Impact of macro-economic environment on the automotive industry

ACMA

July 2021

Research

ACMA Automotive Component Manufacturers Association of India

CRISIL An S&P Global Company

Content

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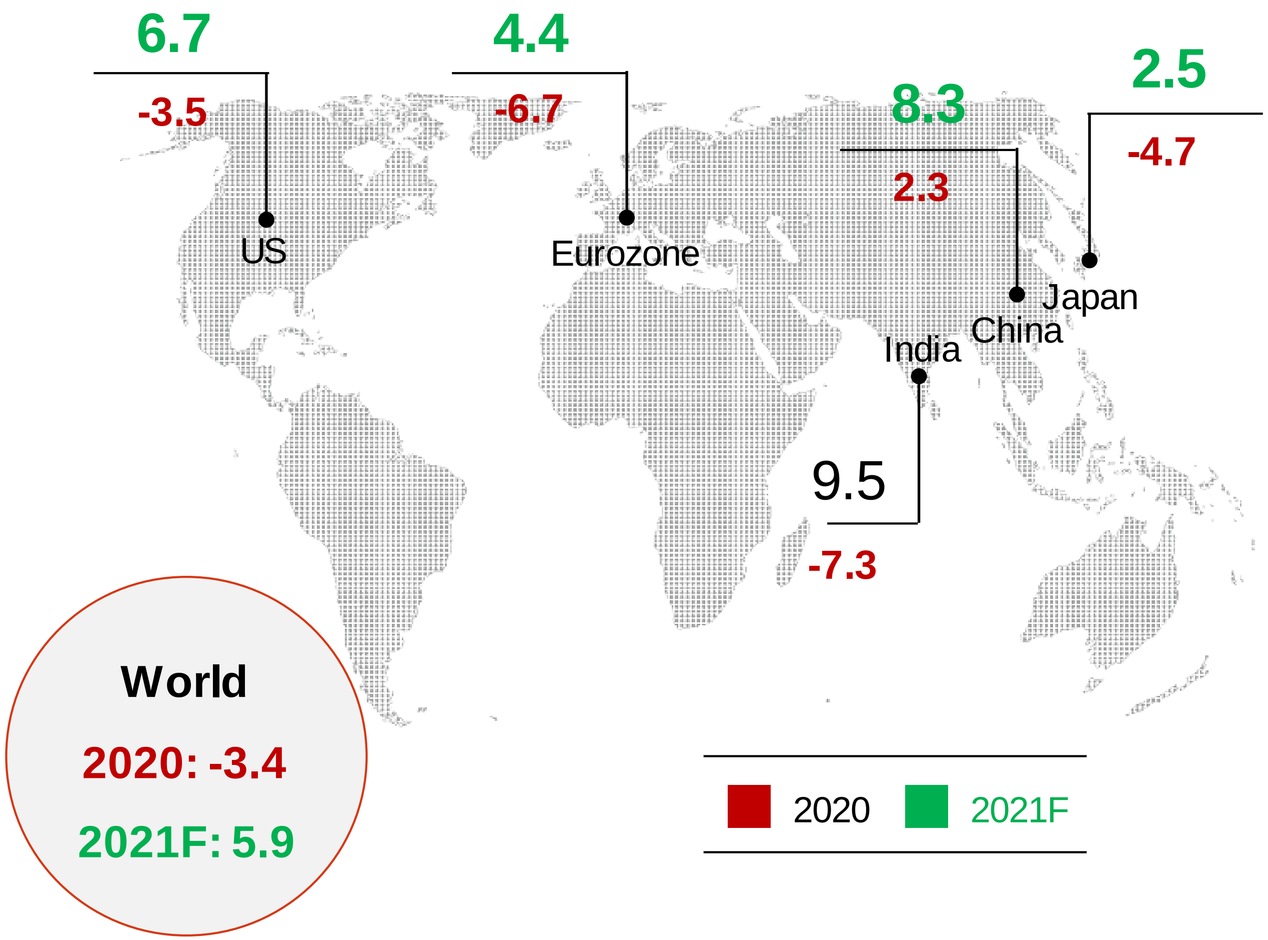
Economy overview

Global tide supportive for exports

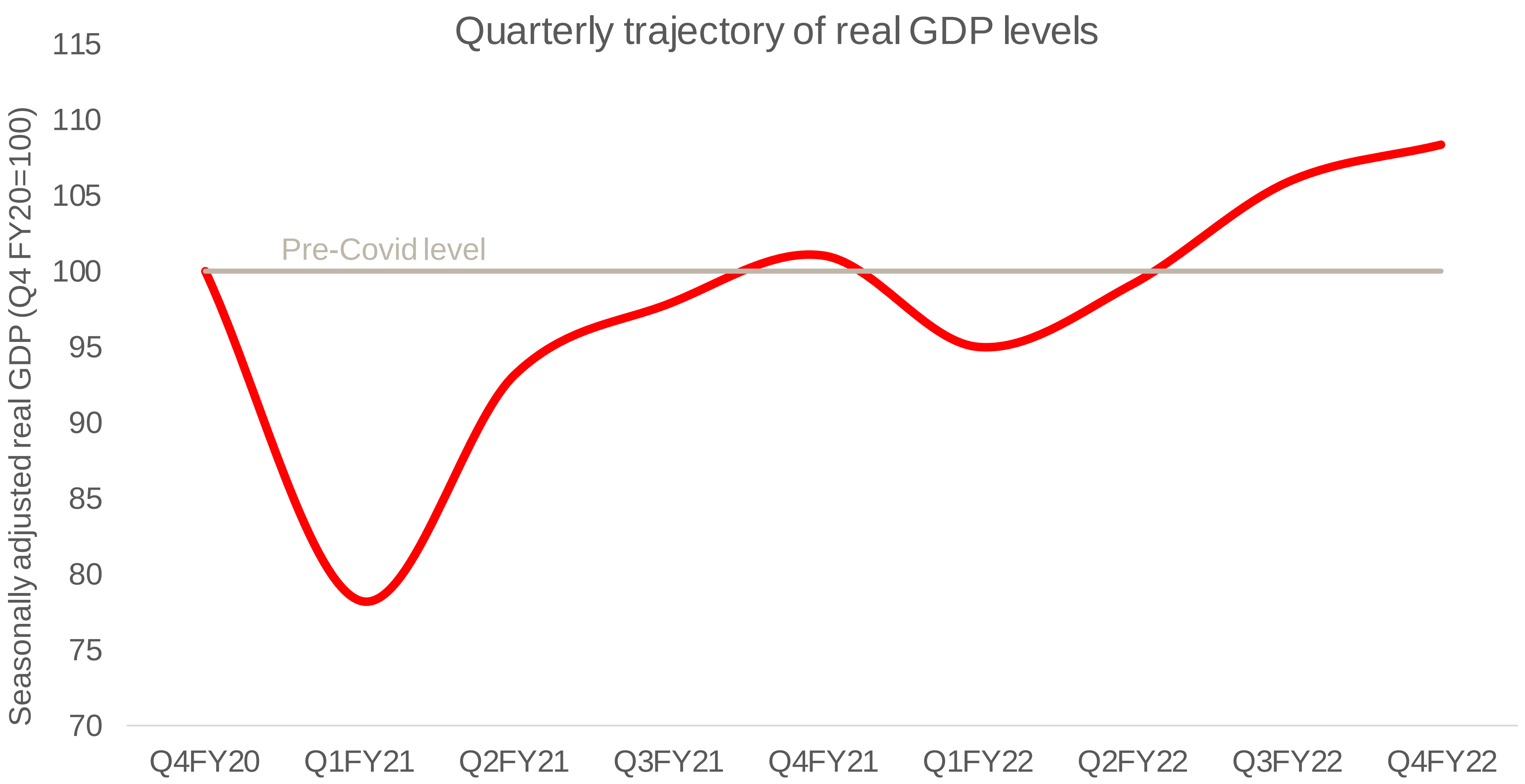
GDP growth (%)



- Economic recovery set to accelerate in the US, due to a massive fiscal stimulus plan
- A high degree of unevenness and uncertainty persists owing to relapse of Covid-19 infection waves across economies
- But accelerating vaccination rates allow for opening of the sectors hardest hit from the social-distancing restrictions and should propel some degree of convergence

Source: Statistical bureau, respective countries, S&P Global; India outlook is fiscal year

An optical rebound in growth



Note: The flat line refers to the indexed level of GDP in Q4FY20
Source: Ministry of Statistics and Programme Implementation (MoSPI), CEIC, CRISIL

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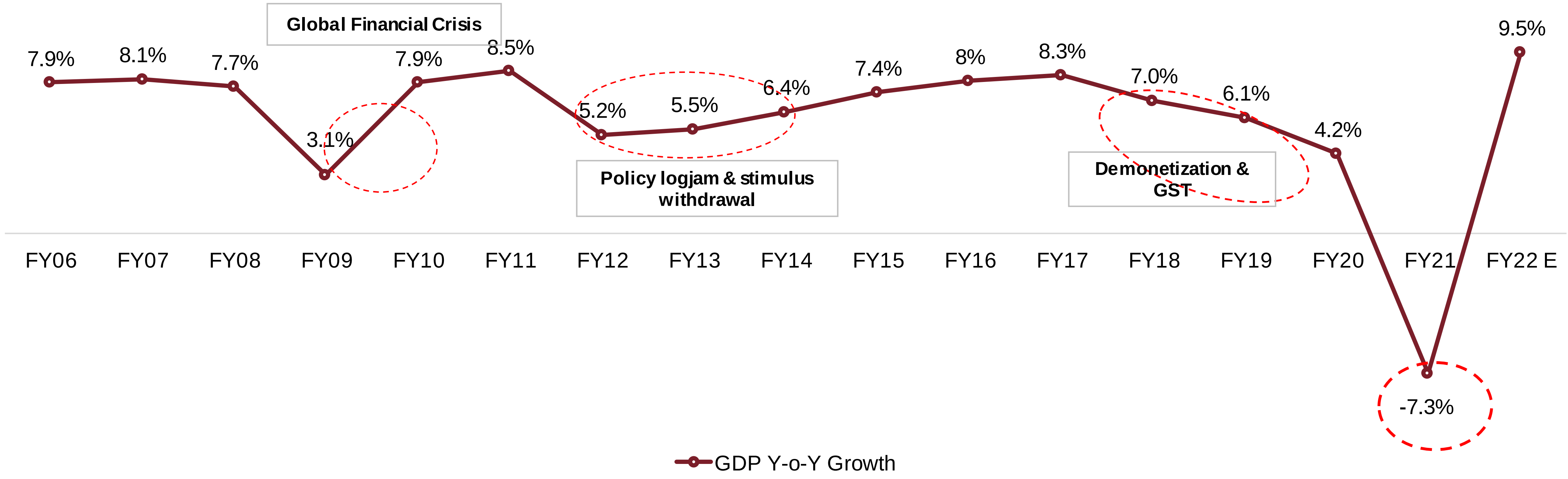
Macroeconomic outlook

Segments (% Growth Y-o-Y)	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20 E	FY 21 E	FY22P
GDP (% Growth Y-o-Y)	7.4	8.0	8.8	7	6.1	4.8-5	(7.3)	9.5
CAD (as a % of GDP)	-1.3	-1.1	-0.7	-1.8	-2.1	-0.9	+1.3	-1.2
10-year G-sec yield (end-March)	7.7	7.5	6.8	7.6	7.5	6.2	6.2	6.5
PFCE	6.4	7.9	8.1	7	7.2	5.5	(9.1)	8-9
Crude oil ($/barrel/CY)			44	54.5	71	64	42.3	63-68
Inflation (Consumer Price Index)	5.9	4.9	4.5	3.6	3.4	4.8	6.2	5.3

Source: CSO, RBI and CRISIL estimates. CY – Calendar Year

Economy expected to recover from a weak base, impact of third wave & the further pace of vaccination remains a key monitorable

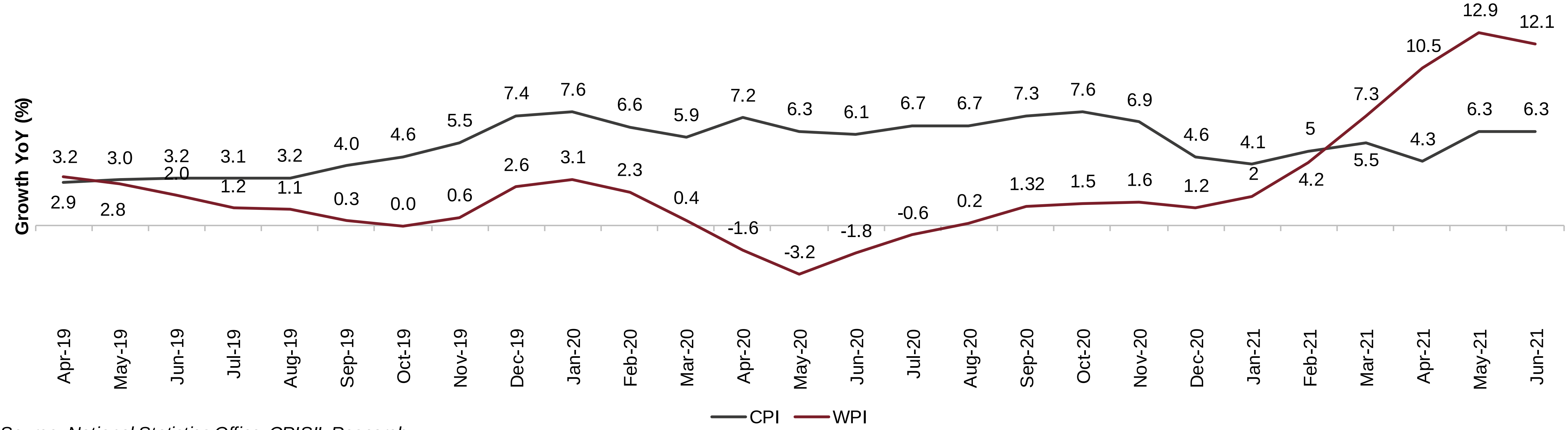


Note: GDP – Gross domestic product; Data on 2011-12 base, P=Projected
Source: Central Statistical Office, MOSPI, CRISIL Research

- India's GDP contracted 7.3% in FY21 with manufacturing & services sector taking a comparable hit
- A much faster revival in the second half of the year restricted the overall fall
- On this lower base, GDP is expected to bounce back next fiscal
- However, growth forecast has been lowered from our earlier estimate of 11% due to the prolonged impact of Covid including to preclude a third wave.
- In the pessimistic case, wherein vaccination slackens and the third wave turns out to be intense, we see GDP growth for this fiscal dropping to 8%.

CPI inflation stabilises in June, remains above RBI's target

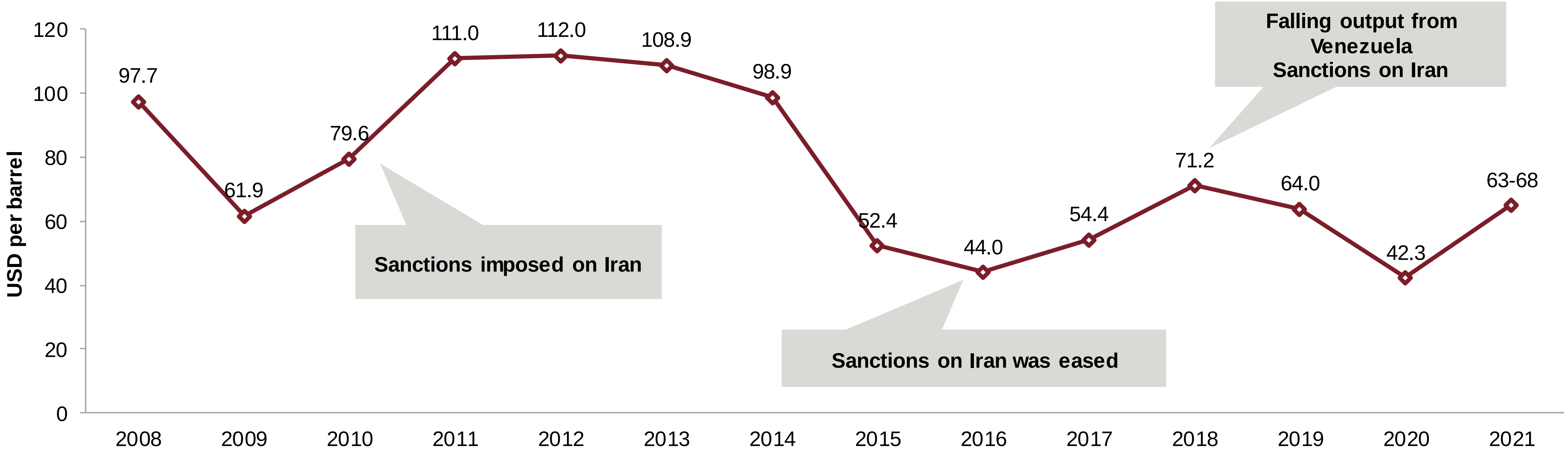
Inflation (YoY Growth %)



Source- National Statistics Office, CRISIL Research

- Inflation based on the Consumer Price Index (CPI) remained steady at 6.3% on-year in June compared with previous month, but was slightly higher than 6.2% in June 2020. Retail inflation has remained above the Reserve Bank of India's (RBI) comfort zone of 2-6% for the second month on the trot.
- CPI inflation for food and beverages combined rose to 5.6% on-year in June from 5.2% in May. Inflation rose despite a high base of last year (7.9% in June 2020)
- Rise in food inflation was capped by decline in prices of cereals and vegetables
- Core CPI inflation fell to 6.1% on-year from 6.6% the previous month, but was higher than 5.4% in June 2020
- CPI inflation expected to average 5.3% in FY22, compared with 6.2% last year, with risks tilted to the upside. Moderation in inflation is predicated on lower food prices, given the high base (food inflation averaged 7.7% last year) and expectation of a normal monsoon.

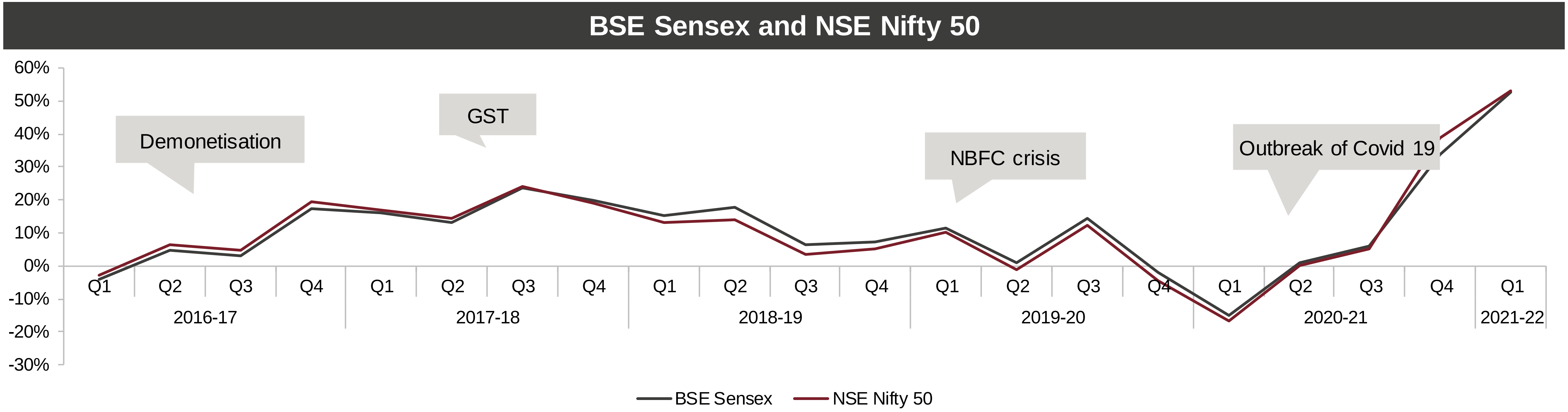
Crude prices to increase in 2021 supported by recovery in oil demand



Note: Prices are as per calendar year
E=Estimate, P=Projected
Source: CRISIL Research

- Crude oil prices declined nearly 35% on-year to $42.3 per barrel in calendar year 2020, given the global oil demand contraction on account of Covid-19.
- In 2021, oil prices are expected to increase to $63-68 per barrel led by recovery in demand
- Prices remained elevated in Q1 due to continued production cuts by OPEC+ as well as production loss in US due to deep freeze in Texas.

Indices continue their forward march in Q1 FY22



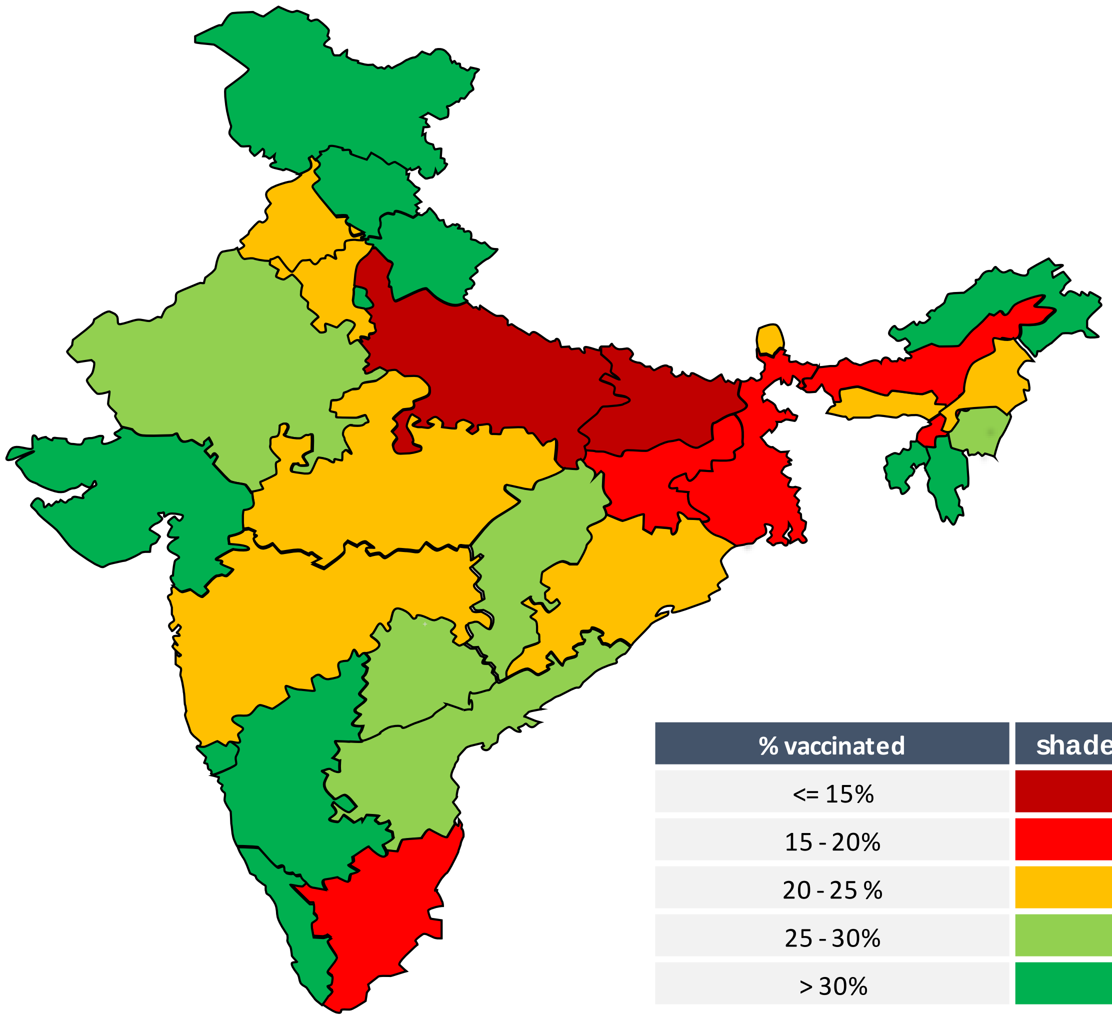
Source: BSE, NSE, CRISIL Research

Index	Q1 FY20	Q2 FY20	Q3 FY20	Q4 FY20	Q1 FY21	Q2 FY21	Q3 FY21	Q4 FY21	Q1 FY22
BSE Sensex	39,380	37,827	40,725	36,163	33,476	38,255	43,101	48,298	51,067
NSE Nifty 50	11,819	11,205	12,033	10,587	9,861	11,236	12,644	14,692	15,110

- Indices continued on their growth trajectory in Q1 FY22 and reached historic high levels
- After a m-o-m drop in April, indices registered growth in May and June

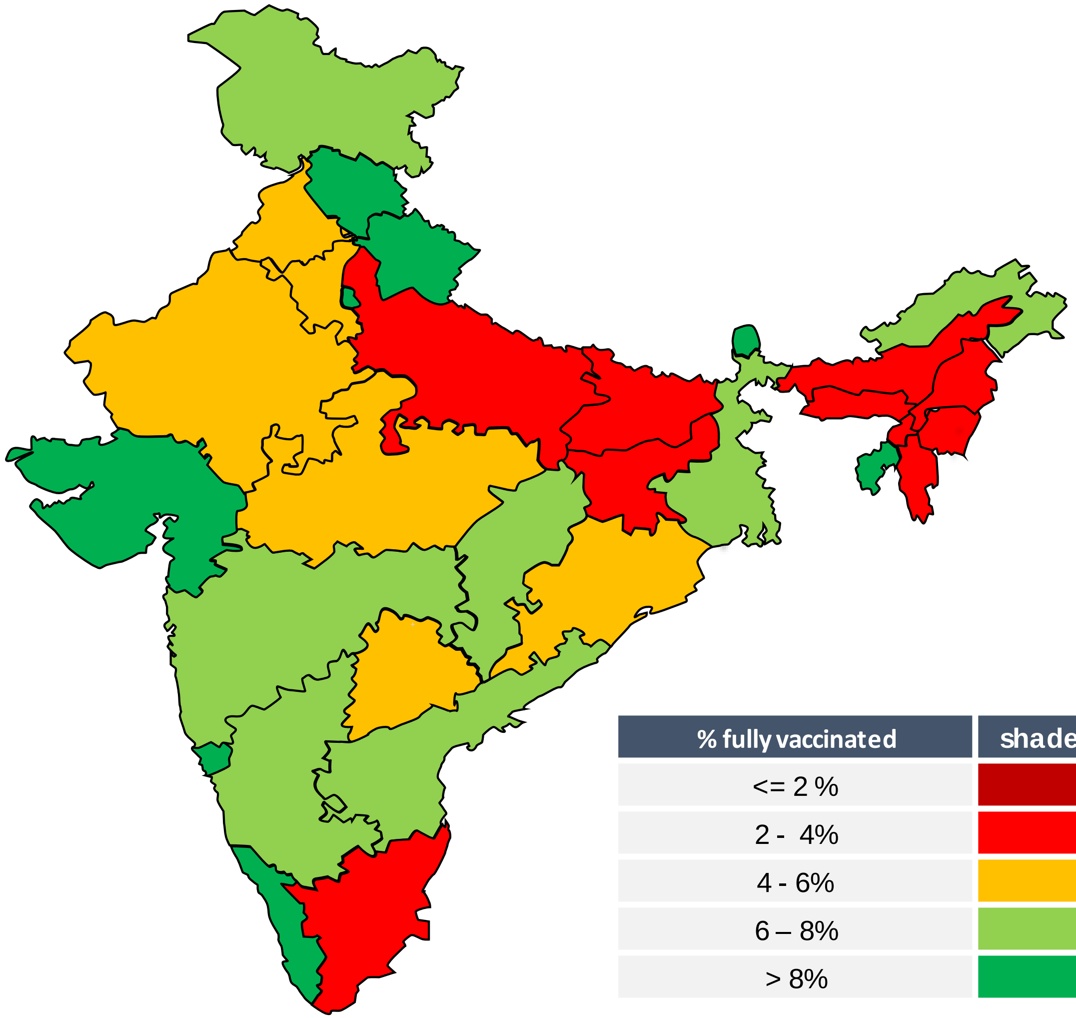
GJ, KL lead in terms of % of population inoculated; while UP, Bihar, TN lag amongst the major states

Vaccination progress : 1st dose



% vaccinated	shade
<= 15%	
15 - 20%	
20 - 25 %	
25 - 30%	
> 30%	

Vaccination progress : 2nd dose

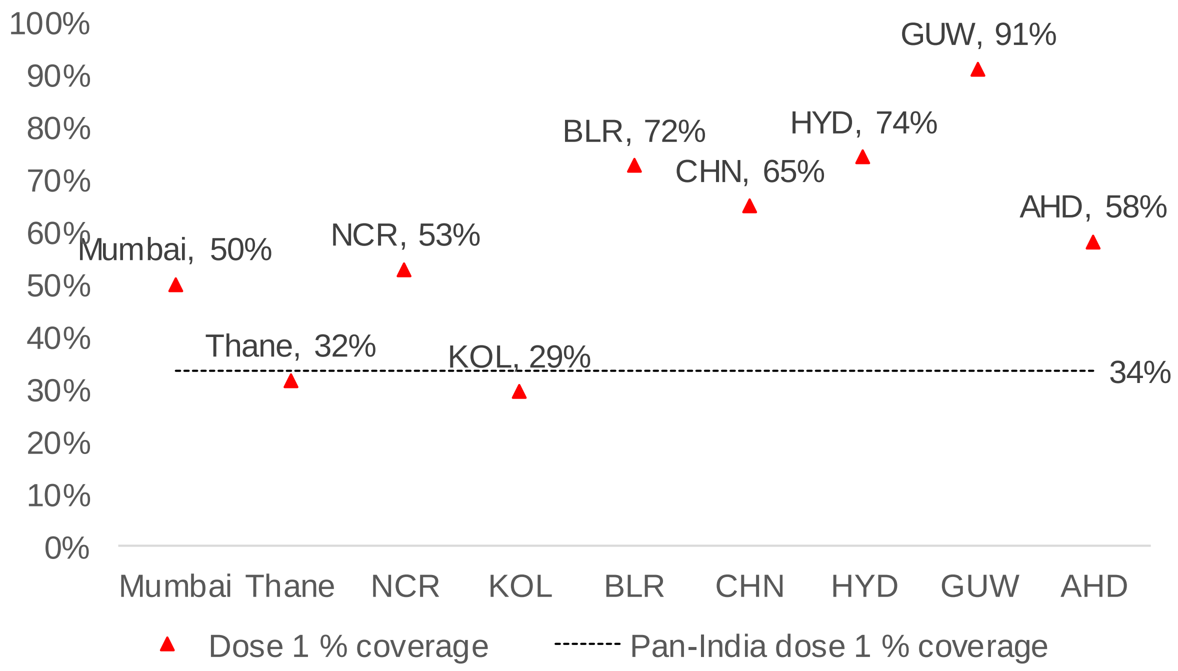


% fully vaccinated	shade
<= 2 %	
2 - 4%	
4 - 6%	
6 – 8%	
> 8%	

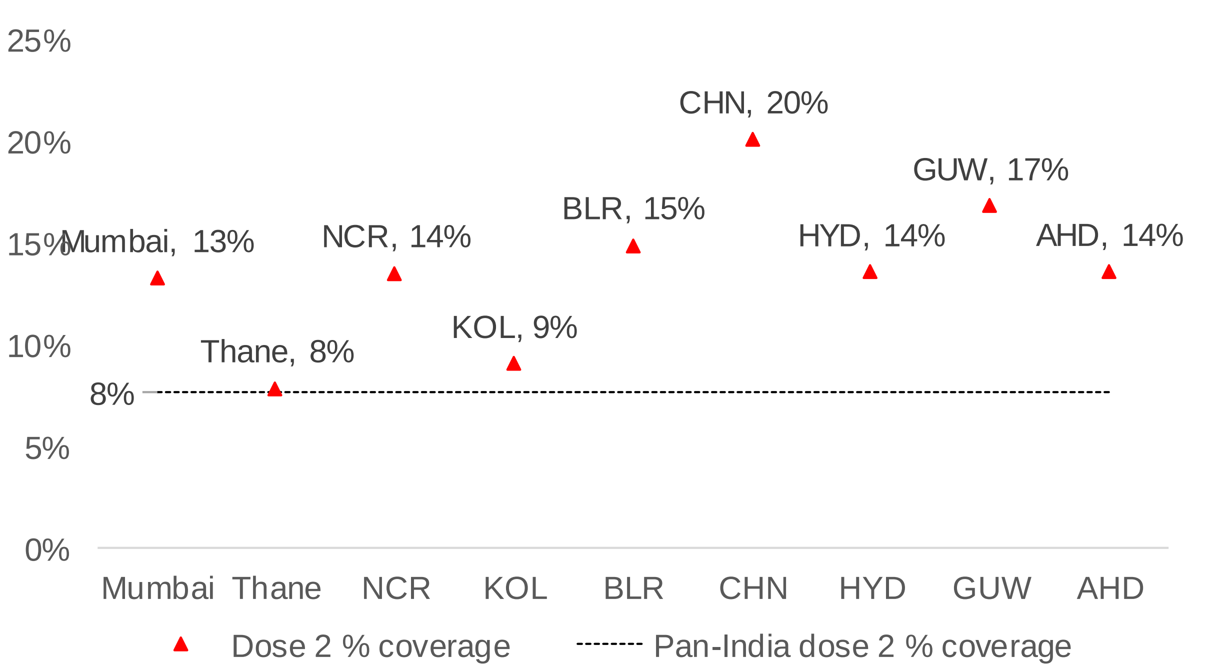
As of 12th July 2021
Source: MohFW,UIDAI,CRISIL Research

Key metros are leading in terms of vaccination coverage

District-wise dose 1 penetration



District-wise dose 2 penetration



- Kolkata has the lowest penetration for 1st dose while Guwahati (Kamrup Metro) has the highest penetration for 1st dose.
- Most of the metro districts have >50% penetration for 1st dose which should contribute positively to the overall revival process.
- Dose 2 penetration is <20% for the most of the districts except Kolkata which is slightly above 20%.
- Pan-India dose 2 penetration at 8%

Note: Kamrup Metropolitan has been taken as proxy for Guwahati, Dose penetration is calculated on total eligible population
Source: Ministry of Health and Family Welfare, OurWorldinData.org, UIDAI, CRISIL Research

Rural Scenario

Continued government support to keep rural demand resilient in FY22

Agri scenario lends support to a struggling economy

Crop scenario

- Kharif CVI expected to improve by **1-4% in FY22** on account of a normal monsoon expectation and good crop output
- Higher reservoir levels resulted in a good rabi output for FY21. Hence, we expect the Rabi CVI for 2020-21 to be higher by **1-3%** compared to last year

MNREGA

- As on 1st July 2021, Rs. 31,529 cr has been spent out of Rs. 74,775 cr allocated
- So far, around 38.3 million households have worked under the scheme in FY22, while the full-year number in last fiscal was 75 million

Source – Industry, CRISIL Research

Government support

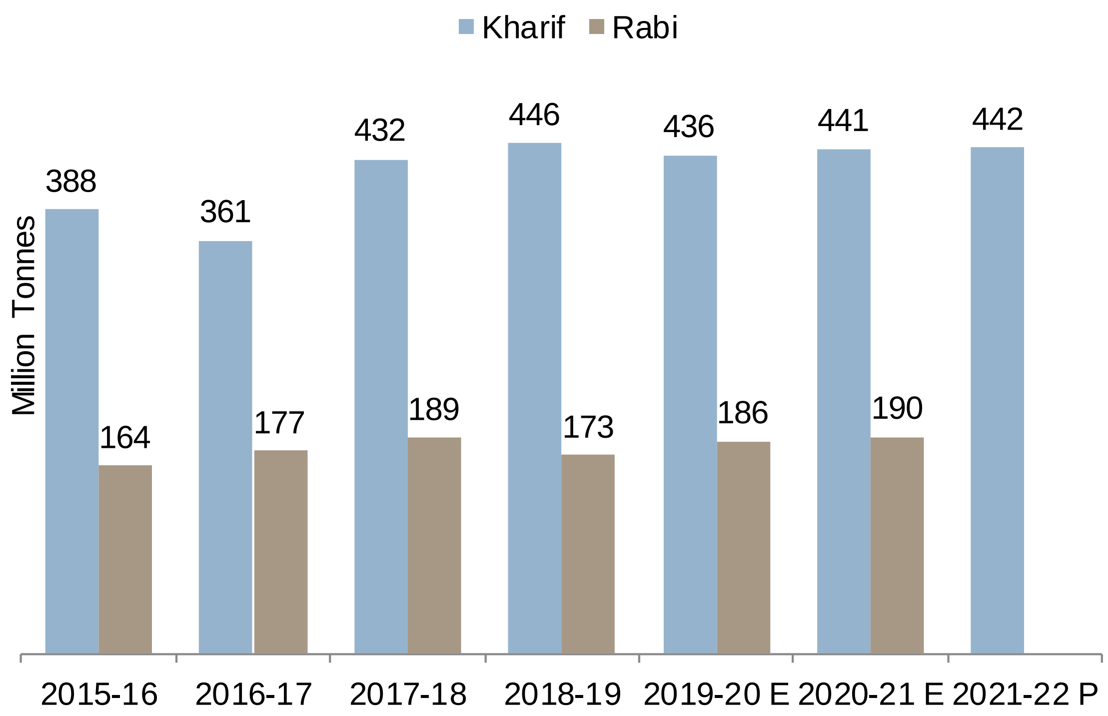
PM Kissan and PM Garib Kalyan Yojana

- A total of 12 crore beneficiaries have been transferred money under PM Kissan Yojana in FY21
- Prime Minister Narendra Modi released the 8th instalment of farmers under PM Kisan Samman Nidhi Yojana (PM-KSNY) on May 14 of over Rs 20,000 crore to more than 9.5 crore farmers of the country.

Source: Ministry of Rural Development

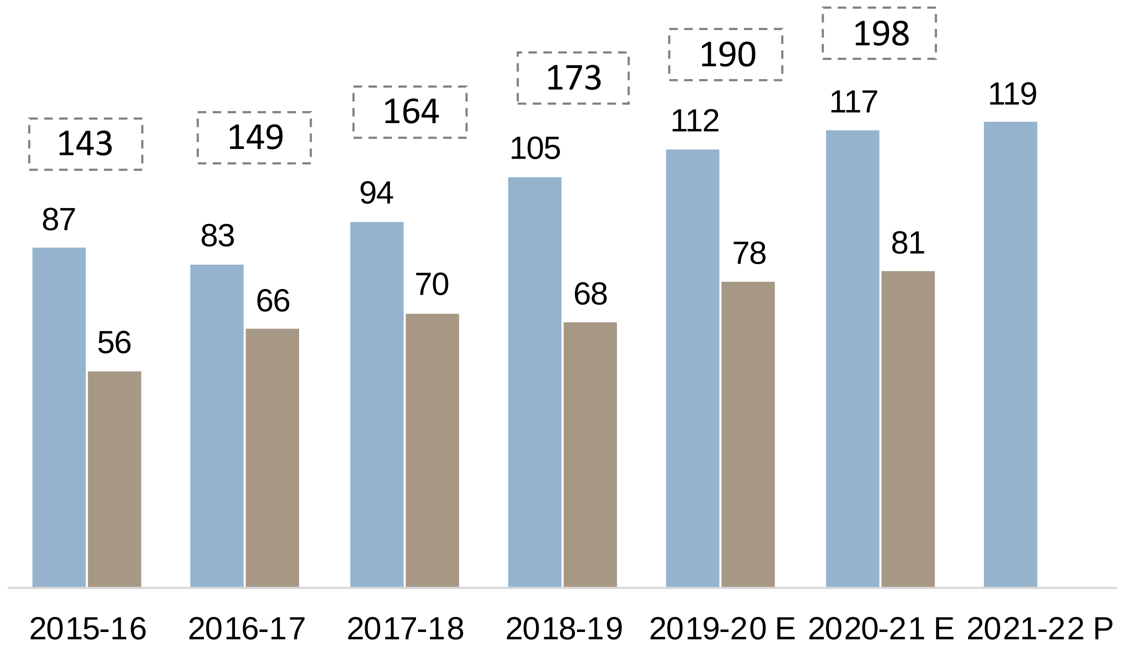
Positive outlook for kharif season and better cash flow in the market to aid agri sector

Food-grain Crop Production



Source: CRISIL Research

Food-grain CVI (Crop Value Index)



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

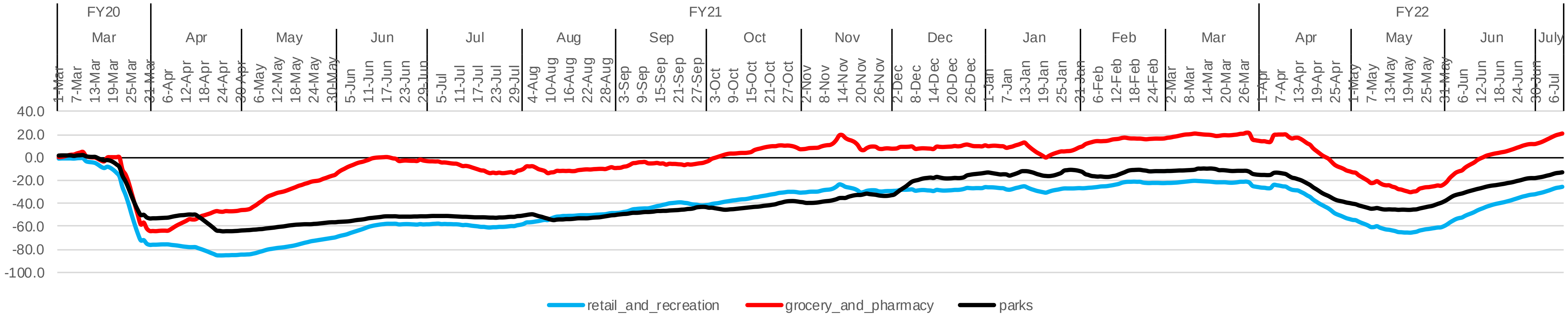
Total CVI

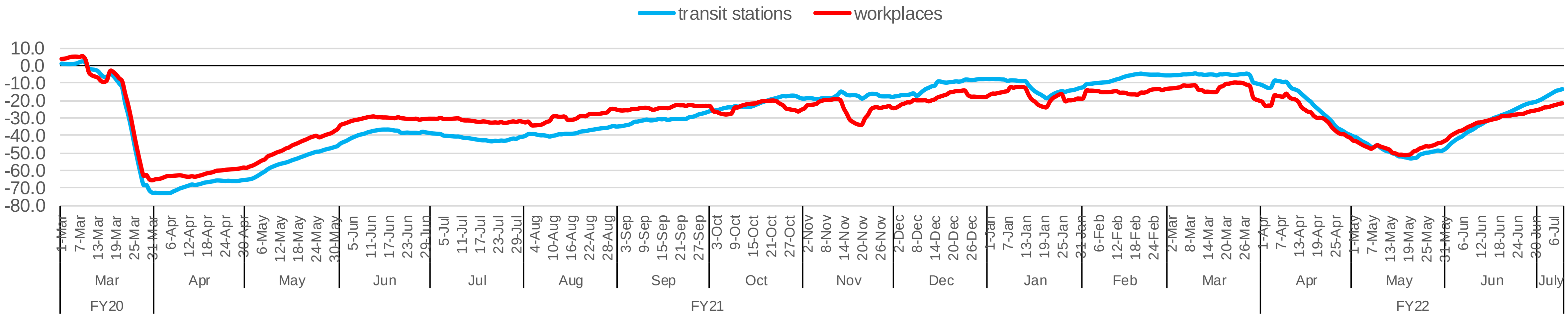
Normal monsoon expectation to aid good kharif production in FY22 as well

Timely payments from government and private agencies for rabi crops has further improved sentiments

On ground sentiments

Mobility indicators-segmental



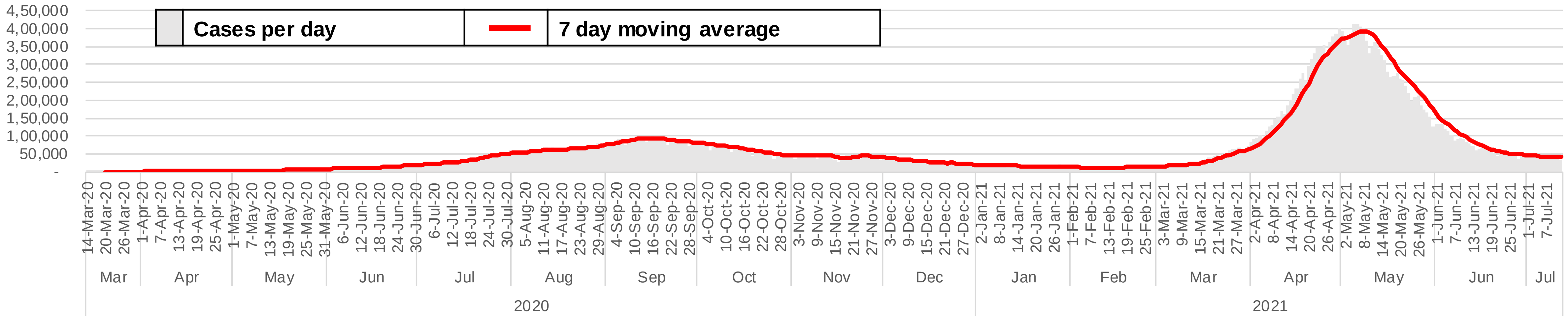


Source: CRISIL Research, Covid-19 Community Mobility Reports by Google,

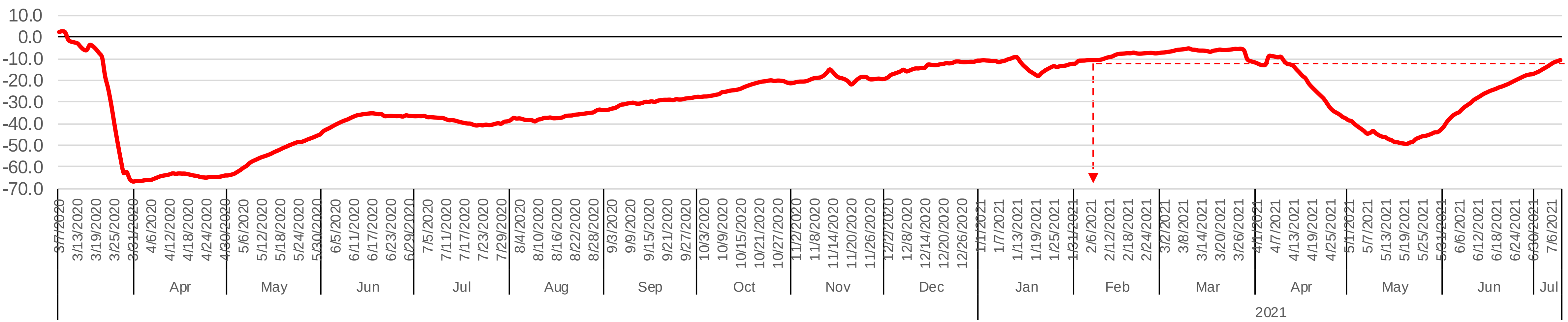
Note: Data is 7 day Moving Average data. Google's Community Mobility Reports use smartphone location data to publish reports about people's movement in an area.

