



# Impact of macro-economic environment on the automotive industry



Automotive Component Manufacturers Association of India

October 2022

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# Content

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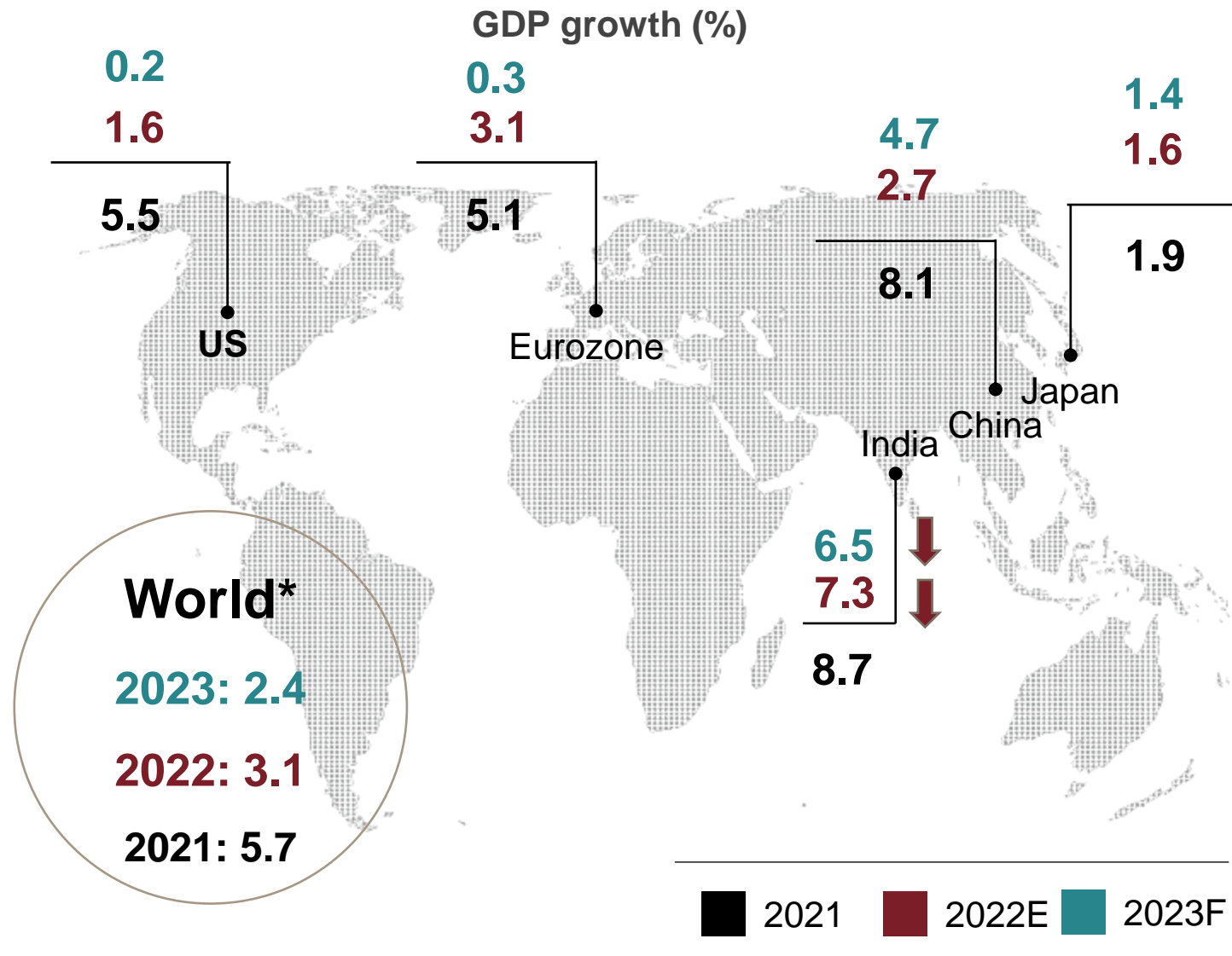
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# Economy overview

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# The direction of travel is unclear



- Sharp growth slowdown expected in 2023 led by effects of rising rates, supply-disruption, energy shortages (Europe and China) and Covid lockdowns (China). Asia-Pacific remains a relative outperformer
- Reining in inflation is Macro Policy Priority Number One
- Inflation threatens to influence politics, trade policies global priorities and poverty goals
- Prospects for a near-term recovery unclear. US faces a classic overheating problem that should resolve itself fairly quickly, Europe's energy reconfiguration will take years to complete, and the timing of China's move away from its stringent zero-COVID policy is anyone's guess (possibly early 2023).

↓ There may be a downward revision in the near future for India

# Mobility Trends

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# Hi-Frequency indicators

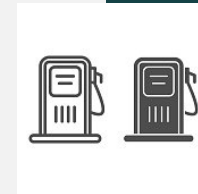
## How are they shaping?

### Mobility indicators and Vaccination progress



Mobility Indicators in September month indicate that most segments such as grocery and pharmacy, parks, retail and recreation and transit stations have stabilized over the last few days

### Fuel and Power consumption



Power consumption witnessed a 11.3% year on year growth in September 2022 . Diesel consumption witnessed growth of 13.5% in September 2022 on y-o-y basis while petrol consumption saw a growth of 8.8% for the same period

### Freight movement & Transporter Profitability



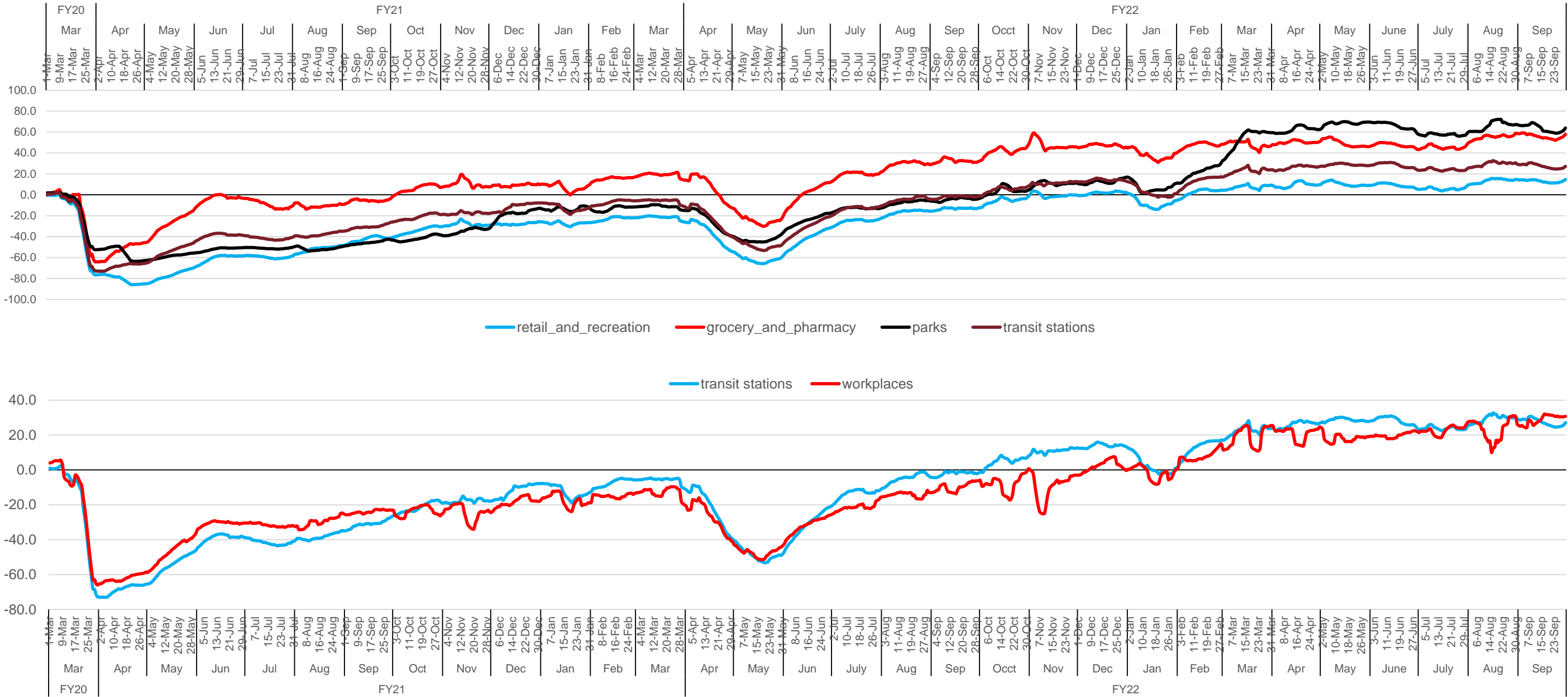
E-waybill generation has been at daily average of 1.55mn in September 2022 compared to August 2022 daily average of 1.58mn for intra-city. While for inter-city the same has been about daily average of 0.88mn in September 2022 compared with daily average of 0.95mn in August 2022

### STU Tendering Tracker



Interactions indicate STU tenders from states like Maharashtra, Karnataka, Uttar Pradesh, Tamil Nadu, Telangana, Kerala can see delivery spread over the next 12-18 months

# Mobility indicators-segmental

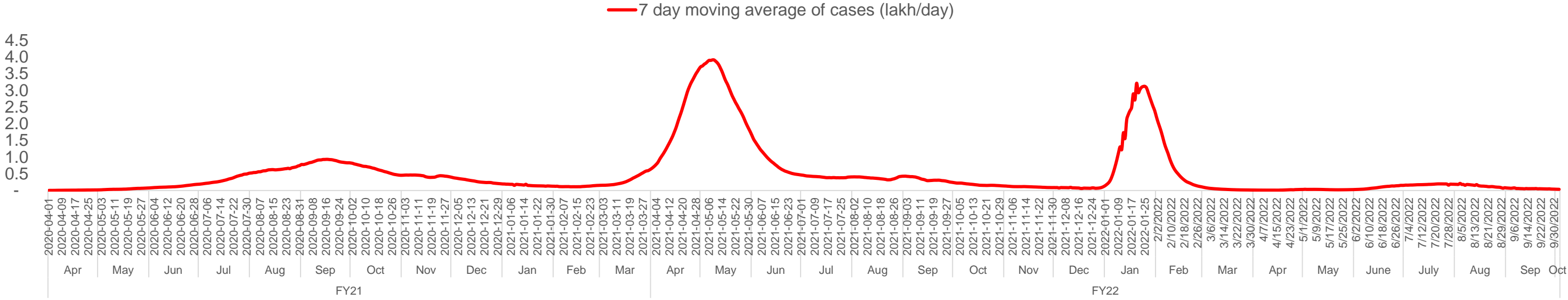


Source: CRISIL MI&A, Covid-19 Community Mobility Reports by Google,

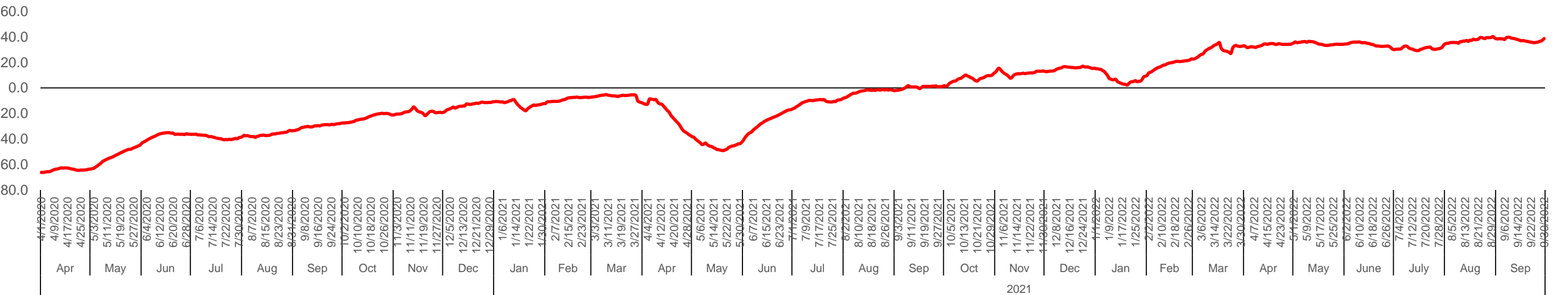
Note: Data is 7 day Moving Average data. Google's Community Mobility Reports use smartphone location data to publish reports about people's movement in an area.

# COVID-19 situation and overall mobility

Trend in new COVID-19 cases per day (7 day moving average)



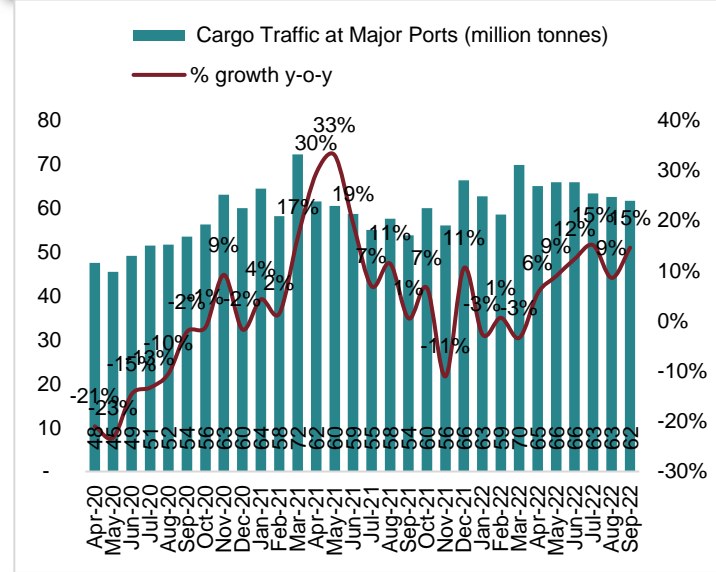
Trend in average mobility trends (7 day moving average) (%)



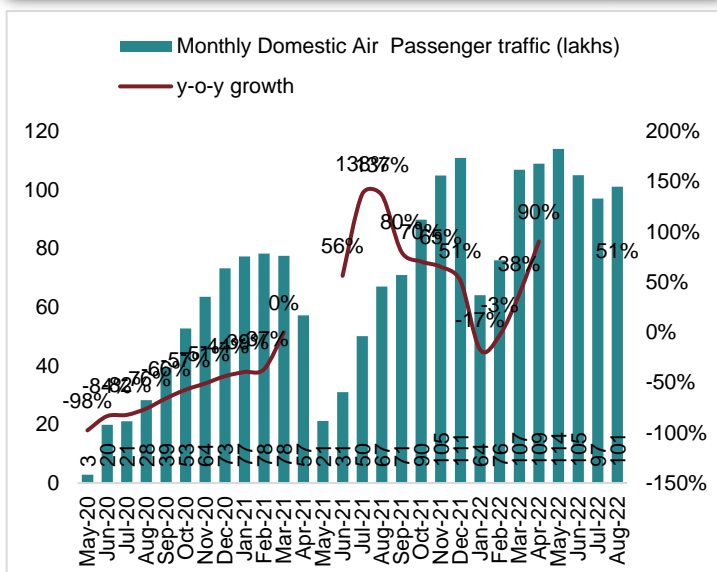


# Overall mobility

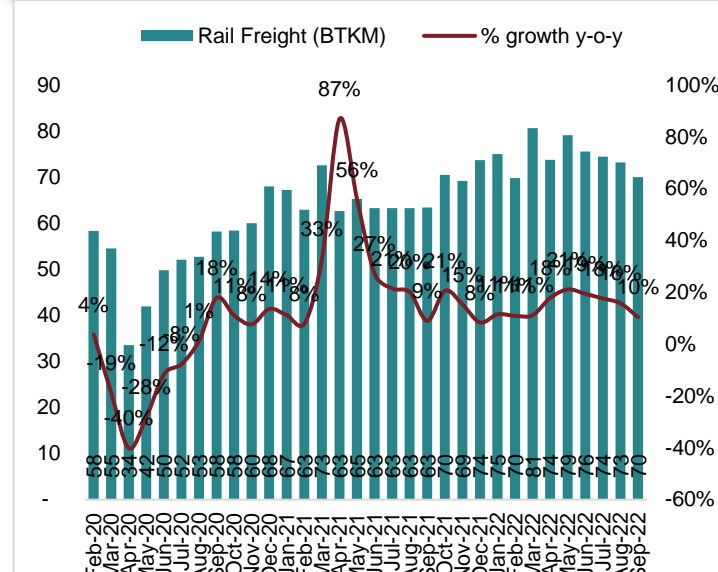
### Port Traffic



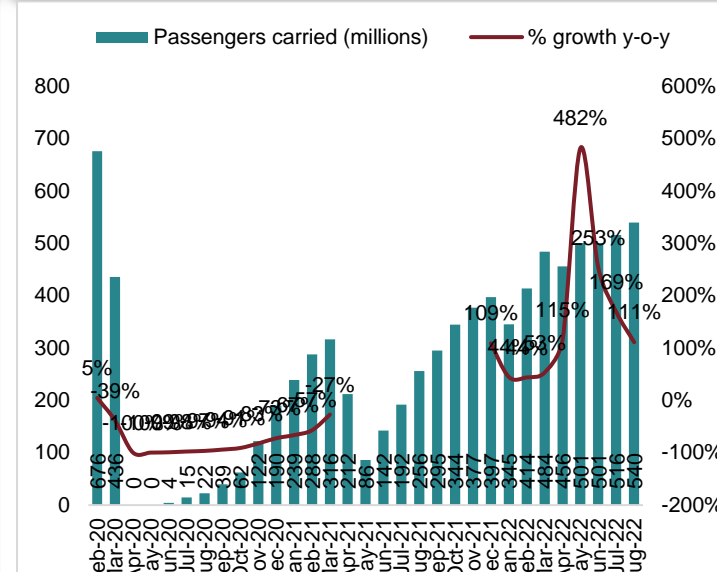
### Air traffic (Domestic)



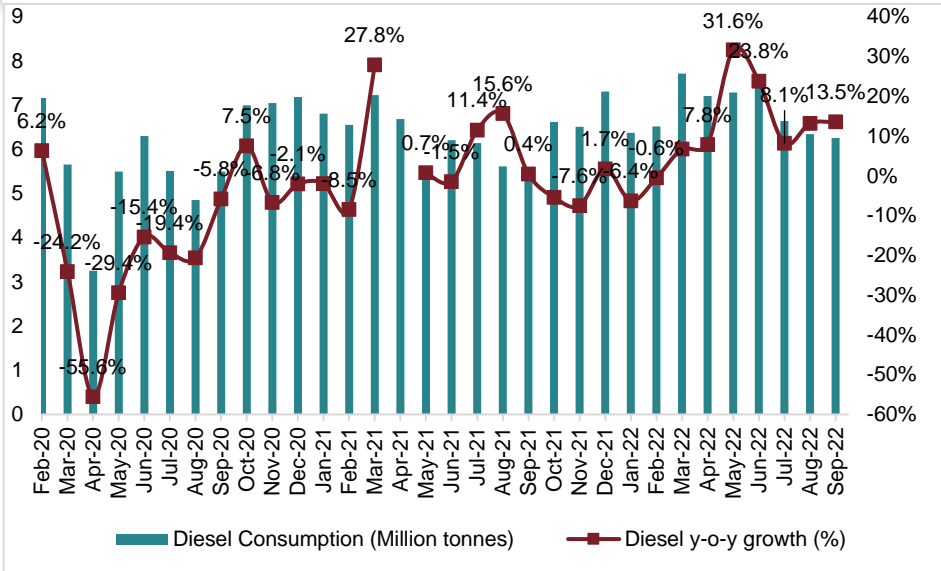
### Rail Cargo



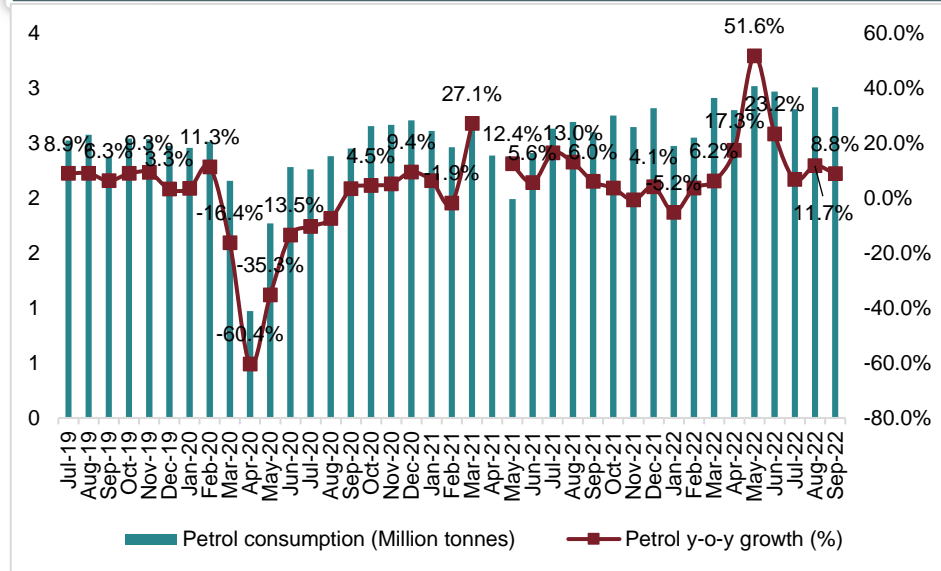
### Rail passenger



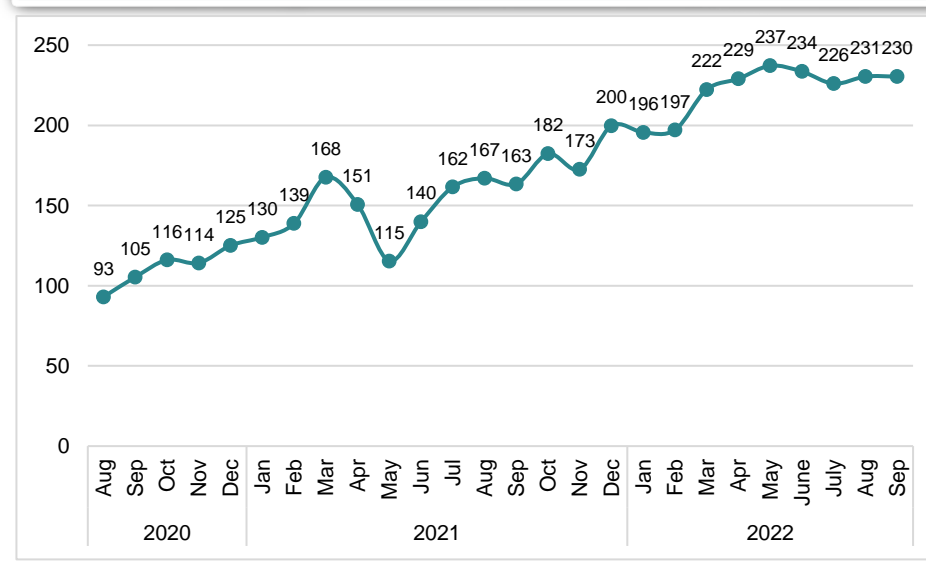
### Monthly diesel consumption



### Monthly petrol consumption

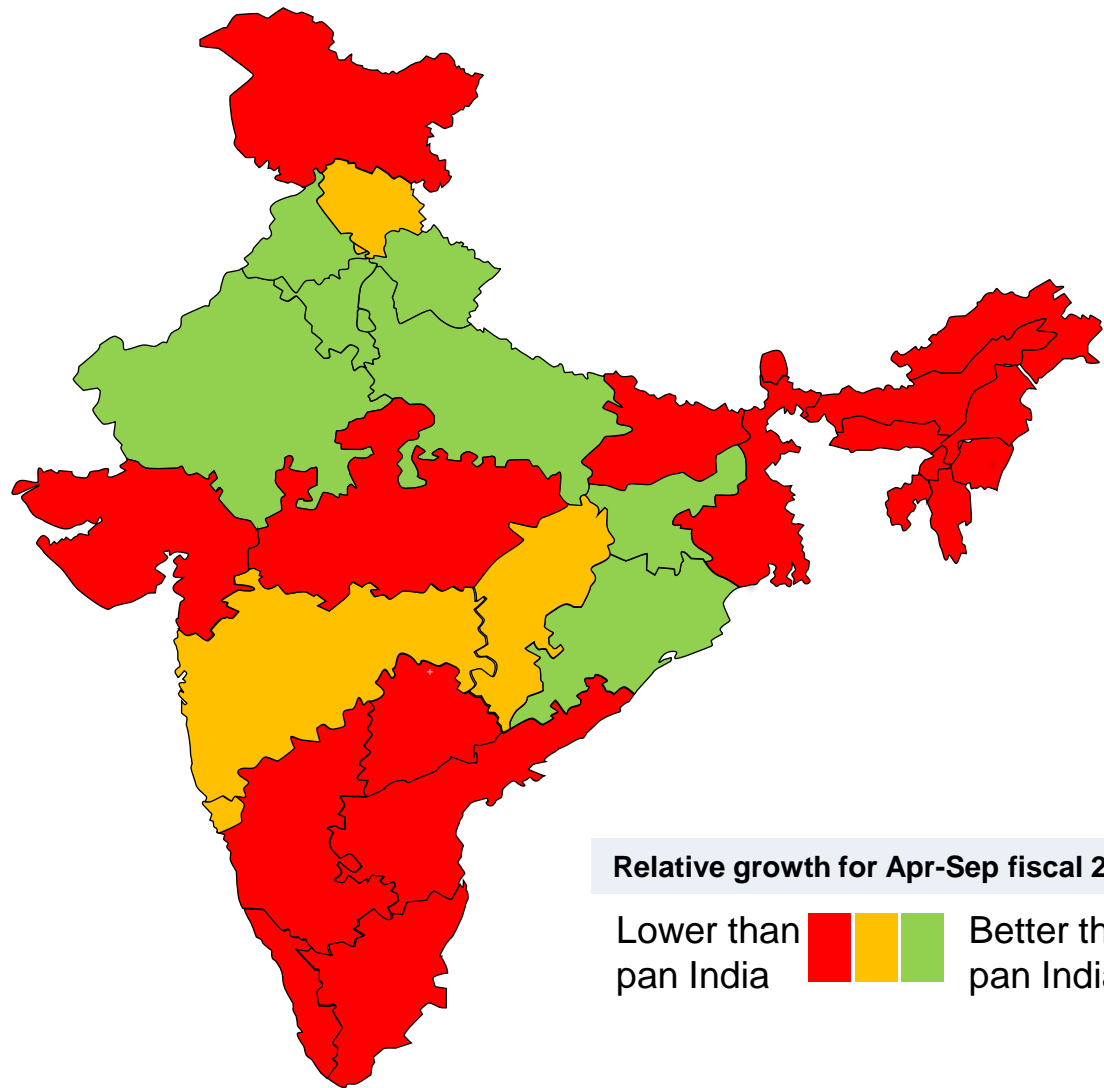


### NETC/Fastag collections-Indexed to Feb-20 levels



# North region performed better than other regions in Apr–Sep FY23 period

Eastern region seeing a slowdown in power consumption

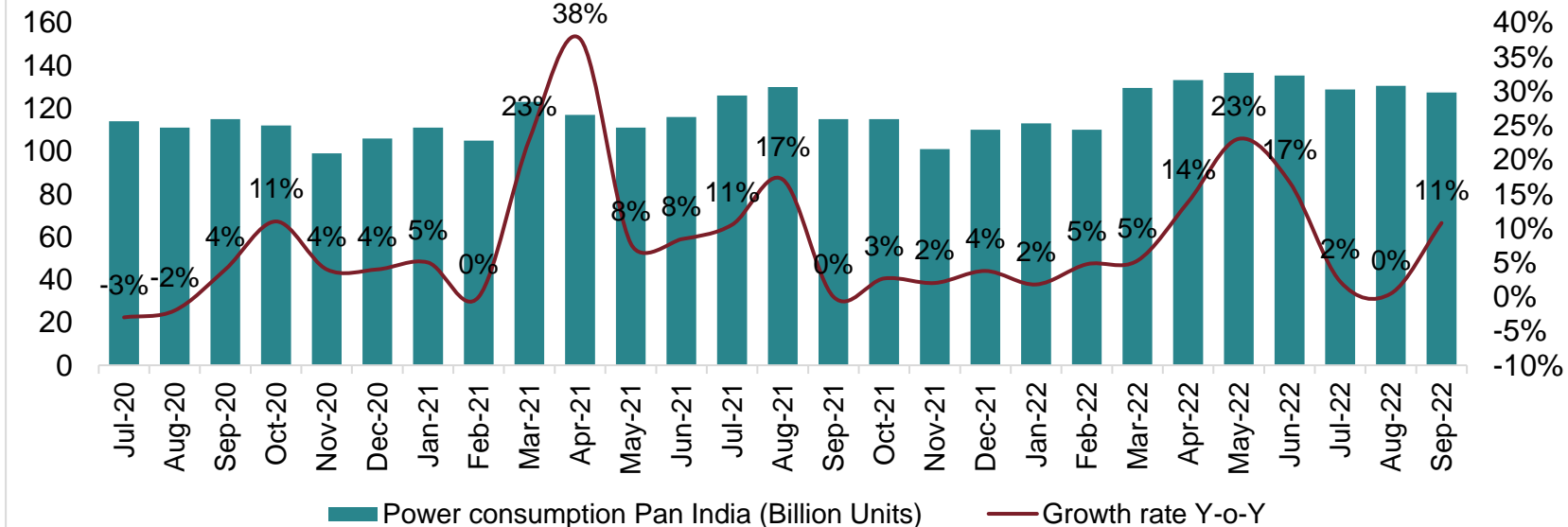


Relative growth for Apr-Sep fiscal 2023

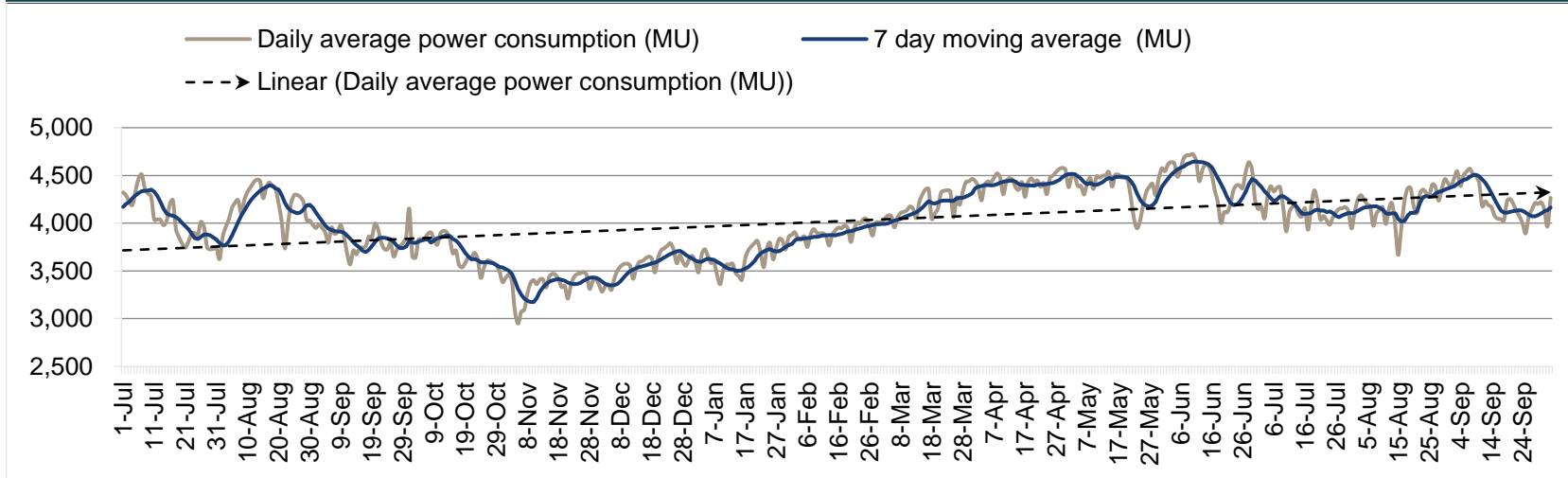
Lower than pan India ■ ■ ■ Better than pan India

Source: Posoco, CRISIL MI&A,

Monthly trend for power consumption in India

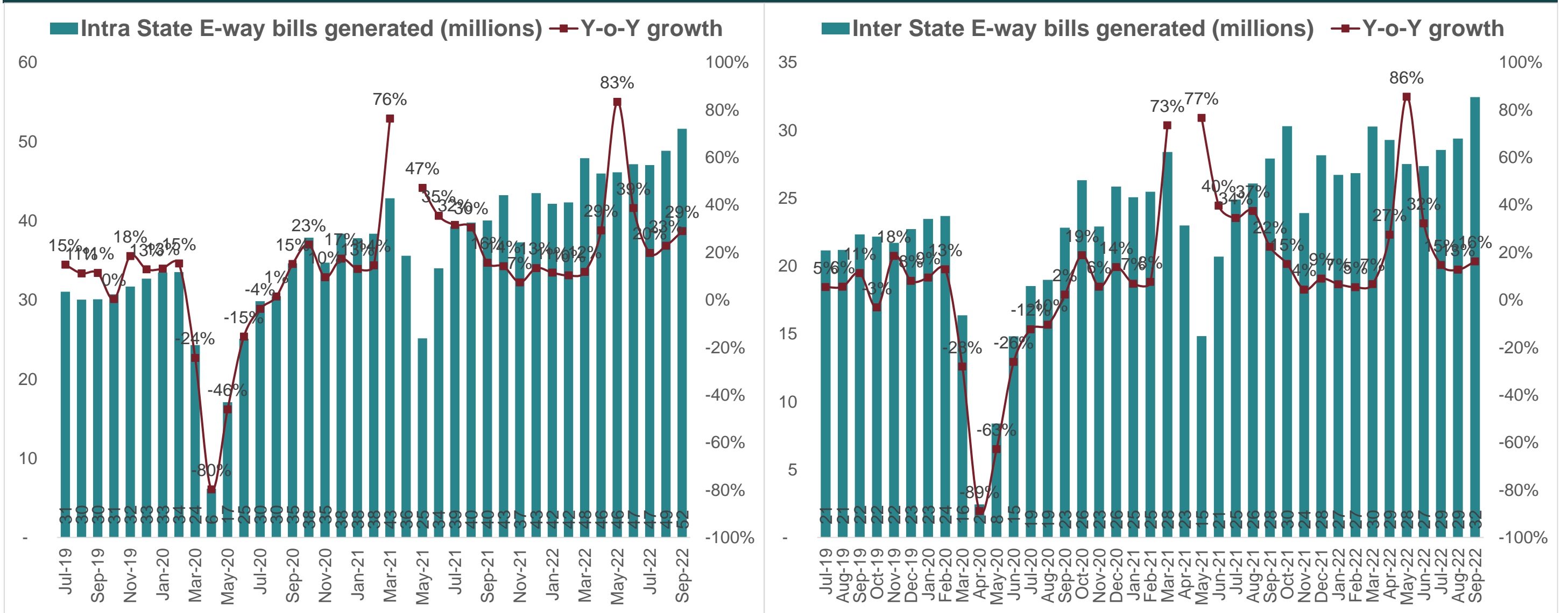


Daily trend for power consumption in India



# M-o-m improvement continued in September

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



Note:

1. y-o-y growth not mentioned in Apr-21 as values are not meaningful due to low base effect of previous year caused by the nationwide lockdown.
2. 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
3. Source: GST Network, CRISIL MI&A,

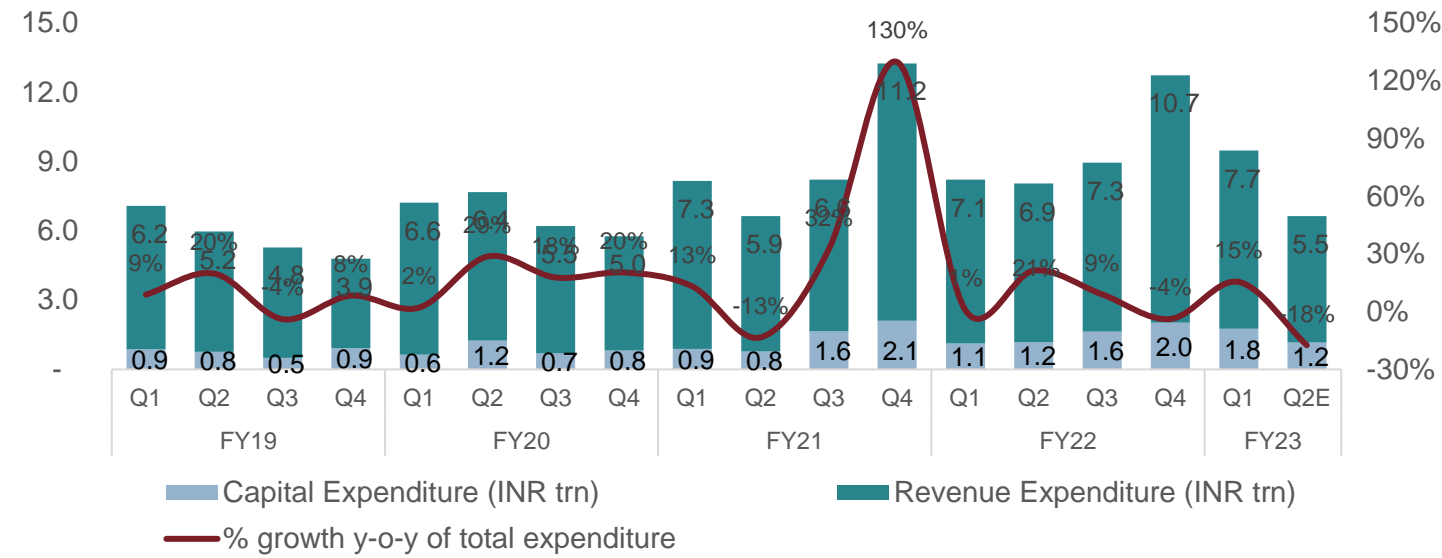
# High frequency parameters seeing sequential improvement

Consulting

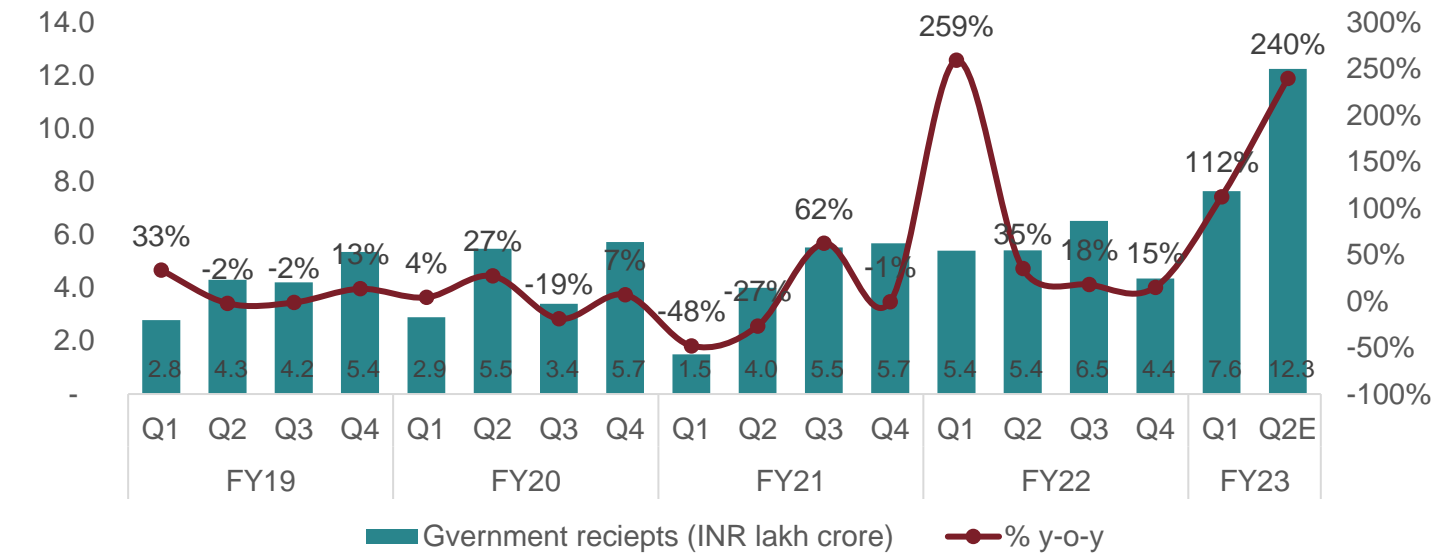
Segments	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
<b>Core Sectors</b>																		
Coal	9%	7%	7%	19%	21%	8%	15%	8%	5%	8%	7%	0%	29%	25%	31%	11%	8%	
Crude Oil	-2%	-6%	-2%	-3%	-2%	-2%	-2%	-2%	-2%	-2%	-2%	-3%	-1%	5%	-2%	-4%	-3%	
Natural Gas	25%	20%	21%	19%	21%	28%	26%	24%	20%	12%	13%	8%	6%	7%	1%	0%	-1%	
Petroleum Refinery Products	31%	15%	2%	7%	9%	6%	14%	4%	6%	4%	9%	6%	9%	17%	15%	6%	7%	
Fertilizers	4%	-10%	2%	1%	-3%	0%	0%	3%	4%	-2%	-1%	15%	9%	23%	8%	6%	12%	
Steel	494%	55%	25%	9%	5%	3%	5%	1%	-1%	3%	6%	4%	-1%	15%	3%	6%	2%	
Cement	607%	12%	8%	22%	36%	11%	15%	-3%	13%	14%	5%	9%	8%	26%	19%	2%	2%	
Electricity	39%	7%	8%	11%	15%	1%	3%	2%	3%	1%	4%	5%	11%	22%	16%	2%	1%	
<b>Auto-offtake</b>																		
Two Wheelers	NM	26%	3%	-2%	-15%	-17%	-25%	-34%	-11%	-21%	-27%	-21%	15%	250%	23%	10%	16%	13%
Cars	NM	113%	118%	45%	8%	-41%	-27%	-19%	-13%	-8%	-7%	-4%	-4%	185%	19%	11%	21%	92%
Uvs + Vans	NM	118%																
Three Wheelers	NM	-49%	-9%	41%	60%	54%	19%	-7%	25%	-10%	-2%	-1%	51%	2162%	184%	73%	63%	73%
<b>Auto-Vaahan</b>																		
2W	171%	155%	18%	28%	7%	-9%	-6%	0%	-19%	-13%	-10%	-4%	42%	214%	20%	-9%	9%	10%
Cars+Uvs	913%	171%	43%	63%	39%	22%	-11%	-19%	-10%	-10%	-7%	-5%	31%	209%	41%	-3%	8%	11%
<b>Others</b>																		
PMI Manufacturing	55.5	50.8	48.1	55.3	52.3	53.7	55.9	57.6	55.5	54	54.9	54	54.7	54.6	53.9	56.4	56.2	55.1
IIP Overall	134%	29%	14%	11%	12%	3%	4%	1%	1%	1%	2%	2%	7%	20%	12%	2%		
Diesel consumption	106%	1%	-2%	11%	16%	0%	-6%	-8%	2%	-6%	-1%	7%	8%	32%	24%	8%	13%	14%
Rail freight (NTKM)	87%	56%	27%	21%	20%	9%	21%	15%	8%	11%	11%	18%	21%	19%	18%	18%	13%	10%
Bitumen consumption	343%	12%	-23%	5%	16%	-2%	5%	-22%	-18%	-2%	3%	-12%	-8%	6%	22%	1%	51%	
<b>Total credit</b>	6%	5%	6%	6%	7%	7%	7%	7%	10%	7%	8%	9%	10%	12%	12.0%	13%	14%	15%
Industry credit	0%	1%	0%	1%	2%	2%	4%	4%	8%	6%	11%	7.00%	10%	11%	11.0%	12%	11%	
-Micro and Small	4%	5%	6%	9%	10%	10%	12%	13%	20%	20%	29%	32.00%	46%	49%	48%	44%	28%	
-Medium	50%	52%	61%	66%	63%	49%	49%	49%	87%	75%	82%	55.00%	52%	50%	49%	34%	36%	
-Large	-2%	-2%	-3%	-3%	-1%	-1%	1%	0%	1%	0%	4%	0.00%	1%	2%	3%	5%	6%	

# Central government finances in a relatively healthier position in FY23 compared to last year

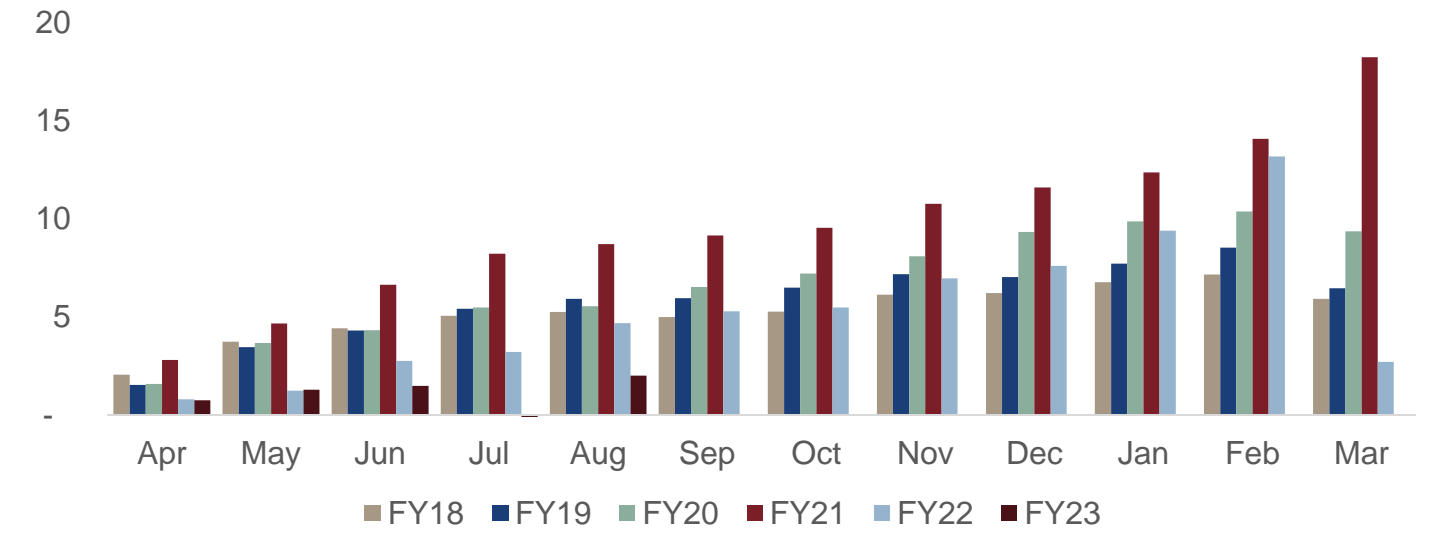
### Government expenditure better in Q1FY23 than Q1FY22



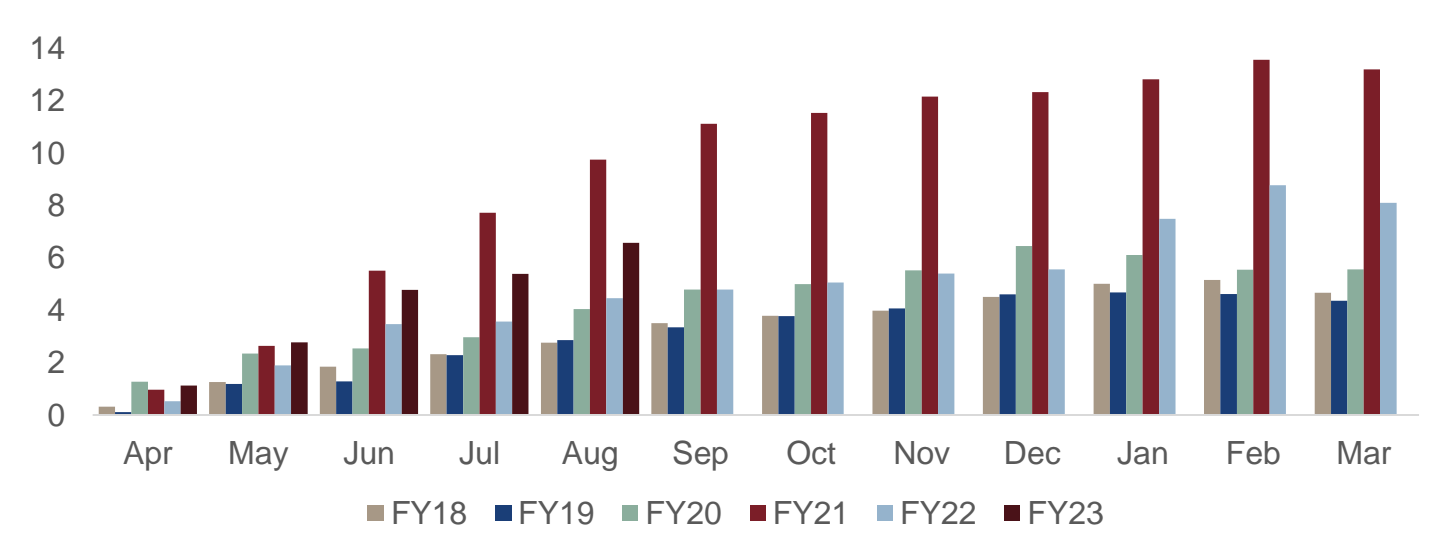
### Receipts in Q2FY23 improve



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

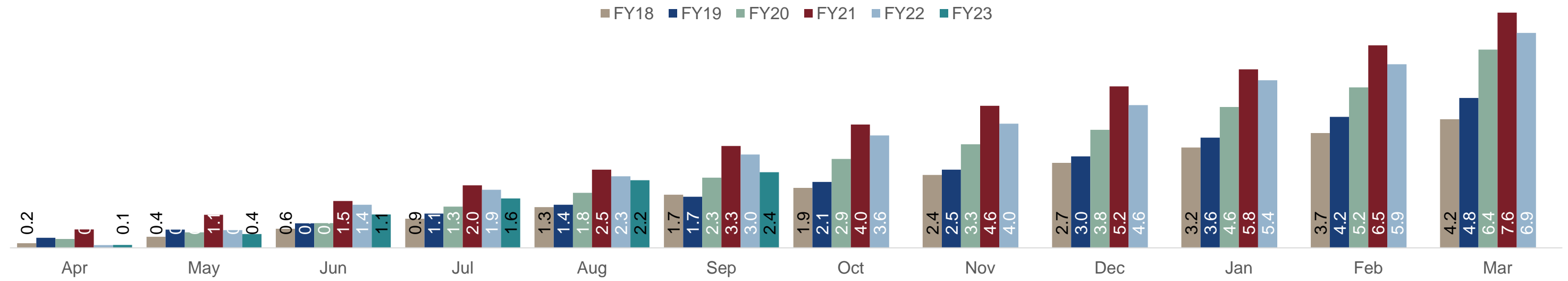


### m-o-m build-up of cumulative market borrowings of the govt. (INR trillion)

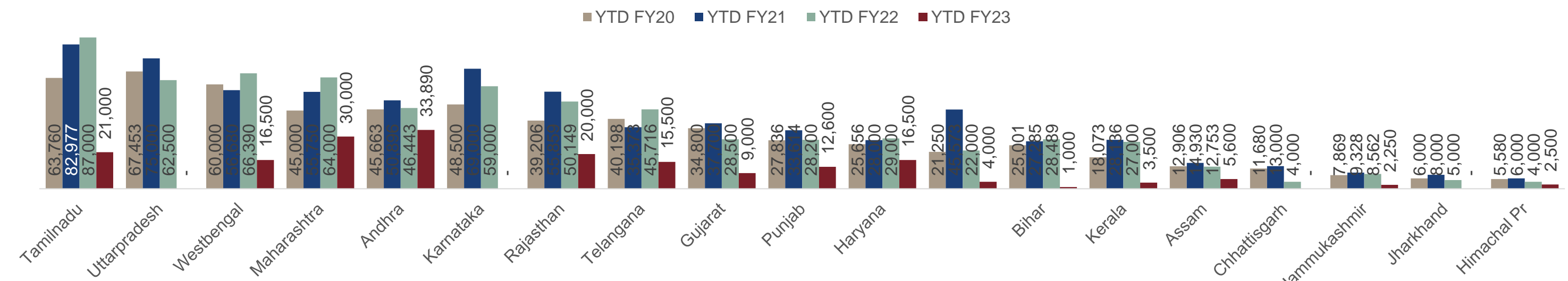


# State government borrowings similar to last year

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)



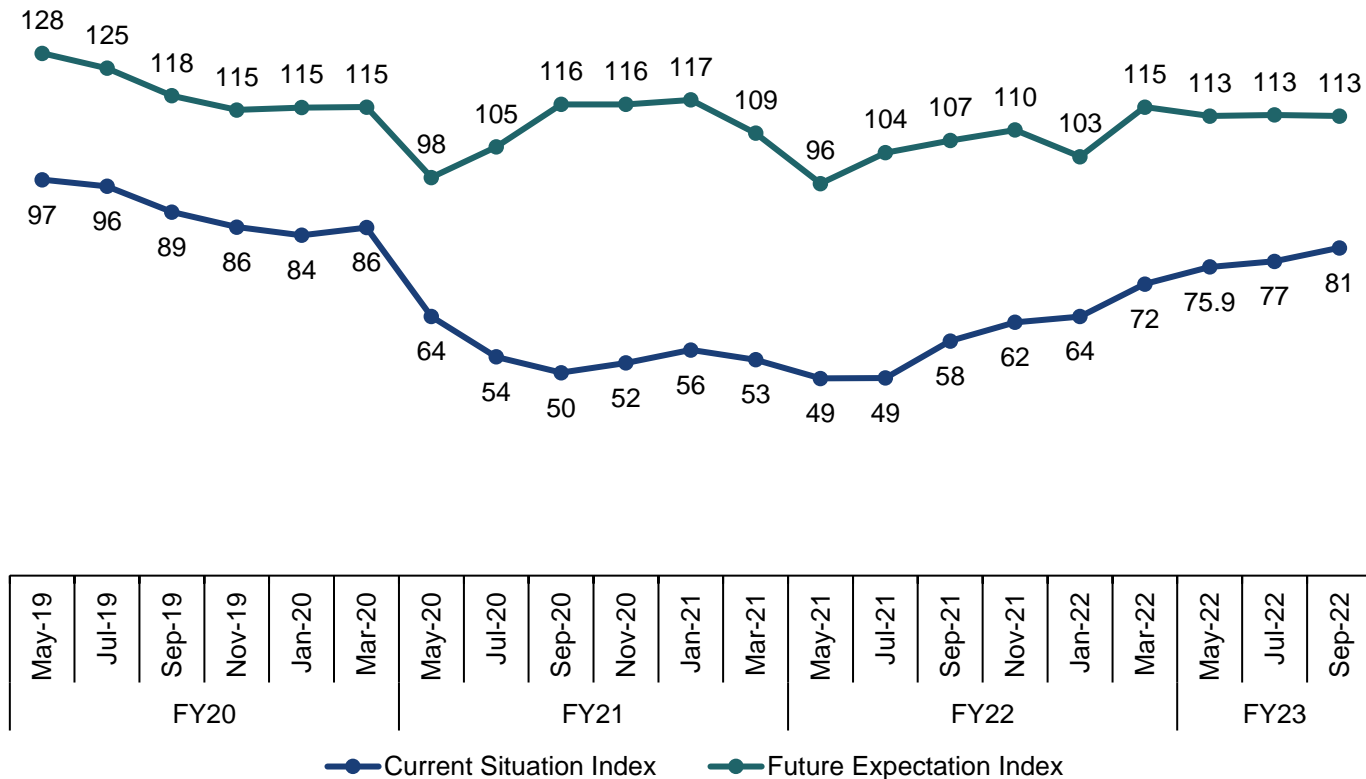
Source: RBI, MINISTRY OF FINANCE, CRISIL Research

