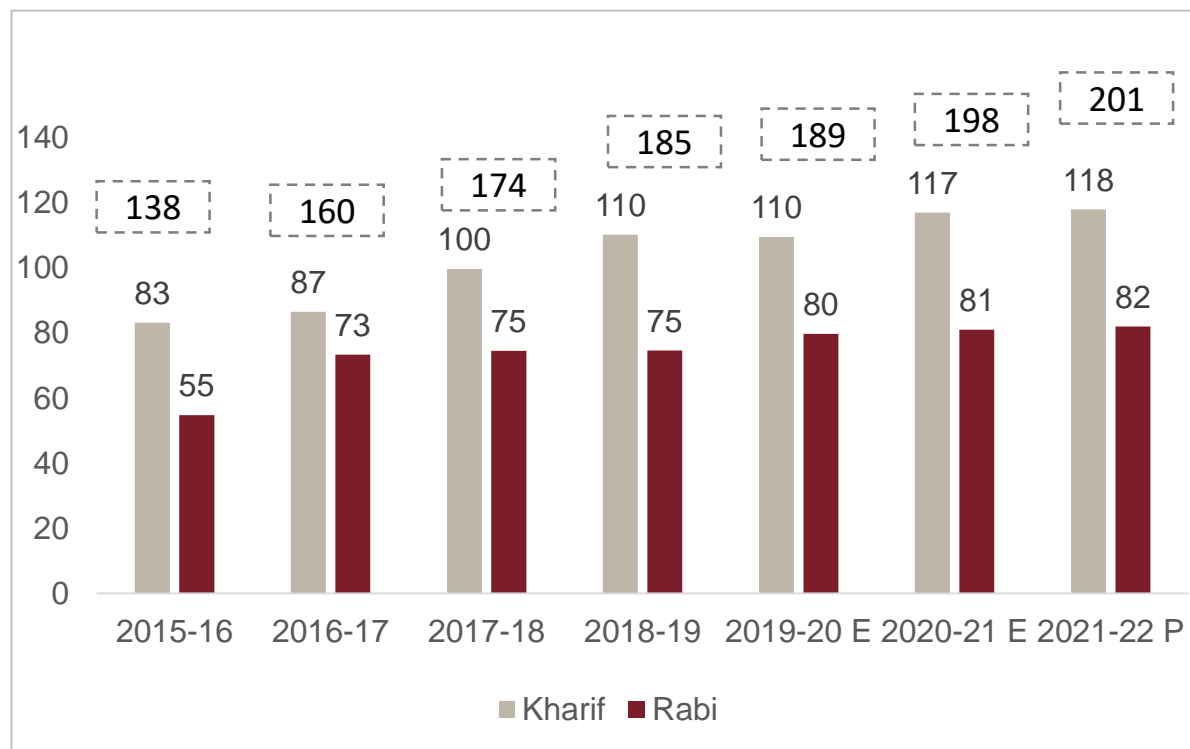
# Higher input cost and low realizations to impact farm sentiments in the near term

## Food-grain Crop Production



Source: CRISIL Research

## Food-grain CVI (Crop Value Index)



Source: CRISIL Research;  
Note: CVI- Crop value index, CVI has been indexed to 100 at 2011-12

Total CVI



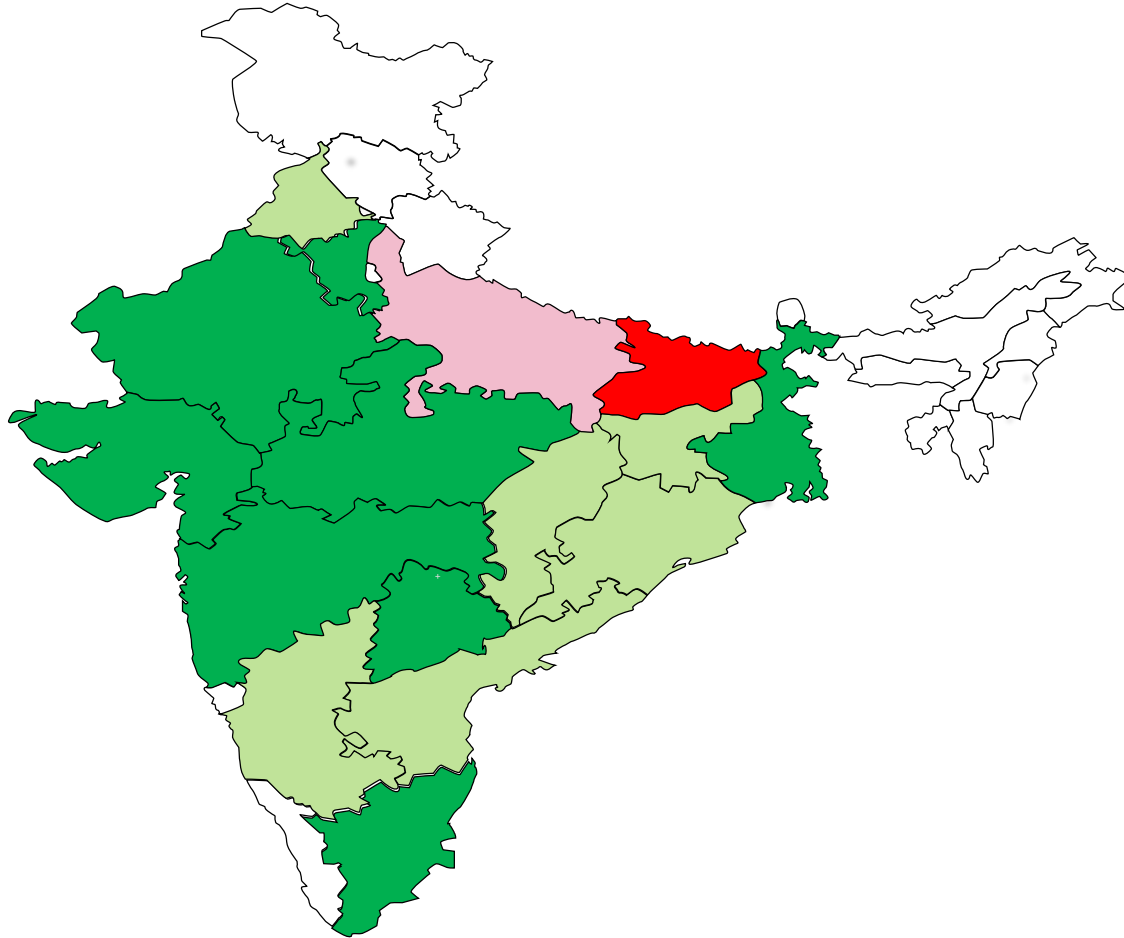
Crop damage on account of unseasonal rainfall to impact rabi crop output in FY22



Lower government procurement to impact farm income for the current fiscal

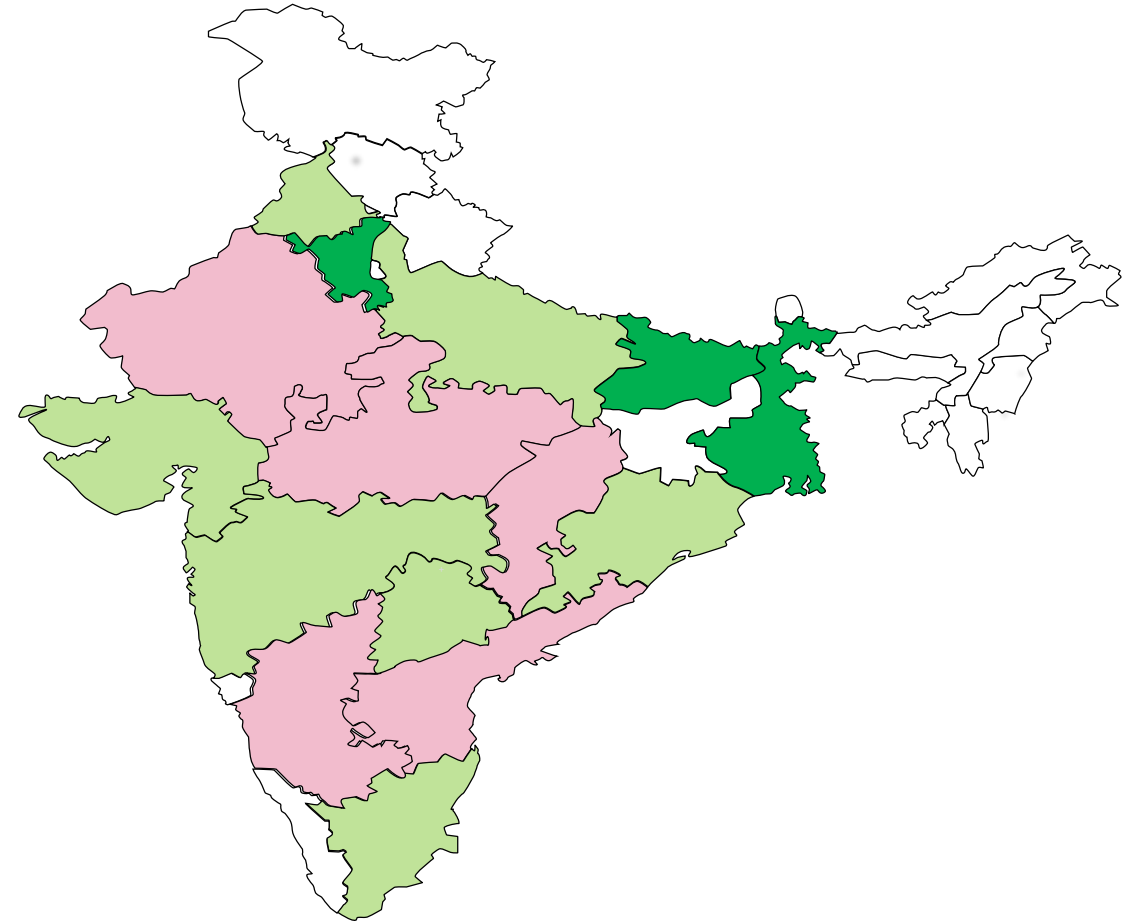
# State wise Crop Value Index

Kharif CVI heat Map for FY22



Source: CRISIL Research

Rabi CVI heat map for FY22



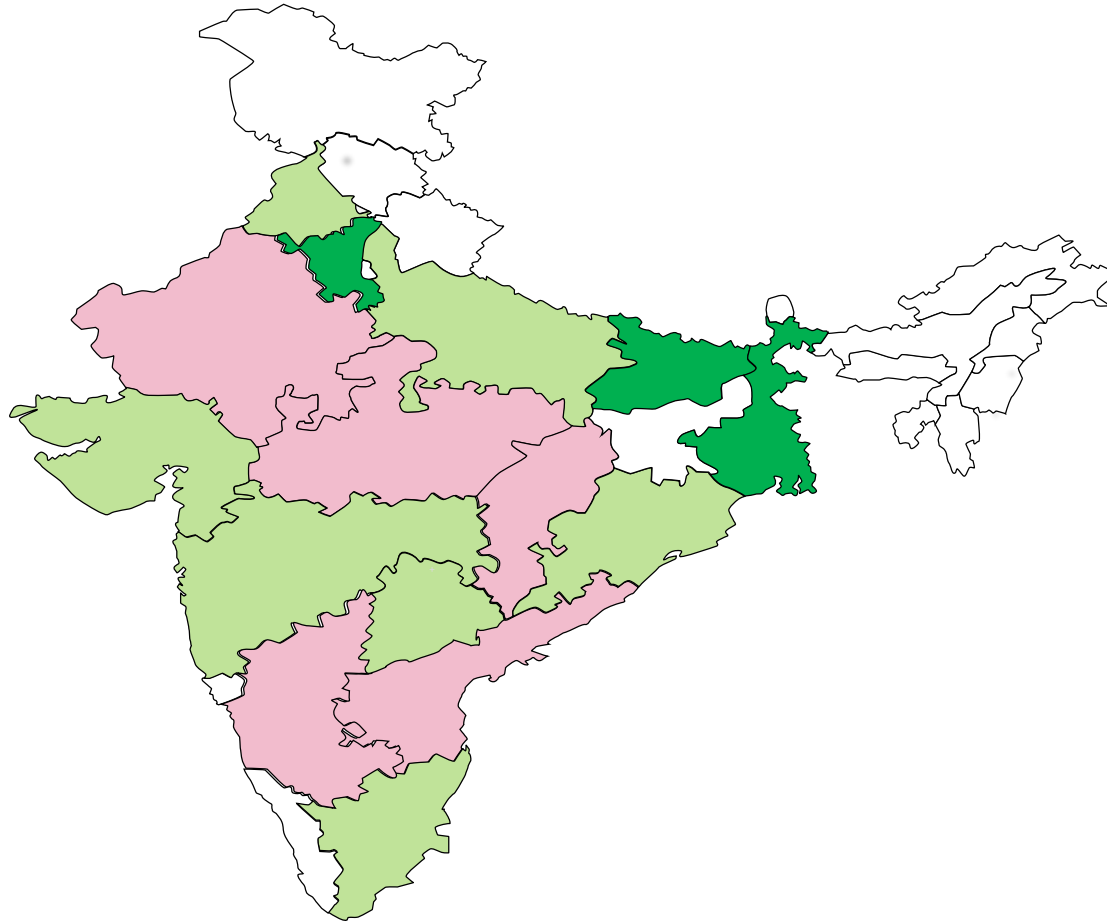
Source: CRISIL Research

Colours indicate % change on-year



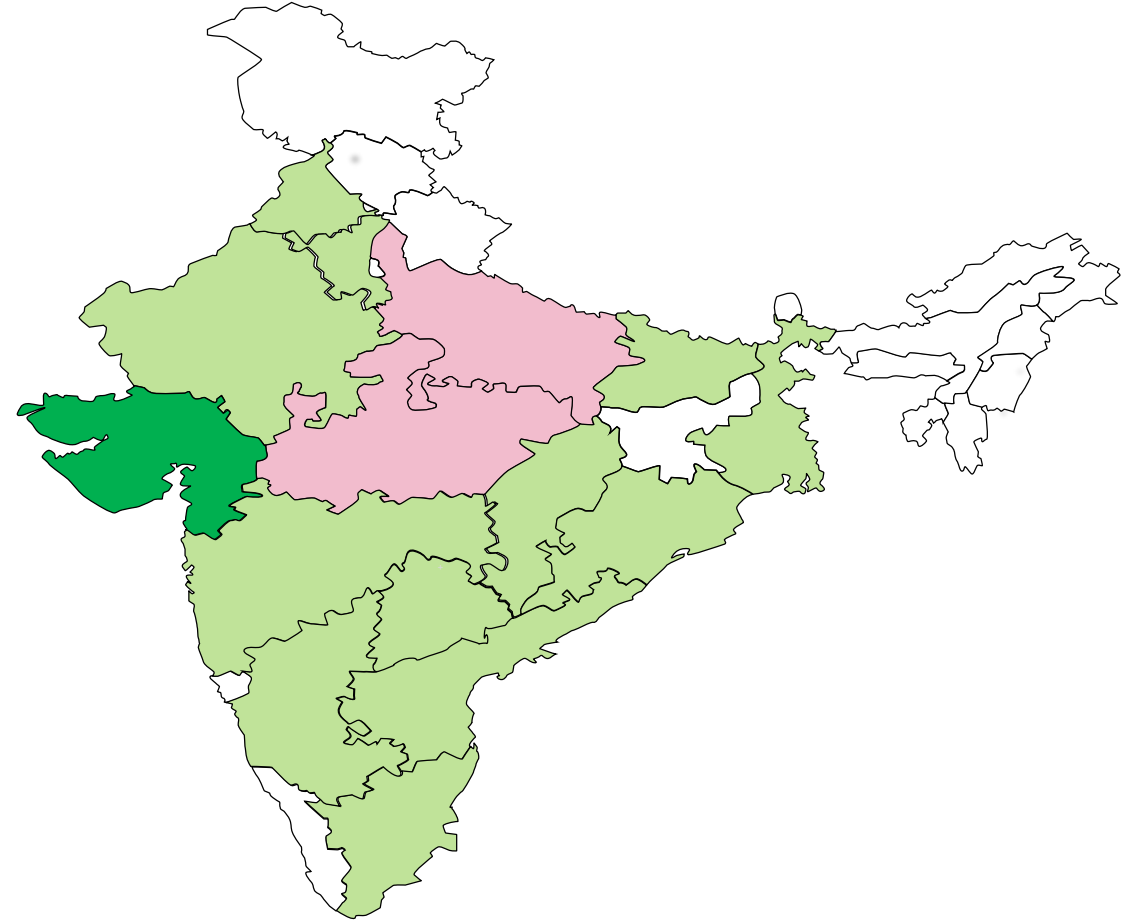
# State-wise production and farm income expectation for the rabi season

Rabi CVI heat Map for FY22



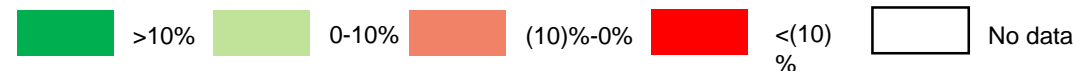
Source: CRISIL Research

Rabi Production for FY22



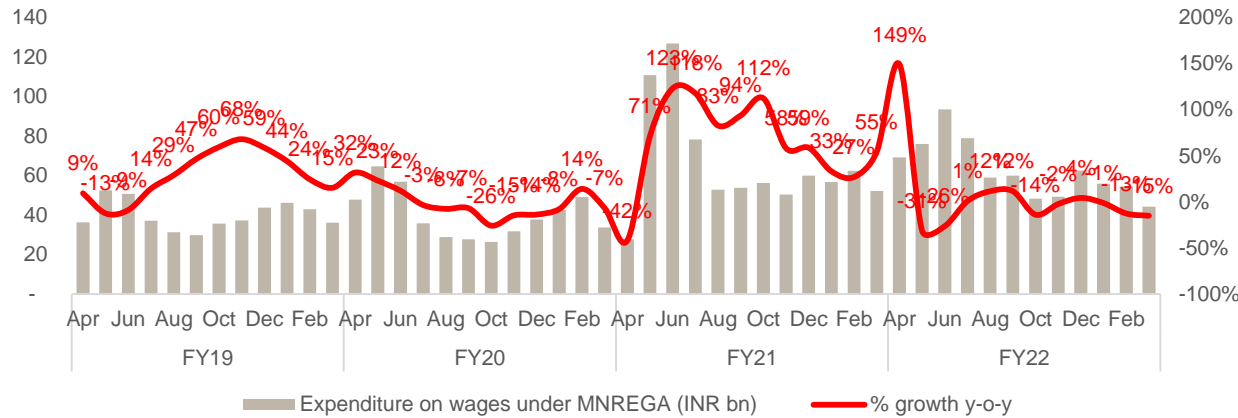
Source: CRISIL Research

Colours indicate % change on-year

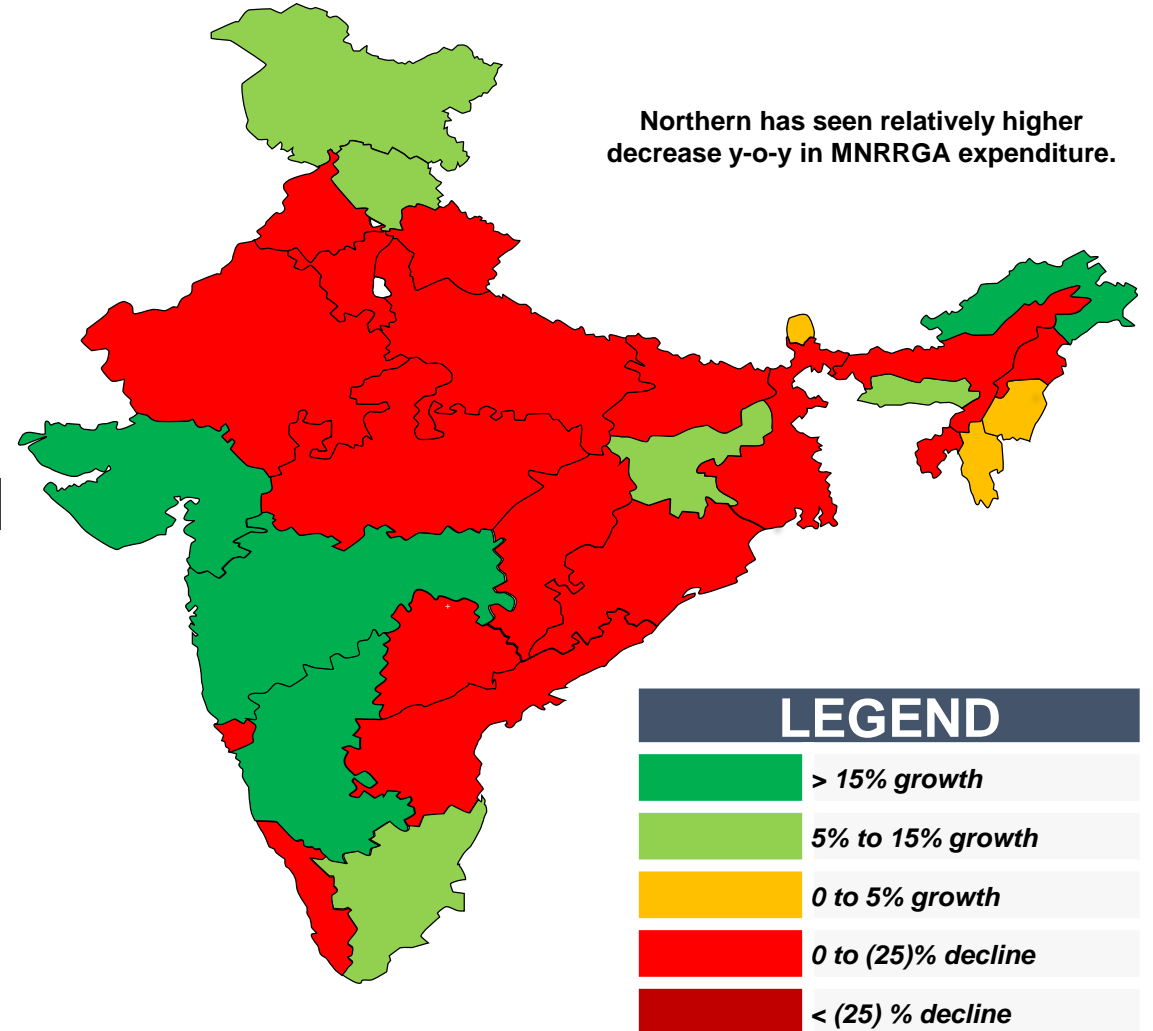


# After a record spending in FY21, MNREGA scheme expenditure tapered down in FY22

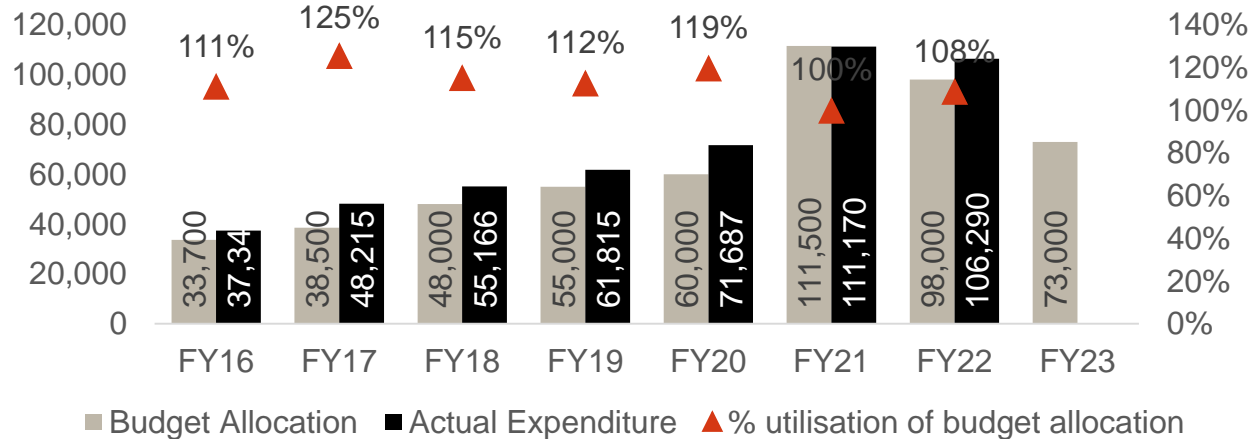
### MNREGA wages growth



### State wise growth in MNREGA wages expenditure for FY22



### The MNREGA scheme has a history of overshooting budget



Note:

Dec data is provisional and maybe restated over the next few days

Source: Budget documents, Ministry of Rural development, CRISIL Research

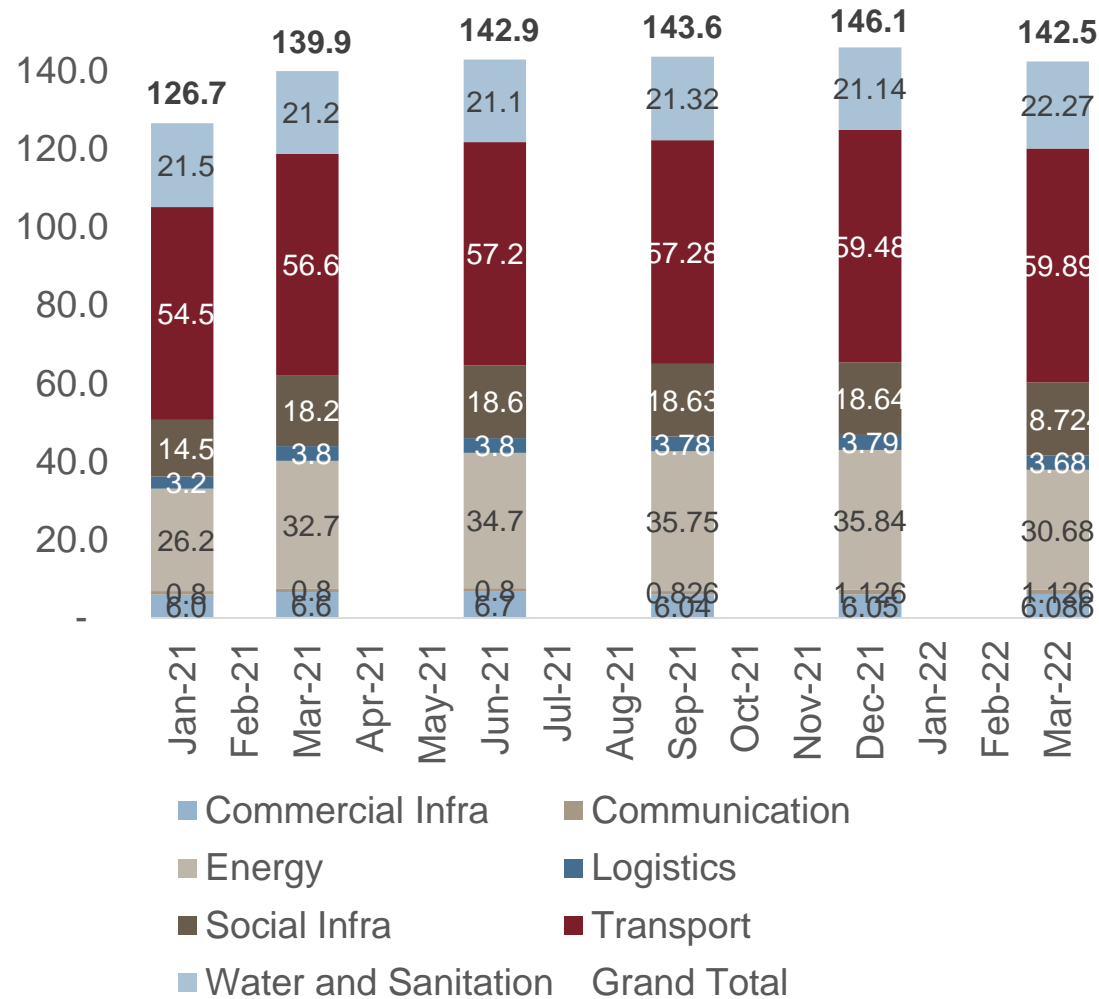
# How is the infrastructure scenario shaping up?



# National Infrastructure Pipeline

# Transport , energy, water and sanitation investments dominate the investments outlined in the NIP, momentum improving sequentially

Total project value of the NIP umbrella on the rise (INR trillion)

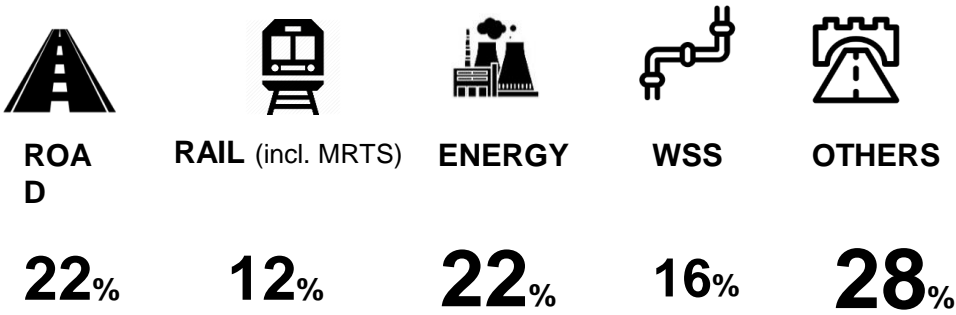


Sector wise stage wise value of projects (INR trillion)

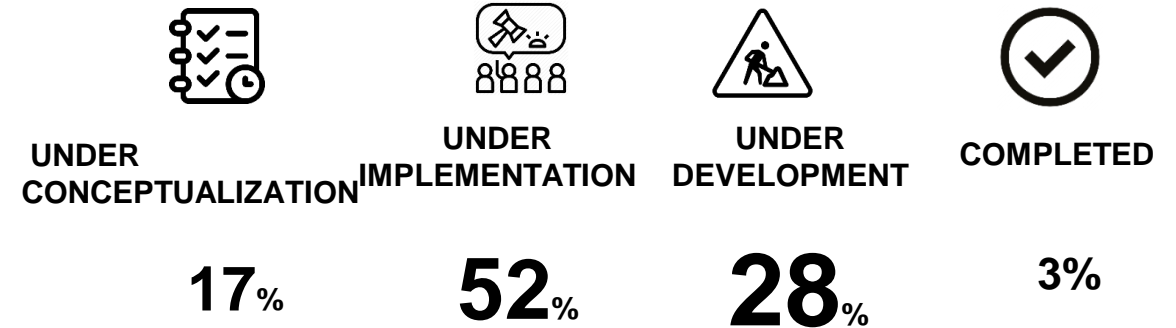
Stage/Progress	Segment	Jan-21	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22
<b>Completed</b>	Transport	0.11	0.16	0.32	0.32	1.28	1.36
	Energy	0.01	1.01	1.49	1.84	1.84	1.89
	Water and Sanitation	0.06	0.12	0.58	0.59	0.61	0.68
	Commercial Infra	0.00	0.01	0.03	0.03	0.037	0.10
	Social Infra	-	0.06	0.07	0.07	0.073	0.084
	Logistics	0.06	0.21	0.21	0.3	0.31	0.29
	Communication	0.00	0.00	0.00	0.006	0.006	0.006
<b>Under Construction</b>	Transport	26.76	28.88	29.76	29.81	31.72	31.80
	Energy	2.09	6.95	7.24	7.9	10.1	9.58
	Water and Sanitation	11.93	12.12	11.69	11.61	11.61	12.13
	Commercial Infra	0.73	1.34	1.33	0.71	0.71	0.70
	Social Infra	10.67	13.87	15.23	15.23	15.24	15.24
	Logistics	1.88	2.79	2.78	2.69	2.69	2.76
	Communication	0.65	0.74	0.74	0.73	1.04	1.04
<b>Pre-construction &amp; planning</b>	Transport	27.60	27.55	27.07	27.15	26.48	26.73
	Energy	24.11	24.78	25.96	26.01	23.9	19.26
	Water and Sanitation	9.53	8.97	8.86	9.12	8.92	9.51
	Commercial Infra	5.25	5.26	5.37	5.3	5.3	5.33
	Social Infra	3.81	4.23	3.32	3.33	3.33	3.4
	Logistics	1.21	0.79	0.79	0.79	0.79	0.62
	Communication	0.19	0.10	0.09	0.09	0.08	0.08
<b>Total Completed</b>		<b>0.25</b>	<b>1.57</b>	<b>2.69</b>	<b>3.16</b>	<b>4.156</b>	<b>4.41</b>
<b>Total Under Construction</b>		<b>54.71</b>	<b>66.69</b>	<b>68.77</b>	<b>68.68</b>	<b>73.11</b>	<b>73.25</b>
<b>Total Pre-construction &amp; planning</b>		<b>71.69</b>	<b>71.68</b>	<b>71.50</b>	<b>71.8</b>	<b>68.8</b>	<b>64.93</b>

# Roads account for ~76% of opportunity in the transport segment

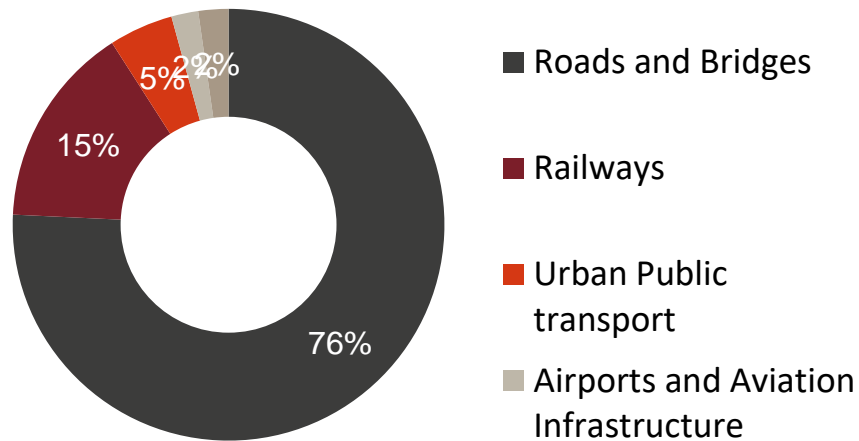
Transport, energy and water projects account for ~80% of NIP spending of Rs. 143 lakh crore



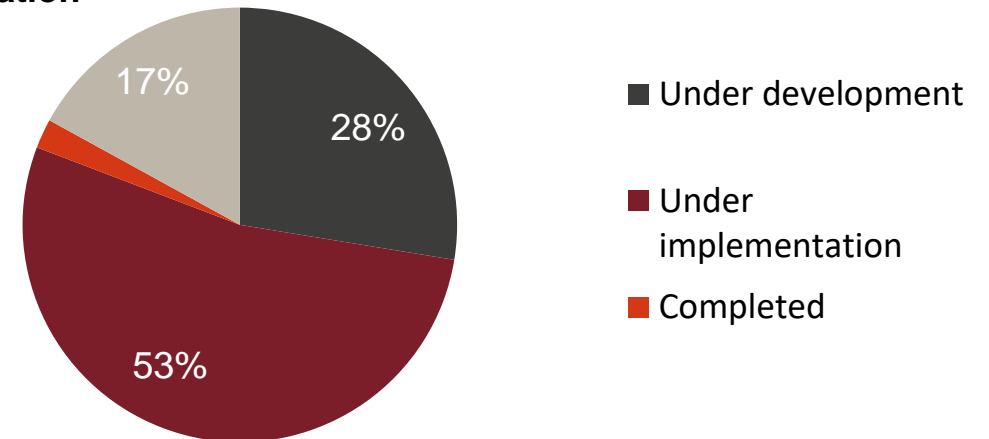
~Rs 73.3 lakh crore of projects currently under implementation



Roads account for ~76% of opportunity in the transport segment



Around half of investments under transport segment are under Implementation



Note: 1. All charts are for the period FY20-25

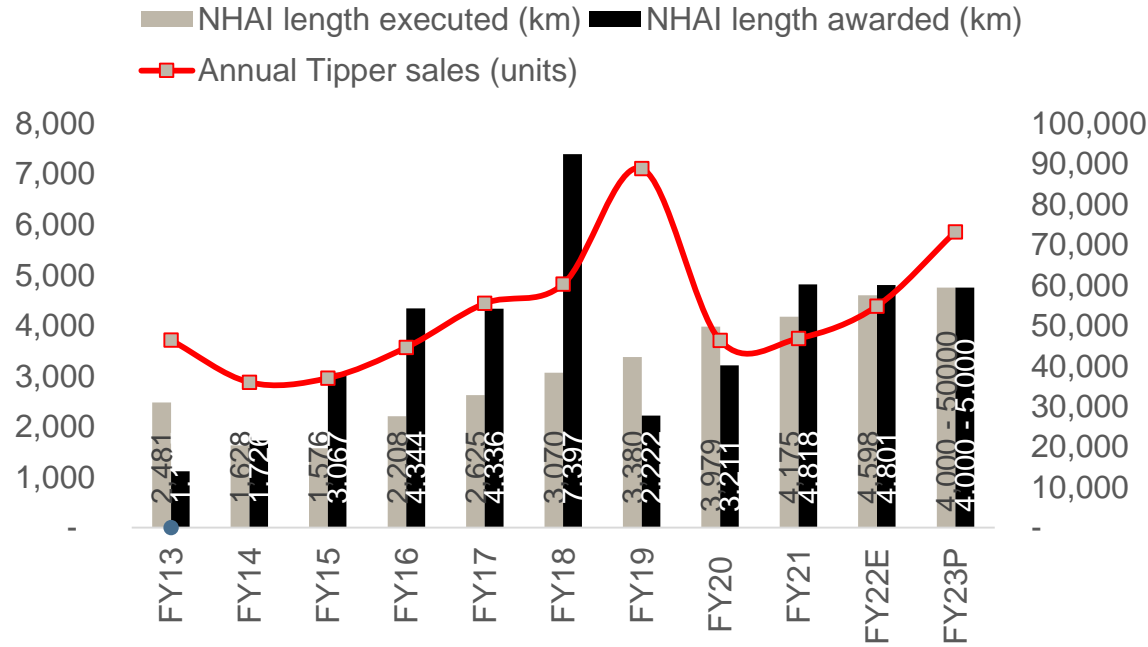
2. Others include irrigation, rural infra, ports, airports, health, petroleum, natural gas, education, etc

3. Updated as on 2<sup>nd</sup> April 2022

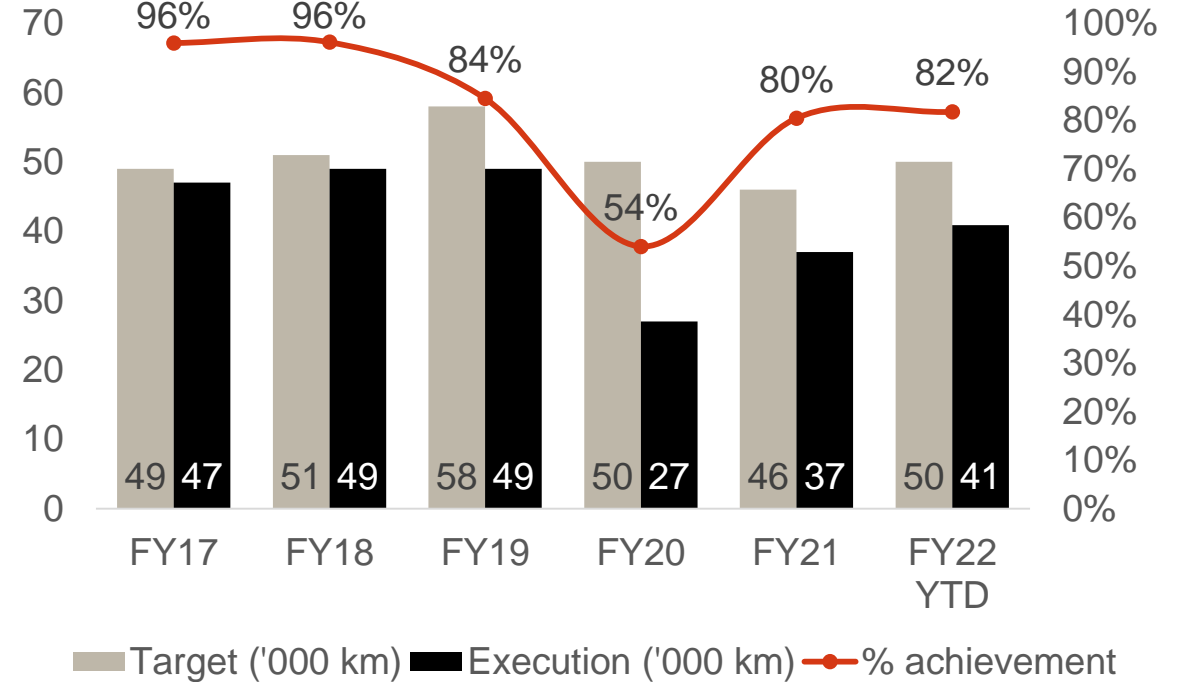
# Focus on Road Infrastructure

# Strong pace of central government projects to keep tipper demand higher than previous year

## National highways (NHA) – Awarded and executed



## Trend in PMGSY target and execution



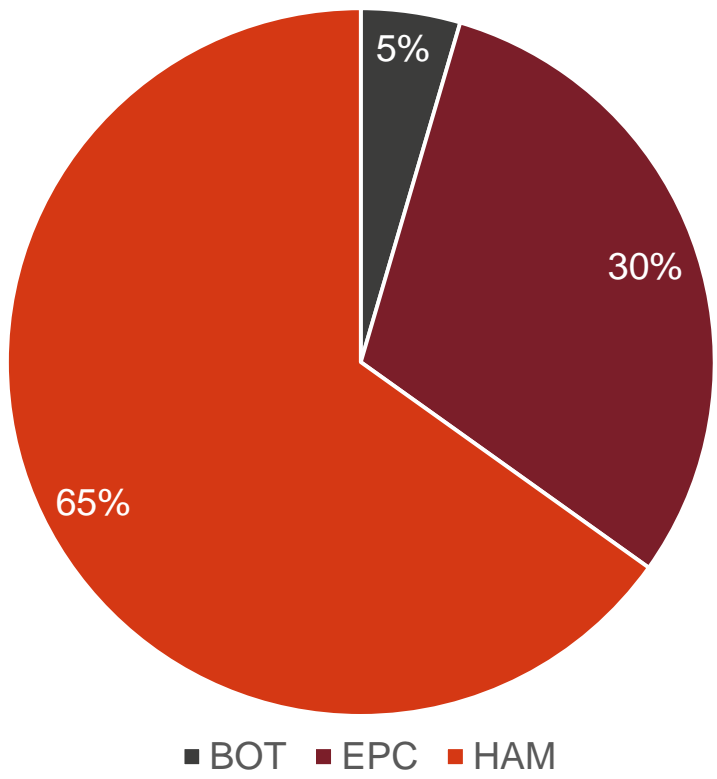
FY22 has seen strong awarding of road projects after two slow years, this should keep the tipper segment buoyant as the government pushes infra outlay ahead of key state elections