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)



Source: Google mobility trends,Covid19India.org,CRISIL Research

High frequency parameters seeing growth on a very low base of last year

Segments	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
Core Sectors																											
Coal	3%	2%	3%	-2%	-9%	-20%	-18%	-4%	6%	8%	11%	4%	-15%	-14%	-16%	-6%	4%	21%	12%	3%	2%	-2%	-4%	0%	9%	7%	
Crude Oil	-7%	-7%	-7%	-4%	-5%	-5%	-5%	-6%	-7%	-5%	-6%	-5%	-6%	-7%	-6%	-5%	-6%	-6%	-6%	-5%	-4%	-5%	-3%	-3%	-2%	-6%	
Natural Gas	-1%	0%	-2%	0%	-4%	-5%	-6%	-6%	-9%	-9%	-10%	-15%	-20%	-17%	-12%	-10%	-9%	-11%	-9%	-9%	-7%	-2%	-1%	12%	25%	20%	
Petroleum Refinery Products	4%	-2%	-9%	-1%	3%	-7%	0%	3%	3%	2%	7%	0%	-24%	-21%	-9%	-14%	-19%	-9%	-17%	-5%	-3%	-3%	-11%	-1%	31%	15%	
Fertilizers	-4%	-1%	2%	2%	3%	5%	12%	14%	10%	0%	3%	-12%	-4%	7%	4%	7%	7%	0%	6%	2%	-3%	3%	-4%	-7%	4%	-10%	
Steel	13%	13%	11%	8%	4%	-1%	0%	7%	9%	2%	3%	-22%	-83%	-40%	-23%	-6%	-2%	3%	-3%	-4%	3%	3%	-2%	27%	473%	59%	
Cement	2%	3%	-2%	8%	-5%	-2%	-8%	4%	5%	5%	8%	-25%	-85%	-21%	-7%	-13%	-15%	-4%	3%	-7%	-7%	-6%	-5%	33%	583%	8%	
Electricity	6%	7%	9%	5%	-1%	-3%	-12%	-5%	0%	3%	12%	-8%	-23%	-15%	-10%	-2%	-2%	5%	10%	2%	5%	5%	0%	22%	39%	7%	
Auto-offtake																											
Two Wheelers	-16%	-7%	-12%	-17%	-22%	-22%	-14%	-14%	-17%	-16%	-20%	-40%	-100%	-84%	-39%	-15%	3%	12%	17%	13%	7%	7%	10%	73%	NM	26%	3%
Cars	-20%	-26%	-24%	-36%	-42%	-33%	-6%	-11%	-8%	-8%	-9%	-53%	-100%	-88%	-59%	-18%	11%	55%	39%	-14%	13%	-7%	-1%	108%	NM	113%	118%
Uvs + Vans	-11%	-10%	-4%	-21%	-8%	-4%	13%	20%	12%	-3%	-6%	-49%	-100%	-76%	-43%	1%	26%	38%	39%	3%	23%	25%	33%	153%	NM	118%	
Three Wheelers	-7%	-6%	-9%	-11%	-8%	0%	-4%	4%	22%	13%	-31%	-58%	-100%	-95%	-80%	-77%	-75%	-72%	-5%	-22%	-6%	-6%	-3%	16%	NM	-49%	-9%
Auto-Vaahan																											
2W	-6%	-8%	-4%	0%	-2%	-7%	12%	8%	-13%	-4%	8%	36%	-76%	-89%	-40%	-36%	-27%	-13%	-25%	-19%	12%	-7%	-16%	-35%	171%	155%	18%
Cars+Uvs	1%	0%	-5%	-4%	-10%	-10%	23%	10%	-3%	6%	8%	-5%	-91%	-86%	-37%	-23%	-4%	10%	-6%	7%	24%	-2%	13%	34%	913%	171%	43%
Others																											
PMI Manufacturing	51.8	52.7	52.1	52.5	51.4	51.4	50.6	51.2	52.7	55.3	54.5	51.8	27.4	30.8	47.2	46	52	56.8	58.9	56.3	56.4	57.7	57.5	55.4	55.5	50.8	48.1
IIP Overall	3%	5%	1%	5%	-1%	-4%	-4%	2%	0%	2%	5%	-19%	-57%	-33%	-17%	-11%	-7%	1%	5%	-2%	2%	-1%	-3%	24%	134%	29%	
Diesel consumption	2%	3%	1%	3%	-1%	-3%	-7%	9%	0%	-2%	6%	-24%	-56%	-29%	-15%	-19%	-21%	-6%	8%	-7%	-2%	-2%	-8%	28%	106%	1%	-1%
Rail freight (NTKM)	2%	1%	0%	-1%	-9%	-11%	-11%	-3%	0%	-3%	4%	-19%	-40%	-28%	-12%	-8%	1%	18%	11%	8%	14%	11%	8%	33%	87%	56%	27%
Bitumen consumption	0%	1%	-2%	42%	10%	-13%	-18%	18%	2%	6%	23%	-30%	-73%	-19%	37%	-4%	39%	38%	49%	18%	21%	-3%	-10%	45%	253%	185%	
Total credit	0%	1%	-2%	42%	10%	-13%	-18%	18%	2%	6%	23%	-30%	-73%	-19%	37%	-4%	39%	38%	49%	18%	21%	-3%	-10%	45%	253%	185%	
Industry credit	7%	6%	6%	6%	4%	3%	3%	2%	2%	2%	1%	1%	2%	2%	2%	1%	0%	0%	-2%	-1%	-1%	-1%	0%	0%			
-Micro and Small	1%	1%	1%	1%	-2%	-1%	-1%	0%	0%	1%	0%	2%	-2%	-3%	-4%	-2%	-1%	0%	1%	0%	1%	1%	2%	1%			
-Medium	3%	3%	2%	2%	-1%	0%	1%	-2%	2%	3%	4%	-1%	-6%	-5%	-9%	-3%	3%	14%	17%	21%	15%	19%	21%	29%			
-Large	8%	7%	8%	7%	5%	3%	4%	3%	2%	3%	1%	1%	3%	3%	4%	1%	1%	-1%	-3%	-2%	-2%	-3%	-2%	-1%			

Research

Source: CSO, RBI and CRISIL estimates

Note - (based on MOSPI classification)*

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Indian automobile industry

Assumptions

- **Infrastructure activities** to continue with its pace and improve gradually
- **Normal and well distributed monsoon in 2021**
- **Crude oil prices** are expected to average **$63-68** per barrel in CY 2021. **Retail fuel prices** to remain elevated above Rs. 100, expected to constraint demand.
- **Rising commodity prices to remain a key monitorable**. Further hike in vehicle prices going ahead.
- **Financing scenario to remain accommodative; barring MSME and commercial segment**
- No additional **stimulus from the Government** considered

Case 1 – Covid situation to be under control, economy gradually picking up, supply issue to normalise
Economic situation to gradually improve
Fewer fatalities as compared to covid wave-2
Further lockdowns not expected to have substantial impact either on demand or on supply front
Pending bookings to be served in Q2 and Q3 of FY22
Supply issue to ease out gradually

Case 2 – Unfavourable impact due to covid wave-3
Wave-3 to impact India in August 2021
Fresh lockdowns to be induced, impacting sentiments as well as supply chain in Q2 of FY22
Economy to remain subdued till Q3 of FY22. Lower demand due to higher practice of WFH.
Supply issue to persist in Q2 of FY22
Hit on income, leading to negative consumer sentiments.

Annual Forecast – Domestic (Base case)

	Volume				Growth y-o-y (%)			
	FY19	FY20	FY21	FY22E	FY19	FY20	FY21	FY22E
Passenger vehicles ('000)	3,377	2,773	2,712	3,285-3305	3%	(18)%	(2)%	20-22%
Two-wheelers (mn)	21.18	17.42	15.12	16.1-16.3	5%	(18)%	(13)%	6-8%
Commercial vehicles ('000)	1,007	718	566	685-695	18%	(29)%	(21)%	21-23%
Three-wheelers ('000)	701	636	216	233-235	10%	(9)%	(66)%	7-9%
Tractors ('000)	787	709	898	955-965	8%	(10)%	26.6%	6-7%

SOURCE: SIAM, CRISIL Research

Quarterly forecasts – Domestic (Base case)

Vehicle segment	Subsegment	Volume				YoY growth (%)			
		Q1 FY 22	Q2 FY 22 E	Q3 FY 22 E	Q4 FY 22 E	Q1 FY 22	Q2 FY 22 E	Q3 FY 22 E	Q4 FY 22 E
Passenger vehicles	Cars (‘000)	337	420-430	465-475	475-485	321	0-2	(11)-(9)	(8)-(6)
	UVs & vans (‘000)	308	387-397	430-440	440-450	319	30-32	15-17	5-7
	PVs (‘000)	**645**	**700-710**	**870-880**	**910-920**	**320**	**12-14**	**0-2**	**(2)-0)**
Two-wheelers	Motorcycles (mn)	1.74	2.76-2.81	3.32-3.37	3.15-3.2	93	(12)-(10)	5-7	12-14
	Scooters (mn)	0.59	1.13-1.18	1.39-1.44	1.4-1.45	75	(15)-(13)	(2)-0	2-4
	Mopeds (‘000)	69	133-138	180-185	183-188	28	(33)-(31)	(15)-(13)	18-20
	2W (mn)	**2.4**	**4.05-4.1**	**4.91-4.96**	**4.76-4.81**	**86**	**(14)-(12)**	**2-4**	**9-11**
Commercial vehicles	SCV (‘000)	68.9	106-108	114-116	123-125	172	8-10	(11)-(9)	8-10
	ULCV (‘000)	3.3	7-8	10-11	11-12	189	6-8	(4)-(2)	3-5
	MHCV (‘000)	28.0	51-52	58-60	76-78	582	115-117	17-19	0-2
	Buses (‘000)	4.5	5.2-5.4	5.8-6.0	10-10.4	312	30-32	42-44	27-29
	CVs (‘000)	**104.4**	**170-172**	**189-192**	**221-224**	**231**	**28-32**	**(2)-0**	**6-8**
Tractors (‘000)		**229**	**248-253**	**256-261**	**223-227**	**39**	**5-7**	**(1)-1**	**(6)-(4)**
Three-wheelers	Goods (‘000)	8.6	20.8-21.3	26.3-26.8	32-32.5	48	6-8	(7)-(5)	13-15
	Passenger (‘000)	15.8	28.8-29.3	43.7-44.2	56.6-57.1	128	10-12	0-2	(2)-0
	3W (‘000)	**24.4**	**49.8-50.3**	**70.3-70.8**	**89-89.5**	**91**	**8-10**	**(3)-(1)**	**3-5**

SOURCE: SIAM, CRISIL Research

Annual Forecast – Domestic (Pessimistic Case)

	Volume				Growth y-o-y (%)			
	FY19	FY20	FY21	FY22E	FY19	FY20	FY21	FY22E
Passenger vehicles ('000)	3,377	2,773	2,712	3,125-3,145	3%	(18)%	(2)%	15-17%
Two-wheelers (mn)	21.18	17.42	15.12	14.4-14.6	5%	(18)%	(13)%	(5)-(3)%
Commercial vehicles ('000)	1,007	718	566	595-605	18%	(29)%	(21)%	5-7%
Three-wheelers ('000)	701	636	216	160-164	10%	(9)%	(66)%	(27)-(25)%
Tractors ('000)	787	709	898	935-945	8%	(10)%	26.6%	4-5%

SOURCE: SIAM, CRISIL Research

Quarterly forecasts – Domestic (Pessimistic case)

Vehicle segment	Subsegment	Volume				YoY growth (%)			
		Q1 FY 22	Q2 FY 22 E	Q3 FY 22 E	Q4 FY 22 E	Q1 FY 22	Q2 FY 22 E	Q3 FY 22 E	Q4 FY 22 E
Passenger vehicles	Cars (‘000)	337	360-370	455-465	475-485	321	(16)-(14)	(13)-(11)	(7)-(5)
	UVs & vans (‘000)	308	335-345	410-420	425-435	319	12-14	9-11	2-4
	PVs (‘000)	**645**	**700-710**	**870-880**	**910-920**	**320**	**(4)-(2)**	**(4)-(2)**	**(3)-(1)**
Two-wheelers	Motorcycles (mn)	1.74	2.13-2.18	3.12-3.17	3.29-3.34	93	(32)-(30)	(1)-1	16-18
	Scooters (mn)	0.59	0.7-0.75	1.12-1.17	1.23-1.28	75	(47)-(45)	(20)-(18)	(10)-(8)
	Mopeds (‘000)	69	90-95	132-137	135-140	28	(54)-(52)	(37)-(35)	(12)-(10)
	2W (mn)	**2.4**	**2.97-3.05**	**4.41-4.45**	**4.69-4.74**	**86**	**(37)-(35)**	**(8)-(6)**	**9-11**
Commercial vehicles	SCV (‘000)	68.9	73-75	100-103	107-109	172	(26)-(24)	(22)-(20)	(5)-(3)
	ULCV (‘000)	3.3	4.2-4.4	7-7.2	9.3-9.6	189	(38)-(36)	(35)-(33)	(16)-(14)
	MHCV (‘000)	28.0	31.8-32.3	50.9-51.9	67.8-69.3	582	33-35	2-4	(11)-(9)
	Buses (‘000)	4.5	5.1-5.2	6.0-6.1	7.6-7.8	312	28-30	46-48	(4)-(2)
	CVs (‘000)	**104.4**	**114.2-116.9**	**164.5-168.4**	**192-196**	**231**	**(14)-(12)**	**(15)-(13)**	**(8)-(6)**
Tractors (‘000)		**229**	**232-237**	**256-261**	**220-224**	**39**	**(2)-0**	**(1)-1**	**(8)-(6)**
Three-wheelers	Goods (‘000)	8.6	9.5-10	18.5-19	24.2-24.7	48	(51)-(49)	(34)-(32)	(15)-(13)
	Passenger (‘000)	15.8	18.8-19.3	25.3-25.8	38-38.5	128	(29)-(27)	(43)-(41)	(34)-(32)
	3W (‘000)	**24.4**	**28.5-29**	**44-44.5**	**62.5-63**	**91**	**(38)-(36)**	**(39)-(37)**	**(28)-(26)**

SOURCE: SIAM, CRISIL Research

Annual forecasts – Exports

Vehicle segment	Subsegment	Volume				YoY growth (%)			
		FY 19	FY 20	FY 21	FY22E	FY 19	FY 20	FY 21	FY22E
Passenger vehicles	Cars ('000)	514	475	262	330-340	(11)	(7)	(45)	27-29
	UVs & vans ('000)	162	186	138	170-175	(4)	15	(26)	24-26
	PVs ('000)	**676**	**662**	**400**	**500-520**	**(10)**	**(2)**	**(40)**	**26-28**
Two-wheelers	Motorcycles (mn)	2.87	3.14	3.03	3.35-3.45	15	9	(3)	11-13
	Scooters (mn)	0.40	0.37	0.23	0.25-0.35	27	(7)	(37)	34-36
	Mopeds ('000)	17	14	8.3	13-18	(4)	(17)	(40)	80-85
	2W (mn)	**3.28**	**3.52**	**3.28**	**3.6-3.8**	17	7	**(7)**	**13-15**
Commercial vehicles	LCV ('000)	47.2	33.9	31.1	43-45	(3)	(28)	(8)	39-41
	MHCV ('000)	40.4	14.9	13.5	20-22	27	(63)	(9)	48-50
	Buses ('000)	12.4	11.9	5.7	7-9	(24)	(3)	(52)	46-48
	CVs ('000)	**99.9**	**60.7**	**50.3**	**71-73**	**3**	**(39)**	**(17)**	**43-45**
Tractors ('000)		**92**	**76**	**88.6**	**90-92**	**7**	**(17)**	**17**	**3-4**
Three-wheelers	Goods ('000)	6.2	6.3	5.6	7.5-8	47	2	(12)	39-41
	Passenger ('000)	561.5	495.9	387.4	520-525	49	(12)	(22)	34-36
	3W ('000)	**567.7**	**502.2**	**392.9**	**525-535**	**49**	**(12)**	**(22)**	**34-36**

Note: We have assumed the Covid situation to gradually normalize going ahead, and we expect no further sizeable global resurgence of Covid cases
Source: SIAM, CRISIL Research

Domestic PV industry continues to grapple for stock

Vehicle segment	Normal inventory in days	Current inventory levels*	Inventory Units	Reasons
Passenger Vehicles	25-30	15-20	120-150 thousand	High retail traction, new launches, slower production amid Covid restrictions have kept the inventory levels low . Industry continues to face chip shortage.
Two Wheelers	30-35	35-40	1.5-2 million	Some pick up in demand in June, very less inventory build up during May, slowdown in production kept the dealer inventory at normal level
Commercial Vehicles	25-35	~43	80-85 thousand	Inventory levels higher than normal inventory largely due to covid induced lockdown and subdued demand. Some OEM's still facing supply issues on specific segments
Tractors	30-35	~40	90-95 thousand	Inventory levels, have increased in Q1 due to the expected price rise in July. Moreover, considering sudden uncertainty in the market due to covid and lockdowns, dealers are willing to stock up ahead of festive season. Demand continues to be high for higher HP tractors.
Three-wheeler	20-25	40-45	~25-30 thousand	Retail demand has nosedived and dealers are left with enough stock to last more than a month for this meagre retail demand

NOTE: Inventory level as on end of June 2021, Inventory units have been calculated using last 12 months sales*

Source: Industry, CRISIL Research

Passenger vehicles

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Strong booking pipeline, new launches, continued need for personal vehicles to support industry revival in FY22

Variables	FY18	FY19	FY20	FY21	FY22 E
Income for discretionary spending	F	F	NF	NF	F

Variables	FY18	FY19	FY20	FY21	FY22 E
Cost of ownership	F	NF	N	N	N
Petrol / CNG Vehicles	F	NF	N	N	NF
Diesel vehicles	F	NF	N	NF	N
Interest rates	F	N	N	F	N

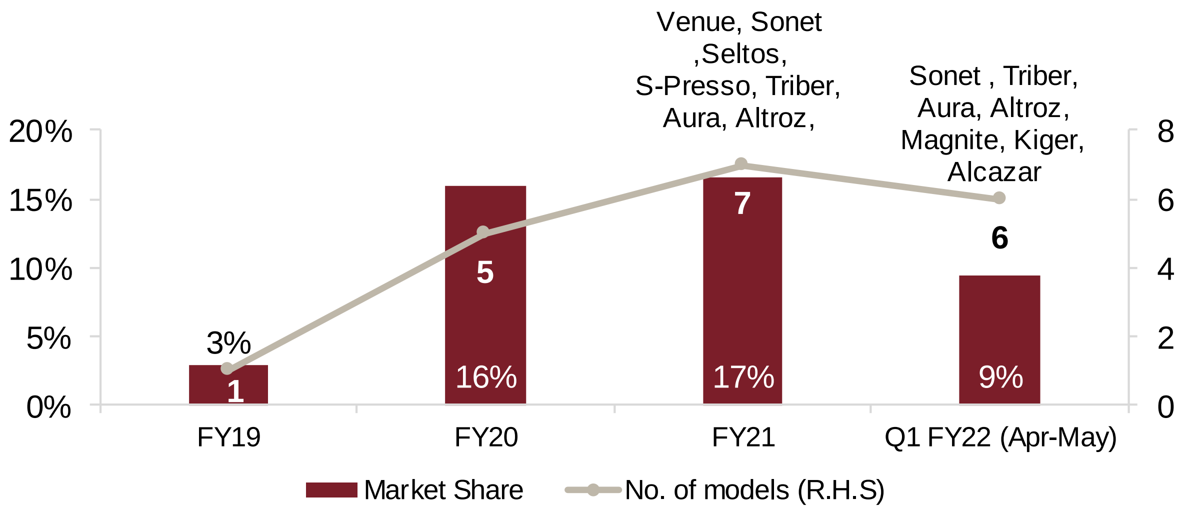
Variables	FY18	FY19	FY20	FY21	FY22 E
New model/ facelift launches	N	NF	F	N	F
Regulations – passenger vehicles	F	N	NF	N	N
Impact on Overall Sales Growth	**F**	**N**	**NF**	**NF**	**F**

E: Estimated

SOURCE: Industry, CRISIL Research

Higher launches in the UV segment to aid its faster growth

New launches provide the much needed kicker



Note: Vehicle is considered newly launched for 18 months,;Model wise data not available for June 2021
Source: Industry, CRISIL Research

- With shortening replacement cycles, new launches provide an additional booster to the demand
- Even a face lift can provide the necessary thrust
- In FY21, recent launches contributed ~17% to the industry sales
- With a strong pipeline, we expect UV segment to get benefited in FY22

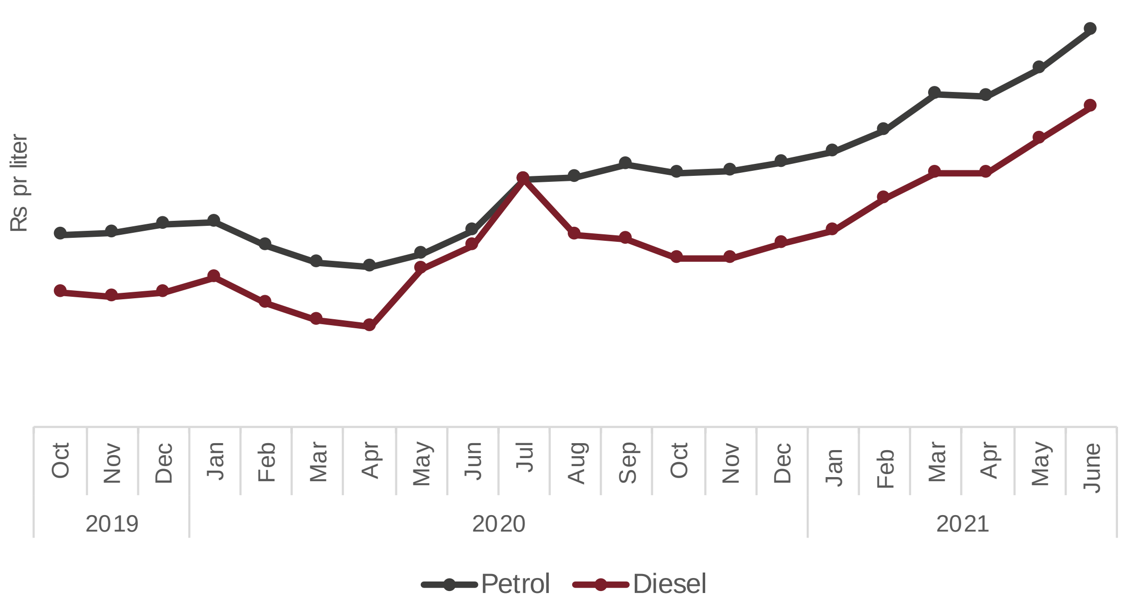
Major upcoming launches

Company	Model	Segment
Maruti Suzuki	Jimny	UV
	Celerio facelift	Small Car
Citroen	C5	UV
Mahindra	XUV 700	UV
	TUV3OO facelift	UV
Tata	HBX	UV
	Hexa facelift	UV
Hyundai	Sonata facelift	Large Car
MG	Hector facelift	UV
Kia	Xceed	UV
Toyota	C-HR	UV
Volkswagen	Vento facelift	Large car

Source: Industry, CRISIL Research

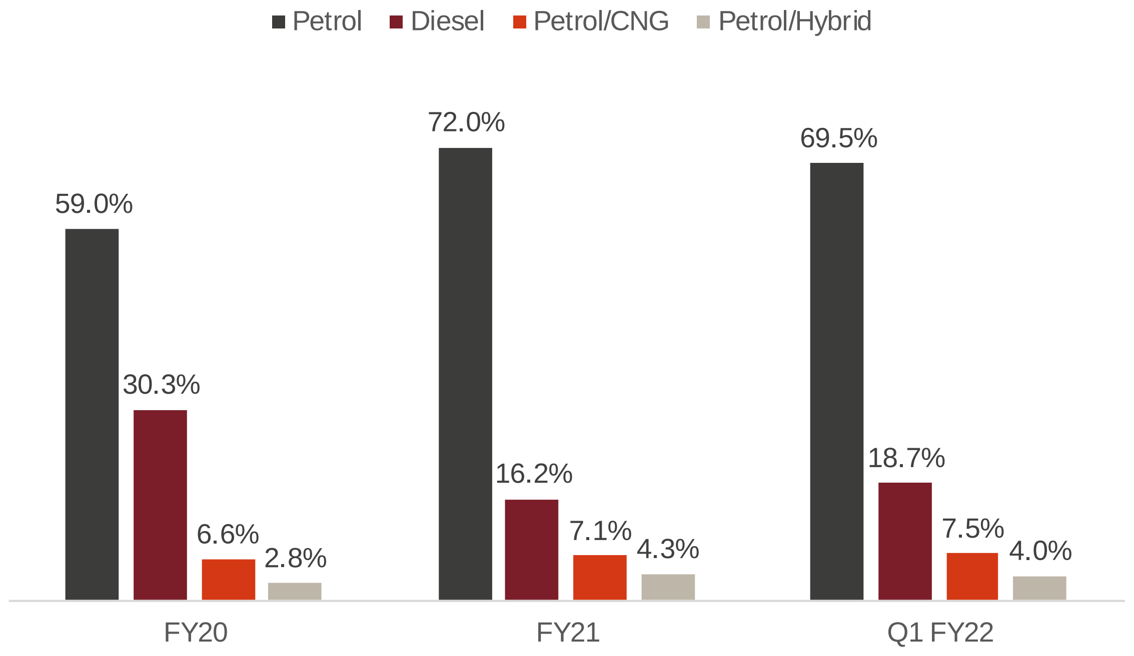
Rising fuel prices have accelerated shift towards alternate fuel variants

Fuel Prices



Source: Industry, CRISIL Research

Rise in petrol & CNG variants post BS-VI



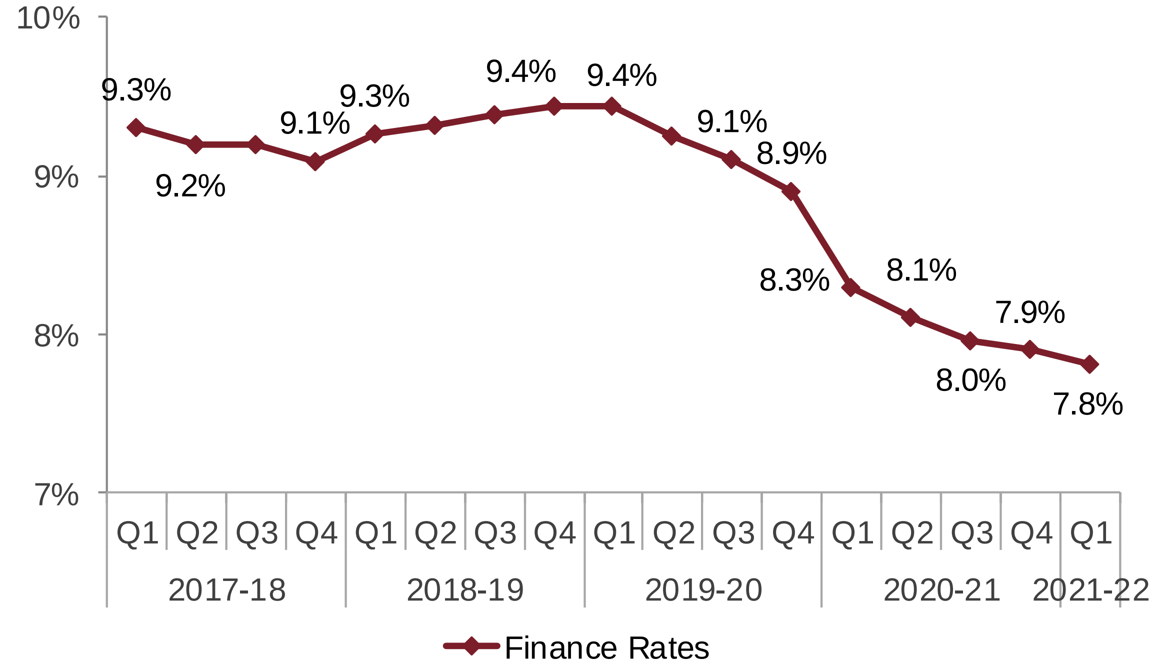
Source: Industry, MoRTH, CRISIL Research

- Ever increasing fuel prices have shot up the operating cost of passenger vehicles; crossing Rs 100 barrier has impacted consumer sentiments especially towards petrol vehicles
- In lieu of this, share of CNG vehicles has been on the rise, We expect the shift towards CNG vehicles to continue going forward
- During FY 21, with shortening price differential between diesel & petrol, increased diesel vehicle costs for BSVi, consumers moved away from diesel vehicles
- However, the steep rise in petrol costs has pushed customers towards diesel segment again during Q1FY22
- Primary diesel vehicle consumers, the commercial segment sales contracted significantly in FY21 amidst the pandemic concerns

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

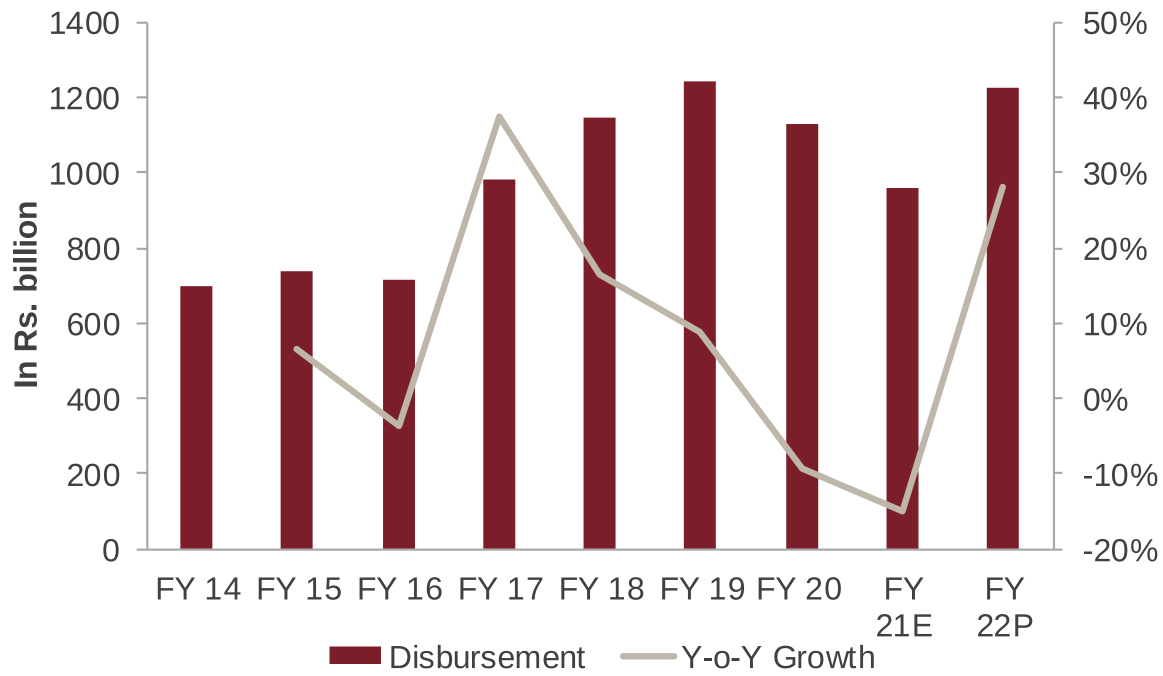
Revival in demand, increased vehicle prices to boost disbursements in FY22

Interest rates



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

Disbursement

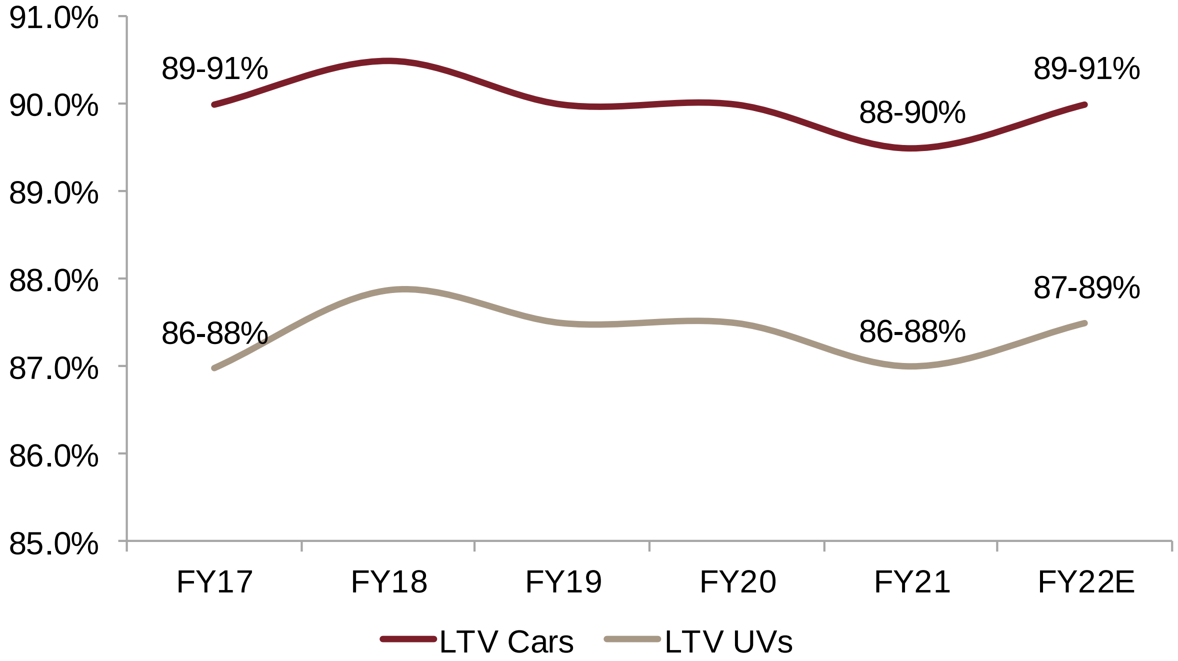


Source: Company Reports, CRISIL Research

- Higher reduction in interest rates (~70-90 bps) have been witnessed in PVs segment as income sentiments have not been as severely impacted for the buyer segment of these vehicles as compared to other vehicle segments, Interest rates have been sliding
- Continued y-o-y drop in underlying vehicle demand exerted pressure on disbursement levels in FY21
- In FY22, supported by the estimated pick up (20-22%) in PV demand, as well as the increased vehicle prices to support disbursements growth albeit on a lower base

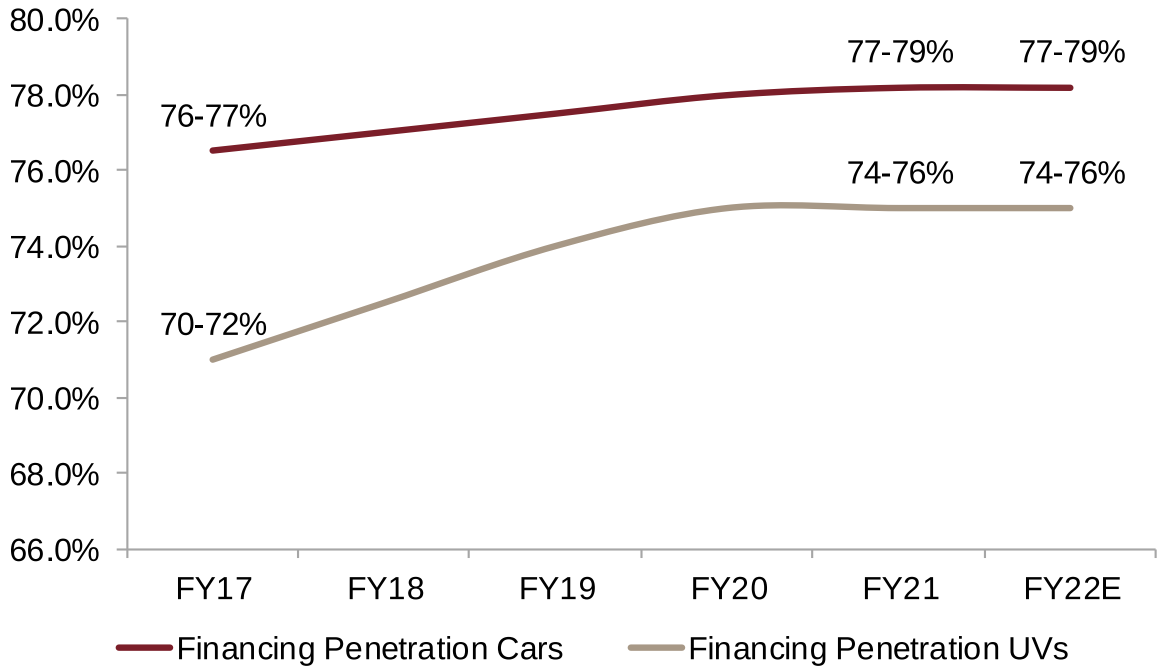
LTV to reach pre Covid levels in FY22

Loan-to-value (LTV) for PV



Source: Industry, CRISIL Research

Financing penetration

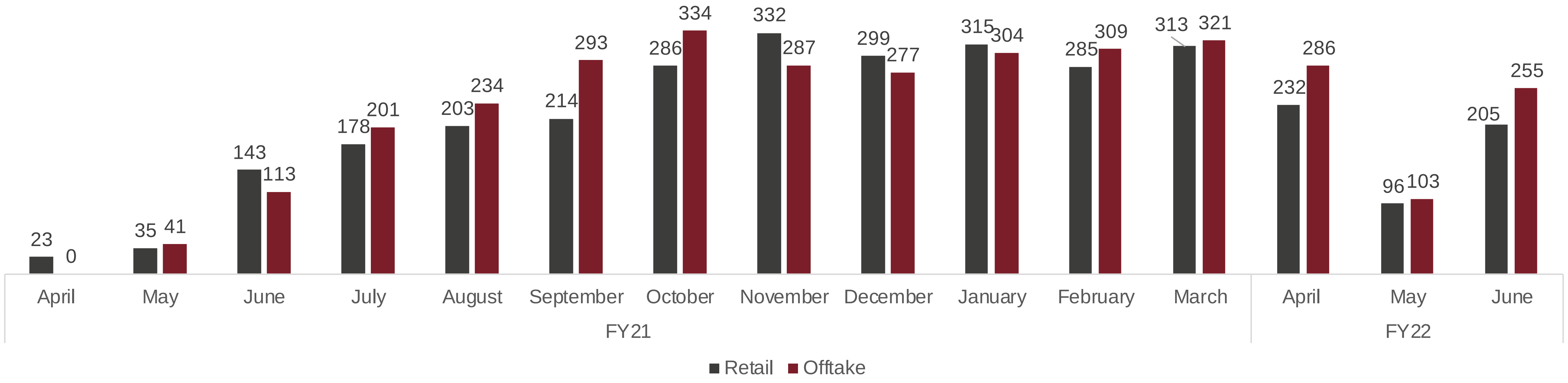


Source: Industry, CRISIL Research

- Typical PV customers have healthy financial profile, hence despite the economic impact of pandemic there was no sizeable impact on either LTVs on penetration during FY21
- Some improvement in expected in LTVs in FY 22 backed by estimated improvement in incomes, as well as pick up in disbursements
- Finance penetration is expected to remain range bound

Some improvement in offtake during June

Retail vs off-take FY21

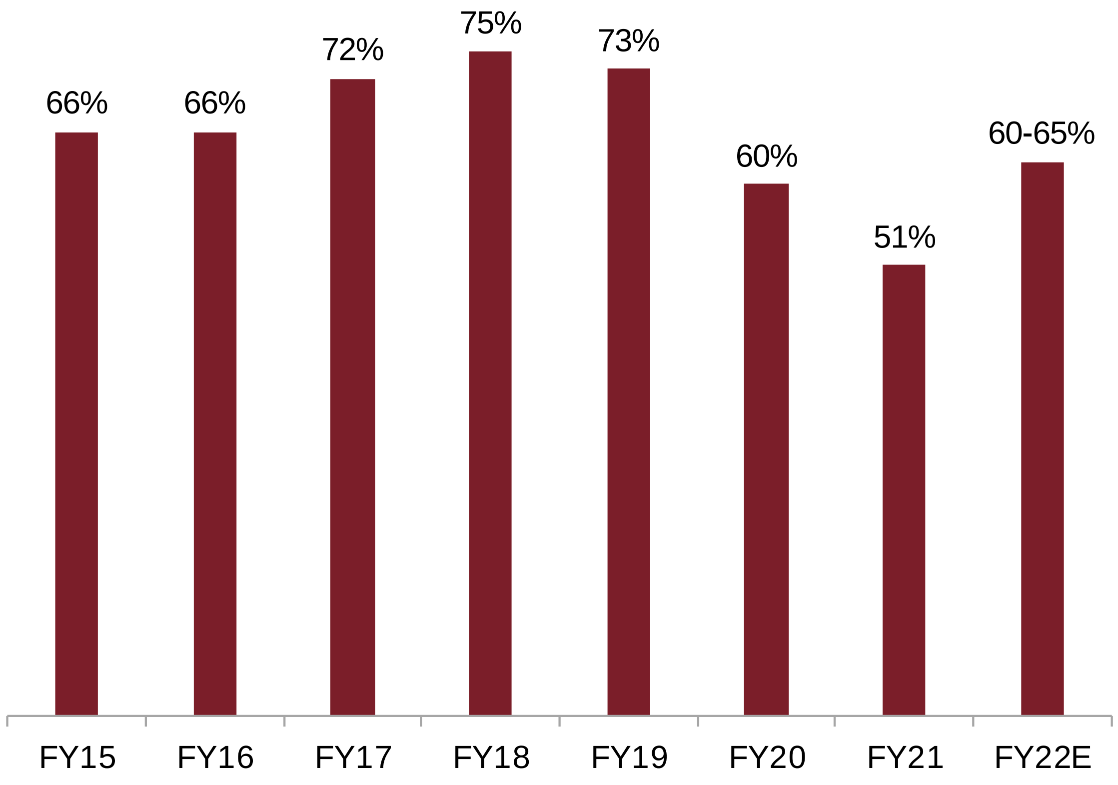


Note: Retail numbers are estimated, Offtake numbers include Tata Motors sales
Source – MoRTH, SIAM, CRISIL Research

- Since the festive season of FY21, retail sales have been in line with the offtake numbers
- There was some improvement in offtake during the Q1 FY22 boosting dealer inventory, continued restrictions in few states like Kerala, WB limited the retail demand growth
- Moreover, amidst the restricted RTO operations, a retail demand witnessed some spillover to July
- Dealer stock levels continue to remain below normal; currently at 15-20 days
- Popular models like Creta, Magnite, Ertiga continue to command high waiting periods

Marginal improvement in utilization during Q1 FY 22, annual utilization to cross FY levels during FY 22

High utilization levels to continue in FY22



Source: SIAM, CRISIL Research

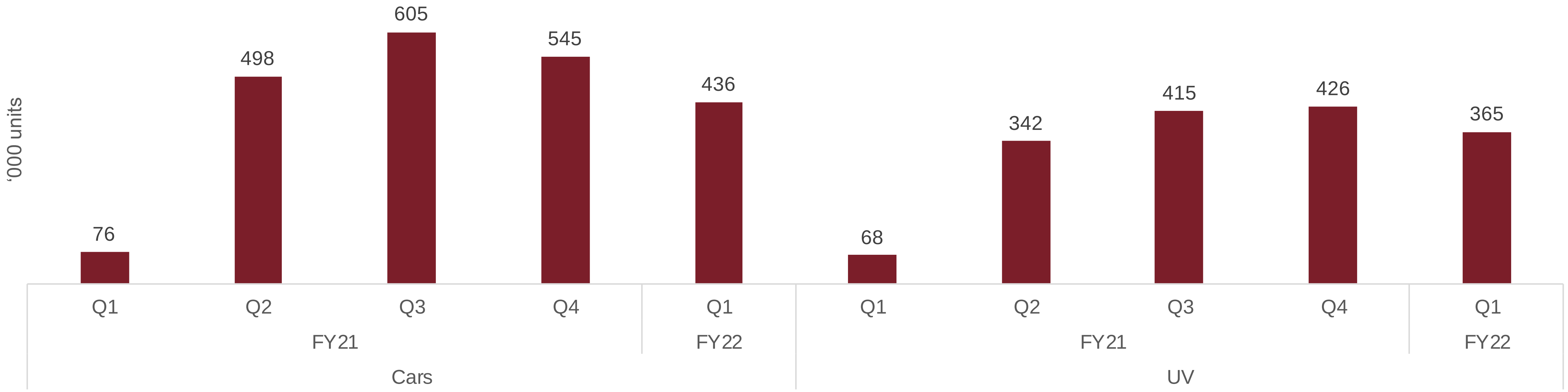
Player-wise capacity utilisation

Player	Effective Capacity (in '000) (on 31st Mar 2021)	Production (FY21) (in '000)	Capacity utilization FY21	Capacity utilization Q1 FY22
Maruti	2,050	1410	69%	70%
Hyundai	763	568	74%	75%
Tata Motors	564	222	39%	50%
Ford India	440	89	20%	19%
Renault-Nissan	480	144	30%	33%
General Motors	165	28	17%	-
Toyota	310	54	17%	11%
Honda	180	56	31%	42%
Volkswagen	179	51	28%	41%
Kia Motors	300	193	64%	71%
Industry Total	**6015**	**3062**	**51%**	**53%**

Source: SIAM, CRISIL Research

Production suffered again in Q1 FY22

Quarterly production trend



Source: SIAM, CRISIL Research

- Amidst the Covid wave 2& the induced lockdowns, production contracted in Q1FY22
- Q-o-Q drop in production was slightly higher for cars , as OEMs continued to focus on high demand UV segment
- This further boosted share of UVs in total production; from 44% in FY21 to 46% in Q1 FY22
- Revival in production is expected from Q2 , in line with the estimated demand growth and Covid situation normalizing
- Resurgence of Covid in the form of third wave will derail the estimated growth and remains a key monitorable

Domestic – annual forecast

		Passenger vehicles	Cars	UVs and vans
	FY 20 volumes	2,773	1,698	1,075
	YoY Growth in FY20	18%	23%	7%
	FY 21 volumes	2712	1542	1170
	YoY Growth in FY21	2%	9%	8%
Base case	FY 22E volumes	3,285-3,305	1,700-1,720	1,575-1,585
Base case	YoY Growth in FY22E	20-22%	10-12%	34-36%
Pessimistic Case	FY 22E volumes	3,125-3,145	1,485-1,505	1,335-1,345
Pessimistic Case	YoY Growth in FY22E	15-17%	6-8%	27-29%

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

Source – SIAM, CRISIL Research

Domestic – quarterly forecast (Base case)

Period		Passenger vehicles		Cars		UVs and vans	
		Volume (000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q1	154	(78)%	80	(82)%	74	(72)%
	Q2	692	12%	404	9%	288	15%
	Q3	897	14%	516	8%	381	24%
	Q4	934	43%	513	27%	420	67%
FY22 E	Q1	645	320%	337	321%	308	319%
	Q2	815-825	12-14%	420-430	0-2%	387-397	30-32%
	Q3	900-910	0-2%	465-475	(11)-(9)%	430-440	15-17%
	Q4	920-930	(2)-0%	475-485	(8)-(6)%	440-450	5-7%
FY23 P	Q1	775-785	20-22%	400-410	18-20%	370-380	21-23%

Source – SIAM, CRISIL Research

- From a high of Q4 FY21, sales contracted sharply (31% q-o-q) in Q1FY22 amidst the second wave and the subsequent restrictions
- Cars witnessed a higher drop of 34% while UVs contracted 26% q-o-q
- We expect sales to gradually normalize from Q2 backed by continued need for personal mobility, strong order pipeline, estimated improvement in economy & added push with new launches
- Festive demand is expected to provide additional kicker to Q3 demand
- UVs are expected to continue to outpace cars given the changing consumer preference towards UVs as well as the UV dominated new vehicle pipeline of OEMs
- Annual FY22 sales are expected to cross FY20 levels and reach near FY19 levels
- We have not considered the resurgence of Covid and renewed restrictions in the base case

Domestic – quarterly forecast (Pessimistic case)

Period		Passenger vehicles		Cars		UVs and vans	
		Volume (000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q1	154	(78)%	80	(82)%	74	(72)%
	Q2	692	12%	404	9%	288	15%
	Q3	897	14%	516	8%	381	24%
	Q4	934	43%	513	27%	420	67%
FY22 E	Q1	645	320%	337	321%	308	319%
	Q2	700-710	(4)-(2)%	360-370	(16)-(14)%	335-345	12-14%
	Q3	870-880	(4)-(2)%	455-465	(13)-(11)%	410-420	9-11%
	Q4	910-920	(3)-(1)%	475-485	(7)-(5)%	425-435	2-4%
FY23 P	Q1	770-780	19-21%	405-415	20-22%	360-370	17-19%

Source – SIAM, CRISIL Research

- In the pessimistic scenario, we have considered a third Covid wave in August with subsequent restrictions , Covis cases to gradually subside in September
- Due to the third wave, sales in Q2 are estimated to remain subdued and in line with Q1 numbers and demand to improve from Q3 FY22
- Pent up demand, estimated improvement in economy, booking pipeline, festive demand to support sales in the second half of FY22
- Increased requirement for personal mobility to provide additional push
- Some down treading is also expected providing a fillip to small cars, although UVs will continue to outpace cars

Stakeholder interactions

- Fuel prices crossing Rs 100 is a psychological barrier, this will give a boost to CNG cars (specially in lower segment).
- Demand is mainly seen due to higher savings of a particular segment of people, these are the typical PV buyers.
- If Covid wave-3 coincides with festive, then consumer sentiments will be negative, impacting the sale for the year.
- Practicality and need for personal mobility will top all other reasons to buy a car this year.
- Supply issue still exist like availability and high price of steel, shortage of semi conductors and particular types of polymers. However, the issue is getting normalised gradually.
- We are seeing gradual increase in enquiries from rural region post unlock, however momentum in booking will be seen with the start of the festive season.