# Perceptions and Expectations on the General Economic Situation Consulting

## Consumer Confidence Index

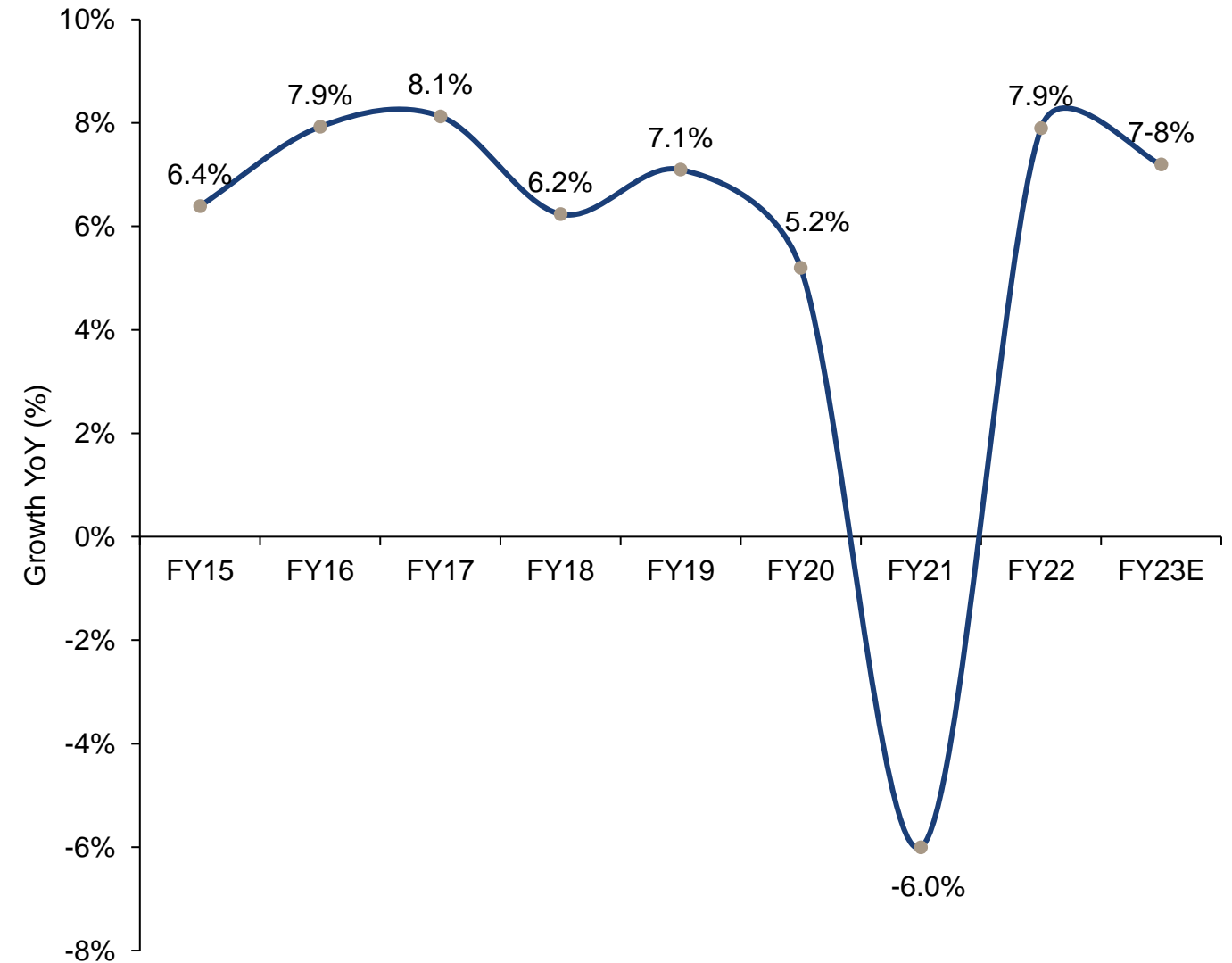


- Current situation index has been showing some improvement from the low of June '21, however, till Sep '22 it remained in the negative territory
- Many households are pessimistic on their current incomes but are hopeful of improvement over the next year
- Future Expectation index which represents consumer confidence for the next one year, remained rangebound during FY23 amidst the increased essential spending of most households



Source: CRISIL Research, RBI, NCAER

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



NOTE: New series considered with a base year - 2011-12  
Source: CRISIL MI&A

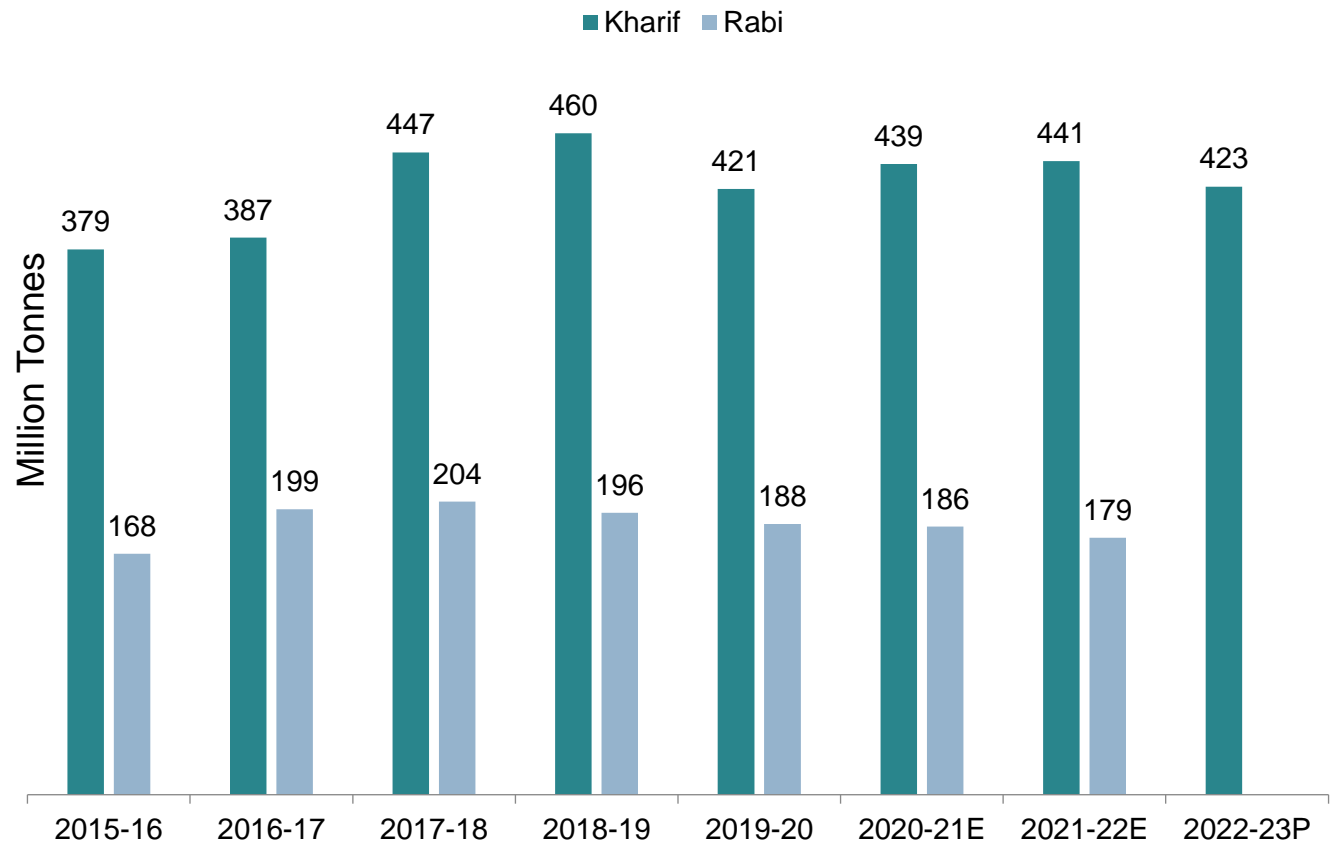
# Rural Scenario and Government Spending

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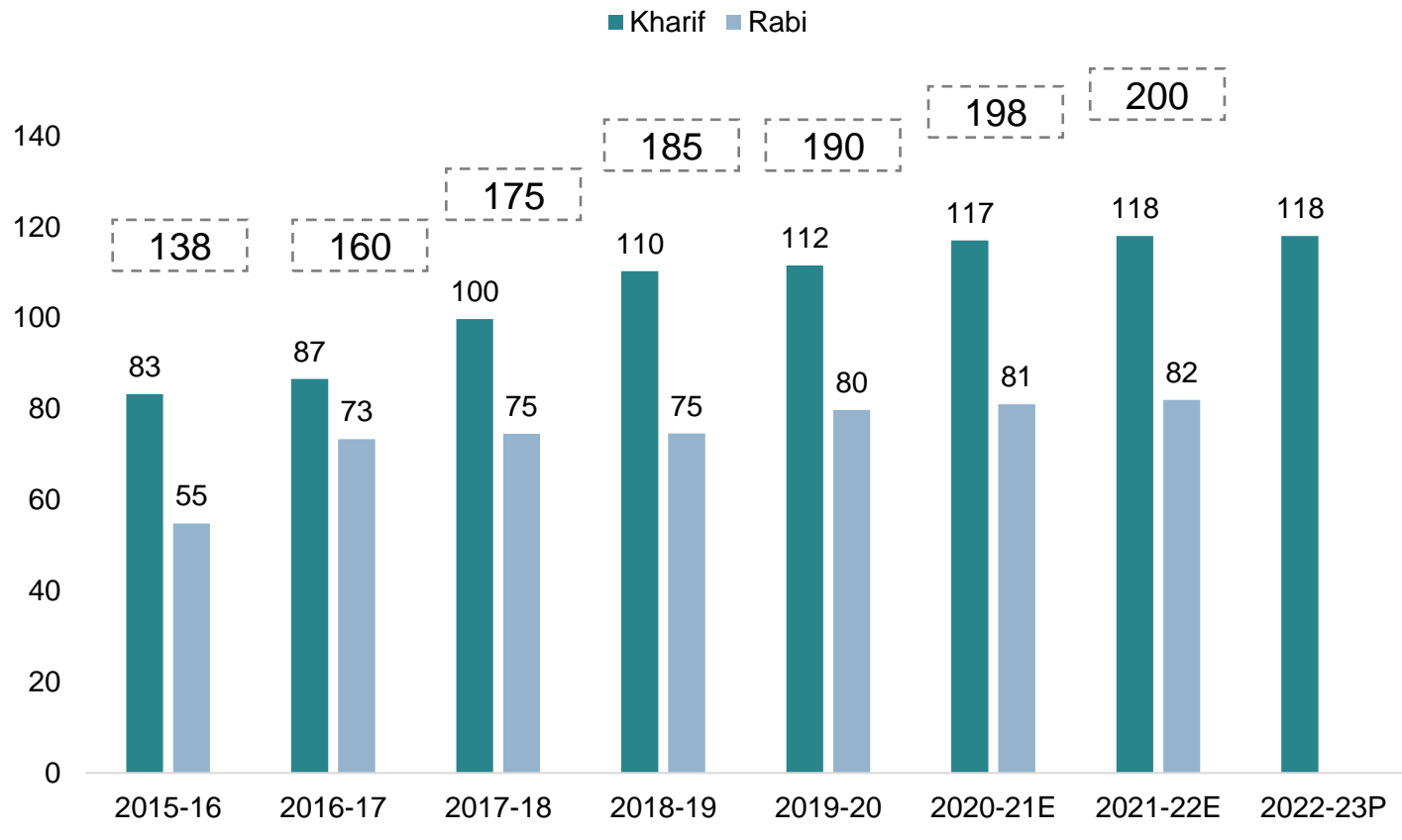
# High costs and low realization amidst the uneven spread of rainfall to impact farm sentiments in the near term

## 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

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Uneven spread of rainfall has led to crop damage in certain states resulting in a drop in foodgrain production

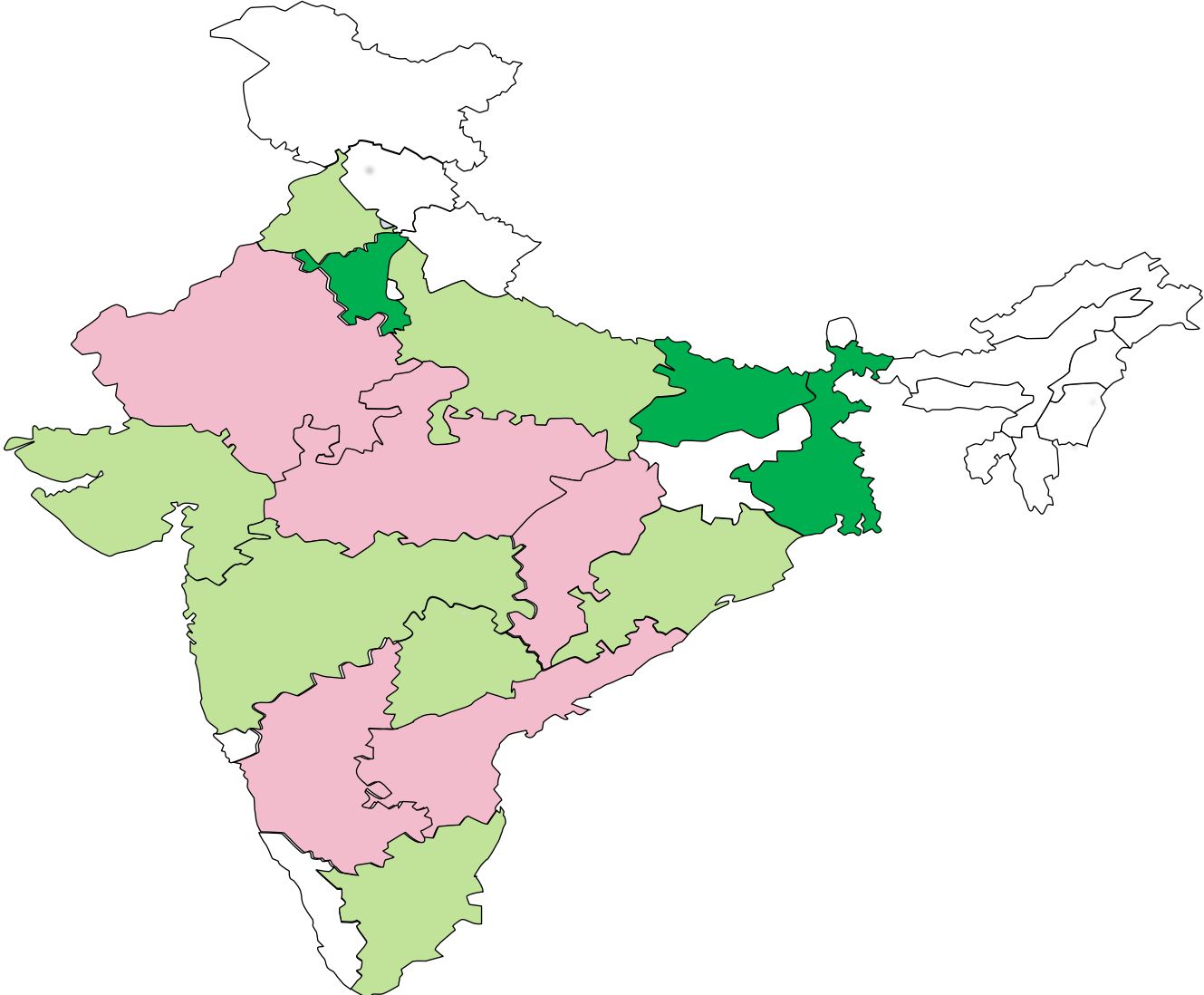
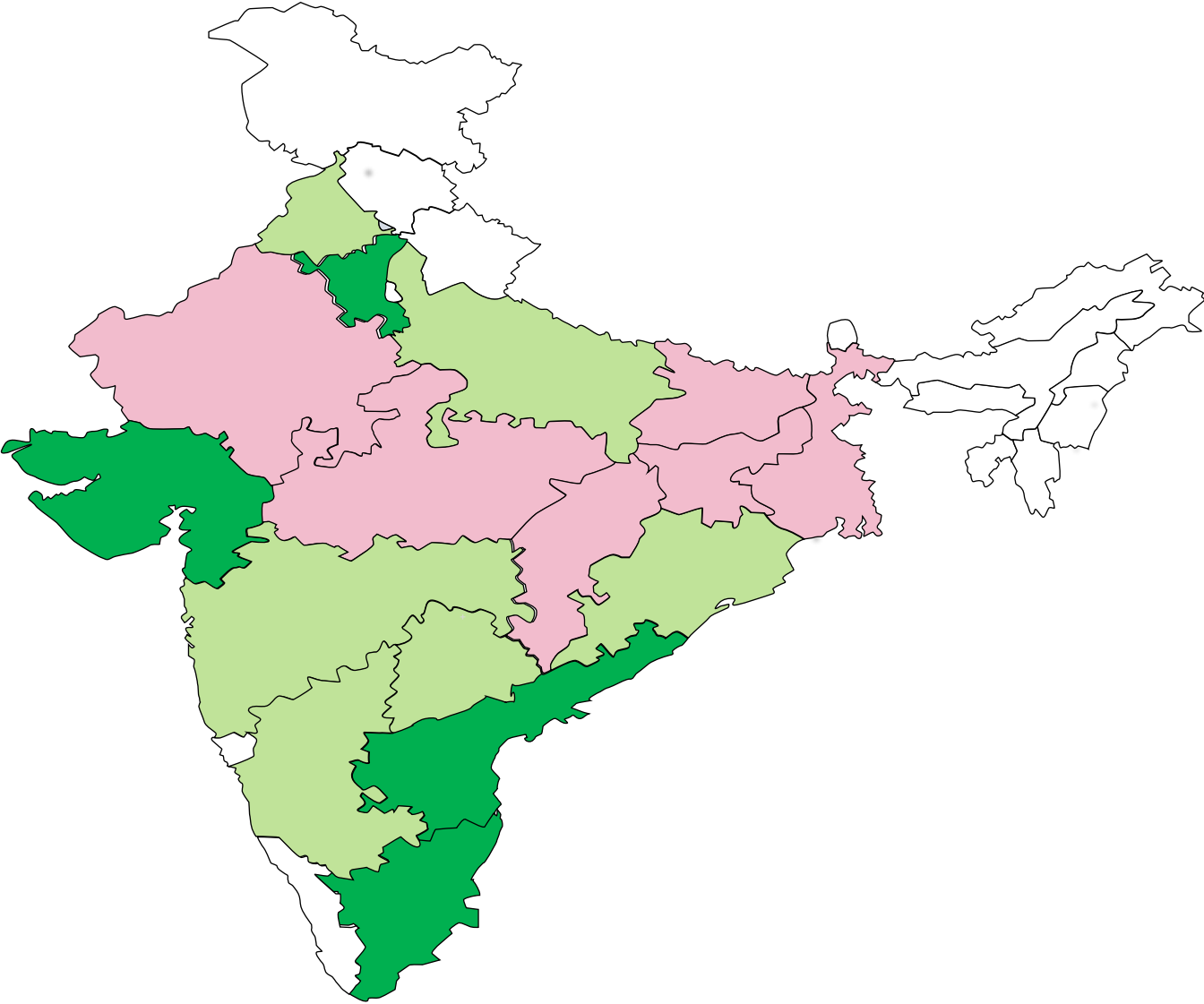


Higher prices/MSP on-year to result in stable income levels as compared to the previous year

# State wise Crop Value Index

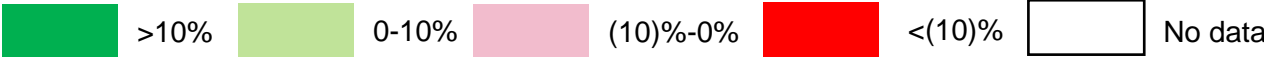
Kharif CVI heat Map for FY23

Rabi CVI heat map for FY22



Source: CRISIL MI&A

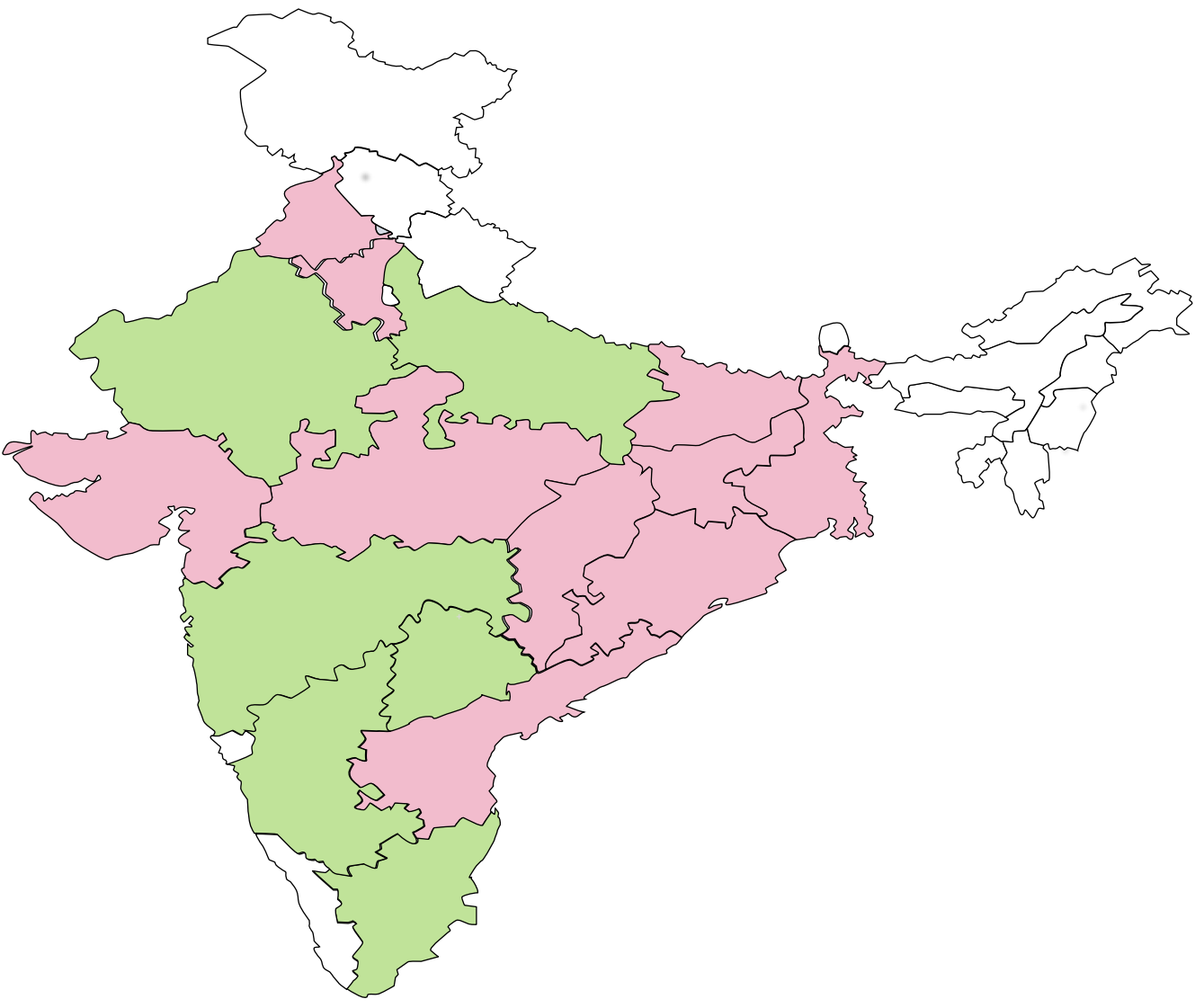
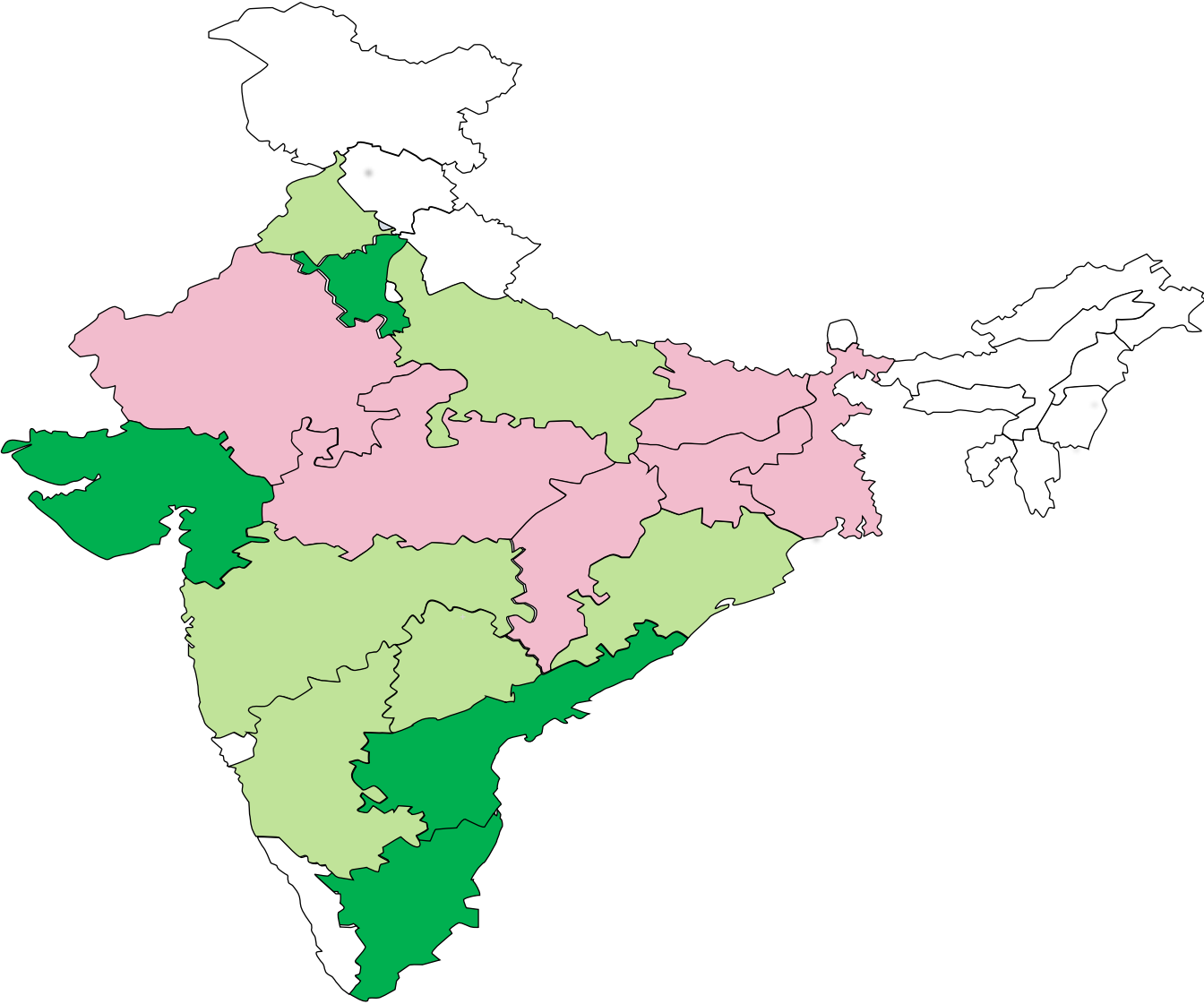
Colours indicate % change on-year



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

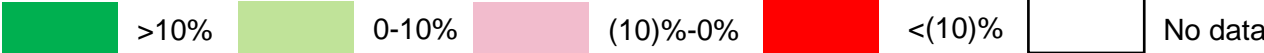
Kharif CVI heat Map for FY23

Kharif Production for FY23



Source: CRISIL MI&A

Colours indicate % change on-year



# Kharif farm sentiments to be impacted on account of low government support and crop damage across certain states

## Farm incomes under pressure

### Crop scenario



- Kharif CVI expected to be stable in FY23 on account of lower crop production due to uneven spread of rainfall.
- Higher input cost and low realizations to impact farm sentiments in near term
- Positive sentiments for the upcoming rabi season on account of healthy reservoir levels
- In October, government increased MSP for Rabi crops

### MNREGA



- In fiscal 2022, Rs.99,053 cr has been spent in comparison to Rs.98,000 cr allocated
- Till September 2022, around 48.8 million households have worked under the scheme in FY23, while the full-year number in last fiscal was around 72.6 million
- For fiscal 2023, allocated expenditure has been cut by 25% to Rs.73,000 cr.
- Till September 2022, the total expenditure on the scheme has been ~Rs. 54,739 cr.



## Government support

### PM Kisan and PM Garib Kalyan Yojana

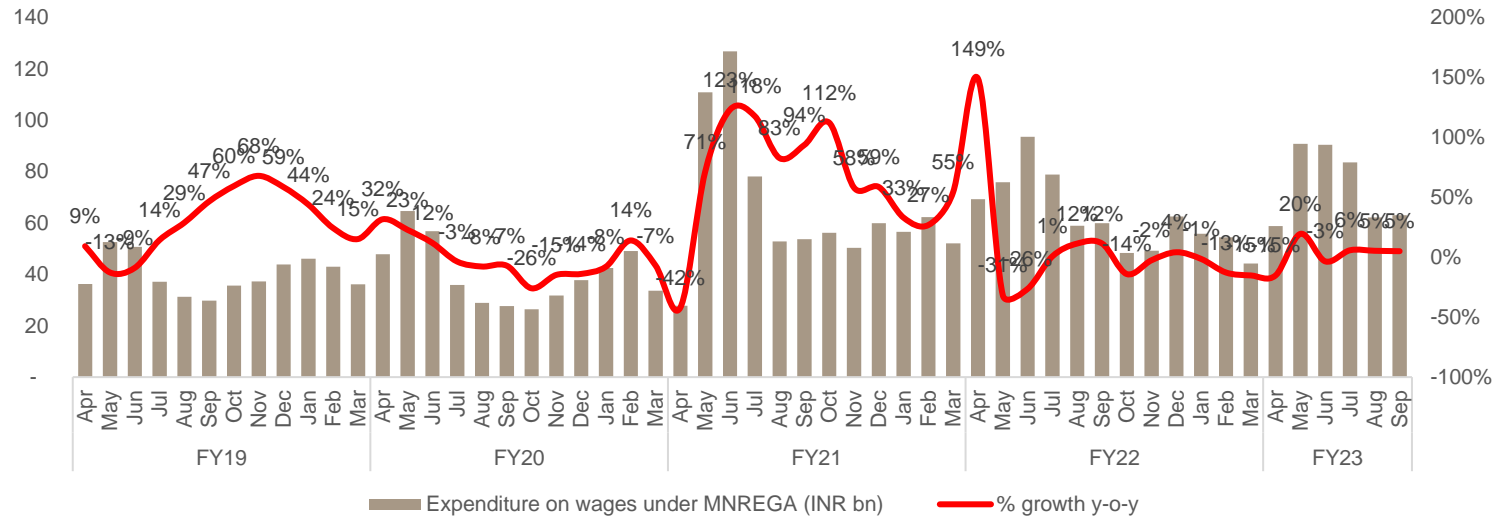


- Allocation for PM Kisan in the union budget for fiscal 2023 has been Rs.68000 cr, which is only marginally higher than the revised estimates for fiscal 2022, at Rs.65000 cr.
- A total of 12 crore beneficiaries have been transferred money under PM Kissan Yojana in fiscal 2022
- As per a statement from PMO (Prime Minister Office), PM Kisan 12th Installment List 2022 for Rs 2000 will be transferred directly in the bank account of eligible beneficiaries by first week of October 2022.
- Union Cabinet has approved the extension for the PMGKAY for a further period of 3 months i.e. October to December 2022.

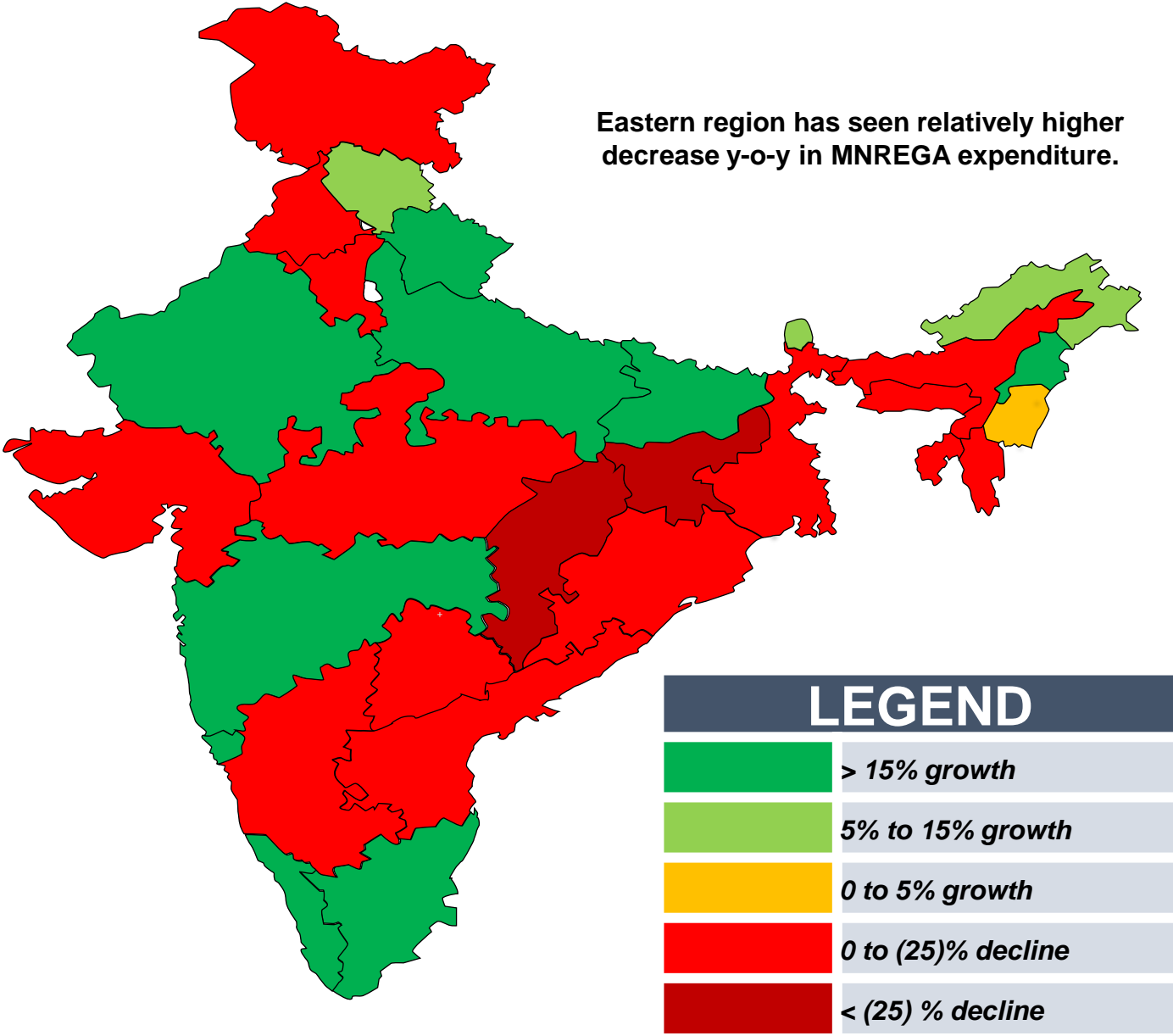
Source – MNREGA, Industry, CRISIL MI&A

# MNREGA scheme budget allocation tapered down in FY23

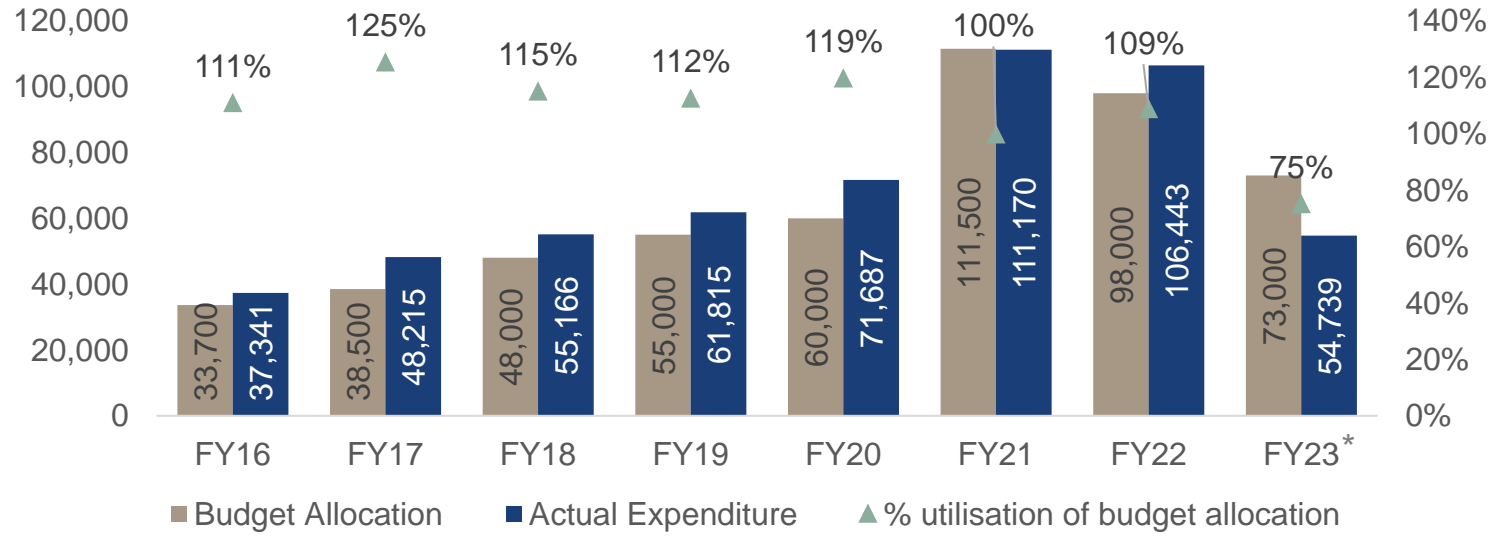
## MNREGA wages growth



## State wise growth in MNREGA wages expenditure for Apr-Sep FY23



## The MNREGA scheme has a history of overshooting budget



Note: \*: Actual Expenditure in FY23 is for April –Sep period  
 Source: Budget documents, Ministry of Rural development, CRISIL MI&A

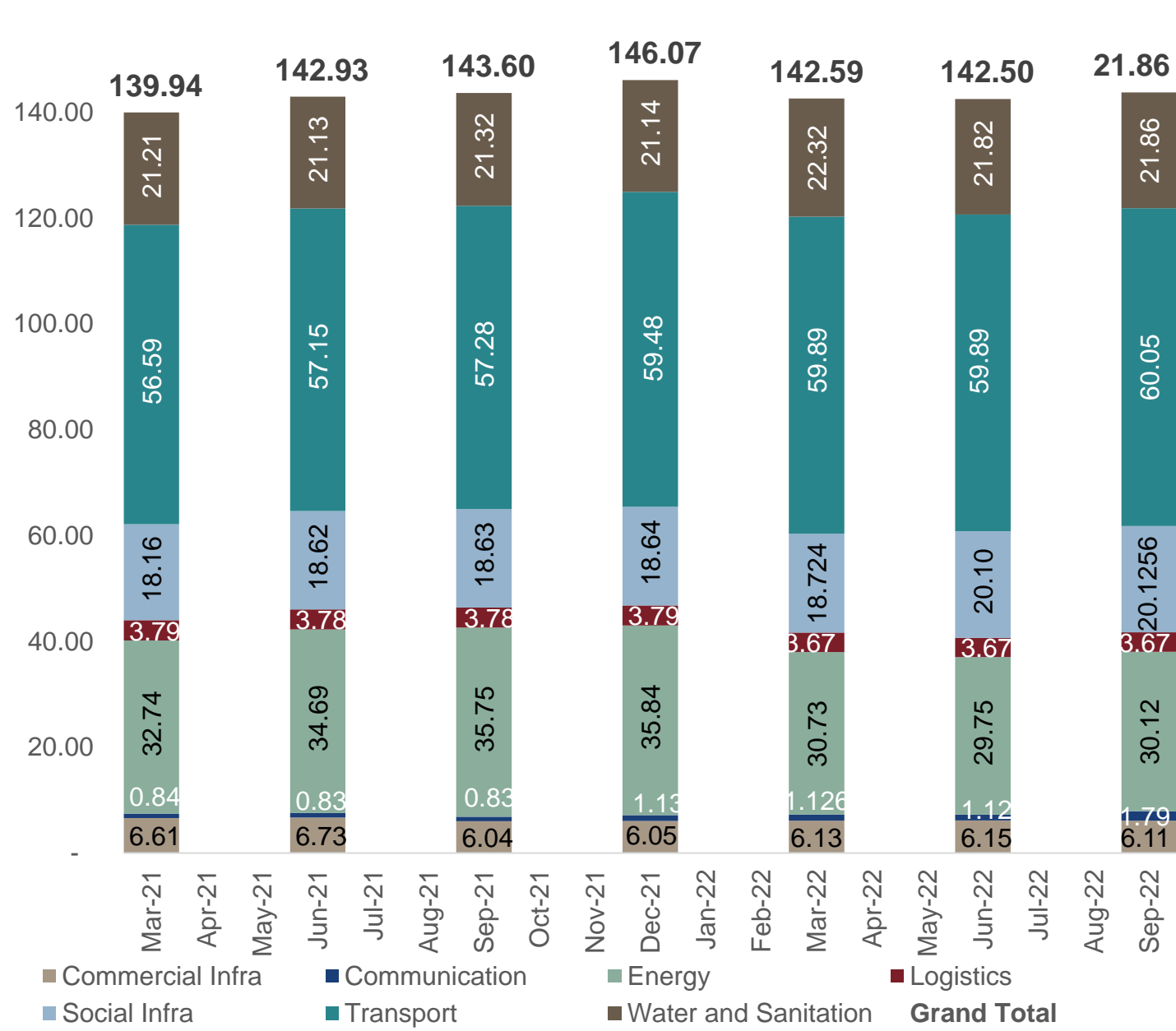
# How is the infrastructure scenario shaping up?

# National Infrastructure pipeline

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# 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)**

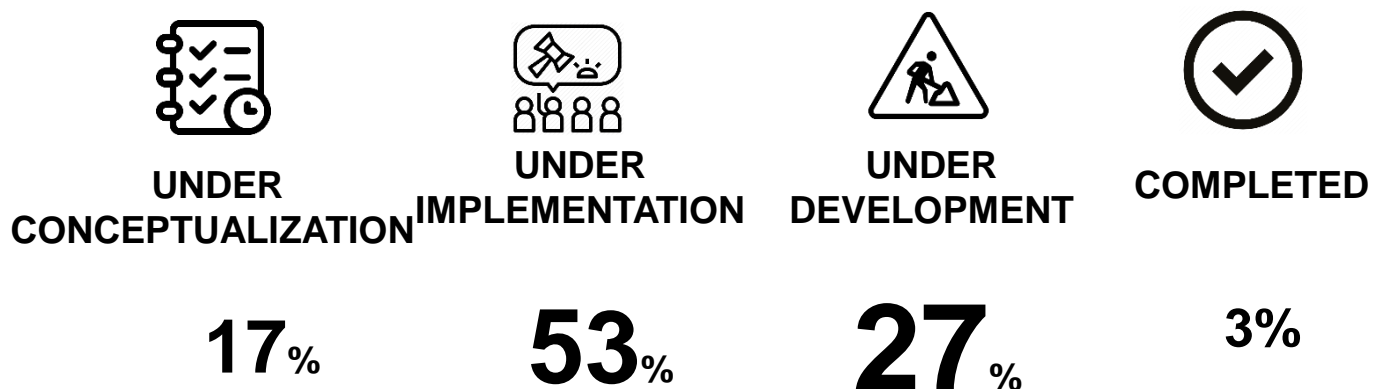
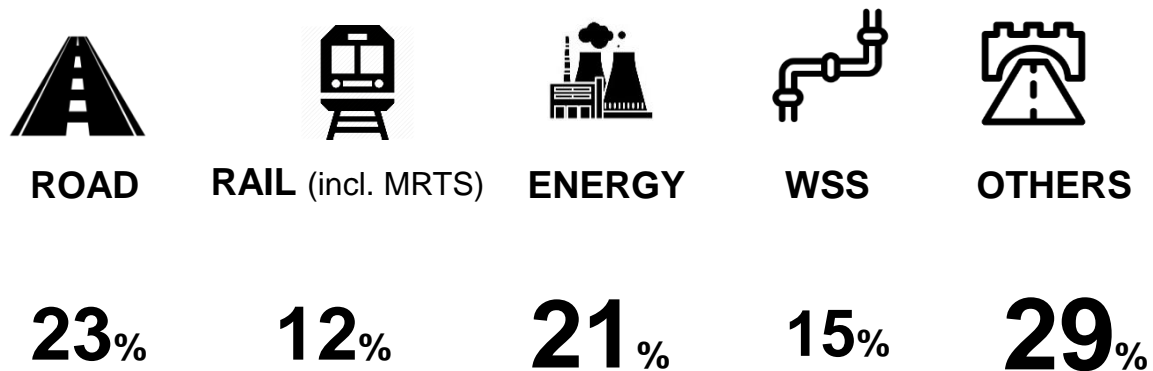
Stage/Progress	Segment	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22
<b>Completed</b>	Transport	0.32	0.32	1.28	1.36	1.64	1.88
	Energy	1.49	1.84	1.84	1.89	1.94	2.08
	Water and Sanitation	0.58	0.59	0.61	0.68	0.69	0.79
	Commercial Infra	0.03	0.03	0.04	0.10	0.11	0.17
	Social Infra	0.07	0.07	0.07	0.08	0.09	0.10
	Logistics	0.21	0.30	0.31	0.29	0.29	0.29
	Communication	0.00	0.01	0.01	0.01	0.01	0.01
<b>Under Construction</b>	Transport	29.76	29.81	31.72	31.80	31.83	31.79
	Energy	7.24	7.90	10.10	9.58	9.50	9.66
	Water and Sanitation	11.69	11.61	11.61	12.13	12.13	12.10
	Commercial Infra	1.33	0.71	0.71	0.70	0.70	0.71
	Social Infra	15.23	15.23	15.24	15.24	17.01	17.21
	Logistics	2.78	2.69	2.69	2.76	2.76	2.76
	Communication	0.74	0.73	1.04	1.04	1.04	1.04
<b>Pre-construction &amp; planning</b>	Transport	27.07	27.15	26.48	26.73	26.42	26.38
	Energy	25.96	26.01	23.90	19.26	18.31	18.38
	Water and Sanitation	8.86	9.12	8.92	9.51	9.00	8.97
	Commercial Infra	5.37	5.30	5.30	5.33	5.34	5.23
	Social Infra	3.32	3.33	3.33	3.40	3.00	2.82
	Logistics	0.79	0.79	0.79	0.62	0.62	0.62
	Communication	0.09	0.09	0.08	0.08	0.08	0.74
<b>Total Completed</b>		<b>2.69</b>	<b>3.16</b>	<b>4.16</b>	<b>4.41</b>	<b>4.76</b>	<b>5.32</b>
<b>Total Under Construction</b>		<b>68.77</b>	<b>68.68</b>	<b>73.11</b>	<b>73.25</b>	<b>74.97</b>	<b>75.27</b>
<b>Total Pre-construction &amp; planning</b>		<b>71.50</b>	<b>71.8</b>	<b>68.80</b>	<b>64.93</b>	<b>62.77</b>	<b>63.14</b>



# Roads account for ~77% of opportunity in the transport segment

Transport, energy and water projects account for ~78% of NIP spending of Rs. 143.7 lakh crore

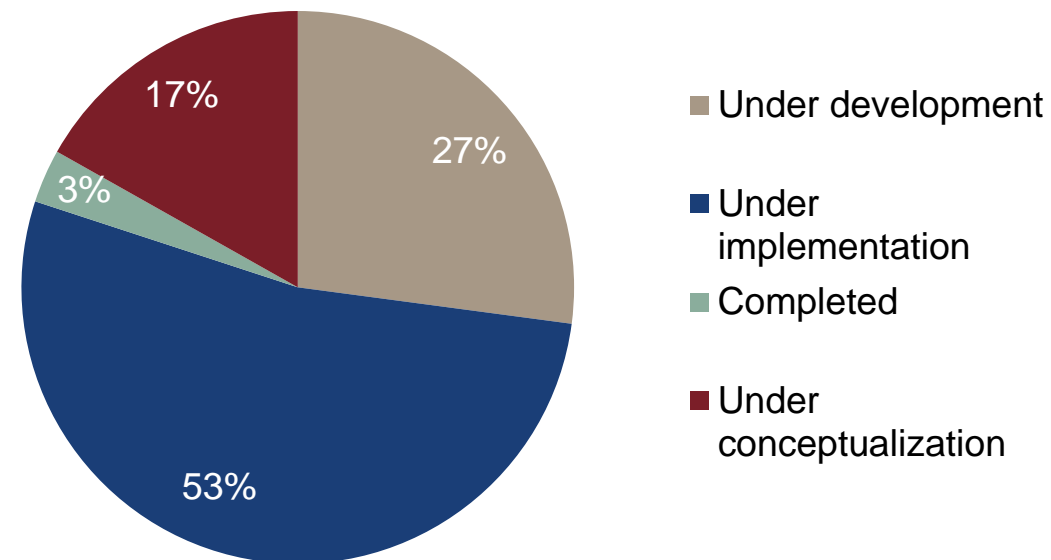
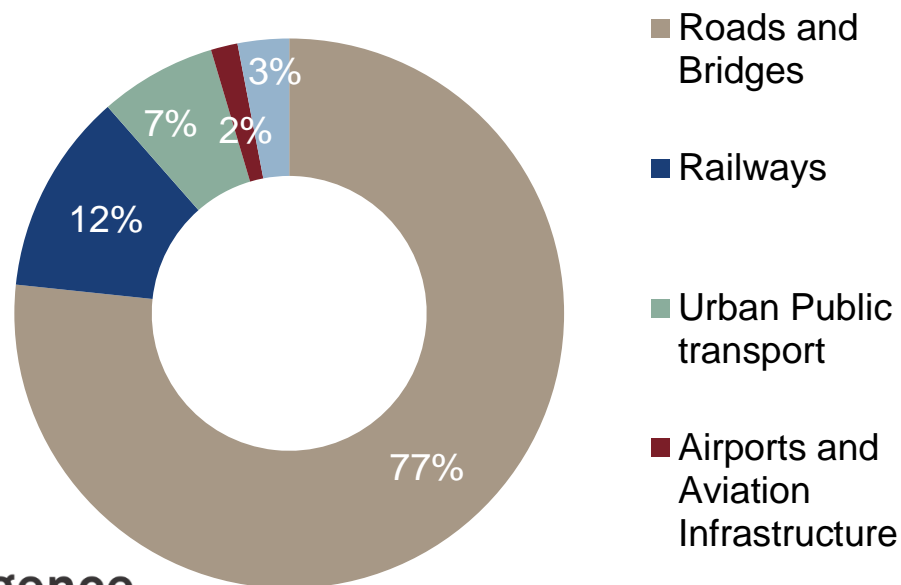
~Rs 31.79 lakh crore of projects currently under implementation



## Roads account for ~77% of opportunity in the transport segment

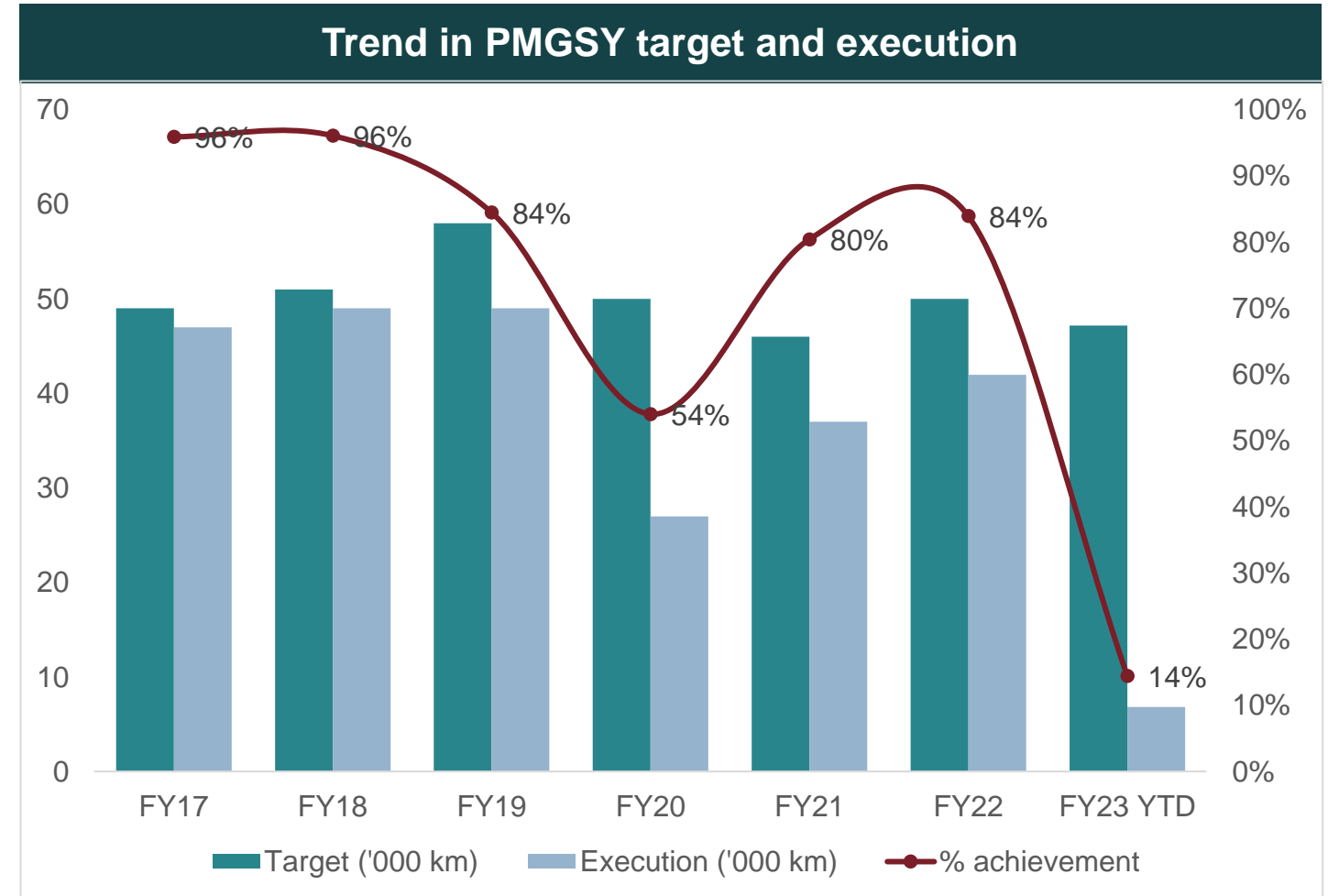
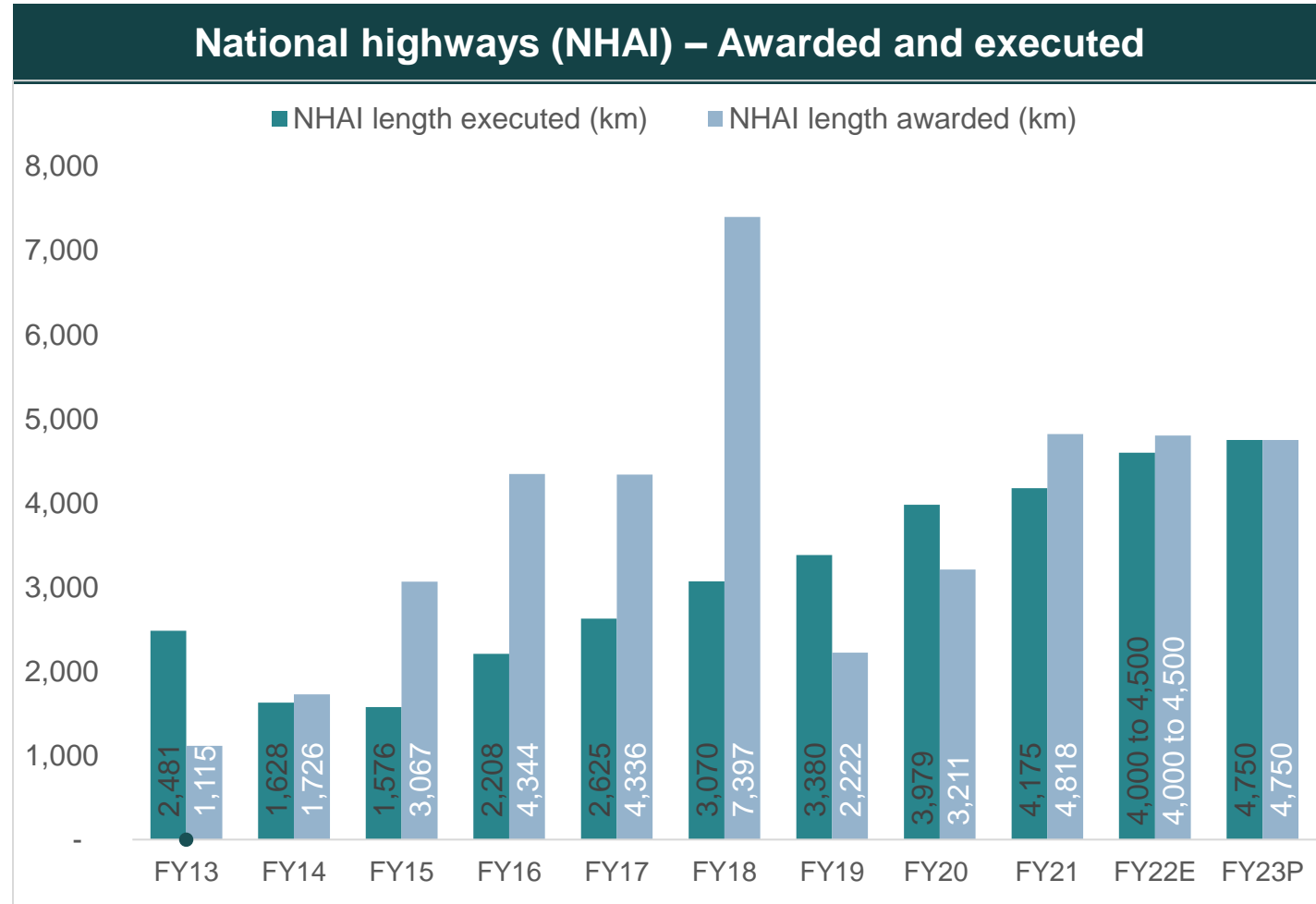
## Around half of investments under transport segment are under Implementation