E: Estimated; P: Projected, National Highway Authority of India  
 Source: NHA, MoRTH, CRISIL Research

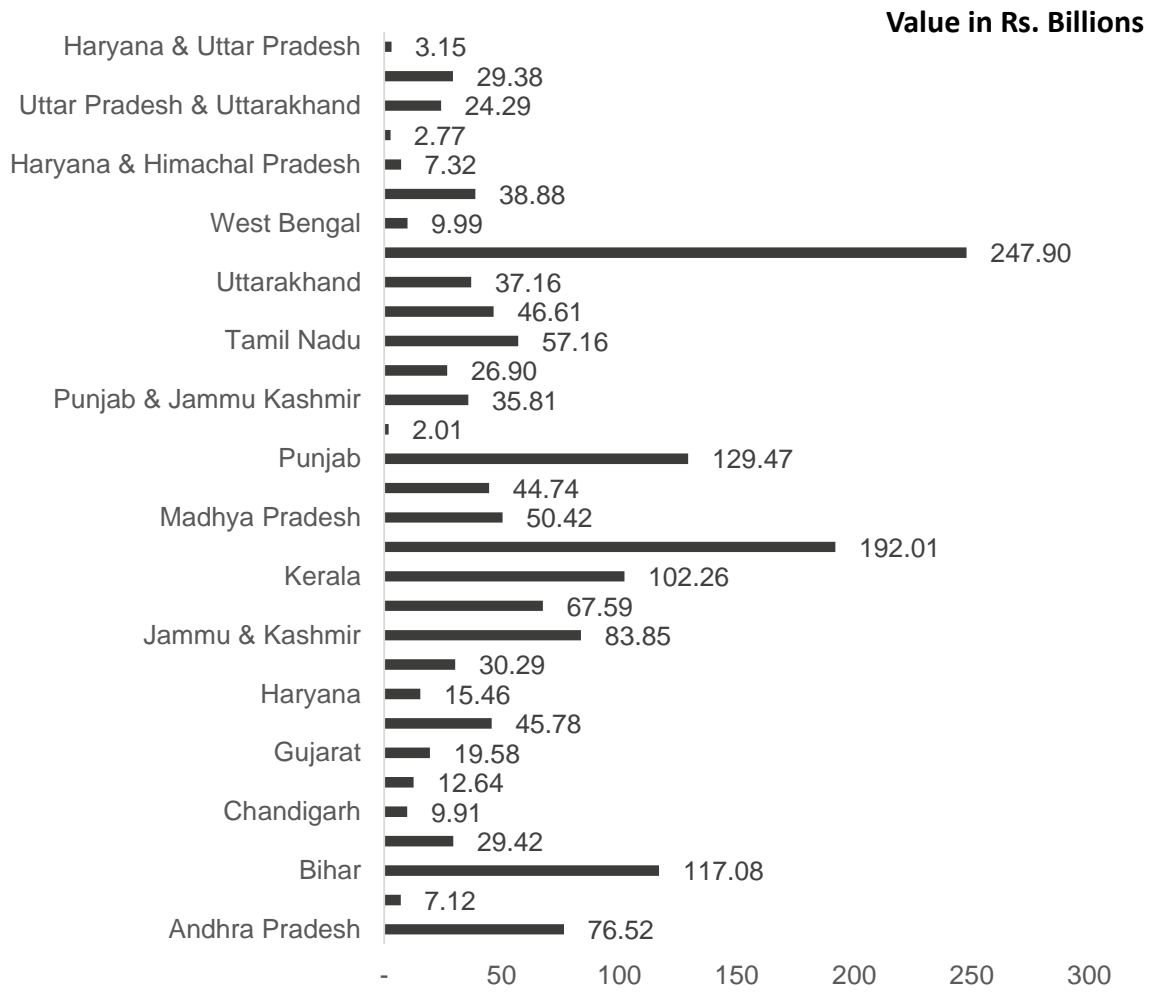
# NHAI tendering in FY22 catalyzing tipper demand, push may continue in FY23 as well

Total NHAI project value by mode type in Apr-March

Value in Rs. Billions **~1603.47**



Tender project value in major states

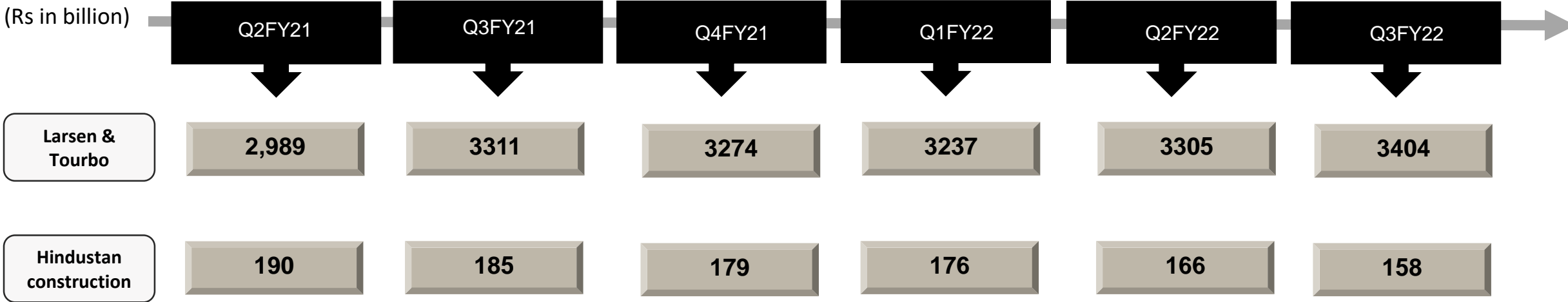


Source: CRISIL Research

Note: March data till 22<sup>nd</sup>  
 \*Total tender value consists of states mentioned herewith

# Order books swelling at EPC firms amid high govt spending and swift economic rebound

*Major players have bulging order book; Players with focus on roads, bridges and metro witnesses robust growth*



Source: CRISIL Research; Company Reports  
 Note: Order book is cumulative till that quarter  
 NA- Not available

# Indian automobile industry



# Assumptions

- No major global turmoil especially in Asia
- Quick and peaceful resolution to the Russia Ukraine conflict
- High chances of continued disruption in semiconductor supply (Russia – Palladium & Ukraine – Neon gas) ; extending waiting periods
- Domestic market remains the primary priority for the OEMs
- OEMs to shift back focus towards the premium segments of UVs and premium hatchbacks
- No disruption in OEM vehicle launch plans
- Elevated inflation levels, impact on consumer disposable incomes in the short term
- Increase in vehicle prices from April
- Fuel prices to remain elevated (FY23 – average of 90\$ per barrel)
- Financing scenario to remain accommodative
- Favourable monsoon
- Pending bookings to be served in Q1 & Q2 of Fiscal 2023
- Possibility of downside to our forecast if the Russia Ukraine conflict escalates

# Annual Forecast – Domestic (Base case)

	Volume			
	FY20	FY21	FY22	FY23P
<b><u>Passenger vehicles</u></b> (‘000)	2,773	2,712	2942	3440-3460
<b><u>Two-wheelers</u></b> (mn)	17.42	15.12	13.46	13.2-13.7
<b><u>Commercial vehicles</u></b> (‘000)	718	566	721	827-844
<b><u>Three-wheelers</u></b> (‘000)	636	216	260	357-362
<b><u>Tractors</u></b> (‘000)	709	898	842	840-850

	Growth y-o-y (%)			
	FY20	FY21	FY22	FY23P
	(18)%	(2)%	9%	16-18%
	(18)%	(13)%	(11)%	(1)-1%
	(29)%	(21)%	26%	15-17%
	(9)%	(66)%	20%	37-39%
	(10)%	26.6%	(6)%	0-2%

SOURCE: SIAM, CRISIL Research

# Quarterly forecasts – Domestic

Vehicle segment	Subsegment	Volume				YoY growth (%)			
		Q3 FY 22	Q4 FY 22	Q1 FY 23 P	Q2 FY 23 P	Q3 FY 22	Q4 FY 22	Q1 FY 23 P	Q2 FY 23 P
Passenger vehicles	Cars ('000)	349	398	382-392	388-398	(32)	(22)	14-16	13-15
	UVs & vans ('000)	411	398	455-465	465-475	9	(5)	48-50	18-20
	<b>PVs ('000)</b>	<b>760</b>	<b>797</b>	<b>845-855</b>	<b>860-870</b>	<b>(15)</b>	<b>(15)</b>	<b>31-33</b>	<b>16-18</b>
Two-wheelers	Motorcycles (mn)	2.4	2.2	2.49-2.54	2.35-2.40	(22)	(22)	44-46	(10)-(8)
	Scooters (mn)	1.0	1.1	0.95-1.00	1.23-1.28	(28)	(24)	66-68	(7)-(5)
	Mopeds ('000)	160	109	95-100	143-148	(24)	(30)	42-44	(13)-(11)
	<b>2W (mn)</b>	<b>3.6</b>	<b>3.4</b>	<b>3.58-3.63</b>	<b>3.75-3.80</b>	<b>(12)</b>	<b>(23)</b>	<b>49-51</b>	<b>(9)-(7)</b>
Commercial vehicles	LCV ('000)	127.6	148.9	125-127	136-139	(8)	19	70-72	26-28
	MHCV ('000)	60.4	88.1	68.0-68.5	70-71	21	16	149-151	36-38
	Buses ('000)	6.9	12.1	10.6-10.8	9.5-9.6	67	53	99-101	51-53
	<b>CVs ('000)</b>	<b>196</b>	<b>250</b>	<b>204-208</b>	<b>217-221</b>	<b>1</b>	<b>19</b>	<b>91-93</b>	<b>30-32</b>
Tractors ('000)		<b>223</b>	<b>177</b>	<b>223-228</b>	<b>207-211</b>	<b>(13)</b>	<b>(26)</b>	<b>(2)-1</b>	<b>(2)-0</b>
Three-wheelers	Goods ('000)	22.3	22.9	26.3-26.8	33.0-33.5	(21)	(19)	207-209	43-45
	Passenger ('000)	60.1	60.3	53.5-54.0	61.2-61.8	37	5	241-243	30-32
	<b>3W ('000)</b>	<b>82.4</b>	<b>83.2</b>	<b>80.2-80.7</b>	<b>94.5-95.0</b>	<b>14</b>	<b>(3)</b>	<b>229-231</b>	<b>34-36</b>

SOURCE: SIAM, CRISIL Research

# Annual forecasts – Exports

Vehicle segment	Subsegment	Volume				YoY growth (%)			
		FY 20	FY 21	FY22	FY23P	FY 20	FY 21	FY22	FY23P
Passenger vehicles	Cars ('000)	475	262	375	400-410	(7)	(45)	42	7-9
	UVs & vans ('000)	186	138	203	225-235	15	(26)	45	12-14
	<b>PVs ('000)</b>	<b>662</b>	<b>400</b>	<b>578</b>	<b>630-640</b>	<b>(2)</b>	<b>(40)</b>	<b>43</b>	<b>9-11</b>
Two-wheelers	Motorcycles (mn)	3.14	3.03	4.08	4.42-4.48	9	(3)	34	8-10
	Scooters (mn)	0.37	0.23	0.35	0.35-0.45	(7)	(37)	51	10-12
	Mopeds ('000)	14	8.3	10	10-12	(17)	(40)	231	8-10
	<b>2W (mn)</b>	<b>3.52</b>	<b>3.28</b>	<b>4.4</b>	<b>4.5-5.0</b>	<b>7</b>	<b>(7)</b>	<b>36</b>	<b>8-10</b>
Commercial vehicles	LCV ('000)	33.9	31.1	58.3	58-63	(28)	(8)	87	2-4
	MHCV ('000)	14.9	13.5	25.7	23-28	(63)	(9)	90	3-5
	Buses ('000)	11.9	5.7	8.3	8-9	(3)	(52)	46	0-2
	<b>CVs ('000)</b>	<b>60.7</b>	<b>50.3</b>	<b>92.3</b>	<b>92-97</b>	<b>(39)</b>	<b>(17)</b>	<b>83</b>	<b>2-4</b>
Tractors ('000)		76	88.6	129	130-140	(17)	17	45	4-6
Three-wheelers	Goods ('000)	6.3	5.6	10	11.0-11.5	2	(12)	82	9-11
	Passenger ('000)	495.9	387.4	490	515-525	(12)	(22)	26	5-7
	<b>3W ('000)</b>	<b>502.2</b>	<b>392.9</b>	<b>500</b>	<b>525-535</b>	<b>(12)</b>	<b>(22)</b>	<b>27</b>	<b>5-7</b>

# PV industry continues to grapple for stock

Vehicle segment	Normal inventory in days	Current inventory levels*	Inventory Units	Reasons
Passenger Vehicles	25-30	15-20	80-100 thousand	High retail traction, new launches, slower production have kept the inventory levels low . Industry continues to face chip shortage.
Two Wheelers	30-35	43-48	1.6-2.0 million	Slow down in retail momentum resulted in stock correction in December which partially normalized inventory levels. However, OEMs have increased stock levels in Q4 FY22 anticipating good demand
Commercial Vehicles	25-35	~30	55-60 thousand	Inventory levels are in the normal range for the MHCV segment. However, the SCV segment is facing problems and inventory levels are much lower than normal on account of shortage of semi conductor.
Tractors	30-35	43-48	93-98 thousand	Inventory levels, have further increased in Q4 due player actions to achieve year end numbers. Dealers have more stock than required on account of poor retail sentiments on ground.
Three-wheeler	20-25	40-45	~25-30 thousand	OEMs have increased production due to pick up in demand and dealers are left with enough stock to last more than a month for the retail demand

**Research** NOTE:\* Inventory level as on end of March 2022, Inventory units have been calculated using last 12 months sales

Source: Industry, CRISIL Research

# Passenger vehicles

# Strong booking pipeline, new launches to support continued growth in FY23

Variables	FY19	FY20	FY21	FY22	FY23 E
Income for discretionary spending	F	NF	NF	F	N*

Variables	FY19	FY20	FY21	FY22	FY23 E
Cost of ownership	NF	N	N	N	N
Petrol / CNG Vehicles	NF	N	N	NF	NF
Diesel vehicles	NF	N	NF	NF	NF
Interest rates	N	N	F	N	N

Variables	FY19	FY20	FY21	FY22	FY23 E
New model/ facelift launches	NF	F	N	F	F
Regulations – passenger vehicles	N	NF	N	N	N

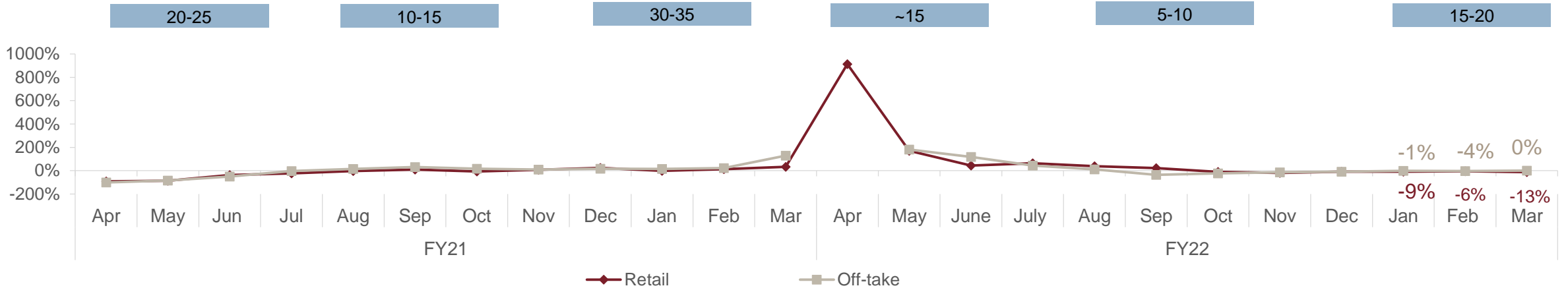
<b>Impact on Overall Sales Growth</b>	<b>N</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>
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E: Estimated; \*: Due to estimated pressure on GDP growth & inflation

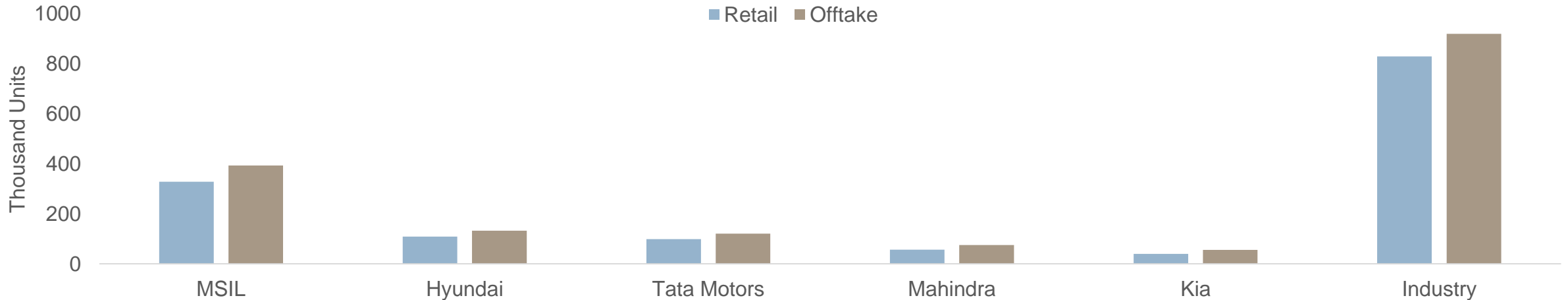
SOURCE: Industry, CRISIL Research

# Dealer inventory built up during Q4, yet high waiting periods pursue

Offtake records much faster q-o-q growth (21% vs 4%)



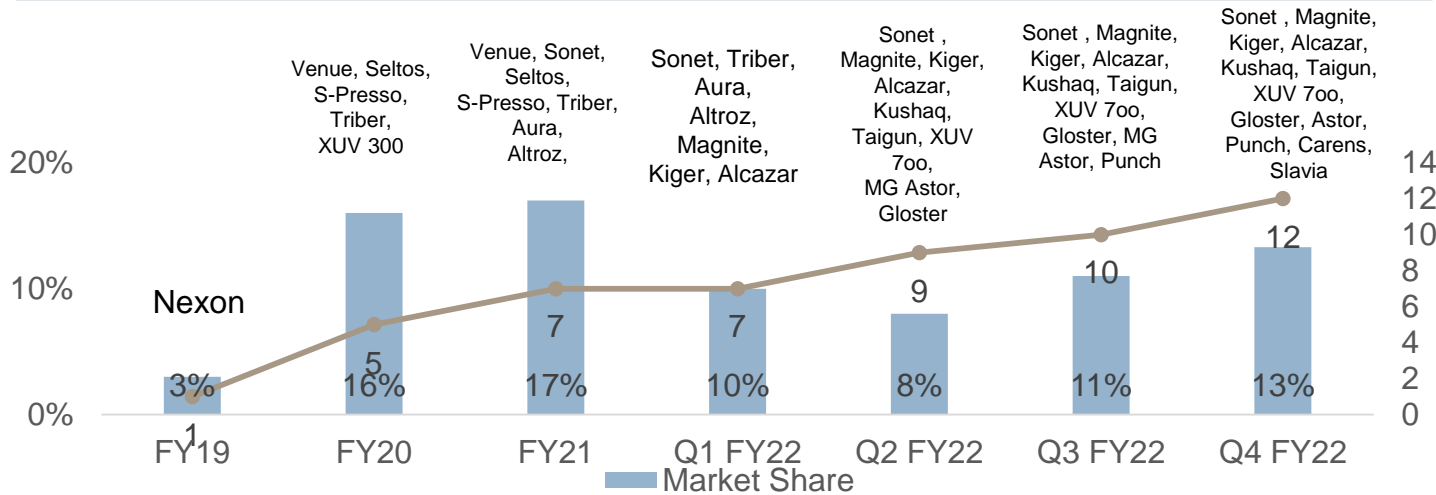
Offtake eclipse retails for all major players





# SUV segment continues to expand in this fiscal

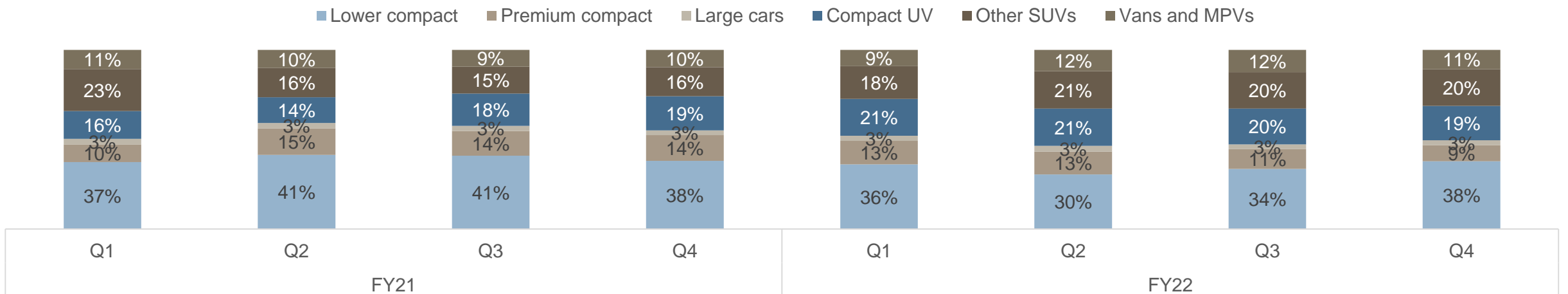
## New launches provide the much-needed push in FY22



## Major upcoming launches (Q1 FY 2023)

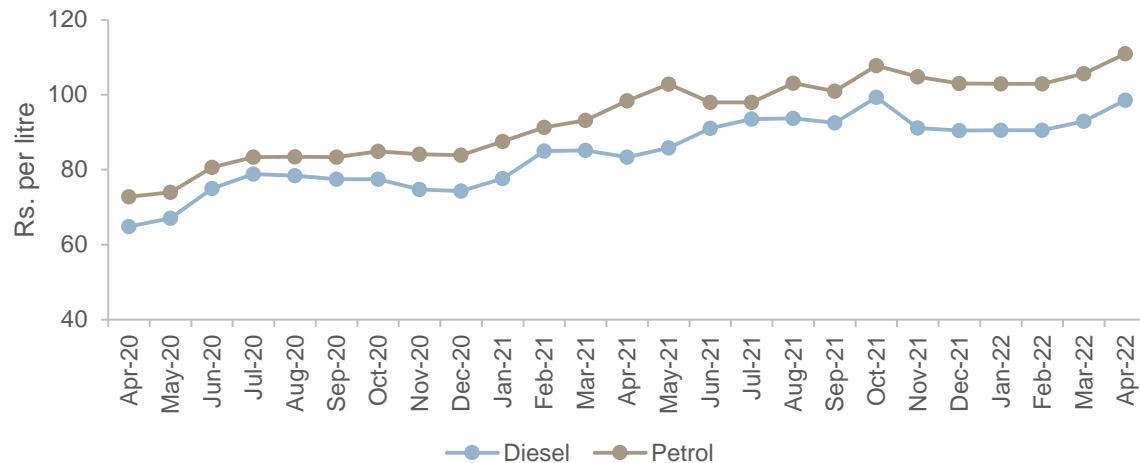
Company	Model	Segment
Hyundai	Creta facelift	Other SUV
	Venue facelift	Compact UV
Maruti	Brezza facelift	Compact UV
Kia	Sportage	Other SUV
Volkswagen	Virtus	Large car

## Fall in share of premium compact and Other SUV segment due to supply constraint

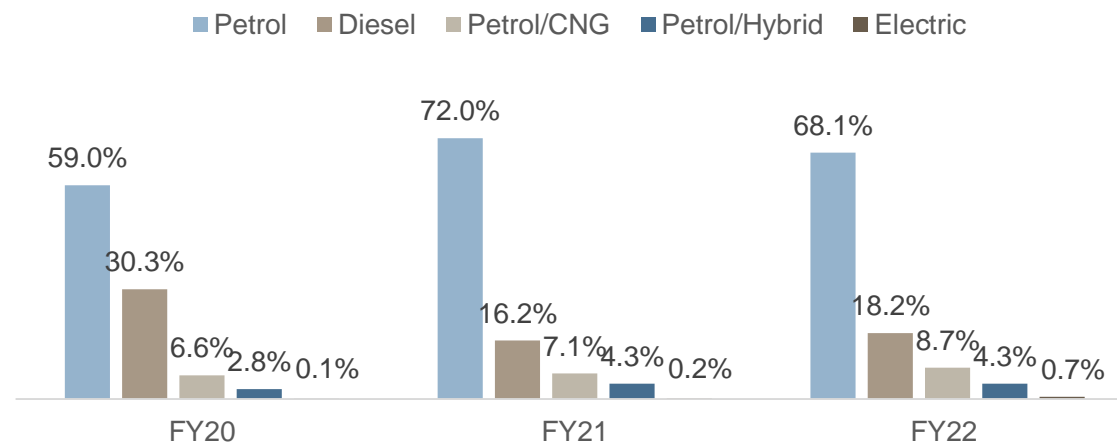


# Rise in fuel prices incentivise CNG/Electric vehicle adoption, interest rates remain muted

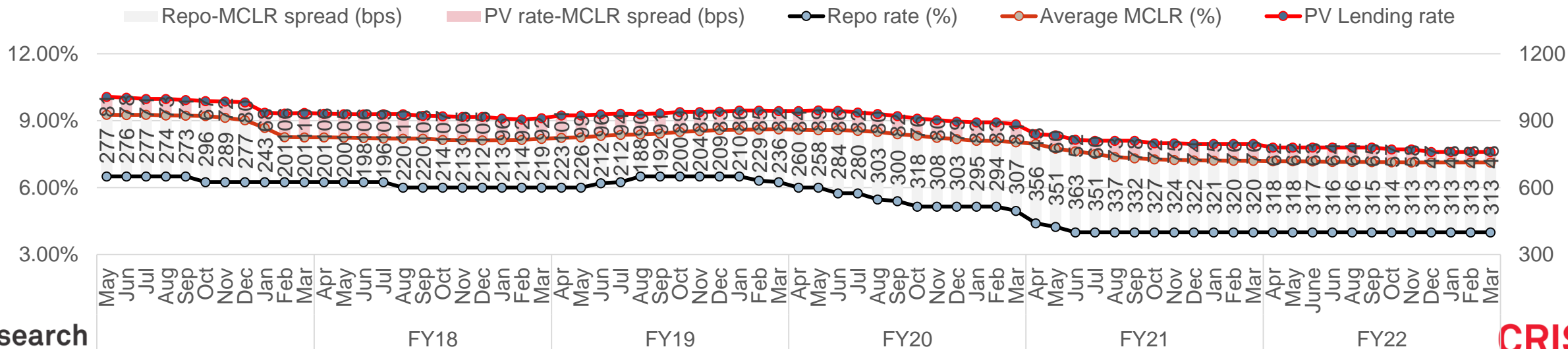
### Fuel prices hiked in the second half of March



### Share of CNG & Electric expanded further in fiscal 22

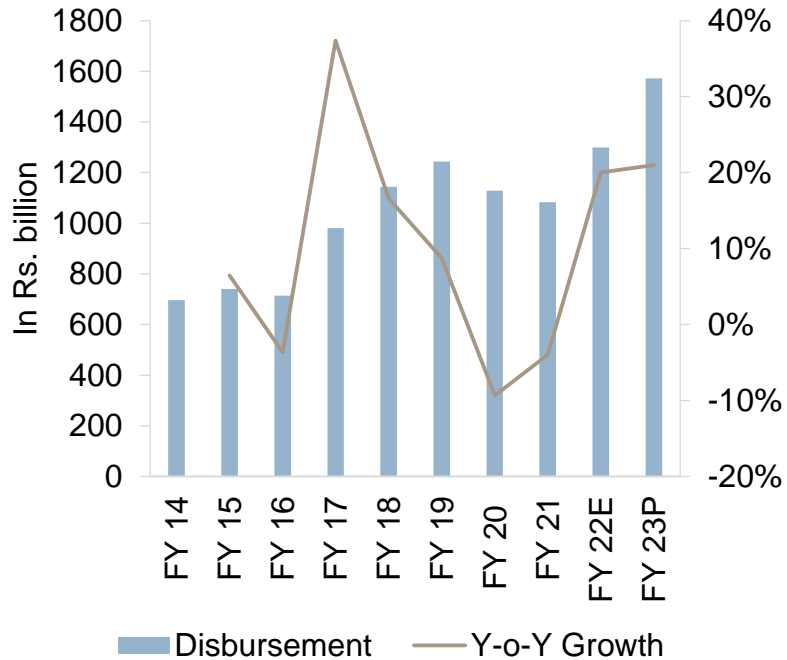


### Difference between MCLR & lending rate narrows down further

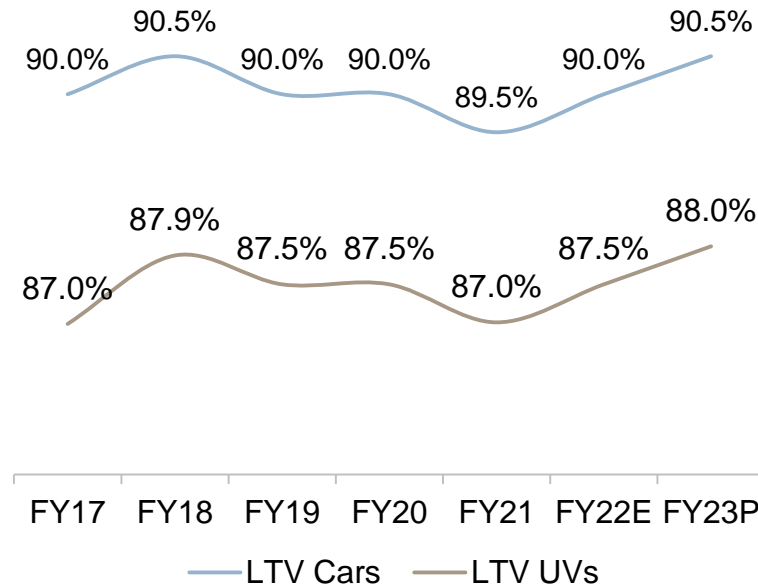


# Disbursements expected to rise further in fiscal 23, interest rates to remain subdued

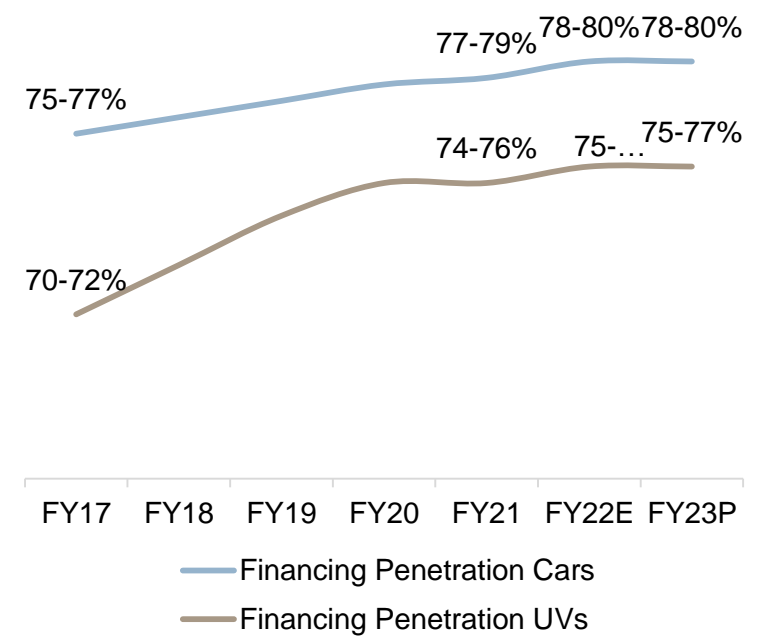
## Disbursement



## Loan-to-value (LTV)



## Financing penetration

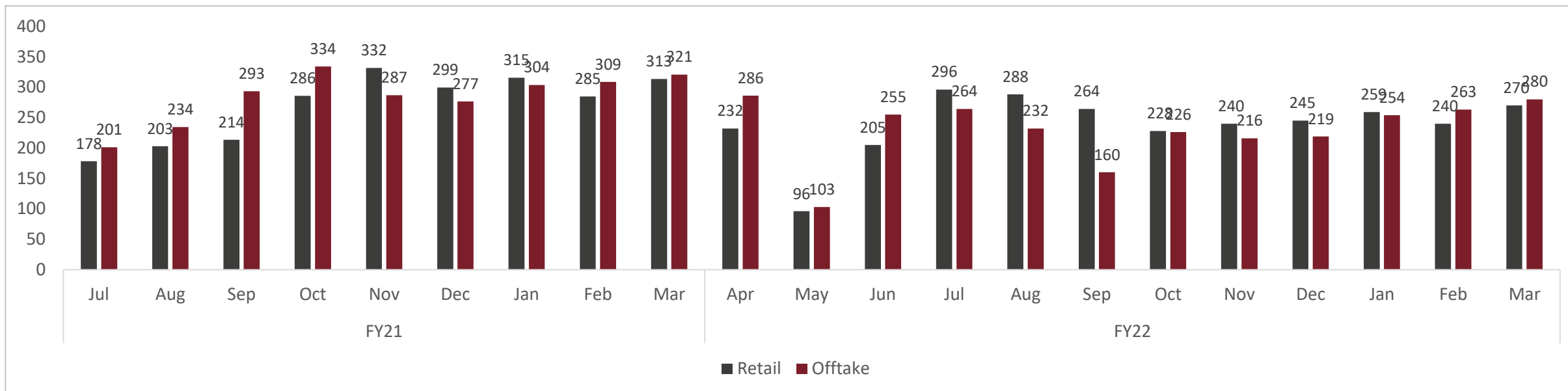


Source: Company Report, Industry, CRISIL Research

- PV industry is expected to grow 12-14% y-o-y during fiscal 23 providing a push to overall disbursements during the year, expected increase in prices to offset the rise in commodity costs will provide an added support to the disbursements; After a slide in fiscal 21, disbursement bounced back during fiscal 22 with increase in vehicle sales volumes as well as prices.
- Interest rates have been contracting q-o-q during fiscal 22, we expect the rates to remain muted during fiscal 23
- However, some cautious funding is expected going ahead amidst the estimated pressure on disposable incomes of customers amidst the global uncertainty
- LTV & Penetration levels are expected to continue their gradual improvement

# Some improvement in retail during Q2

## Retail vs off-take FY21 & FY22

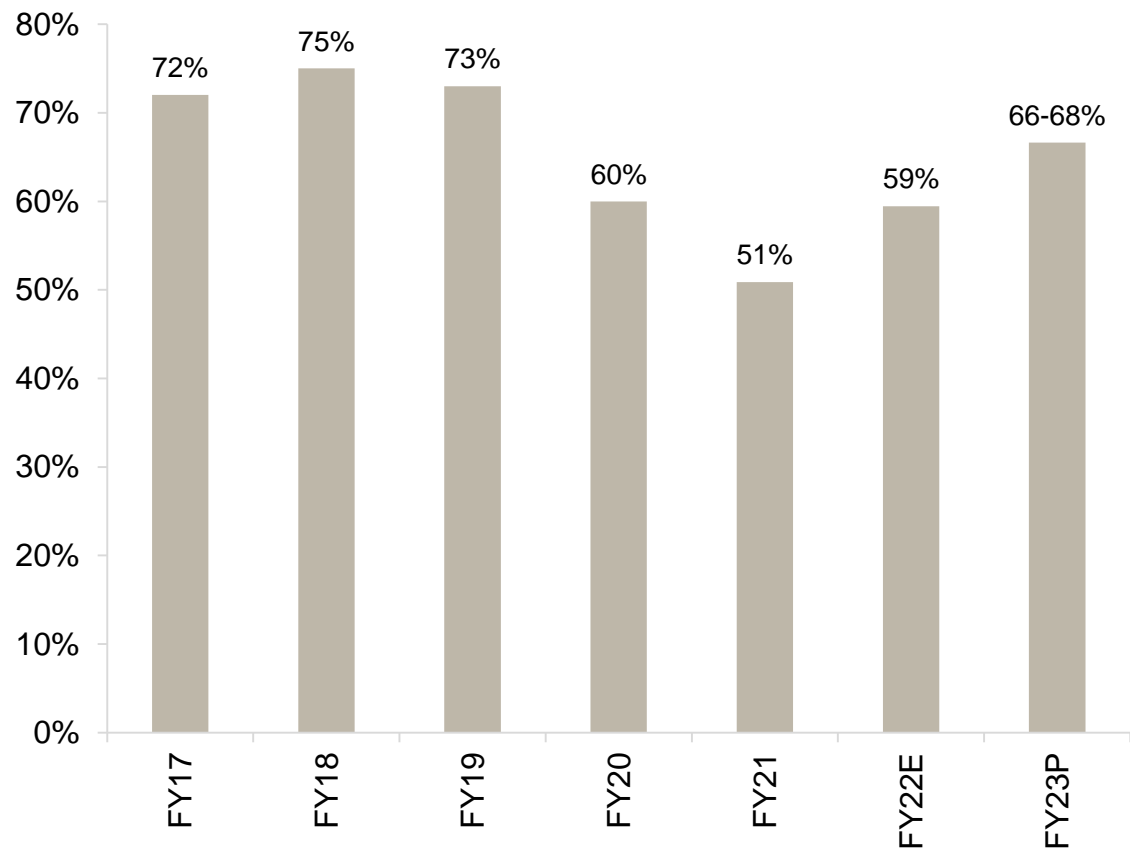


Note: Retail numbers are estimated, Offtake numbers include Tata Motors sales  
 Source – MoRTH, SIAM, CRISIL Research

- Retail sales have been better than offtake in turn increasing pressure on supply.
- There was some improvement in offtake during the Q1 FY22 boosting dealer inventory, continued restrictions in few states like Kerala, WB limited the retail demand growth
- Continued supply shortage on account of the semi conductor chip issue resulted in a large difference between retail & offtake in Q3 FY22
- Dealer stock levels continue to remain below normal; currently at 15-20 days

# Utilization improved in fiscal 22 despite the semiconductor handicap; expected to witness further improvement in fiscal 23

## Supply constraint impacts utilization level



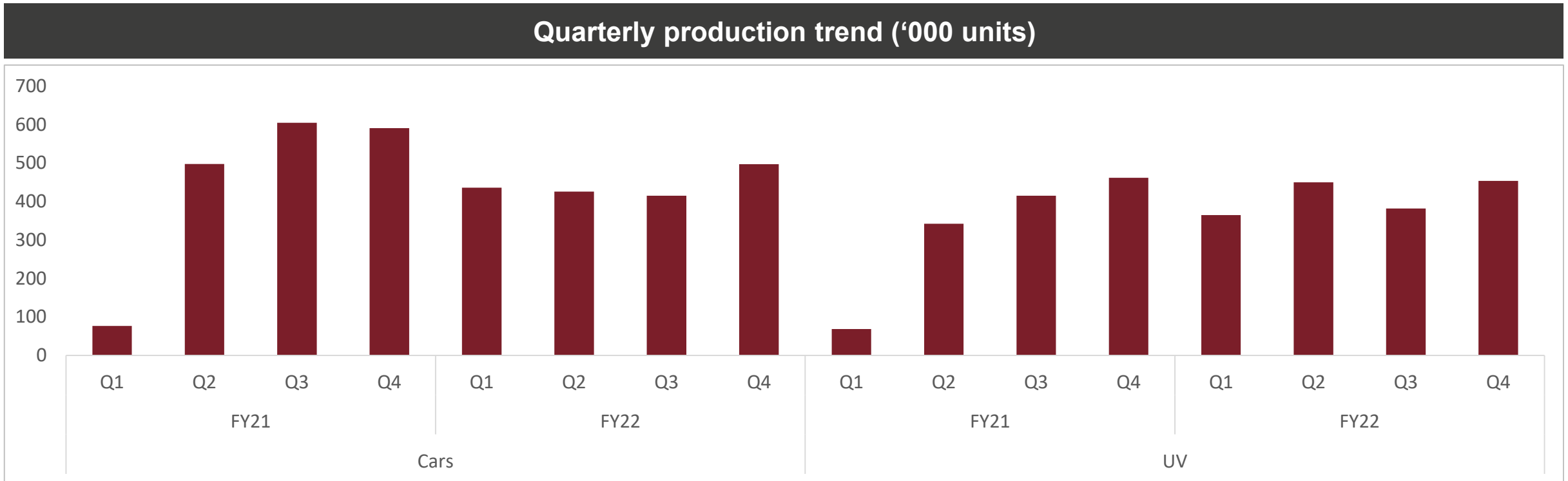
Source: CRISIL Research Estimated

## Capacity utilisation of key players

Player	Effective Capacity (in '000) (on 31st Mar 2021)	Capacity utilisation in FY21	Capacity Utilisation in FY22
Maruti	2,050	69%	78%
Hyundai	763	74%	79%
Tata Motors E	564	38%	59%
Renault-Nissan	480	30%	38%
Toyota	310	17%	24%
Honda	180	48%	58%
Volkswagen	179	28%	42%
Kia Motors	300	64%	76%

Source: SIAM, Industry, CRISIL Research

# Production witnessed decline in Q4 Fiscal 2022



Source: SIAM, CRISIL Research

- Amidst the Covid wave 2 & the induced lockdowns, production contracted in Q1 FY22
- Q-o-Q drop in production was slightly higher for cars , as OEMs continued to focus on high demand UV segment
- This further boosted share of UVs in total production; from 44% in fiscal 2021 to 48% in Q4 fiscal 2022
- Revival in production is witnessed from Q2 , in line with the estimated demand growth and Covid situation normalizing
- OEMs pushed inventory in Feb & March improving production for Q4 FY22.
- Semi conductor shortage to impact production in fiscal 2022.