Dealer

- Inventory of lower segment cars is ~20-30 days barring CNG variants. For others, waiting period starting from 3 weeks. CNG variants across OEMs and across models is facing supply issue.
- Inventory at the dealer end is in the range of 15-20 days.
- Postponement as well as cancellations of bookings have taken place due to uncertainty about income prospects, due to Covid cases in family etc
- CNG variants are in high demand for entry level cars and MPVs (Ertiga) especially on account of rising fuel prices.
- CNG supply will be made available from July onwards, most of the OEMs have not manufactured CNG models since oxygen was not available for industrial production due to supply being diverted for medical use.
- Demand from rural area is still low, since they are conservative buyers and car is not a need based purchase for them
- OE as well as dealer discounts are at normal level.

Financier

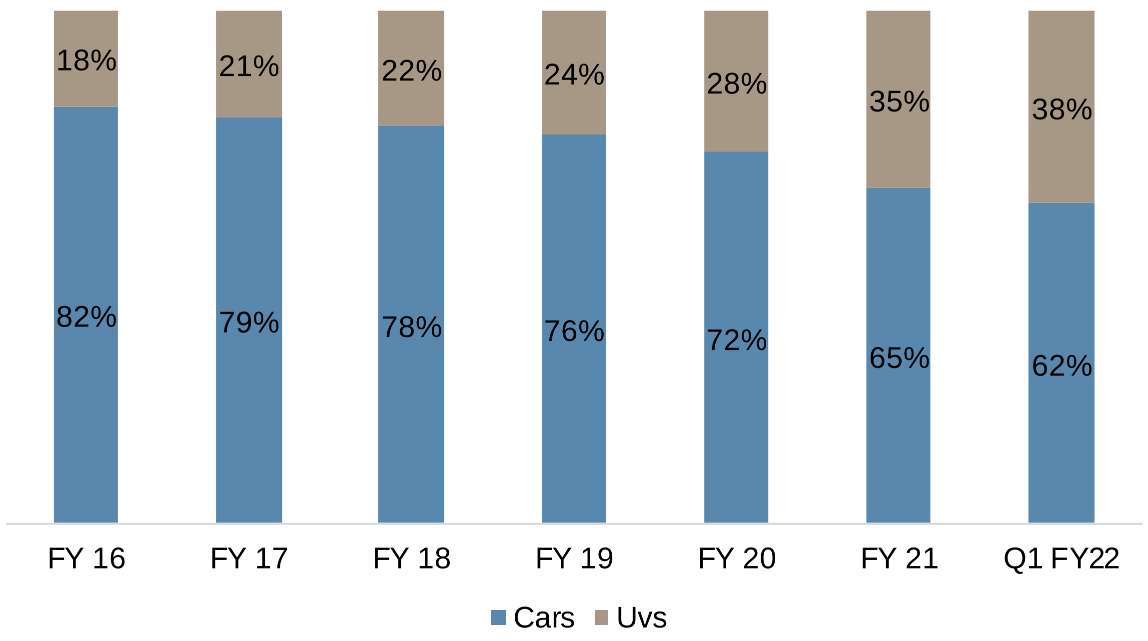
- There are cases of EMI bouncing, however the proportion is miniscule, not expected to translate to any change in financing for PV segment. However, small businesses have suffered a major blow during covid, of which few have translated to NPAs for key financiers especially the ones active in the MSME segment.
- Lenders have become more cautious about CIBIL score and the industry in which the car buyers works in. They are cautious in lending to airline or restaurant workforces.
- Most of the financiers are still not funding cab aggregators.
- Major demand will continue from the urban market. Rural will also continue with the momentum given good rainfall and higher cash availability from the rabi proceeds.

Source – Industry, CRISIL Research

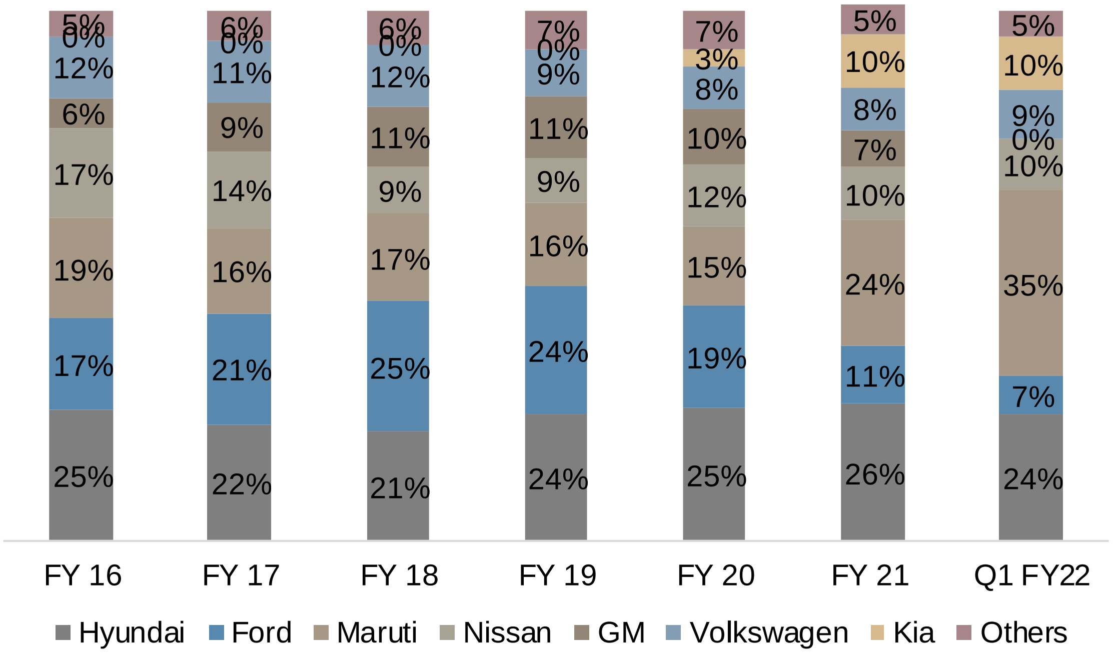
PV exports

UVs continue their forward march, Maruti expands its presence further

Share of UVs on a rising trend



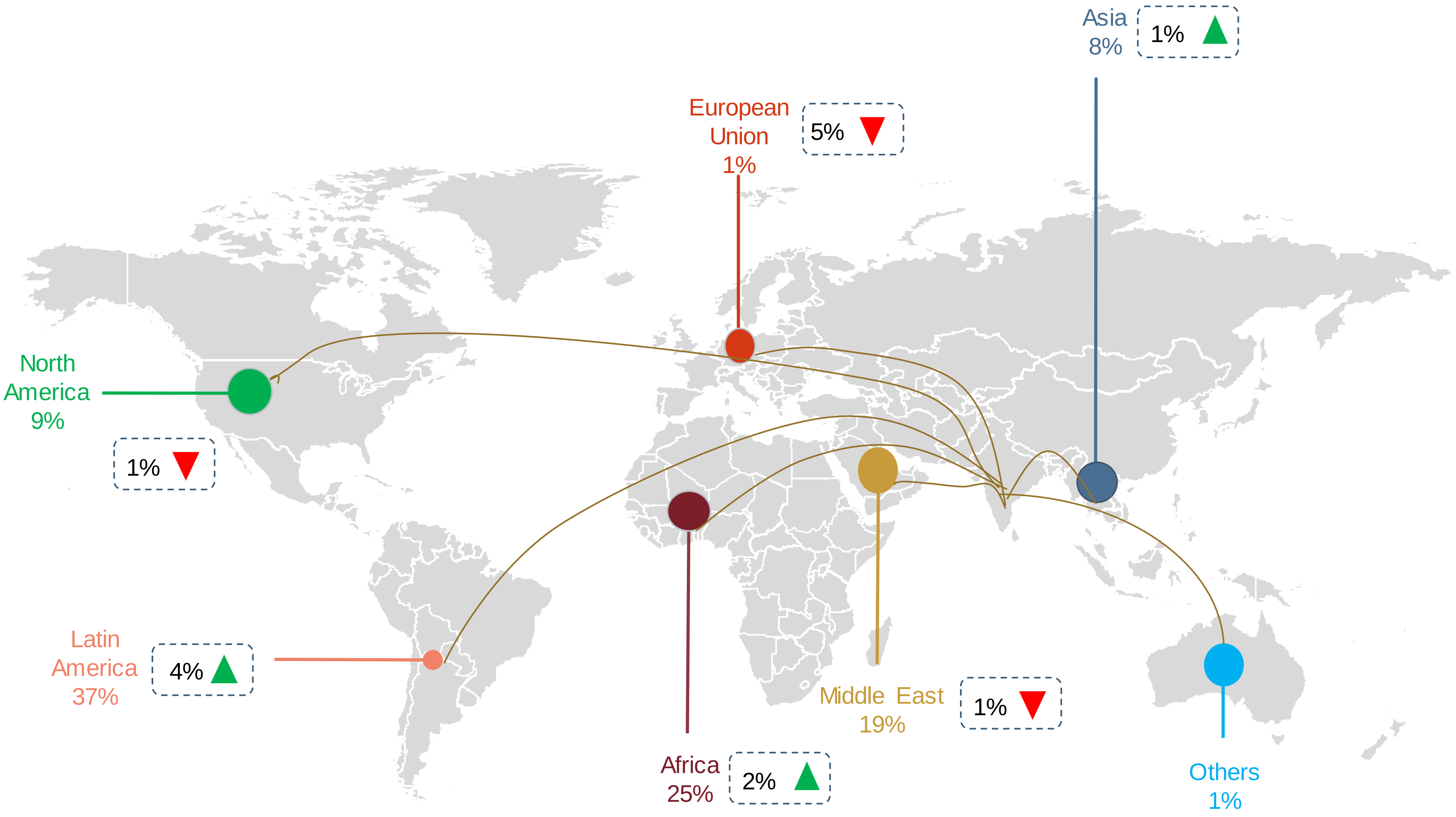
Hyundai tops the pole position, closely followed by MSIL



Source: SIAM, CRISIL Research

- Passenger vehicle exports registered a de-growth of 40% in FY21, after a significant drop in the first half, OEMs cut their losses in H2
- After q-o-q drop in Q4, exports witnessed growth in Q1 FY22
- UVs recorded 23% growth while cars clocked slower growth pace of 7% during the quarter
- Maruti, Hyundai, Nissan and recent entrant Kia continued to dominate the exports market
- Maruti has extended its presence from 24% in FY21 to 35% during Q1 FY22 backed by healthy rise in its Brezza exports

Passenger Vehicle Exports



- LATAM and Africa has aided the exports in FY21
- Preference towards Evs and stringent emission norms limited exports to EU
- Share of exports to North America sees marginal drop.
- Covid situation has improved across most geographies
- Pace of vaccination in developing countries remains a key monitorable
- Chip shortage continues to remain a hurdle for the industry
- Spread of Delta variant is a concern

Research

Note: Represents volume data for FY21 exports, % in dotted boxes indicates change in share from FY20 to FY 21

Source: DGFT, CRISIL Research

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Two-wheelers

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Gradual improvement expected in two wheeler industry

Variables	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 E
Income for discretionary spending	F	F	NF	NF	N

Variables	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 E
Cost of ownership	F	NF	N	NF	NF
Interest rates	F	N	N	F	N

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

Variables	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022 E
Regulations – 2 wheelers	F	NF	N	NF	N

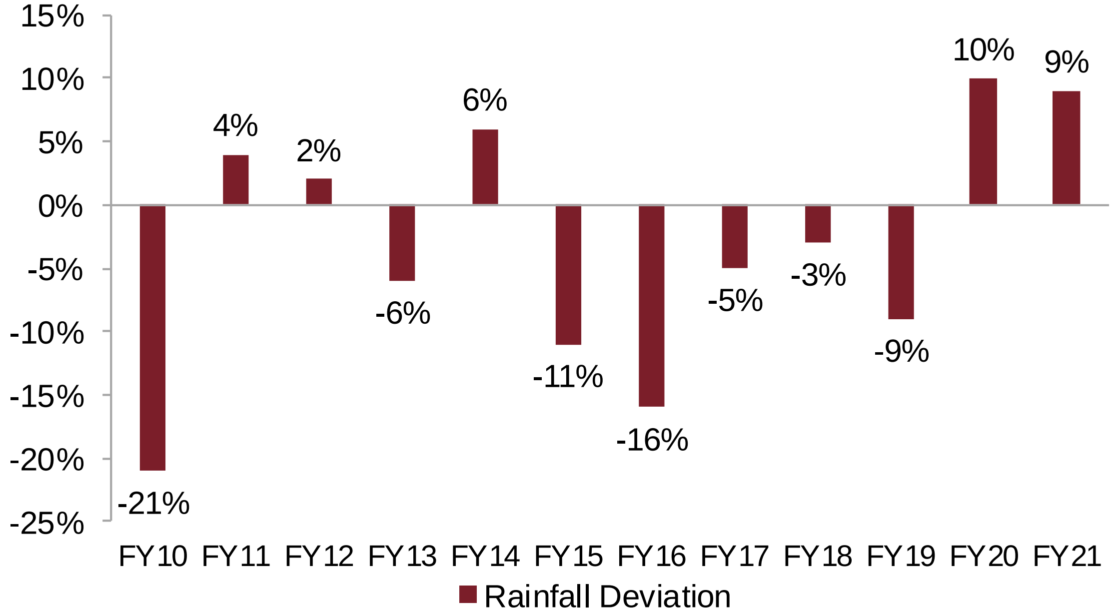
Impact on Overall Sales Growth	**F**	**N**	**NF**	**NF**	**N**

NF: Not Favorable, F: Favorable; N: Neutral

E: Estimates P: Projected

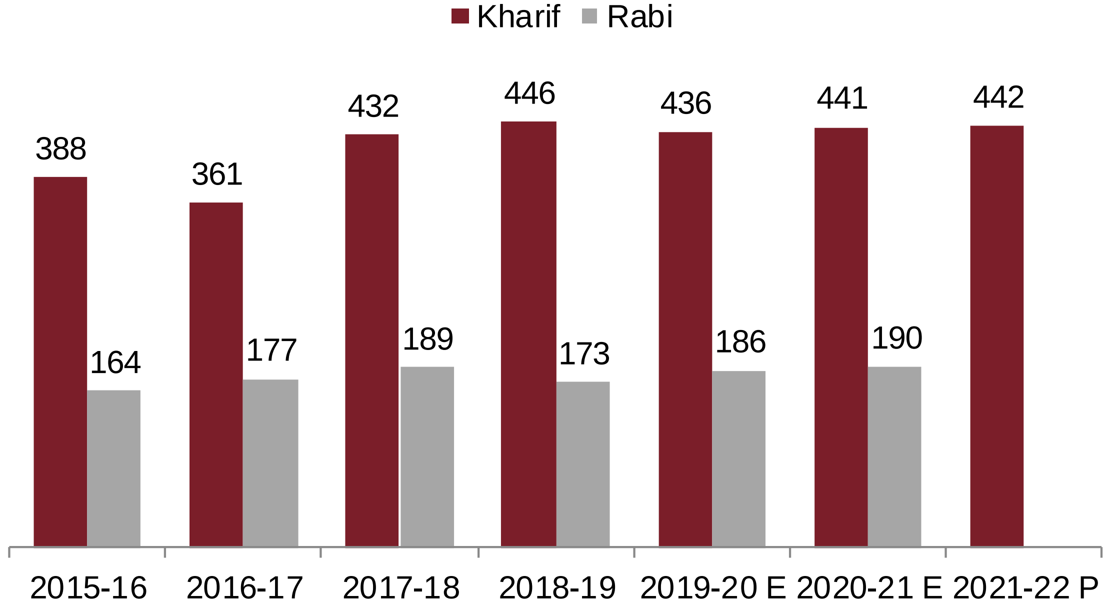
Normal monsoon to support rural incomes in FY22

FY22 – a normal monsoon year



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

Positive boost from high crop production

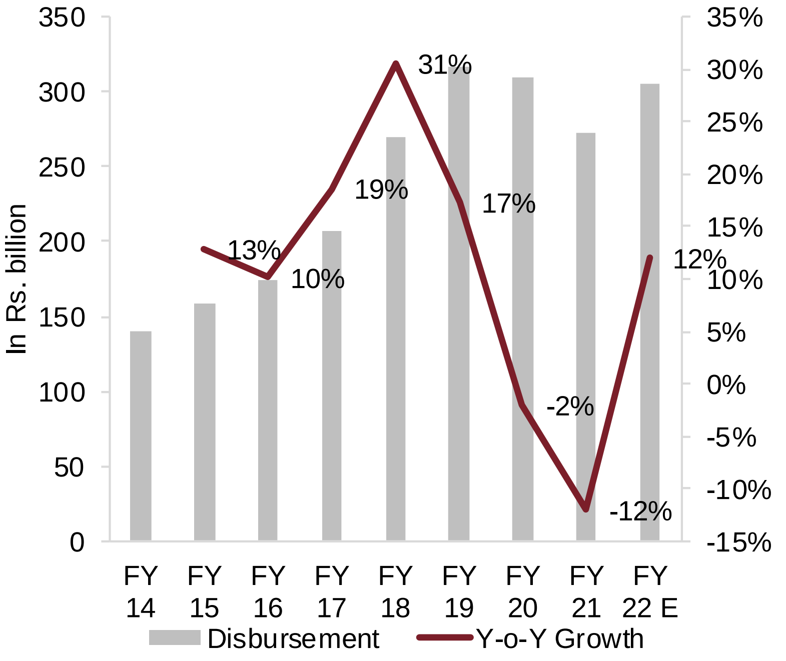


MY: Marketing year, P: Projected
Notes: 1) Base of 100 for Index (kharif and rabi) taken in MY Jan-Dec 2015
Source: Ministry of Agriculture, CRISIL Research

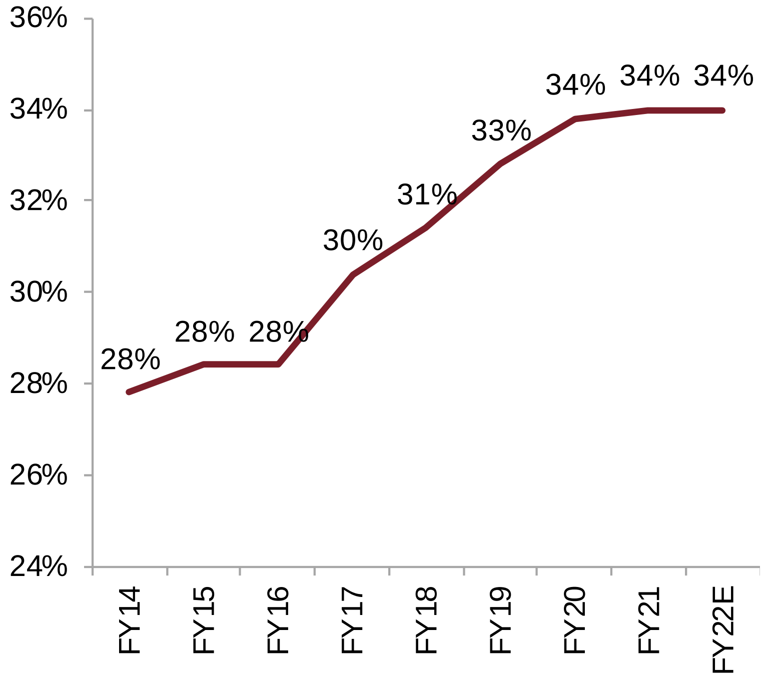
- Southwest monsoon over the country is expected to be normal. Rainfall is expected to pickup in second half of July.
- Normal monsoon expectation to aid good kharif production in FY22 as well.
- Timely payments from government and private agencies for kharif crop has further improved sentiments
- This is expected to provide an additional boost to rural demand

Disbursements to reach pre covid levels in FY22, finance penetration and LTV to remain range bound.

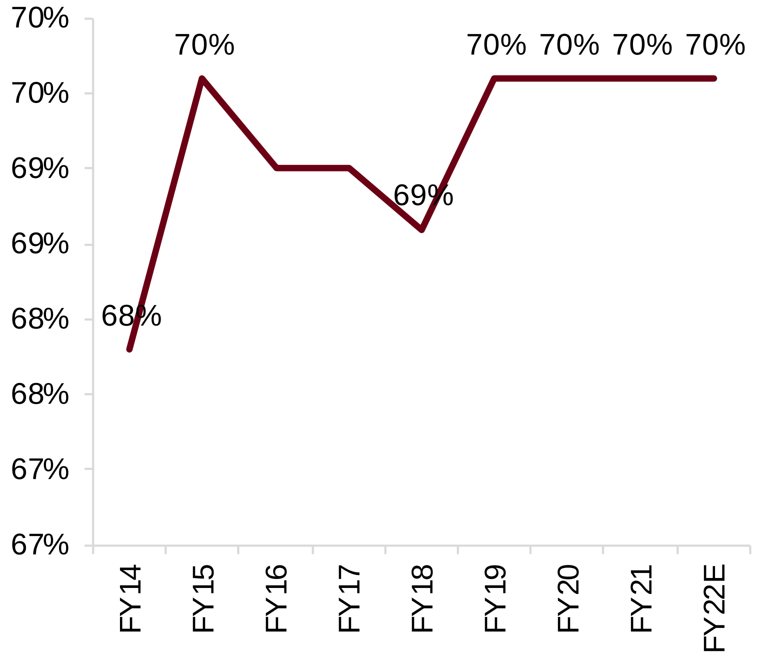
Disbursement



Auto finance penetration



Loan-to-value

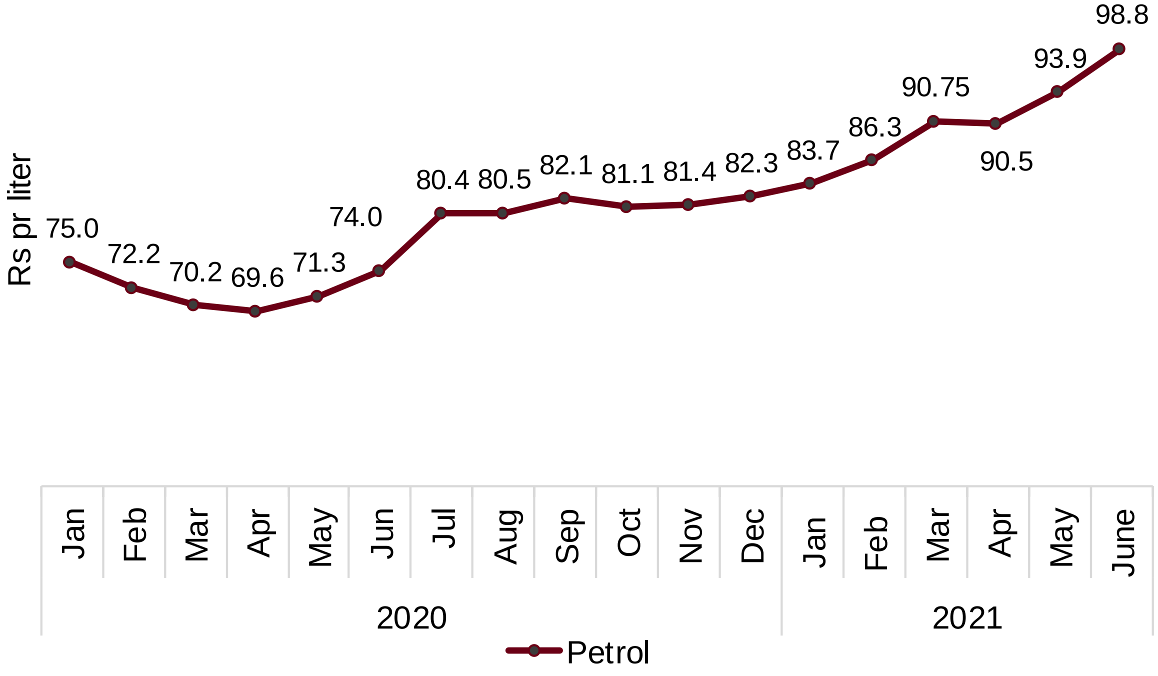


Source: Experian Credit Bureau, Company Reports, CRISIL Research

- Disbursements are expected to see an uptick in FY22, following a contraction in FY21 due to sluggish sales during the year
- Penetration levels are estimated to have remained more or less at year-ago levels in FY21. This was on account of financiers being apprehensive in providing loans in the initial months of the year. Lending was being provided to customers with stable income and good track record.
- In times of subdued demand sentiments, financiers kept the Loan to Value (LTV) at pre covid levels to push sales.

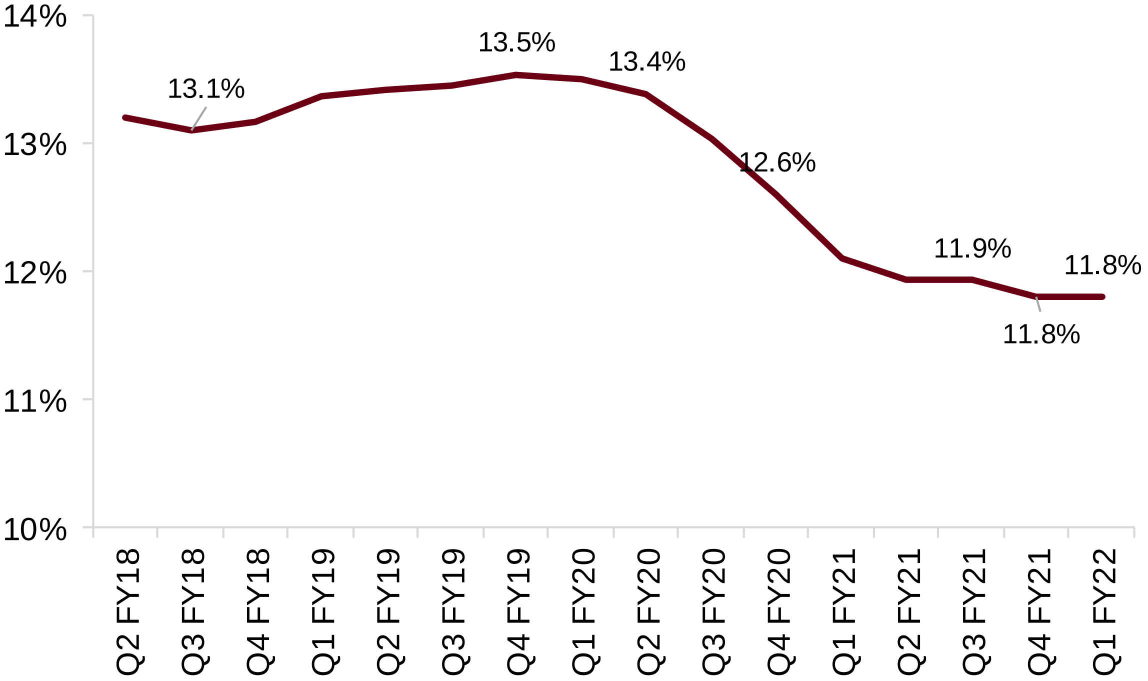
Rising fuel prices continue to impact already sluggish two wheeler sales

Petrol Prices



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

Interest Rates

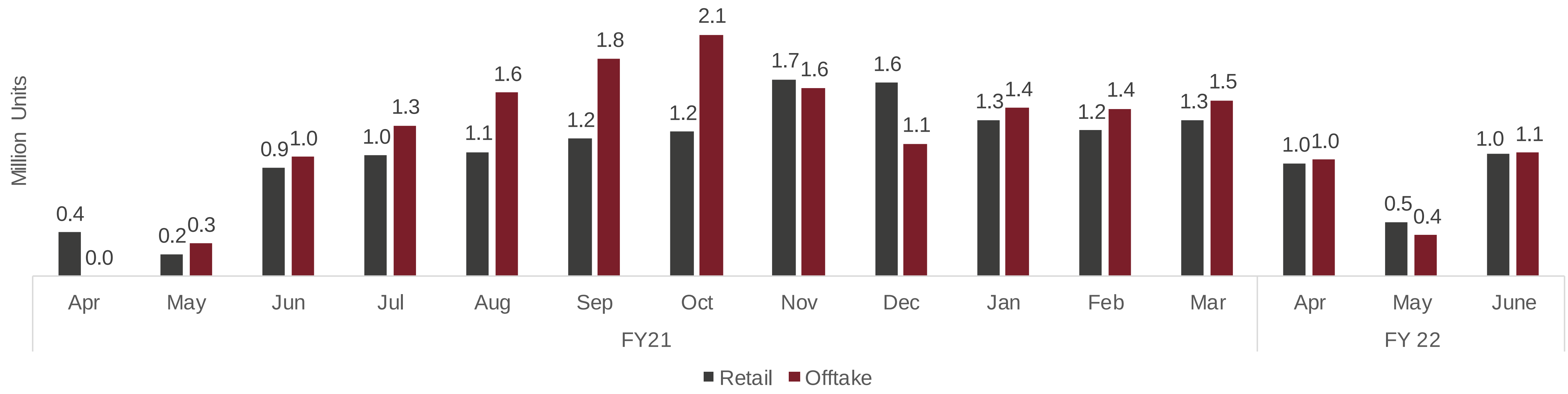


NOTE - Interest rates are an indicative rates charged by Banks
Source – CRISIL Research

- Fuel prices continued their upward march in June with petrol prices touching Rs 100
- Moreover, price hikes taken by OEMs in the current unlock phase has increased the cost of ownership for customers
- Interest rates continue to remain range bound

Offtake bounced back stronger to cross retail sales level in June

Retail vs off-take sales trend

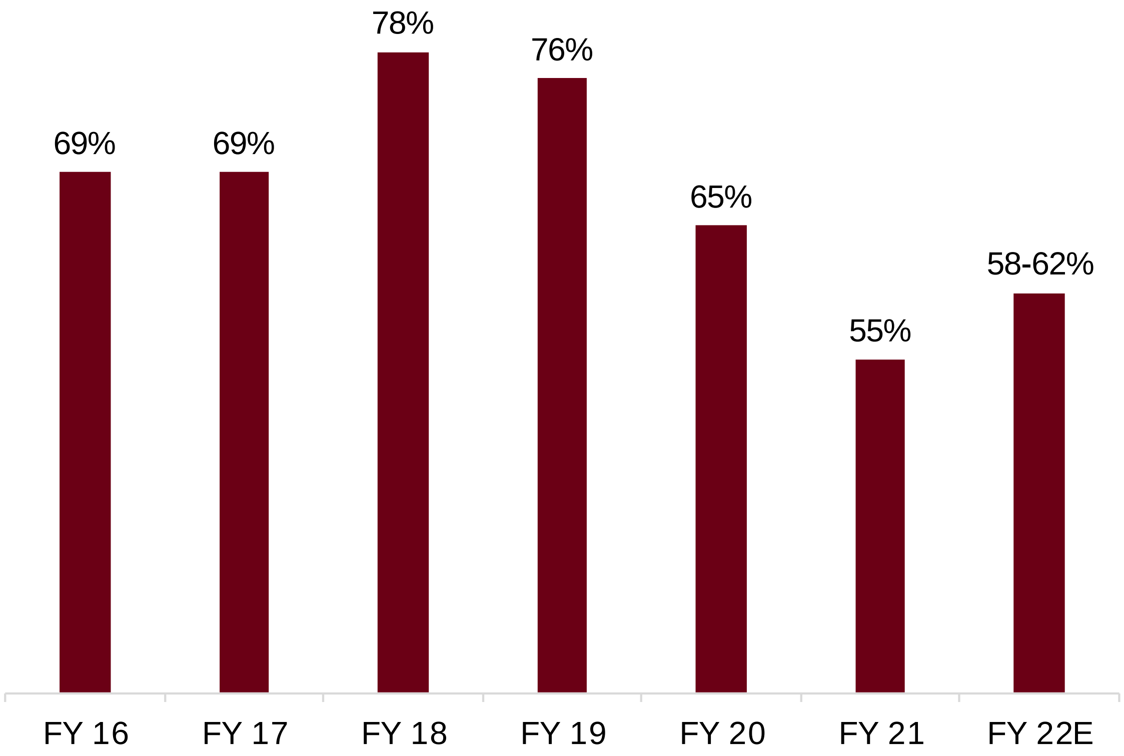


Note: Retail numbers are estimated
Source – MoRTH, SIAM, CRISIL Research

- Retail as well as offtake sales took a nosedive in May amidst wave 2 lockdowns
- With staggered unlock, sales picked up pace in June and reached April levels, offtake registered an accelerated pick up
- Currently dealers are holding 35-40 days inventory, slightly above the normal 35 day levels. Inventory levels are relatively higher in states with continued lockdown restrictions.
- Retail sales are expected to pick up in July August with normalizing market operations coupled with pent up demand

Utilization dropped further in Q1FY22, some improvement expected for the complete year

Utilisation rates to jump to pre-covid levels



SOURCE: Industry, SIAM, CRISIL Research

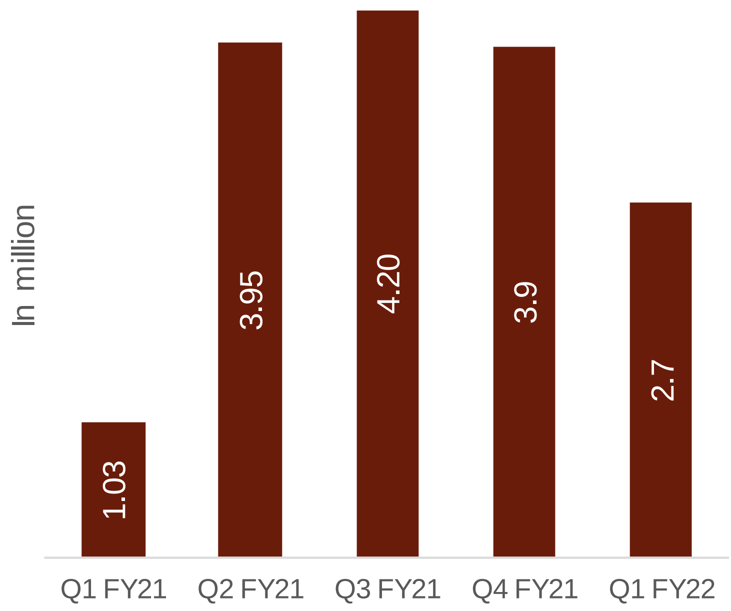
Utilisation levels improved sharply in H2 FY21

Player	Effective Capacity* in mn (as on 31st Mar 2021)	Production (in mn) FY21	Capacity utilization FY21	Capacity Utilization Q1 FY22
Hero Motocorp	11.0	5.8	53%	31%
Bajaj Auto	5.4	3.6	67%	76%
HMSI	7	3.9	56%	31%
TVS Motor Company	4.5	2.9	65%	56%
India Yamaha Motors	1.6	0.7	46%	33%
Suzuki Motors	1.1	0.6	55%	51%
Royal Enfield	0.95	0.6	66%	54%
Industry Total	**33.2**	**18.3**	**55%**	**42%**

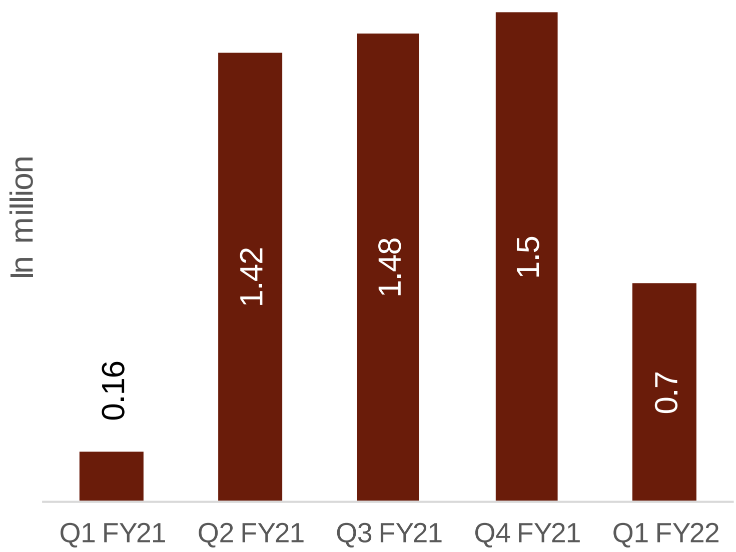
Capacity utilization estimates of Bajaj Auto and TVS Motor Co Ltd exclude three-wheelers

Spread of second wave of COVID impacted production in Q1FY22

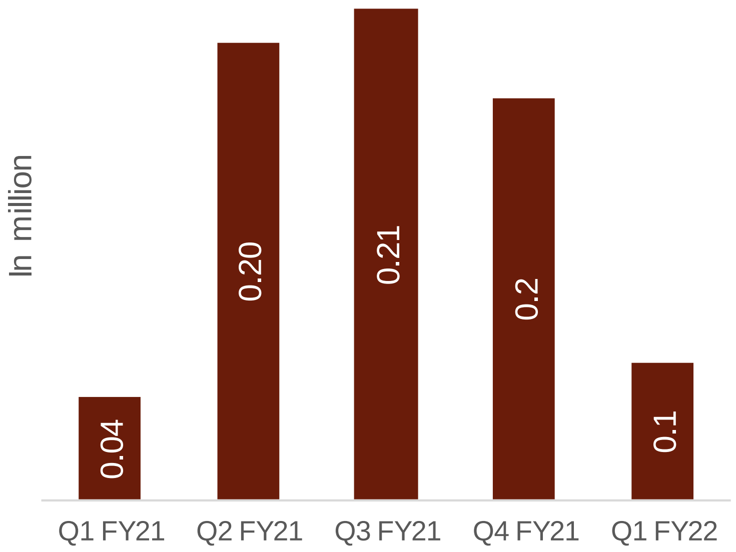
Motorcycles



Scooters



Mopeds



Source: SIAM, CRISIL Research

- During Q1 of FY22, production cycles of all OEMs was hampered severely owing to the imposition of Covid restrictions, unavailability of labour as they moved back to their hometown and supply chain disruptions.
- On a Q-o-Q basis, production of two wheelers across all segments has dropped
- On a lower base of last year and far more reaching impact of first covid wave, production improved on a y-o-y basis.