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 22<sup>nd</sup> September 2022



# Focus on Road Infrastructure

# Infra outlay continues in FY23

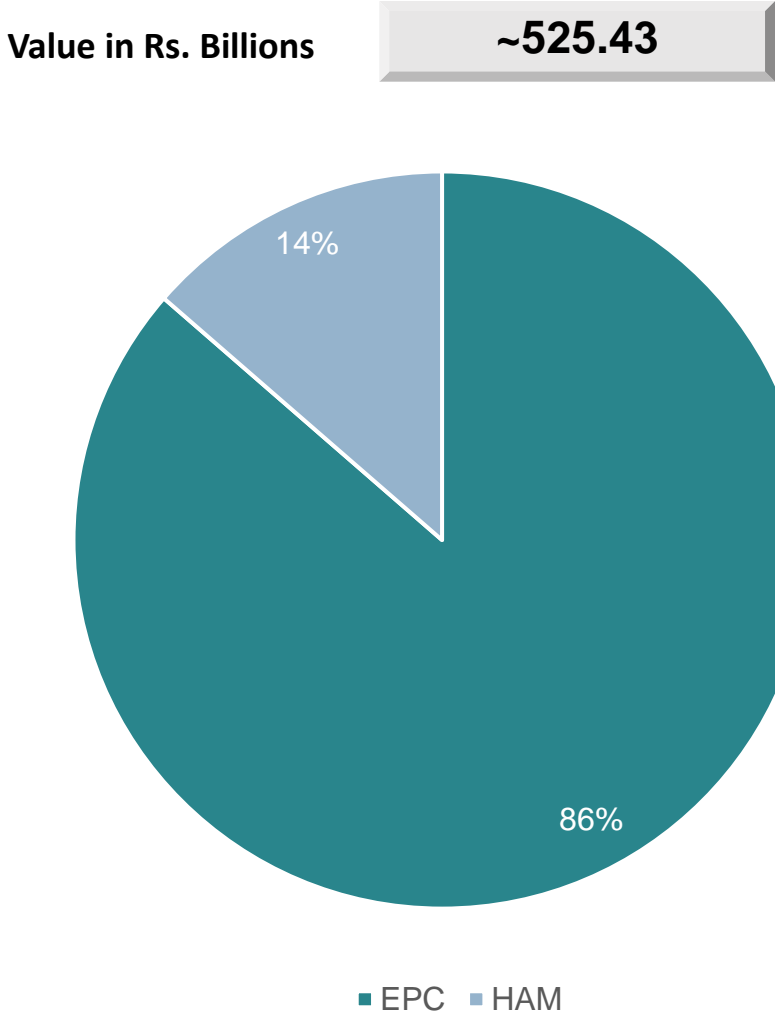


FY22 has seen strong awarding of road projects after two slow years, as the government pushes infra outlay ahead of key state elections

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

# NHAI tendering in Apr-Sep FY23

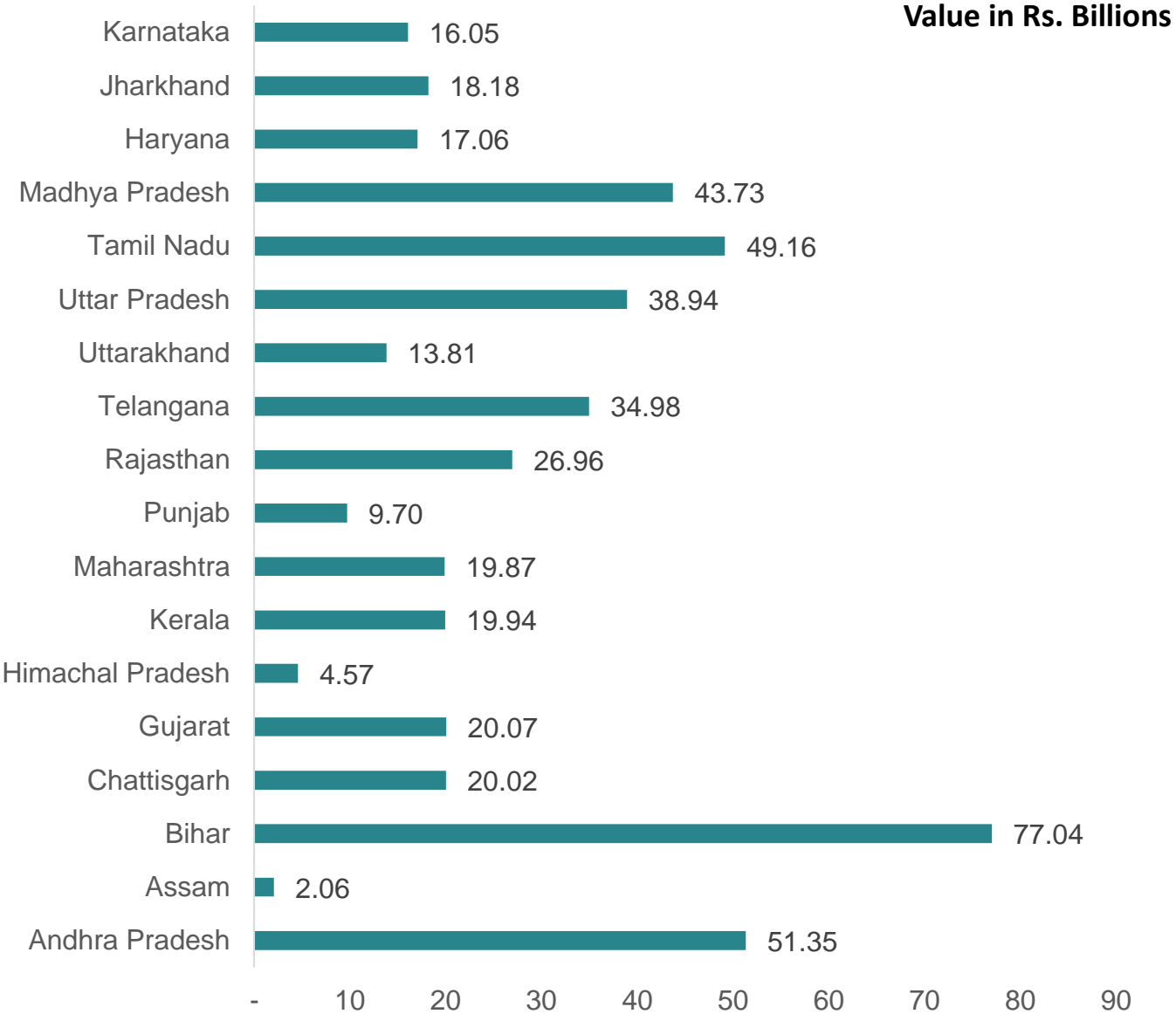
## Total NHAI project value by mode type in Apr-Sep



\*Total tender value consists of states mentioned herewith

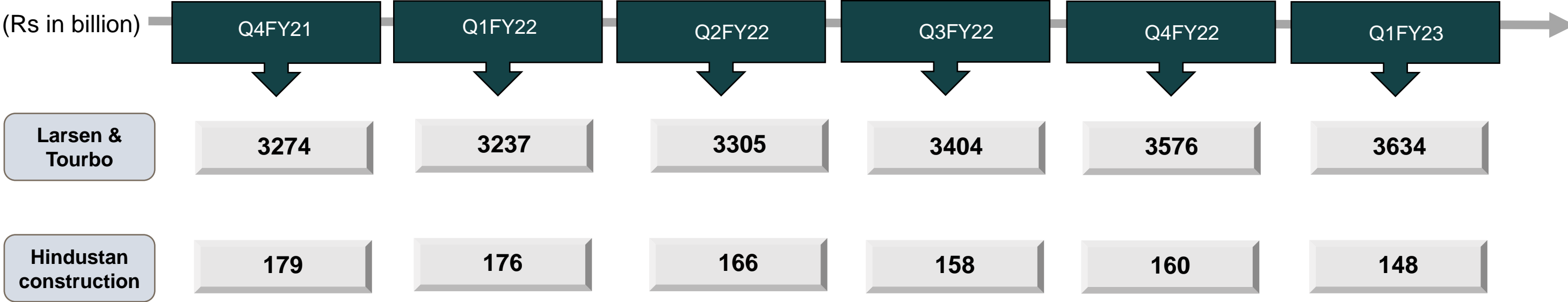
Source: CRISIL Research

## Tender project value in major states



# 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

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- **No further global disruptions**
- **Economic situation to remain challenging**
- **Continued improvement in production levels**
- **No disruption in OEM vehicle launch plans**
- **Elevated inflation levels, impact on consumer disposable incomes to continue in the short term**
- **No further price rise**
- **Retail fuel prices to remain elevated**
- **Financing scenario to remain accommodative**
- **Some BSVI phase 2 vehicle inventory build up in Q4 FY23**
- **Old BSVI vehicle registrations to be allowed after April'23**

# Domestic – Annual forecast

Consulting

Segment	Volumes				Y-o-y growth rate			
	FY20	FY21	FY22	FY23E	FY20	FY21	FY22	FY23E
PV (mn)	2.8	2.7	3.1	3.7-3.9	(18)%	(2)%	13%	24-26%
Two Wheelers (mn)	17.4	15.1	13.5	14.5-15.0	(18)%	(13)%	(11)%	9-11%
CV ('000)	718	566	716	952-967	(28)%	(21)%	26%	33-35%
Three Wheelers ('000)	636	217	260	452-457	(9)%	(66)%	20%	74-76%
Tractors (mn)	0.71	0.89	0.84	0.87-0.89	(10)%	27%	(6)%	4-6%



# Domestic – Long term forecast

Segment	Volumes				Y-o-y growth rate			
	FY20	FY21	FY22	FY27P	FY20	FY21	FY22	FY22-27 CAGR
PV (mn)	2.8	2.7	3.1	4.8-5	(18)%	(2)%	13%	9-11%
Two Wheelers (mn)	17.4	15.1	13.5	16.5-17.5	(18)%	(13)%	(11)%	4-6%
CV ('000)	718	566	716	1200-1250	(28)%	(21)%	26%	11-13%
Three Wheelers ('000)	636	217	260	647-652	(9)%	(66)%	20%	19-21%
Tractors (mn)	0.71	0.89	0.84	1-1.2	(10)%	27%	(6)%	5-7%

# Domestic- Quarterly forecast

Consulting

Segment	Subsegment	Volumes				Y-o-y growth rate			
		Q1 FY23	Q2 FY23	Q3 FY23E	Q4 FY23E	Q1 FY23	Q2 FY23	Q3 FY23E	Q4 FY23E
PV (mn)	Cars	0.40	0.47	0.39-0.41	0.38-0.4	19%	37%	14-16%	(13)-(11)%
	UV	0.51	0.55	0.54-0.56	0.55-0.57	65%	40%	32-34%	14-16%
	<b>Industry</b>	<b>0.91</b>	<b>1.02</b>	<b>0.94-0.96</b>	<b>0.93-0.95</b>	<b>41%</b>	<b>38%</b>	<b>24-26%</b>	<b>2-4%</b>
Two Wheelers (mn)	Motorcycle	2.41	3.00	2.3-2.8	1.5-1.7	38%	15%	6-8%	(29)-(27)%
	Scooter	1.19	1.56	1.1-1.3	0.7-0.9	102%	17%	15-17%	(22)-(20)%
	Moped	0.11	0.12	0-0.2	0-0.2	61%	(29)%	(13)-(11)%	(6)-(4)%
	<b>Industry</b>	<b>3.71</b>	<b>4.68</b>	<b>3.8-4.0</b>	<b>2.3-2.6</b>	<b>55%</b>	<b>14%</b>	<b>8-10%</b>	<b>(26)-(24)%</b>
CV ('000)	LCV	136.6	141.7	137-140	150-153	86%	31%	8-10%	1-3%
	MHCV	67.4	72.0	80.5-81.5	96.5-98.5	147%	40%	33-35%	10-12%
	Buses	19.1	17.9	15-16	20-21	256%	186%	126-128%	68-70%
	<b>Industry</b>	<b>223.1</b>	<b>231.6</b>	<b>233-237</b>	<b>267-272</b>	<b>110%</b>	<b>40%</b>	<b>20-22%</b>	<b>7-9%</b>
Three Wheelers ('000)	GV	22	22	18-23	20-25	153%	(6)%	(4)-(2)%	(4)-(2)%
	PV	57	91	109-113	110-115	234%	92%	84-86%	85-87%
	<b>Industry</b>	<b>74</b>	<b>113</b>	<b>130-135</b>	<b>132-137</b>	<b>205%</b>	<b>60%</b>	<b>60-62%</b>	<b>61-63%</b>
Tractors(mn)		<b>0.26</b>	<b>0.21</b>	<b>0.21</b>	<b>0.18</b>	<b>16%</b>	<b>3%</b>	<b>(3)%</b>	<b>3%</b>

# Exports – Annual forecast

Consulting

Segment	Subsegment	Volumes				Y-o-y growth rate			
		FY20	FY21	FY22	FY23E	FY20	FY21	FY22	FY23E
PV (mn)	Cars	0.48	0.26	0.37	0.38-0.43	(7)%	(44)%	42%	7-9%
	UV	0.19	0.14	0.20	0.22-0.27	15%	(25)%	45%	19-21%
	<b>Industry</b>	<b>0.66</b>	<b>0.40</b>	<b>0.58</b>	<b>0.63-0.68</b>	<b>(2)%</b>	<b>(39)%</b>	<b>43%</b>	<b>12-14%</b>
Two Wheelers (mn)	Motorcycle	3.1	3.0	4.1	4.1-4.2	9%	(3)%	34%	1-3%
	Scooter	0.4	0.2	0.4	0.4-0.5	(7)%	(40)%	23%	28-30%
	Moped	0.01	0.008	0.01	0-0.01	(17)%	(37)%	51%	(49)-(47)%
	<b>Industry</b>	<b>3.5</b>	<b>3.3</b>	<b>4.4</b>	<b>4.5-4.7</b>	<b>7%</b>	<b>(7)%</b>	<b>36%</b>	<b>3-5%</b>
CV ('000)	LCV	33.7	31.1	58.3	67-69	(28)%	(8)%	87%	16-18%
	MHCV	14.4	13.5	25.7	15-17	(64)%	(7)%	90%	(39)-(37)%
	Buses	12.2	5.7	8.3	13-15	(2)%	(53)%	(46)%	68-70%
	<b>Industry</b>	<b>60.4</b>	<b>50.3</b>	<b>92.3</b>	<b>97-99</b>	<b>(40)%</b>	<b>(17)%</b>	<b>83%</b>	<b>5-7%</b>
Three Wheelers ('000)	GV	6.3	5.6	10	5-10	2%	(12)%	82%	(36)-(34)%
	PV	496	387	490	402-407	(12)%	(22)%	26%	(19)-(17)%
	<b>Industry</b>	<b>502</b>	<b>393</b>	<b>500</b>	<b>408-413</b>	<b>(12)%</b>	<b>(22)%</b>	<b>27%</b>	<b>(19)-(17)%</b>
Tractors ('000)		<b>76</b>	<b>89</b>	<b>129</b>	<b>138-140</b>	<b>(17)%</b>	<b>17%</b>	<b>45%</b>	<b>7-9%</b>

# Segment wise Inventory situation

Vehicle segment	Normal inventory in days	Current inventory levels*	Inventory Units	Reasons
Passenger Vehicles	~30	30-40	0.2-0.3 million	Inventory built up done in Q2 for the upcoming festive season coupled with OE push for basic hatchbacks, boosted the inventory levels from ~20 days at Q1 end to 30-40 days at Q2 end. Improved production levels provided a kicker to offtake in Q2.
Two Wheelers	~45	~52-58	2-2.5 million	As OEMs wanted to cater to the festive season bumper, there has been a boost in the inventory levels in Q2 of FY 23. Higher offtake witnessed in scooter inventory as compared to the motorcycle inventory.
Commercial Vehicles	~30	28-30	70-75 thousand	Inventory built up done in Q2 largely in the LCV segment for the upcoming festive season. Buses too have witnessed some inventory built up to cater the tourism demand.
Three Wheelers	20-25	42-48	35-40 thousand	With gradual improvement in demand as well as estimated rise retail sales, inventory built up was done during Q2 pushing the inventory levels to 52-58 days levels.
Tractors	~35-40	48-50	130-150 thousand	Inventory levels were already high in Q2. There has been an additional stock build up in the month of September in order to cater to festive demand.

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# Passenger vehicles

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# Improvement in production, intermittent launches, booking pipeline & OE push to help industry clock record high sales in FY23

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

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	NF

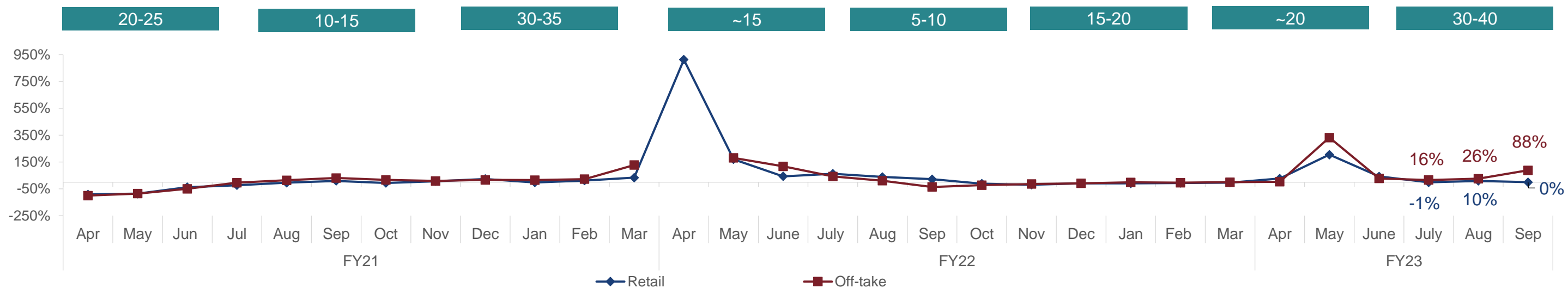
Variables	FY19	FY20	FY21	FY22	FY23 E
New model/ facelift launches	NF	F	N	F	F
Regulations – passenger vehicles	N	NF	N	N	N

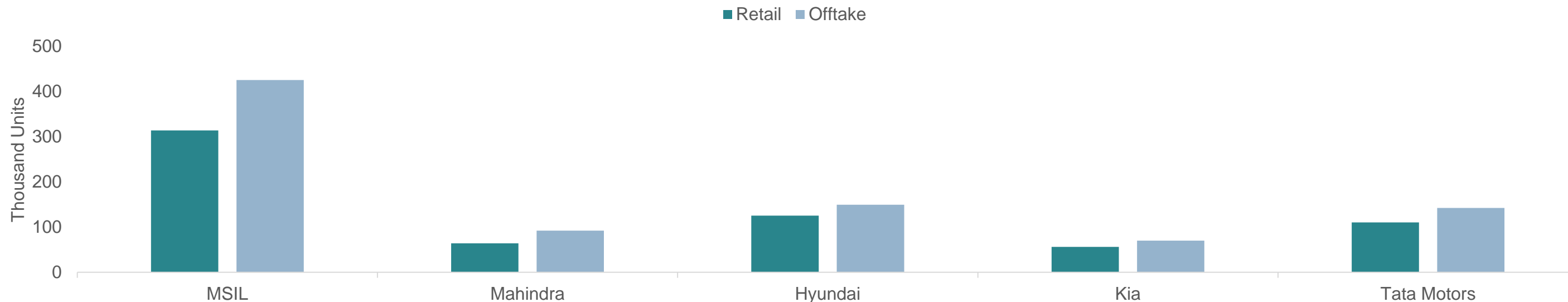
Variables	FY19	FY20	FY21	FY22	FY23 E
Vehicle Supply	N	N	NF	NF	N
<b>Impact on Overall Sales Growth</b>	<b>N</b>	<b>NF</b>	<b>NF</b>	<b>F</b>	<b>F</b>

# Inventory push during Q2 with upcoming festive season, CAFÉ norm compliance

Inventory built up at dealer level- slow moving vehicles dominate the inventory

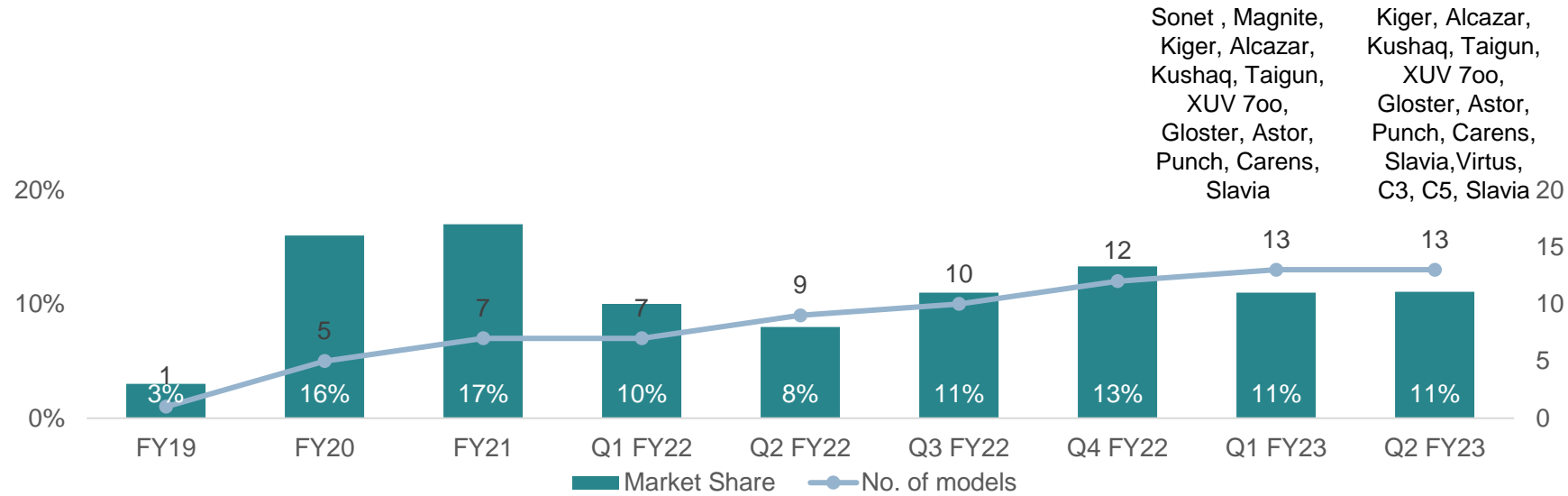


Market leader continued with the basic hatchback segment push in Q2



# Higher dispatches for in-demand premium compact, compact UV segment; OE push for lower compact

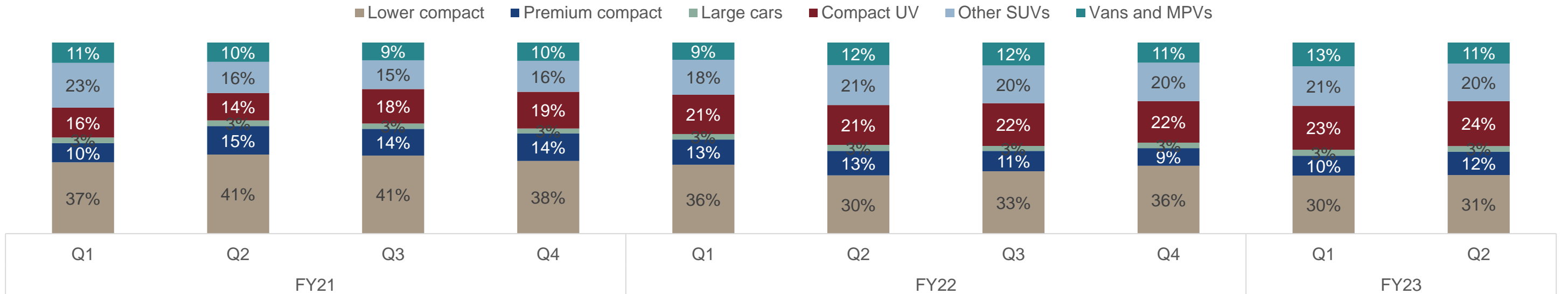
## Recent launches continue their support, facelifts enjoy high traction



## No market disrupting launch expected in Q3

Company	Model	Segment
Tata Motors	Altroz EV	Premium compact
Maruti	Jimny	Compact UV
Honda	HR-V	Other SUV

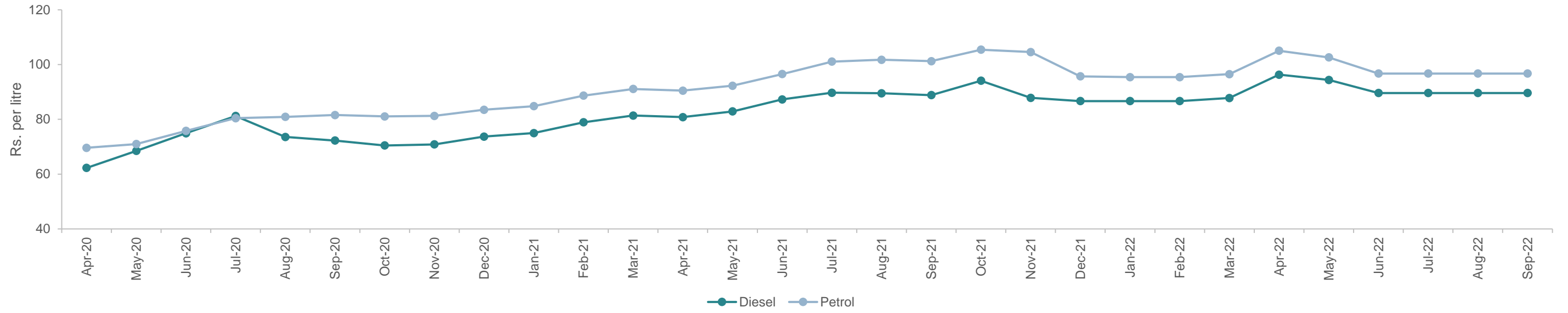
## Sizable inventory built up for lower compact



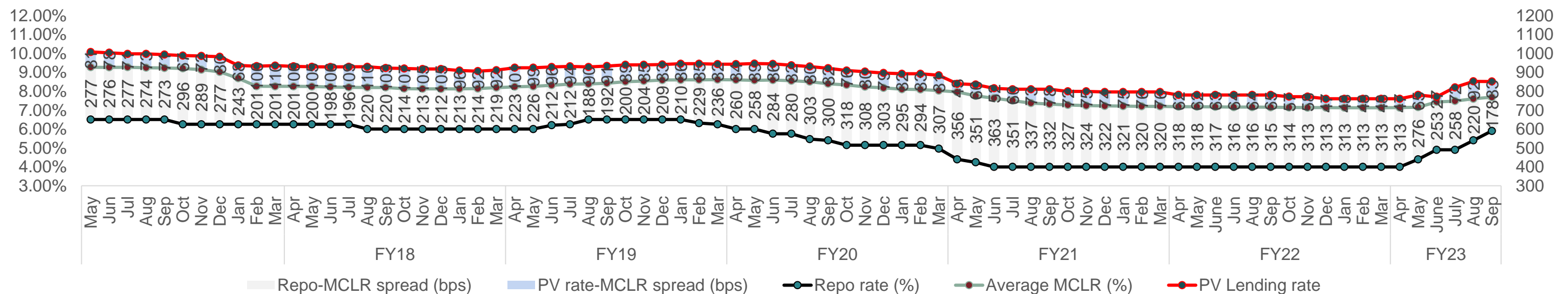


# Interest rates get a further lift post RBI rate hike

Fuel prices remain elevated, although some respite in Q2 from Q1 levels



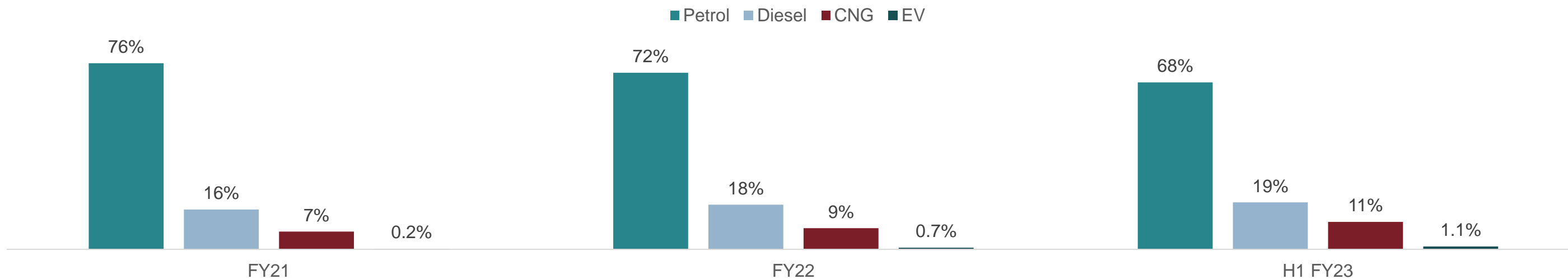
Increased interest burden weighing on vehicle TCO



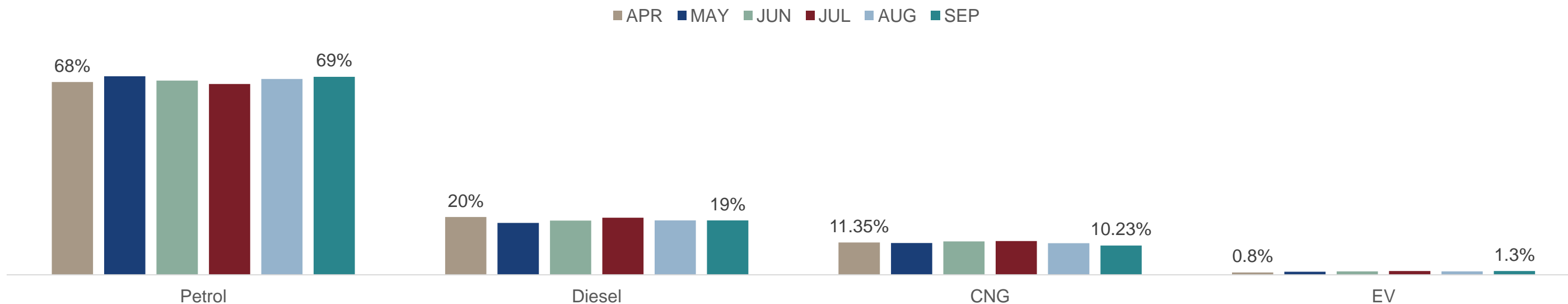
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# CNG share dropping m-o-m amidst higher CNG retail price & reducing gap with ICE vehicles cost of operations

High CNG prices back y-o-y diesel segment growth, EV continue gradual forward march



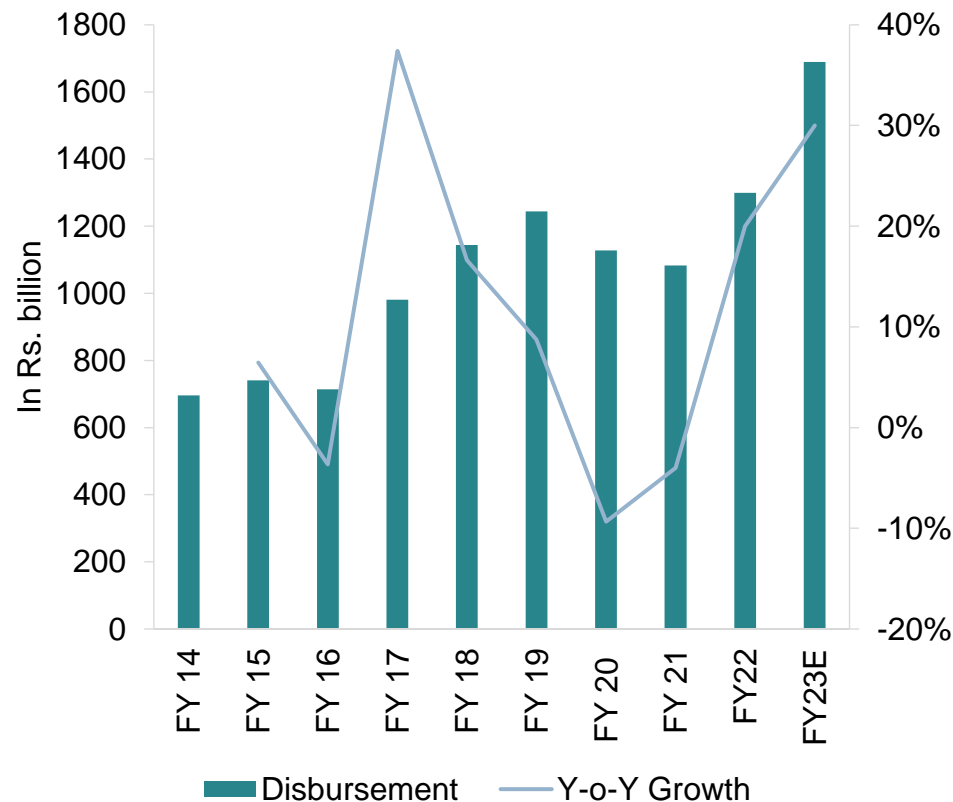
FY23 m-o-m split: Sharp rise in CNG prices exerting pressure on CNG share



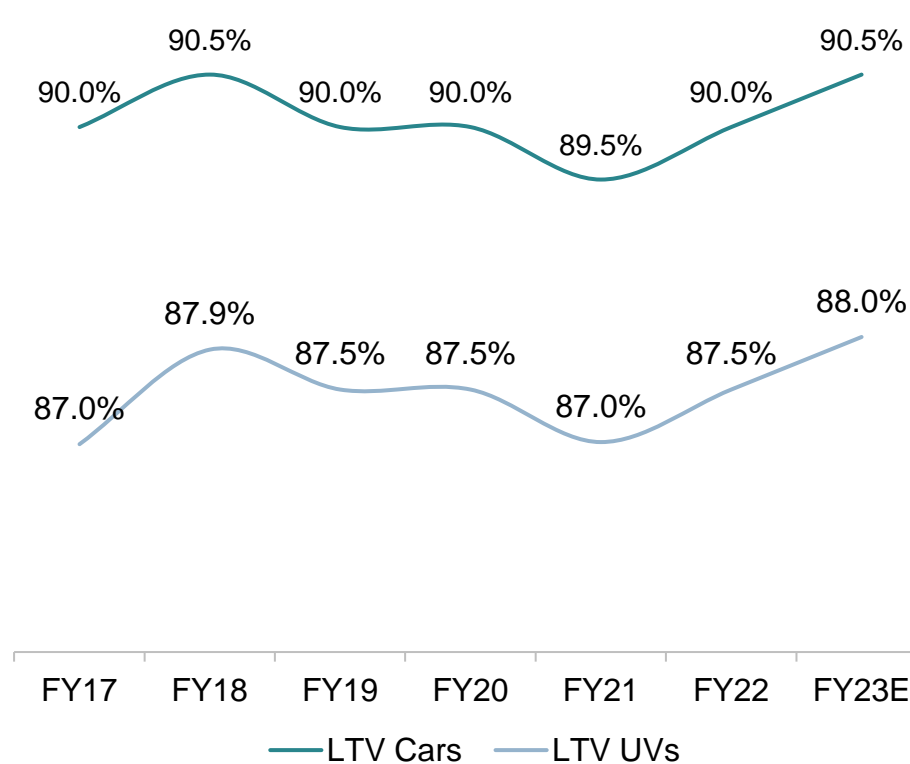
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# Record high sales to thrust disbursement growth in FY23, price hike to provide an additional kicker

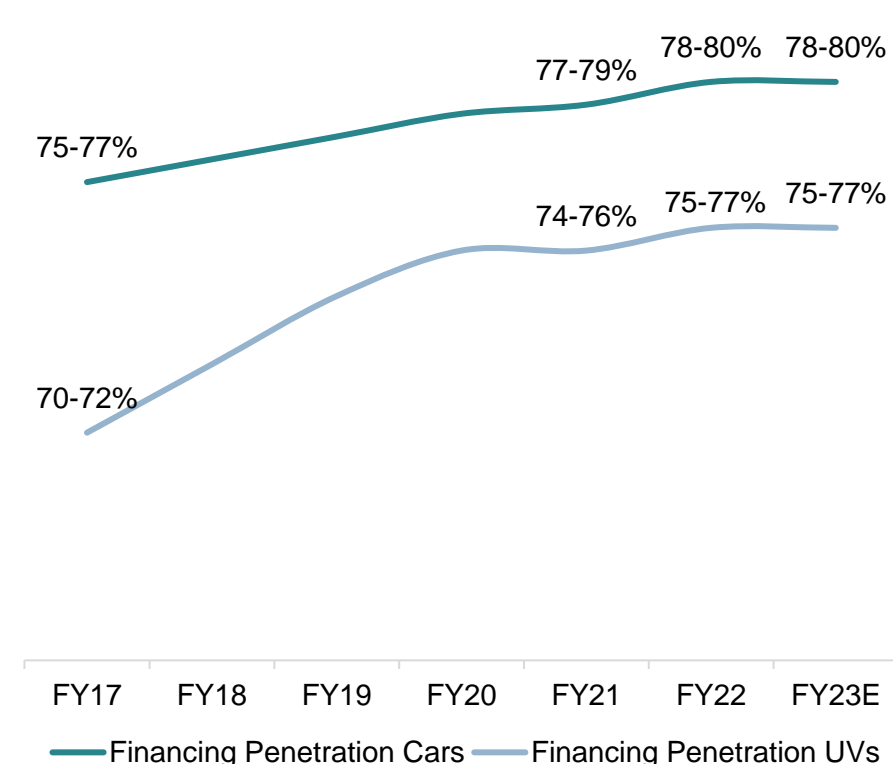
## Disbursement



## Loan-to-value (LTV)



## Financing penetration



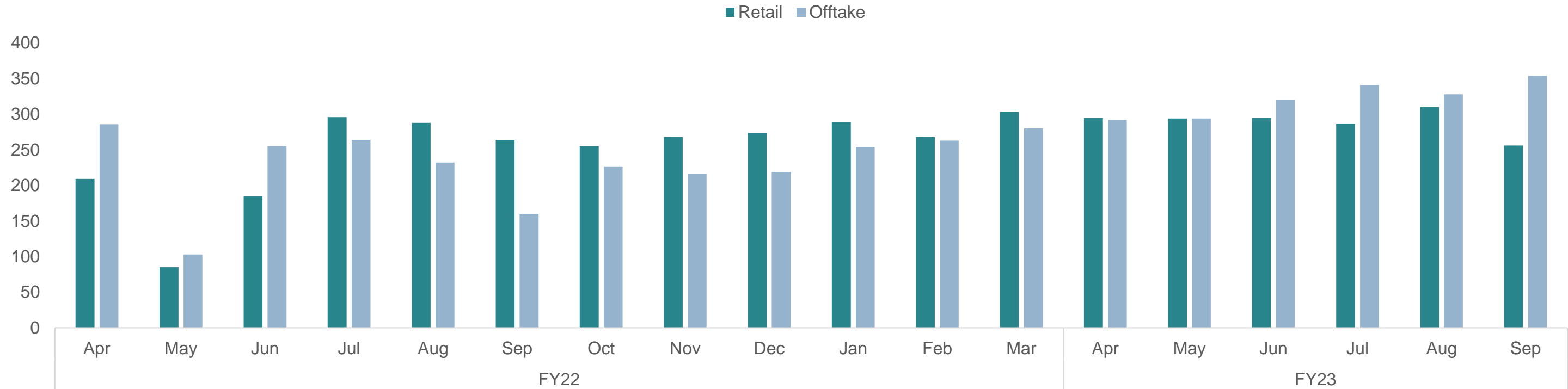
Source: Company Report, Industry, CRISIL Research

- From a low of FY21, disbursements have bounced back and are expected to achieve record numbers in tandem with PV sales expectations
- 28-32% y-o-y rise is expected in the financial disbursements this year- 24-26% from the volume growth supported by 5-6% price hike
- Industry has already increased prices in H1FY23, another round is expected during Q4 to comply with BSVI phase 2 norms
- Mandatory 6 airbags mandate has been currently postponed to FY24 limiting the price rise this year
- Financers remain accommodative of the PV industry
- Rising interest rates remain a concern

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# 2.5% in retails vs 38% y-o-y growth in offtake during Q2

High hopes from festive season, Inventory built up done in Sep



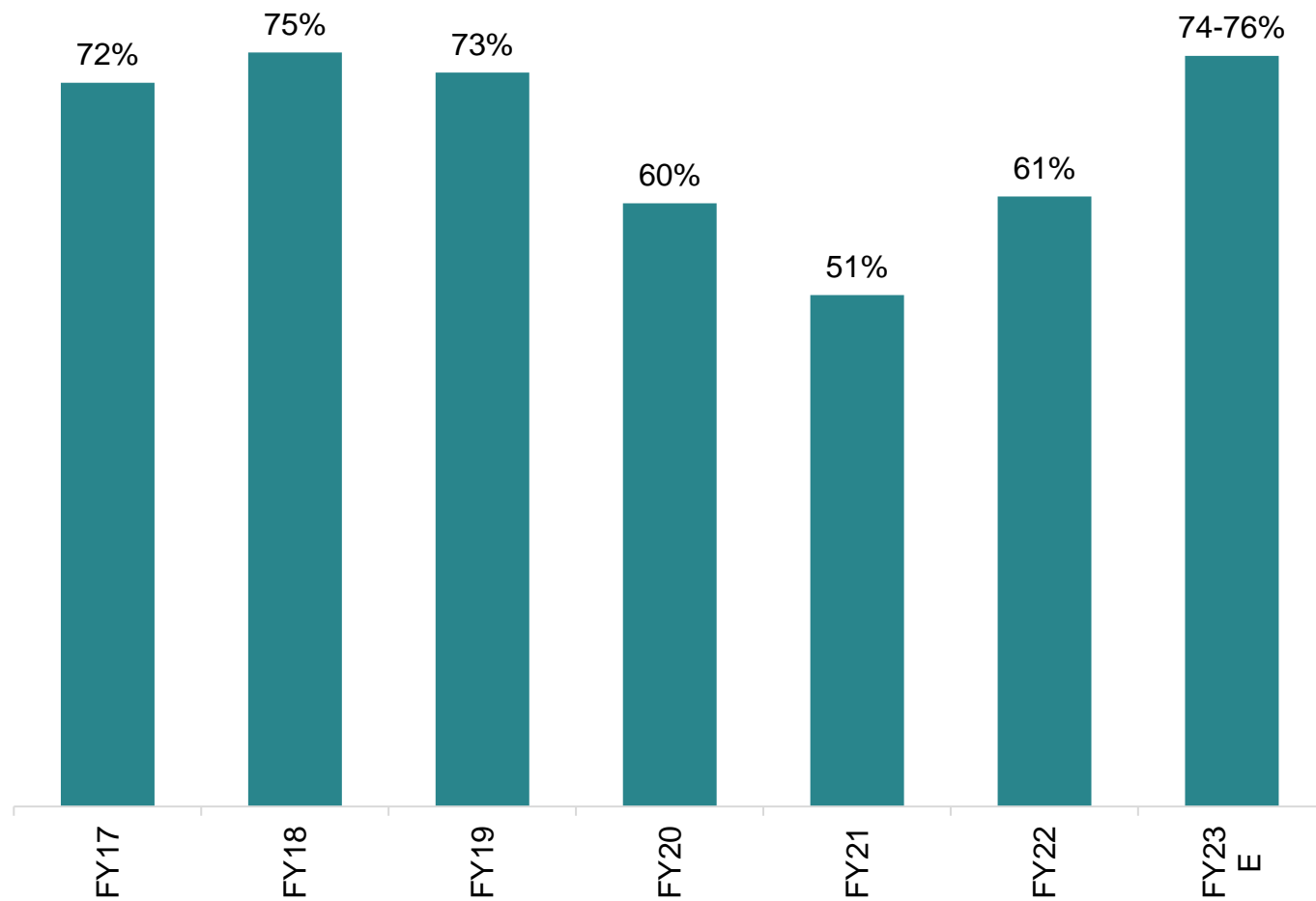
Note: Retail numbers are estimated, Offtake numbers include Tata Motors sales  
 Source – MoRTH, SIAM, CRISIL Research

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- Retails improved 8% m-o-m in August with improvement in vehicle production as well as continued booking pipeline for popular models
- September saw a sharp 16% drop in retail amidst the *Shraddha* period during the second half of the month
- However, there was a sharp increase in offtake with inventory built up for upcoming festive season
- Festive season is expected to be very positive with October expected to clock record retails
- Some slowdown in retail expected from November
- There was a push from OE side, especially for slow moving basic hatchback segment, which also contributed to increase in offtake during Q2

# Easing of supply issues boosts utilization levels, offtakes remain healthy

## Utilization to reach record levels in FY23



Source: CRISIL MI&A Estimated

## Capacity utilisation of key players

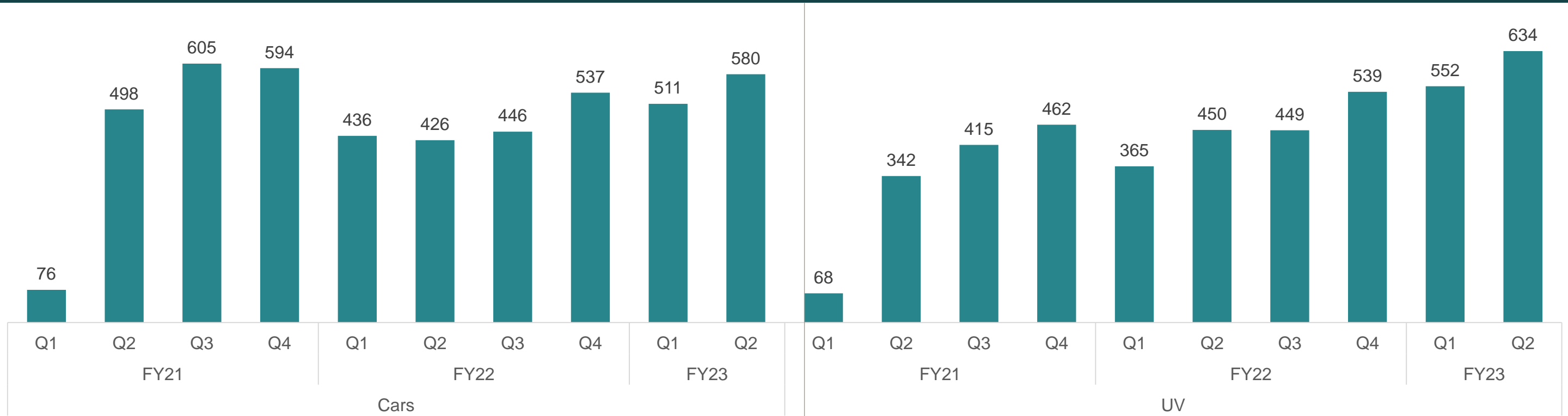
Player	Effective Capacity (in '000) (on 31st Mar 2022)	Capacity utilisation in FY21	Capacity Utilisation in FY22	Capacity Utilisation in H1 FY23
Maruti	2,250	69%	79%	86%
Hyundai	763	74%	79%	94%
Tata Motors	564	38%	66%	99%
Renault-Nissan	480	30%	39%	46%
Toyota	310	17%	24%	39%
Honda	180	48%	59%	67%
Volkswagen	179	28%	43%	31%
Kia Motors	300	64%	79%	118%

Source: SIAM, Industry, CRISIL MI&A

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# Higher q-o-q increase in UV production during Q2 FY23

## Record high production of UVs in Q2



Source: SIAM, CRISIL Research

- There was higher push towards small cars during Q4 amidst the chip shortage; in FY23 production has improved gradually especially in Q2
- High booking pipeline, continued preference for UVs pushed for higher production of UVs; however, few OEMs continued their push for small cars especially of their premium models; Increase in small car production (14%) was only marginally lower than the increase in UV production (15%).
- Production levels are expected to remain healthy going ahead
- Booking pipeline, recent launches to back UV production focus; premium hatchbacks to also remain in the focus
- Basic hatchback production will continue in order to meet market share & CAFÉ compliance targets

# Domestic – annual forecast

	Units	Passenger cars	UVs & vans	Total
<b>FY21</b>	Millions	1.54	1.17	<b>2.71</b>
<i>y-o-y growth</i>	%	-9%	9%	<b>-2%</b>
<b>FY22</b>	Millions	1.47	1.60	<b>3.06</b>
<i>y-o-y growth</i>	%	-5%	37%	<b>13%</b>
<b>FY23E</b>	Millions	1.6-1.7	2.1-2.2	<b>3.7-3.9</b>
<i>y-o-y growth</i>	%	12-14%	35-37%	<b>24-26%</b>

Source – SIAM, CRISIL Research

# Domestic – quarterly forecast

Consulting

Fiscal	Quarter	Passenger cars		UVs & vans		Total	
		Sales ( '000)	y-o-y growth	Sales ( '000)	y-o-y growth	Sales ( '000)	y-o-y growth
FY22	Q1	336	348%	309	317%	649	335%
	Q2	344	(21)%	396	32%	740	0%
	Q3	349	(32)%	411	9%	760	(15)%
	Q4	437	(15)%	482	15%	919	(1)%
FY23 E	Q1	398	19%	509	65%	908	40%
	Q2	470	37%	554	40%	1,025	38%
	Q3 E	395-405	14-16%	545-550	32-34%	945-950	24-26%
	Q4 E	383-388	(13)-(11)%	555-560	14-16%	940-945	2-4%
FY24 P	Q1 P	383-388	(4)-(2)%	568-573	11-13%	955-960	4-6%
	Q2 P	382-387	(19)-(17)%	582-587	4-6%	965-970	(7)-(5)%

Source – SIAM, CRISIL Research

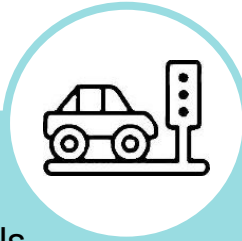
- Q2 offtake reached a record high of million+ volumes amidst the improvement in production as well as OE push especially for small cars segment
- Q3 is also expected to remain healthy backed by offtake for booking pipeline of popular models coupled with continued push for the small cars segment in order to avoid the penalty to be levied for non-compliance with CAFÉ norms from FY24
- High discount levels (40k+) for slow moving vehicles to continue in Q3, traction for UVs to continue going ahead
- BSVI phase 2 to be mandatory from FY24, gradual introduction of BSVI phase 2 vehicles expected from Q4
- Some built up of phase 2 vehicles will be done in Q4
- Inventory built up is expected to continue in Q1FY24 as well



# Stakeholder interactions

Consulting

## OEMs



- Further improvement in production levels
- Contraction in waiting periods
- Healthy retails expected in Q3, dealers have done inventory build up from September
- Recent launches providing the major impetus to the demand
- **UV segment continues its march forward, premium compact is providing the impetus to hatchbacks**
- **Rising demand for AT variants, premium and feature rich vehicles**
- **Increasing contribution from women buyers in the post Covid world with continued necessity for personal mobility**
- **Calendar year offtake expected at 3.7-3.9 million**

## Dealer



- Definite improvement in vehicle supply
- Improved dispatches especially for premium compact, compact UVs, other UVs and MPVs
- **Waiting periods have come down by a month even for popular models**
- Increase in inventory, currently 30-40 days
  - **Push from OEMs for slow moving models**
  - **Significant share of slow-moving vehicles in the inventory**
  - Popular models are immediately retailed
- **Typical waiting of 2-3 months for popular models**
- **High discounts of upto 40-50 k on slow moving models**
- **September retails were slow due to the *Shradh* period**
- **High hopes from the festive season, record high retails expected in October**
- **Recent launches especially in the compact UVs and Other UV segment are enjoying high traction**
- **Sluggish demand for lower compact segment**