# Domestic – annual forecast

	Passenger vehicles	Cars	UVs and vans
FY 20 volumes	2,773	1,698	1,075
YoY Growth in FY20	18%	23%	7%
FY 21 volumes	2712	1542	1170
YoY Growth in FY21	2%	9%	8%
FY 22 volumes	2942	1427	1515
YoY Growth in FY22	9%	7%	30%
FY 23P volumes	3440-3460	1558-1572	1875-1895
YoY Growth in FY23P	16-18%	9-11%	23-25%

NOTE: Volumes in thousand units, numbers in red boxes indicate y-o-y de-growth, numbers in green boxes represent y-o-y growth

Source – SIAM, CRISIL Research

# Domestic – quarterly forecast

Period		Passenger vehicles		Cars		UVs and vans	
		Volume (000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q4	934	43%	513	27%	420	67%
	Q1	645	320%	337	321%	308	319%
FY22 E	Q2	741	2%	344	(19)%	397	32%
	Q3	760	(15)%	349	(32)%	411	9%
	Q4	797	(15)%	398	(22)%	398	(5)%
FY23 P	Q1	845-855	31-33%	382-392	14-16%	455-465	48-50%
	Q2	860-670	16-18%	388-398	13-15%	465-475	18-20%
	Q3	855-865	12-14%	385-395	11-13%	465-475	13-15%
	Q4	873-883	9-11%	392-402	(1)-1%	475-485	20-22%

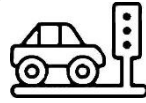
Source – SIAM, CRISIL Research

- Cars witnessed a higher drop of 22% while UVs contracted 5% on-year in Q4 FY22
- Sales to expected to witness robust growth in Q1 FY23 backed by continued need for personal mobility, strong order pipeline, estimated improvement in economy & added push with new launches over an above a low base.
- UVs are expected to continue to outpace cars given the changing consumer preference towards UVs as well as the UV dominated new vehicle pipeline of OEMs
- Annual FY23 sales are expected to witness a strong growth of 16-18% on-year
- We have not considered the resurgence of Covid and renewed restrictions in the forecast



# Stakeholder interactions

## OEM/ Tier-I suppliers



- Semiconductor supply was on a recovery path, **improvement in production levels till February**; supply situation was expected to normalize by June 2022. Russia Ukraine crisis derailed overall recovery plan
- **Semiconductor supply expected to take a hit, waiting periods to increase by 0.5-1 month, ~5% production loss expected during the next year**
- **Worsening Covid situation in Asia & Europe remains a key monitorable**; further disruption in component supply will exacerbate the supply situation
- Sharp increase in commodity prices amidst crude oil price hike; will have to be passed on to the end consumer; 3-5% vehicle price rise expected from April
- **Retail demand expected to remain positive; supply remains the primary constraint; booking pipeline to provide an added cushioning**

## Dealer



- Healthy demand, good enquiries during Jan & Feb, even March started on a positive note
- Russia Ukraine conflict and the **subsequent fear in customers' mind** regarding the estimated increase in fuel costs, inflation, drop in disposable incomes started impacting demand
- **Enquiries got impacted in the second half, few customers postponed their purchases, some increase in cancellations**;
- Few customers even delayed remaining payment and delivery of their vehicles
- Lifting of Covid restrictions & **reopening of public transport, office buses dampened the need for personal mobility**
- Some impact on retail demand expected in Q1, **mainly for the price sensitive customers preferring below 6-7 lakh priced vehicle**
- **Inventory levels have increased to 15-20 days** in Q4; however, most vehicles are **basic hatchbacks, manual transmission vehicles**
- **OEMs are primarily dispatching only basic variants of vehicles- vehicles & variants in actual demand are short in supply**
- High waiting periods for CNG, AT vehicles persist
- **OEMs curtailed orders in March; supply problem expected to worsen**

## Financier



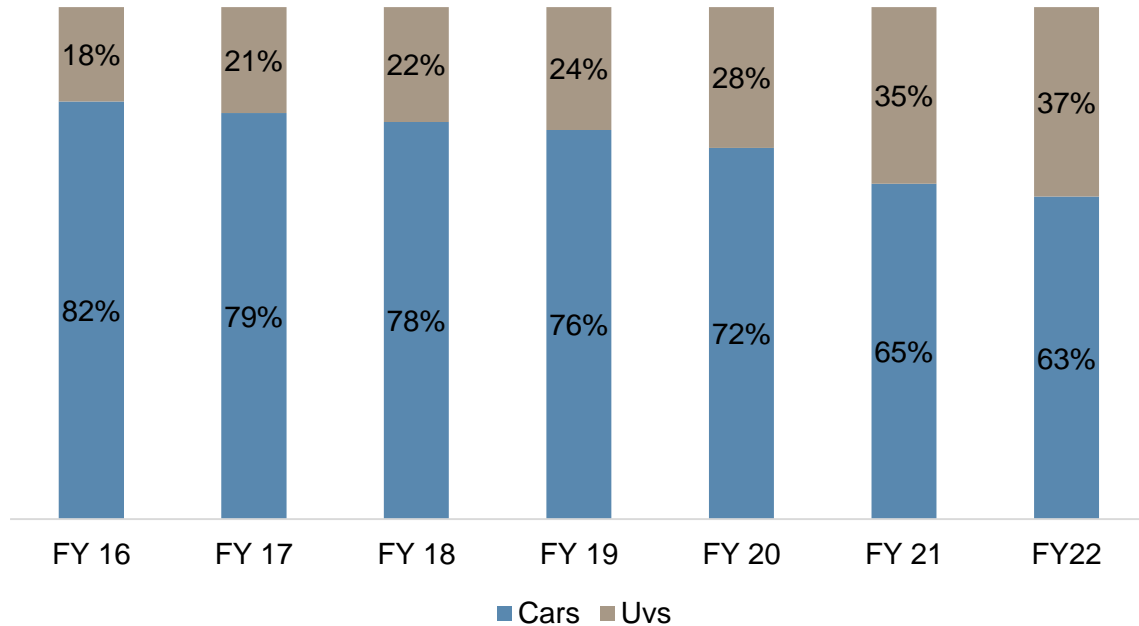
- Healthy penetration, high LTV & competitive interest rates being offered
- No sizeable impact of global crisis witnessed in March, however, some pessimism amidst the hike in fuel prices during the second half of March
- **Some moderation in disbursement demand expected in Q1**
- **However, more than the demand, supply expected to be the primary hurdle**
- Launch of higher ticket compact UVs and premium vehicles to provide a kicker to the disbursement growth
- **More cautious funding is expected going ahead amidst the possible impact on customer disposable incomes, still PV remains one of the best segment for financiers**

Source – Industry, CRISIL Research

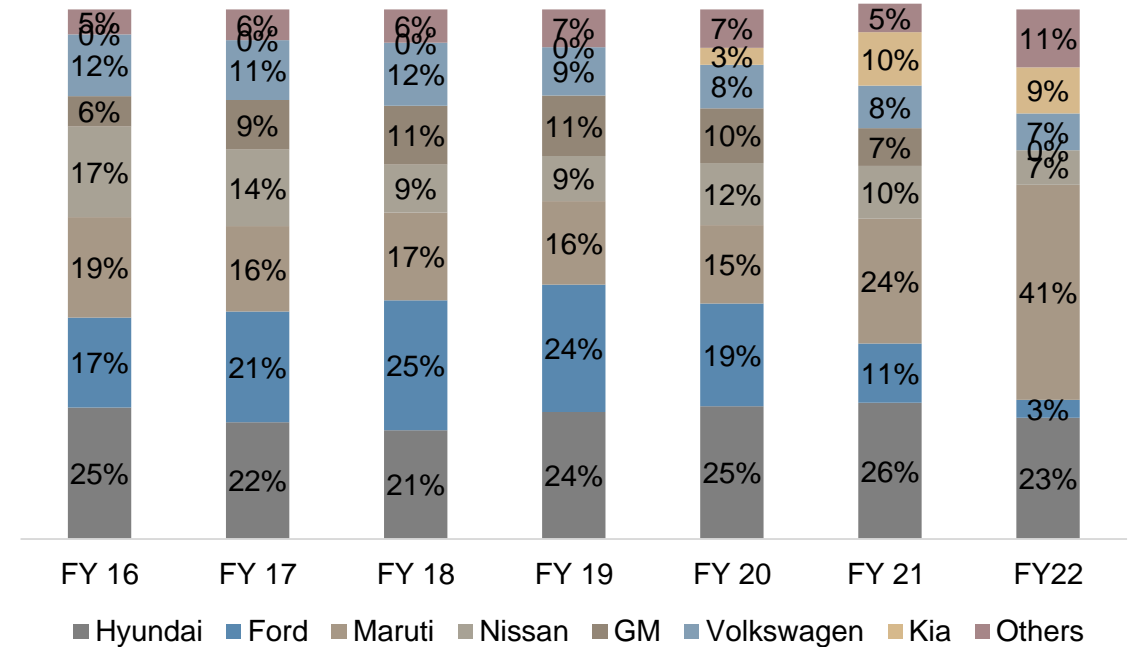
# PV exports

# UVs continue their forward march, Maruti expands its presence further

Share of UVs on a rising trend



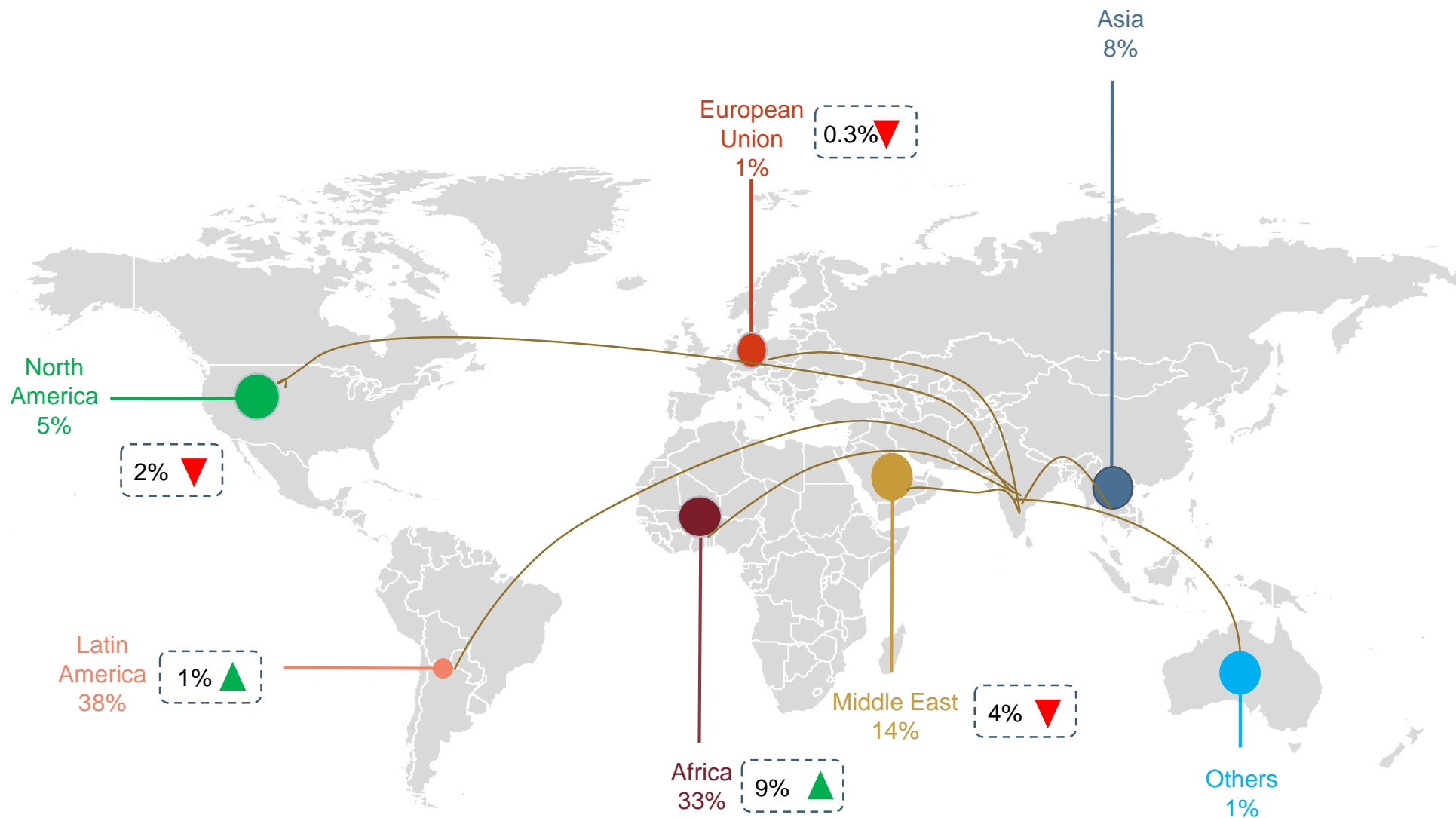
Hyundai tops the pole position, closely followed by MSIL



Source: SIAM, CRISIL Research

- Passenger vehicle exports registered a growth of 43% in FY22
- After q-o-q drop in Q4 FY21, exports witnessed growth from Q1 FY22
- Maruti, Hyundai, Nissan and recent entrant Kia continued to dominate the exports market
- Maruti has extended its presence from 24% in FY21 to 41% during FY22 backed by healthy rise in its Brezza exports

# Passenger Vehicle Exports



- LATAM and Africa has aided the exports in the first half of FY22
- Preference towards Evs and stringent emission norms limited exports to EU
- Share of exports to North America sees marginal drop.
- Covid situation has improved across most geographies
- Pace of vaccination in developing countries remains a key monitorable
- Chip shortage continues to remain a hurdle for the industry
- Spread of Delta variant is a concern

# Two-wheelers

[Back to Summary Forecast Slide](#)

# Two-wheeler sales to remain sluggish in fiscal 2023 as well

Variables	FY 2019	FY 2020	FY 2021	FY 2022 E	FY 2023 P
Income for discretionary spending	F	NF	NF	N	N

Variables	FY 2019	FY 2020	FY 2021	FY 2022 E	FY 2023 P
Cost of ownership	NF	N	NF	NF	NF
Interest rates	N	N	F	N	N

Variables	FY 2021	FY 2022 E	FY 2023 P
Fuel injector vehicle	NF	N	N
E- Carburetor vehicle	N	N	N

Variables	FY 2019	FY 2020	FY 2021	FY 2022 E	FY 2023 P
Regulations – 2 wheelers	NF	N	NF	N	N

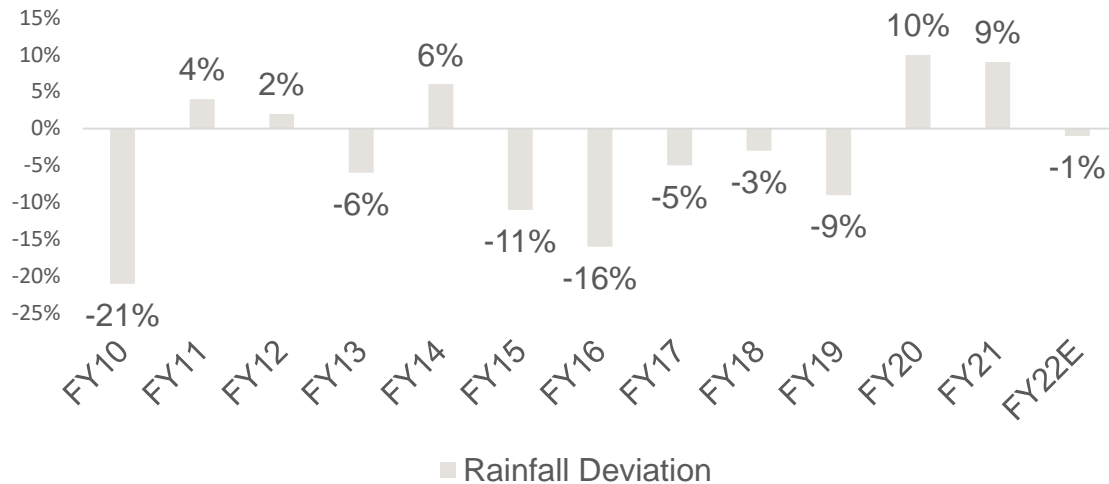
<b>Impact on Overall Sales Growth</b>	<b>N</b>	<b>NF</b>	<b>NF</b>	<b>N</b>	<b>N</b>
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NF: Not Favorable, F: Favorable; N: Neutral

E: Estimates P: Projected

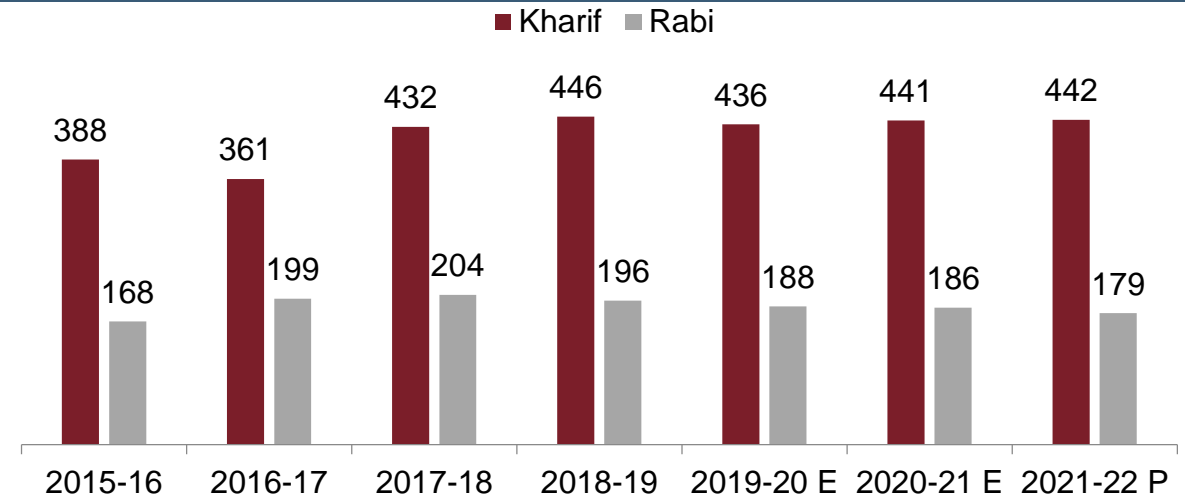
# Southwest Monsoon has been normal in fiscal 2022

## Normal rainfall in fiscal 2022



NOTE: Rainfall deficiency in the range of -10% to 10% of the long period average is considered as normal as per IMD  
 Source : IMD, CRISIL Research

## Positive boost from high crop production

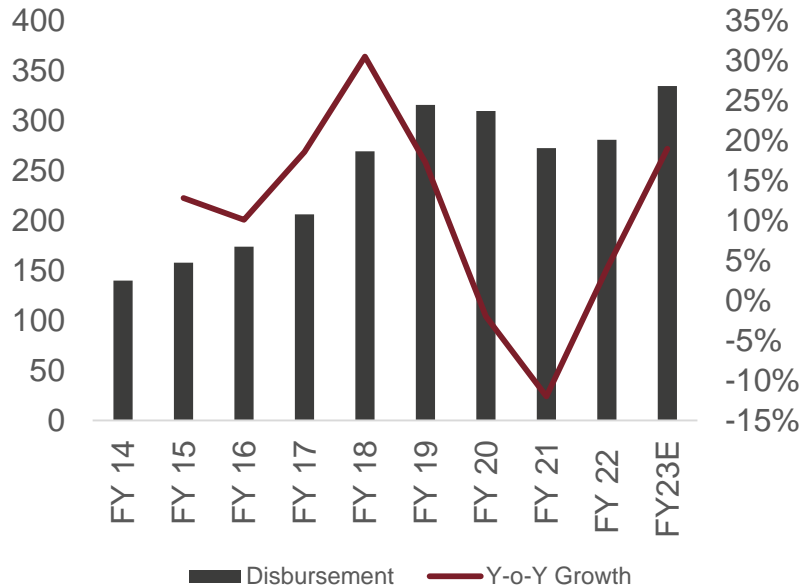


MY: Marketing year, P: Projected  
 Notes: 1) Base of 100 for Index (kharif and rabi) taken in MY Jan-Dec 2015  
 Source: Ministry of Agriculture, CRISIL Research

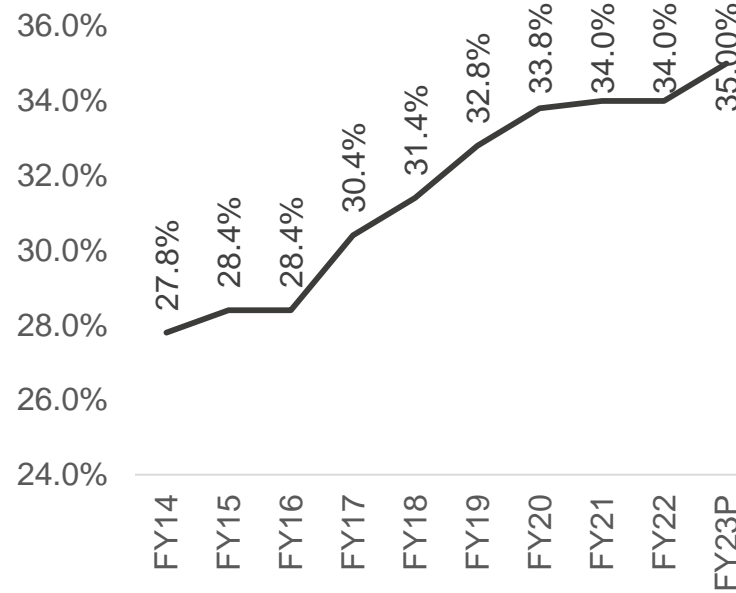
- The southwest monsoon seasonal rainfall during June to September for the country as a whole has been normal.
- After excess rainfall in June, deficit rainfall was recorded in July and August respectively, rainfall showers during September were aggressive and refused to quit well into October.
- The wide fluctuations in the rainfall during this monsoon season had only marginal impact on the reservoir levels.
- Erratic rainfall in many states, delayed harvesting, lower cash in hands of the farmers coupled with lower commercial demand have impacted sales negatively.
- Crop prices received in the market have been a marginal relief for farm income however not sufficient to improve cash flow significantly.

# Pandemic slowed down the fast-paced growth of the two-wheeler finance; Festive demand remained muted

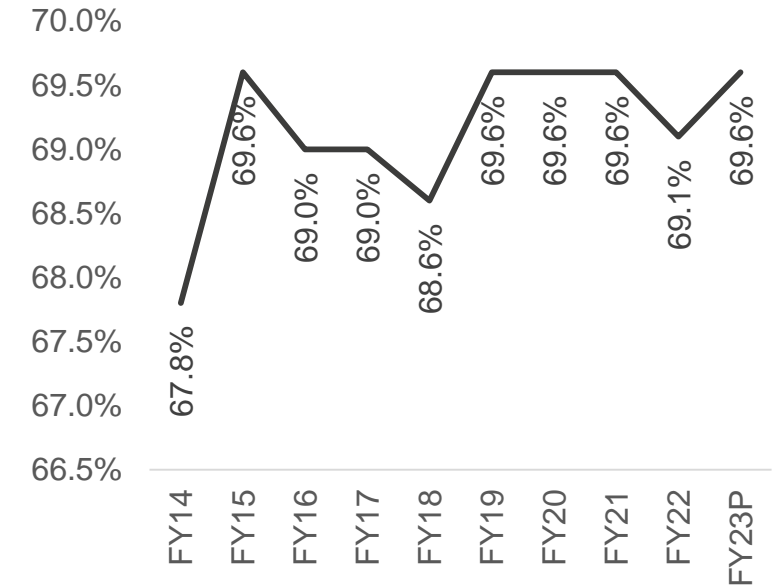
## Disbursement



## Auto finance penetration



## Loan-to-value



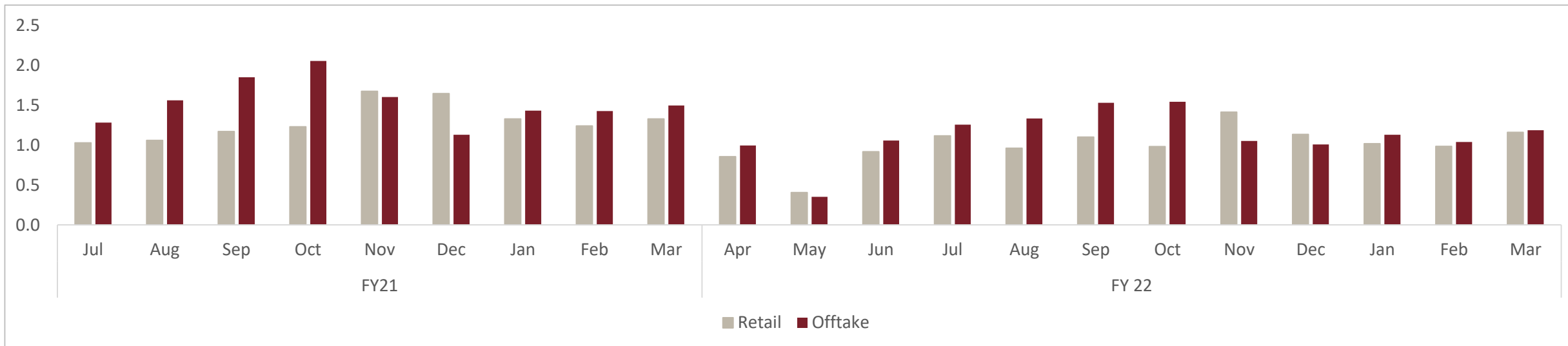
Source: Experian Credit Bureau, Company Reports, CRISIL Research

- The disbursements are on the road to getting back on track and is expected to get better in the coming year considering the slight recovery in two-wheeler segment.
- The festive seasons in India have always been the hype for Auto Markets, but due to rise in prices of petrol and vehicles, the demand remains sluggish as people are refraining from buying a brand new two-wheeler with their income levels staying intact.
- As economic condition of India is slowly but surely improving, the LTV levels are supposed to be restored by the players in the coming financial year



# Two-wheeler retail volumes witnessed a huge decline on year in fiscal 2022

## Retail vs off-take sales trend

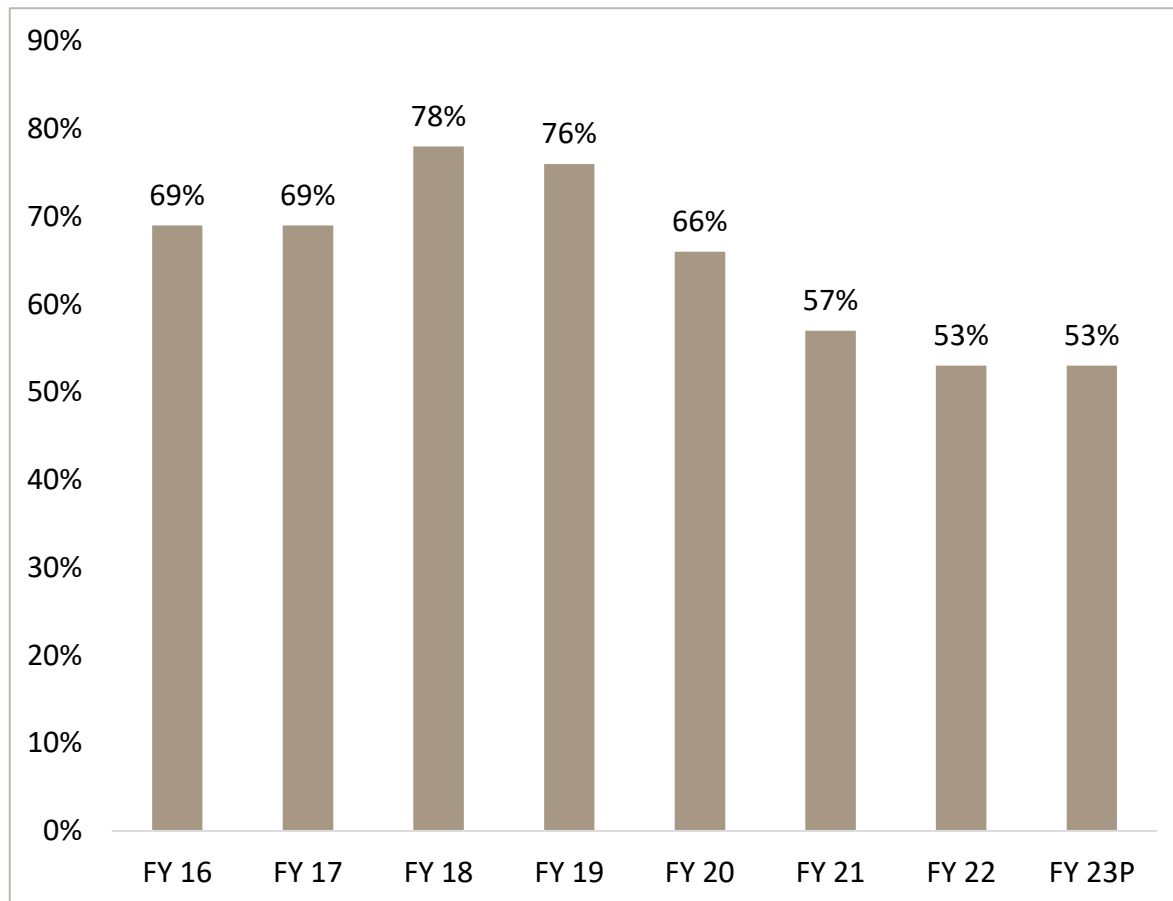


Note: Retail numbers are estimated  
 Source – MoRTH, SIAM, CRISIL Research

- Wholesale offtake of leading two-wheeler manufacturers, declined in FY22 as compared to the previous year. Whereas sequential demand also witnessed a significant decline due to weak demand sentiments.
- Dealer level inventory stood higher during the month. This higher dealer inventory led to major OEMs announcing production cuts in Dec 2021, however overall offtake was higher than retail in Q4 FY22.
- Higher dealer inventory, production cuts by OEMs and semiconductor shortage kept the two-wheeler wholesales under pressure in FY22.

# Capacity utilization levels to remain stable in FY23

## Utilisation rates to jump to pre-covid levels



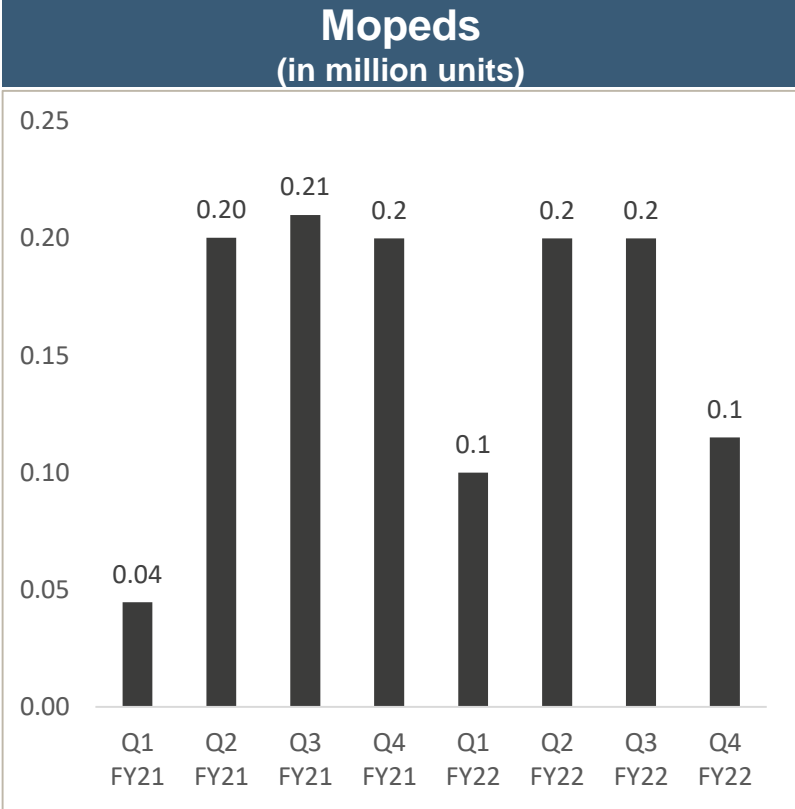
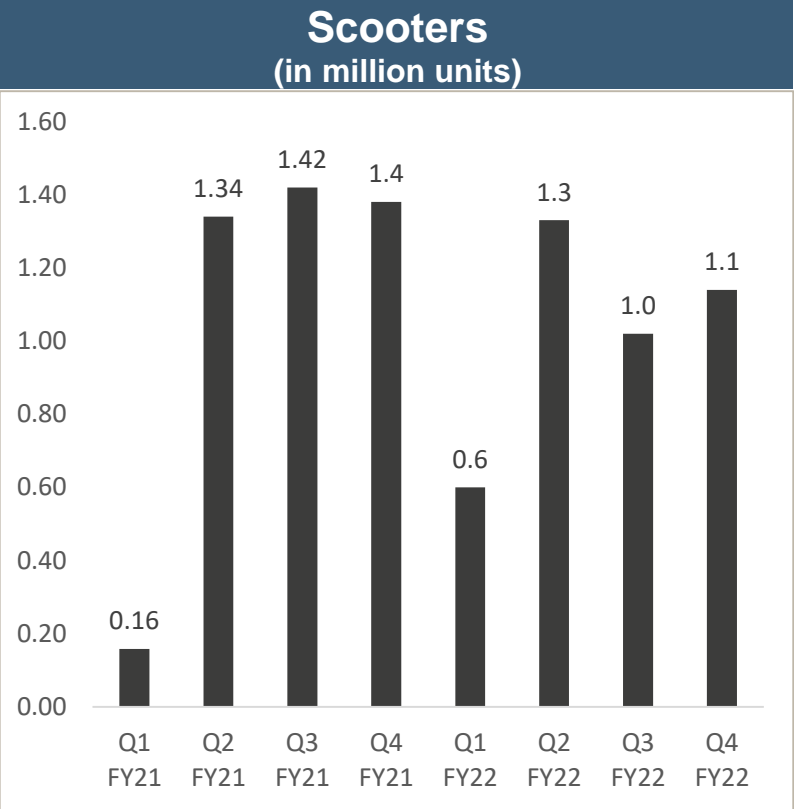
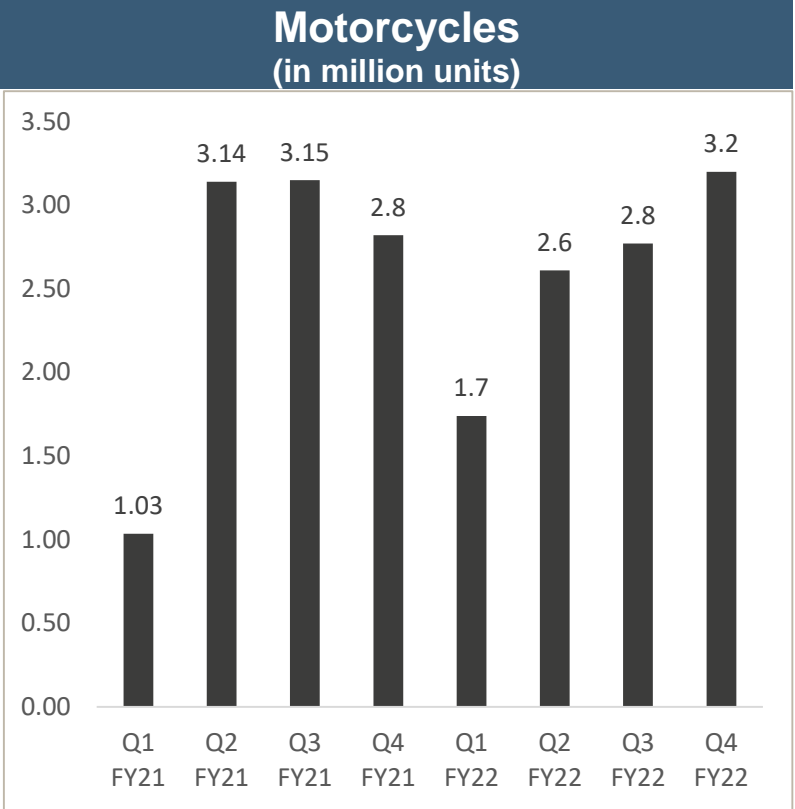
SOURCE: Industry, SIAM, CRISIL Research

## Utilisation levels

Player	Effective Capacity* in mn (as on 31st Mar 2022)	Production (in mn) FY22	Capacity utilization FY22
Hero Motocorp	11.0	4.82	53%
Bajaj Auto	5.4	3.80	67%
HMSI	7	3.79	61%
TVS Motor Company	4.5	3.13	65%
India Yamaha Motors	1.6	0.74	46%
Suzuki Motors	1.1	0.75	58%
Royal Enfield	0.95	0.60	66%
<b>Industry Total</b>	<b>33.2</b>	<b>17.7</b>	<b>53%</b>

Capacity utilization estimates of Bajaj Auto and TVS Motor Co Ltd exclude three-wheelers

# OEMs increased stock levels for motorcycles anticipating good demand



Source: SIAM, CRISIL Research

- Muted consumer sentiments have led to dealer inventory being above normal since H2 FY21.
- With high stock levels prevailing in the market, OEMs are expected to liquidate inventory by end of FY23 before BS VI-B comes into play by 1<sup>st</sup> April, 2024
- Production cuts might be announced during H2 FY23

# Domestic – annual forecast

	Two-wheelers	Motorcycles	Scooters	Mopeds
FY 20 volumes	17.4	11.2	5.6	0.64
YoY Growth in FY20	18%	18%	17%	28%
FY 21 volumes	15.12	10.02	4.48	0.62
YoY Growth in FY21	13%	11%	20%	3%
FY 22E volumes	13.46	9.0	4.0	0.47
YoY Growth in FY22E	11%	10%	11%	23%
FY 23 volumes	13.2-13.7	8.90-8.95	4.03-4.08	0.45-0.50
YoY Growth in FY23P	(1)-1%	(2)-0%	0-2%	(2)-0%

NOTE: Volumes in million units;

YoY Growth in red indicates a negative growth

YoY Growth in green indicates a positive growth

Source – SIAM, CRISIL Research

# Domestic – quarterly forecast

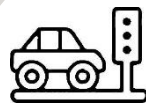
Period		Two-wheeler		Motorcycles		Scooters		Mopeds	
		Volume (mn)	YoY Growth	Volume (mn)	YoY Growth	Volume (mn)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q4	4.4	25%	2.8	25%	1.4	25%	162	15%
	Q1	2.4	86%	1.7	93%	0.6	75%	69	28%
FY22P	Q2	4.6	(12)%	2.6	(17)%	1.3	(1)%	164	(17)%
	Q3	3.6	(12)%	2.4	(22)%	1.0	(28)%	160	(24)%
	Q4	3.4	(23)%	2.2	(22)%	1.1	(24)%	109	(30)%
	Q1	3.58-3.63	49-51%	2.49-2.54	44-46%	0.95-1.00	66-68%	95-100	42-44%
FY23P	Q2	3.75-3.80	(9)-(7)%	2.35-2.40	(10)-(8)%	1.23-1.28	(7)-(5)%	143-148	(13)-(11)%
	Q3	3.55-3.60	(2)-0%	2.42-2.47	(1)-1%	0.97-1.03	(2)-0%	130-135	0-2%
	Q4	2.48-2.53	(26)-(24)%	1.58-1.63	(28)-(26)%	0.78-0.83	(25)-(23)%	90-95	(16)-(14)%
	Q1	3.58-3.63	49-51%	2.49-2.54	44-46%	0.95-1.00	66-68%	95-100	42-44%

Source – SIAM, CRISIL Research

- After clocking some traction in Q2, scooters segment registered near comparable numbers in Q4FY22; improvement in economy, pent up demand, opening-up of offices backed this demand
- However, motorcycle demand was significantly impacted on account of sluggish rural sentiments
- Economy has started reviving with offices and schools opening up, but increase in fuel prices is a major concern for growth going forward
- Going ahead in FY23, uncertainty revolves around increasing fuel prices, increasing vehicle prices and uneven rainfall spread dampening rural sentiments in certain states. Further, inventory liquidation in Q4 FY23 on account of BS VI-B regulation to be implemented from 1<sup>st</sup> April 2023 to negatively impact industry.