Domestic – annual forecast

		Two-wheelers	Motorcycles	Scooters	Mopeds
	FY 20 volumes	17.4	11.2	5.6	0.64
	YoY Growth in FY20	18%	18%	17%	28%
	FY 21 volumes	15.12	10.02	4.48	0.62
	YoY Growth in FY21	13%	11%	20%	3%
Base case	FY 22E volumes	16.1-16.3	10.9-11.1	4.48-4.68	0.56-0.58
	YoY Growth in FY22E	6-8%	9-11%	1-3%	(9)-(7)%
Pessimistic Case	FY 22E volumes	14.4-14.6	10.2-10.4	3.61-3.81	0.42-0.44
	YoY Growth in FY22E	(5)-(3)%	3-5%	(18)-(16)%	(31)-(29)%

NOTE: Volumes in million units;
YoY Growth in red indicates a negative growth
YoY Growth in green indicates a positive growth

Source – SIAM, CRISIL Research

Domestic – quarterly forecast (Base case)

Period		Two-wheeler		Motorcycles		Scooters		Mopeds	
		Volume (mn)	YoY Growth	Volume (mn)	YoY Growth	Volume (mn)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q2	4.72	1%	3.15	8%	1.38	(16)%	197	20%
	Q3	4.78	13%	3.15	16%	1.42	5%	211	29%
	Q4	4.37	25%	2.83	25%	1.38	25%	155	10%
FY22E	Q1	2.40	86%	1.74	93%	0.59	75%	69	28%
	Q2	4.05-4.10	(14)-(12)%	2.76-2.81	(12)-(10)%	1.13-1.18	(15)-(13)%	133-138	(33)-(31)%
	Q3	4.91-4.96	2-4%	3.32-3.37	5-7%	1.39-1.44	(2)-0%	180-185	(15)-(13)%
	Q4	4.76-4.81	9-11%	3.15-3.20	12-14%	1.40-1.45	2-4%	183-188	18-20%
FY23P	Q1	4.96-5.01	107-109%	3.31-3.36	91-93%	1.45-1.50	146-148%	185-190	170-172%

Source – SIAM, CRISIL Research

- After clocking some traction in Q3 and Q4, scooters segment registered a de-growth q-o-q basis in Q1FY22, Outbreak of second wave of COVID in the domestic market since March 2021 has hampered sales growth in Q1 FY22.
- Motorcycles demand also dropped (38% q-o-q) amidst rise in vehicle prices, increase in fuel prices.
- We expect gradual improvement in two wheeler sales going ahead with markets opening up, improvement in economic scenario and continued healthy rural incomes amidst normal monsoon in FY22
- Festive season is expected to provide a boost to the demand
- Reopening of schools/colleges as well as improvement in urban demand to revive scooter segment growth from Q3

Domestic – quarterly forecast (Pessimistic case)

Period		Two-wheeler		Motorcycles		Scooters		Mopeds	
		Volume (mn)	YoY Growth	Volume (mn)	YoY Growth	Volume (mn)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q2	4.72	1%	3.15	8%	1.38	(16)%	197	20%
	Q3	4.78	13%	3.15	16%	1.42	5%	211	29%
	Q4	4.37	25%	2.83	25%	1.38	25%	155	10%
FY22P	Q1	2.40	86%	1.74	93%	0.59	75%	69	28%
	Q2	2.97-3.02	(37)-(35)%	2.13-2.18	(32)-(30)%	0.70-0.75	(47)-(45)%	90-95	(54)-(52)%
	Q3	4.41-4.45	(8)-(6)%	3.12-3.17	(1)-1%	1.12-1.17	(20)-(18)%	132-137	(37)-(35)%
	Q4	4.69-4.74	9-11%	3.29-3.34	16-18%	1.23-1.28	(10)-(8)%	135-140	(12)-(10)%
FY23P	Q3	4.72-4.77	97-99%	3.35-3.40	93-95%	1.24-1.29	113-115%	108-113	59-61%

Source – SIAM, CRISIL Research

- Pessimistic assumptions across the two wheeler segments are considered taking into account the possibility of a third wave of covid19 infections hitting the country in August 2021.
- In this assessment we have considered peak of the second wave to come by mid August and Covid case declining in September 2021.
- Revival in sales growth will be postponed to Q3, when the educational institutions re-open, more people commute to office, and urban income sentiment to improve in the second half of the fiscal.
- Spread of COVID-19 cases in rural areas remains a key monitorable and can impact motorcycle sales.

Stakeholder interactions

OEM

- Rural demand saw quick revival post unlock, urban demand remains sluggish in July
- Favourable rural demand pushing motorcycle sales
- Economy and executive segments are more in demand
- Scooter segment still remains a worry, situation exacerbated by traction for EV scooters
- Reopening of schools/ colleges/ offices to provide a push to scooter sales
- Inventory build up for festive demand expected to push wholesale from October
- Another price hike is expected before the festive season
- Covid third wave remains a big concern

Dealer

- Retail demand was impacted due to second wave of COVID-19 in April and May as most of the dealerships remained closed.
- Scooter segment remains sluggish as most of the companies are still on work from home basis.
- However enquiry levels have improved on m-o-m basis in July.
- Motorcycle sales are expected to be good, on expectations of normal monsoon, leading to increased rural-income.
- Inventory levels are normal at 35-40 days
- No supply constraints being faced.
- Significant discounts are not being offered by any OEM
- Enquiries for EV on the rise

Financier

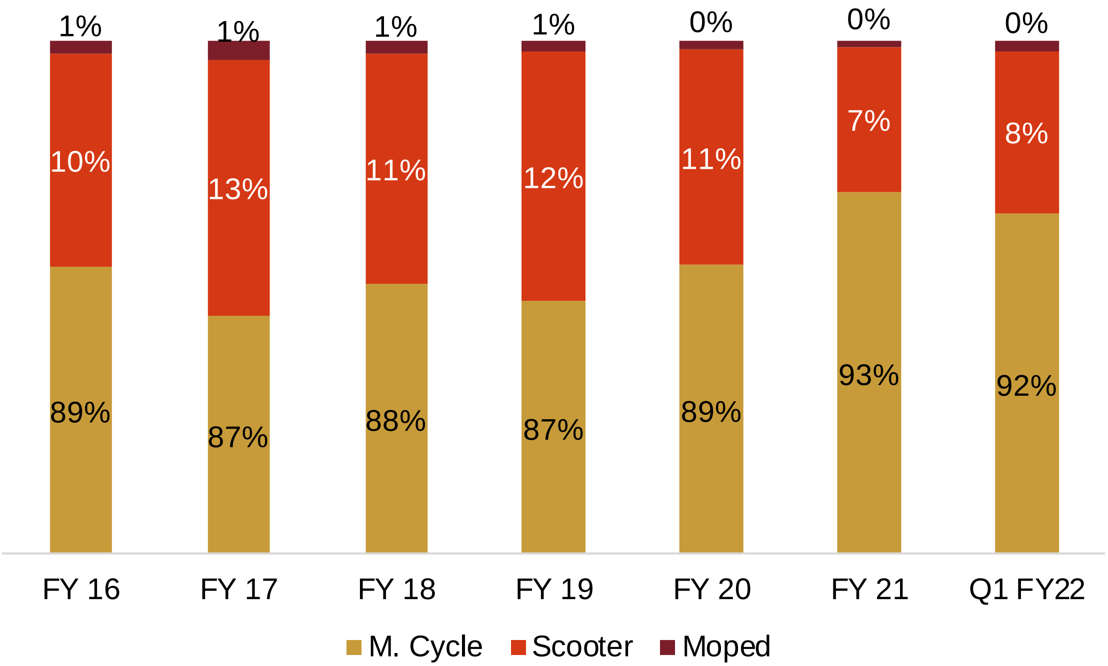
- No major change in the LTVs or interest rates was done during Q1
- Interest rates remain favourable
- Despite some improvement in June and July, financers remain cautious
- Gradual improvement in demand expected
- Disbursement for the year expected to revive from a low base with demand improvement as well as increase in vehicle prices

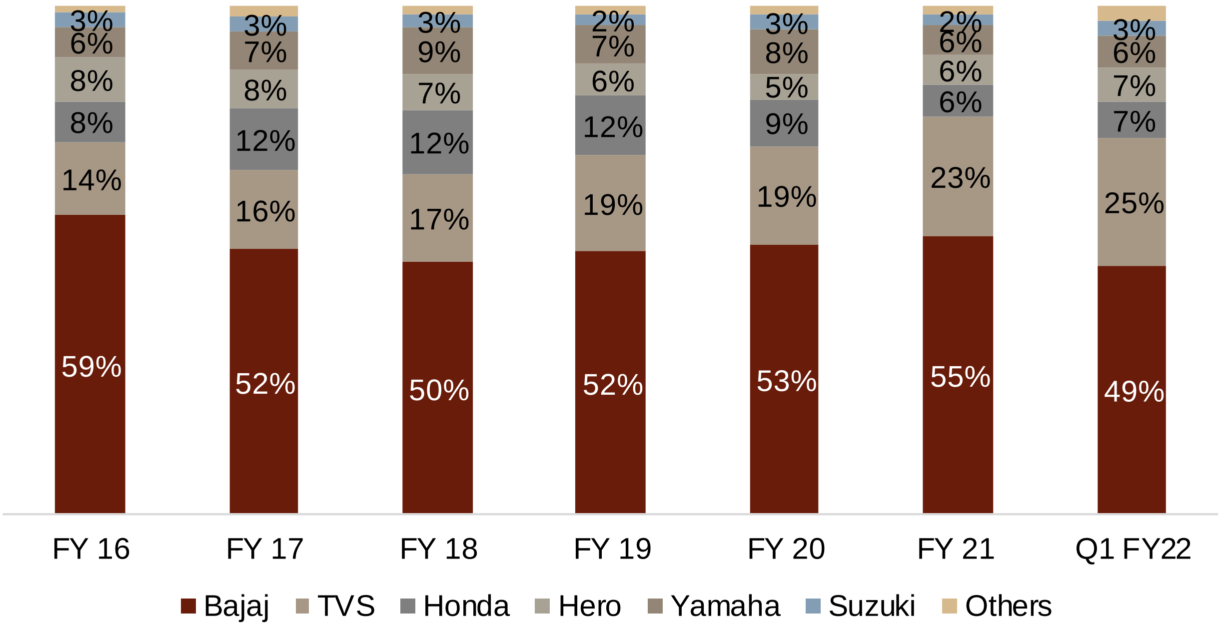
Source – Industry, CRISIL Research

Two wheeler exports

Scooters regain some ground in Q1 FY22

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

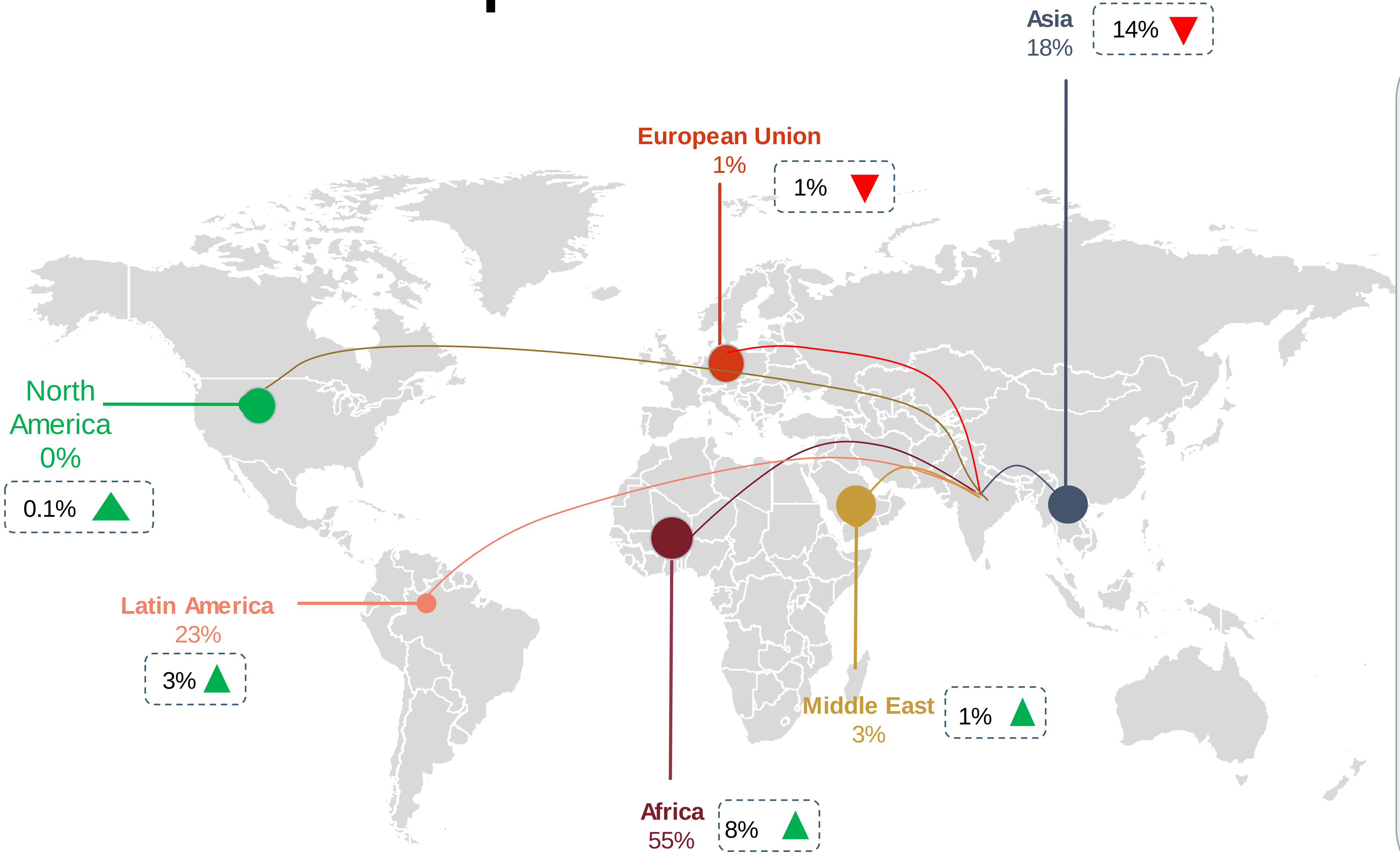




Source: SIAM, CRISIL Research

- In FY2021, exports dropped 7% y-o-y amidst the sluggish global demand due to Covid pandemic
- During Q1 FY22, exports witnessed some growth especially in scooter on a q-o-q levels with improvement in Covid conditions globally
- Scooters saw a high revival on a lower base pushing the exports share for HMSI, TVS

Two-Wheeler Exports



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

Note: Represents volume data for FY21 exports, % in dotted boxes indicates change in share from FY20 to FY 21
Source: DGFT, CRISIL Research

Commercial vehicles

Overview of end-use segments – cargo

Segments (% Growth Y-o-Y)	FY 17	FY 18	FY 19	FY 20	FY 21 P	FY 22 P	
Coal (production)	3.0	3.0	7	1	(2)	6-8	Core Sectors
Iron ore (production)	25	3	3	19	(16)-(18)	12-17	
Steel (consumption)	3.1	8	9	1	(6)	10-12	
Cement (consumption)	1.9	9	12	(2)	0.3	9-11	
Roads (Km constructed / day)	7	8	9	11	11	12-12.5	
Port (traffic)	5.6	6.5	4.5	2	(5)	7-8	
Two-wheelers (domestic sales)	6.9	14.8	5	(17)	(13)	6-8	Discretionary Products
Passenger vehicles (domestic sales)	9.2	8	3	(18)	(2)	20-22	
Consumer durables (consumption)	6.6	5.8	7	5	(17)	15-20	
E-retail	22	35	35-37	23	10-15	22-27	
RMG (market size)	17	5	8	(3)	(24)	15-20	

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

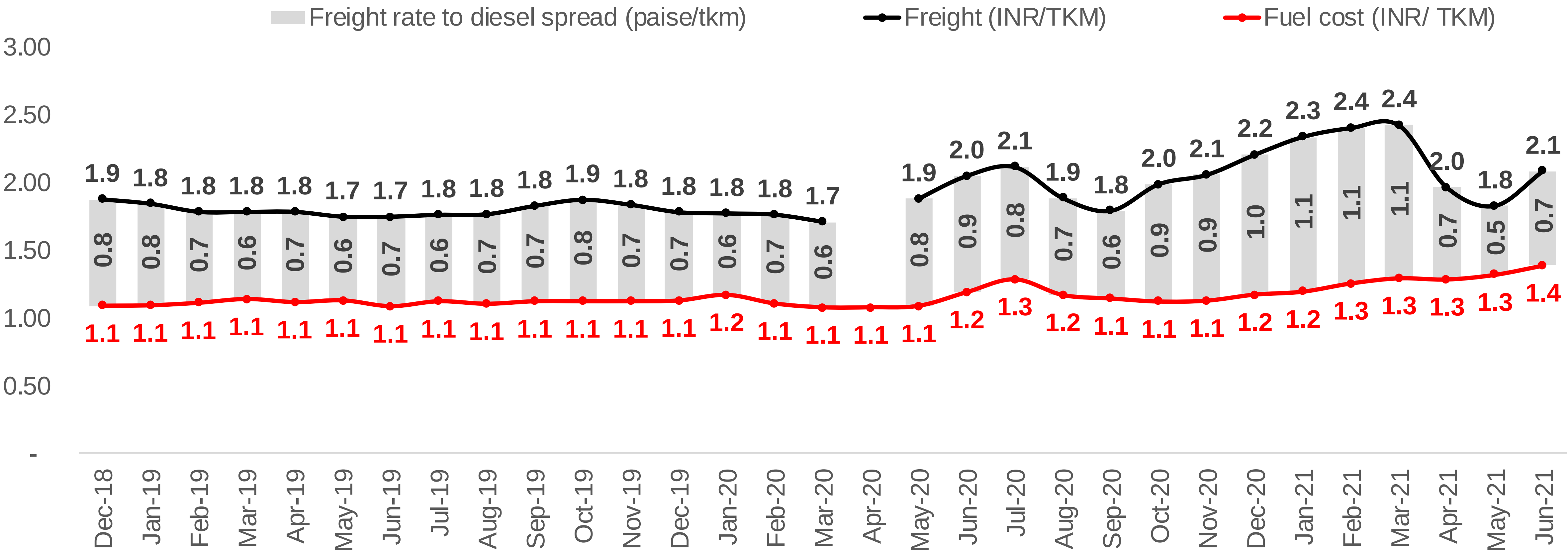
Overview of end-use segments

Segments (% growth Y-o-Y)	FY17	FY18	FY19	FY20	FY21E	FY22P	
Dairy (production)	5.8	6.7	7	5	(3)-(5)	2-4	Non - Discretionary Products
FMCG	5	8	12	5	5-7	9-10	
Pharmaceuticals (market size)	5	1	15	11	10-11	34-35	
Gross school enrollment							Buses
K-12	77.5	74.3	73.2	73.5	73.8	74	
Above K-12	22.6	22.6	22.5	23.1	23.6	24.2	
IT employee base	4	3	4	4	9	6-8	
Air passenger traffic	163	188	209	209	63.6	85-90	
Hotel room demand	7	5	4	1	(51)	35-40	

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

Source: NASSCOM, AAI, CRISIL Research

Freight and diesel spread improved in June compared to May 2021



Research Source: IFTRT,PPAC,CRISIL Research

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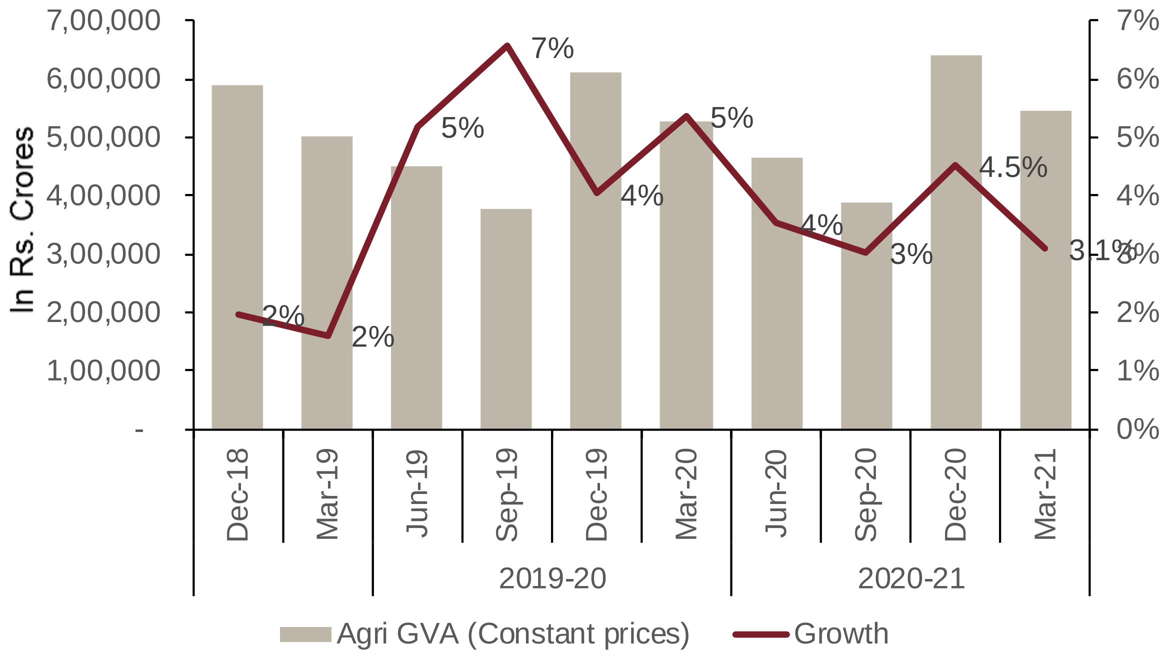
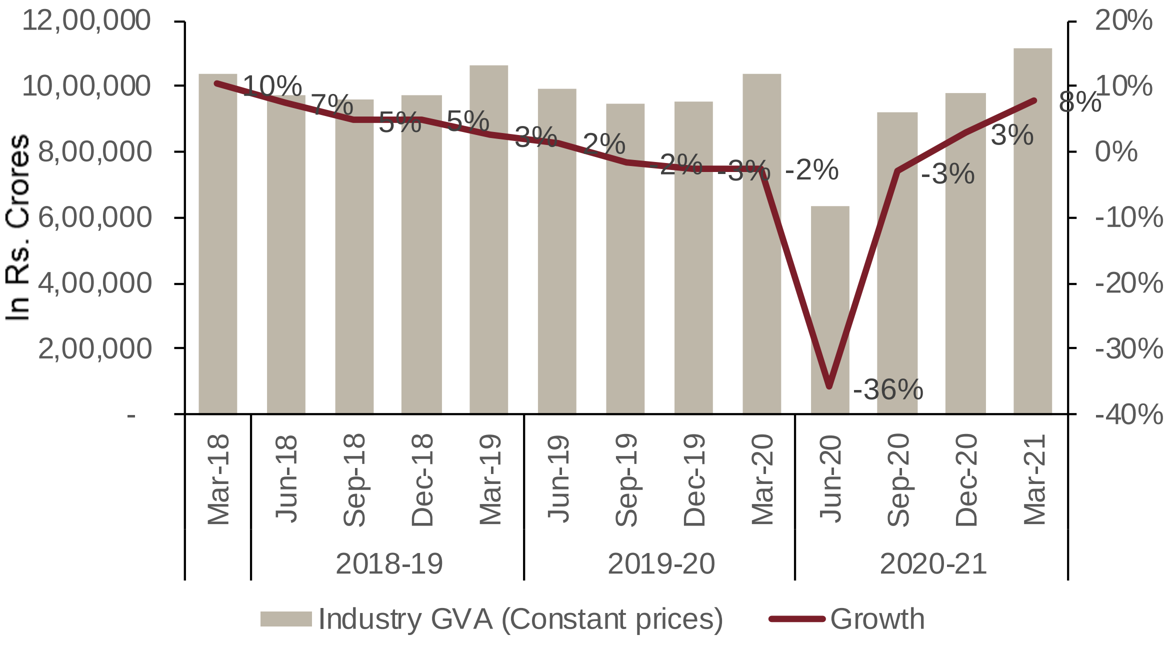
Normal monsoon support sustained Agri GVA growth momentum in FY21;

Agriculture GVA growth



Source: MOSPI, CRISIL Research

Industry GVA growth

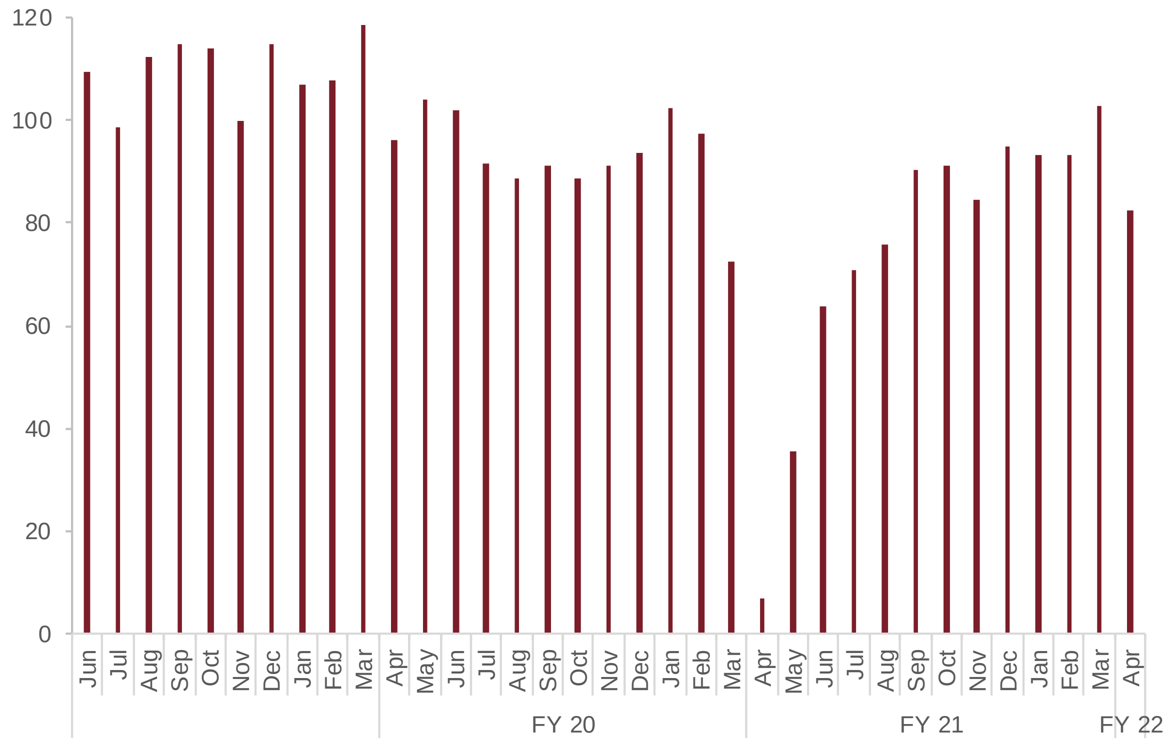


Source: MOSPI, CRISIL Research

- Agri GDP growth of Q4 FY2021 again grew at 3.1% on-year. It has been the best performing sector among the three broad categories.
- Consecutive good monsoons have help the agri sector remain relatively unscathed thus far.
- With good sowing the upcoming Rabi season as well as expectations of normal rainfall in FY22 will help the sector maintain its momentum in the upcoming fiscal as well.
- Industry GVA witnessed growth in Q4 FY21 by 8% which was significantly better than Q3 growth of 3%

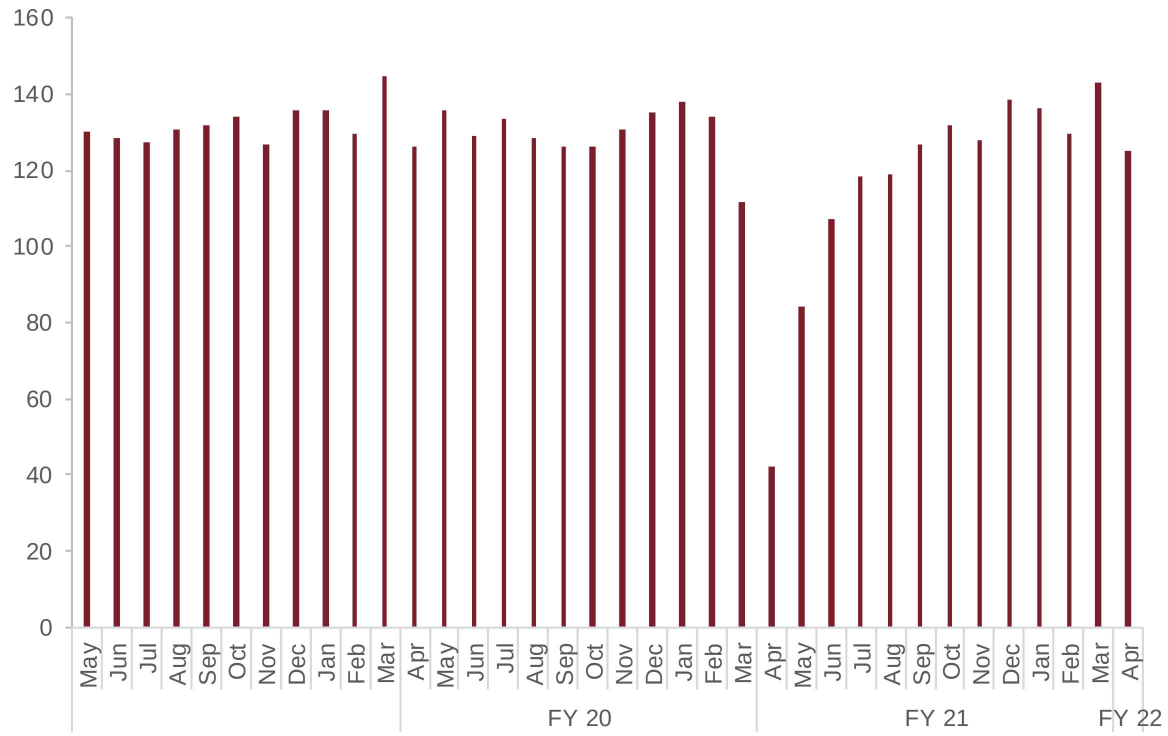
Index of Industrial Production (IIP) rose a sharp 134.4% on-year in April 2021, following a 24.1% growth in the previous month.

IIP Capital Goods posts growth on a low base



Source: MOSPI, CRISIL Research

IIP Manufacturing posts yoy increase from a low base in April

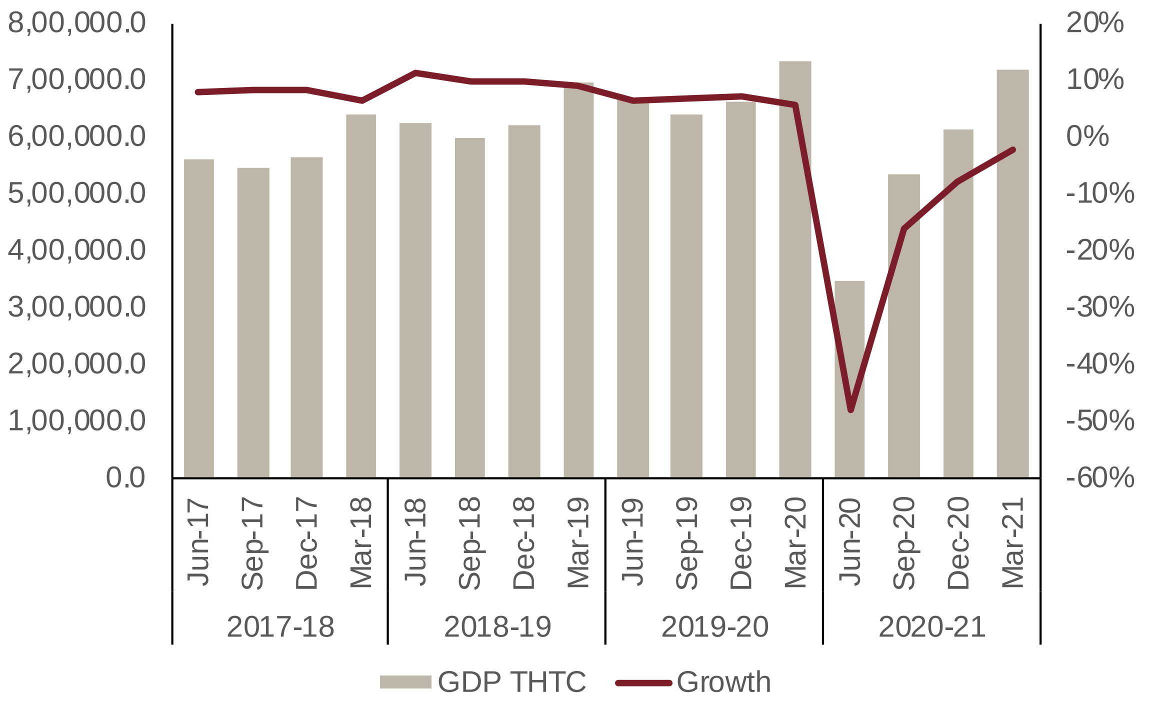


Source: MOSPI, CRISIL Research

- IIP rose 134.4% on-year in April 2021. This was largely on 197.1% rise in the manufacturing sector – the largest component of IIP (with 77.6% weight). Also posting growth were the mining (14.4% weight; rose 37.1% on-year compared with 5.9% growth in March) and electricity (7.9% weight; rose 38.5% over a 28.3% growth in March) sectors
- On use-based classification in seasonally-adjusted terms, capital goods rose a healthy 13.1% on-month in April.

GDP THTC & IIP-Mining

GDP THTC

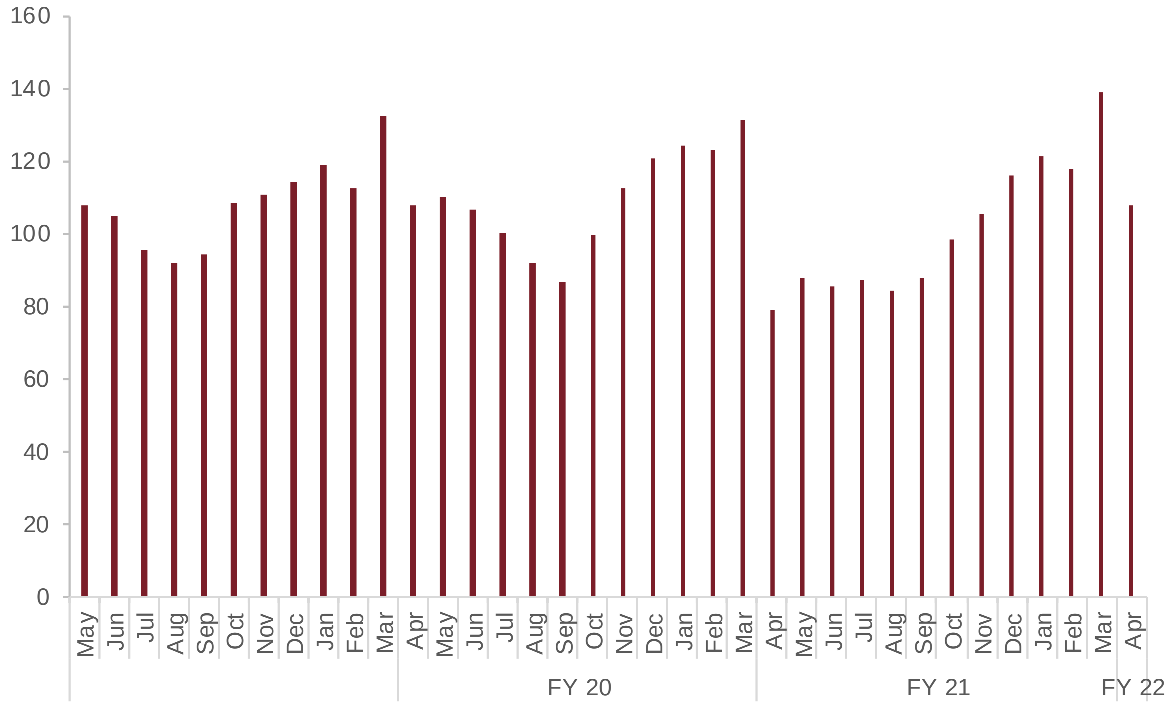


NOTE: THTC: Transport Hotel Transport Communication Services

Source- MOSPI, CRISIL Research

In Rs. Crores

IIP mining on a gradual uptick after August



Source- MOSPI, CRISIL Research

- GDP THTC registered a lower single digit de-growth of 2% in last quarter of the fiscal. For entire fiscal, this segment has been affected due to fear of catching virus. Second wave of COVID-19 is expected to further restrict movement.
- The mining sector (14.4% weight in total IIP) de-grew by 22% m-o-m in April after 17% growth in March.

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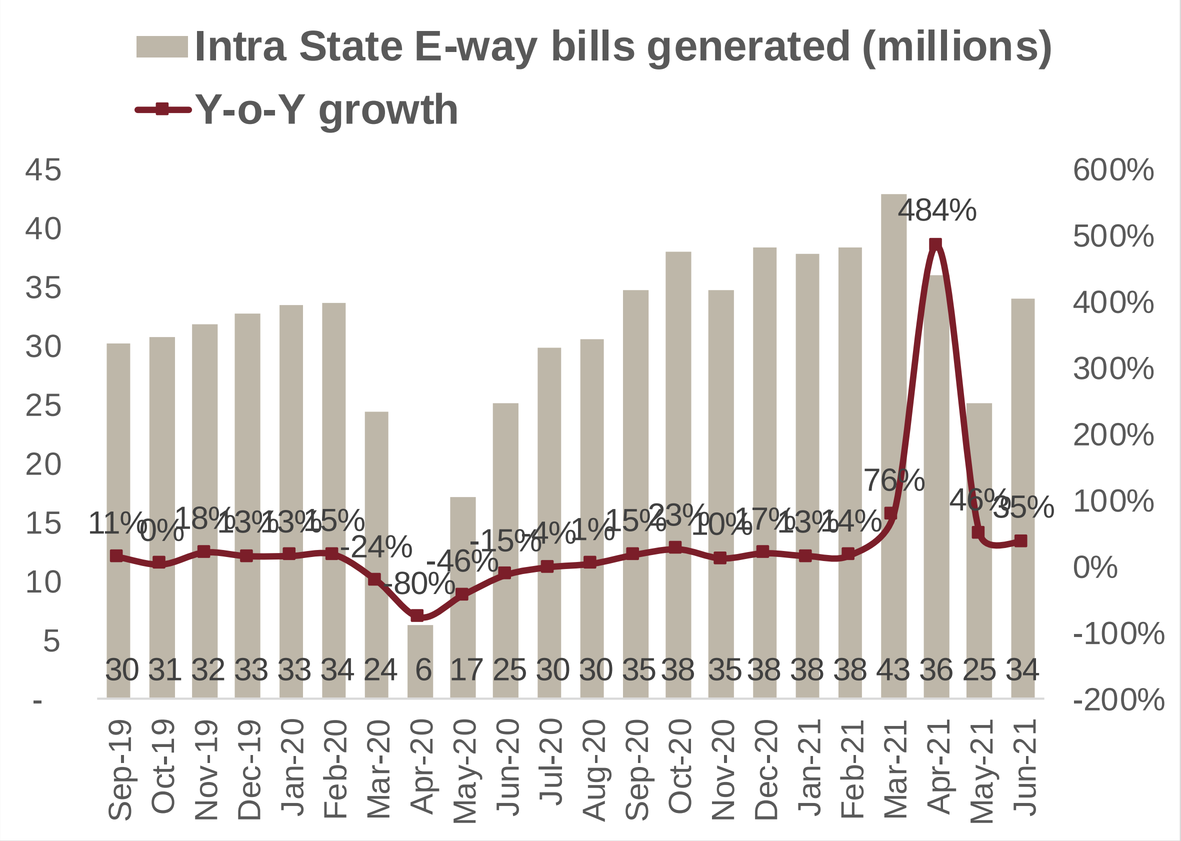
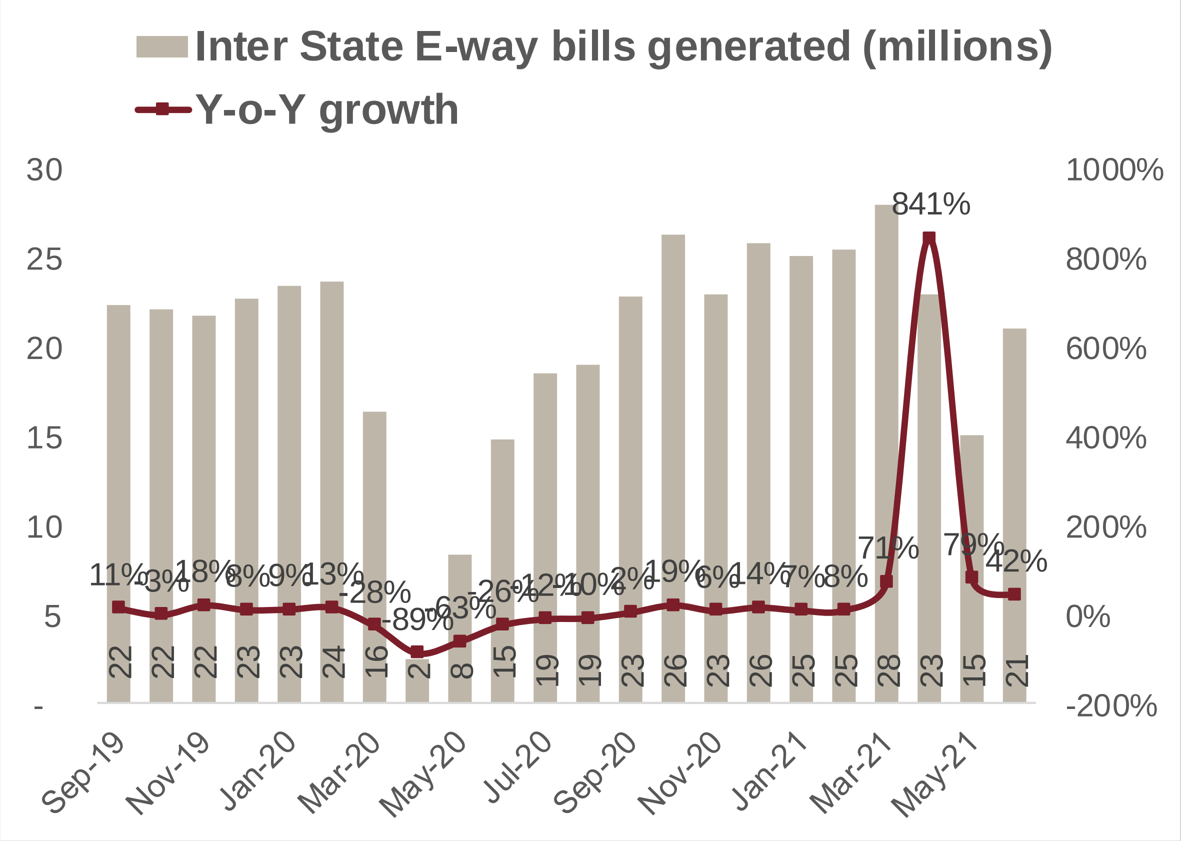
Intra state and Inter state E-waybill trend

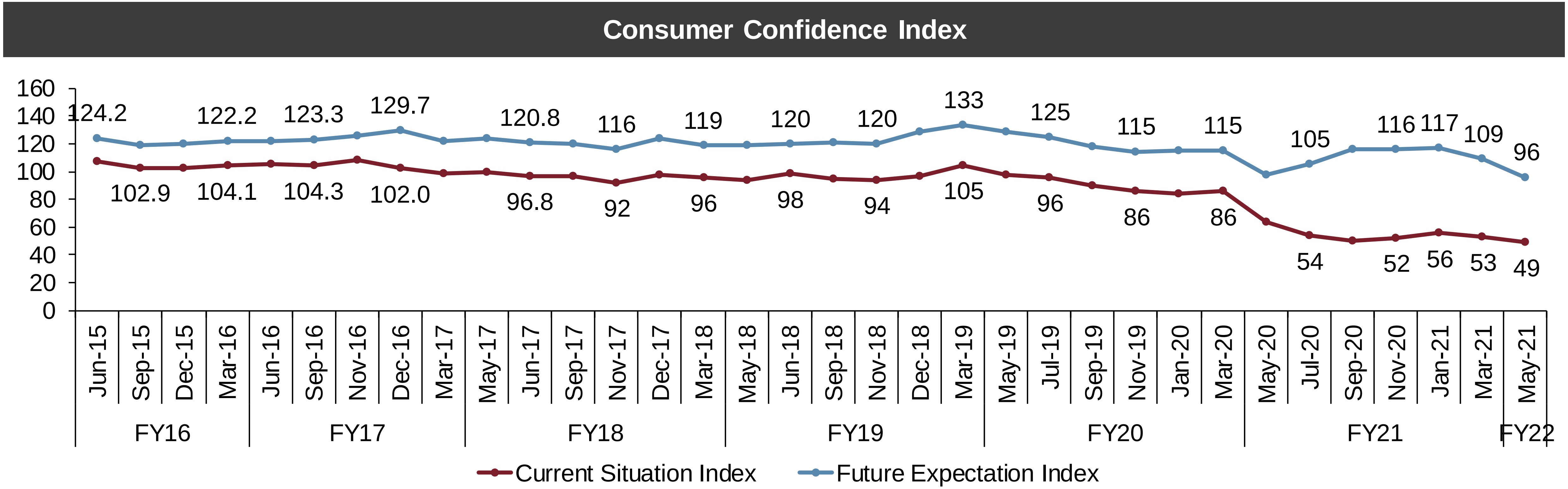
Number of E-way bills generated in India (millions)