## Financier

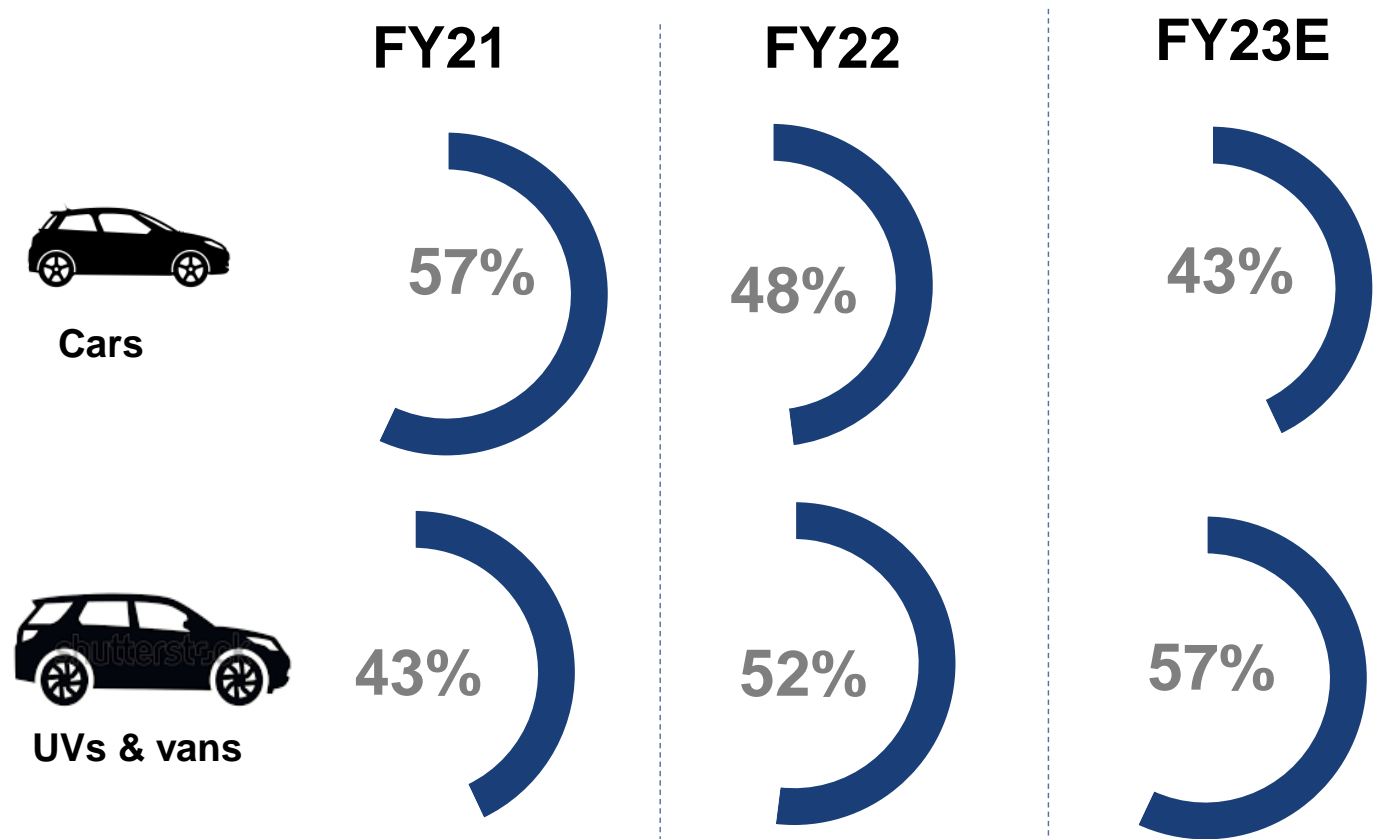


- **High traction in the market is backing the disbursement growth**
- Interest rates have been hiked in line with the hike in repo rates
- Another round of rate increase expected soon
- LTV and penetration levels remain steady
- **No sizeable impact of rate hike seen on disbursement during Q2**
- Stance from financiers remains accommodative
- High inflation levels remain a concern
- Some increase in caution going ahead if the economic indicators remain negative

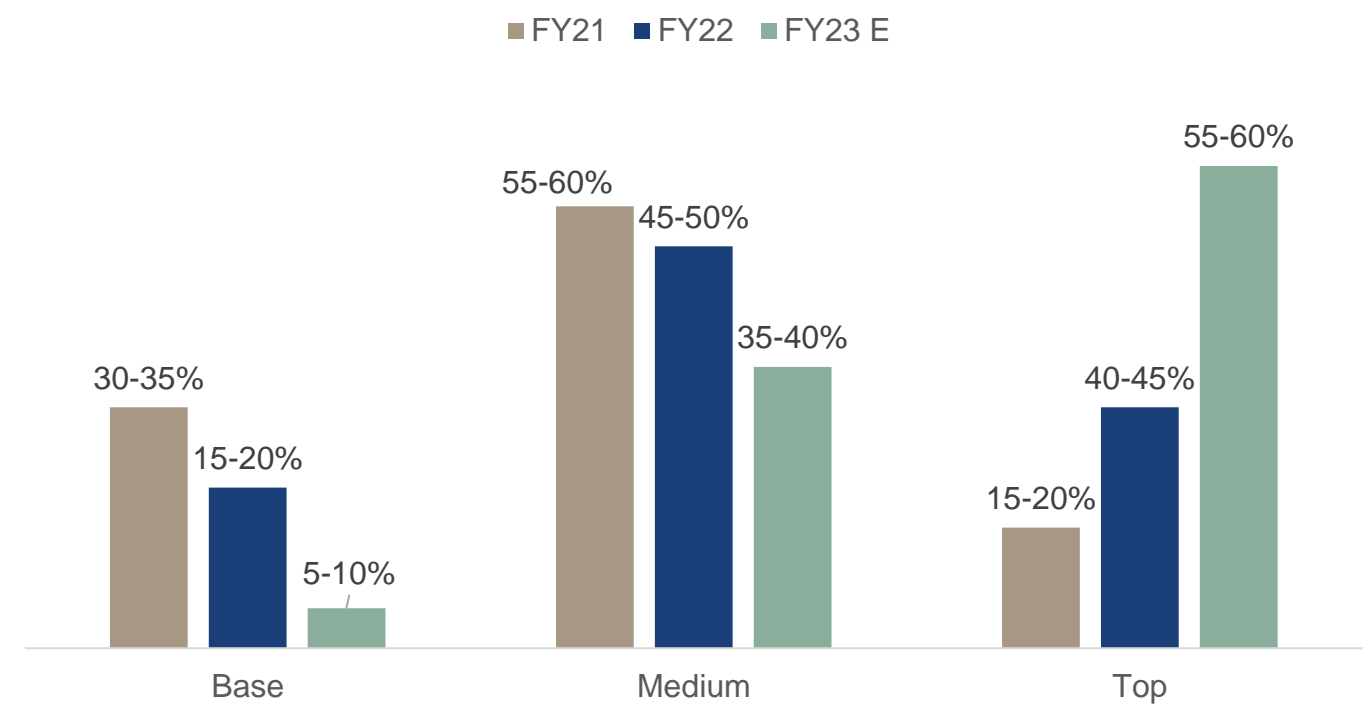
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# UV sales zoomed past cars', rising preference for premium variants

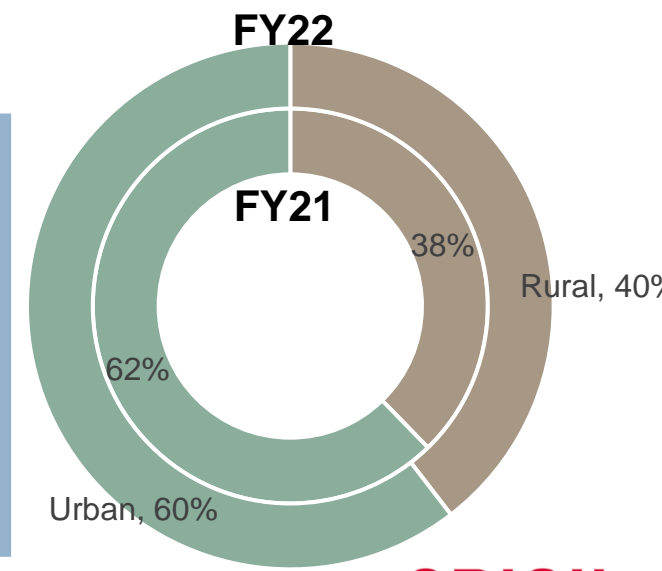
Segmental share in annual sales



Variant wise split in sales



- Rising customer preference, intermittent feature rich competitively prices launches, OE focus is thrusting UV segment forward; Segment is estimated to continue its march forward
- Urban demand dominates the market
- Preference for latest tech, feature rich variants is on the rise, especially post the pandemic
- Base & medium variants saw more traction during the pandemic due to economic uncertainty & lower waiting periods amidst the increased need for personal mobility
- In FY23, preference for top variant has picked up pace, slowing traction from price sensitive customers amidst unfavourable economic environment is providing an added thrust

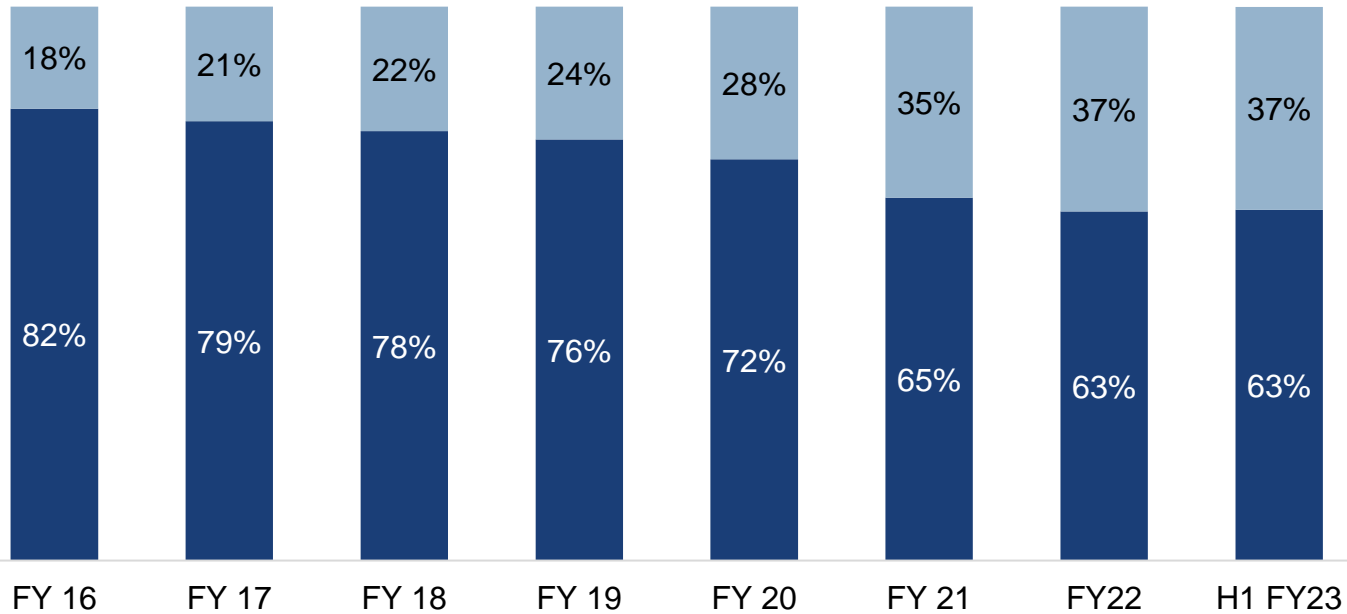


# PV exports

# Exports to expand further from the high base of FY22

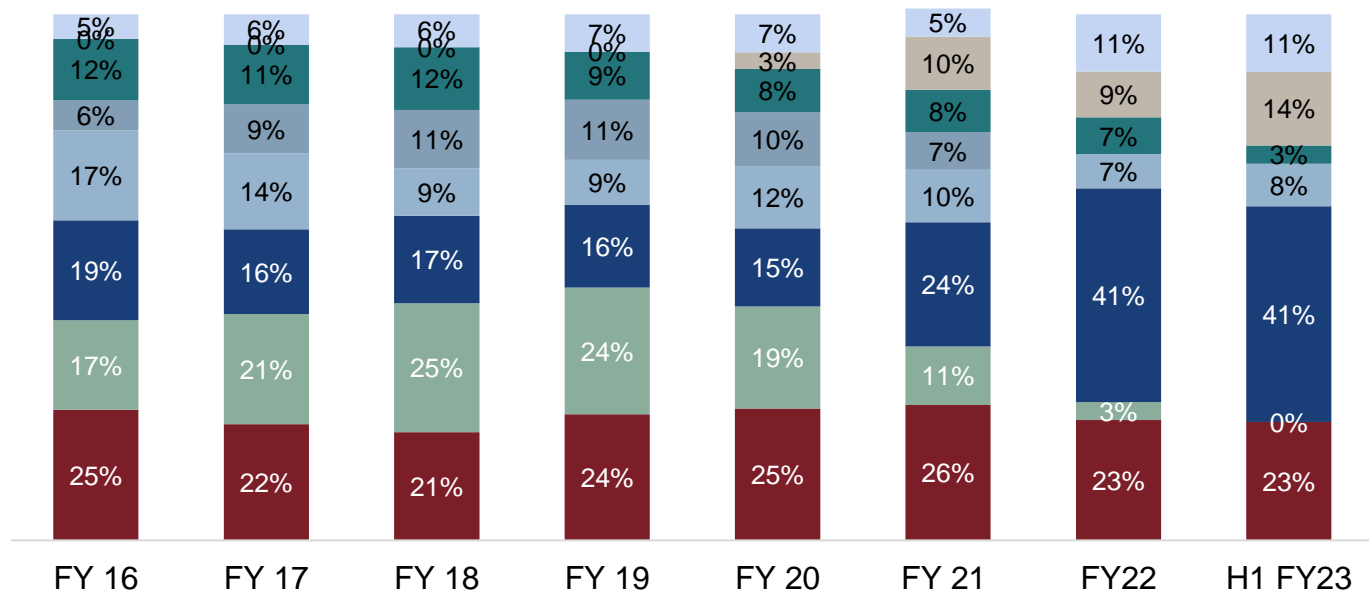
## Share of UVs on a rising trend

■ Cars ■ Uvs



## MSIL maintains its export focus

■ Hyundai ■ Ford ■ Maruti ■ Nissan ■ GM ■ Volkswagen ■ Kia ■ Others

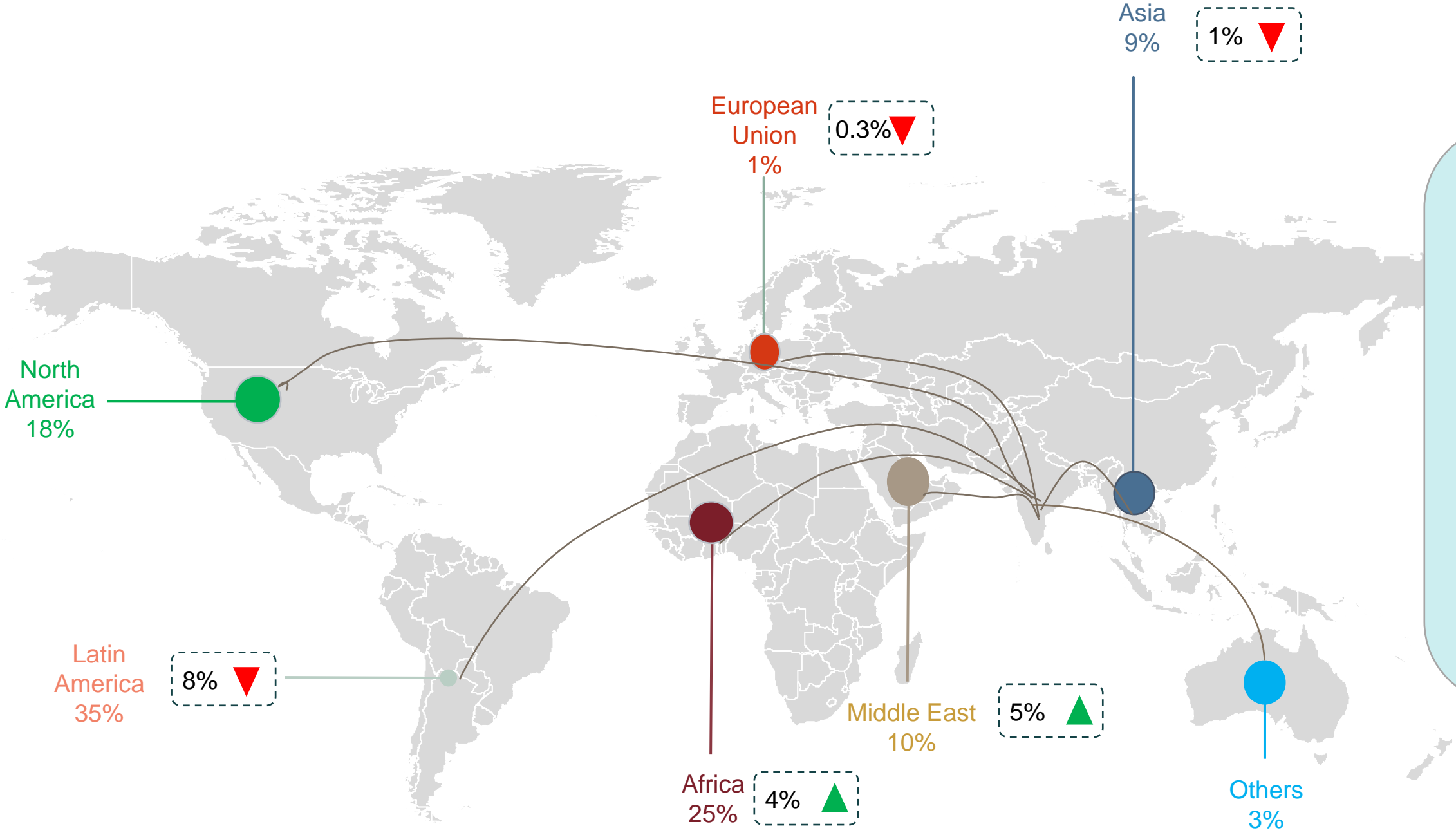


Source: SIAM, CRISIL Research

- Increased exports push from Maruti has helped car segment maintain its share in FY23 with Swift, Spresso, Dzire in the top 5 vehicles exported
- Seltos & Sonet have helped boost Kia's share in exports
- Third highest contributor to domestic sales, Tata Motors has low presence in the exports market
- Industry has clocked 13% y-o-y growth in H1FY23, where UVs grew at a faster pace of 16% vis a vis 11% growth witnessed in cars
- For the complete year FY23, exports are expected to clock 12-14% y-o-y growth and reach near pre Covid levels of 0.7 million in FY23

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# Passenger Vehicle Exports



- Exports to Africa & Middle East has increased by ~10% to 35% of PV exports during April-August period
- Share of exports to South Africa & Saudi Arabia increased from 17% & 2% in FY22 to 19% & 4% respectively in FY23
- Mexico remained the leading destination for Indian exports, although its share contracted from ~32% in FY22 to 21% in FY23.

# Two-wheelers

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# Two-wheeler sales show gradual improvement in fiscal 2023 from a low base of consecutive contractions

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

Variables	FY19	FY20	FY21	FY22	FY23 E
Cost of ownership	NF	N	N	N	N
Interest rates	N	N	F	N	NF

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

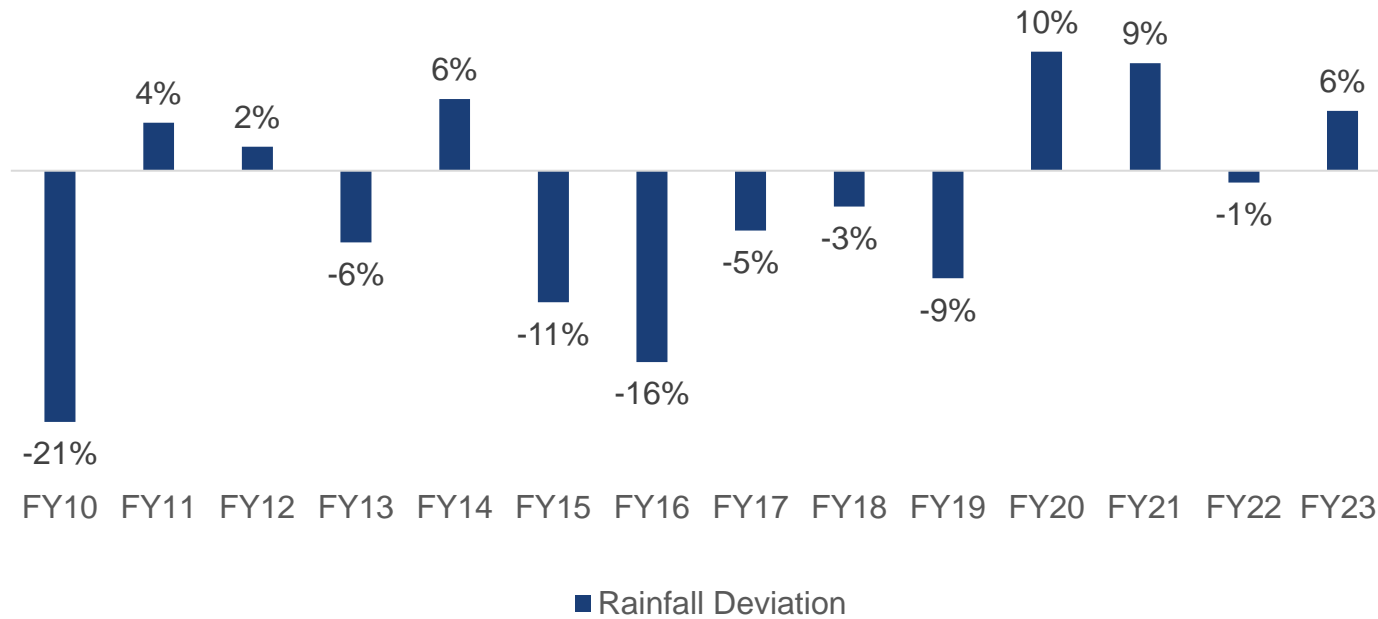
<b>Impact on Overall Sales Growth</b>	<b>N</b>	<b>NF</b>	<b>NF</b>	<b>NF</b>	<b>N</b>
---------------------------------------	----------	-----------	-----------	-----------	----------

NF: Not Favorable, F: Favorable; N: Neutral  
 E: Estimates P: Projected

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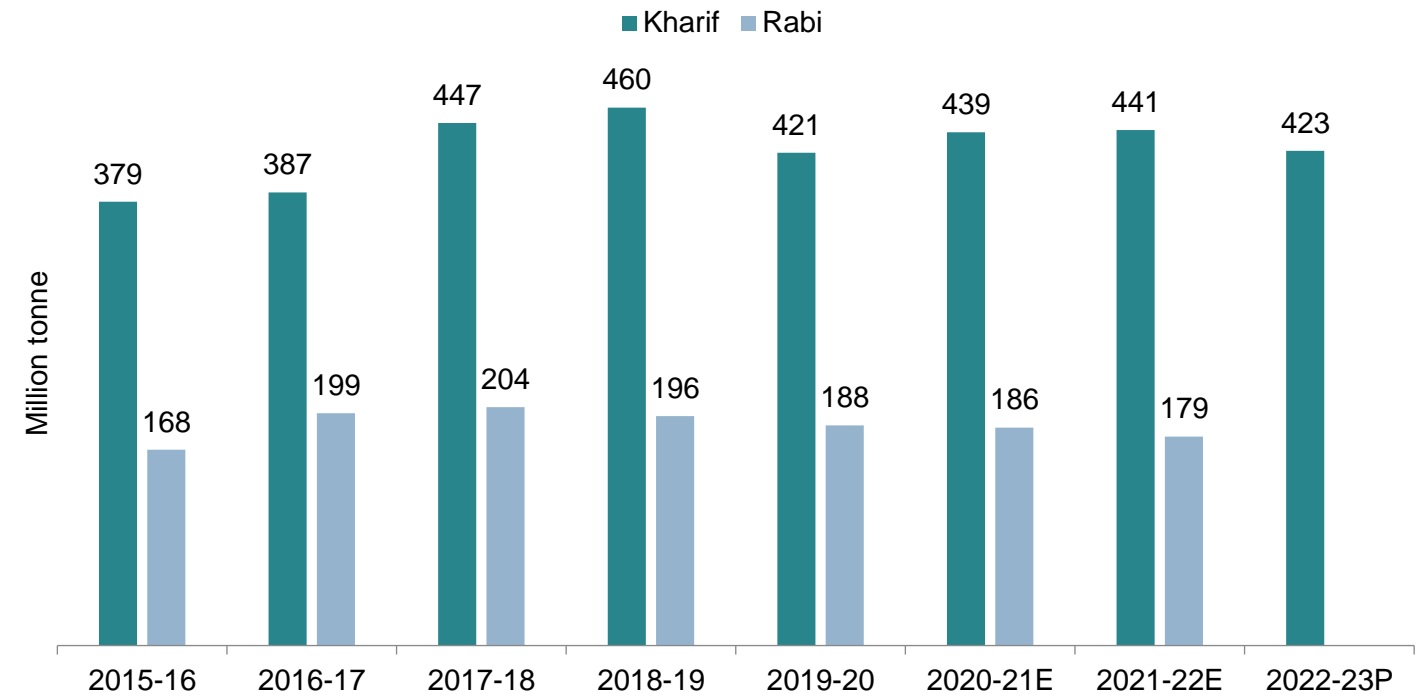
# Normal monsoon during the year, erratic rain witnessed in few states

## Monsoon remained in the accepted normal range



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

## Food-grain Crop Production



Source: Ministry of Agriculture, CRISIL Research

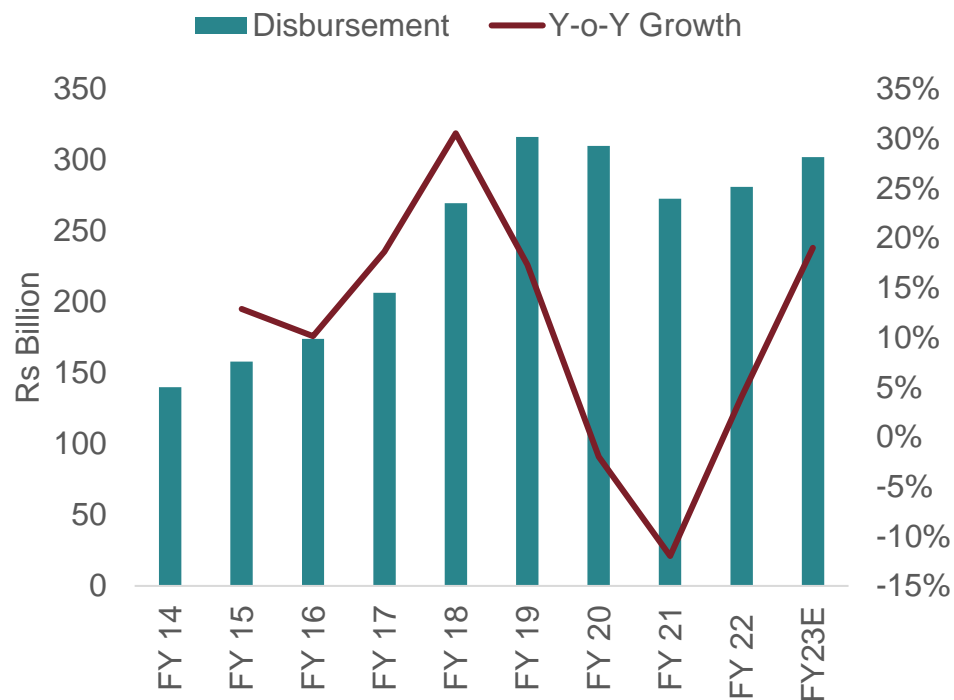
- Monsoon during the current fiscal for the country as a whole was normal. However, few states experienced excess rainfall.
- After excess rainfall in June, deficit rainfall was recorded in July and August respectively.
- Heavy rainfall was recorded in the months of September and October affecting the rural demand of motorcycles
- Erratic rainfall in some states, delayed harvesting, lower cash in hands of the farmers coupled with lower commercial demand have impacted sales negatively.

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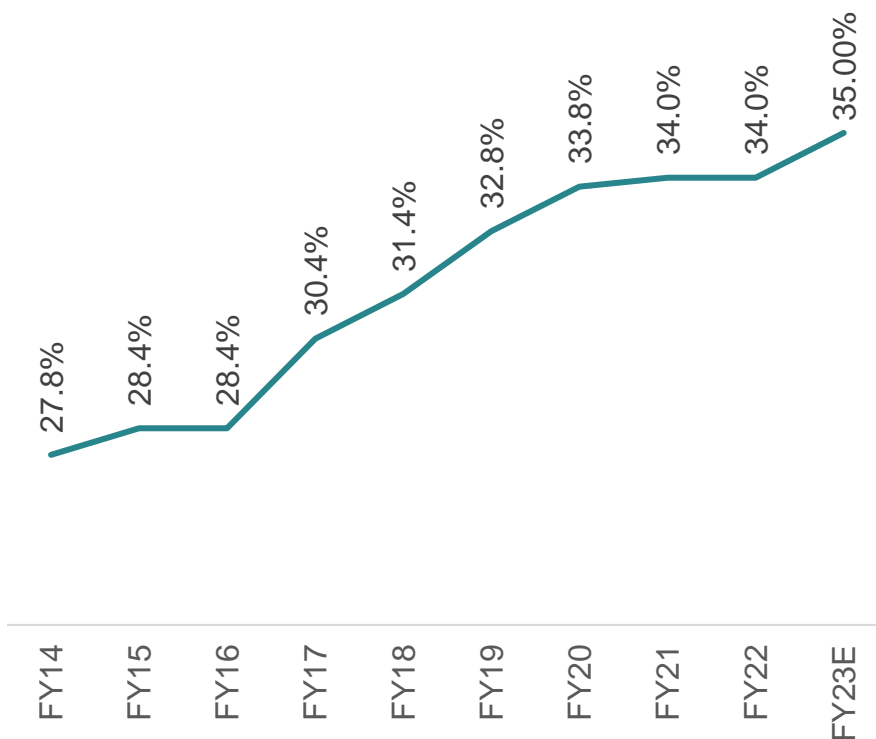


# Recovery in sales after a two year drop to back disbursements in FY23

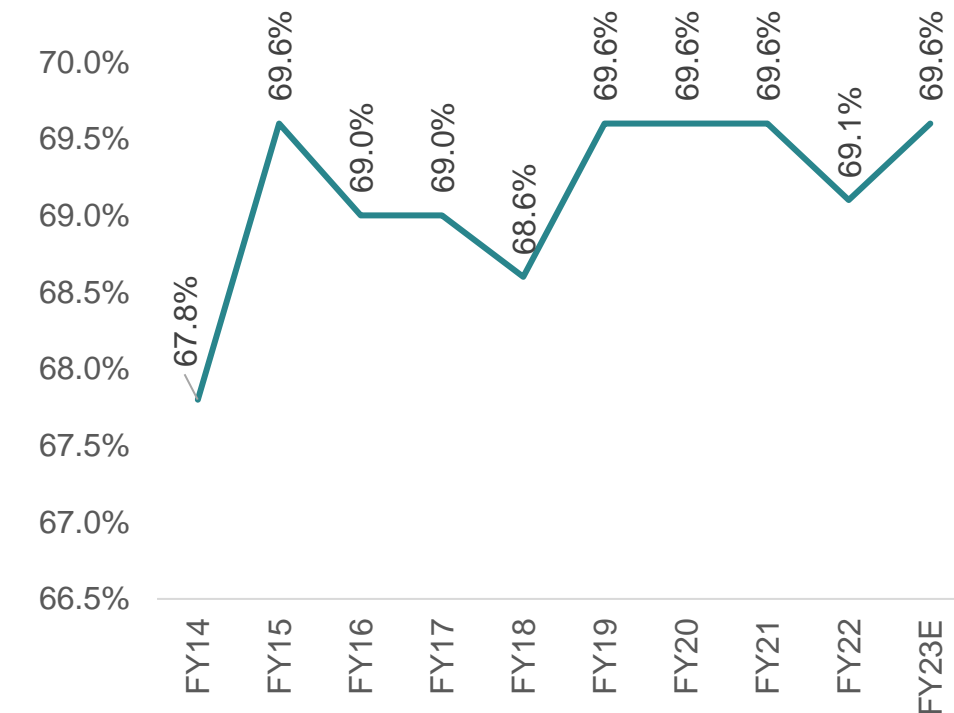
## Disbursements



## Auto finance penetration



## Loan-to-value



Source: Experian Credit Bureau, Company Reports, CRISIL Research

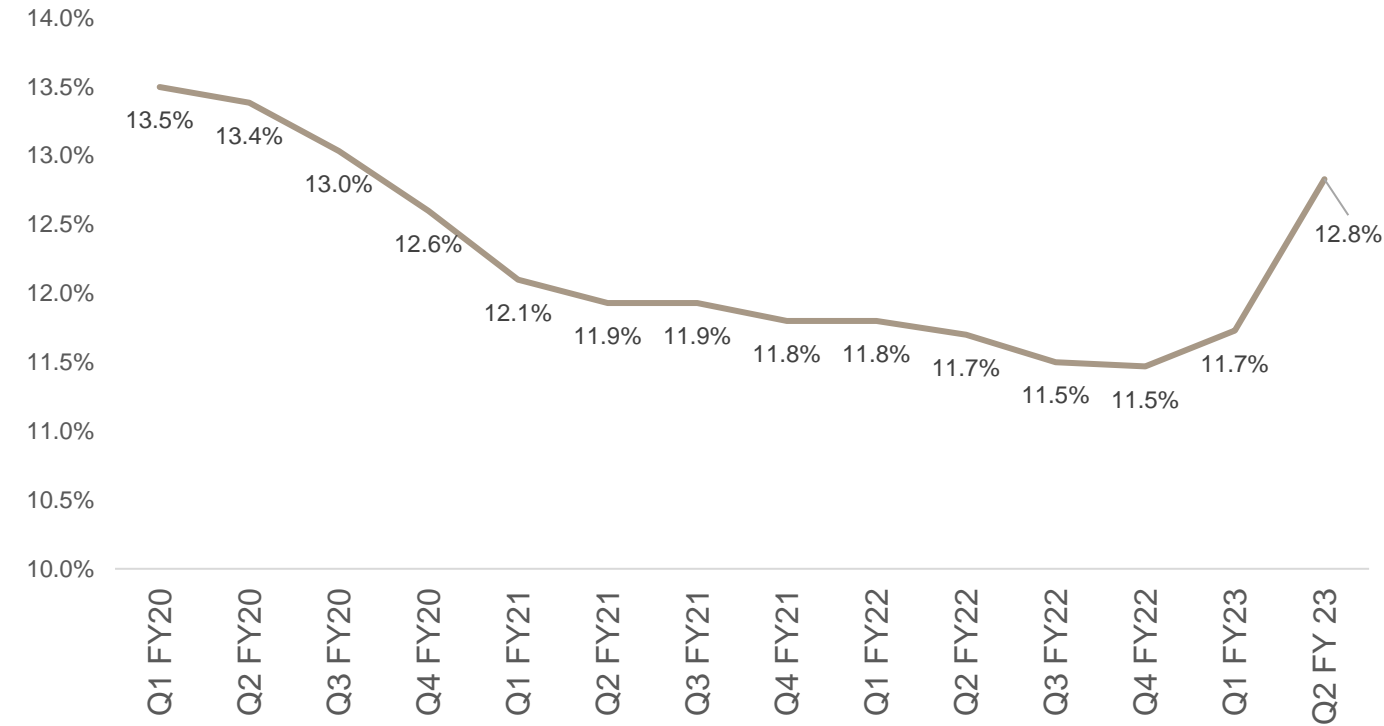
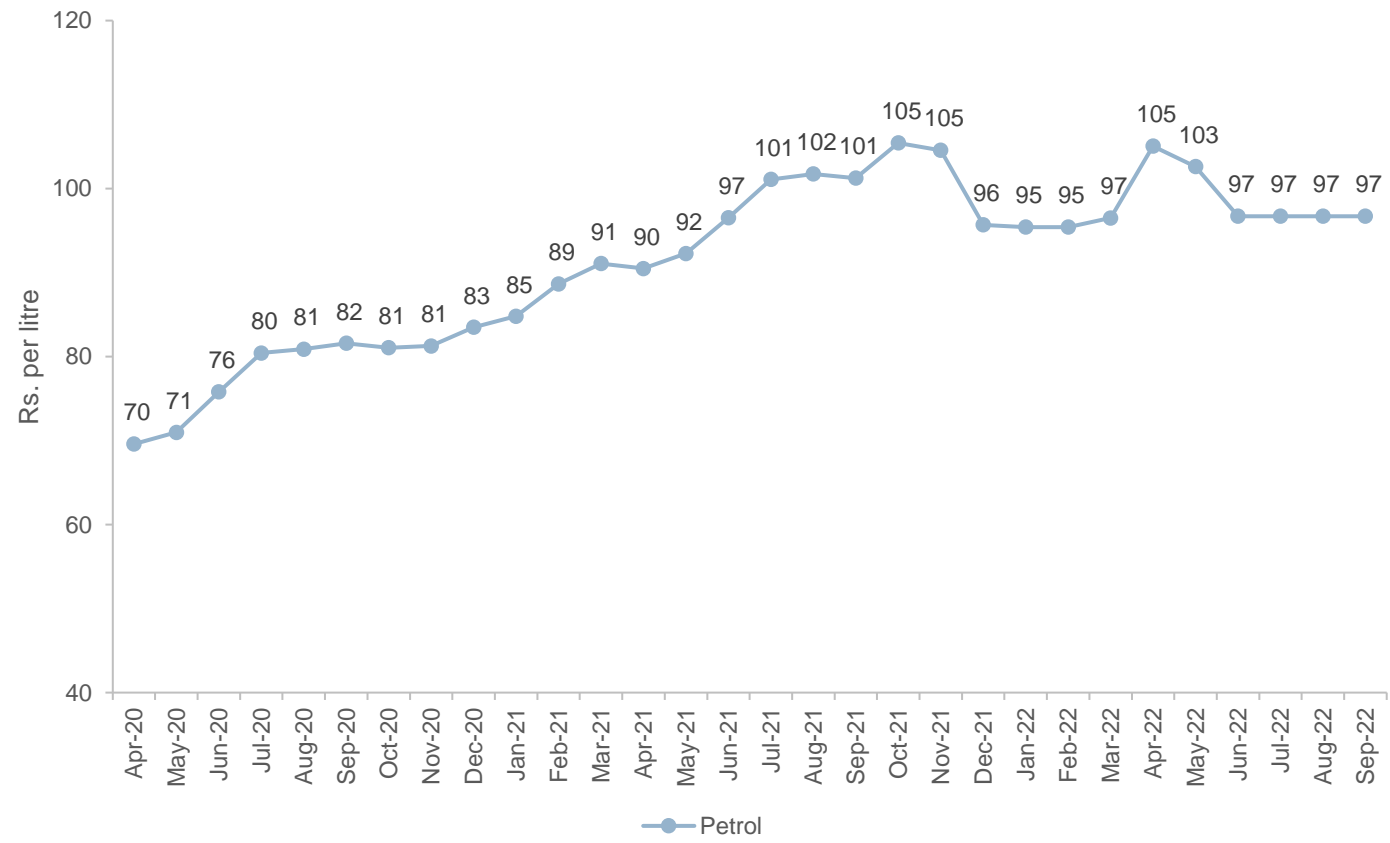
- The disbursements are on the road to getting back on track and is expected to get better in the coming year considering the slight recovery in two-wheeler segment.
- The festive seasons in India have always been the hype for Auto Markets, along with normalcy post-COVID amping up the sales
- As economic condition of India is slowly but surely improving, the LTV levels are supposed to be restored by the players in the coming financial year

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# High Fuel prices to result in increased cost of ownership impacting entry level segment

**Petrol Prices: Remained rangebound in the last quarter**

**Interest Rates: 90 bps hike in Q2FY23**



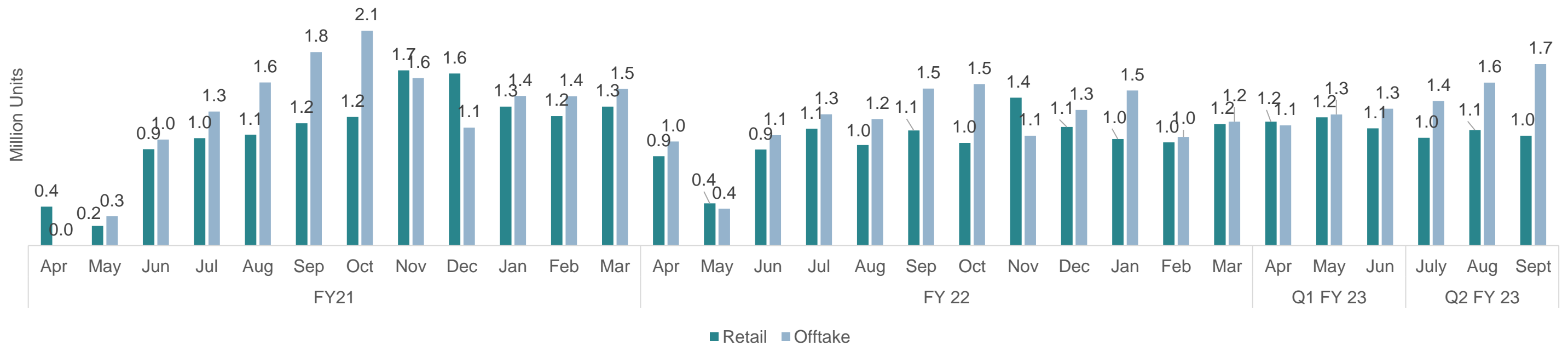
Note: Fuel prices in Delhi region  
Source: Industry, CRISIL Research

NOTE - Interest rates are an indicative rates charged by Banks  
Source – CRISIL Research

- Fuel prices after being stagnant for about three months from Dec-Feb, spiked to Rs. 105 in Apr 22 owing to rise in worldwide crude oil prices. It has now settled in the range from Rs. 96 to Rs.97
- Commodities and raw materials prices have been rising and as a result, the vehicle prices have also gone up to compensate for that additional manufacturing costs.
- Interest rates show an increase in Q2 of FY 23 to 12.8% amidst the sharp rise in repo rates

# Higher offtake in Q2 of fiscal 23 for the festive inventory built-up

**Retail vs off-take sales trend: Q2 wholesales increased 26% q-o-q while retails contracted 10%**



In million units

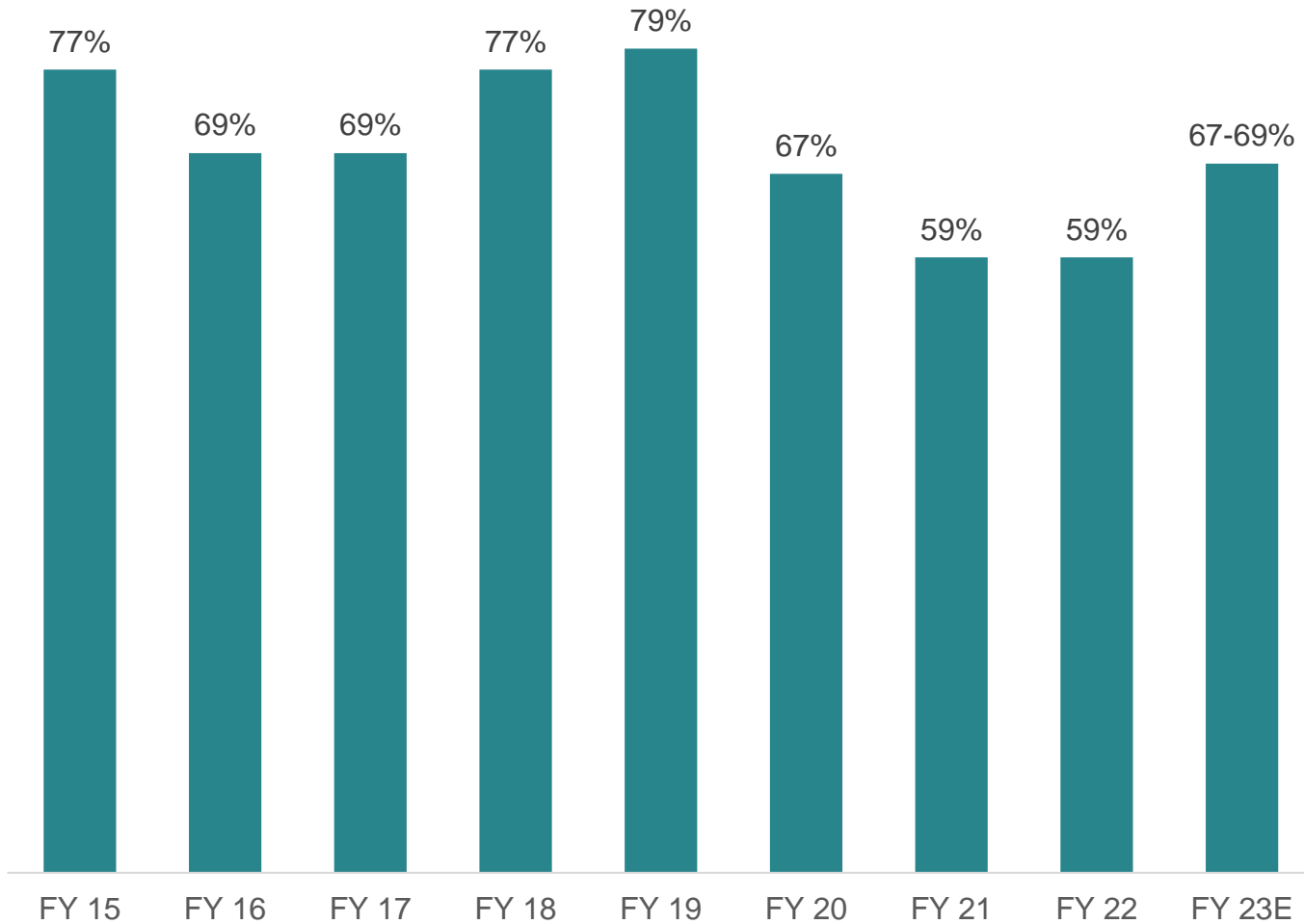
Note: Retail numbers are estimated

Source – MoRTH, SIAM, CRISIL Research

- Festive inventory built up backed offtake growth in Q2, while retail sales remained subdued
- However, retails are expected to improve during October, the shift to BSVI phase 2 will provide a boost to retails during Q3 & Q4
- Dealer inventory levels are above normal at the end of Q2, which will exert pressure on the off takes going ahead

# Increased traction to back utilization improvement in FY23

## Utilisation rates to jump to pre-COVID levels



SOURCE: Industry, SIAM, CRISIL Research

## Offtake push helped improve utilisation in Q2

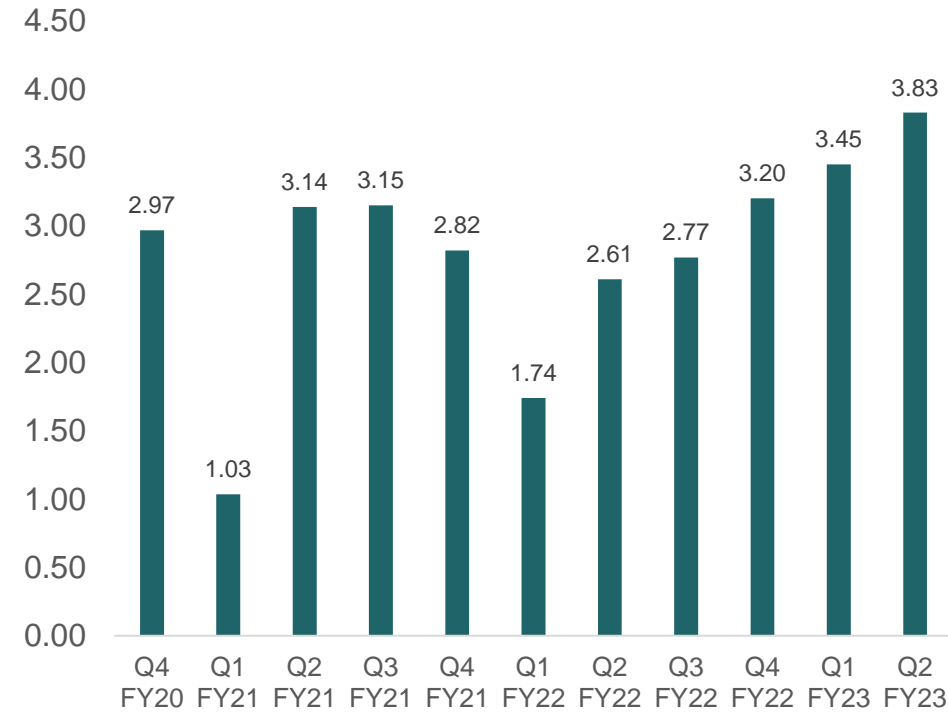
Player	Effective Capacity estimate in mn (as on 31st Mar 2022)	Production Q2 FY23 (in mn)	Utilization Q2 FY23	Production H1 FY 23 (in mn)	Capacity utilization H1 FY 23 (%)
Hero Motocorp	9.6	2.76	115%	4.11	86%
Bajaj Auto	5.72	1.88	132%	2.75	96%
HMSI	6.4	2.52	157%	3.59	112%
TVS Motor Company	4.5	1.83	163%	2.68	119%
India Yamaha Motors	1.6	0.48	119%	0.69	86%
Suzuki Motors	1.25	0.45	145%	0.66	105%
Royal Enfield	0.95	0.42	177%	0.63	132%
Piaggio Vehicles	0.15	0.04	96%	0.05	73%
Other Players	0.96	0	1%	0	0%
Industry Total	31.13	10.38	133%	15.16	97%

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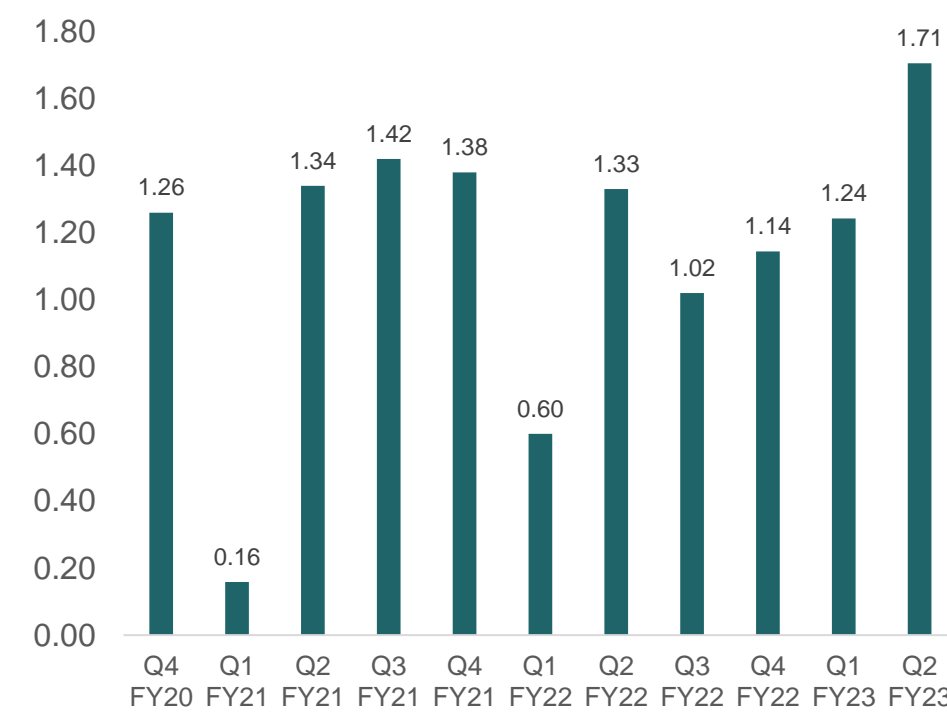
Capacity utilization estimates of Bajaj Auto and TVS Motor Co Ltd exclude three-wheelers

# Sales recovery, easing of supply issues backing two year high production

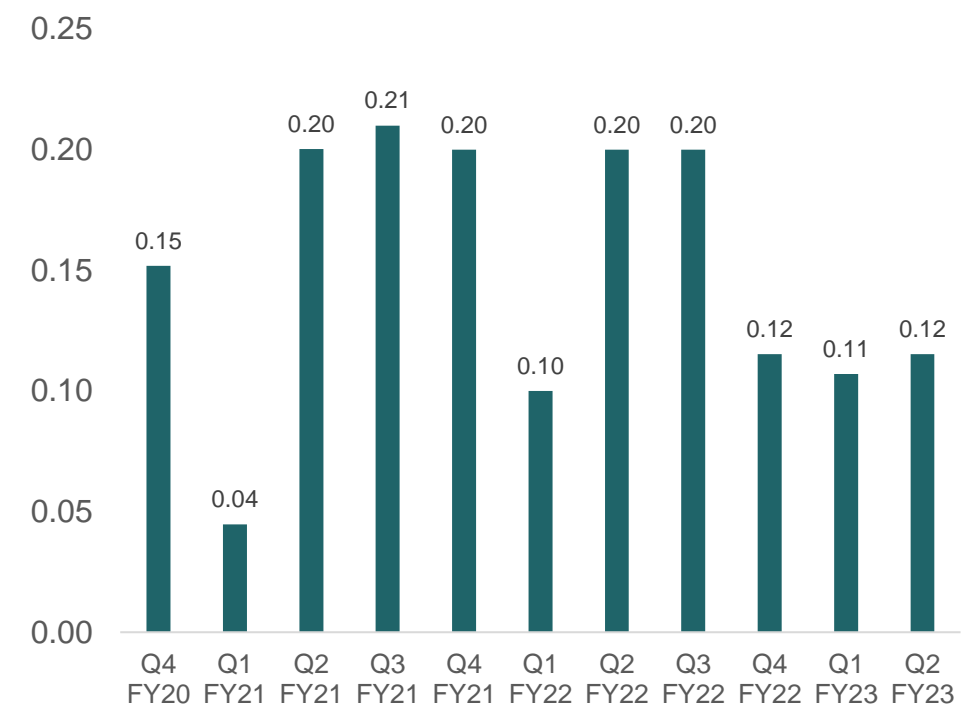
## Motorcycles



## Scooters



## Mopeds



In million units

Source: SIAM, CRISIL Research

- Backed by increased offtake demand and normalization in supply, production improved on a q-o-q basis for all the segments during Q2
- Scooter production improved by more than a third while motorcycle production rose 11% q-o-q
- Offtake sales are expected to be under pressure in H2 compared to H1 which will limit production levels going ahead

# Domestic – annual forecast

	Units	Motorcycle	Scoters	Mopeds	Total
<b>FY21</b>	Millions	10.0	4.5	0.6	15.1
<i>y-o-y growth</i>	%	(11)%	(20)%	(3)%	(13)%
<b>FY22</b>	Millions	9.0	4.0	0.5	13.5
<i>y-o-y growth</i>	%	(10)%	(11)%	(24)%	(11)%
<b>FY23E</b>	Millions	9.5-9.7	4.7-4.9	0.4-0.6	14.5-15.0
<i>y-o-y growth</i>	%	6-8%	18-20%	(7)-(5)%	9-11%

Source – SIAM, CRISIL Research

# Domestic – quarterly forecast

Consulting

Fiscal	Quarter	Motorcycle		Scooter		Moped		Total	
		Sales ( mn)	y-o-y growth	Sales ( mn)	y-o-y growth	Sales ( mn)	y-o-y growth	Sales ( mn)	y-o-y growth
FY22	Q1	1.7	93%	0.6	75%	0.1	28%	2.4	86%
	Q2	2.6	(17)%	1.3	(1)%	0.2	(17)%	4.1	(12)%
	Q3	2.4	(22)%	1.0	(28)%	0.1	(38)%	3.6	(25)%
	Q4	2.2	(22)%	1.1	(24)%	0.1	(30)%	3.4	(23)%
FY23 E	Q1	2.4	38%	1.2	102%	0.1	61%	3.7	54%
	Q2	3.0	15%	1.6	17%	0.1	(29)%	4.7	14%
	Q3 E	2.3-2.8	7%	1.1-1.3	16%	0-0.2	(12)%	3.8-4.0	9%
	Q4 E	1.5-1.7	(28)%	0.7-0.9	(21)%	0-0.2	(5)%	2.3-2.6	(25)%
FY24 P	Q1 P	1.8-2.0	(22)%	0.8-1.0	(24)%	0-0.2	(10)%	2.8-3.0	(22)%
	Q2 P	2.1-2.3	(28)%	1.1-1.3	(30)%	0-0.2	(13)%	3.3-3.6	(28)%

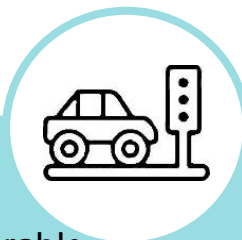
Source – SIAM, CRISIL Research

- Two-wheeler sales improved by more than a quarter (q-o-q) in Q2 FY23. Scooters witnessed better traction (31% q-o-q) while motorcycles rose by 24%. However, entry level motorcycle demand remained under pressure.
- This increased offtake was also due to the inventory build up which was done in Q2 to cater to the expected bumper festive demand in Q3.
- Given the high inventory levels with the dealers, offtake is expected to go down in Q3 as well as Q4. Transition to BSVI phase 2 will also exert pressure on offtakes during H2FY23 as OEMs will focus on liquidating the old BSVI inventory.
- Implementation of BSVI phase 2 norms from FY24 will impact in retail demand for Q1 & partially in Q2 FY24. Gradual improvement in offtake is expected in FY24.