# Stakeholder interactions

## OEM



- Urban demand witnessing revival, however rural demand remains sluggish.
- Favorable urban demand pushing scooter sales
- Motorcycle demand impacted as prices have increased 5-8% in FY22
- With increasing fuel prices and increasing raw material prices due to the Russia-Ukraine crisis the vehicle prices are further expected to increase by 4-6% in FY23
- This will impact rural sentiments negatively and thus motorcycle demand is expected to decline
- Reopening of schools/ colleges/ offices to provide a push to scooter sales
- Inventory levels are high, however due to implementation of BS VI-B from 1<sup>st</sup> April 2023, OEMs are expected to liquidate stock levels in Q4 FY23.
- Monsoon remains a key monitorable

## Dealer



- Post withdrawal of lockdown restrictions, there was a gradual increase in demand, but before it would pick up pace, the repercussions of war between Russia-Ukraine hit the Auto Market.
- Petrol prices have been skyrocketing and raw materials prices have also been increasing, both collectively will have a negative impact on the demand of two-wheelers
- With schools, colleges and offices operating with full capacities, the demand was supposed to pick up some pace, but it remained sluggish, because stagnant income levels of customers possibly could not meet the increased vehicle prices, hence the gap.
- Supply side constraints are there which has led to increase in waiting periods by about 3-4 weeks than usual
- Recent price hike of around 1.5-2% WEF 1<sup>st</sup> April 2022 (FY23)
- Enquiries to conversion ratio for EV two-wheelers have been on the rise

## Financier



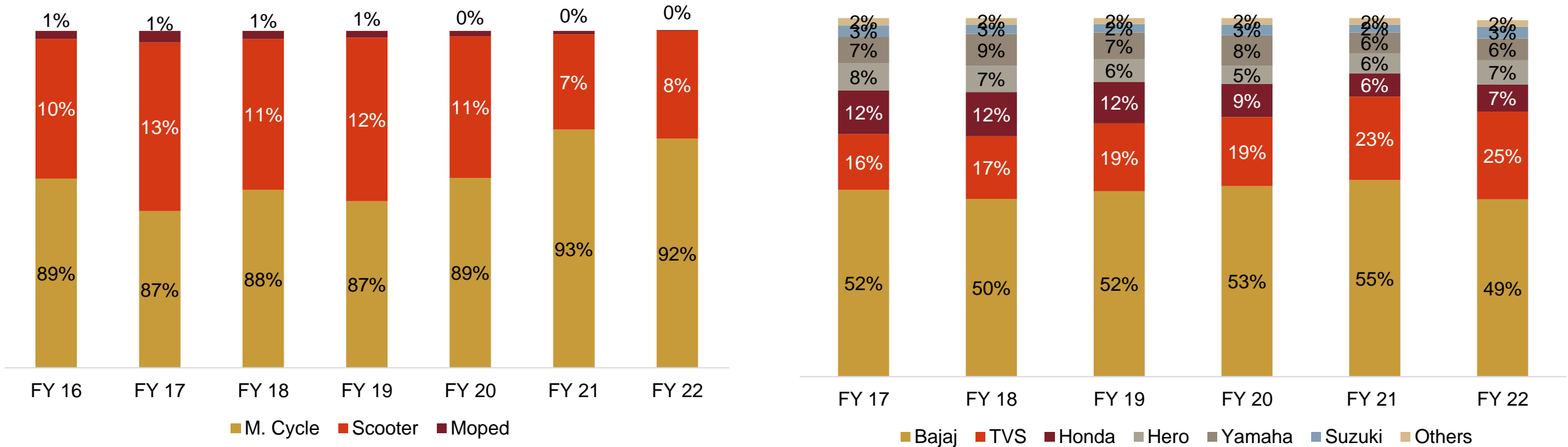
- No major change in the LTVs or interest rates.
- Interest rates remain favorable
- Gradual improvement in demand expected
- Disbursement for the year expected to revive from a low base with demand improvement as well as increase in vehicle prices

Source – Industry, CRISIL Research

# Two-wheeler exports

# Export demand witnessed robust growth in FY22

Bajaj loses share to TVS, HMSI amidst the rise in scooter exports

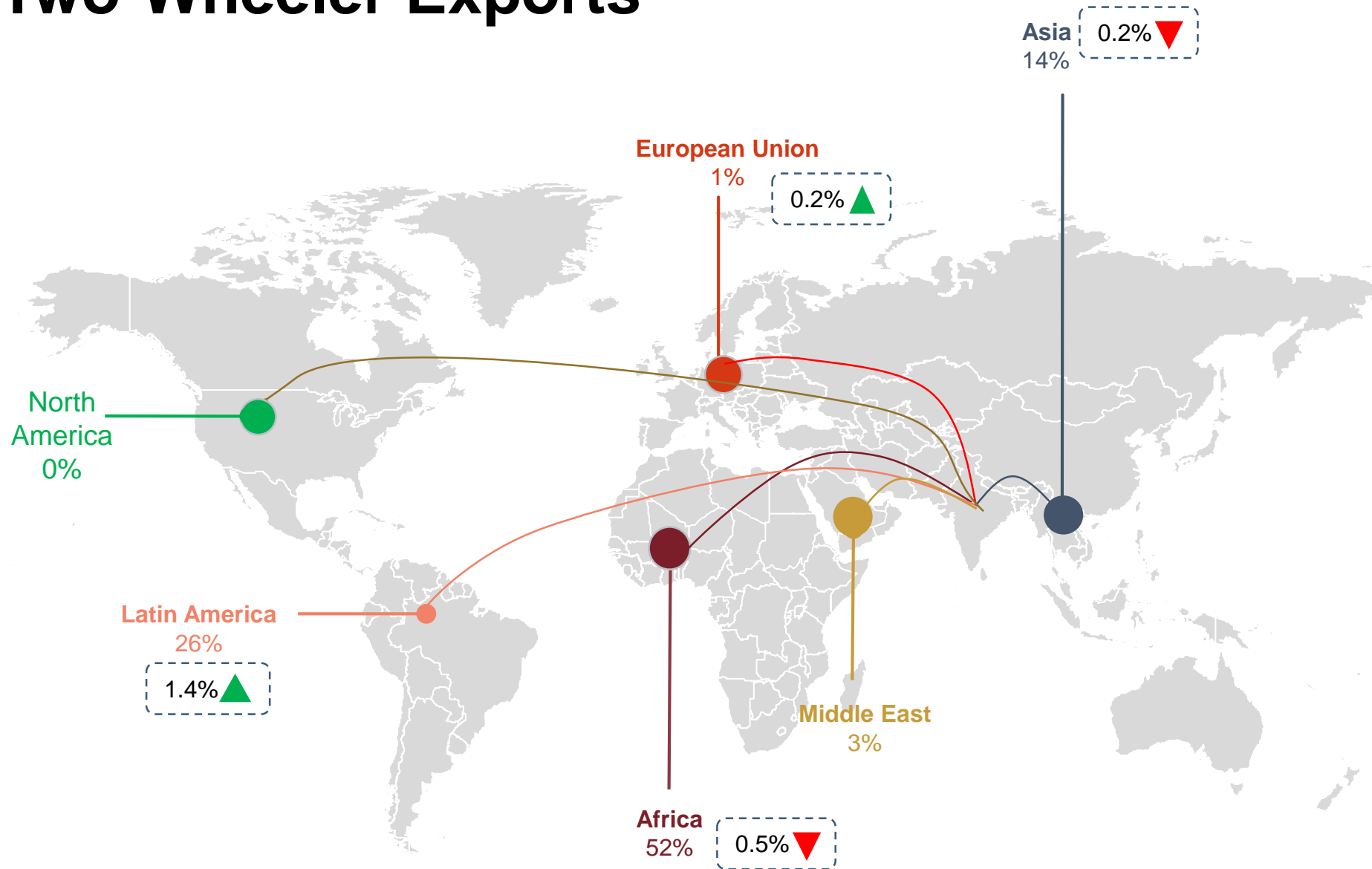


Source: SIAM, CRISIL Research

- Exports to Africa have been affected due to increasing covid cases and inadequate vaccination progress.
- Exports to key destinations like US and Europe remained robust over low base.
- There has been one price hike in July and another one in October driven by commodity prices.
- Overall demand has been growing in international markets.



# Two-Wheeler Exports



- Lower spread of covid in African region has proved beneficial for motorcycle exports & is expected to support exports during FY22 as well
- Two-wheeler in LATAM is now used for personal commute due to social distancing requirement which is aiding exports from India.
- Covid impacted demand from Asian countries, however, some improvement is expected during FY22 and is visible in H1 FY22
- Firming up of crude oil prices is expected to provide impetus to two-wheeler exports.
- Implementation of RCEP can have sizeable impact on Indian 2W exports. It needs to be monitored closely

# Commercial Vehicles

# Overview of end-use segments – cargo

Segments (% Growth Y-o-Y)	FY 18	FY 19	FY 20	FY 21	FY 22 P	FY 23 P
Coal (production)	2.0	7	0	(4)	11	6-8
Iron ore (production)	3	3	19	(17)	22	5-7
Steel (consumption)	8	9	2	(5)	7	6-8
Cement (consumption)	9	12	(2.4)	0.3	5.8	5-7
Roads (Km constructed / day)	8	9	11	11	12-13	13-14
Port (traffic)	6.5	8.2	2	(5.5)	5-7	3-5
Two-wheelers (domestic sales)	14.8	5	(18)	(13)	(9)-(7)	4-6
Passenger vehicles (domestic sales)	8	3	(18)	(2)	13	16-18
Consumer durables (consumption)	5.8	7	5	(17)	12-17	8-13
E-retail	35	35-37	23	13	27	25-30
RMG (market size)	5	68	(2)	(24)	1	14-16

Core Sectors

Discretionary Products

Source: CSO, RBI, SIAM and CRISIL estimates E: Estimated; P: Projected

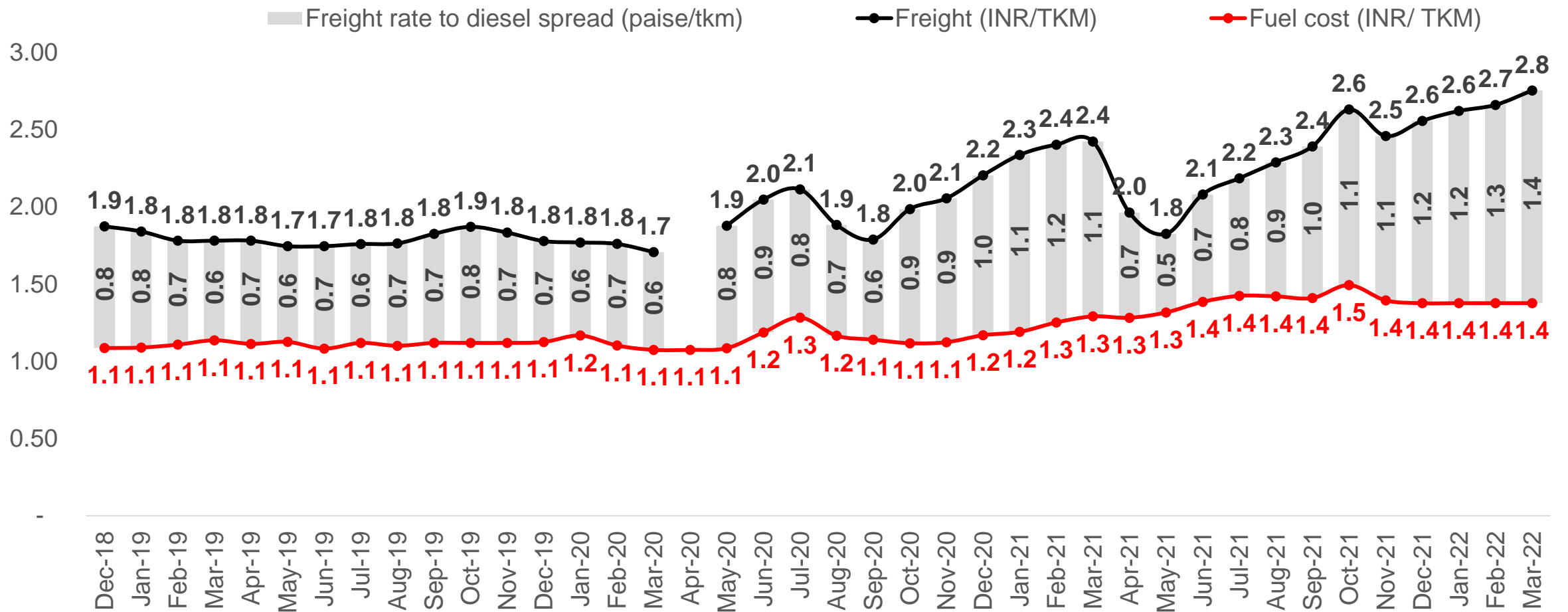
# Overview of end-use segments

Segments (% growth Y-o-Y)	FY 18	FY 19	FY 20	FY 21	FY 22 P	FY 23 P	
Dairy (production)	6.7	7	5	(4)	3	5-7	Non - Discretionary Products
FMCG	8	12	5	3.5	13-15	8-10	
Pharmaceuticals (market size)	1	15	9	14	28	(3)	
Gross school enrollment							Buses
K-12	73.4	73.4	78	74.5	74.8	75.1	
Above K-12	23.4	22.5	22.5	22.2	23.0	23.4	
IT employee base	3	4	4	9	13	5-7	
Air passenger traffic	188	209	209	63.9	104	185	
Hotel room demand	5	4	1	(51)	74	25-30	

Note – Gross enrollment ratio (GER) is the ratio of the number of students enrolled to the population of those who qualify for the particular grade level. K-12 indicates classes 1<sup>st</sup> – 12<sup>th</sup>.

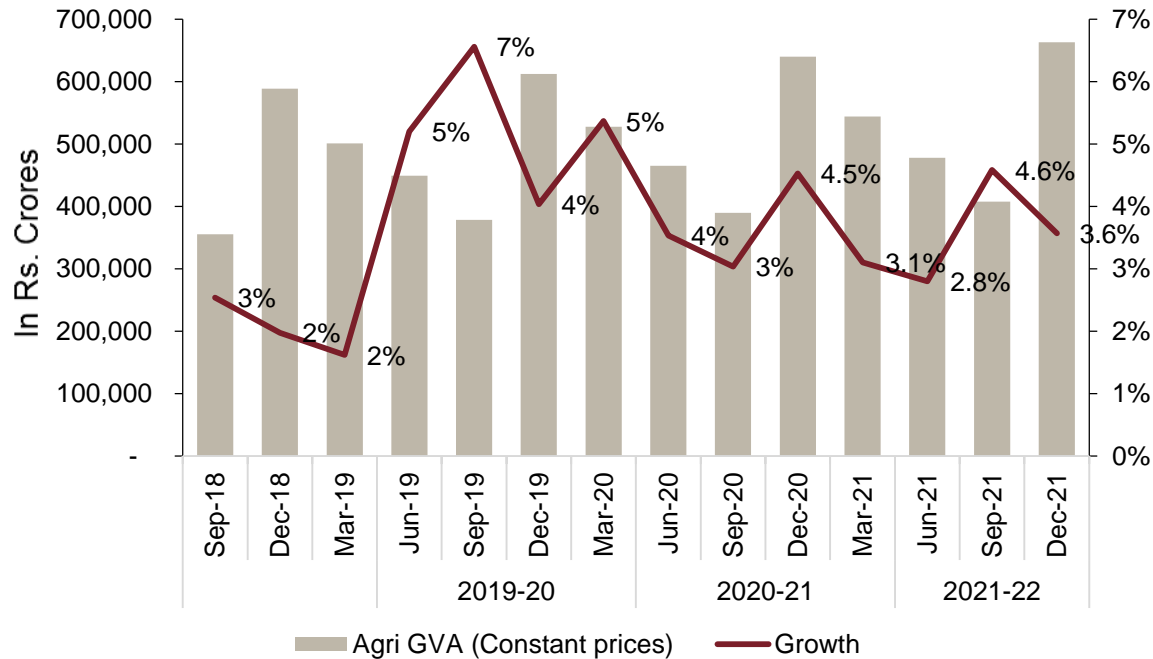
Source: NASSCOM, AAI, CRISIL Research

# Freight and diesel on a continuous improvement

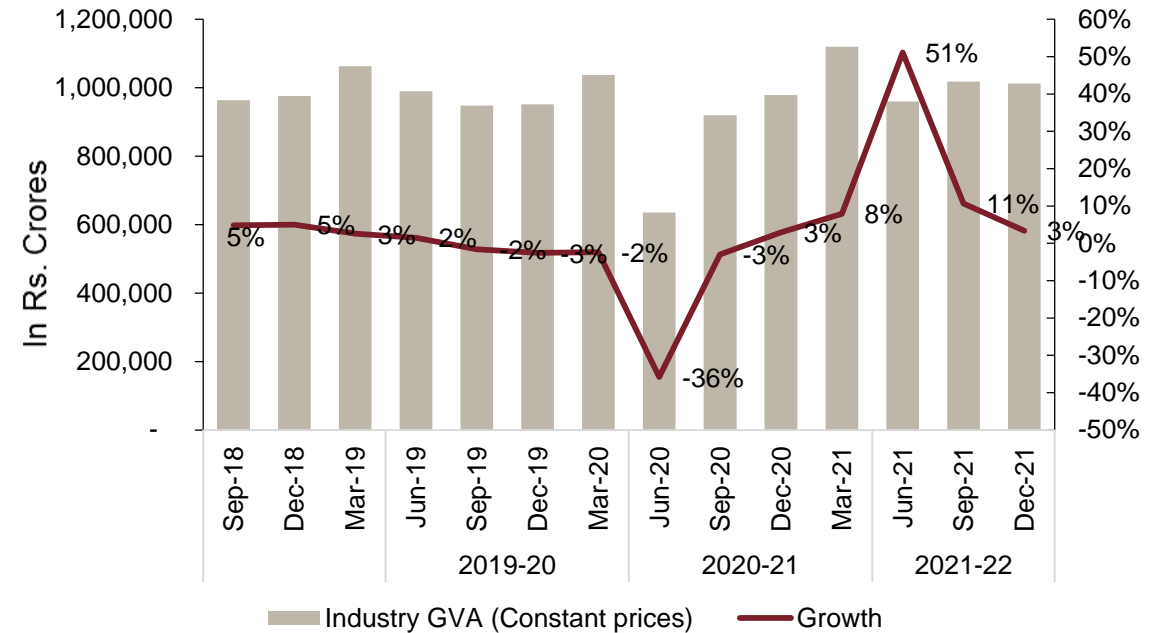


# Agriculture is expected to maintain a healthy growth momentum – growing 3.3% in fiscal 2022

Agriculture GVA growth



Industry GVA growth



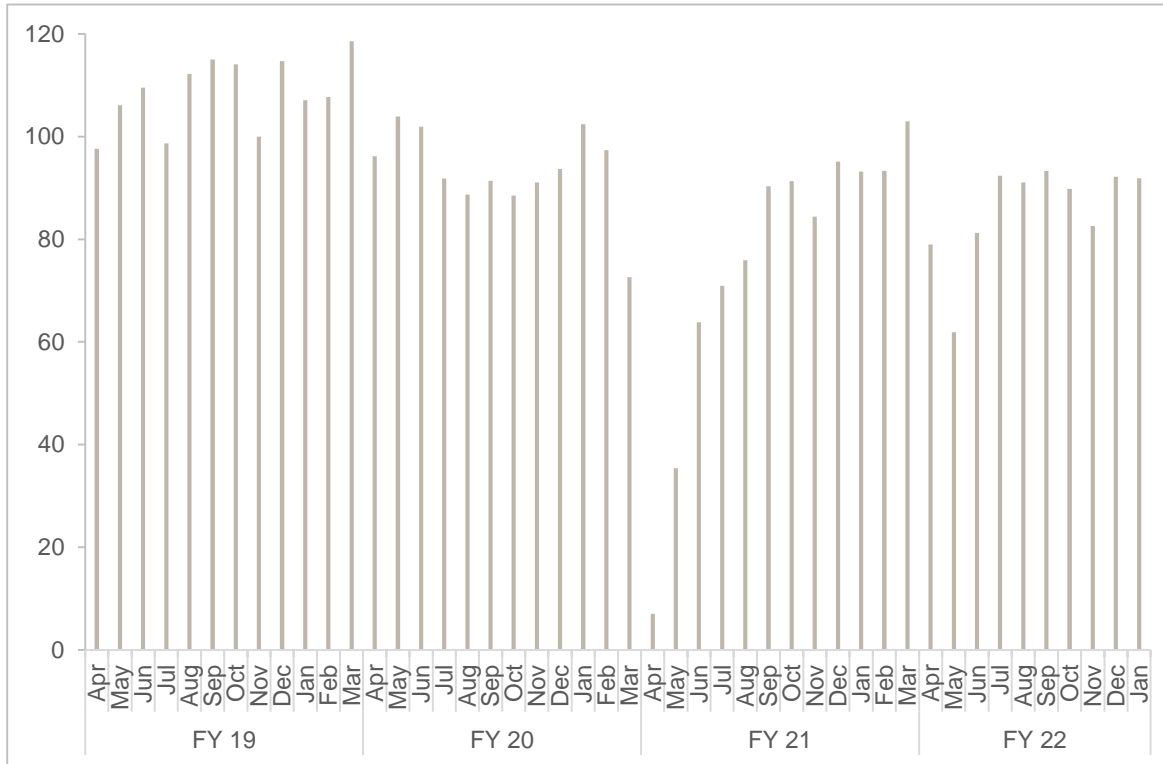
Source: MOSPI, CRISIL Research

Source: MOSPI, CRISIL Research

- Agri GDP growth of Q3 FY 2022 grew at 3.6% on-year. Growth in Q2 FY 2022 was around 4.5%
- Overall agriculture growth is expected to remain healthy at 3-3.5% in next fiscal as well, given the normal monsoon, expectation of record kharif production, and adequate reservoir levels.
- Industry GVA witnessed growth in Q3 FY22 by 3% on a growth of 3% in Q3 FY21

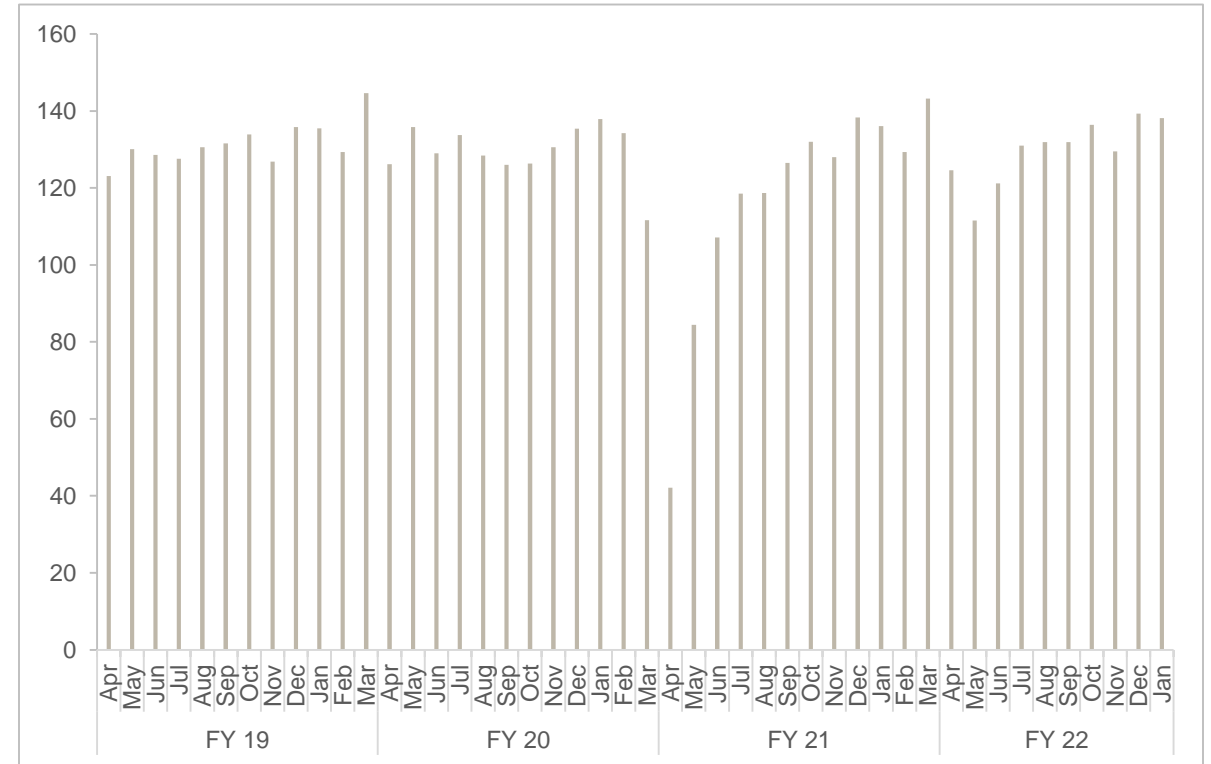
# IIP holds ground

## IIP Capital Goods



Source: MOSPI, CRISIL Research

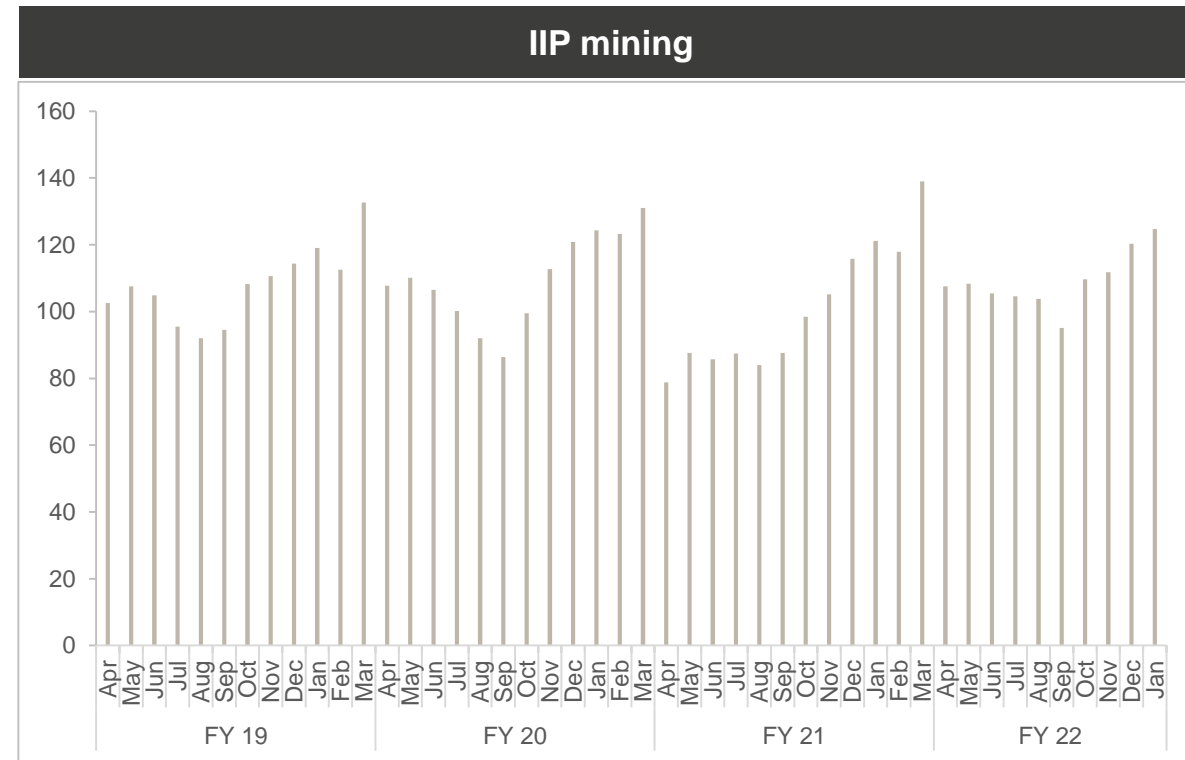
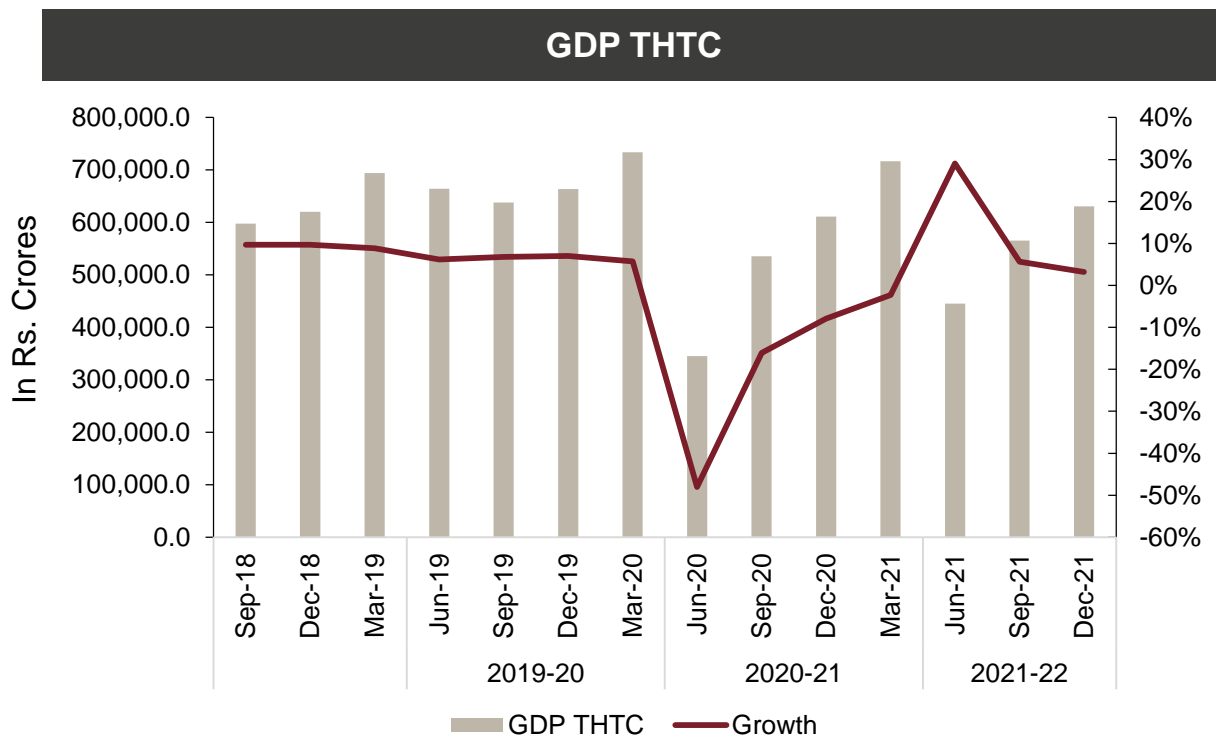
## IIP Manufacturing



Source: MOSPI, CRISIL Research

- The Index of Industrial Production (IIP) printed at 138.4 in January, same as that in December and representing 1.3% on-year growth, up from 0.7% growth in December.
- In terms of sectoral composition, while pick up in infrastructure activity provided support, capital and consumer goods performance continued to remain weak, indicating a broad based revival in the economy still remains elusive.
- Growth in manufacturing (which has the highest weight of 77.6% in IIP) improved to 1.1% in January, from 0.2% in December, suggesting some of the supply side issues may be getting eased.

# GDP THTC & IIP-Mining



NOTE: THTC: Transport Hotel Transport Communication Services

Source- MOSPI, CRISIL Research

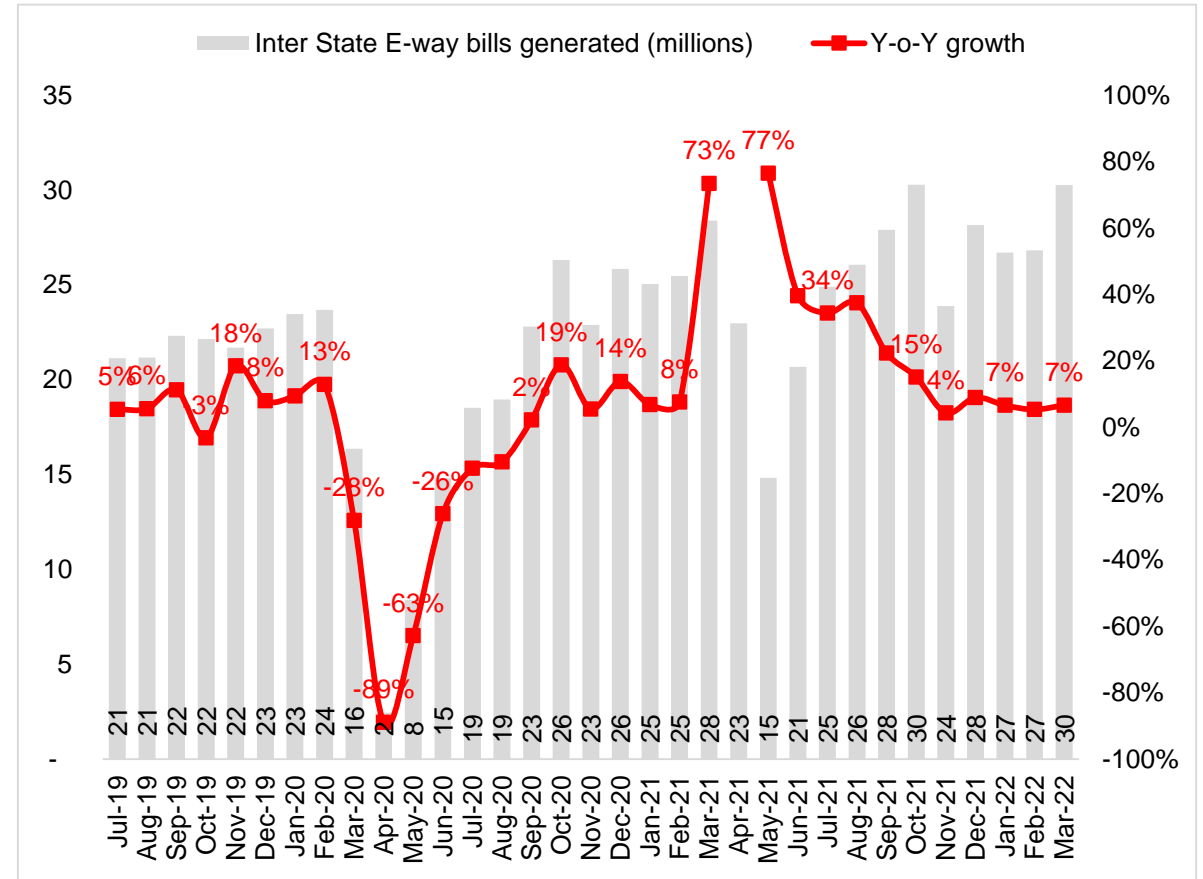
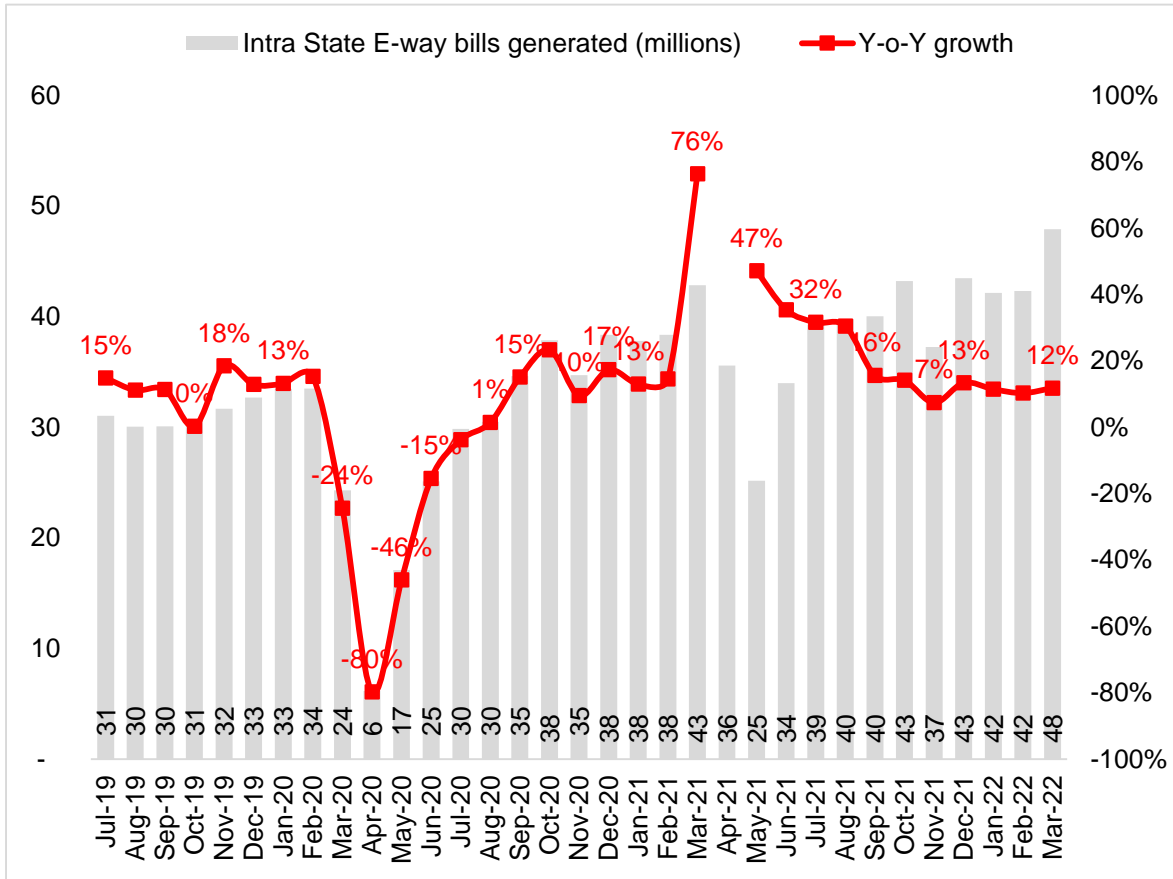
Source- MOSPI, CRISIL Research

- GDP THTC registered a growth of 3% in third quarter over Q3FY21. This segment is showing signs of revival
- Mining (14.4% weight) sector did better, growing 2.8% on-year in January, up from 2.6% in December.