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

Future expectation index moved to pessimistic territory

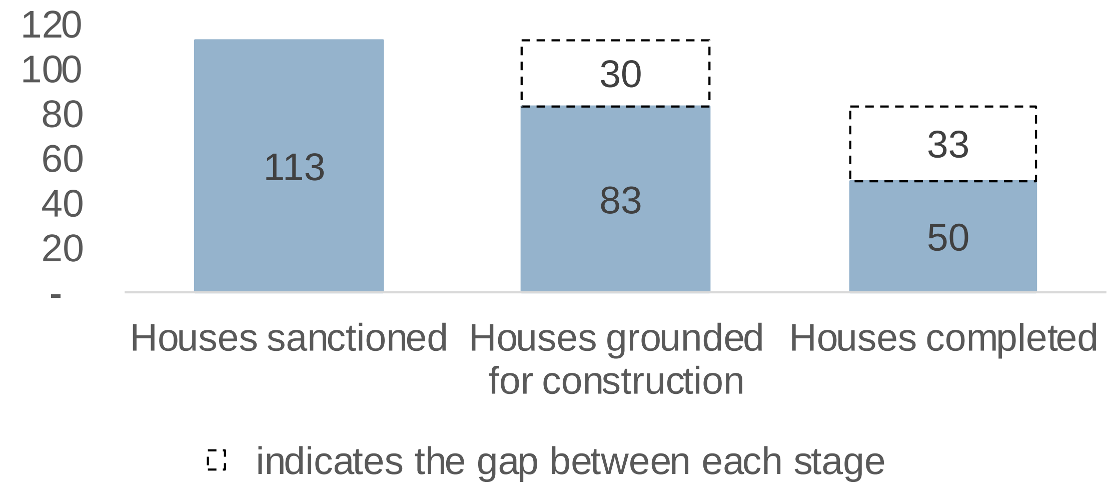


Source- RBI, CRISIL Research

- Consumer confidence for the current period weakened further; the current situation index (CSI)3, which has been in the negative territory since July 2019, fell to a new all-time low as consumer perceptions on general economic situation and employment scenario lowered further.
- The future expectations index (FEI) moved to pessimistic territory for the second time since the onset of the pandemic; this was driven by sharp fall in expectations on general economic situation, employment scenario and household income over one year horizon

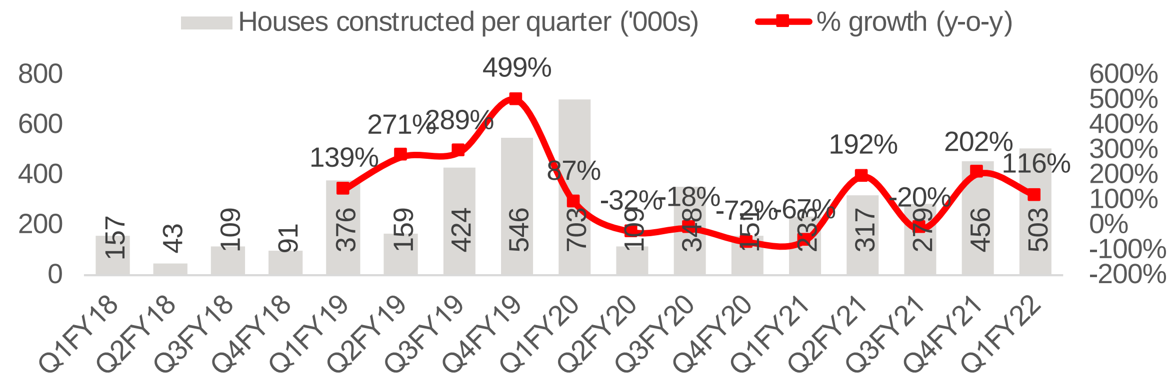
PMAY(Urban): After a sluggish FY20 and a slow start to FY21, PMAY(U) now gathering momentum as we head into FY22

Cumulative completion status as on 22nd March 2021 (lakh houses)

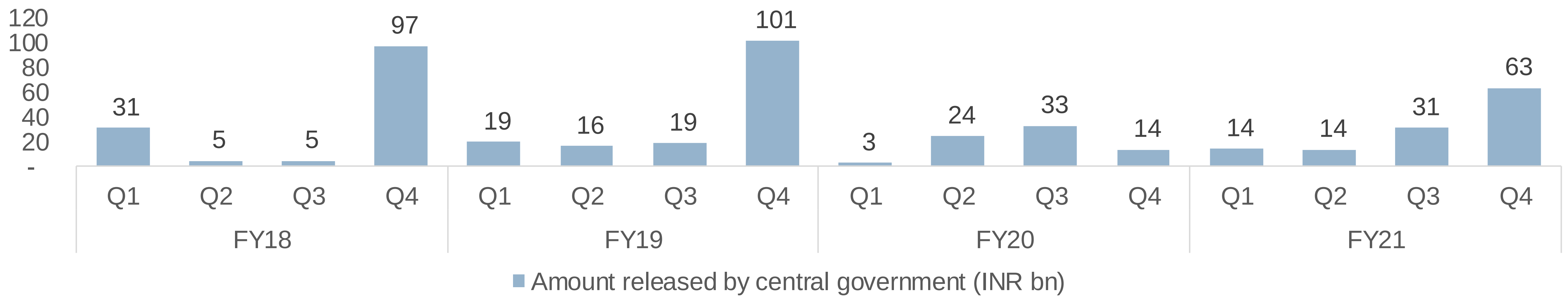


Pace of house construction

Houses constructed per year ('000 houses)	FY18	FY19	FY20	FY21	FY22 YTD
	400	1,505	1,311	1,285	503



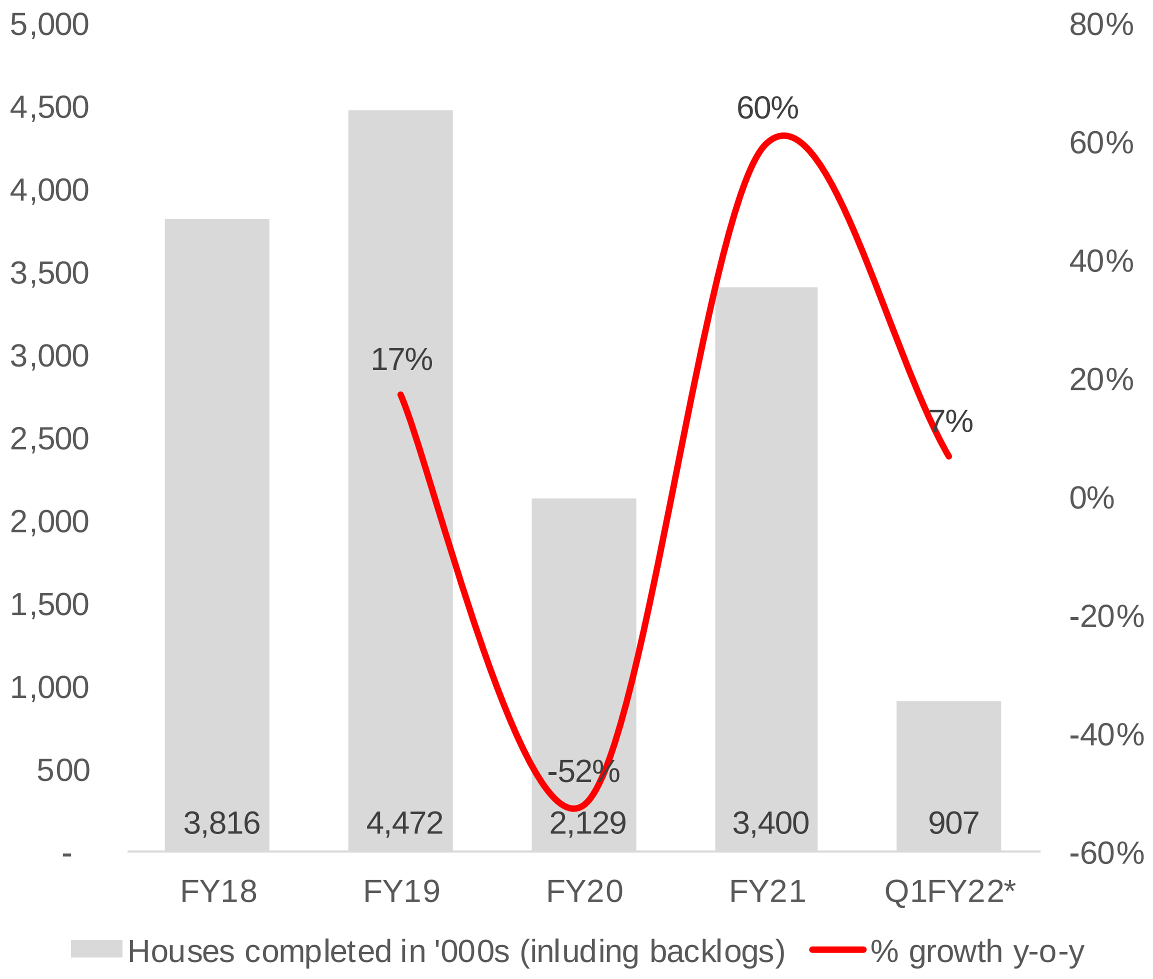
Funding scenario in FY21 has been relatively better that FY20



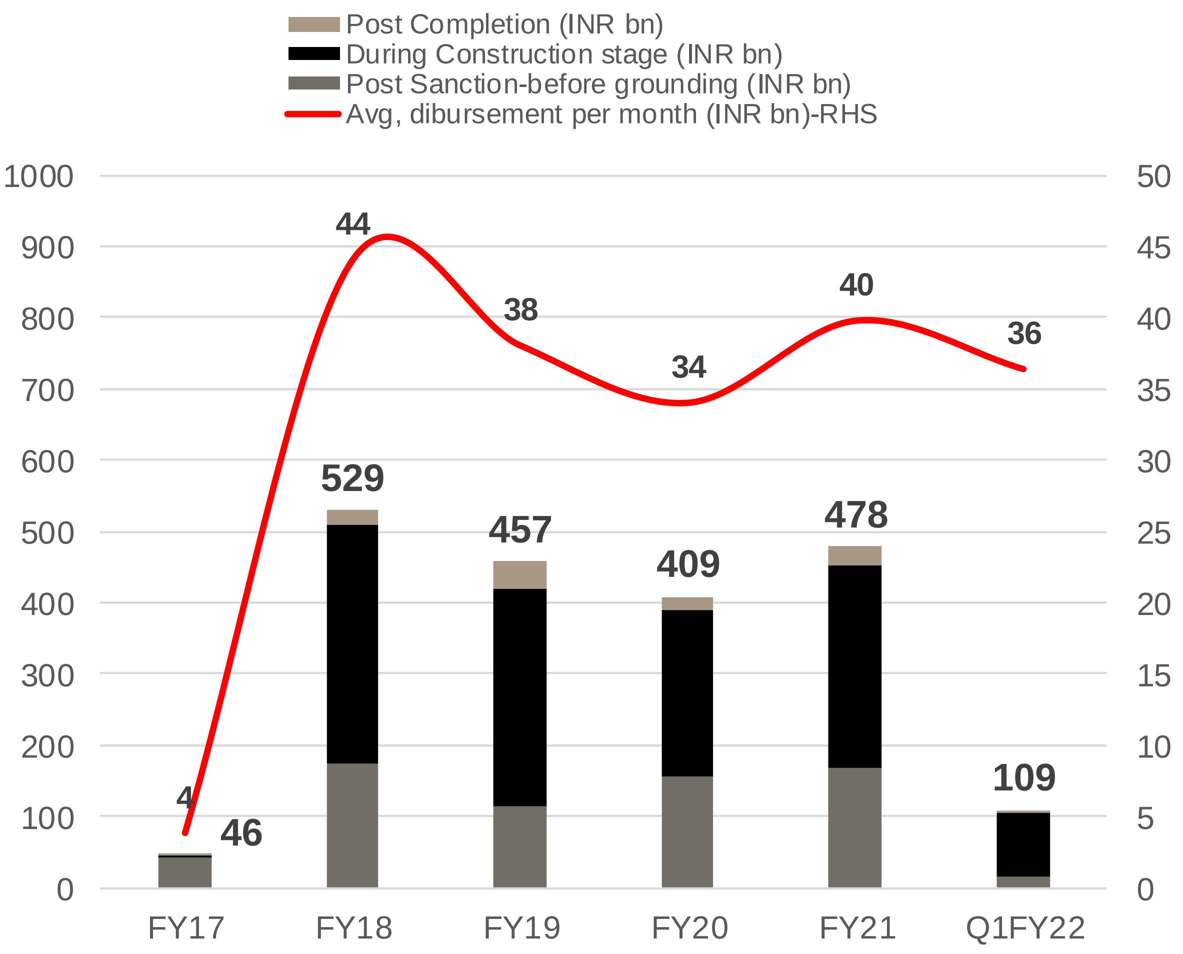
Source: Ministry of Housing and Urban Affairs, CRISIL Research

PMAY-G: Construction pace seeing improvement sequentially after seeing a lull in FY20 and H1FY21

PMAY-G construction-quarterly



PMAY-G Funding-quarterly



Research

*Q1FY22 growth denotes figures for annualised numbers
Source: Ministry of rural development, CRISIL Research

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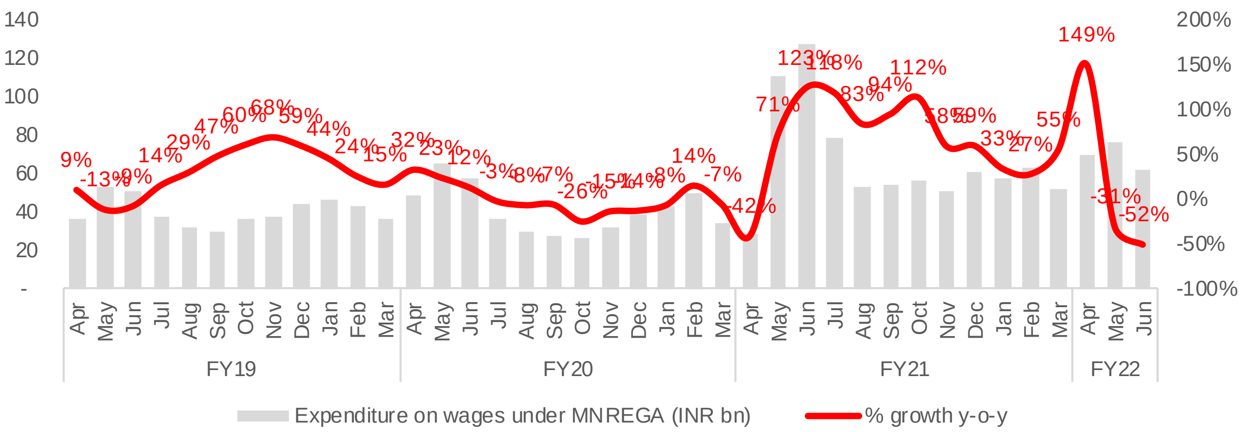
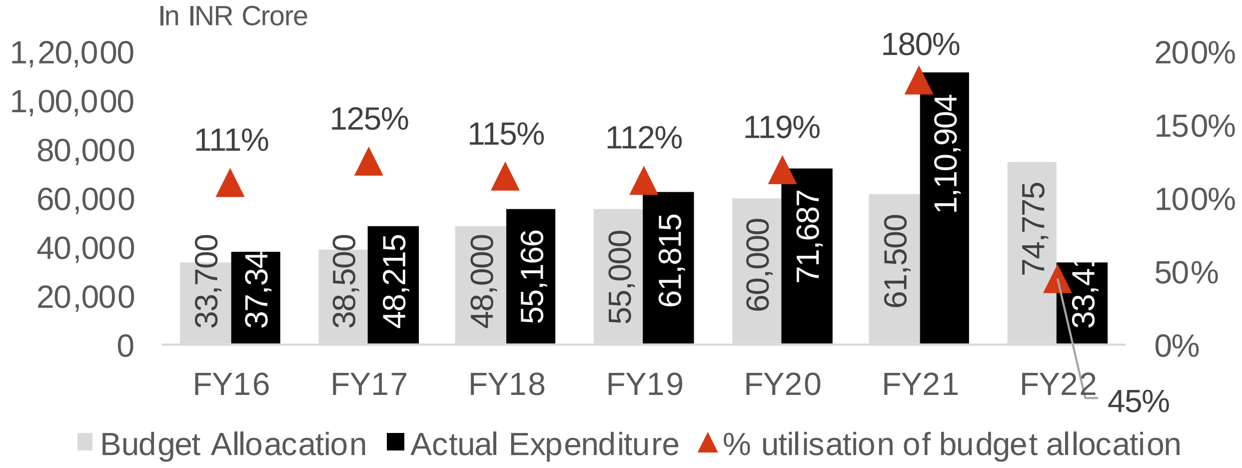
69

After a record spending in FY21, MNREGA scheme to revert to pre COVID expenditure trajectory in FY22

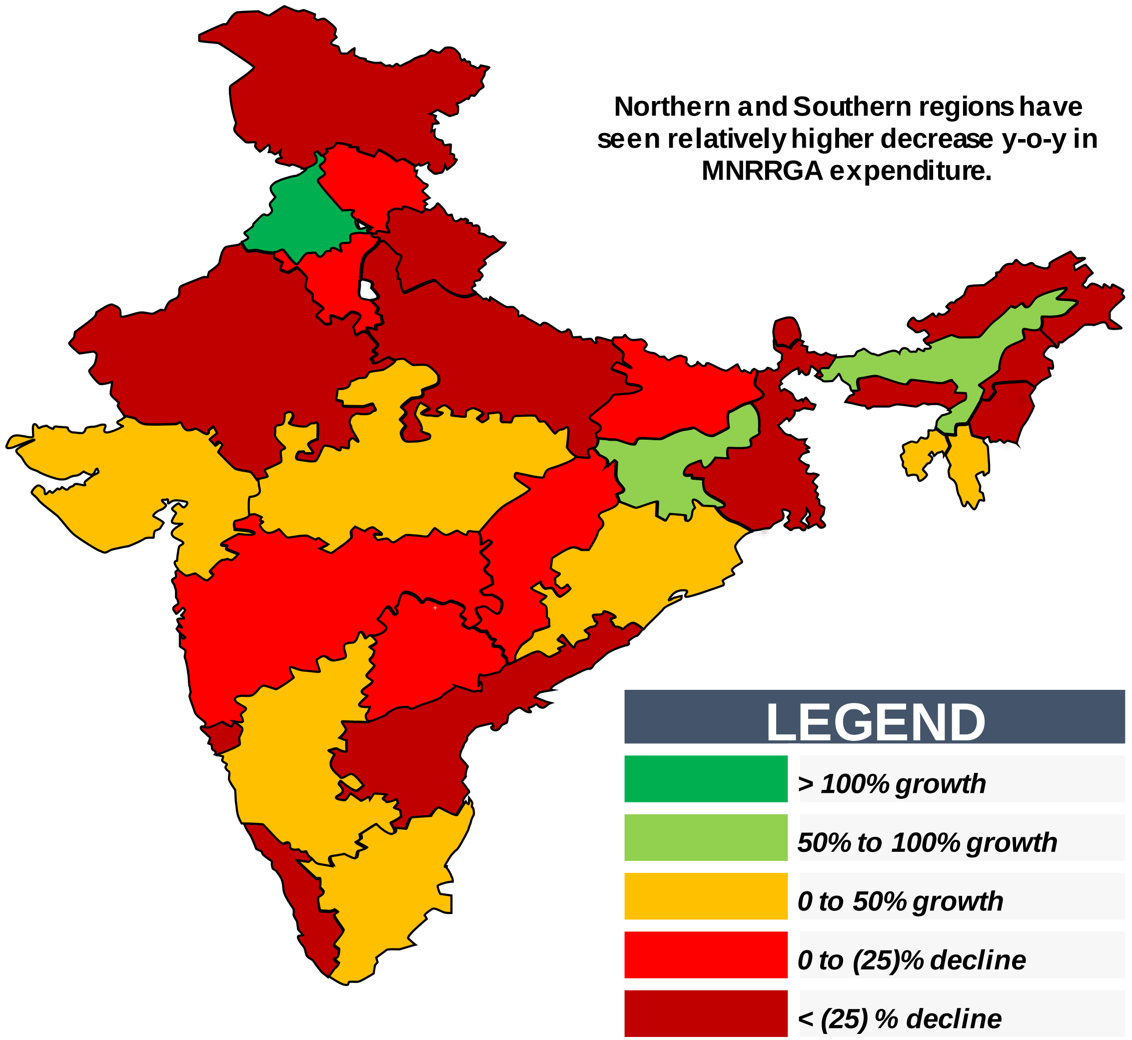
MNREGA wages growth robust in FY21



The MNREGA scheme has a history of overshooting budget



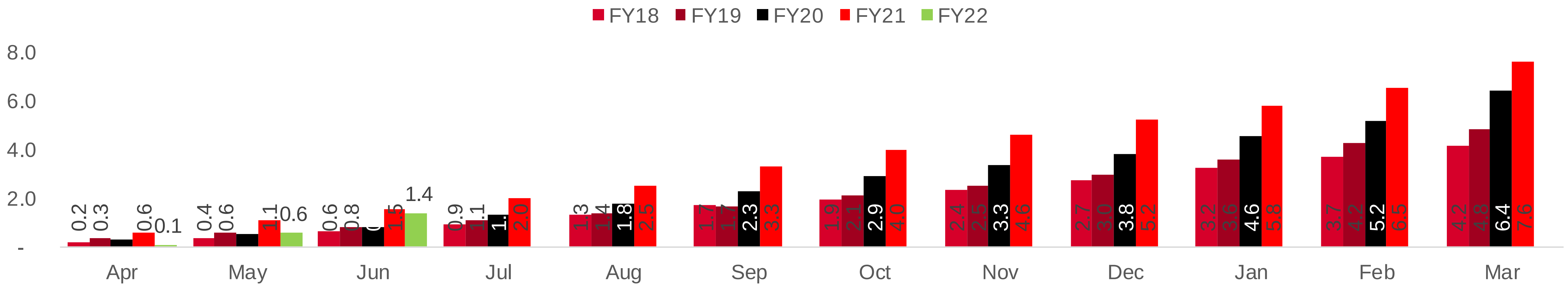
State wise growth in MNREGA wages expenditure for FY22



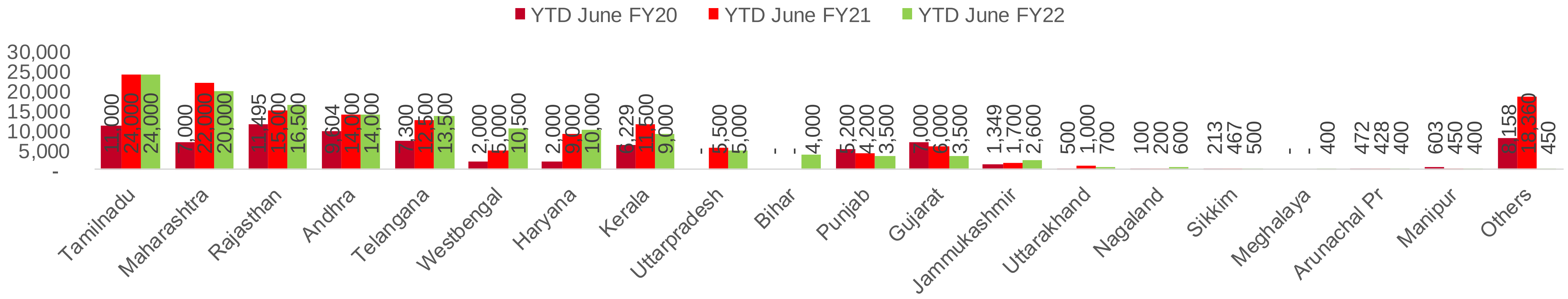
Note:
Dec-March data is provisional and maybe restated over the next few days
FY21 budget allocation was later increased to INR 1 lakh crore as a part of covid relief measures
Source: Budget documents, Ministry of Rural development, CRISIL Research

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

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



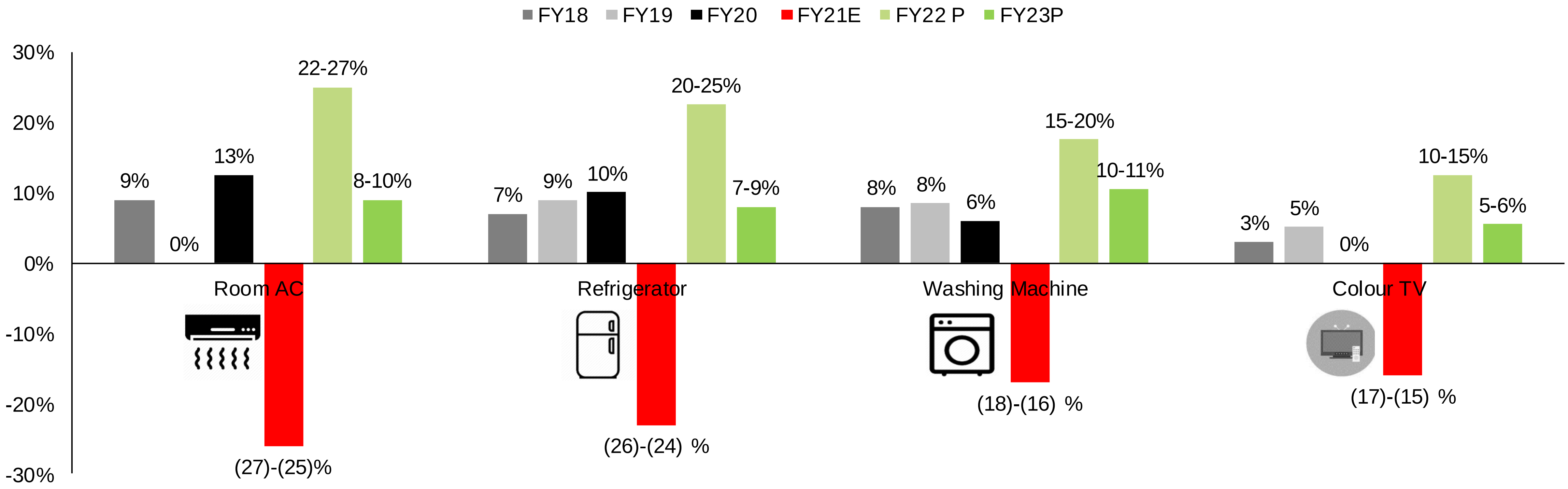
Year to date G-sec borrowings of various state governments and comparable levels for past year (INR billion)



Source: RBI, MINISTRY OF FINANCE , CRISIL Research

Demand to witness optical growth in first half; real rebound expected in second half of FY22

Trend in annual volume growth across consumer durables and automobiles

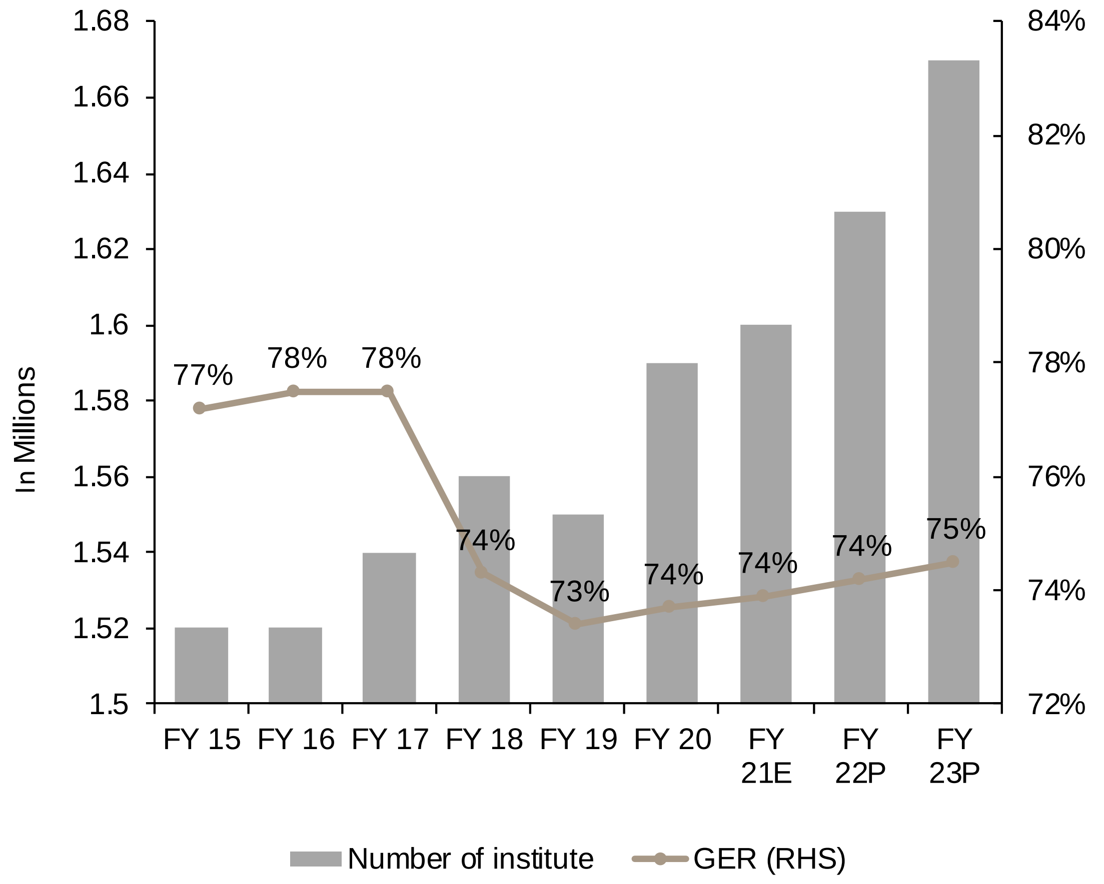


Source: CRISIL Research

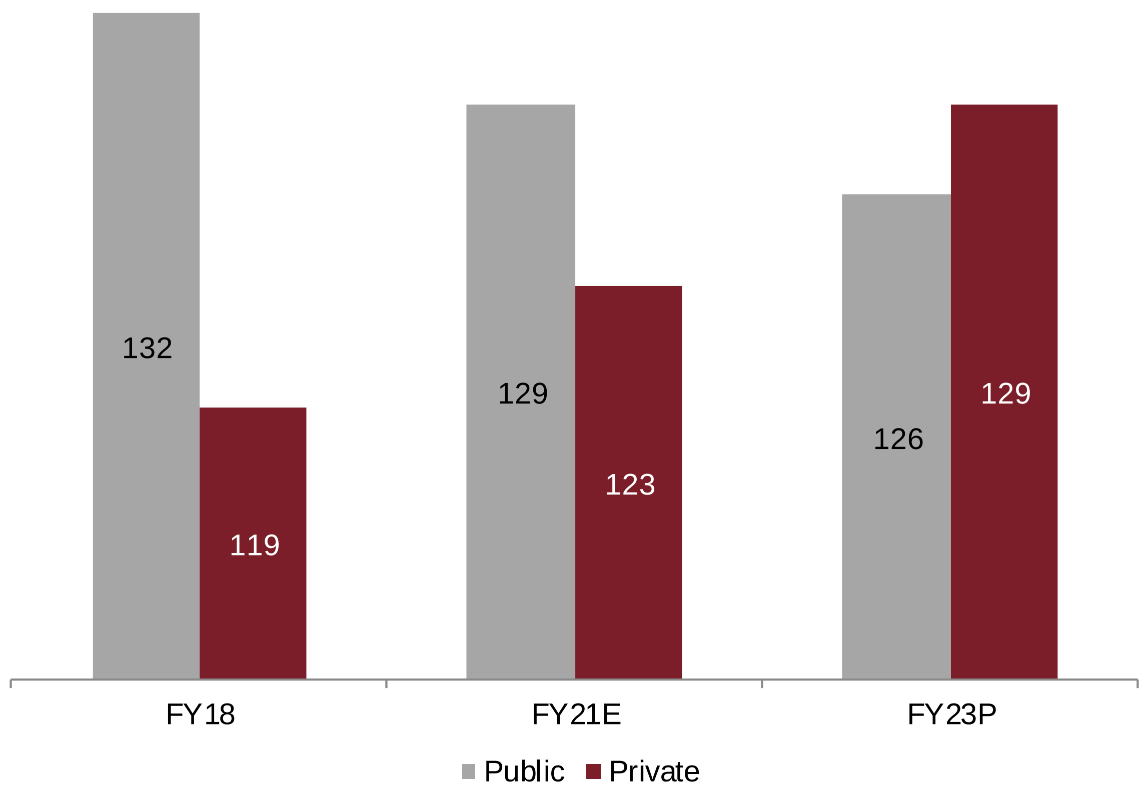
- The household appliances sector is expected to witness 15-20% growth in FY22 on a low base of previous fiscal, expected increase in discretionary spend and waning impact of pandemic.
- The CTV segment is expected to witness 10-15% growth in FY22 on account of a low base, preference for larger screen sizes, higher discretionary spending and waning impact of the pandemic.
- The Washing Machine segment is expected to witness 15-20% growth in FY22 on account of a low base, people's focus on hygiene and a higher discretionary spending.
- A low base, higher discretionary spending, no rating revision and waning impact of the pandemic, will help refrigerator demand grow by 20-25% in FY22.

Covid 19 shifts education sector online. Online school concept to have severe dent on school bus demand FY22

K-12 (Elementary + Sec & Higher Sec) : Institutions and GER



K12 Enrollments (millions)



Note – GER is e ratio of the number of students enrolled to the population of those who qualify for the particular grade level.
E : Estimated, P : Projected
Source: CRISIL Research, DISE, MHRD

Research

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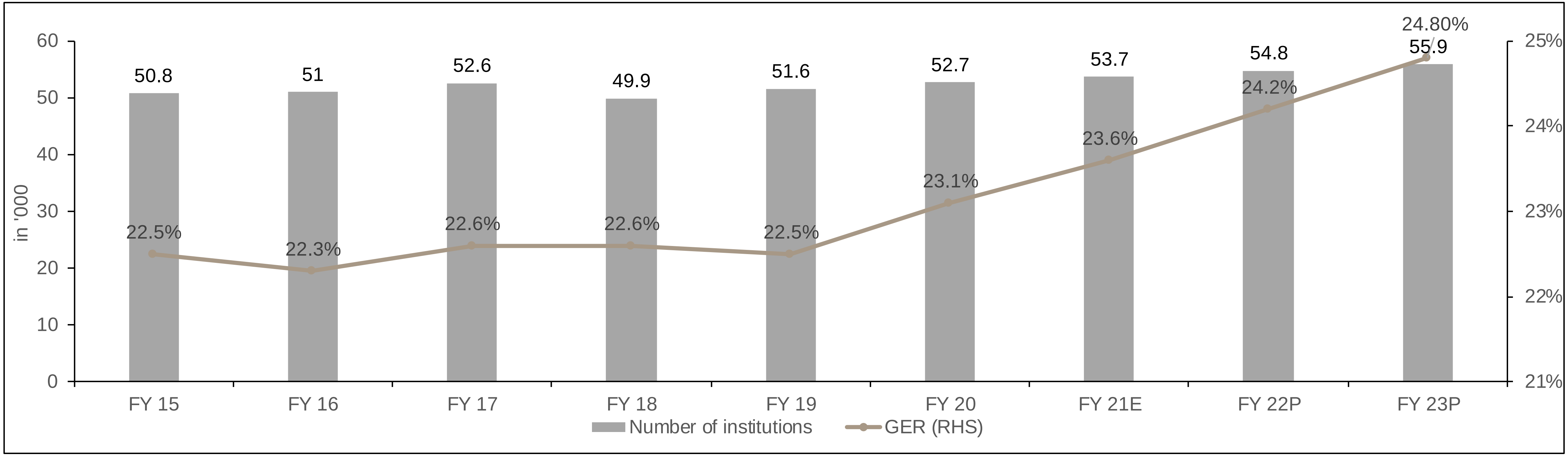
Higher education in India characterised by large number of Institutions and low GERs , bus demand unlikely to materialize in H1 FY22

Higher education institutes (Above 12th Class)



Both formal and non- formal segments have shifted to online mode and conducting the classes through online channels. The delay in opening of educational institutes as well as the expected social distancing and "virtual classroom" measures are severely expected to dent demand for buses

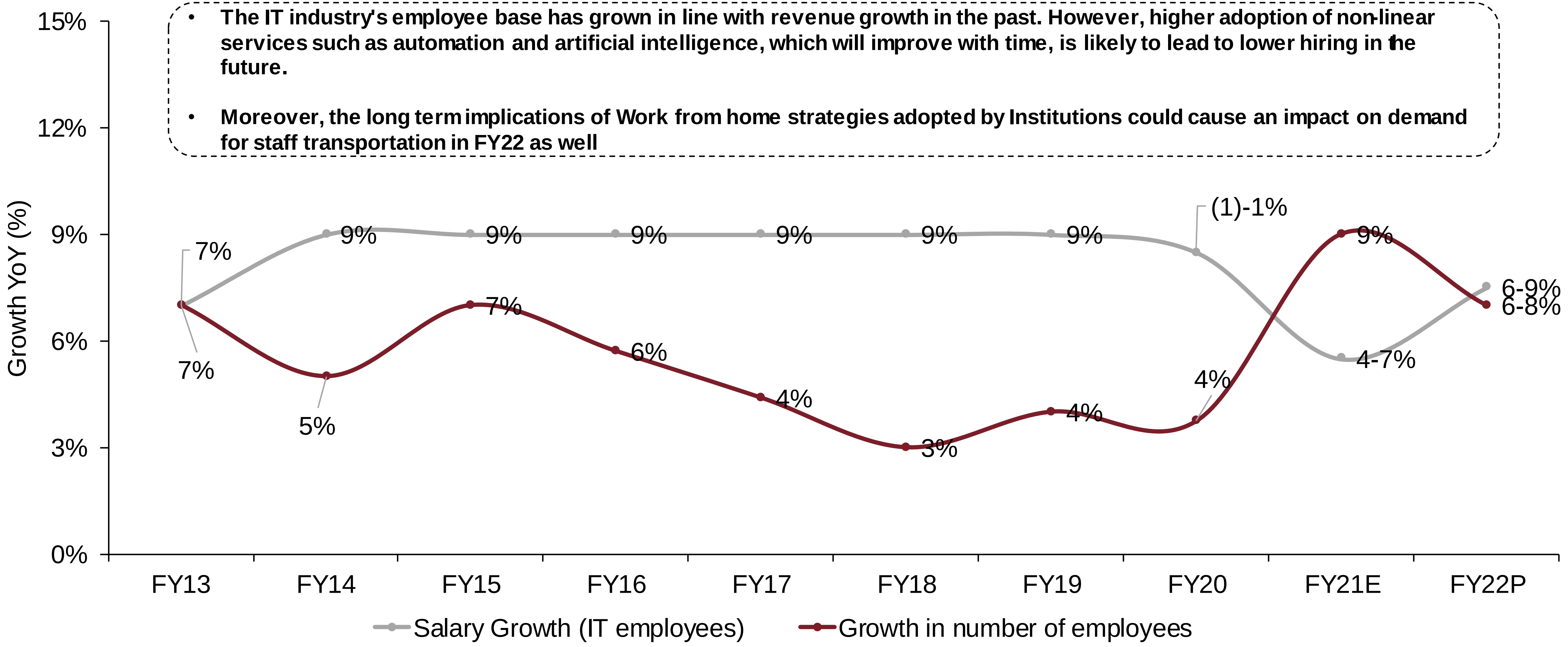
As a result demand from the School segment is to be subdued in FY22 at least in H1 FY22

^^ based on Oxfam rapid survey of schools in Sep 2020
NOTE: P - Projected
Source: CRISIL Research, DISE

Employee base to expand in current fiscal, non-linearity to limit medium term employee additions; salary growth to be better in FY22.