# Stakeholder interactions

Consulting

## OEMs



- Positive supply sentiments and considerable recovery in semiconductor supply which resulted in improved inventory in August and September
- Inventory was high in Q1 for motorcycles as compared to scooters and hence, production for scooters was ramped up in Q2 FY23.
- Robust growth was witnessed in Navratri and similar growth expected in Diwali season in October
- Key monitorable for rural demand will be the kharif income which will be affected due to the unseasonal rainfall in October - this will impact motorcycle sales in the coming months.
- Implementation of BS-VI B is expected to negatively impact wholesale numbers as OEM's will be liquidating their inventory.
- Demand in H2 FY24 is also expected to be impacted on account of a price hike due to BS-VI B. OEM's will also be transitioning internally and aligning their production accordingly.

## Dealer



- There has been a substantial improvement in demand for the ICE two wheelers in last couple of months as the rainy season has come to an end and festive season has begun.
- Scooters too have seen some improvement in demand from the urban side, but the sentiments are mixed. Post COVID-19 pandemic, the reopening of educational institutions, corporates, industries and government offices has led to an increase in scooter purchase in the tier two and tier three cities
- Rural demand for motorcycles have seen moderate growth, owing to late harvest & payments. However, for the scooters, rural demand remains on the lower side, as the prices for the scooters have considerably risen post BS6 implementation.
- Enquiries to Conversion percentage remains low to moderate.
- There are not much discounts offered currently, barring some marginal discounts on accessories However the advent of festive season looks promising with discount offers and increase in sales
- Price increase in two wheelers is expected in the near time, though marginal, but still might impact the demand in the long run.

## Financier



- Interest rates have gone up whereas LTV remained on the similar lines.
- Gradual improvement in demand expected as the festive times are near, which back disbursement growth in the industry

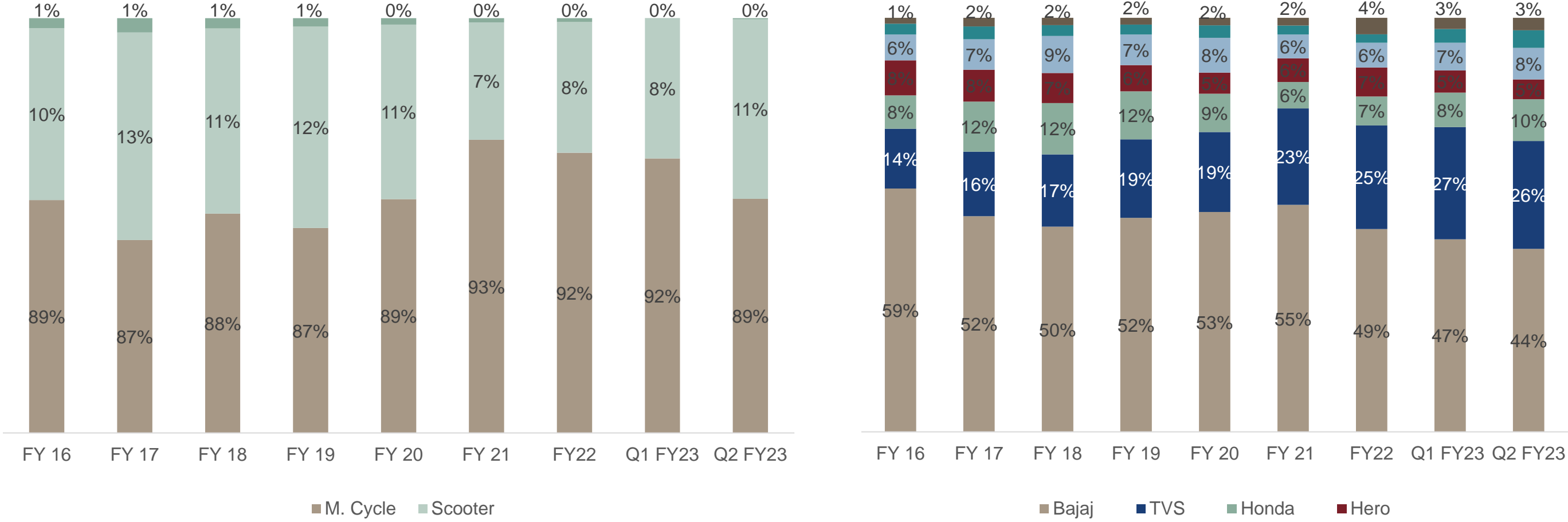
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# Two-wheeler exports

# Export demand to rise further in FY23

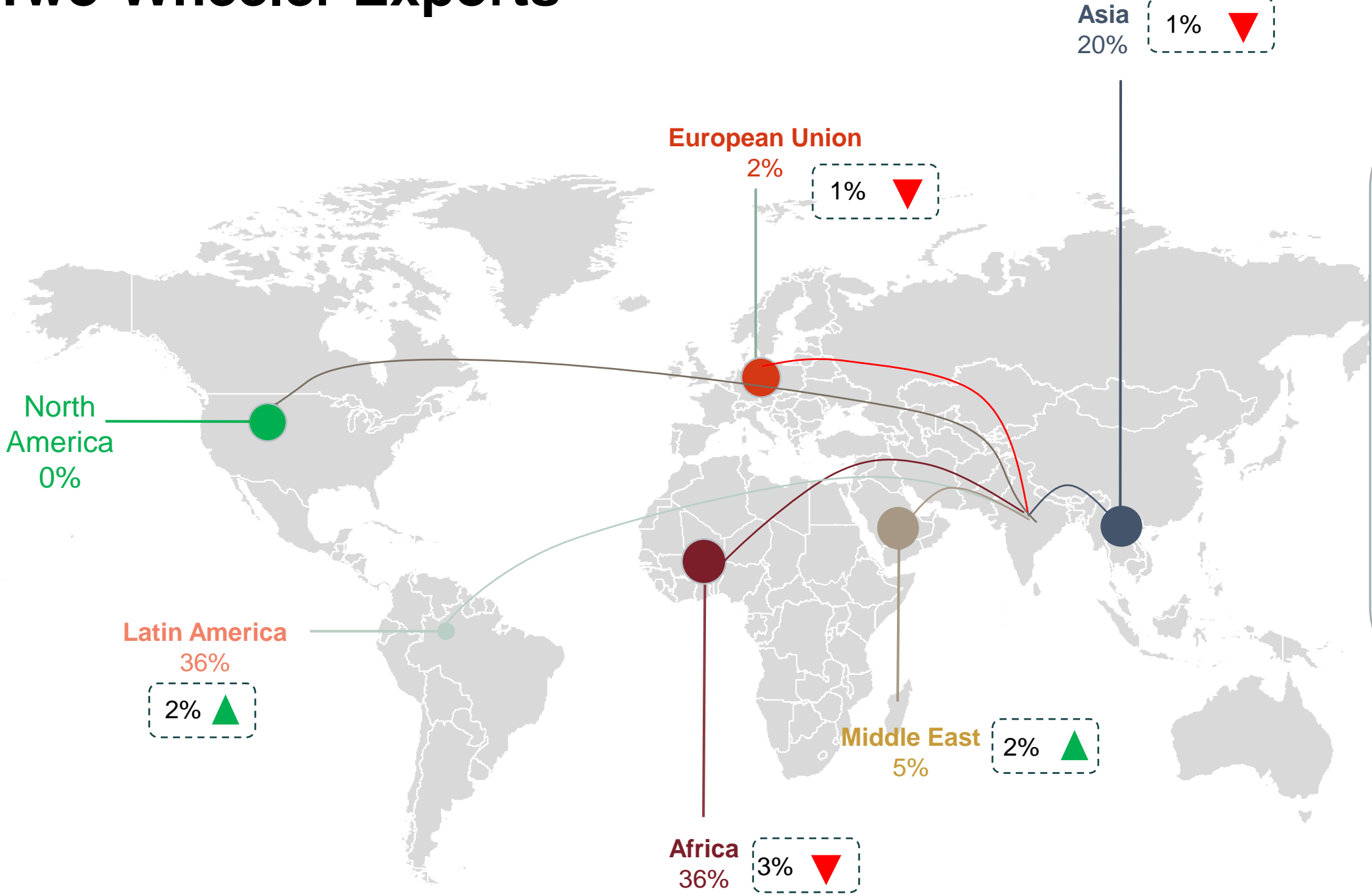
## Bajaj loses share to TVS, HMSI amidst the rise in scooter exports



Source: SIAM, CRISIL Research

- Export demand increased substantially by 36% in FY22 over the lower base of FY21 as economies started recovering
- In fiscal 2023 export demand to increase 3-5% from this recovered base
- Scooters will provide the thrust while motorcycles will rise at a subdued pace

# Two-Wheeler Exports



- Africa & Asia are the primary export destinations of Indian two wheelers
- However, there was a drop in the exports to Nigeria & Nepal during FY23 (April-Aug) period contracting the share of exports to Africa & Asia
- Colombia was the leading destination for exports in FY23 backing the share expansion of Latin America region
- Exports to UAE got a boost pushing the exports to Middle East during April-Aug FY23

# Commercial Vehicles

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# Overview of end-use segments - Cargo

Consulting

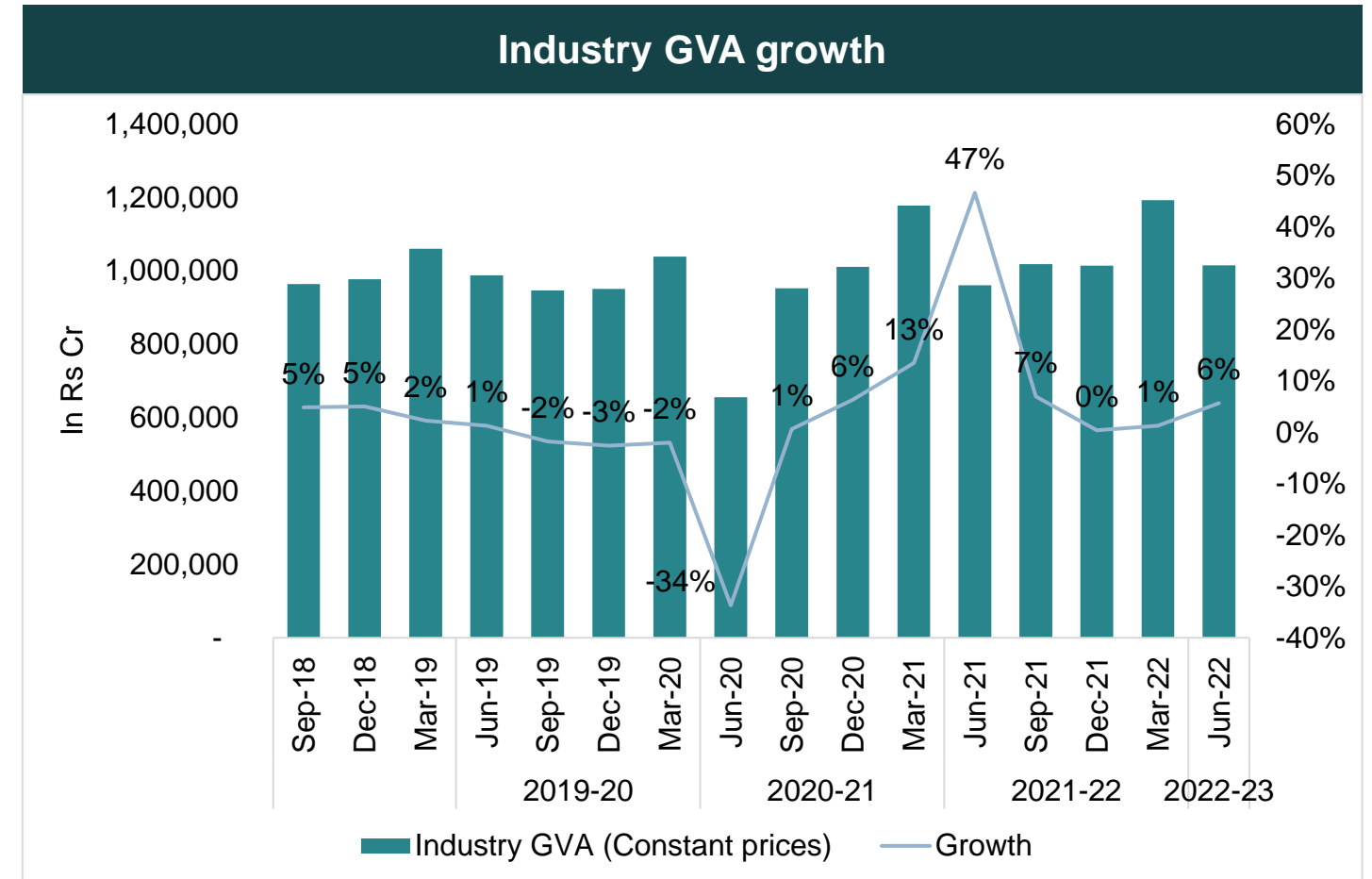
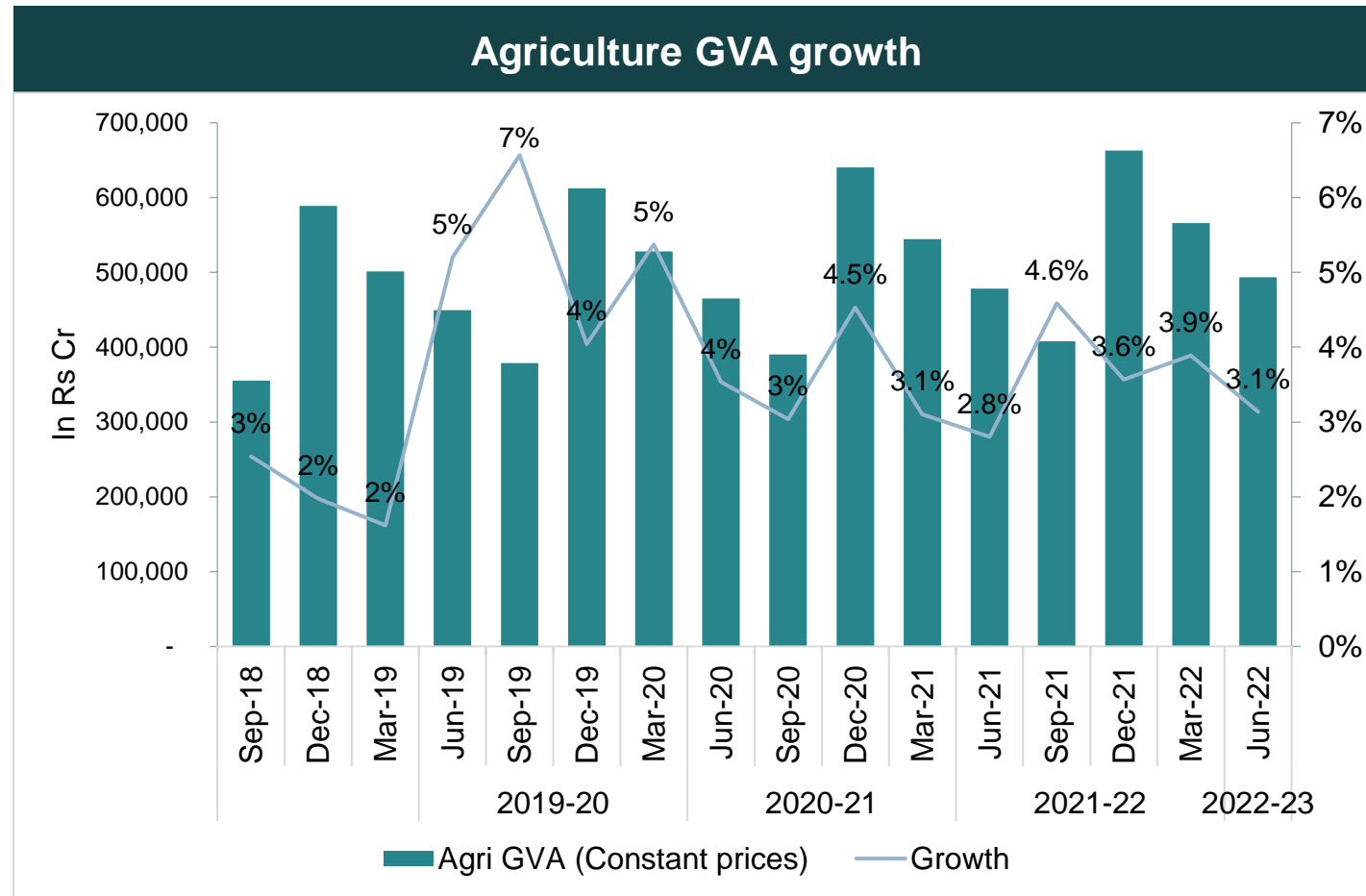
Segments (% Growth Y-o-Y)	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23 P	FY 24 P	
Coal (Production)	2	7	0	(4)	11	8-10		Core Sectors
Iron ore (Production)	3	3	19	(17)	23	0-2	3-5	
Steel (Consumption)	8	9	1	(5)	11.4	8-10		
Cement (Consumption)	9	12	(-3)	1	9	9-11	1-3	
Roads (Km Constructed / Day)-NHAI	8	9	11	11	13	14-15		
Port (Traffic)	6.5	8.2	2	(5.5)	4.4	3-6		
Two-wheelers (Domestic sales)	14.8	5	(18)	(13)	(11)	9-11	4-6	Discretionary Products
Passenger vehicles (Domestic sales)	8	3	(18)	(2)	13	24-26	4-6	
Consumer durables (Consumption)	5.8	7	5	(17)	12-17	8-10		
E-retail	35	35-37	23	13	27	25-30		
RMG (Market Size)	5	6	(2)	(24)	23	17-19	10-12	
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	13	7-8	6-8	9-11	

# Overview of end-use segments - Buses

Consulting

Segments (% Growth Y-o-Y)	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23 P	FY 24 P	
<b>Gross School Enrollment</b>								<b>Buses</b>
K-12	73.4	73.4	78	74.5	74.8	75.1	75.4	
Above K-12	23.4	22.5	22.5	22.2	23.0	23.4	23.4	
<b>IT Employee Base</b>	3	4	4	7	14.5	8-10		
<b>Air Passenger Traffic (million passengers)</b>	188	209	209	64.4	106.8	195		
<b>Hotel Room Demand</b>	5	4	1	(51)	74	25-30		

# Agriculture is expected to maintain a healthy growth momentum – growing 3% in fiscal 2023 Consulting

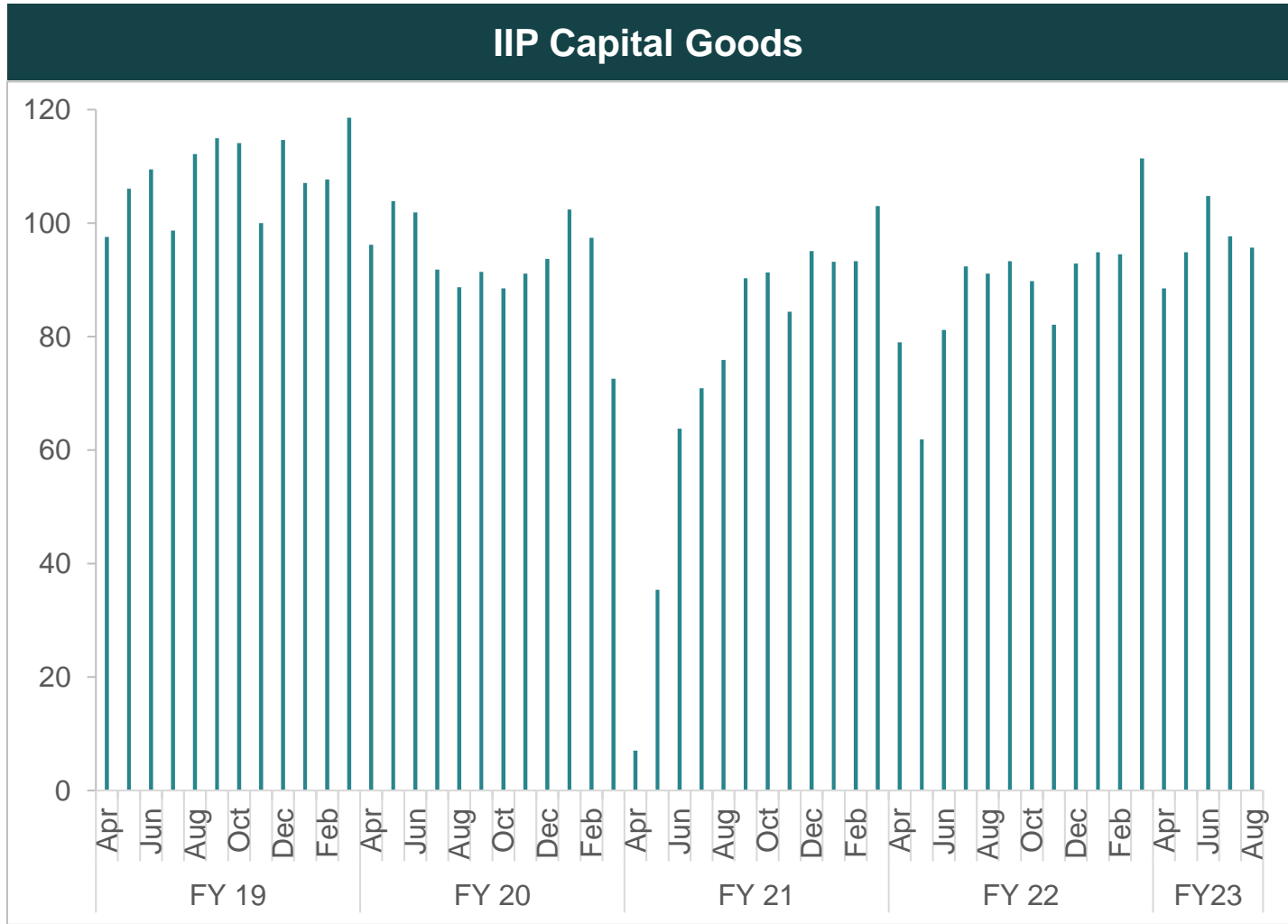


Source: MOSPI, CRISIL Research

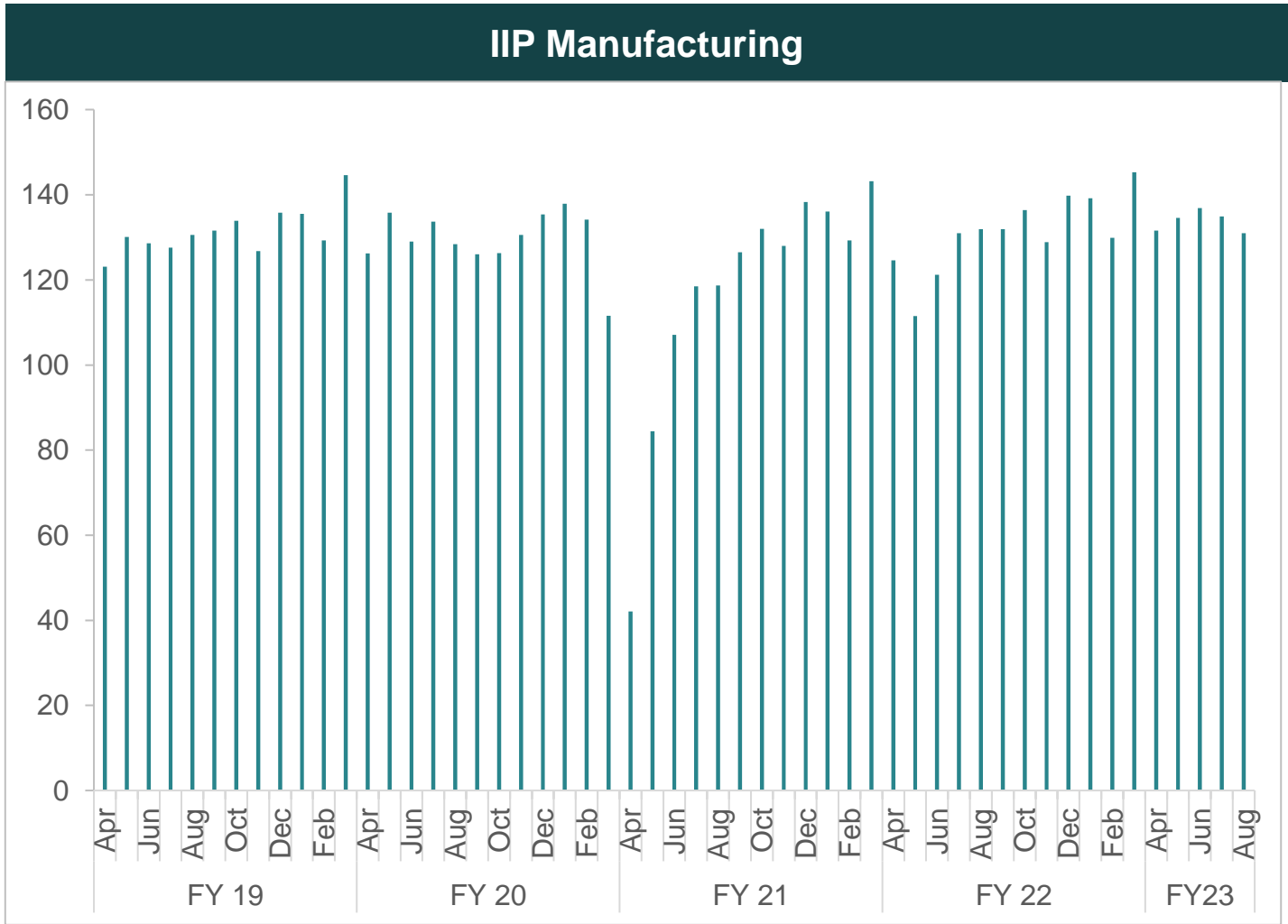
- Agri GDP at 3.1% on-year during Q1FY23. Growth in Q1 FY22 was around 2.8%
- Overall agriculture growth is expected to remain at 3% in this fiscal, given expectation of healthy kharif production, and adequate reservoir levels
- Industry GVA witnessed 6% growth in Q1 FY23

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# IIP holds ground across major sectors



Source: MOSPI, CRISIL Research



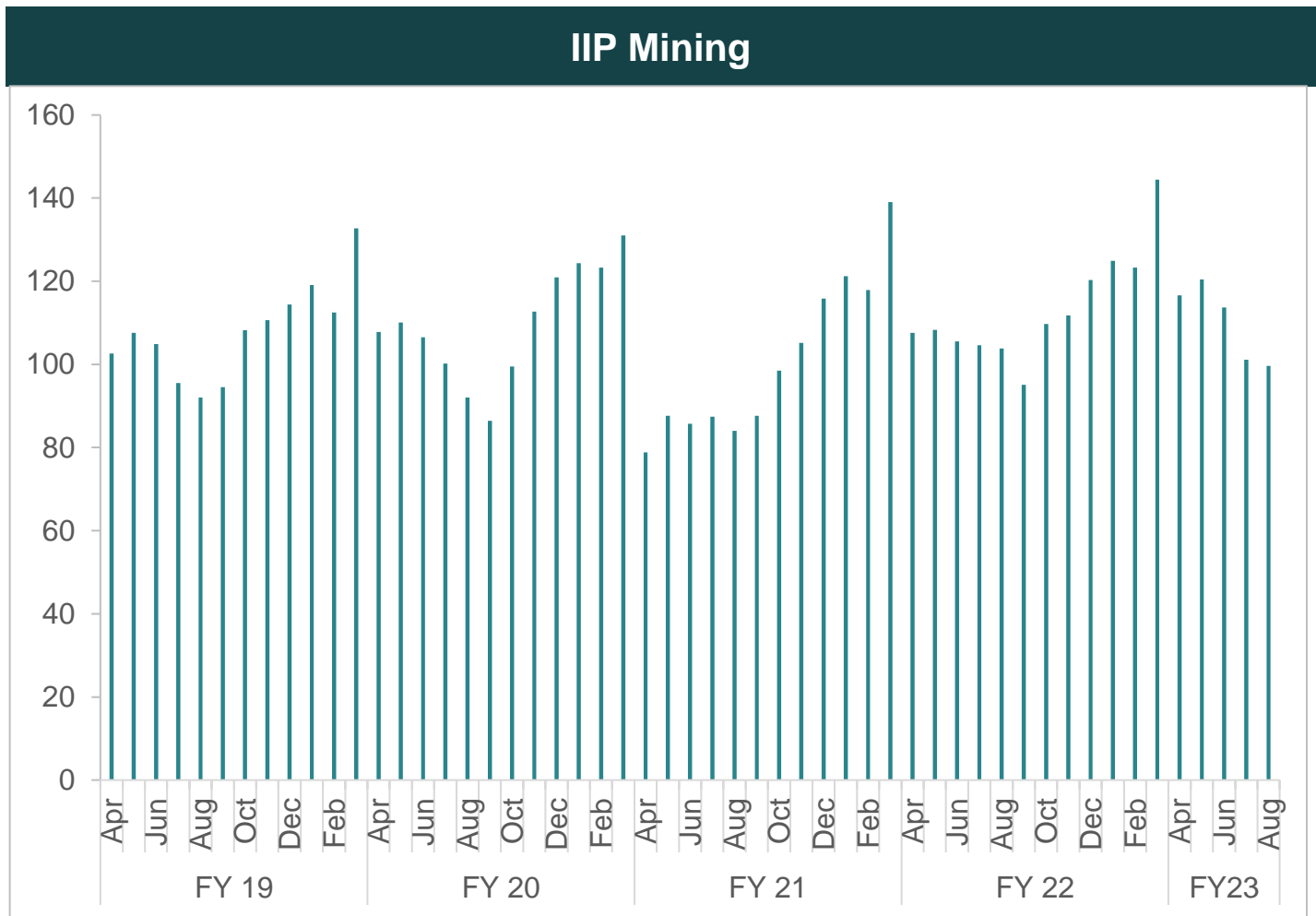
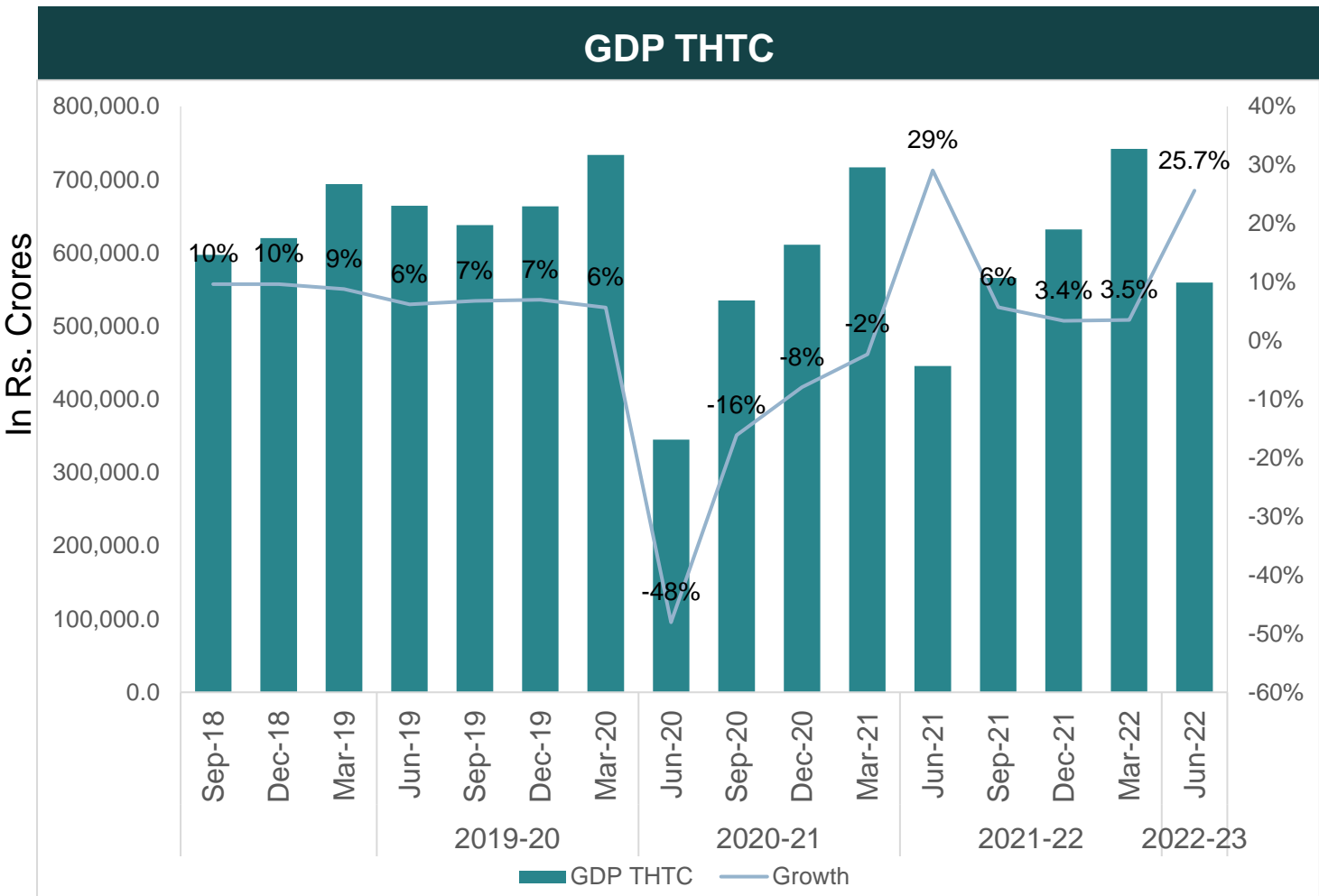
Source: MOSPI, CRISIL Research

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- The Index of Industrial Production (IIP) contracted 1% on-year in August 2022 from 2.4% on-year growth in July.
- Manufacturing IIP growth slowed to -1% on-year in August from 3% the previous month and 13.1% in June 2022. Sequentially, it declined 3% on-month in August.
- IIP capital goods showed growth of 5% on-year in August. Sequentially, it declined 2% on-month in August



# GDP THTC sees growth on low base; Mining IIP growth sinks in August



NOTE: THTC: Transport Hotel Transport Communication Services

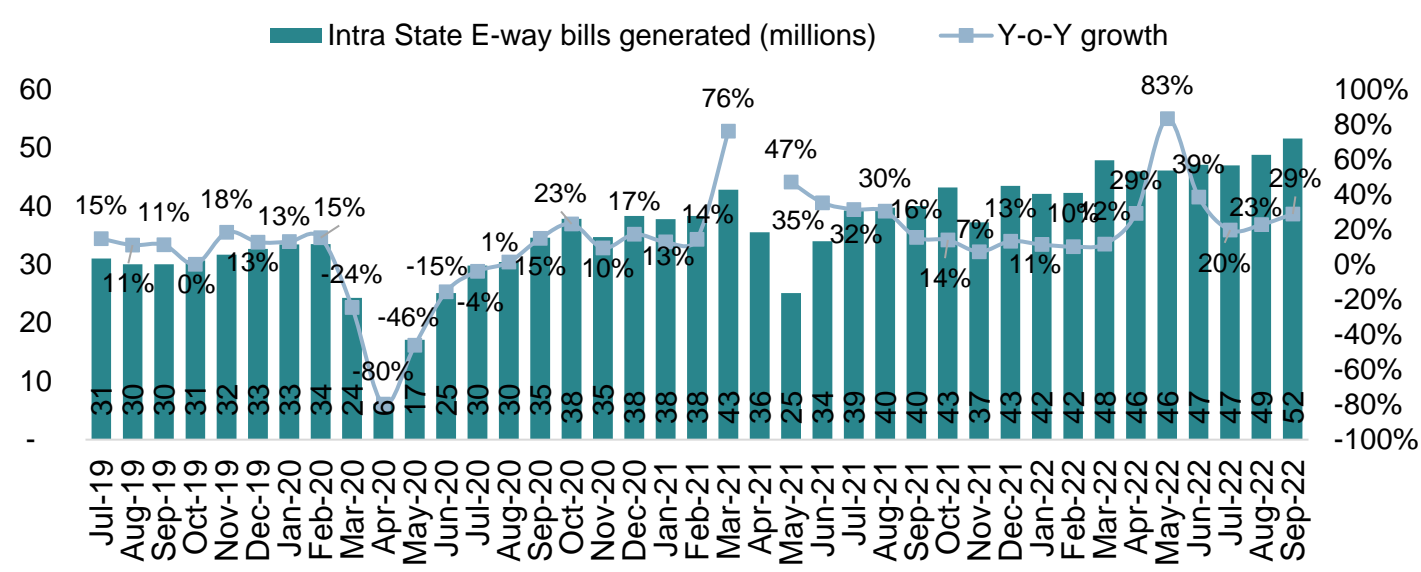
Source: MOSPI, CRISIL Research

Source- MOSPI, CRISIL Research

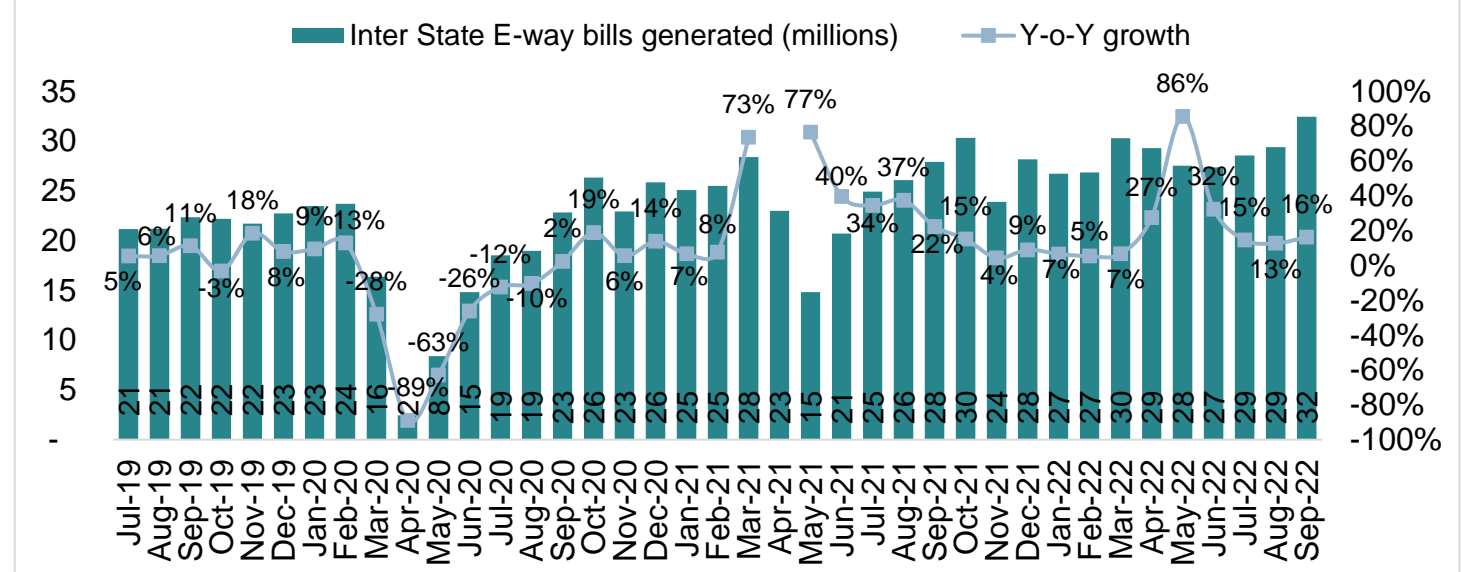
- GDP THTC registered a growth of 25.7% in first quarter over Q1FY23. This segment is showing tremendous growth on account of tourism sector picking up.
- Mining (14.4% weight) sector, declined by 4% on-year in August

# Overall mobility picking up

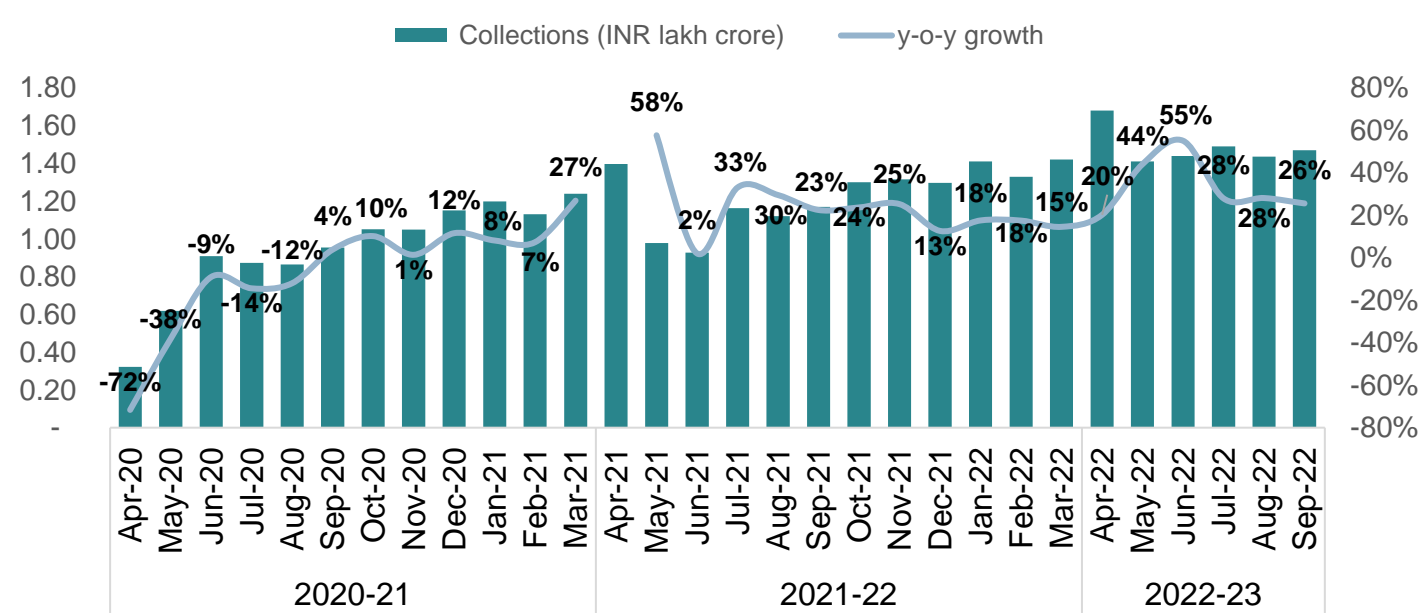
## Ewaybills : Intrastate



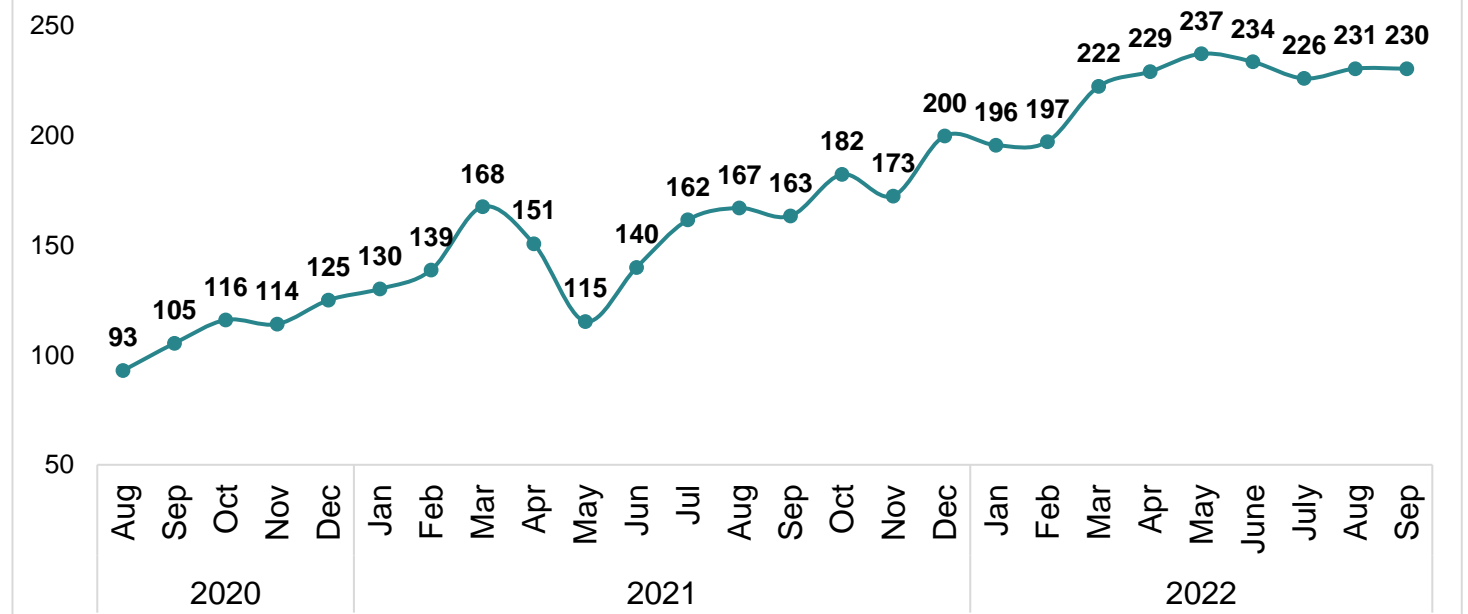
## Ewaybills : Interstate



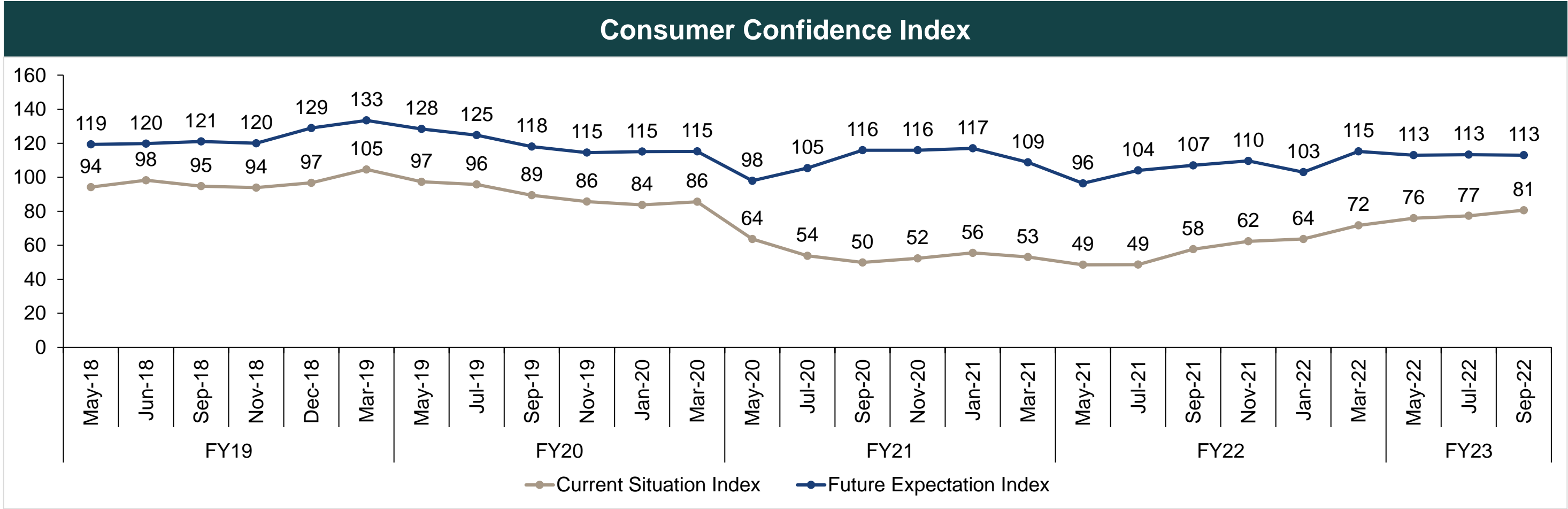
## GST collections



## Fastag trend (Feb 2020 level =100)



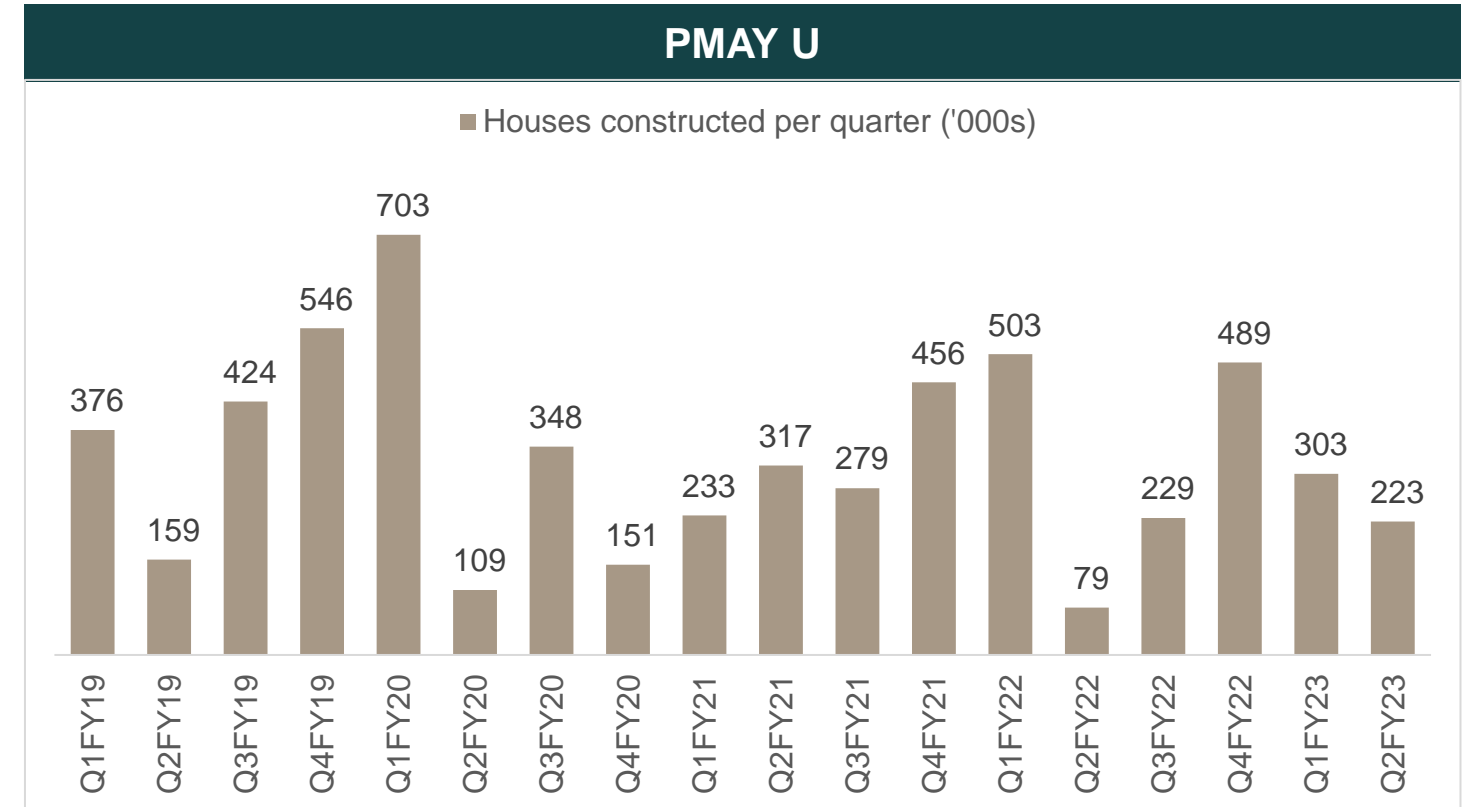
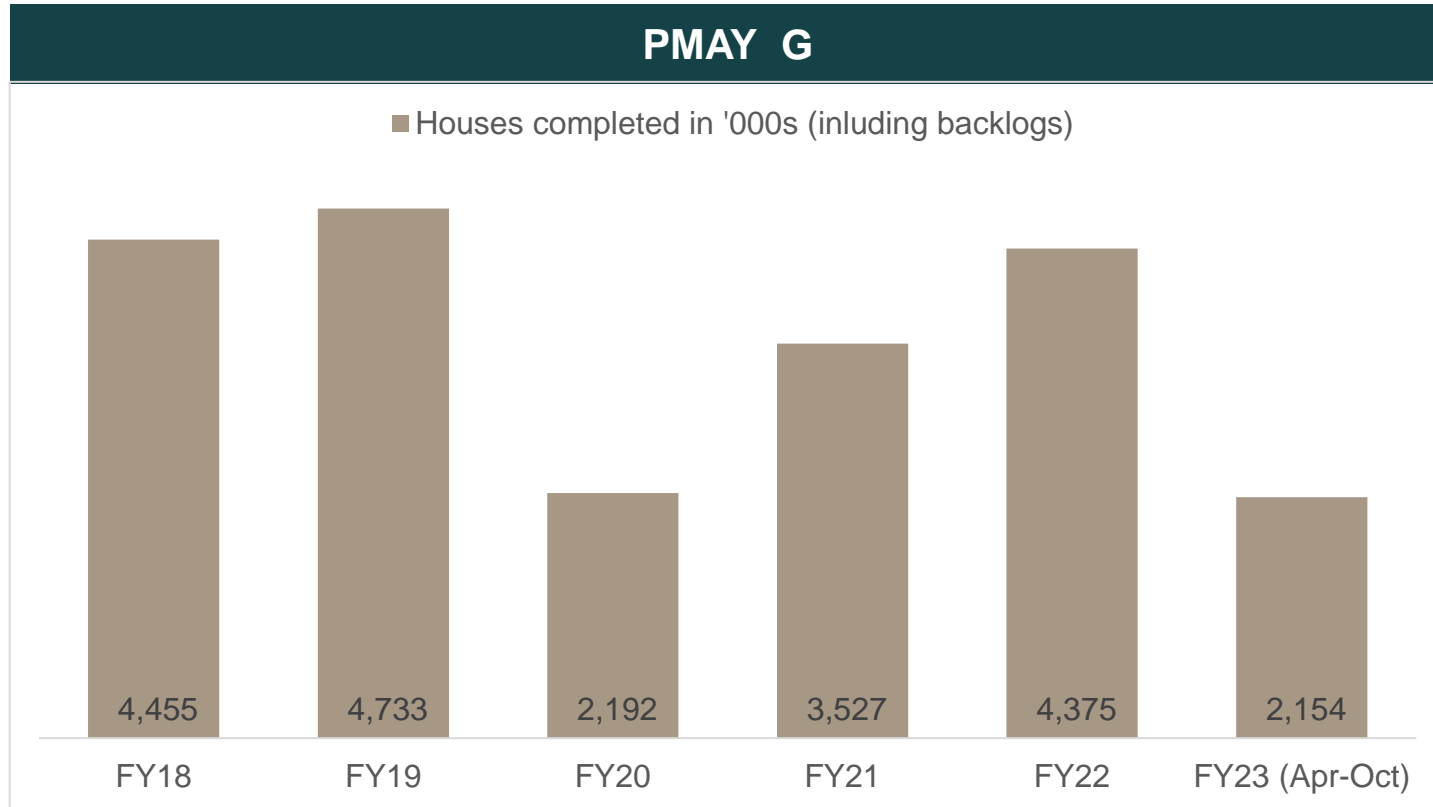
# Current situation remains in red despite gradual improvement