# Intra state and Inter state E-waybill trend

Number of E-way bills generated in India (millions)

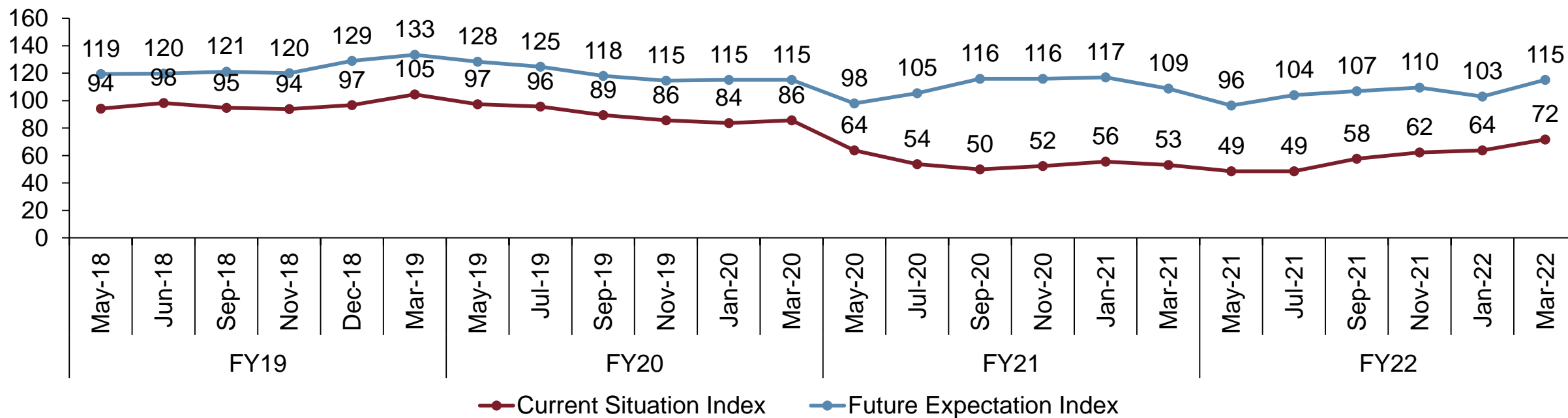


Agri, last mile distribution and market load operations do not come under ambit of E-way bill hence the E-way bills mentioned here may not represent the entire movement of goods in the country

Source: GST Network, CRISIL Research,

# Perceptions and Expectations on the General Economic Situation

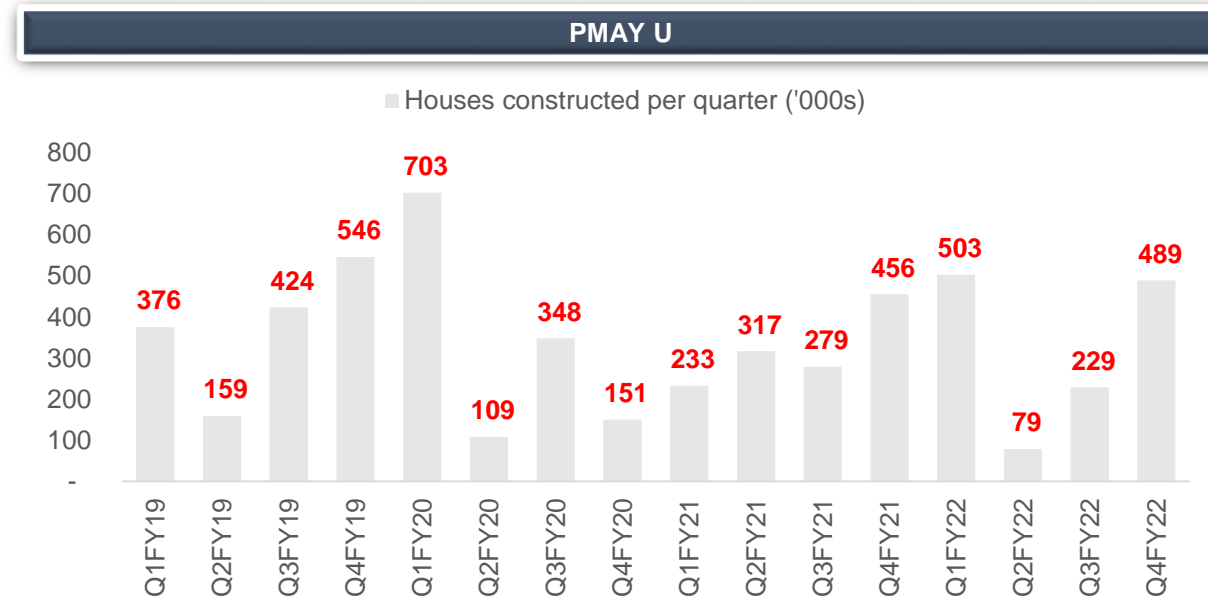
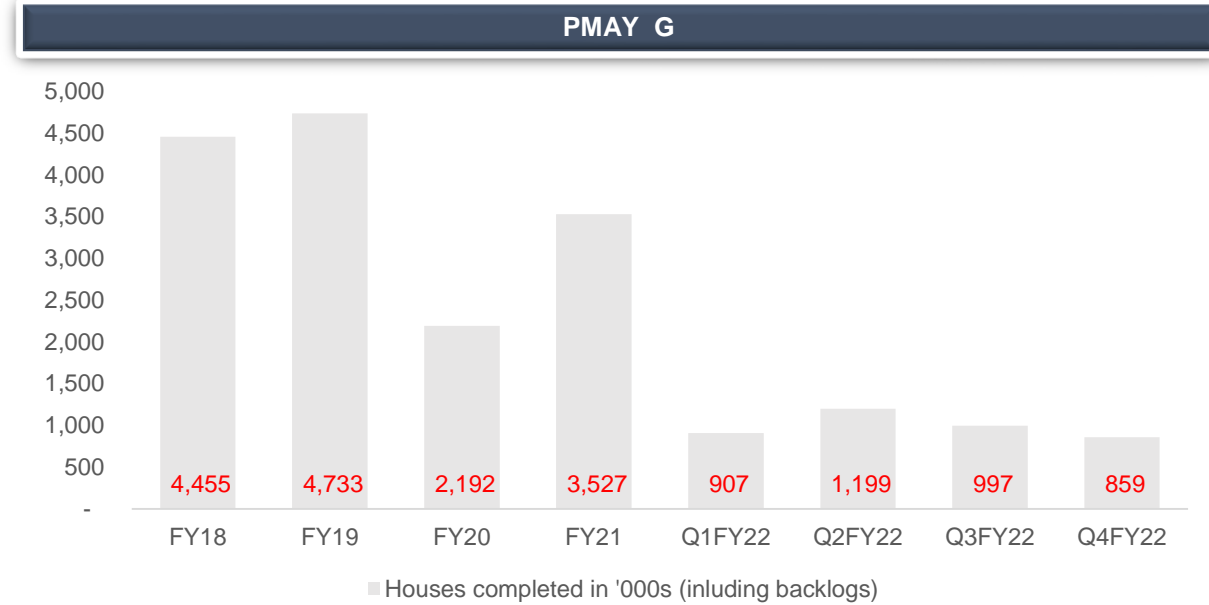
## Consumer Confidence Index



Source- RBI, CRISIL Research

- Consumer confidence for the current period continued on its recovery path, witnessed since mid-2021 though the assessment compared to a year ago remained in negative zone. The current situation index improved further in March 2022 on the back of improved sentiments on general economic situation, employment and household income.
- One year ahead outlook, as measured by the future expectations index (FEI), also continued on its recovery path which was interrupted by a dip in the January 2022 round at the peak of Omicron variant impact of COVID-19

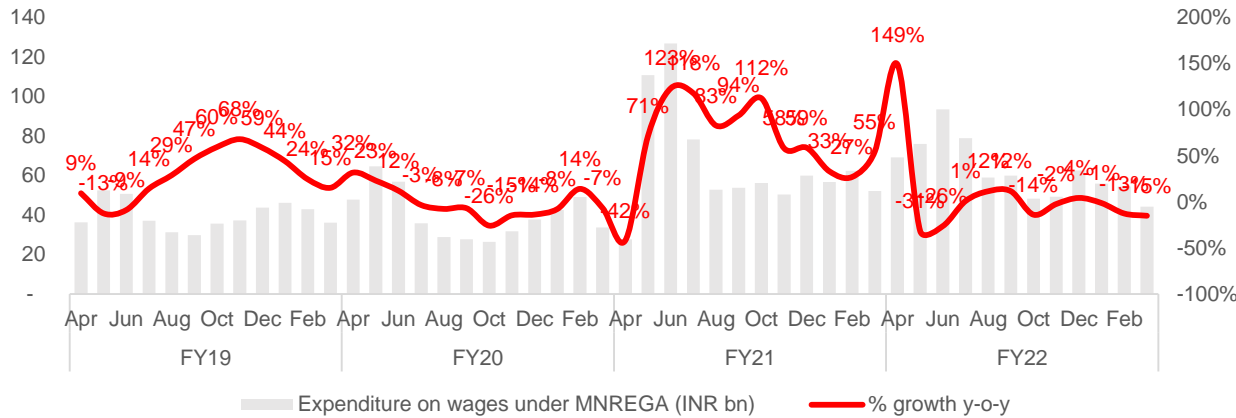
# 1.23 cr houses sanctioned under PMAY-Urban, 58.01 lakh units already built



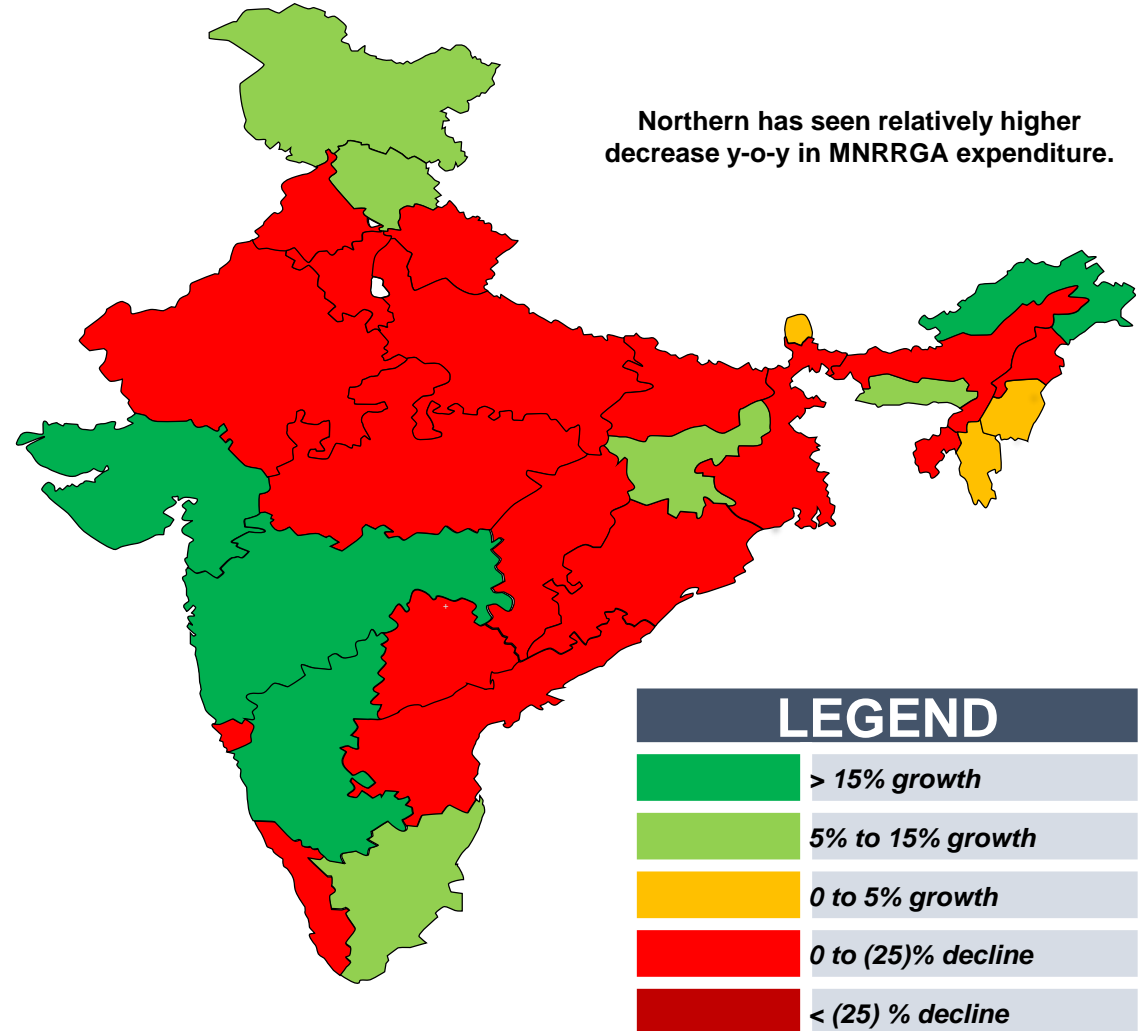
- Out of the total sanctioned houses under PMAY-Urban, 97.02 lakh have been grounded for construction and 58.01 lakh units have already been completed or delivered to beneficiaries.
- The highest execution was when there were elections in FY19 post which activities have tapered off
- ~48% of the homes sanctioned being completed in the urban areas. The rural segment has fared better with a 75% completion rate.

# After a record spending in FY21, MNREGA scheme expenditure tapered down in FY22

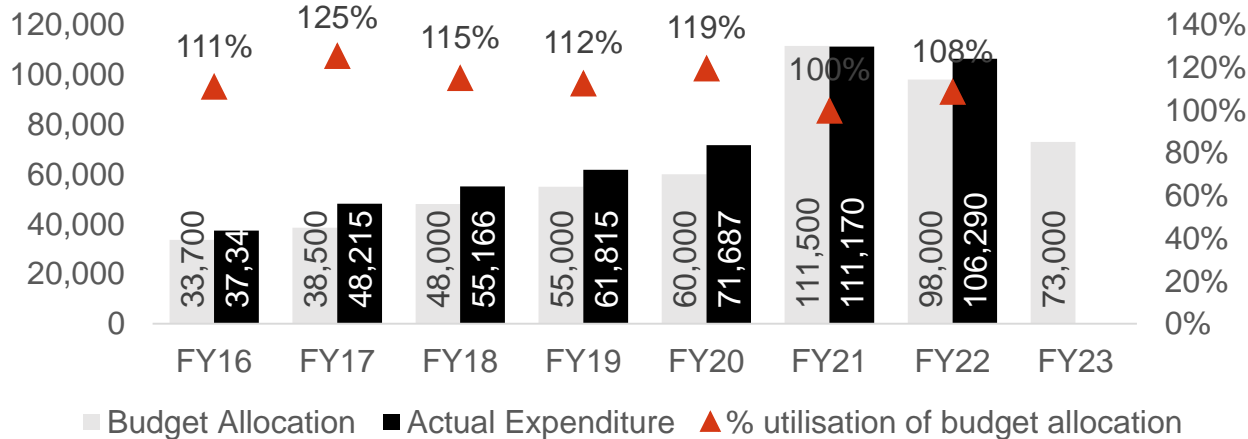
### MNREGA wages growth



### State wise growth in MNREGA wages expenditure for FY22

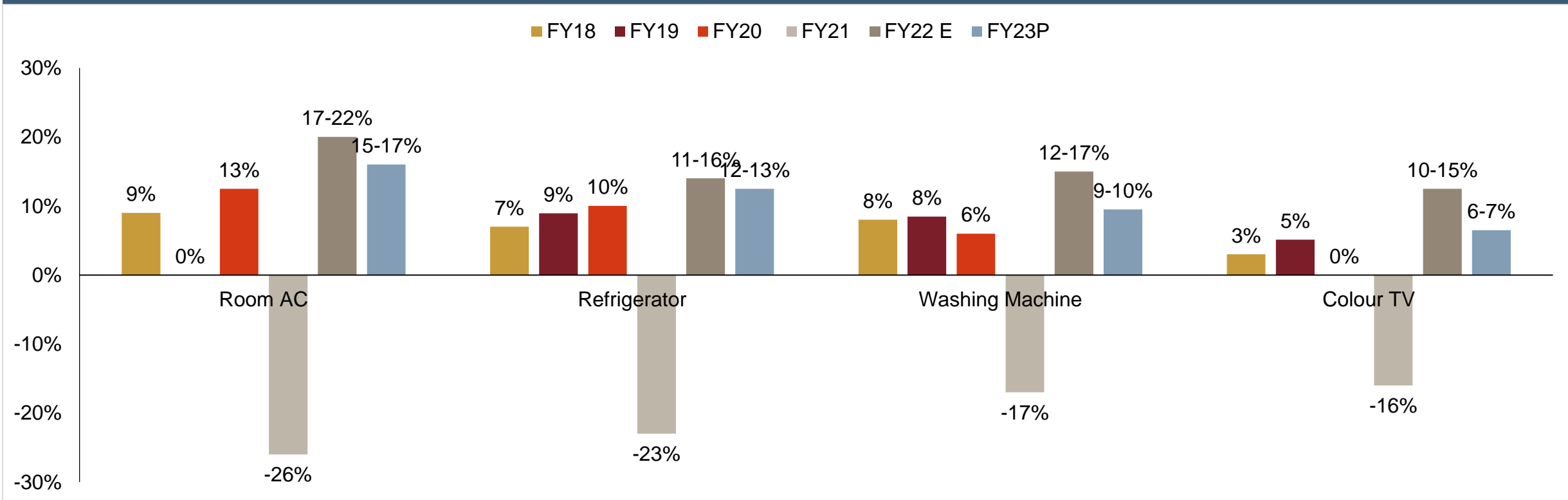


### The MNREGA scheme has a history of overshooting budget



# Demand for household appliances industry to rise by 8-13% in FY23 to be propelled by low penetration and rising affordability

Trend in annual volume growth across consumer durables and automobiles



Source: CRISIL Research

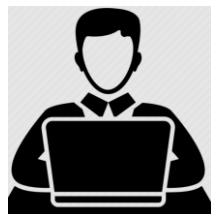
- The household appliances sector is expected to witness 8-13% growth in fiscal 2022 on a low base of previous fiscal, expected increase in discretionary spend and waning impact of pandemic.
- The CTV segment is expected to witness 6-7% growth in fiscal 2023 on account of preference for larger screen sizes, higher discretionary spending and waning impact of the pandemic.
- The Washing Machine segment is expected to witness 9-10% growth in fiscal 2023 on account of people's focus on hygiene and a higher discretionary spending.
- Higher discretionary spending, no rating revision and waning impact of the pandemic, will help refrigerator demand grow by 12-13% in fiscal 2023.
- AC demand is expected to rise by 15-17%.

# Buses demand to rise with economy opening up



Segments	FY 18	FY 19	FY 20	FY 21	FY 22 P	FY 23 P
No of K-12 institutions (million)	1.56	1.56	1.65	1.62	1.65	1.69
Gross enrolment ration (GER) (%)	73.4	73.4	78	74.5	74.8	75.1

- Covid wave 2 and Omicron impacted school /college reopening for academic year 2021-22; School bus demand might come in fiscal 2023 with improvement in number of K-12 institutions and gross enrolment ratio



Segments (% Growth Y-o-Y)	FY 18	FY 19	FY 20	FY 21	FY 22 P	FY 23 P
Growth in number of IT employees	3	4	4	9	13	5-7

- The IT industry's employee base has grown in line with revenue growth in the past. However, higher adoption of non-linear services such as automation and artificial intelligence, which will improve with time, is likely to lead to lower hiring in the future.



Segment	FY 18	FY 19	FY 20	FY 21	FY 22 P	FY 23 P
Pan India hotel rooms supply	72028	75250	77410	79051	83617	91162
Occupancy rates (%)	65	65	64	31	51	60

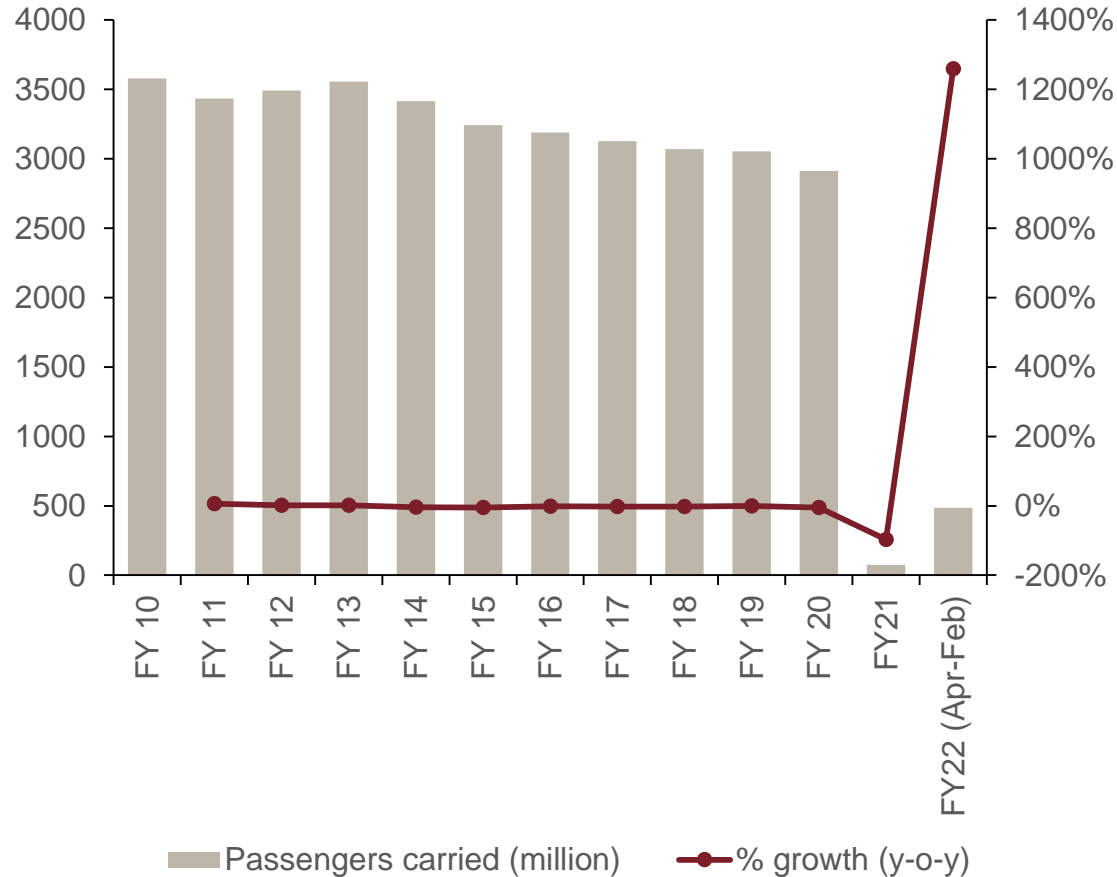
- The hotels sector is expected to witness strong growth in fiscal 2023, on the back of a recovery in major demand drivers as the economy picks up. The sector will likely reach pre-pandemic levels in absolute terms, as it emerges from the shadows of the pandemic.
- Premium hotels saw a sharp recovery in fiscal 2022 on a low base, driven by staycations and leisure demand. A revival in corporate travel and MICE segments, coupled with restarting of inbound international travel, should help the sector regain pre-pandemic levels in fiscal 2023.

## Research

Source: CSO, RBI, SIAM and CRISIL estimates E: Estimated; P: Projected

# While railways was losing share to road and air based modes earlier, with the COVID-19 effect waning passenger movement across modes to be better

Railway Passenger Traffic growth (%) - Non suburban-Reservation

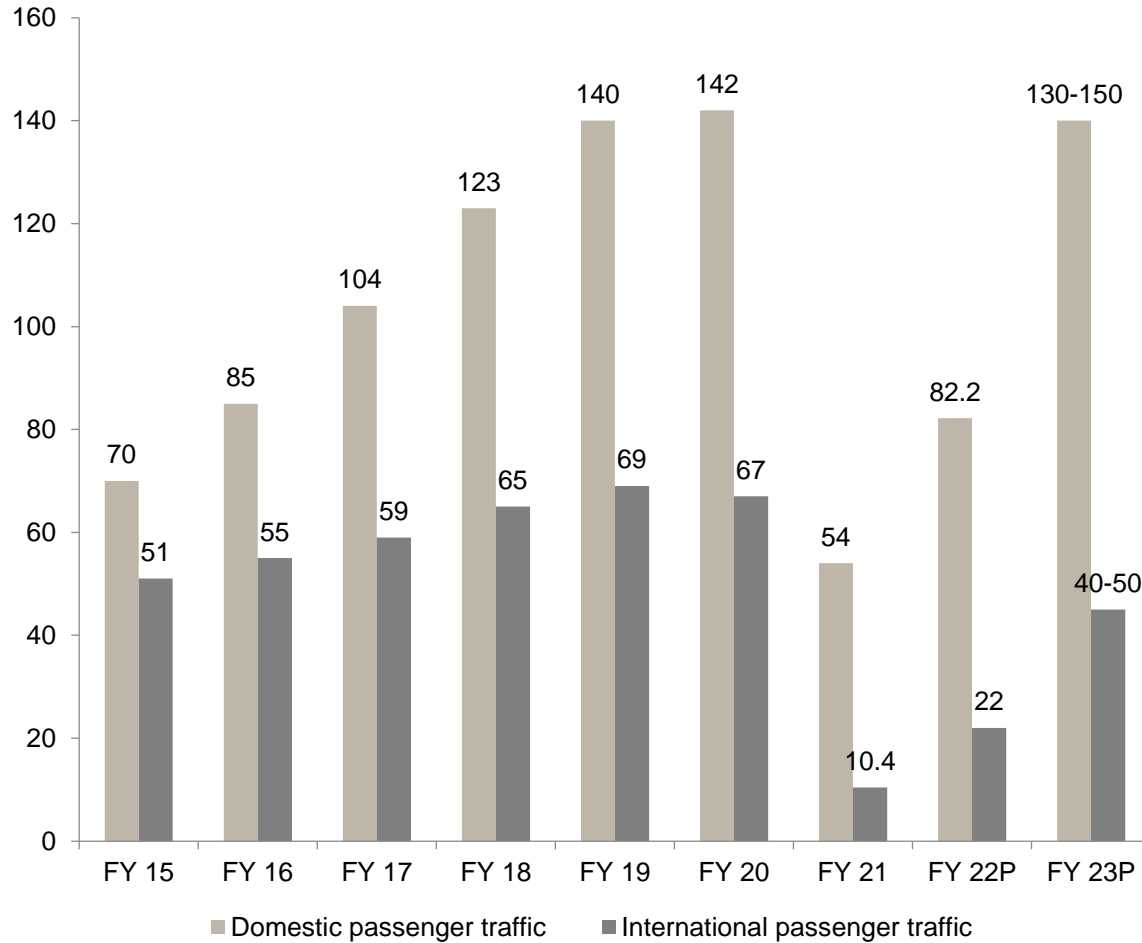


Railway Passenger Traffic growth (%) - Non suburban-Unreserved



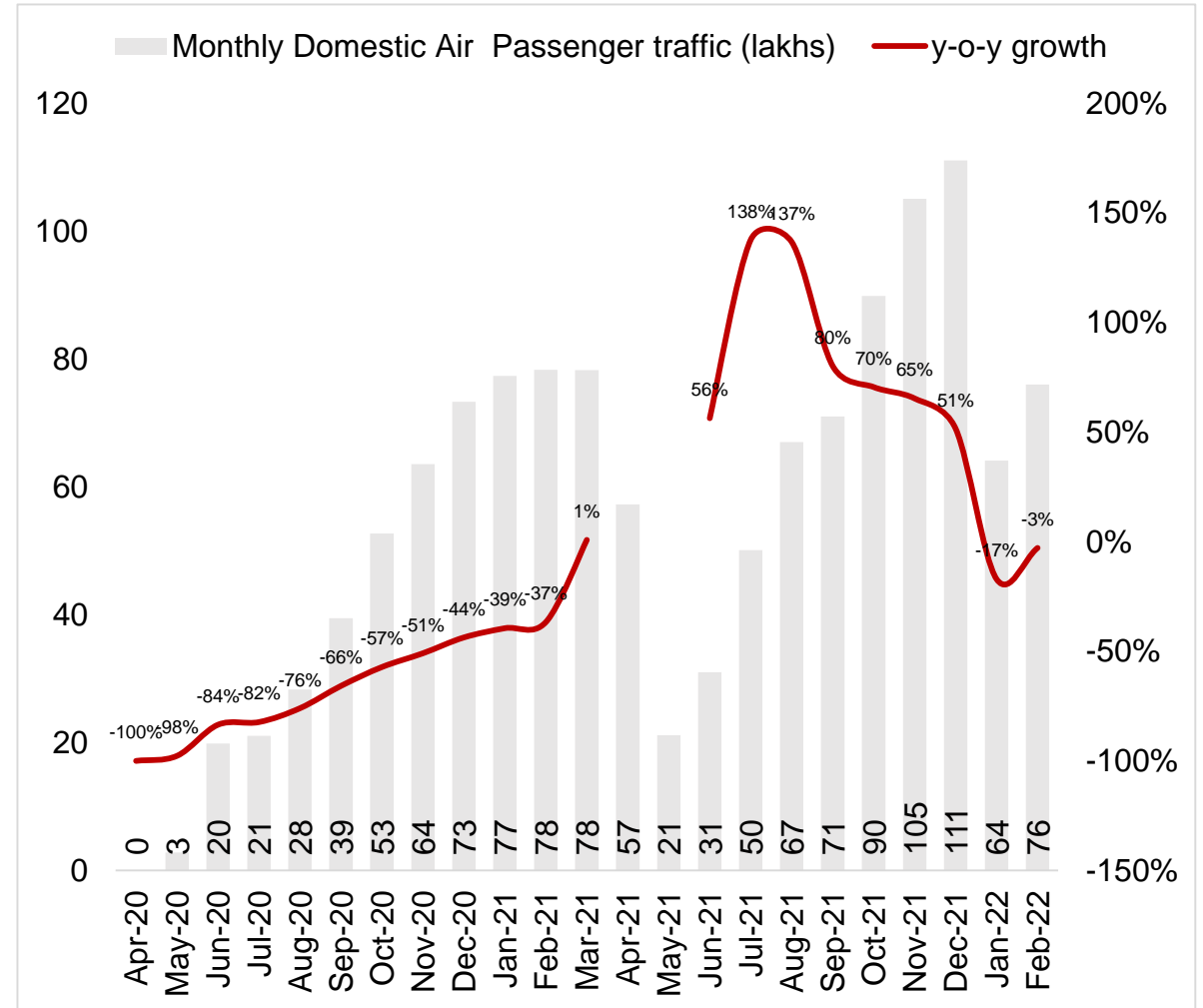
# Airlines sector expected to fly out of turbulence in FY23 in absence of further waves of pandemic

Air passenger traffic- Annual (Domestic & International)



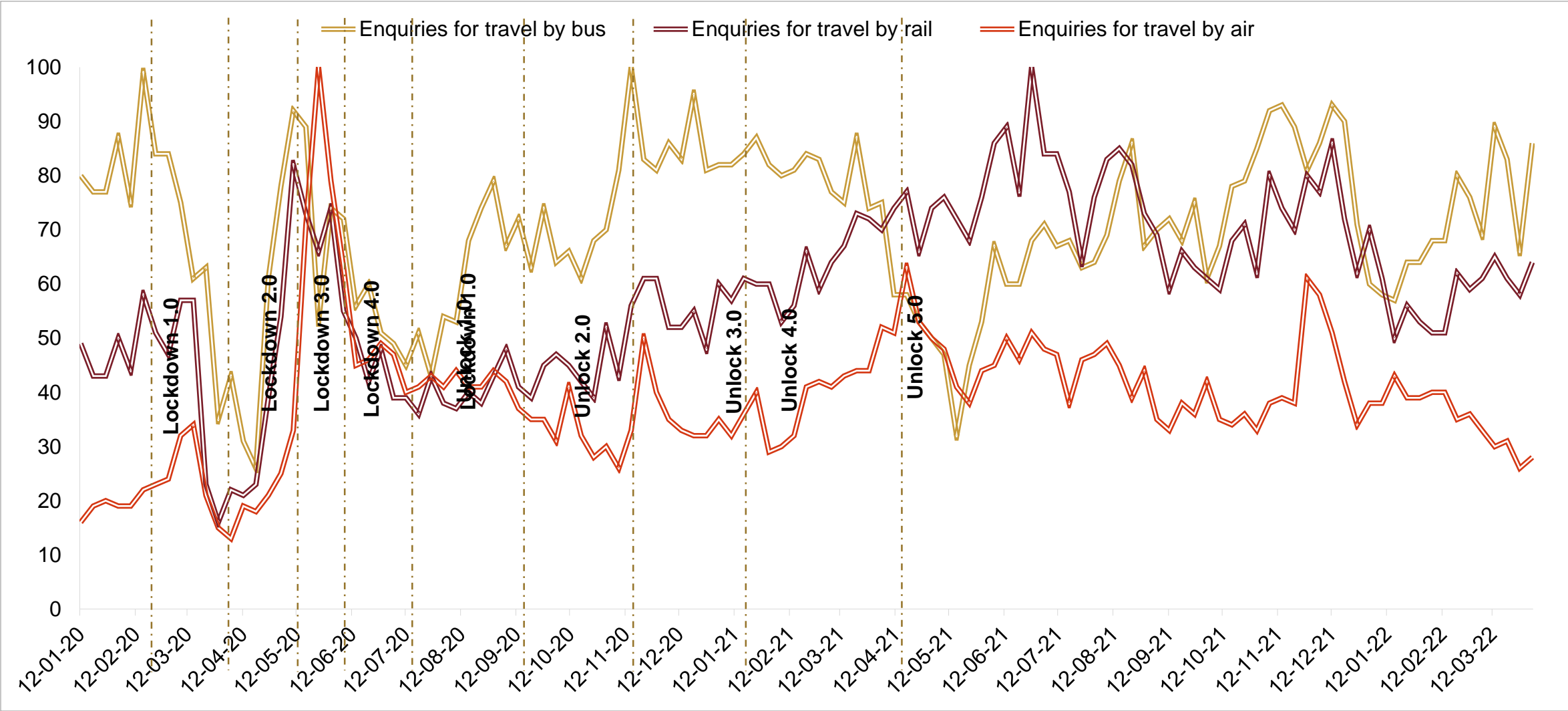
Source: Directorate General of Civil Aviation (DGCA), CRISIL Research  
 Note: E: Expected P: Projected

Domestic Air passenger traffic- Monthly



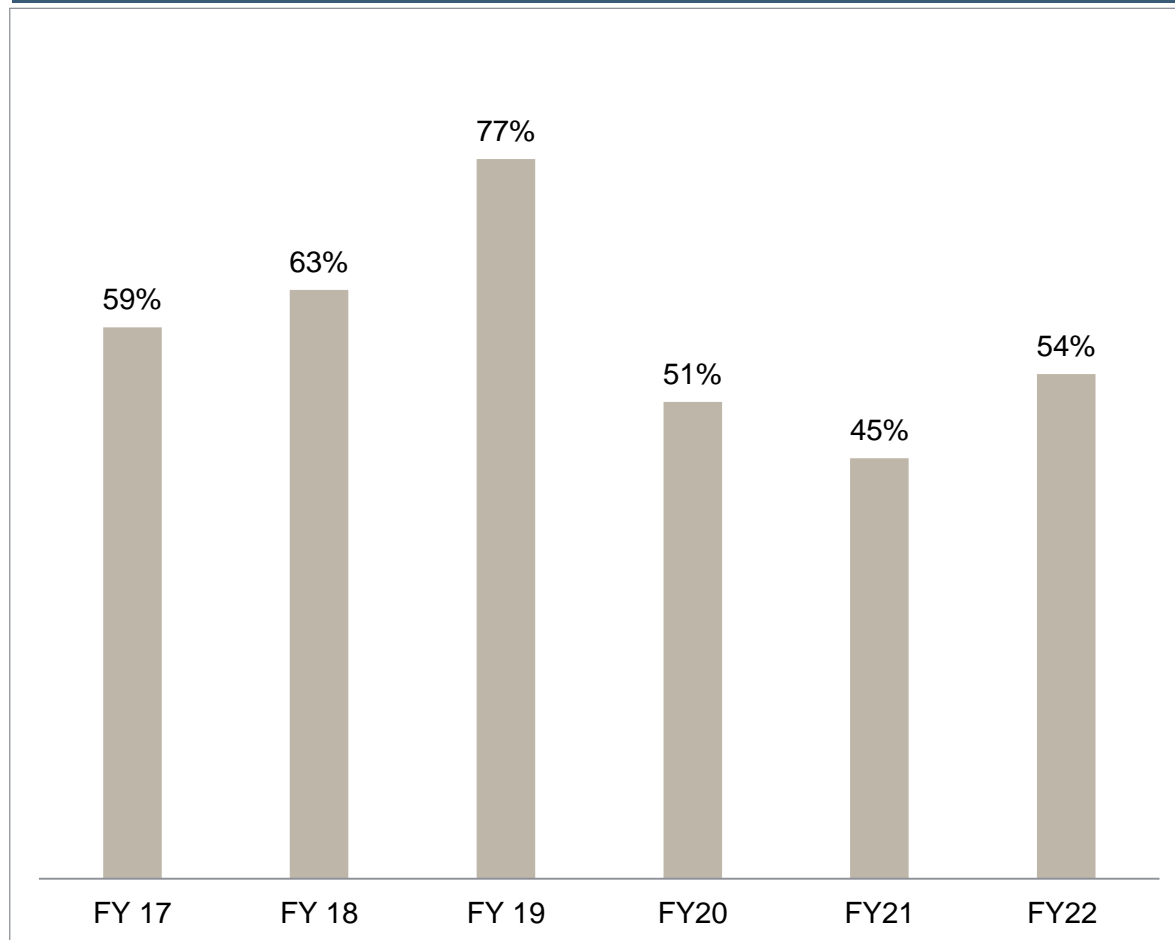


# Enquiries to travel by bus and rail remains popular, air travel has seen an uptick



# Capacity utilisation showed improvement in FY22

## Decline in capacity utilization level



Note : Capacity utilization is that of Tata Motors, Ashok Leyland, Eicher Motors and Mahindra & Mahindra representing ~ 90% of domestic sales

Source: CRISIL Research

## Player-wise capacity utilisation

Player	Effective Capacity estimate (as on 31st Mar 2020)	Production Apr-Mar FY22 (in '000)	Capacity utilization in FY22
Ashok Leyland	2,22,300	128,395	58%
Eicher Motors	97,500	56,409	58%
Tata Motors	7,62,000	357,847	47%
Mahindra & Mahindra	2,92,000	192,571	66%

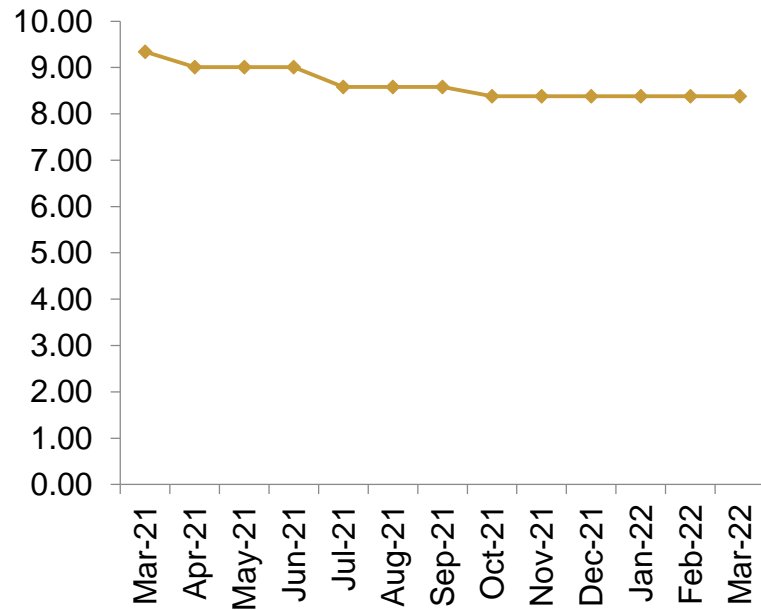
## Capacity additions

Player	Location	Capacity '000 units	Investment	Status
Ashok Leyland Ltd.	Medak, Telangana	20	Rs 5 billion	Under implementation
Ashok Leyland Ltd.	Alwar, Rajasthan	1	Rs 2 billion	Planning
VECV Ltd.	Bhopal, MP	40	Rs 4 billion	Under implementation
Volvo Buses India Pvt. Ltd.	Bengaluru, Karnataka	1.5	Rs 3 billion	Planning
Veera Vahana Udyog Pvt. Ltd.	Anantapur, Andhra Pradesh	3	Rs 1 billion	Planning