Growth in salary and number of IT employees

- **The IT industry's employee base has grown in line with revenue growth in the past. However, higher adoption of non-linear services such as automation and artificial intelligence, which will improve with time, is likely to lead to lower hiring in the future.**
- **Moreover, the long term implications of Work from home strategies adopted by Institutions could cause an impact on demand for staff transportation in FY22 as well**

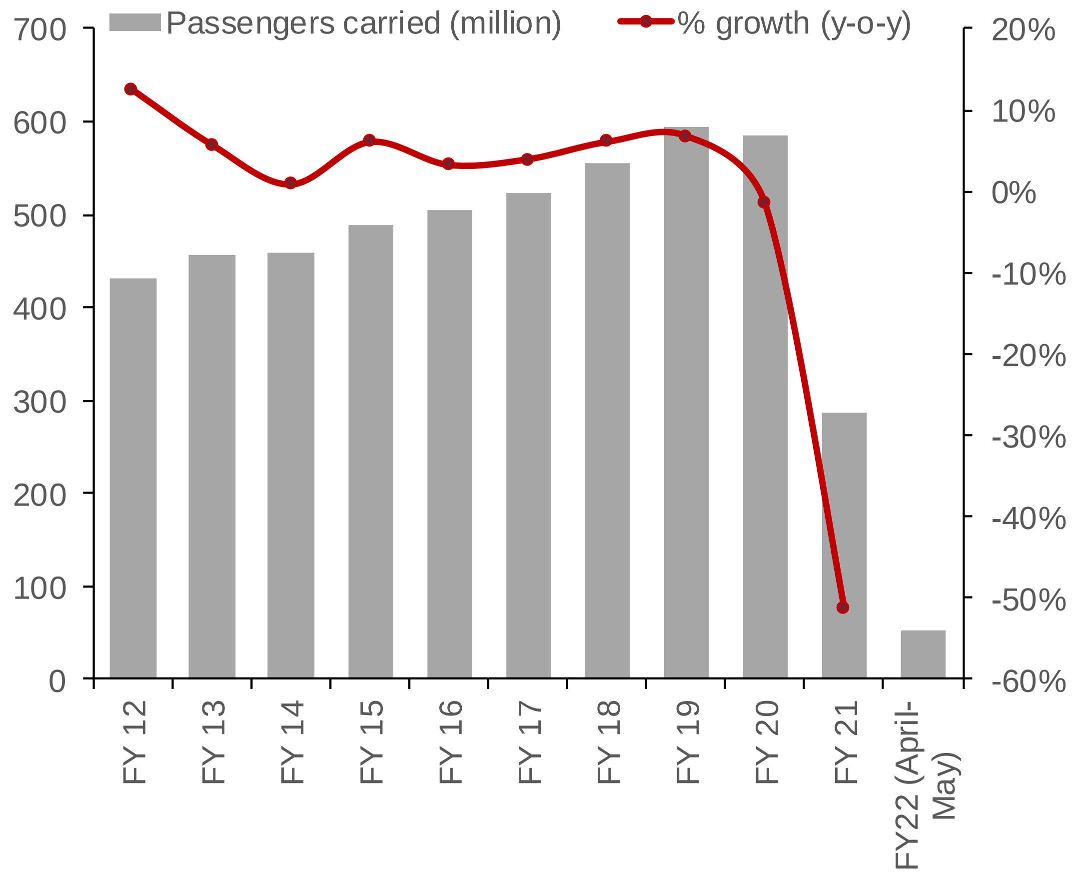


NOTE: Employee growth is summation of employees working for domestic and international clients based in India

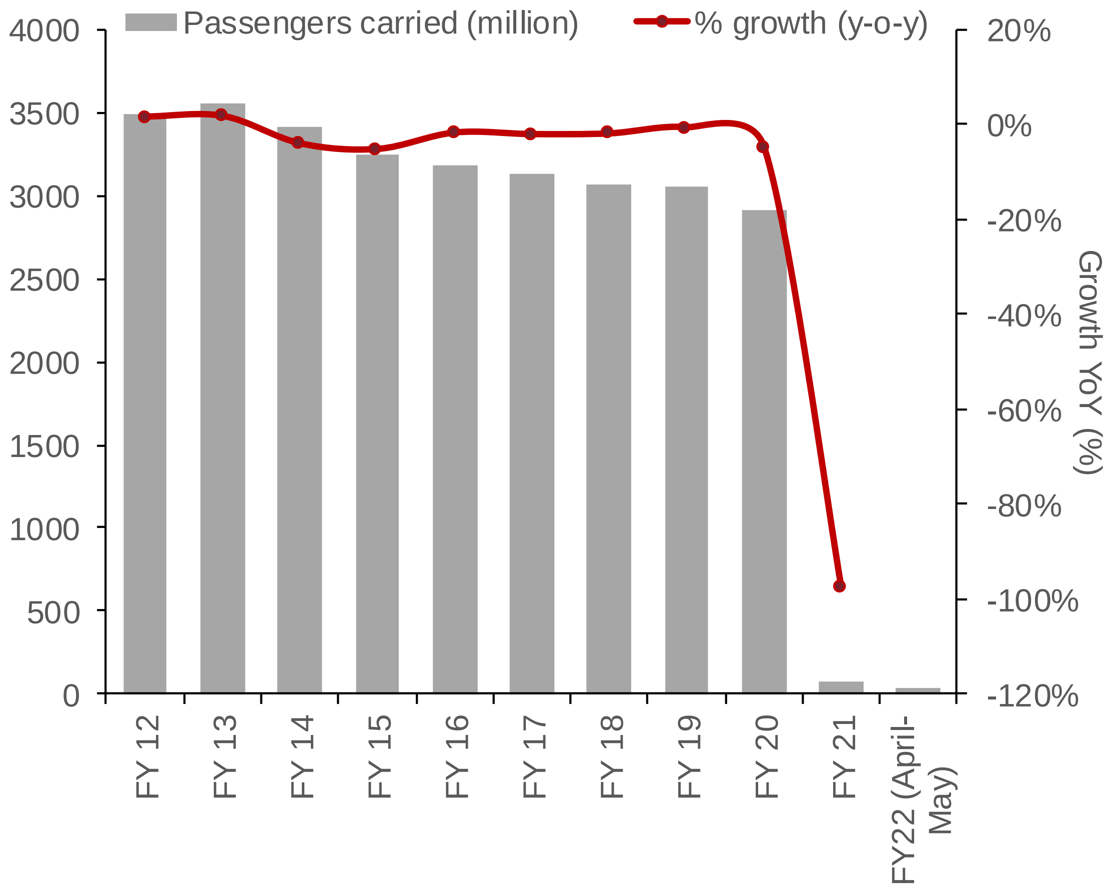
Source: National Association of Software and Services Companies (NASSCOM), CRISIL Research

While railways was losing share to road and air based modes earlier, with the advent of COVID-19 passenger movement across modes to suffer

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



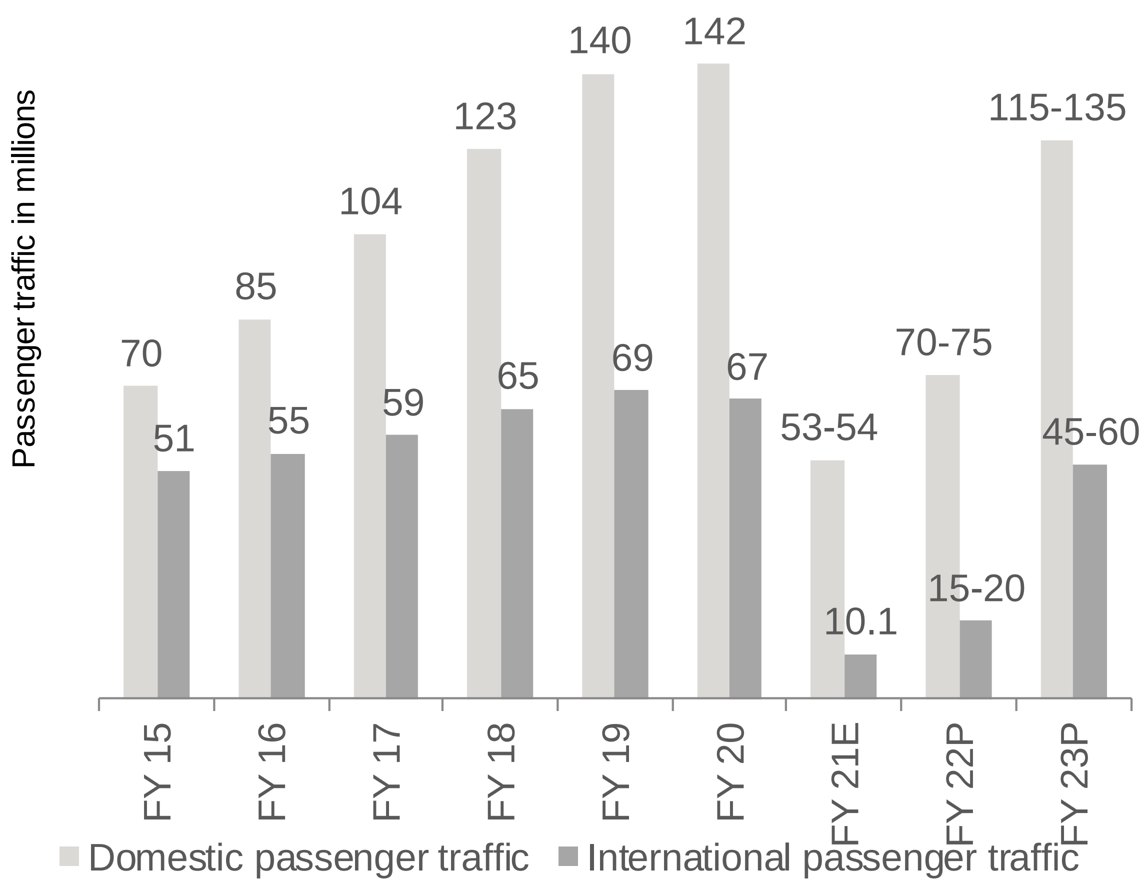
Railway Passenger Traffic growth (%)-Non suburban-Unreserved



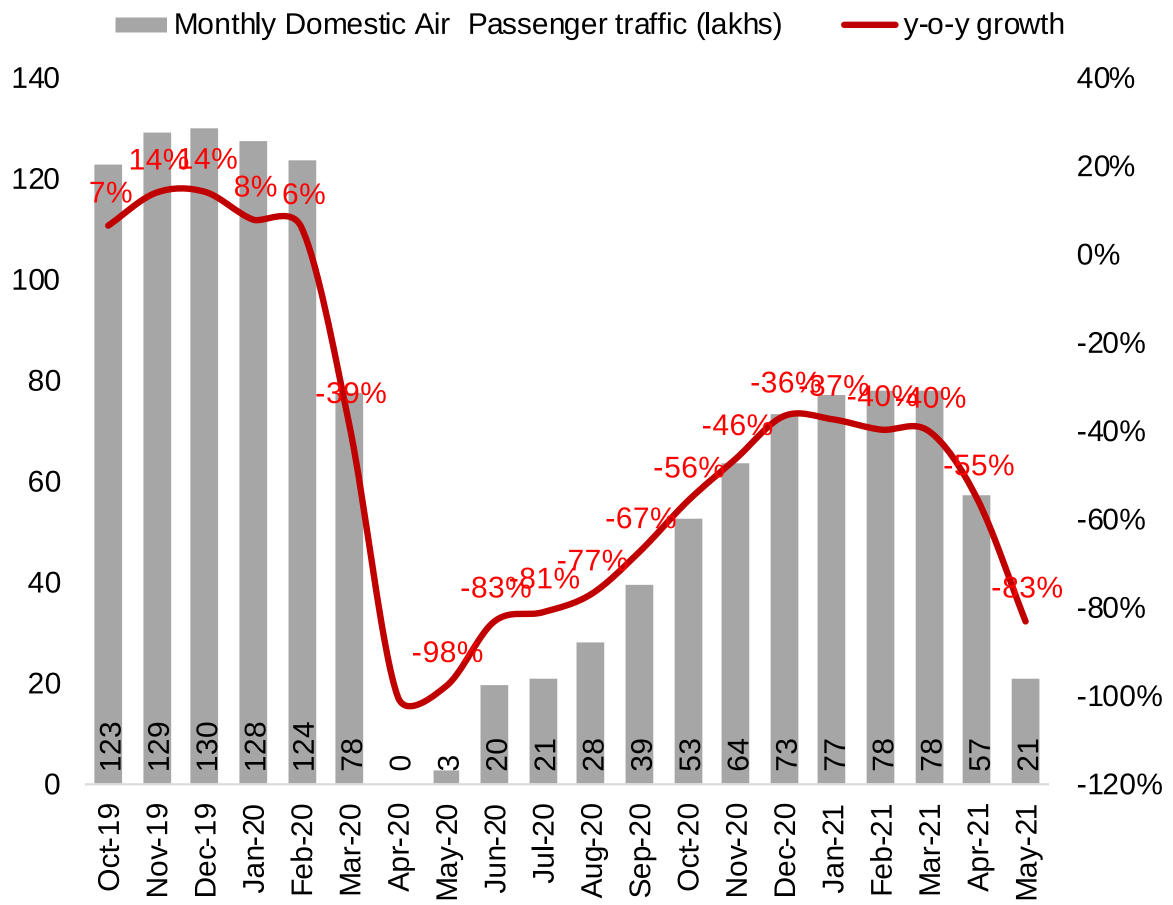
Source: Indian Railways, CRISIL Research

Airlines sector to continue experiencing turbulence due to the Covid-19 outbreak even in FY22

Air passenger traffic- Annual (Domestic & International)



Domestic Air passenger traffic- Monthly



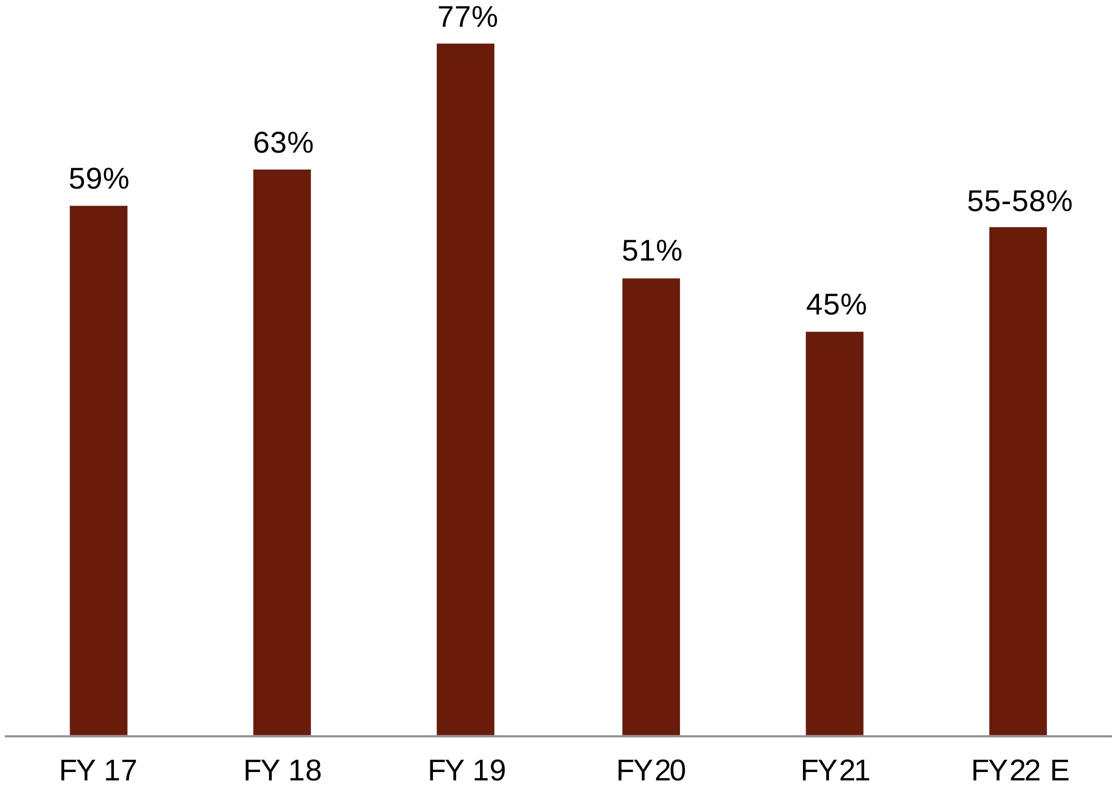
Source: Directorate General of Civil Aviation (DGCA), CRISIL Research

Note: E: Expected P: Projected

Scenario – Base case – Pandemic is brought into control by Q1FY22.

Capacity utilisation dropped in FY21, some improvement expected in FY22

Decline in capacity utilization level



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

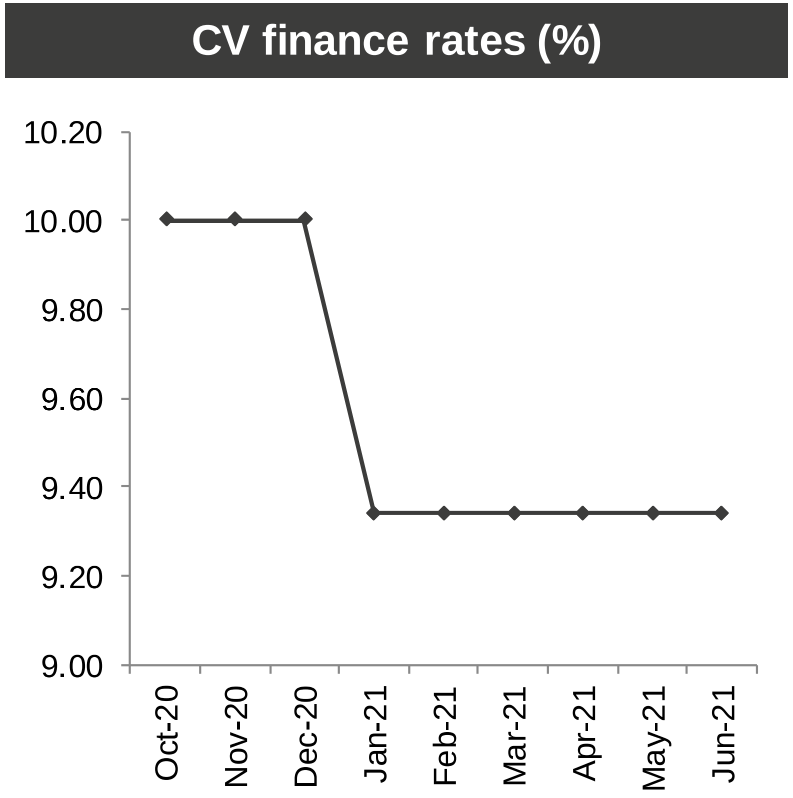
Player-wise capacity utilisation

Player	Effective Capacity estimate (as on 31st Mar 2021)	Production (FY21) (in '000)	Capacity utilization in FY21	Capacity utilization in Q1 FY22
Ashok Leyland	2,22,300	103,349	46%	35%
Eicher Motors	97,500	41,752	43%	33%
Tata Motors	7,62,000	262,919	35%	30%
Mahindra & Mahindra	2,92,000	168,040	58%	57%

Source: Industry, CRISIL Research

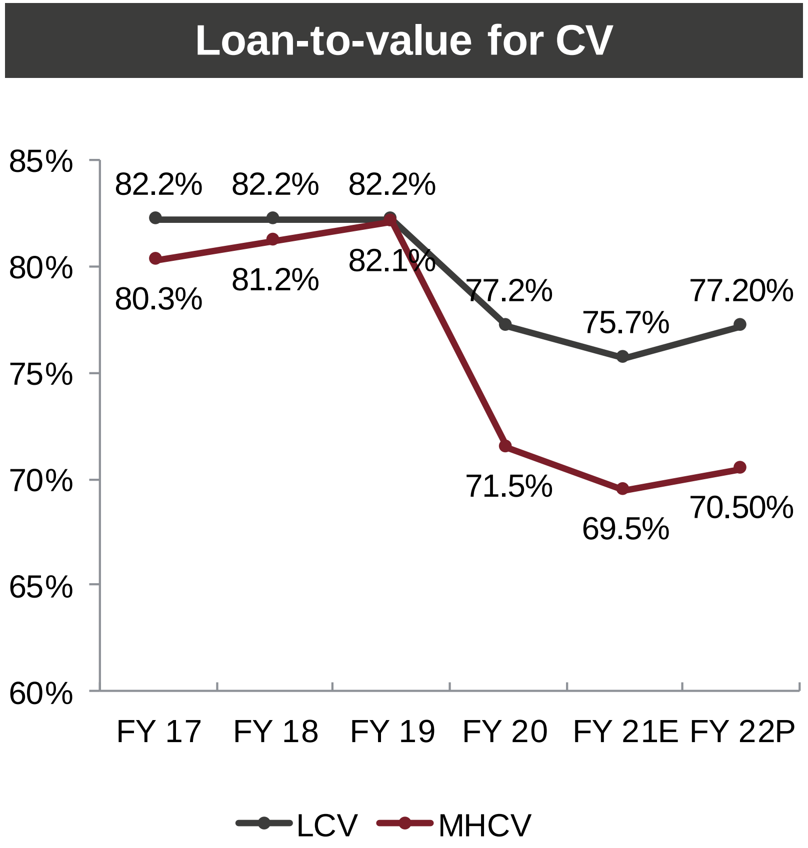
- The capacity utilisation of the top four players - Tata Motors (standalone), Ashok Leyland, Volvo Eicher Commercial Vehicles (VECV), and Mahindra & Mahindra - which was at ~45% in FY21, have fallen to ~37% in Q1 FY22 but expected to show improvement in next three quarters and settle at ~55-58%
- OEMs had earlier anticipated demand to be muted in FY21 (owing to increase in vehicle prices) because of which they had refrained from any major capacity expansion in FY20 and FY21.

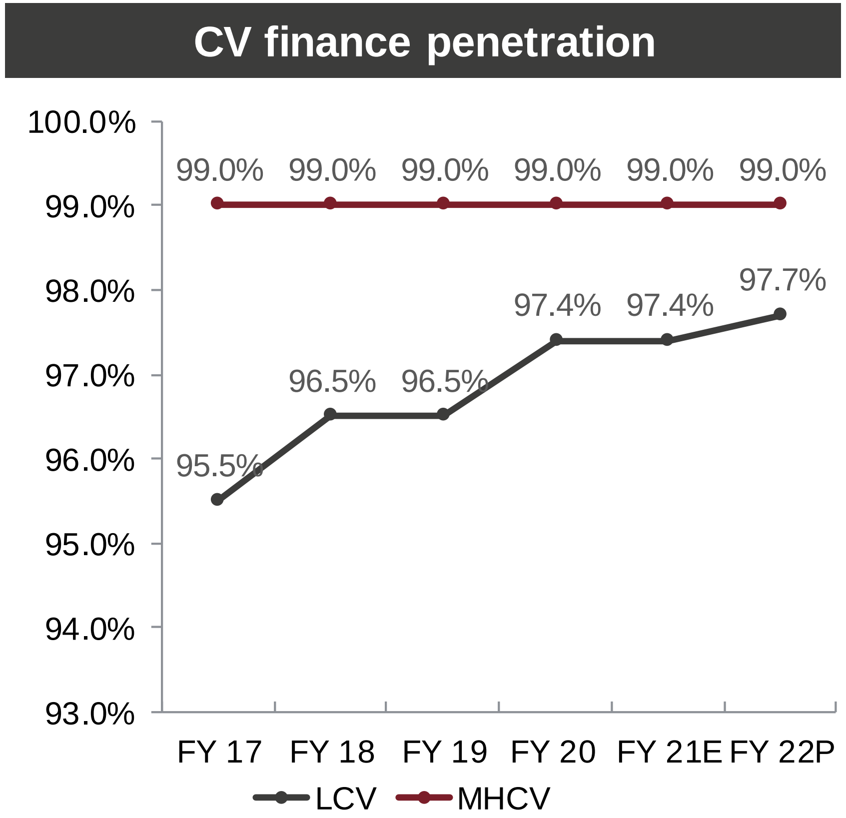
Cautious lending by banks; more focus on collections



NOTE - Interest rates are an indicative rates charged by Banks

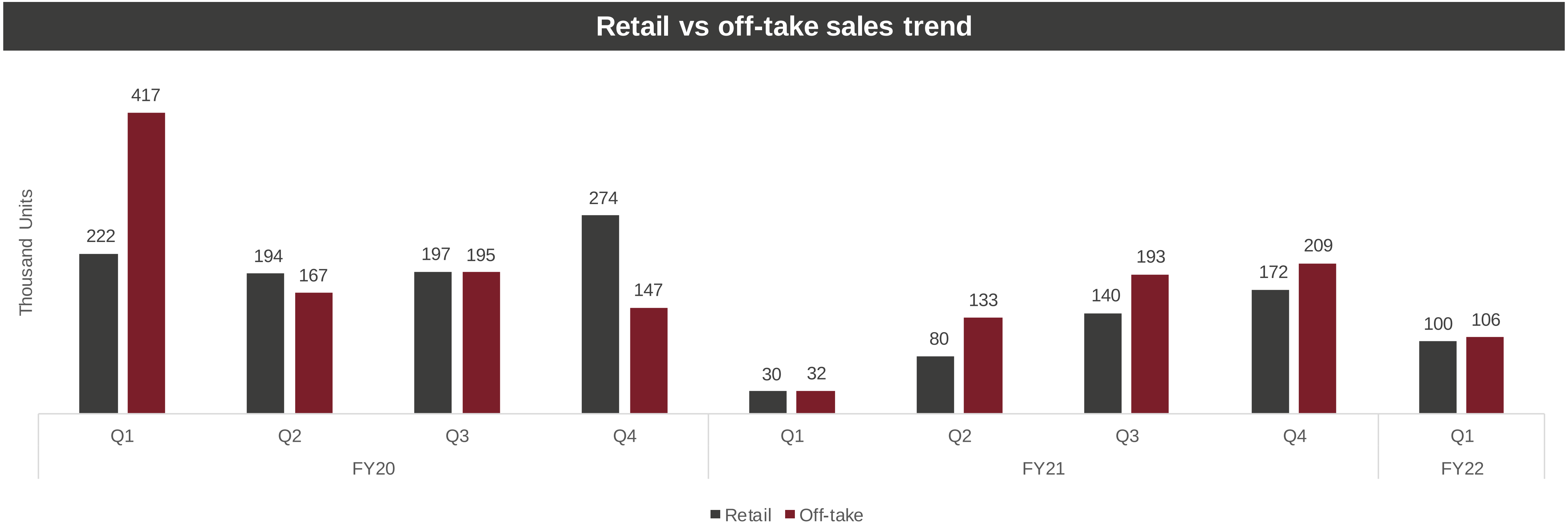
Source: Company Reports, Industry, Crisil Research





- Higher risk perception to impact LTV in the near term, as economic recovery takes places LTVs likely to reach pervious levels.
- Finance penetration to increase in LCV space, MHCV segment is already highly penetrated

Retail as well as offtake sales contract in Q1 FY22

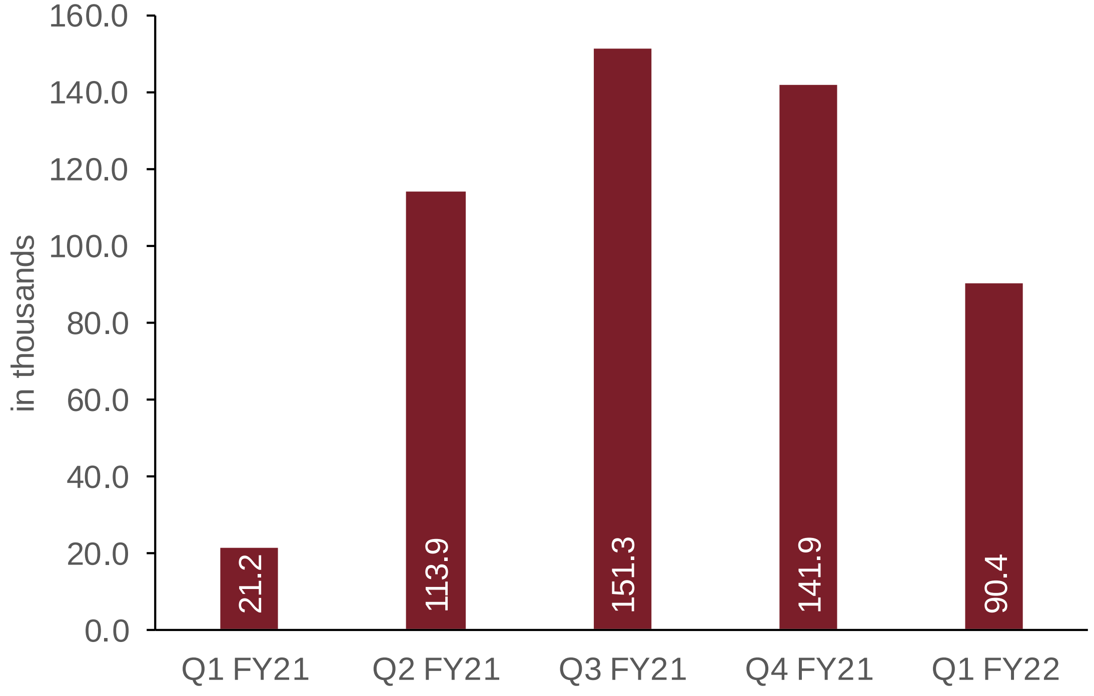


Source: SIAM, MoRTH, CRISIL Research

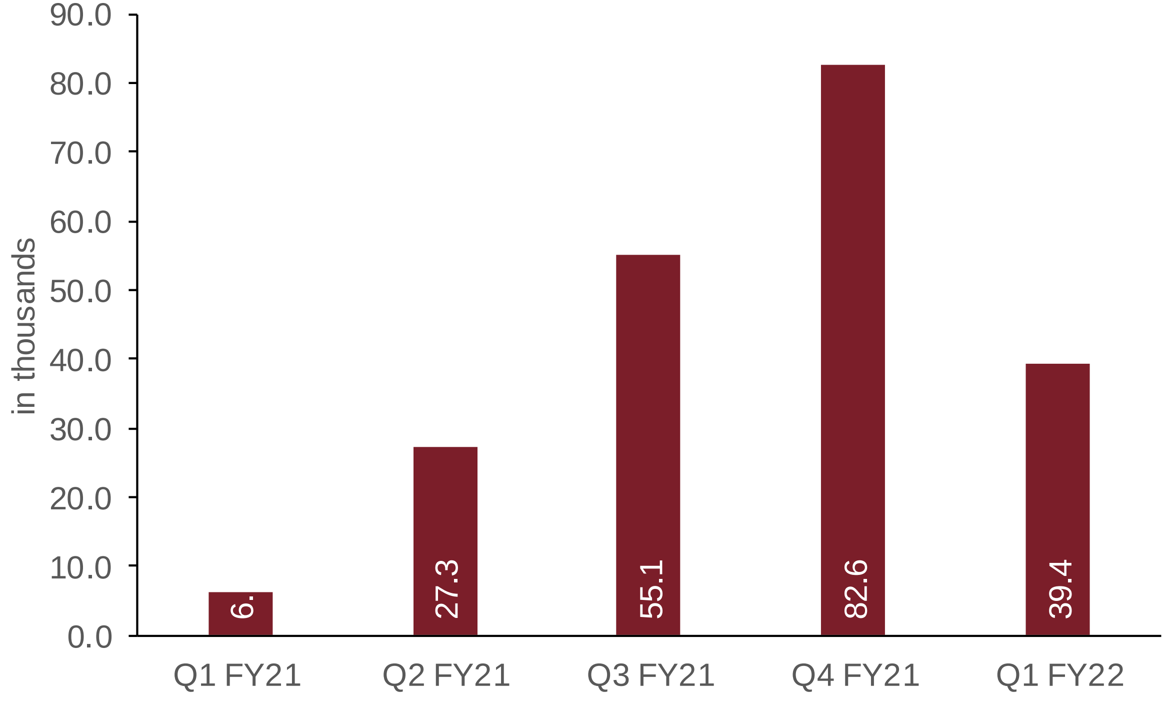
- After the sequential improvement during H2FY21, retail as well as off take sales dropped in Q1FY22 amidst the sluggish demand
- Some OEMs also faced supply issues due to semi conductor supply constraints.
- Production issues to continue in FY22.
- Among all segments- Pick-ups and SCV continue to see good traction in the economy especially in rural areas.
- This is followed by the tippers segment with good traction visible due to construction activities

Production of MHCVs fared better than LCVs in Q1 FY22

LCV production levels



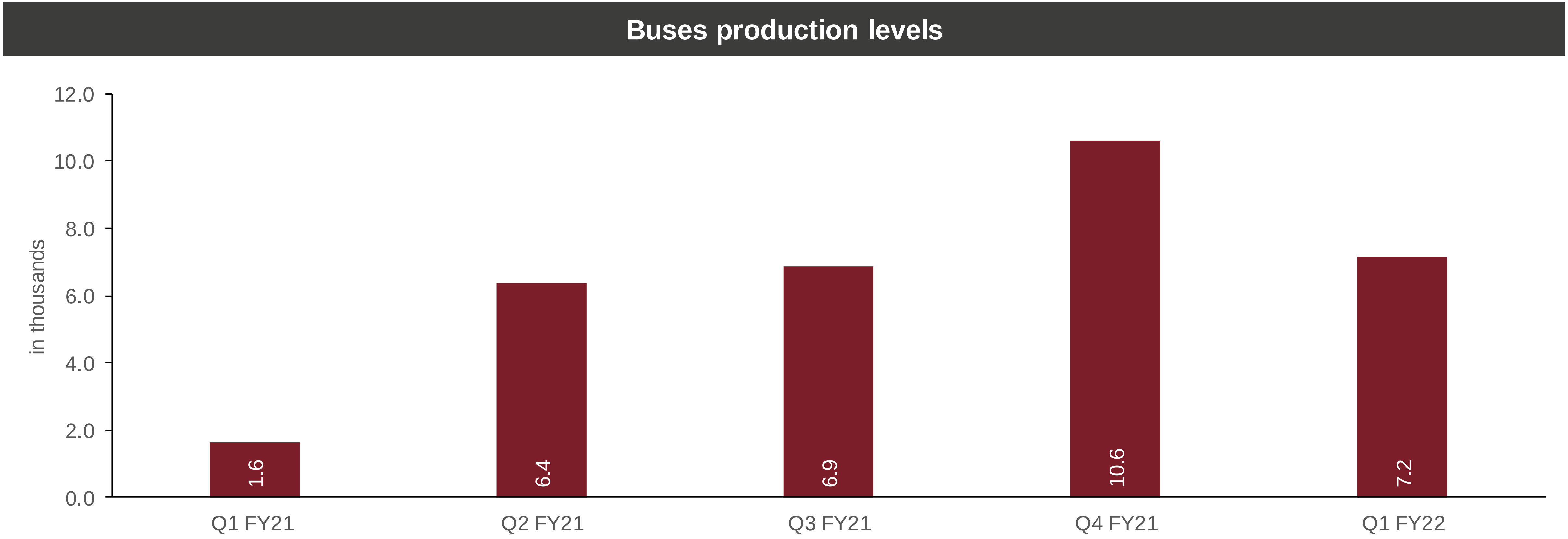
M&HCV production levels



- LCV production witnessed growth of 327% yoy and MHCV of 542% yoy in Q1 FY22. Growth in LCV was aided by sub-one tonne and pick up category. Both category remain robust
- MHCV production growth due to gradual pick up in end use sectors after ease of lockdown.

NOTE: Figures in thousands
Source: SIAM, CRISIL Research

Bus demand is still subdued



- Demand for buses has been depressed even in Q1 FY22. Though Production saw a growth of 341% in Q1 FY22 compared to same quarter last year.
- Demand on LCV bus side was mainly seen from ambulance segment and STU procurement

NOTE: Figures in thousands
Source: SIAM, CRISIL Research

Domestic – Annual Forecast

		CV	SCV	ULCV	MHCV	Buses
	FY 20 volumes	718	411	36	185	86
	YoY Growth in FY20	29%	20%	26%	47%	7%
	FY 21 volumes	566	365	30	154	17
	YoY Growth in FY21	21%	11%	18%	18%	79%
Base case	FY 22 E volumes	**685-695**	413-420	32-33	214-217	25-26
	YoY Growth in FY22 E	21-23%	13-15%	8-10%	39-41%	50-52%
Pessimistic case	FY 22 E volumes	**595-605**	351-358	23.9-24.5	178-182	23-24
	YoY Growth in FY22 E	5-7%	(4)-(2)%	(20)-(18)	16-18%	36-38%

NOTE: Volumes in thousands units;
YoY Growth in red indicates a negative growth
YoY Growth in green indicates a positive growth

Source – SIAM, CRISIL Research

Domestic – Quarterly Forecast (Base case)

Period		CV		SCV		ULCV		MHCV		Buses	
		Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q2	133	(20)%	98.4	(1)%	6.8	(23)%	23.9	(41)%	4.0	(76)%
	Q3	193.1	(1)%	128.3	5%	10.8	5%	50	15%	4.1	(78)%
	Q4	208.6	41%	113.6	40%	11.2	58%	76	92%	7.9	(62)%
FY22 E	Q1	104.4	231%	68.9	172%	3.3	189%	28.0	582%	4.5	312%
	Q2	170-172	28-32%	106-108	8-10%	7-8	6-8%	51-52	115-117%	5.2-5.4	30-32%
	Q3	189-192	(2)-0%	114-116	(11)-(9)%	10-11	(4)-(2)%	58-60	17-19%	5.8-6.0	42-44%
	Q4	221-224	6-8%	123-125	8-10%	11-12	3-5%	76-78	0-2%	10-10.4	27-29%
FY23 F	Q1	198-200	90-92%	111-113	63-65%	10-11	204-206%	63-65	128-130%	12.7-13.0	185-187%

- **SCV & ULCV**: Essentials section of E-commerce, FMCG and Agri to see continuation of the traction seen in FY21 Healthy sentiments on the Agri crop for 2021-22 Kharif season may help volumes starting end of Q2FY22. Possibility of third wave may limit Q2FY22 offtake and retail numbers to some extent, however these issues to get ironed out towards later part of Q2FY22. Interactions indicate players may push volumes in by means of offers, schemes and financing to regain volumes lost in Q4FY21 and Q1FY22,
- **MHCV**: Along with E-commerce essentials, pent-up demand of consumer durables also to see traction in FY22, which would aid e-commerce growth. Infrastructure spending to drive freight demand for goods such as cement and steel, production of these goods in turn, is expected to drive freight demand for minerals such as coal, iron ore, limestone/dolomite, etc. Further, long pending replacement due could bring some demand in this segment . However financer participation remains a major monitorable
- **Buses**: Schools less likely to resume full fledged operations before Q1 FY23. Even if commenced, attendance is expected to be optional and at low levels. Complete operation may commence starting Q2 or Q3 FY23 as vaccination drives reach advanced levels. Staff transport to be focused only towards MFG as major IT/ITES and service based companies announcing WFH policies even for CY2021.

 Source – SIAM, CRISIL Research

Domestic – Quarterly Forecast (Pessimistic case)

Period		CV		SCV		ULCV		MHCV		Buses	
		Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q2	133	(20)%	98.4	(1)%	6.8	(23)%	23.9	(41)%	4.0	(76)%
	Q3	193.1	(1)%	128.3	5%	10.8	5%	50	15%	4.1	(78)%
	Q4	208.6	41%	113.6	40%	11.2	58%	76	92%	7.9	(62)%
FY22 E	Q1	104.4	232%	68.9	172%	3.3	189%	28.0	582%	4.5	312%
	Q2	114.2-116.9	(14)-(12)%	73-75	(26)-(24)%	4.2-4.4	(38)-(36)%	31.8-32.3	33-35%	5.1-5.2	28-30%
	Q3	164.5-168.4	(15)-(13)%	100-103	(22)-(20)%	7-7.2	(35)-(33)%	50.9-51.9	2-4%	6.0-6.1	46-48%
	Q4	192-196	(8)-(6)%	107-109	(5)-(3)%	9.3-9.6	(16)-(14)%	67.8-69.3	(11)-(9)%	7.6-7.8	(4)-(2)%
FY23 F	Q1	198-200	90-92%	111-113	63-65%	10-10.2	204-206%	63.8-64.5	128-130%	12.8-13.0	185-187%

- **SCV & ULCV**: Essentials section of E-commerce, FMCG and Agri to see continuation of the traction seen in FY21 Healthy sentiments on the Agri crop for 2021-22 Kharif season may help volumes starting end of Q2FY22. Possibility of third wave may limit Q2FY22 offtake and retail numbers to some extent, however these issues to get ironed out towards later part of Q2FY22. Interactions indicate players may push volumes in by means of offers, schemes and financing to regain volumes lost in Q4FY21 and Q1FY22,
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Research *Source – SIAM, CRISIL Research*

Stakeholder interactions

OEM

- Supply constraints most acute in the pickup space. May take H2FY22 to get completely resolved. Pickup Industry may see a ceiling of 25-26,000 units due to this
- ICV and Tipper segments could scale FY18 volumes if 3rd wave remains just speculation
- Availability of finance in MHCVs for FTU/ FTB segment still a challenge, However funding for KAM and large customers has started from Banks
- Replacement participation currently very limited to LFOs and strategic customers. Need based purchases happening in Q1FY22
- Discounting levels have reached new highs INR 6-10 lakh discounts on offer, even for 2-3 vehicle deals in case of strategic customers
- ICV segment is seeing a healthy participation from captive financers, while the push may reduce after Q4FY21, fundamental demand from e-comm, FMCG.FMCD and consumption goods is expected to remain strong and the deal pipeline looks healthy

Dealer

Demand Story

- SCV Demand continues to be resilient compared to MHCVs. Existing vehicle owners coming for replacements
- In case of ILCV E-commerce and consumer goods holding their ground in terms of freight demand
- MHCV haulage seeing pressure on fundamentals, current demand arising from need based purchases by LFOs. Replacement may take time to restart and reach Q4FY21 levels
- Tipper demand focused towards road construction and infrastructure activities. North eastern region seeing good traction. North and West also seeing good momentum

Discounts and Financing

- OEMs across have increased prices in July 2021
- Discounts of 6-7 lakhs in 2-3 vehicle deals are almost a norm now. In some cases also going up to 8-10 lakhs

Financier

LTVs and participation levels

- LTVs in the SCV space continue to be strong. Captives primary drivers of funding followed by a few NBFCs tied up with OEMS
- ICV funding facing some challenges because of higher delinquencies in the >14T segment segment
- Retail customer funding in MHCV still very low. Most deals being closed are large and strategic buyers only.
- Buses segment continues to see dearth of funding. Banks still very pessimistic about participation here

Asset Quality

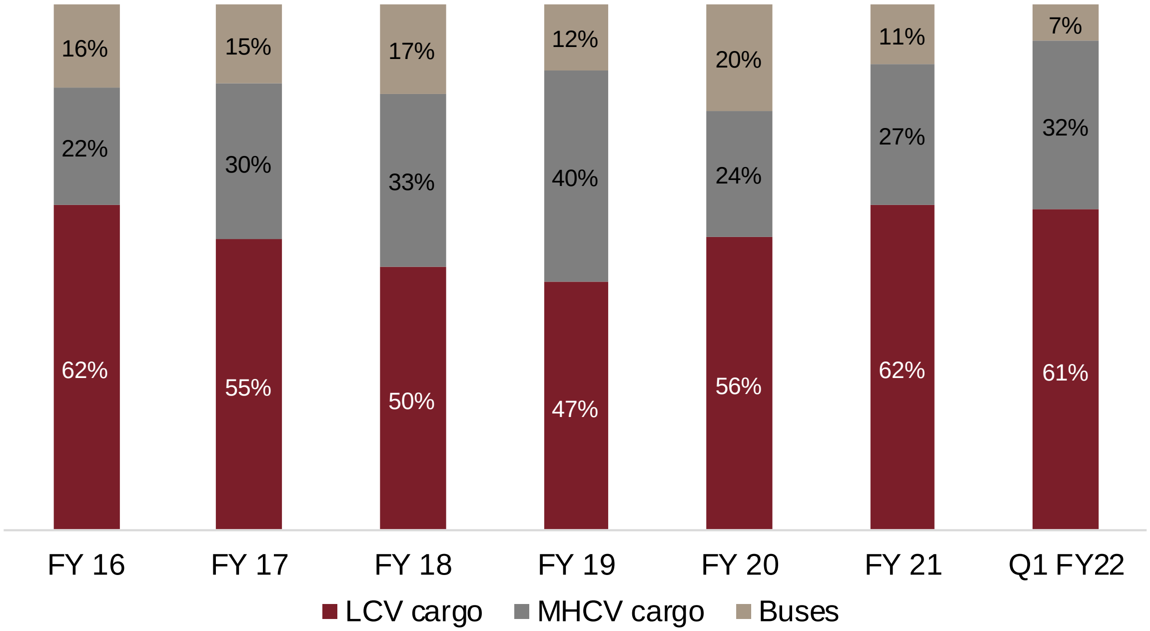
- Collections had been improving in H2FY21 due to the ECLG scheme being able to provide some relief to fleet owners.
- However with the onset of the second wave of covid and the subsequent lockdowns collections have been hit badly in May 2021.
- Further in this instance there is no provision for moratorium and this may result in up to 1.5X higher GNPAs compared to Q4FY21

Source – Industry, CRISIL Research

Commercial Vehicle exports

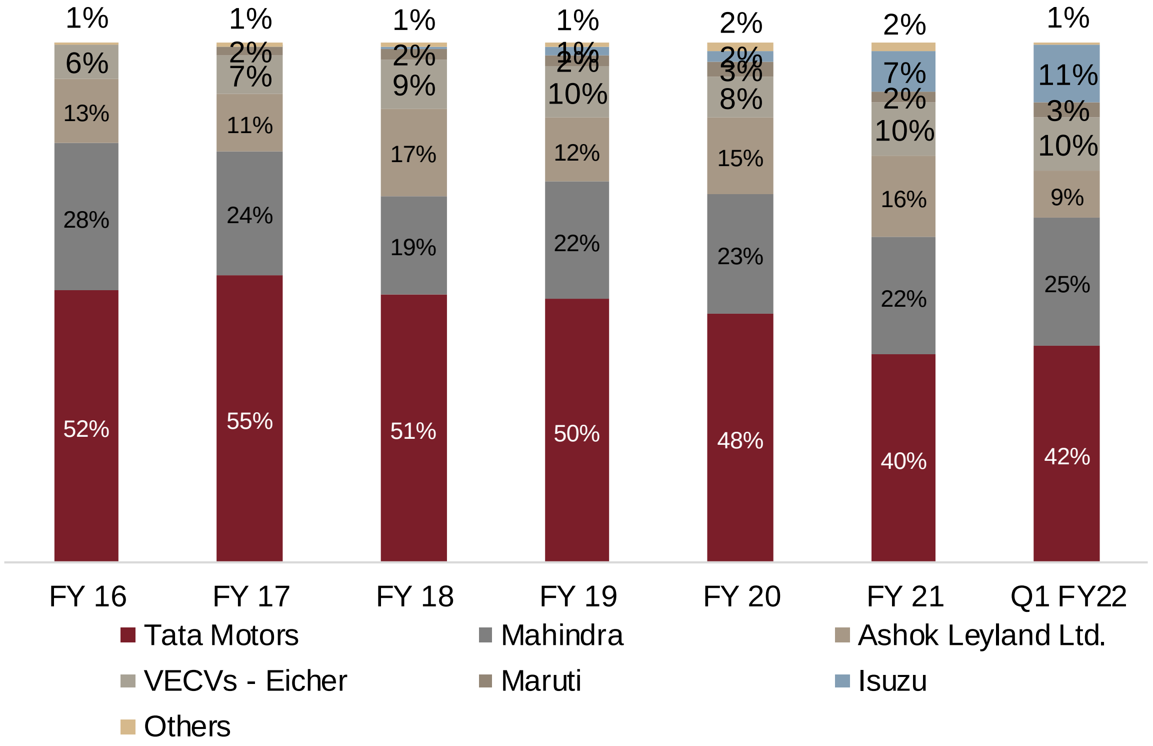
MHCV regain some ground in Q1 FY22

LCV continues to dominate



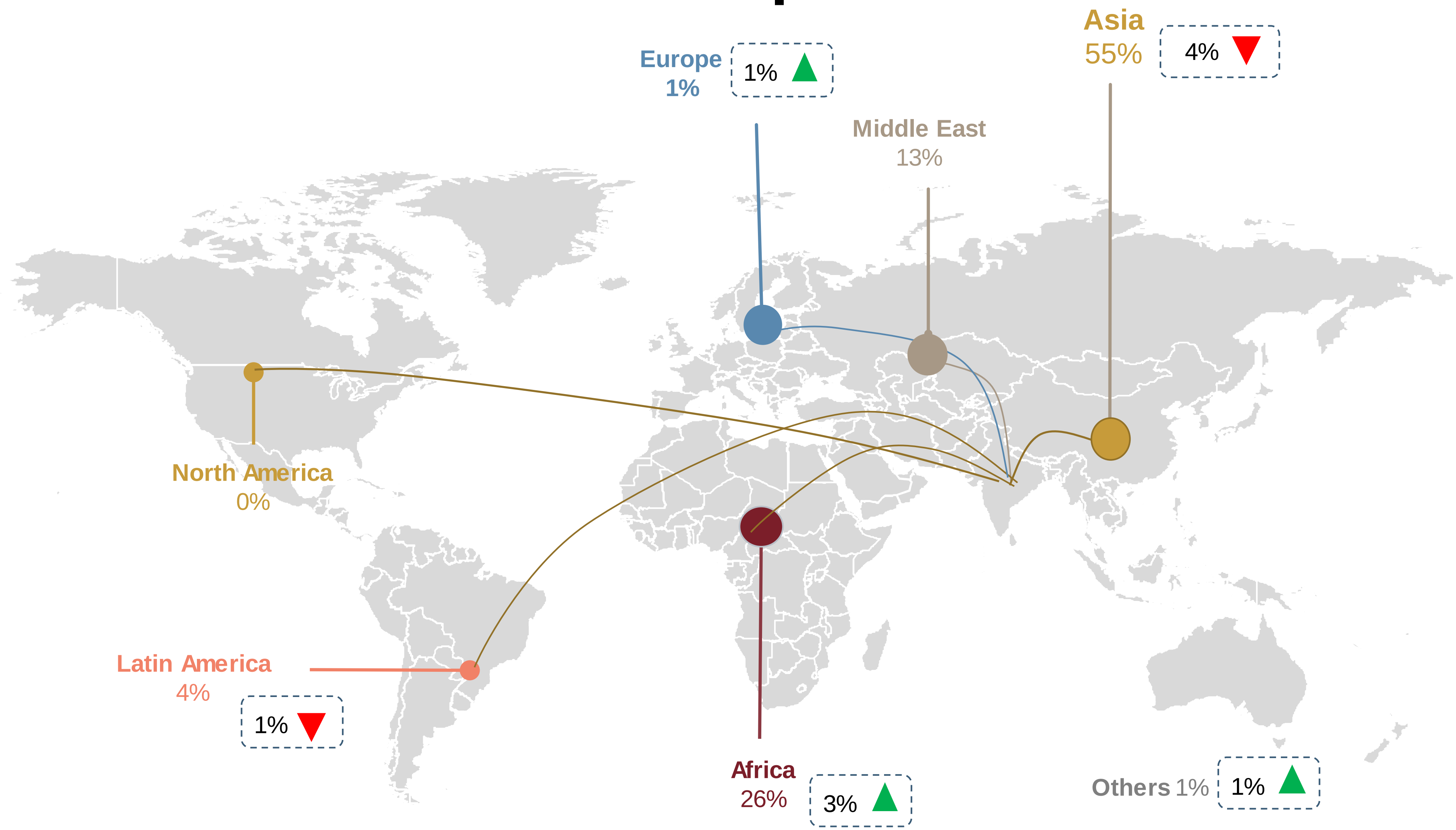
Source: SIAM, CRISIL Research

Tata / Mahindra expand share



- From some improvement in Q4, sales dropped in Q1 FY22 on a q-o-q basis, buses saw sharpest drop of 42%, LCV dropped slowest at 15%
- However, compared to FY21, LCV lost some ground, while MHCV expanded its presence, buses share continues on a shrinking path
- ALL saw a significant loss in exports share to Mahindra and market leader Tata