Source- RBI, CRISIL Research

- Current situation index has been showing some improvement from the low of Jun 21, however, till Sep 22 it remained in the negative territory
- Many households are pessimistic on their current incomes but are hopeful of improvement over the next year
- Future Expectation index which represents consumer confidence for the next one year remained rangebound during FY23 amidst the increased essential spending of most households

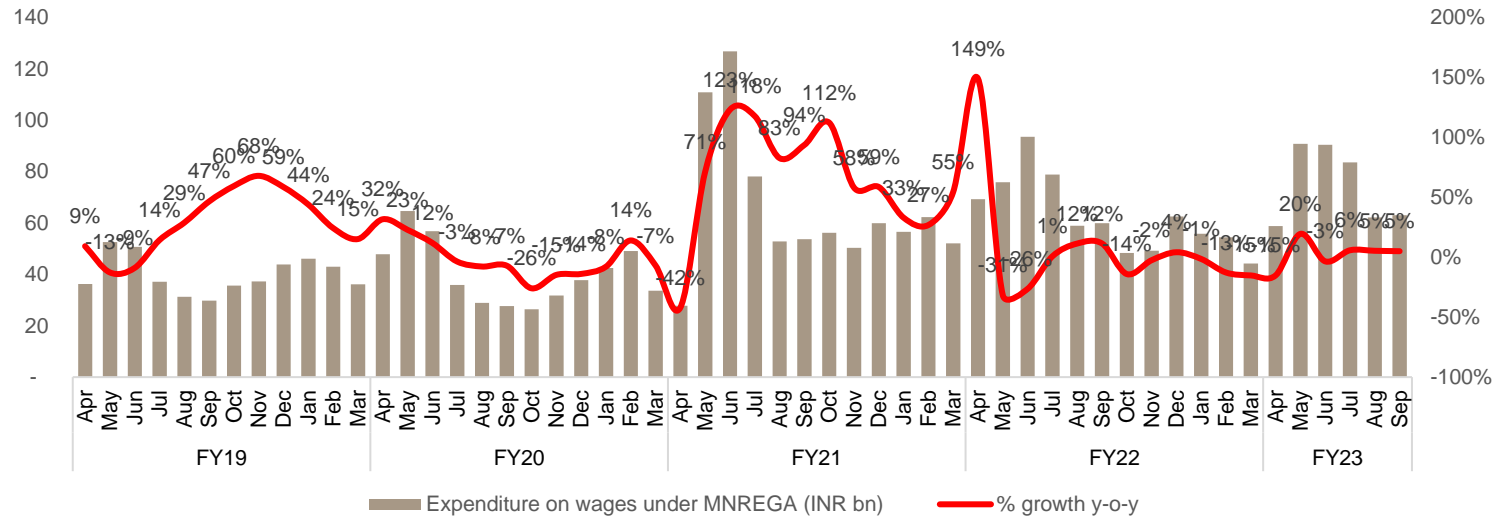
# 1.23 cr houses sanctioned under PMAY-Urban, 63.27 lakh units already built during Apr-Sep



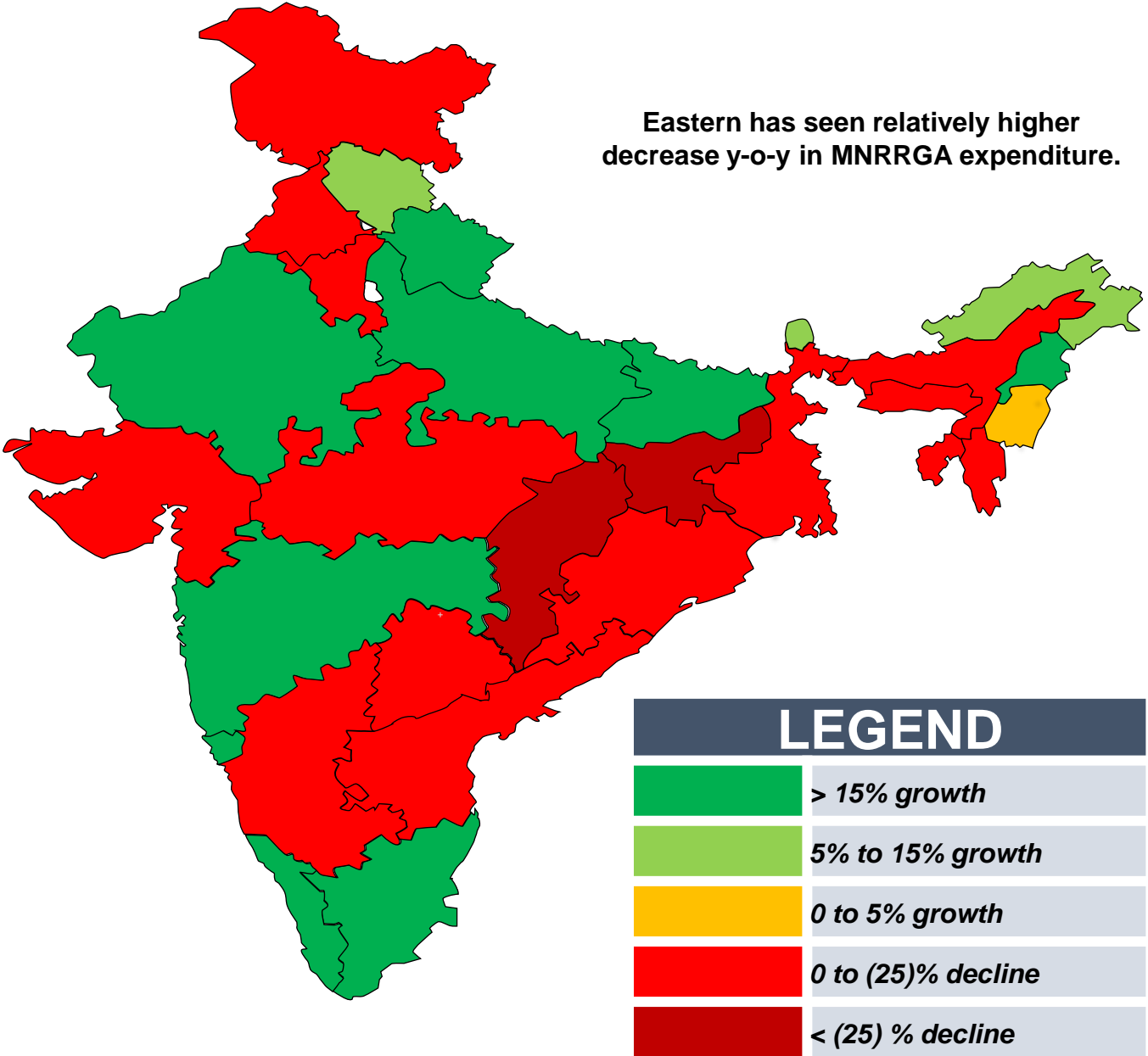
- Out of the total sanctioned houses under PMAY-Urban, 104.12 lakh have been grounded for construction and 63.27 lakh units have already been completed or delivered to beneficiaries.
- The highest execution was when there were elections in FY19, post which activities have tapered off
- ~51% of the homes sanctioned are being completed in the urban areas.

# MNREGA scheme budget allocation tapered down in FY23

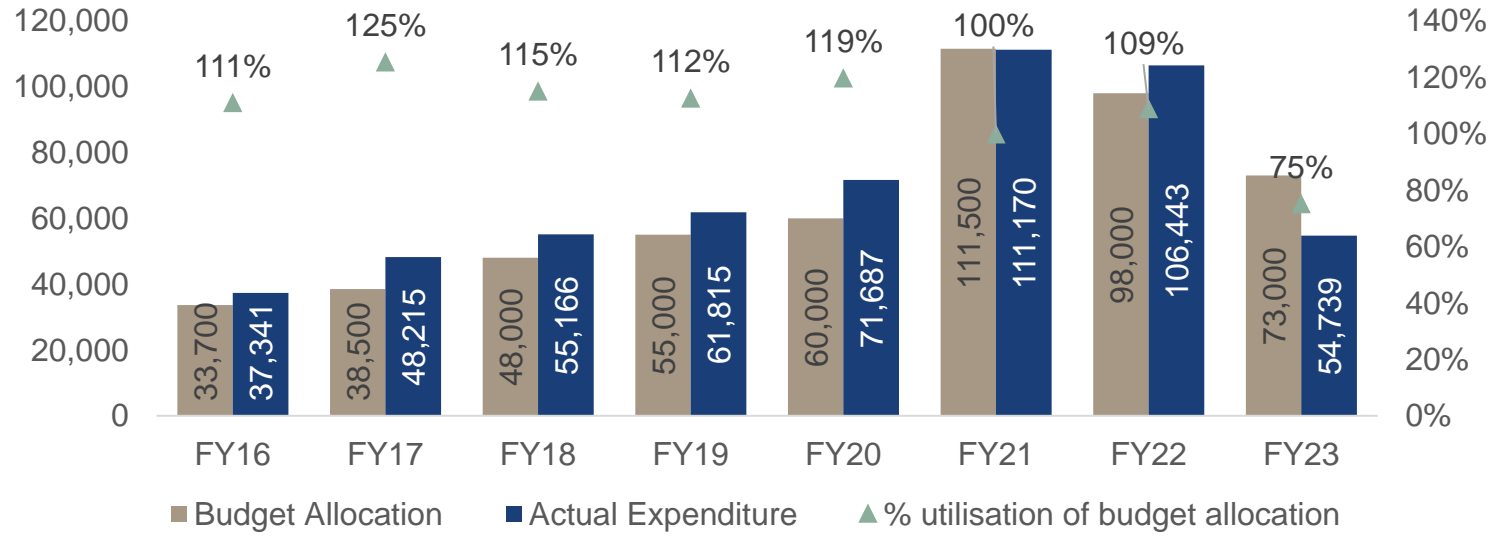
## MNREGA wages growth



## State wise growth in MNREGA wages expenditure for Apr-Sep FY23



## The MNREGA scheme has a history of overshooting budget

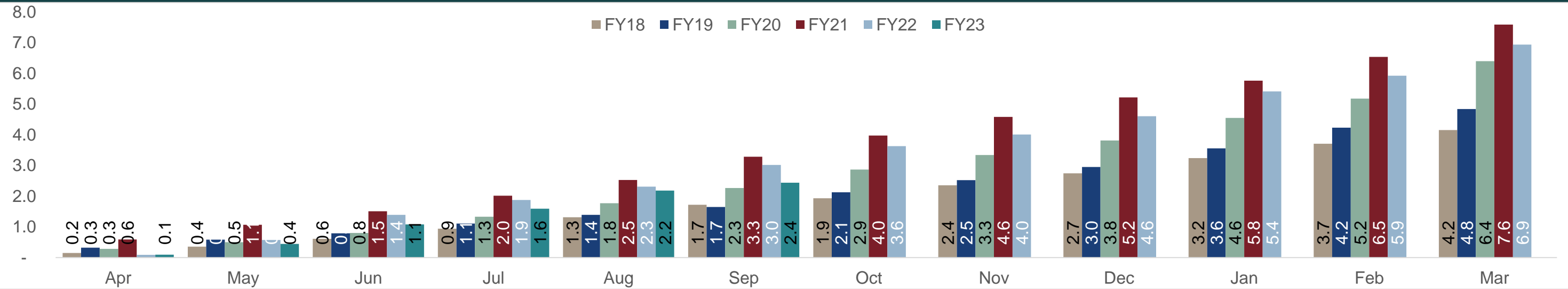


**LEGEND**

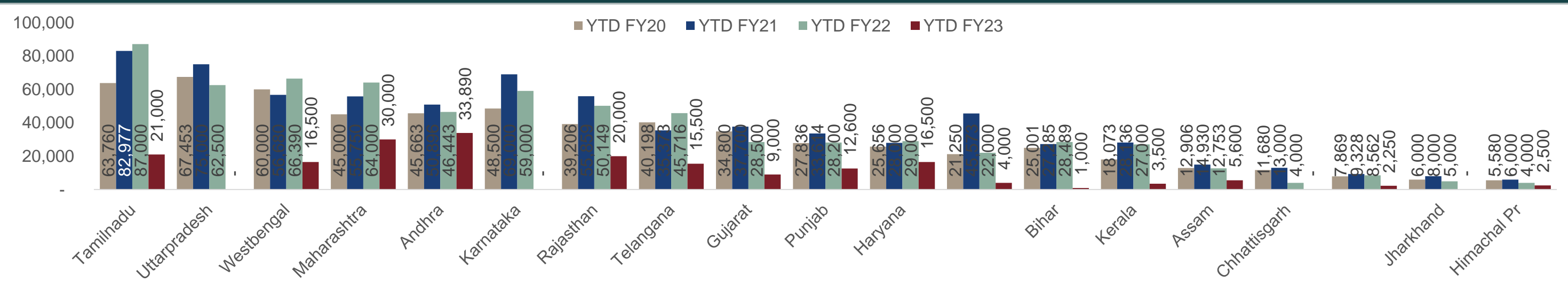
- > 15% growth
- 5% to 15% growth
- 0 to 5% growth
- 0 to (25)% decline
- < (25) % decline

# State government borrowings similar to last year

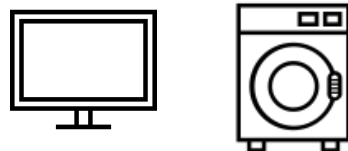
m-o-m build-up of state government G-sec borrowings (INR trillion/INR lakh crore)



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



# Overview of end-use segments – Discretionary consumer goods



Segments (% Growth Y-o-Y)	FY 18	FY 19	FY 20	FY 21	FY 22 E	FY 23 P
<b>Consumer durables (Consumption)</b>	5.8	7	5	(17)	12-17	8-10

- The household appliances sector is expected to witness growth in fiscal 2023 on expected increase in discretionary spend and waning impact of pandemic. Long-term demand is expected to clock a healthy trajectory, led by rising disposable income and low penetration levels amid an improving economy. Demand is expected to improve, and industry can see a growth of 8 to 10% fiscal 2023.



Segments (% Growth Y-o-Y)	FY 18	FY 19	FY 20	FY 21	FY 22 E	FY 23 P
<b>E-retail</b>	35	35-37	23	13	27	25-30

- The sector is expected to witness 25-30% growth in fiscal 2023 on account of higher discretionary spending and waning impact of the pandemic. An improving economy amid low to moderate inflation is expected to drive consumer spends in the medium to long term, propelling growth in the retail industry. Among verticals, food & grocery is expected to grow at a healthy pace on back of significant offline as well as online impetus.



Segments (% Growth Y-o-Y)	FY 18	FY 19	FY 20	FY 21	FY 22 E	FY 23 P
<b>RMG (Market Size)</b>	5	6	(2)	(24)	23	17-19

- Overall RMG industry revenues increased by 22-24% in fiscal 2022. The demand was driven by US ban on China, arrival of festive season, revival in overall economy along with reopening of offices, schools, and other enterprises. This fiscal, domestic demand is estimated to grow by 17-19% on year basis and will be driven by revival in consumer spend amid improving economy. While overall RMG exports are likely to grow at 9-11%, exports to USA is likely to remain healthy.

# Overview of end-use segments of buses



Segments	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23 P	FY24 P
No of K-12 institutions (million)	1.56	1.56	1.65	1.62	1.6	1.7	1.7
Gross enrolment ratio (GER) (%)	73.4	73.4	78	74.5	74.8	75.1	75.4

- We expect ~80,000 to 90,000 K-12 institutions to be set up between fiscals 2022 and 2025, as compared with 55,000 to 65,000 in the previous three years. GER in the overall K-12 segment is likely to reach 75.1% in fiscal 2023 from 74.5% in fiscal 2021.



Segments (% Growth Y-o-Y)	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23 P
Growth in number of IT employees	3	4	4	7	14.5	8-10

- Revenue of the Indian IT services industry is expected to show double digit growth in this fiscal due to digitization and transformational projects. Operating margins are expected to contract in this fiscal account of increased employee related costs and increase in expenses. Employee additions are expected to bump up with skilled workforce at core in future for both the domestic and export markets.

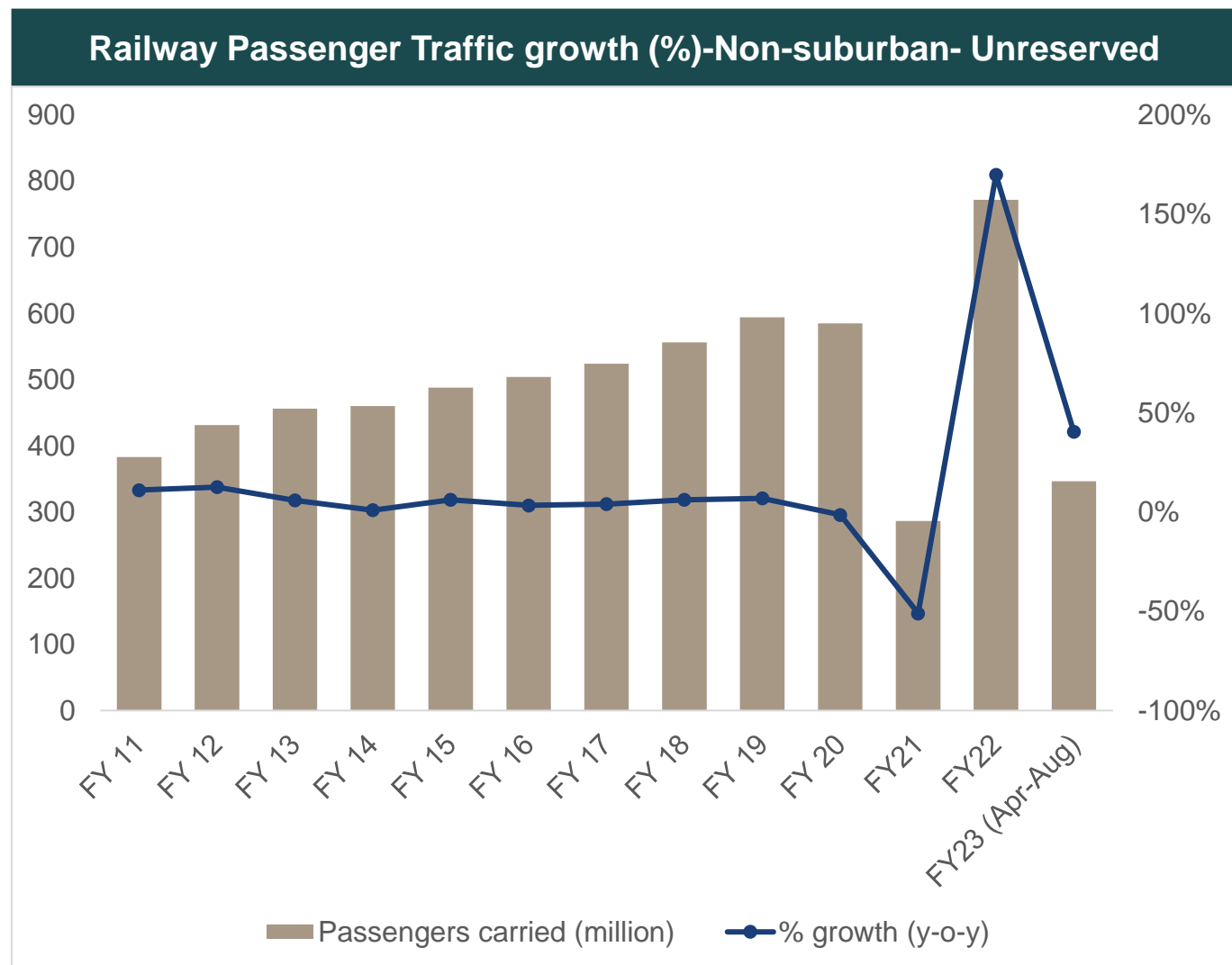
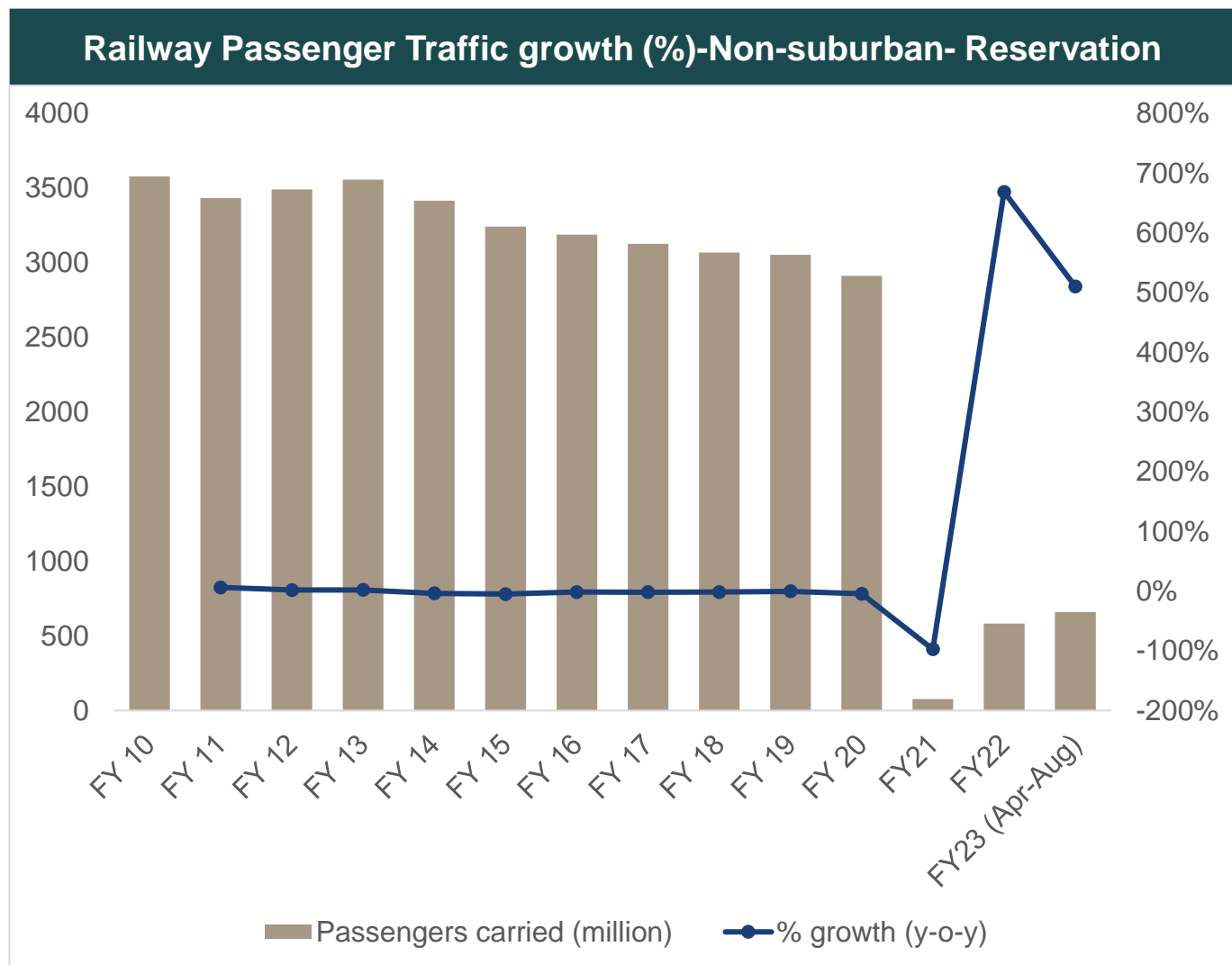


Segment	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23 P
Pan India hotel rooms supply	72028	75250	77410	79051	83617	91162
Occupancy rates (%)	65	65	64	31	50	60

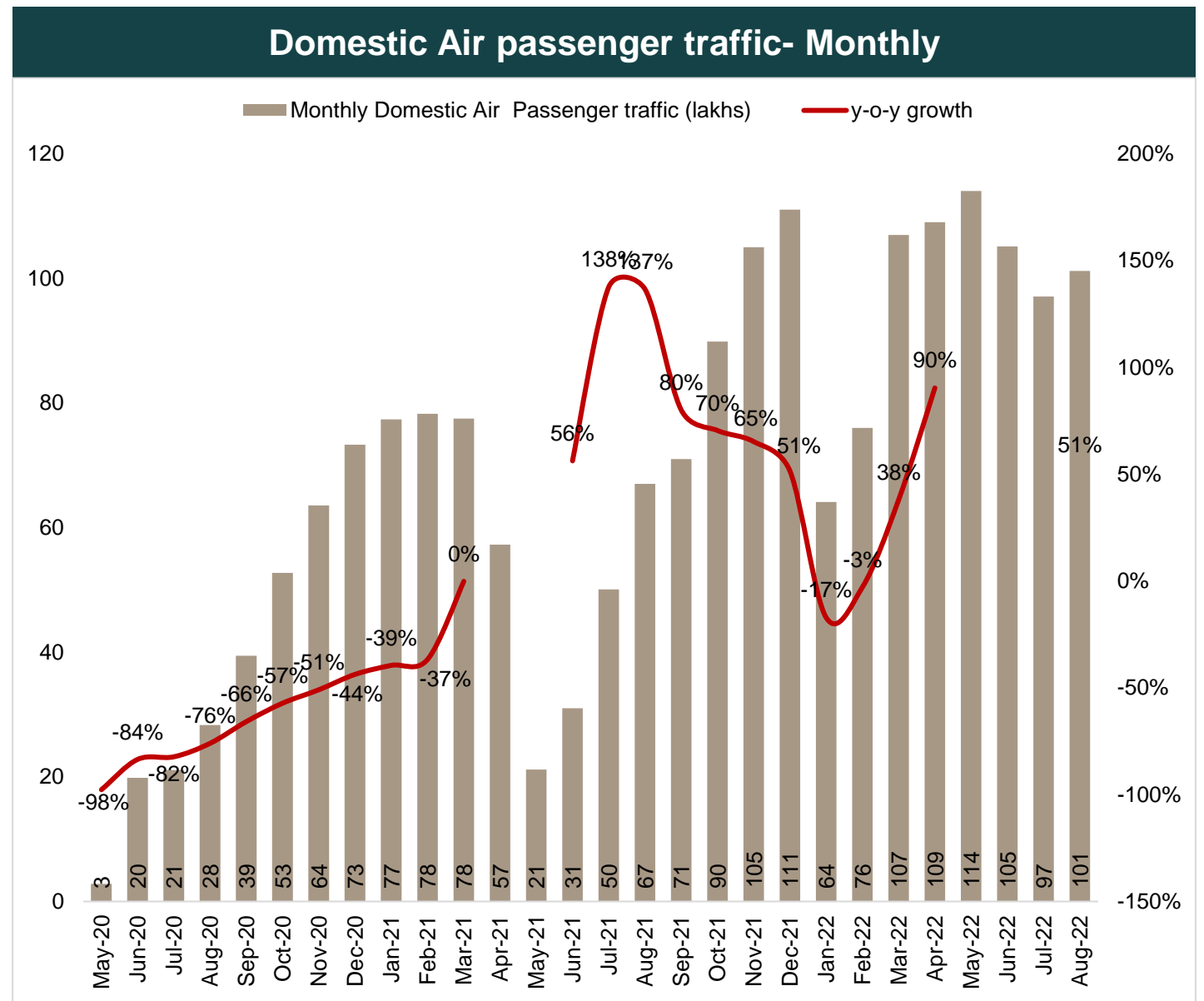
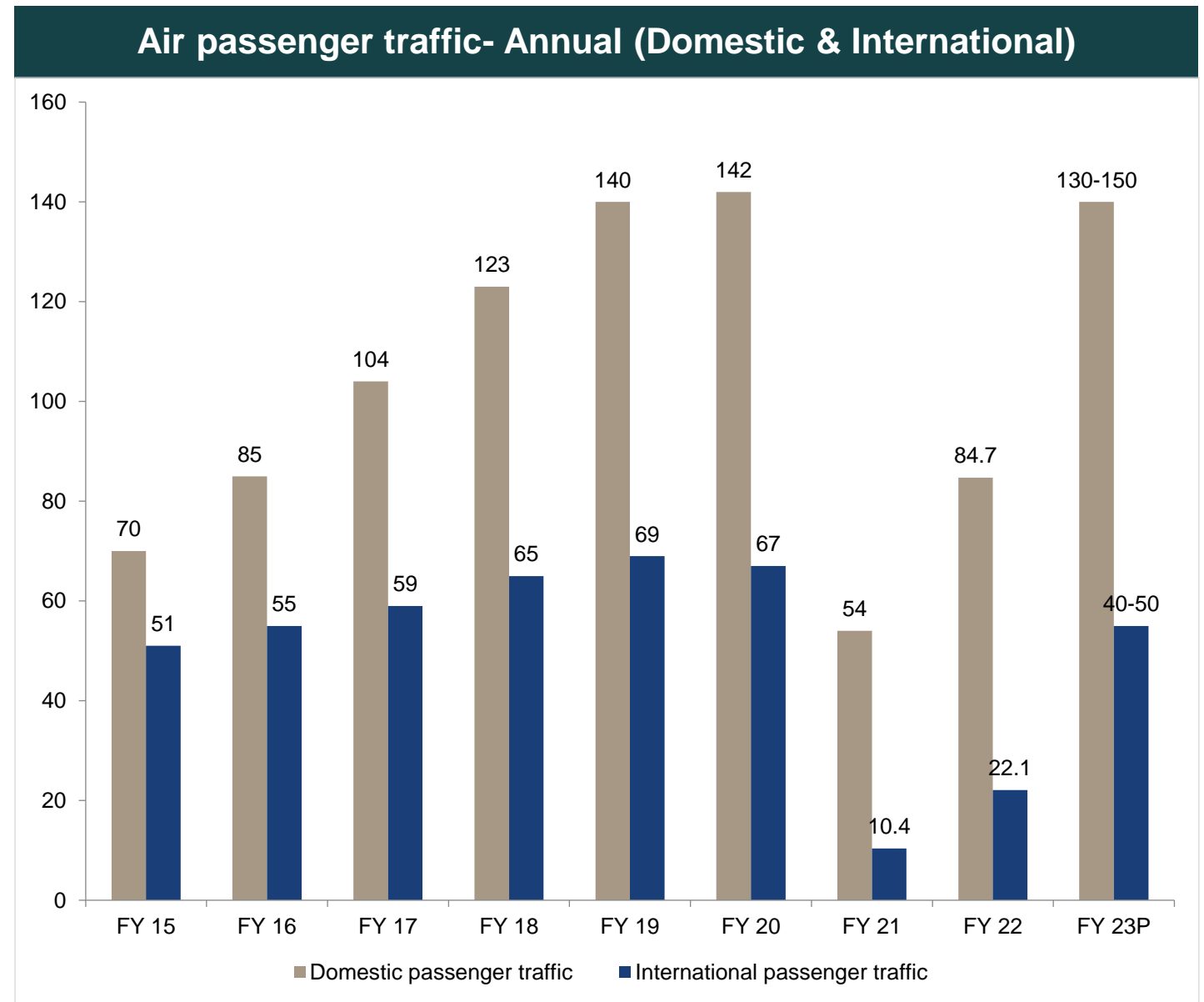
- The hotels sector is expected to witness strong growth in fiscal 2023, on the back of a recovery in major demand drivers as the economy picks up. The sector will likely reach pre-pandemic levels in absolute terms, as it emerges from the shadows of the pandemic.
- Premium hotels saw a sharp recovery 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.



# 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

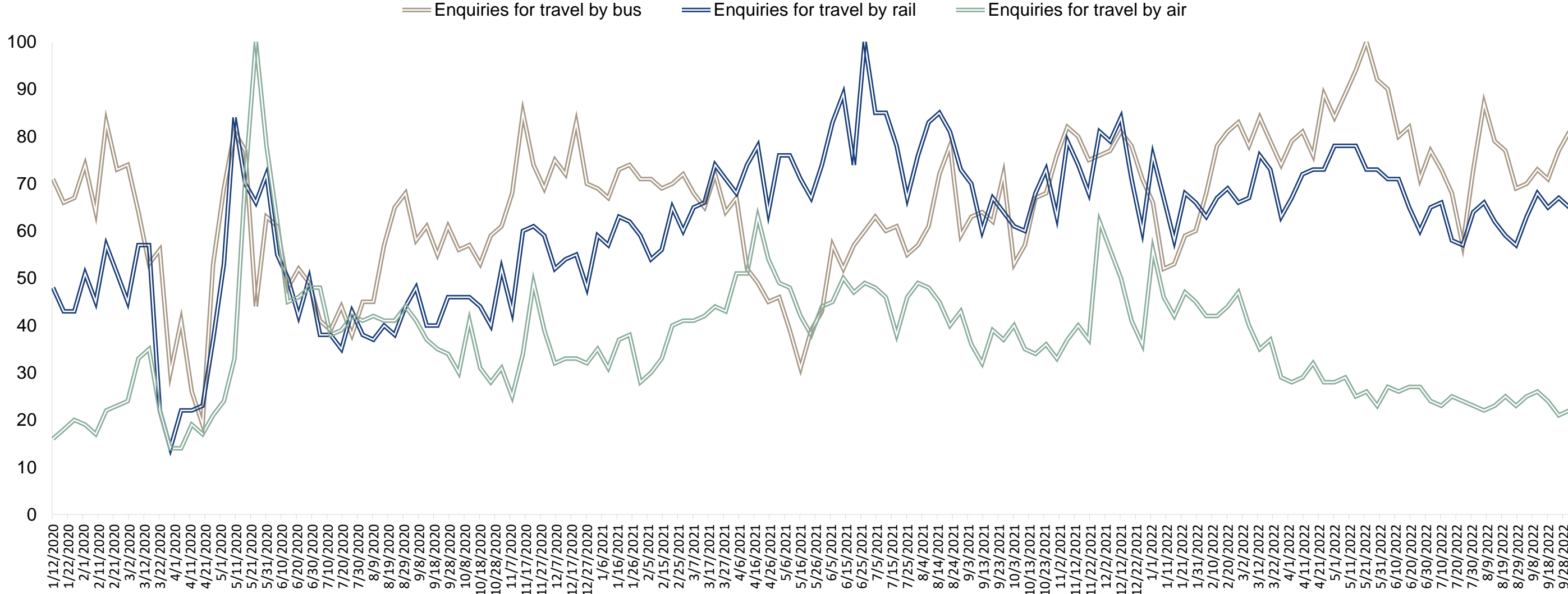


# Airlines sector expected to fly out of turbulence in FY23 in absence of further waves of pandemic



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

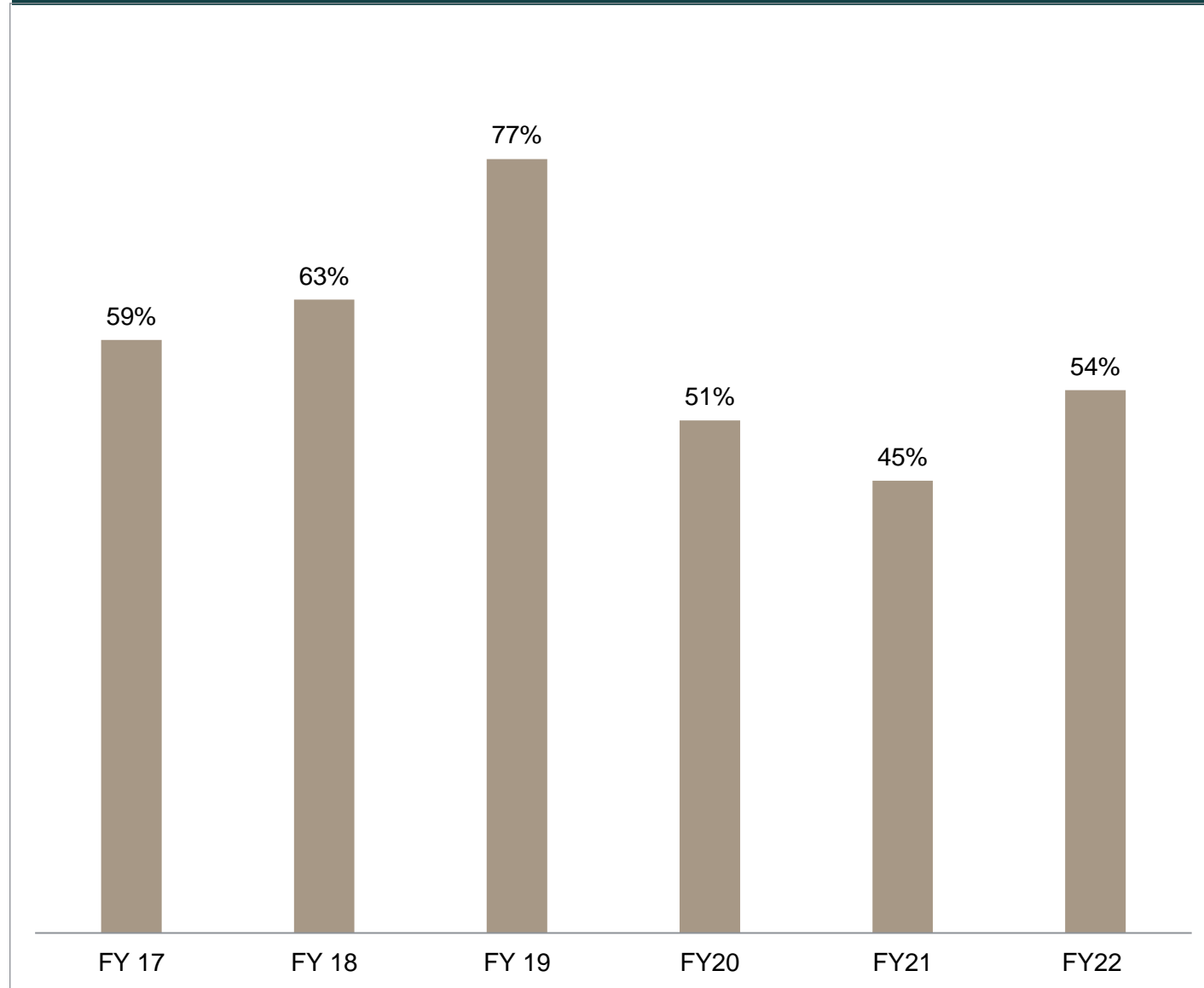
# Train & bus travel remained range bound



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# Capacity utilisation showed improvement in first half of FY23; Utilisation to Consulting further increase as production will pick up in second half on account of BS6 B

## 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: Industry, CRISIL Research

## Player-wise capacity utilisation

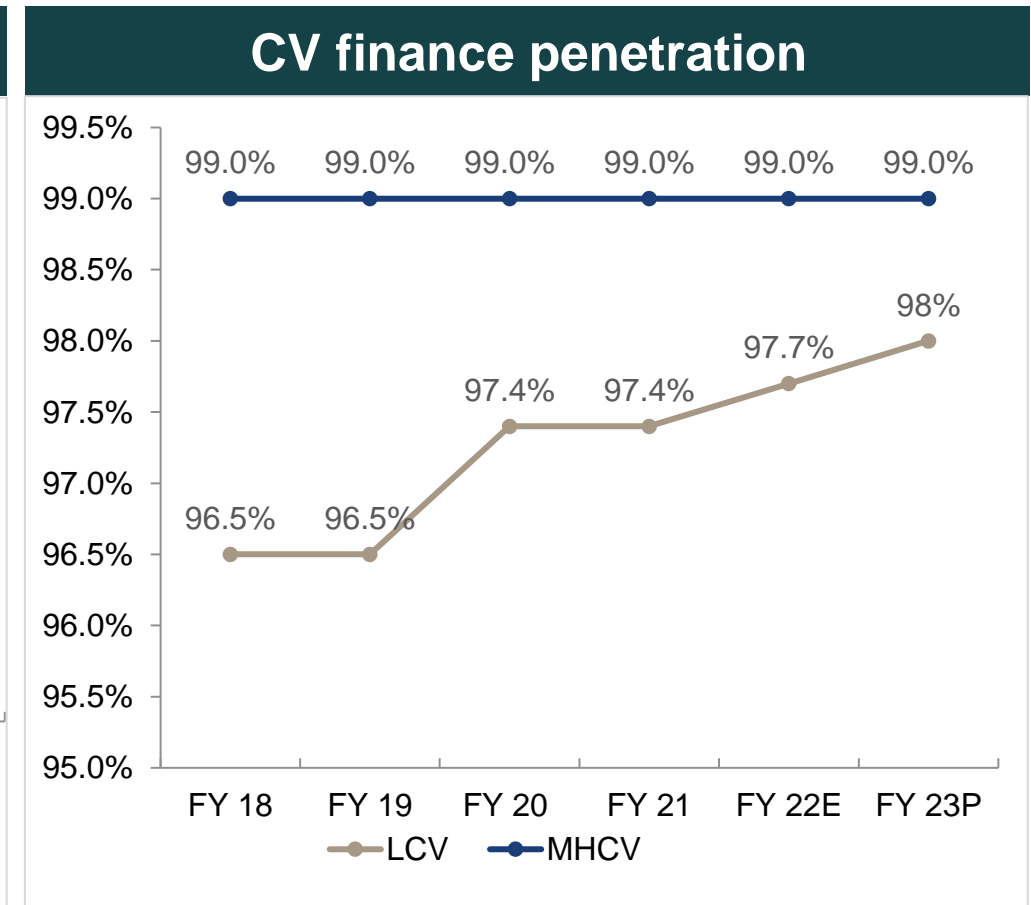
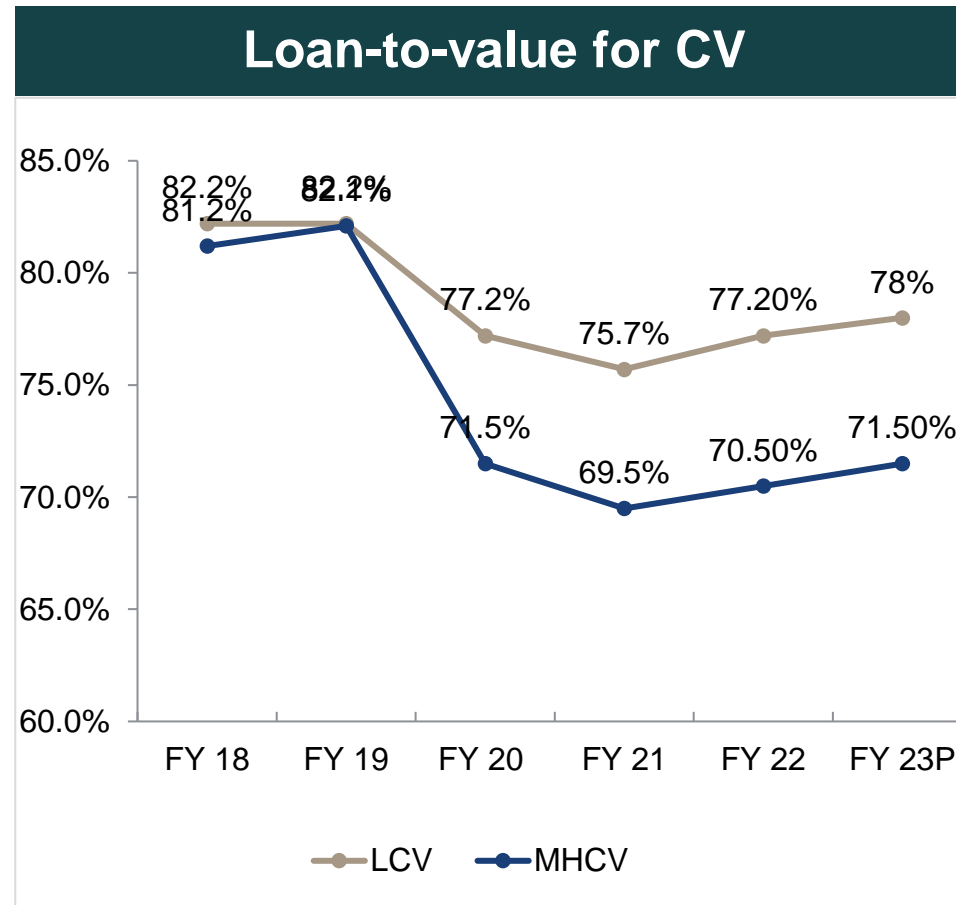
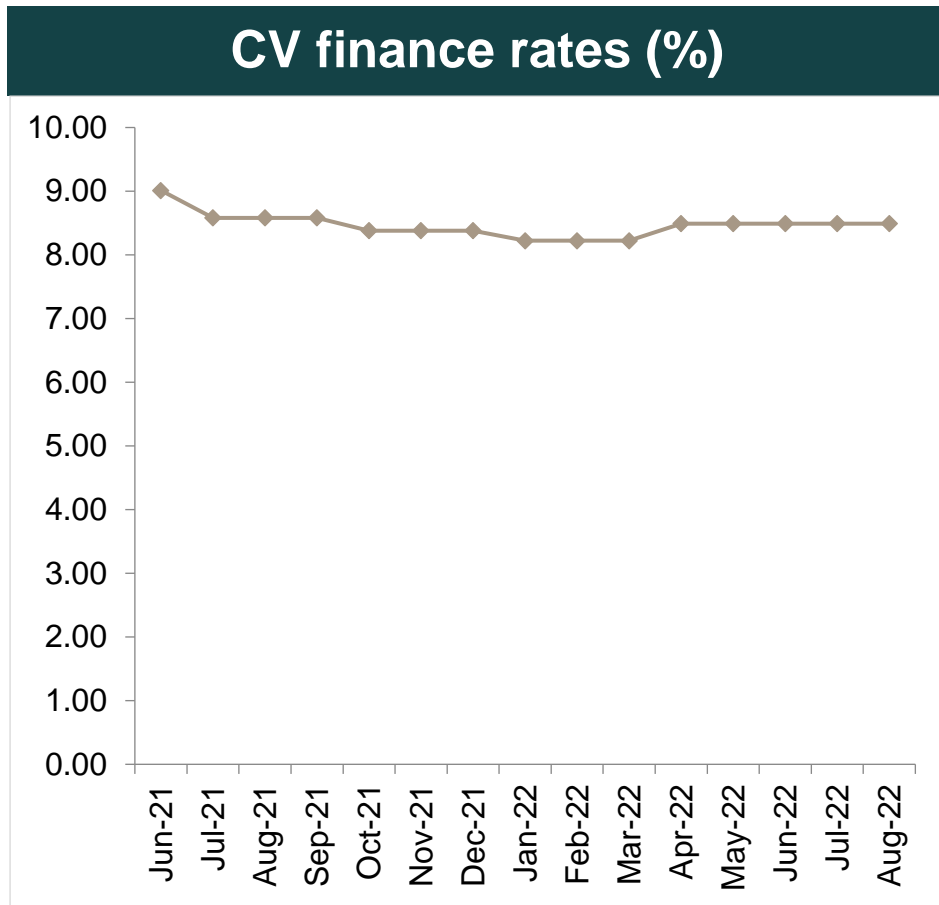
Player	Effective Capacity estimate (as on 31st Mar 2020)	Production Apr-Sep FY23 (in '000)	Capacity utilization in Apr-Sep FY23
Ashok Leyland	2,22,300	86,390	78%
Eicher Motors	97,500	36,677	75%
Tata Motors	7,62,000	201,614	53%
Mahindra & Mahindra	2,92,000	133,081	91%

## Capacity additions

Player	Location	Capacity '00 units	Status
Causis E-Mobility Pvt. Ltd.	Murshidabad, West Bengal	15	Planning
Causis E-Mobility Pvt. Ltd.	Pune, Maharashtra	10	Under implementation
Veera Vahana Udyog Pvt. Ltd.	Anantapur, Andhra Pradesh	30	Planning
Triton Electric Vehicle Pvt. Ltd.	Kutch, Gujarat	500	Planning

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# Cautious lending by banks; more focus on collections



- With pick-up in economic activities and operator profitability, players are increasing their LTVs to attract more customers.
- However, LTVs will still continue to remain below the peaks we have seen in the past as stress on the books of CV financiers has not dissipated.

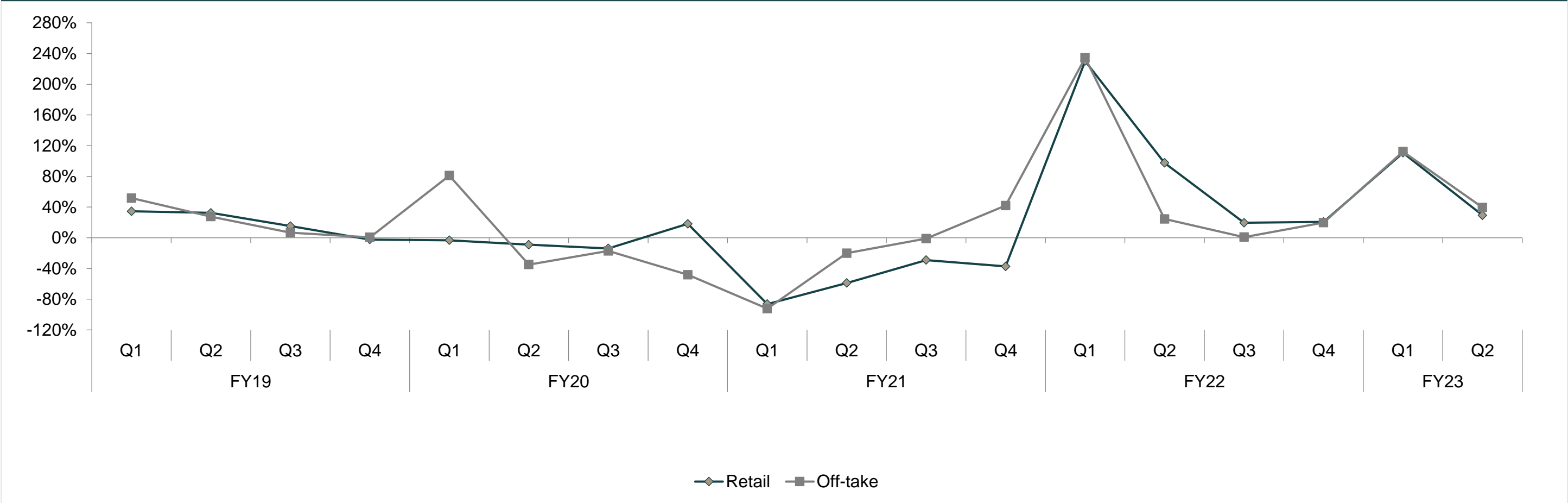
NOTE - Interest rates are an indicative rates charged by Banks

Source: Company Reports, Industry, Crisil Research

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# Retail & offtake showing recovery on sequential basis; Retail momentum to continue on account of festive season

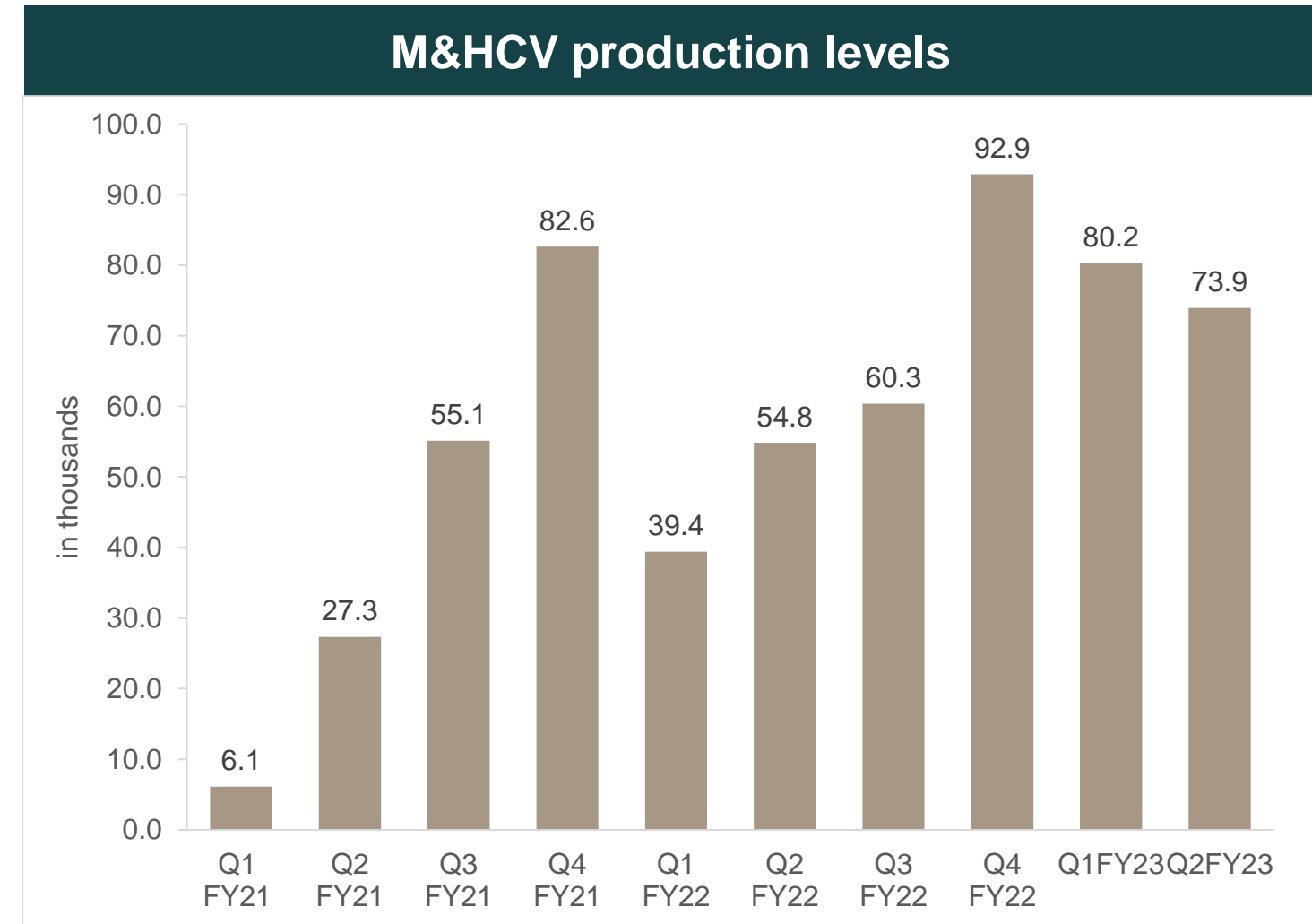
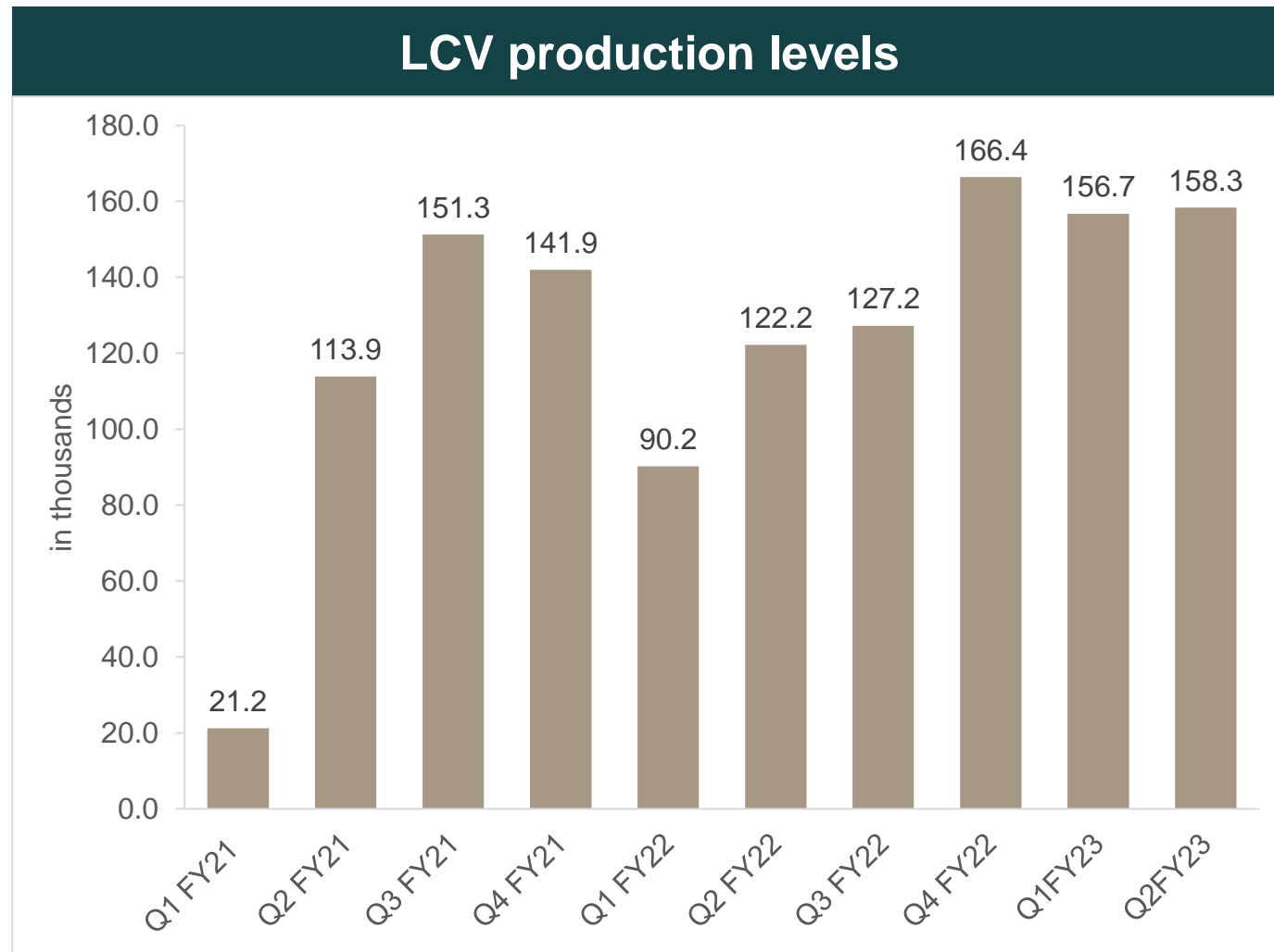
Retail vs off-take (Growth y-o-y)



Source: SIAM, MoRTH, CRISIL Research

- CV demand growth for Medium and heavy CVs (MHCVs), is expected to be backed by replacement demand because of improved utilisation and profitability of fleet operators, and government spending on infrastructure.
- LCVs will be propelled by a surge in e-commerce and better last-mile connectivity.