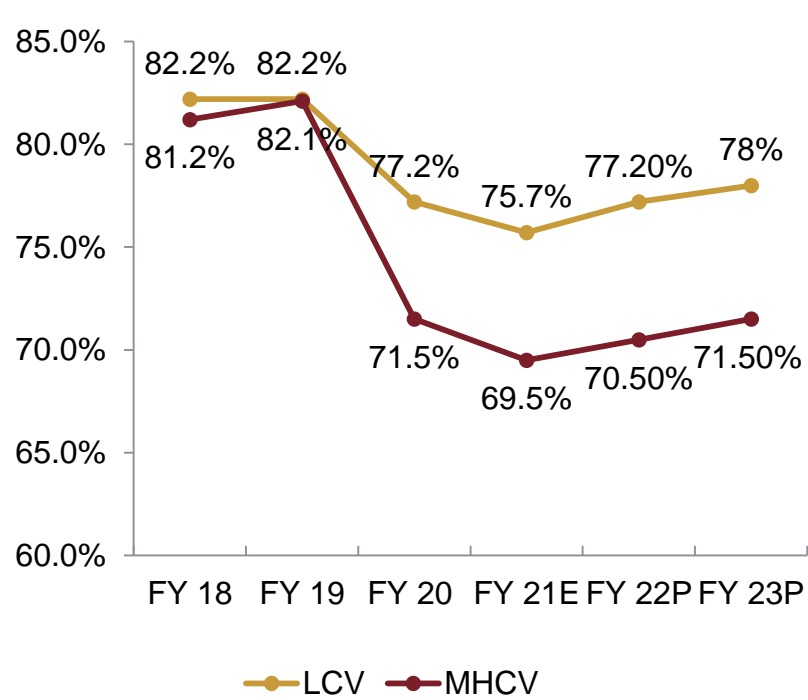
Source: Industry, CRISIL Research

# Cautious lending by banks; more focus on collections

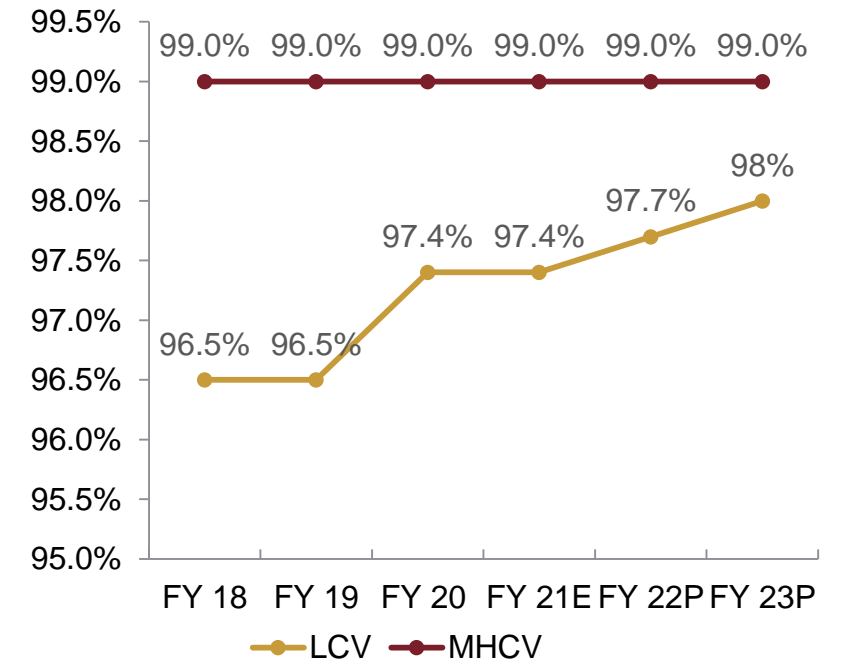
## CV finance rates (%)



## Loan-to-value for CV



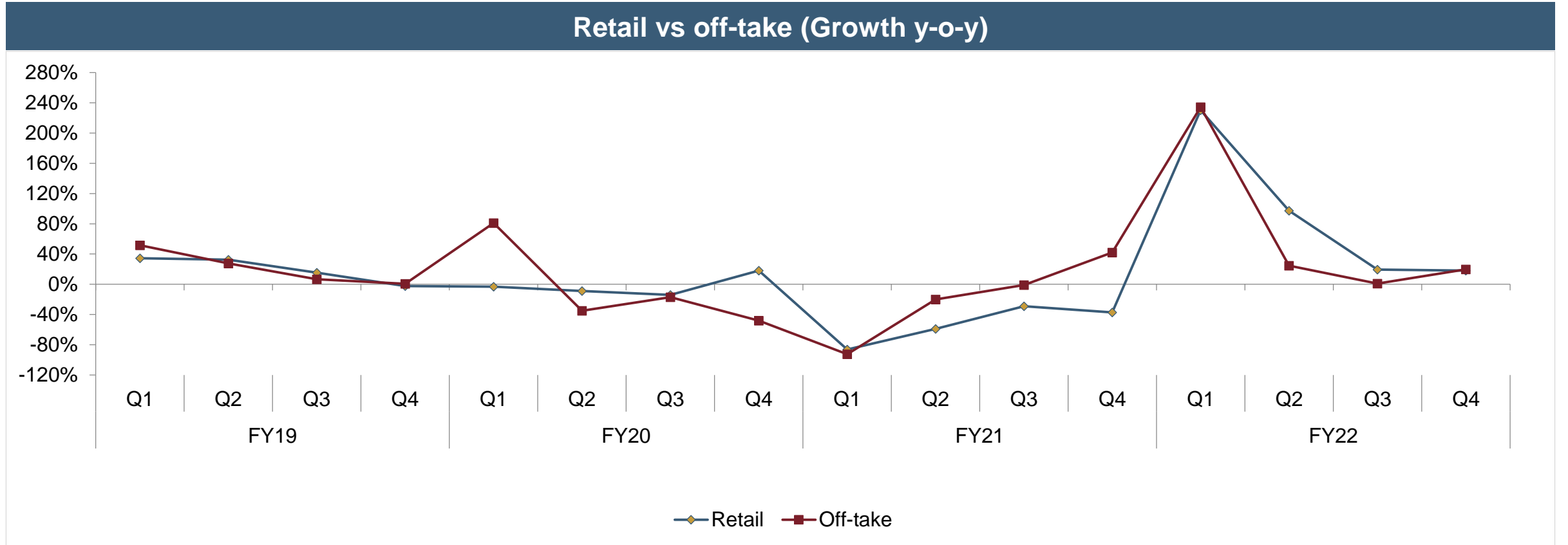
## CV finance penetration



NOTE - Interest rates are an indicative rates charged by Banks

Source: Company Reports, Industry, Crisil Research

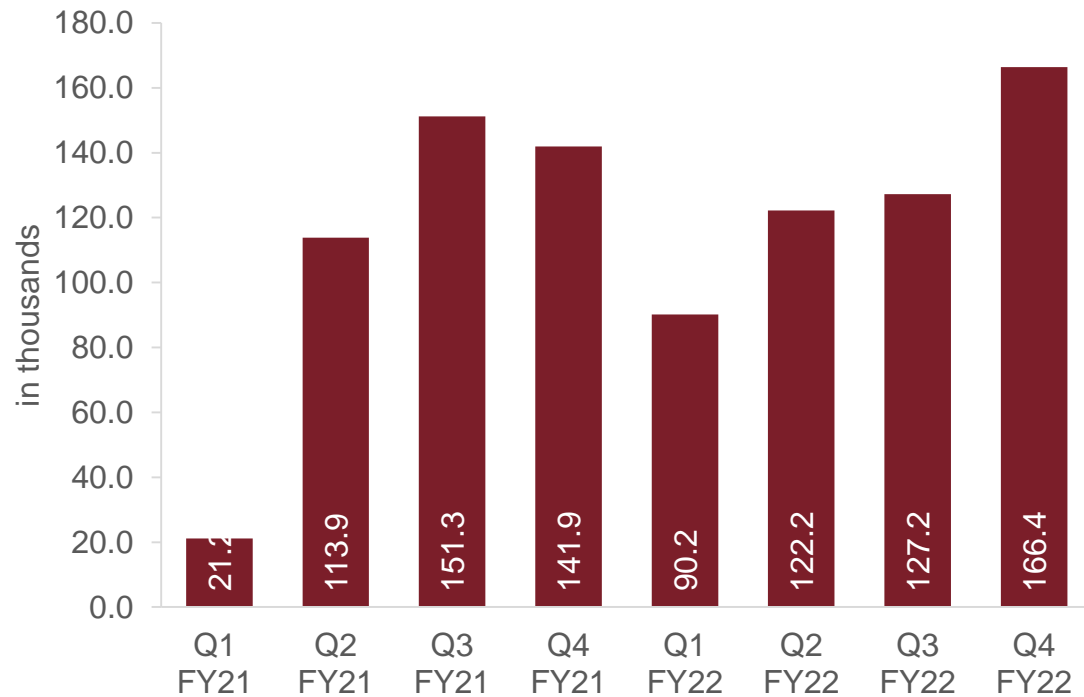
# Retail & offtake showing recovery on sequential basis



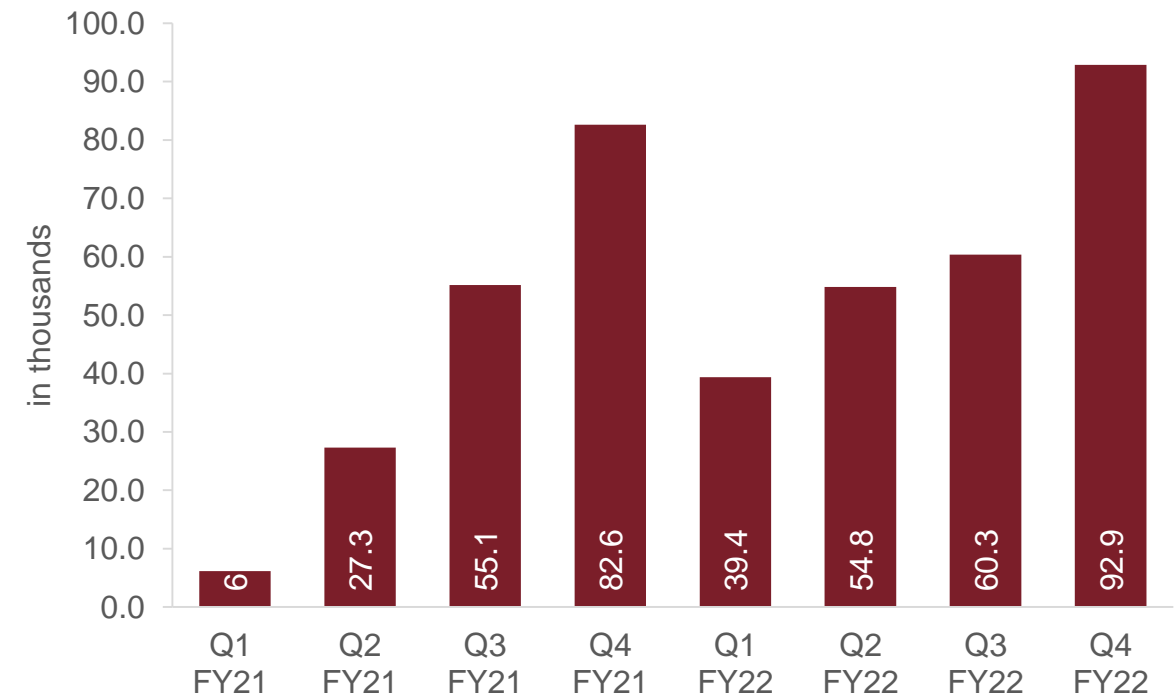
Source: SIAM, MoRTH, CRISIL Research

# Production of LCV and MHCVs in Q4 FY22

## LCV production levels



## M&HCV production levels

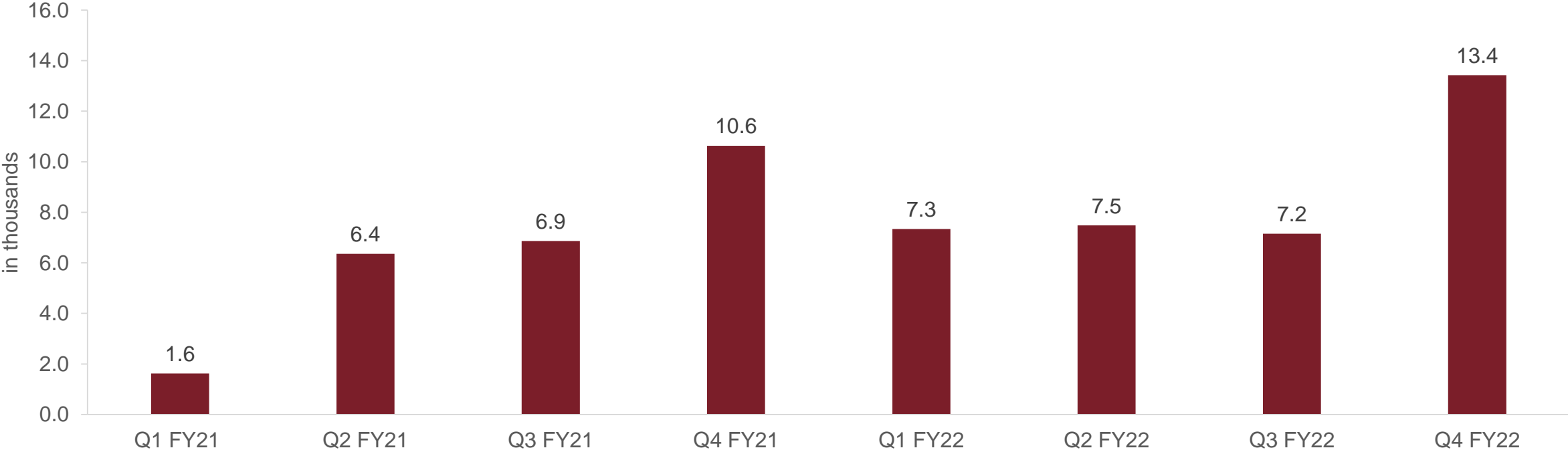


- LCV production witnessed growth of 17% yoy and MHCV of 12% yoy in Q4 FY22.

NOTE: Figures in thousands  
Source: SIAM, CRISIL Research

# Bus demand is still subdued

Buses production levels



- Demand for buses has been depressed even in Q4 FY22. Though Production saw a growth of 26% in Q4 FY22 compared to same quarter last year.

NOTE: Figures in thousands  
Source: SIAM, CRISIL Research

# Domestic – Annual Forecast (Base case)

	CV	LCV cargo	MHCV cargo	Buses
FY 21 volumes	566	395	154	17
YoY Growth in FY21	21%	12%	17%	80%
FY 22E volumes	721	458	227	30.7
YoY Growth in FY22E	26%	16%	47%	79%
FY 23 volumes	827-844	507-517	275-279	41.1-41.9
YoY Growth in FY23P	15-17%	11-13%	21-23%	34-36%

NOTE: Volumes in thousands units;

YoY Growth in red indicates a negative growth

YoY Growth in green indicates a positive growth

# Domestic – Quarterly Forecast (Base case)

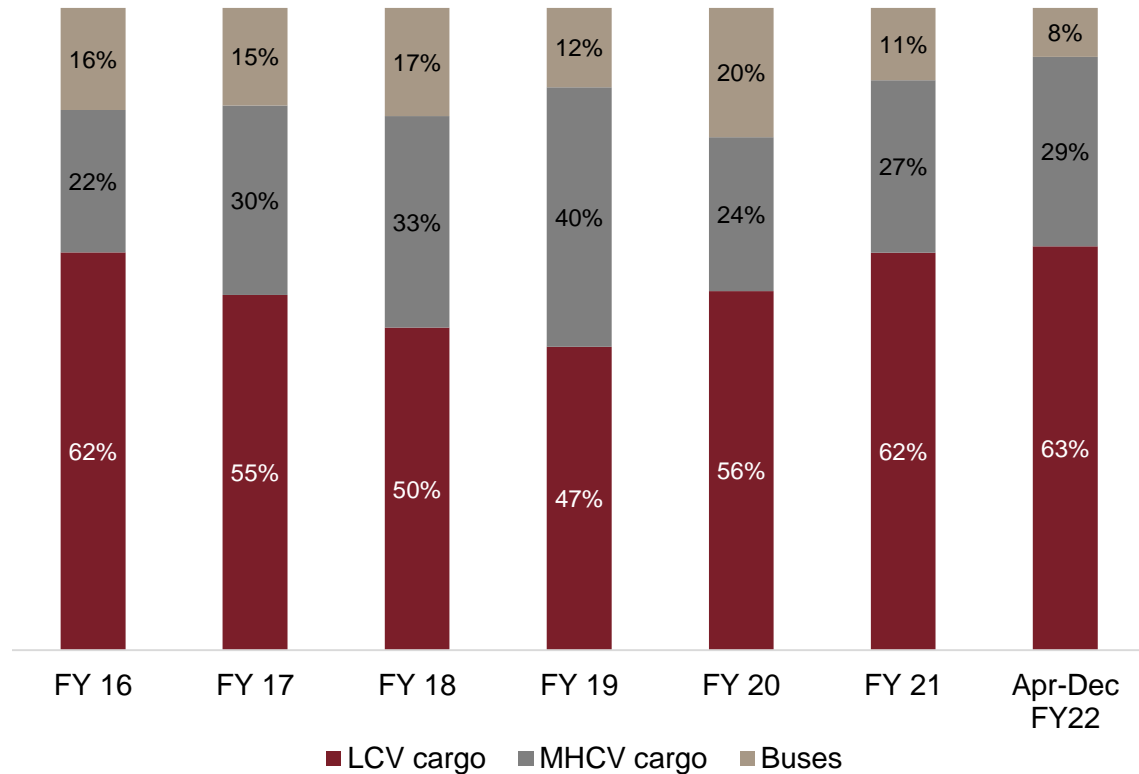
Period		CV		LCV Cargo		MHCV Cargo		Buses	
		Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth
FY22P	Q1	107	238%	73.5	179%	27.3	567%	5.4	389%
	Q2	167	24%	108	3%	51.3	115%	6.3	57%
	Q3	196	1%	127.6	(8)%	60.4	21%	6.9	67%
	Q4	250	19%	148.9	19%	88.1	16%%	12.1	53%
FY23P	Q1	204-208	91-93%	125-127	70-72%	68-68.5	149-151%	10.6-10.8	99-101%
	Q2	217-221	30-32%	136-139	26-28%	70-71	36-38%	9.5-9.6	51-53%
	Q3	233-237	19-21%	149-152	17-19%	73-74	21-23%	9.8-10	42-44%
	Q4	173-176	(31)-(29)%	97-99	(35)-(33)%	64-66	(27)-(25)%	11.2-11.4	(7)-(5)%

- **SCV & ULCV:** Healthy sentiments on the Agri crop for Kharif season may help volumes. E-commerce, FMCG and Agri to see continuation of the traction. Traction for CNG powered vehicles and supply of CNG related components to remain a key monitorable. Some OEM's also planning to launch electric in this segment. OEMs across might bring attractive schemes with discounts and easy financing to attract customers to offset the price hike. Demand from retail customers and MLO's to gain some momentum. SCV segment is expected to grow on account of record grain output
- **MHCV:** Replacement demand will spur growth which will be aided by construction projects. NIP projects to continue freight demand for goods such as cement and steel, production of these goods in turn, is expected to drive freight demand for minerals such as coal, iron ore, limestone/dolomite, etc. Aggregate transportation in some states positively affecting this segment to a extent. Retail participation is seeing momentum after ease of funding conditions. Segment witnessing more demand from the higher tonnage vehicles which could dampen the overall numbers. Car carrier could see improvement with the PV segment witnessing great demand on account of personal mobility. Big private players are making investments to transport cargo via railways impacting trailers market
- **Buses:** Most of the schools have resumed full fledged operations or might do so from Q1 FY23. However, some parents are still not sure of sending their children's to school which can have some effect on LCV buses side. Some demand for buses coming from schools side but not that great it should be after remaining negligible for almost 2 years. Staff transport which was earlier focused only towards MFG and saw some demand from IT/ITES and service based companies might see some demand coming in. FY23 may see a continuation of the high dependence on STU-PPP orders seen in FY22 especially from the southern and northern states.

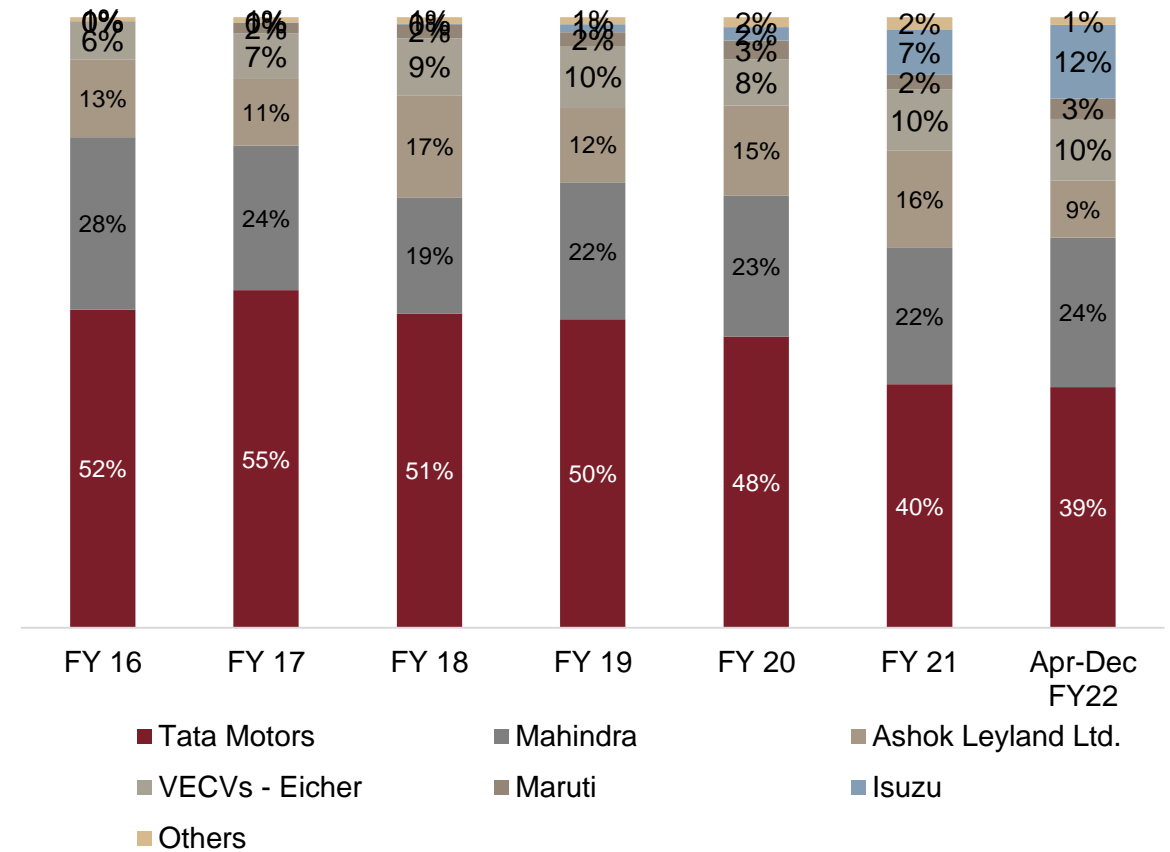


# Share of LCV cargo on an uptrend

LCV occupies ~2/3<sup>rd</sup> share



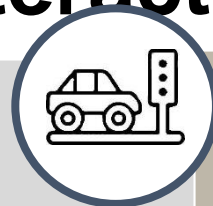
Share of leading players declines



Source: SIAM, CRISIL Research

# Stakeholder interactions

## OEM



## OEM

- Utilization levels for cargo segment which saw some tapering down post festive especially in sectors such as steel, cement, auto and textiles witnessed increase in momentum with prolonged monsoon fading away. Better utilisation were seen in agri, fmcg and e-commerce largely on the urban side. Rural witnessed slower momentum in fmcg and agri compared to urban.
- Regulatory norms and geopolitical issues is affecting states such as Bihar and Orissa. Iron ore transportation affected in Orissa because of subdued demand from China
- Announcement of multiple road projects post election results bodes well for steel and cement transportation
- Preference for higher tonnage vehicles in trailers and tippers is becoming prominent among transporters

## Dealer



### Demand Story

- SCV Demand continues to be resilient except in some states where delayed rainfall and absence of MLOs resulted in muted demand in rural areas. One of the OEMs facing ECU shortage
- CNG vehicles have gained a good attraction especially in both sub-1 tonne segment and 7.5 to 12T segment with 7.5 to 12T segment reaching almost 40-50%. Agri, FMCG and E-commerce continues to drive the demand . Supply improved for SCV CNG vehicles which witnessed some issues in last quarter.
- In case of ILCV E-commerce, FMCG and FMCD are now actively contributing in terms of freight demand. CNG variants preferred in 15T segment for short lead distance
- MHCV haulage seeing relatively slower ramp up on the retail side but LFO participation is robust. Demand gradually picking up for steel, cement sectors. Trailer demand still not in full swing as auto segment witnessing sluggish demand in 2W and tractors and PV OEMs still not able to fulfil demand for running models
- Tipper demand focused towards road construction, metro projects and infrastructure activities continues.

## Financier



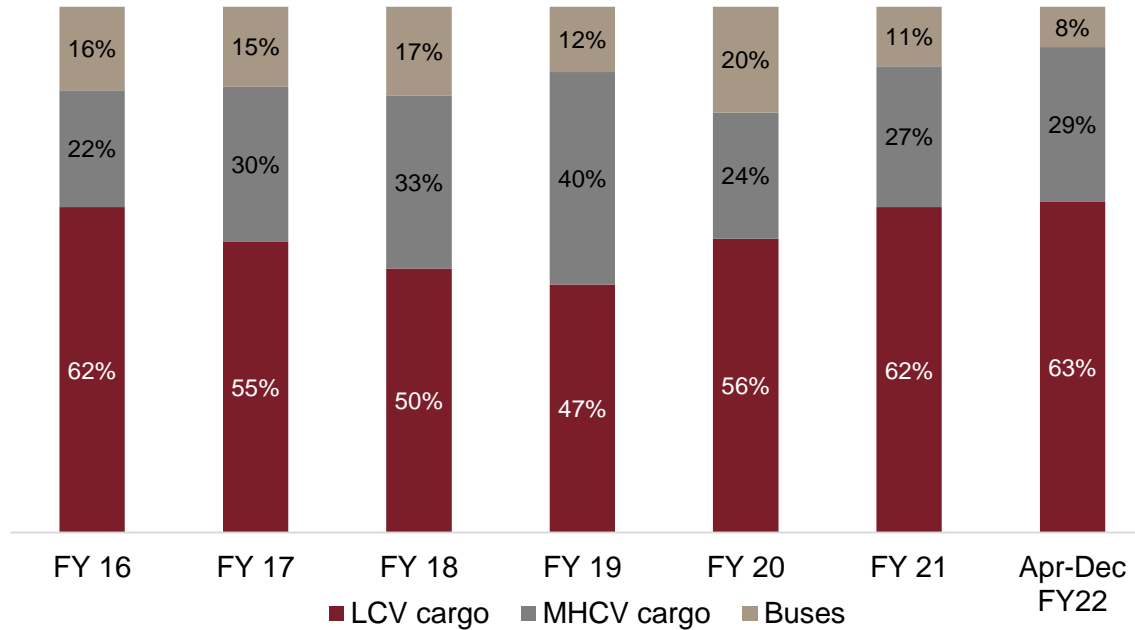
### LTVs and participation levels

- Retail customer funding in MHCV cargo and tippers has improved largely but still retail participation is slow in some segments. Most deals being closed are either LFO's or strategic customers.
- For some cases in retail funding, customer have been asked to present contract copy or guarantor.
- Buses segment seeing some demand from STUs and school side. Not all financiers ready to fund STU tender buses because of uneven re-payment schedule.
- In case of buses financiers have been cautious and have increased number of checks in getting a loan approved. LFOs who have not availed moratorium or paying instalments on time are getting better response and better interest rates than the SFOs who have availed moratorium.
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# Commercial Vehicle exports

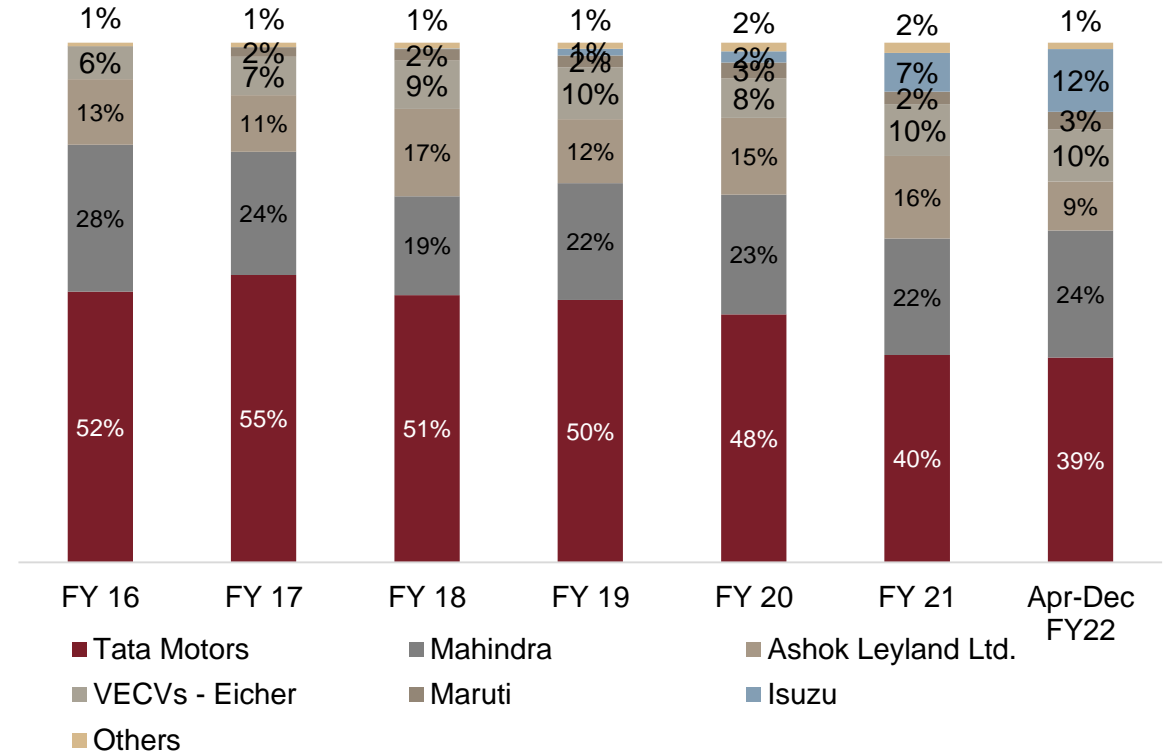
# MHCV regain some ground in Q3 FY22

## LCV continues to dominate



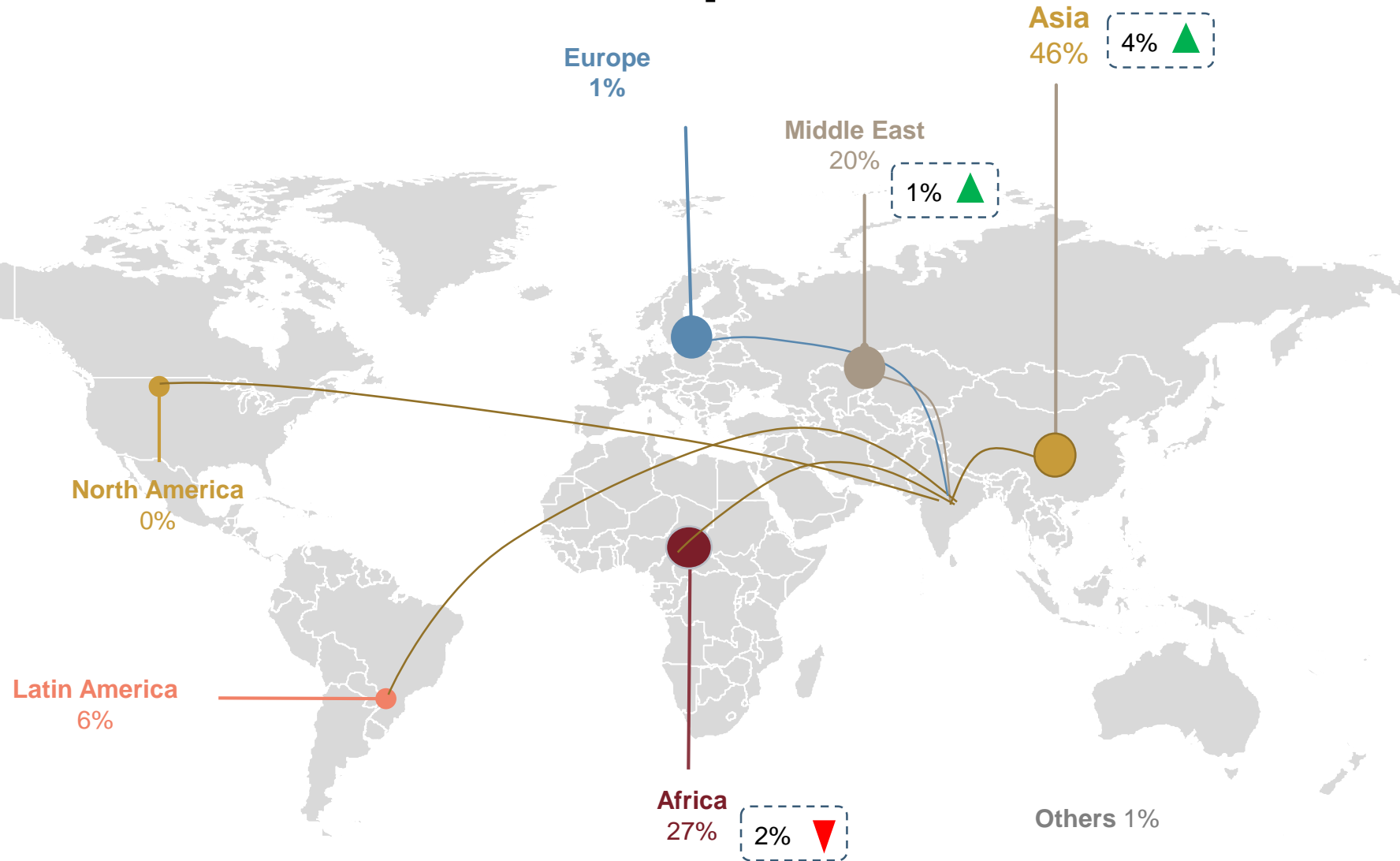
Source: SIAM, CRISIL Research

## Tata / Mahindra expand share



- From some improvement in Q4, sales dropped in Q1 FY22 on a q-o-q basis, however again have picked up in Q3 FY22
- Compared to FY21, LCV gained some ground, while MHCV expanded its presence, buses share continues on a shrinking path
- ALL saw a significant loss in exports share to Mahindra and market leader Tata

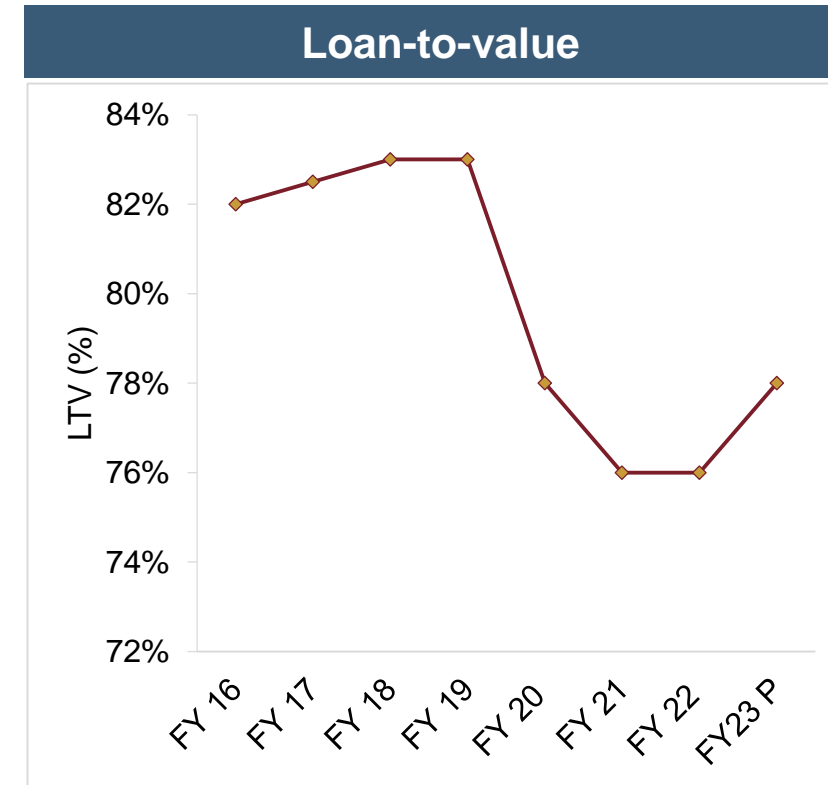
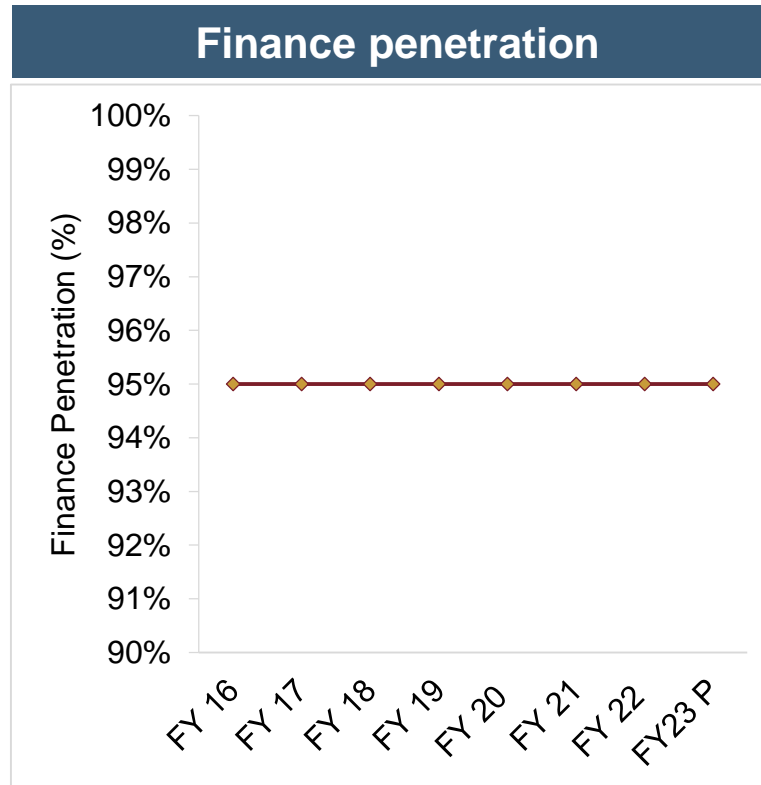
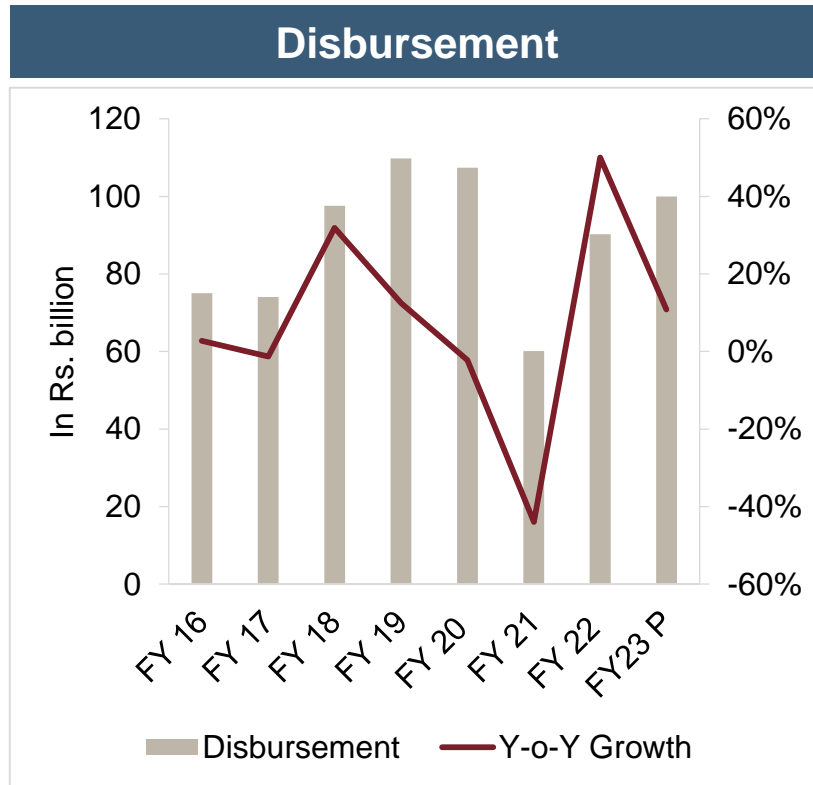
# Commercial vehicles exports



- Neighboring countries Nepal & Bangladesh continue to dominate Indian exports contributing 35% in FY22 (Apr-Oct)
- Bangladesh has taken the lead during the year
- Europe and Africa are impacted due to the Covid wave & its impact on the demand remains a key monitorable
- Africa contributes to 8% of India's exports
- Spread of Omicron variant globally remains a concern

# Three-wheelers

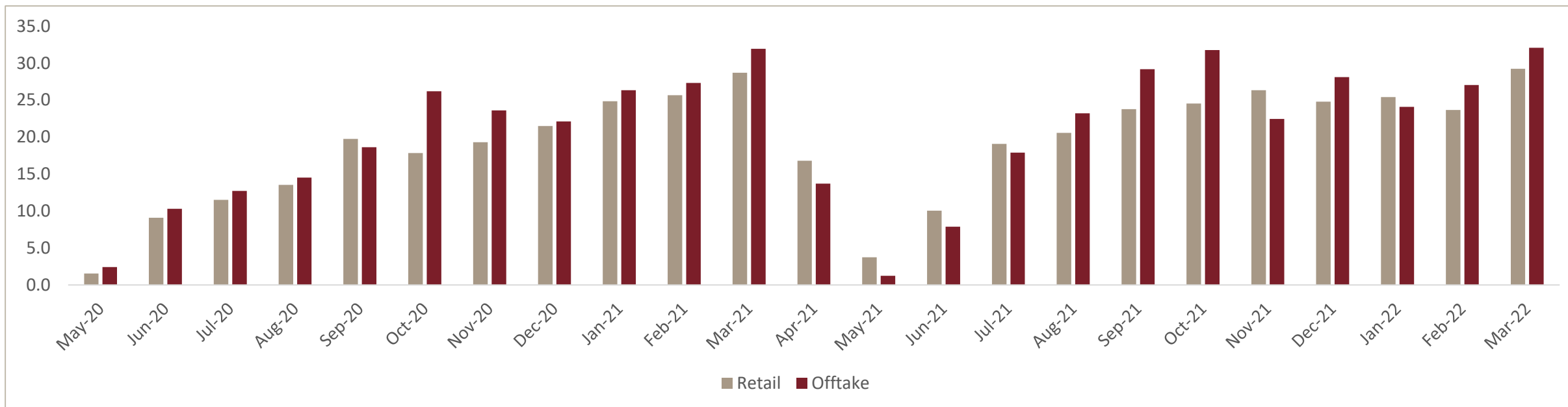
# Disbursement expected to grow during FY23, LTV to remain range bound



- Amidst the steep sales contraction, financing parameters also took a hit, disbursements grew in FY22 on a low base of FY21
- Moreover, given the modest financial profile of the customers coupled with the drop in earning, most financiers turned extremely cautiously and focused more on recovery during the year
- LTV levels were dropped despite rise in vehicle prices
- Going ahead, disbursement levels to be improve with positive demand sentiments. Financiers are expected to support and LTVs to expected to improve

# Three-wheeler industry sees q-o-q growth in Q4 FY22

## Retail vs off-take FY22



Note: Retail numbers are estimated

Source: SIAM, Vahan, CRISIL Research

- Three wheeler industry was going through hardships, for last two years. Covid induced lockdown has led to lower mobility and increase in preference towards personal mobility. Sales reached 12 months low during May 2021.
- There was gradual pickup in the sales from July and industry witnessed further growth during Q3
- September month onwards industry started witnessing positive trend on back of decline in covid cases reopening of economy, opening of school, colleges and offices
- There was some wholesale traction in October in anticipation for the festive demand.