Commercial vehicles exports



- Neighboring countries Nepal & Bangladesh continue to dominate Indian exports contributing 46% in FY21
- Nepal has taken the lead during the year
- Saudi Arabia has expanded its presence in FY21
- Asia is severely impacted due to the Covid wave & its impact on the demand remains a key monitorable
- Impact of Covid on Africa was relatively limited and has gained share during the year
- Spread of Delta variant globally remains a concern

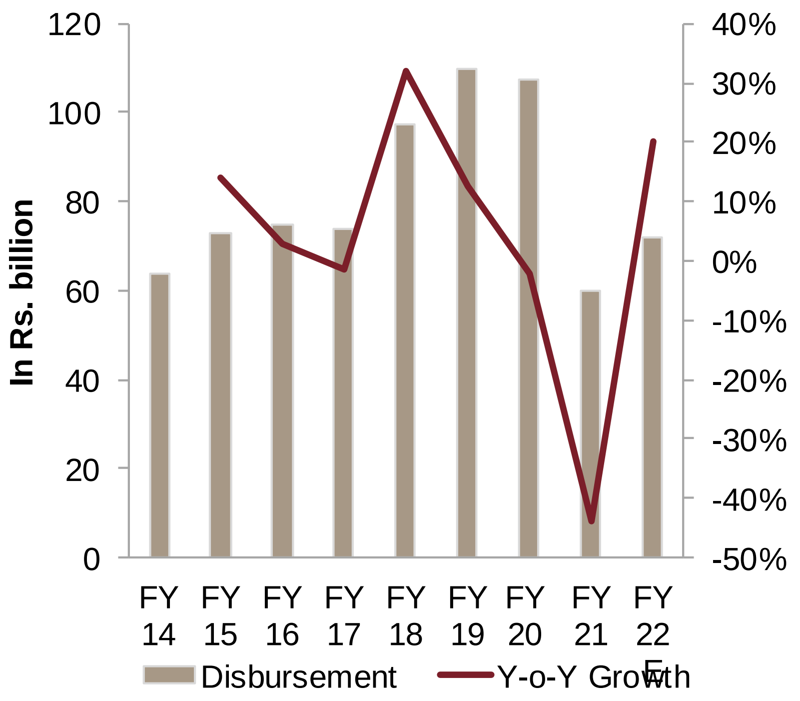
Note: : Represents volume data for FY21 exports, % in dotted boxes indicates change in market share from FY20 to FY21

Source: DGFT, CRISIL Research

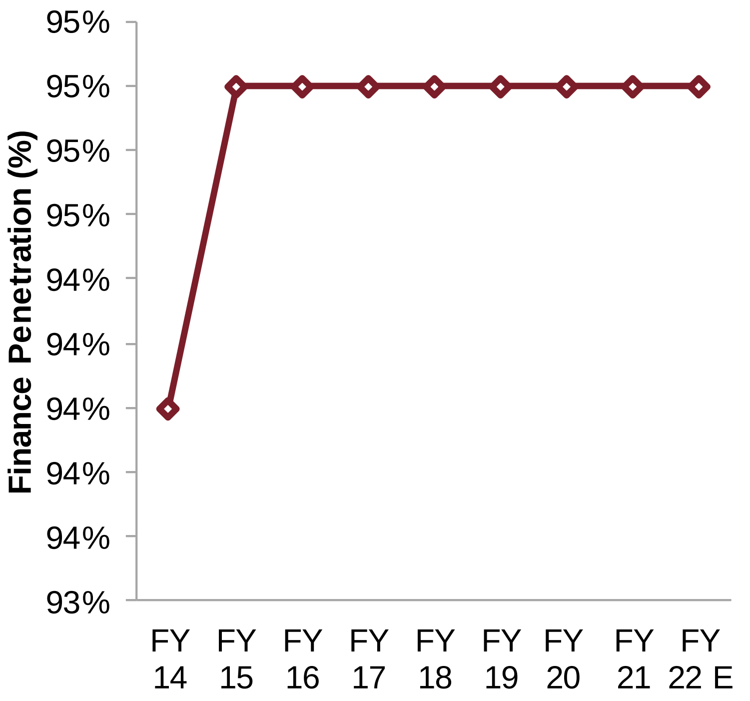
Three-wheelers

Some recovery expected in disbursement during FY22, LTV to remain range bound

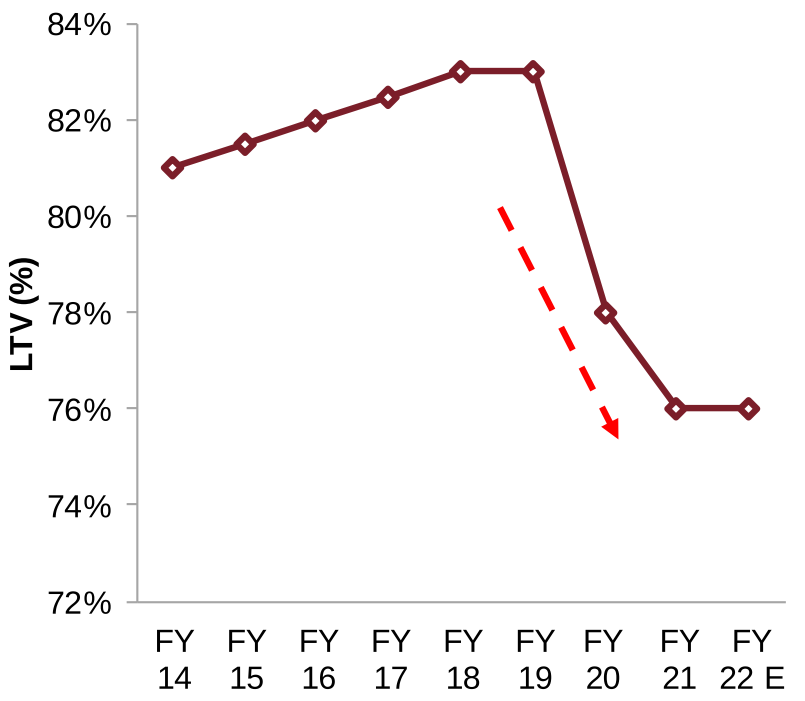
Disbursement



Finance penetration



Decline in loan-to-value continues

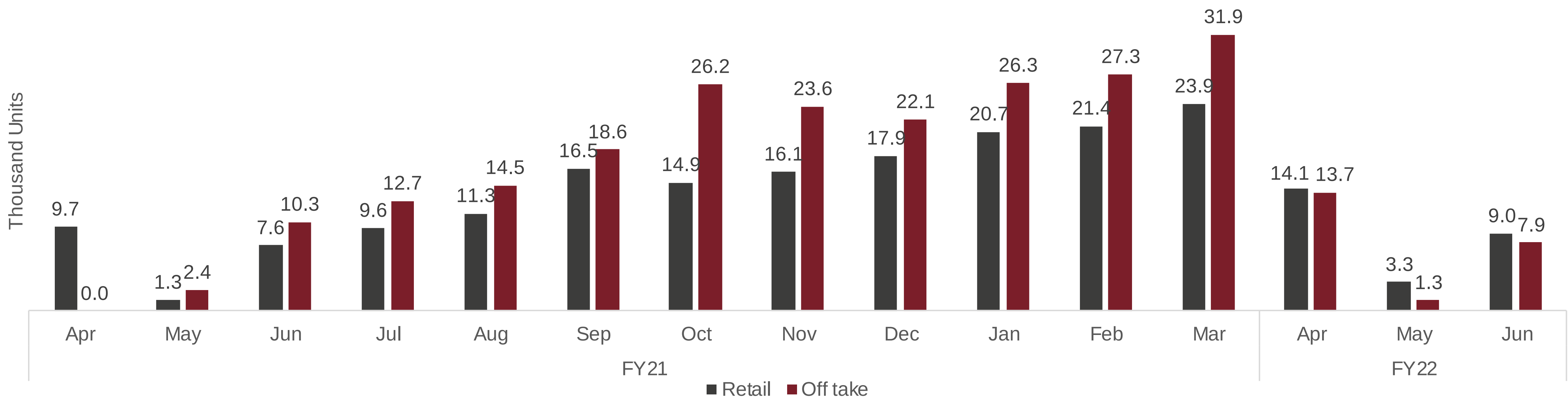


- Amidst the steep sales contraction, financing parameters also took a hit, disbursements reached a historic low during FY21
- Moreover, given the modest financial profile of the customers coupled with the drop in earning, most financers turned extremely cautiously and focused more on recovery during the year
- LTV levels were dropped despite rise in vehicle prices
- Going ahead, some improvement is expected in disbursement levels in line with demand growth (14-16%), however, financers are expected to remain cautious, and LTVs to remain under pressure

Source: Experian Credit Bureau, Company Reports, CRISIL Research

Three wheeler industry loses its growth tempo in Q1 FY22

Retail vs off-take FY21



Note: Retail numbers are estimated
Source: SIAM, Vahan, CRISIL Research

- Three wheeler industry is going through a very rough period, recent lockdown due to covid wave-2 led to lower mobility and increase in preference towards personal mobility exacerbating the situation for three wheeler industry in May; Sales reached 12 months low
- June month witnessed some improvement, However, sales couldn't reach April level as well
- Retail sales outpaced off take as dealers are unwilling to order given the uncertain times for the industry

Domestic – annual forecast

		Three wheelers	Cargo	Passenger
	FY 20 volumes	637	112	525
	YoY Growth in FY20	9%	13%	8%
	FY 21 volumes	216	82	134
	YoY Growth in FY21	66%	26%	74%
Base case	FY 22E volumes	233-235	88.5-90	145.2-145.7
	YoY Growth in FY22E	7-9%	7-9%	8-10%
Pessimistic Case	FY 22E volumes	159-161	61.5-62	98.3-98.8
	YoY Growth in FY22E	25-27%	24-26%	25-27%

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

Source – SIAM, CRISIL Research

Domestic – quarterly forecast (Base case)

Period		Three-wheeler		Cargo		Passenger	
		Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q1	12.8	(91)%	5.8	(90)%	6.9	(94)%
	Q2	45.9	(75)%	19.8	(27)%	26.2	(83)%
	Q3	72.7	(59)%	29.1	(2)%	43.6	(70)%
	Q4	85.6	(66)%	28.3	15%	57.2	(46)%
FY22E	Q1	24.4	91%	8.6	48%	15.8	128%
	Q2	49.8-50.3	8-10%	20.8-21.3	6-8%	28.8-29.3	10-12%
	Q3	70.3-70.8	(3)-(1)%	26.3-26.8	(7)-(5)%	43.7-44.2	0-2%
	Q4	89-89.5	3-5%	32-32.5	13-15%	56.6-57.1	(2)-0%
FY23 P	Q1	80-80.5	228-230%	28.8-29.3	237-239%	50.9-51.4	223-225%

Source – SIAM, CRISIL Research

- After a long hiatus, passenger vehicle segment showed some improvement during the last quarter of FY21& clocked ~30% growth on a q-o-q basis
- However, in Q1 FY22, second wave of covid & the resulting curbs impacted the passenger segment demand, especially in May; although some m-o-m revival was registered in June
- Passenger segment saw a sharp 72% drop in Q1 FY22 on a q-o-q basis, it was slightly lower for cargo at 70%
- In Q2 FY22, assuming the Covid cases remaining under control & gradual recovery in economic activities, we expect some normalization in demand especially for cargo segment
- Passenger segment is expected to get a push in Q3FY22 with reopening of schools offices & colleges and in turn the increased demand for last mile connectivity

Domestic – quarterly forecast (Pessimistic Case)

Period		Three-wheeler		Cargo		Passenger	
		Volume ('000)	YoY Growth	Volume ('000)	YoY Growth	Volume ('000)	YoY Growth
FY21	Q1	12.8	(91)%	5.8	(90)%	6.9	(94)%
	Q2	45.9	(75)%	19.8	(27)%	26.2	(83)%
	Q3	72.7	(59)%	29.1	(2)%	43.6	(70)%
	Q4	85.6	(66)%	28.3	15%	57.2	(46)%
FY22E	Q1	24.4	91%	8.6	48%	15.8	128%
	Q2	28.5-29	(38)-(36)%	9.5-10	(51)-(49)%	18.8-19.3	(29)-(27)%
	Q3	44-44.5	(39)-(37)%	18.5-19	(34)-(32)%	25.3-25.8	(43)-(41)%
	Q4	62.5-63	(28)-(26)%	24.2-24.7	(15)-(13)%	38-38.5	(34)-(32)%
FY23 P	Q1	53-53.5	118-120%	20.5-21	140-142%	32.3-32.8	106-108%

Source – SIAM, CRISIL Research

- In the pessimistic scenario, we are expecting a third wave in August and the ensuing restrictions, gradual improvement expected from September
- In turn, even Q2 numbers are expected to be in red, dragging down the overall annual numbers further
- Poor sales in two quarters to push industry recovery further
- Gradual improvement is expected from Q3 onwards
- Requirement for last mile connectivity will come from Q4 with schools/colleges/offices reopening providing impetus to passenger segment
- FMCG, vegetables, milk and other essential commodities' transportation to back cargo segment

Stakeholder interactions

OEM

- Second wave brought the industry back to square one during the first quarter
- Customer earnings have taken a big hit, it will take some time before they are ready to invest
- Moreover, support from financers is very limited currently, somewhat better than last year, still not comparable to pre covid levels
- Improvement in retails expected from August – September
- Given the impact on dealer financials , OEMs are not pushing vehicles to dealers
- Industry expected to normalize only in FY23, only gradual recovery expected,
- Primary passenger segment to remain in red
- Resurgence of Covid will push the revival further
- Emergence of third wave remains a key monitorable

Dealer

- Gradual recovery till Q4 came to a screeching halt in Q1 FY22
- With no earnings and additional medical costs due to Covid, customer finances have taken a severe hit
- Increased prices, higher fuel costs, no discounts has exacerbated the situation
- Very few enquiries, conversion rate slid further during the quarter
- Many cancellations, defaults as well
- Dealer working capital has been impacted, hence keeping minimal vehicles in stock
- Ordering only after receiving an confirmed order
- Gradual improvement expected in cargo, passenger vehicles to get a push only after reopening of schools/colleges/ offices
- Third wave will aggravate industry troubles

Financier

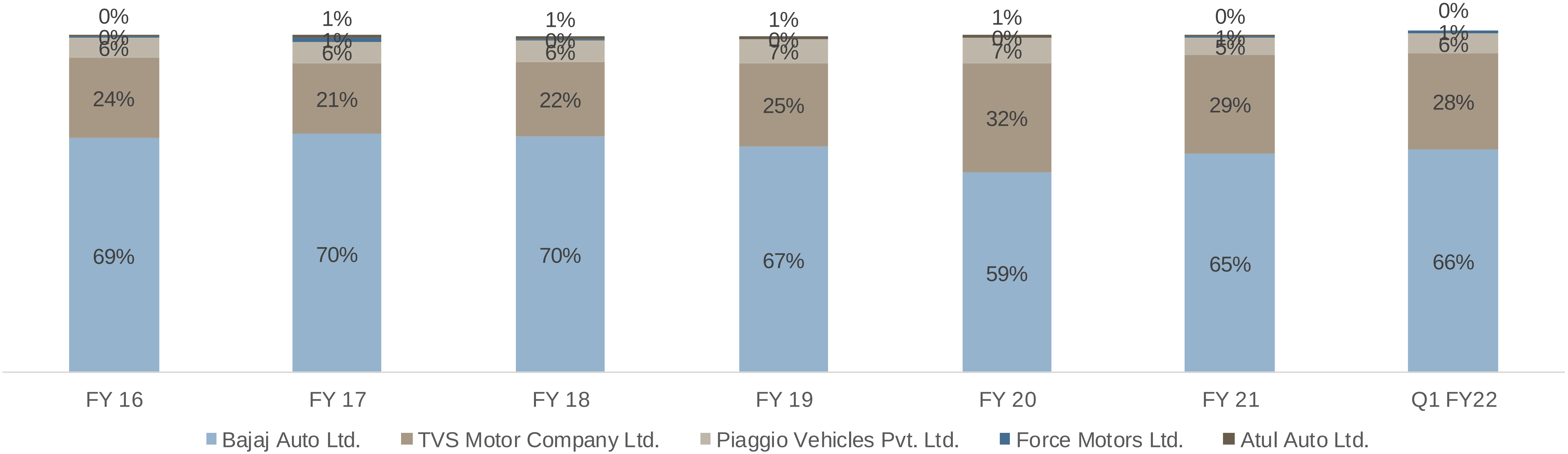
- Given the relatively humble financial profile of the customers coupled with the impact on customer financials in last one and a half years, financers are very cautious while funding
- Focus is still on recovery
- Many repossessions are happening especially in passenger segment
- No major improvement in LTV expected in the medium term
- Financers are currently wait and watch mode
- However, financers are willing to find strong profiles

Source – Industry, CRISIL Research

Three wheeler exports

Cargo segment gains some share, Bajaj expands its lead further in Q1 FY22

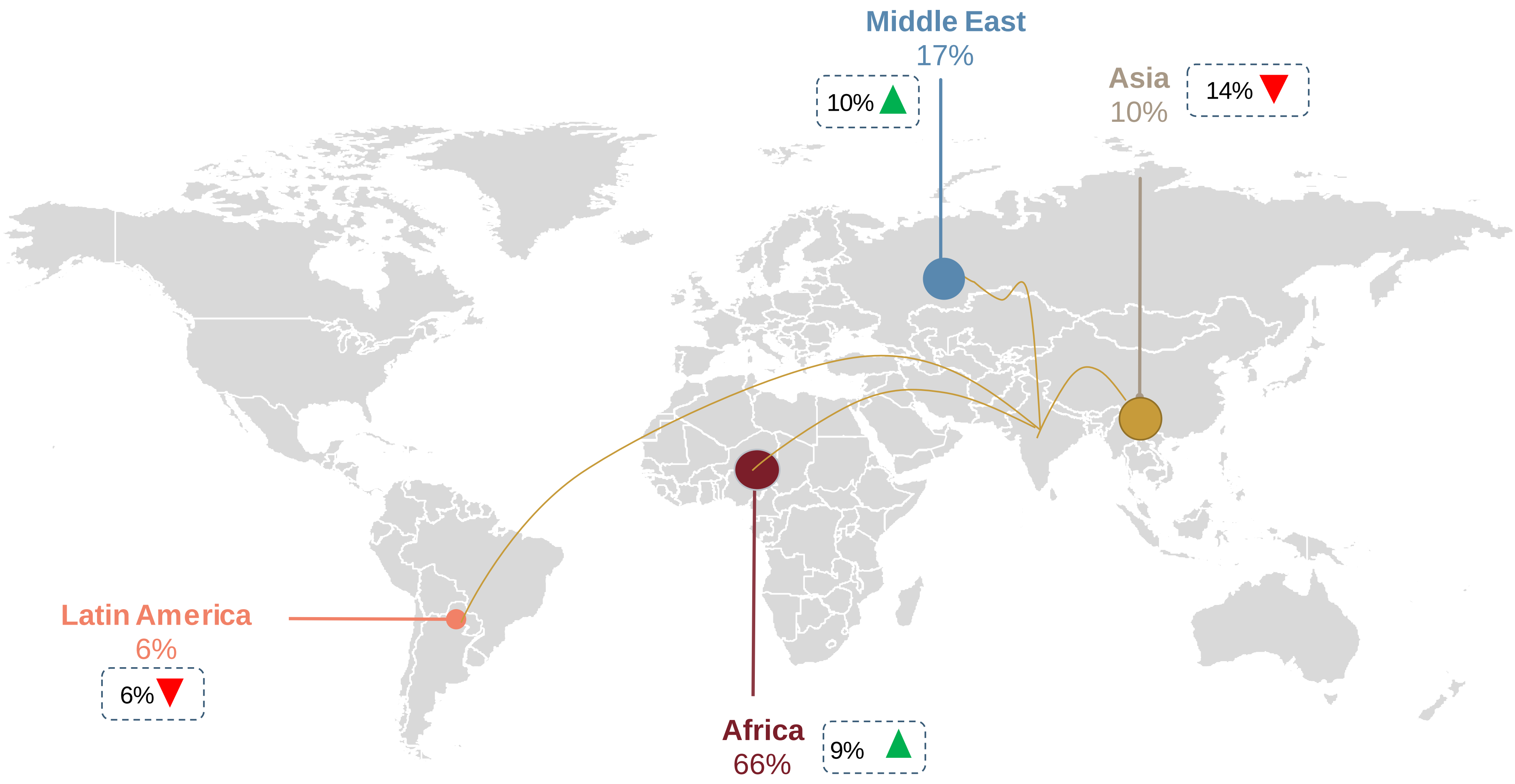
Bajaj maintains its top position



Source: SIAM, CRISIL Research

- Q1 FY22 witnessed some improvement in exports, exports grew 68% q-o-q , with smaller cargo segment registering a sharp growth of 140% q-o-q
- Bajaj continues to dominate the 3W exports
- It extended its lead further during Q1
- With domestic market in red, OEMs are focusing on exports which is expected to aid exports during FY22

Three-wheeler exports



- Covid has impacted demand from Asia, LATAM & only gradual recovery is expected
- Exports share of African and Middle East countries increased aided by limited covid spread and crude prices firming up in FY21
- Substantial recovery is seen in exports to Egypt after the ban of auto-rickshaw was lifted which has aided exports growth.
- Demand from Iraq has supported expansion of Middle East share
- The impact on the demand due to the resurgence of Covid remains a key monitorable

Note: : Represents volume data for FY21 exports, % in dotted boxes indicates change in market share from FY20 to FY21

Source: DGFT, CRISIL Research

Tractors

Back to Summary Forecast Slide

Tractor industry to grow further in FY22, even from the high base of FY21

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

Favorable

Neutral

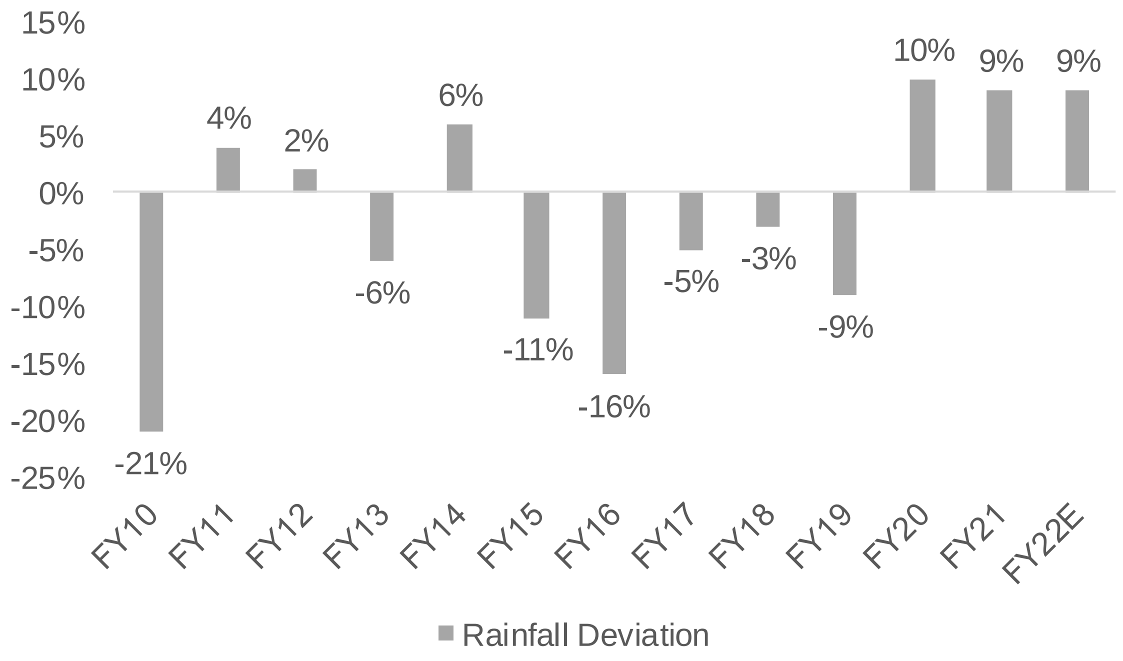
Not Favorable

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

Source: CRISIL Research

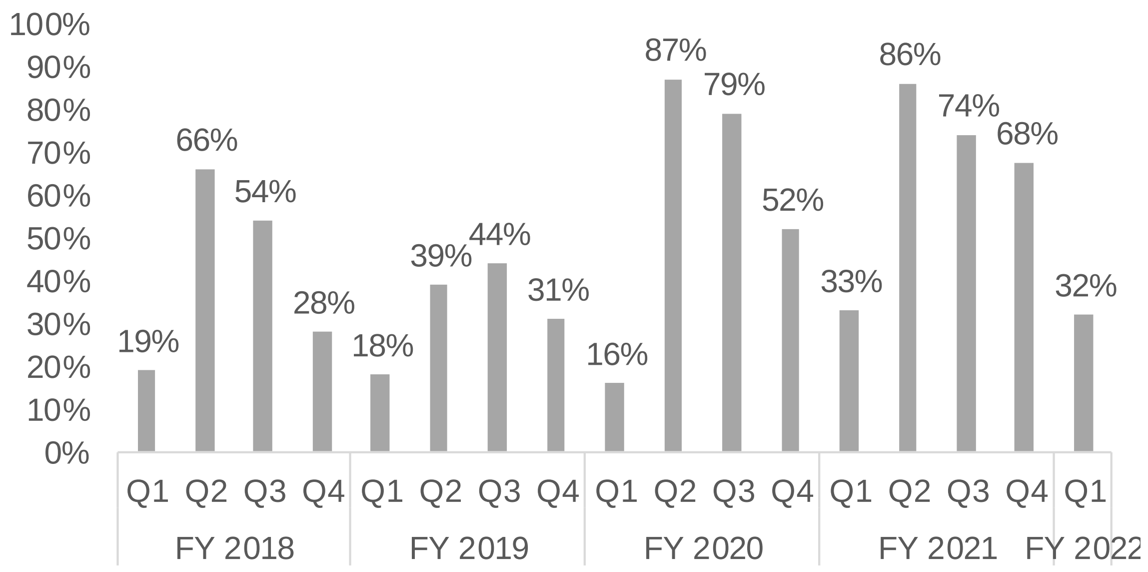
South West Monsoon is likely to be normal in FY22

Normal rainfall in FY22



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

Reservoir Levels are higher

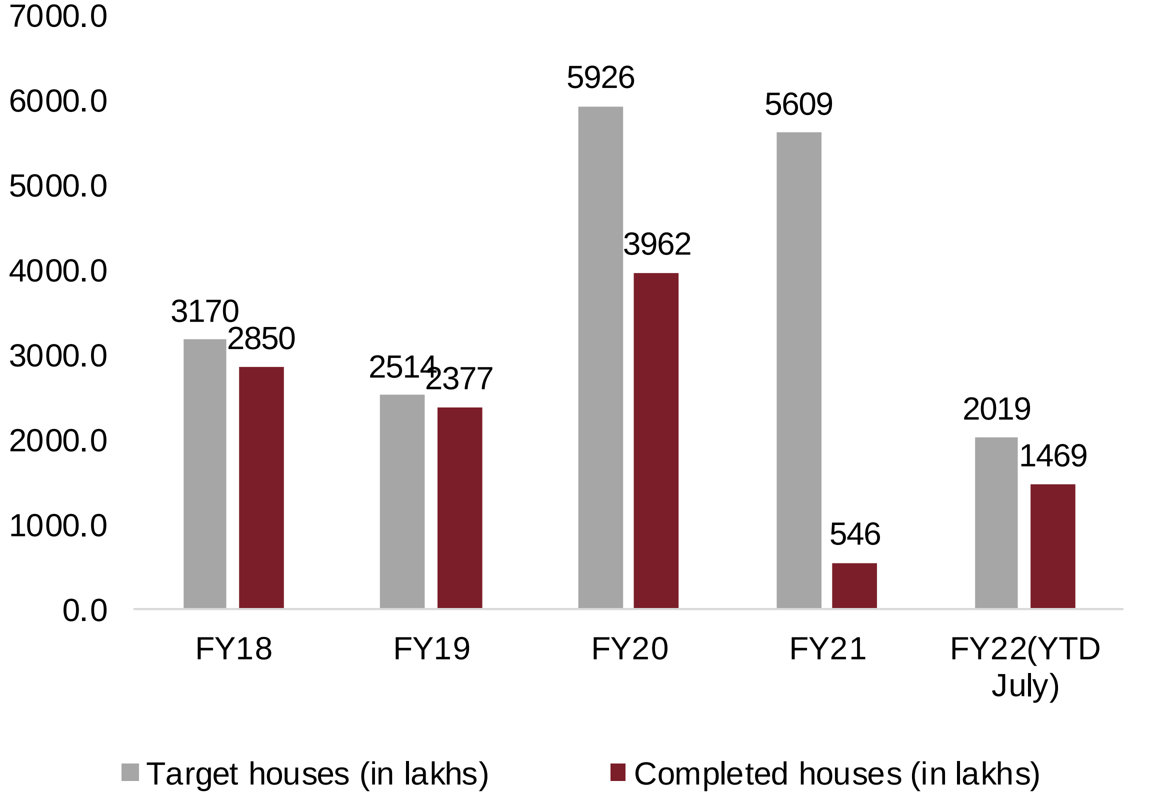


Notes: Storage Status of 120 Reservoirs of the Country

- The total live capacity of 130 monitored reservoirs is 55.606 BCM, which is 32% of total live storage capacity of these reservoirs.
- The overall storage position is less than the corresponding period of last year in the country as a whole but is better than the average storage of last ten years during the corresponding period.
- Southwest monsoon over the country is expected to be normal. Rainfall is expected to pickup in second half of July.

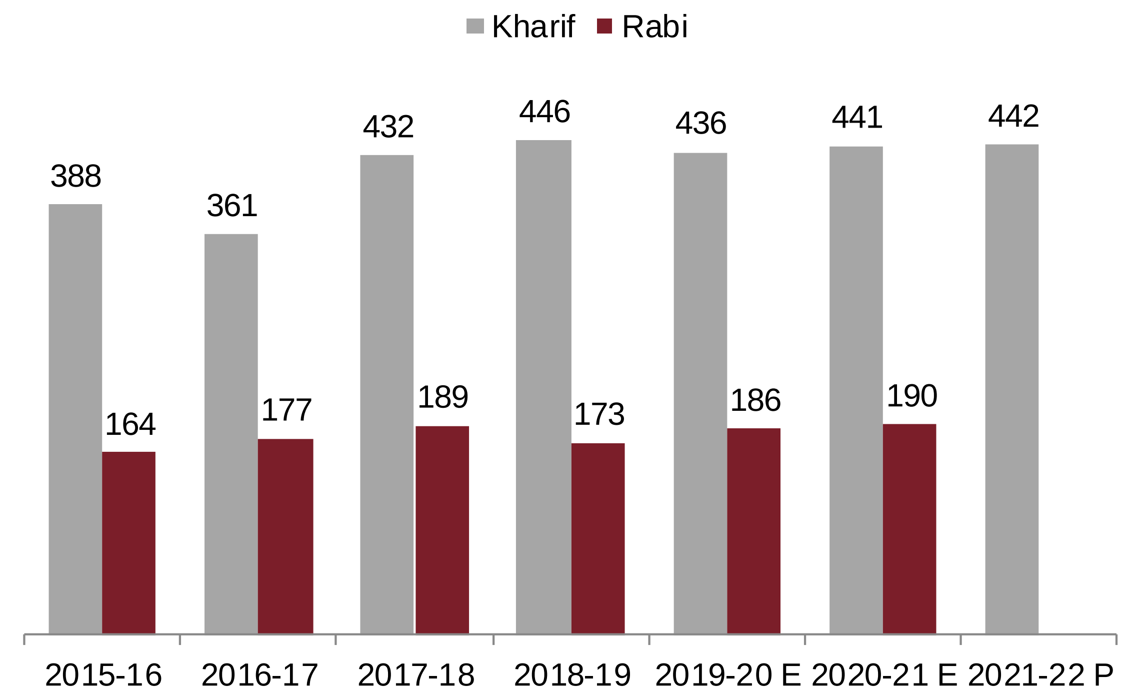
Positive outlook for kharif season and better cash flow in the market to aid agri sector

PMAY-G



Source: Ministry of Rural Development, CRISIL Research

Crop production growth higher for MY20

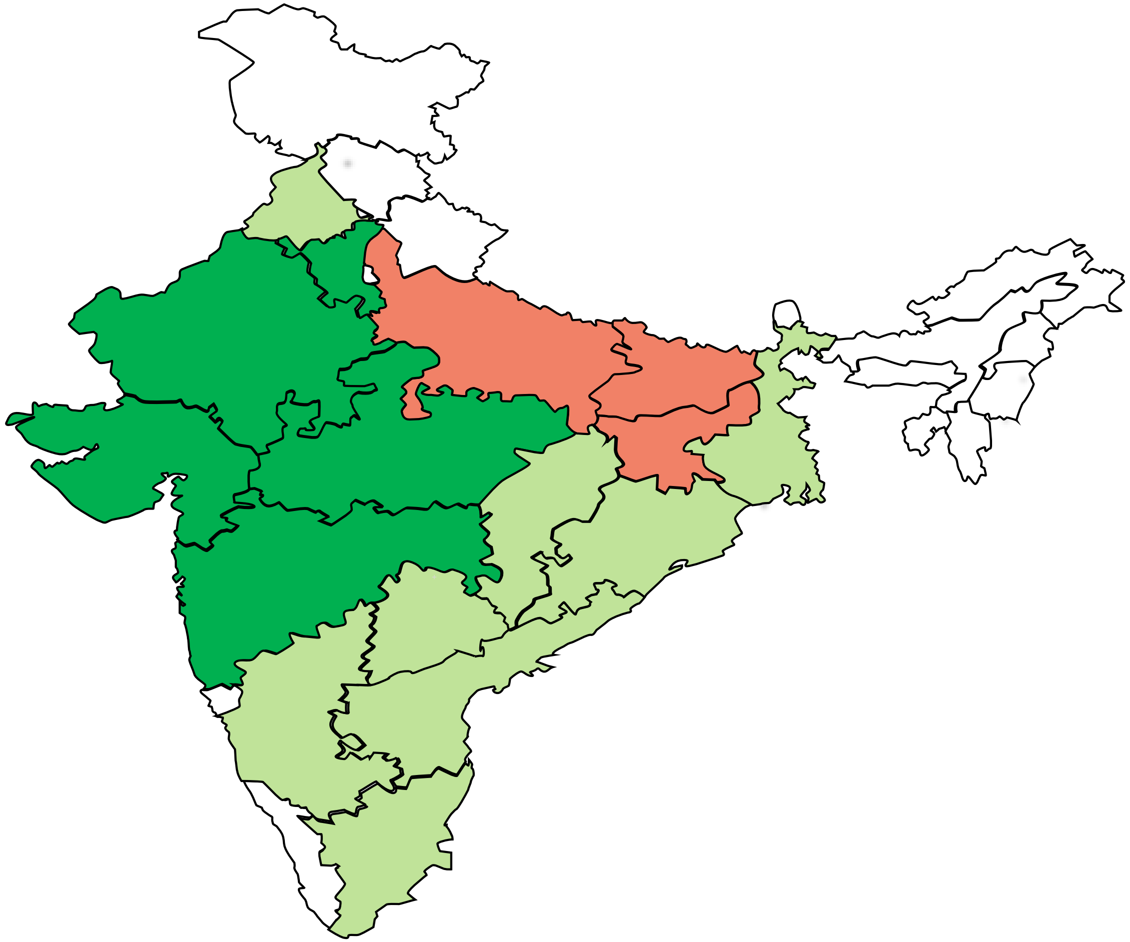


MY: Marketing year, P: Projected
Notes: 1) Base of 100 for Index (kharif and rabi) taken in MY Jan-Dec 2015
Source: Ministry of Agriculture, CRISIL Research

- Construction pace seeing improvement sequentially after seeing a lull in FY21.
- Normal monsoon expectation to aid good kharif production in FY22 as well.
- Timely payments from government and private agencies for rabi crops has further improved sentiments

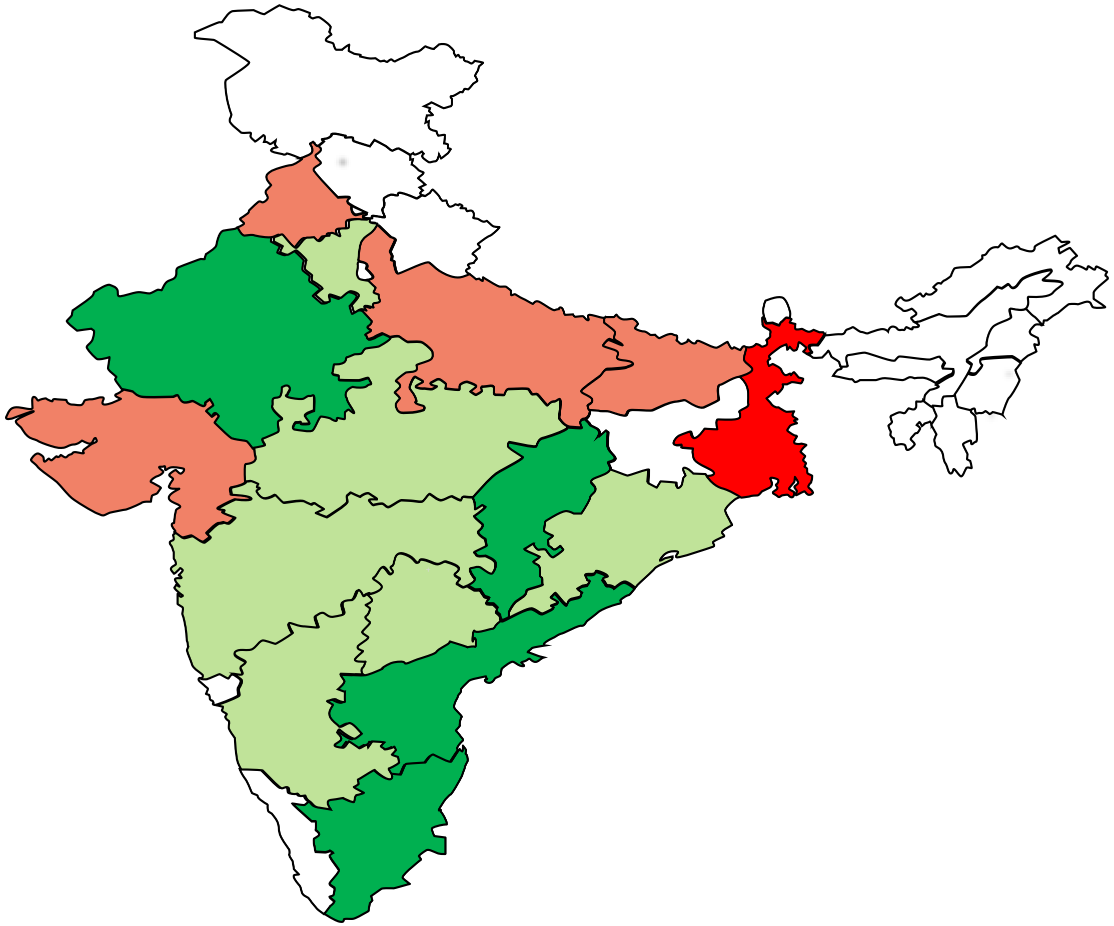
State wise Crop Value Index

Kharif CVI heat Map for FY22



Source: CRISIL Research

Rabi CVI heat map for FY21



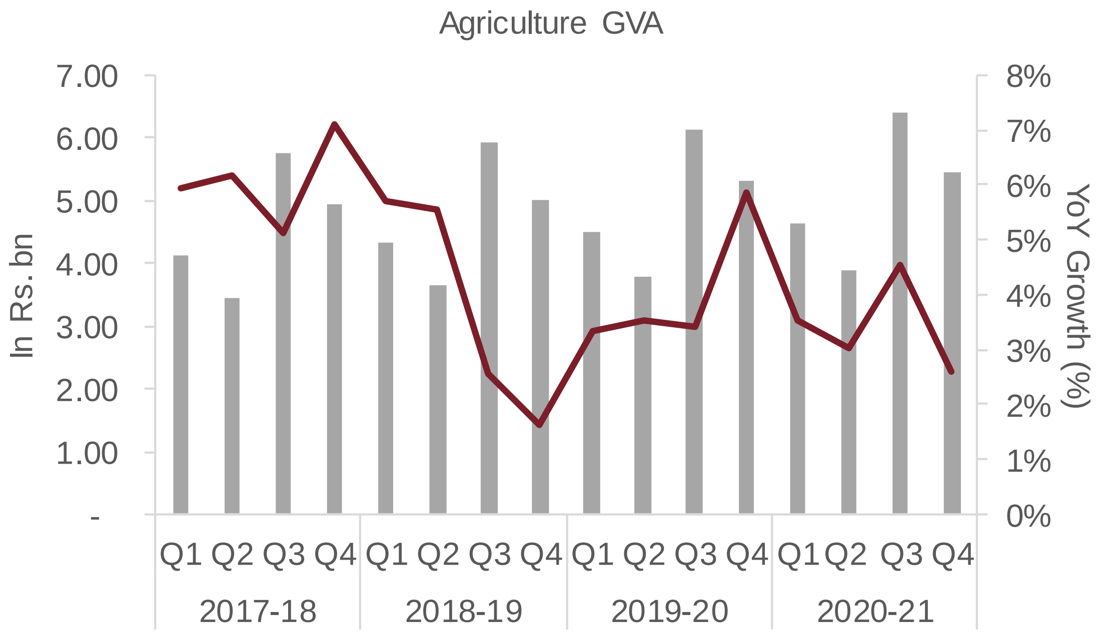
Source: CRISIL Research

Colours indicate % change on-year

>10% | 0-10% | (10)%-0% | <(10) % | No data

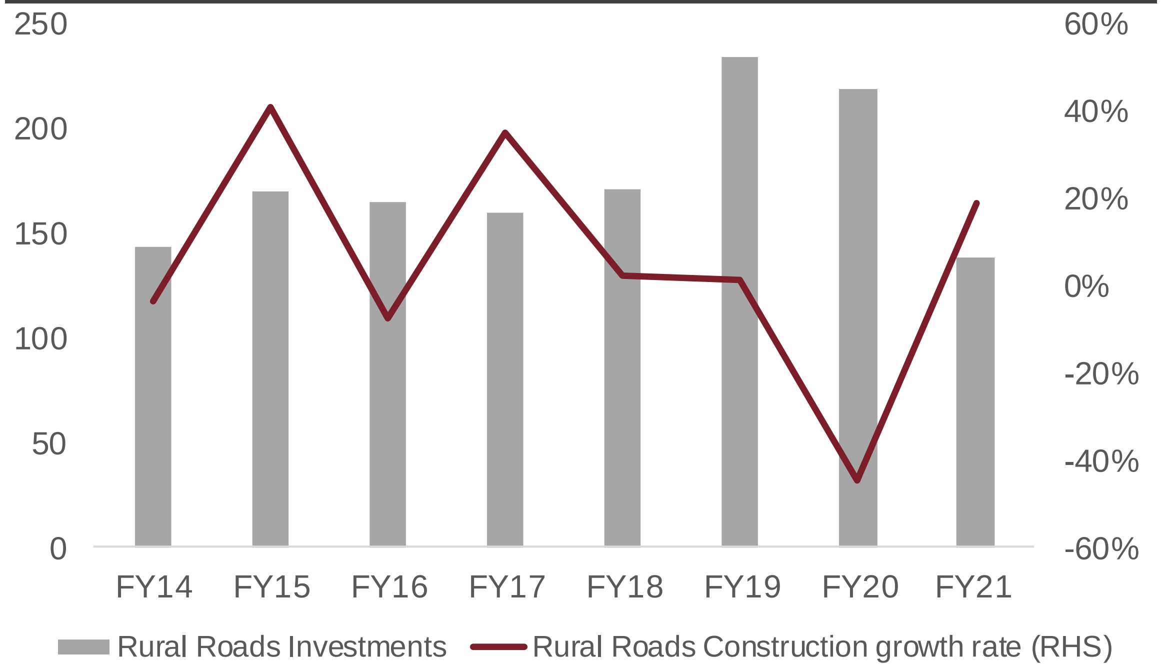
Normal monsoon support sustained Agri GVA growth momentum in FY21

Agriculture GVA & Growth rate (y-o-y)



Note: GVA at basic prices (constant 2011-12)
Source: Ministry of Statistics and Programme Implementation, CRISIL Research

PMGSY Status

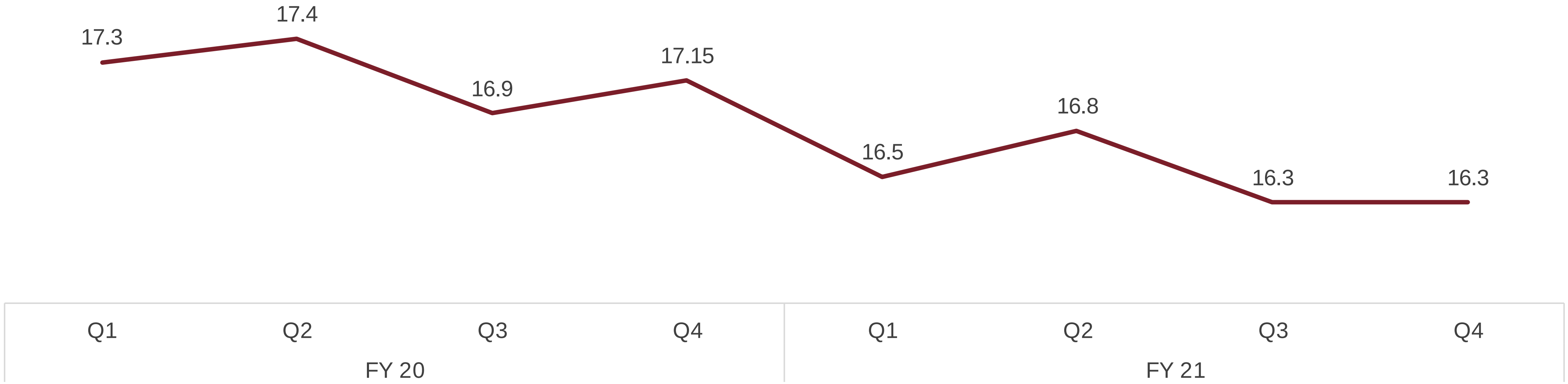


Source: OMMS (Online management, Monitoring and Accounting System), CRISIL Research

- Agri GDP grew at 3.1% on-year in Q4 FY21. It has been the best performing sector among the three broad categories.
- Consecutive good monsoons helped the agri sector to remain relatively unscathed thus far.
- With good sowing the upcoming Rabi season as well as expectations of normal rainfall in FY22 will help the sector maintain its momentum in the upcoming fiscal as well.