# Production of LCV and MHCVs continues to see upward trajectory behind story of inventory buildup, E-commerce, Infra dependent applications and replacement Consulting

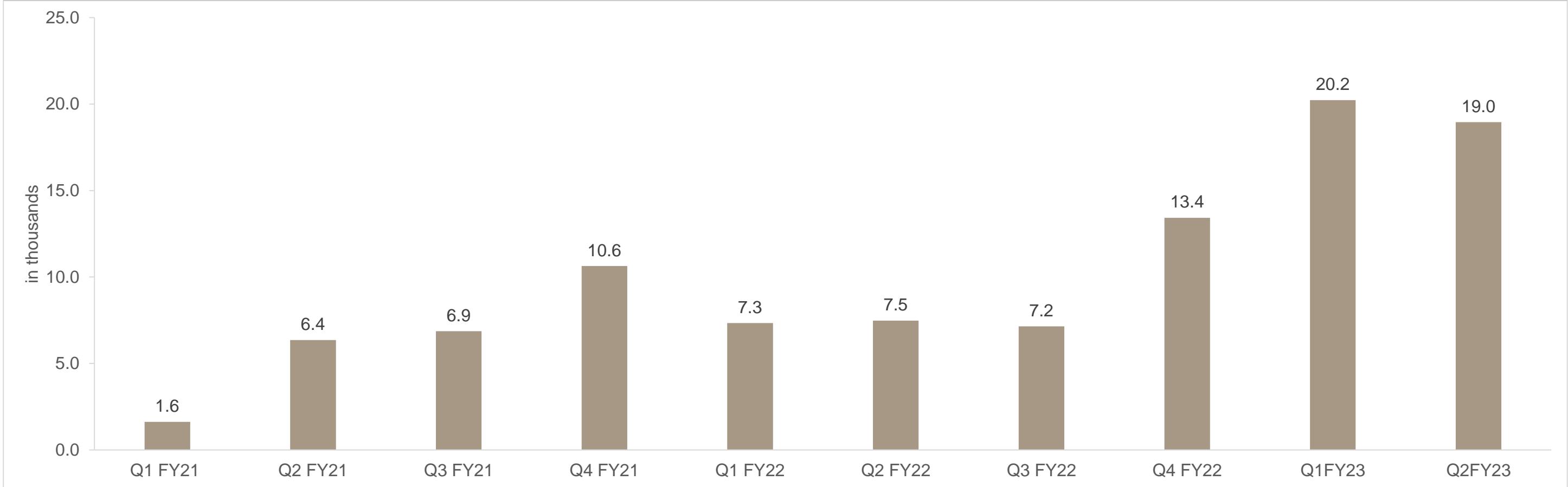


- Production for LCV and MHCV increased by approx. 30-35% Y-o-Y in Q2 FY23 on account of a stock build up by OEMs for upcoming festive season
- Production to further witness growth in next few quarters as the market demand remains strong and OEMs would ready themselves for BSVIB scenario

NOTE: Figures in thousands  
Source: SIAM, CRISIL Research

# Bus demand supported by schools, tourism and STU procurement

Buses production levels



- Demand for buses has been exceptional in Q2 FY23 on account of schools and increasing tourism.
- Second half of FY23 will continue to see several STU-PPP orders especially from the southern and northern states viz. Karnataka, Maharashtra, West Bengal, and Delhi.

NOTE: Figures in thousands  
 Source: SIAM, CRISIL Research



# Domestic – Annual forecast

	Units	LCV cargo	IMHCV cargo	Buses	CV
<b>FY21</b>	Thousands	395	154	17	<b>566</b>
<i>y-o-y growth</i>	%	(12)%	(17)%	(80)%	<b>(21)%</b>
<b>FY22</b>	Thousands	458	227	30.7	<b>716</b>
<i>y-o-y growth</i>	%	16%	47%	79%	<b>26%</b>
<b>FY23E</b>	Thousands	564-573	315-320	73-74	<b>952-967</b>
<i>y-o-y growth</i>	%	23-25%	39-41%	138-140%	<b>33-35%</b>

Source – SIAM, CRISIL Research

Note: The scenario is considering a no-production scenario from April 1<sup>st</sup> 2023 for pre BS VI B /phase 2 norms (Inventory buildup of pre BSVI B inventory in Q4FY23)

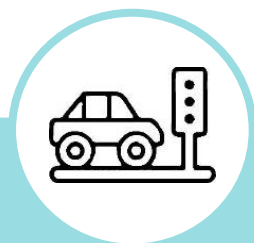
# Domestic – quarterly forecast (1/2)

Consulting

Annual	Quarter	LCV cargo		IMHCV cargo		Buses		Total	
		Sales ( '000)	y-o-y growth	Sales ( '000)	y-o-y growth	Sales ( '000)	y-o-y growth	Sales ( '000)	y-o-y growth
FY22	Q1	73.6	179%	27.3	567%	5.4	389%	106.2	237%
	Q2	108	3%	51.3	115%	6.3	57%	167	24%
	Q3	127.6	(8%)	60.4	21%	6.9	67%	196	1%
	Q4	148.9	19%	88.1	16%	12.1	53%	250	19%
FY23 E	Q1	136.6	86%	67.4	147%	19.1	256%	223.1	110%
	Q2	141.7	31%	72.0	40%	17.9	186%	231.6	40%
	Q3 E	137-140	8-10%	80.5-81.5	33-35%	15-16	126-128%	233-237	20-22%
	Q4 E	150-153	1-3%	96.5-98.5	10-12%	20-21	68-70%	267-272	7-9%
FY24 P	Q1 P	118-121	(14)-(12)%	67-68.5	0-2%	19-20	0-2%	204-208	(9)-(7)%
	Q2 P	143-146	1-3%	77-79	8-10%	17.5-18.5	0-2%	238-243	3-5%

Source – SIAM, CRISIL Research

- **SCV & ULCV:** E-commerce, FMCG and Agri to see continuation of the traction in FY23 as well. CNG vehicles face headwinds due to the rise in CNG prices. Availability of CNG options is expected to sustain volumes in this segment. However, some OEMs seek to profit by offering CNG variant alternatives, while a selected few also intend to provide electrified version of variants in this segment.
- **MHCV:** Replacement demand is likely to boost aided by construction projects. NIP projects to continue freight demand for goods such as cement, steel and coarse aggregates. 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 an extent. The segment is anticipated to be propelled by soaring demand from large, structured projects and rising MSMEs' economic contribution
- **Buses:** The government is considering launching its largest-ever procurement to buy roughly 8,000 electric buses for State Transport Undertakings (STUs) around the country to speed up the transition to clean mobility in the public transportation system, Despite being a part of replacement, this is likely to boost the demand for IMHCV buses



## Transporters

### Utilization levels

- After some tapering off in Q1FY23, utilisation level has witnessed promising growth in the second half of Q2FY23.
- Utilisation in FMCG/CD, courier/parcels due to e-commerce and freight goods experienced a boost thanks to festive season. Auto-carriers and textiles are also expected to propel in utilisation level.
- Utilisation in Agri products, containers, and petroleum tankers, witnessed a sluggish growth.
- Regulatory norms and geopolitical issues is affecting states such as Orissa. Iron ore transportation affected in Orissa because of subdued demand from China and high excise duty
- Undergoing and upcoming infrastructure projects in roads, bridges, and metros augment well for steel and cement transportation
- Preference for higher tonnage vehicles in trailers and tippers is becoming prominent among transporters



## Dealers & OEMs

- The SCV segment now offers a wide range of products, covering various tonnages that cater to the needs of all types of customers. Players have launched numerous products, especially over the past five years, to plug gaps in tonnages.
- E-commerce, FMCG and Agri to continue fueling demand for SCVs and ILCVs
- Attraction in CNG vehicles in both sub-1 tonne segment and 7.5 to 12T segment which was showing increasing signs has seen fall in demand in the past 5-6 months especially due to increased CNG prices. However, CNG variants are anticipated to grow in 15T segment for plying short routes
- The recently announced National Logistics Policy (NLP) aimed at easing the goods movement coupled with PM Gati Shakti National Master Plan (NMP) will magnify long haul movements, in turn the demand for MHCVs.
- Surge in tipper demand focused on road construction, bridges, metro projects and infrastructure activities continues.
- MHCV haulage seeing relatively slower ramp up on the retail side, but LFO participation is moderate. Demand slowed down for steel, cement sector due to monsoon. Trailer demand still not in full swing. Demands for tanker and concrete mixture vehicles are booming.



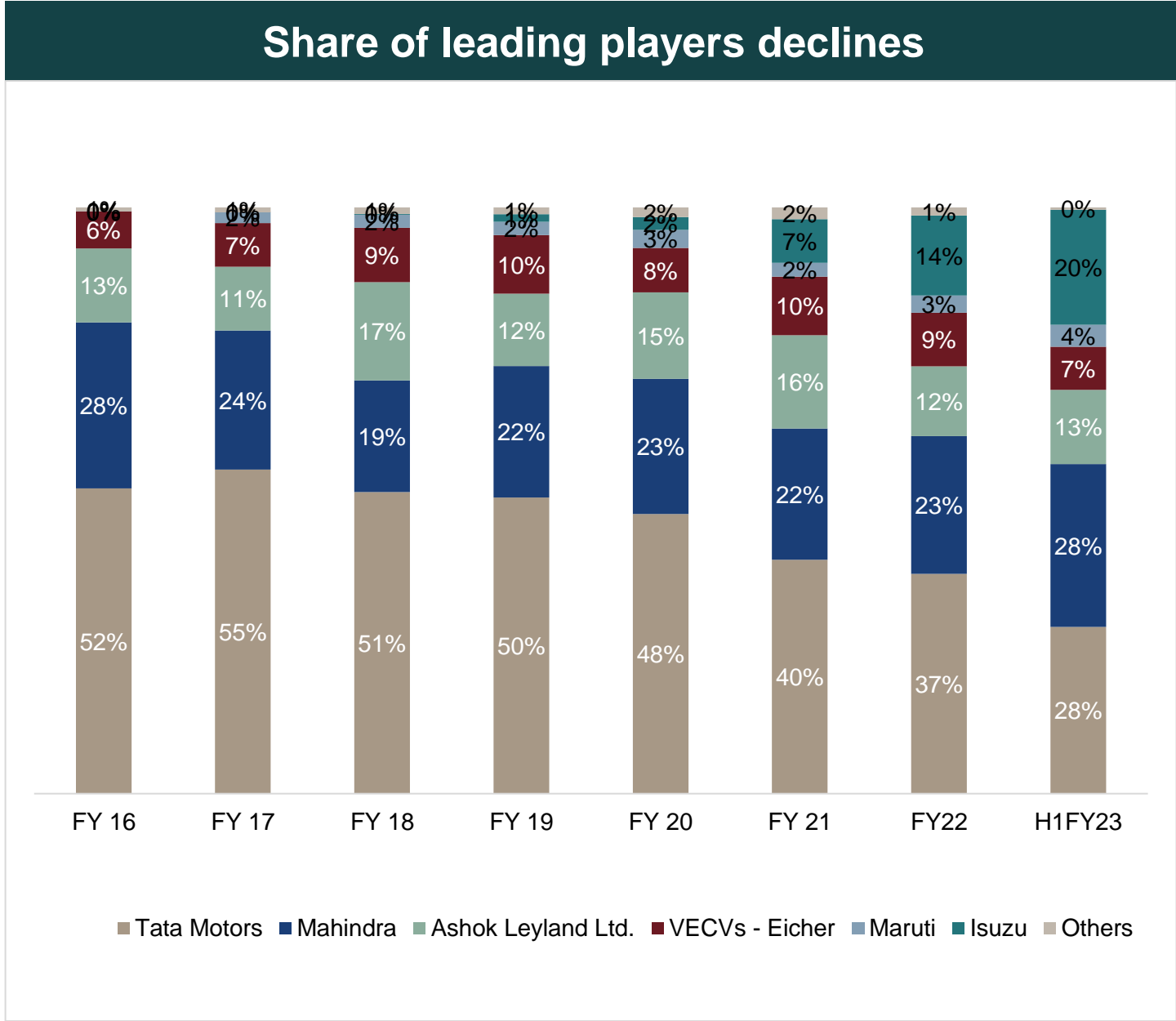
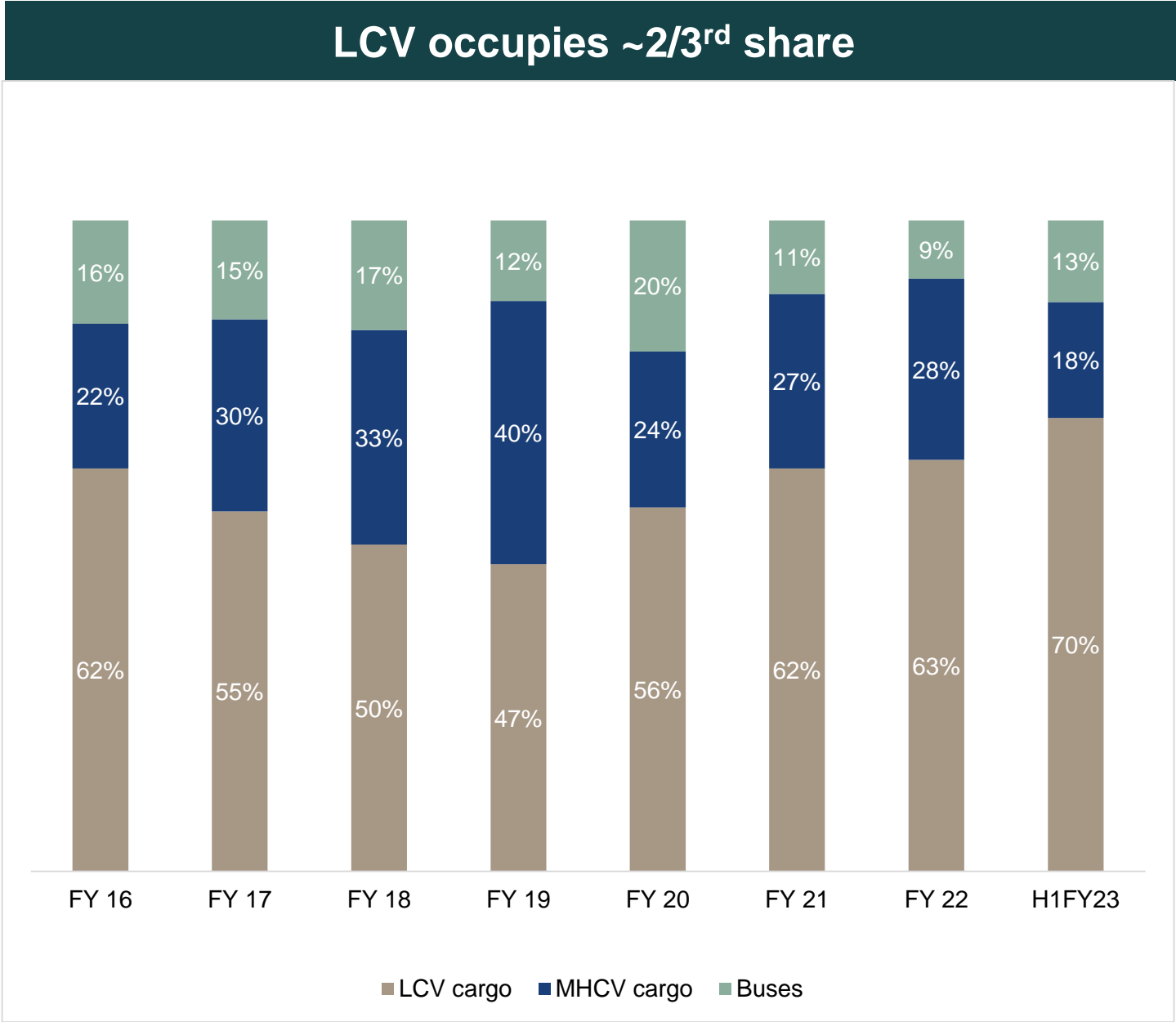
## Financier

- SCVs are witnessing aggressive financing options and higher loan offerings
- Thanks to the festive season, various attractive loan schemes are being offered to lure fleet operators
- Funding for retail customers 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.
- Cargo operators face issues with financing as several of them were unable to repay their loans
- With standardization in truck body building, financiers are expected to be more willing to fund the generally unsupported body building cost
- The impact of repo rate hikes by RBI must be monitored closely going forward
- For some cases in retail funding, customer have been asked to present contract copy or guarantor particularly for MHCVs.
- Demand in the buses segment is fueled largely by STUs and replacement demand. Also, 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.

# Commercial Vehicle exports

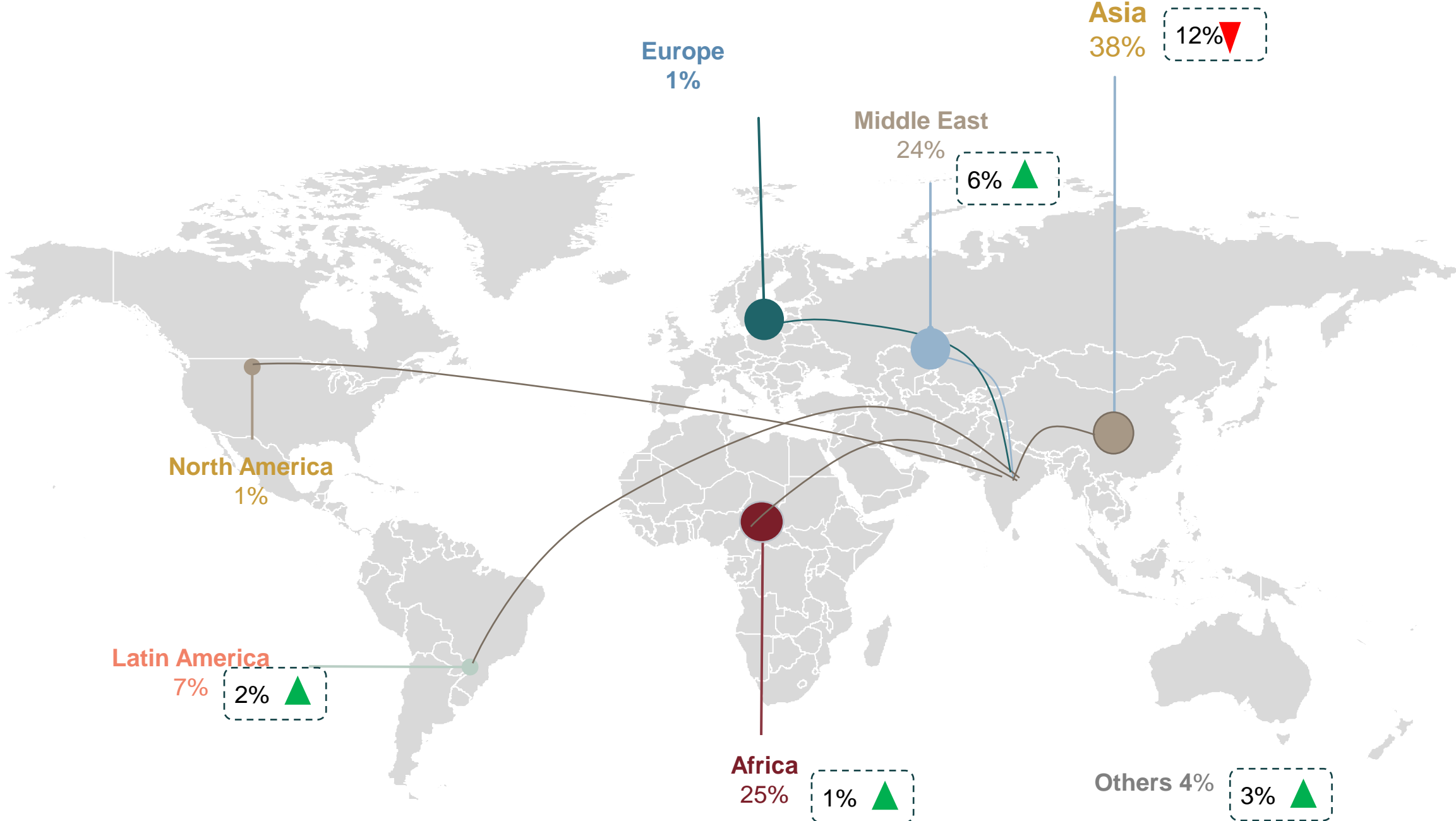
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# Share of LCV cargo on an uptrend



Source: SIAM, CRISIL Research

# Commercial Vehicle Exports

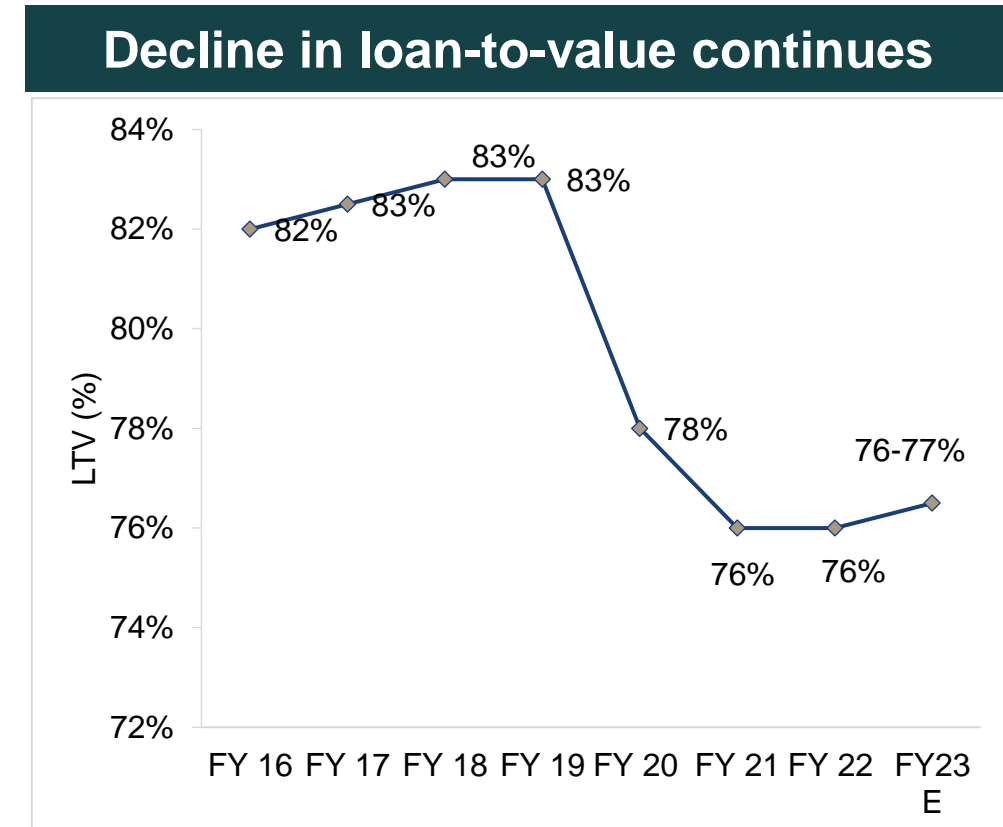
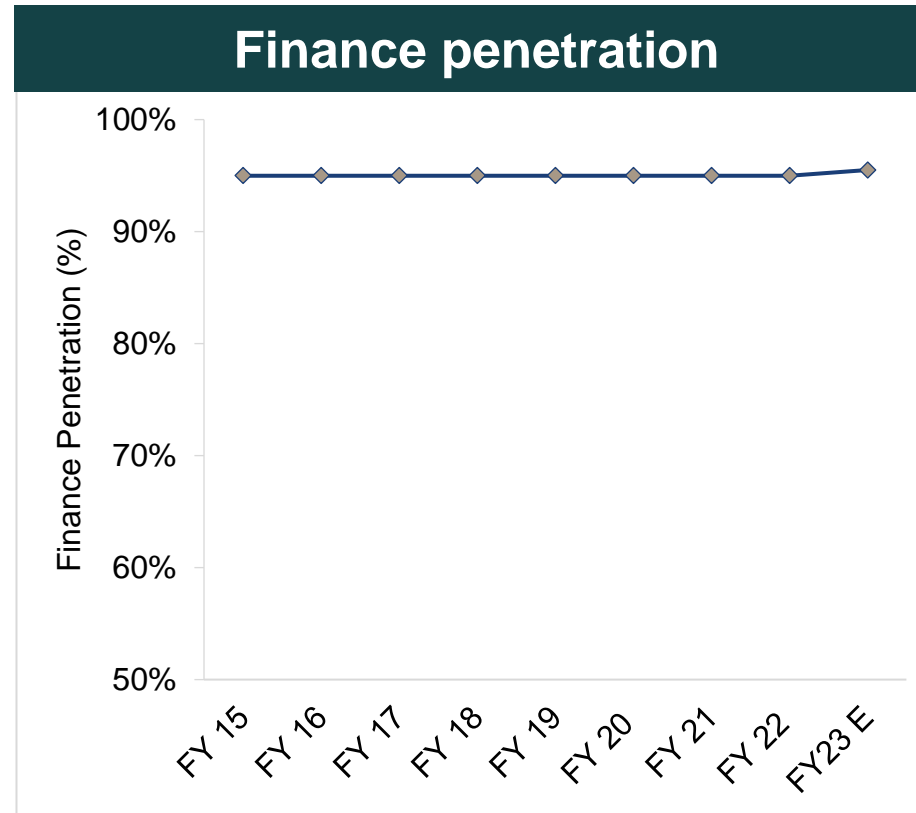
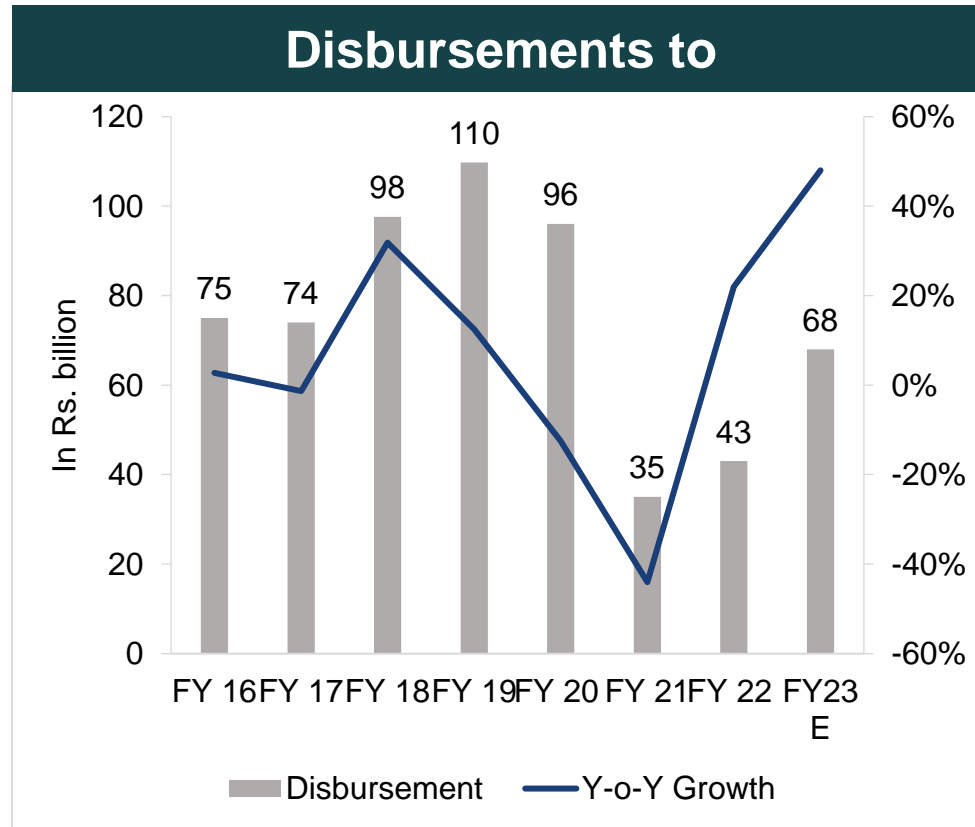


- Neighboring countries Nepal & Bangladesh continue to dominate Indian exports contributing 30% in FY23 (Apr-Aug)
- Bangladesh has become the largest market during the year
- South Africa extended its presence to 13% from 10% in FY22. of India's exports while Saudi Arabia contributed 16% to exports (vis a vis 12% in FY22)

# Three-wheelers



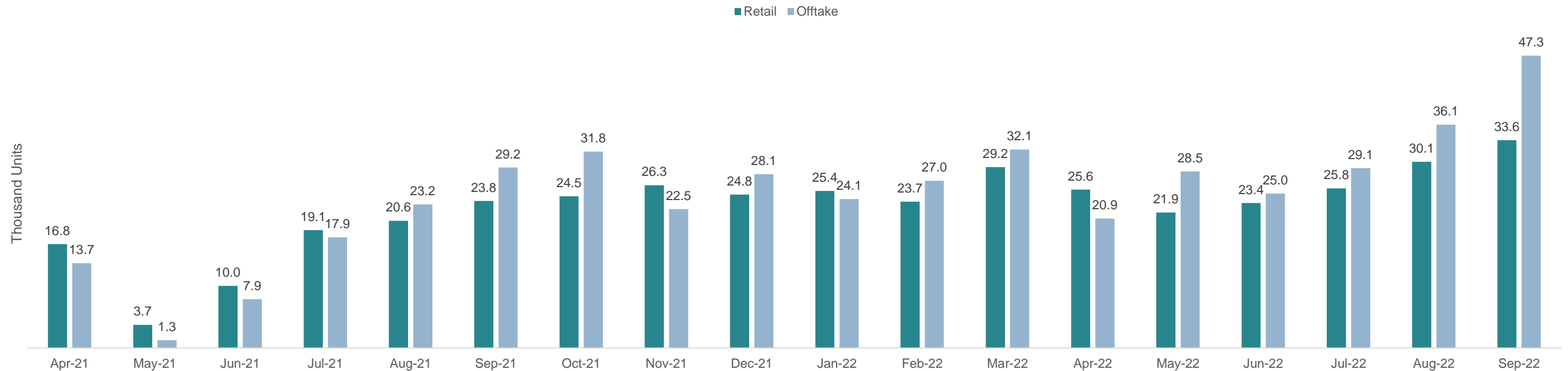
# Improvement in sales to back disbursement growth in FY23



- Disbursement levels are rising from the bottom of FY21 backed by gradual improvement in sales, the improvement is expected to continue during FY23
- Three-wheeler financing market is expected reach Rs ~68 billion in fiscal 2023. However, there is sizeable scope of improvement compared to the pre pandemic levels
- With estimated improvement in the 3W market, financial parameters are expected to improve going ahead
- However, lenders are still being cautious while lending to this segment

# Three-wheeler offtake increased in Q2 FY23 on the onset of festivals

## Offtake outpaced retail growth during Q2



Source: SIAM, Vahan, CRISIL Research

- Inventory buildup for festivals, Improved supply for CNG vehicle pushed offtake during Quarter 2.
- Offtake increased 60% y-o-y in Q2FY23 while retails increased at a slower pace of 41% during the same period.
- Normalized market operations, opening of schools, colleges and offices as well as people using public transport has increased, has created some momentum in the passenger segment.
- Some improved traction is expected during the second half of the year
- However, given the high operating cost for ICE three-wheeler preference for EV is expected to continue

# Domestic – annual forecast

Sales	Units	Passenger	Goods	Total
<b>FY21</b>	'000	132	84	<b>216</b>
<i>y-o-y growth</i>	%	-74%	-25%	<b>-66%</b>
<b>FY22</b>	'000	180	77	<b>258</b>
<i>y-o-y growth</i>	%	37%	-8%	<b>20%</b>
<b>FY23E</b>	'000	363-368	85-90	<b>452-457</b>
<i>y-o-y growth</i>	%	99-101%	13-15%	<b>74-76%</b>

Source – SIAM, CRISIL Research

# Domestic – quarterly forecast

Fiscal	Quarter	Passenger		Goods		Total	
		Sales ( '000)	y-o-y growth	Sales ( '000)	y-o-y growth	Sales ( '000)	y-o-y growth
FY22	Q1	15.8	128%	8.7	48%	24.4	91%
	Q2	47.3	79%	23.0	16%	70.3	52%
	Q3	60.1	37%	22.3	(21)%	82.4	13%
	Q4	60.3	5%	22.9	(19)%	83.2	(3)%
FY23 E	Q1	52.7	234%	21.8	153%	74.5	205%
	Q2	90.9	92%	21.6	(6)%	112.5	60%
	Q3 E	109-113	84-86%	18-23	(4)-(2)%	130-135	60-62%
	Q4 E	110-115	85-87%	20-25	(4)-(2)%	132-137	61-63%
FY24 P	Q1 P	98-103	89-91%	19-24	0-2%	120-125	63-65%
	Q2 P	117-122	31-33%	21-26	5-7%	140-145	26-28%

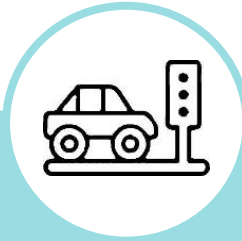
Source – SIAM, CRISIL Research

- Three-wheeler industry is witnessing robust growth on a low base of previous years.
- Passenger segment is performing better as compared to the goods segment as urban movement in terms of schools, colleges, business and recreational outings has increased substantially.
- Festive demand started on a great note and Diwali demand is expected to be high as well.
- Goods segment has witnessed some impact due to competition from the EV three-wheeler segment and hence growth is muted.

# Stakeholder interactions

Consulting

## OEMs



- Passenger segment to witness robust growth on a low base of previous years.
- Further, urban movement has been growing on account of normalcy. Businesses have also witnessed good growth which has led to an uptick in employment.
- Cargo sales expected to be impacted on the back of competition from electric vehicles. Increased cost of ownership for ICE vehicles is making customers consider EV's as an option.
- Growth is expected to continue through all quarters of fiscal 2023 as well as fiscal 2024 on account of a low base and improved movement in cities.
- Financers are more than willing to support which will further help improve retail momentum on-ground

## Dealers



- Three-wheeler sales are gradually picking up pace as situation has returned to normalcy with schools, colleges and offices reopening.
- Inventory build up, improvement in vehicle supply supported offtake in Q2
- CNG vehicle supply issue has slowly been eased out.
- Healthy retail sales during Navratri.
- Price hike in CNG gas is a key concern.
- Moreover, Increased price of vehicle, higher fuel costs, has led customers to shift to electric vehicle especially in tier-2 and tier-3 areas.

## Financier



- Given the increased retail demand financiers are a bit aggressive
- Financers 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 has increased to 13-17%

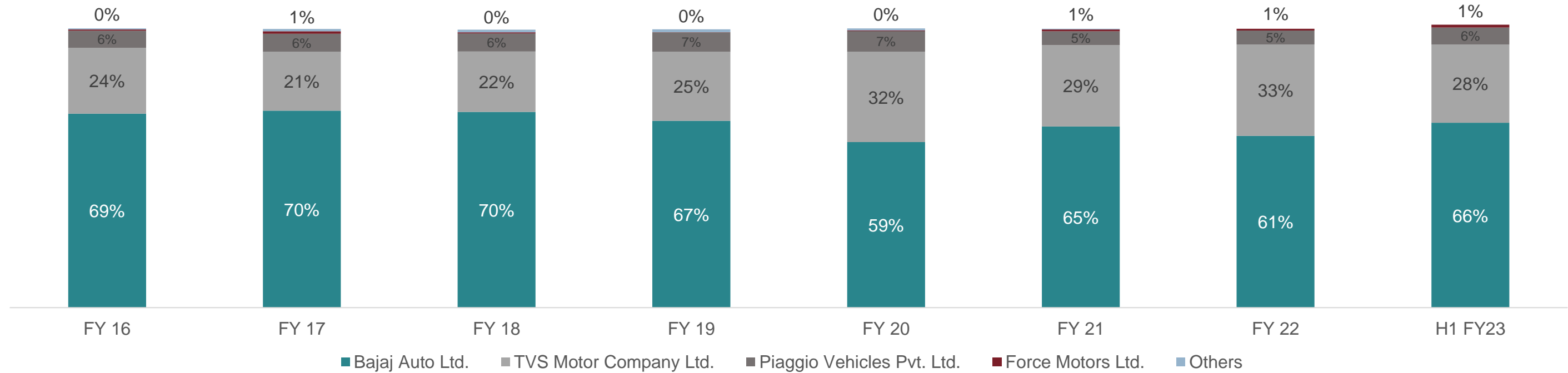
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# Three-wheeler exports

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# Exports witnessed healthy growth TVS expands its presence

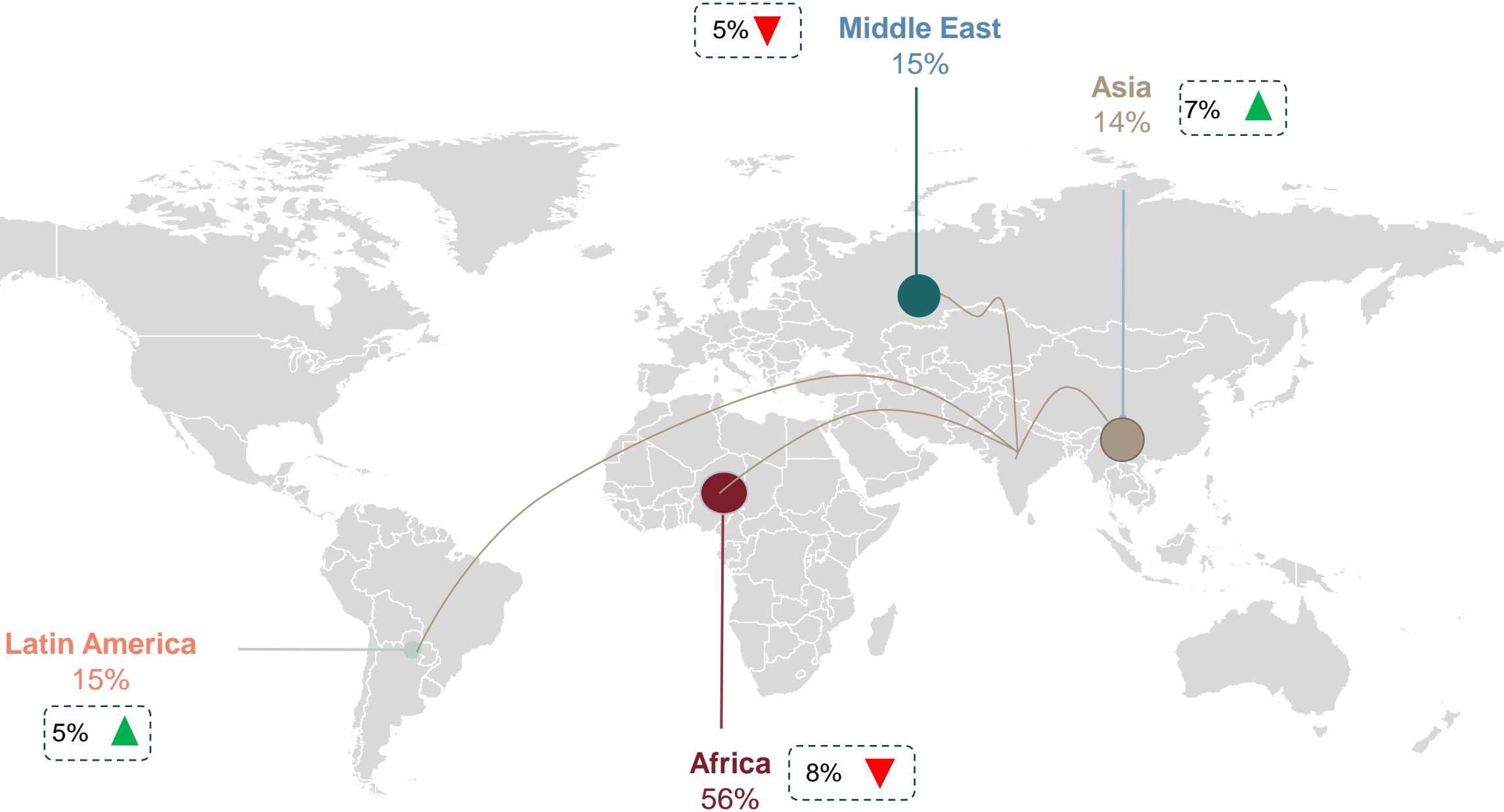
## Bajaj maintains its top position



Source: SIAM, CRISIL Research

- FY22 witnessed sharp improvement in exports, exports grew 27% y-o-y , with smaller cargo segment registering a sharp growth of 82% y-o-y.
- Q1 FY23 exports declined by 29% over high base last year.
- Bajaj continues to dominate the 3W exports.
- With retail sales improvement, OEMs are now focusing more on the domestic market.

# Three-wheeler exports







































- Share of exports to Asia rose amidst the increased exports to Indonesia
- Nigeria has extended its lead by 7% to 35% during April-Aug FY23 vis-à-vis last year
- However, the drop in demand from Egypt restricted exports to Africa
- Higher exports to Mexico & Peru supported share expansion of Latin America



# Tractors

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# Demand to rise in FY23 from the low base of FY22

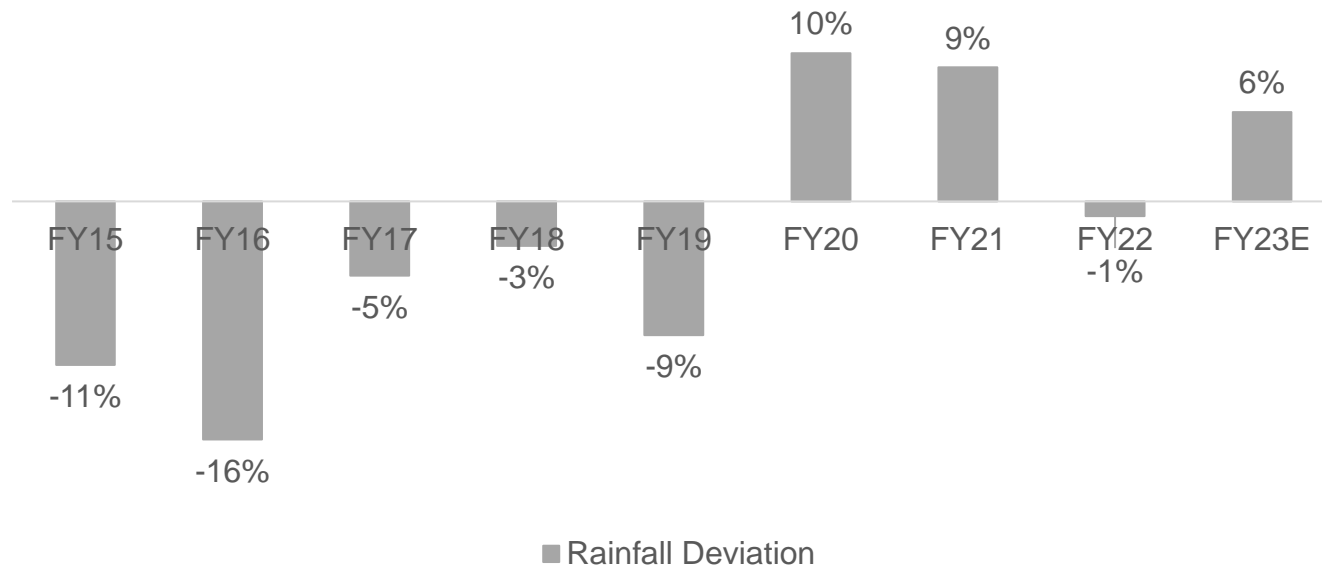
Parameters	Impact		
	FY 21	FY22	FY23E
<b>Farm Income**</b>			
-- Crop Prices			
-- Crop Output			
-- Kharif Output			
-- Rabi Output			
<b>Demand Indicators</b>			
-- Infrastructure Development			
-- Sand Mining			
<b>Supply side variables &amp; financing</b>			
-- Finance Availability			
-- Channel Inventory			
-- Player Action			



NOTE : \*\* FY23 assumed neutral assuming normal monsoon,  
 Source: CRISIL Research

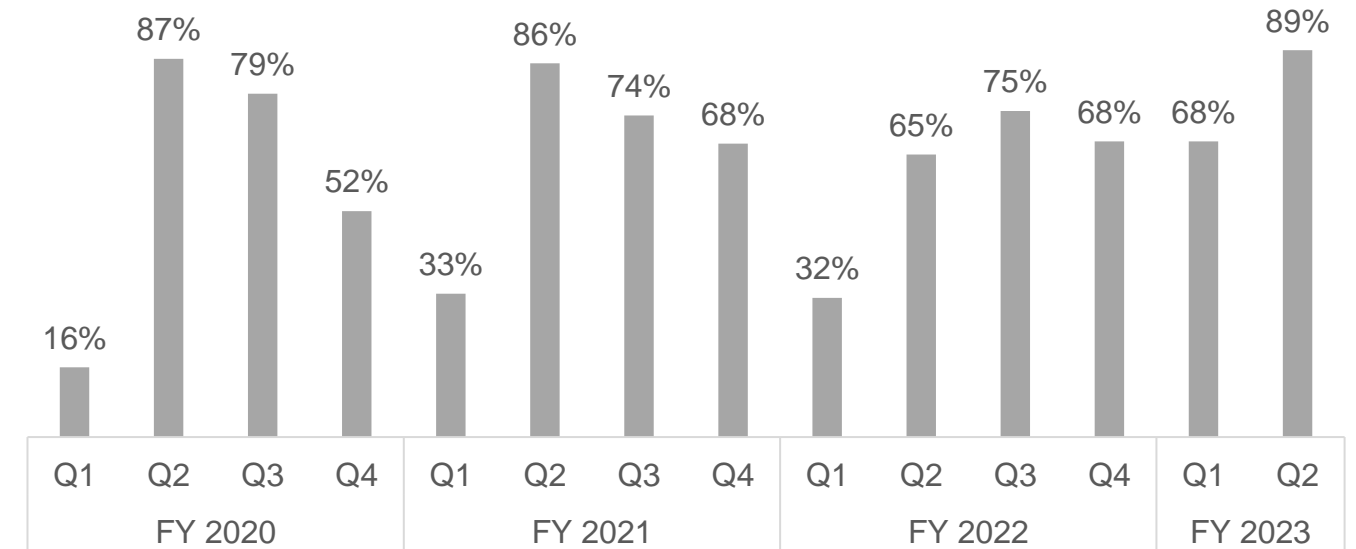
# Normal yet erratic monsoons in FY23, favorable reservoir levels

## Monsoon in the acceptable range during FY23



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 have improved

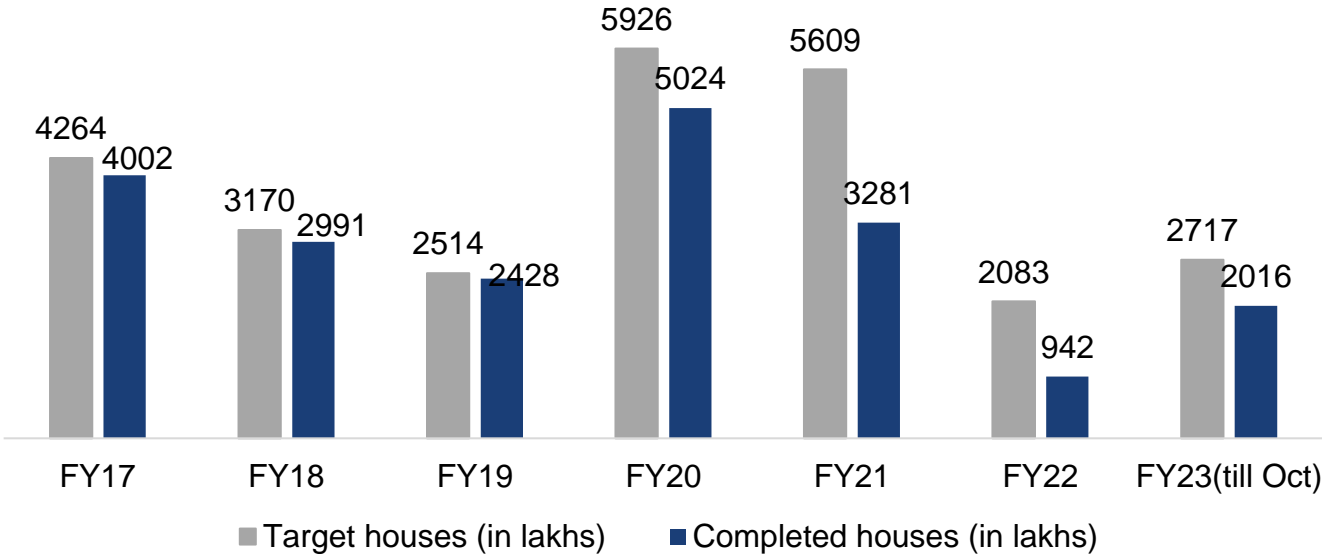


Notes: Storage Status of 140 Reservoirs of the Country

- The IMD forecast says that the country’s rainfed areas have received normal rains during this year’s monsoon season. South & West regions have witnessed above normal rainfall while other parts have received below-normal rainfall
- The country witnessed excess rainfall during September and first half of October
- Uneven spread of rainfall has led to crop damage in certain states resulting in a drop in food grain production
- Thus, this delayed and erratic monsoon in few regions fueled negative retail sentiments
- Overall healthy monsoon has improved the reservoir levels, leading to high moisture content in the soil, which is very positive for higher food grain production in the upcoming rabi season

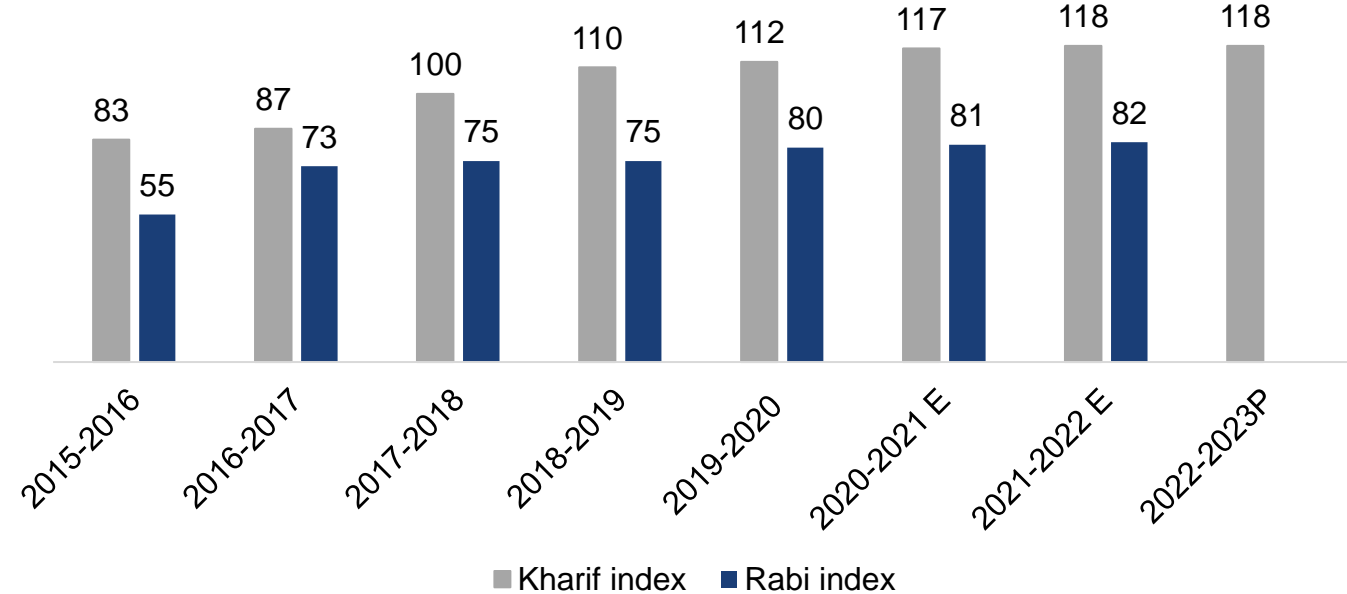
# Uneven rainfall impacting farm sentiments