# Domestic – annual forecast

	Three wheelers	Cargo	Passenger
FY 21 volumes	216	82	134
YoY Growth in FY21	66%	26%	74%
FY 22E volumes	260	77	183
YoY Growth in FY22E	20%	7%	37%
FY 23P volumes	357-362	111-116	242-247
YoY Growth in FY23P	37-39%	49-51%	32-34%

NOTE: Volumes in thousand units, numbers in red boxes indicate y-o-y de-growth, numbers in green boxes represent y-o-y growth  
 Source – SIAM, CRISIL Research

# Domestic – quarterly forecast

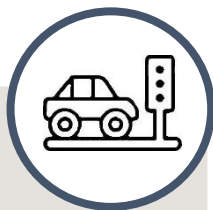
Period		Three-wheeler		Cargo		Passenger	
		Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q4	85.6	(66)%	28.3	15%	57.2	(46)%
	Q1	24.4	91%	8.6	48%	15.8	128%
FY22	Q2	70.9	52%	23.5	17%	47.4	79%
	Q3	82.4	14%	22.3	(21)%	60.1	37%
	Q4	83.2	(3)%	22.9	(19)%	60.3	5%
FY23 P	Q1	80.2-80.7	229-231%	26.3-26.8	207-209%	53.5-54.0	241-243%
	Q2	94.5-95.0	34-36%	33.0-33.5	43-45%	61.2-61.8	30-32%
	Q3	92.0-92.5	11-13%	27.4-27.9	23-25%	64.3-64.8	7-9%
	Q3	91.3-91.8	9-11%	27.2-27.7	19-21%	63.8-64.3	5-7%

Source – SIAM, CRISIL Research

- After a long hiatus, passenger vehicle segment showed some improvement during FY22 & clocked 37% growth on a y-o-y basis
- Passenger segment saw a 5% rise in Q4 FY22 on a y-o-y basis, whereas cargo declined by 19% on-year
- Passenger segment is expected to get a push in Q1FY21 with reopening of schools, offices & colleges and in turn the increased demand for last mile connectivity
- Three-wheeler growth is expected to continue at a robust pace on account of a low base in the previous years

# Stakeholder interactions

## OEM



- Primary passenger segment to witness robust growth in FY22
- Cargo sales also picked up as economy revives, and e-commerce improves
- Increase in petrol and fuel prices is shifting customers to CNG and electric vehicles
- Urban movement has come back to normal which has helped the passenger three-wheeler segment revive.
- Growth is expected to continue in fiscal 2023 as well on account of a low base
- Financiers are more than willing to support which will further help improve retail momentum on-ground

## Dealer



- With the covid cases declining three-wheeler inching toward normalization.
- Passenger segment witnessed healthy growth with reopening of schools/colleges/ offices
- Cargo segment witnessed similar vein pushed by e-commerce and captive business which has boosted the demand for last-mile deliveries in urban areas as well as in town.
- Most of the customers for Passenger vehicle is first time buyer.
- Moreover, Increased prices, higher fuel costs, has led customers to shift to CNG and electric vehicle
- Even in cargo, predominantly diesel segment there is an increased traction for CNG models
- Current Inventory levels are around 35-40 days
- Rural demand is also seeing some good traction.

## Financier



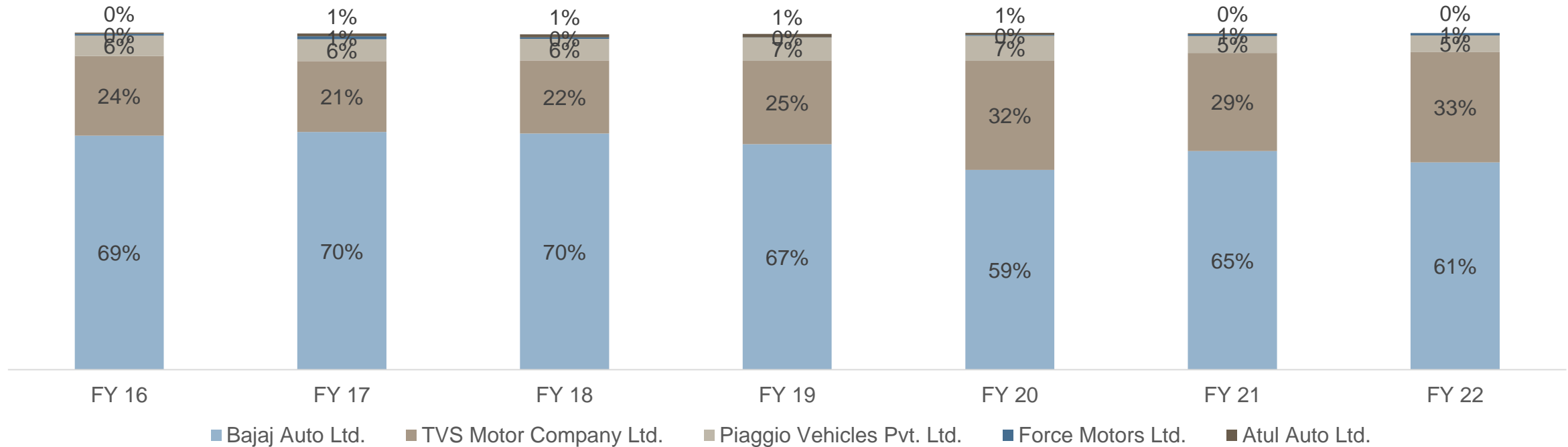
- Given the increased retail demand financiers are also changing their stance towards three-wheeler segment
- Financiers support is expected to improve going forward, especially for passenger segment
- LTV expected to be in the range of 90-95% in the near term and ROI to be 10-14%

Source – Industry, CRISIL Research

# Three-wheeler exports

# Cargo segment gains some share, exports witness robust growth in FY22

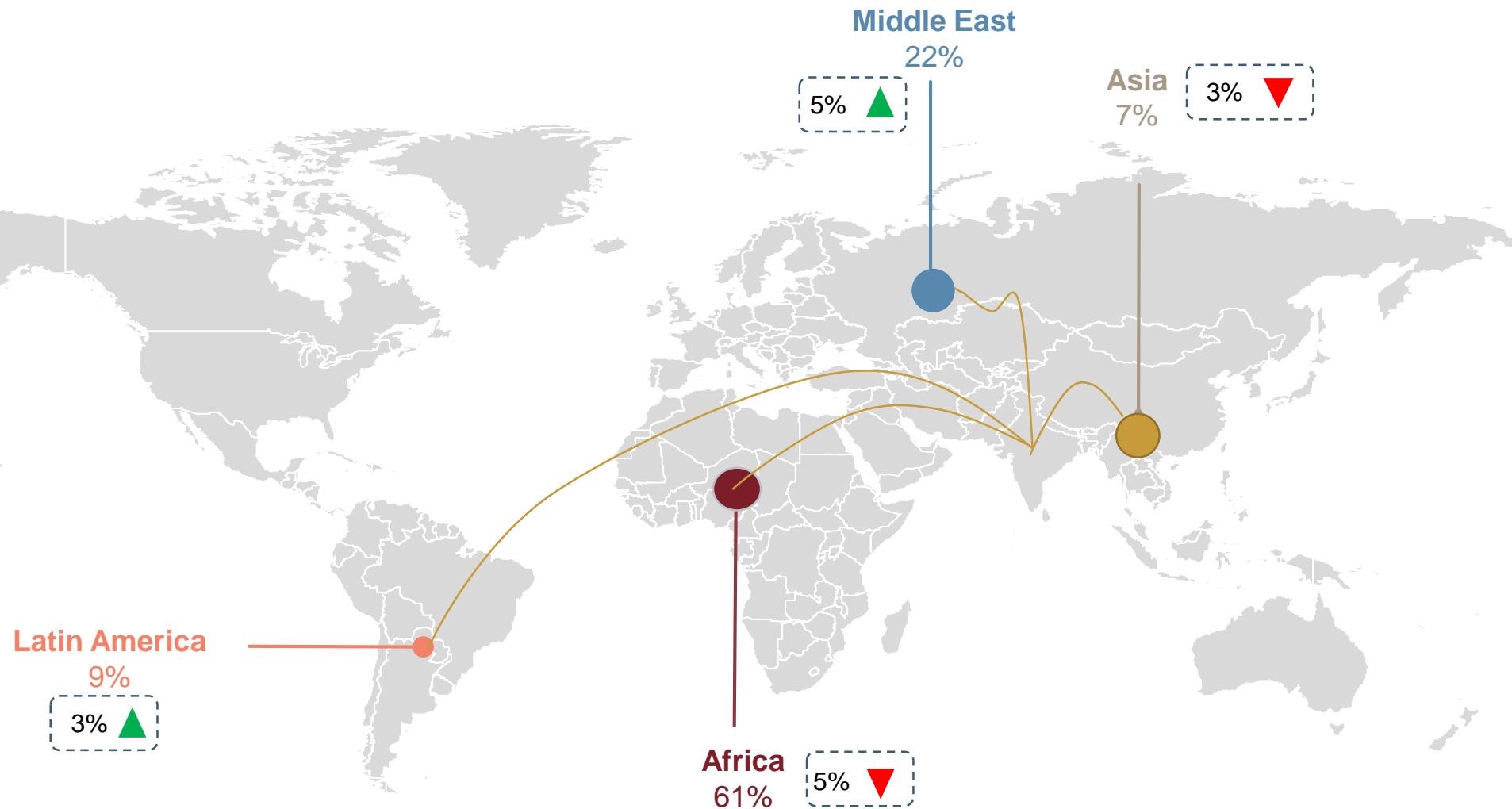
Bajaj maintains its top position



Source: SIAM, CRISIL Research

- FY22 witnessed some improvement in exports, with passenger carrier segment driving growth
- Bajaj continues to dominate the 3W exports,
- However, TVS improved its market share by 400 bps in FY 22 and captured into some market share of Bajaj

# Three-wheeler exports

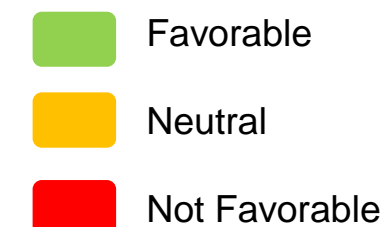


- Covid has impacted demand from Asia & only gradual recovery is expected
- Exports share of Middle East countries increased aided by limited covid spread and crude prices firming up
- Substantial recovery is seen in exports to Egypt after the ban of auto-rickshaw was lifted which has aided exports growth.
- Demand from Iraq has supported expansion of Middle East share
- The impact on the demand due to the resurgence of Covid remains a key monitorable

# Tractors

# Tractor demand to decline in FY22 over a high base of last year

Parameters	Impact		
	FY 20	FY21	FY22E
<b>Farm Income**</b>	Neutral	Favorable	Neutral
-- Crop Prices	Favorable	Favorable	Favorable
-- Crop Output	Neutral	Favorable	Favorable
-- Kharif Output	Neutral	Favorable	Neutral
-- Rabi Output	Neutral	Favorable	Favorable
<b>Demand Indicators</b>	Favorable	Neutral	Neutral
-- Infrastructure Development	Favorable	Not Favorable	Neutral
-- Sand Mining	Not Favorable	Favorable	Neutral
<b>Supply side variables &amp; financing</b>	Neutral	Neutral	Favorable
-- Finance Availability	Neutral	Neutral	Neutral
-- Channel Inventory	Neutral	Favorable	Not Favorable
-- Player Action	Favorable	Favorable	Neutral



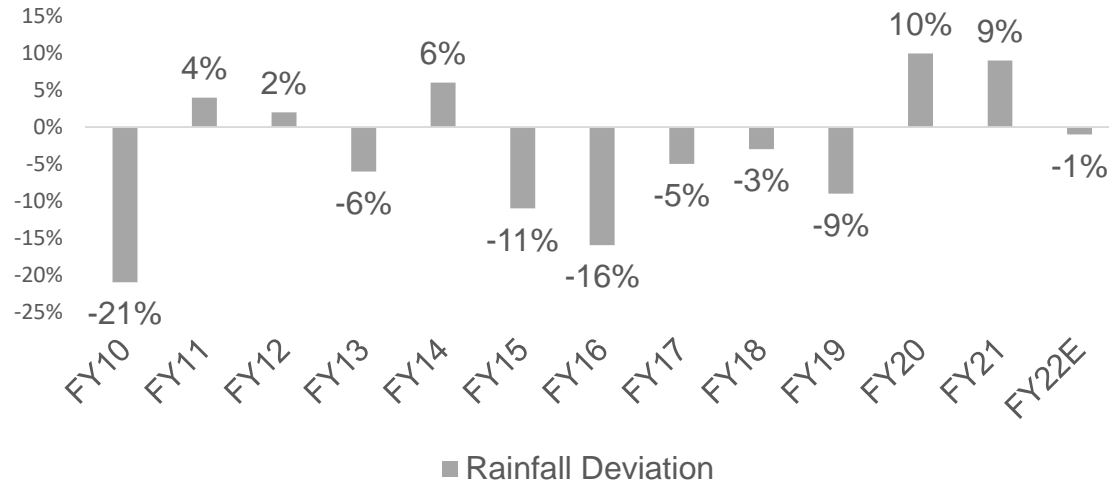
NOTE : \*\* FY22 assumed neutral assuming normal monsoon,

Source: CRISIL Research



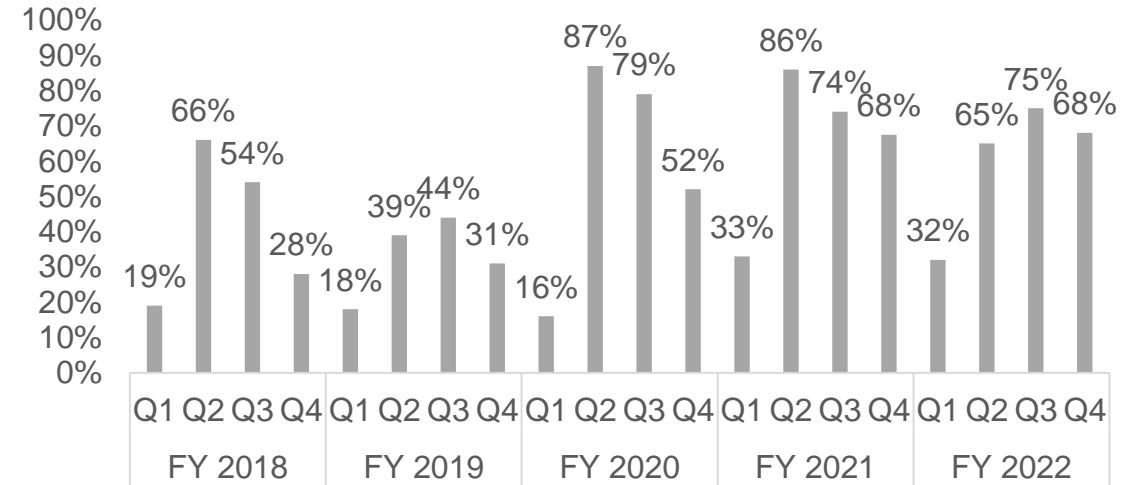
# Southwest Monsoon has been normal in fiscal 2022

## Normal rainfall in FY22



NOTE: Rainfall deficiency in the range of -10% to 10% of the long period average is considered as normal as per IMD. P: Projected  
Source : IMD, CRISIL Research

## Reservoir Levels are higher

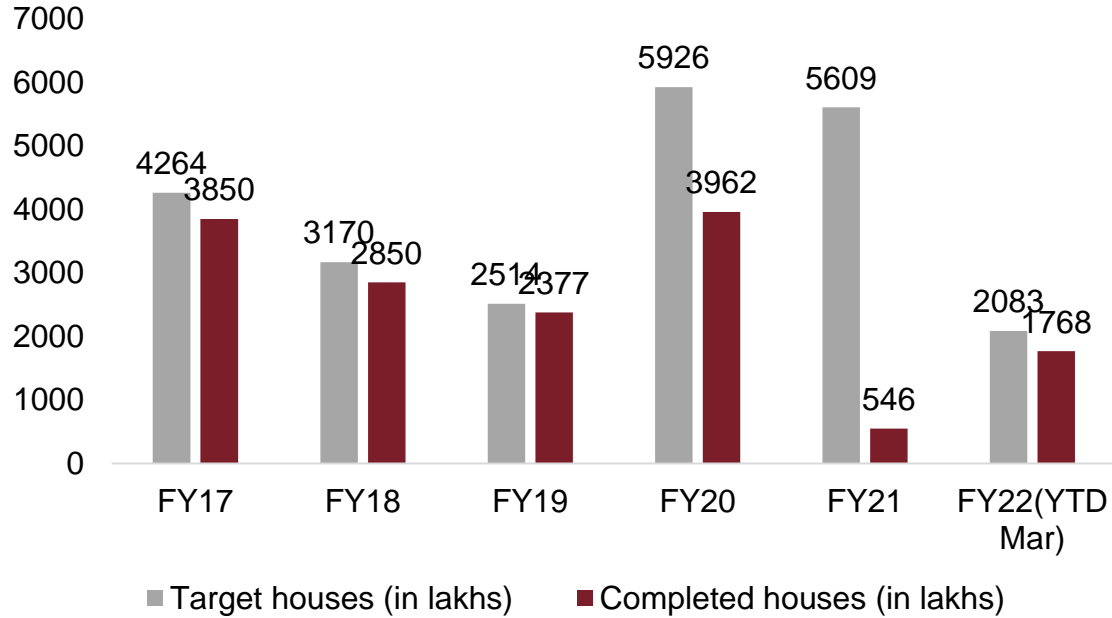


Notes: Storage Status of 140 Reservoirs of the Country

- The southwest monsoon seasonal rainfall during June to September for the country as a whole has been normal.
- Considering month to month rainfall variation over India as a whole, the season is very uniquely placed in the historical record for its distinct and contrasting month to month variation
- After excess rainfall in June, deficit rainfall was recorded in July and August respectively. The monsoon started pouring like cats and dogs during September and refused to quit well into October.
- The wide fluctuations in the rainfall during this monsoon season had only marginal impact on the reservoir levels.
- Bountiful rain in September and October has ensured that the water levels in India's main reservoirs are into their optimum levels.

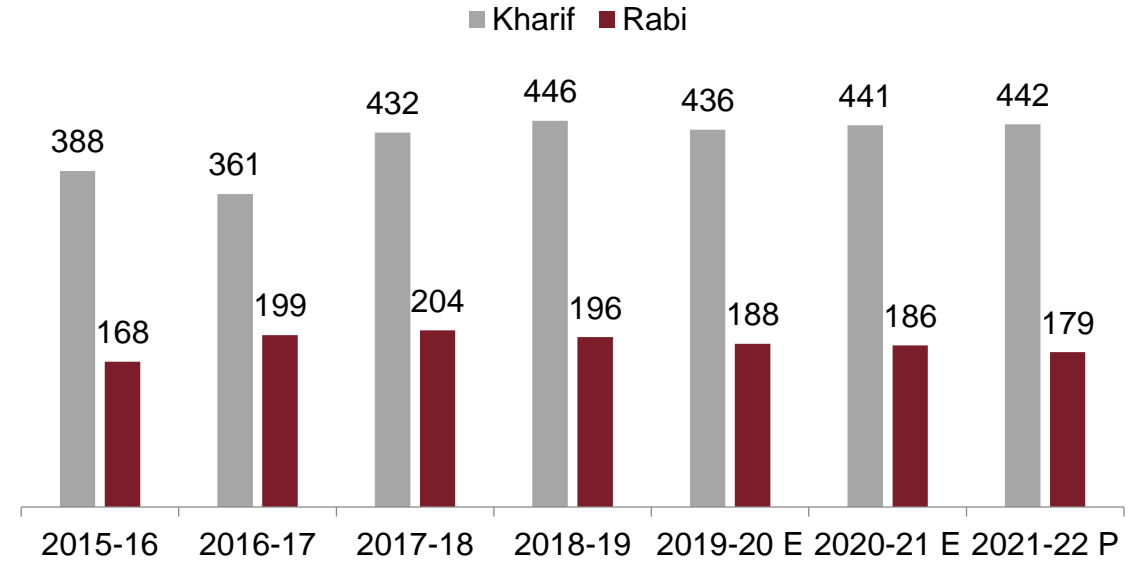
# The cost of agricultural inputs such as seeds, fertilizers, and farm labour is rising, affecting farmers' profitability

## PMAY-G



Source: Ministry of Rural Development, CRISIL Research

## Crop production growth higher for MY20



MY: Marketing year, P: Projected

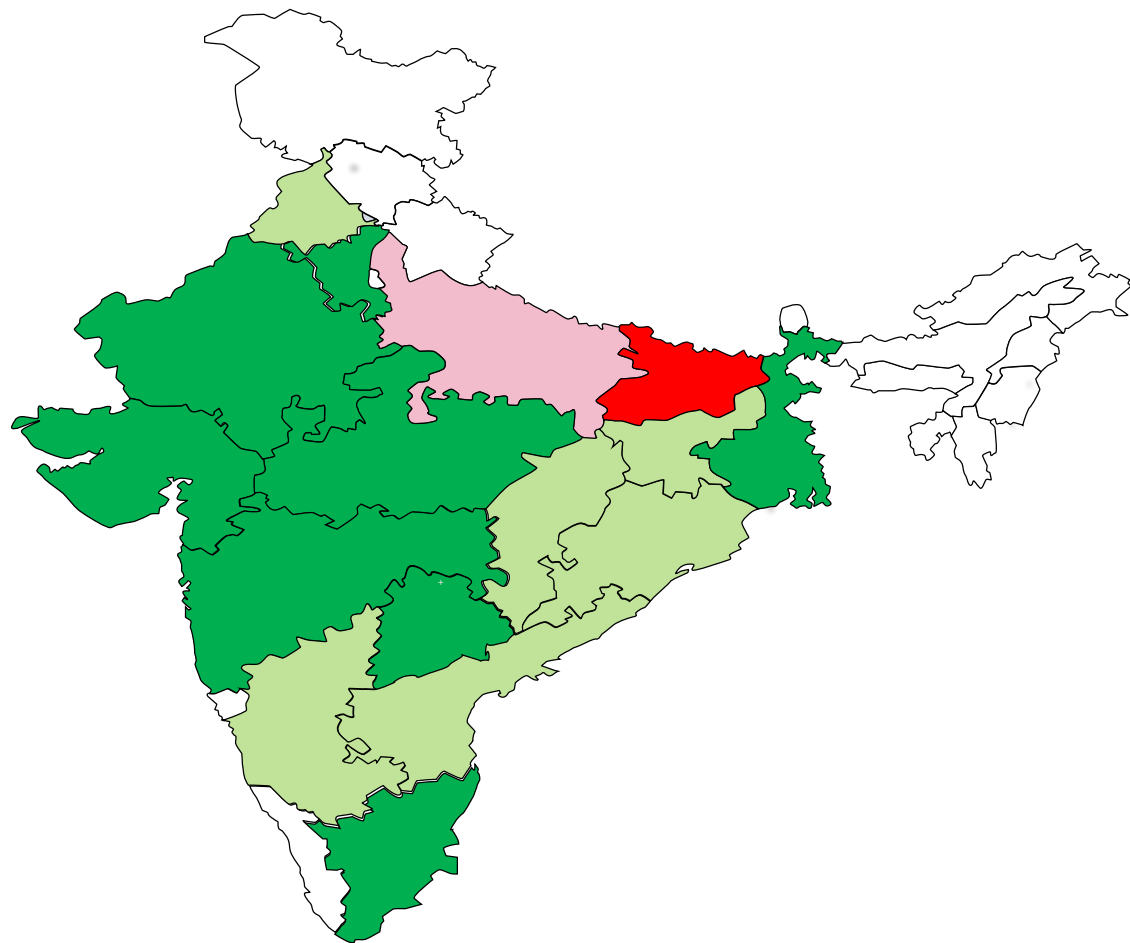
Notes: 1) Base of 100 for Index (kharif and rabi) taken in MY Jan-Dec 2015

Source: Ministry of Agriculture, CRISIL Research

- High growth in minimum support prices is unlikely to continue in view of the central government's fiscal constraints and fixing of inflation control emerging as the central pillar of economic policy.
- Moreover, the cost of agricultural inputs such as seeds, fertilizers, and farm labour is rising, affecting farmers' profitability.

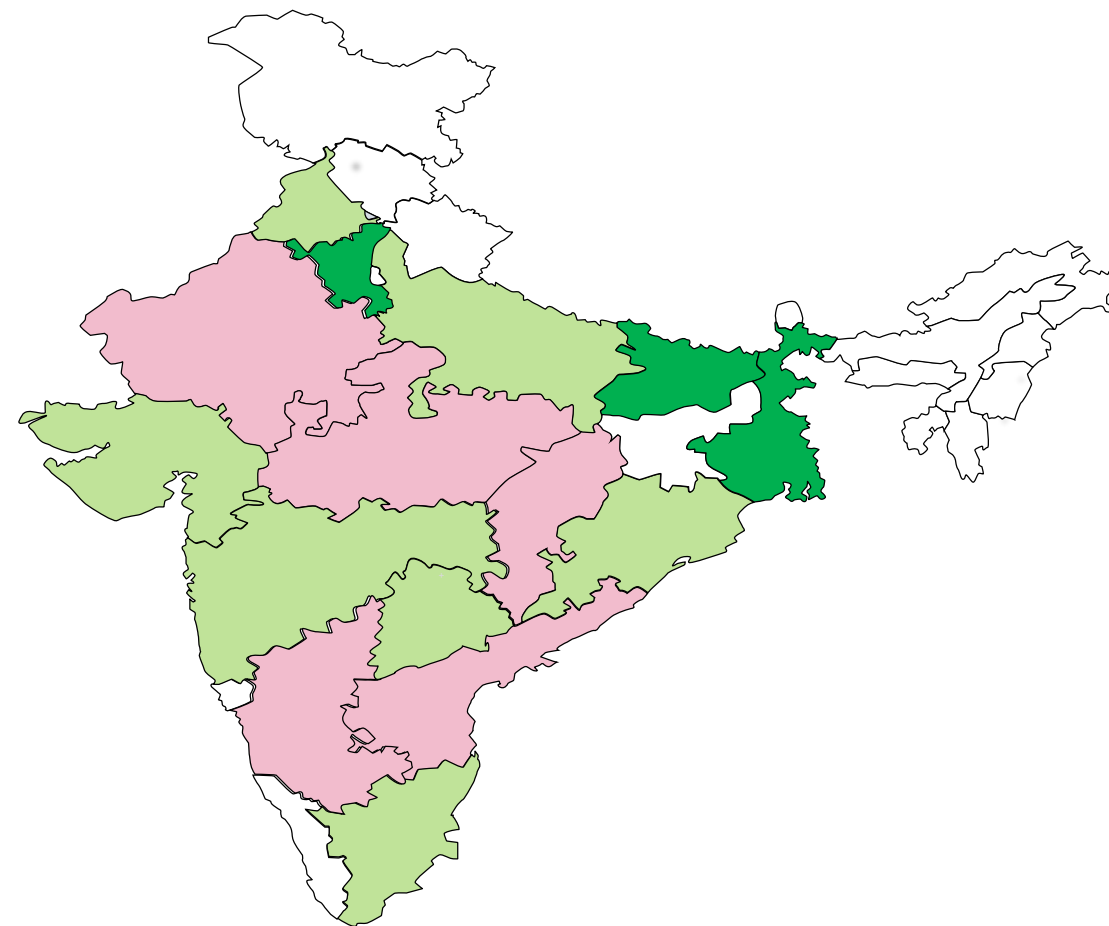
# State wise Crop Value Index

Kharif CVI heat Map for FY22



Source: CRISIL Research

Rabi CVI heat map for FY22

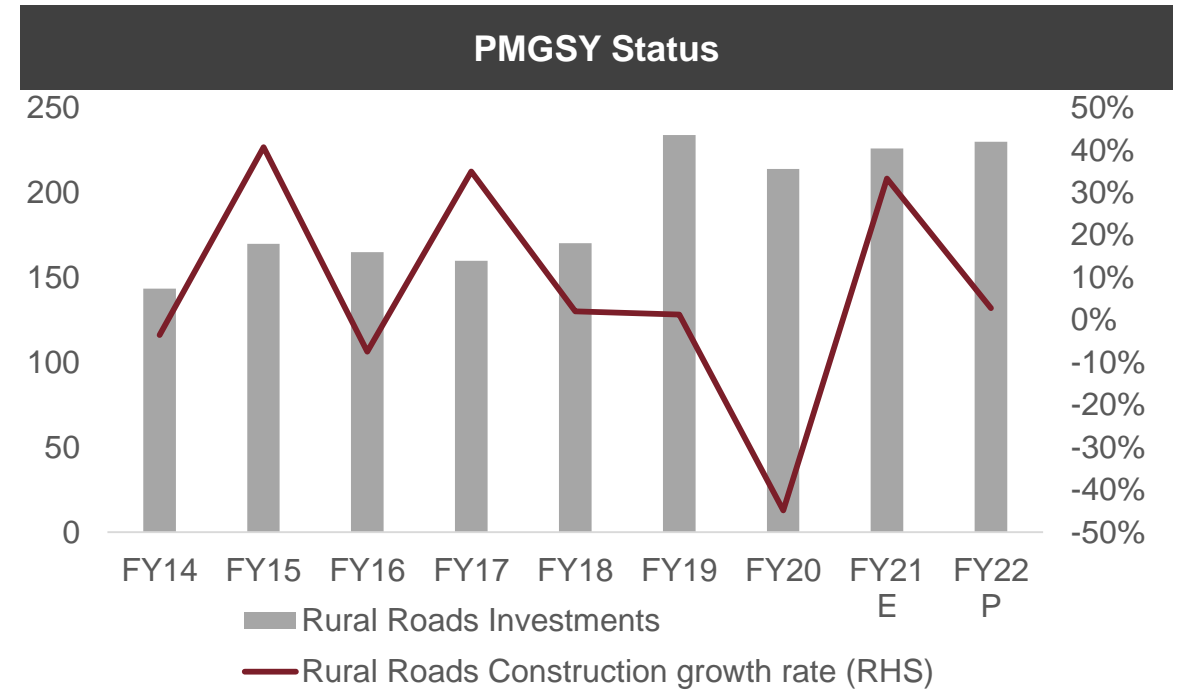
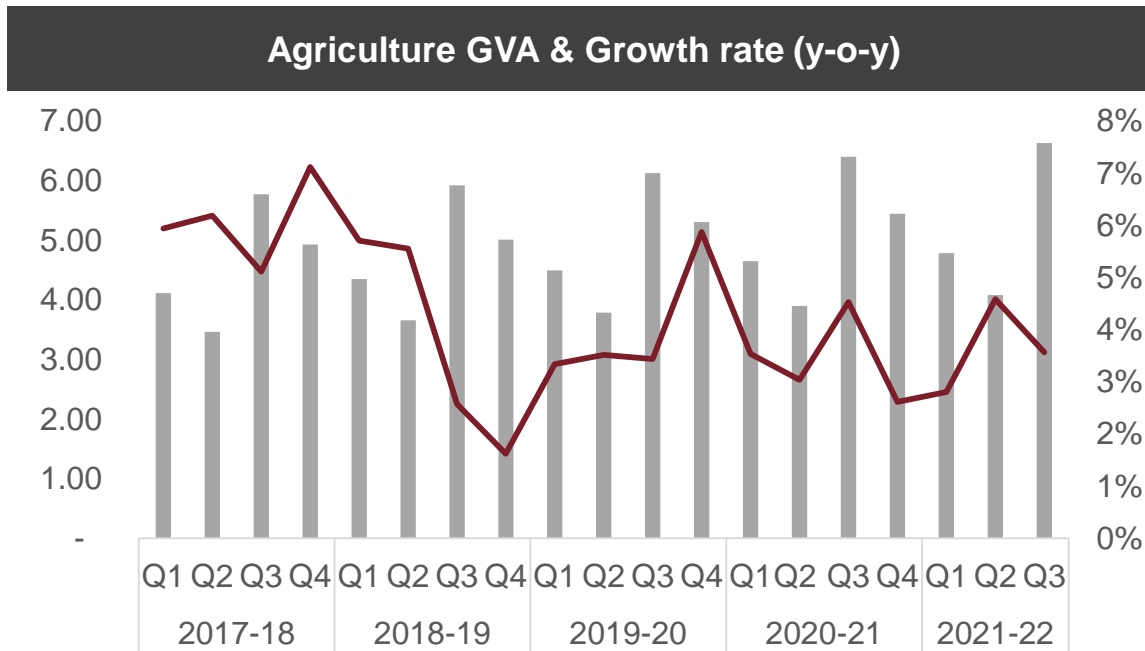


Source: CRISIL Research

Colours indicate % change on-year



# Agriculture GVA is expected to maintain a healthy growth momentum



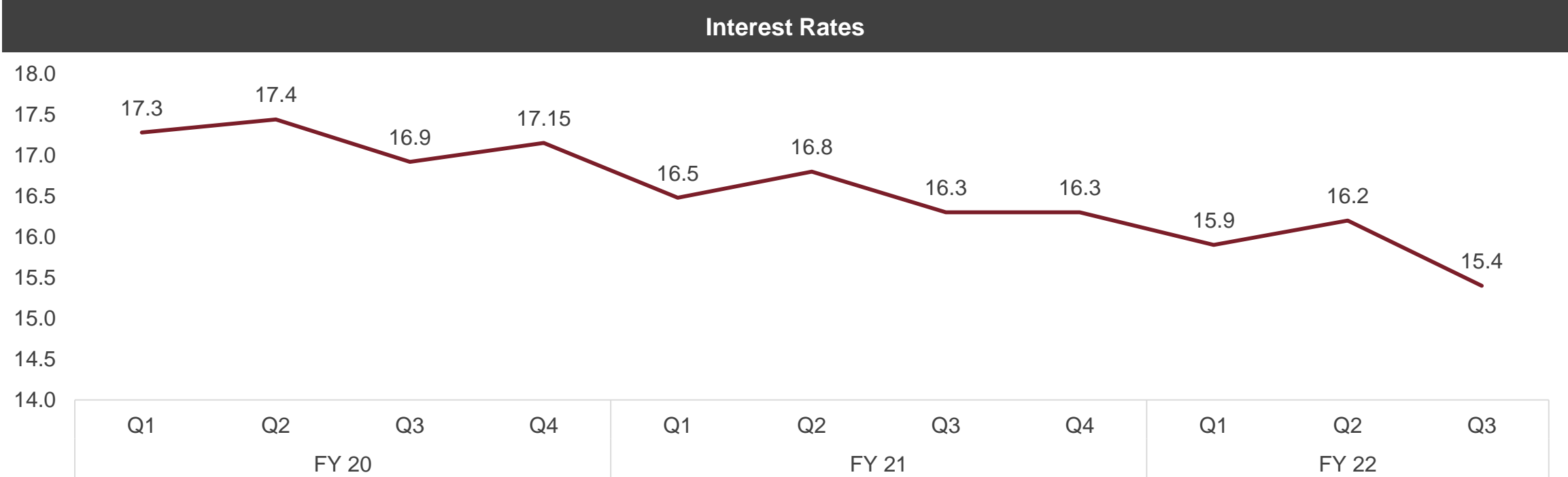
Note: GVA at basic prices (constant 2011-12)

Source: Ministry of Statistics and Programme Implementation, CRISIL Research

Source: OMMS (Online management, Monitoring and Accounting System), CRISIL Research

- Following the elevated commodity prices and fresh supply chain issues arising from the Russia-Ukraine conflict, as well as the renewed lockdowns in parts of China India's GDP forecast is to be at 7.2%.
- Higher prices of fuels and items such as edible oils are likely to compress disposable incomes in the mid to lower income segments, constraining the demand revival in FY2023.
- As economic activity normalizes, there could be a shift in the availability of agricultural labour across different regions, affecting acreage. Also, inadequate availability of fertilizers poses a concern.
- Thus, even with a normal monsoon and healthy reservoir levels, acreage and, therefore, output may not rise meaningfully in FY2023, constraining agricultural GVA

# Disbursements to increase at a moderate pace in FY22 on a high base

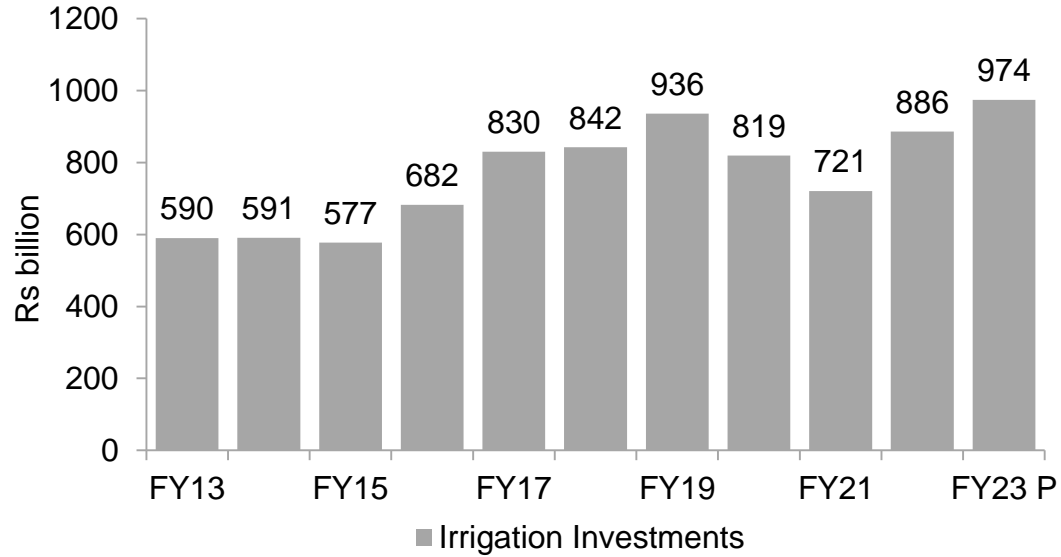


NOTE: Interest rates for Q4FY22 is not yet released by leading financiers  
 Source: CRISIL Research

- With 70-75% of tractors purchased on credit, credit availability is a key demand driver, and indirectly boosts tractor sales.
- However, non-performing assets are higher in public banks as compared with private banks and NBFCs.
- LTVs are estimated to have grown from 75.5% in fiscal 2021 to 76% in fiscal 2022.

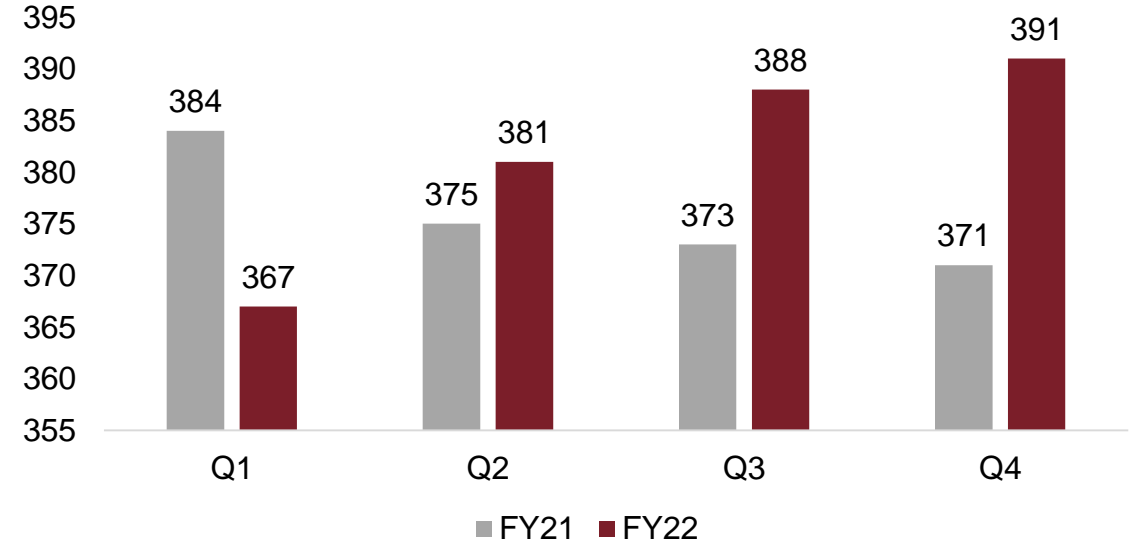
# Irrigation investment is expected to improve due to the low penetration of Irrigation in the country.