Interest rates remains stable, credit availability and affordable financing rates further aiding tractor demand

Repo rate cuts from RBI can lead to marginal decline in the interest rates

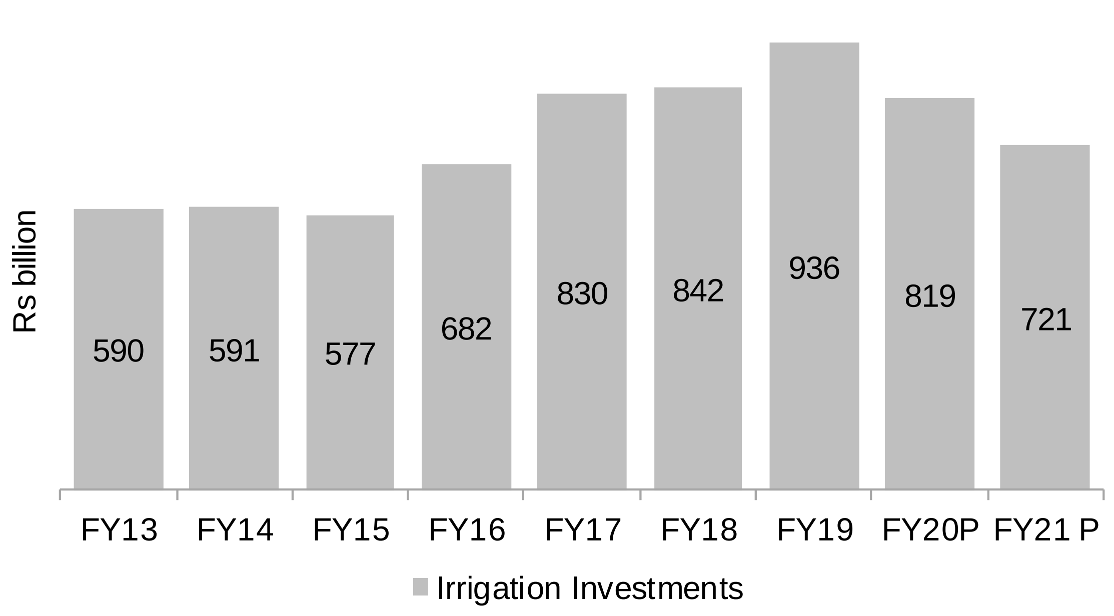


NOTE: Interest rates for Q1FY21 is not yet released by leading financiers
Source: CRISIL Research

- Financing issue persisted in April and May as doorstep inspection could not be performed. However, financers have now come up with digital processes.
- Amid robust demand, no interest cuts were done in Q4FY21
- Tractor NPAs are estimated to be at a stable level in FY22.
- LTVs are expected to remain at a similar level of 70-75% due to risky nature of business.

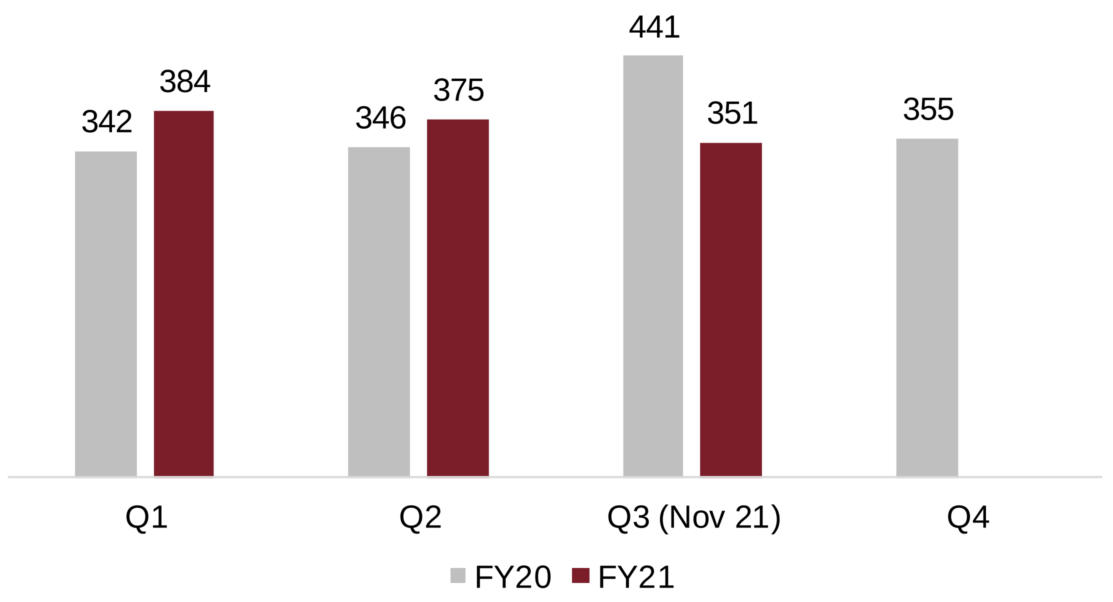
Irrigation investments expected to get back to pre-Covid levels in FY22

Irrigation spending at slower pace



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

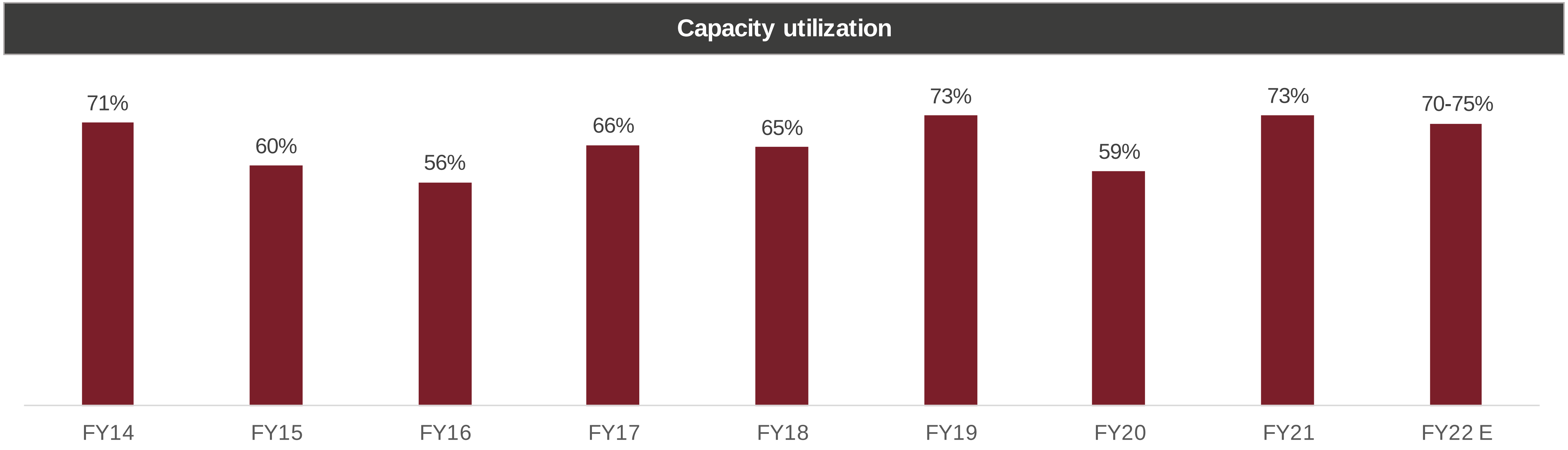
Daily Rural Wage



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

- The government's renewed thrust on enhancing irrigation intensity and making the nation more drought-proof is expected to support agriculture growth and increase mechanization.
- Irrigation intensity is expected to improve the most in Tamil Nadu, Uttar Pradesh, Madhya Pradesh, Rajasthan and Karnataka. Irrigation intensity is highest in northern region, followed by the southern and eastern regions
- Government's focus on improving farm incomes through various schemes, promoting farm mechanization; and investments to improve rural infrastructure will aid better sentiments.

Utilization to remain range bound with demand growth as well as capacity additions



E: Estimated
Source: CRISIL Research

- Overall capacity utilization for the tractor industry is estimated to have reached 73% in FY21, mainly due to higher production as the domestic tractor demand rose in the fiscal.
- In FY22, capacity utilization is expected to range bound due to significant demand coupled with capacity addition by players like Escorts and Swaraj.

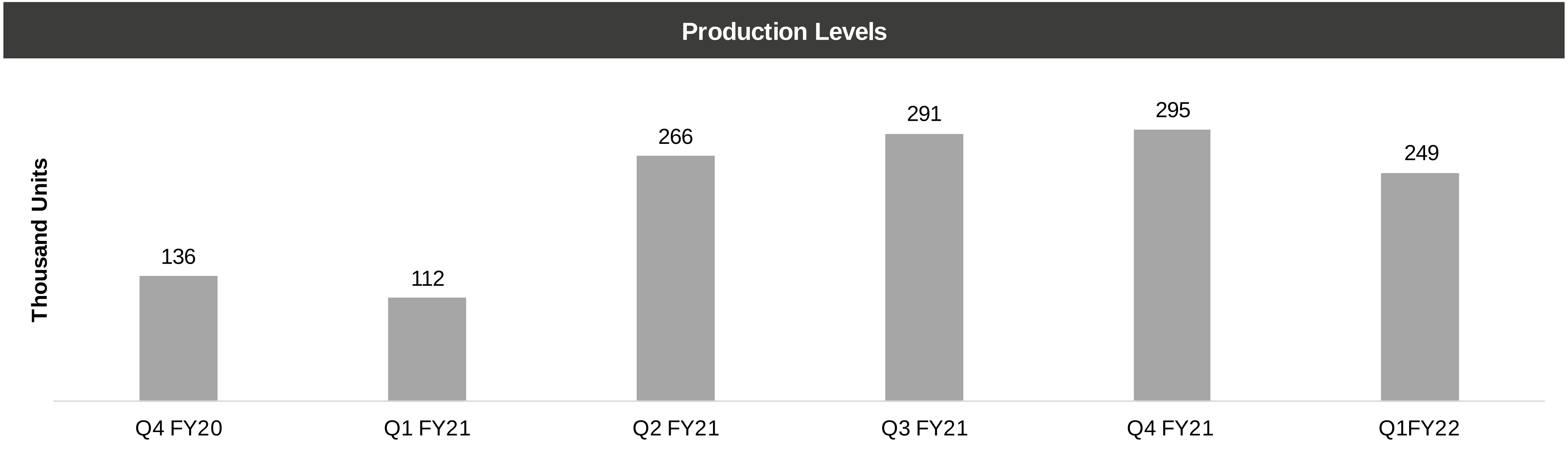
Implementation of Trem IV norms in Oct 2021

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 October 2021	5	4.7	0.025

Source: Industry, CRISIL Research

- The new emission norms which are expected to be set in place will require Agricultural machinery – including agricultural tractors, power tillers and combined harvesters.
- To simplify and avoid any confusion with other vehicle norms with "BS" or "Bharat Stage" prefix, Agricultural tractors and other farm equipment vehicles will fall under the TREM Stage-IV and TREM Stage-V.
- The TREM-IV regulations effective from October 2021 (due to which the price for >50 hp tractors is expected to increase by 10-12%) will aid in increasing realizations marginally.
- As tractor with more than 50HP contribute only 8% to overall tractor sales, we expect limited impact on tractor industry.

Production levels are higher y-o-y, drop on a q-o-q basis amidst Covid restrictions



Source: CRISIL Research

- Production continued on a growth trajectory in FY21 in line with the strong sales traction
- However, Q1 FY22 saw the production contraction on a q-o-q basis given the Covid restriction during the quarter
- Production is expected to pick up going ahead with the estimated improvement in demand as well as streamlining of OEM supply streams

Domestic – Annual & Quarterly Forecast (Base Case)

FY 21 volumes	898
YoY Growth in FY21	26.6%
FY 22 E volumes	955-965
YoY Growth in FY22 E	6-7%

Period		Tractors	
		Volume ('000)	YoY Growth
FY21	Q2	236	40%
	Q3	258	26.5%
	Q4	238	63%
FY22 E	Q1	229	39%
	Q2	248-253	5-7%
	Q3	256-261	(1)-1%
	Q4	223-227	(6)-(4)%
FY23 P	Q1	228-232	(1)-1%

*NOTE : ** FY22 assumed neutral assuming normal monsoon, E: Estimated P: Projected; Volumes in thousand units; YoY Growth in red indicates a negative growth, green indicates positive growth*

Source – CRISIL Research

- Tractor industry to see a growth by 6-7% in FY22 after growing at a robust pace in FY21.
- Healthy reservoir levels, high farm profitability, sustained government support in terms of procurement of food grain, expected pick-up in commercial demand and normal monsoon prediction for the year.

Domestic – Annual & Quarterly Forecast (Pessimistic Case)

FY 21 volumes	898
YoY Growth in FY21	26.6%
FY 22 E volumes	936-945
YoY Growth in FY22 E	4-5%

Period		Tractors	
		Volume ('000)	YoY Growth
FY21	Q2	236	40%
	Q3	258	26.5%
	Q4	238	63%
FY22P	Q1	229	39%
	Q2	232-237	(2)-0%
	Q3	256-261	(1)-1%
	Q4	220-224	(8)-(6)%
FY23	Q1	228-232	(1)-1%

*NOTE : ** FY22 assumed neutral assuming normal monsoon, E: Estimated P: Projected; Volumes in thousand units; YoY Growth in red indicates a negative growth, green indicates positive growth*

Source – CRISIL Research

- In the pessimistic scenario, we have assumed a third wave to hit during August , to subside gradually in September
- Third wave of Covid-19 to impact agricultural sentiments in Q2 and impact tractor industry sales during the quarter
- Tractor industry to see a growth by 4-5% in FY22 after growing at a robust pace in FY21.

Stakeholder interactions

OEM

- Retail sentiments remained positive due to timely and healthy cash disbursements amid higher procurement.
- Expected higher output for the upcoming Kharif season and disbursements under government income support schemes will further aid tractor demand.
- The jump in tractor sales can also be attributed to higher need of mechanization and monsoon is expected to be normal this year.
- The demand on-ground is positive across states on account of a good Rabi produce and expectation of better farm income.

Dealer

- Inventory at dealer's end has largely normalized
- Higher HP tractors are in more demand
- Dealers are looking to stock up ahead of festive season as there is uncertainty with regards to Covid and lockdowns
- Rabi crop has done really well.
- There has been good support from the government in terms of procurement

Financier

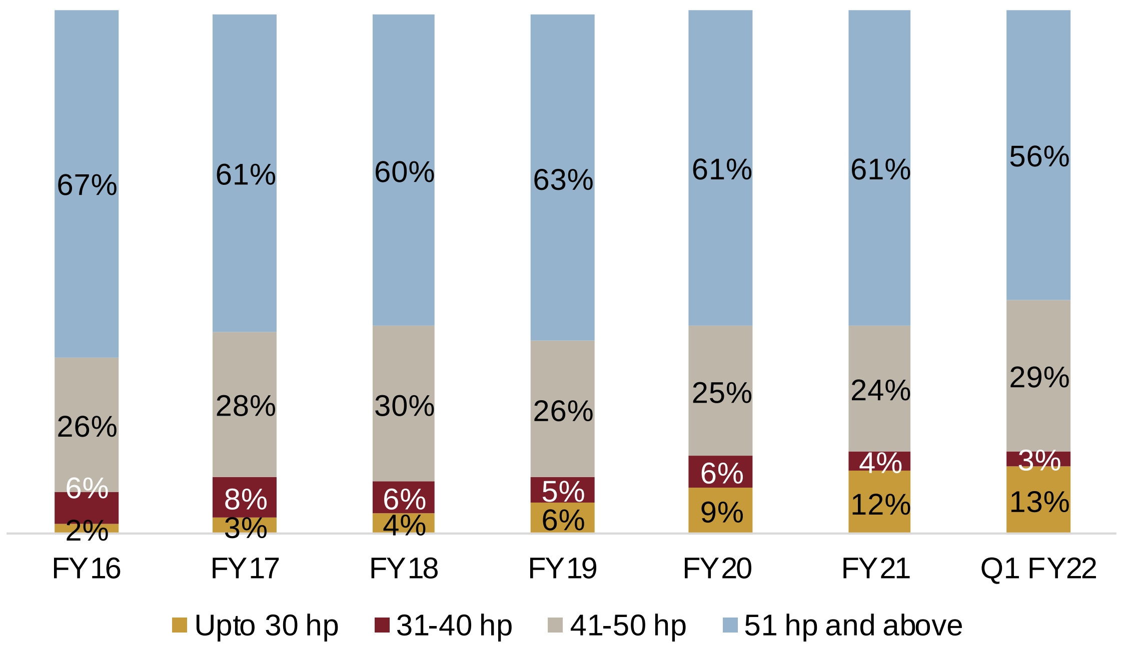
- Financers have now come up with digital processes.
- There is cash flow in market as farmers have received better crop realizations
- This year there have been fewer defaults
- Collection is at 75% till now and if it continues to be good for coming months financers will also be aggressive for the next quarter.
- LTVs are expected to remain at a similar level at 70-75% amid risk averse investors.
- Tractor loans under moratorium are estimated to be at less than 10%.

Source – Industry, CRISIL Research

Tractor exports

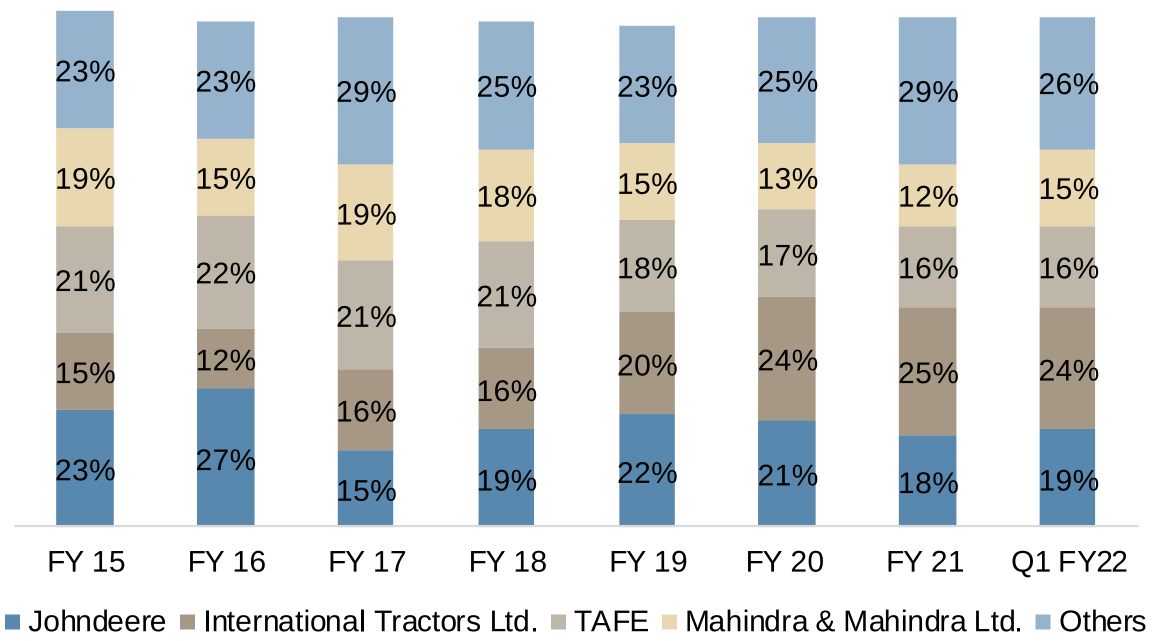
Growth in exports expected to continue in FY22

Segment wise market share of exports



Source: CRISIL Research

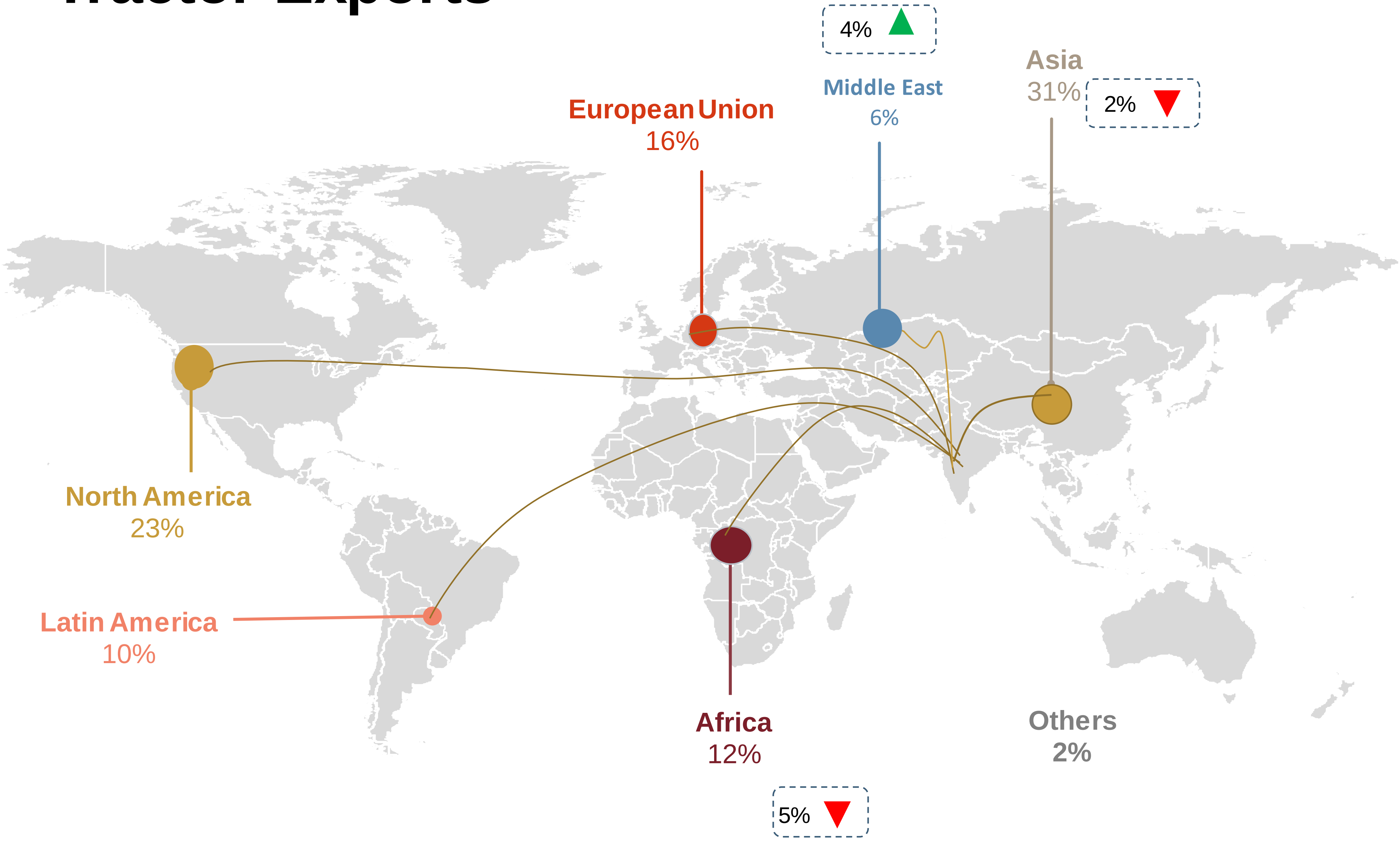
Player wise market share of exports



Source: CRISIL Research

- Tractor industry clocked record exports with 17% growth during FY21 backed by increased demand from major importers such as Europe and Latin America coupled with strategic partnerships developed by players such as Escorts.
- However, on a q-o-q basis, exports dropped 6% during Q1 FY22 amidst continued impact on Asian markets
- Share of 51HP & above tractors drooped during the quarter while 41-50 HP tractors expanded their presence
- On a high base of FY21, exports are expected to grow at a relatively muted pace with continued support from major markets like US & EU while Asian markets are expected to remain muted

Tractor Exports



- In FY21, US & Europe continued to support Indian Tractor exports
- Exports to Asian countries dropped amidst the continued Covid impact
- Increased exports to Turkey during the year helped expand exports to Middle East
- In FY22, African market is expected to push demand given the limited impact of current wave in the African market
- EU & US expected to back tractor exports in FY22
- Improvement in Asian markets is expected to be gradual

Note: : Represents volume data for FY21 exports, % in dotted boxes indicates change in market share from FY20 to FY21

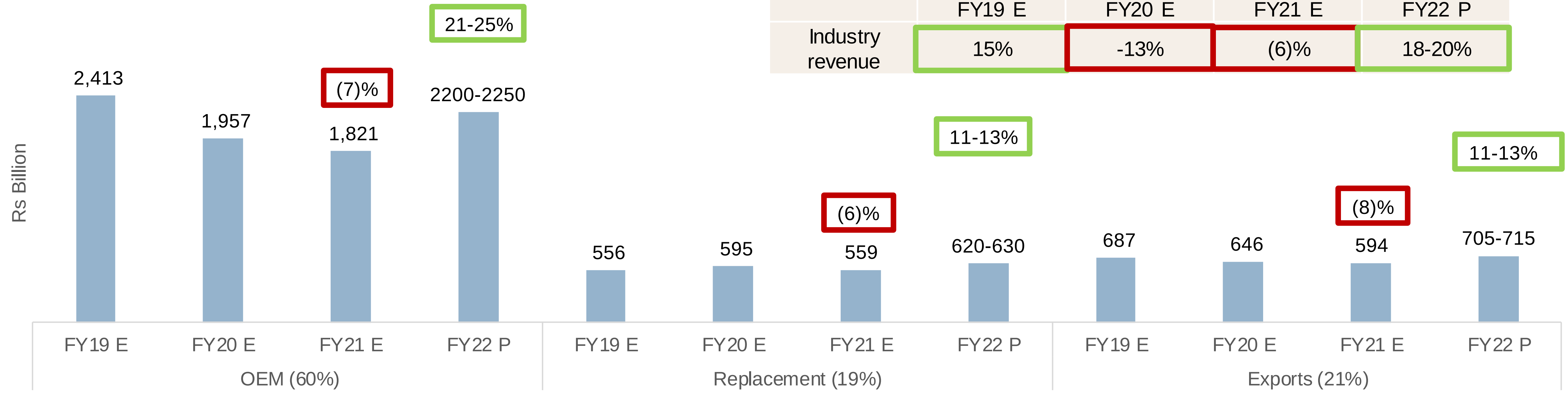
Source: DGFT, CRISIL Research

Auto Components

Second wave decelerated the industry growth pace in FY22

Demand from OEMs to drive auto component growth in FY22

	FY19 E	FY20 E	FY21 E	FY22 P
Industry revenue	15%	-13%	(6)%	18-20%

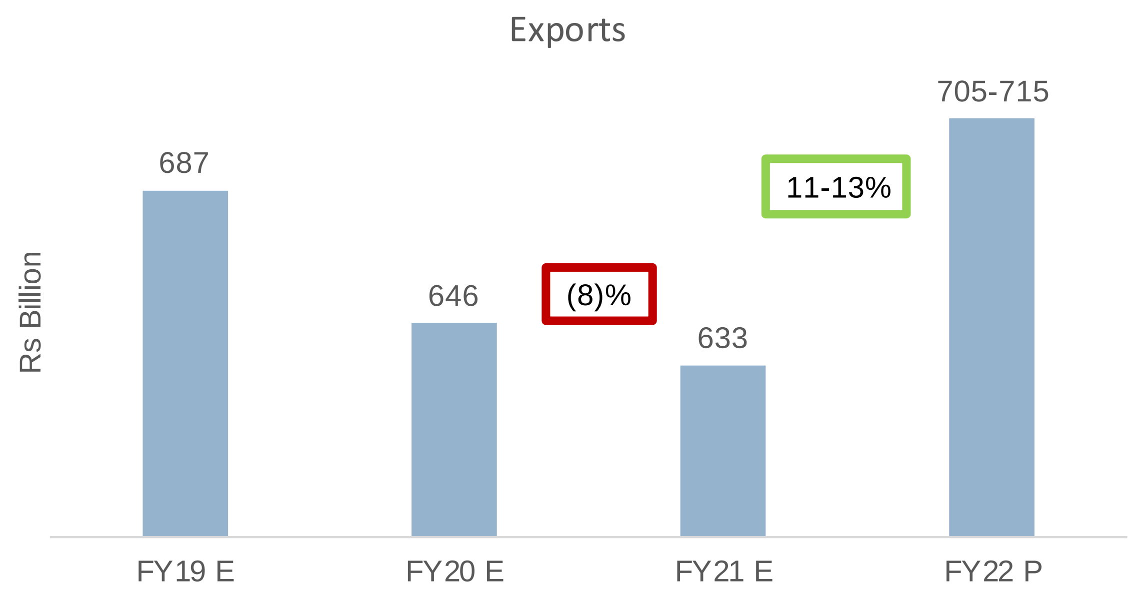


Note: Coloured brackets represent y-o-y growth; Numbers in the bracket in the axis represent share in production for FY21
Source: CRISIL Research

- Production revenue is estimated to have dropped ~7% in FY 21, amidst subdued demand across all automobile asset classes, decline in exports given COVID-19 outbreak in key export destinations and lower demand from replacement market owing to less movement of vehicles
- During Q1, amidst the second wave and subsequent lockdowns, industry demand as well as production got impacted
- Going ahead in FY 22, we expect the revenue to grow at relatively lower pace of 21-25% from the low base of FY21.
- The growth will be supported by expected global recovery and recovery in domestic auto demand
- However, resurgence of Covid remains a key monitorable

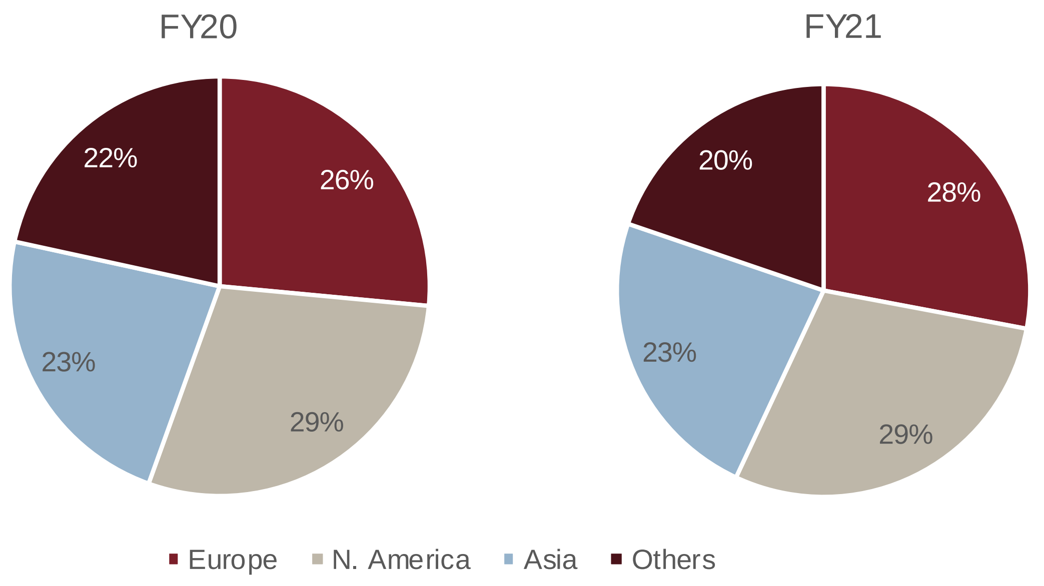
US, Europe to lead export revival in FY22, impact of further resurgence of Covid remains a key monitorable

Export demand expected to revive in FY 22



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

Developed nations support exports

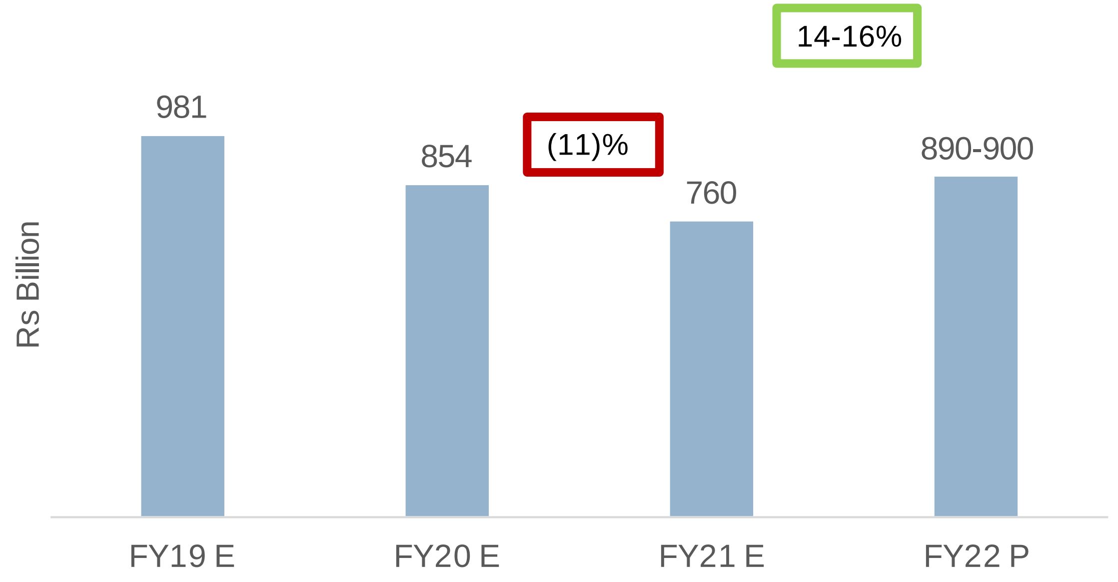


Source: DGFT, CRISIL Research

- Exports are estimated to have dropped 8% during FY21 amidst the global slowdown due to Covid pandemic, continued demand from US/ EU restricted the fall
- On this lower base, exports are estimated to bounce back in FY22 supported by demand from Europe and US with normalizing Covid situation as well as increasing inoculation
- However, spreading Delta variant cases across Europe remains a key monitorable

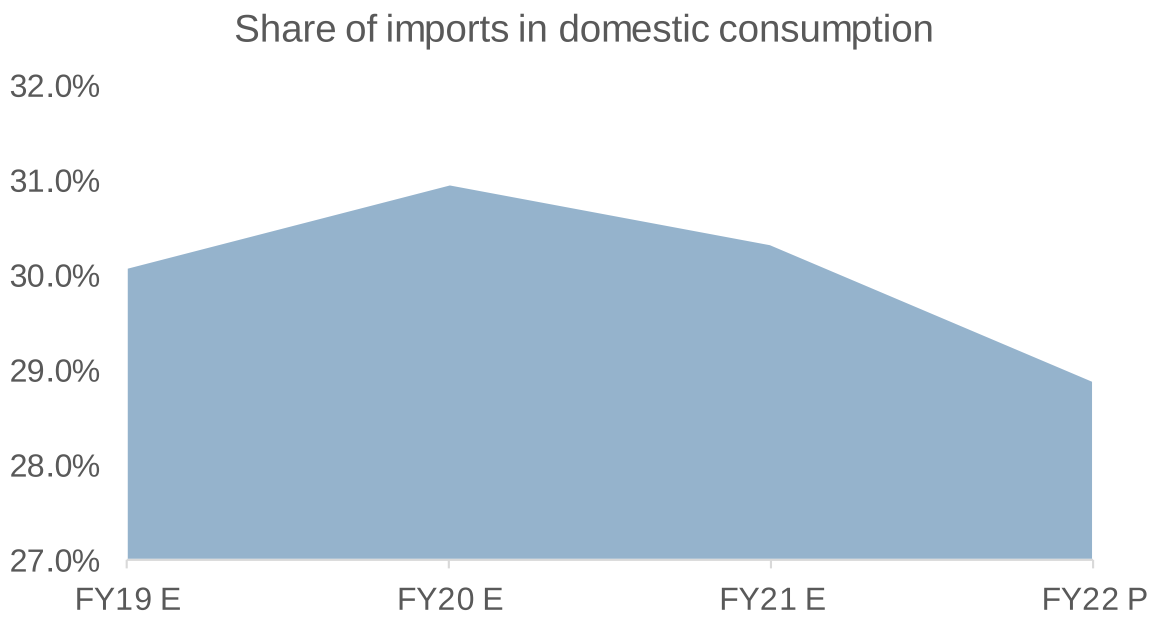
Some recovery expected in FY22 with estimated improvement in domestic demand

Partial recovery in FY22 after a consecutive drop



Source – DGFT, CRISIL Research

Localisation pulling the import share down

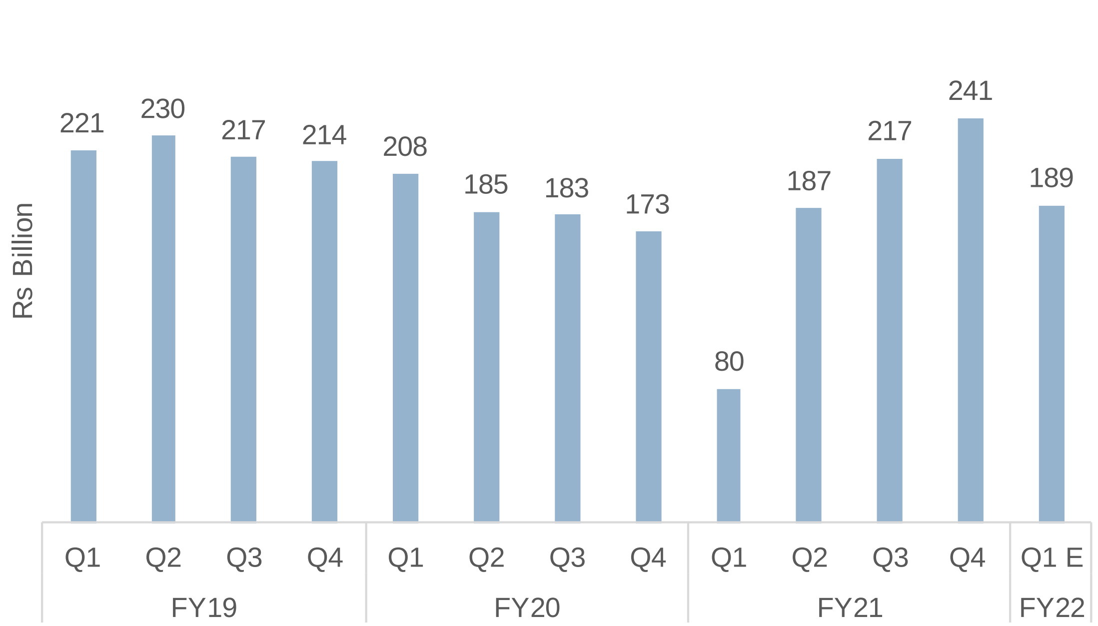


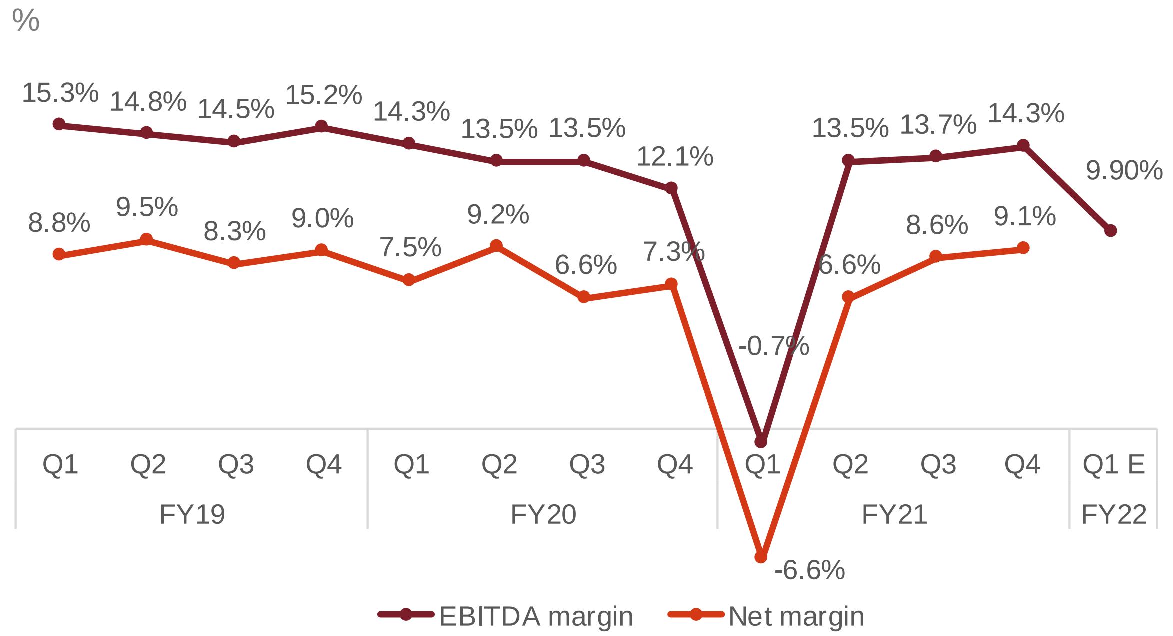
Source: DGFT, CRISIL Research

- India imports mainly from China, Korea, Germany, Japan and the USA
- In FY21, imports are expected to have declined 11% owing to subdued demand from OEMs and aftermarket.
- In FY22, imports to recover from the low base with some improvement in domestic auto demand, further impact of pandemic remains a key monitorable.

Second wave drags down revenue levels in Q1FY22, margins saw significant contraction

Company financials see red in Q1





Source: Company financials, CRISIL Research

- With improvement in production, revenue of the auto component companies rose further in Q4, second Covid wave brought the demand/ production levels down in Q1FY22
- Operating margins are expected to have contracted amidst the decline in production levels coupled with continued increase in raw material prices,
- Amidst the sluggish demand companies could not pass on the rise in raw material prices to the end customer

Thank You

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