## PMAY-G is under progress



Source: Ministry of Rural Development, CRISIL Research

## Farm incomes growth at similar levels for MY23



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

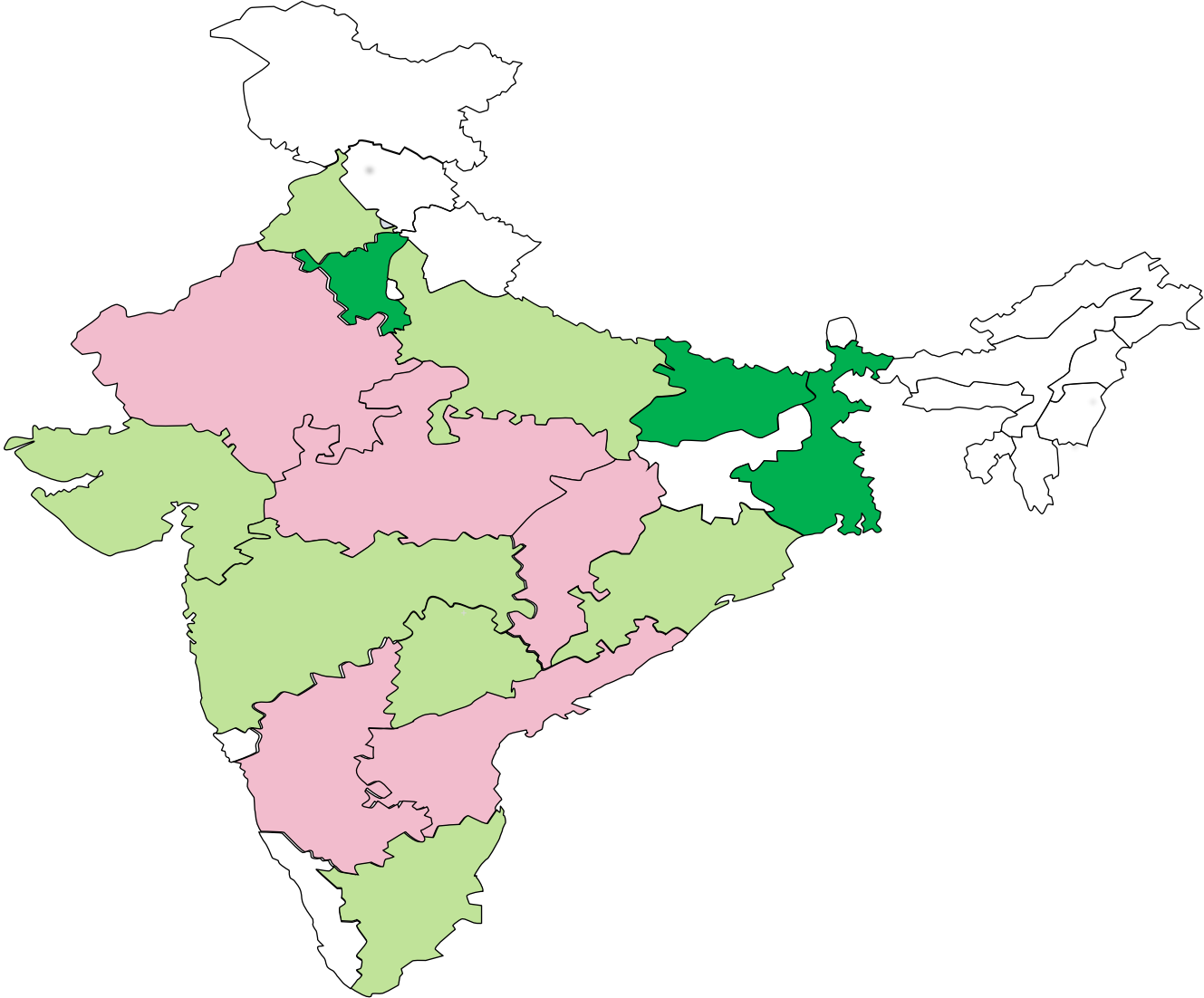
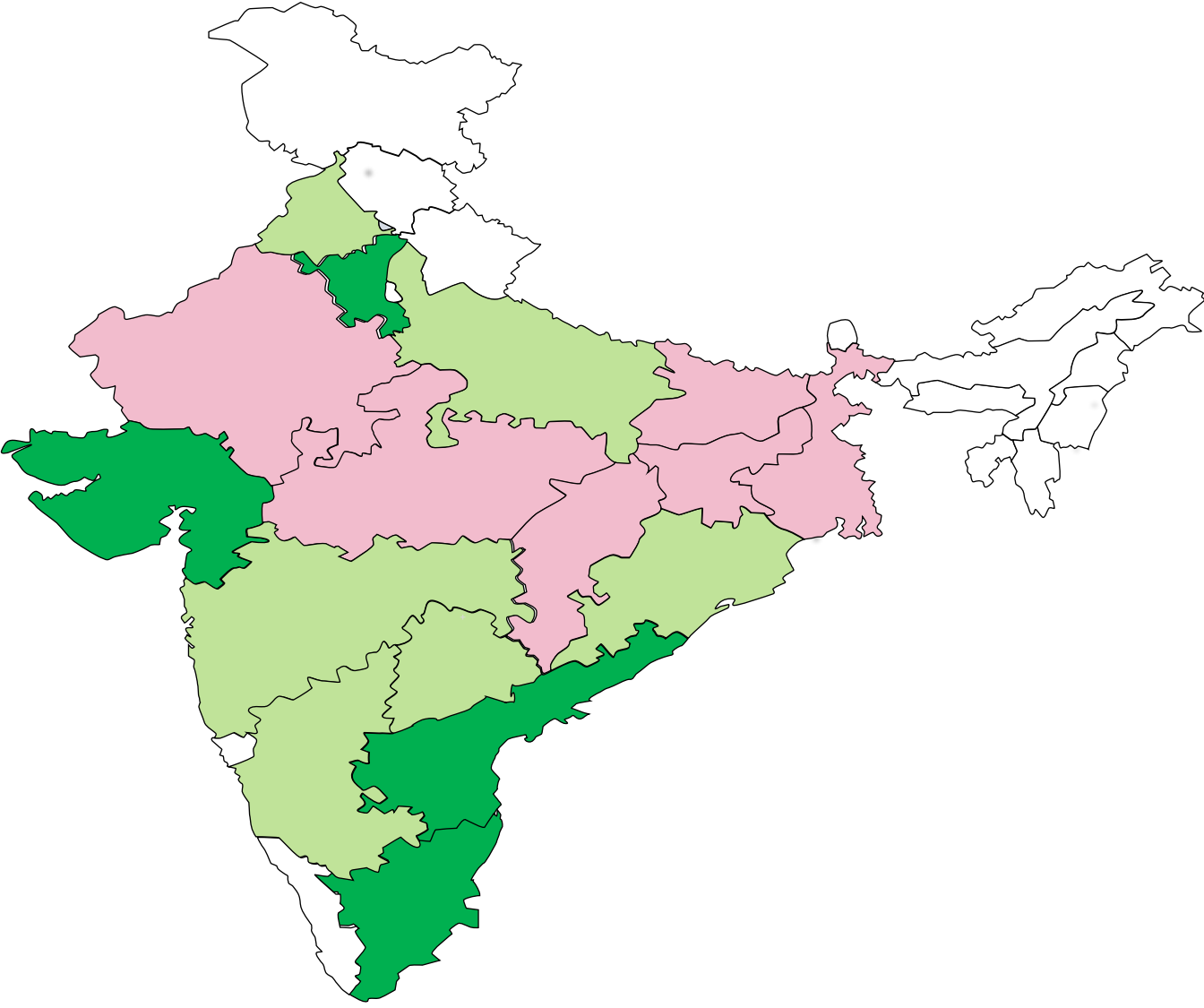
- Sowing of kharif crops had begun with slight delay, with the onset of southwest monsoon.
- Harvesting of some kharif crops has started and will be in full swing from October end.
- Due to erratic monsoon, there is drop in sowing for crops like paddy, pulses, oilseeds, Jute.
- Amidst the low kharif crop production, crop prices are slightly higher on year which is leading to stable farm income this fiscal

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# State wise Crop Value Index

Kharif CVI heat Map for FY23

Rabi CVI heat map for FY22

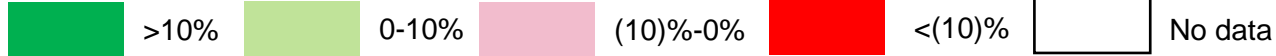


Source: CRISIL  
Research

**Market Intelligence  
& Analytics**

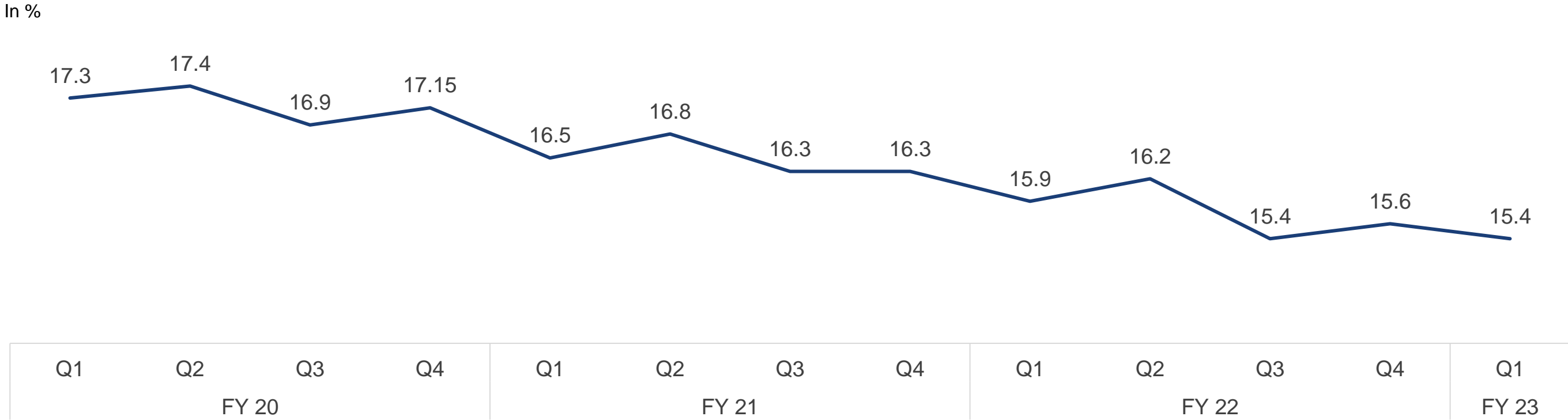
Source: CRISIL  
Research

Colours indicate % change on-year



# Improving financing support for the segment

## Slide in interest rates continued in Q1



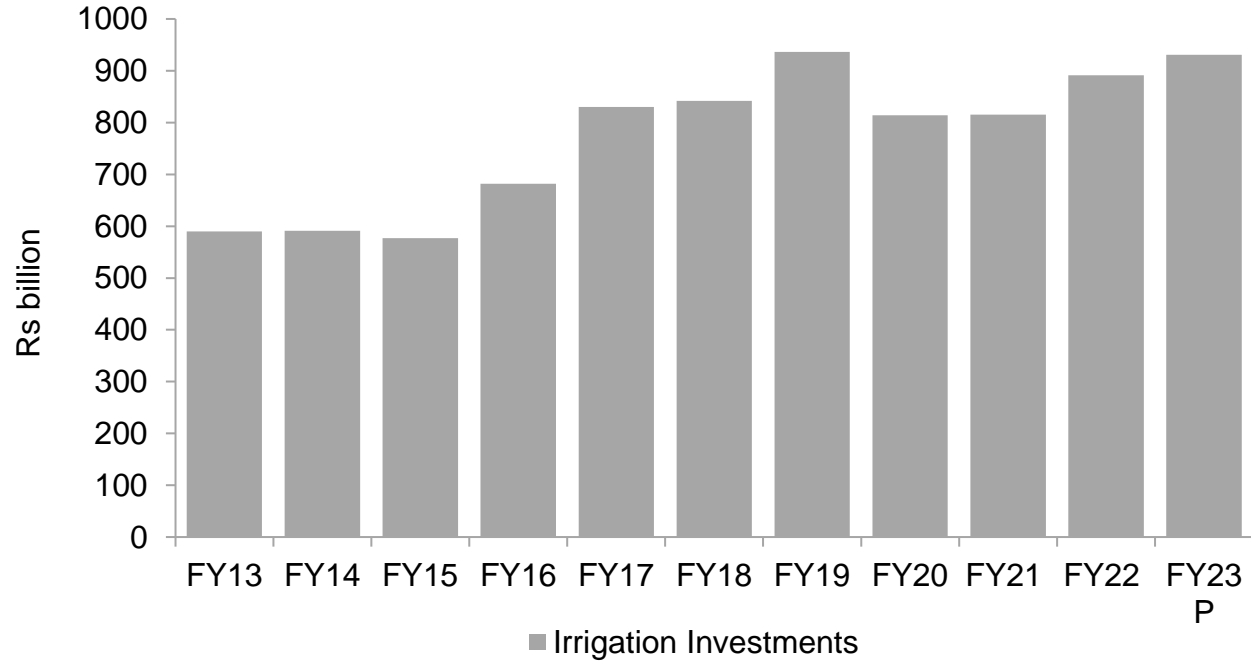
NOTE: Interest rates for Q2FY23 are not yet released by leading financiers

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. We expect LTVs to increase marginally from fiscal 2023 onwards
- The entry of private financiers over the past few years has also increased finance availability.
- Credit availability and affordable rates of finance, increasing budgetary allocation towards the rural sector, and government support for farm mechanisation to also encourage growth.
- The interest rate hike by RBI is unlikely to have a significant impact on tractor demand but high inflation is a concern that can affect sales

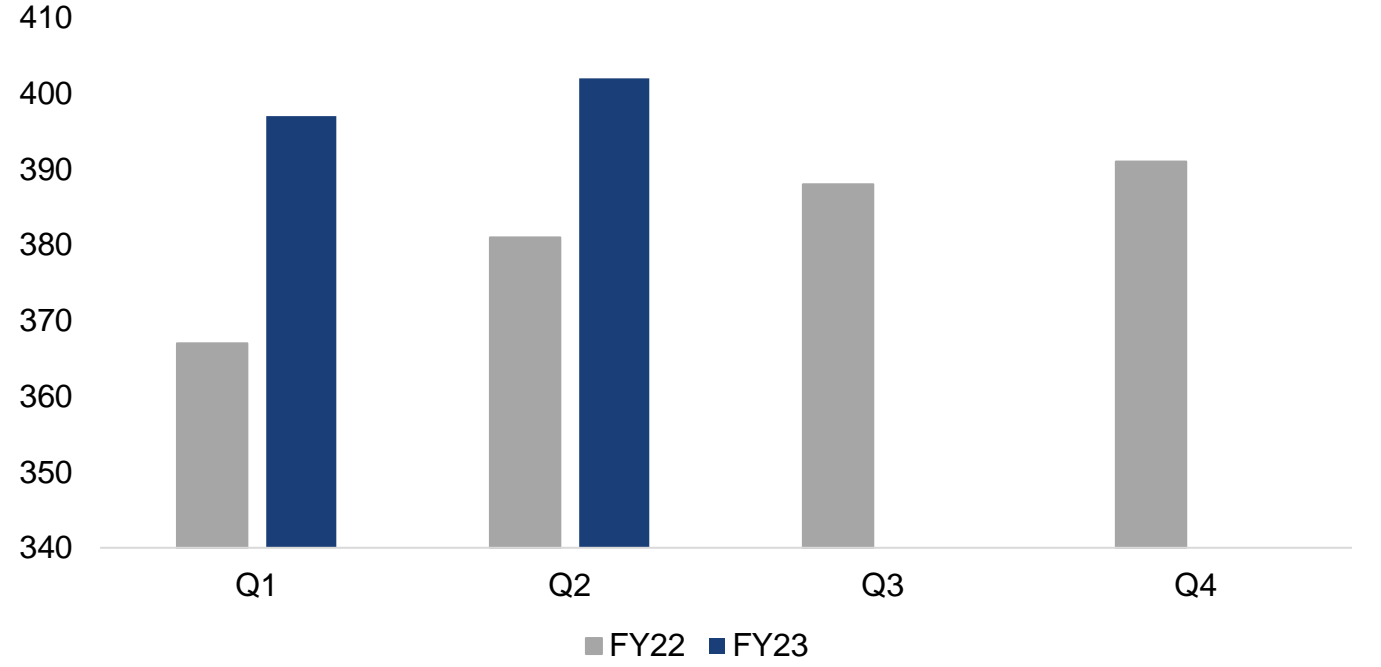
# State funded irrigation construction capex to rise in FY23

## Irrigation spending is expected to increase



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

## Daily Rural Wage increased in Q2 FY23

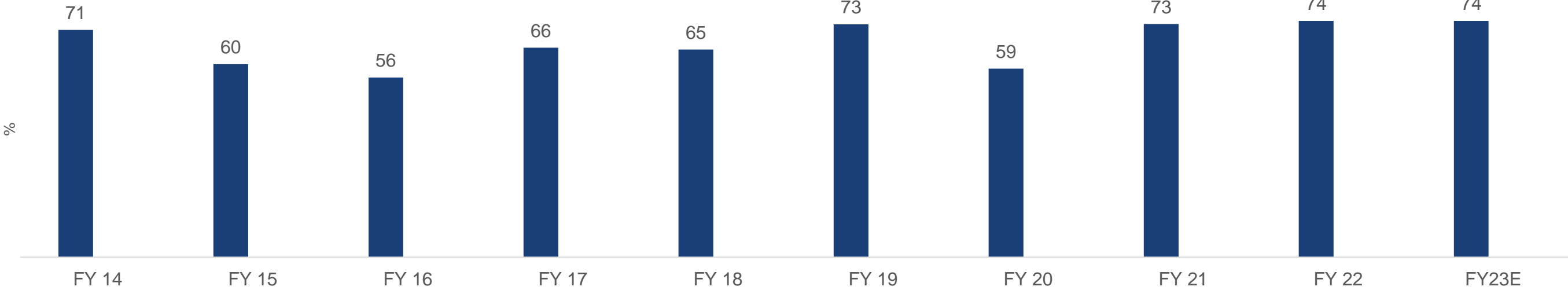


Rural wages includes general non-agricultural labour.  
Source: RBI, CRISIL Research

- Spending in irrigation by states to increase, Centre to focus on monitoring
- The government has increased the spending requirement by state governments from 32% to 42%, in line with greater transfer of taxes to states.
- The central government will play an active role in monitoring the progress of PMKSY projects and has taken several steps to crystallize investments for irrigation.

# Capacity utilization to remain stable in fiscal 2023 due to capacity addition by Mahindra

Capacity utilization to remain rangebound despite demand improvement



E: Estimated  
Source: CRISIL Research

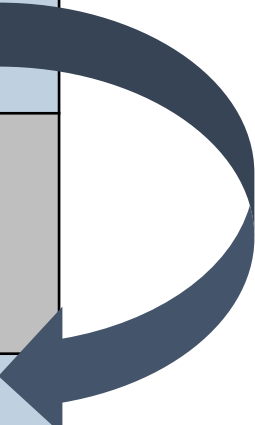
- In In fiscal 2023, due to capacity addition by Mahindra, we expect capacity utilization to remain at similar level due to anticipated increase in volumes in the fiscal.
- Escorts is rapidly expanding distribution in new geographies. It is expected to further aid their exports for the coming years.
- ITL, manufacturing both higher and lower horsepower tractors, is continuing to expand its overseas footprint by launching tractors in the 90-120 hp range for developed markets.
- CNH has plans of doubling its tractor manufacturing capacity to 1 lakh units. Already the capacity has been expanded to 65,000 units in April.
- By the end of 2023, CNH wants to take it up to 75,000 units, before scaling it to 1 lakh units per annum, given the fact that India will serve both the domestic market as well as exports.

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# TREM IV norms not implemented yet

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

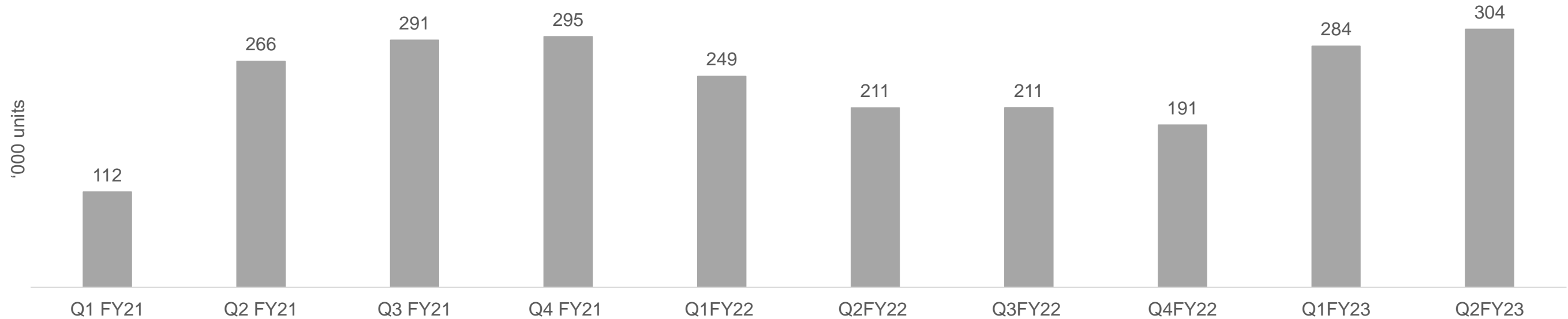


Source: Industry, CRISIL Research

- TREM IV norms were expected to be implemented from 1 Oct 2022. However, there is no clarity regarding the implementation of the same
- These norms are 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.

# Improving traction backing q-o-q improvement in production levels

## Festive boost backed production improvement in Q2



Source: CRISIL Research

- Retail demand remained strong in September due to festivals like Ganesh Chaturthi and Navratri.
- Owing to festive boost, several OEMs have ramped up their production in Q2
- The demand is expected to continue in October as well owing to festivals like Dussehra and Diwali
- Production levels are at 44% higher levels in Q2 FY23 in comparison to last year.

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# Domestic – annual & quarterly forecast

Consulting

	Units	Sales
<b>FY21</b>	Millions	0.89
<i>y-o-y growth</i>	%	27%
<b>FY22</b>	Millions	0.84
<i>y-o-y growth</i>	%	(6)%
<b>FY23E</b>	Millions	0.87-0.89
<i>y-o-y growth</i>	%	4-6%

Fiscal	Quarter	Tractors	
		Sales ( '000)	y-o-y growth
<b>FY22</b>	Q1	229	40%
	Q2	211	-11%
	Q3	223	-13%
	Q4	117	-25%
<b>FY23 E</b>	Q1	265	16%
	Q2	217	3%
	Q3 E	215-217	(4)-(2)%
	Q4 E	182-184	2-4%
<b>FY24 P</b>	Q1 P	250-252	(6)-(4)%
	Q2 P	206-208	(6)-(4)%

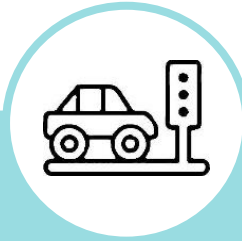
Source – SIAM, CRISIL Research

- Domestic tractor demand is expected to clock 4-6% on-year growth in fiscal 2023 after declining by 6% on-year in fiscal 2022.
- Higher raw material prices at the beginning of the fiscal led to price hikes during Q1.
- In Q3, healthy festive sales are expected to support the demand.
- However, sluggish retail sentiments amidst the delayed and erratic monsoon, high inventory levels in H1 and lower replacement demand is expected to limit sales growth during H2 of FY23.

# Stakeholder interactions

Consulting

## OEMs



- Parts of the country have been reeling in floods while some other regions were facing drastic deficiency in rainfall, bringing mixed agricultural sentiments across regions
- Deficient rainfall in the northern region has caused a delay in sowing activities and a decline in sown area for paddy this season
- The delayed showers in this region in the past couple of days is not enough to bring a respite to the farmers and thus will have minimal impact, if any
- Crop outlook in the western and southern region, on the other hand, is quite healthy with adequate rainfall and reservoir levels
- Delivery momentum has been improving for the festive season.

## Dealers



- There has been excess rainfall in most of the regions.
- Kharif sowing was been delayed due to irregular rains in the initial months. Thus, we can expect some delay in harvesting as well.
- Some crop damage is expected due to excess rainfall in most of the states.
- However, the damage is yet to be assessed by the authorities.
- Stock levels are very high at dealer level inventory. However, the players are in push mode to built up additional stocks to cater to festive demand.
- Dealers are taking hit in their margins due to consequent tractor price hikes undertaken by OEMs.
- Commercial activities are slowly resuming but currently are very less.

## Financier



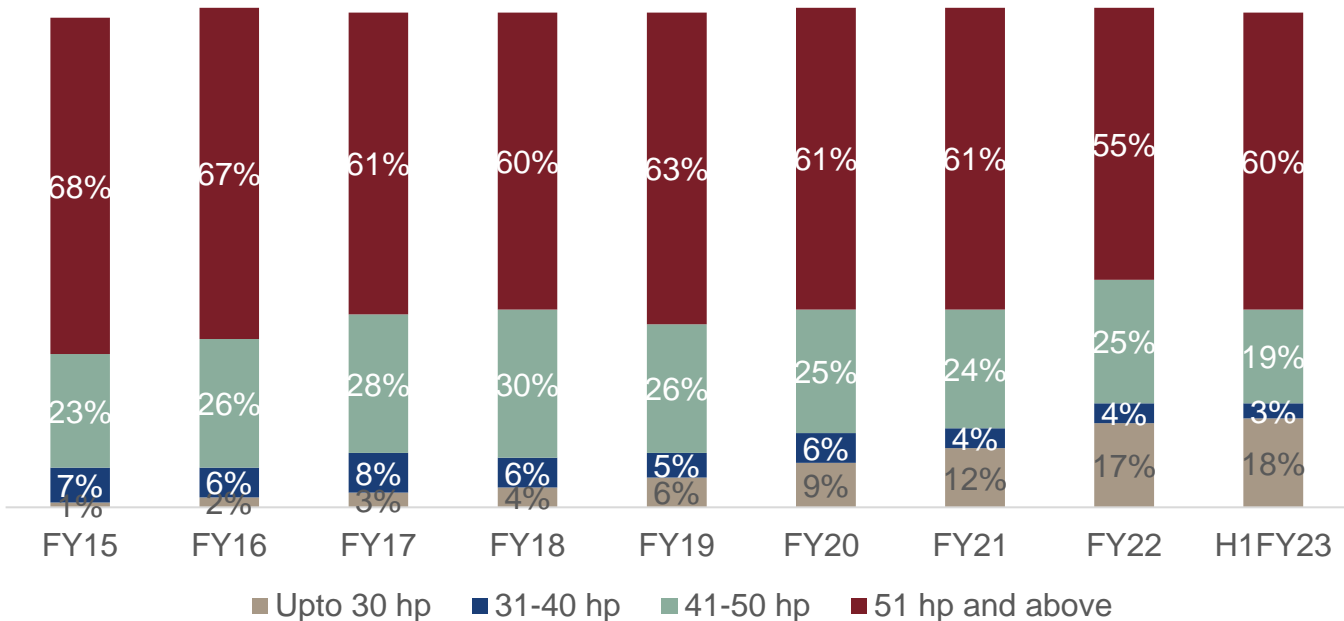
- Financing is robust with lucrative terms of credit for the festive purchases
- Disbursements to increase at a moderate pace in FY23.
- Non-performing assets are higher in public banks as compared with private banks and NBFCs.
- LTVs are estimated to have grown from 75.5% in fiscal 2021 to 76% in fiscal 2022. Some further improvement is expected during the fiscal.
- Financing situation in certain states are worrisome with rising NPA levels and is a key monitorable in the coming months as funding levels could be significantly impacted

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# Tractor exports

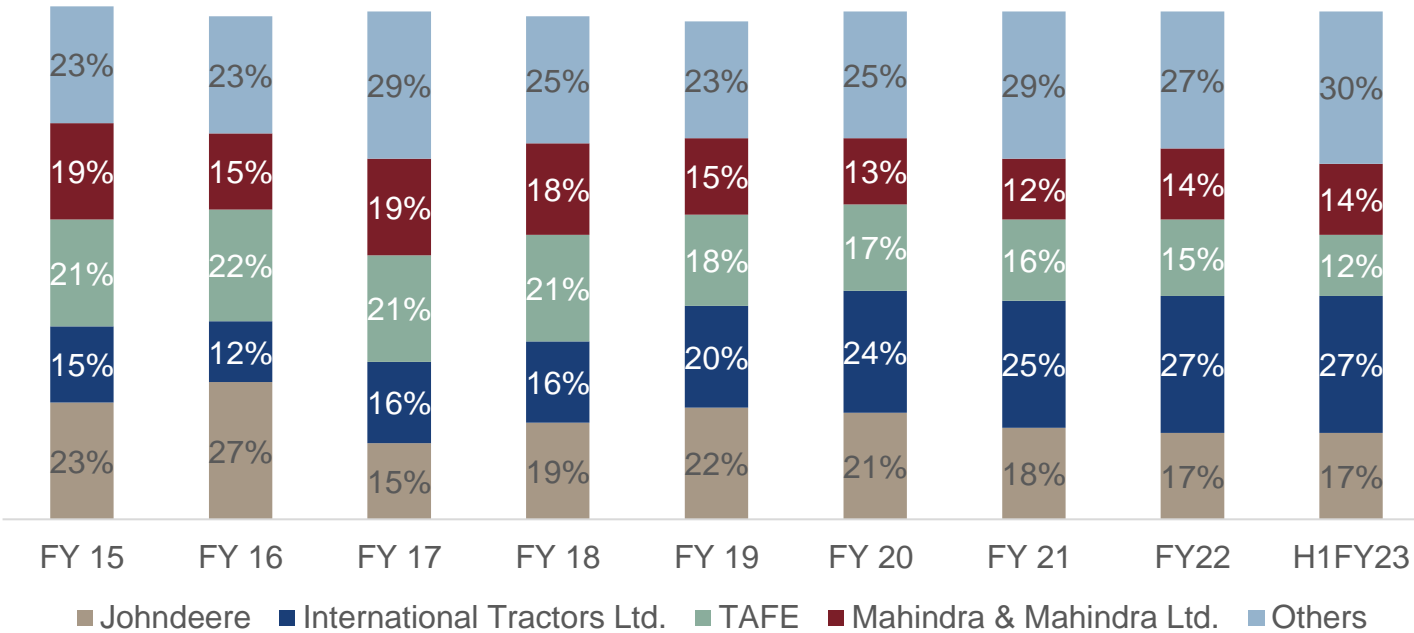
# 7-9% exports growth in FY23 on a healthy base of last year

Segment wise market share of exports



Source: CRISIL Research

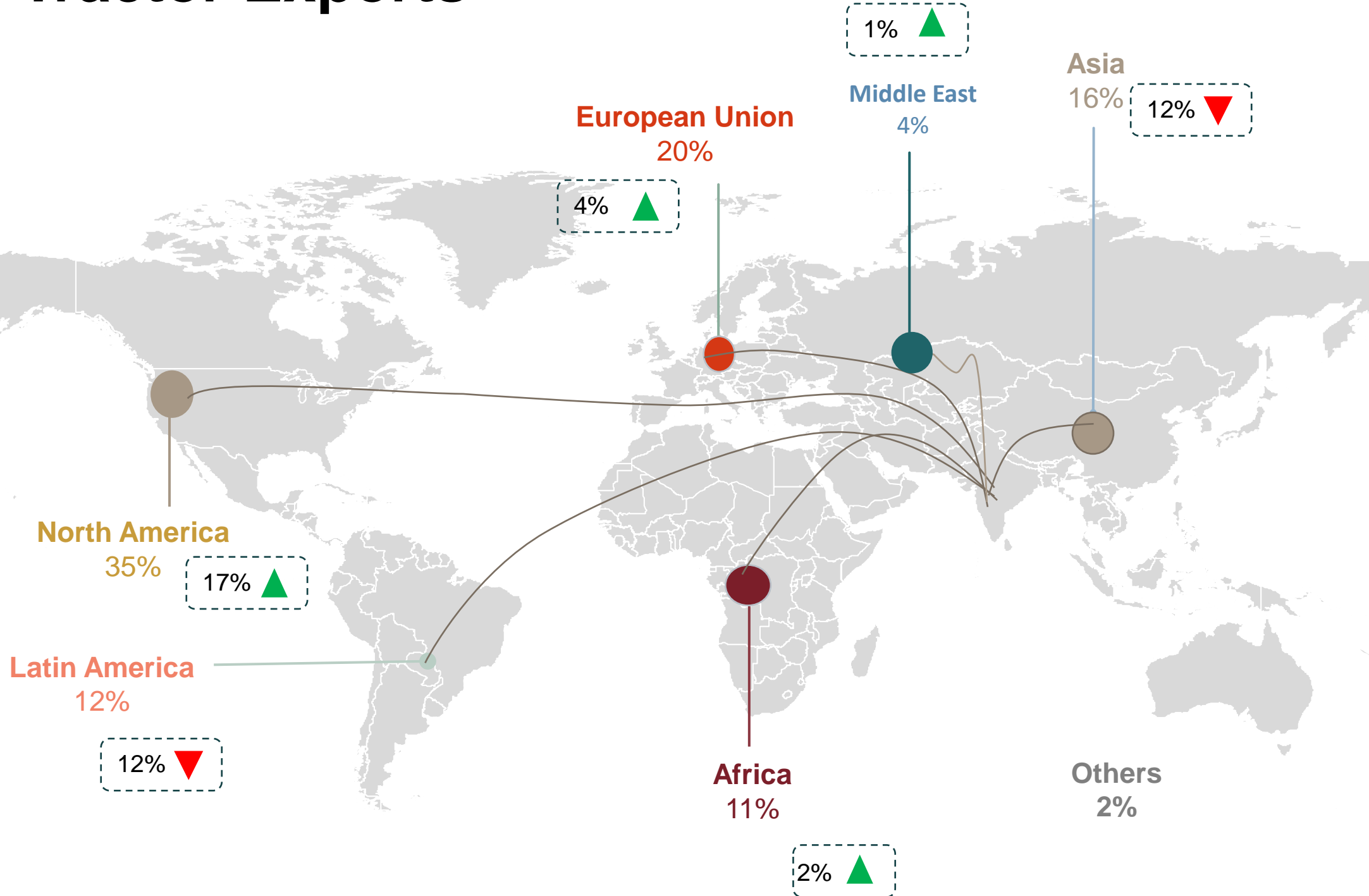
Player wise market share of exports



Source: CRISIL Research

- Exports, accounting for about 13% of the overall tractor sales, are expected to rise by 7-9% on-year in fiscal 2023.
- More than 51 hp tractors accounted for about 55% share in India’s tractor export basket for fiscal 2022. The share has risen to 60% in H1 FY23 period.
- Rising demand for Indian tractors from the US, Europe and from the neighboring Asian countries has fueled demand higher hp tractors.
- John Deere is the leading player for exports in this segment followed by International tractors limited.

# Tractor Exports



- Share of exports to North America nearly doubled during April-Aug FY23 backed by increased demand from USA
- ITL's Solis brand has also been gaining popularity in the European markets. With most of the global companies de-risking exports from China due to the complexities and disruptions in the nation, India has become the natural hedge against Chinese exports.
- Exports to Asia dropped with the contraction of exports to Nepal, although exports to Bangladesh remained rangebound
- Exports to Mexico dropped, contracting the share of Latin America in the Indian exports

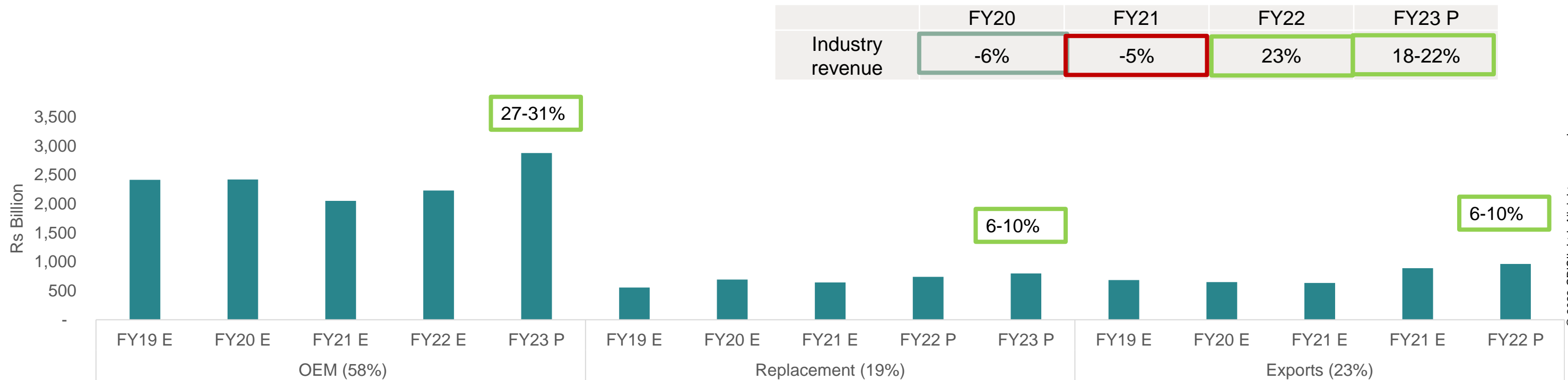
# Auto Components

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# Thrust to the OEM demand to back component industry growth

Healthy demand growth across segments to boost OEM demand in FY23



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

Source: CRISIL Research

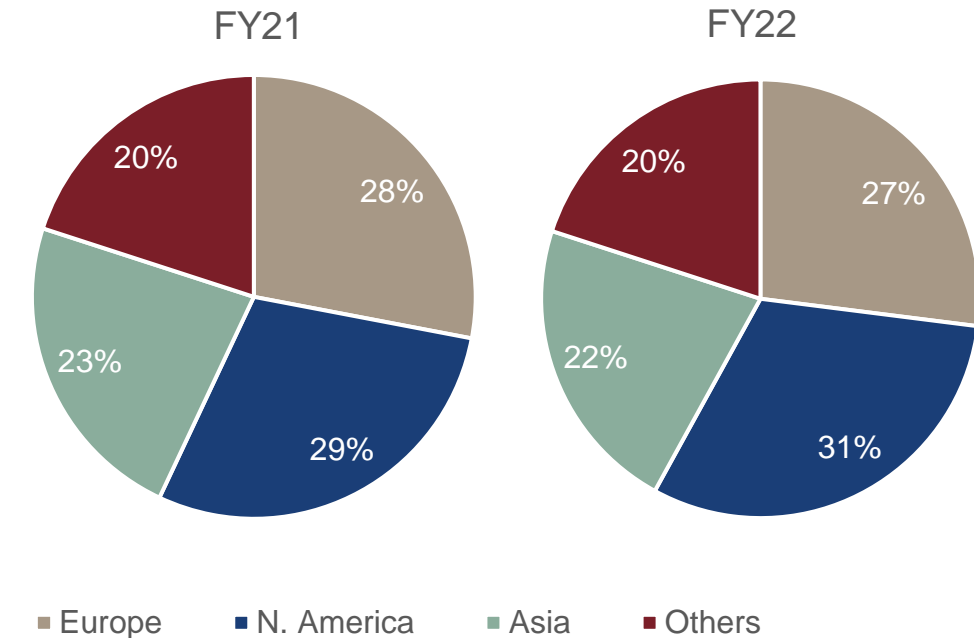
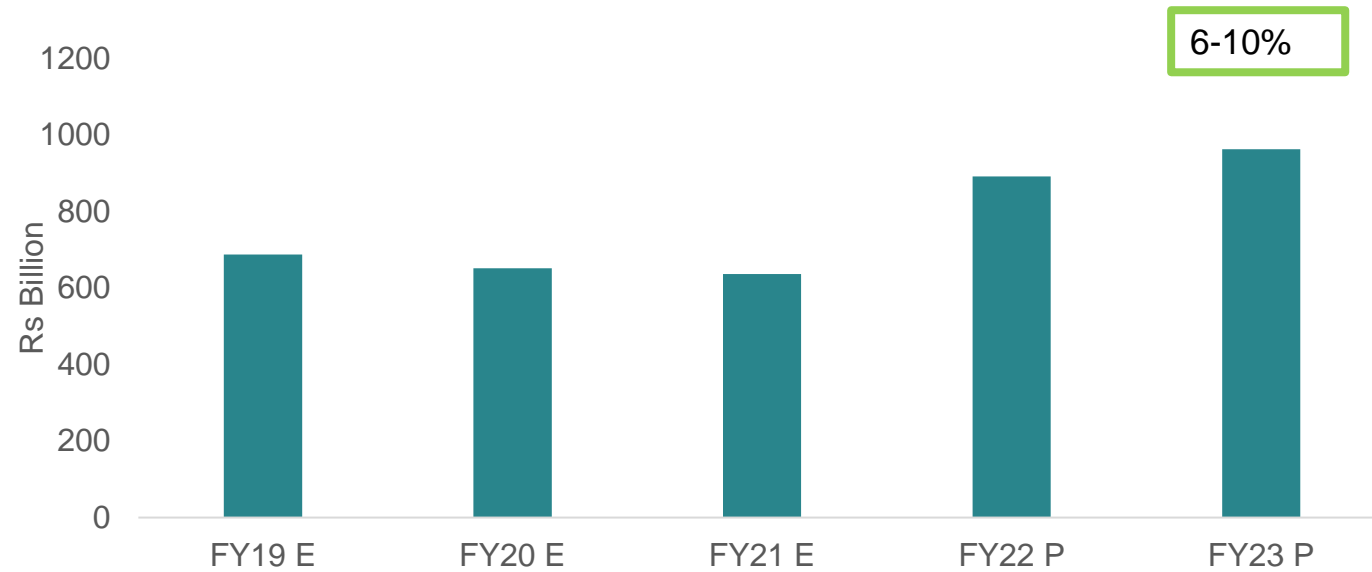
- In fiscal 2023, the OEM segment (58% of revenues) is likely to witness robust growth; PV and CV segments to provide the thrust in fiscal 2023. On a lower base, two-wheeler and three-wheeler segments are also estimated to improve and support the component industry growth
- Exports (23% of revenues) are projected to increase by 6-10% in fiscal 2023, with high inflation and economic slowdown acting as headwinds
- Replacement demand (19% of revenues) is expected to grow by 6-10% in fiscal 2023, driven by higher vehicle movement and the high sales witnessed in FY18-19

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# Exports to continue to grow in FY23 due to global demand and China +1 strategy, albeit at a slightly reduced pace

Export demand expected to grow in FY 23

Developed nations support exports



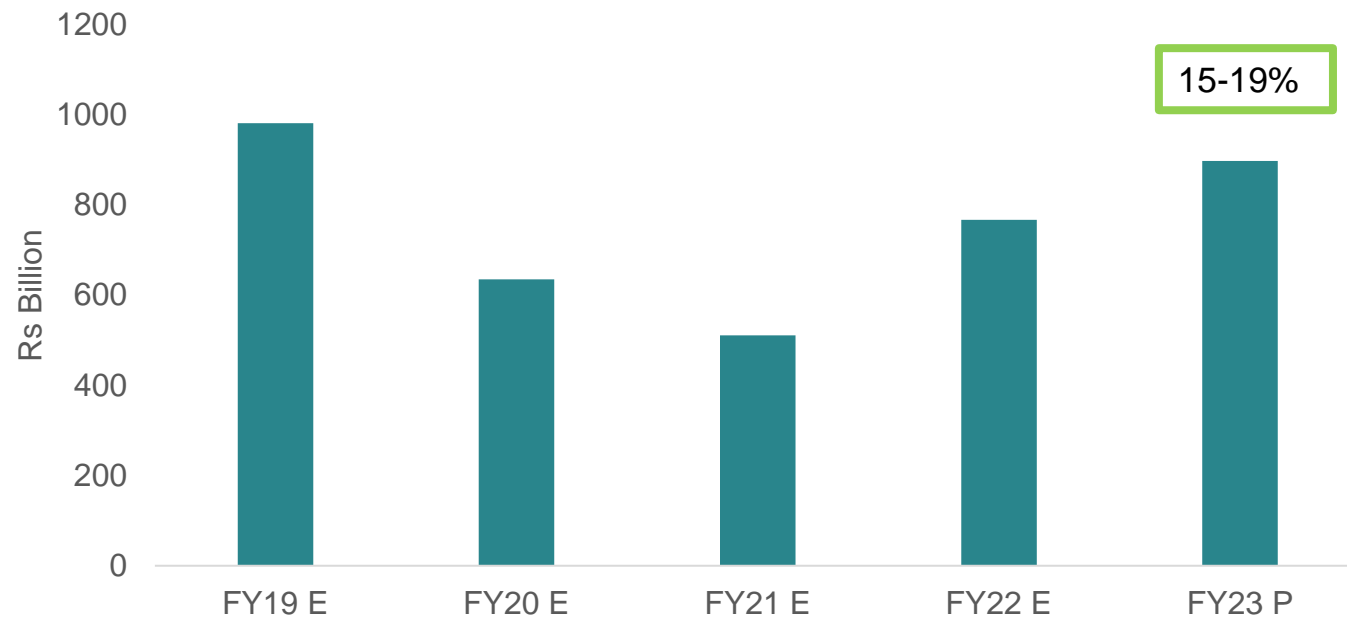
Note: Brackets represent y-o-y growth;  
Source: CRISIL Research

Source: DGFT, CRISIL Research

- Auto component exports (accounting for 23% of the overall demand in FY22) are projected to witness 6-10% growth over the high double-digit growth witnessed in FY22
- The growth would be on the back of healthy demand from North America and Europe which together contributed 58% to the export demand during FY22.
- Export revenues are also expected to be supported by the global demand and China +1 strategy. However, rising inflation and global economic slowdown remain key monitorables.

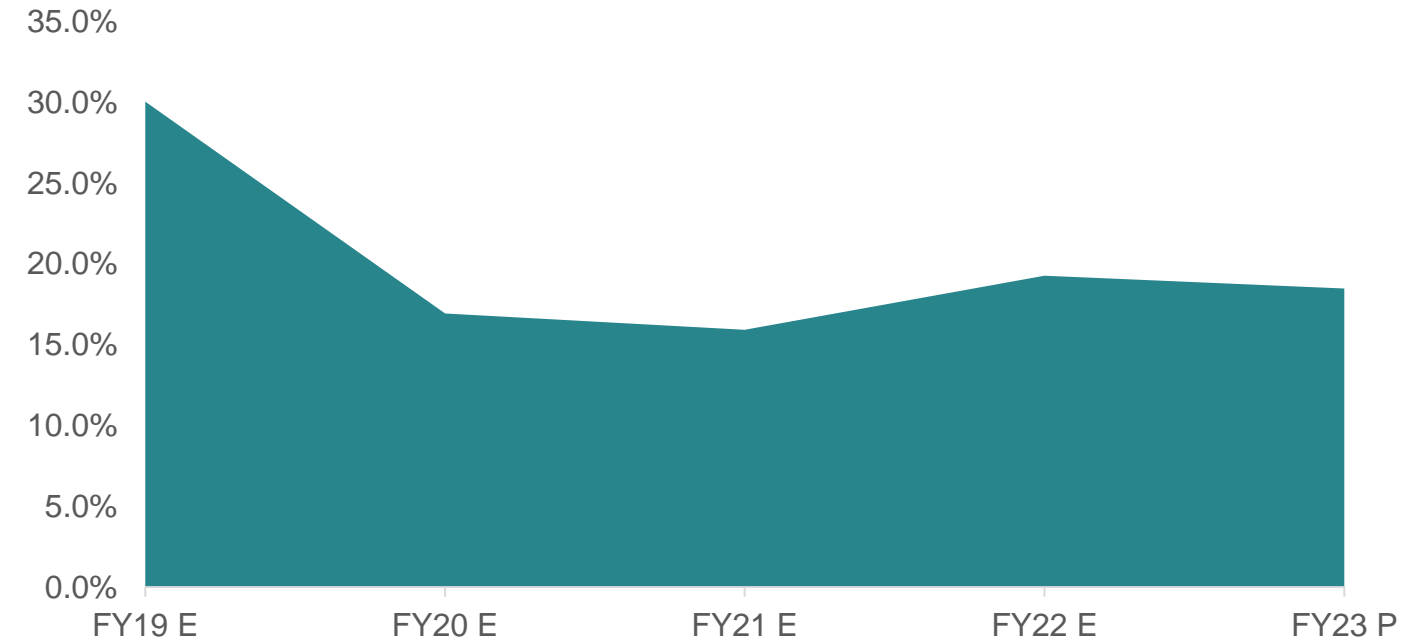
# Increased traction to back higher import demand in fiscal 2023

## Healthy rise in import demand



Source – DGFT, CRISIL Research

## However, the share in consumption to contract

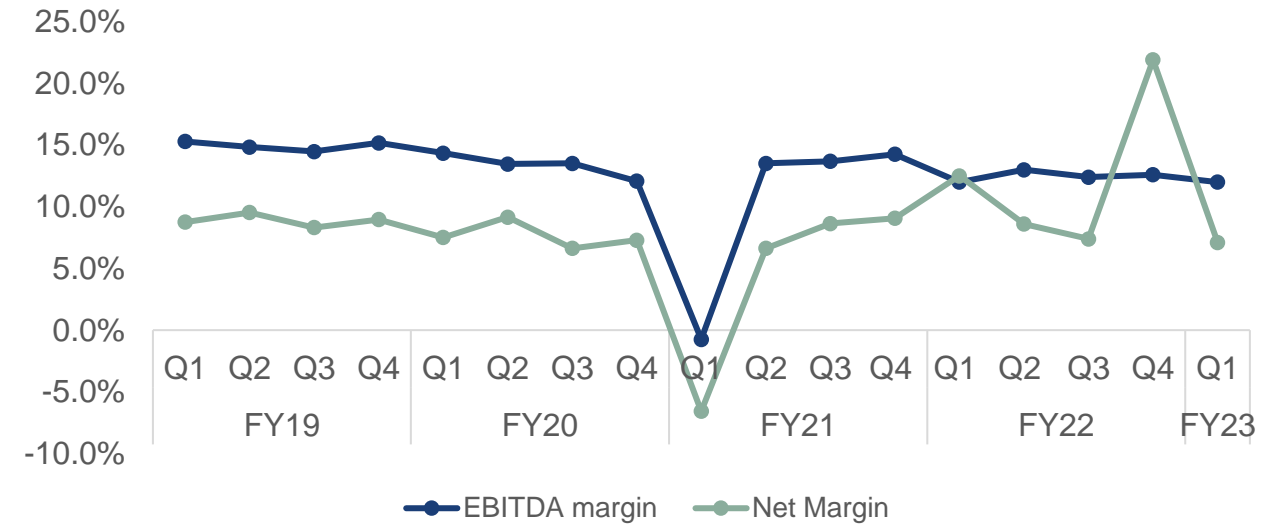
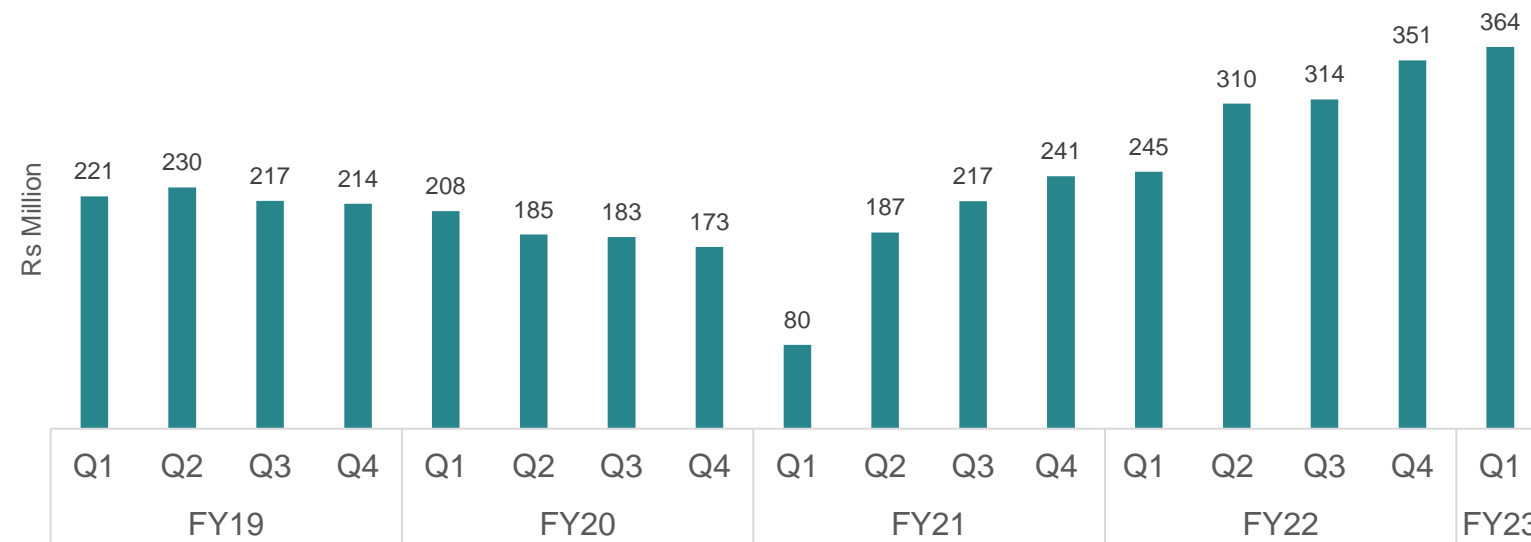


Source: DGFT, CRISIL Research

- Auto component imports to improve in fiscal 2023 with improving domestic vehicle production.
- Going ahead, import demand is likely to grow led by a recovery in domestic market.
- In fiscal 2023, we expect imports to increase by 15-19% amidst the increased need of components for higher domestic demand.
- However, faster consumption growth of 21-25% will contract the share of imports in the overall consumption.

# Revenue to increase, margins to improve going ahead

## Company financials



Note: Based on the aggregated financials of 57 auto component players

Source: Company financials, CRISIL Research

- Gradual increase in aggregate revenue of players in the last 2 quarters backed by increased demand
- Profitability to improve in fiscal 2023 and 2024, led by a recovery in demand and correction in raw material prices
- In fiscal 2023, it is expected margins of auto component manufacturers to improve by ~50-100 bps due to operating leverage as well as correction in input costs.

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# Thank You

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