Irrigation spending at slower pace



Source: Department of Agriculture, Cooperation & Farmers Welfare, CRISIL Research  
P: Projected

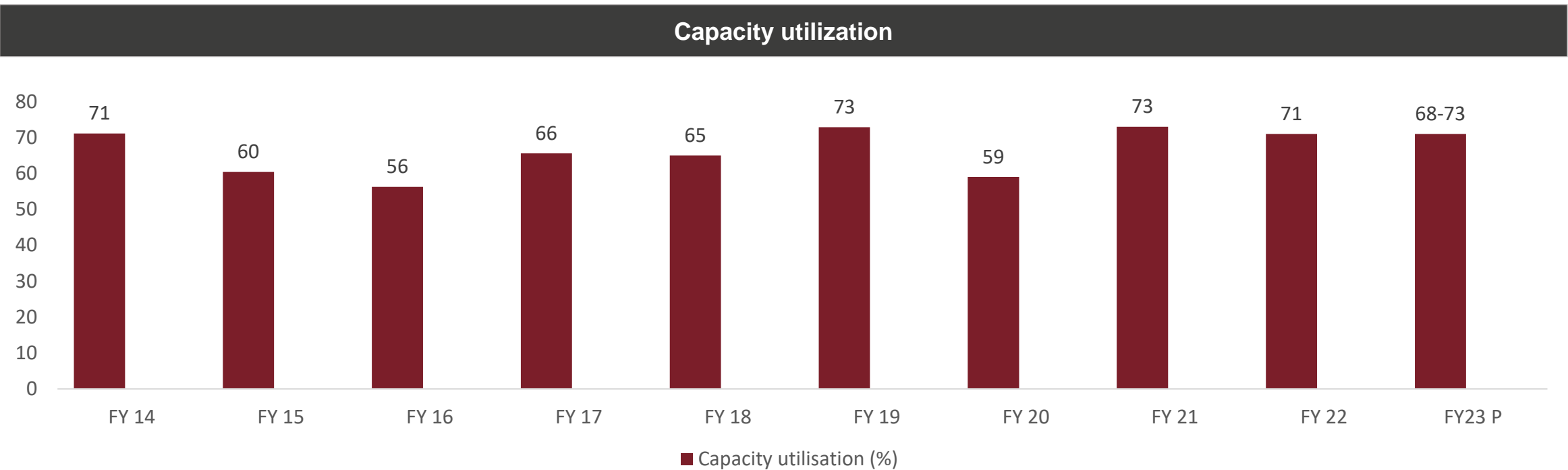
Daily Rural Wage



Rural wages includes general non-agricultural labour.  
Source: RBI, CRISIL Research

- Apart from the top-6 states that accounted for the majority of irrigation investment, Odisha has emerged as a top state with considerable increase in irrigation investments over the past few years.
- State funds will continue to play an outsized role in Irrigation investments.
- The central government will play an active role in monitoring the progress of PMKSY projects, and has taken several steps to crystallise investments for irrigation.

# Capacity utilization to remain stable in FY23 with no new expansion plans by OEMs



*E: Estimated*

*Source: CRISIL Research*

- Production capacity of Escorts Ltd is expected to reach 150,000 units in fiscal 2022 (including capacity addition due to joint venture with Kubota).
- Thus, in fiscal 2022, amid drop in demand, capacity utilization to fall due to capacity expansion planned by OEMs.
- Capacity utilization increased significantly in fiscal 2021 due to lack of capacity additions with production volumes increasing.

# TREM IV norms to come into effect from 1st April'22.

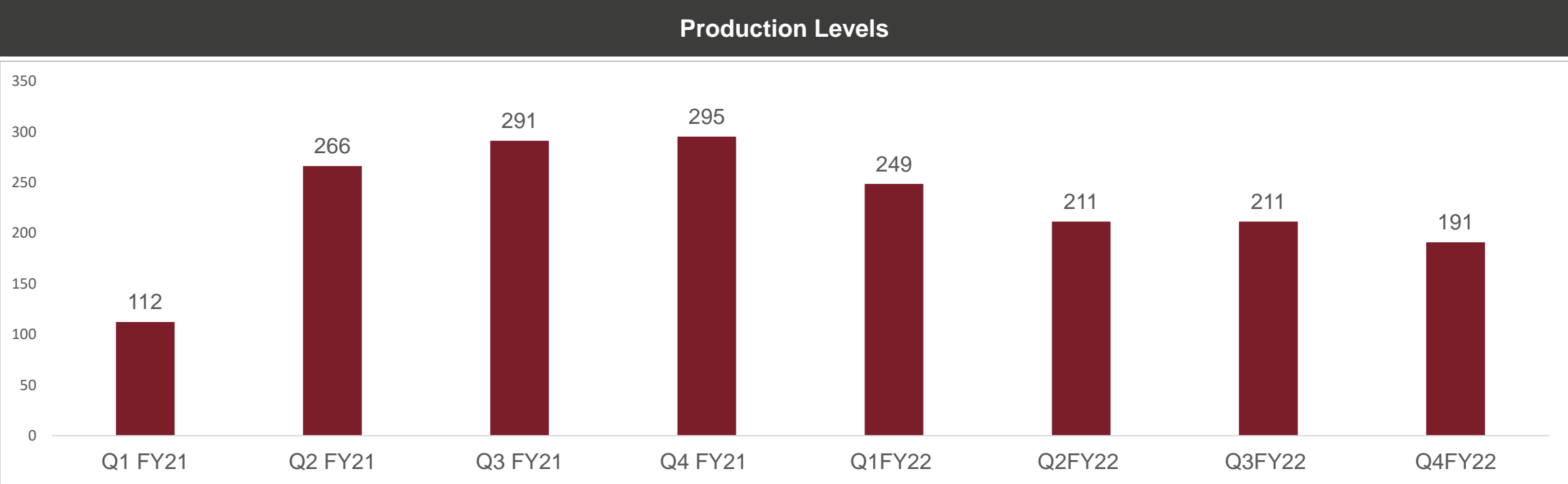
Emission standard stage	Engine Power	Market share	Date	CO	HC+Nox	PM
	HP			g/kWh		
Trem Stage III A	11 to 25HP	9%	1st April 2010	5.5	8.5	0.8
	25 to 50HP	84%	1st April 2010	5.5	7.5	0.6
	50 to 75 HP	7%	1st April 2010	5	4.7	0.4
Trem Stage IV	11 to 25HP	8%	No change			
	25 to 50HP	84%				
	50 to 75 HP	8%	1st April 2022	5	4.7	0.025

Source: Industry, CRISIL Research

- TREM IV norms applicable only on 50HP and above tractor segment forming ~10% of domestic sales, thus we expect limited impact on tractor industry.
- Although major technological changes are available with OEMs, the pass through of the incremental cost, related to the technological changes, to the farmers is likely to be a challenge.
- Given the price sensitive nature of the farming community. Cost escalations to the tune of 10-12% is expected.



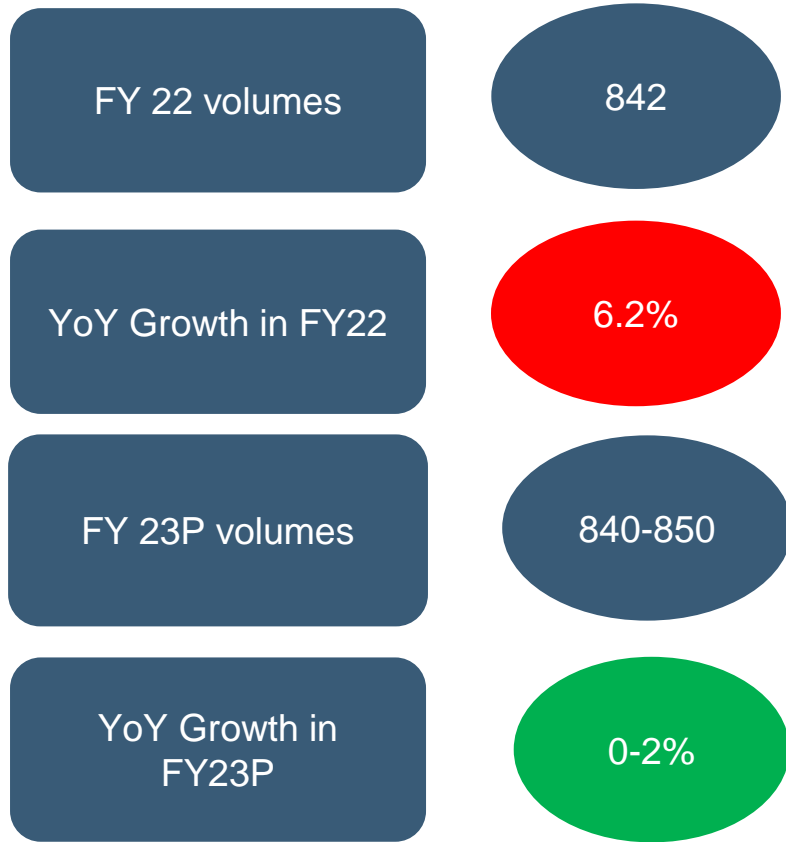
# Production levels are high as the demand continues



Source: CRISIL Research

- While several OEMs have streamlined supply issues. Production levels are at lower levels in order to cater to the high inventory levels.
- FY22 saw a production declined by 11% y-o-y.

# Domestic – Annual & Quarterly Forecast



Period		Tractors	
		Volume ('000)	YoY Growth
FY22P	Q1	229	38%
	Q2	211	(10.5)%
	Q3	223	(13)%
	Q4	177	(26)-(25)%
FY23	Q1	223-228	(2)-1%
	Q2	207-211	(2)-0%
	Q3	225-230	1-3%
	Q4	179-183	2-4%

Source – CRISIL Research

- Tractor demand to remain stable in FY23 over a high base of the previous years
- Rising tractor prices amid price hikes taken by OEMs, higher inventory at dealer's end, lower commercial demand, negative farmer sentiments due to rising cost of cultivation, low fertilizer availability, increase in other expenditure (such as marriages and other social occasions) to hamper demand.

# Stakeholder interactions

## OEM



- Higher inventory levels, lower replacement demand and negative retail sentiments due to higher retail prices to hamper demand.
- Price hikes to the tune of 2-4% expected to be taken by OEMs to counter rising commodity inflation to further dampen prospects of healthy sales.
- Clearing of sugarcane arrears in Maharashtra, higher prices fetched for soybean and increase in demand for lower hp tractor (<30) to have led to increase in sales.
- Illegal mining activities are at a standstill in states such as Bihar, Jharkhand and Uttar Pradesh which is expected to impact commercial demand negatively.

## Dealer



- Sentiments have improved well from previous two months. Ukraine war has caused price increase in wheat that is creating good sentiments.
- Normally farmers used to stock up the crops and sell it when prices are being but currently due to R-U crisis they are insisting not to stock up and sell it in market as soon as it is harvested.
- Farmers are getting prices for cotton and soybean. Yield is affected because if unseasonal rainfall there is 20-30% damage. Pulses damage was more.
- Rabi crops outlook is good. Horticulture crop prices like grapes pomegranate price are not doing good.
- Onion prices are also low. Sugarcane production has been more this time because of which there is delay in harvesting

## Financier

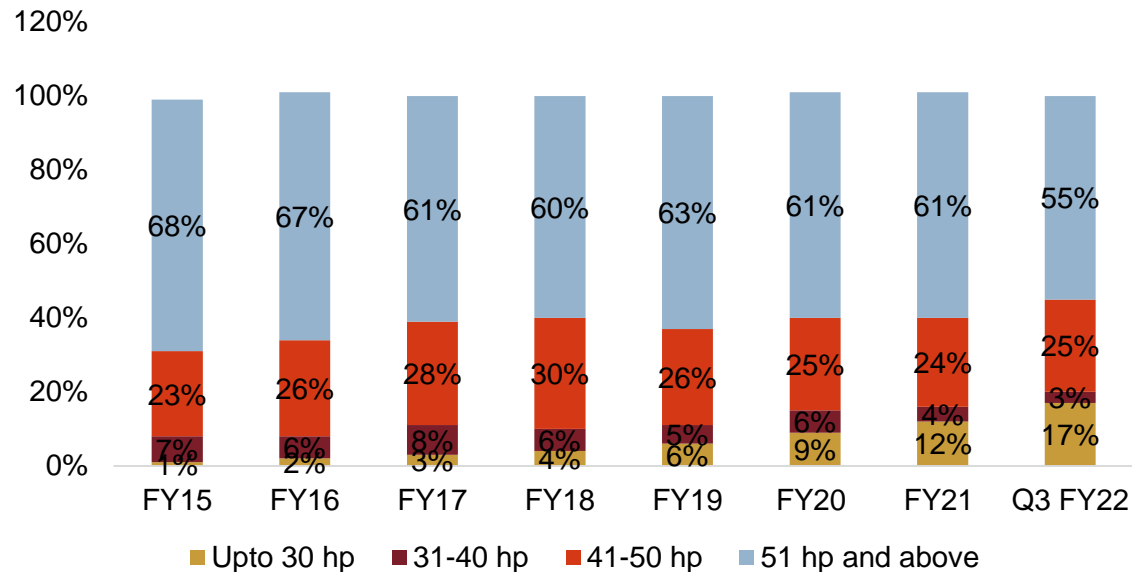


- Disbursements to increase at a moderate pace in FY22 on a high base.
- Non-performing assets are higher in public banks as compared with private banks and NBFCs.
- LTVs are estimated to have grown from 75.5% in fiscal 2021 to 76% in fiscal 2022.

# Tractor exports

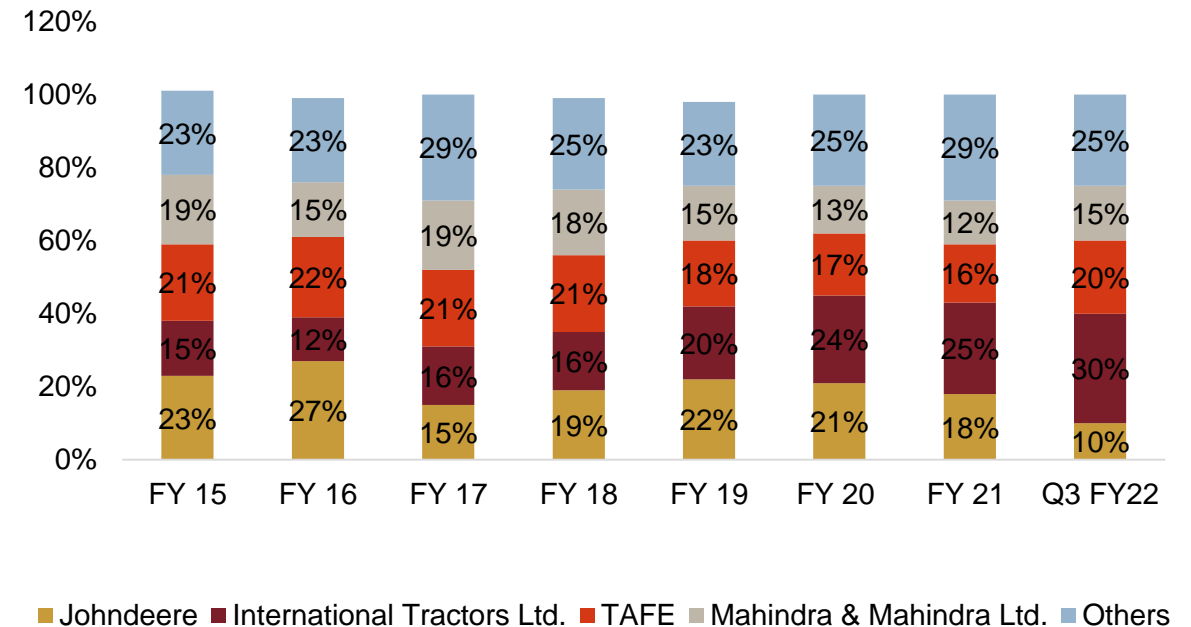
# Growth in exports expected to continue in FY22

## Segment wise market share of exports



Source: CRISIL Research

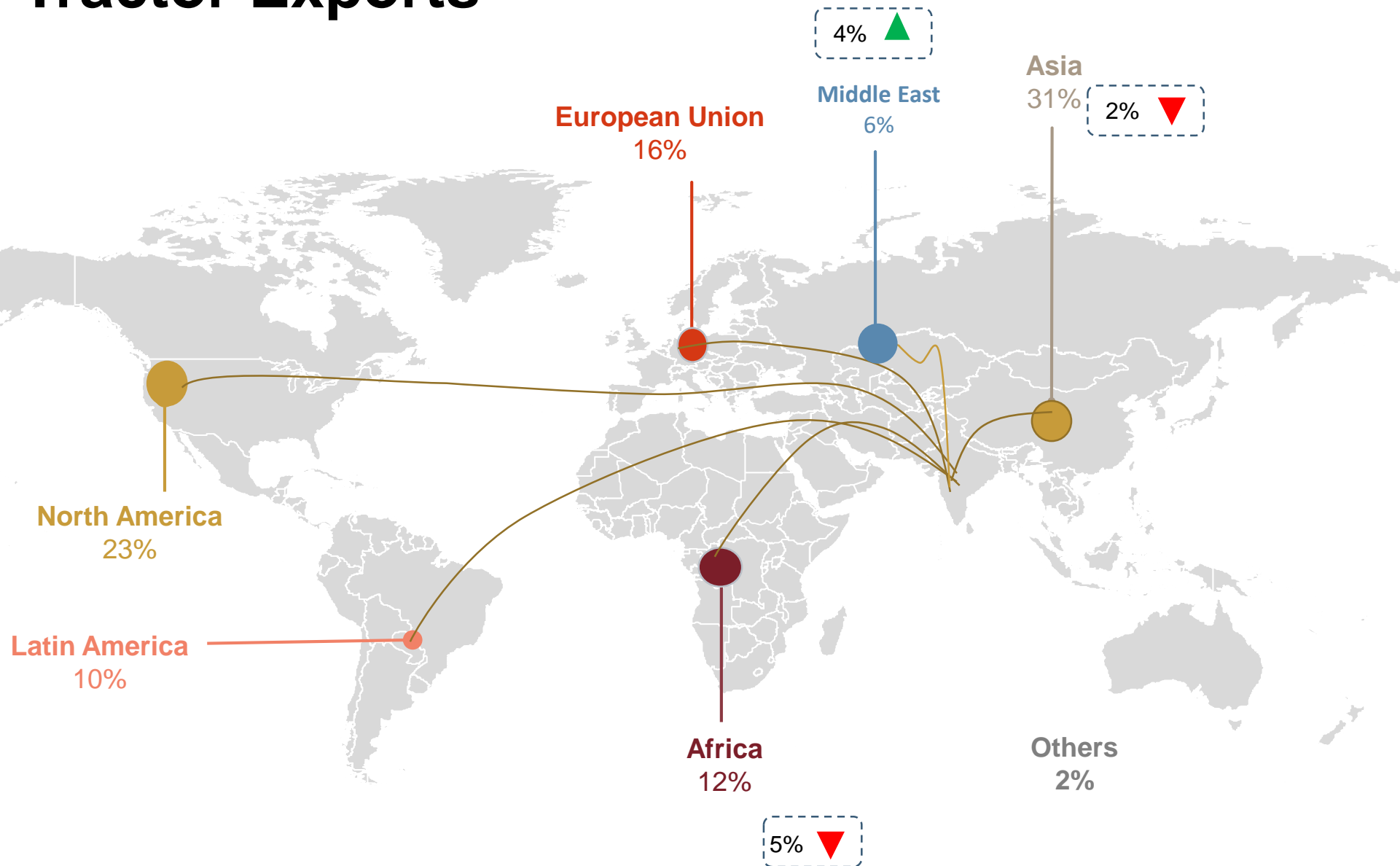
## Player wise market share of exports



Source: CRISIL Research

- Favorable diplomatic relationship with Bangladesh and logistical ease between both countries has led to rise in exports to the nation.
- Strategic push, such as setting up base in foreign countries, by players to cater to the global demand is also expected to push export sales
- ITL's Solis brand has also been gaining popularity in the European markets.
- Escorts reduced exports from its Poland factory and has started exporting from India. Mahindra is a dominant player in exports to the United States and Asian nations.

# Tractor Exports



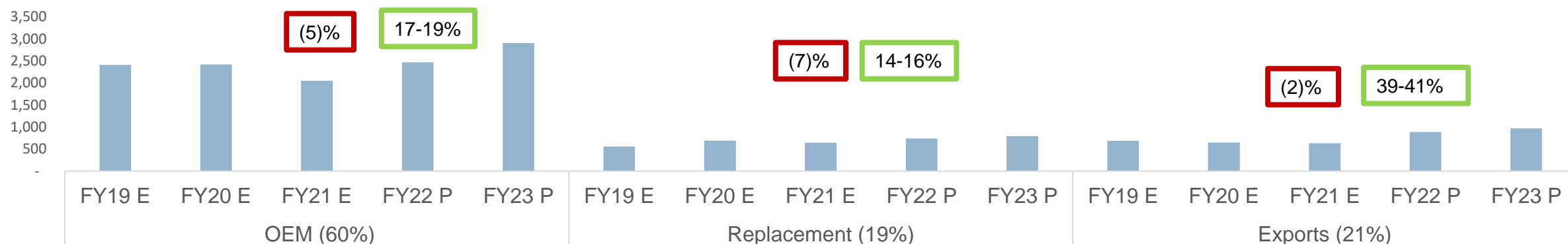
- Exports, accounting for about 13% of the overall tractor sales, are estimated to rise by 43-47% on-year in fiscal 2022 after registering a 17% growth in fiscal 2021.
- USA, Europe & Asia are likely to remain the focal regions for long-term exports. Also, with India emerging as an export hub for relatively small tractors (30-75 horsepower or hp), and major companies increasing focus on international markets with the launch of 90-120 hp.
- ITL and Escorts have been focusing on growing exports to insulate themselves from the cyclic domestic market demand.

# Auto Components

# Auto components production revenue to recover by 22-25% in FY22 backed by demand recovery

Demand from OEMs to drive auto component growth in FY22

	FY19 E	FY20 E	FY21 E	FY22 P
Industry revenue	15%	-6%	-5%	22-25%



Note: Coloured brackets represent y-o-y growth; Numbers in the bracket in the axis represent share in production for FY21

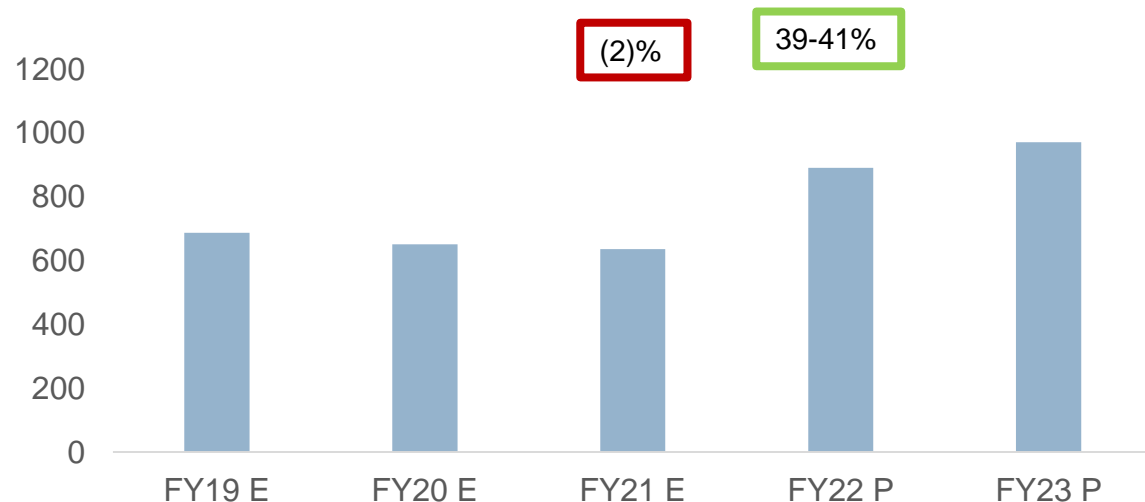
Source: CRISIL Research

- Owing to the low base of the previous two fiscals. Auto component revenue is expected to increase by 22-25% on-year after declining by 6% and 5% in fiscals 2020 and 2021, respectively.
- This can be attributed to increase in OEM demand, driven by the recovery in commercial vehicles (CV) and two-wheeler production.
- However, production growth across OEM segments is estimated to have been affected by persistent semiconductor shortages, which hit production of select high-end models of utility vehicles, premium motorcycles and light commercial vehicle.

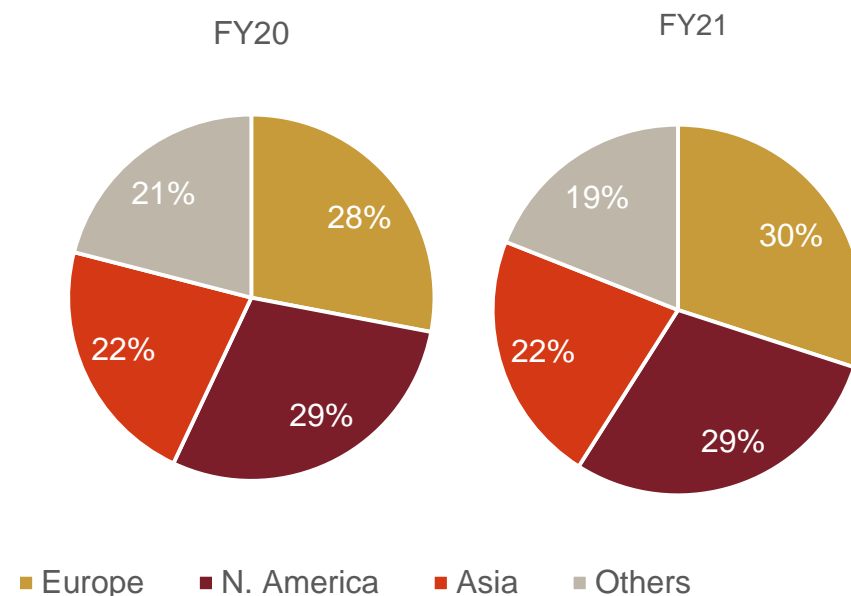


# Exports to increase in FY22 on the back of recovery in key global automotive markets

## Export demand expected to revive in FY 22



## Developed nations support exports



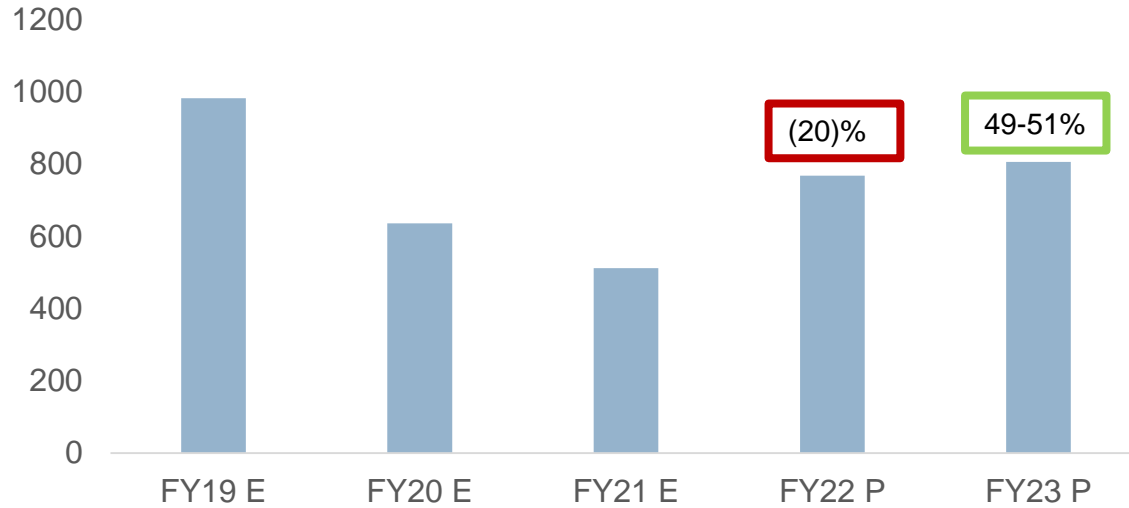
Note: Brackets represent y-o-y growth;  
Source: CRISIL Research

Source: DGFT, CRISIL Research

- On the export front, the industry witnessed a decline of 2% in fiscal 2021. Going ahead, demand is expected to grow by 39-41%, backed by a global recovery.
- The growth would be on the back of healthy demand from North America and Europe which together contributed 59% to export demand from April-October 2021.
- An uptick in freight demand amidst an economic recovery in the US and an expected revival in passenger vehicle markets across Europe are expected to bolster demand for auto component exports.
- Moreover, in value terms, demand is expected to be slightly better, owing to increase in realisations as auto component players have undertaken price hikes to offset the rising input cost burden.

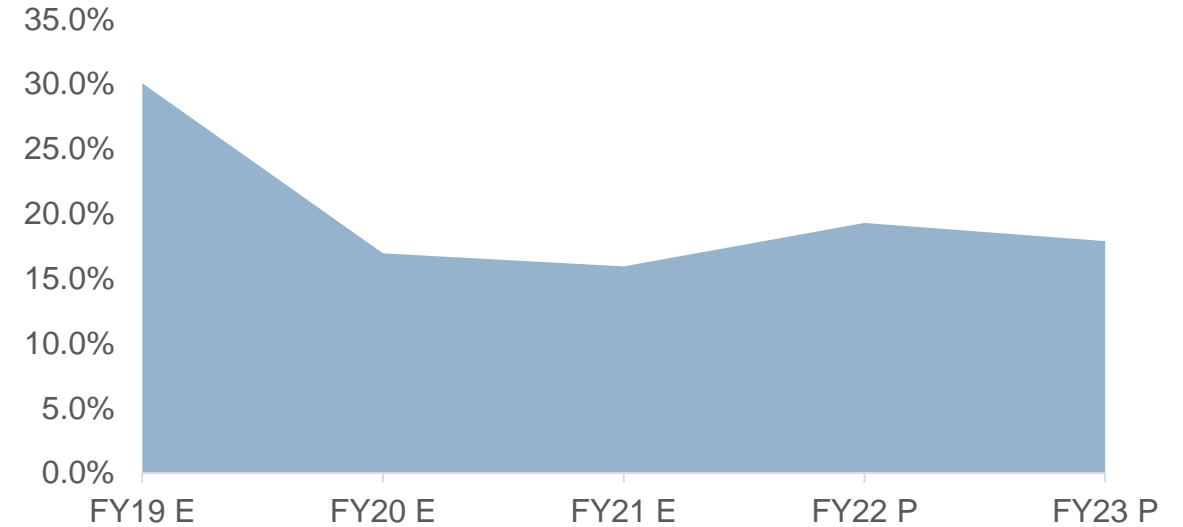
# Imports to increase significantly in FY22 on a low base of preceding two fiscals

## Recovery in FY22 after a consecutive drop



Source – DGFT, CRISIL Research

## Imports Share to increase on a low base

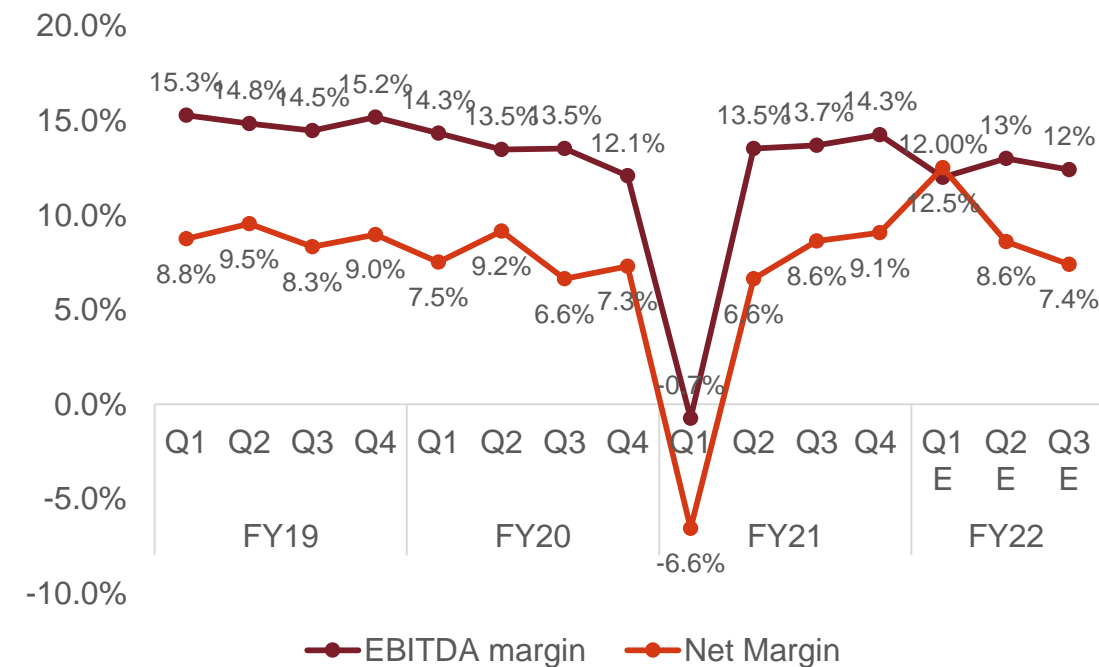
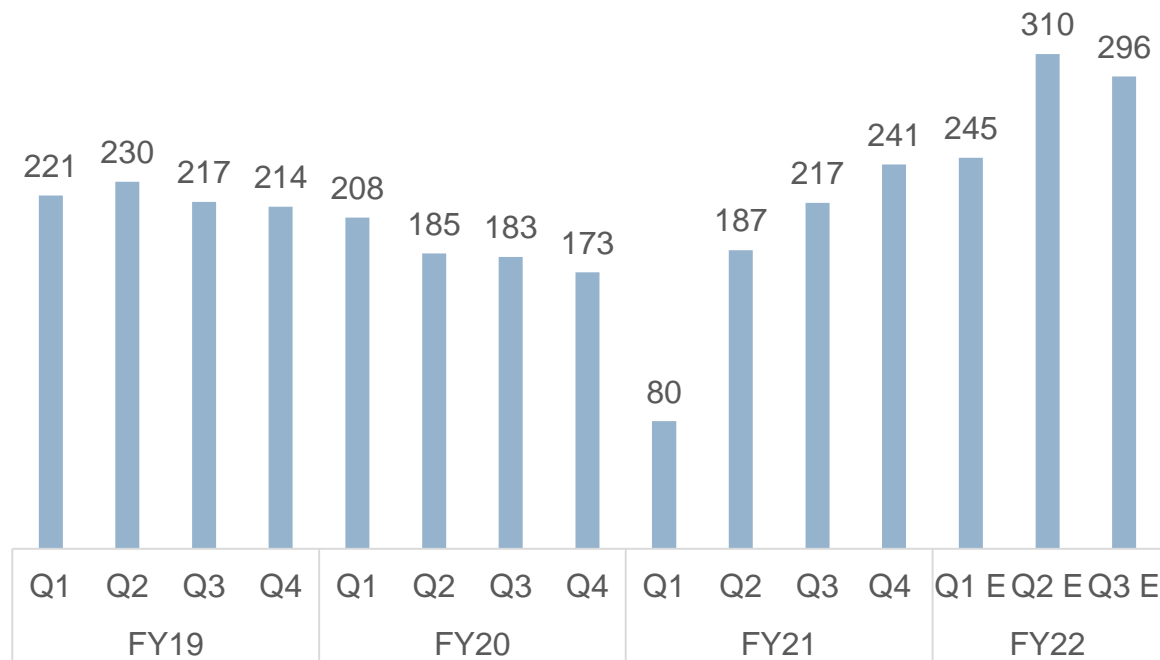


Source: DGFT, CRISIL Research

- Utilization levels of domestic OEMs and aftermarket players have also been impacted since the beginning of fiscal 2022 on account of state-wide lockdown and restrictions and persisting semiconductor shortage issue.
- Going ahead, import demand is likely to grow led by a recovery in domestic market.
- India imports mainly from China, Korea, Germany, Japan and the USA. In H1 FY22, share of China in auto component imports increased substantially owing to higher demand for replacement and low-value products such as gear boxes and other accessories used for motor vehicles.

# EBITDA margin to rebound in fiscal 2022 supported by higher demand and better realisations

## Company financials



Source: Company financials, CRISIL Research

- Margins are expected to improve in FY22.
- This can be attributed to improved demand from all segments and recovery in utilization levels of automotive component players in fiscal 2022.
- Utilization levels of players had dropped to an all-time low in fiscal 2021. This coupled with higher input costs took a toll on profitability during the year.
- In FY23, margins are further expected to expand as raw material prices soften during the year.
- Additionally, higher capacity utilization levels on the back of robust demand sentiments would aid the expansion in margins.

# Annual Forecasts

# Annual Forecast – Domestic (Base case)

	Volume			
	FY20	FY21	FY22	FY23P
<b>Passenger vehicles</b> (‘000)	2,773	2,712	2942	3440-3460
<b>Two-wheelers</b> (mn)	17.42	15.12	13.46	13.2-13.7
<b>Commercial vehicles</b> (‘000)	718	566	721	827-844
<b>Three-wheelers</b> (‘000)	636	216	260	357-362
<b>Tractors</b> (‘000)	709	898	842	840-850

	Growth y-o-y (%)			
	FY20	FY21	FY22	FY23P
	(18)%	(2)%	9%	16-18%
	(18)%	(13)%	(11)%	(1)-1%
	(29)%	(21)%	26%	15-17%
	(9)%	(66)%	20%	37-39%
	(10)%	26.6%	(6)%	0-2%

SOURCE: SIAM, CRISIL Research

# Quarterly forecasts – Domestic

Vehicle segment	Subsegment	Volume				YoY growth (%)			
		Q3 FY 22	Q4 FY 22	Q1 FY 23 P	Q2 FY 23 P	Q3 FY 22	Q4 FY 22	Q1 FY 23 P	Q2 FY 23 P
Passenger vehicles	Cars ('000)	349	398	382-392	388-398	(32)	(22)	14-16	13-15
	UVs & vans ('000)	411	398	455-465	465-475	9	(5)	48-50	18-20
	<b>PVs ('000)</b>	<b>760</b>	<b>797</b>	<b>845-855</b>	<b>860-870</b>	<b>(15)</b>	<b>(15)</b>	<b>31-33</b>	<b>16-18</b>
Two-wheelers	Motorcycles (mn)	2.4	2.2	2.49-2.54	2.35-2.40	(22)	(22)	44-46	(10)-(8)
	Scooters (mn)	1.0	1.1	0.95-1.00	1.23-1.28	(28)	(24)	66-68	(7)-(5)
	Mopeds ('000)	160	109	95-100	143-148	(24)	(30)	42-44	(13)-(11)
	<b>2W (mn)</b>	<b>3.6</b>	<b>3.4</b>	<b>3.58-3.63</b>	<b>3.75-3.80</b>	<b>(12)</b>	<b>(23)</b>	<b>49-51</b>	<b>(9)-(7)</b>
Commercial vehicles	LCV ('000)	127.6	148.9	125-127	136-139	(8)	19	70-72	26-28
	MHCV ('000)	60.4	88.1	68.0-68.5	70-71	21	16	149-151	36-38
	Buses ('000)	6.9	12.1	10.6-10.8	9.5-9.6	67	53	99-101	51-53
	<b>CVs ('000)</b>	<b>196</b>	<b>250</b>	<b>204-208</b>	<b>217-221</b>	<b>1</b>	<b>19</b>	<b>91-93</b>	<b>30-32</b>
Tractors ('000)		223	177	223-228	207-211	(13)	(26)	(2)-1	(2)-0
Three-wheelers	Goods ('000)	22.3	22.9	26.3-26.8	33.0-33.5	(21)	(19)	207-209	43-45
	Passenger ('000)	60.1	60.3	53.5-54.0	61.2-61.8	37	5	241-243	30-32
	<b>3W ('000)</b>	<b>82.4</b>	<b>83.2</b>	<b>80.2-80.7</b>	<b>94.5-95.0</b>	<b>14</b>	<b>(3)</b>	<b>229-231</b>	<b>34-36</b>

SOURCE: SIAM, CRISIL Research

# Thank You

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